MHBC | PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE

October 29, 2024

Rita Szilock, Senior Development Planner
City of Waterloo

Dear Ms. Szilock:

RE: Official Plan Amendment (OPA No. 55) and Zoning By-law Amendment (Z-24-07)
Submission#1– Response to Comments
1 Columbia Street West & 351-355 King Street North, Waterloo
OUR FILE 2382A

On behalf of our client, Centurion Property Associated Ltd., and in conjunction with Studio Lumina and other members of the project team, we have reviewed the consolidated comments provided on July 12, 2024. To summarize, the development has been revised as follows:

1. The grading has been adjusted such that the maximum height of the retaining wall is 600 mm, per staff comments. In this regard, setbacks within the Zoning By-law would not apply.
2. As you are aware, a minimum amount of parking is no longer required in the Zoning By-law. In this regard, the parking area under the new proposed building has been revised to add a loading space, remove vehicular parking, and add bicycle parking. Furthermore, the access to the service rooms has been adjusted to increase soft landscaped areas and enlarge the dog run area.
3. The front of the site has been revised to provide a direct access to the commercial use and to address the comment regarding the driveway visibility triangle.

Planning Addendum
As requested by City staff, the following outlines the required amendments to the Official Plan and Zoning By-law. We note that some of the amendments have not changed or have only been modified at staff's request.

Official Plan Amendment
1. Permit a maximum density of 1,191 bedrooms per hectare – no change from previous request.
2. Permit amenity area on the ground floor – no change from previous request.

Zoning By-law Amendment
1. Permit a maximum density of 1,191 bedrooms per hectare – no change from previous request.
2. Rear Yard Setback – 3.25 metres – please see previous justification
3. Minimum building height and minimum podium height (height of café) – no change

4. Minimum driveway width – 5.842 m (recognize existing condition)
5. Minimum tower separation between two towers on the same lot – 9 metres (clarification of previous request)
6. No change to other tower setback or step back requirements for 7 storey building.
7. Minimum driveway width (entrance from King Street) – no change from previous request

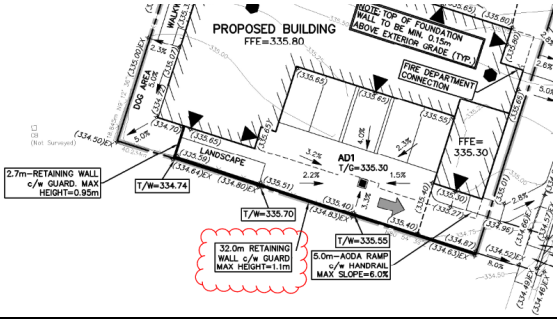
In this regard, the only 'new' request is recognition of the minimum driveway aisle width in the underground parking structure. The columns on either side of the driveway already exist and there is no opportunity to remove them and widen the drive aisle. This aisle provides access between the existing parking in the 1 Columbia building and the proposed parking below the propose 7 storey building. The reduction from 6.1 to 5.8 metres is very minor and the width is sufficient to allow the movement of two vehicles.

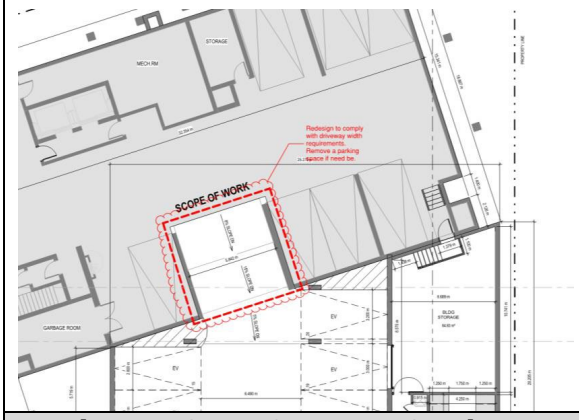
We note that the Planning Act no longer permits minimum parking requirements within a Major Transit Station Area. As such, although the supply of parking has been modified in response to staff site design comments, no justification is required, as technically, the project does not require parking.

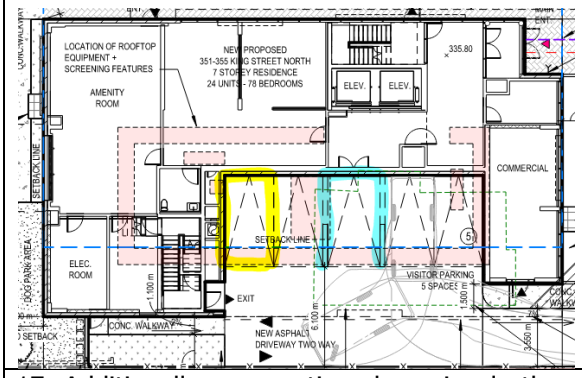
Response Matrix
The following table includes the comments provided by the City and Region, together with a response.

Planning Comments	
Official Plan	
Density	**Response**
1. Staff do not object to the requested residential density of 1,191 bedrooms per hectare (470 bedrooms), whereas the maximum legal non-conforming density permitted on the lands is 1,105 bedrooms per hectare (436 bedrooms). The requested density increase is 34 bedrooms or a 7.8% increase of the total permitted bedrooms. Generally, when an increase in density is requested, it is offset by a community benefit. To this regard, staff support the inclusion of a green roof on top of the proposed 7 storey building. The proposed green roof is a sustainability measure that will help to offset the urban heat island effect in this area and is viewed by staff as a community benefit	Noted
Active Frontage Area	
Amenity Area	**Response**
2. Staff do not object to the request to include indoor amenity area within the ground floor of the existing building, given that the ground floor of the existing building is currently occupied by a large lobby, as shown on the 2013 approved site plan. Staff are of the opinion that the proposed indoor amenity area will provide more activation of the ground floor than the existing legal non-conforming lobby. Staff are also of the opinion that the proposed new café addition will help to activate the King Street frontage of the existing building.	Noted

3. With respect to the inclusion of ground floor Amenity Area within the proposed new 7 storey building. Staff do not object to this request so long as the indoor amenity areas are located to the rear of the building allowing the proposed commercial unit to animate the Active Frontage Area along the King Street frontage.	The indoor amenity areas are located to the rear of the building on the ground floor – please refer to the enclosed plans.
Office Use	**Response**
4. An additional amendment will be required to permit the small office use (13 sq. m.) proposed along the ground floor frontage of the new 7-storey building (Drawing A201, dated 2022.12.20). Policy 11.1.45(20)(a)(ii) directs office uses to be located above the ground floor. In your resubmission please provide appropriate planning rationale to permit the small office space on the ground floor along an Active Frontage Area.	The office use is intended for the operation of the building (both new and existing) – it is not intended to be leased space. It is normal to have building management offices within buildings for rental housing.
Zoning Comments	
Height	
Minimum Building Height for Café Addition	**Response**
5. Upon further review and consideration staff concur with the applicant that the Café addition does not need an amendment from the minimum building height requirement of 10.5 metres as the addition is located along the flankage yard and the By-law requires that building height be measured along the front building façade.	Acknowledged
Minimum Podium Height for Café Addition	**Response**
6. The minimum podium height amendment for the Café addition is still required. However, in this instance staff do not object to the requested reduction in the minimum podium height from 10.5 m to 4.2 m to accommodate the café addition. The café is being added to an existing building containing residential units with windows facing the café addition. In this instance it would not be practical to increase the height of the café addition to comply with the minimum podium height requirements as that would block off residential unit windows in the existing building, making the residential units uninhabitable.	Agreed
Setbacks	
Retaining Walls	**Response**
7. Please note that any new retaining walls that exceed 0.6 metres in height above grade and are attached to the building will be considered to form part of the building and will be required to comply with the setback requirements in the Zoning By-law (s. 3.A.7). In your resubmission either redesign the proposed development to remove retaining walls that are greater than 0.6 metres in height or incorporate a zoning amendment with an appropriate planning rationale to capture the zoning deficiency. For reference, an example of a retaining wall that does not comply with the Zoning By-law is redlined	Site grading has been revised to ensure the retaining wall is 0.6 m in height or less. Please refer to Plans A011, C2.1 and C2.2

on the below excerpt from the Functional Grading Plan, prepared by MTE, dated September 6, 2022.  	
Tower Separation	**Response**
8. Please note that there are inconsistencies within the PJR when referencing the tower separation relief being requested from a tower on the same lot. A 9 metre tower separation is referenced on page 13, while a 10 metres tower separation is referenced on page 44 and the submitted site plan shows a 10.3 metre separation between the two buildings. Please clarify the requested tower separation in your resubmission.	The closest points between the existing tower at 1 Columbia and the proposed 7 storey building is 9.017 metres. However, given the nature of detailed design, some flexibility is requested and therefore a 9 m tower separation requirement is requested. The rationale advanced in the PJR does not change. Please refer to Plan A011
Vehicular Parking	**Response**
9. Please note that the minimum vehicular parking rates are no longer applicable given Bill 185. Staff continue to encourage the applicant to include sufficient parking within the development to meet the needs of the residents. Lastly, please note that the accessible parking requirements outlined in the Zoning By-law are still applicable.	Noted. No change to the supply of barrier free spaces is proposed.
Bicycle Parking	**Response**
10. It is unclear where the 93 outdoor bike parking spaces are located. Staff strongly encourage the applicant to locate the majority of the bike parking spaces inside the building. In your resubmission, please demonstrate where the bike parking spaces are located so staff can verify zoning compliance.	It is acknowledged that the existing building and units pre-date such requirements. The new building and renovated additional units within 1 Columbia require bicycle parking, as does the new commercial use. There are existing outdoor bike parking spaces at the entrance to 1 Columbia from King St and at the entrance to the building from Columbia St. The attached Bicycle Parking Diagram (A014) describes locations and numbers of all existing and proposed parking spaces. Proposed bike parking to include 120 spaces: 75 outdoor spaces 45 indoor spaces

Loading	**Response**
11. There are two Type A loading spaces required (3 m by 7 m) but only 1 Type B loading space (3 m by 12m) has been provided. In your resubmission, consider adding a Type A loading space to the covered, at grade, parking area under the new 7 storey building to ensure compliance with the Zoning By-law and to ensure there is a functional loadings space for the residents of the new 7 storey building.	The Planning Act does not allow for minimum parking requirements within a Major Transit Station Area. A Type A loading space is proposed at grade as recommended in staff comments. Operations of this building will require occasional management-driven loading needs (mainly for new furniture). Use of this loading space will be scheduled by management, and for café use.
Driveway Width	**Response**
12. In your resubmission revise the design of the access ramp leading into the new underground parking area to meet the minimum 6.1 metre driveway width requirements in the Zoning By-law. Consider removing a parking space to accommodate the 6.1 metre wide driveway width. 	This cannot be revised. The walls shown on the Plan are fixed and already in place supporting the building at 1 Columbia. Removing a parking space would not allow for any widening of the driveway as the wall would remain. Site specific relief is proposed to recognize this existing situation and the resulting very minor reduction.
Landscape Open Space vs Outdoor Amenity Area	**Response**
13. Based on staff's review, the total landscape open space area appears to include the outdoor amenity area as well. Please note that these two areas cannot overlap as per the definition of Amenity Area, see below: **AMENITY AREA** means an area designed for active and or passive recreation for the exclusive use and benefit of the residents / tenants in a BUILDING, such as but not limited to: a.) outdoor patios b.) balconies c.) communal indoor recreational spaces (such as gyms) d.) communal indoor social spaces (such as entertainment rooms) e.) SWIMMING POOLS f.) outdoor rooftop amenity space (such as rooftop decks and terraces) (see section 3.A.4.4) Excludes: a.) lobbies, washrooms, laundries, storage areas, and the like b.) circulation spaces, such as hallways, elevators, and the like c.) reception areas, management offices, and the like d.) parking areas and access driveways e.) LANDSCAPED OPEN SPACE, excluding outdoor patios f.) receiving areas, LOADING SPACES, and the like	We understand, from other discussions with City staff, that an outdoor patio is not a 'common outdoor area' and as such, can be included in both calculations for landscape open space and amenity area. We expect the same interpretation and application of the By-law to apply to this project.
14. In your resubmission, to avoid confusion, please either remove the outdoor amenity area reference from the data chart or demonstrate where the outdoor amenity area is located versus the landscape open space on the subject site. Staff note that based on the information provided in the submitted data chart there appears to be sufficient	See above

amenity area provided inside the two buildings to satisfy the By-law requirements.	
15. For further clarity, please see below for the definition of Landscape Open Space (LOS). Staff note that the outdoor bike parking spaces cannot be included within the LOS and if 93 outdoor bike parking spaces are proposed they would take up a considerable amount of space. **LANDSCAPED OPEN SPACE** means a portion of a LOT predominantly used for the growth of trees, shrubs, grasses, and or other vegetation (the "Green Space"). Includes COMMON OUTDOOR AREA and outdoor hardscapes that are ACCESSORY to the Green Space, such as a surface walkway for the Green Space, common patio for the exclusive use of residential uses on the LOT, or common DECK for the exclusive use of residential uses on the LOT. Exclusions include, but are not limited to: a.) BUILDINGS and STRUCTURES (except for a common DECK for the exclusive use of the residential uses on the LOT) b.) parking areas, including parking decks c.) DRIVEWAYS d.) LOADING SPACES e.) BICYCLE PARKING f.) curbs and retaining walls g.) garbage enclosures h.) rooftop AMENITY AREAS, rooftop decks, rooftop terraces constructed after the effective date of this BY-LAW, unless otherwise stated in this BY-LAW i.) stairs and ramps j.) utilities	Noted regarding the bicycle parking. Plans and statistics have been updated accordingly.
Site Design Considerations	**Response**
16. As mentioned in the pre-consultation record, dated August 22, 2023, turning movement out of the last at grade parking space under the new 7 storey building seem problematic and not functional (see yellow highlighted area below). Please redesign to ensure that functional turning movements in and out of all of the proposed parking spaces can be maintained. 	The parking layout has been reconfigured as recommended. Bicycle parking is introduced in areas where turning movements were challenging.
17. Additionally, as mentioned previously there is a conflict between one of the parking spaces and the access door into the building (see blue highlighted area above). The parking layout in this area should be redesigned to avoid the conflict between parking space and pedestrian access.	The parking layout is reconfigured as recommended. The parking space is removed to maintain a functional access point. Note that this entrance is intended only for loading, not for regular building access
18. Given the parking relief granted by Bill 185, it is recommended that the applicant reconfigure the parking layout of the covered at grade parking area by removing a couple of the spaces to allow for functional turning movements and to incorporate a Type A loading space.	The parking layout is reconfigured as recommended. A new Type A loading space is proposed.
19. Please clarify how the 7 storey building will be serviced by hydro? If the existing hydro transformer is proposed to be shared by the two buildings does it have sufficient load capacity to accommodate the 7 storey building? For	A new transformer is to be provided to replace the existing. This new transformer is to serve both the existing and proposed buildings.

further hydro related commentary, see Appendix 4 for Enova Power comments and contact Eddie Richter, eddie.richter@enovapower.com.	
20. A small portion of the southeast corner of the proposed 7 storey building is located within the 3m by 3m driveway visibility triangle. Please note that the 3m by 3m visibility triangle should be free of encroachments.	The plan has been modified to eliminate the obstruction.
Coordination of Studies and Plans	**Response**
21. In your resubmission, please ensure that all submission materials are consistent and coordinated.	Plans have been coordinated.
Shadow Study	**Response**
22. Staff request that the applicant take a second look at the shadow study analysis prepared by Studio Limina and ensure that the statements contained within it accurately capture what is shown on the submitted shadow study. For example, the shadow study analysis incorrectly states that the courtyard is in full sun between 2pm and 6pm on September 21st, which does not appear to be accurate based on staff's review of the submitted shadow study. See below for shadows cast at 2pm on September 21st. 	The shadow study is updated to correct the text.
Urban Design	
Site Plan	**Response**
23. Maneuvering within the proposed surface parking lot south of the new seven storey building appears to be challenging. A hammerhead may be needed, unless a turning movement diagram can demonstrate that users can maneuver with relative ease and avoid having to reverse onto King Street which should not be an option at this location.	The parking area is revised to eliminate awkward turning movements. Entering and exiting will be in a forward direction.
24. Please confirm with Landscape services that the proposed plant materials in the amenity area can thrive in a low sun access environment.	Confirmed that the proposed plant materials are suitable for the shaded site condition.
25. I would suggest changing the proposed softscape within the visibility triangle between the driveway and sidewalk from softscape to hardscape. This small patch of softscape may face a lot of abuse from vehicles and pedestrians.	Noted – this can be considered through the future site plan application.
Built Form	**Response**
26. Urban Design staff agree with the applicant's justification for a reduced minimum tower separation from a tower on	Acknowledged.

the same lot, as the proposed tower is technically only the seventh storey.	
27. Further, Urban Design staff agree with the Applicant's justification for a 0m stepback between the 6th and 7th storey, as it does not align with the general design intentions (non tower podium-built form), and secondly the height to width ratio between the proposed height and the dimensions of King Street are appropriate. As such, the proposed building mass is site appropriate.	Acknowledged.
Development Engineering	**Response**
28. City of Waterloo will require a Hydrant Flow test confirming suitable water distribution. The applicant can also request a Hydraulic Model through the Region of Waterloo to confirm the boundary conditions.	Fire Flow Analysis report is included with the submission.
29. Grading and Drainage from the site is to be designed such that overland flows do not negatively impact adjacent properties. The major overland flow route from this developed property should be directed to the municipal right of way and not to the adjacent property. a. Confirm grassed swale within 1 Columbia Street West, south of the existing building remains in good working condition and is suitable to convey overland flow of proposed grading plan.	There is currently no defined grassed swale south of the existing building. The landscape strip is relatively flat from north to south with a large drop in grade occurring on the neighbouring property to the south. We don't expect significant runoff flowing south under existing conditions. Regrading within the grassed area will be proposed during detail design/SPA in order to convey the minor runoff generated here to the Spruce Street right-of-way. Overland flow generated within the hardscape area west of the existing building is directed west onto Spruce Street
Landscape Architecture	**Response**
30. Please note that all current Site Plan, Subdivision and Capital Project applications and development processes have been compiled into the recently implemented City of Waterloo Comprehensive Engineering and Landscape Manual (CELM). Please visit the CELM (https://www.waterloo.ca/en/government/development-engineering-manual.aspx) for all standard guidance, standards and requirements. All forthcoming submissions shall meet the requirements/follow the processes set out in the CELM.	Noted
31. Please note that all existing shared boundary trees and trees on adjacent properties proposed to be removed shall have documented approval in the form of a Letter of Consent at the detailed design stage	Noted.
32. The City recommends replacement rate of trees to be removed is at a ratio of 2:1. The applicant is encouraged to maximize tree planting wherever possible on site and within the King Street right-of-way.	Total existing tree removal quantities are 19, which mostly are privately owned trees with 2 shared trees with the neighbours. The project team did their best to provide as many new trees as possible, resulting in 18 new trees. Due to the limited space and the future road widening, the project cannot achieve the targeted 2:1 compensation ratio.

33. A reduced rear yard setback typically impacts site landscaping. When a 7.5m rear yard setback is provided as required, there is generally adequate space to include a landscape strip with columnar trees. With the proposed setback reduced from 7.5m to 3.0m, there will not be space for trees along this boundary. Because of the configuration of the lot and the enhanced landscaping provided in the central courtyard area, this setback reduction seems appropriate in this specific case from a landscape architecture perspective. Please note that details regarding the proposed fence and retaining wall will need to be figured out during the site plan process.	Acknowledged.
34. The Urban Design Guidelines discuss the change in paving and addition of planting as helping to differentiate between public and private space, however, café users will have to enter the café over a change in pavement. As part of the Site Plan submission please clarify what portion of the courtyard is associated with the café and what portion of the courtyard is associated with the common outdoor area.	Noted – to be considered through future site plan submission.
35. Although final detail of the courtyard area will be advanced through the Site Plan Approval Landscape Plans, a structural engineer should be involved with site plan development to ensure the underground parking is designed to provide structural support for adequate soil volumes for long term tree growth. Large canopy trees and other landscaping such as shrubs, perennials, etc., are expected and will greatly enhance this space	Noted.
36. Staff appreciate the inclusion of a green roof on the seven storey building. Please note that additional information may be requested during the Site Plan process	Noted.
37. Further details will be required during the Site Plan Application process for review and acceptance from Development Engineering landscape staff.	Acknowledged.
Region of Waterloo Comments	
Provincial Policy	**Response**
The site is within the Region of Waterloo's 'Delineated Built Up Area'. It is also within a 'Major Transit Station Area', with access to transit, active transportation routes and public service facilities.	Agreed.
Increasing the density of the site is conforms with the Growth Plan and is consistent with the 2020 PPS.	Agreed.
Regional Official Plan	**Response**
The 'Delineated Built-Up Area' designation permits a full range of urban uses, including high density residential developments. The Region supports intensification and redevelopment in 'Delineated Built-Up Areas' provided the proposed development satisfies the general and any applicable specific ROP policies and Regional guidelines.	Agreed.
Policy 2.F of ROPA 6 establishes a minimum annual intensification target of 83% in the Built-Up Area of the City	Agreed.

of Waterloo (Table 3). The proposed development will contribute to the achievement of this target.	
ROPA 6 Section 2.A.4 d) provides direction for an urban form that will optimize infrastructure, particularly along the ION light rail transit and other transportation corridors, to support the achievement of 15-minute neighbourhoods through a more compact built form … The proposed development is well served by a range of land uses, active transportation and transit	Agreed.
ROPA 6 Policy 3.A.2 states: *Area municipalities, in collaboration with the Region, will plan to provide a diverse range and mix of housing options with an overall target of a minimum of 30 percent of new ownership and rental housing being affordable to low and moderate income households. The range and mix of housing options provided will vary in terms of form, tenure, density and number of bedrooms to accommodate the needs of all sizes, incomes, and ages of households.* ROPA 6 Policy 3.A.17 states: *Development applications proposing residential uses will be required to indicate if and how they are contributing to meeting the affordable housing target set out in Policy 3.A. 2, and include an assessment of mix and range of types, bedroom mix, unit sizes, tenures and accessibility requirements.* The proposed development includes bachelor, one bedroom, two bedroom, three bedroom and four bedroom units.	Noted.
Environmental Noise Assessment	**Response**
The Environmental Noise Assessment, 1 Columbia Street West, Waterloo, Ontario (November 18, 2022) prepared by SLR Consulting (Canada) Ltd is currently being peer reviewed by the Region's third-party peer review consultant. Peer review comments will be forwarded when available.	Please see separate correspondence in response to Peer Reviewer comments.
Servicing Comments	**Response**
Regional staff have reviewed the Functional Servicing & Stormwater Management Report (December 5, 2023) by MTE Consultants Inc. The applicant has not adequately demonstrated their proposed development can be supported by the existing infrastructure. Therefore, the applicant is required to submit a model request to the Region or perform a hydrant flow test to confirm the boundary conditions	Fire Flow Analysis report is included with the submission
The proposed servicing is an extension to service from 1 Columbia Street West: no connection to King Street North is proposed. The applicant should be made aware that no	Noted.

connection to the 400mm regional watermain on King Street North will be permitted in accordance with Section B.2.1.4.1 of the Design Guidelines and Supplemental Specifications for Municipal Services for February 2024.	
Regional Site Plan Requirements (Advisory)	**Response**
The applicant is advised of the following requirement for a future Site Plan application: • Salt Management Plan; • Approval of the road widening; • Regional access permit; • Stormwater management report and lot, grading and drainage plan. •	Noted.
Salt Management Plan	**Response**
The Region requires that the applicant complete a Salt Management Plan prior to site plan approval.	Noted.
Regional Road Dedication	**Response**
Regional staff have received the registered reference plan and will work with the applicant to complete the road widening along King Street North.	Acknowledged.
Access Permit/TIS/Access Regulation	**Response**
Regional staff have received the access permit application. The Regional access permit will be issued with the Site Plan clearance.	Noted.
Peer Review Comments for Environmental Noise Assessment	
Assessment Approach	**Response**
2. Development drawings included with the submission package differ in comparison to the appendix drawings in the Noise Study. Although changes appear to be minor, a review is required to confirm the Noise Study/assessment is not affected.	Please see separate correspondence in response to Peer Reviewer comments.
Surface Transportation Noise	**Response**
8. A review was completed of the roadway noise modelling. The following is noted: a. Modelling was completed using line sources in Cadna/A with emission rates calculated with ORNAMENT algorithms. The approach is considered acceptable, as a STAMSON v5.04 validation file was provided in the Noise Study. b. On review of the results in **Table 6** and **Figure 2** of the Noise Study, the east façade worst-case sound levels are shown to be 65 dBA. However the Noise Study **Appendix D** validation file indicates 66 dBA (65.9 dBA) on the east façade sound level. A review/revision of the Cadna/A implementation of ORNAMENT is required. Should the impacts exceed 65 dBA during the daytime, the results and	Please see separate correspondence in response to Peer Reviewer comments.

conclusions are to be revised regarding façade construction and warning clause/ventilation recommendations. c. King Street North, south of Columbia Street, slopes downward and is expected to have a gradient high than 2%. On review of the ORNAMNET Sound Power Calculation sheet and **Appendix D** validation file, a gradient adjustment was not considered. A review of the roadway gradient is required to be completed for King Street North, and included, if applicable.	
10. A discussion of OLA sound levels was included in **Section 2.4.2** of the Noise Study. The following is noted: a. The at-grade area is publicly accessible and excluded from the assessment, which is considered acceptable. b. The private terraces were excluded as the depth is less than 4m, which is considered appropriate. On review of the submission package drawings, private terraces do not appear to be included. Although changes to the development drawings appear to be minor, a review should be completed of current drawings to confirm the results and conclusions of the Noise Study do not change.	Please see separate correspondence in response to Peer Reviewer comments.
Surrounding Stationary Noise	**Response**
14. The identification of significant stationary noise sources was reviewed. The following is noted: a. A site visit was completed on October 22, 2022 to identify significant stationary noise sources within the surrounding area, which is considered appropriate. b. Sources of Interest include: i. 354 King Street North commercial building rooftop equipment consisting of HVAC units, which is considered appropriate. ii. Other Institutional/Commercial Lands surrounding the development were considered to be insignificant based on sire visit observations. This sis considered acceptable, with exception of McDonalds restaurant. As indicated in the City of Waterloo Zoning By-law, drive thrus within 100m of a noise sensitive building are of interest. Therefore, an assessment of McDonalds drive thru and rooftop equipment is necessary. In particular, the night-time period historically includes high levels of activity within the drive-thru for a McDonalds restaurant. iii. Industrial facilities are included in the discussion of the Institutional/Commercial buildings, where an assessment was not considered necessary due to closer intervening noise sensitive buildings. This is considered acceptable.	Please see separate correspondence in response to Peer Reviewer comments.

iv. The adjacent King's Court (345 King St N) appears to have PTAC units long the north façade facing the proposed development. As the proposed development is expected to have noise sensitive units closer to the King's Court building than the existing house with marginally lower ambient noise, an assessment of PTAC units from this development is necessary to confirm stationary noise is not a concern.	
Development Stationary Source Noise	**Response**
20. An assessment of stationary noise on the surroundings and itself was not completed for the development mechanical systems, as insufficient information was available at the time of the Noise Study. However, based on the submission development drawing **A205 – Level MPH& Roof**, sufficient mechanical system information is anticipated to be available. In addition, mandatory AC may be applicable for the development (refer *Comments 8.b and 8.c* above). Providing PTAC units are used for cooling, an assessment of mechanical system noise should be completed at this stage to confirm the guideline limits can be met. The Region has experience with the assessment of mechanical noise being left late in the planning process, leading to design challenges. Hence, it is recommended that an appropriate hold or condition be placed on the development until the mechanical design can be verified.	Please see separate correspondence in response to Peer Reviewer comments.
21. An assessment/discussion of the existing 1 Columbia Street building mechanical equipment is required to confirm stationary noise is not a concern for the new building. On review of available aerial photography, sources are expected to include an internal cooling tower and a rooftop emergency generator at a minimum.	Please see separate correspondence in response to Peer Reviewer comments.
Conclusions	**Response**
22. The Conclusions and Recommendations section summarizes the mitigation requirements in the Noise Study. As the results of the transportation and surrounding stationary noise study may be revised, comments could not be provided at this time.	Please see separate correspondence in response to Peer Reviewer comments.
Summary	**Response**
The environmental noise study provided for 1 Columbia Street West & 351 and 355 King Street North development in Waterloo presents an assessment for road traffic and stationary noise sources. The Region of Waterloo seeks assurance that the sound levels and impacts are accurate and complete. Comments provided in tis review have the potential to change the outcomes and conclusions of the Noise Study.	Please see separate correspondence in response to Peer Reviewer comments.

Revised analysis, additional information, clarification and supporting justification is required.	

Key items with the potential to affect the results and conclusions of the Noise Study include the following:
• A comparison of the development submission drawings with the drawings applied in the assessment is required to confirm the noise study assessment is not affected.
• Regarding the transportation noise assessment, the following is noted:
  ○ A review/revision of the Cadna/A implementation of ORNAMENT is required, as the appendix's validated STAMSON and Cadna/A results are predicted to be higher than the results included in the body of the report
  ○ A review of the roadway gradient is required to be completed for King Street North, and included, if applicable.
  ○ As modelled noise impacts have the potential to exceed 65 dBA during the daytime following the above roadway modeling review (ie. Validation confirmation and gradient), the inclusion of a building component assessment and revied ventilation/warming clauses may be required.
• Regarding the surrounding stationary noise assessment, the following is noted:
  ○ The potential impacts from the McDonalds drive-thru and restaurant are required.
  ○ An assessment of mechanical equipment noise from the adjacent King's Court (345 King St. N) building is required)
• An assessment of development mechanical equipment should be completed, particularly if PTAC units have the potential to be used.
• An assessment/discussion of the existing 1 Columbia Street building mechanical equipment is required to confirm stationary noise is not concern for the new building.
	Please see separate correspondence in response to Peer Reviewer comments.

Without addressing these items, it is not possible to provide assurance that the values, results, and conclusions are reasonable. A letter addendum may be considered sufficient regarding the above, providing the results and conclusions are unchanged. Otherwise, a revised Noise Study is considered necessary.	Please see separate correspondence in response to Peer Reviewer comments.

Waterloo Catholic District School Board	
Comments/Conditions	**Response**
A. That any Education Development Charges shall be collected prior to the issuance of building permit(s).	Noted.
Enova Power Comments	**Response**
From the drawings I have it looks like the plan is to feed the additional building from inside 1 Columbia. Please provide load calcs as early possible to see if Enova's transformer can handle the additional proposed load.	Noted – to be coordinated through future site plan approval process.
If the additional load cannot be met with the existing transformer, either a replacement or a new transformer will need to be supplied.	Noted. A replacement transformer is contemplated.
Canada Post Comments	**Response**
Project adheres to the multi-unit policy and will be serviced by developer/owner installed Lock Box Assembly. *Multi-unit buildings and complexes (residential and commercial) with a common lobby, common indoor or sheltered space, require a centralized lock bock assembly which is to be provided by, installed by and maintained by the developer/owner at the owner's expense. Buildings with 100 units or more MUST have a rear loading Lock Box Assembly with dedicated secure mail room.*	Noted.

Please find enclosed with this Resubmission:

1. One (1) copy of a Resubmission Letter/Response Matrix addressing all comments received and a list of any new amendments being requested.
2. One (1) copy of the revised Site Plan with revised Data Chart
3. One (1) copy of the revised Architectural Plans, including floor plans, underground parking plans, elevations and cross-sections.
4. One (1) copy of revised Shadow Study analysis
5. One (1) copy of revised Functional Servicing and SWM Report
   a. Applicant to demonstrated to the Region's satisfaction that the existing servicing infrastructure can support the proposed development
   b. Applicant to address the City's Development Engineering comments
6. One (1) copy of revised Noise Study or Letter Addendum to Noise Study
   a. To address the Noise Study peer review comments.
7. One (1) digital copy of the above listed resubmission items. Please ensure the digital copies meet AODA standards.