

Section 3: Performance Standards for Mid-Rise Buildings

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Excerpt from the Avenues & Mid-Rise Buildings Study (May 2010)

For the full report see: <http://www.toronto.ca/planning/midrisestudy.htm>

3.1

Introduction

This section proposes a series of Performance Standards that will guide the design of mid-rise buildings in a manner appropriate to the Avenues.

The Performance Standards are guided by the objective to create healthy, livable and vibrant main streets while protecting the stability and integrity of adjacent neighbourhoods. To this end, built form controls embedded in these standards will ensure that the Avenues develop in an appropriate and context-sensitive manner. The Performance Standards are intended to provide simple, straight-forward guidance for those seeking to develop mid-rise projects on the Avenues. Key provisions are as follows:

- Buildings are moderate in height - no taller than the R.O.W. is wide;
- Buildings provide an appropriate transition in scale to adjacent neighbourhoods;
- Sidewalks are wide enough to include and support trees, generate a lively pedestrian culture and ensure accessibility for all;
- Sidewalks on the Avenues enjoy at least five hours of sunlight from the spring through to the fall;
- The ground floor of buildings provide uses that enliven sidewalks and create safe pedestrian conditions;
- The public realm should be protected and enhanced by limiting vehicle access from the Avenue, encouraging shared access, and creating a public laneway system that is accessed from side streets;
- Streetscape and building design reflects excellence in sustainability, urban design and architecture, recognizing the important public role of the Avenues in defining the quality of life for the city and its neighbourhoods; and,
- Mid-rise development sites located within Existing HCDs, HCDs Under Study, areas that warrant further heritage analysis, and Character Areas (see Section 2.3.1), should reflect local conditions and reference additional design guidelines that promote “context sensitive” intensification.

Key recommendations contained in this section are intended to form the basis for a new as-of-right zoning for mid-rise buildings on the Avenues. This new zoning will apply mainly to those Avenue segments designated as Mixed-Use Areas and Employment Areas (see Section 2.1: Where the Recommendations Apply). It is anticipated that this new zoning may reduce the need to prepare area specific studies for all segments. However, certain areas of the Avenues with unique characteristics may continue to require area specific study.

Through an as-of-right zoning strategy and other changes to City processes (see Section 4: Recommendations), the City will provide a level of certainty to the development process that is absent today. Land owners and developers working within this new regulatory framework will know how much they can build and the general timeframes they can expect for the application process. In return, they will be expected to build to a high standard of design excellence. The community will be offered a greater degree of assurance that the standards controlling building heights and massing will be adhered to.

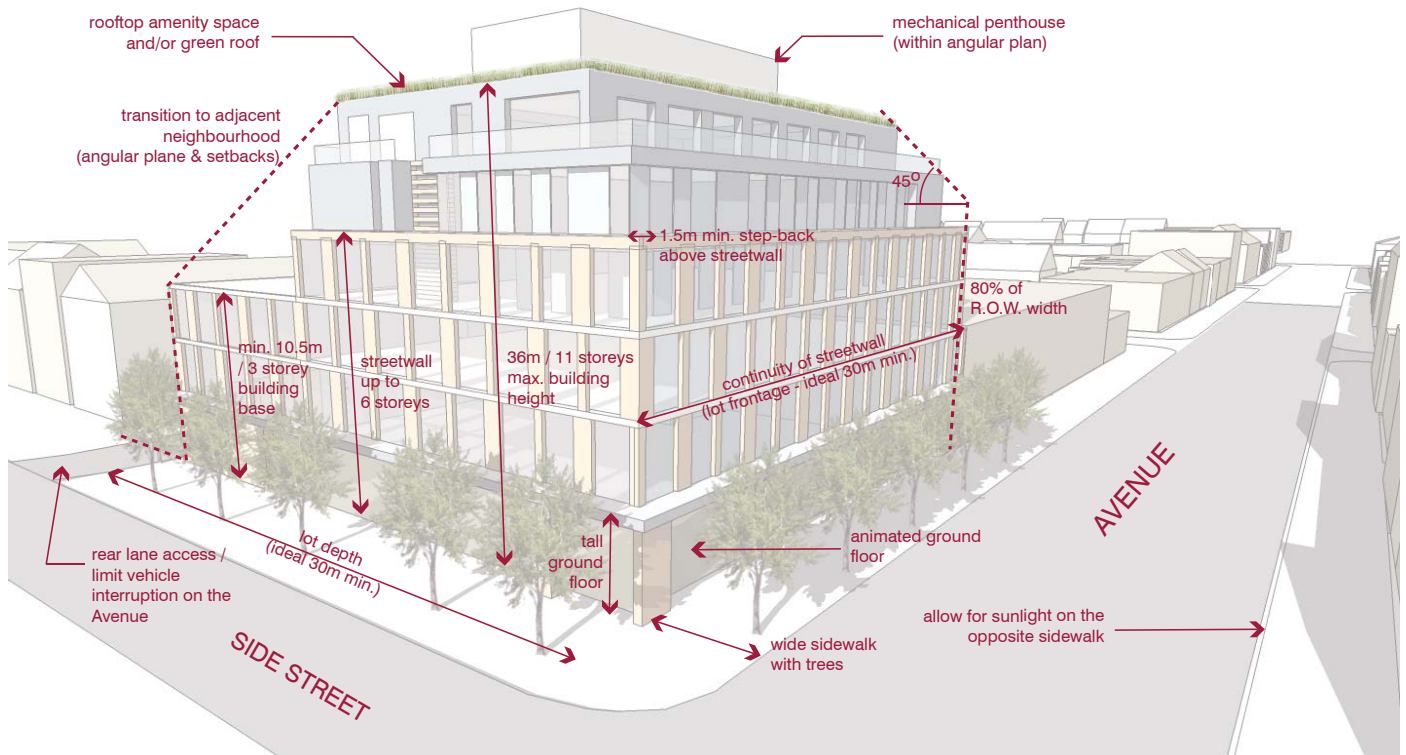


Diagram illustrating key components of the Performance Standards.

How can Performance Standards help create great Mid-Rise buildings on the Avenues?

Performance Standards are based on best principles (Official Plan policies) and best practices (urban design criteria and guidelines) and will guide the design of mid-rise buildings and ensure they are responsive to both their existing and planned context.

The creation and implementation of Performance Standards for mid-rise buildings will help to ensure high quality, appropriately-scaled mid-rise urban form along the Avenues. The creation of well-designed, pedestrian-scaled streets will result in mid-rise buildings that are of the highest design character and respond to their district and city-wide context.

Successful mid-rise buildings employ design strategies such as street-oriented character, massing that responds to all frontages, a variety of architectural detail and context-sensitive massing. The design of Avenues-oriented buildings must be mindful of limiting shadows on sidewalks and neighbouring properties, and stimulate pedestrian environments through the careful use of scale, setbacks and step-backs.

Implementation of the Performance Standards

Section 3.2 outlines Performance Standards recommended by this study.

The Performance Standards refer to an integrated set of measurable criteria that are used to establish how existing and planned buildings behave towards each other or “perform” in relation to a set of criteria or principles, within an area specific setting or context. Some Performance Standards include criteria (e.g. Design Quality) that are not as easily measurable and provide guidance on urban design quality and character within the context of this study.

Some of the following Performance Standards define requirements that could be integrated into new zoning by-laws, while others will be used as design guidelines to complement the zoning regulations.

Exceptions to the Performance Standards

When implementing the urban design recommendations of this section, whether through zoning or design guidelines, it is important to recognize that exceptions may sometimes be warranted and that at times a project that strives for excellence in design can demonstrate that a specific guideline is not appropriate in that instance. It is the responsibility of the designer / developer / builder to demonstrate to the City where this exception exists and it is at the discretion of the City to support or not support a justification. In cases where the City requires further review of applications, the City’s Design Review Panel may assist the process.

3.1.1 Using the Performance Standards

The application of the Performance Standards will vary according to location on the Avenues (i.e. width of the R.O.W., Character Area, Retail Priority Area) as well as physical site characteristics (i.e. lot depth and width, topography), and site location (i.e. corner or mid-block sites). The following Key Considerations are provided to give users of this document a step-by-step guide to determining which Performance Standards to use, and how they will apply in a site-specific manner. These steps are provided as a guide only, and it is recommended that the Performance Standards be read in their entirety.

Key Considerations

1. What is the maximum allowable height?
Refer to Performance Standard 1 for R.O.W. widths and provisions for maximum allowable heights
2. What angular planes will apply to the rear?
The property dimensions and land use to the rear will influence applicability of the rear transition. Refer to Performance Standards 5A - 5D
3. What provisions will apply to the side property?
Is the property on a corner or mid-block location? Refer to Performance Standards 6, 8A - 8E, and 13
4. Will front setbacks be required?
What is the width of the existing sidewalks? In combination with the width of the R.O.W., this will determine if front setbacks are applicable. Refer to Performance Standard 7 (setbacks will vary by use i.e. commercial-retail or residential at-grade).
5. Is there an existing public lane at the rear of the property?
Refer to Performance Standards 5A - 5D, 16A and 16B
6. Is the property in a Character Area?
Refer to Performance Standards 19 A - G, and Appendix A: Character Area Study
7. Is the property in an area where retail at grade is required?
Refer to Performance Standard 3, and Appendix B: Retail Study
8. Is the use at grade (fronting the Avenue) residential?
Refer first to Section 2.4.2: Recommendations for Retail At Grade, and refer to Performance Standards 3 and 16

3.1.2 Optimal Site Conditions

A thorough review of the Avenues existing context reveals that no two Avenues are identical, nor are there sites with identical characteristics or conditions. This section outlines some of the ideal site conditions for the optimal development of a mid-rise building within the context of this study.

1. Table 3 identifies the maximum allowable heights based on R.O.W. width.

To achieve these heights, minimum lot depths are required as per Table 4. These depths assume the integration of:

- angular planes - front and rear;
- setbacks, including rear lanes;
- a depth of 11.6 metres for the uppermost floor at the maximum height (identified as a minimum dimension for a double-loaded corridor), following the application of the angular planes; and
- potential for typical below-grade parking layouts, including ramps and access.

See section diagrams on opposite page.

Mid-rise buildings may be developed on properties shallower than those identified in Table 4. Generally, a lot depth of approximately 30 metres will permit the development of a 5 to 6-storey mid-rise building and can integrate below-grade parking. For example, to achieve a top floor of 11.6 metres on a 6-storey building, a depth of 32.6 metres is required (see section diagrams on opposite page).

The optimal conditions are dependent on a combination of both lot width and depth.

Table 3

R.O.W. Width ¹	Mixed-Use		Commercial	
	storeys	height (m) ²	storeys	height (m) ³
20m	6	19.5	5	18.9
27m	8	25.5	7	26.1
30m	9	28.5	8	29.7
36m	11	34.5	9	33.3

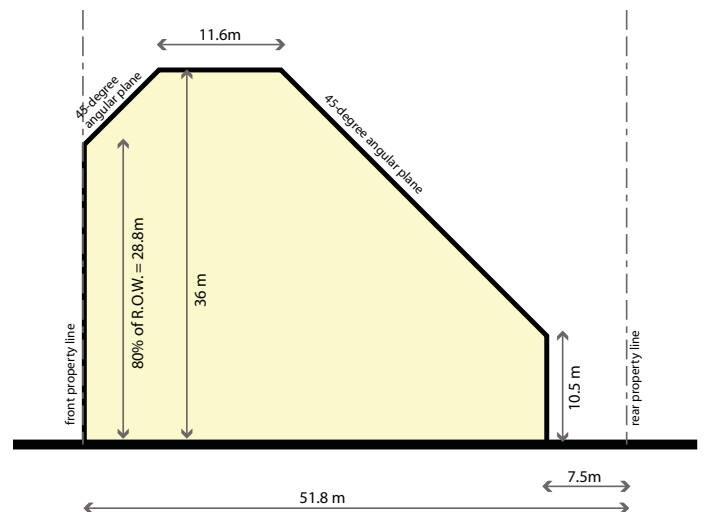
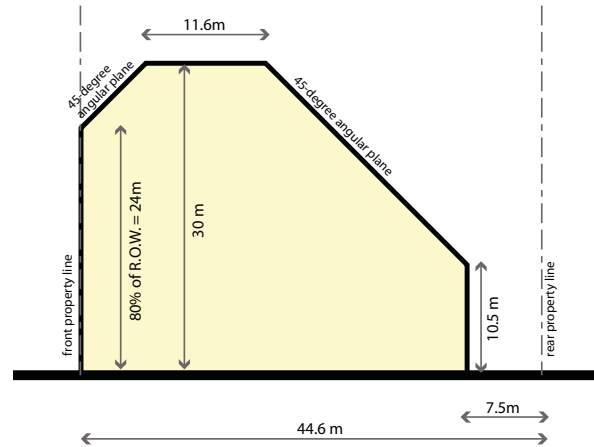
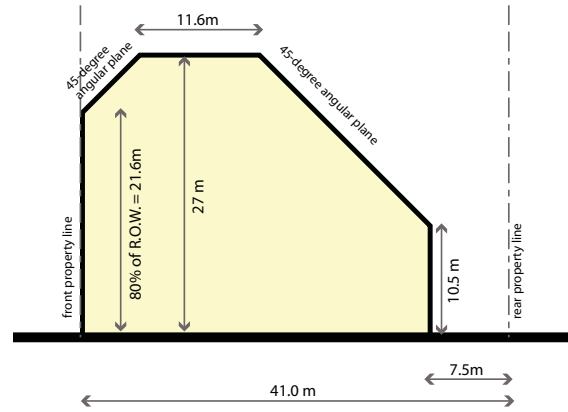
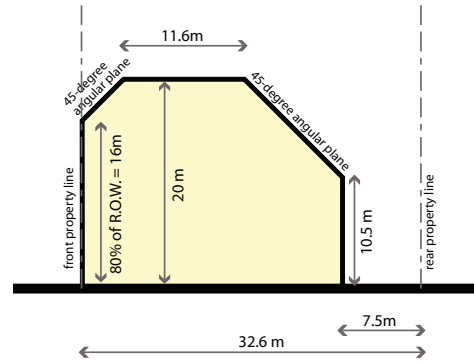
Assumptions

- 1 - R.O.W. width as identified in Official Plan Map 3
- 2 - Mixed Use heights assume 4.5m for ground floor and 3.0m for all floors above
- 3 - Commercial heights assume 4.5m for ground floor and 3.6m for all floors above

Table 4

R.O.W. Width	Lot Depth
Ideal Minimum	
20m	32.6m
27m	41.0m
30m	44.6m
36m	51.8m

Assumes a depth of 11.6 metres at the uppermost height per R.O.W. (using a setback of 7.5m & 45-degree angular plane from 10.5m above the setback).



2. Minimum lot widths of 30 metres will:
 - allow for the integration of structured on-site parking;
 - be able to incorporate side step-backs at upper storeys; and
 - potentially encourage property owners to consider consolidation of narrow properties.

3. Other ideal lot conditions include:
 - existing rear lane or potential to extend a rear lane system.

Illustration of ideal minimum lot depths by R.O.W. width. Rear set back can include public lane where they exist.

3.2

Performance Standards

1. Maximum Allowable Height

The maximum allowable height of buildings on the Avenues will be no taller than the width of the Avenue right-of-way, up to a maximum mid-rise height of 11 storeys (36 metres).

2. Minimum Building Height

All new buildings on the Avenues must achieve a minimum height of 10.5 metres (up to 3 storeys) at the street frontage.

3. Minimum Ground Floor Height

The minimum floor to floor height of the ground floor should be 4.5 metres to facilitate retail uses at grade.

4A. Front Façade: Angular Plane

The building envelope should allow for a minimum of 5-hours of sunlight onto the Avenue sidewalks from March 21st - September 21st.

4B. Front Façade: Pedestrian Perception Step-back

“Pedestrian Perception” step-backs may be required to mitigate the perception of height and create comfortable pedestrian conditions.

4C. Front Façade: Alignment

The front street wall of mid-rise buildings should be built to the front property lines or applicable setback lines.

5A. Rear Transition to Neighbourhoods: Deep

The transition between a deep Avenue property and areas designated Neighbourhoods, Parks and Open Space Areas, and Natural Areas to the rear should be created through setback and angular plane provisions.

5B. Rear Transition to Neighbourhoods: Shallow

The transition between a shallow Avenue property and areas designated Neighbourhoods, Parks and Open Space Areas, and Natural Areas to the rear should be created through alternative setback and angular plane provisions.

5C. Rear Transition to Employment Areas

The transition between an Avenue property and areas designated Employment Areas to the rear should be created through setback and step-back provisions.

5D. Rear Transition to Apartment Neighbourhoods

The transition between an Avenue property and areas designated Apartment Neighbourhoods to the rear should be created through setbacks and other provisions.

6. Corner Sites: Heights & Angular Planes

On corner sites, the front angular plane and heights that apply to the Avenue frontage will also apply to the secondary street frontage.

7A. Minimum Sidewalk Zones

Mid-rise buildings may be required to be set back at grade to provide a minimum sidewalk zone.

7B. Streetscapes

Avenue streetscapes should provide the highest level of urban design treatment to create beautiful pedestrian environments and great places to shop, work and live.

8A. Side Property Line: Continuous Street Walls

Mid-rise buildings should be built to the side property lines.

8B. Side Property Line: Limiting Blank Side Walls

Blank sidewalls should be designed as an architecturally finished surface and large expanses of blank sidewalls should be avoided.

8C. Side Property Line: Step-backs at Upper Storeys

There should be breaks at upper storeys between new and existing mid-rise buildings that provide sky-views and increased sunlight access to the sidewalk. This can be achieved through side step-backs at the upper storeys.

8D. Side Property Line: Existing Side Windows

Existing buildings with side wall windows should not be negatively impacted by new developments.

8E. Side Property Line: Side Street Setbacks

Buildings should be setback along the side streets to provide transition to adjacent residential properties with front yard setbacks.

9. Building Width: Maximum Width

Where mid-rise building frontages are more than 60 metres in width, building façades should be articulated or “broken up” to ensure that façades are not overly long.

10. At-Grade Uses: Residential

Where retail at grade is not required, and residential uses are permitted, the design of ground floors should provide adequate public/private transition, through setbacks and other methods, and allow for future conversion to retail uses.

11. Setbacks for Civic Spaces

In special circumstances where civic or public spaces are desired, additional setbacks may be encouraged.

12. Balconies & Projections

Balconies and other projecting building elements should not negatively impact the public realm or prevent adherence to other Performance Standards.

13. Roofs & Roofscapes

Mechanical penthouses may exceed the maximum height limit by up to 5 metres but may not penetrate any angular planes.

14. Exterior Building Materials

Building should utilize high-quality materials selected for their permanence, durability and energy efficiency.

15. Façade Design & Articulation

Mid-rise buildings will be designed to support the public and commercial function of the Avenue through well articulated and appropriately scaled façades.

16A. Vehicular Access

Whenever possible, vehicular access should be provided via local streets and rear lanes, not the Avenue.

16B. Mid-Block Vehicular Access

For mid-block sites without rear lane access, a front driveway may be permitted, provided established criteria are met.

17. Loading & Servicing

Loading, servicing and other vehicular related functions should not detract from the use or attractiveness of the pedestrian realm.

18. Design Quality

Mid-rise buildings will reflect design excellence and green building innovation utilizing high-quality materials that acknowledge the public role of the Avenues.

19A. Heritage & Character Areas

All mid-rise buildings on the Avenues should respect and be sensitively integrated with heritage buildings and in the context of Heritage Conservation Districts.

19B. Development in a HCD

The character and values of HCDs must be respected to ensure that the district is not diminished by incremental or sweeping change.

19C. Development Adjacent to a Heritage Property

Development adjacent to heritage properties should be sensitive to, and not negatively impact, heritage properties.

19D. Character Area: Fine Grain Fabric

New mid-rise buildings in Character Areas that have a fine grain, main street fabric should be designed to reflect a similar rhythm of entrances and multiple retail units.

19E. Character Area: Consistent Cornice Line

Buildings in a Character Area should maintain a consistent cornice line for the first step-back by establishing a “datum line” or an average of the existing cornice line.

19F. Character Area: Vertical Additions

Additions to existing buildings is an alternative to redevelopment projects on the Avenues, and should be encouraged in areas with an existing urban fabric.

19G. Character Area: Other Considerations

Additional “context sensitive” design and massing guidelines should be considered for development in Character Areas.

Performance Standard #1: Maximum Allowable Height

The maximum allowable height of buildings on the Avenues will be no taller than the width of the Avenue right-of-way, up to a maximum mid-rise height of 11 storeys (36 metres).

- Using the four prevailing right-of-way widths: 20, 27, 30, & 36 metres.
- The maximum height may only be achieved if the built form demonstrates compliance with all applicable Performance Standards.
- Not all sites on the Avenues will be able to achieve the maximum height. The dimensions of the development lot – particularly lot depth – impact the ability of a given site to be built to its maximum height.

Achieving the maximum building heights will be dictated by the required angular planes set out in subsequent Performance Standards.

Rationale

The City has generally defined mid-rise buildings as being “taller than a typical house or townhouse but no taller than the width of the street’s public right-of-way”. For example, on a street with a 20 metre right-of-way, a mid-rise building consisting of commercial uses at grade and residential uses above, can be up to 20 metres in height, or 6 storeys.

Official Plan Map 3 - Right-of-Way Widths Associated with Existing Major Streets, identifies Avenues with seven different right-of-ways (R.O.W.) widths: 20, 23, 27, 30, 33, 36, and 45 metres. There are four widths - 20, 27, 30 and 36 metres that prevail. In instances where the right-of-way width is 23 and 33 metres, Performance Standards for mid-rise buildings will apply, permitting maximum building heights are the same as the R.O.W.

Eglinton Avenue West is the only Avenue that has a 45 metre wide R.O.W. As the maximum mid-rise height is defined as 11 storeys, or approximately, 36 metres, the City should undertake further study of this area to determine appropriate building heights.

The *Design Criteria for Review of Tall Building Proposals* defines tall buildings as those which are taller than the right-of-way they are located on. For the purposes of this study, it is assumed a mid-rise building is never taller than 11 storeys or 36 metres high (equal to the width of the widest prevailing right-of-way found on the Avenues).

Table 5

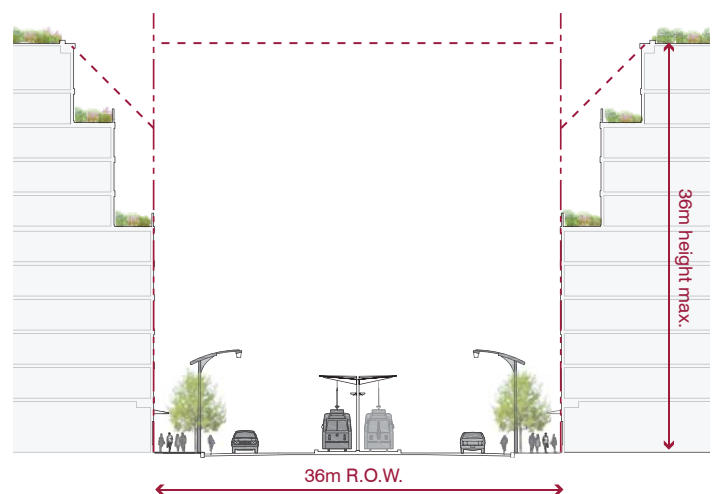
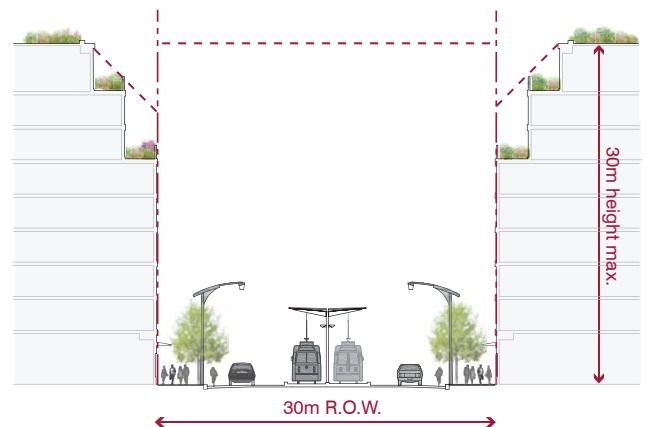
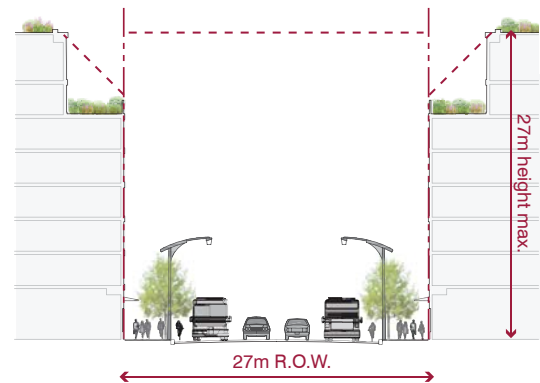
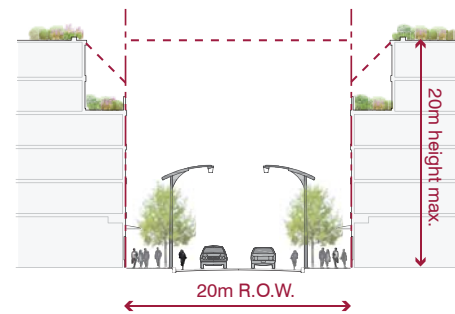
R.O.W. Width ¹	Mixed-Use		Commercial	
	storeys	height (m) ²	storeys	height (m) ³
20m	6	19.5	5	18.9
27m	8	25.5	7	26.1
30m	9	28.5	8	29.7
36m	11	34.5	9	33.3

Assumptions

1 - R.O.W. width as identified in Official Plan Map 3

2 - Mixed Use heights assume 4.5m for ground floor and 3.0m for all floors above

3 - Commercial heights assume 4.5m for ground floor and 3.6m for all floors above



The former City of Toronto’s Main Streets By-law (By-law 1994-0178) was created after a study of existing context along Toronto’s main streets as well as extensive public consultation. The resulting By-law created a building envelope within the 4 to 6 storey range. However, the City has seen very little “uptake” based on this zoning and today there are still very few buildings in this height range along the former City’s main streets.

The creation of a context-appropriate height regime might encourage land owners to consider the mid-rise building as a feasible typology for development.

Sites that are constrained by size or context and cannot meet the Performance Standards for front, side and rear transitions (Performance Standards 4, 5, and the 7) **will generally not be permitted to develop at the maximum height.** The maximum allowable height defined in this Performance Standard is the determining factor for height maximums and supersedes other angular plane restrictions which could potentially be more permissive.

This study recognizes that building height is only one aspect of regulating building design. Imperative to the success of the Avenues is the ability of mid-rise buildings to fit into a variety of existing contexts and contribute positively to the overall character of the Avenues. Subsequent Performance Standards outline additional methods to shape and design mid-rise buildings.

Official Plan Reference

3.1.2 Built Form

Policies: 1, 3 a), and 4

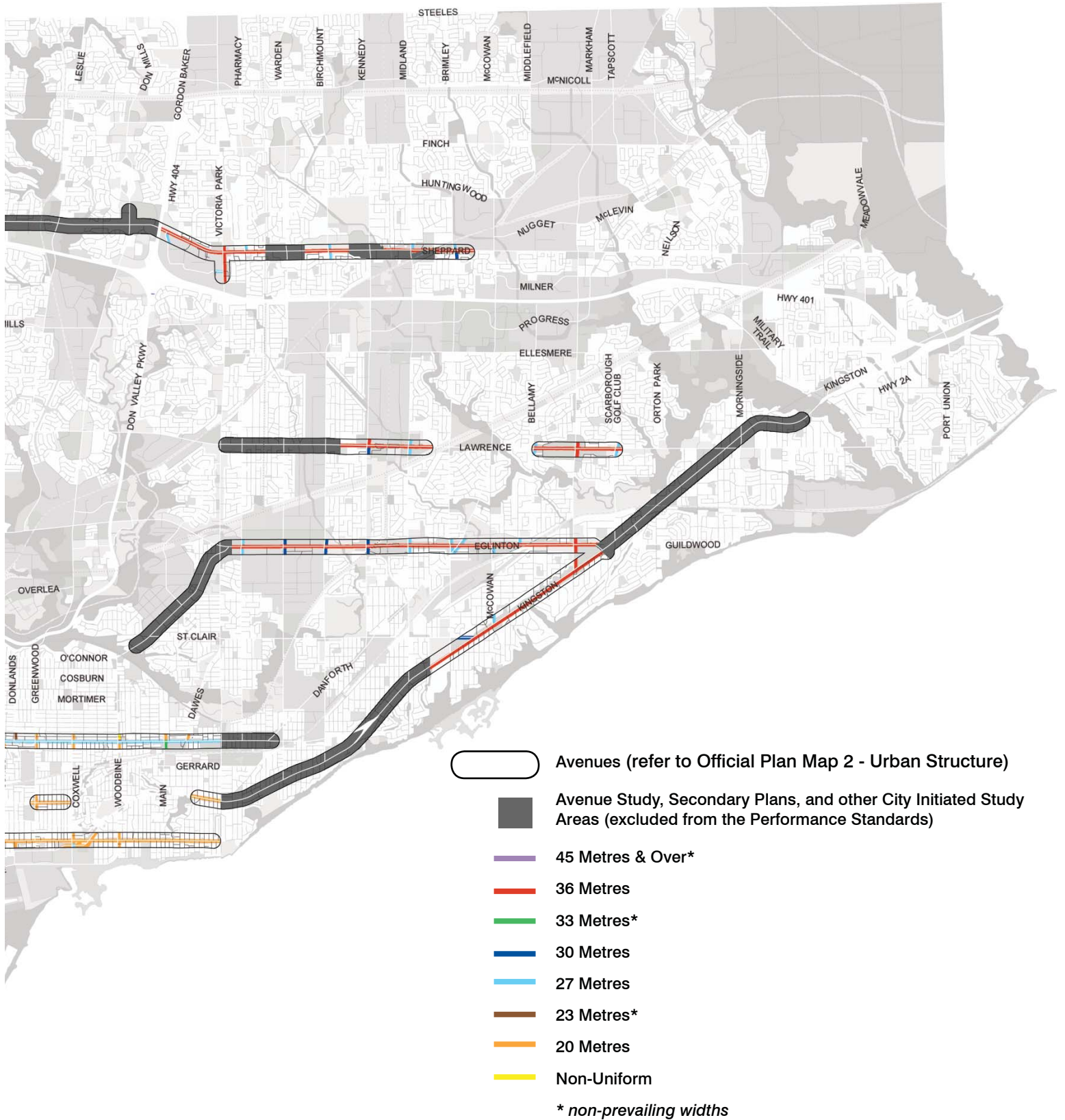
Maximum allowable height is determined by the width of the right-of-way (Note, in some cases, where sidewalk width is not sufficient, front setbacks from the property line will be necessary. This will not affect the overall height or angular plane provisions applied to the building).

Map 6: Avenues & R.O.W. Widths



Not to Scale

Map should be referred to in colour



According to Official Plan Map 3 - Right-of-Way Widths Associated with Existing Major Streets, the Avenue right-of-ways fall into one of seven widths: 20, 23, 27, 30, 33, 36, and 45 metres. There are four widths - 20, 27, 30 and 36 metres that prevail. In instances where the right-of-way width is 23 and 33 metres, maximum building heights should not exceed the R.O.W. width. The 45 metre wide R.O.W. along Eglinton Avenue West should be considered for area-specific study.

Performance Standard #2: Minimum Building Height

All new buildings on the Avenues must achieve a minimum height of 10.5 metres (3 storeys) at the street frontage.

Rationale

The City's strategy to reurbanize the Avenues will strengthen community focal points as well as intensify mixed-uses in appropriate locations. By identifying the Avenues as locations for new residents and jobs, the City can make better use of existing infrastructure and create a more vibrant street life on the Avenues. In order to do this, the

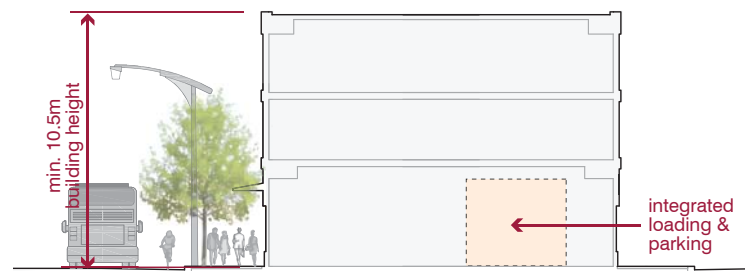
inefficient development of sites on the Avenues needs to be prevented through the requirement of a minimum building height on the Avenues. One-storey retail buildings and townhomes are examples of inefficient building typologies.

A minimum height of 10.5 metres will allow for up to three storeys, but different uses may result in one or two storey buildings.

The minimum building height also supports the objective to create a pedestrian environment through street walls that are generally consistent along the Avenues, as well as achieving a minimum density along the Avenues to support improved public transit.



Example of a 3 storey building.



Examples of minimum total building height of 3 storeys.

Official Plan Reference

2.2 Structuring Growth in the City: Integrating Land Use and Transportation

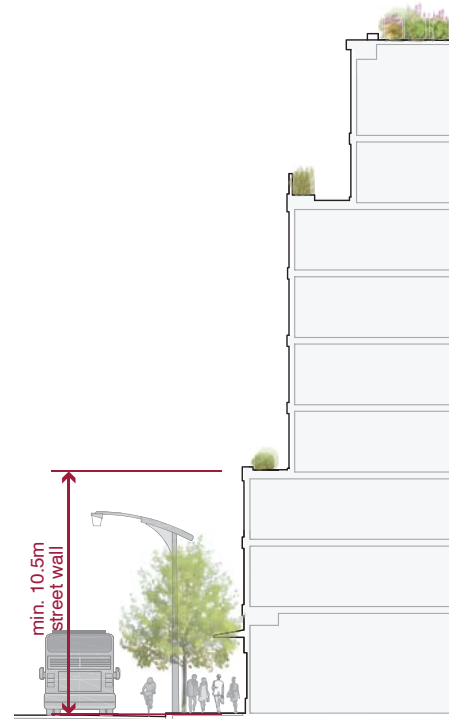
Policies: 2 a), 2 b), and 2 d)

2.2.3 Avenues: Reurbanizing Arterial Corridors

Policies: 2 b) i), and 2 b) v) (1)



Example of a 3 storey street wall.



Examples of minimum street wall height of 3 storeys.

Performance Standard #3: Minimum Ground Floor Height

The minimum floor-to-floor height of the ground floor should be 4.5 metres to facilitate retail uses at grade.

- **Ground floor heights should be a minimum of 4.5 metres (floor to floor, measured from average grade) to accommodate retail uses and provide sufficient clearance for loading areas. Where residential uses front onto Avenues at grade level, the vertical distance from grade to the top of the second storey floor level should also measure 4.5 metres.**

Rationale

Floor heights for commercial uses are generally higher than a typical residential floor. A taller floor-to-floor height at grade will provide for flexibility of grade level uses and increase the marketability of retail spaces. A floor-to-floor height of 4.5 metres has been cited as the desirable height to achieve this. A taller floor-to-floor height at the street level also emphasizes this portion of the building and thereby increases the visibility of any developed retail.

A floor-to-floor height of 4.5 metres provides clearance for loading spaces and trucks into internal spaces of a building (i.e. would not require double height garage door openings), which should be met at the rear of the site.

A 4.5 metre floor-to-floor height is also required for at-grade residential uses fronting onto an Avenue. For residential uses, the 4.5 metres height would be taken from exterior grade to the top of the second storey floor level. See Performance Standard 10 for a description of design measures for residential at grade.

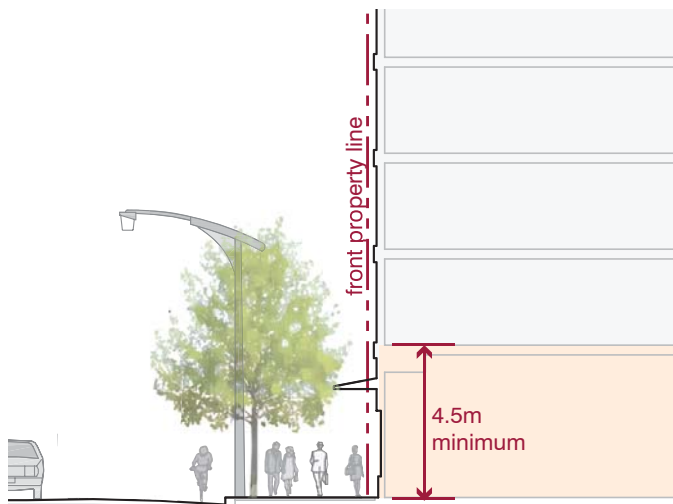
As the Avenues mature, residential uses at grade may be converted to retail uses. The 4.5 metre height considered with a horizontal setback required for residential uses (see Performance Standard 10), provides an infill zone that can accommodate this transition.

Official Plan Reference

2.2 Structuring Growth in the City: Integrating Land Use and Transportation

Policies: 2 c)

3.5.2 The Future of Retailing



Example of minimum ground floor height for commercial-retail uses.



Example of tall ground floors for flexible commercial space.

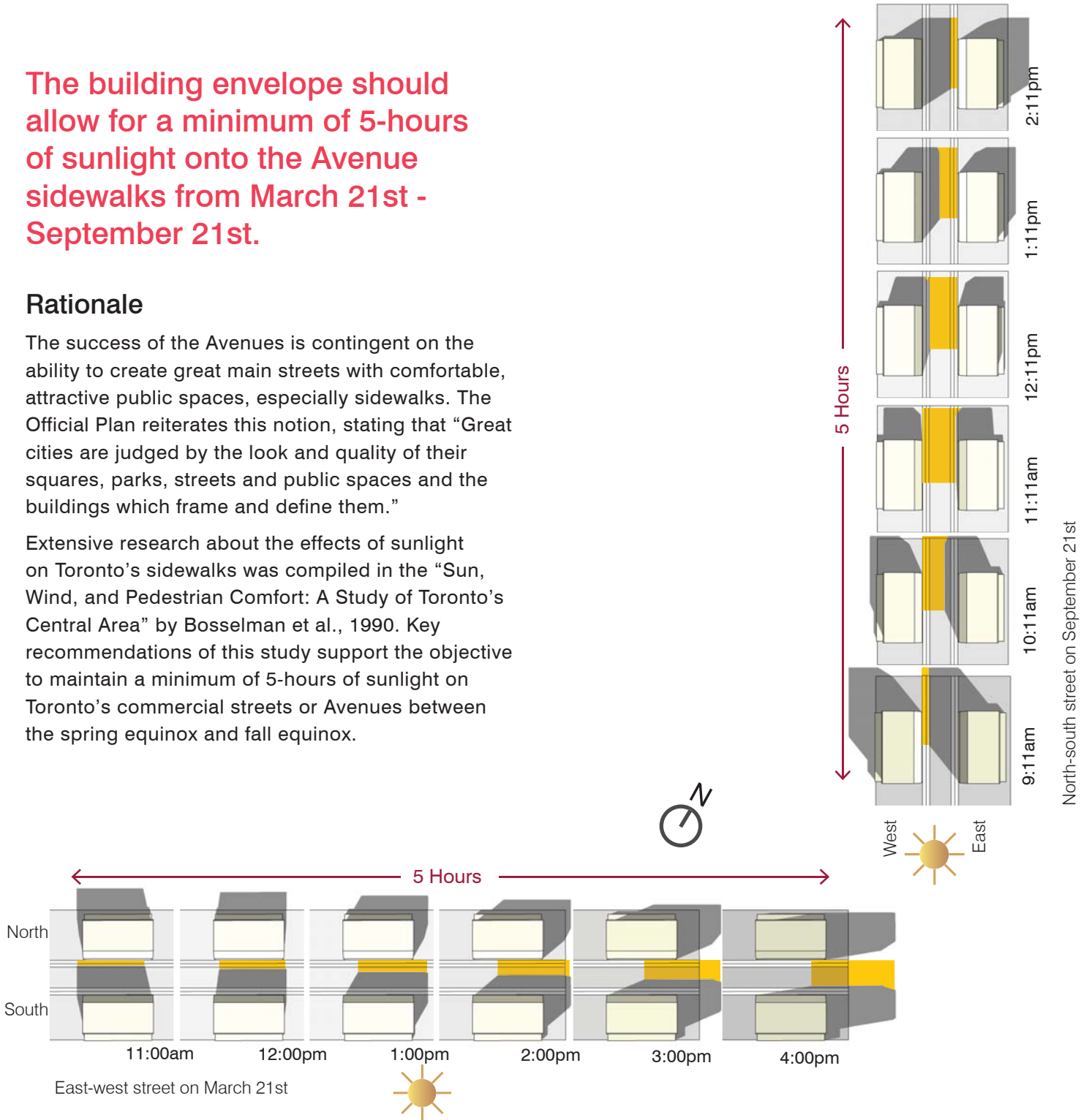
Performance Standard #4A: Front Façade: Angular Plane

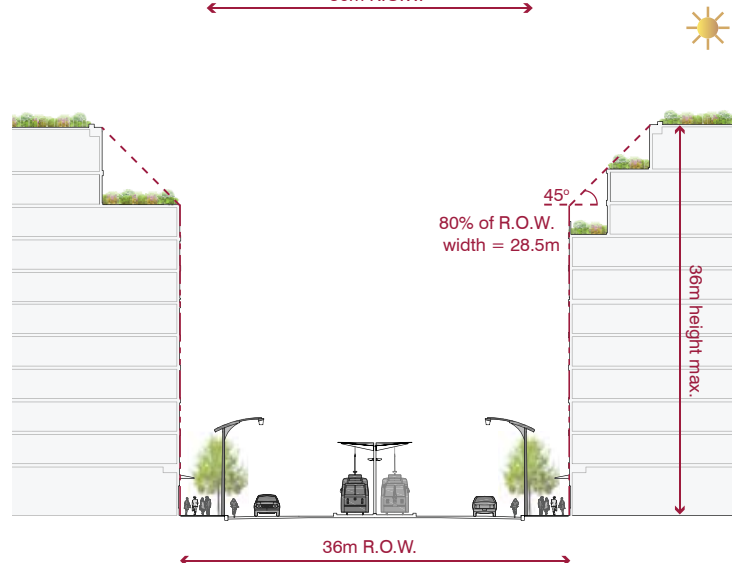
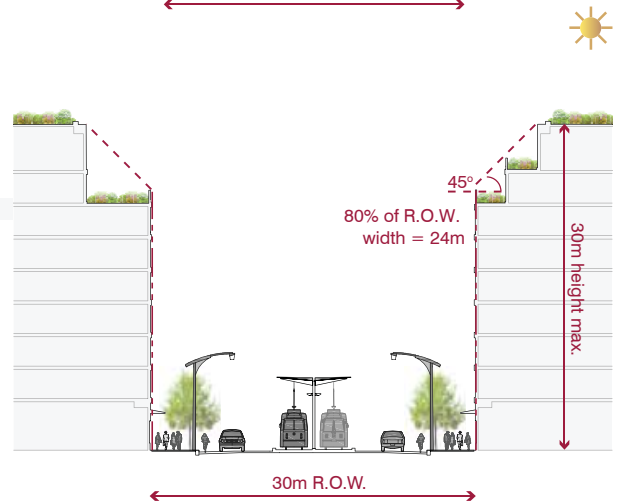
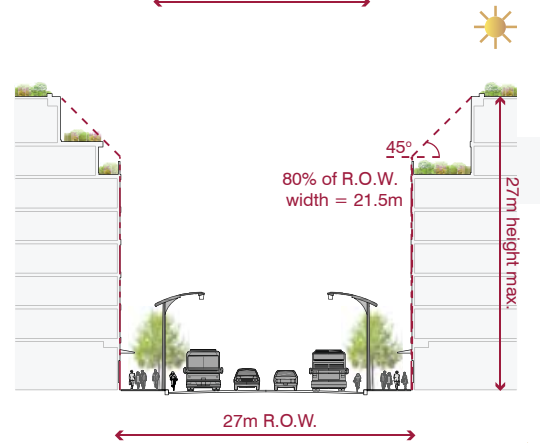
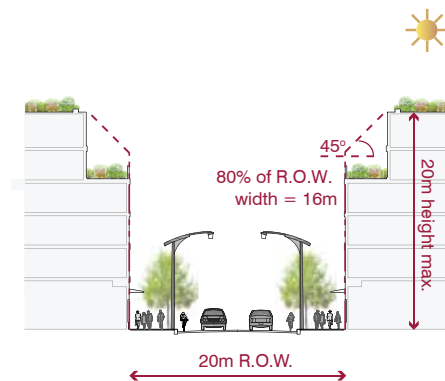
The building envelope should allow for a minimum of 5-hours of sunlight onto the Avenue sidewalks from March 21st - September 21st.

Rationale

The success of the Avenues is contingent on the ability to create great main streets with comfortable, attractive public spaces, especially sidewalks. The Official Plan reiterates this notion, stating that “Great cities are judged by the look and quality of their squares, parks, streets and public spaces and the buildings which frame and define them.”

Extensive research about the effects of sunlight on Toronto’s sidewalks was compiled in the “Sun, Wind, and Pedestrian Comfort: A Study of Toronto’s Central Area” by Bosselman et al., 1990. Key recommendations of this study support the objective to maintain a minimum of 5-hours of sunlight on Toronto’s commercial streets or Avenues between the spring equinox and fall equinox.





This Performance Standard results in a building envelope that allows for 5-hours of sunlight access on the opposite sidewalk as well as ensuring that the street wall height is in proportion with the R.O.W. An angular plane will be taken from a height equivalent to 80% of the R.O.W. width and subsequent storeys must fit within a 45-degree angular plane from this point. The minimum street wall height is 10.5 metres as per Performance Standard 2.

Given that there may be buildings as high as the right-of-way width, the upper storeys of buildings will need to be massed to provide sunlight on the opposite sidewalk. Buildings built to the front property line and to the maximum allowable height will need to step-back to fit within this angular plane.

The recommendations of this Performance Standard should also apply to diagonal streets, buildings that are set back from the property line, and streets that have a grade difference from one side of the R.O.W. to the other, in order to achieve consistency of built form along the Avenues, even though the five hours of sunlight may be achieved through different tools.

Official Plan Reference

3.1.2 Built Form

Policies: 3 c), 3 d), and 3 e)

4.5 Mixed Use Areas

Policies: 2 e)

Performance Standard #4B: Front Façade: Pedestrian Perception Step-back

“Pedestrian Perception” step-backs on buildings taller than 23 metres should be required to mitigate the perception of height and create buildings at the street that are of a comfortable scale for pedestrians.

Rationale

The provisions of Performance Standard 4A will generally result in a step-back of the upper floors of mid-rise buildings. An additional step-back may be appropriate for buildings taller than 7 storeys in height as a means of mitigating the perception of height on the Avenue. The ideal location of this additional “Pedestrian Perception” step-back is not prescribed and should be determined as part of the design process.

Front step-backs articulate building massing, reduce shadow impacts within the public realm, and help to mitigate the pedestrian’s perception of height. The minimum step-back dimension is 1.5 metres.



For buildings taller than 23 metres, an additional step-back may be required. The location of this step-back is flexible. The above example illustrates a 9 storey building on a 30 metre R.O.W. which integrates step-backs in accordance with Performance Standard 4A: Front Façade: Angular Plan and an additional Pedestrian Perception step-back.

Buildings on a 20 and 23 metre right-of-way are not required to meet this Guideline. For R.O.W.s, larger than 23 metres, an additional Pedestrian Perception step-back should be considered between the third floor and the 80% height of the façade.

Official Plan Reference

3.1.2 Built Form

Policies: 4



Visualization of front step-backs on a 30 metre wide R.O.W.

Performance Standard #4C: Front Façade: Alignment

The front street wall of mid-rise buildings should be built to the front property lines or applicable setback lines.

- The street wall is defined as the portion of a building's façade comprised of the building base (minimum of 10.5 metres or 3 storeys in height and up to the 80% of the permitted maximum building height).
- A building should have a minimum of 75% of its frontage built to the setback line (see Performance Standard 7A) for the first 3 storeys at a minimum.
- The remaining 25% may setback an additional distance up to a maximum of 5 metres to provide a deeper area for lobby entrances, bike parking or outdoor marketing areas such as café seating (for residential uses at-grade see Performance Standard 10).



Rationale

The ground floors of buildings are generally required to provide retail fronting onto the Avenue. Mid-rise buildings should be built to the setback line (as identified in Performance Standard 7A) so that they create a continuous street wall with direct connections between grade-related commercial and community uses and the public realm. This relationship of sidewalk to grade-related uses “encourages diverse economic stimulation and social interaction at a pedestrian scale.” (City’s Vibrant Streets Manual, p. 26).

The front façade build-to requirement may allow for some flexibility in design.

Additional setbacks may be desirable for a portion of the building frontage to accommodate an outdoor marketing zone, building entrances, and café and restaurant terraces - for a maximum of 25% of the façade width.

Balconies and below-grade parking structures may not protrude into the public realm, but may extend as far as the front property line, or the front setback line.

Where ground floor residential uses are permitted, special setback provisions apply (see Performance Standard 10).

Official Plan Reference

3.1.2 Built Form

Policies: 1 a) and 3 a)

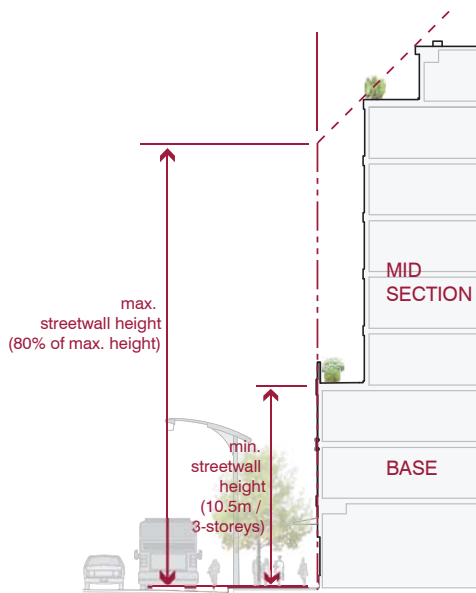
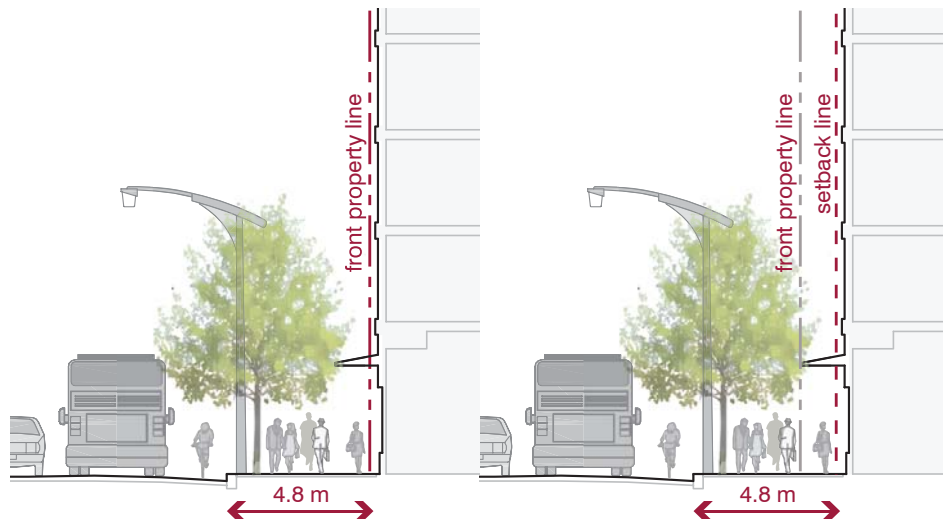


Diagram identifying the street wall



Example of property 'build-to' line.

Example of setback 'build-to' line.

Performance Standard #5A:

Rear Transition to Neighbourhoods: Deep Properties

The transition between a deep Avenue property and areas designated Neighbourhoods, Parks and Open Space Areas, and Natural Areas to the rear should be created through setback & angular plane provisions.

- The transition for deep properties abutting Neighbourhoods and all properties abutting Parks and Open Space Areas, and Natural Areas will include a minimum setback of 7.5 metres to the building face and a 45-degree angular plane from the property line to a maximum height of 1:1. This provides a lower building at the rear and a gradual transition from the rear property line.
- Where a public laneway abuts a site, the laneway may be included for the purposes of establishing the setback and angular plane.
- In order to minimize overlook, principal windows should not be located closer than 10 metres from the rear property line and balconies should not be below 10.5 metres from grade from the rear property line.

Rationale

The City's Official Plan policies are explicit in their intent to protect Toronto's Neighbourhoods, Parks and Open Space Areas, and Natural Areas. Any new guidelines or policies should continue to create an appropriate transition between the Avenues and adjacent residential communities and parks, which the rear transition Performance Standards provide for.

The Performance Standards recognize the variation in physical property dimensions across the City's Avenues. There are shallow properties on some Avenues and deep properties on others. Table 6 (on the opposite page), outlines the definition of deep lots according to maximum height and R.O.W. width for the four prevailing right-of-way widths on the Avenues. These also consider the dimensions required to efficiently provide parking in below grade structures.

The 7.5 metre setback allows for a two-way lane (6.0 metres), and a walkway (1.5 metres) or landscape buffer (1.5 metres). In the instance where a property abuts a public lane, the lane may be included within the 7.5 metre setback calculation. This setback encourages improvement to existing lanes and the creation of a continuous rear lane system where none currently exists. Setbacks in excess of 7.5 metres may be appropriate in areas where a greater landscape buffer is necessary.

In order to respond to the variety of property depths, lots equal to, or less than, the minimum depth (by right-of-way width) will be considered shallow properties, and those with a depth greater than the depth identified will be considered deep properties.

Official Plan Reference

3.1.2 Built Form

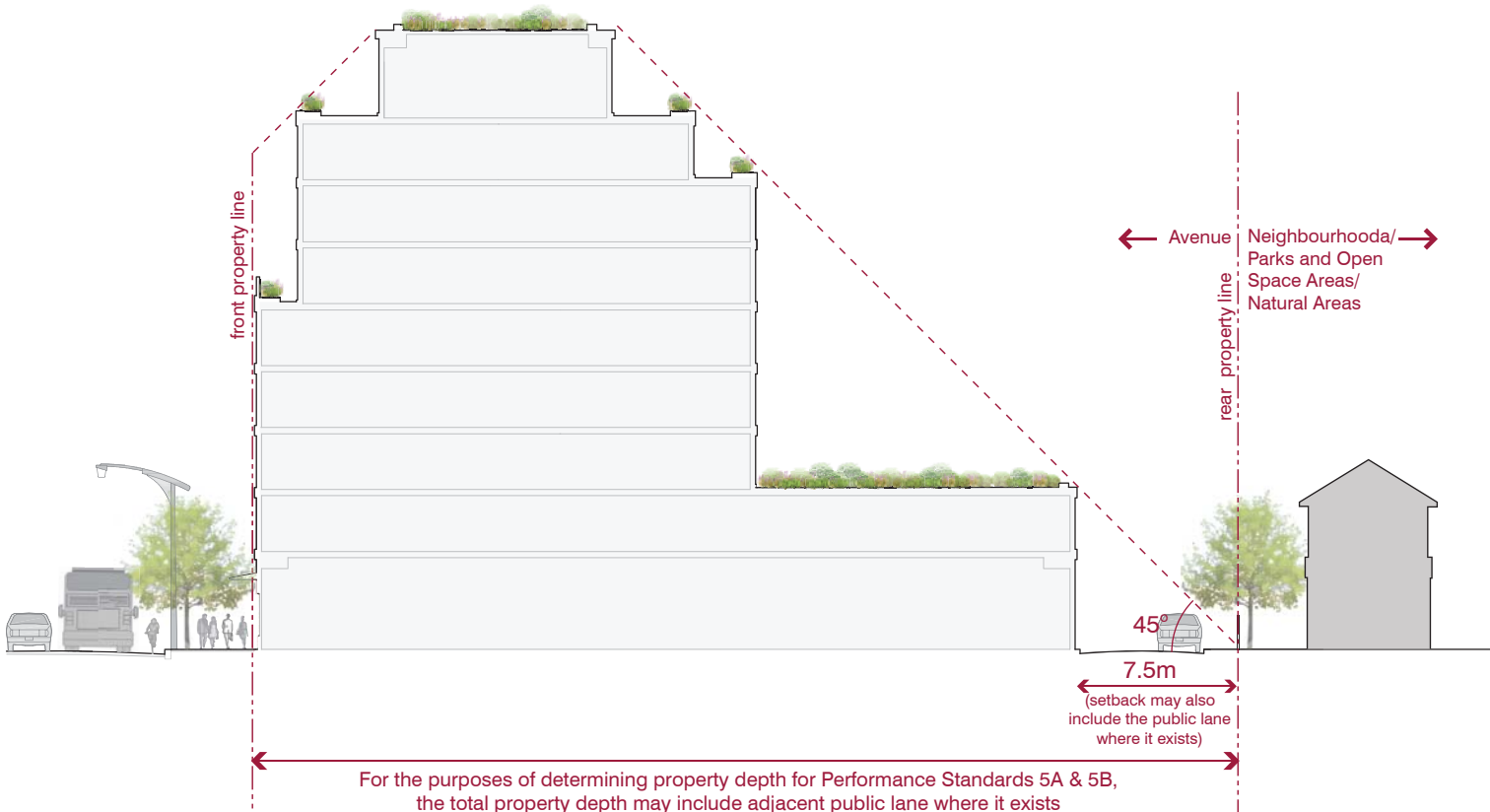
Policies: 3 a), 3 b), 3 c), and 3 d)

4.5 Mixed Use Areas

Policies: 2 c) and 2 d)

Table 6

R.O.W. Width	Definition of Deep Lot is greater than
20m	32.6m
27m	41.0m
30m	44.6m
36m	51.8m



Illustrating the rear transition for deep properties abutting Neighbourhoods, Parks and Open Space Areas and Natural Areas (30 metre R.O.W.).

Performance Standard #5B: Rear Transition to Neighbourhoods: Shallow Properties

The transition between a shallow Avenue property and areas designated Neighbourhoods, Parks and Open Space Areas, and Natural Areas to the rear should be created through alternative setback & angular plane provisions.

- The transition for shallow properties abutting Neighbourhoods and Parks and Open Space Areas, and Natural Areas will include a minimum setback of 7.5 metres from the property line and a 45-degree angular plane from a height of 10.5 metres above the 7.5 metre setback line to a maximum height of 1:1. This provides a lower building at the rear and a gradual transition from the rear property line.
- Where a public laneway abuts a site, the laneway may be included for the purposes of establishing the setback and angular plane.
- In order to minimize overlook, principal windows should not be located closer than 10 metres from the rear property line and balconies should not be below 10.5 metres from grade from the rear property line.

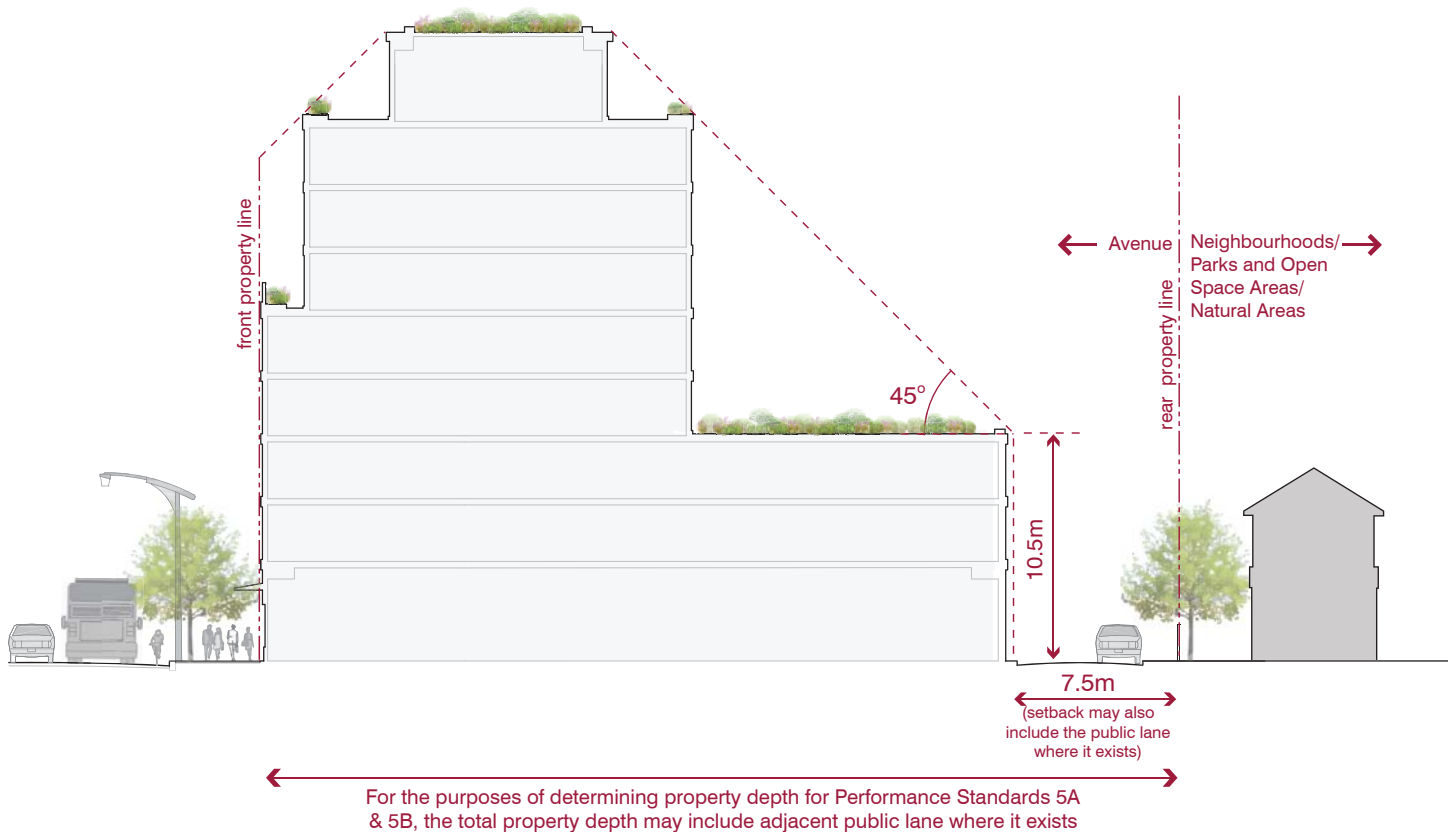
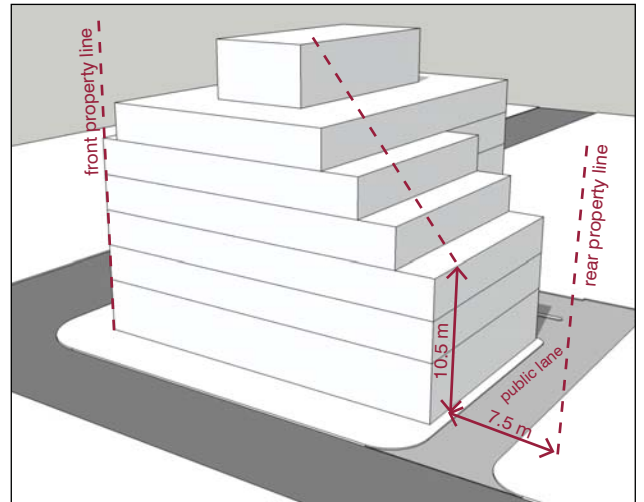
Rationale

This Study proposes that alternative regulations for rear transitions adjacent to areas designated as Neighbourhoods and Parks and Open Spaces Areas, and Natural Areas be adopted for shallow properties on the City's Avenues. This Performance Standard is similar to 5A, but in this instance the angular plane is taken from a height of 10.5 metre at the 7.5 metre setback.

This Performance Standard is proposed for shallow properties because it is slightly more permissive than other existing rear transition regulations across the City. This Performance Standard only applies to properties that are equal to, or less than those indicated on Table 7.

Table 7

R.O.W. Width	Definition of Shallow Lot is equal to or less than
20m	32.6m
27m	41.0m
30m	44.6m
36m	51.8m



Illustrating the alternative transition for shallow properties abutting Neighbourhoods, Parks and Open Space Areas, and Natural Areas (30 metre R.O.W.).

Performance Standard #5B (cont'd): Rear Transition to Neighbourhoods: Shallow Properties

Considerations for Enhancement Zones

An additional provision for shallow lots could include the creation of an “Enhancement Zone” which would allow development on shallow Avenue properties to achieve mid-rise development permissions. “Enhancement Zones” would be identified parcels of land containing a single detached home or two adjacent parcels of land containing two adjacent and attached semi-detached dwellings (see illustration on page 57). The “Enhancement Zone” concept was developed as part of the St. Clair Avenue Study (Bathurst Street to Keele Street) after City staff conducted a comprehensive detailed block-by-block and lot-by-lot analysis of the area. It was implemented through a City-initiated Official Plan Amendment which sets out the parameters for its application. If used, the Enhancement Zones identified for St. Clair Avenue West would be free of any buildings or structures and would act as a buffer between the rear of an Avenue development and the side yard of a residential property.

From a development perspective, the “Enhancement Zone” would help facilitate and provide the opportunity for parcels fronting on the Avenues to reach the maximum allowable heights identified in Performance Standard 1 while meeting rear angular plane and rear setback requirements. The City has undertaken a preliminary property depth analysis on the Avenues that identifies a number of properties on the Avenues that do not have the sufficient lot depth to accommodate the maximum allowable heights determined by the right-of-way width and other requirements such as a 6.0 metre laneway or driveway, sufficient space for servicing, underground parking and other technical considerations. The “Enhancement Zone” is only one solution to developing mid-rise buildings on shallow properties and may not be applicable in all circumstances.

The “Enhancement Zone” was a unique solution that addressed a series of issues limiting development on shallow properties on St. Clair Avenue West. Subsequent consideration of “Enhancement Zones” should only be considered after a comprehensive City-initiated Study has been conducted that addresses the following rationale and characteristics:

Rationale

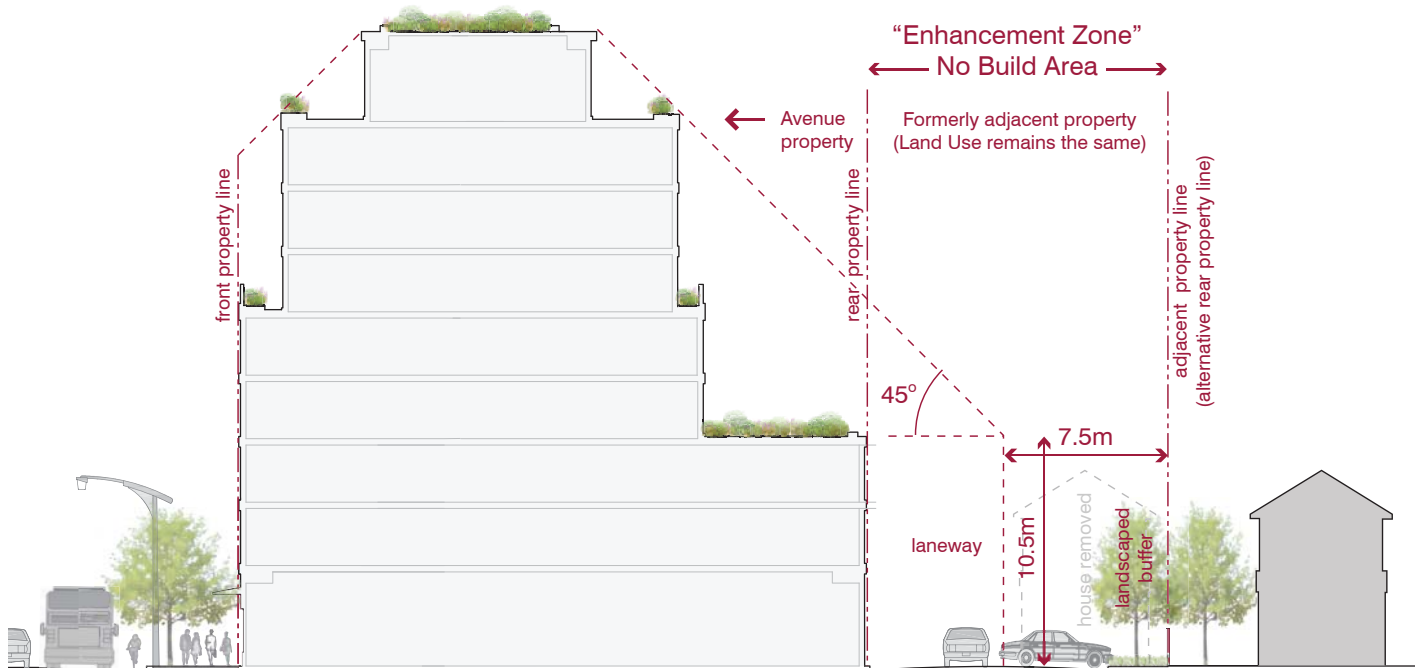
- Without the consideration of “Enhancement Zones” a mid-rise building could not be achieved (i.e. lot depth is generally less than 30 metres).
- The introduction of “Enhancement Zones” will result in a mid-rise building where the Performance Standards can be successfully applied (i.e. widened sidewalks, heights, building setbacks, etc).
- The enhancement zones would create a logical rear lane system, extend or widen an existing laneway, or provide sufficient space for a private driveway to the rear of Avenue properties.

Characteristics

- A maximum of one residential property (or one pair of semi-detached houses) may be considered to provide the depth required to achieve the “Enhancement Zone”.
- The residential building or property to be used as an “Enhancement Zone” must be perpendicular to the Avenue property.
- New buildings must to be set back for sidewalk widening (see Performance Standard 7) or to accommodate Transit City routes.
- An laneway system currently exists and would remain in place (preventing new mid-rise buildings from encroaching into the Neighbourhood).

- The setback and angular planes (from Performance Standard 5B) would be taken from the edge of the “Enhancement Zone” (adjacent property line); but will still be a “no-build” zone (permitting only a lane, parking and landscaping).
- The introduction of “Enhancement Zones” may be applied to the majority of the blocks along the Avenue segment.
- The residential properties within an enhancement zone should be part of a generally uniform lot pattern within the block and would not result in erratic lot configurations.

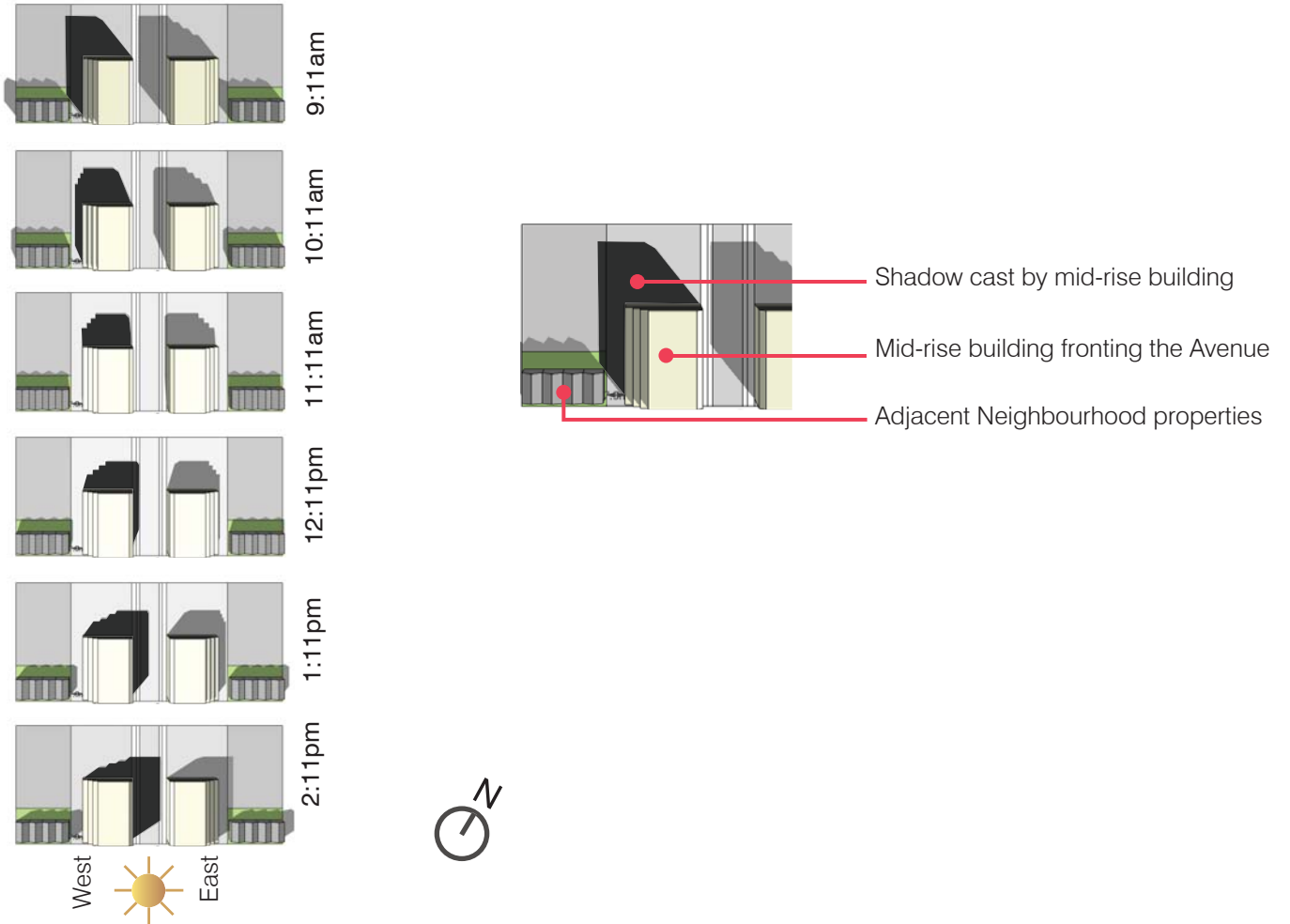
The creation of an “Enhancement Zone” will require an Official Plan Amendment and should only be recommended by the City once a comprehensive City-initiated area-specific study has been completed. An “Enhancement Zone” should only be considered as part of an area-specific solution to the development of shallow lots along an Avenue and not as an individual site-specific solution.



Illustrating the St. Clair Avenue “Enhancement Zone” transition for properties abutting Neighbourhoods or Parks and Open Space Areas (30 metre R.O.W.).

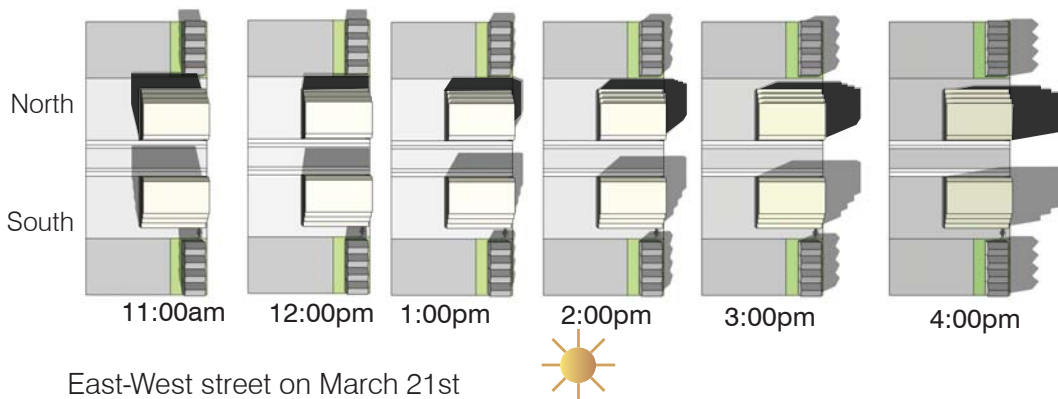
Performance Standards #5A & 5B (cont'd): Shadow Testing

The angular plane provisions in Performance Standards 5A and 5B result in minimal shadow impacts on neighbourhood properties located behind an Avenue's mid-rise building.



North-South street on September 21st

Shadow Testing of Performance Standard 5B (angular plane from 10.5 metres above setback)

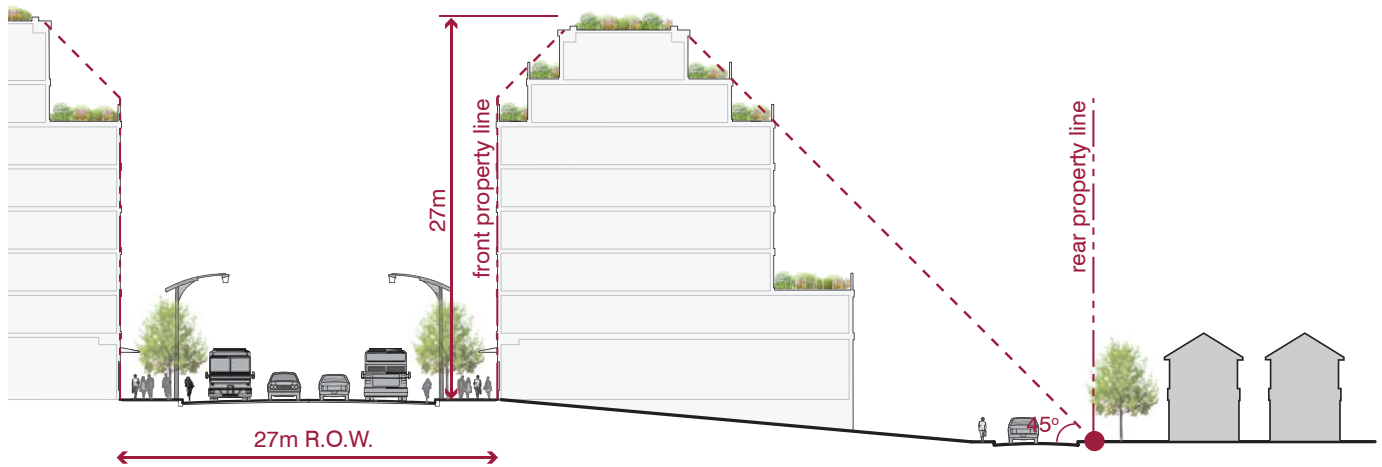


East-West street on March 21st

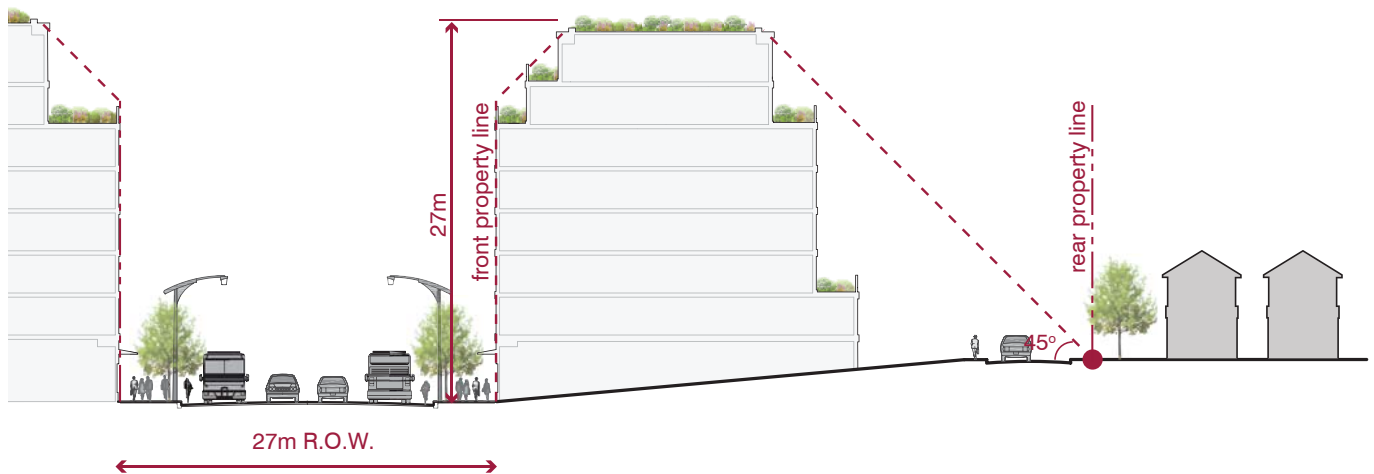
Shadow Testing of Performance Standard 5B (angular plane from 10.5 metres above setback)

Angular Plane Location

In situations where the rear of the property is at a different grade level than the Avenue frontages, the rear angular plane should always be taken from the lowest grade elevation of the adjacent property located along the rear of the mid-rise building's property line. This will ensure that properties to the rear are not subject to additional shadow impacts resulting from changes in grade, or creating potential for taller buildings adjacent to these shared property lines.



Where the rear property line is lower than the Avenue frontage.



Where the rear property line is higher than the Avenue frontage.

Performance Standard #5C: Rear Transition to Employment Areas

The transition between an Avenue property in a Mixed Use Area and areas designated Employment Areas to the rear should be created through setback & step-back provisions.

- **Where a public laneway abuts a site, the laneway may be included for the purposes of establishing step-backs and setbacks.**

Rationale

The setback and angular plane provisions in both Performance Standards 5A and 5B protect abutting Neighbourhoods and Parks and Open Space Areas and provide for privacy, sunlight, sky-views and space for a rear lane.

The need for privacy, sunlight and sky-view are not as stringent for abutting Employment Areas. Typically, there is no usable outdoor space associated with these types of uses, therefore angular planes are not as necessary. The transition and distance for the taller portions of buildings is not required because privacy is not an issue.

This transition includes a minimum setback of 7.5 metres from the property line to the building face to allow for a rear lane. At the setback line, the building height is permitted up to 13.5 metres (or approximately four storeys). All floors above the 13.5 metre height must step back an additional 2.5 metres. This equates to a total setback of 10 metres from the property line above a 13.5 metre height.

In addition to the Performance Standard outlined here, applicants should refer to the Ministry of the Environment *Land Use Compatibility Guidelines*, which provide recommendations to ensure that sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse effects. The guidelines supplement the Environmental Protection Act to meet the requirements of PPS 1.7.1 e. The guidelines outline three classes of industrial facilities, and separation distances will depend on the three potential influence areas established.

This Performance Standard only applies to properties designated for residential/mixed-use permissions that abut Employment Areas at the rear.

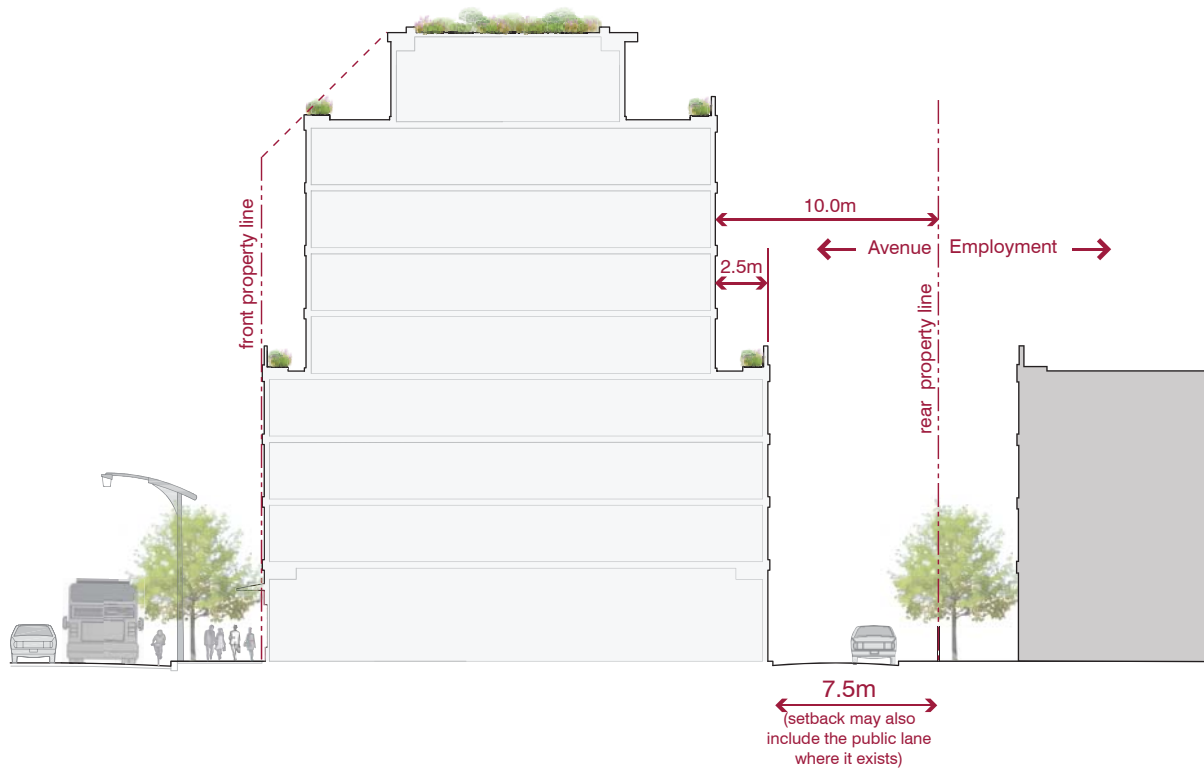
Official Plan Reference

3.1.2 Built Form

Policies: 3 a), 3 b), 3 c), and 3 d)

4.5 Mixed Use Areas

Policies: 2 c)



Illustrating the rear transition for properties abutting Employment Areas (30 metre R.O.W.).

Performance Standard #5D: Rear Transition to Apartment Neighbourhoods

The transition between an Avenue property and areas designated Apartment Neighbourhoods to the rear should be created through separation distances, setbacks and other provisions.

Rationale

There are conditions along the Avenues where an Avenue-fronting property is bounded along the rear by a site or sites with an Apartment Neighbourhood land use designation. There are three general configurations of buildings on these Apartment Neighbourhood sites:

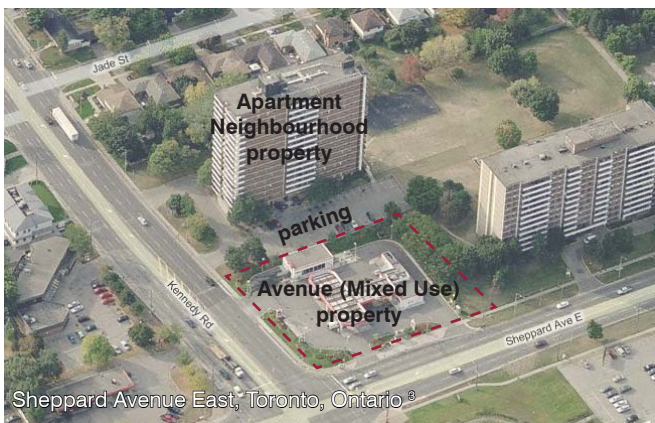
1. Existing Apartment buildings are located parallel to the Avenue's rear property line with a setback that is used as parking or vehicular movement;
2. Existing Apartment buildings are located parallel to the Avenue's rear property line with a setback that is used as open space; or
3. Existing Apartment buildings are perpendicular to the Avenue property with minimal or no windows facing the Avenue property.

In these three configurations, there are three main considerations:

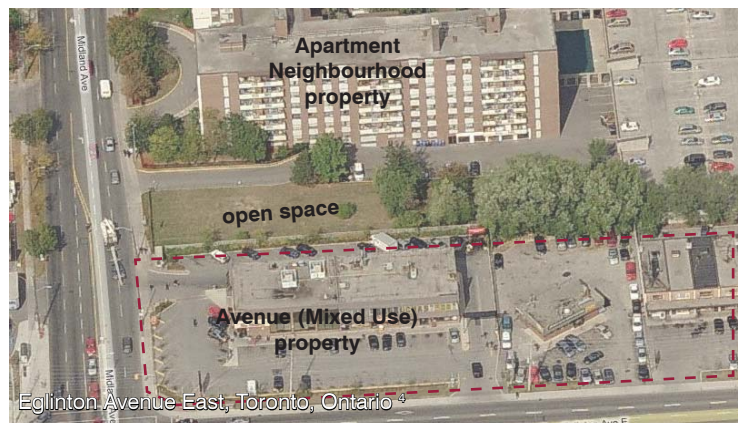
- Providing separation distance between existing apartment buildings and new mid-rise buildings on the Avenue, particularly in configurations where there will be facing windows. The separation distance between buildings should be a minimum of 20 metres;
- Ensuring the rear of new mid-rise buildings on the Avenue are treated with a positive edge, particularly in the Configuration 2. In this instance a high level of landscaping should be applied to the area at the rear of the mid-rise building; and
- Ensuring that the setback is consistent with the other rear transitions (5A - C) to allow for a continuous rear lane system.

In instances where there is an open space associated with an apartment building or grouping of apartment buildings, new mid-rise buildings should follow Performance Standard 5B for the rear transition to ensure appropriate setbacks and mitigation of shadows from new buildings on open spaces.

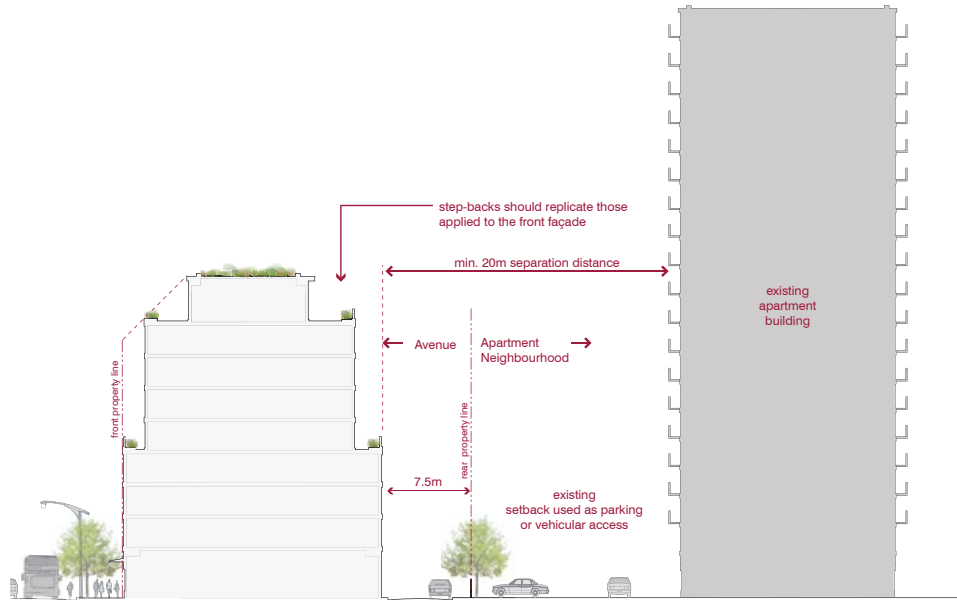
There may be conditions where an Apartment building is located perpendicular to the Avenue's rear property line (Configuration 3), but this configuration is less common. This Performance recommends a 15 metre separation distance for existing apartment buildings up to 20 storeys, and at higher adjacent heights, additional separation is likely necessary. Given the possible variations of glazing on the existing apartment buildings, these should be dealt with on a site-by-site basis.



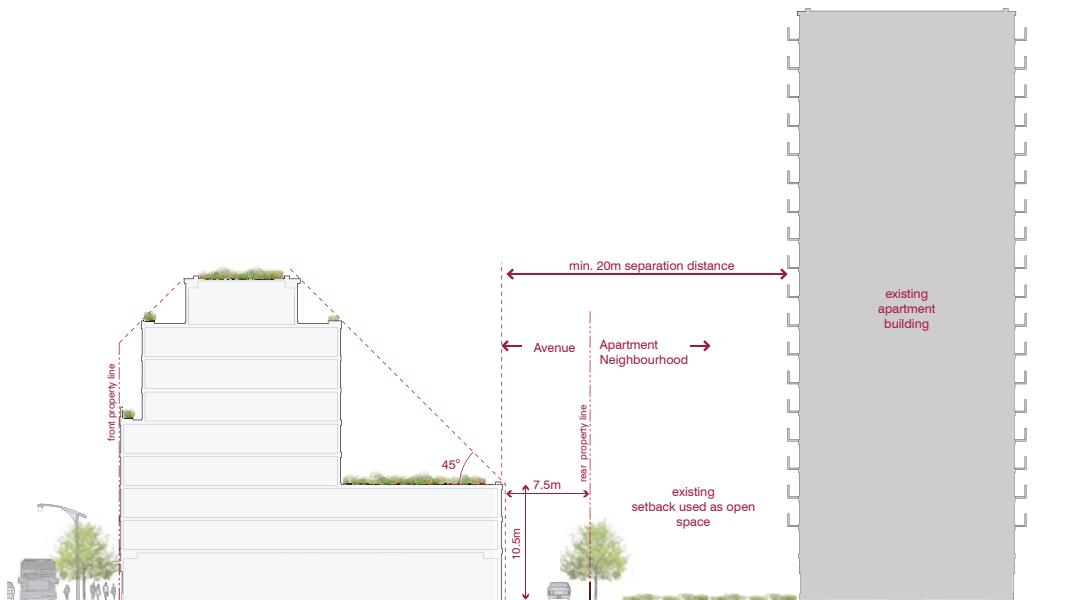
Configuration 1: Where apartment buildings are located parallel to the Avenue's rear property line with a setback that is used as parking or a laneway (example shown at Sheppard Ave. East & Kennedy Rd.).³



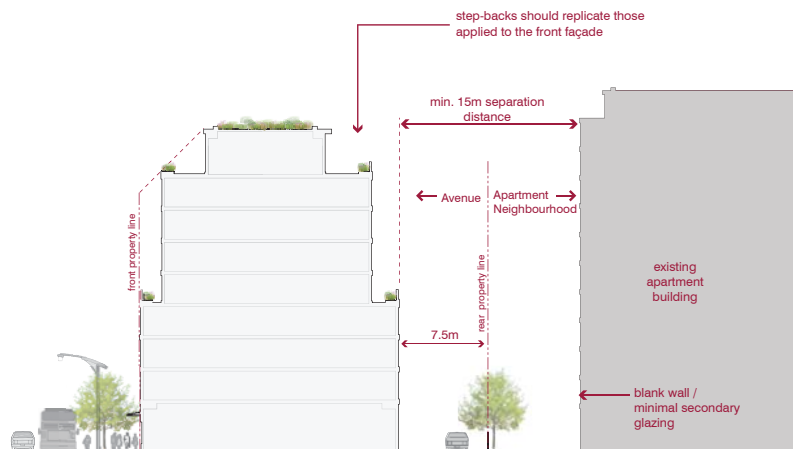
Configuration 2: Where apartment buildings are located parallel to the Avenue's rear property line with a setback that is used as open space (Example shown at Eglinton Ave. East & Midland Ave.).⁴



Configuration 1: Existing Apartment buildings are located parallel to the Avenue's rear property line with a setback that is used as parking or a laneway.



Configuration 2: Existing Apartment buildings are located parallel to the Avenue's rear property line with a setback that is used as open space.



Configuration 3: Existing Apartment buildings are perpendicular to the Avenue property with minimal or no windows facing the Avenue property.