P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 9.1.2
Design Review Committee
November 14, 2019

TO: Chair and Members of Design Review Committee

SUBMITTED BY: -Original Signed-
Kelly Denty, Director, Planning and Development

DATE: October 28, 2019

SUBJECT: **Case 22444: Substantive Site Plan Approval – 1591 Granville Street and 1568 Hollis Street, Halifax**

ORIGIN

Application by Upland Planning and Design on behalf of United Gulf Developments Limited.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter (HRM Charter), Part VIII, Planning & Development.

RECOMMENDATION

It is recommended that the Design Review Committee:

1. Refuse the qualitative elements of the substantive site plan approval application for a 21-storey mixed-use development at 1591 Granville Street and 1568 Hollis Street, Halifax as shown in Attachment A, as the proposal does not comply with Sections 3.2.1, 3.2.2, 3.2.5, 3.3.1, 3.3.4, 3.4.1, and 3.4.2 of the Design Manual, as noted in Attachment E; and

2. Refuse the requested variances to the Land Use By-law requirements regarding streetwall width, upper storey streetwall stepbacks, and maximum tower width and separation, as contained in Attachment C, as the proposal does not comply with Sections 3.6.4, 3.6.5, and 3.6.7 of the Design Manual, as noted in Attachment E.

BACKGROUND

An application has been received from Upland Planning and Design, on behalf of property owner United Gulf Developments Limited, for substantive site plan approval to enable a 21-storey mixed-use development at 1591 Granville Street and 1568 Hollis Street, to be known as "Skye Halifax" (Map 1). The property is in the Downtown Halifax plan area and is zoned DH-1. Additionally, the property is within Precinct 4 – Lower Central Downtown.

This report addresses relevant regulations held within both the Land Use By-law and Design Manual in order to assist the Design Review Committee with their decision.

Subject Site	1591 Granville Street and 1568 Hollis Street, Halifax
Location	Site bounded by Granville, Sackville and Hollis Streets, and the abutting HRM-owned MetroPark garage to the south
Zoning (Map 1)	DH-1 (Downtown Halifax) Zone
Lot Size	3,657 square metres (39,363 square feet)
Site Conditions	Significant grade changes surrounding site and frontage on 3 streets
Current Land Use(s)	Existing office building (vacant), parking lot, vacant space
Surrounding Land Use(s)	Surrounded by a mix of uses including: • The Maple, a mixed-use development to the east; • Centennial office building to the north; • Mountain Equipment Coop and buildings under construction to the west; and • MetroPark facility to the south.

Project Description

The proposed 21-storey mixed-use development is summarized as follows (Attachments A, B, C and D):

- Mix of uses including hotel, ground-floor retail, residential units, and underground parking;
- Four levels of underground parking, to be accessed off Hollis Street, including approximately 294 vehicle spaces and 223 bicycle spaces;
- Two ground-floor levels, one each facing Hollis and Granville streets, which include hotel lobby, restaurant and amenity space, residential lobby and amenity space, and retail spaces;
- Approximately 129 hotel units within the remainder of the building base (levels 3 to 5);
- Approximately 416 residential units within the two tower portions of the building;
- Landscaped rooftop terraces and amenity space located at the 3rd, 6th, and 22nd levels;
- Exterior building materials to include aluminum curtain and window walls with clear glass, fritted glass balcony rails, and stone cladding, aluminum screening and vertical aluminum fins in the base portions of the building; and
- Overall building height of 66 metres, plus penthouses (for residential amenities and mechanical), as per LUB allowances.

Information about the approach to the design of the building has been provided by the applicant and can be found in Attachment B. The proposed building floor plans, renderings and building cross sections can be found in Attachment D.

Regulatory Context

With regard to the Downtown Halifax Secondary Municipal Planning Strategy (DHSMPS) and the Downtown Halifax Land Use Bylaw (LUB), the following are relevant to note from a regulatory context:

- Zone: DH-1 (Downtown Halifax)
- Precinct: Lower Central Downtown (Precinct 4)
- Central Blocks: The site is located within the Central Blocks
- Maximum Building Height: The maximum permitted pre-bonus building height is 51 metres
- Post-Bonus Building Height: The maximum permitted post-bonus building height is 66 metres

- Viewplane: Viewplane #6 encumbers the southwest corner of the site on Granville Street
- Streetwall Setback: Varies between 0 – 1.5 metres
- Streetwall Height: Minimum streetwall height is 11 metres, and maximum streetwall height is 18.5 metres on all streets
- Prominent Civic/ Cultural Frontage: The site is identified as a Prominent Civic / Cultural Frontage along Sackville Street and adjacent building corners (Map 1 of the Design Manual)

Site Plan Approval Process
Under the site plan approval process, development proposals within the Downtown Halifax Plan area must meet the land use and building envelope requirements of the Land Use By-law (LUB), as well as the requirements of the By-law's Design Manual. The process requires approvals by both the Development Officer and the DRC as follows:

Role of the Development Officer
In accordance with the Substantive Site Plan Approval process, as set out in the Downtown Halifax LUB, the Development Officer is responsible for determining if a proposal meets the land use and built form requirements of the Downtown Halifax LUB. The Development Officer has reviewed this application and determined that the following elements do not conform to the Downtown Halifax LUB:

- Minimum and maximum streetwall heights;
- Minimum streetwall width;
- Upper storey streetwall stepbacks;
- Upper storey side yard stepback; and
- Maximum tower width and separation distance.

The applicant has requested variances to these elements, and additional information on these requests can be found in Attachment C.

Role of the Design Review Committee
The Design Review Committee, established under the LUB, is the body responsible for making decisions relative to a proposal's compliance with the requirements of the Design Manual.

The role of the DRC in this case is to:

1. Determine if the project is in keeping with the guidelines contained within the Design Manual (Attachment E);
2. Consider the variance requests that have been made pursuant to variance criteria in the Design Manual (Attachment E);
3. Provide advice to the Development Officer if the proposal is suitable in terms of the expected wind conditions on pedestrian comfort (Attachment F); and
4. Provide advice to the Development Officer on the suitability of the proposed post-bonus height public benefit category (Attachment B).

Notice and Appeal
Where a proposal is approved by the Design Review Committee, notice of the decision is given to all assessed property owners within the DHSMPS Plan Area boundary plus 30 meters. Any assessed property owner within the area of notice may appeal the decision of the DRC to Regional Council. If an appeal is filed, Regional Council will hold a hearing and make decision on the application. A decision to uphold an approval will result in the approval of the project while a decision to overturn an approval will result in the refusal of the site plan approval application.

COMMUNITY ENGAGEMENT

The community engagement process is consistent with the intent of the HRM Community Engagement Strategy and the requirements of the Downtown Halifax LUB regarding substantive site plan approvals. The level of engagement was information sharing, achieved through the developer's website, public kiosks at HRM Customer Service Centres, and a Public Open House held on January 24, 2019.

DISCUSSION

Design Manual Guidelines

As noted above, the Design Manual contains a variety of building design conditions that must be met for the development of new buildings and modifications to existing buildings. Items of specific consideration to this proposal are as follows:

- Section 2.4 of the Design Manual contains design guidelines that are to be considered specifically for properties within Precinct 4; and
- Section 3.6 of the Design Manual specifies conditions in which variances to certain Land Use By-law requirements may be considered.

An evaluation of the general guidelines and the relevant conditions as they relate to the project are found in a table format in Attachment E. This table indicates staff's analysis and advice as to whether the project complies with the guidelines. Additionally, it identifies circumstances where there are different possible interpretations of how the project relates to a criterion, where additional explanation is warranted, or where the Design Review Committee will need to give attention in its assessment of conformance to the Design Manual. Staff have identified the following items as discussion items that require further consideration by the Design Review Committee:

Streetwall Design and Animated Streetscapes (Sections 2.4d & e, 3.2.1f, 3.2.5b & c, 3.3.1b, c & d, 3.3.3 a, 3.4.1 b)

To enhance the public realm and create pedestrian-oriented streetwall conditions, the Design Manual encourages active uses along street frontages, a high degree of building articulation, visual interest, visibility through abundant glazing and light penetration, more animation and "eyes on the street", prominent entrances and exemplary design along civic frontages.

The proposed design has several positive elements, such as active uses in the form of ground-floor retail and hotel uses, frequent entries, some canopies along the Granville Street frontage, and a large amount of glazing. However, there are also deficiencies and a lack of information on how these guidelines are to be achieved. The entrances on Hollis Street should have more emphasis and legibility, especially the hotel lobby. Regarding the Sackville Street façade, since the applicant has indicated that entrances are not possible, then other options should be explored which provide visual interest, such as artworks, advertising and lighting displays. Along Granville Street, there is a large blank retaining wall for a distance of approximately 22 metres. Within the through-building plaza, there is a lack of detail on how this space will be a public benefit, and how it will be animated and interesting for pedestrians. Staff also have concerns for this feature as it is not universally accessible to all members of the public given it has been designed absent of ramps or other equivalent features to support accessibility. The only entrance off the plaza is a rear door for secondary residential access, close to Hollis Street.

Corner Sites and Sloping Conditions (Sections 3.2.2a & b, 3.2.5 b, c, e & f, 3.3.2c & d, 3.4.1 b, 3.4.2a, b & c)

The Design Manual calls for careful design treatment and considerations at building corners, along sloping streets and prominent civic frontages. In this case, the Sackville Street frontage and building corners are designated as a Prominent Civic/Cultural Frontage (Map 1 of the Design Manual). The highest possible standards in design and material quality are encouraged, as are massing articulation and architectural features which accentuate the visual prominence of the site. In this case, the design does not orient the building toward the corners or to Sackville Street. The design is lacking distinctive corner features and

architectural treatment, both in the building base and the upper (north) tower component, which could address other guidelines relating to the provision of a distinctive top to the building. As noted above, it is not felt that the Sackville Street façade effectively provides entrances or elements of visual interest for the pedestrian.

Building Articulation and Roofscapes (Sections 3.3.1a, b, c & d, 3.3.4a, b & d)
To ensure that building designs provide articulation and elements of variety and visual interest, the Design Manual calls for building forms which follow a "base/ middle/ top" design in which these building elements are clearly defined and distinguished from one another, and which contribute to the visual quality of the pedestrian environment and the skyline.

The base of the proposed building coincides with the streetwall or hotel podium and displays a high degree of transparency and quality materials. The base is distinguished from the middle by its vertical articulation on the lower and upper ground floor levels, by the repetition of stone clad bays, and on the hotel levels above the ground floor via the vertical aluminum fins. As noted above, it is not evident how a sense of pedestrian animation and engagement will be achieved at the ground floor levels.

The residential towers in the building's middle are more horizontal in their articulation as a result of the repetition of the continuous balconies that wrap around the towers. The alternating width of balconies on the southern tower provides some visual interest. However, the repetition of balconies and lack of stepbacks on both towers and the excessive width of the southern tower do not contribute to the physical and visual quality of the streetscape and skyline, violating the built form objectives of the DHSMPS related to sun and sky exposure at street level and access to light and privacy for tenants.

The top of the building, as noted in the applicant's design rationale, includes the penthouse levels of the towers. The top lacks interest and distinguishing characteristics and does not contribute to the visual quality of the skyline.

Revisions to the building design via a future application are recommended in order to meet these guidelines, especially with regard to the tops of the towers, to include unique features, sculpting and night lighting, and regarding the southern tower, which should be reduced in width accordingly to better comply with the Design Manual and Land Use By-law requirements.

Variance Requests
The applicant is requesting multiple variances to the quantitative requirements of the Downtown Halifax LUB, and these fall under five different categories: 1. streetwall height, 2. streetwall width, 3. upper storey streetwall stepback, 4. upper storey side yard stepback, and 5. tower width and separation distances.

Some variance requests, such as the upper storey streetwall stepbacks of the north tower, apply in multiple locations. Other building features such as the continuous wrap-around balconies require more than one category of variances; those being the upper storey streetwall stepback, upper storey side yard stepback and tower width and separation distances. The applicant has detailed each of the variance requests with diagrams and provided a rationale for each variance pursuant to the Design Manual criteria (Attachment C). The staff review of the variances, provided in the section below, differs slightly from that of the applicant's by separating the balcony variances into the respective variance categories.

Variance 1: Streetwall Height
Map 7 (Streetwall Heights) and section 9(2) of the LUB allows for a maximum streetwall height of 18.5 metres around the entire site. Section 9(3) of the LUB requires a minimum streetwall height of 11 meters. The applicant has requested that the maximum height be exceeded in locations along Hollis and Sackville Streets, up to 23.3 metres. Additionally, the minimum streetwall height is proposed to be reduced to 5.6 metres along the southern half of Granville Street.

Section 9(8) of the LUB provides the ability to vary streetwall heights where the relaxation is consistent with the criteria of the Design Manual. Section 3.6.3 of the Design Manual allows for a variance to the streetwall

height requirements subject to meeting certain conditions as outlined in Attachment E. Of the potential conditions for a variance, this application is being requested under the following provisions:

> *a. the streetwall height is consistent with the objectives and guidelines of the Design Manual; and*
> *c. The streetwall height of abutting buildings is such that the streetwall height would be inconsistent with the character of the street;*

The only abutting building is the HRM-owned MetroPark facility. The proposed Hollis Street streetwall is to be similar to and consistent with that of the MetroPark garage and will wrap around Sackville Street at the same height, to be consistent with the Granville streetwall where it meets the MetroPark. The one-storey portion of the building at the southern end of Granville street, which is proposed to be 5.6 metres instead of the 11 metre minimum height, will be for hotel use and includes aluminum screening above, as a faux façade which encloses hotel terraces, to give the impression of a higher streetwall. The stepped back portion of the façade beyond the first floor extends to the approximate height of the MetroPark garage. This is a reasonable and practical design solution in this case. Therefore, staff have no objection to this variance request.

Variance 2: Streetwall Width

Section 9(5) of the LUB requires that the streetwall extend the full width of any lot within the Central Blocks. The applicant has requested a variance to this requirement to allow for the small gap for emergency egress at the southern end of Granville Street and for a public thru-block plaza combined with the outdoor patio area for hotel restaurant space.

Section 9(8) of the LUB provides the ability to vary streetwall width where the relaxation is consistent with the criteria of the Design Manual. Section 3.6.4 of the Design Manual allows for a variance to the streetwall width requirements subject to meeting certain conditions outlined in Attachment E. Of the potential conditions for a variance, this application is being requested under the following provisions:

3.6.4 a. the streetwall width is consistent with the objectives and guidelines of the design manual; and
b. the resulting gap in the streetwall has a clear purpose, is well-designed and makes a positive contribution to the streetscape;

Generally, a streetwall width variance is reasonable to allow for such matters as emergency egress, which are often required by the building code and associated regulations, and for elements of public benefit such as appropriately located and designed thru-block plazas or connections. However, given the length of the site along Hollis and Granville Streets, the thru-block plaza is located too close to the street intersection to achieve its intended (“clear”) purpose, as pedestrians would be more inclined to stay on the public sidewalk. Staff advise that the plaza should be located further south along the block as part of a redesign of the proposal. A relocation of the plaza could coincide with alternate tower stepbacks and floor plate sizes so that the tower separation and plaza location are roughly at the midpoint of the site along Hollis and Granville Streets. That scenario would require minimal variances, would be more functional for pedestrians and would be much more in keeping with the LUB and Design Manual. Alternatively, a through-block connection could be located at the southern end of the site, next to MetroPark, thereby allowing for a linkage to Blowers Street.

There is also concern with the lack of accessibility of the plaza, lack of opportunities for connections (entries) into and out of the building other than the rear door for secondary residential access near Hollis Street, and a lack of engaging pedestrian experiences. Therefore, it is recommended that this variance request be refused, due to the fact that this space as proposed will not be a public benefit or have a clear purpose, and due to the lack of details on how this space will be animated and interesting for pedestrians.

Variance 3: Streetwall Stepback

Section 9(7)(a) and (b) of the LUB stipulate minimum stepbacks above the streetwall of 3 metres and 4.5 metres for portions of a building that are a maximum of 33.5 metres in height or greater than 33.5 metres in height, respectively. Section 10(13) stipulates that balconies shall be permitted encroachments into a stepback, provided that the protrusion of the balcony is no greater than 2 metres from the building face and

the aggregate length of such balconies does not exceed 50% of the horizontal width of that building face. In this case the exterior walls of the north tower have a 2 metre stepback from Granville, Sackville and Hollis Streets, and the south tower has a 2.4 metre stepback from Hollis Street. However, the balconies on both towers extend 100% of the building width, and slightly beyond that if counting the corner balconies. Therefore, with respect to the balconies, the overall effect is a lack of upper storey streetwall stepbacks altogether.

Section 9(8) of the LUB provides the ability to vary the streetwall stepback where the relaxation is consistent with the criteria of the Design Manual. Section 3.6.5 of the Design Manual allows for a variance to the upper storey streetwall stepback requirements subject to meeting certain conditions outlined in Attachment E. Of the potential conditions for a variance, this application is being requested under the following provisions:

3.6.5 a. the upper storey streetwall setback is consistent with the objectives and guidelines of the Design Manual; and
b. the modification results in a positive benefit such as improved heritage preservation or the remediation of an existing blank building wall.

In this case the building walls, combined with the wrap-around balconies, result in the absence of stepbacks altogether of the north tower from the three abutting streets and the south tower from Hollis Street. This is inconsistent with the built form (base/ middle/ top) objectives of the DHSMPS, LUB and Design Manual. The south tower is located too close to Hollis Street and too far away from Granville Street while the north tower is needlessly close to all abutting streets. Instead, alternate floor plates could allow for stepbacks from all streets by relocating the central corridors, stair and elevators slightly further back. Likewise, such a redesign could resolve other variance requests (refer to Variance 5: Tower Width and Separation below) and result in efficient and reasonable floor plate sizes for both towers. There is no related “positive benefit” which results from the variance requests. Therefore, staff recommend that this variance request be refused.

Variance 4: Upper Storey Side Yard Stepback (Mid-Rise and High-Rise)
Section 10(4) addresses mid-rise portions of the building and 10(7) addresses high-rise portions of the building. These sections stipulate that the mid-rise portion (from top of streetwall up to 33.5 metres) and high-rise portions of a building (above a height of 33.5 metres) shall be setback 5.5 metres and 11.5 metres, respectively, from interior lot lines. Additionally, section 10(13) stipulates that balconies shall be permitted encroachments into a stepback, provided that the protrusion of the balcony is no greater than 2 metres from the building face and the aggregate length of such balconies does not exceed 50% of the horizontal width of that building face. In this case, both the mid-rise and high-rise portions of the south tower are located as close as 4 metres to the side property line. The continuous, wrap around balconies are located between 2 metres and 3 metres to the side property line, due to their alternating widths.

Section10(14) of the LUB provides the ability to vary building setbacks and stepbacks where the relaxation is consistent with the criteria of the Design Manual. Section 3.6.6 of the Design Manual allows for a variance to the upper storey side yard stepback requirements subject to meeting certain conditions outlined in Attachment E. Of the potential conditions for a variance, this application is being requested under the following provisions:

3.6.6 a. the upper storey side yard stepback is consistent with the objectives and guidelines of the Design Manual; and
c. a reduction in setback results in the concealment of an existing blank wall with a new, well designed structure.

A portion of the MetroPark facility’s northern wall will be concealed by the streetwall or base portion of the building. Further concealment of the existing blank wall may be achieved by varying the mid-rise stepback. While the reduced upper storey side yard stepback is quite substantial (instead of 11.5 metres, 4.6 metres for exterior walls and 2 metres for balconies), it can be considered reasonable in this case, as the site is next to the HRM-owned MetroPark facility, and due to the presence of the viewplane, which would eliminate

any future development rights on the MetroPark property. Therefore, staff have no objection to this variance request.

Variance 5: Tower Width and Separation

Section 10(11) stipulates that any portion of a building above a height of 33.5 metres located in the Central Blocks (Map 8) shall be a maximum width of 38 metres and a maximum depth of 27.5 metres. Section 10(9) stipulates that the high-rise portions of buildings above a height of 33.5 metres shall be separated a minimum of 23 metres, when both portions are used for residential purposes. If one or both towers are not used for residential purposes, then the minimum separation is 17 metres. In this case, instead of the required 38 metres, the south tower is proposed to be 56 metres between outer walls and will be approximately 60 metres wide when factoring in the continuous balconies, which also require variances. Instead of the required minimum 23 metres tower separation, the towers are proposed to be separated by 15 metres between outer walls, and if factoring in the continuous balconies this separation would be further reduced to between 11 and 12 metres.

Section 10(14) of the LUB provides the ability to vary building setbacks and stepbacks where the relaxation is consistent with the criteria of the Design Manual. Section 3.6.7 of the Design Manual allows for a variance to the maximum tower width requirements subject to meeting certain conditions outlined in Attachment E. Of the potential conditions for a variance, this application is being requested under the following provisions:

3.6.7 a. the maximum tower width is consistent with the objectives and guidelines of the Design Manual; and
b. the modification results in a clear public benefit such as the remediation of an existing blank building wall;

The proposed south tower width is unusually large and lacks adequate rationale for its dimensions. With the continuous balconies factored in, the towers effectively appear wider in all directions. The increased south tower width directly results in an undesirable separation distance between the north and south towers, thereby requiring another variance. The proposed tower separation violates the DHSMPS and Design Manual objectives of providing sunlight penetration and sky view at street level, and adequate privacy for building tenants at the tower levels. There is no clear public benefit, as the through-building plaza is unrelated to the width of towers and, in staff's view, has been proposed in an undesirable location (refer to variance #2). Therefore, staff do not support this requested variance and it is recommended that this variance request be refused.

There is ample room on this site, which is 98 metres long (323 ft.) and similar in length to most central blocks, to accommodate two towers which meet the minimum separation distance of 23 metres between residential buildings. The north tower floor plate (footprint) could be stepped back and made larger, the appropriate separation distance could be applied, and the south tower could be reduced in width and slightly increased in depth. A high number of alternative design options and flexibility exists on a site this large which would still yield a substantial amount of gross square footage.

Wind Assessment

A quantitative pedestrian wind impact assessment was prepared by RWDI Consulting for the proposal and is included in Attachment F. The purpose of the study is to assess the effect of the proposed development on local site conditions, specifically pedestrian areas such as building entrances, surrounding sidewalks, and amenity terraces, and to recommend wind control measures for any adverse effects. Wind conditions are rated in terms of relative comfort for different pedestrian activities such as "sitting", "standing", "strolling" and "walking." Wind tunnel testing was conducted based on current conditions and also with the proposed buildings in place.

The RWDI study indicates that the pedestrian wind conditions for the proposed development are expected to meet or surpass suitable conditions and meet the comfort and safety criterion for each of the test locations, with the exception of the north tower rooftop (level 22). In this outdoor amenity location, higher-than desired wind speeds and comfort levels were predicted. These wind conditions will be improved significantly by the incorporation of a higher glass guardrail around the west and north edges of the rooftop,

which has been incorporated into the building design. Additional wind mitigation measures such as vegetation are also possible.

Proposed Public Benefit
The Downtown Halifax LUB specifies a maximum pre-bonus height and a maximum post-bonus height. Projects that propose to exceed the maximum pre-bonus height are required to provide a public benefit. The LUB lists the required public benefit categories, and establishes a public benefit value that, with adjustments for inflation, is the equivalent of $4.70 for every 0.1 square metres of gross floor area created by extending above the pre-bonus height. The maximum pre-bonus height for the proposal is 51 metres and the post-bonus height is 66 metres. The gross floor area to be gained is approximately 10,260 square metres. A preliminary calculation of the value of the required public benefit is approximately $482,220. The applicant has outlined the elements proposed for public benefit in Attachment B.

The applicant proposes that the public benefit category include the *provision of publicly accessible amenity or open space (where a deficiency in such space exists)*, in the form of the through-building seating plaza.

While the MPS and Design Manual encourage through-block linkages, there is no specific indication, other than the general guidelines, of how these connections should be designed and how they should be assessed in terms of achieving a public benefit. As noted above in the *Streetwall Design and Animated Streetscapes* and *Variance 2: Streetwall Width* sections, the proposed plaza does not have a clear purpose, does not appear to be barrier-free (accessible), is located too close to the intersection, and it is unclear how this space will be animated and interesting for pedestrians.

Under these circumstances, staff advise the proposed through-block (building) connection does not constitute a material public benefit and it is recommended that that DRC recommend that the Development Officer not accept the proposed public benefit.

As an alternative, if the Committee approves the proposed qualitative elements and variance requests, then it is suggested that the Committee recommend to the Development Officer that the public benefit category be the *undergrounding of overhead electrical and communication distribution systems*. On each of the streets/ sidewalks surrounding this site, there are several existing poles and wires which comprise some of the last remaining above-grade electrical and telecommunication infrastructure in the “central block” portion of downtown. It would be considered a public benefit to have the undergrounding of this infrastructure completed.

Conclusion
Staff advise that the proposed development and the requested variances are not reasonably consistent with the objectives and guidelines of the Design Manual. Therefore, it is recommended that the substantive site plan approval application be refused, for the reasons outlined in this report and in Attachment E.

FINANCIAL IMPLICATIONS

The HRM cost associated with processing this planning application can be accommodated with the approved 2019-2020 operating budget for C310 Urban and Rural Planning Applications.

RISK CONSIDERATION

There are no significant risks associated with the recommendations contained within this report.

ENVIRONMENTAL IMPLICATIONS

No implications have been identified.

ALTERNATIVES

1. The Design Review Committee may choose to approve the proposed variances outlined in Attachment C, accept the findings of the quantitative wind assessment included in Attachment F, recommend the Development Officer accept the public benefit as described in Attachment B, and approve the application as proposed, without conditions. An appeal of the Design Review Committee's decision can be made to Regional Council.

2. The Design Review Committee may choose to approve the application with conditions. An appeal of the Design Review Committee's decision can be made to Regional Council.

ATTACHMENTS

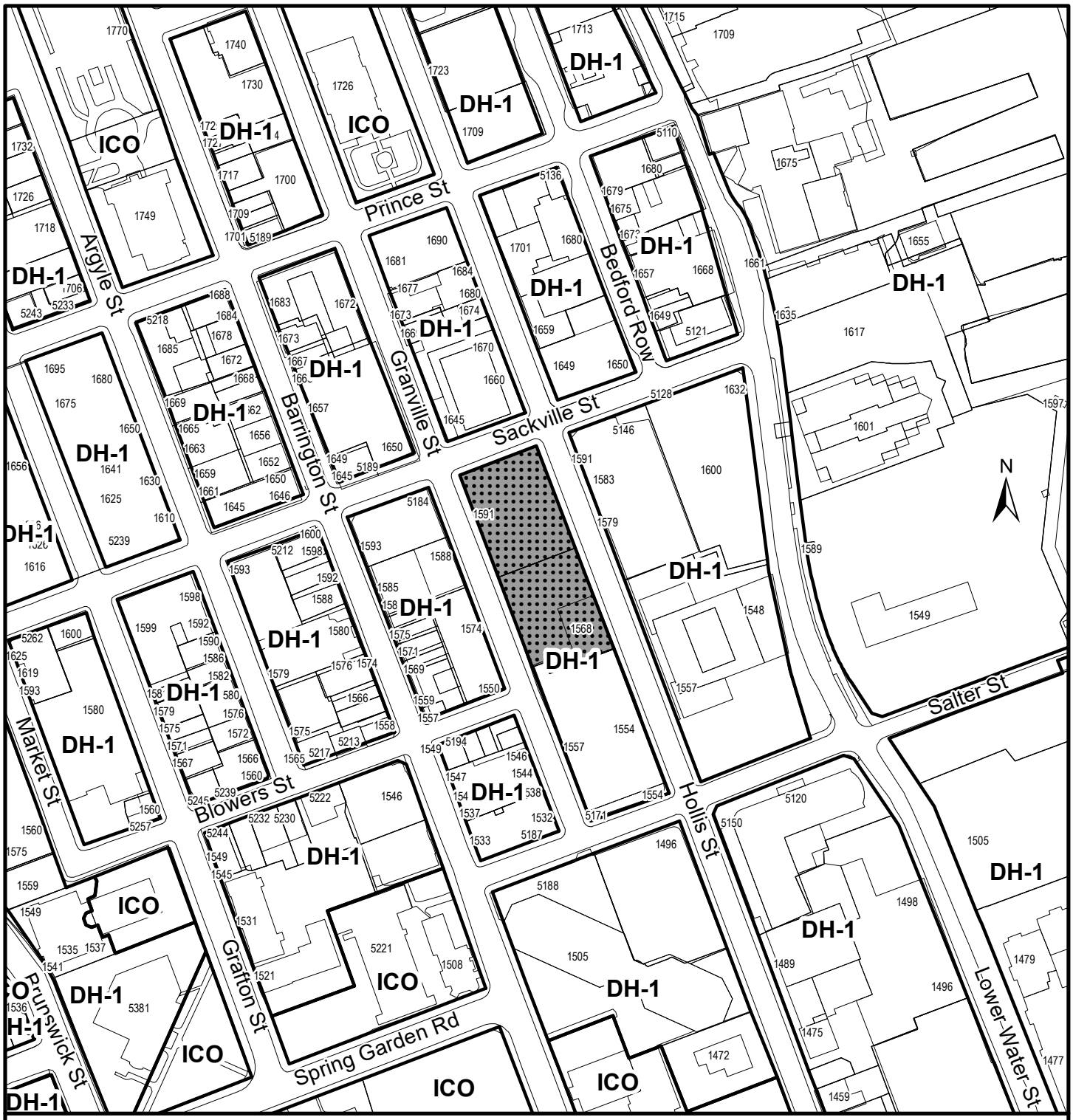
Map 1 Location and Zoning

Attachment A Site Plan Approval Plans
Attachment B Design Rationale and Public Benefit
Attachment C Variance Requests
Attachment D Renderings, Floorplates and Cross Sections
Attachment E Design Manual Checklist
Attachment F Pedestrian Wind Impact Assessment

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Paul Sampson, Planner II, Current Planning, 902.490.6259

Report Approved by: -Original Signed-
Steve Higgins, Manager of Current Planning, 902.490.4382



Map 1 - Zoning and Location

1591 Granville Street & 1568 Hollis Street,
Halifax

HALIFAX

Subject Property

0 20 40 60 80 m

Zone

DH-1 Downtown Halifax
ICO Institutional, Cultural and Open Space

Downtown Halifax
Land Use By-Law Area

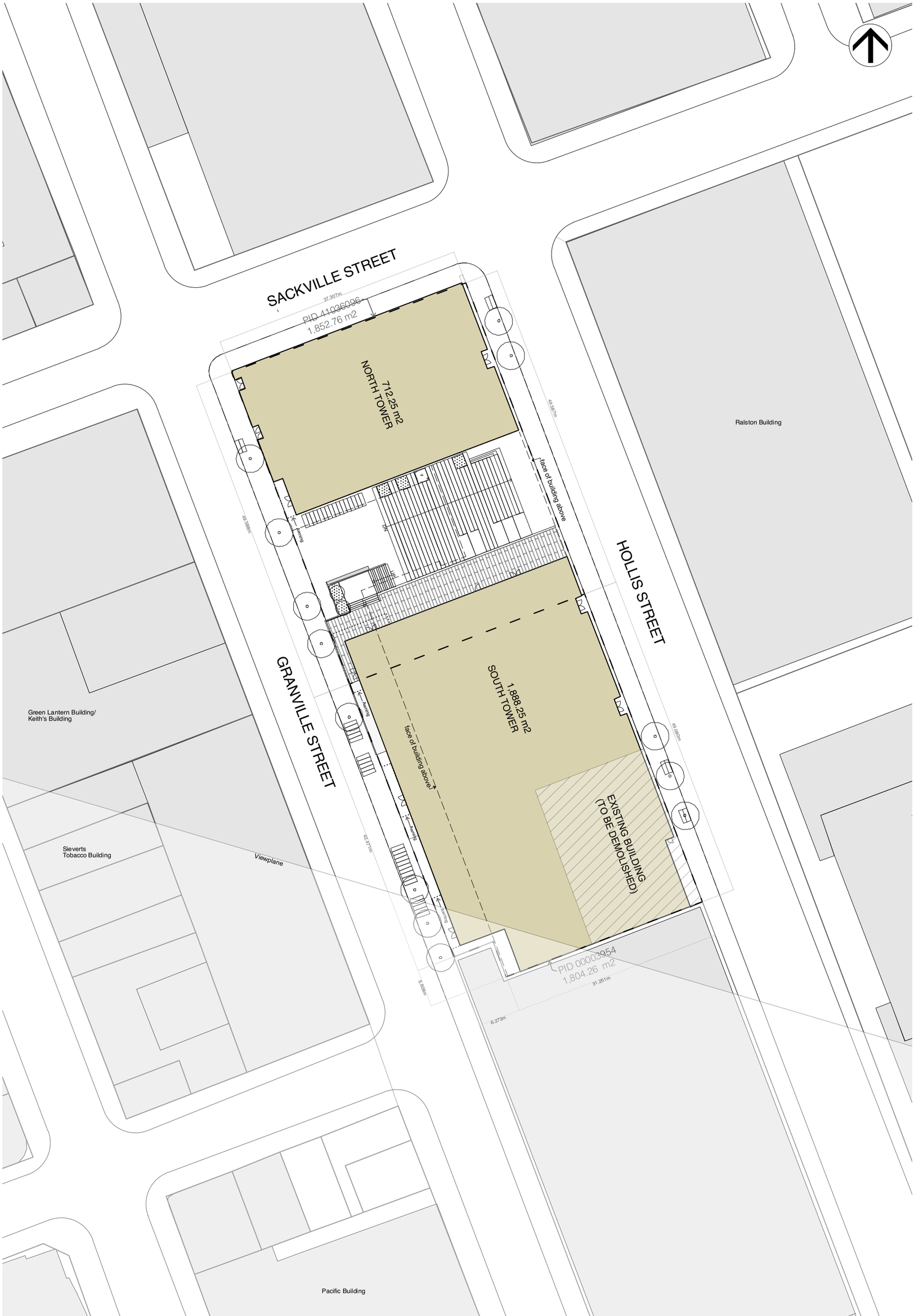
This map is an unofficial reproduction of a portion of the Zoning Map for the plan area indicated.

The accuracy of any representation on this plan is not guaranteed.

SKYE HALIFAX

ATTACHMENT A : SITE PLAN APPROVAL PLANS

November 2019



UPLAND

- Site Boundary
- Other Property Boundaries
- Sidewalk
- Existing Sidewalk (to be modified)
- Proposed Building
- Existing Building (to be demolished)

Properties	PID 41036096, PID 00003954
Owner	United Gulf Developments Ltd.
Drawn by	Angharad Wylie
Checked by	Ian Watson
Date	10.08.2019
Project No	180901
Scale	1:500

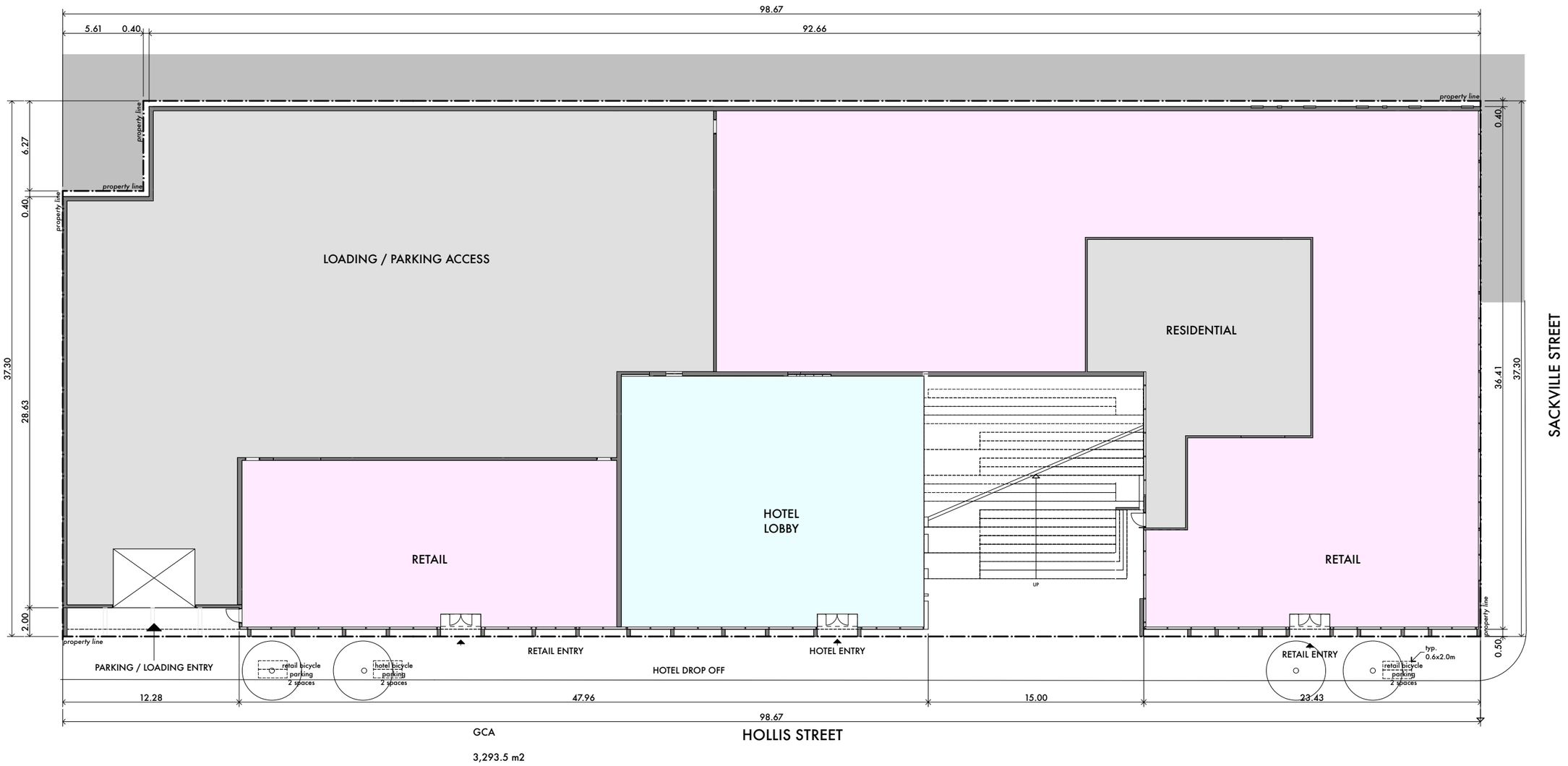
Projected Coordinate System: ATS_77_MTM_Zone_5N
Projection: Transverse_Mercator
False_Easting: 5500000.00000000
False_Northing: 0.00000000
Central_Meridian: -64.50000000
Scale_Factor: 0.99960000
Latitude_Of_Origin: 0.00000000
Linear Unit: Meter

Data Sources: Halifax Regional Municipality
Architects: architectsAlliance

01

SITE PLAN

TEXPARK



GCA

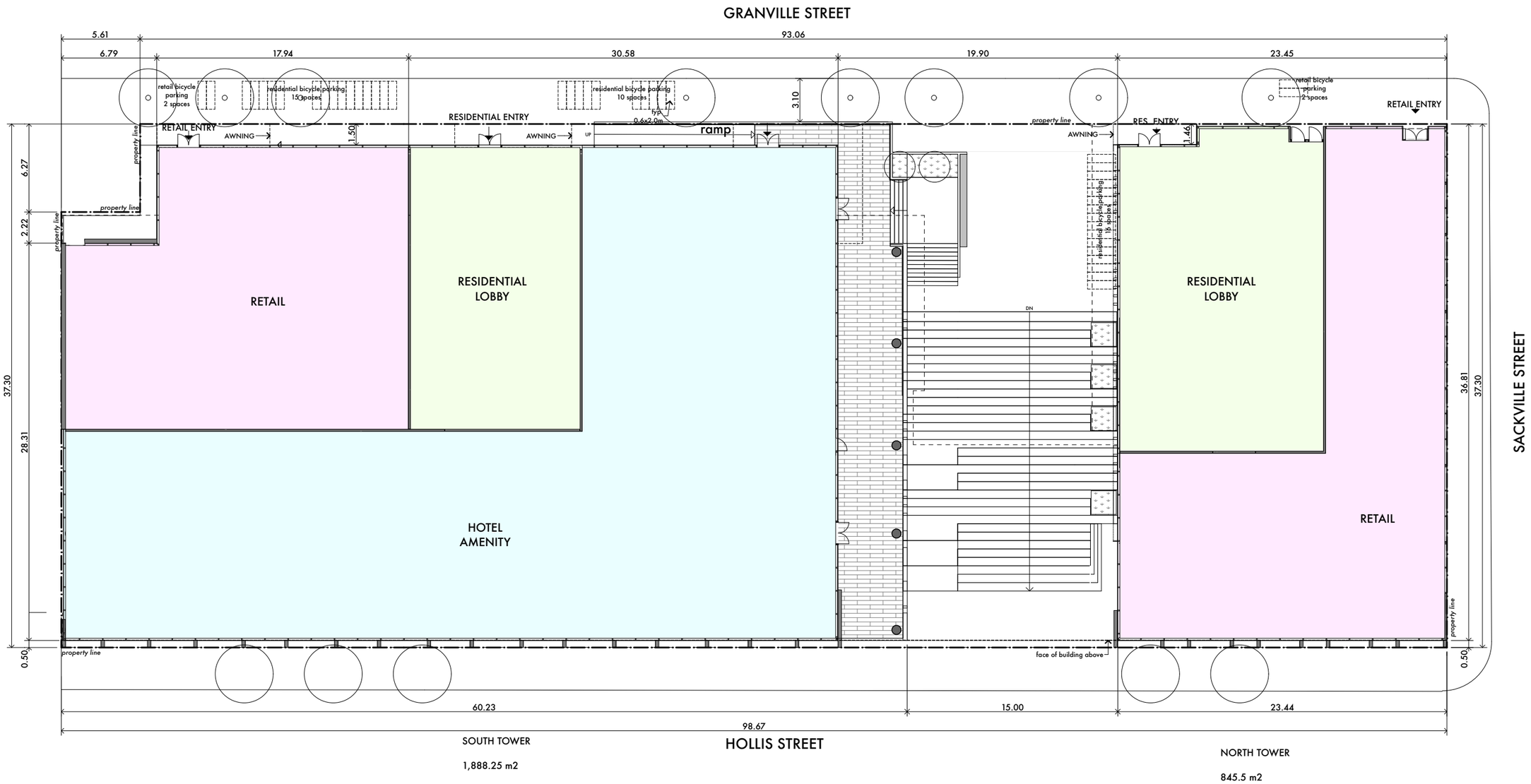
3,293.5 m2

Lower Ground

SKYE HALIFAX

1:300
2019-10-17

aA

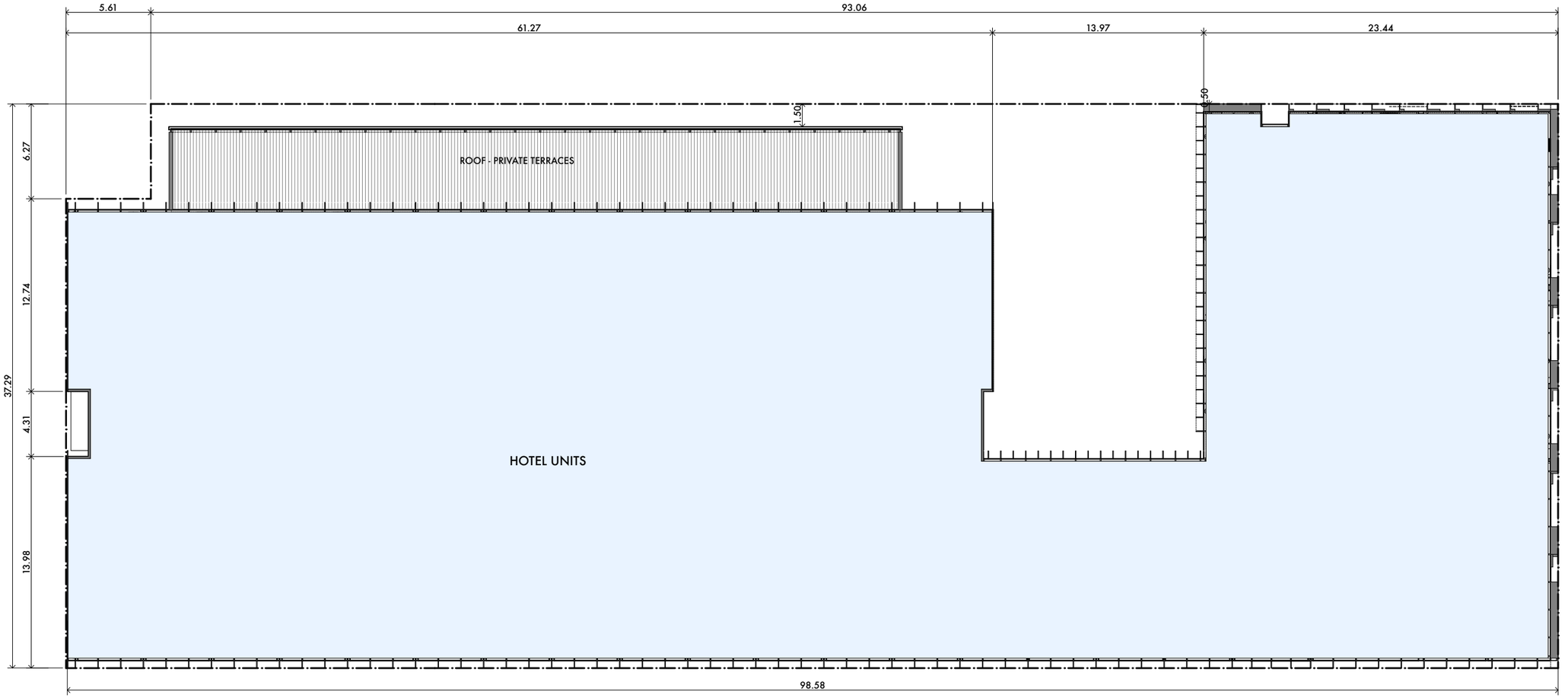


Upper Ground

SKYE HALIFAX

1:300
2019-10-17

aA



Hotel Plate

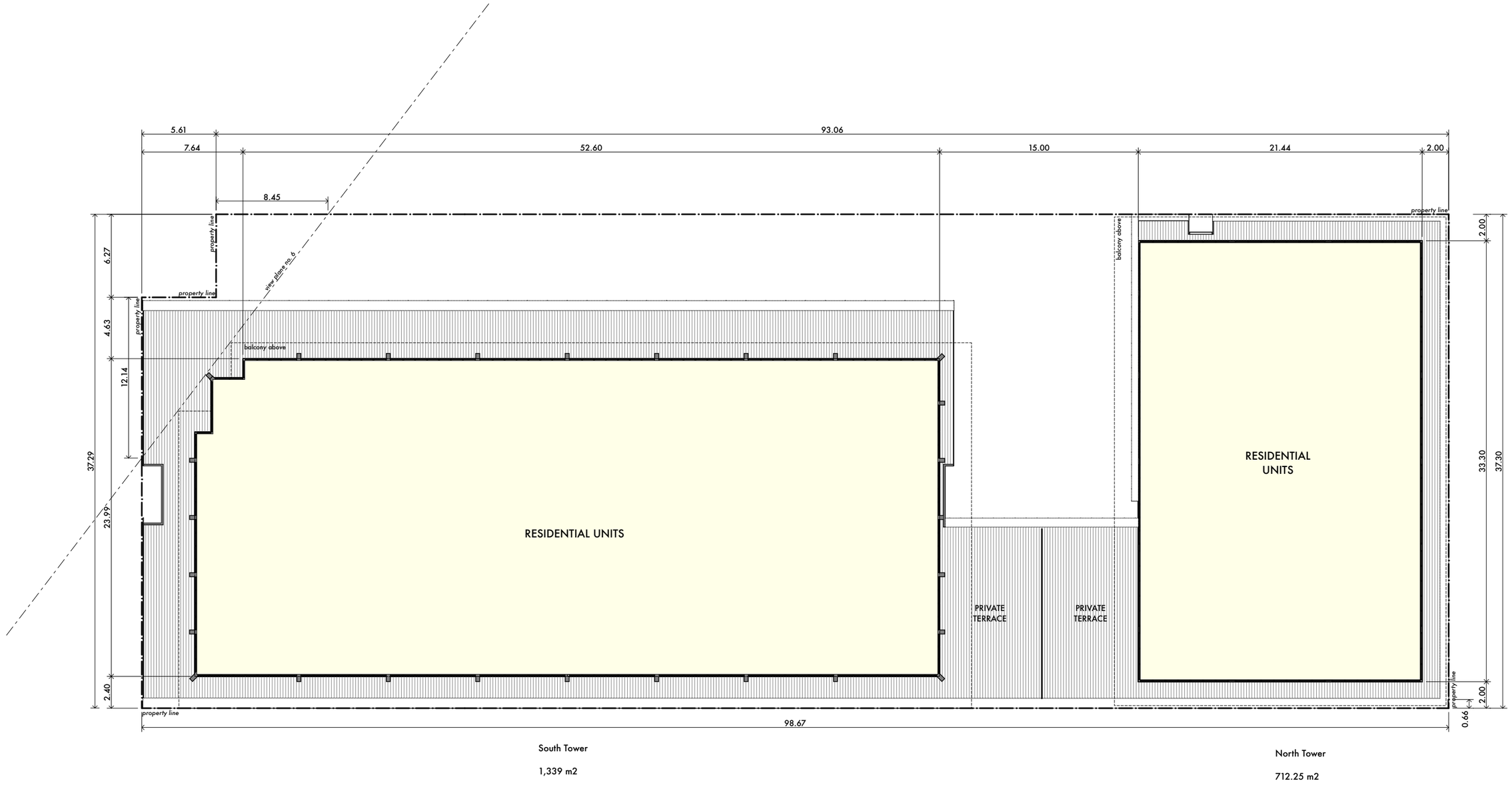
2,831 m2

Hotel Level 3

SKYE HALIFAX

1:300
2019-10-17

aA



South Tower

1,339 m2

North Tower

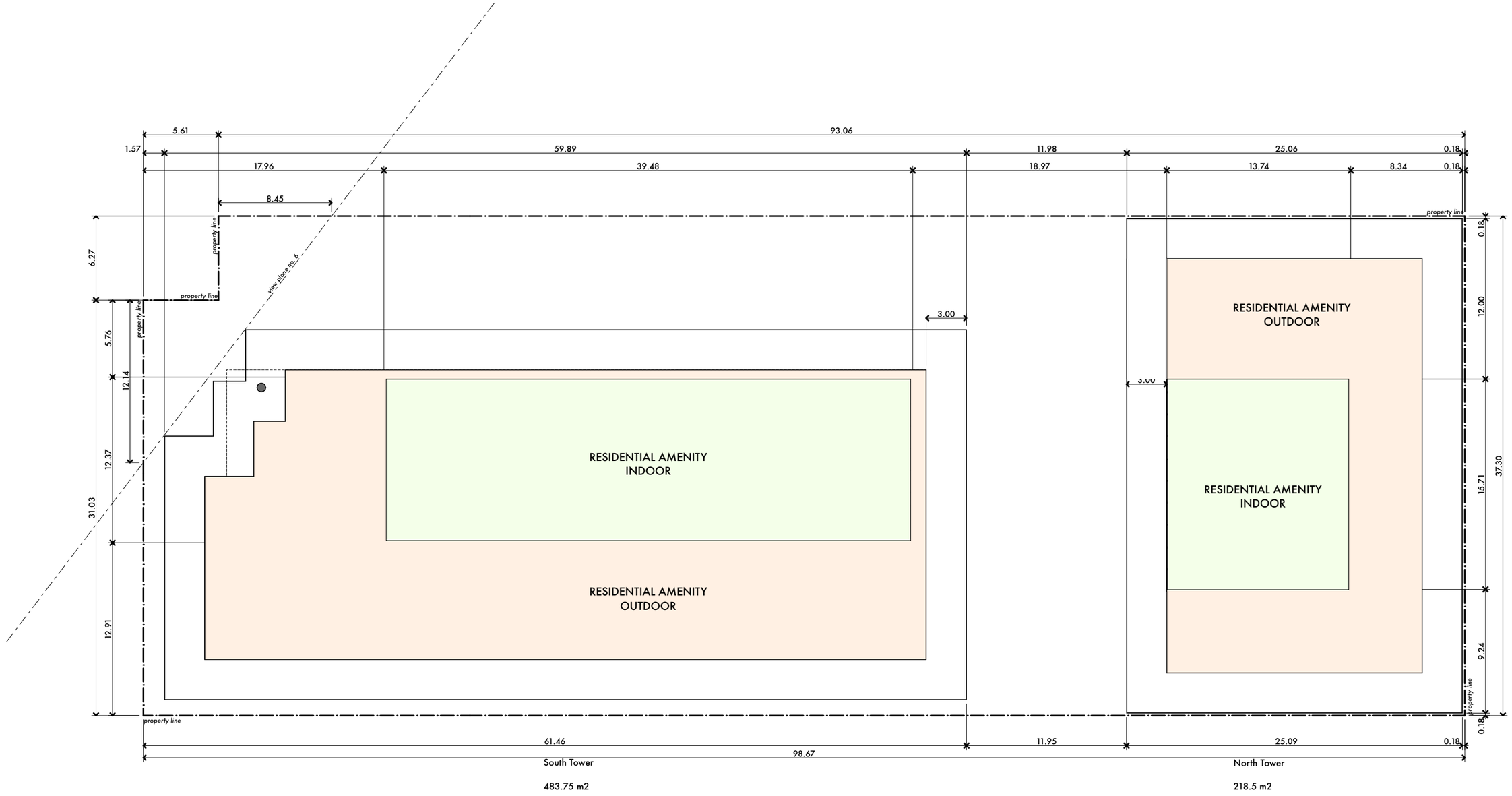
712.25 m2

Residential Level 6

SKYE HALIFAX

1:300
2019-10-17

aA

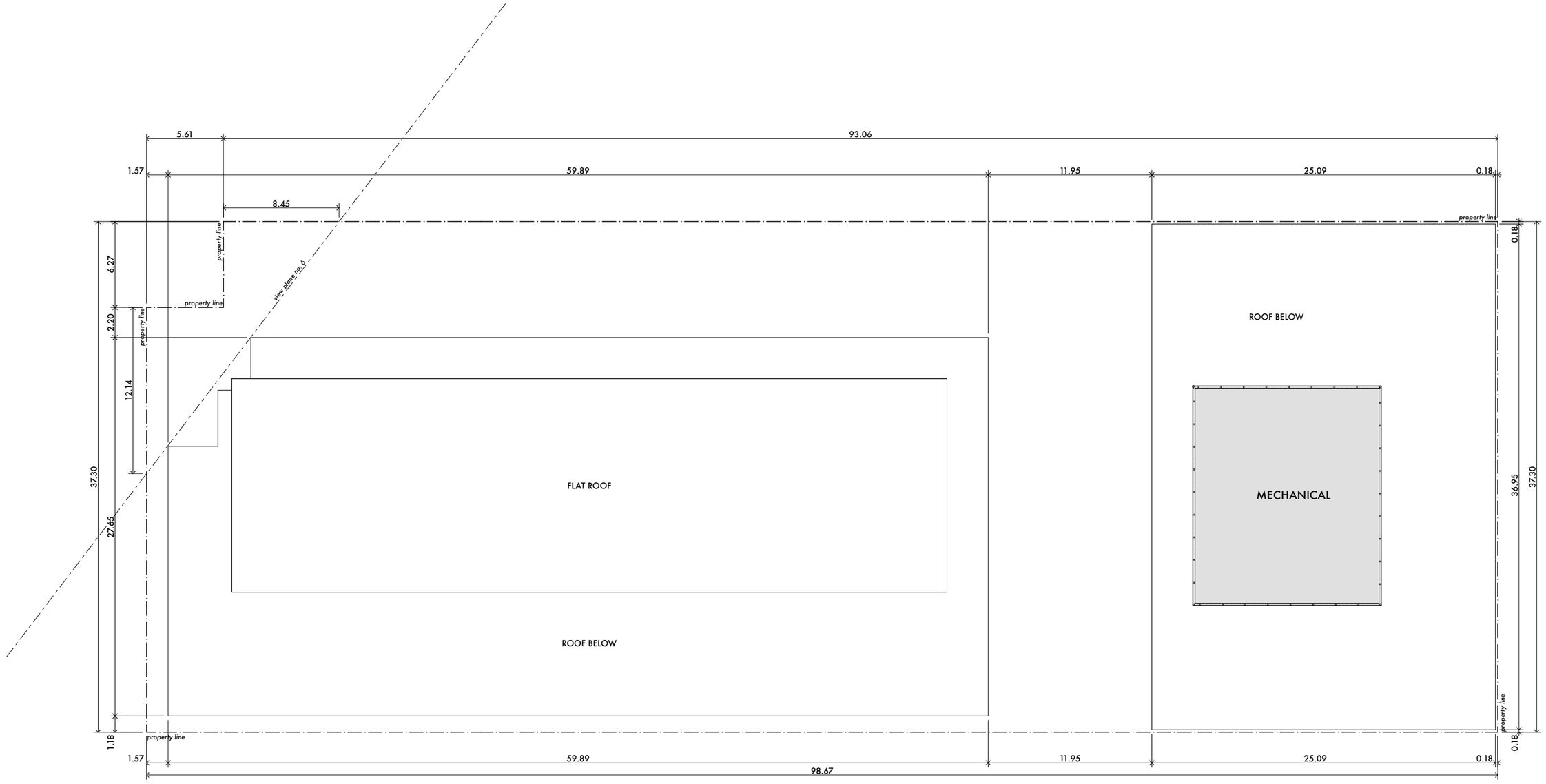


Amenity Level 22

SKYE HALIFAX

1:300
2019-10-17

aA



Top of Roof

SKYE HALIFAX

1:300
2019-10-17

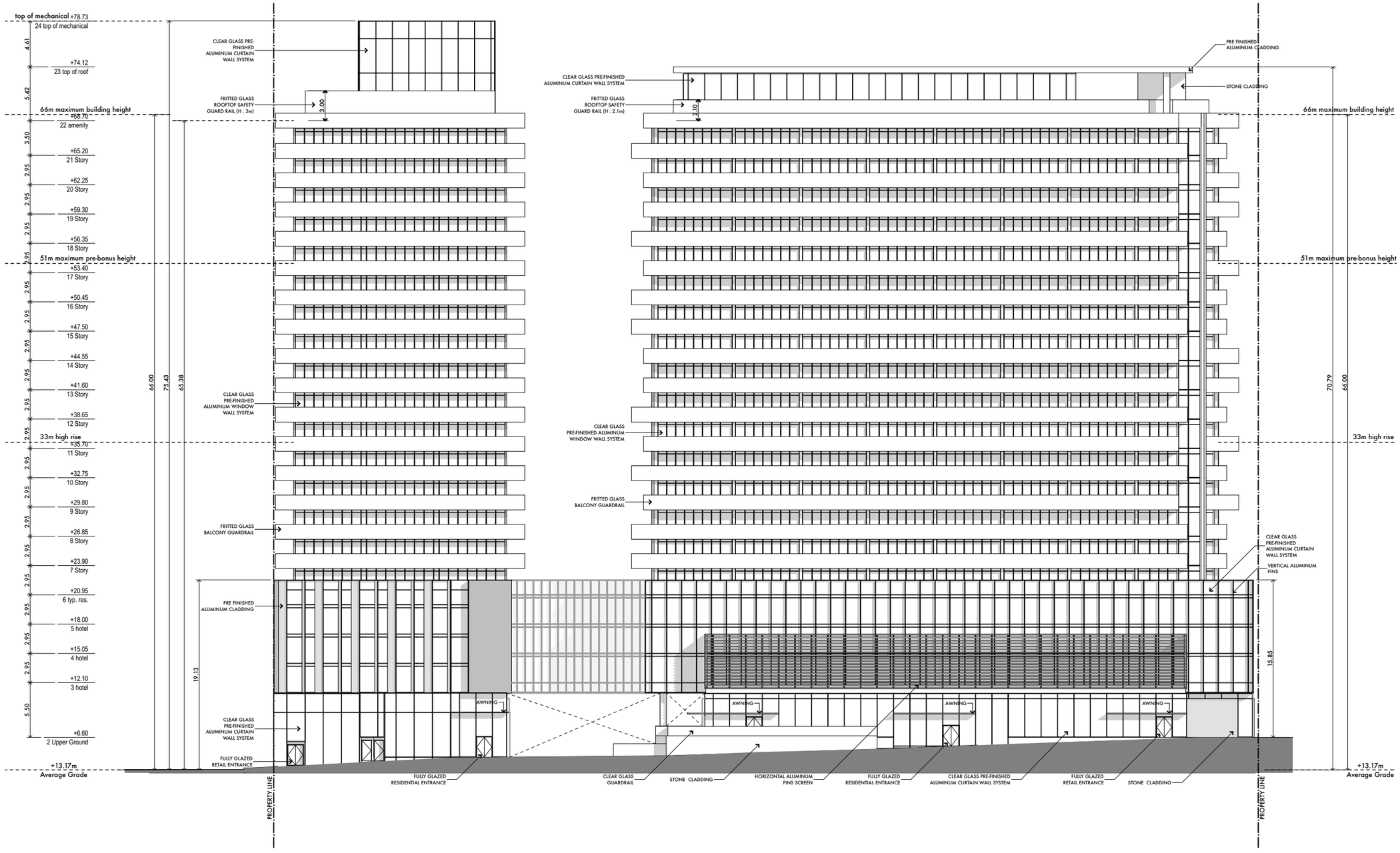
aA

East Elevation

SKYE HALIFAX

1:400
2019-10-17

aA

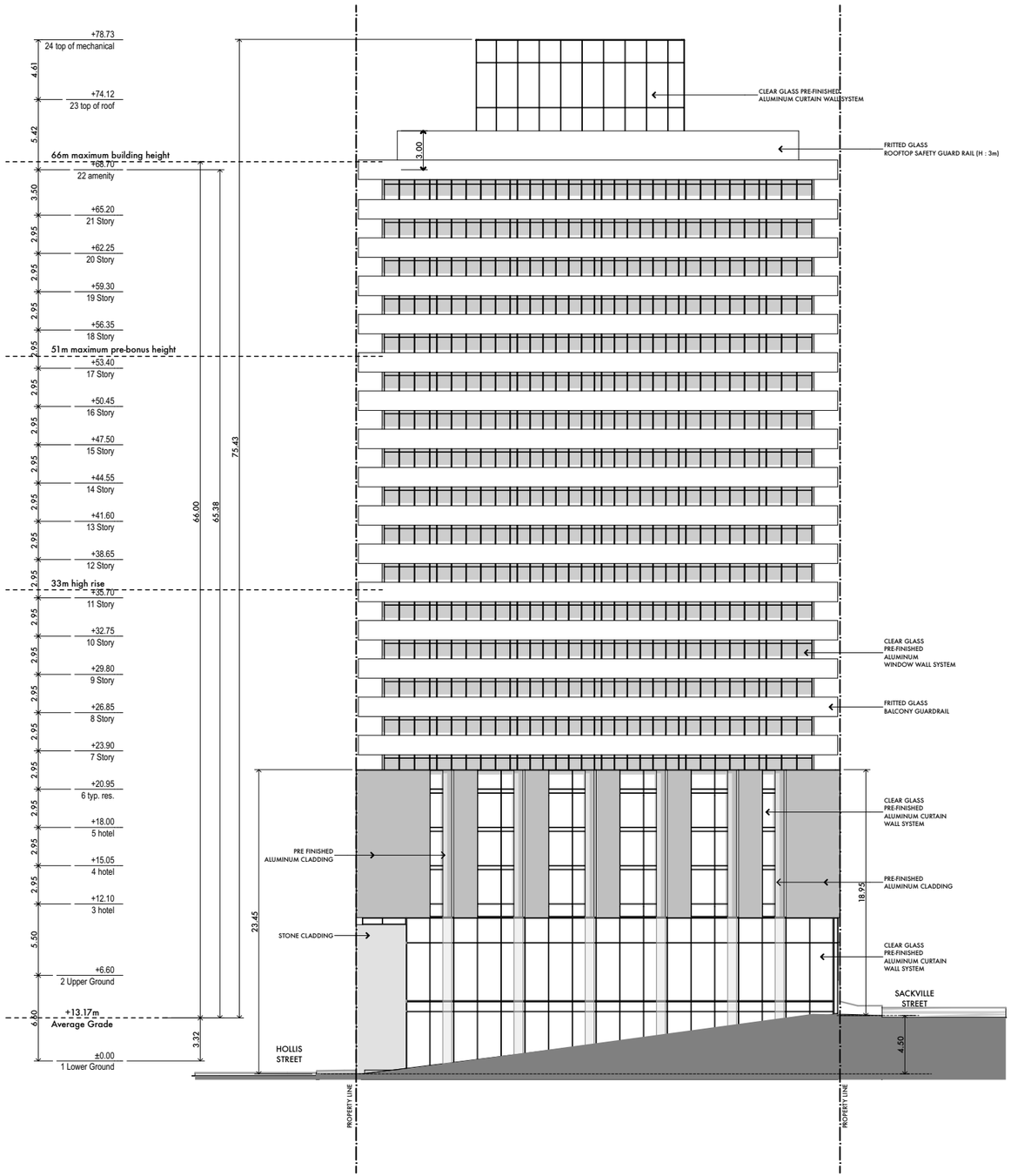


West Elevation

SKYE HALIFAX

1:400
2019-10-17

aA

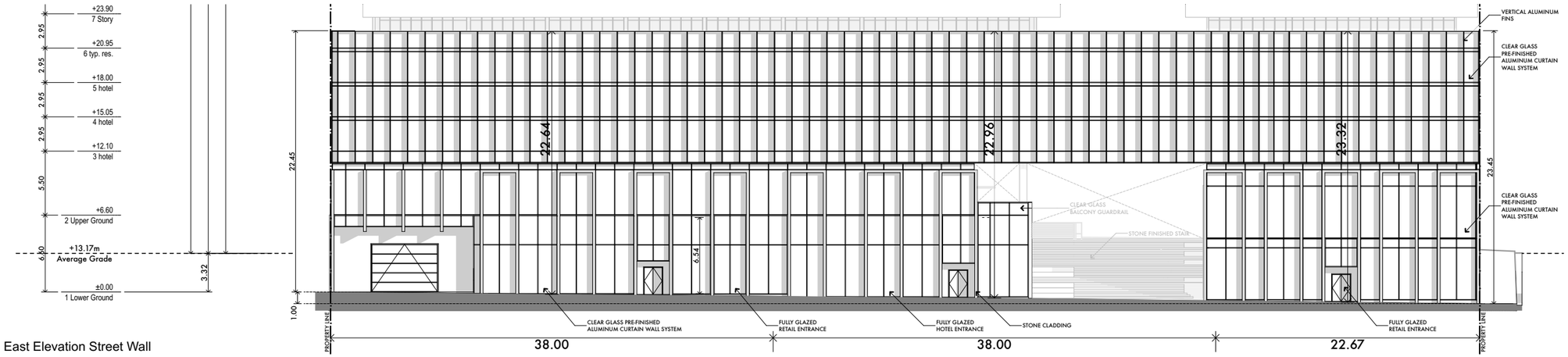


North Elevation

SKYE HALIFAX

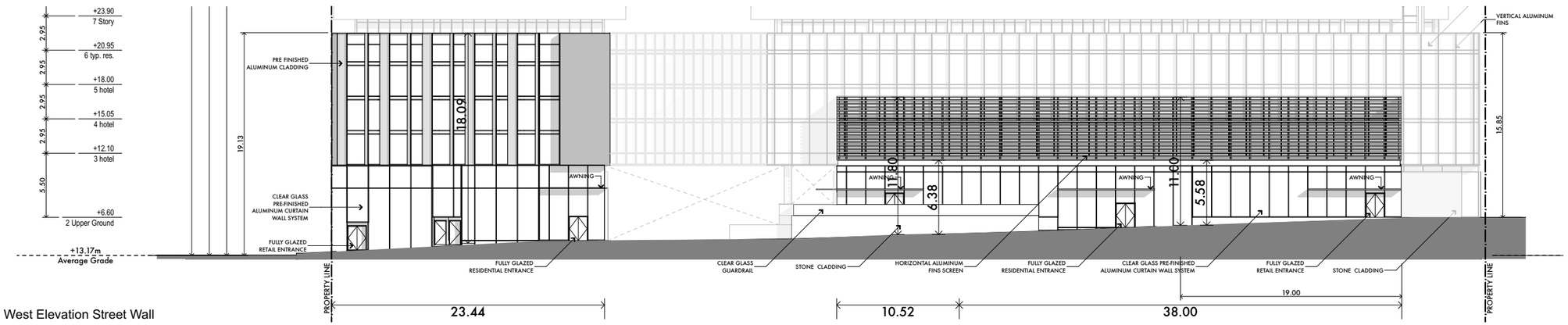
1:400
2019-10-17

aA



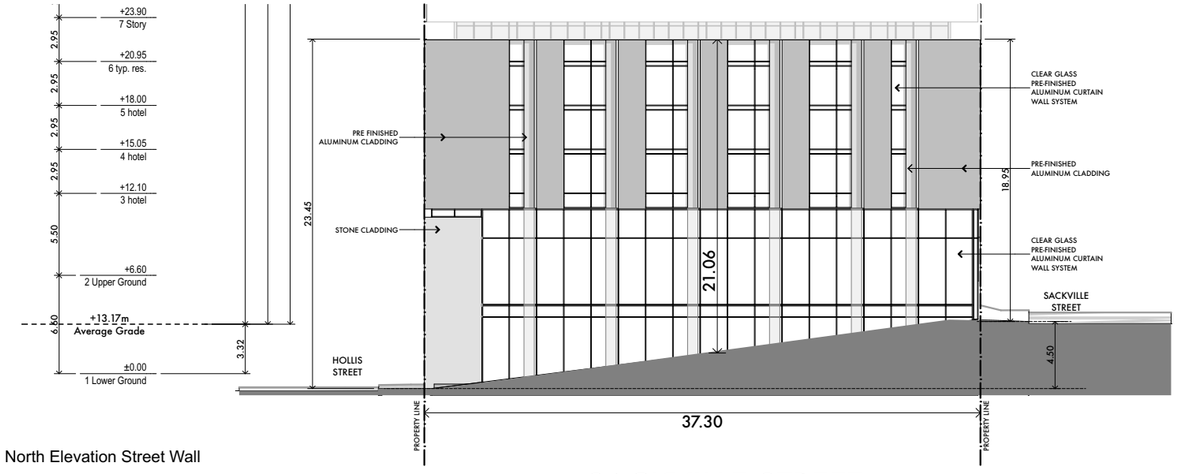
East Elevation Street Wall

HOLLIS STREET



West Elevation Street Wall

GRANVILLE STREET



North Elevation Street Wall

SACKVILLE STREET

Street Elevation

SKYE HALIFAX

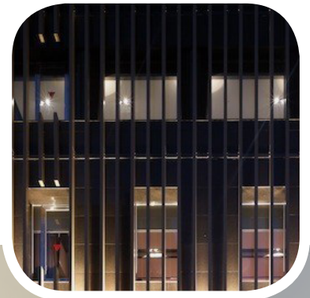
1:400
2019-10-17

aA

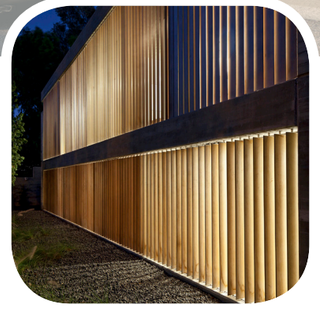
Facade Fins
Up Light

Urban Ceiling
Light Troughs

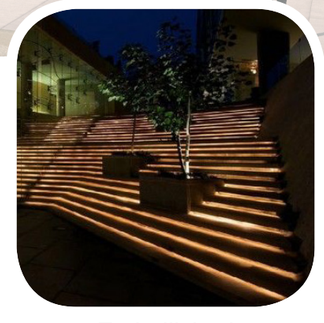
Enhanced
Bridge Frame



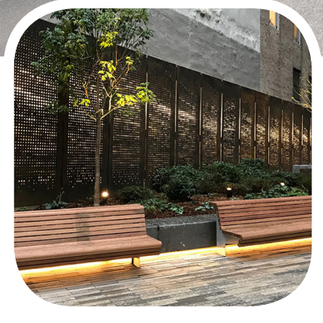
Backlit Perforated
Feature Graphic



Street Level
Ambiance



Embellished
Urban Steps



Landscape
Highlights

Neutral Screen
Up light

Attachment B: Design Rationale and Public Benefit

SKYE HALIFAX

SITE PLAN APPROVAL | 2019.10.08 | APPLICATION

UPLAND

on behalf of

United Gulf Developments Limited

Table of Contents

Project Introduction

Skye Halifax is an ambitious proposal to develop one of the most significant vacant sites in the heart of downtown Halifax, and put the feather in the cap of downtown's revitalization.

With 416 residential units, 129 hotel rooms, and 2,356 m^2 of retail floor area, Skye Halifax promises to bring new life and activity to an entire city block. The proposal is also key to activation of three street frontages, with 230 metres of road frontage on Hollis Street, Granville Street, and Sackville Street.

At the heart of the proposal is a through-block pedestrian connection that serves to increase route options for pedestrians and reduce the perceived block length, while also providing public space where people are invited to gather on the seating "stairs" and watch the pulse of the city.

The building itself is located on a block with its neighbour—the MetroPark Garage—providing little existing architectural context. Skye Halifax is therefore both freed from existing architectural precedent and shouldered with the task of positively defining the character of a prominent city block. The building achieves this with the careful use of materials and form to visually define the building's mix of uses; to complement the pedestrian realm; and to create a "base", "middle", and "top" without resorting to the "layer cake" architecture that has become common in the Downtown Plan Area.

Key Project Stats

PIDs:	41036096 & 00003954
Zoning:	Downtown Halifax 1 (DH-1)
Precinct:	Precinct 4 – Lower Central Downtown
Lot Area:	1,853 m^2 + 1,804 m^2 = 3,657 m^2
Street Frontage:	93 m + 37 m + 99 m = 229 m
Max. Pre-Bonus Height:	51 m
Max. Post-Bonus Height:	66 m
Building Height:	65.38 m
Penthouse Roof Height (North Tower):	75.43 m
Penthouse Roof Height (South Tower):	70.79 m
Residential Units:	416
Hotel Rooms:	129
Retail Floor Area:	2,356 m^2
Gross Floor Area:	46,722 m^2
Automobile Parking Spaces:	294
Bicycle Parking Spaces (Class A):	172
Bicycle Parking Spaces (Class B):	51

Design Manual Objectives

Precinct 4: Lower Central Downtown
The following general criteria shall apply:

a. Allow for mixed-use high-rise infill development on large opportunity sites.

The development proposal is mixed-use (residential / commercial / hotel) with a high-rise building on one of downtown's largest opportunity sites.

b. Prohibit new surface parking lots of any kind.

The proposed development does not include any new surface parking lots.

c. Ensure that existing surface parking lots and vacant sites are developed.

The proposal is the development of an existing surface parking lot.

d. Vacant sites shall be developed in a way that provides a continuous streetwall and uninterrupted pedestrian experience.

Except for the valuable pedestrian amenities provided by the through-block connection, the proposed development provides a continuous streetwall and an uninterrupted pedestrian experience.

e. The precinct is to be characterized by animated streetscapes.

The proposal includes a high proportion of at-grade commercial uses, including outdoor café seating on the Granville Street side. It also includes a through-block pedestrian connection with public seating.

f. Focus pedestrian activities at sidewalk level through the provision of weather protected sidewalks using well-designed canopies and awnings.

Building entries are sheltered by awnings or are inset into the façade.

g. East-west streets shall continue to provide views between the Citadel and the Harbour.

The proposal does not impede views down Sackville Street.

h. to m.

Not applicable.

Guideline 3.1.1
Pedestrian-Oriented Commercial

A: Retail shop fronts are located close to sidewalks and pedestrian plazas. The footprint of the building is broken into many smaller retail units interspersed with lobby entrances.

B: The ground floors are clad primarily in clear glazing, with stone and metal detailing.

C: Entries are located frequently along both the Granville Street and Hollis Street frontages. The steep grade and short frontage along Sackville Street prevent entrances from being accommodated here; however, the clear glazing allows for pedestrian interest and visual interaction with the interior activities of the building.

D: The Land Use By-law does not identify the site for any required pedestrian-oriented commercial frontages. Awnings are provided over any protruding building entrances.

E: Spill-out activity is encouraged by the use of portions of the pedestrian through-block connection as stepped seating. The raised area in the through-block connection also includes space for outdoor seating for the hotel café.

F: The only non-commercial uses proposed at grade are the hotel and residential lobbies. They have sufficient floor-to-ceiling height to be converted to commercial uses in the future.

Guideline 3.1.2
Streetwall Setback

The streetwall setback of the building ranges from 0 metres to 1.5 metres.

Along Hollis Street, the building continues the streetwall defined by the MetroPark garage.

On Granville Street, the building ranges from 0 metres (the established setback) to 1.5 metres, which allows for a barrier-free access ramp.

The proposal includes the entirety of this block of Sackville Street, and therefore defines the streetwall for that block.

Guideline 3.1.3
Streetwall Height

Most streetwalls meet or exceed the minimum height of 11 metres. On Granville Street, a portion of the streetwall is below 11 metres per the technical definition of streetwall. However, a perforated metal screen is included to a height of 11 metres to provide pedestrians on the street a sense of enclosure. The deviation from the technical definition of streetwall is addressed in Variance Request 1.

Due to the large site, various slopes on the site, and the need to match internal floorplates, some streetwalls exceed the maximum streetwall height. This is also addressed by Variance Request 1.

Guideline 3.2.1
Design of the Streetwall

A: The lower half of the streetwall is differentiated into vertical sections through the use of projections and recesses, vertical stone-clad bays, alternating materials (glass, aluminum, and stone), the through-block pedestrian connection, and the locations of entrances. The upper half of the streetwall includes a regular pattern of vertical fins.

B: The streetwall occupies 100% of the frontage along each street, except for the areas dedicated to providing a through-block pedestrian connection, and a small outdoor seating area for the hotel café.

C: Granville Street has a right-of-way width of 15.2 metres, with a proposed streetwall ranging from 11 metres to 18.09 metres high with the slope of the road. Hollis Street has a right-of-way width of 16 metres. The streetwall here is proposed to range from 22.64 metres to 23.32 metres with the slope of the street, which keeps the streetwall in line with that established by MetroPark.

D: Not applicable.

E: The streetwall is designed with high-quality glazing, aluminum curtain wall, and stone.

F: The streetwall has high transparency provided by the extensive use of glazing.

G: All grade-level frontages are a mix of glazing and stone and metal detailing that excludes blank walls. Utility functions are contained within the building.

Guideline 3.2.2
Building Orientation and Placement

A & B: The building is oriented to all three street edges and, with the exception of plaza space, is placed at all three street edges. Primary access points are clearly defined by awnings and have direct access to the sidewalk or plaza spaces.

C: No side yard setbacks are proposed.

Guideline 3.2.3
Retail Uses

A: Not applicable.

B: The Land Use By-law does not apply mandatory retail frontages to the subject site. Building entrances are sheltered with awnings or recesses.

C: At-grade uses are retail and lobbies for the hotel and residential uses. Lobby spaces could easily be converted to retail spaces in the future.

D: Retail uses are located immediately adjacent to the sidewalk.

E: Retail frontages are not hidden by deep columns or large building projections.

F: Retail entrances are located at grade.

G: Commercial signage to be determined depending on the retail provider.

Guideline 3.2.4
Residential Uses

A: Not applicable.

B: Residential units are accessed by at-grade lobbies, distinguished from the exterior by awnings.

C: Ground-floor, individually-accessed residential units are not contemplated due the priority of ground-floor retail in this portion of downtown.

D: The building contains a high proportion of two-bedroom units. All residential units have immediate access to private balconies, and shared access to the rooftop outdoor amenity space.

E: Not applicable.

F: Not applicable.

Guideline 3.2.5
Sloping Conditions

The subject site encompasses three street frontages, with Granville and Hollis at different elevations and Sackville sloping between them. Given the block proportions (*i.e.* running north-south), and the existing roles these three streets play in the function of downtown, the architectural design of the building treats Granville and Hollis as the primary frontages. As a result, the relatively short and steep stretch of Sackville is unable to be effectively utilized for access to the building. The retail display of the Hollis and Granville frontages are wrapped around to Sackville as much as practicable and the Sackville frontage is clad in transparent glazing that allows for a visual interface between the interior and street activities.

Guideline 3.2.6
Pedestrian Walkways

Not applicable.

Guideline 3.2.7
Other Uses

A: The residential and hotel lobbies include a high proportion of glazing and contribute to frequent entries along the Hollis and Granville frontages.

Guideline 3.3.1
Building Articulation

A: The building is articulated into a “base” created by the hotel podium, a “middle” created by the towers, and a “top” created by the penthouses.

B: The building borrows materials (*e.g.* glazing, aluminum panels) found in other buildings in the area (The Maple, *etc.*) while adding to the variety of architectural expression in the area through the use of massing, orientation (two alternating towers), and detailing.

C: The massing is articulated through features and changes in materials, such as the dark aluminum cladding on the band of hotel rooms making up the top portion of the streetwall.

D: All facades, with the exception of the fire wall adjacent to (*i.e.* hidden by) the MetroPark Garage, are treated with the same high level of design quality.

Guideline 3.3.2
Materials

A: The building is clad in glass, aluminum curtain wall systems, aluminum paneling, and stone detailing. All of these materials systems are designed to be of high quality, durable, aesthetically-pleasing, and easy to install with a high degree of precision.

B: The building uses a limited and unified palate of materials, with careful changes in materials used to delineated changes in the different functions of the building.

C: Materials are consistent across facades.

D: Materials are consistent around building corners.

E: The building uses stone, glass, concrete, and aluminum.

F: The materials are not intended to mimic other materials.

G - J: None of these materials are proposed.

Guideline 3.3.3
Entrances

A: The building has multiple entrances to serve the various functions of the building (residential, hotel, retail). These entrances are emphasized in various ways, including the use of recesses in the building facade, awnings, signage, and materials detailing.

B: Awnings and recesses provide pedestrian weather protection over the building's various entrances.

Guideline 3.3.4
Roof Line and Roofscapes

A: The roof of the buildings differ from the building "middle" through the massing of the penthouse levels.

B: The building "tops" incorporate similar glazing as the "middles" of the building to bring consistency to the building design.

C: Landscaped amenity space is provided both on the roof of the podium and on the top of the towers.

D: Rooftop mechanical features and rooftop access points are enclosed (screened from view) within the penthouse on top of each tower.

E: Not applicable.

F: Parapet design is consistent around all sides of each roof.

Guideline 3.4.1
Prominent Frontages and View Termini

A: Not applicable.

B: The Sackville frontage is defined as a prominent civic frontage on Map 1 of the Design Manual. This frontage, as well as all frontages on the building, has a high quality of streetwall design.

Guideline 3.4.2
Corner Sites

The building includes two corners; one at Hollis and Sackville and one at Granville and Sackville. These two corners are given the same high quality of materiality and design afforded to the rest of the building. Because these corners are relatively small in the scope of the overall site and building mass, and because the two corners are in relative proximity to each other, no unique architectural treatment is proposed (*e.g.* spire or turret).

Guideline 3.4.3
Civic Buildings

Not applicable.

Guideline 3.5.1
Vehicular Access, Circulation, Loading and Utilities

A: All motor vehicle parking is located underground.

B: The width of the garage access is the smallest it can functionally be, is recessed, and is located adjacent to the non-pedestrian streetscape created by the MetroPark Garage.

C: Loading, storage, utilities, and solid waste pickup are all accessed from inside the parking garage, out of view from public streets and spaces and residential uses.

D: Not applicable.

E: Utilities, meters, and mechanical equipment are integrated in interior service rooms and within the screened rooftop penthouses.

F: Ventilation is not located adjacent to public streets. Utility hookups are contained within the building and within underground vaults.

Guideline 3.5.2
Parking Structures

Not applicable.

Guideline 3.5.3
Surface Parking

Not applicable.

Guideline 3.5.4
Lighting

The lighting concept includes a variety of lighting methods, including up-lighting, edge lighting along landscaping and other distinctive features, and a back-lit perforated metal screen. The lighting concept highlights key elements of the building, and is designed to be glare-free and without light trespass onto neighbouring properties.

Guideline 3.5.5
Signs

Signage will be designed once retail tenants and the hotel provider have been established. Signs will be wall signs (*i.e.* not pylons, rooftop signs, or billboards) and will be of materials in keeping with the design of the building.

Land Use By-law Requirements

7(1)	**Permitted Land Uses**	**Yes.** Proposed uses are commercial uses, residential uses, and uses accessory to the foregoing.
7(4a)	**Residential Dwelling Mix**	**Yes.** The residential unit mix includes 416 units, of which 192 (46.2%) include two bedrooms.
7(5)	**Residential Access**	**Yes.** The residential lobbies are located at ground level on Granville Street and are separate from non-residential uses.
8(1)	**Lot Frontage**	**Yes.** All lots have frontage on a street.
8(2)	**Number of Buildings**	**Yes.** Lot lines will be adjusted prior to development permitting such that only one building is located on a lot.
8(7)	**Post-bonus Height**	**Yes.** Maximum post-bonus height is 66 metres on the site (measured from average grade), with exemptions for certain rooftop features. The building is 65.38 metres high as measured from average grade. Exempt features are addressed in 8(8).
8(8)	**Rooftop Features**	**Yes.** Elevator access, penthouses, and mechanical equipment occupy 29.2% of the south tower roof and 23.6% of the north tower roof.
8(10)	**Rooftop Feature Setback**	**Yes.** All rooftop features exceeding the maximum height are set back a minimum of 3 metres from the outer edge of the roof.

8(12)	**Landscaping for Flat Roofs**	**Yes.** Flat rooftops not required for mechanical equipment are landscaped to provide amenity space for residents and guests.
8(13)	**Land Uses at Grade**	**Yes.** All ground floors of the building have a floor-to-floor height greater than 4.5 metres.
8(14)	**View Plane Requirements**	**Yes.** View Plane 6 extends over the southwest corner of the site. The proposed building does not protrude through the view plane.
8(20)	**Cladding Materials**	**Yes.** Proposed exterior materials do not include any on the prohibited list.
9(1)	**Streetline Setbacks**	**Yes.** Streetline setbacks range from 0 metres to 1.5 metres, with the exception of a very small portion at the garage entry. This deviation is accommodated by the definition of streetwall, "*which does not include minor recesses for elements such as doorways*".
9(2)	**Maximum Streetwall Height**	**Variance.** The maximum streetwall height permitted on the site is 18.5 metres. The proposed streetwall is up to 23.32 metres high. See Variance Request 1.
9(3)	**Minimum Streetwall Height**	**Variance.** The streetwall is at its lowest on the south podium on the Granville frontage. This streetwall, excluding the metal screen, is as low as 5.58 metres. See Variance Request 1.
9(5)	**Streetwall Width**	**Variance.** The continuity of the Hollis and Granville streetwalls are broken by a through-block pedestrian connection. The streetwall on Granville is also reduced for a small area for outdoor seating for the hotel café, and a small area adjacent to the MetroPark garage for emergency egress. See Variance Request 2.

9(7) Streetwall Stepbacks	**Variance.** Stepbacks above the streetwall range from 2 metres to 4.77 metres. A variance is needed for all stepbacks of less than 3 metres at heights below 33.5 metres, and less than 4.5 metres at heights above 33.5 metres. See Variance Request 3.
10(7) High-Rise Setback	**Variance.** The high-rise portion of the south tower is set back from interior lot lines by 4 metres; less than the required 11.5 metres. A variance is needed. See Variance Request 3.
10(9) Tower Separation	**Variance.** The high-rise portion of the two towers are separated from each other by 15 metres; less than the 23 metres required for residential towers. A variance is needed. See Variance Request 4.
10(11) Tower Width	**Variance.** The south tower has a width of 56.23 metres, which exceeds the maximum tower width of 38 metres. A variance is needed. See Variance Request 4.
10(13) Balconies	**Variance.** Balconies encroach into setbacks, stepbacks, and separation distances. Most are not more than 2 metres. However, the north and east sides of the south tower encroach by up to 2.4 metres, and all balconies exceed more than 50% of the horizontal width of the building face. A variance is needed. See Variance Request 5.
14(15) Bicycle Parking	**Yes.** Bicycle parking is provided, with 172 Class A spaces and 51 Class B spaces.

Public Benefit

Map 4 indicates a pre-bonus maximum height on the site of 51 metres. The building includes five floors above or partially above this height, each with a gross floor area of 2,052 m².

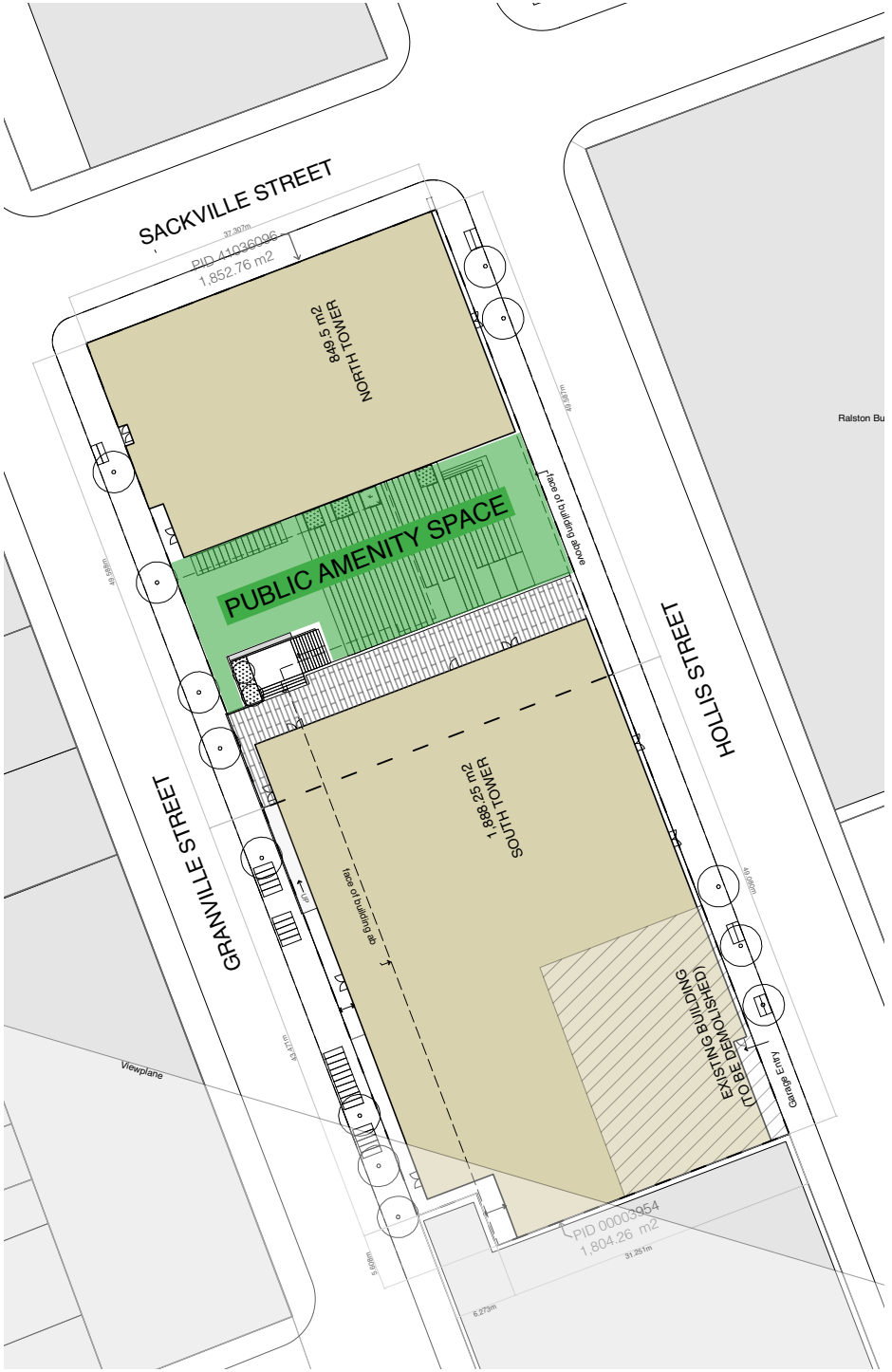
The rate used is $40.00/m² adjusted using the Statistics Canada, Province of Nova Scotia CPI on June 16, 2019 (the anniversary date of the By-law approval). As per the calculations of the LUB, the required public value is:

(5 floors)*(2,052 m²/floor)*($47/m²) = $482,220

The public benefits proposed to meet these contribution include:

(b) the provision of publicly accessible amenity or open space, where a deficiency in such spaces exists;

The public space contribution includes investment in higher-quality finishes and public amenities, such as street trees and furniture, to provide high-quality public space in the through-block pedestrian connection.



Attachment C: Variance Requests

SKYE HALIFAX

SITE PLAN APPROVAL | 2019.10.08 | APPLICATION

Variance Request 1
Streetwall Height

Subsection 9(2) and Map 7 of the LUB establish a maximum streetwall height of 18.5 metres on the site. Subsection 9(3) establishes a minimum streetwall height of 11 metres. The building itself is surround by three different streets, each at a different elevation and each sloping to various degrees. As a result, the streetwall height (per the LUB definition) on Granville ranges from 5.58 metres to 18.09 metres, the streetwall height on Sackville Street is 21.06 metres, and Hollis ranges from 22.64 metres to 23.32 metres. Granville Street requires a variance to minimum streetwall height, while Sackville and Hollis Streets require a variance to maximum streetwall height.

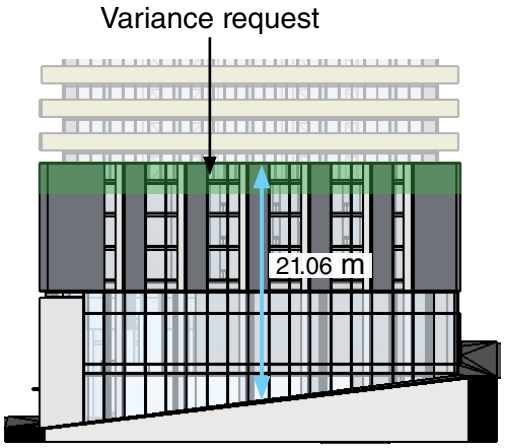
Subsection 3.6.3 of the Design Manual permits a variance for streetwall height where:

a) the streetwall height is consistent with the objectives and guidelines of the Design Manual; and

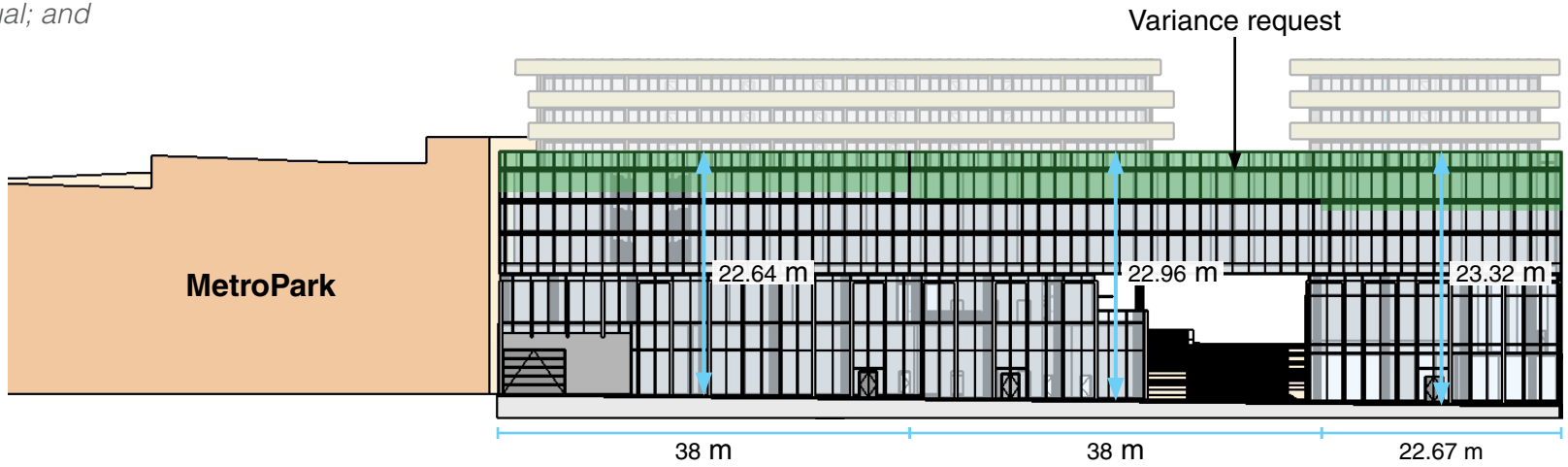
[...]; or

c) the streetwall height of abutting buildings is such that the streetwall height would be inconsistent with the character of the street; or [...]

The guidelines of the Design Manual outline that streetwall height should *generally* form a 1:1 ratio with street widths, and sets maximum streetwall heights accordingly. However, the Design Manual clearly contemplates allowing a variance to this guideline, including situations where a variance would increase consistency with abutting streetwalls. In this case, the requested variance on Hollis Street brings the proposed building into better consistency with the streetwall height of the only abutting building, the MetroPark. On Sackville Street, the variance allows a smooth connection between the Hollis and Granville streetwalls. The variance also assists with guideline 3.2.4(d) (outdoor amenity space) by providing a consistent roof grade on the podium, thereby increasing its usability.



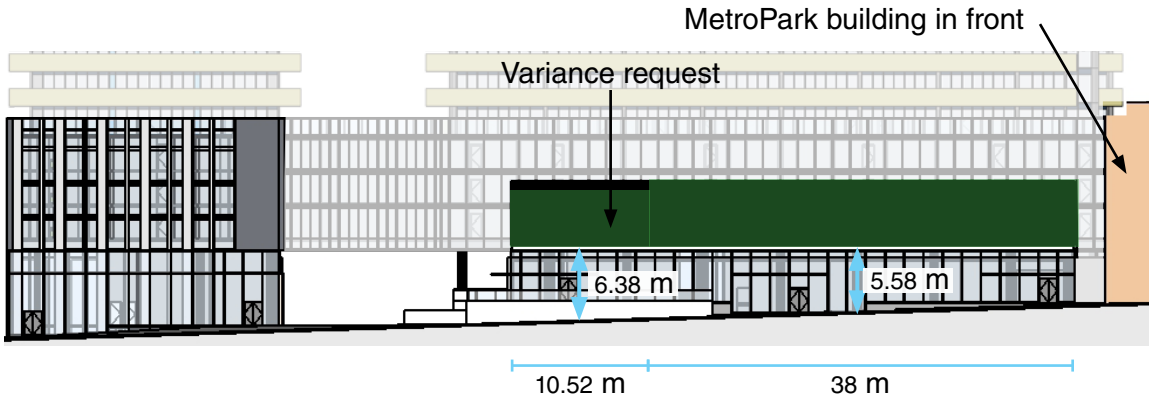
Sackville Street



Hollis Street

On Granville Street, a variance to the minimum streetwall height is required. The ground floor retail / residential lobby / hotel amenity space has a streetwall height of 5.58 metres to 6.38 metres as defined by the Land Use By-law. The second floor is not able to be bumped out to the same plane because this would create hotel units that were unusably deep. Conversely, the ground floor cannot be inset to meet the plane of the hotel level because this would create a large streetwall setback, contrary to the Design Manual objectives.

A perforated metal screen is included to continue the plane created by the first floor, up and above the minimum streetwall height of 11 metres. While this screen does not meet the technical definition of streetwall in the LUB, it fulfills the Design Manual objective of providing a sense of enclosure to people on the street.

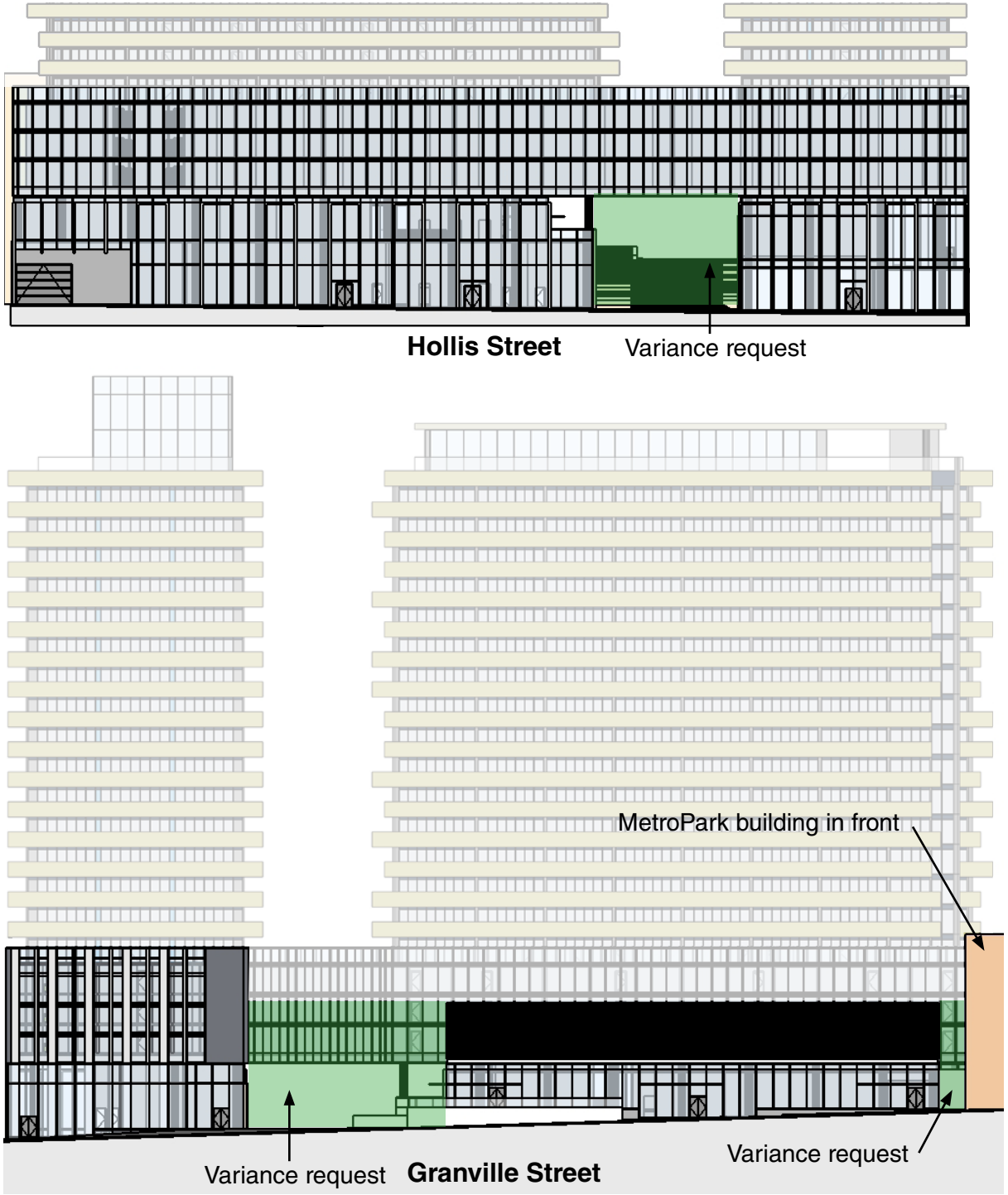


Granville Street

Variance Request 2
Streetwall Width

Subsection 9(5) of the LUB requires the streetwall to extend 100% of the width of the block. The proposed building design includes a through-block pedestrian connection and “seating stairs” between the north and south tower. It also includes a small adjacent outdoor area for hotel café seating. Combined these create gap for approximately 21% of the streetwall on the Granville Street frontage. On the very southwest corner of the building there is also a small (1.18 m) gap to allow for emergency egress.

Subsection 3.6.4 of the Design Manual permits a variance for the streetwall width. Consistent with the variance criteria, a variance in this case would have a clear purpose and would contribute to the public realm, both in terms of pedestrian connections and in terms of places for pedestrians to “dwell” and bring activity to the street.


Hollis Street
Variance request
MetroPark building in front
Variance request
Granville Street
Variance request

Variance Request 3
Stepbacks and Setbacks

Subsection 9(7) of the LUB requires stepbacks of 3 metres and 4.5 metres for the mid-rise and high-rise portions of towers, respectively. Subsection 10(7) requires the high-rise portion of towers to be set back from internal lot lines by 11.5 metres. The proposed building has stepbacks ranging from 2 metres to 4.77 metres, and the south tower is set back 4 metres from the south lot line and 4.63 metres from the south-west internal lot line.

Subsection 3.6.5 of the Design Manual permits variance of the upper storey streetwall stepbacks where:

a) the upper storey streetwall stepback is consistent with the objectives and guidelines of the Design Manual; and

b) the modification results in a positive benefit such as improved heritage preservation or the remediation of an existing blank building wall.

The need for stepbacks, and indeed the location and orientation of the towers, is heavily influenced by the provision of the through-block pedestrian connection.

Developing the dimensions and locations of the towers—particularly where mixed uses are present—is a delicate balancing act of aligning parking ramps, internal connections, emergency accesses, and elevators, while still ensuring floorplates have a workable size for their intended use.

Providing the through-block connection greatly reduces the flexibility around the other design factors and necessitates the reduction in stepbacks to accommodate the north tower. Or, conversely, varying the stepbacks on the north tower enables the positive benefit of providing a through-block pedestrian connection.

Reducing the stepbacks on the south tower allows it to continue the plane of the north tower's western façade, providing the positive benefit of architectural cohesion between the two towers.

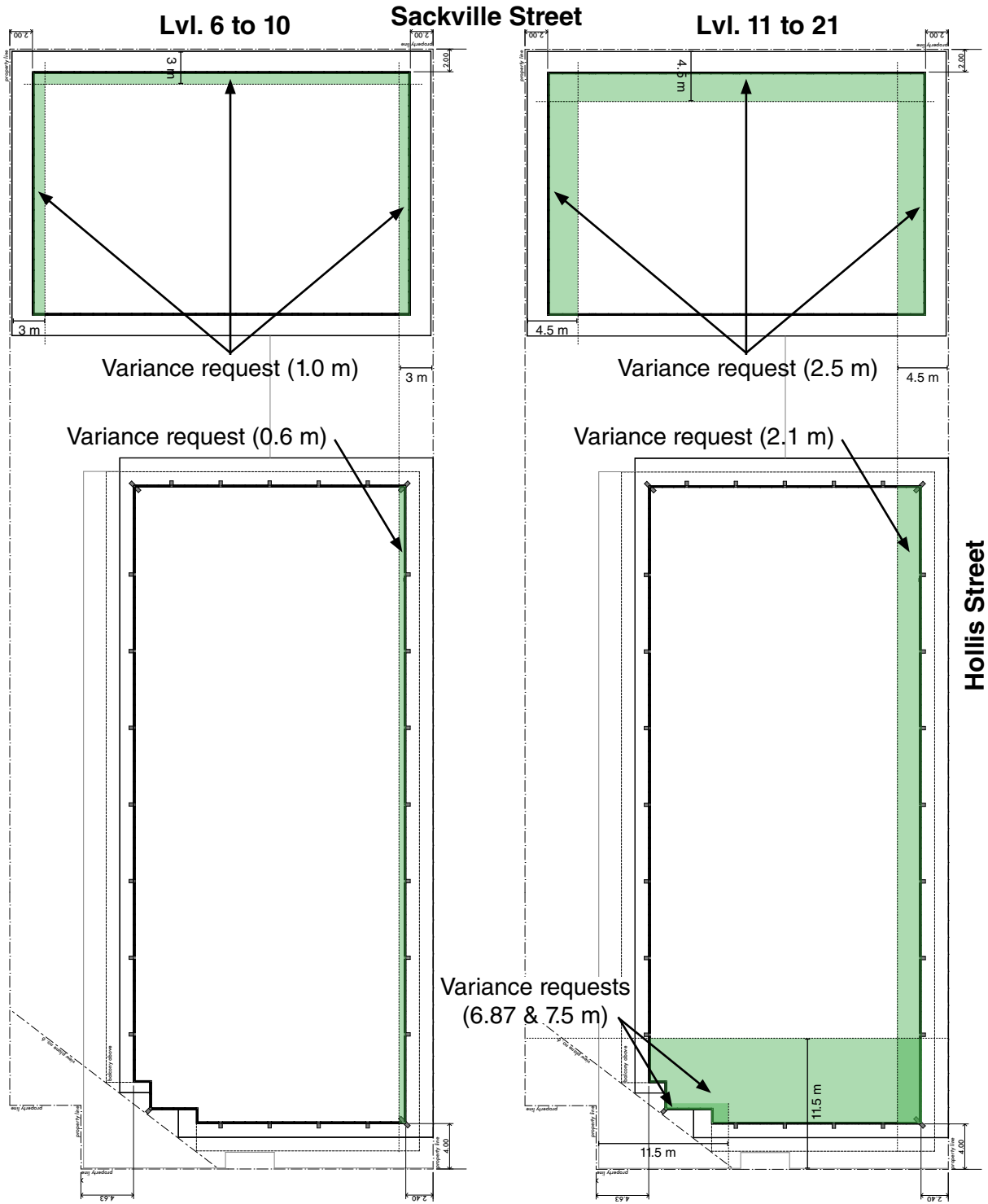
Subsection 3.6.6 of the Design Manual permits variance of the upper storey side yard stepbacks where:

a) the upper storey side yard stepback is consistent with the objectives and guidelines of the Design Manual; and

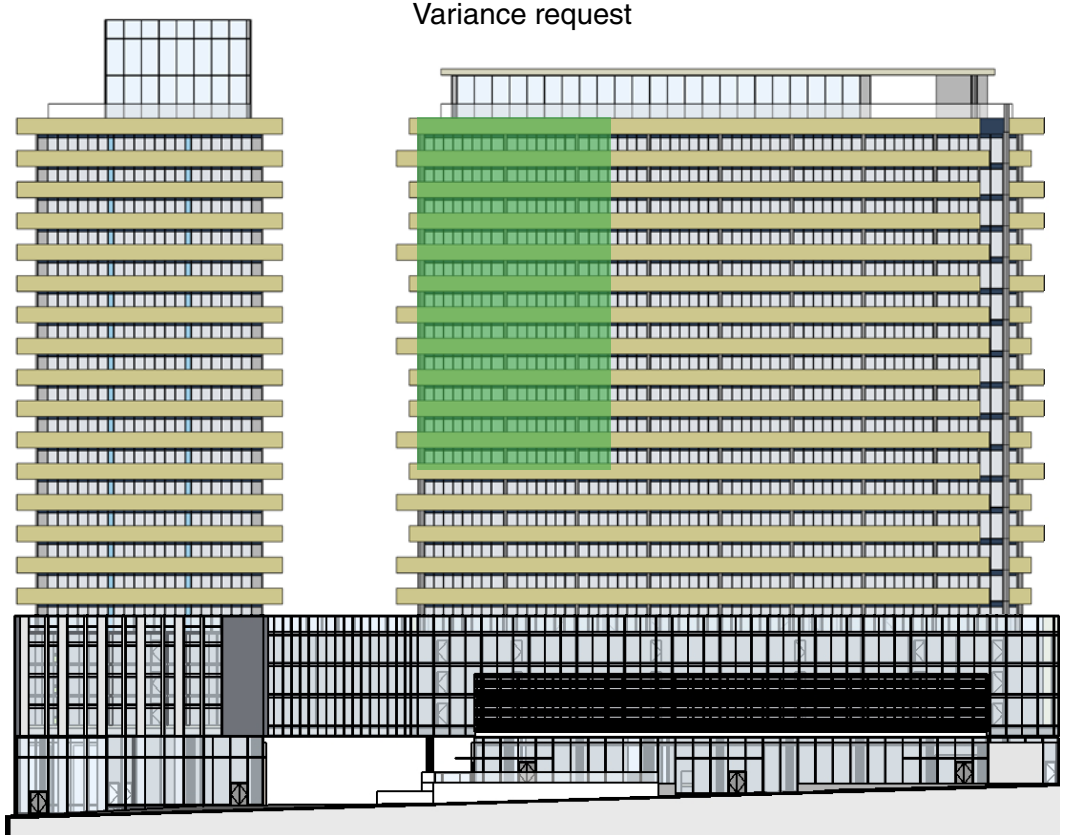
[...]; or

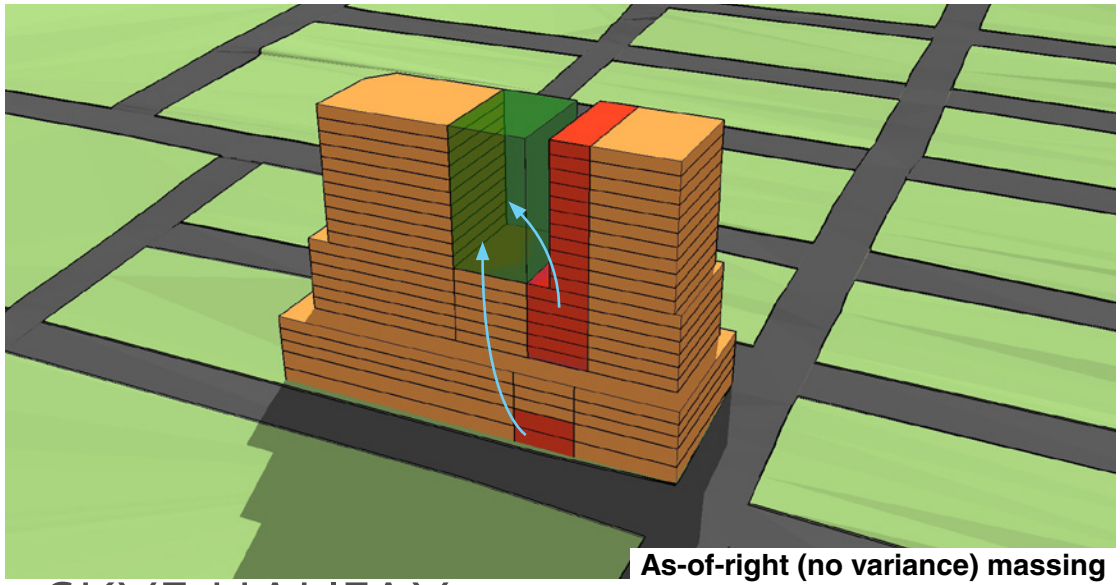
c) a reduction in setback results in the concealment of an existing blank wall with a new, well designed structure.

The proposed reduction in setbacks from the south and south-west property lines will ensure the blank wall on the MetroPark garage stairwell tower is obscured. Additionally, this variance will not prejudice development on the MetroPark site because that property is located under View Plane 6 and is not developable beyond its current height.


Sackville Street
Lvl. 6 to 10
Lvl. 11 to 21
3 m
4.5 m
Variance request (1.0 m)
Variance request (2.5 m)
Variance request (0.6 m)
Variance request (2.1 m)
Hollis Street
Variance requests
(6.87 & 7.5 m)
11.5 m
11.5 m

Variance request





As-of-right (no variance) massing

Variance Request 4
Tower Width and Separation

Subsection 10(9) requires a tower separation of 17 metres for commercial buildings and 23 metres for residential buildings. The proposal has a tower separation of 15 metres. Subsection 10(11) of the LUB restricts tower width (above 33.5 metres height) to 38 metres. The south tower has a width of 56.23 metres. These changes result from a reallocation of floor area assigned in an as-of-right scenario to the north tower, the mid-rise portion of the building, and the through-block pedestrian connection (see image).

Subsection 3.6.7 of the Design Manual permits a variance where:

a) the maximum tower width is consistent with the objectives and guidelines of the Design Manual; and

b) the modification results in a clear public benefit such as the remediation of an existing blank building wall

These proposed variances create a clear public benefit by enabling the through-block pedestrian connection. The requested variances also improve the architectural expression of the building by creating two distinct towers instead of one large mass joined by a continuous mid-rise wall.

Variance Request 5
Balconies

Subsection 10(13) of the LUB allows balconies to project into required setbacks, stepbacks, and separation distances provided the projection is no more than 2 metres and the balconies do not exceed an aggregate width more than 50% of the building width.

On the north tower all balconies project into the streetwall stepback, the upper story setbacks, and the tower separation distance by 2 metres. The balconies cover 112% of the tower width.

The south tower has a pattern of offset balconies. As a result, the following balcony encroachments occur:

Floors 7, 8, 10, 12, 15, 16, 18, & 21

Streetwall & upper story stepback:	2.4 m
Internal lot line setback:	1.2 m
Tower separation:	2.4 m

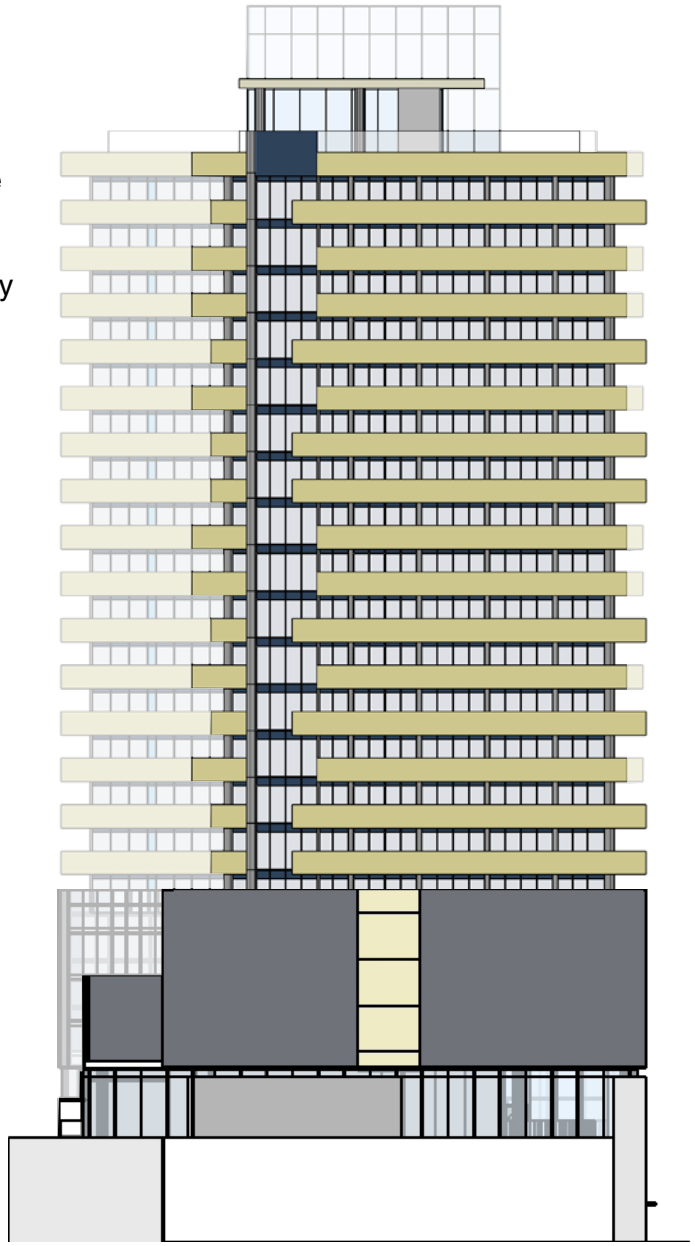
Floors 9, 11, 13, 14, 17, 19, 20, & RT

Streetwall & upper story stepback:	1.2 m
Internal lot line setback:	2.4 m
Tower separation:	1.2 m

The balconies cover between 88% and 115% of the tower width in the east-west direction and between 97% and 106% of the tower width in the north-south direction.

A variance is needed for the additional 0.4 metres on any balcony that encroaches by 2.4 metres, and a variance is needed for all balconies to exceed 50% of the tower widths.

Subsection 10(14) of the LUB permits these requirements to be varied where the variation would be consistent with the Design Manual. This variation would ensure every residential unit has the benefit of private outdoor amenity space, and would increase the visual interest of the building by allowing the off-set location of balconies at alternating floor levels.



Salter Street

Attachment D: Renderings, Floorplates and Cross Sections

GRANVILLE STREET VIEW

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

aA

SKYE HALIFAX

SITE PLAN APPLICATION

United Gulf Developments Limited, Halifax

November 2019

HOLLIS STREET / SACKVILLE STREET VIEW

HOLLIS STREET VIEW

SACKVILLE STREET / GRANVILLE STREET VIEW

GRANVILLE STREET VIEW

GRANVILLE STREET VIEW

DRAWING LIST:

Texpark

June 25th, 2019

Floor Area												Parking		Hotel Units		Condominium Units									RSA TOTAL
Level	total levels	Ht / flr	Total Ht _ m	GCA/level	Total GCA	Interior Residential Amenity	GFA Deductions	Retail GFA	Hotel GFA	Condominium GFA	Total GFA	Resident Vehicle Parking	Commercial Vehicle Parking	per floor	total	S per level	S total	1b per level	1b total	2b per level	2b total	3b per level	3b total	Total Units	
P2-P4	3			3,450	10,350		10,350					225	0												
P1	1			3,450	3,450		3,450					42	27												
Subtotal Below Grade	4				13,800		13,800					267	27												
Lower Ground	1	6.70	6.70	3,294	3,294			1,442	368	0	1,810														
Upper Ground	1	5.50	5.50	2,738	2,738			914	1,143	570	2,626														
levels 3-5	3	2.95	8.85	2,831	8,493			0	8,493	0	8,493			43	129	0	0	0	0	0	0	0	0	0	402
level 6	1	2.95	2.95	2,051	2,051			0	0	2,051	2,051					0	0	14	14	12	12	0	0	26	#REF!
level 7	1	2.95	2.95	2,051	2,051			0	0	2,051	2,051					0	0	14	14	12	12	0	0	26	
levels 8-20	13	2.95	38.35	2,051	26,666			0	0	26,666	26,666					0	0	14	182	12	156	0	0	338	4,602
level 21	1	3.50	3.50	2,051	2,051			0	0	2,051	2,051					0	0	14	14	12	12	0	0	26	
level 22 / amenity	1	5.45	5.45	702	702	518		0	0	702	702														358
level 23 / mech.		3.50		271	271			0	0	271	271														
Subtotal Above Grade	22				48,317	518	0	2,356	10,003	34,362	46,722														
Project Totals	**22**		**74.25**		**62,117**	**518**	**0**	**2,356**	**10,003**	**34,362**	**46,722**	**267**	**27**		**129**		**0**		**224**		**192**		**0**	**416**	**#REF!**

502,726 sf

Floor Area Summary	
Site Area	3,645
Total Residential Units	416
Res GFA Above Grade	34,362
Non GFA Above Grade	10,003
Total GFA Above Grade	46,722
Interior Residential Amenity	518
Hotel Rooms	129
FSI	12.82

Bldg Height Summary (m)			
	proposed	*permitted*	
Main Roof Height	65.38	66.00	*average grade*
Mech P.H. Height (South Tower)	70.79		
Mech P.H. Height (North Tower)	75.43		

Vehicular Parking Summary		
	Proposed	
Visitor Parking	0	
Resident Parking	267	
Car Share	0	
Commercial Parking	27	
Totals	**294**	

Bicycle Parking Summary						
	Proposed			Required		
	Class A	Class B	Totals	A	B	Required
Residential	167	41	208	166.4	41.6	*208*
Hotel	5	2	7	5.6	1.4	*7*
Retail	0	8	8	1.6	6.4	8
Totals	172	51	223			

NO	ISSUANCE	DATE
1	x	x
2		
3		
4		
5		
6		
7		
8		
9		

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

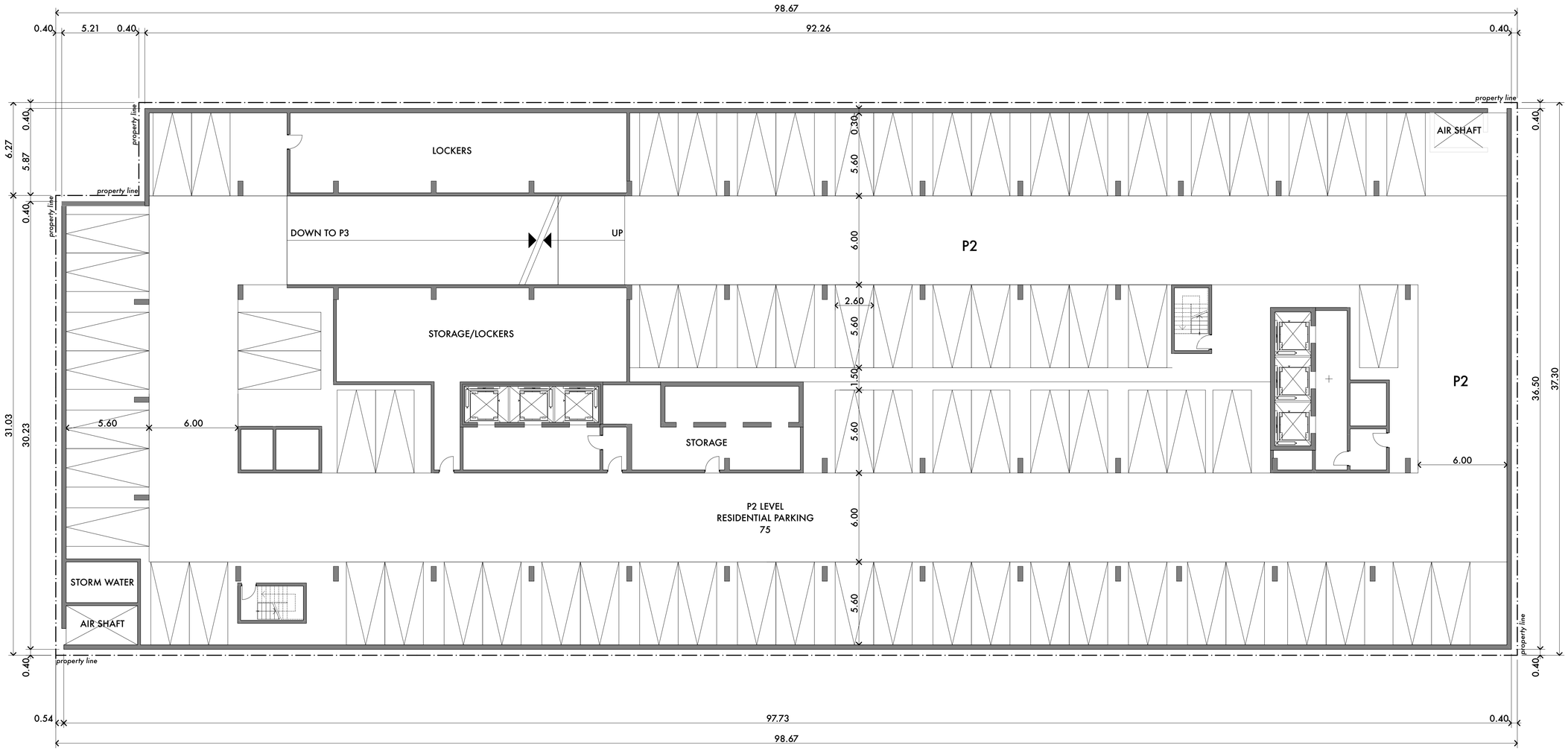
SKYE HALIFAX
UNITED GULF

Project Statistics

1:0.74

2019-10-17

A-1.1



NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

N

SKYE HALIFAX
UNITED GULF

P2-P4

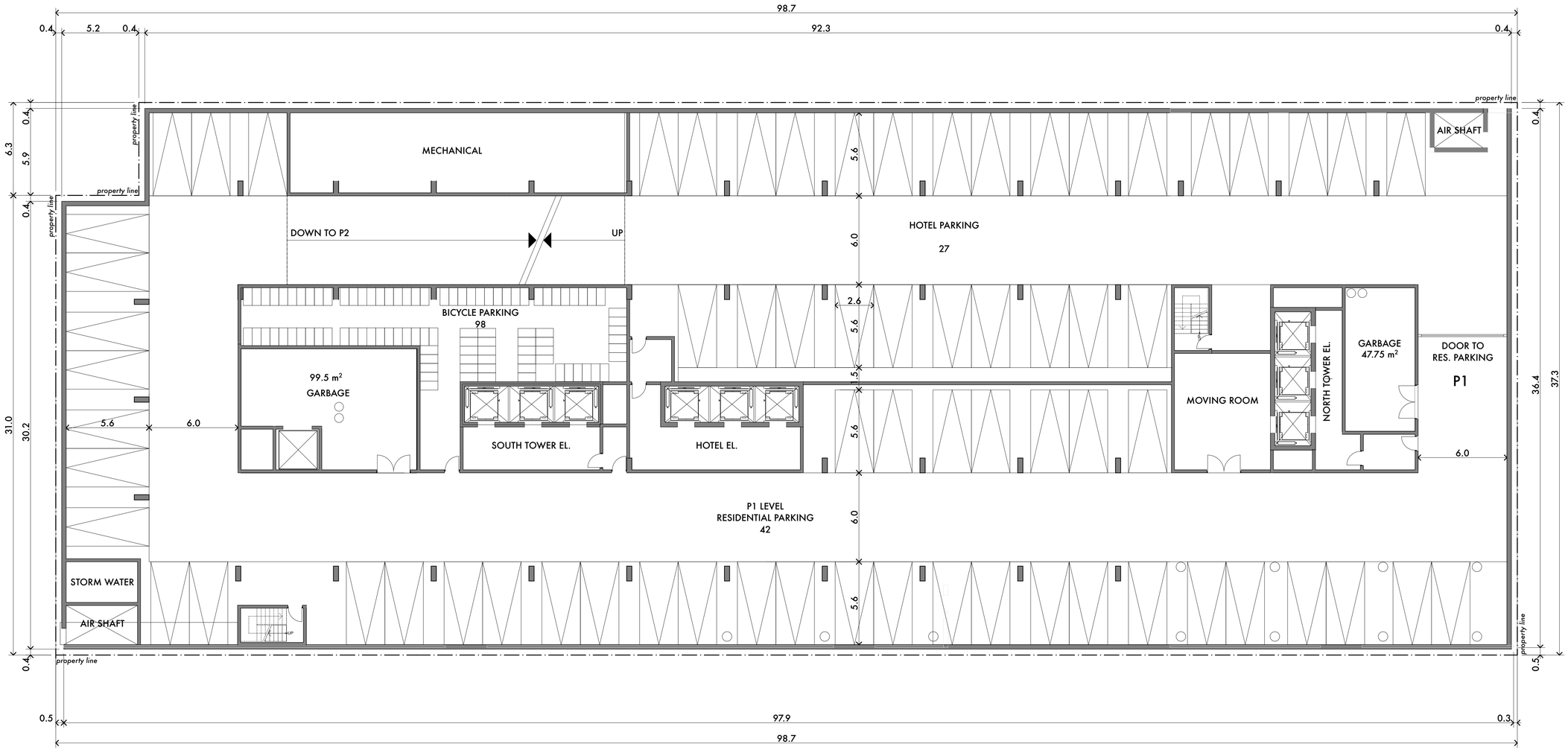
1:150

See Issurance Summary

A-2.1

Printed On: Thursday, October 17, 2019

/Volumes/ArchProj/21806-1 TEXPARK'd DRAWINGS/3.1 ARCHICAD/BUILDINGS [PLN-PLP]/191008_Halifax.pln



NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

N

SKYE HALIFAX
UNITED GULF

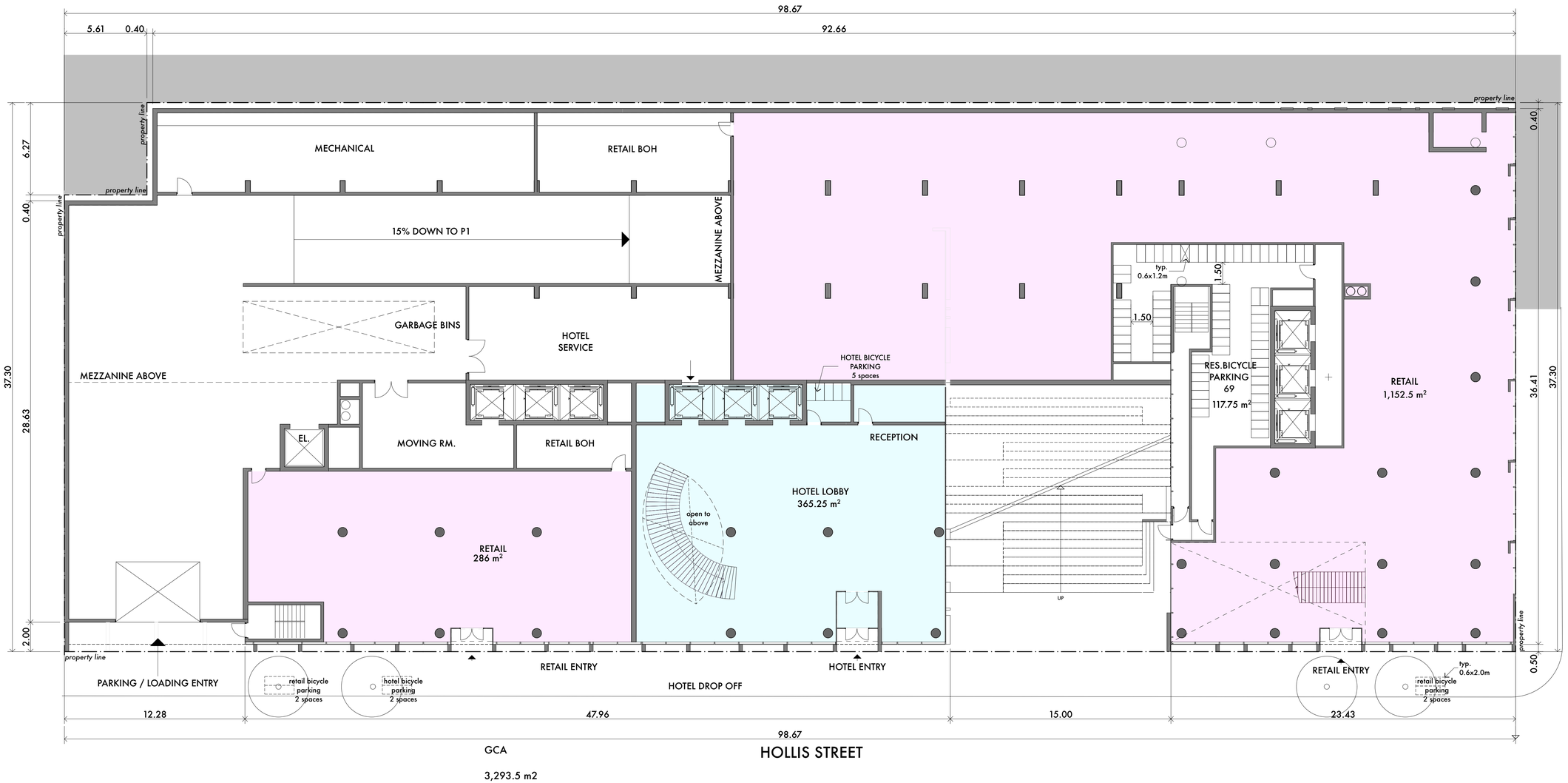
P1

1:150

See Issurance Summary

A-2.2

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		



architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

SKYE HALIFAX
UNITED GULF

Lower Ground

1:150

See Issurance Summary

A-2.3

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

SACKVILLE STREET

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

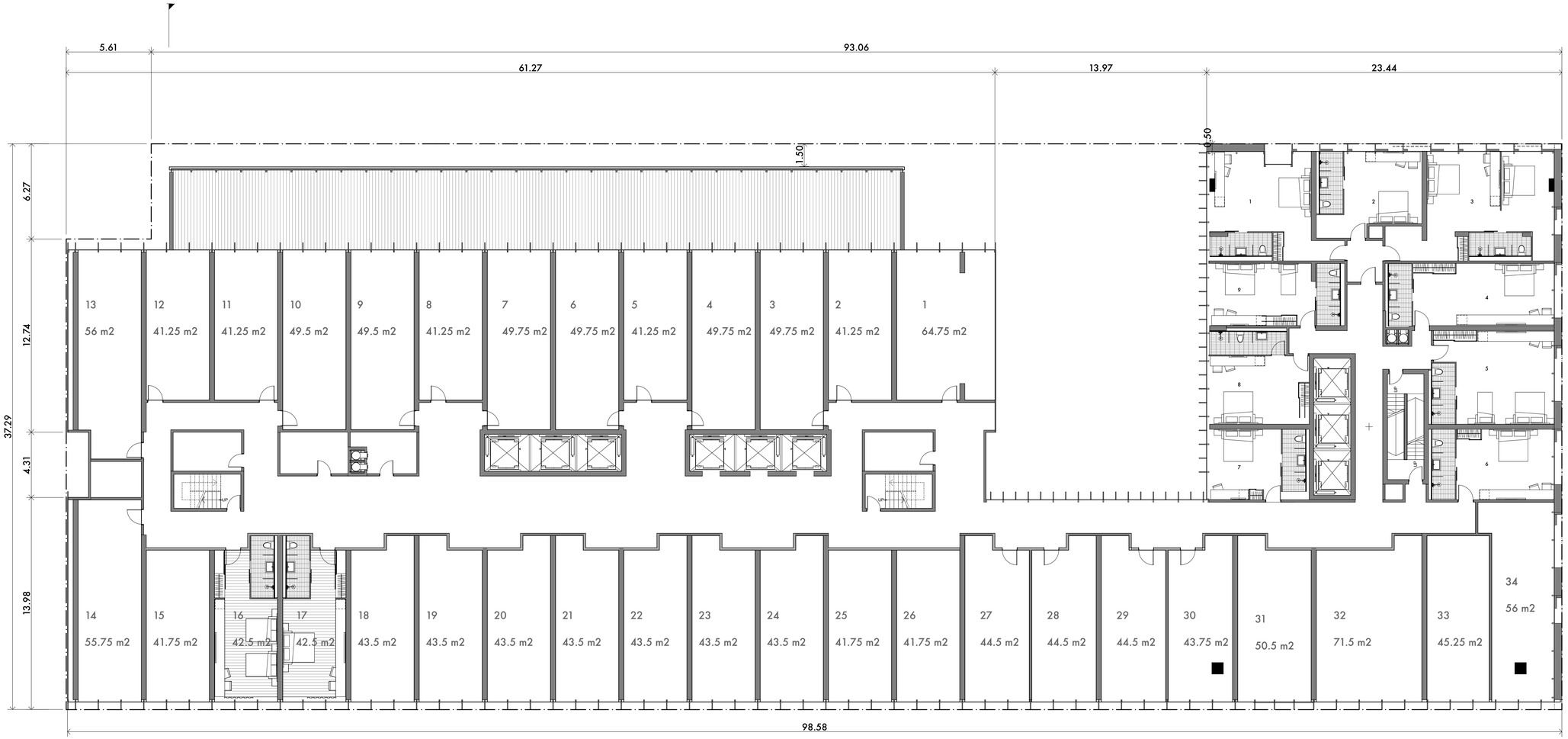
SKYE HALIFAX
UNITED GULF

Upper Ground

1:150

See Issurance Summary

A-2.4



Hotel Plate

2,831 m2

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

SKYE HALIFAX
UNITED GULF

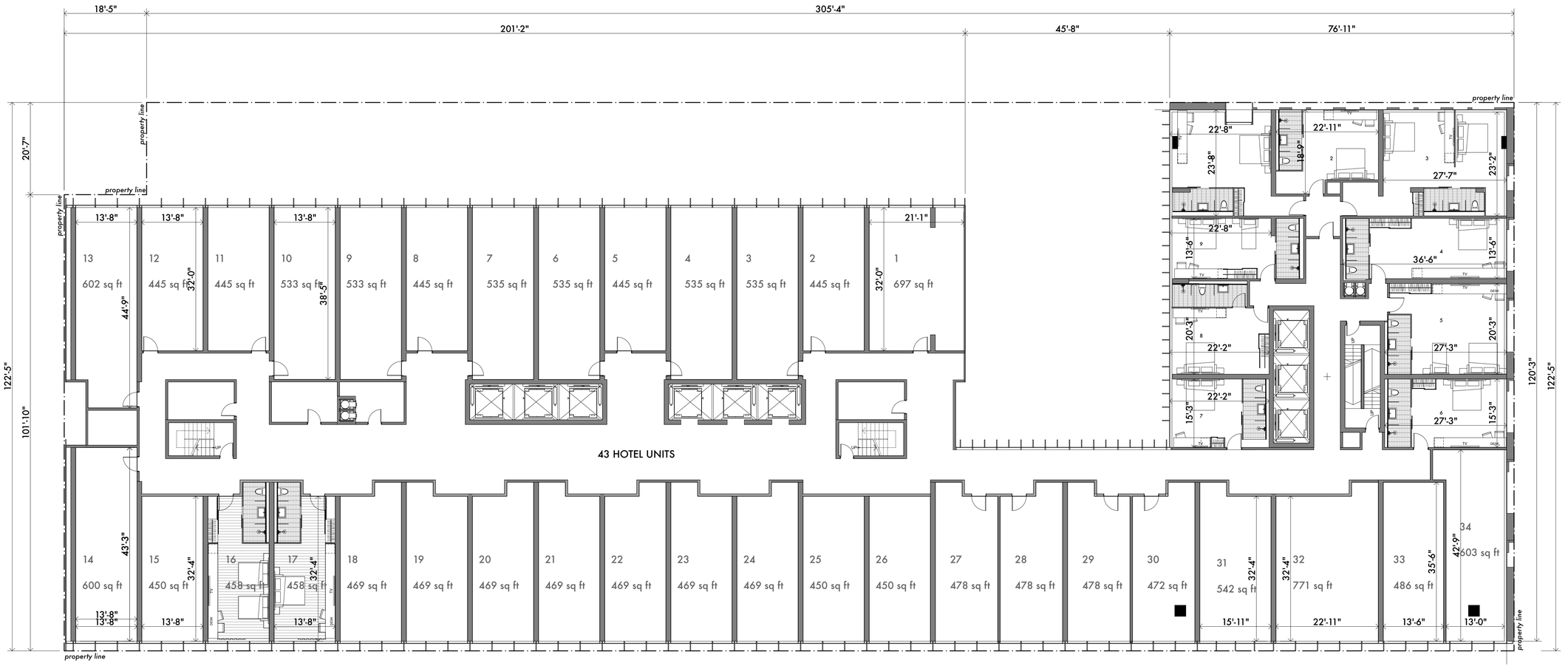
Hotel Level 3

1:150

See Issurance Summary

A-2.5

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		



Hotel Plate

30,474 sq ft

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

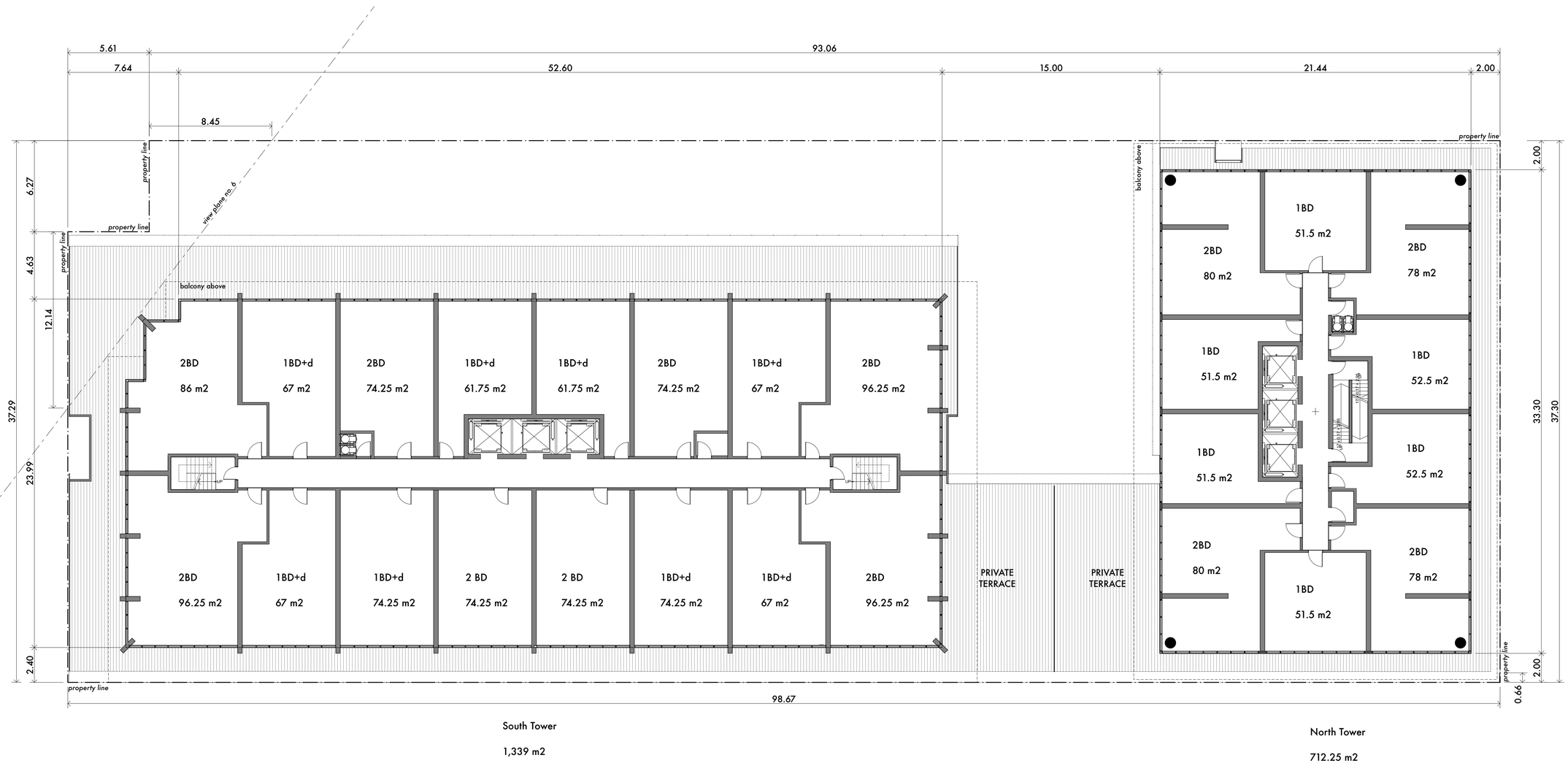
SKYE HALIFAX
UNITED GULF

Hotel Levels 4-5

1:150

See Issurance Summary

A-2.6



Printed On: Thursday, October 17, 2019

/Volumes/ArchProj/21806-1 TEXPARK\3 DRAWINGS\3.1 ARCHICAD\BUILDINGS [PLN-PL]P191008_Halifax.pln

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

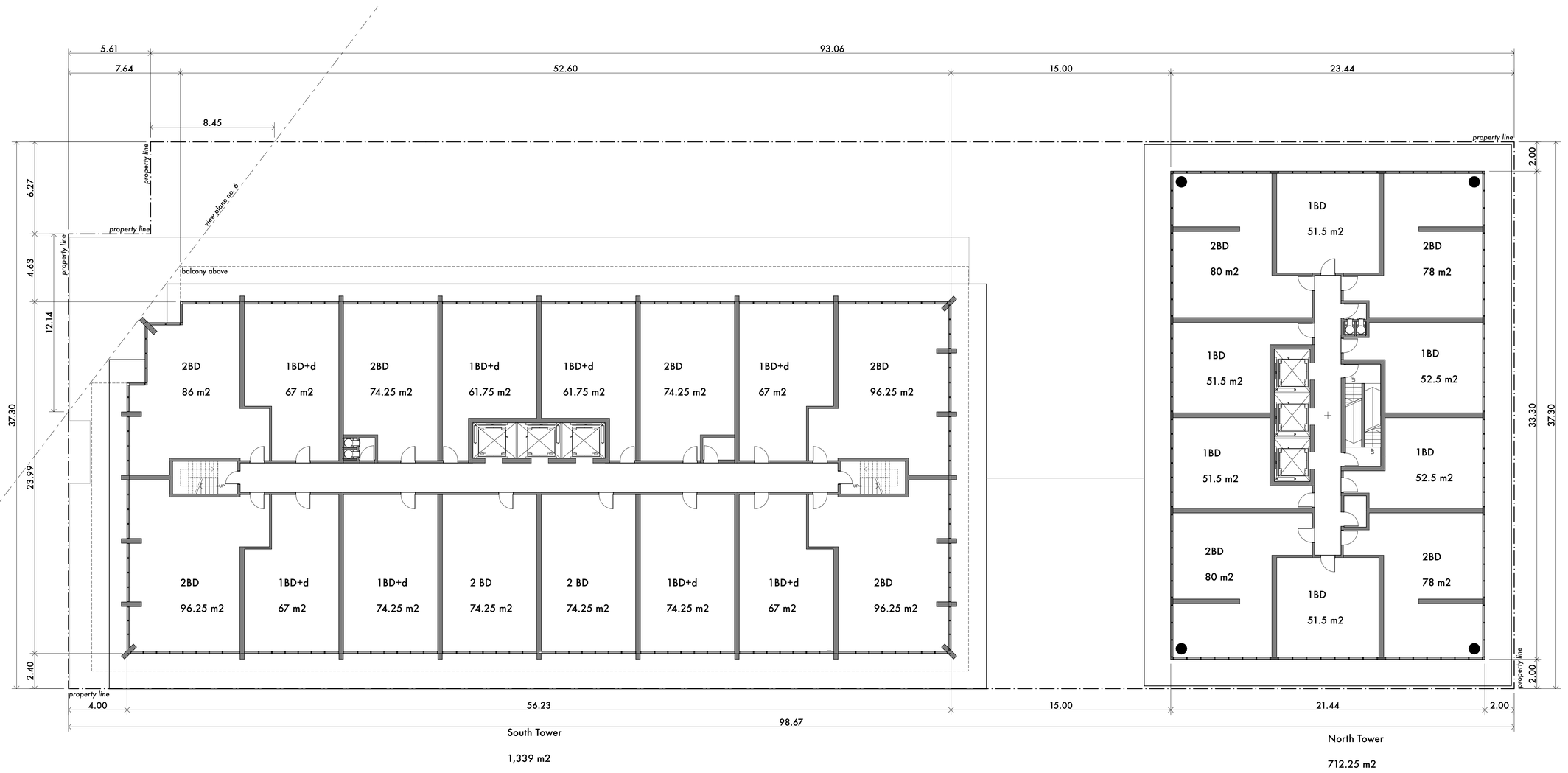
SKYE HALIFAX
UNITED GULF

Level 6

1:150

See Issurance Summary

A-2.7



NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

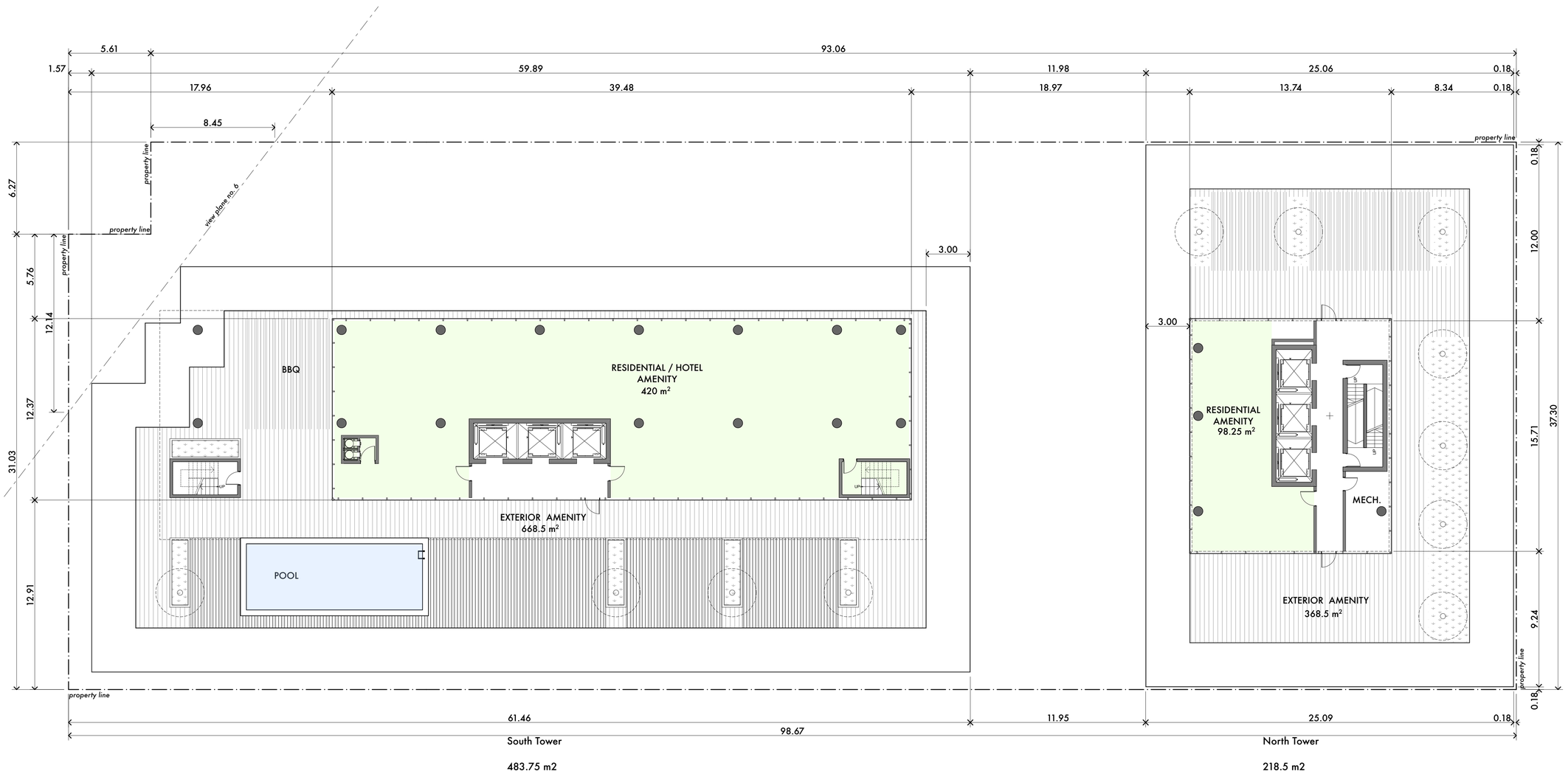
SKYE HALIFAX
UNITED GULF

Levels 7-21

1:150

See Issurance Summary

A-2.8



Printed On: Thursday, October 17, 2019

/Volumes/ArchProj/21806-1 TEXPARK\3 DRAWINGS\3.1 ARCHICAD\BUILDINGS [PLN-PL]\191008_Halifax.pln

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

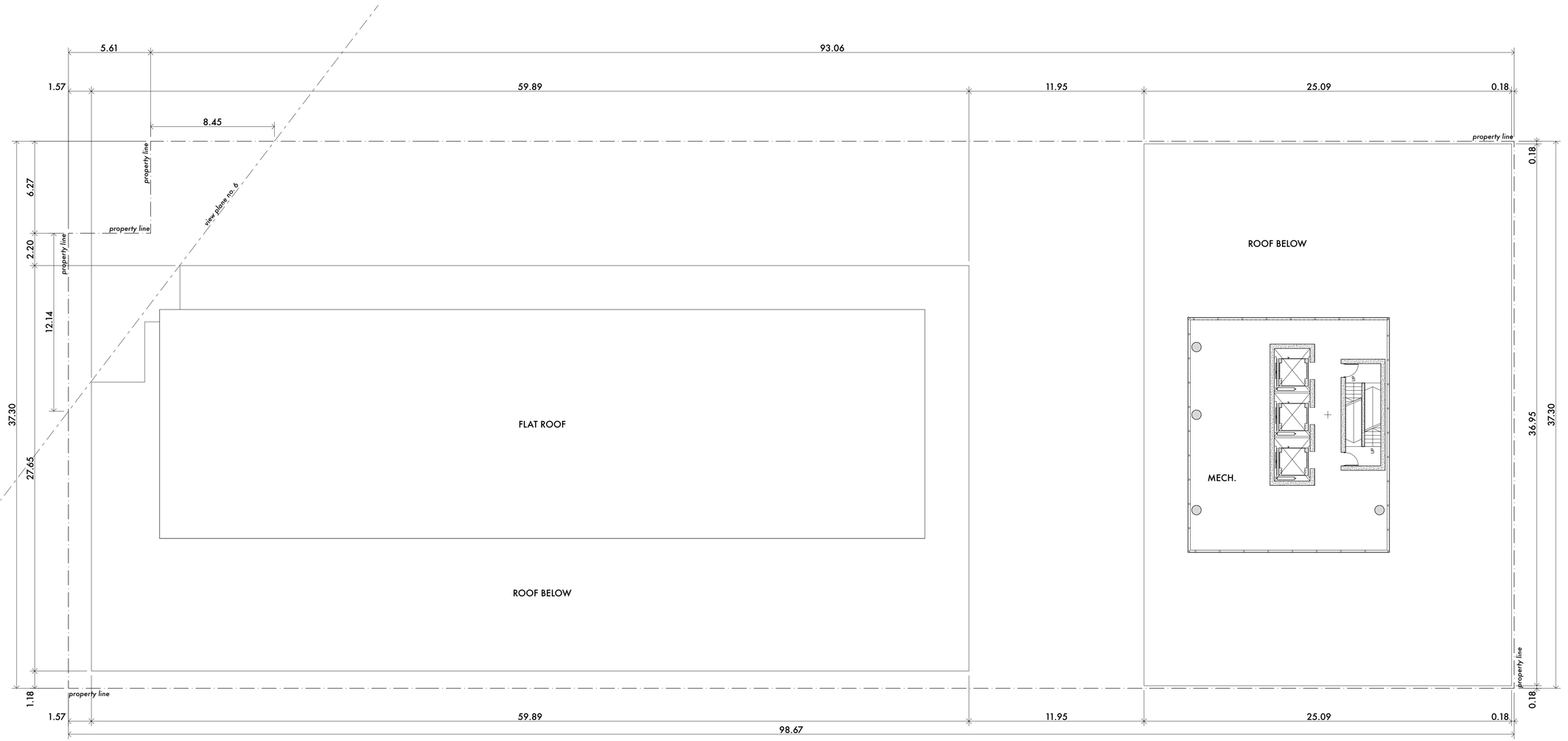
SKYE HALIFAX
UNITED GULF

Amenity - level 22

1:150

See Issurance Summary

A-2.9



Printed On: Thursday, October 17, 2019

/Volumes/Arch Proj/21806-1 TEXPARK'S DRAWINGS/3.1 ARCHICAD/BUILDINGS [PLN-PLP]191008_Halifax.pln

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

N

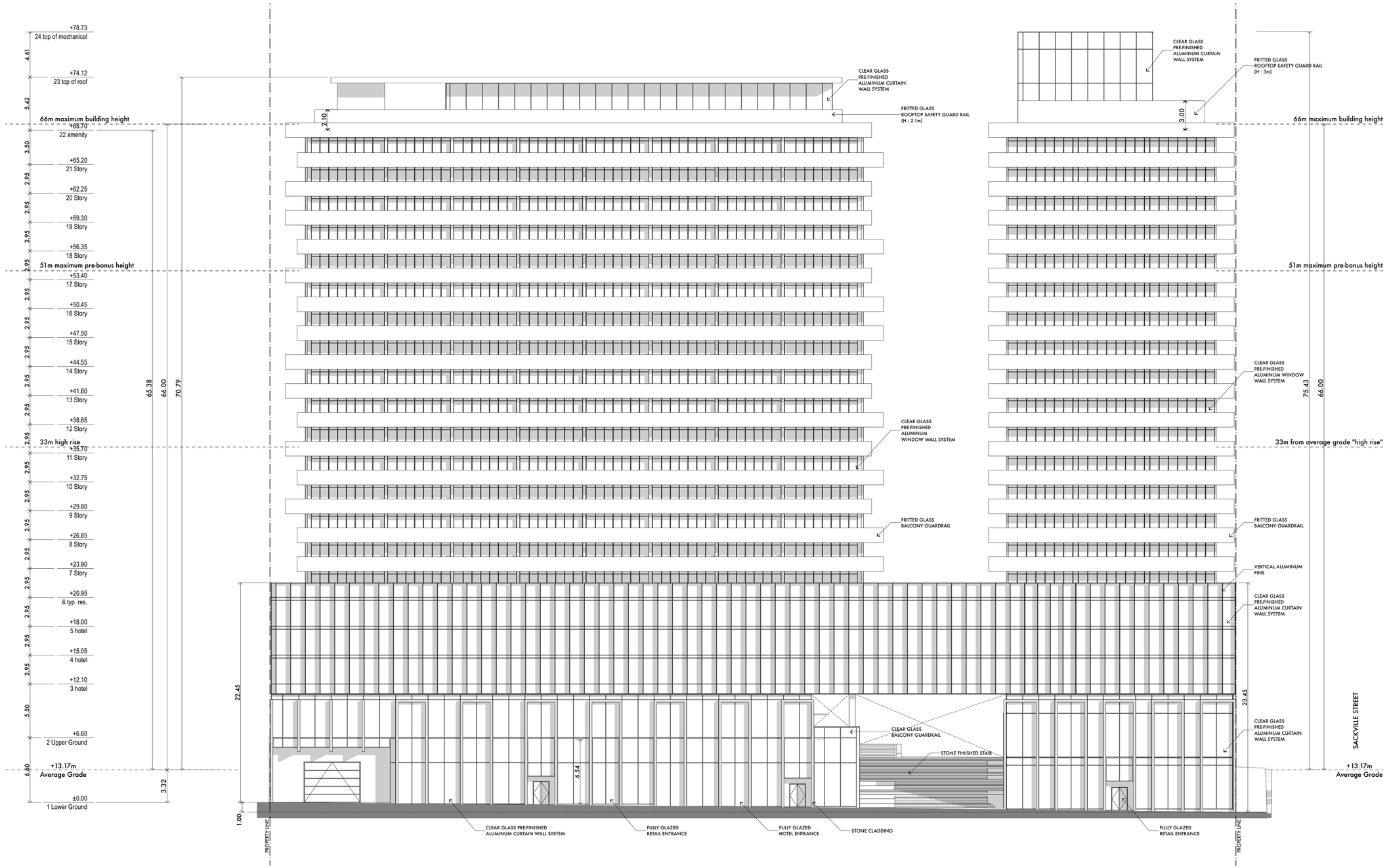
SKYE HALIFAX
UNITED GULF

Mechanical

1:150

See Issurance Summary

A-2.10



1 East Elevation
A-3.1

NO	ISSUANCE	DATE
1	x	x
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

SKYE HALIFAX
UNITED GULF

East Elevation

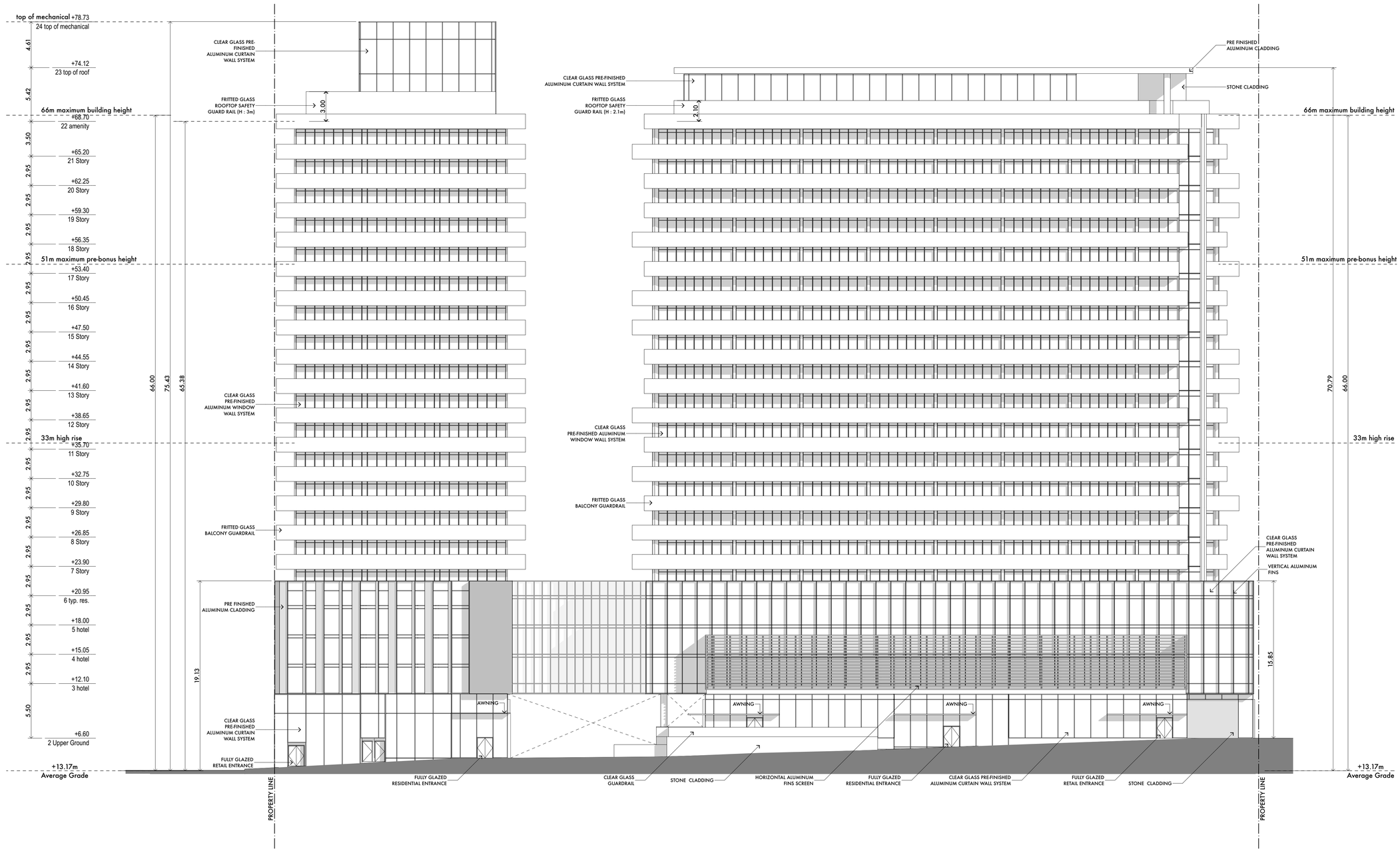
1:200

2019-10-17

A-3.1

Printed On: Thursday, October 17, 2019

/Volumes/ArchProj/21806-1 TEXPARK'G DRAWINGS/3.1 ARCHICAD/BUILDINGS [PLN-PLP]191008_Halifax.pln



1 West Elevation
A-3.2

NO	ISSUANCE	DATE
1	x	x
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

SKYE HALIFAX
UNITED GULF

West Elevation

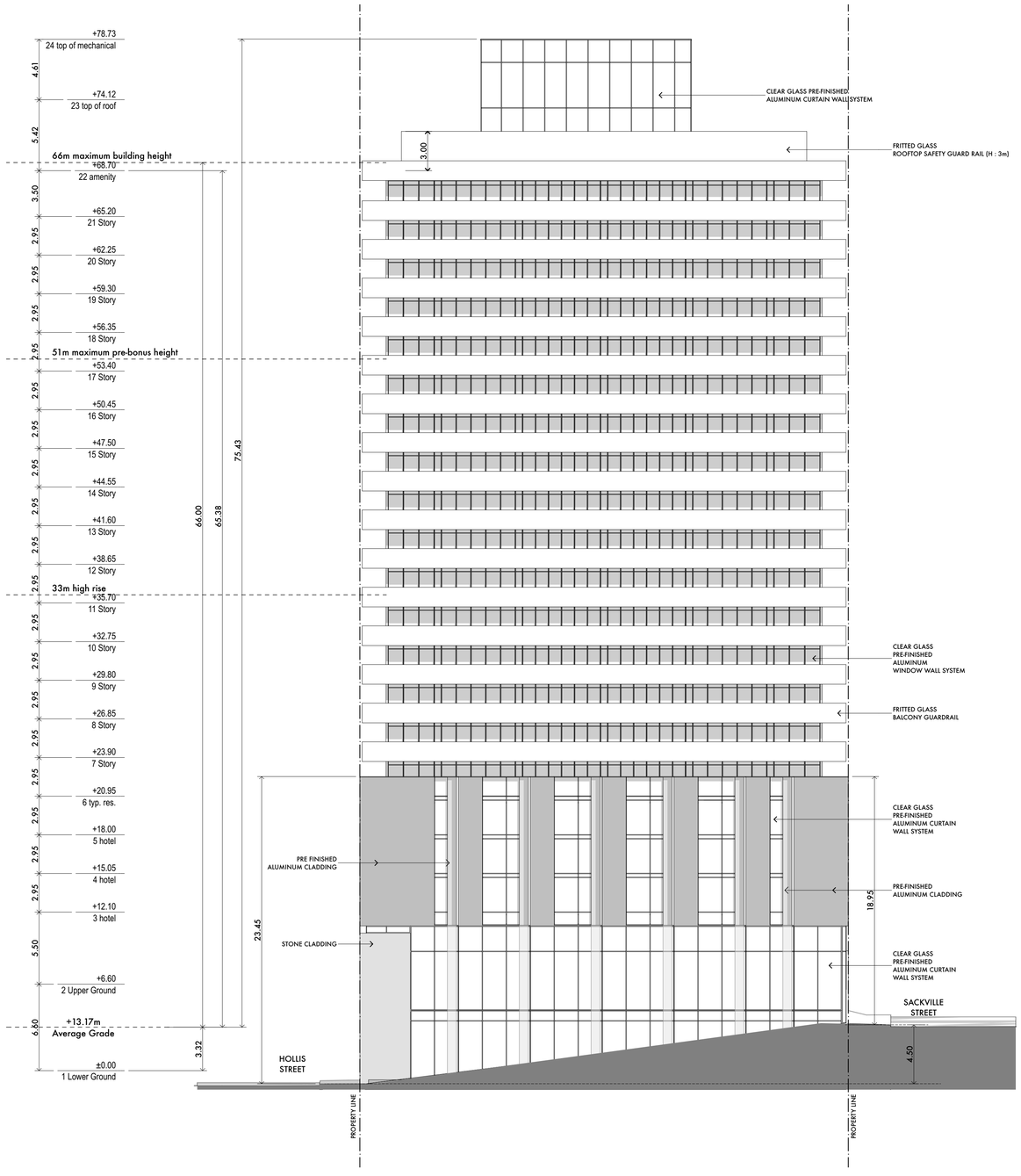
1:200

2019-10-17

A-3.2

Printed On: Thursday, October 17, 2019

/Volumes/ArchProj/21806-1 TEXPARK\3 DRAWINGS\3.1 ARCHICAD\BUILDINGS [PLN-PLP]\191008_Halifax.pln



1
A-3.3
North Elevation

Printed On: Thursday, October 17, 2019

\Volumes\ArchProj\21806-1 TEXPARK\3 DRAWINGS\3.1 ARCHICAD\BUILDINGS [PLN-PLP]191008_Halifax.pln

NO	ISSUANCE	DATE
1	-	-
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

N

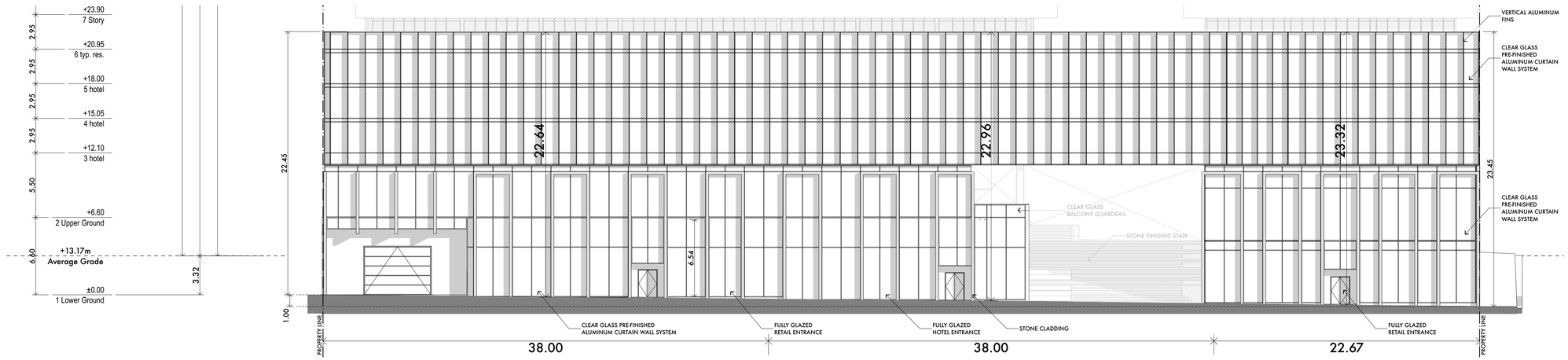
SKYE HALIFAX
UNITED GULF

North Elevation

1:200

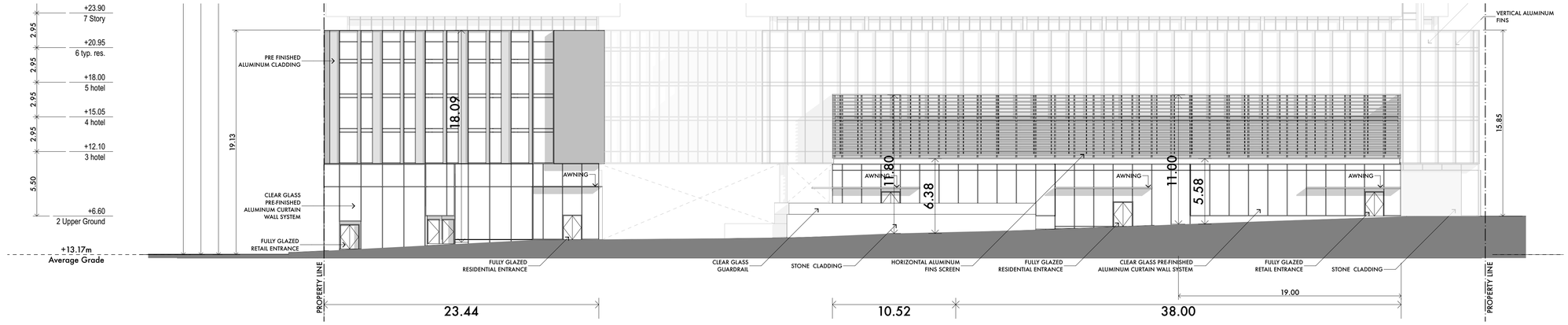
See Issurance Summary

A-3.3



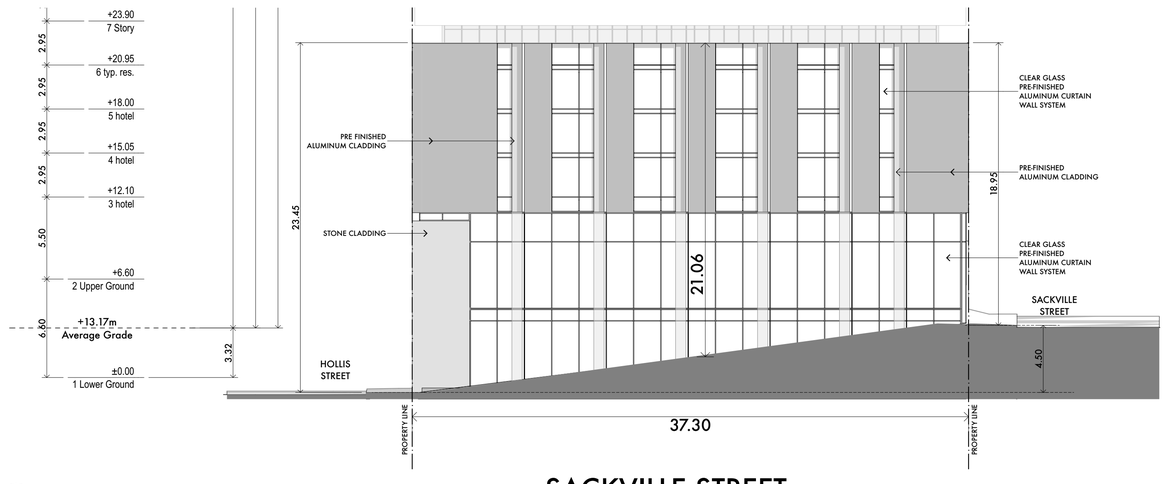
1 A-3.4 East Elevation Street Wall

HOLLIS STREET



2 A-3.4 West Elevation Street Wall

GRANVILLE STREET



3 A-3.4 North Elevation Street Wall

SACKVILLE STREET

NO	ISSUANCE	DATE
1	x	x
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

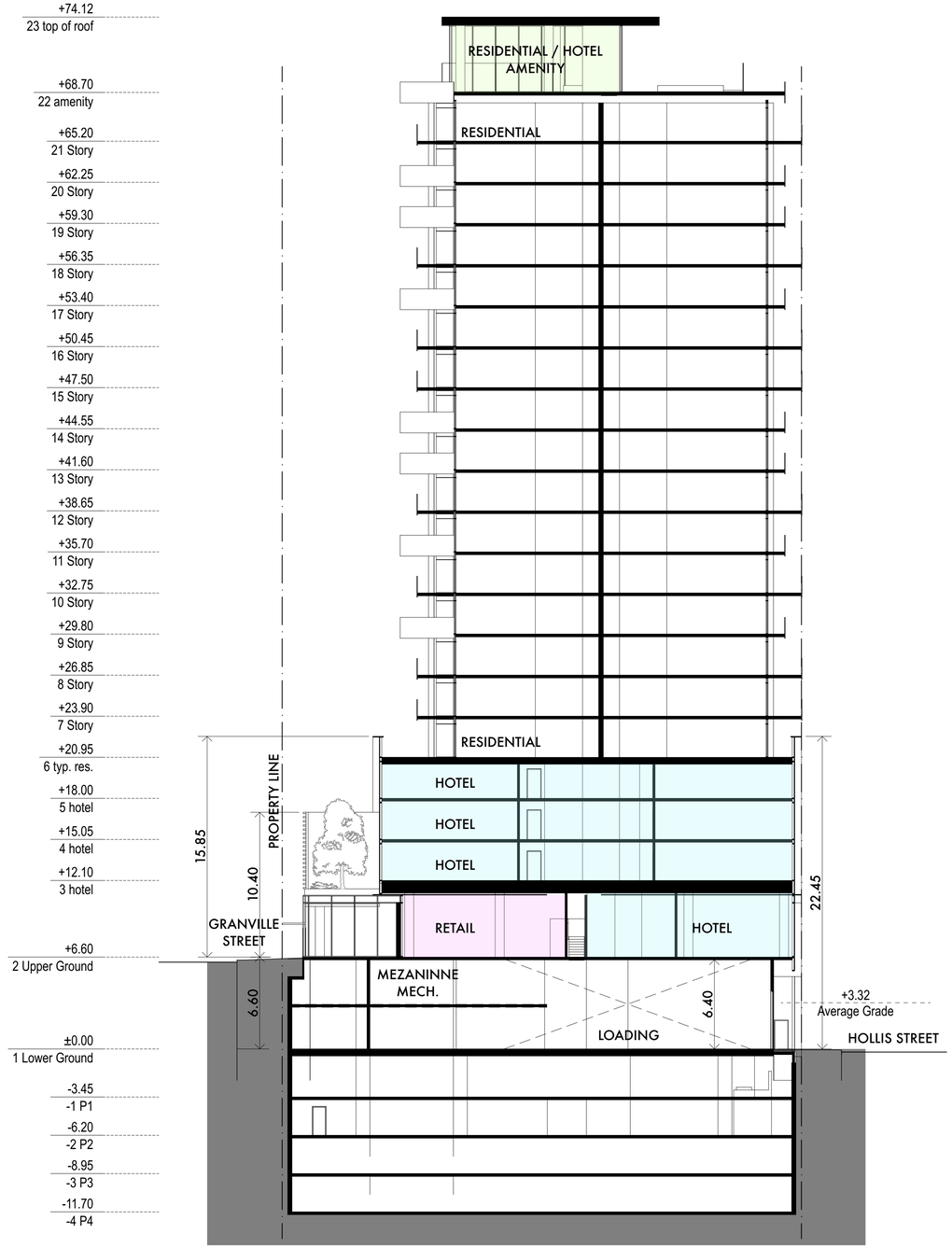
SKYE HALIFAX
UNITED GULF

Street Wall Elevations

1:200

2019-10-17

A-3.4



NO	ISSUANCE	DATE
1	x	x
2		
3		
4		
5		
6		
7		
8		
9		

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

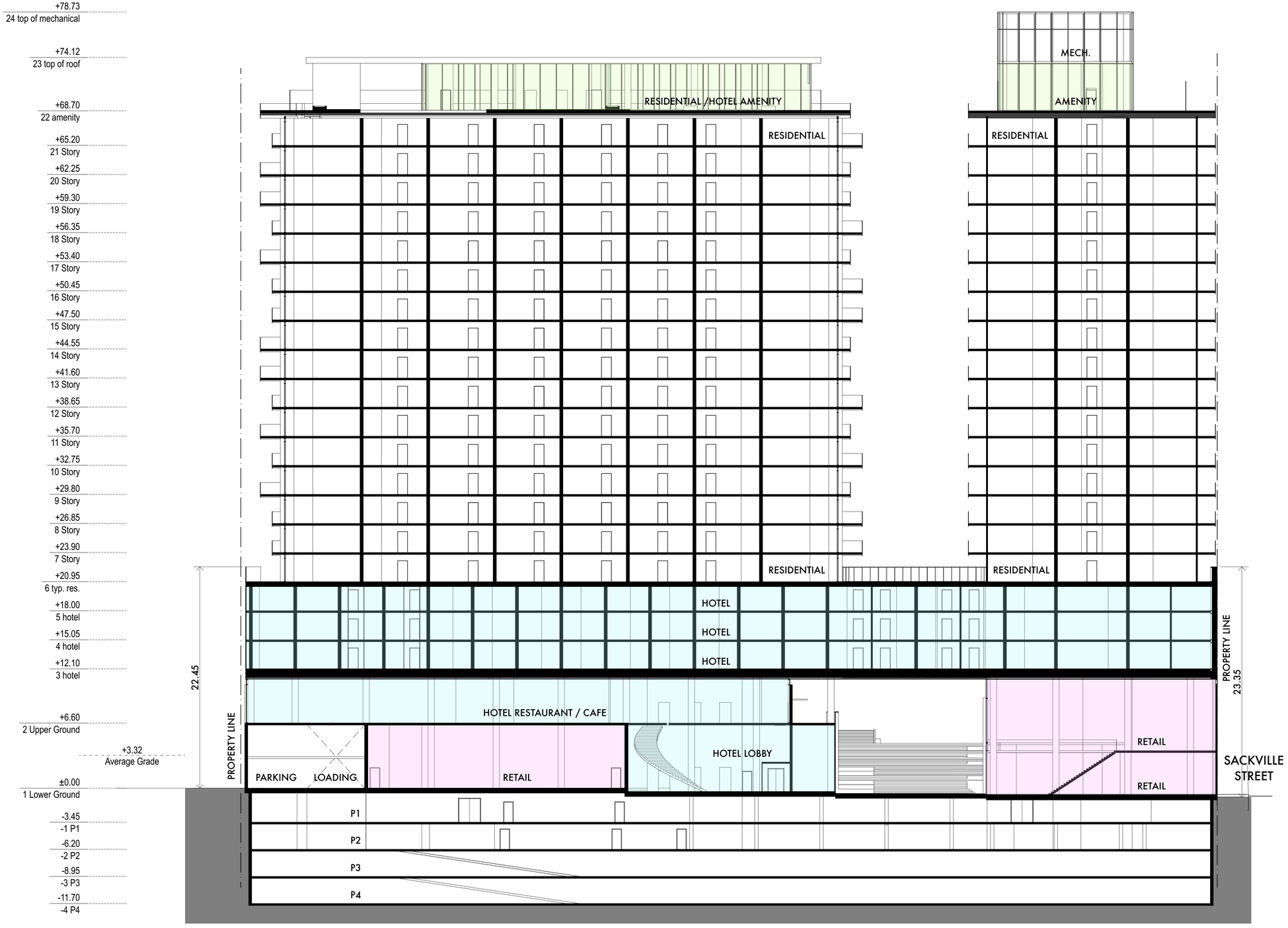
SKYE HALIFAX
UNITED GULF

West East Section

1:200

2019-10-17

A-4.1



NO	ISSUANCE	DATE
1	x	x
2		
3		
4		
5		
6		
7		
8		
9		

aA

architectsAlliance

205-317 Adelaide St. West
Toronto, Ontario M5V 1P9
t 416 593 6500
f 416 593 4911
info: architectsalliance.com

SKYE HALIFAX
UNITED GULF

S-N Section

1:200

2019-10-17

A-4.2

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
2	**DOWNTOWN PRECINCT GUIDELINES** *(refer to Map 2 for Precinct Boundaries)*		
2.4	**Precinct 4: Lower Central Downtown**		
2.4a	Allow for mixed-use high-rise infill development on large opportunity sites.	Yes	
2.4b	Prohibit new surface parking lots of any kind.	Yes	
2.4c	Ensure that existing surface parking lots and vacant sites are developed.	Yes	
2.4d	Vacant sites shall be developed in a way that provides a continuous streetwall and uninterrupted pedestrian experiences.	No	There is a lack of activity and pedestrian experience along the Sackville Street frontage, within the through-building public plaza and along Granville Street due to a 22 metre long retaining wall. The proposed streetwall is interrupted by the through-building public connection, the restaurant patio and the emergency egress at the southwest corner on Granville Street. Streetwall width variances are requested. However, the through-block connection should be relocated further south. Refer to variance section.
2.4e	The precinct is to be characterized by animated streetscapes.	Partial	While the proposed variety of uses and entrances are supported, there is a lack of information relating to engaging pedestrian experiences, especially along Sackville Street and within the through-building public plaza. There is also concern with the stone wall on Granville Street which is to abut the streetline for approximately 22 metres.
2.4f	Focus pedestrian activities at sidewalk level through the provision of weather protected sidewalks using well-designed canopies and awnings.	Yes	The design incorporates canopies/ awnings over some entry doors on Granville Street and incorporates recessed entries on both Hollis and Granville Streets which provide

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
			some weather protection. The through-block connection would also provide some protection.
2.4g	East-west streets shall continue to provide views between the Citadel and the Harbour.	Yes	
2.4h	Extensions of east-west streets between Lower Water Street and the Harbour are required as key components in open space network.	N/A	
2.4i	Establish the George Street and Carmichael Street corridor as a major east-west pedestrian connection, given the linkage between the Town Clock, the Grand Parade, and the Harbour.	N/A	
2.4j	To ensure that the Halifax Harbourwalk is of a width and quality to be an important open space linkage with other precincts.	N/A	
2.4k	Ensure that Lower Water Street shall be developed with a continuous streetwall and public realm design that emphasizes its meandering qualities and its emergence as an important street.	N/A	
2.4l	To retain isolated heritage properties and protect them from inappropriate redevelopment.	N/A	
2.4m	New waterfront development shall adhere to Section 2.10 of the Design Manual.	N/A	
3.1	**THE STREETWALL**		
3.1.1	**Pedestrian-Oriented Commercial** *(not applicable)*		
3.1.2	**Streetwall Setback** *(refer to Map 6)*		
3.1.2a	Minimal to no Setback (0-1.5m): Corresponds to the traditional retail streets and business core of the downtown. Except at corners or where an entire block length is being redeveloped, new buildings should be consistent with the setback of the adjacent existing buildings.	Yes	The streetwall setbacks are consistent with intent of the design manual. However, variances to the minimum and maximum streetwall heights are requested. Refer to variance section.
3.1.2b	Setbacks vary (0-4m): Corresponds to streets where setbacks are not consistent and often associated with non-commercial and residential uses or house-form building types. New buildings should provide a setback that is no greater or lesser than the adjacent existing buildings.	N/A	

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.1.2c	Institutional and Parkfront Setbacks (4m+): Corresponds to the generous landscaped setbacks generally associated with civic landmarks and institutional uses. Similar setbacks designed as landscaped or hardscaped public amenity areas may be considered where new public uses or cultural attractions are proposed along any downtown street. Also corresponds to building frontages on key urban parks and squares where an opportunity exists to provide a broader sidewalk to enable special streetscape treatments and spill out activity such as sidewalk patios.	N/A	
3.1.3	**Streetwall Height** *(refer to Map 7)* To ensure a comfortable human-scaled street enclosure, streetwall height should generally be no less than 11 metres and generally no greater than a height proportional (1:1) to the width of the street as measured from building face to building face. Accordingly, maximum streetwall heights are defined and correspond to the varying widths of downtown streets: generally, 15.5m, 17m or 18.5m. Consistent with the principle of creating strong edges to major public open spaces, a streetwall height of 21.5m is permitted around the perimeter of Cornwallis Park. Maximum Streetwall Heights are shown on Map 7 of the Land Use By-law.	No	Map 7 of the Downtown Halifax LUB shows a maximum streetwall height of 18.5 metres for the subject lands. There is also a minimum height of 11 metres. The proposal does not meet the minimum height along the southern portion of Granville Street and exceeds the maximum height along the Sackville and Hollis Streets façades. Variances are requested. Refer to staff report and variance section below.
3.2	**PEDESTRIAN STREETSCAPES**		
3.2.1	**Design of the Streetwall**		
3.2.1a	The streetwall should contribute to the fine grained character of the streetscape by articulating the façade in a vertical rhythm that is consistent with the prevailing character of narrow buildings and storefronts.	Yes	The design expresses the idea of narrow shopfronts via the use of vertical stone-clad bays and vertically-oriented aluminum fins along the streetwall. This is combined with the presence of frequent entries and canopies or recessed entries.
3.2.1b	The streetwall should generally be built to occupy 100% of a property's frontage along streets.	No	Streetwall width variances are requested – refer to 2.4d and variance section.
3.2.1c	Generally, streetwall heights should be proportional to the width of the right of way, a 1:1 ratio between streetwall height and right of way width. Above the maximum streetwall height, further building heights are subject to upper storey stepbacks.	No	Variances to the minimum and maximum streetwall heights and upper stepbacks are requested. Refer to variance section.

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.2.1d	In areas of contiguous heritage resources, streetwall height should be consistent with heritage buildings.	N/A	
3.2.1e	Streetwalls should be designed to have the highest possible material quality and detail.	Yes	The streetwall will feature high quality materials such as glazed curtain wall, aluminum cladding and screening, and stone cladding used on the vertical bays, within the through-building connection and for the retaining walls and other portions of walls.
3.2.1f	Streetwalls should have many windows and doors to provide eyes on the street and a sense of animation and engagement.	Partial	While the proposal includes numerous entries and abundant glazing, as sense of animation and engagement is not obvious or ensured, particularly on Sackville Street and within the through-building public plaza.
3.2.1g	Along pedestrian frontages at grade level, blank walls shall not be permitted, nor shall any mechanical or utility functions (vents, trash vestibules, propane vestibules, etc.) be permitted.	Yes	
3.2.2	**Building Orientation and Placement**		
3.2.2a	All buildings should orient to, and be placed at, the street edge with clearly defined primary entry points that directly access the sidewalk.	Partial	With the exception of Sackville Street, the building is placed and oriented towards the remaining streets (Granville and Hollis). Primary entry points directly access those sidewalks, but not on Sackville.
3.2.2b	Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space (see diagram at right). Such treatments are also appropriate for Prominent Visual Terminus sites identified on Map 9 of the Land Use By-law.	Partial	While the through-building public plaza is defined by the exterior walls of the building's base, between the north and south portions, there are no proposed entrances (other than a residential rear entry/ exit) or obvious elements of pedestrian interest or animation.
3.2.2c	Side yard setbacks are not permitted in the Central Blocks defined on Map 8 of the Land Use Bylaw,	No	While a through-block pedestrian connection may be warranted, the location should

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
	except where required for through-block pedestrian connections or vehicular access.		be further south on the block, and further from the Sackville street intersection. Streetwall width variances are requested – refer to 2.4d and variance section.
3.2.3	**Retail Uses**		
3.2.3a	All mandatory retail frontages (Map 3 of Land Use By-law) should have retail uses at-grade with a minimum 75% glazing to achieve maximum visual transparency and animation.	Yes	The subject site is not located on a pedestrian-oriented commercial street (Map 3), therefore this guideline isn't mandatory. However, the design complies with the Design Manual in this regard.
3.2.3b	Weather protection for pedestrians through the use of well-designed awnings and canopies is required along mandatory retail frontages (Map 3) and is strongly encouraged in all other areas.	Yes	
3.2.3c	Where retail uses are not currently viable, the grade-level condition should be designed to easily accommodate conversion to retail at a later date.	N/A	
3.2.3d	Minimize the transition zone between retail and the public realm. Locate retail immediately adjacent to, and accessible from, the sidewalk.	Yes	
3.2.3e	Avoid deep columns or large building projections that hide retail display and signage from view.	Yes	
3.2.3f	Ensure retail entrances are located at or near grade. Avoid split level, raised or sunken retail entrances. Where a changing grade along a building frontage may result in exceedingly raised or sunken entries it may be necessary to step the elevation of the main floor slab to meet the grade changes.	Yes	The proposal mostly complies, with the exception of Sackville Street. In order to have an entrance on Sackville St., this would require stepping the slab elevation or having a mezzanine level, which may not be feasible. Refer to 3.2.5 f.
3.2.3g	Commercial signage should be well designed and of high material quality to add diversity and interest to retail streets, while not being overwhelming.	N/A	
3.2.4	**Residential Uses**		
3.2.4 a.	Individually accessed residential units (i.e. town homes) should have front doors on the street, with appropriate front yard privacy measures such as	N/A	

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
	setbacks and landscaping. Front entrances and first floor slabs should be raised above grade level for privacy, and should be accessed through means such as steps, stoops and porches.		
3.2.4 b.	Residential units accessed by a common entrance and lobby may have the entrance and lobby elevated or located at grade-level, and the entrance should be clearly recognizable from the exterior through appropriate architectural treatment.	Yes	
3.2.4 c.	Projects that feature a combination of individually accessed units in the building base with common entrance or lobby-accessed units in the upper building are encouraged.	N/A	
3.2.4 d.	Units with multiple bedrooms (2 and 3 bedroom units) should be provided that have immediately accessible outdoor amenity space. The amenity space may be at-grade or on the landscaped roof of a podium.	Yes	
3.2.4 e.	Units provided to meet housing affordability requirements shall be uniformly distributed throughout the development and shall be visually indistinguishable from market-rate units through the use of identical levels of design and material quality.	N/A	
3.2.4 f.	Residential uses introduced adjacent to pre-existing or concurrently developed eating and drinking establishments should incorporate acoustic dampening building materials to mitigate unwanted sound transmission.	N/A	
3.2.5	**Sloping Conditions**		
3.2.5a	Maintain active uses at-grade, related to the sidewalk, stepping with the slope. Avoid levels that are distant from grade.	Yes	
3.2.5b	Provide a high quality architectural expression along facades. Consider additional detailing, ornamentation or public art to enhance the experience.	Partial	The Sackville Street façade, while being a mostly glazed wall, should incorporate elements of pedestrian visual interest, such as public art, advertising/ signage, lighting, etc., since there are no entrances proposed.

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.2.5c	Provide windows, doors and other design articulation along facades; blank walls are not permitted.	Partial	Refer to 3.2.5 b above.
3.2.5d	Articulate the façade to express internal floor or ceiling lines; blank walls are not permitted.	Yes	
3.2.5e	Wrap retail display windows a minimum of 4.5 metres around the corner along sloping streets, where retail is present on the sloping street.	No	This is not met at the corner of Sackville and Hollis Streets. Clear glass on the Hollis Street façade changes to stone cladding around the corner.
3.2.5f	Wherever possible, provide pedestrian entrances on sloping streets. If buildings are fully accessible at other entrances, consider small flights of steps or ramps up or down internally to facilitate entrances on the slope.	No	No entrances are proposed on Sackville Street. If it is not possible to provide a pedestrian entrance in this location (eg. stepping the slab elevation or a mezzanine level), then the rationale should indicate this. Other options should be explored which provide visual interest along Sackville St., including the building corners.
3.2.5g	Flexibility in streetwall heights is required in order to transition from facades at lower elevations to facades at higher elevations on the intersecting streets. Vertical corner elements (corner towers) can facilitate such transitions, as can offset or broken cornice lines at the top of streetwalls on sloping streets.	No	Streetwall height variances are requested. Refer to variance section.
3.2.6	**Elevated Pedestrian Walkways** *(not applicable)*		
3.2.7	**Other Uses** *(not applicable)*		
3.3	**BUILDING DESIGN**		
3.3.1	**Building Articulation**		
3.3.1a	To encourage continuity in the streetscape and to ensure vertical breaks in the façade, buildings shall be designed to reinforce the following key elements through the use of setbacks, extrusions, textures, materials, detailing, etc.: • Base: Within the first four storeys, a base should be clearly defined and positively contribute to the quality of the pedestrian	No	The base of the building, as noted in the applicant's design rationale, coincides with the streetwall or hotel podium. The base displays a high degree of transparency and quality materials. The base is distinguished from the middle by its vertical articulation on the lower and upper ground floor

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
	environment through animation, transparency, articulation and material quality. • Middle: The body of the building above the base should contribute to the physical and visual quality of the overall streetscape. • Top: The roof condition should be distinguished from the rest of the building and designed to contribute to the visual quality of the skyline.		levels, by the repetition of stone clad bays, and on the hotel levels above the ground floor via the vertical aluminum fins. It is less obvious how a sense of pedestrian animation and engagement will be achieved at the ground floor levels. The middle of the building, the residential towers, are more horizontal in their articulation as a result of the repetition of the continuous balconies that wrap around all sides of the towers. Despite the alternating width of balconies on the southern tower which provides some visual interest, the repetition of balconies and lack of stepbacks on both towers and the excessive width of the southern tower does not contribute to the physical and visual quality of the streetscape. The top of the building lacks interest and distinguishing characteristics and does not contribute to the visual quality of the skyline.
3.3.1b	Buildings should seek to contribute to a mix and variety of high quality architecture while remaining respectful of downtown's context and tradition.	Partial	The base of the building meets this guideline more so than the towers, which do not comply with the high quality of architecture envisioned by the Design Manual.
3.3.1c	To provide architectural variety and visual interest, other opportunities to articulate the massing should be encouraged, including vertical and horizontal recesses or projections, datum lines, and changes in material, texture or colour.	No	With regard to the base of the building, more information was sought on how visual interest will be achieved at the pedestrian levels. The tower portions of the building require design changes that articulate the massing, reduce the width of the south tower and provide distinct and interesting

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
			architectural features at the rooftop.
3.3.1d	Street facing facades should have the highest design quality, however, all publicly viewed facades at the side and rear should have a consistent design expression.	No	See above. The only side facing façade is at the southern end of the site, abutting the MetroPark garage, and will not be visible from the street.
3.3.2	**Materials**		
3.3.2a	Building materials should be chosen for their functional and aesthetic quality, and exterior finishes should exhibit quality of workmanship, sustainability and ease of maintenance.	Yes	Proposed exterior materials include glazed aluminum curtain wall, stone and aluminum cladding, including stone clad vertical bays and aluminum fins and screening on the base portion, and a combination of clear glass window wall and fritted glass balcony rails on the towers.
3.3.2b	Too varied a range of building materials is discouraged in favour of achieving a unified building image.	N/A	
3.3.2c	Materials used for the front façade should be carried around the building where any facades are exposed to public view at the side or rear.	No	Clear glass at the Hollis Street corner changes to stone cladding around the corner on Sackville Street.
3.3.2d	Changes in material should generally not occur at building corners.	No	See 3.3.2c above.
3.3.2e	Building materials recommended for new construction include brick, stone, wood, glass, in-situ concrete and pre-cast concrete.	Yes	
3.3.2f	In general, the appearance of building materials should be true to their nature and should not mimic other materials.	Yes	
3.3.2g	Stucco and stucco-like finishes shall not be used as a principle exterior wall material.	Yes	
3.3.2h	Vinyl siding, plastic, plywood, concrete block, EIFS (exterior insulation and finish systems where stucco is applied to rigid insulation), and metal siding utilizing exposed fasteners are prohibited.	Yes	

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.3.2i	Darkly tinted or mirrored glass is prohibited. Clear glass is preferable to light tints. Glare reduction coatings are preferred.	Yes	
3.3.2j	Unpainted or unstained wood, including pressure treated wood, is prohibited as a building material for permanent decks, balconies, patios, verandas, porches, railings and other similar architectural embellishments, except that this guideline shall not apply to seasonal sidewalk cafes.	Yes	
3.3.3	**Entrances**		
3.3.3a	Emphasize entrances with such architectural expressions as height, massing, projection, shadow, punctuation, change in roof line, change in materials, etc.	Partial	The proposed entrances on Hollis Street are recessed. While there are over-arching stone clad vertical bays above, the entrances require more emphasis, especially the main hotel entry. On Granville Street, the entries are covered by canopies, but could use more prominence as well.
3.3.3b	Ensure main building entrances are covered with a canopy, awning, recess or similar device to provide pedestrian weather protection.	Yes	Canopies and recessed entries are proposed. See above.
3.3.3c	Modest exceptions to setback and stepback requirements are possible to achieve these goals.	N/A	
3.3.4	**Roof Line and Roofscapes**		
3.3.4a	Buildings above six storeys (mid and high-rise) contribute more to the skyline of individual precincts and the entire downtown, so their roof massing and profile must include sculpting, towers, night lighting or other unique features.	No	The design should be revised to meet this guideline, especially with regard to the tops of the towers, to include unique features, sculpting and night lighting, etc. The southern tower should be reduced in width accordingly.
3.3.4b	The expression of the building top (see previous) and roof, while clearly distinguished from the building middle, should incorporate elements of the middle and base such as pilasters, materials, massing forms or datum lines.	No	The proposed towers do not have a distinguishable or articulated building “top”. Revisions to the design are recommended.
3.3.4c	Landscaping treatment of all flat rooftops is required. Special attention shall be given to landscaping rooftops in precincts 3, 5, 6 and 9,	Yes	

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
	which abut Citadel Hill and are therefore pre-eminently visible. The incorporation of living green roofs is strongly encouraged.		
3.3.4d	Ensure all rooftop mechanical equipment is screened from view by integrating it into the architectural design of the building and the expression of the building top. Mechanical rooms and elevator and stairway head-houses should be incorporated into a single well-designed roof top structure. Sculptural and architectural elements are encouraged to add visual interest.	No	Lack of sculptural and architectural elements to add visual interest. See above.
3.3.4e	Low-rise flat roofed buildings should provide screened mechanical equipment. Screening materials should be consistent with the main building design. Sculptural and architectural elements are encouraged for visual interest as the roofs of such structures have very high visibility.	N/A	
3.3.4f	The street-side design treatment of a parapet should be carried over to the back-side of the parapet for a complete, finished look where they will be visible from other buildings and other high vantage points.	Yes	
3.4	**CIVIC CHARACTER**		
3.4.1	**Prominent Frontages and View Termini**		
3.4.1a	Prominent Visual Terminus Sites: These sites identify existing or potential buildings and sites that terminate important view corridors and that can strengthen visual connectivity across downtown. On these sites distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways should be provided. Design elements (vertical elements, porticos, entries, etc.) should be aligned to the view axis. Prominent Visual Terminus Sites are shown on Map 9 in the Land Use By-law.	N/A	
3.4.1b	Prominent Civic Frontage: These frontages identify highly visible building sites that front onto important public open spaces such as the Citadel and Cornwallis Park, as well as important symbolic or ceremonial visual and physical connections such as the waterfront boardwalks, the proposed Grand Promenade linking the waterfront to the Town Clock, and other east-west streets that connect the downtown to the waterfront. Prominent Civic	No	The proposed building (Sackville Street) is within a Prominent Civic/Cultural Frontage as shown on Map 1. The DM calls for the highest possible standards in design and material quality and encourages massing articulation and architectural features that

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
	Frontages are shown on Map 1 in Appendix A of the Design Manual.		accentuate the visual prominence of the site. Therefore, it is suggested the Sackville Street frontage and corners address this guideline. See 3.4.2 below.
3.4.2	**Corner Sites**		
3.4.2a	Provision of a change in the building massing at the corner, in relation to the streetwall.	No	The building massing at the corner does not include corner features or elements that address the intersection of streets.
3.4.2b	Provision of distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways.	No	The corners at Sackville and Hollis Streets and Sackville and Granville Streets could, but do not, provide distinctive architectural treatment to accentuate their importance. Also, the upper base and tower portions of the building could include features that address this and other guidelines, such as a distinctive top to the building.
3.4.2c	Developments on all corner sites must provide a frontal design to both street frontages.	No	See above.
3.4.2d	Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space.	N/A	
3.5	**PARKING, SERVICES AND UTILITIES**		
3.5.1	**Vehicular Access, Circulation, Loading and Utilities**		
3.5.1a	Locate parking underground or internal to the building (preferred), or to the rear of buildings.	Yes	Vehicle and most bicycle parking are proposed to be located underground.
3.5.1b	Ensure vehicular and service access has a minimal impact on the streetscape, by minimizing the width of the frontage it occupies, and by designing integrated access portals and garages.	Yes	The Traffic Impact Statement relating to the vehicle parking entry has been reviewed by staff.

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.5.1c	Locate loading, storage, utilities, areas for delivery and trash pick-up out of view from public streets and spaces, and residential uses.	Yes	
3.5.1d	Where access and service areas must be visible from or shared with public space, provide high quality materials and features that can include continuous paving treatments, landscaping and well designed doors and entries.	Yes	
3.5.1e	Coordinate and integrate utilities, mechanical equipment and meters with the design of the building, for example, using consolidated rooftop structures or internal utility rooms.	Yes	
3.5.1f	Locate heating, venting and air conditioning vents away from public streets. Locate utility hook-ups and equipment (i.e. gas meters) away from public streets and to the sides and rear of buildings, or in underground vaults.	Yes	
3.5.4	**Lighting**		
3.5.4a	Attractive landscape and architectural features can be highlighted with spot-lighting or general lighting placement.	Yes	A conceptual lighting scheme has been provided.
3.5.4b	Consider a variety of lighting opportunities inclusive of street lighting, pedestrian lighting, building up- or down-lighting, internal building lighting, internal and external signage illumination (including street addressing), and decorative or display lighting.	Yes	
3.5.4c	Illuminate landmark buildings and elements, such as towers or distinctive roof profiles.	No	No distinctive tower elements or roof profiles are proposed.
3.5.4d	Encourage subtle night-lighting of retail display windows.	Yes	
3.5.4e	Ensure there is no light trespass onto adjacent residential areas by the use of shielded full cutoff fixtures.	N/A	
3.5.4f	Lighting shall not create glare for pedestrians or motorists by presenting unshielded lighting elements in view.	Yes	
3.5.5	**Signs** *(to comply with LUB and be reviewed at permit stage)*		
3.6	**SITE PLAN VARIANCES**		

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.6.3	**Streetwall Height Variance** Streetwall heights may be varied by site plan approval where:		
3.6.3a	The streetwall height is consistent with the objectives and guidelines of the Design Manual: and	Yes	See below.
3.6.3b	The modification is for a corner element that is used to join streetwalls of differing heights; or	N/A	
3.6.3c	The streetwall height of abutting buildings is such that the streetwall height would be inconsistent with the character of the street; or	Yes	Streetwall height variances are reasonable. The proposed Hollis streetwall is to be similar to and consistent with that of the MetroPark garage and will wrap around Sackville Street at the same height, to be consistent with the Granville streetwall, where it meets MetroPark. The one-storey portion at the southern end of Granville street, which is below the 11 metre minimum height, will be for hotel use and includes aluminum screening above, as a faux façade, to give the impression of a higher streetwall. This is a reasonable design solution.
3.6.3d	Where a landmark building element is called for pursuant to the Design Manual.	N/A	
3.6.4	**Streetwall Width Variance** Streetwall widths may be varied by site plan approval where:		
3.6.4a	the streetwall width is consistent with the objectives and guidelines of the Design Manual; and	Yes	
3.6.4b	the resulting gap in the streetwall has a clear purpose, is well-designed and makes a positive contribution to the streetscape	No	Generally, a streetwall width variance is reasonable to allow for emergency egress (southern end of Granville) and for a public thru-block plaza. However, the thru-block plaza should be located further south along the block; it is located too close to the intersection to achieve it's intended ("clear") purpose.

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
			A relocation of the plaza could coincide with alternate tower stepbacks and floor plate sizes so that the tower separation and plaza location are roughly at the midpoint of the site along Hollis and Granville Streets. That scenario would require minimal variances and would be much more in keeping with the LUB and Design Manual. An alternate scenario could see the through-block connection located at the southern end of the site, next to MetroPark, thereby allowing for a linkage to Blowers Street. There is also concern with the lack of accessibility of the plaza, and a lack of animation and pedestrian experience, thereby questioning its public benefit altogether.
3.6.5	**Upper Storey Streetwall Stepback Variance** Upper storey streetwall stepbacks may be varied by Site Plan Approval where:		
3.6.5a	The upper storey streetwall setback is consistent with the objectives and guidelines of the Design Manual; and	No	See below.
3.6.5b	the modification results in a positive benefit such as improved heritage preservation or the remediation of an existing blank building wall.	No	The building walls, combined with the wrap-around balconies, result in no stepbacks of the north tower from the 3 abutting streets. This is inconsistent with the built form (base/ middle/ top) objectives of the LUB and DM. The south tower is located too close to Hollis Street and too far away from Granville Street. Instead, alternate floor plates could allow for a stepback from Hollis Street by relocating the central corridor, stair and elevators slightly further back. There is no related “positive benefit” which results from such variances.
3.6.6	**Upper Storey Side Yard Stepback Variance**		

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
	The setbacks requirements of this section may be varied by Site Plan Approval where:		
3.6.6a	the upper storey side yard stepback is consistent with the objectives and guidelines of the Design Manual; and	Yes	This is the side yard stepback from the MetroPark garage site. Since that site is owned by HRM and under a viewplane, the relaxation of the abutting setback is reasonable (for the south tower).
3.6.6b	where the height of the building is substantially lower than the maximum permitted building height and the setback reduction is proportional to that lower height; or	N/A	
3.6.6c	a reduction in setback results in the concealment of an existing blank wall with a new, well designed structure.	Yes	Further concealment of the existing blank wall of the MetroPark structure may be achieved. A reduced setback in that location will not impact the MetroPark site, as it is under a viewplane and cannot be redeveloped at a larger height.
3.6.7	**Maximum Tower Width Variance** The maximum tower dimensions may be varied by Site Plan Approval where:		
3.6.7a	The Maximum Tower Width is consistent with the objectives and guidelines of the Design Manual; and	No	The maximum permitted tower dimensions are 38 metres in width by 27.5 metres in depth. The proposed south tower is 56 metres wide instead of 38 metres (60 metres if you include the balconies). The separation distance between towers is 15 metres instead of 23 m. However, the “wrap-around” balconies make the towers appear wider in all directions, reducing the tower separation (to 11m to 12m). Alternatively, the north tower floor plate (footprint) could be stepped back and made larger, the appropriate separation distance could be applied, and the south tower could be less wide and slightly greater in depth.

Attachment E – Design Manual Checklist: Case 22444			
Section	**Guideline**	**Complies**	**Discussion**
3.6.7b	the modification results in a clear public benefit such as the remediation of an existing blank building wall; or	No	There is no clear public benefit, as the through-building plaza is unrelated to tower width and is also not in an acceptable location. The increased tower width results in unacceptable tower separation distance (lack of sunlight penetration, sky view, and privacy). There is ample room on this site, which is 98 metres long (323 ft.), to have two towers which meet the separation distance requirement of 23 metres between residential buildings.

REPORT

Attachment F: Pedestrian Wind Impact Assessment

TEXPARK (PROJECT SKYE)

HALIFAX, NS

PEDESTRIAN WIND STUDY
RWDI #1803494
April 1, 2019

SUBMITTED TO

Ian Watson
Planner
ian@uplandstudio.ca

Upland | Planning + Design Studio
63 King Street
Dartmouth, Nova Scotia
B2Y 2R7
T: 902-423-0649

SUBMITTED BY

Yi (Leo) Zeng, M.Eng., EIT
Technical Coordinator
Yi.Zeng@rwdi.com

Hanqing Wu, Ph.D., P.Eng.
Technical Director/ Principal
Hanqing.Wu@rwdi.com

Dan Bacon
Senior Project Manager / Associate
Dan.Bacon@rwdi.com

RWDI
600 Southgate Drive
Guelph, Ontario, Canada N1G 4P6
T: 519.823.1311

EXECUTIVE SUMMARY

RWDI was retained to conduct a Pedestrian Wind Assessment for the proposed TexPark (Project Skye) in Halifax, Nova Scotia (**Image 1**). Based on our wind-tunnel testing for the proposed development under the Existing and Proposed configurations (**Images 2A** and **2B**), and the local wind records (**Image 3**), the potential wind comfort and safety conditions are predicted as shown on site plans in **Figures 1A** through **3B**, while the associated wind speeds are listed in **Table 1**. These results can be summarized as follows:

- The existing wind conditions on and around the site are comfortable for sitting or standing during the summer months (May to October), and standing or strolling during the winter months (November to April), which are appropriate for the intended use.
- With the addition of the proposed project, wind speeds are expected to be similar or slightly reduced. Wind conditions are expected to be comfortable for standing or sitting during the summer, and strolling or better during the winter, which are appropriate for the intended pedestrian usages.
- During the summer, wind conditions on Level 6 terrace and Level 22 roof amenity of proposed development are expected to be comfortable for sitting or standing, with slightly higher wind speeds comfortable for strolling at the northern area of Level 22 roof amenity.
- For the existing site configuration, wind speeds at all locations on and around the site are expected to meet the recommended safety criterion. With the addition of the proposed development, winds are anticipated to meet the safety criterion at all grade level and terrace areas except one location at the northern area of Level 22 roof amenity of the proposed building. Conceptual wind control measures are discussed in the report.

TABLE OF CONTENTS

LIST OF IMAGES

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

RWDI was retained to conduct a pedestrian wind assessment for the proposed TexPark (Project Skye) in Halifax, Nova Scotia. This report presents the project objectives, background and approach, and discusses of the results from RWDI's assessment and provides conceptual wind control measures, where necessary.

1.1 Project Description

The project (site shown in **Image 1**) is located on the south side of Sackville Street, between Granville Street and Hollis Street. The proposed building is 79 meters tall, consisting of two 22-storey towers with a terrace at the roof level.

1.2 Objectives

The objective of the study was to assess the effect of the proposed development on local conditions in pedestrian areas on and around the study site and provide recommendations for minimizing adverse effects, if needed. This quantitative assessment was based on wind speed measurements on a scale model of the project and its surroundings in one of RWDI's boundary-layer wind tunnels. These measurements were combined with the local wind records and compared to appropriate criteria for gauging wind comfort and safety in pedestrian areas. The assessment focused on critical pedestrian areas, including building entrances, public sidewalks, and amenity terraces.

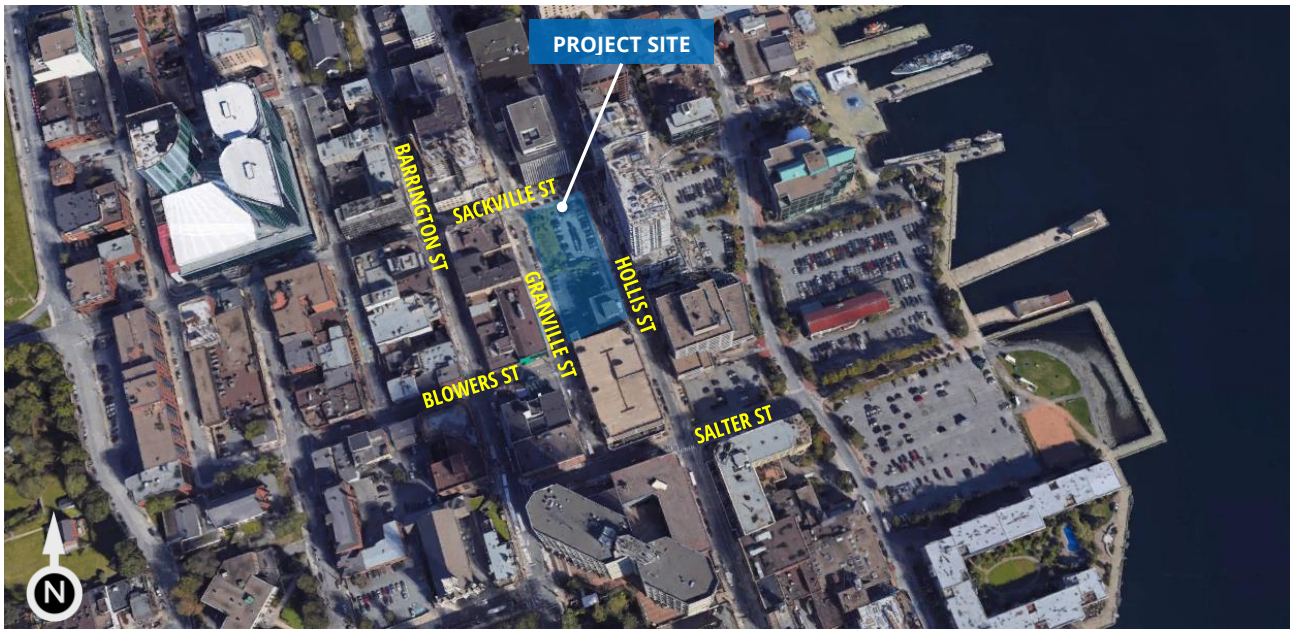


Image 1: Site Plan – Aerial View of Site and Surroundings (Photo Courtesy of Google™ Earth)

2 BACKGROUND AND APPROACH

2.1 Wind Tunnel Study Model

To assess the wind environment around the proposed project, a 1:300 scale model of the project site and surroundings was constructed for the wind tunnel tests of the following configurations:

A - Existing: Existing site with existing surroundings (**Image 2A**), and

B - Proposed: Proposed project with existing surroundings (**Image 2B**),

The wind tunnel model included all relevant surrounding buildings and topography within an approximately 360 m radius of the study site. The wind and turbulence profiles in the atmospheric boundary layer beyond the modelled area were also simulated in RWDI's wind tunnel. The wind tunnel model was instrumented with 80 specially designed wind speed sensors to measure mean and gust speeds at a full-scale height of approximately 1.5 m above local grade in pedestrian areas throughout the study site. Wind speeds were measured for 36 directions in a 10-degree increments. The measurements at each sensor location were recorded in the form of ratios of local mean and gust speeds to the mean wind speed at a reference height above the model. The placement of wind measurement locations was based on our experience and understanding of the pedestrian usage for this site, and reviewed by Upland | Planning + Design Studio.

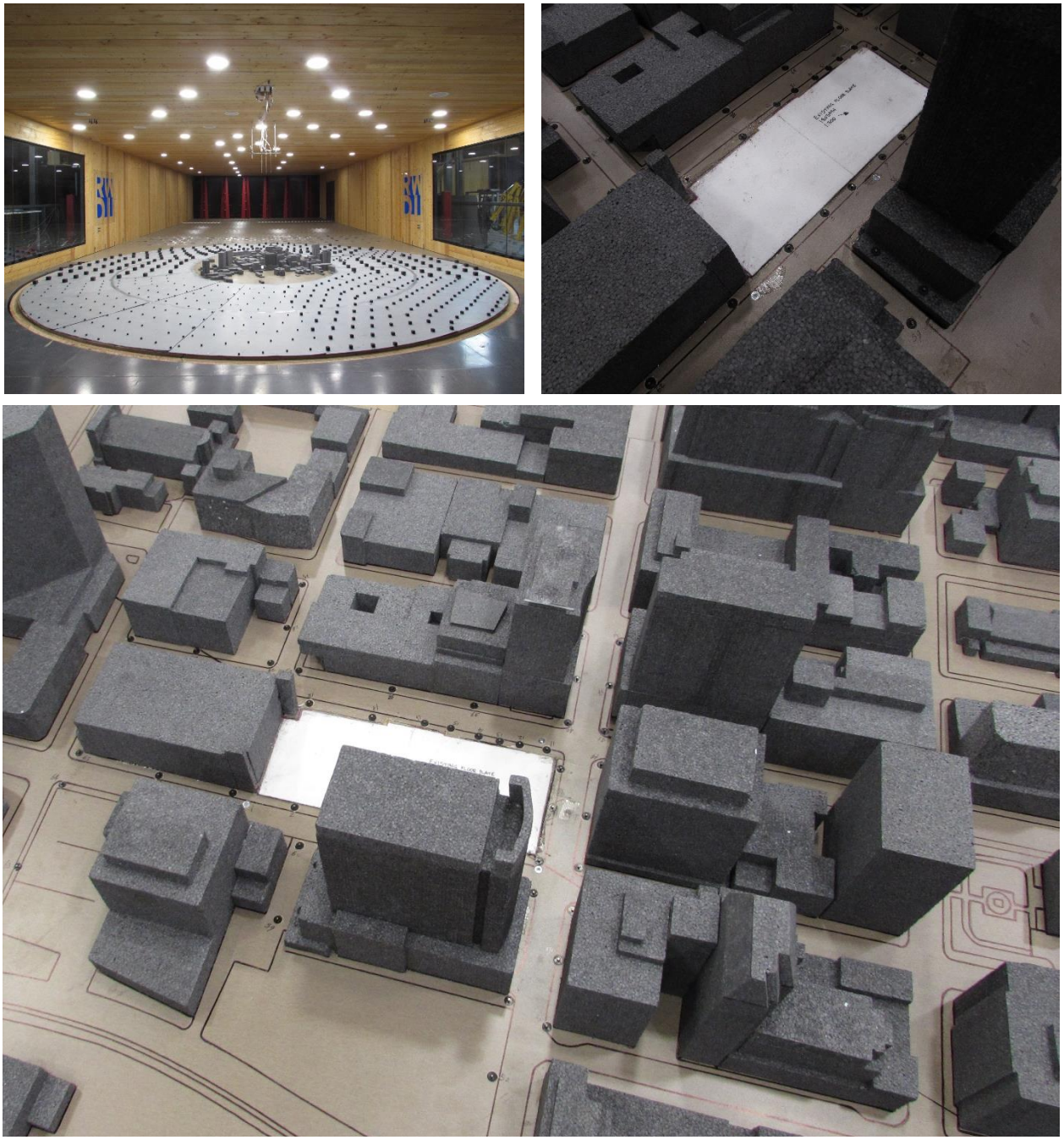


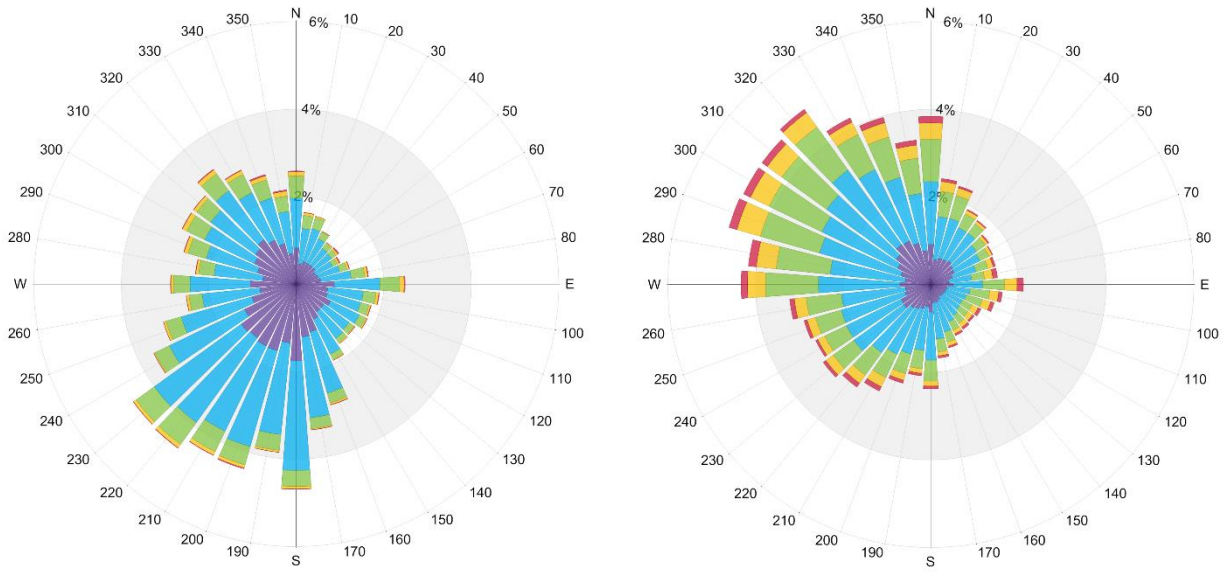
Image 2A: Wind Tunnel Study Model – Existing Configuration

Image 2B: Wind Tunnel Study Model – Proposed Configuration

2.2 Meteorological Data

Wind statistics recorded at Shearwater Airport between 1977 and 2007, inclusive, were analyzed for the Summer (May through October) and Winter (November through April) seasons. **Image 3** graphically depicts the directional distributions of wind frequencies and speeds for these two seasons. Winds from the southwest and northwest directions are predominant in the summer and winter as indicated by the wind roses. Strong winds of a mean speed greater than 30 km/h measured at the airport (at an anemometer height of 10 m) occur for 2.6% and 11.2% of the time during the summer and winter seasons, respectively, and they are primarily from the east, southwest and northwest directions.

Wind statistics were combined with the wind tunnel data to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the wind criteria for pedestrian comfort and safety.



Wind Speed (km/h)	Probability (%) Summer	Winter
Calm	6.5	4.1
1-10	34.6	22.6
11-20	44.6	40.1
21-30	11.7	22.0
31-40	2.2	8.1
>40	0.4	3.1

Image 3: Directional Distribution of Winds Approaching at Shearwater Airport From 1977 to 2007

2.3 RWDI Pedestrian Wind Criteria

The RWDI pedestrian wind criteria, which have been developed by RWDI through research and consulting practice since 1974, are used in the current study. These criteria have been widely accepted by municipal authorities as well as by the building design and city planning community. Regional differences in wind climate and thermal conditions as well as variations in age, health, clothing, etc. can affect a person's perception of the wind climate. Therefore, comparisons of wind speeds for the existing and proposed building configurations are the most objective way in assessing local pedestrian wind conditions. In general, the combined effect of mean and gust speeds on pedestrian comfort can be quantified by a Gust Equivalent Mean (GEM).

Comfort Category	GEM Speed (km/h)	Description
Sitting	≤ 10	Calm or light breezes desired for outdoor restaurants and seating areas where one can read a paper without having it blown away
Standing	≤ 14	Gentle breezes suitable for main building entrances, bus stops, and other places where pedestrians may linger
Strolling	≤ 17	Moderate winds that would be appropriate for window shopping and strolling along a downtown street, plaza or park
Walking	≤ 20	Relatively high speeds that can be tolerated if one's objective is to walk, run or cycle without lingering
Uncomfortable	> 20	Strong winds of this magnitude are considered a nuisance for all pedestrian activities, and wind mitigation is typically recommended

Notes:
(1) GEM speed = max (mean speed, gust speed/1.85);
(2) GEM speeds listed above are based on a seasonal exceedance of 20% of the time between 6:00 and 23:00. Nightly hours between 0:00 and 5:00 are excluded from the wind analysis for comfort since limited usage of outdoor spaces is anticipated; and,
(3) Instead of standard four seasons, two periods of summer (May to October) and winter (November to April) are adopted in the wind analysis, because in a cold climate such as that found in Halifax, there are distinct differences in pedestrian outdoor behaviours between these two-time periods.

Safety Criterion	Gust Speed (km/h)	Description
Exceeded	> 90	Excessive gust speeds that can adversely affect a pedestrian's balance and footing. Wind mitigation is typically required.

Notes:
(1) Based on an annual exceedance of 9 hours or 0.1% of the time for 24 hours a day; and,
(2) Only gust speeds need to be considered in the wind safety criterion. These are usually rare events, but deserve special attention in city planning and building design due to their potential safety impact on pedestrians.

3 RESULTS AND DISCUSSION

The predicted wind conditions are shown on site plans in **Figures 1A** through **3B** located in the "Figures" section of this report. These conditions and the associated wind speeds are also represented in **Table 1**, located in the "Tables" section of this report. The following is a detailed discussion of the suitability of the predicted wind conditions for the anticipated pedestrian use of each area of interest.

3.1 Grade Level (Locations 1 through 66)

Wind conditions comfortable for walking or strolling are appropriate for sidewalks and walkways as pedestrians will be active and less likely to remain in one area for prolonged periods of time. Lower wind speeds conducive to standing are preferred at main entrances where pedestrians are apt to linger. Main entrances of the proposed building are situated near Locations 3, 4, 7, 13 and 17 in **Figures 1B, 2B** and **3B**. Wind speeds comfortable for sitting are preferred for areas intended for passive activities, such as patios and terraces during the summer when these areas are typically in use.

3.1.1 Existing Configuration

Summer wind conditions are suitable for standing or sitting around the existing project site (**Figure 1A**). During the winter, wind conditions are mostly suitably for strolling and standing, with one walking condition at Location 8, at the intersection of Sackville Street and Hollis Street (**Figure 2A**). The wind safety criterion is met at all locations (**Figure 3A**).

All test locations are deemed for the intended use in the Existing Configuration.

3.1.2 Proposed Configuration

The addition of the proposed building is not expected to negatively impact the existing wind conditions on and around the project site. Conditions remain comfortable for sitting or standing during the summer, and strolling or better during the winter (**Figures 1B** and **2B**), similar to or slightly improved from the existing conditions.

All grade level locations are predicted to remain suitable for the intended use (**Figures 1B** and **2B**).

3.2 Above-Grade Levels (Locations 67 through 80)

It is generally desirable for wind conditions on terraces intended for passive activities to be comfortable for sitting more than 80% of the time in the summer. During the winter, the area would not be used frequently and increased wind activity would be considered appropriate.

During the summer, the wind speeds at Level 6 terrace are predicted to be suitable for sitting (see Locations 69 and 70 in **Figure 1B**), which is considered desired for these areas. For the Level 22 amenity, wind conditions at most areas are expected to be comfortable for sitting or standing, except two locations at the northern area of Level 22 amenity (see Locations 78 and 79 in **Figure 1B**). These two locations are comfortable for strolling during the

summer. It is recommended to install tall guardrails along the west and north perimeter of Level 22 terrace (**Image 4**). Alternatively, planters with dense mature foliage can be considered as wind control mitigation (**Image 4**).

Wind speeds are expected to meet the safety criterion at all terrace locations except one location at north of Level 22 amenity (see Location 78 in **Figure 3B**). This is mainly a winter issue and the above-mentioned wind control measures will help reduce the wind speeds.

Image 4: Examples of Guardrail and Planters for Terraces

4 APPLICABILITY OF RESULTS

The drawings and information listed below were received from Upland | Planning + Design Studio and were used to construct the scale model of the proposed TexPark (Project Skye). The wind conditions presented in this report pertain to the proposed as detailed in the architectural design drawings listed in the table below. Should there be any design changes that deviate from this list of drawings, the wind condition predictions presented may change. Therefore, if changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on wind conditions.

File Name	File Type	Date Received (dd/mm/yyyy)
Skye Halifax - Building drawings 2019.01.16.pdf	Adobe Acrobat Document	05/02/2019
Skye Halifax 2019.01.skp	SketchUp Model	06/02/2019

5 REFERENCES

1. ASCE Task Committee on Outdoor Human Comfort (2004). *Outdoor Human Comfort and Its Assessment*, 68 pages, American Society of Civil Engineers, Reston, Virginia, USA.

2. Williams, C.J., Hunter, M.A. and Waechter, W.F. (1990). "Criteria for Assessing the Pedestrian Wind Environment," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.36, pp.811-815.

3. Williams, C.J., Soligo M.J. and Cote, J. (1992). "A Discussion of the Components for a Comprehensive Pedestrian Level Comfort Criteria," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.41-44, pp.2389-2390.

4. Soligo, M.J., Irwin, P.A., and Williams, C.J. (1993). "Pedestrian Comfort Including Wind and Thermal Effects," *Third Asia-Pacific Symposium on Wind Engineering*, Hong Kong.

5. Soligo, M.J., Irwin, P.A., Williams, C.J. and Schuyler, G.D. (1998). "A Comprehensive Assessment of Pedestrian Comfort Including Thermal Effects," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.77&78, pp.753-766.

6. Williams, C.J., Wu, H., Waechter, W.F. and Baker, H.A. (1999). "Experiences with Remedial Solutions to Control Pedestrian Wind Problems," *Tenth International Conference on Wind Engineering*, Copenhagen, Denmark.

7. Lawson, T.V. (1973). "Wind Environment of Buildings: A Logical Approach to the Establishment of Criteria", *Report No. TVL 7321*, Department of Aeronautic Engineering, University of Bristol, Bristol, England.

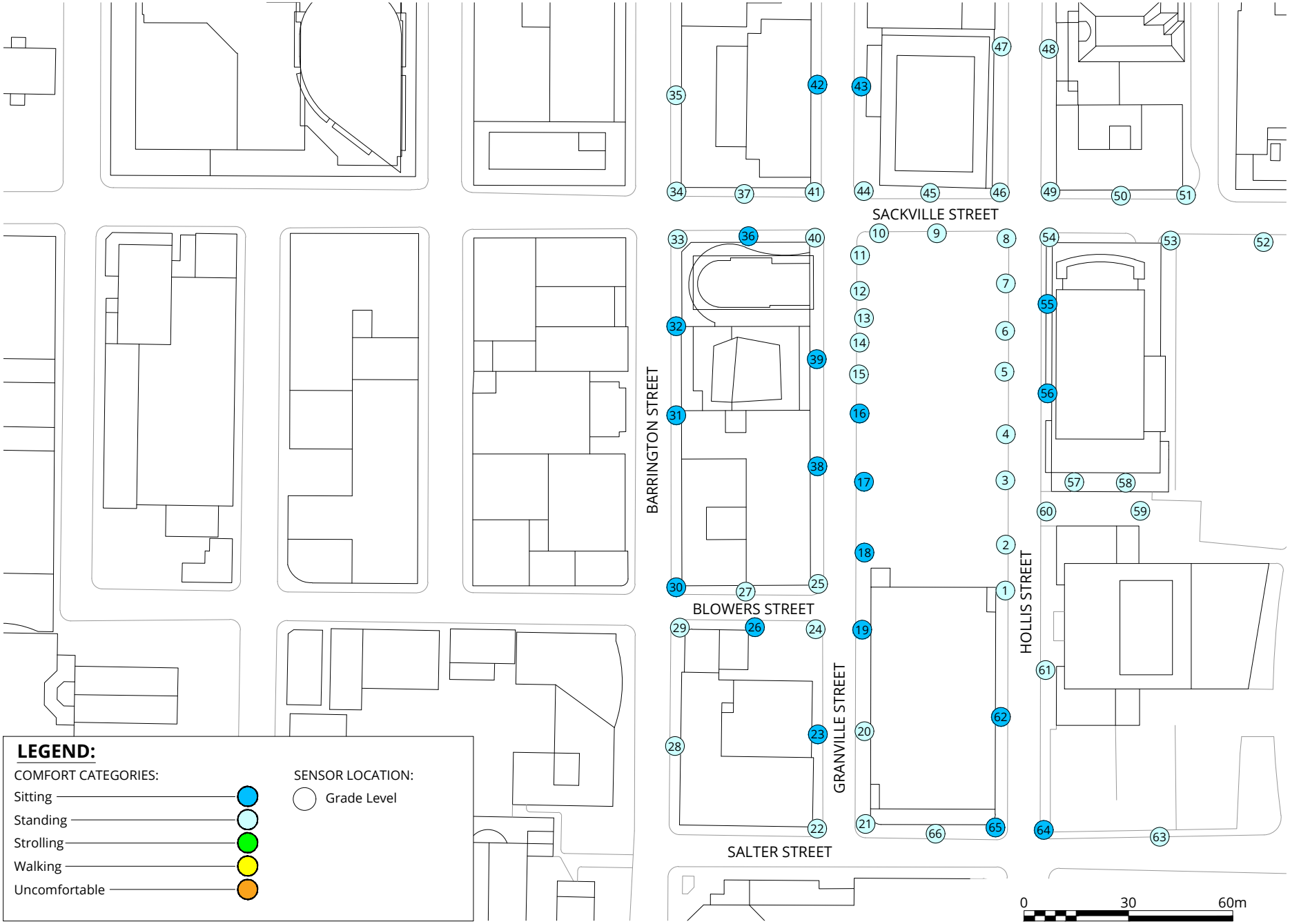
8. Durgin, F. H. (1997). "Pedestrian Level Wind Criteria Using the Equivalent average", *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 66, pp. 215-226.

9. Wu, H. and Kriksic, F. (2012). "Designing for Pedestrian Comfort in Response to Local Climate", *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.104-106, pp.397-407.

10. Wu, H., Williams, C.J., Baker, H.A. and Waechter, W.F. (2004), "Knowledge-based Desk-Top Analysis of Pedestrian Wind Conditions", *ASCE Structure Congress 2004,* Nashville, Tennessee.

11. Williams, C.J., Wu, H., Waechter, W.F. and Baker, H.A. (1999). "Experiences with Remedial Solutions to Control Pedestrian Wind Problems," *Tenth International Conference on Wind Engineering*, Copenhagen, Denmark.

FIGURES



Pedestrian Wind Comfort Conditions

Existing Configuration

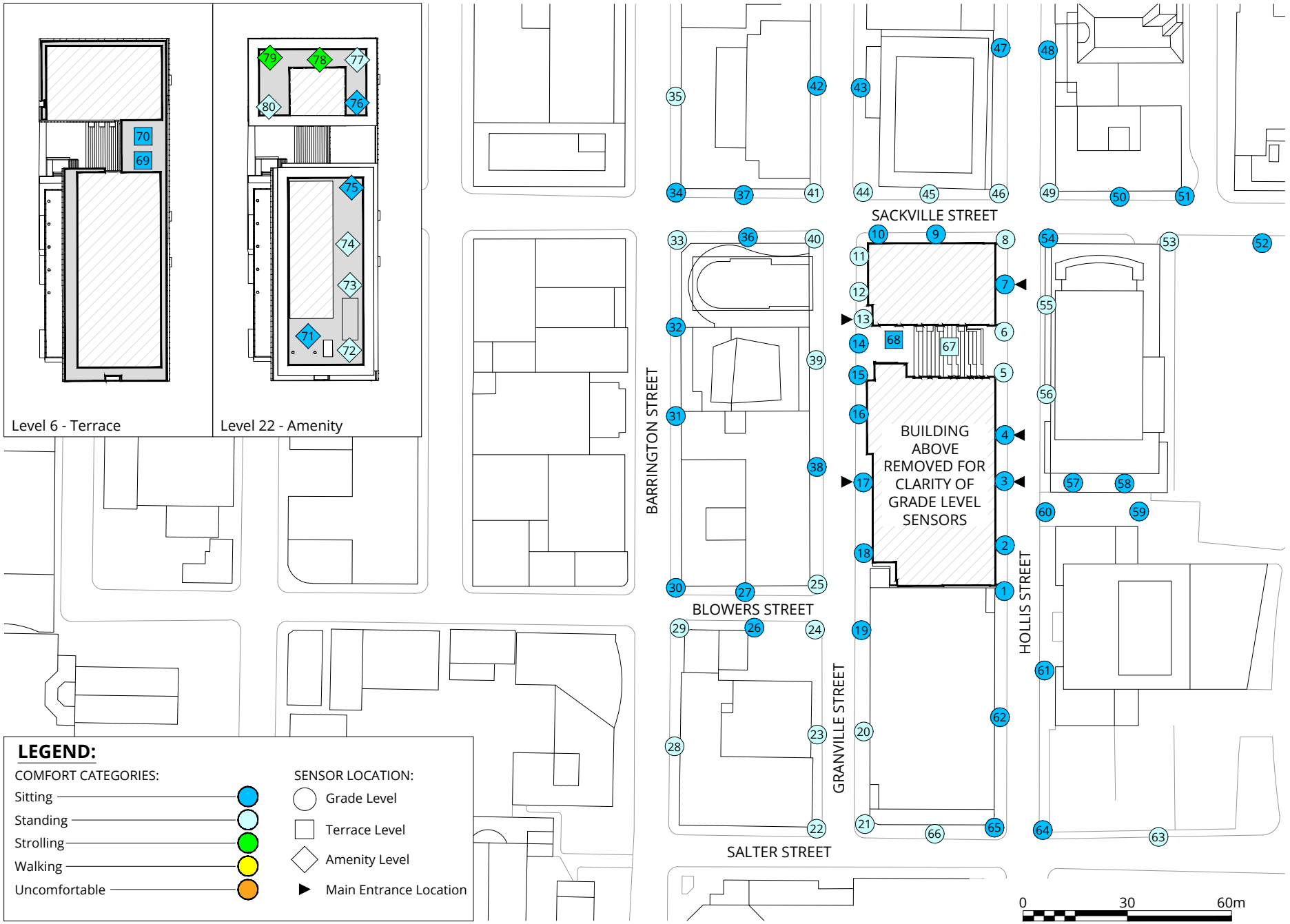
Summer (May to October, 6:00 to 23:00)

TexPark (Project Skye) - Halifax, NS

True North

Project #1803494

Drawn by: DBB	Figure: 1A
Approx. Scale:	1:1500
Date Revised:	Apr. 1, 2019



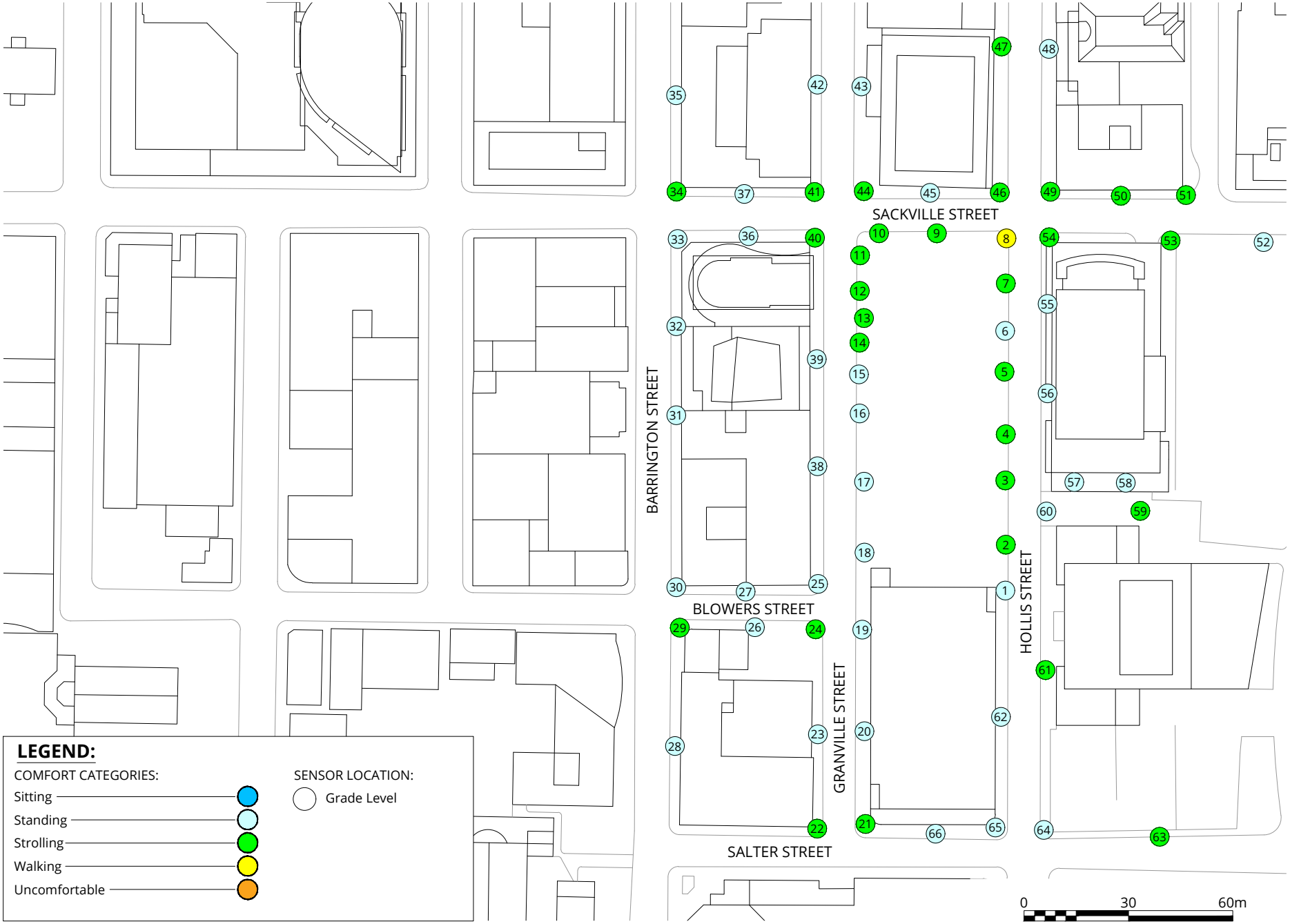
Pedestrian Wind Comfort Conditions
Proposed Configuration
Summer (May to October, 6:00 to 23:00)

TexPark (Project Skye) - Halifax, NS

True North

Project #1803494

Drawn by: DBB	Figure: 1B
Approx. Scale:	1:1500
Date Revised:	Apr. 1, 2019



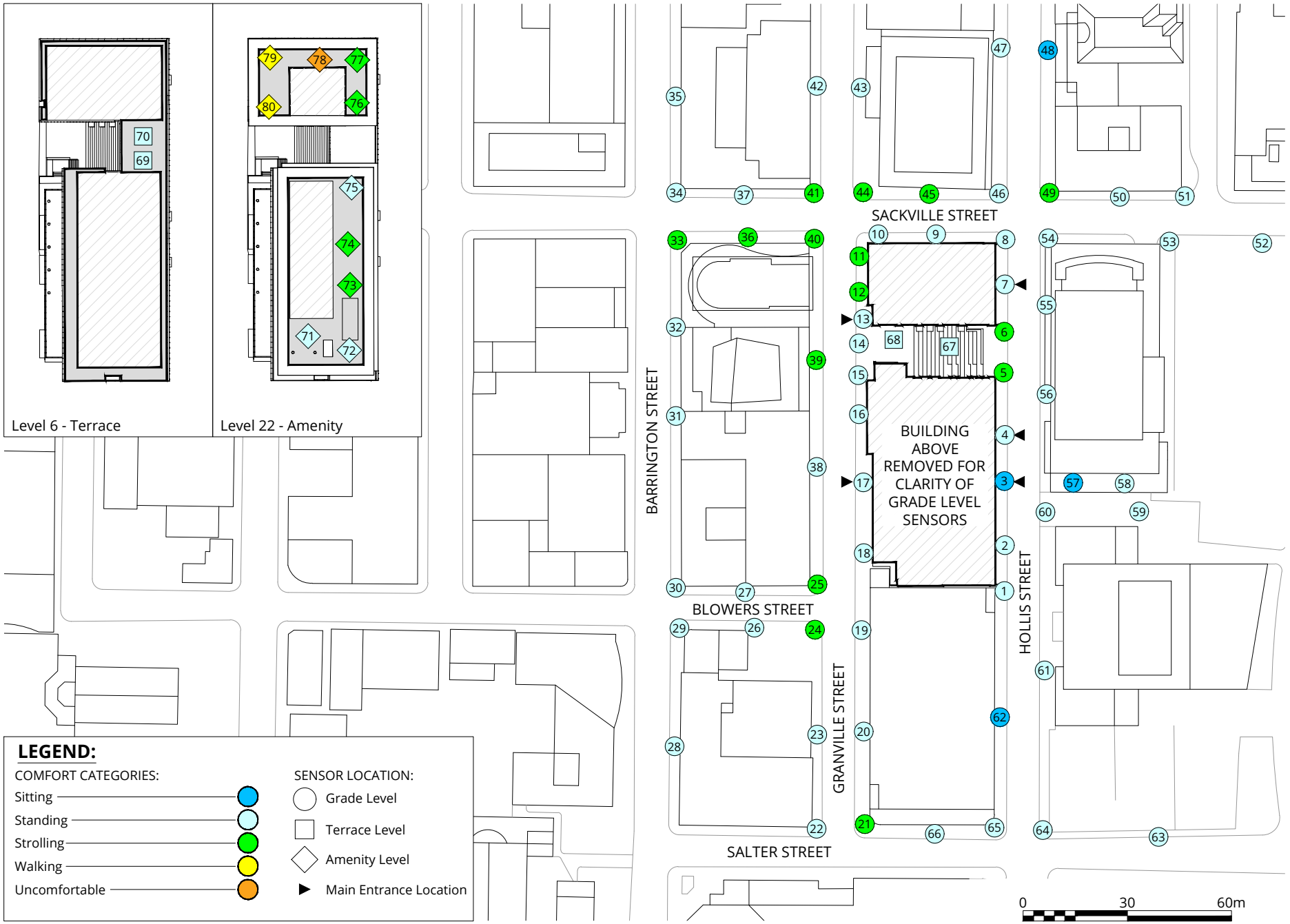
Pedestrian Wind Comfort Conditions
Existing Configuration
Winter (November to April, 6:00 to 23:00)

TexPark (Project Skye) - Halifax, NS

True North

Project #1803494

Drawn by: DBB	Figure: 2A
Approx. Scale:	1:1500
Date Revised:	Apr. 1, 2019



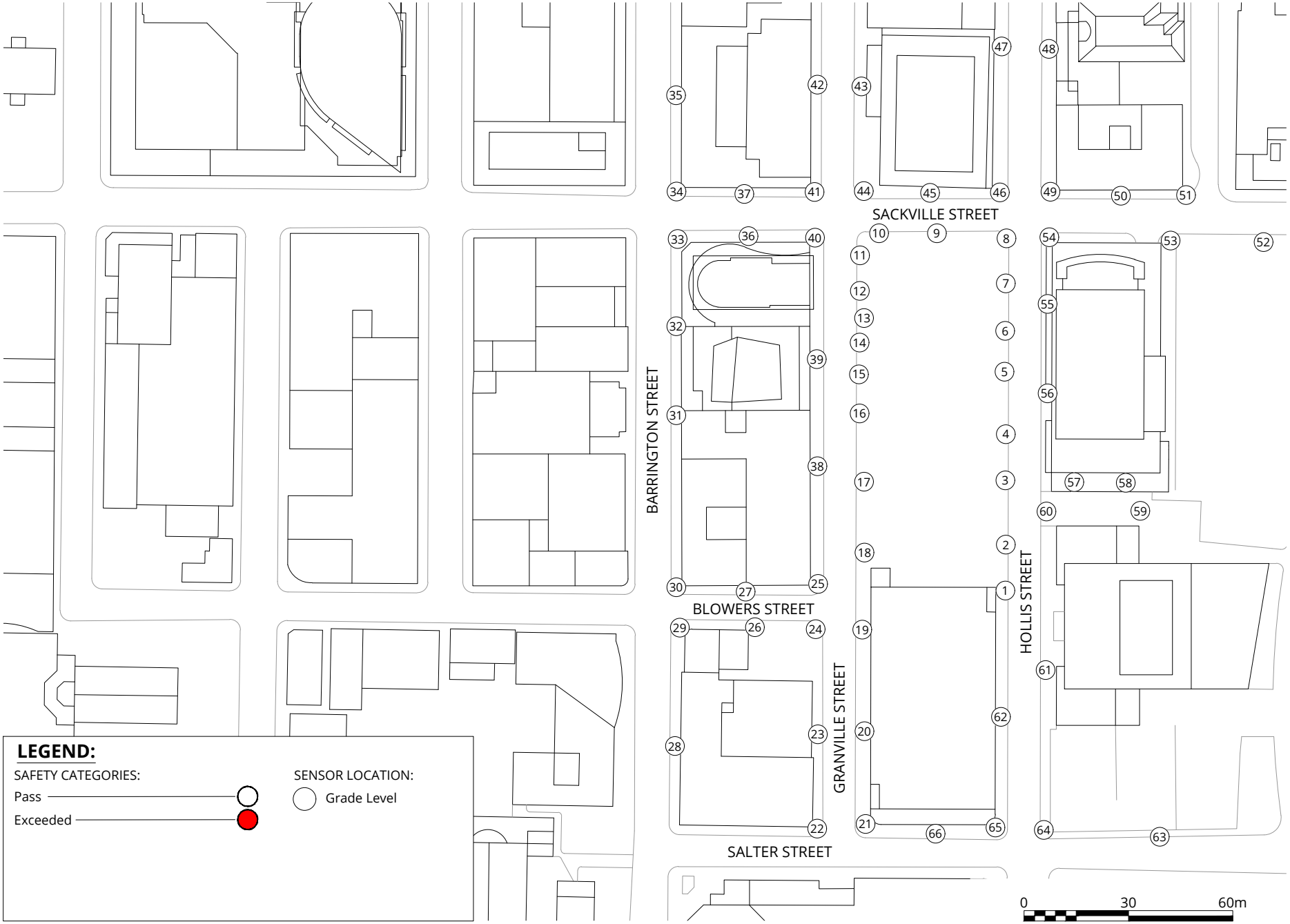
Pedestrian Wind Comfort Conditions
Proposed Configuration
Winter (November to April, 6:00 to 23:00)

TexPark (Project Skye) - Halifax, NS

True North

Project #1803494

Drawn by: DBB	Figure: 2B
Approx. Scale:	1:1500
Date Revised:	Apr. 1, 2019



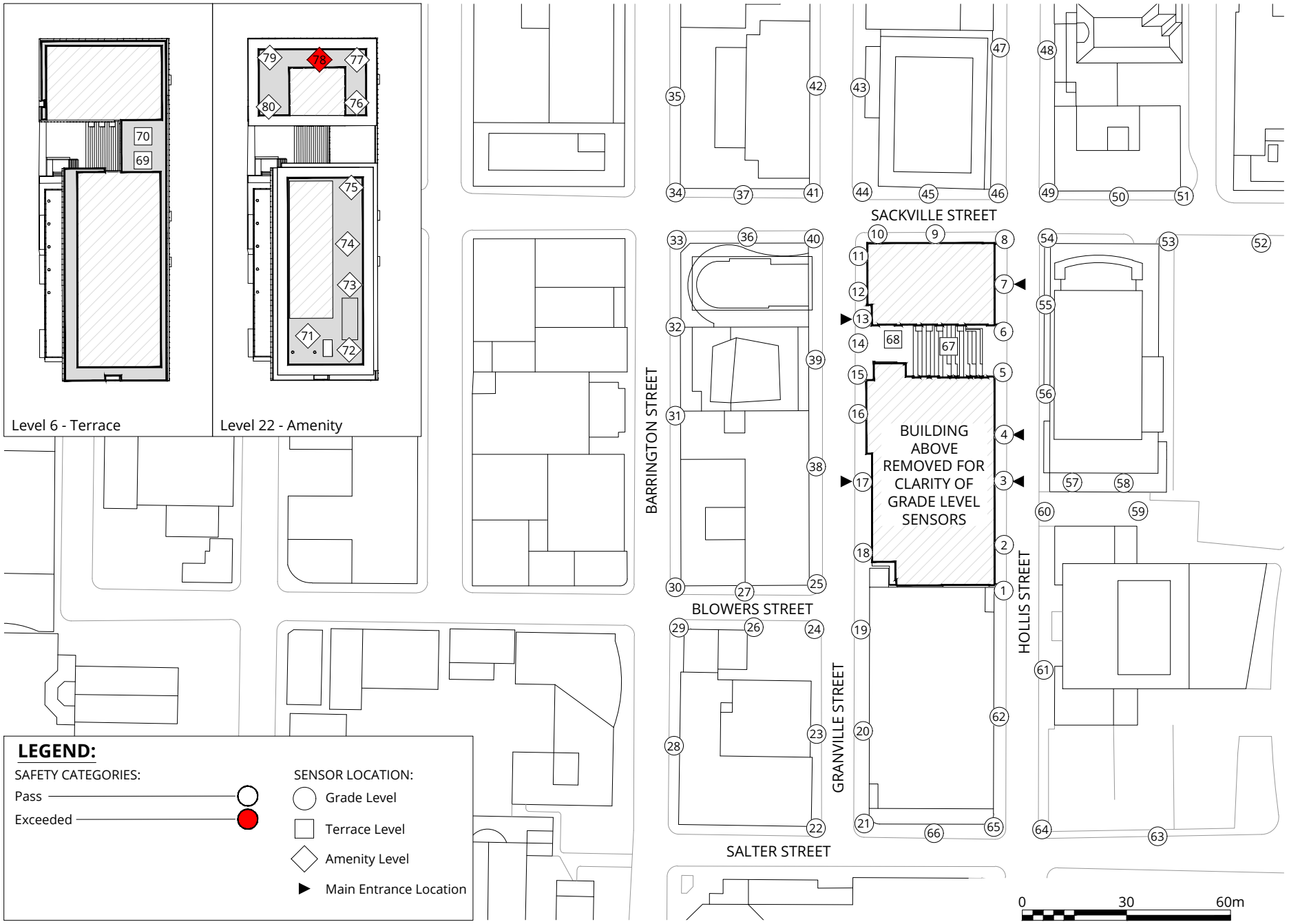
Pedestrian Wind Safety Conditions
Existing Configuration
Annual (January to December, 0:00 to 23:00)

TexPark (Project Skye) - Halifax, NS

True North

Project #1803494

Drawn by: DBB	Figure: 3A
Approx. Scale:	1:1500
Date Revised:	Apr. 1, 2019



Pedestrian Wind Safety Conditions
Proposed Configuration
Annual (January to December, 0:00 to 23:00)

TexPark (Project Skye) - Halifax, NS

True North

Project #1803494

Drawn by: DBB	Figure: 3B
Approx. Scale:	1:1500
Date Revised:	Apr. 1, 2019

TABLES

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
1	Existing	11	Standing	14	Standing	78	Pass
	Proposed	9	Sitting	12	Standing	72	Pass
2	Existing	13	Standing	15	Strolling	72	Pass
	Proposed	9	Sitting	11	Standing	58	Pass
3	Existing	14	Standing	17	Strolling	74	Pass
	Proposed	8	Sitting	10	Sitting	64	Pass
4	Existing	13	Standing	16	Strolling	76	Pass
	Proposed	8	Sitting	11	Standing	66	Pass
5	Existing	12	Standing	15	Strolling	73	Pass
	Proposed	12	Standing	15	Strolling	79	Pass
6	Existing	11	Standing	14	Standing	67	Pass
	Proposed	12	Standing	15	Strolling	65	Pass
7	Existing	12	Standing	16	Strolling	68	Pass
	Proposed	10	Sitting	13	Standing	64	Pass
8	Existing	14	Standing	18	Walking	79	Pass
	Proposed	11	Standing	14	Standing	66	Pass
9	Existing	12	Standing	15	Strolling	78	Pass
	Proposed	10	Sitting	14	Standing	65	Pass
10	Existing	12	Standing	16	Strolling	72	Pass
	Proposed	10	Sitting	14	Standing	60	Pass
11	Existing	12	Standing	16	Strolling	69	Pass
	Proposed	13	Standing	17	Strolling	72	Pass
12	Existing	11	Standing	16	Strolling	67	Pass
	Proposed	11	Standing	15	Strolling	58	Pass
13	Existing	11	Standing	15	Strolling	69	Pass
	Proposed	11	Standing	14	Standing	58	Pass
14	Existing	11	Standing	15	Strolling	65	Pass
	Proposed	10	Sitting	13	Standing	53	Pass
15	Existing	11	Standing	14	Standing	65	Pass
	Proposed	10	Sitting	13	Standing	54	Pass
16	Existing	10	Sitting	13	Standing	64	Pass
	Proposed	10	Sitting	13	Standing	52	Pass
17	Existing	10	Sitting	13	Standing	62	Pass
	Proposed	9	Sitting	11	Standing	58	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
18	Existing	10	Sitting	13	Standing	65	Pass
	Proposed	9	Sitting	12	Standing	69	Pass
19	Existing	10	Sitting	12	Standing	66	Pass
	Proposed	10	Sitting	13	Standing	66	Pass
20	Existing	11	Standing	13	Standing	58	Pass
	Proposed	11	Standing	14	Standing	61	Pass
21	Existing	13	Standing	16	Strolling	69	Pass
	Proposed	14	Standing	17	Strolling	70	Pass
22	Existing	13	Standing	15	Strolling	69	Pass
	Proposed	12	Standing	14	Standing	64	Pass
23	Existing	10	Sitting	12	Standing	63	Pass
	Proposed	11	Standing	14	Standing	63	Pass
24	Existing	12	Standing	15	Strolling	81	Pass
	Proposed	14	Standing	17	Strolling	83	Pass
25	Existing	11	Standing	13	Standing	71	Pass
	Proposed	13	Standing	16	Strolling	75	Pass
26	Existing	10	Sitting	12	Standing	57	Pass
	Proposed	10	Sitting	12	Standing	55	Pass
27	Existing	11	Standing	12	Standing	66	Pass
	Proposed	10	Sitting	11	Standing	60	Pass
28	Existing	13	Standing	14	Standing	71	Pass
	Proposed	13	Standing	13	Standing	70	Pass
29	Existing	13	Standing	15	Strolling	66	Pass
	Proposed	11	Standing	13	Standing	63	Pass
30	Existing	10	Sitting	13	Standing	60	Pass
	Proposed	10	Sitting	12	Standing	63	Pass
31	Existing	9	Sitting	12	Standing	52	Pass
	Proposed	9	Sitting	11	Standing	50	Pass
32	Existing	9	Sitting	12	Standing	50	Pass
	Proposed	9	Sitting	11	Standing	48	Pass
33	Existing	11	Standing	14	Standing	67	Pass
	Proposed	11	Standing	15	Strolling	66	Pass
34	Existing	11	Standing	15	Strolling	67	Pass
	Proposed	10	Sitting	13	Standing	54	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
35	Existing	11	Standing	14	Standing	55	Pass
	Proposed	11	Standing	14	Standing	55	Pass
36	Existing	10	Sitting	14	Standing	71	Pass
	Proposed	10	Sitting	15	Strolling	70	Pass
37	Existing	12	Standing	14	Standing	71	Pass
	Proposed	10	Sitting	13	Standing	57	Pass
38	Existing	9	Sitting	12	Standing	60	Pass
	Proposed	9	Sitting	12	Standing	54	Pass
39	Existing	9	Sitting	12	Standing	63	Pass
	Proposed	11	Standing	15	Strolling	62	Pass
40	Existing	11	Standing	15	Strolling	72	Pass
	Proposed	11	Standing	16	Strolling	63	Pass
41	Existing	12	Standing	17	Strolling	69	Pass
	Proposed	13	Standing	17	Strolling	72	Pass
42	Existing	10	Sitting	13	Standing	61	Pass
	Proposed	9	Sitting	12	Standing	56	Pass
43	Existing	9	Sitting	12	Standing	51	Pass
	Proposed	9	Sitting	12	Standing	48	Pass
44	Existing	13	Standing	17	Strolling	75	Pass
	Proposed	12	Standing	16	Strolling	66	Pass
45	Existing	12	Standing	14	Standing	73	Pass
	Proposed	14	Standing	17	Strolling	85	Pass
46	Existing	13	Standing	17	Strolling	71	Pass
	Proposed	11	Standing	14	Standing	64	Pass
47	Existing	11	Standing	15	Strolling	69	Pass
	Proposed	10	Sitting	13	Standing	60	Pass
48	Existing	12	Standing	14	Standing	67	Pass
	Proposed	7	Sitting	10	Sitting	47	Pass
49	Existing	13	Standing	16	Strolling	71	Pass
	Proposed	12	Standing	15	Strolling	74	Pass
50	Existing	14	Standing	16	Strolling	79	Pass
	Proposed	10	Sitting	13	Standing	70	Pass
51	Existing	13	Standing	15	Strolling	73	Pass
	Proposed	9	Sitting	12	Standing	63	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
52	Existing	12	Standing	14	Standing	72	Pass
	Proposed	10	Sitting	13	Standing	58	Pass
53	Existing	13	Standing	15	Strolling	84	Pass
	Proposed	11	Standing	14	Standing	76	Pass
54	Existing	14	Standing	17	Strolling	75	Pass
	Proposed	10	Sitting	14	Standing	61	Pass
55	Existing	10	Sitting	13	Standing	62	Pass
	Proposed	11	Standing	14	Standing	54	Pass
56	Existing	8	Sitting	11	Standing	57	Pass
	Proposed	11	Standing	13	Standing	57	Pass
57	Existing	11	Standing	14	Standing	71	Pass
	Proposed	8	Sitting	10	Sitting	63	Pass
58	Existing	11	Standing	14	Standing	71	Pass
	Proposed	8	Sitting	11	Standing	63	Pass
59	Existing	12	Standing	16	Strolling	69	Pass
	Proposed	8	Sitting	11	Standing	62	Pass
60	Existing	11	Standing	14	Standing	66	Pass
	Proposed	8	Sitting	11	Standing	62	Pass
61	Existing	12	Standing	15	Strolling	67	Pass
	Proposed	10	Sitting	12	Standing	61	Pass
62	Existing	10	Sitting	13	Standing	70	Pass
	Proposed	8	Sitting	10	Sitting	62	Pass
63	Existing	11	Standing	15	Strolling	70	Pass
	Proposed	11	Standing	14	Standing	67	Pass
64	Existing	10	Sitting	14	Standing	61	Pass
	Proposed	10	Sitting	13	Standing	61	Pass
65	Existing	10	Sitting	13	Standing	76	Pass
	Proposed	10	Sitting	13	Standing	75	Pass
66	Existing	12	Standing	14	Standing	68	Pass
	Proposed	11	Standing	14	Standing	65	Pass
67	Existing	-	-	-	-	-	-
	Proposed	11	Standing	13	Standing	57	Pass
68	Existing	-	-	-	-	-	-
	Proposed	10	Sitting	12	Standing	56	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
69	Existing	-	-	-	-	-	-
	Proposed	9	Sitting	12	Standing	60	Pass
70	Existing	-	-	-	-	-	-
	Proposed	10	Sitting	12	Standing	62	Pass
71	Existing	-	-	-	-	-	-
	Proposed	10	Sitting	14	Standing	61	Pass
72	Existing	-	-	-	-	-	-
	Proposed	11	Standing	14	Standing	65	Pass
73	Existing	-	-	-	-	-	-
	Proposed	13	Standing	16	Strolling	87	Pass
74	Existing	-	-	-	-	-	-
	Proposed	13	Standing	16	Strolling	76	Pass
75	Existing	-	-	-	-	-	-
	Proposed	9	Sitting	12	Standing	59	Pass
76	Existing	-	-	-	-	-	-
	Proposed	10	Sitting	15	Strolling	80	Pass
77	Existing	-	-	-	-	-	-
	Proposed	12	Standing	17	Strolling	79	Pass
78	Existing	-	-	-	-	-	-
	Proposed	16	Strolling	23	Uncomfortable	108	Exceeded
79	Existing	-	-	-	-	-	-
	Proposed	16	Strolling	20	Walking	79	Pass
80	Existing	-	-	-	-	-	-
	Proposed	13	Standing	18	Walking	71	Pass

Seasons		Hours
Summer	May - October	6:00 - 23:00 for comfort
Winter	November - April	0:00 - 23:00 for safety
Configurations		
Existing	Without the proposed development	
Proposed	With the proposed development	

Comfort Speed (km/h)	
(20% Seasonal Exceedance)	
≤ 10	Sitting
11 - 14	Standing
15 - 17	Strolling
18 - 20	Walking
> 20	Uncomfortable

Safety Speed (km/h)	
(> 0.1% Annual Exceedance)	
≤ 90	Pass
> 90	Exceeded