

PLANNING JUSTIFICATION BRIEF

ZONING BY-LAW AMENDMENT

316 King Street North
City of Waterloo

Date:

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Prepared for:

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Our File 1877A

1.0 INTRODUCTION

MHBC Planning and Andrew Bousfield Architects (ABA), on behalf of Milestone Developments Canada Inc. (Milestone) have prepared revised development plans for 316 King Street North in response to staff comments previously provided, as well as our meeting in August 2019 and the Site Plan Pre-consultation meeting held in December 2019.

The following discusses the revised Zoning By-law Amendment application, including the required amendments to By-law 2018-050, provides justification for same, as well as summaries of the supporting studies that accompany this resubmission. This Addendum should be read in conjunction with the previously submitted Planning Justification Report, for a more fulsome review of the planning framework. The focus of the Addendum is on the City's Official Plan and Zoning By-law (2018-050).

City of Waterloo Official Plan

As noted in our previous submissions, the lands are designated "Mixed-Use High Density Residential", which permits apartment buildings, as well as ancillary commercial uses (though they are not required). The maximum permitted height is 81 metres and the maximum permitted density is 750 bedrooms per hectare.

The proposed development includes an addition to the existing 10 storey building. Combined the development includes 123 units and 193 bedrooms on a lot area of 0.2583 hectares, resulting in a density (747 beds/ha) that is less than the permitted maximum. The height of the addition is 14 storeys, less than 50 m, which is well below the maximum permitted in the Official Plan.

The lands are located within a Major Corridor, just north of the Major Node centred on University Ave and King St. Lands on both sides of King St, as well as the lands immediately to the east are all designated High Density, 81 Metres. Intensification and redevelopment within Major Corridors (and within the High Density designation) is both permitted and encouraged.

The application advanced in 2018 proposed two separate buildings – the existing 10 storey apartment building, as well as a second 15 storey mixed-use building. The existing building contains 25 units and 123 bedrooms (the majority of the units have 5-bedrooms). As part of the development of the lands, the owner proposed to convert the existing 25 units in the existing building into 50 two-bedroom units. The second, 15 storey building was proposed to contain 80 two-bedroom units, for a total of 130 units and 260 bedrooms-bedroom. The resulting density exceeded the maximum permitted in the Official Plan (which was measured in bedrooms/ha) and Zoning By-law (which was measured in units/ha).

The revised design has introduced a mix of unit types and sizes, broadening the site's appeal and also reducing the number of bedrooms. The combined building now has 123 units and 193 bedrooms, resulting in a reduction of 67 bedrooms from the original submission. The project now complies with the Official Plan and 2018 Zoning By-law in terms of density.

City of Waterloo Zoning By-law (1108)

The Zoning By-law Amendment application was submitted in 2018, prior to the release of the Third Draft of what would become By-law 2018-050. As such, the application was advanced under the previous Multiple Residence-25 (MR-25) Zone. Since that time, the City approved a new Zoning By-law (2018-050), which is now in force and effect, save for two site specific appeals. In this regard, the applicant has been working with City staff to bring the development closer into compliance with the regulations in the new By-law, even though it was advanced under the regulations of By-law 1108. It should be noted that the MR-25 zone permits apartment buildings, up to 25 storeys/75 metres in height.

City of Waterloo Zoning By-law (2018-050)

The subject lands are zoned "Zone Change (ZC)" in By-law 2018-050, reflecting the active application that was submitted prior to the passing of By-law 2018-050. As noted above, the applicant has been working with staff for the past 18 months on revisions and changes to the plan and design, with the goal of bringing the project closer into compliance with By-law 2018-050. Despite these efforts and the changes, amendments to the By-law are required. However their number and magnitude have been significantly reduced wherever possible, to minimize any impacts on surrounding lands, and to ensure the development is both feasible, and a positive addition to the City. The following outlines the requested amendments to By-law 2018-050, and provides appropriate justification.

Residential Mixed-Use (RMU) Zone

The surrounding lands are all zoned RMU-81, which implements the Mixed-Use High Density Residential designation and which represents a general update to the previous MR-25 zone. Now that the lands are subject to By-law 2018-050, wherein the lands are zoned ZC, a change from the ZC to the RMU-81 zone is required. As the lands are designated Mixed-Use High Density Residential, the RMU-81 zone is the appropriate zone to implement the Official Plan.

The following table provides a summary of the performance standards in the RMU-81 zone (and other applicable General Provisions) and indicates (in bold) where an amendment to the regulation is required:

Table 1 – Summary of RMU-81 Regulations

Regulation	Required	Proposed
Lot Frontage (min)	20 metres	70.35 metres
Street Line Setback (min)	5 metres	4.0 metres
Street Line Setback (max)	75% of the Front Building Façade within 6.0 metres of the Street Line	100 % of the Front Building façade is within 6.0 metres of the Street Line
Side Yard Setback (min)	3.0 metres	3.0 metres (north lot line) 1.0 metres (south lot line)
Rear Yard Setback (min)	5.0 metres	5.0 metres to Building 1.4 metres to Exit Stairs 2.0 metres to Parking Access Ramp 3.0 metres to closest part of parking structure
Building height (max)	81 metres / 25 storeys	48 metres / 14 storeys

Density (min)	150 bedrooms per hectare	747 bedrooms per hectare
Density (max)	750 bedrooms per hectare	747 bedrooms per hectare
Landscape Open Space (min)	30%	25%
Height of First Storey (min)	4.5 metres	4.5 metres (addition)
Podium Height (min)	10.5 metres	20.9 metres
Podium Height (max)	21 metres / 6 storeys	20.9 metres / 6 storeys
Tower Separation (Rear Lot Line)	11 metres	8 metres
Tower Separation (North and South Side Lot Lines)	6 metres on one side, provided the combination of both sides is equal to a minimum of 22 metres	4.8 metres on one side and a combination of 24 metres
Tower Footprint (max)	1,000 square metres	882 square metres
Horizontal Tower Dimension (max)	40 metres	46.15 metres
Tower Step back above Podium (min)	3.0 metres	3.0 metres (addition)
Amenity Area (min)	3 square metres for the first bedroom and 2 square metres for each additional bedroom in the dwelling unit = 505 square metres	505.5 square metres
Parking (Residential Units)	0.9 spaces per unit = 111 spaces	93 spaces (0.756 spaces/unit)
Parking (Visitors)	0.1 spaces per unit = 13 spaces	13 spaces (0.1 spaces/unit)
EV Parking (min)	80% of structured parking spaces	80%, excluding existing structured parking spaces
Loading Space (min)	1 space, 3.0 m x 7.0 m	1 space
Bicycle Parking (min)	0.3 Type A spaces per unit 0.3 Type B spaces per unit Total = 74 spaces	53 Type A spaces 21 Type B spaces Total = 74 spaces
Structured Parking - Minimum Ground Floor Habitable Space	25%	26% (excluding garbage rooms)

Street Line Setback

The RMU-81 zone requires a 5.0 metre setback from the street line (King St N). The existing building is situated 5.0 metres from the King St N lot line, even after a road widening was provided at the time of that site plan application. The proposed addition, to both the north and south sides of the existing building maintains this same setback. The site plan (for pre-consultation) was advanced with a 5.0 metre setback, in compliance with the By-law.

At the meeting, Regional staff advised that a further 0.75-0.80 metre (approximate) road widening would be required. As a result of the additional required widening, the existing building will be approximately 4.2 metres from the King St N lot line. The proposed addition will maintain a consistent façade/street wall, and as a result, will also be 4.2 metres from the new lot line. Although the application and concept site plan were advanced with the intention of complying with the By-law, the Regions' request for an additional road widening has resulted in the need for the amendment. The minor

reduction is due solely to the additional road widening required (beyond the 3 metre road widening previously provided) and given the location of the existing 10-storey building, it is appropriate to retain a consistent building façade facing the street. The building is not getting any closer to the street (rather, the street is getting closer to the existing building), or the existing hydro lines, and as such, there should not be any impact on the streetscape, or related municipal infrastructure. The application requests a 4.0 metre King St street line setback to allow for some flexibility as the final limits of the road widening are determined in consultation with the Region of Waterloo.

Side Yard Setback

The RMU-81 zone requires a 3.0 metre side yard setback, which would apply to the “podium” component of the building, or other structures, but not the “tower”, which is subject to additional regulations that are discussed below. As such, the By-law permits a 6 storey (21 metre) tall building to be located 3.0 metres from either (or both) side lot lines.

The proposed development complies with the setback requirement for the northerly side yard, where the new addition is proposed (containing the apartment units). On the south side of the existing building, a 2-storey parking structure is proposed to more efficiently accommodate parking on site and to minimize the visual impact of parking from the public realm. Due to the location of the existing building and the requirements for minimum parking stall sizes and drive aisle width, the parking structure requires an amendment to the side yard setback.

The structure is two storeys, but the second storey is not enclosed. Rather it contains a parapet that is intended to screen the cars from view of King Street, as well as the neighbouring properties to the south and east. From the ground to the top of the parapet, the parking structure is approximately 5.6 metres tall (approximately the same height as a one and a half storey residential dwelling). The proposed side yard setback along the southerly lot line is 1.0 metres (at its closest point). MTE has prepared an updated Grading Plan which demonstrates that the reduced side yard is sufficient to accommodate site grading and stormwater management – the intent is to maintain the existing drainage pattern along the southerly lot line.

Figure 1 – view of the two storey parking structure



As noted above, the RMU zone would permit up to a 6 storey building at a 3.0 metre setback. The proposed two storey structure is significantly shorter in height and will have no rooms or amenity areas

Landscape Open Space

The RMU-8₁ zone requires a minimum 30% Landscape Open Space, which can be located anywhere on the site (at grade) and can include soft and hard landscaping (walkways, patios). Landscape Open Space cannot contribute towards the required Amenity Area, which is a separate requirement. In this regard, the By-law distinguishes between outdoor Amenity Area and Landscape Open Space. The building contains indoor amenity areas and terraces separate and distinct from the landscape areas.

The original application requested a reduction from 30% to 15%. The revised development includes 25% landscape open space at grade, which is located on the periphery of the site, including the majority of the front yard (except for the driveway entrance). As noted earlier, the Region of Waterloo requires an additional road widening on King Street, which reduced the amount of landscape open space by 2%. Had the additional widening not been required, the landscape open space would have been 27%. Either way, the focus of the landscape open space has been the front of the site, adjacent to King Street, which is the only portion of the site that would be visible from the public realm. The remainder of the perimeter landscaping will be used to soften the edges of the site with appropriate landscape design. However, physical buffering (at grade) from adjacent properties will be achieved through fencing, which will be reviewed and approved by the City through the site plan process. It is also important to note that the existing hydro transformer, which is located in front of the existing building adjacent to the sidewalk, will be removed as part of the redevelopment, improving the aesthetic of the front of the site, and increasing opportunities for additional landscaping.

In summary, the minor reduction in Landscape Open Space will not impact the adjacent lands (which will be appropriately screened with fencing), or the public realm, which continues to contain the majority of the landscape open space.

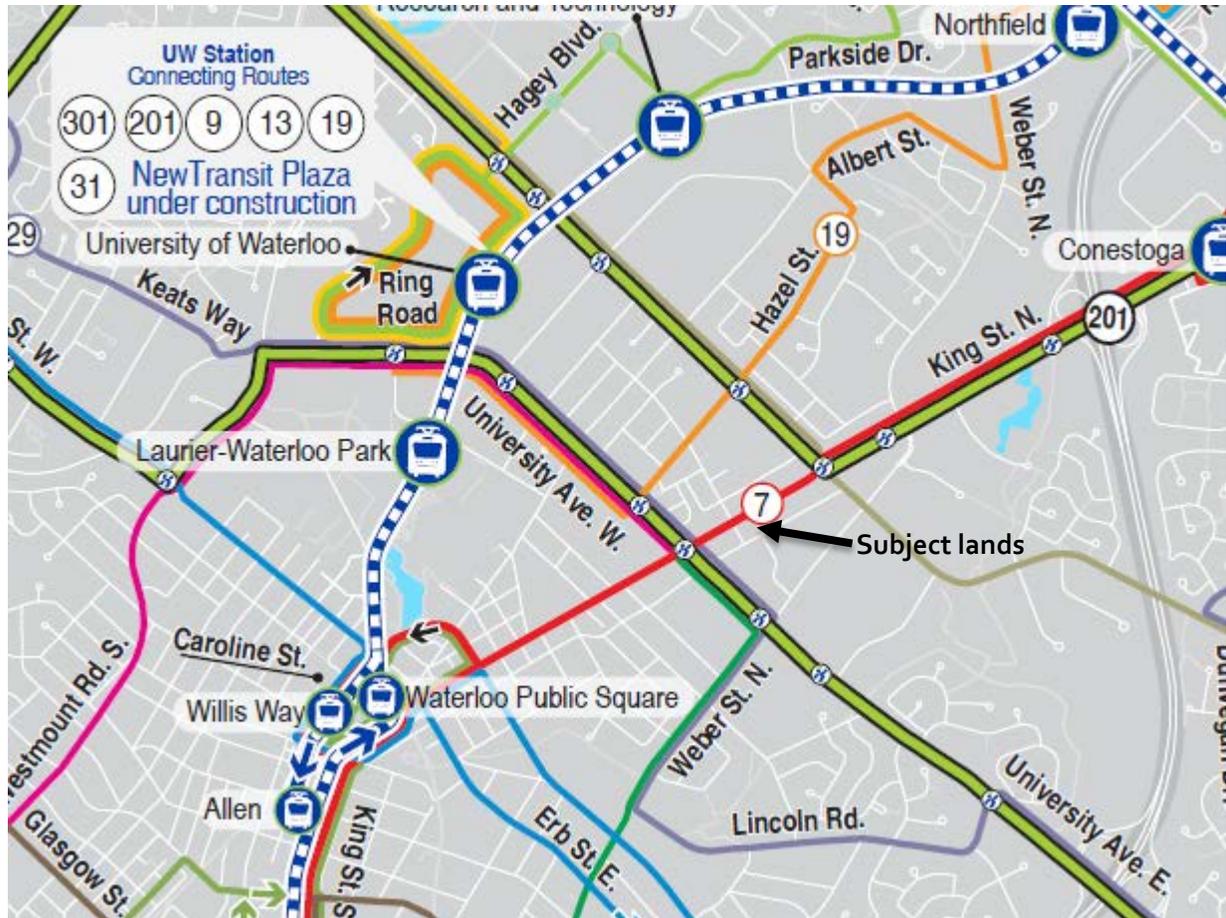
Parking

The previous MR-25 zone required 1 parking space per unit, and did not have a separate requirement for visitors. The new Zoning By-law created a "parking overlay", with distinct Areas that have different parking rates (generally less than the "standard" rate). The RMU-8₁ "standard" requirement is 0.9 parking spaces per residential unit with an additional 0.1 parking spaces per unit devoted to visitors (all fractions of spaces are to be rounded up). The subject lands are located within "Area F" on the parking overlay; however no reduction for lands within Area F applies. Lands less than 60 metres to the east on Regina Street North and less than 100 metres to the south on King Street North are located within Area E, which requires 0.8 spaces per residential unit (the visitor parking rate is the same across the City).

The development has been revised, both to reduce the number of units and to provide additional parking, such that the provided parking rate is 0.75 spaces per residential unit. The proposed visitor parking rate complies with the By-law and no amendment is required. Although we understand the new Zoning By-law evaluated parking rates across the City, in recognition of significant advancements in active transportation and public transit in Waterloo (and the Region), the overall parking rate for the subject lands did not change. Given the minor nature of the reduction (from 0.9 to 0.75 spaces per unit), we are of the opinion that consideration should be given to the site's context. In this regard, the lands are located in close proximity to multiple transit routes, including iXpress routes that connect to the ION LRT system (and other key destinations). Furthermore, the lands are located in a highly pedestrianized environment, influenced by the nearby Universities and Conestoga College. Finally, a significant amount of commercial uses are located in very close proximity, affording the future

residents of the building an opportunity to walk to many destinations. Those that are not within walking distance are accessible via transit on University Avenue, King Street and Columbia Street.

Figure 3 – GRT Transit Routes near Subject Lands



A small percentage of the units will not have access to a parking space, which may be attractive to future purchasers, as the cost of parking spaces for the proposed development will be unbundled from the cost of the unit. Those purchasers who do not acquire a parking space will choose to reside in the building knowing they do not have access to a parking space (the unit also becomes more affordable as a result). No reduction in visitor parking is being requested, ensuring that visitors to the site will be able to utilize parking within the building, rather than on nearby streets. In our opinion, the proposed parking supply is appropriate for the subject lands, in their context, with the available transit and will not detract from the development's appeal to a broad demographic.

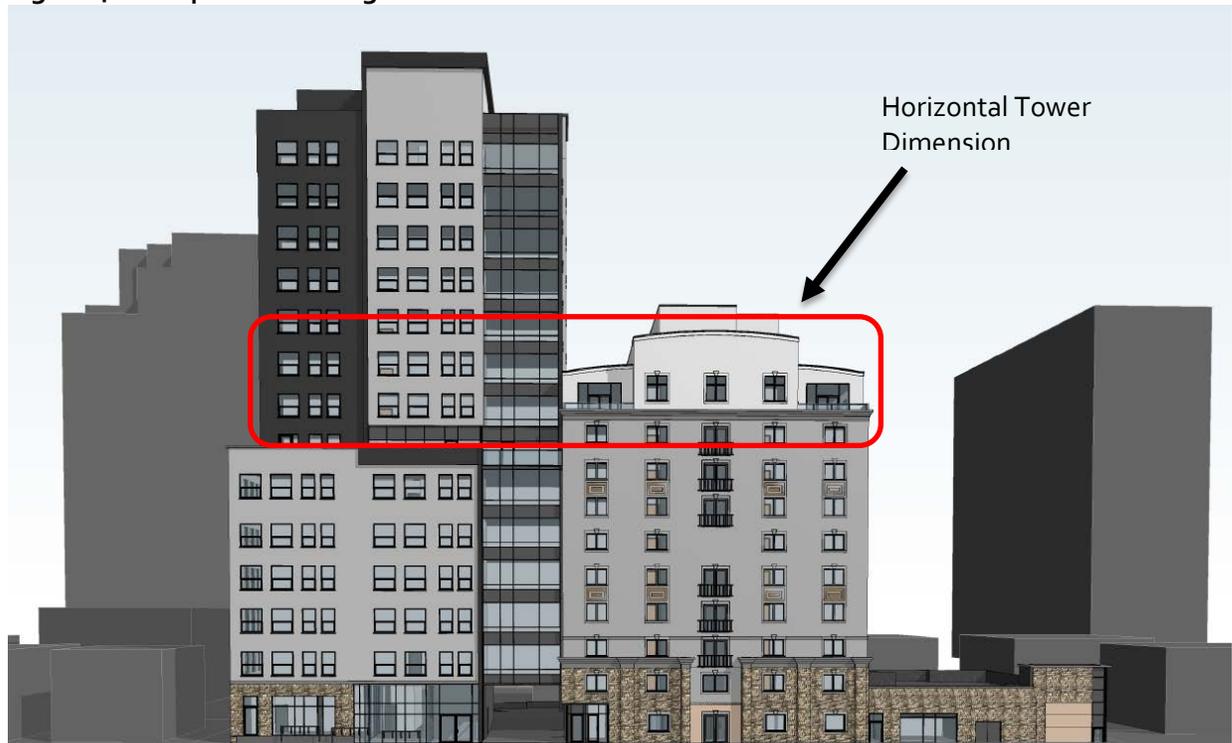
Horizontal Tower Dimension

The RMU-81 zone limits the horizontal dimension of a "tower" to 40 metres, the intent of which is prevent long and tall "slab" buildings from being developed. The tower portion of the building is measured above the podium, which is limited to 6 storeys / 21 metres in height.

The subject lands are unique, in the sense that a 14 storey addition is being proposed adjacent to an existing 10 storey building. As such, the massing is broken up, as the two different "sections" have

different heights. The design further distinguishes between the two components through the use of a prominent vertical glass wall that joins the two buildings, while offering visual relief. As such, the buildings, even when combined, do not appear as a “slab” design.

Figure 4 – Perspective of King Street North Facade



However, the two different sections of the building that exceed 6 storeys/21 metres of height, when combined are 46.15 metres long, which exceeds the By-law maximum. As such, a site specific recognition of the combined horizontal length of the “tower” portion is required. In our opinion, the design of the building, which is both unique, and which breaks up the massing, achieves the objective of reducing the visual appearance of long, tall buildings. The minor increase in maximum horizontal dimension is unique to this project, given the addition of a new 14 storey building to an existing 10 storey building and is appropriate in its context.

Tower Separation

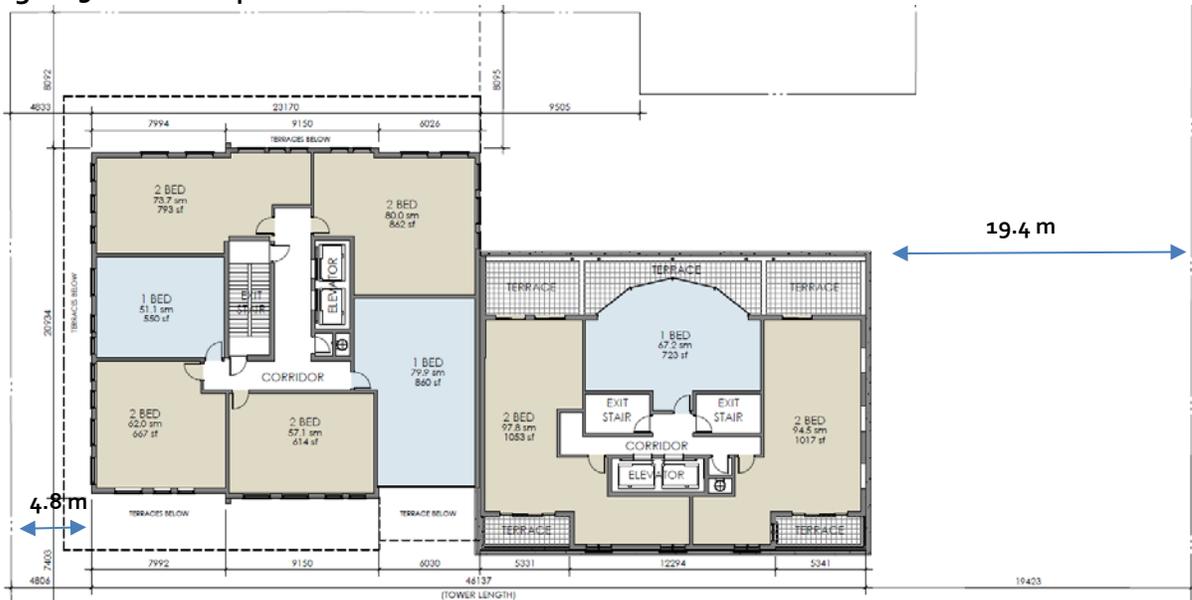
In addition to the horizontal tower dimension regulation, By-law 2018-050 introduced a separate regulation regarding tower separation. More specifically, a minimum separation of 11 metres is required from an “internal lot line”, such as a side or rear lot line. Further to that regulation, for a typical lot (e.g. not a corner lot) Section 3.T.5.2 requires a minimum 6.0 metre separation on one side, provided the separation of the two sides combined is equal to or greater than 22 metres (i.e. for the combined separation from two side lot lines). In the case of the subject lands, both regulations apply.

The internal tower separation regulation applies to the separation of the new addition from the rear (easterly) lot line. The existing 10 storey building is set back between 9.6 and 14.5 metres from the rear lot line, but was constructed prior to the passing of By-law 2018-050. As noted earlier, the rear lot line

is irregular – it is deeper at the south end of the subject lands than it is at the north, where the new addition is proposed. The building has been designed, in response to staff comments, with a “step back” along the rear of the “tower” portion of the building. In this regard, the podium is set back 5.0 metres, consistent with the rear yard setback and the tower is setback an additional 3.0 metres, for a total tower separation of 8.0 metres from the rear lot line. Lands to the rear are currently used for surface parking, in support of the small apartment/multi-unit buildings that exist on the two properties.

The tower portion of the addition is only 23 metres wide and contains two units facing east. As such, overlook and privacy impacts will be minimal. Furthermore, with 8 metres of separation for such a narrow tower component, the redevelopment potential for the lands to the east are not unduly impacted. Finally, the new tower component is only 14 storeys tall, whereas the lands to the east are permitted up to 25 storeys. As such, any component of a tower on those lands that is more than 14 storeys tall would have no separation impacts at all.

Figure 5 – Tower Separation from Side Lot lines



With regard to the separation from the north and south lot lines – the combined separation is 24 metres, which exceeds the By-law requirement. However the separation from the northerly lot line is 4.8 metres, whereas the By-law requires 6.0 metres. The location of the new addition is determined by the location of the existing 10 storey building. In this regard, there are limited lands within which to locate the tower, with sufficient floor area to provide appropriately sized (and designed) units, as well as the functional components of the building (elevators, stairs and corridors). The tower component of the building is only 20.7 metres deep – it is small tower, with a very limited foot print. Furthermore, it is only 14 storeys tall, whereas the By-law permits 25 storeys on the subject lands and the lands to the north. The requested reduction of 1.2 metres will have minimal impact on the lands to the north, and their ability to develop a tower in the future. As noted above, significant separation is provided from the southerly lot line, enabling those lands to redevelop with a lesser setback on their lands, while still maintaining a large tower separation. In our opinion, a minor reduction of 1.2 metres in the setback is appropriate for the unique circumstances of the subject lands, and given the very small width and footprint of the tower (addition) proposed.

Zoning By-law Amendment Summary

Although the Zoning By-law Amendment application was submitted prior to the approval of the new Zoning By-law, significant efforts have been made to bring the development into compliance with the RMU-81 zone and By-law 2018-050. The requested relief amounts to minor reductions in setbacks for the two storey parking structure, a reduced street line setback due to a second road widening requirement from the Region, a minor increase in the horizontal tower dimension which is mitigated through building size and design, and a minor reduction in tower separation for the small tower addition on the north side of the lot. The requested reduction in resident parking is appropriate for the subject lands, given their context and the available transit, while visitor parking will comply with the By-law, minimizing any off-site parking impacts on nearby streets. In our opinion, the development has made significant efforts to reduce the number and magnitude of amendments required and when combined with the proposed changes to the existing building (conversion of 5-bedroom units) will be a significant improvement over the existing situation. The resulting combined building will appeal to a demographic beyond students, will offer a variety of unit sizes (including some three bedroom units), and makes more efficient use of an underutilized property, consistent with the City's objectives for development within a Major Corridor.

Other Supporting Studies

Pedestrian Wind Assessment

SLR Consulting Ltd prepared a Pedestrian Wind Assessment that evaluated the wind conditions around the development, in particular, the conditions within the public realm and building entrances. The Assessment considered the different wind comfort criteria based on the intended use of the area being evaluated. Generally, the highest level of comfort is considered "sitting" followed by "standing" and "leisurely walking." With regard to the proposed development, leisurely walking is desirable for public sidewalks, while standing is preferred for main entrances. These conditions can sometimes be difficult to achieve in the winter, when winds are inherently harsher.

Existing conditions were evaluated and then compared with the post-development conditions to determine the impact, if any, of the development on the wind conditions in and around the development. In the proposed configuration (with the new development included), wind conditions are comfortable for sitting or standing throughout the year on the site. These positive wind conditions are due to the shelter provided by the nearby tall towers on the west side of King Street, which mitigate the prevailing westerly winds. On the west façade of the building, including the main entrances and secondary entrances/exits, wind conditions are comfortable for sitting year-round. Similar wind conditions occur along the north and east sides of the building, where there are additional exits.

On the surrounding sidewalks of King Street North, Regina Street North and Hickory Street East, wind conditions are suitable for leisurely walking or better year round, which is appropriate for the intended use. Finally, the Assessment concludes that wind safety criterion was met in all areas at grade.

As the Wind Assessment demonstrates, there are no negative impacts on the wind conditions on the site, or on the surrounding sidewalks. The post-development wind conditions are appropriate for the intended use and no mitigation measures are required.

Shadow Study

A Shadow Study was previously submitted with the Zoning By-law Amendment application in 2018. As the building design has been modified, staff requested an update to the Study, to reflect the new massing and to assess any impacts resulting from the redesign. The City has established two guidelines for the consideration of Shadow Studies within the Urban Design Manual:

1. As a principle, at least 50% or more of any property should not be shaded for more than two interval times (a 4 hour equivalency); or
2. As a principle, at least 50% of any property should be in full sun for at least two interval times (a 4 hour equivalency).

It is important to note that the above guidelines do not account for the size of impacted lots. A small lot is inherently more likely to be impacted by shadows than a larger lot, which would have more area outside of any shadows. In the case of the subject lands, the majority of the surrounding parcels have not been consolidated and are small both in their width and depth. For this reason, shadow impacts resulting from any intensification of the subject lands (regardless of its height) are likely to impact the small properties.

Consistent with staff direction, the Shadow Study indicates the existing shadows cast by surrounding buildings (including the existing 10-storey building on the subject lands) and identifies the new shadows cast by the proposed 14-storey addition.

March

The proposed 14 storey addition is a slender tower built form, which assists in moving shadows quickly across the landscape. As a result, the shadows move quickly from the west side of King St N (where significant shadows already exist) towards the adjacent lands to the north and finally falling across Regina St to the east, where they overlap existing shadows cast by the taller (and larger) buildings on the west side of King St N. The small lot immediately to the north (324 King St N) is most impacted, however a significant portion of those impacts are due to the tall, long buildings on the west side of King Street and the small size of the lot. The proposed development casts shadows on the front portion of the site in the morning (10 am), the middle portion of the property at 12 pm and the rear portion of the site by 2 pm. By 4 pm, the shadows cast by the proposed development have moved further to the northeast away from 324 King St N and are overlapped by the existing shadows cast by the buildings on the west side of King St N.

June

Shadows are typically shortest in summer. In this case, the shadows impacts on 324 King St N are greatest at 12pm (when the middle portion of the site is in shadow), but in all other time periods, consistent with the guidelines. As the shadows begin to move towards the east, they are negligible compared with the existing shadows cast by the tall buildings on the west side of King St N.

September

Similar to the shadows cast in March, the shadows move quickly across the landscape, which minimizes their impacts on adjacent lands. The lands to the north (324 King St N) are most impacted, but a significant portion of the shadow impact is due to the existing buildings on the west side of King St N. Shadows cast by 316 King St N are in the front portion of the site in the morning, the middle portion of the site at 12 pm and have moved to the rear portion of the site by 2 pm.

December

Shadows are longest in the winter, when the sun is low in the sky. In winter, it is important that the public realm be subject to as much sunlight as possible. In this case, the shadows cast by the proposed development move quickly such that the entirety of the public realm (King St N) is in full sunlight by noon. As with the other times of year, the existing buildings on the west side of King St N and east side of Regina St N cast long shadows.

In conclusion, the design of the building addition is such that the shadows cast are slender and the height of the building compared with surrounding towers results in shorter shadows. The majority of shadow impacts in the immediately surrounding neighbourhood are due to the existing towers on the west side of King St N and the east side of Regina St N.

Grading Plan

MTE has prepared an updated Functional Site Grading Plan, with a particular focus on the south and east area of the site around the proposed parking structure. On the south side of the lot, the parking structure will be partially exposed due to the grade difference on the site from north to south. The enclosed cross-section demonstrates the amount of the building that will be exposed. The height of the structure will remain substantially less than a 6-storey podium, which would be permitted 3 metres from the southerly lot line.

A swale and area drain will be provided in the southeast portion of the site to capture stormwater on site within the landscaped areas and convey the stormwater into the building, and out to the existing storm sewer on King Street. As the majority of the stormwater will be captured on top of the parking structure through drains or within the area drain in the southeast corner the site, the existing drainage pattern along the southerly lot line will be maintained.

Cross Sections

The cross sections of the parking structure demonstrate the grade changes on the site from north to south and east to west. The structure is still only 5.3 metres tall along the south lot line (to the top of the parapet), even when measured from the actual grade (and not the average grade).

Conclusion

The development has undergone significant revisions in response to staff comments and in an effort to bring the new development closer into compliance with the City's new Zoning By-law. The result is a unique development that will significantly improve the existing situation, allow for the more complete development of an underutilized site and result in the conversion of an existing 4/5 bedroom unit building into unit types and sizes that will appeal to a broader demographic. We look forward to working with staff to complete their review and towards a positive staff recommendation at the Formal Public Meeting.

MHBC



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