HALIFAX

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

Item No. 8.1.1
Design Review Committee
April 14, 2016

TO: Chair and Members of Design Review Committee

Original Signed

SUBMITTED BY: Bob Bjerke, Chief Planner and Director of Planning and Development

DATE: March 21, 2016

SUBJECT: **Case 20371 – Substantive Site Plan Approval – Mixed-use Development at 1474 Brenton Street & 1469-73 South Park Street, Halifax**

ORIGIN

Application by Geoff Keddy Architect & Associates

LEGISLATIVE AUTHORITY

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

RECOMMENDATION

It is recommended that the Design Review Committee:

1. Approve the qualitative elements of the substantive site plan approval application for the mixed-use development at 1474 Brenton Street & 1469-73 South Park Street, Halifax, as shown on Attachment A;
2. Approve one requested variance to the Side and Rear Yard Setback, as shown in Attachment B; and
3. Accept the findings of the Qualitative Wind Impact Assessment, as contained in Attachment C.

BACKGROUND

An application has been received from Geoff Keddy Architect & Associates, on behalf of Olympus Properties Ltd., for substantive site plan approval to enable the development of a mixed-use building at 1474 Brenton Street & 1469-73 South Park Street, Halifax (Map 1). To allow the development, the Design Review Committee must consider the application relative to the Design Manual within the Downtown Halifax Land Use By-law (LUB). This report addresses relevant guidelines of the Design Manual in order to assist the Committee in their decision.

Subject Site	A through-block site consisting of three properties each containing one building, at 1474 Brenton Street and 1469 and 1473 South Park Street, Halifax
Location	Mid-block between South Park Street and Brenton Street
Zoning (Map 1)	DH-1 (Downtown Halifax) Zone
Total Size	837.4 square metres (9,014 square feet)
Site Conditions	Flat and fully developed with approximately 75% lot coverage
Current Land Use(s)	Contains three buildings: • Two 2-storey residential buildings, each consisting of 4 units, fronting on South Park Street; and • One 2-storey commercial building fronting on Brenton Street.
Surrounding Land Use(s)	Surrounded by a mixture of intensive commercial and high density residential uses, including: • Retail stores and restaurants along Spring Garden Road to the north, Brenton Street to the east and South Park Street to the west; and • The Trillium condominium tower to the south, which consists of residential units, retail spaces and restaurants.

Project Description

The project involves the construction of a mixed use development as follows:

- Two buildings joined by a single level podium, with an overall height of 4 storeys on Brenton Street (Building A) and 11 storeys plus a penthouse on the South Park Street frontage (Building B);
- A total of 62 residential units;
- Approximately 504.4 square metres (5,430 square feet) of commercial floor space at street level with pedestrian access points along each street and separate residential lobby areas;
- Three underground parking levels containing 35 parking spaces with driveway access from Brenton Street;
- Landscaped areas, including a courtyard on the second level between the two buildings, on residential terraces, and at rooftop levels; and
- Exterior cladding materials which include high density fibre cement panels, glass, aluminum frames, composite panels, glass canopies and glass/ composite balconies with metal railings.

Information about the approach to the design of the building has been provided by the project's architect (Attachment B).

Regulatory Context

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

- the site is within the DH-1 (Downtown Halifax) Zone and the Spring Garden Road Area (Precinct No. 3);
- the maximum pre-bonus height is 39 metres and the maximum post-bonus height is 49 metres;

- the required streetwall setback on both South Park Street and Brenton Street is "Minimal to no setback" (0-1.5m); and
- the minimum streetwall height is 11 metres while the maximum heights are 17.0 metres on South Park Street and 18.5 metres on Brenton Street.

In addition to the above regulations, the Design Manual of the Downtown Halifax LUB contains guidance regarding the appropriate appearance and design of buildings.

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 the application and determined it to be in conformance with these requirements, with the exception of the Side and Rear Yard Setback requirements. The applicant has requested variances to these elements (Attachment B).

Role of the Design Review Committee
The role of the Design Review Committee in this case is to:

1. determine if the project is in keeping with the Design Manual;
2. consider the application for the variance request that has been made; and
3. determine if the project is suitable in terms of expected wind conditions on pedestrian comfort (Attachment D).

DISCUSSION

Design Manual Guidelines
As noted above, the Design Manual contains a variety of building design conditions that are to be met in the development of new buildings and modifications to existing buildings as follows:

- Section 2.3 of the Design Manual contains design guidelines that are to be considered specifically for properties within Precinct No. 3; 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 D. The table indicates staff's advice as to whether the project complies with a particular guideline. In addition, it identifies circumstances where there are different possible interpretations of how the project relates to a guideline, where additional explanation is warranted, or where the Design Review Committee will need to give particular attention in their assessment of conformance to the Design Manual. These matters, identified as "Discussion" items, are considered as follows:

Sloping Conditions - 3.2.3(f), 3.2.5(f) and (g)
The Design Manual indicates that split level or sunken retail entrances should be avoided. It also stipulates that pedestrian entrances on sloping streets should be provided where possible. In this case, a sloping condition exists along the Brenton Street frontage of Building A. In response, the ground-floor retail entrance along the street is designed at the same grade level as the abutting section of sidewalk while a set of stairs is provided inside the building. The proposed height of the ground floor will stay at 4.5 metres (14.8 feet) and as such responds well to the site's sloping street frontages, and meets the intent of the Design Manual.

Vehicular and Service Access - 3.5.1(b) and 3.5.2(c)
The Design Manual calls for the visual impact of parking areas to be minimized. There is only one vehicle entrance to the underground parking levels, to be located on Brenton Street. Given the narrow nature of

the Brenton Street frontage, which is measured at 9.5 metres (31 feet), the entrance covers approximately 50% of the overall width of the building face, as shown on Attachment A. As such, the most appropriate scheme to mitigate against the visual impacts of the parking entrance is to utilize functional and high quality materials of translucent nature. The applicant has complied with this requirement.

Variance Request
One variance is being sought to the quantitative requirements of the Downtown Halifax LUB as follows:

Side and Rear Yard Setbacks (Building B): Section 10, Subsection 4 states that above a height of 18.5 metres, or the height of the streetwall, the mid-rise portion of a building shall be setback from interior lot lines no less than 10% of the lot width or 5.5 metres, whichever is less.

Non-Compliance: Based on subsection 10(4) of the LUB, the residential tower (mid-rise portion) above the height of the Streetwall is required to be setback from the interior property lines no less than 10% of the lot width. The setback is determined based on the calculations of 10% of the lot width (frontage), which is 16 metres (52.5 feet) along South Park Street. As such, the tower on the South Park Street side above a height of 17.0 metres is to be setback 1.6 metres (5.25 feet) from the interior lot lines. The applicant is proposing to vary this setback requirement.

Variance Option: Section 3.6.2 of the design manual allows for a variance subject to meeting certain conditions. This request is being considered under the following provisions:

> "3.6.2(a): the modified setback is consistent with the objectives and guidelines of the Design Manual; and
>
> 3.6.2(b) the modification does not negatively impact abutting uses by providing insufficient separation."

Response: Due to the narrow nature of the subject site, the applicant is proposing a variance to the required interior lot line setbacks on the north and south sides of Building B. The intent of this variance is to utilize part of the required 1.6 metres (5.25 feet) setback to accommodate stair cores on each side of the building and an elevator shaft on the south side, as shown in Attachment A. The proposed modifications are considered minor in nature with minimal impacts to abutting land uses as they only extend along 15% of the length of the north elevation and along 30.5% of the length of the south elevation. Furthermore, the existing setback of the neighbouring building on the south side, The Trillium, provides more than adequate building and massing separation. As such, the Variance request is consistent with the objectives and guidelines of the Design Manual.

Wind Assessment
A qualitative wind impact assessment was prepared by Rowan Williams Davies & Irwin Inc. (RWDI) for the project (Attachment C). The purpose of the assessment is to determine whether the site and its surroundings will be safe and comfortable for pedestrians once the new building is constructed. The concern with respect to wind conditions is whether the site, and in particular the surrounding sidewalks, will be comfortable for their intended usage. Wind conditions are rated in terms of relative comfort for different pedestrian activities that include "sitting", "standing", and "walking."

The assessment concludes that there would be minimal changes to the wind conditions and level of comfort as a result of the project. The proposed development and site design, which includes vertical recession of the upper storeys, recessed entrances, canopies and street trees, assists in mitigating any impacts.

Conclusion
The proposed development and the requested variance are consistent with the objectives and guidelines of the Design Manual. It is, therefore, recommended that the substantive site plan approval application be approved along with the requested variance.

FINANCIAL IMPLICATIONS

There are no financial implications. The HRM costs associated with processing this planning application can be accommodated within the approved operating budget for C310 Planning & Applications.

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 November 16, 2015.

ENVIRONMENTAL IMPLICATIONS

No implications have been identified.

ALTERNATIVES

1. The Design Review Committee may choose to approve the application with conditions. This may necessitate further submissions by the applicant, as well as a supplementary report from staff.

2. The Design Review Committee may choose to deny the application. The Committee must provide reasons for this refusal based on the specific guidelines of the Design Manual. An appeal of the Design Review Committee's decision can be made to Regional Council.

ATTACHMENTS

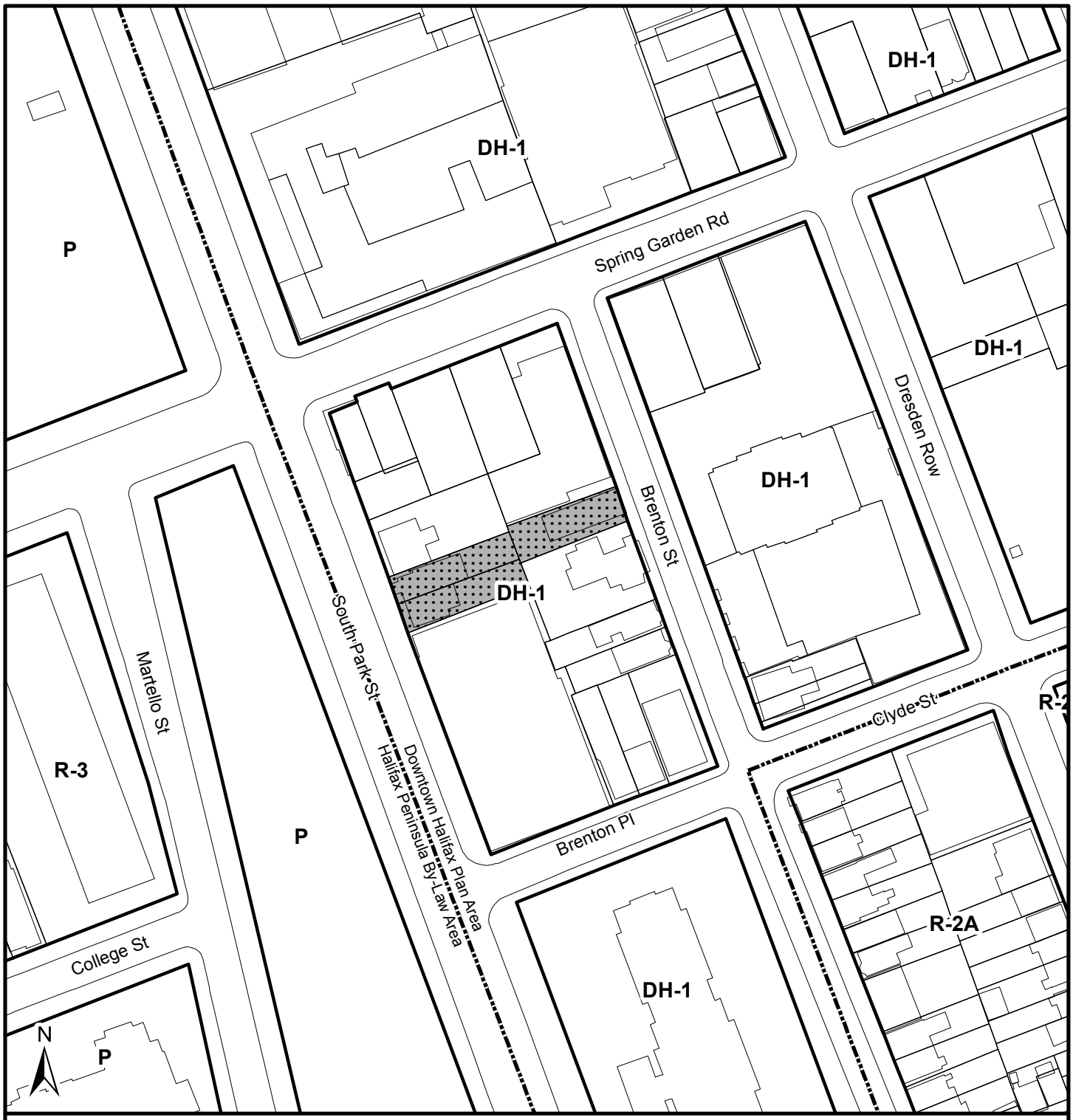
Map 1 Location and Zoning

Attachment A Site Plan Approval Plans
Attachment B Design Rationale & Requested Variance
Attachment C Qualitative Wind Impact Assessment
Attachment D Design Manual Checklist

A copy of this report can be obtained online at http://www.halifax.ca/commcoun/index.php then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Dali Salih, Planner II, Development Approvals, 902.490.1948

Report Approved by: Kelly Denty, Manager of Development Approvals, 902.490.6100



Map 1 - Location and Zoning

HALIFAX

1474 Brenton Street &
1469-73 South Park Street
Halifax

Subject Site

Downtown Halifax Plan Area

Zone - Downtown Halifax
DH-1 Downtown Halifax

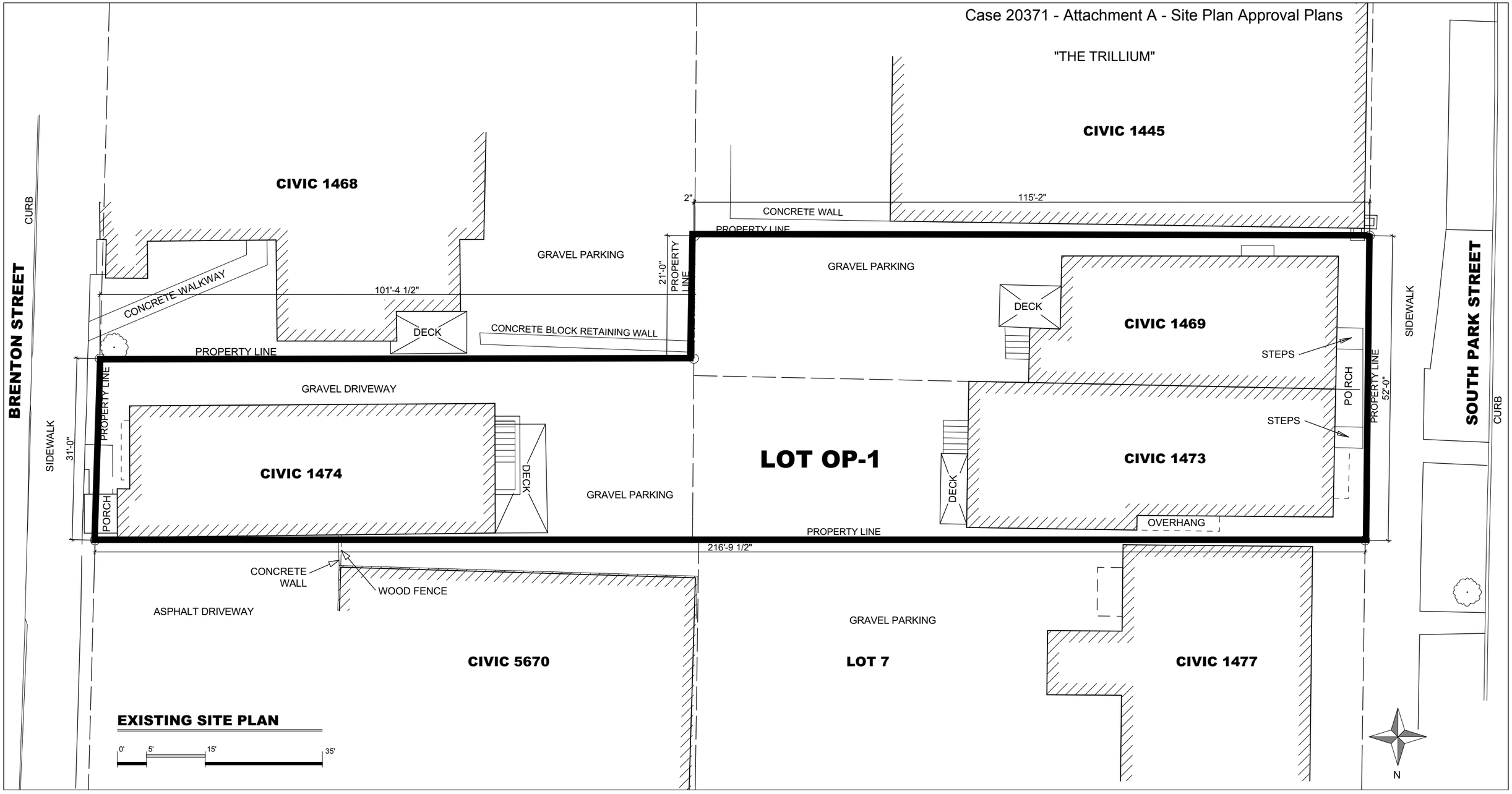
Zone - Halifax Peninsula
R-2A General Residential Conversion
R-3 Multiple Dwelling
P Park and Institutional

0 20 40 60 m

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.

21 March 2016 Case 20371 T:\work\planning\Casemaps\DHFX\20371\ (IAHG)



SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

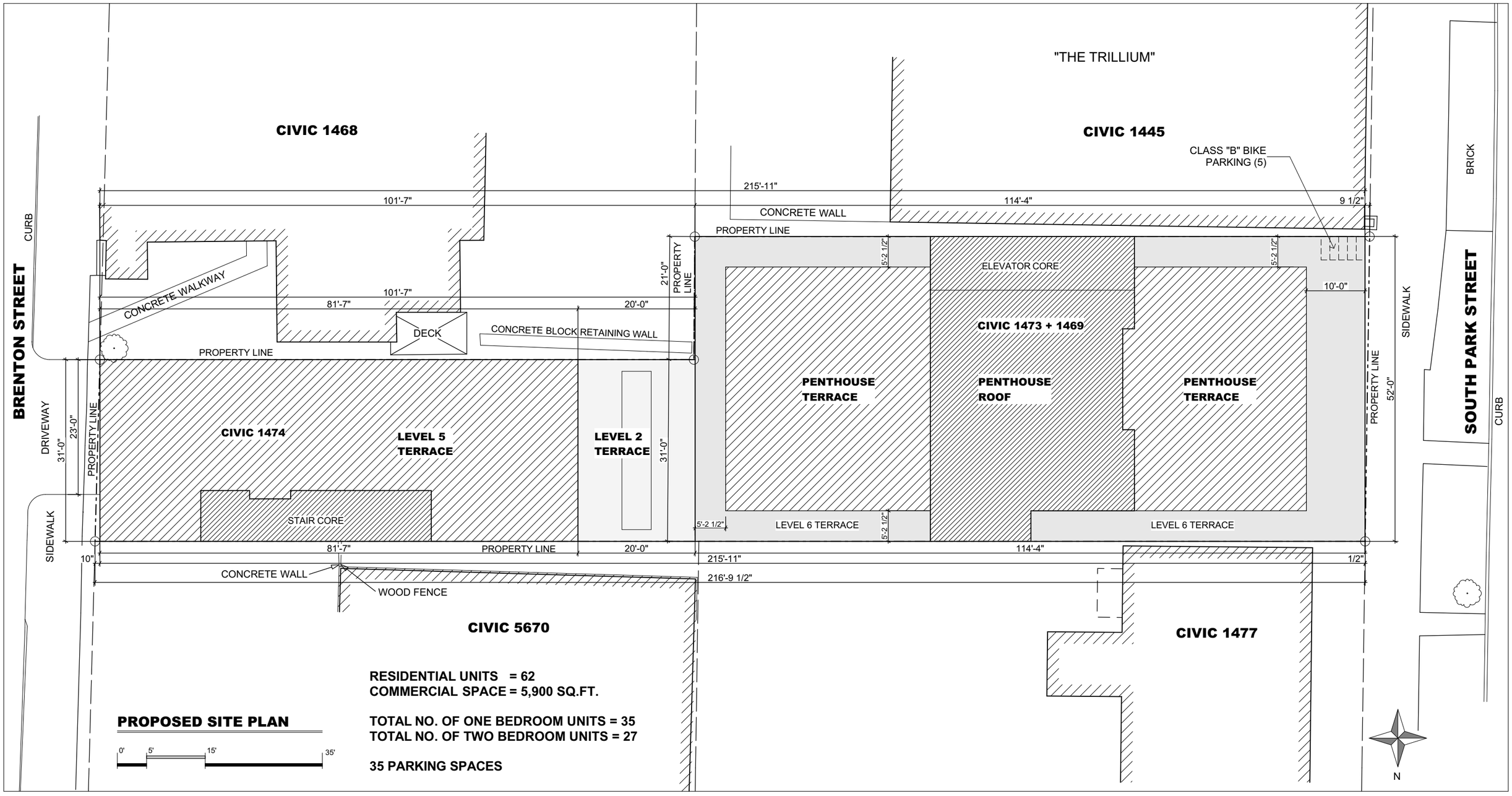
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct. 29, 2015
b	Revised	Sep 25, 2015
a	Issued for Development	Aug 14, 2015

Revisions / Issues:

site plan - existing

a100



PROPOSED SITE PLAN

0' 5' 15' 35'

RESIDENTIAL UNITS = 62
COMMERCIAL SPACE = 5,900 SQ.FT.

TOTAL NO. OF ONE BEDROOM UNITS = 35
TOTAL NO. OF TWO BEDROOM UNITS = 27

35 PARKING SPACES

SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

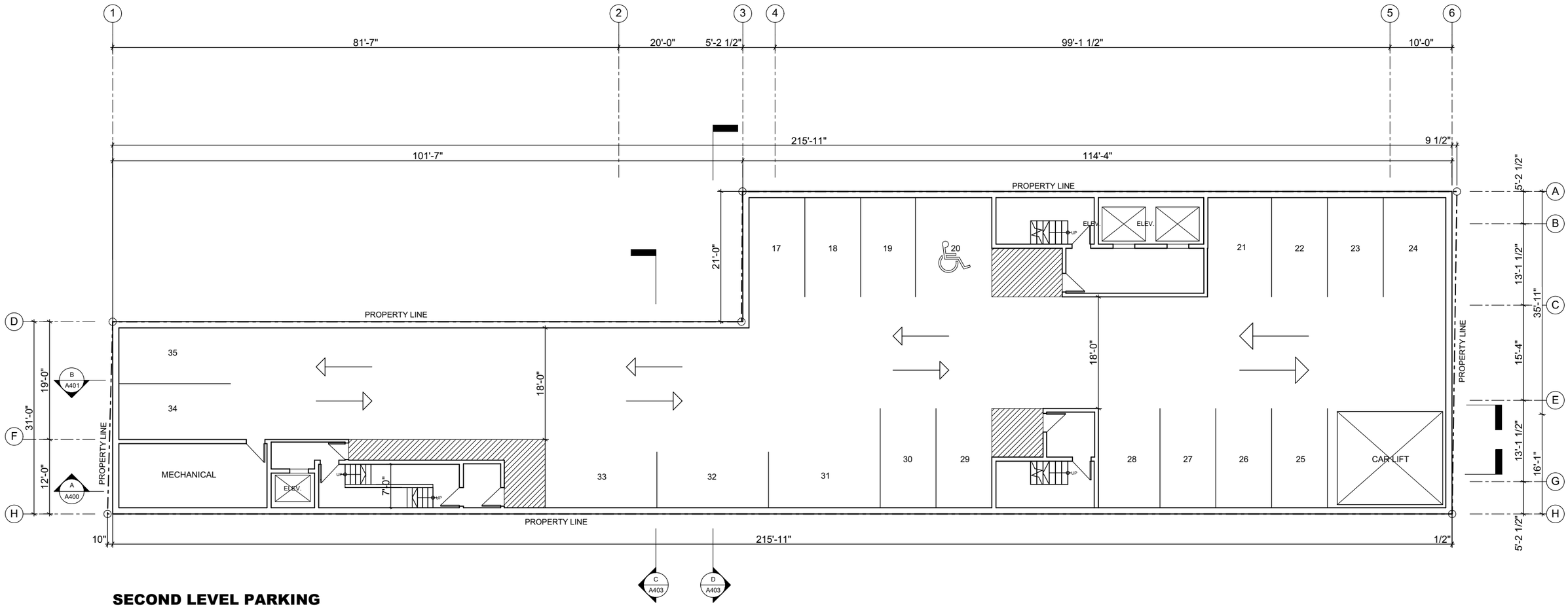
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct. 29, 2015
b	Revised	Sep 25, 2015
a	Issue for Development	Aug 14, 2015

Revisions / Issues:

site plan - proposed

a101



SECOND LEVEL PARKING

0' 5' 15' 35'

SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

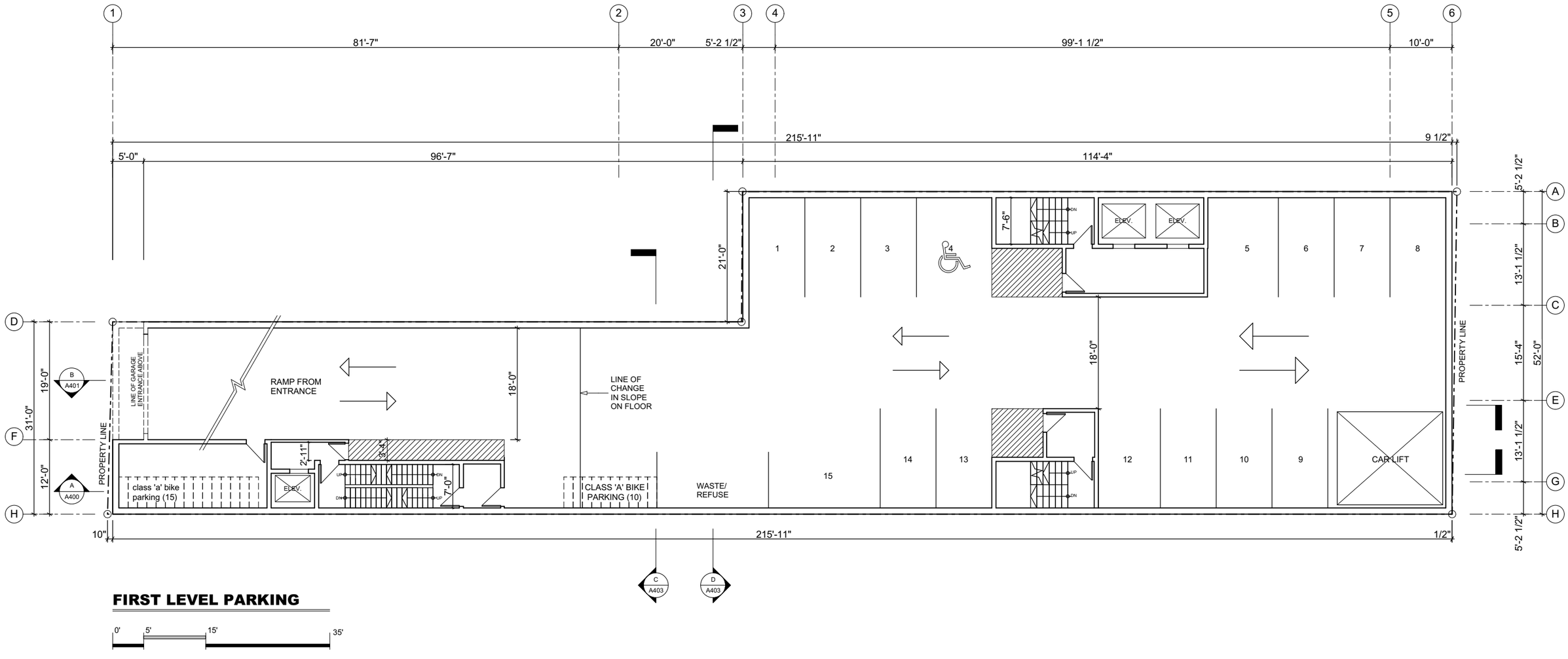
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct. 29, 2015
b	Revised	Sep 25, 2015
a	Issued for Development	Aug 14, 2015

Revisions / Issues:

second level parking

a200



FIRST LEVEL PARKING

0' 5' 15' 35'

SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

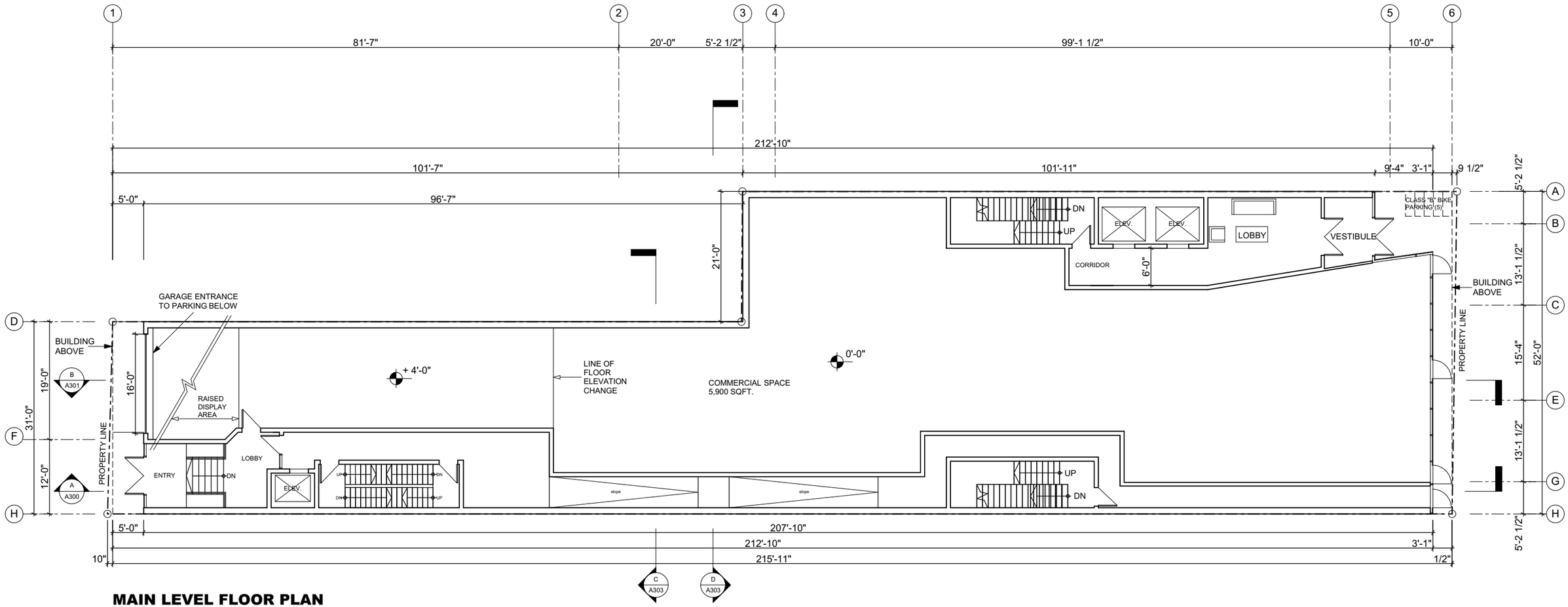
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct. 29, 2015
b	Revised	Sep 25, 2015
a	Issued for Development	Aug 14, 2015

Revisions / Issues:

first level parking

a201



MAIN LEVEL FLOOR PLAN

0' 5' 15' 35'

SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

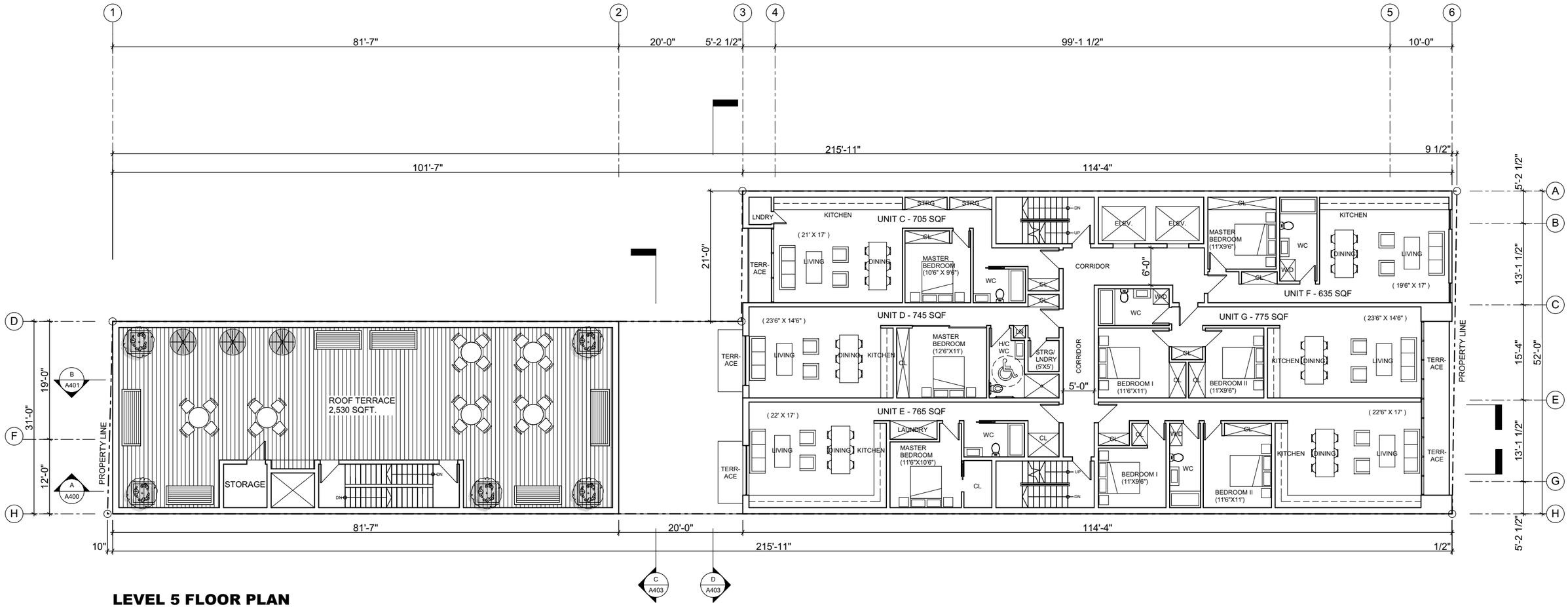
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct 29, 2015
b	Revised	Sep 25, 2015
a	Issue for Development	Aug 14, 2015

Revisions / Issues:

main level

a202



LEVEL 5 FLOOR PLAN

0' 5' 15' 35'

SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

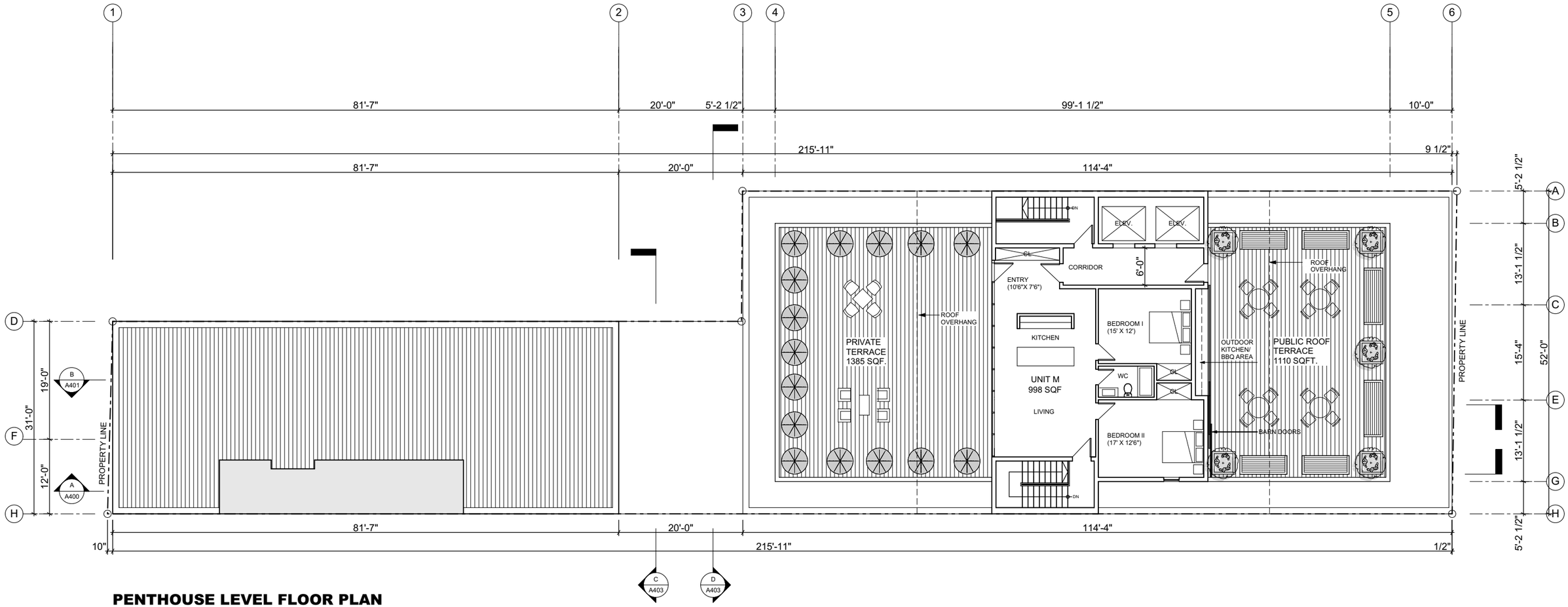
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct. 29, 2015
b	Revised	Sep 25, 2015
a	Issue for Development	Aug 14, 2015

Revisions / Issues:

level 5

a204



PENTHOUSE LEVEL FLOOR PLAN

0' 5' 15' 35'

SOUTH PARK APARTMENT PROJECT

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

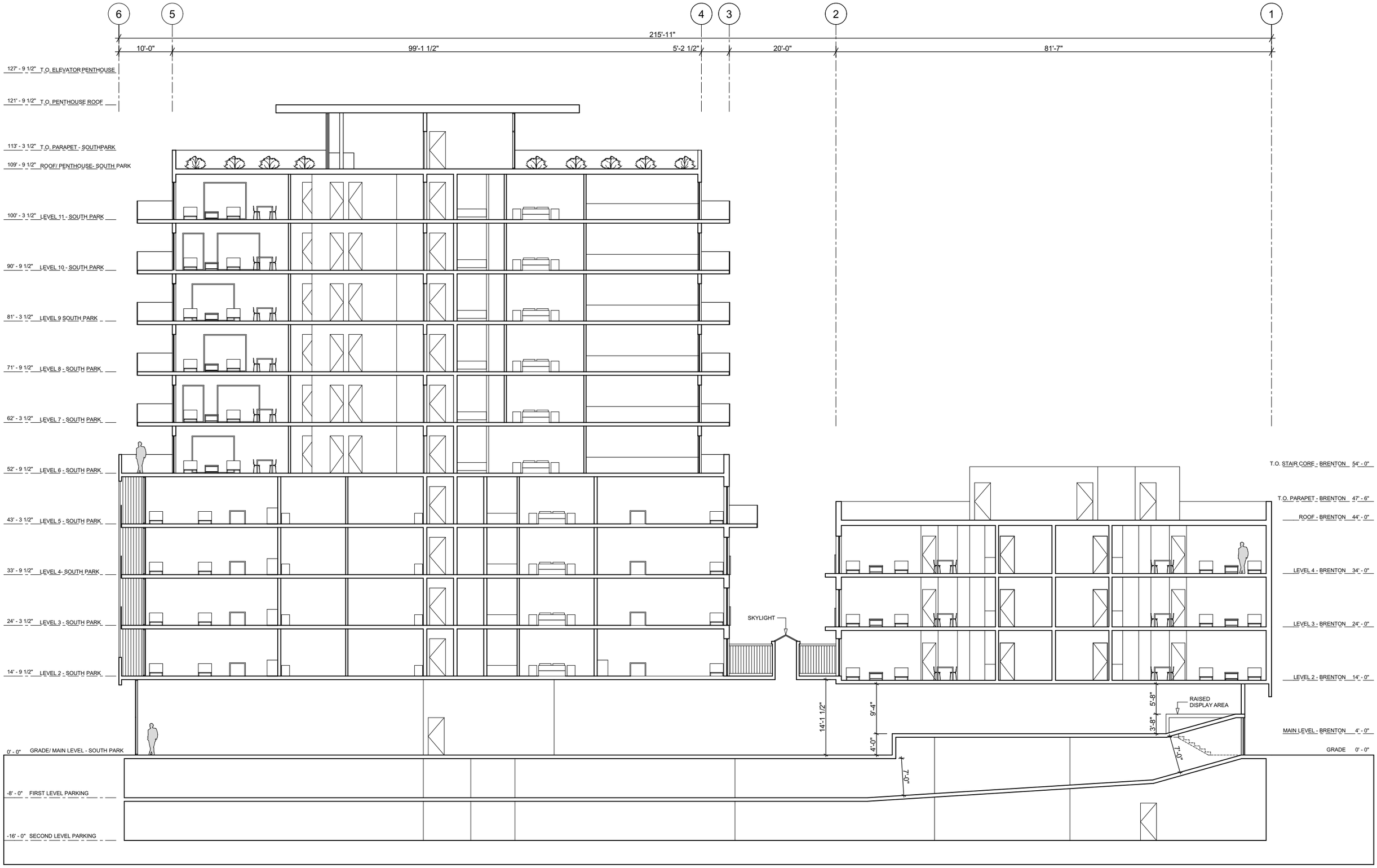
902 420 9400
902 406 6056

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
e	Revised	Jan. 20, 2016
c	Revised	Oct. 29, 2015
b	Revised	Sep 25, 2015
a	Issued for Development	Aug 14, 2015

Revisions / Issues:

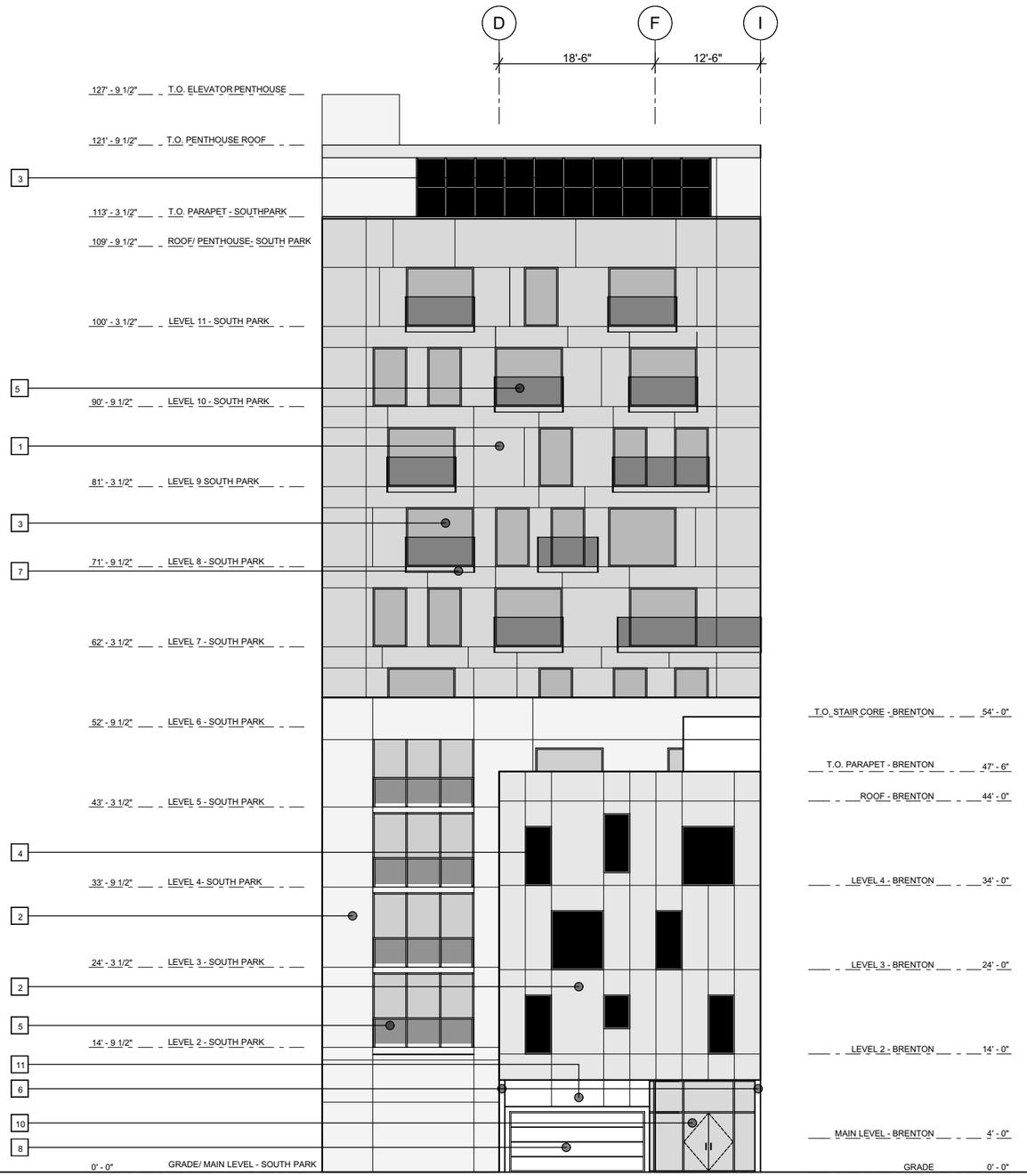
penthouse

a206



SECTION B

0' 5' 15' 35'



EAST ELEVATION

0' 5' 15' 35'

1 DARK PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE80 (CHARCOAL GREY)
OPTION 3: TONALITY CERAMIC : ANTHRACITE
OPTION 4: TRESPA FACADE

2 LIGHT PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE90 (WHITE)
OPTION 3: TONALITY CERAMIC : WHITE MATT
OPTION 4: TRESPA FACADE

3 GLAZING

4 ALUMINIUM FRAME WINDOWS

5 GLASS HANDRAIL

6 WOODEN VERTICAL SLATS

7 CONCRETE SLAB

8 GARAGE DOOR - Translucent Material

9 STEPS

10 ENTRANCE

11 WOOD PANELS

12 SKYLIGHT

SOUTH PARK LOFTS

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect
and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

902 420 9400
902 406 6056

north

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
c	Revised	Dec 11, 2015
c	Revised	Oct 29, 2015
b	Revised	Sep 25, 2015
a	Issued for Development	Aug 14, 2015

Revisions / Issues:

NOTES:

ARCHITECT'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify Geoff Keddy Architect and Associates Limited and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Architect.

ENGINEER'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify Geoff Keddy Architect and Associates Limited and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Engineer.

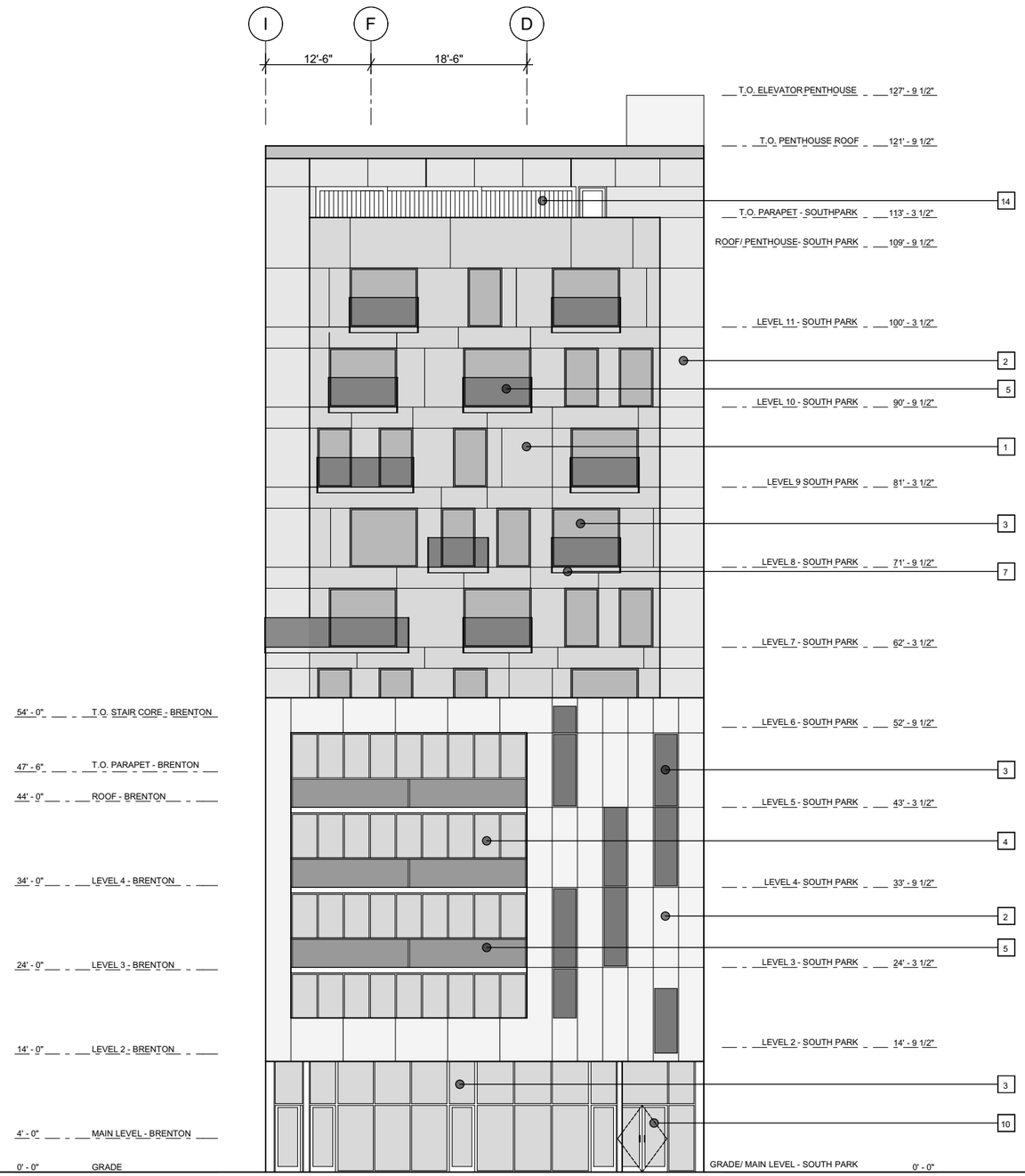
AUTHORITIES' REQUIREMENTS AND APPROVALS:
All materials and workmanship must comply with the requirements of all authorities having jurisdiction over the work. It is the Builder's resonsibility to gain necessary approval from all relevant Authorities.

DIMENSIONS:
All dimensions must be verified on site. Do not scale off drawings. Plans take precedents over elevations. In the absence of dimensions, or if discrepancies exists, consult Architect. All minimum dimensions are to comply with the National Building Code of Canada.

SHOP DRAWINGS:
Submit shop drawings to the Architect and Enginee for approval prior to manufacture of prefabricated elements of the buiding.

east elevation

A400



WEST ELEVATION

0' 5' 15' 35'

1 DARK PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE80 (CHARCOAL GREY)
OPTION 3: TONALITY CERAMIC : ANTHRACITE
OPTION 4: TRESPA FACADE

2 LIGHT PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE90 (WHITE)
OPTION 3: TONALITY CERAMIC : WHITE MATT
OPTION 4: TRESPA FACADE

3 GLAZING

4 ALUMINIUM FRAME WINDOWS

5 GLASS HANDRAIL

6 WOODEN VERTICAL SLATS

7 CONCRETE SLAB

8 GARAGE DOOR - Translucent Material

9 STEPS

10 ENTRANCE

11 WOOD PANELS

12 SKYLIGHT

13 BARN DOORS

SOUTH PARK LOFTS

1469 + 1473 South Park Street
1474 Brenton Street
Halifax, NS

Geoff Keddy Architect and Associates ltd.

5357 Inglis Street
Halifax, Nova Scotia
B3H 1J4

902 420 9400
902 406 6056

north

j	Revised	Feb 26, 2016
h	Revised	Feb 25, 2016
g	Revised	Feb 5, 2016
f	Revised	Jan. 21, 2016
c	Revised	Dec 11, 2015
c	Revised	Oct 29, 2015
b	Revised	Sep 25, 2015
a	Issued for Development	Aug 14, 2015

Revisions / Issues:

NOTES:

ARCHITECT'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify Geoff Keddy Architect and Associates Limited and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Architect.

ENGINEER'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify Geoff Keddy Architect and Associates Limited and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Engineer.

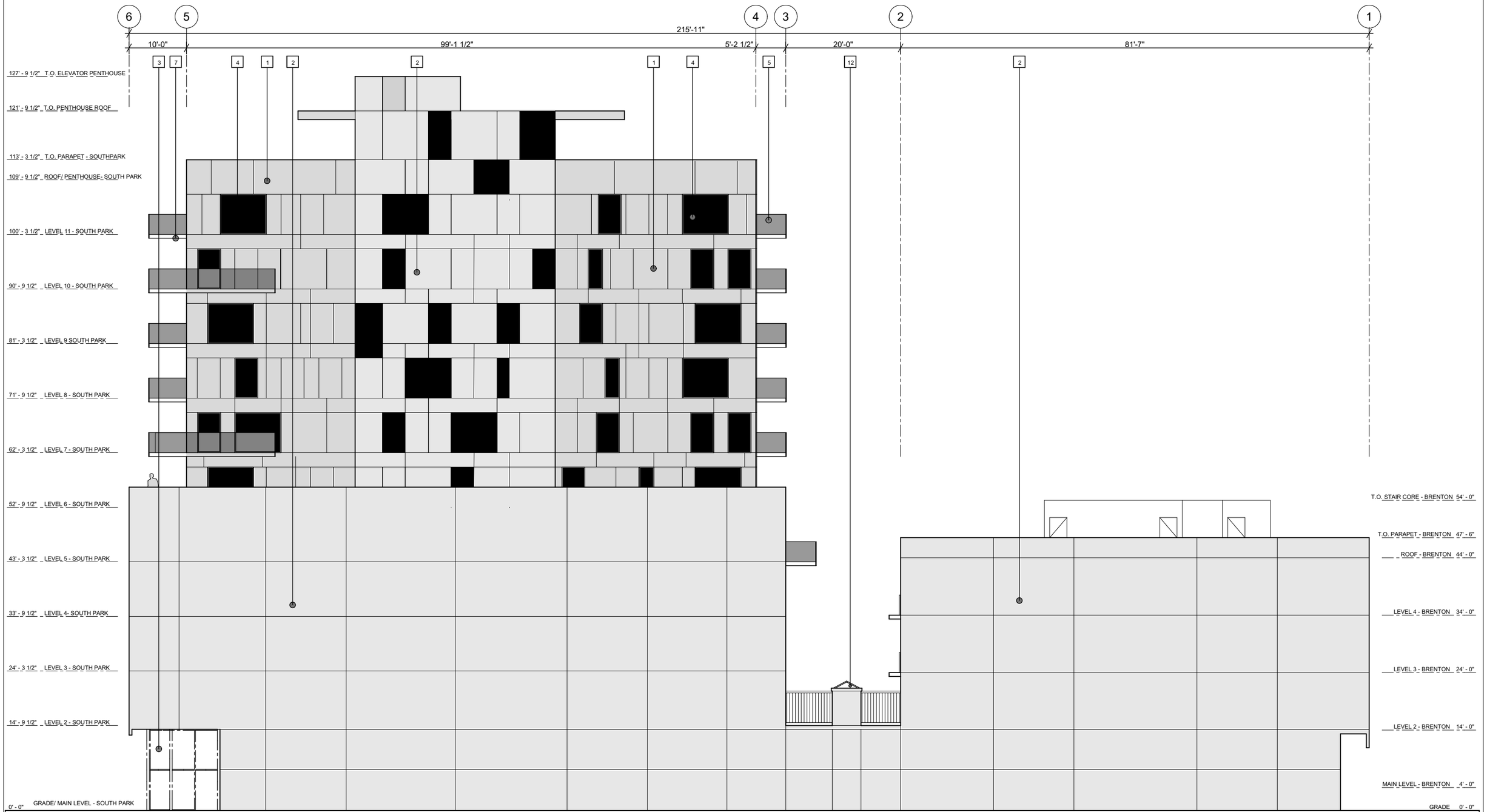
AUTHORITIES' REQUIREMENTS AND APPROVALS:
All materials and workmanship must comply with the requirements of all authorities having jurisdiction over the work. It is the Builder's resonsibility to gain necessary approval from all relevant Authorities.

DIMENSIONS:
All dimensions must be verified on site. Do not scale off drawings. Plans take precedents over elevations. In the absence of dimensions, or if discrepancies exists, consult Architect. All minimum dimensions are to comply with the National Building Code of Canada.

SHOP DRAWINGS:
Submit shop drawings to the Architect and Enginee for approval prior to manufacture of prefabricated elements of the buiding.

east elevation

A401



SOUTH ELEVATION

0' 5' 15' 35'

1 DARK PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE80 (CHARCOAL GREY)
OPTION 3: TONALITY CERAMIC : ANTHRACITE
OPTION 4: TRESPA FACADE

2 LIGHT PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE90 (WHITE)
OPTION 3: TONALITY CERAMIC : WHITE MATT
OPTION 4: TRESPA FACADE

3 GLAZING

4 ALUMINIUM FRAME WINDOWS

5 GLASS HANDRAIL

6 CONCRETE SLAB

7 WOODEN VERTICAL SLATS

8 GARAGE DOOR - Translucent Material

9 STEPS

10 ENTRANCE

11 WOOD PANELS

12 SKYLIGHT

NORTH ELEVATION

0' 5' 15' 35'

1 DARK PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE80 (CHARCOAL GREY)
OPTION 3: TONALITY CERAMIC : ANTHRACITE
OPTION 4: TRESPA FACADE

2 LIGHT PANELS
OPTION 1: CEMBRIT HIGH DENSITY FIBRECEMENT PANELS
OPTION 2: EQUITONE : TECTIVA TE90 (WHITE)
OPTION 3: TONALITY CERAMIC : WHITE MATT
OPTION 4: TRESPA FACADE

3 GLAZING

4 ALUMINIUM FRAME WINDOWS

5 GLASS HANDRAIL

6 CONCRETE SLAB

7 WOODEN VERTICAL SLATS

8 GARAGE DOOR - Translucent Material

9 STEPS

10 ENTRANCE

11 WOOD PANELS

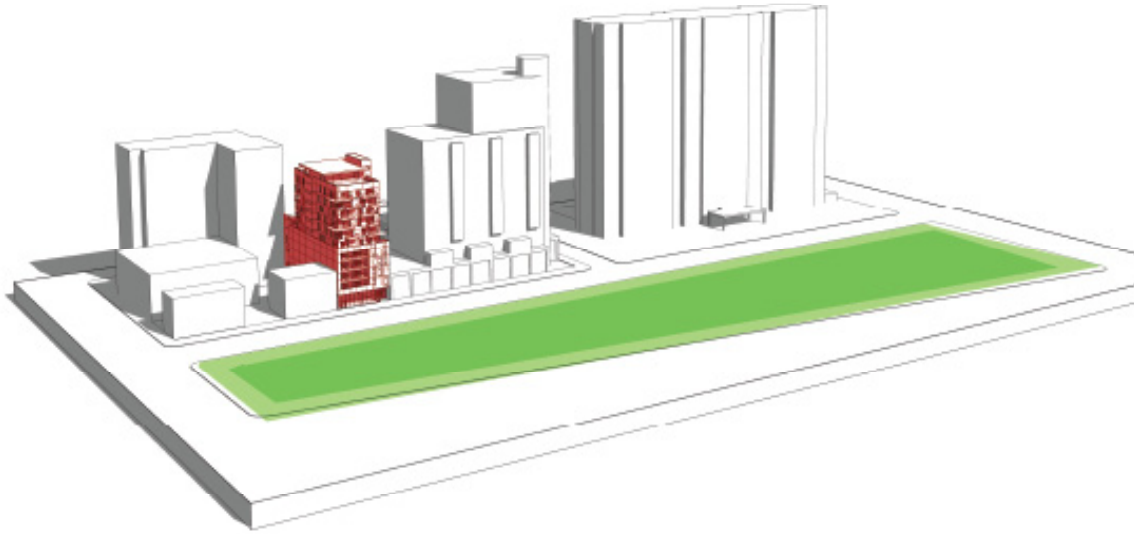
12 SKYLIGHT

SOUTH PARK PROJECT **DESIGN RATIONALE**

GEOFF KEDDY **ARCHITECT** & ASSOCIATES LTD.

1.0 SITE

The following proposal consists of an 11 story (plus penthouse) mid-rise residential in-fill building spanning the block between South Park Street and Brenton Street directly across from Victoria Park. The proposed building will contain a total of 62 residential units with commercial space at grade on South Park Street, which is a designated commercial area. Due to an existing light and air easement on Brenton Street for the adjacent building located at 5670 Spring Garden Road (see attached easement), the proposed building steps down to four stories on the Brenton Street side. A large, open courtyard separates the South Park Street mid-rise and the Brenton Street low-rise which allows for natural daylight and ventilation for the rear facing units and landscaped open space at grade. Both buildings are connected at grade through commercial space and underground via the parking garage which is accessed from the Brenton Street side, maximizing commercial storefront space on South Park Street. Large, landscaped, communal roof terraces are found on top of both the South Park Street mid-rise and the Brenton Street low-rise.



MASSING

1.1 EXISTING CONDITIONS

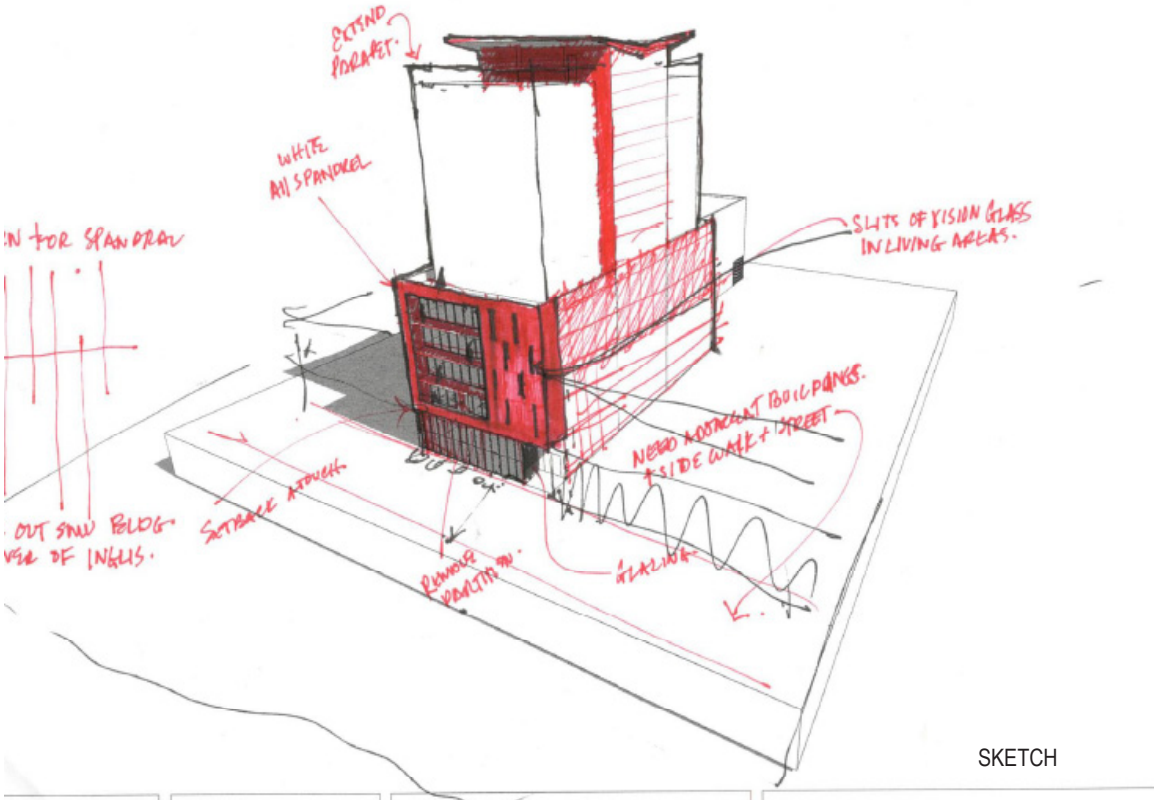
There are currently three seperate lots or PID's included in the proposal. The South Park side of the site currently consists of two separate PID's and is occupied by two semi-detached buildings that contain multiple residential dwellings. Both buildings are in very poor condition and remain under-utilized. The portion of the site abutting Brenton Street, or the third PID, is occupied by a residential dwelling that has been converted to commercial space. The existing conditions do not correspond to HRM's design guidelines.

SOUTH PARK STREET CONTEXT

BRENTON STREET CONTEXT

2.0 DESIGN RATIONALE

The following proposal located in precinct 3 or the Spring Garden Road Area is consistent with the HRM design manual guidelines. Extensive floor to ceiling glazing at ground level along South Park Street, a primary commercial zone in the downtown district, provides a high level of transparency, animating the pedestrian experience. The upper level, which cantilevers above the main entrance to the residential units provides a canopy and weather protection, encouraging pedestrian activity at grade. The upper levels of the streetwall are clad in high quality white spandrel panels. The upper portion of the mid-rise will be clad in Cembrit panels (high density concrete panel), creating a unique pattern that corresponds to the interior floor plates, windows, and terraces. The generous terraces wrapped in wood panels are recessed into the streetwall facade, breaking up the elevation and providing eyes on the street and a sense of animation and engagement while framing the views to Victoria Park. The narrow nature of the lot and building is consistent with the prevailing character of narrow buildings and storefronts in the downtown core. The proposal reinforces the HRM By Design plan by replacing the existing conditions, such as the two dilapidated semi-detached buildings on South Park Street which lack commercial space at ground level, with high quality commercial space and affordable residential dwellings, contributing to increasing density and diversity in the downtown core.



SKETCH

2.1 **DESIGN MANUAL** - RELEVANT CRITERIA

2.3a "Development shall appropriately frame Citadel Hill, the Public Gardens, and Victoria Park through the provision of consistent, animated street walls of superior quality and design." See section 2.0 on how this relates to design manual.

2.3c "Focus pedestrian activities at sidewalk level through the provision of weather protected sidewalks using well-designed canopies and awnings. See section 2.0 on how this relates to design manual.

2.3d "Prohibit new surface parking lots of any kind." All parking will be below grade and accessed from Brenton Street.

2.3e "Improve the pedestrian environment in the public realm through a program of streetscape improvements as previously endorsed by Council (Capital District Streetscape Guidelines)." The proposal does provide the opportunity for landscaping at grade.

3.1.1a "The articulation of narrow shop fronts, characterized by close placement to the sidewalk." The current design provides floor to ceiling windows at grade allowing for commercial and retail.

3.1.1b "High levels of transparency (non-reflective and non-tinted glazing on a minimum of 75% of the first floor elevation.)" The current design provides 100 % floor to ceiling windows at grade on South Park Street, a primary commercial zone in the downtown core, allowing for commercial and retail space.

3.1.1c Frequent entries. The proposed design has several different entrances.

3.1.1e "Patios and other spill-out activity is permitted and encouraged where adequate width for pedestrian passage is maintained." The proposed design provides the opportunity for spill-out activity since the sidewalks are quite spacious along South Park Street.

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. The proposed design is consistent with the setbacks of the buildings located on South Park Street and Brenton Street.

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.” See section 2.0 on how this relates to this particular section of the design manual.

3.2.1e “Streetwalls should be designed to have the highest possible material quality and detail.” See section 2.0 on how this relates to this particular section of the design manual.

3.2.1f “Streetwalls should have many windows and doors to provide eyes on the street and a sense of animation and engagement.” See section 2.0 on how this relates to this particular section of the design manual.

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.).” See section 2.0 on how this relates to this particular section of the design manual.

3.2.4d “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.” The proposed building provides private terraces for each unit above grade. It also provides two large communal landscaped roof terraces and a public courtyard at grade.

3.2.5a “Maintain active uses at-grade, related to the sidewalk, stepping with the slope. Avoid levels that are distant from grade.” The proposed design allows for direct barrier-free access at grade.

3.2.5c “Provide windows, doors and other design articulation along facades; blank walls are not permitted.” See section 2.0 on how this relates to this particular section of the design manual.

3.2.5d “Articulate the façade to express internal floor or ceiling lines; blank walls are not permitted. See section 2.0 on how this relates to this particular section of the design manual.

3.2.7a “Non-commercial uses at-grade should animate the street with frequent entries and windows.” Brenton Street has floor to ceiling windows above the parking entrance roughly 4’ above grade.

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." See section 2.0 on how this relates to this particular section of 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. "See section 2.0 on how this relates to this particular section of the design manual.

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. The proposed building material on the sides and rear are consistent with the street facing 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." Cembrit panels are made of the best quality high density fibre cement slates.

3.3.2b "Too varied a range of building materials is discouraged in favour of achieving a unified building image." The proposed building facade consists of Cembrit panels, white spandrel panels, and clear windows.

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." The proposed building material on the sides and rear are consistent with the street facing materials.

3.3.2d "Changes in material should generally not occur at building corners." The proposed building material on the sides and rear are consistent with the street facing materials.

3.3.2e "Building materials recommended for new construction include brick, stone, wood, glass, in-situ concrete and pre-cast concrete." The streetwall is comprised of high quality glass or spandrel panels. The mid-rise portion is clad in Cembrit panels that are made of the best quality high density fibre cement slates.

3.3.3a "Emphasize entrances with such architectural expressions as height, massing, projection, shadow, punctuation, change in roof line, change in materials, etc." The entrances to the upper level units are punched-in, clearly separating themselves from the entrances at grade.

3.3.3b "Ensure main building entrances are covered with a canopy, awning, recess or similar device to provide pedestrian weather protection." Residential entrances are covered by the building overhang/cantilever above, providing pedestrian weather protection.

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, which abut Citadel Hill and are therefore preeminently visible. The incorporation of living green roofs is strongly encouraged." The rooftop terrace will provide landscaped open space to the users.

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's 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." The stair core is made of the same materials as the rest of the building.

3.3.4e “Low-rise flat roofed buildings should provide screened mechanical equipment. Screening materials should be consistent with main building design. Sculptural and architectural elements are encourage for visual interest as the roofs of such structures have very high visibility.” All mechanical equipment will be located in the basement.

One variance is required. We would like to eliminate the side-yard set back above the streetwall for the two stair cores and elevator shaft in the midrise on South Park Street. At the moment they are required to be setback above the streetwall 10% of the width of the lot which is roughly 5 feet. This will have a negative impact on many levels due to the narrow nature of the site. It will make parking below grade nearly impossible, it reduces the commercial space along South Park Street dramatically, and it makes the units in the mid-rise portion undesirable or too small. We feel this won’t have much of an impact on the relatively new adjacent building to the south due to the generous set-back of the Trillium building. The building to the north is a low-rise building so pushing the one staircore out to the property line above the streetwall shouldn’t have much of an impact. This variance is only required on the South Park Street side and not on the Brenton Street side.

South Park Lofts

Halifax, Nova Scotia

Pedestrian Wind Assessment

RWDI # 1501706
March 9, 2016

SUBMITTED TO

Geoff Keddy
Geoff Keddy Architect and Associates Ltd.
5357 Inglis Street
Halifax, Nova Scotia B3H 1J4
geoffkeddy@eastlink.ca

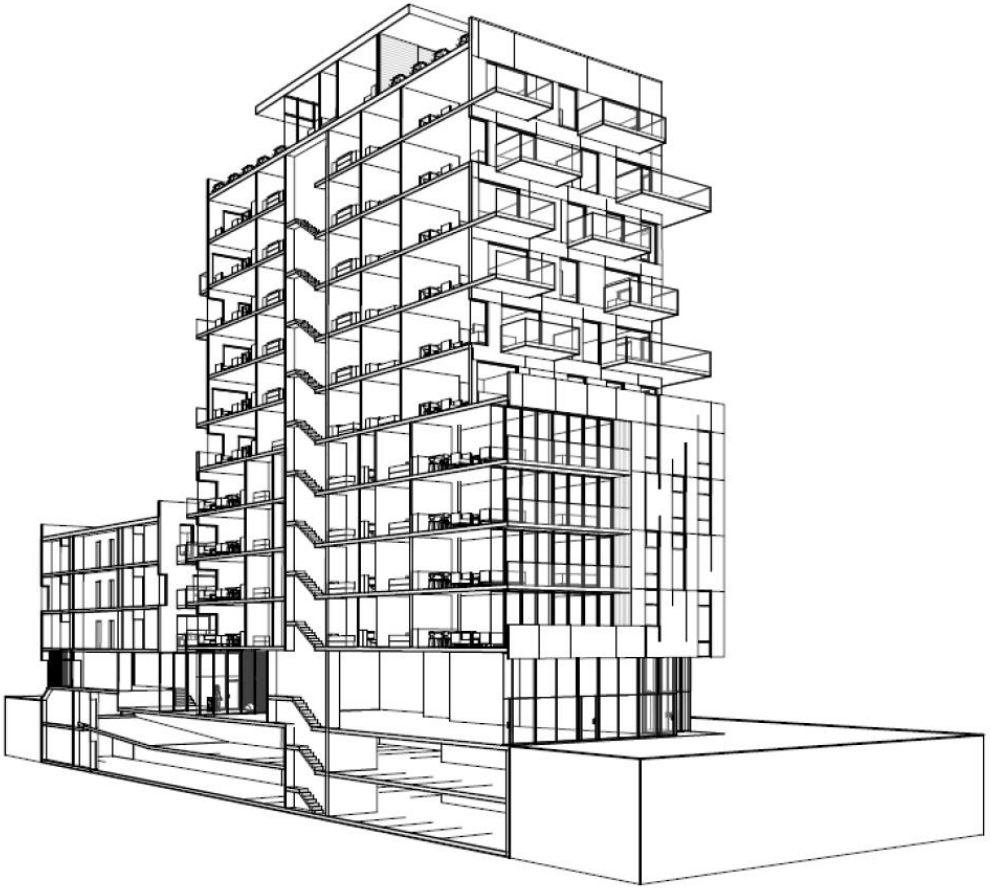
SUBMITTED BY

Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West
Guelph, Ontario, Canada N1K 1B8
519.823.1311

Neetha Vasan, M.A.Sc.
Technical Coordinator
Neetha.Vasan@rwdi.com

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

Edyta Chruscinski, P.Eng., PMP, LEED AP
Senior Project Manager
Edyta.Chruscinski@rwdi.com



South Park Lofts – View from Northwest
Courtesy of Geoff Keddy Architects and Associates Ltd.

1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was retained by Geoff Keddy Architect and Associates to assess the pedestrian level wind conditions for the proposed South Park Lofts in Halifax. An aerial view of the site is shown in Image 1.

The objective of this assessment is to provide a qualitative evaluation of pedestrian wind comfort conditions on and around the development. Conceptual mitigation measures to improve wind comfort have been recommended, where necessary. This qualitative assessment is based on the following:

- a review of regional long-term meteorological data for Halifax;
- recent design drawings received by RWDI on March 8, 2016;
- our engineering judgment and knowledge of wind flows around buildings[1];
- our experience of wind tunnel tests of various building projects[2]; and,
- use of software developed by RWDI (*Windestimator*[3]) for estimating the potential wind conditions around generalized building forms.

This qualitative approach provides a screening-level estimation of potential wind conditions. To quantify these conditions or refine any conceptual mitigation measures, physical scale model tests in a boundary-layer wind tunnel would typically be required.

Note that other wind issues, such as those related to cladding and structural wind loads, door pressures, stack effect, exhaust re-entrainment, snow drifting, snow loading, etc. are not considered in the scope of the current assessment.

Image 1: Aerial photograph of existing site and surroundings
(Courtesy of Google earth™)

1. H. Wu and F. Kriksic (2012). "Designing for Pedestrian Comfort in Response to Local Climate", *Journal of Wind Engineering and Industrial Aerodynamics*, vol.104-106, pp.397-407.
2. C.J. Williams, H. Wu, W.F. Waechter and H.A. Baker (1999), "Experience with Remedial Solutions to Control Pedestrian Wind Problems", *10th International Conference on Wind Engineering*, Copenhagen, Denmark.
3. H. Wu, C.J. Williams, H.A. Baker and W.F. Waechter (2004), "Knowledge-based Desk-Top Analysis of Pedestrian Wind Conditions", *ASCE Structure Congress 2004,* Nashville, Tennessee.

2. BUILDING AND SITE INFORMATION

As shown in Image 1, the site is located in the block bound by Brenton Place to the south, South Park Street to the west, Spring Garden Road to the north and Brenton Street to the east. There are high-rise buildings in the adjacent lots to the south and northeast of the site. The surroundings comprise of several mid-rise and high-rise buildings with lower residential buildings in the distance to the south. Halifax Public Gardens is located to the northwest of the block and several other parks are situated to the north and northwest. Victoria Park is across the street to the west of the site, beyond which is the Dalhousie University Campus comprised of several high-rise buildings. Halifax Harbour is less than a kilometer to the east, separated from the site by several blocks of mid-rise and high-rise buildings.

The proposed project will consist of an 11 story mid-rise residential building spanning the block between South Park Street and Brenton Street directly across from Victoria Park. The building steps down to four stories on the Brenton Street side. Both buildings are connected at grade through an enclosed courtyard (see south elevation in Image 2).

Pedestrian areas on and around the proposed development include (Images 2 and 3):

- Residential and retail entrances along South Park and Brenton Streets;
- Sidewalks on South Park and Brenton Streets;
- Roof terrace on the Brenton Street building;
- Public and private terraces at the Penthouse level on the South Park Street building; and,
- Private terraces on intermediate levels.

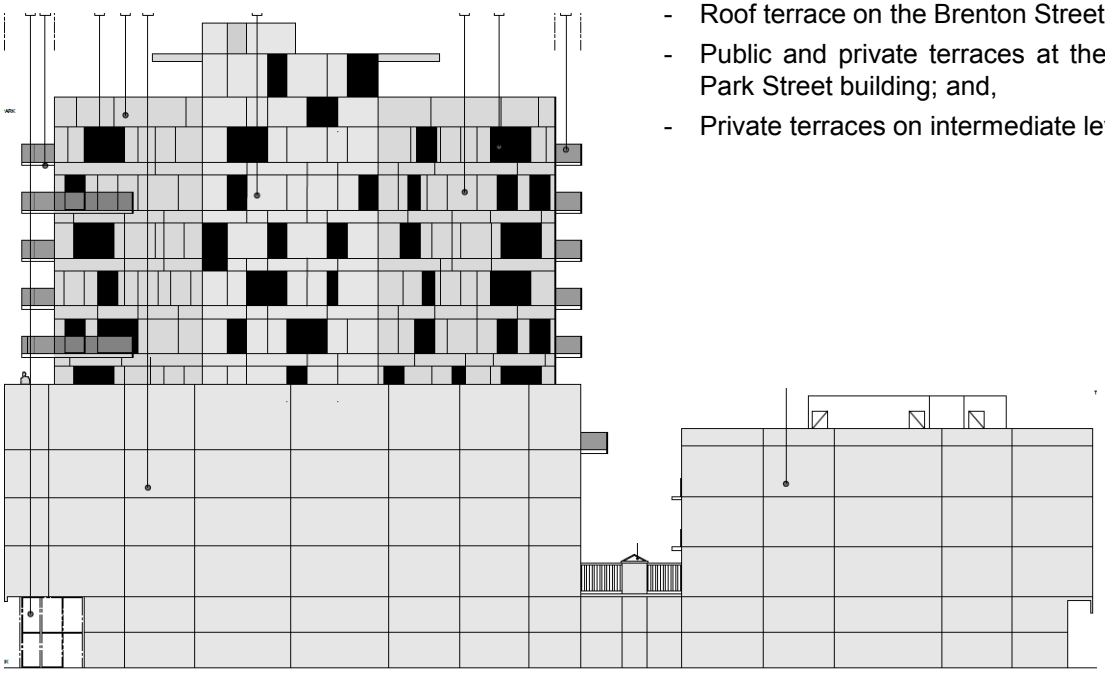


Image 2: South elevation

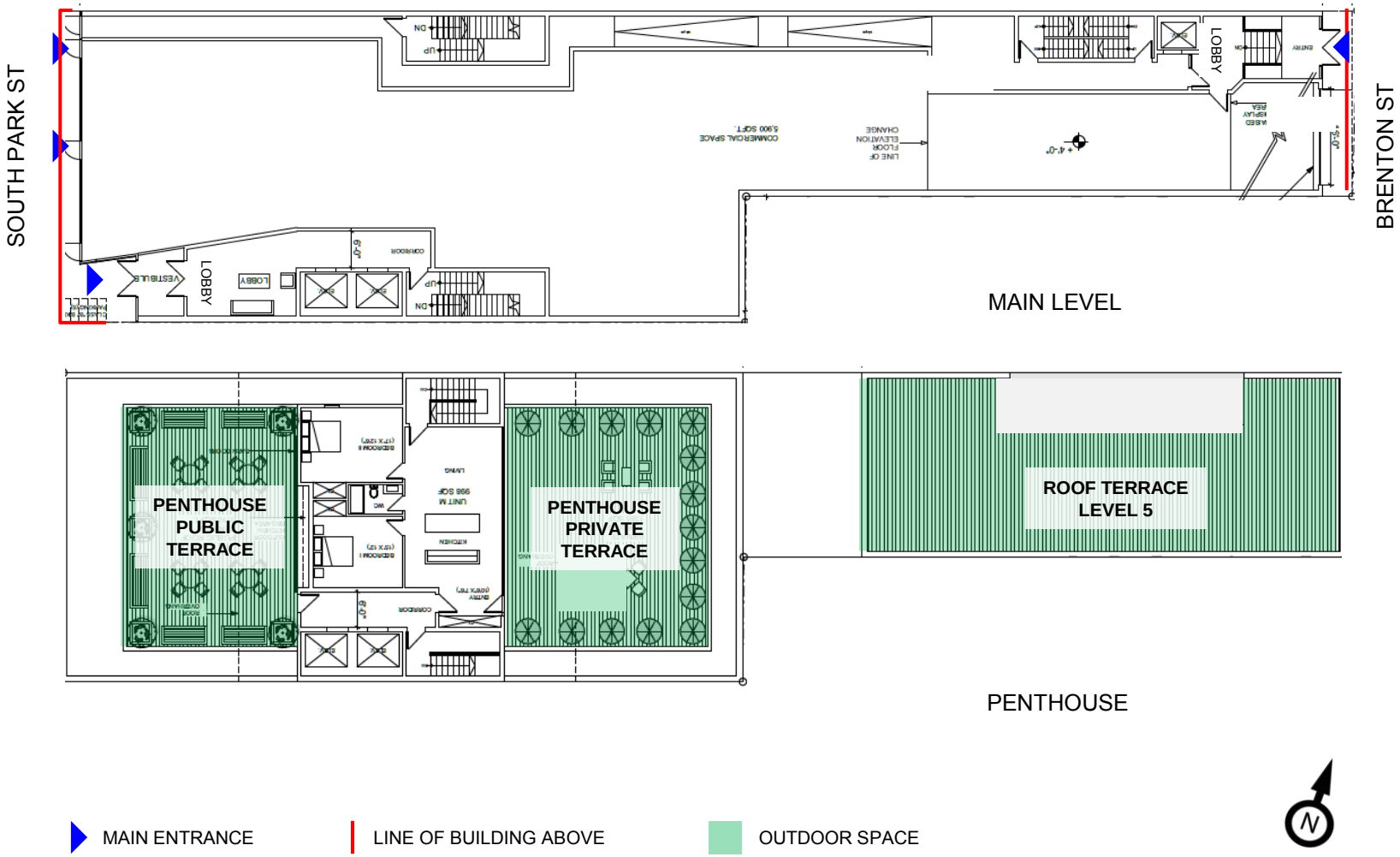


Image 3: Main and Penthouse level plans showing main public areas of the development

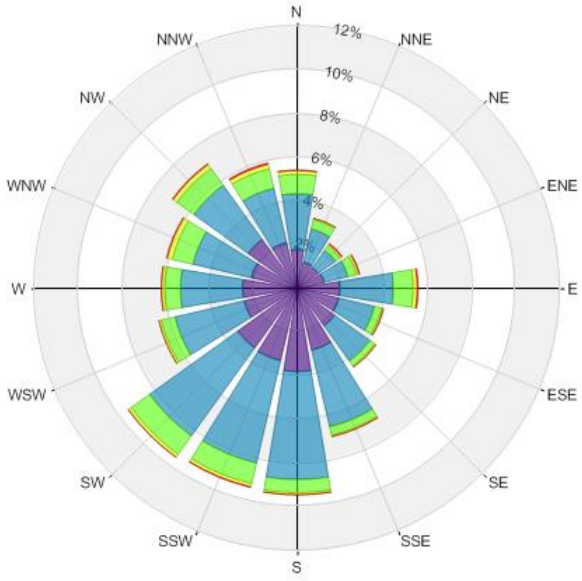
3. METEOROLOGICAL DATA

Meteorological data from Shearwater Airport for the period from 1971 to 2009 were used as a reference for wind conditions in the area.

The distributions of wind frequency and directionality for summer (May through October) and winter (November through April) seasons are graphically depicted in the wind roses in Image 4. When all winds are considered, winds from the north, south and western half of the compass are predominant throughout the year, with secondary winds from the east.

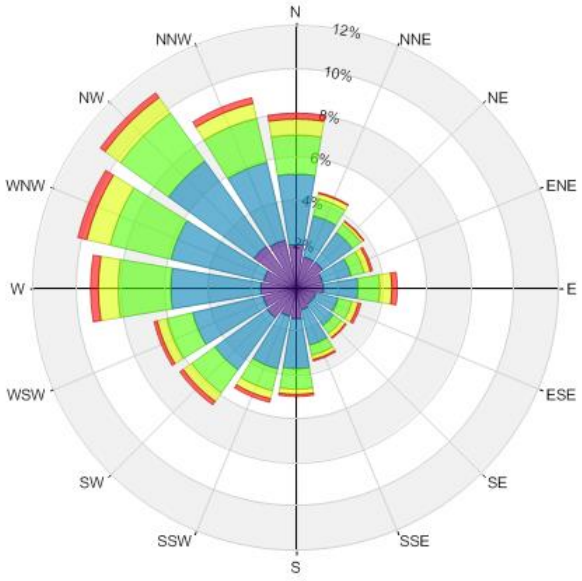
Winds from the southwest quadrant are predominant in the summer, and those from the northwest quadrant are more common in the winter.

Strong winds of a mean speed greater than 30 km/h measured at the airport (red and yellow bands) occur for 2.5% and 10.6% of the time during the summer and winter seasons, respectively. Strong winds are relatively more common from the northwest quadrant, and east directions.



Summer
(May - October)

Wind Speed (km/h)	Probability (%) Summer	Winter
Calm	4.8	3.1
1-10	37.0	23.9
11-20	45.0	41.6
21-30	10.8	20.7
31-40	2.1	7.7
>40	0.4	2.9



Winter
(November - April)

Image 4: Directional distribution (%) of winds (blowing from) - Shearwater Airport (1985 to 2014)

4. EXPLANATION OF CRITERIA

The RWDI pedestrian wind criteria are used in the current study. These criteria have been developed by RWDI through research and consulting practice since 1974. They have also been widely accepted by municipal authorities as well as by the building design and city planning community.

Sitting: Calm or light breezes desired for outdoor restaurants and seating areas where one can read a paper without having it blown away.

Standing: Gentle breezes suitable for main building entrances and bus stops.

Strolling: Moderate winds that would be appropriate for window shopping and strolling along a downtown street, plaza or park.

Walking: Relatively high speeds that can be tolerated if one's objective is to walk, run or cycle without lingering.

Wind conditions are considered suitable for sitting, standing or walking if the wind speeds are expected for at least four out of five days (80% of the time). An **uncomfortable** designation means that the criterion for walking is not satisfied.

Safety is also considered by the criteria and is associated with excessive gust wind speeds that can adversely affect a pedestrian's balance and footing. If winds sufficient to affect a person's balance occur more than 0.1% of the time, the wind conditions are considered severe. Wind control measures are typically required at locations where winds are rated as uncomfortable or they exceed the wind safety criterion.

These criteria for wind forces represent average wind tolerance. They are sometimes subjective and regional differences in wind climate and thermal conditions as well as variations in age, health, clothing, etc. can also affect people's perception of the wind climate.

For the current development, wind speeds comfortable for walking or strolling are appropriate for sidewalks. Lower wind speeds comfortable for standing are required for major building entrances, where pedestrians may linger. Low wind speeds comfortable for sitting are desired for outdoor amenity and terrace areas in the summer, when these spaces are typically in use.

5. PEDESTRIAN WIND CONDITIONS

5.1 Background

Predicting wind speeds and occurrence frequencies is complicated. It involves building geometry, orientation, position and height of surrounding buildings, upstream terrain and the local wind climate. Over the years, RWDI has conducted more than 2,500 wind-tunnel model studies on pedestrian wind conditions around buildings, yielding a broad knowledge base. This knowledge has been incorporated into RWDI's proprietary software that allows, in many situations, for a qualitative, screening-level numerical estimation of pedestrian wind conditions without wind tunnel testing.

The following is a discussion of the wind microclimate on and around the development site for the existing and proposed conditions. The focus of the discussion will be on the main pedestrian areas listed in Section 2 – entrances, sidewalks and terraces on the building. The development site and design of the proposed buildings has several features that are favourable towards achieving wind conditions appropriate for pedestrian use:

- Surrounding buildings that are similar or greater in height than the proposed development;
- Main entrances recessed from the main façade of the buildings;
- Entrances serviced by a vestibule or lobby;
- Terraces protected by the building massing overhead;
- Floors of the building set-back from the main façade at different elevations; etc.

These features and any proposed dense landscaping around or on the development are also positive measures for wind control. They should be retained in the final design.

5.2 Existing Wind Conditions

The two existing buildings on site are much shorter than most of the existing surroundings. As described in Section 2, the surroundings are well developed, comprised of several mid or high rise buildings in most directions. Therefore, the site is fairly sheltered by its surroundings from the predominant winds.

The existing wind conditions on the sidewalks along South Park Street are expected to be comfortable for standing in the summer, and for strolling or walking in the winter, due to their exposure to the west and northwest winds. The sidewalks along Brenton Street are more sheltered and, therefore, have lower wind speeds in general. Given the local wind climate and the heights of the surrounding buildings, it is expected that the winds in the area do not exceed the safety criterion.

5.3 Potential Wind Conditions

This section discusses wind conditions expected after the completion of the proposed project. Since the site is sheltered from most predominant winds by the existing surroundings and the proposed development has a narrow façade exposed to the prevailing west and northwest winds, it is expected that the construction of the proposed buildings will bring very little change to the local wind microclimate. The floor plans in Image 3 may be referred to in conjunction with the following discussion.

5.3 Potential Wind Conditions (continued)

Grade Level

All entrances to the buildings are recessed from the main facade. In addition, the main residential entrances on both South Park and Brenton Streets are serviced by a vestibule or a lobby where patrons can wait on windy days. Both these features are positive for wind control.

Wind speeds on sidewalks around the proposed development are predicted to be comfortable for standing during the summer. During the winter, seasonally higher wind speeds are expected and would be comfortable for strolling or walking. These wind conditions are suitable for pedestrian use and are expected to be similar to the existing wind microclimate in the area.

Terraces

Ideally, it is desirable for wind conditions to be comfortable for sitting on terraces meant for passive activities, particularly in the summer when frequent usage is anticipated. During the winter, outdoor terraces are less likely to be used frequently so higher wind speeds would be acceptable.

Being at higher elevations, the penthouse terraces would be more exposed to winds from all directions. The roof terrace of the Brenton Street building (Level 5) is at a low elevation relative to its immediate surroundings, and thereby less exposed to the prevailing winds. Terraces and balconies at the intermediate levels on the 11-storey building are also sheltered similarly by the neighbouring tall buildings.

Wind speeds on the Penthouse terraces are expected to be comfortable for standing or strolling in the summer and walking in the winter. Slightly lower wind speeds are expected in the lower terraces but the wind speeds would fall under the standing category in the summer and strolling category in the winter.

Wind speeds predicted for the summer are slightly higher than desired for public terraces intended for passive activities. If tall planters or trees are proposed along the perimeter of the terraces, that would reduce wind speeds in the area to more comfortable levels in the summer. Screens, approximately 20-30% porous, may also be considered in place of landscaping. It is recommended that if either of these features are used, that they be at least 2 m tall for good wind control efficacy.

Private terraces and balconies often service tenants of one or a few units and it is understood that patrons would exercise operational control on windy days, without supervision. Terraces on the east side would be more protected from the prevailing winds being on the leeward side of the building. If additional wind reduction is desired, the balustrades of the private terraces may be raised using a 20-30% porous material or local landscaping may be used on the terraces.

During the winter, since terraces are not anticipated to be used frequently the predicted wind conditions would be acceptable. Some examples of wind control features on terraces are shown in Image 5.

Image 5: Wind control elements for terraces

6. SUMMARY

The proposed development spans the block between South Park Street and Brenton Street and consists of an 11 story mid-rise residential building that steps down to four stories on the Brenton Street side. Buildings in the immediate surroundings are generally similar or taller in height. As described in Sections 2 and 5, the development site and surroundings have several features that are favourable for wind control. The surrounding buildings provide shelter to the proposed site from the prevailing winds. Wind conditions on adjacent sidewalks as well as at the recessed entrances are predicted to be comfortable for standing in the summer and strolling or walking in the winter. These conditions are appropriate for pedestrian use and would be similar to the existing conditions around the site.

Wind speed categorizations expected on most of the terraces are predicted to be slightly higher than desirable for frequent passive usage and public gathering. Winds speeds will be lower on the terraces and balconies on the east side of the buildings. Wind control measures would be beneficial in enhancing the wind microclimate on the terraces and have been suggested.

7. APPLICABILITY OF RESULTS

In the event of any significant changes to the design, construction or operation of the building or addition of surroundings in the future, RWDI could provide an assessment of their impact on the wind conditions discussed in this report. It is the responsibility of others to contact RWDI to initiate this process.

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
2	**Downtown Precinct Guidelines**		
2.3	**Precinct 3 - Spring Garden Road Area**		
2.3a	Development shall appropriately frame Citadel Hill, the Public Gardens, and Victoria Park through the provision of consistent, animated streetwalls of superior quality and design.	Yes	
2.3b	Ensure that there continues to be adequate sunlight penetration on Spring Garden Road.	N/A	
2.3c	Focus pedestrian activities at sidewalk level through the provision of weather protected sidewalks using well-designed canopies and awnings.	Yes	
2.3d	Prohibit new surface parking lots of any kind	Yes	
2.3e	Improve the pedestrian environment in the public realm through a program of streetscape improvements as previously endorsed by Council (Capital District Streetscape Guidelines).	Yes	
2.3f	Development shall be in keeping with The Spring Garden Road/Queen Street Area Joint Public Lands Plan, including: • ensure that the Clyde Street parking lots are redeveloped with mid-rise development, underground parking, and massing that transitions to Schmidtville; • ensure that the existing parking supply on the two Clyde Street parking lots will be preserved as part of the redevelopment of those lots, and that in addition, the redevelopment provides adequate parking for the new uses being introduced; • reinforce a development pattern of "monumental" buildings on Spring Garden Road from Queen Street towards Barrington Street; • a new public open space, 2,000 square metres minimum, shall be established at the terminus of Clyde Street, on the east side of Queen Street; • Clyde Street and Brenton Place to become important pedestrian-oriented streets; • allow for a mid-rise development at the corner of Morris and Queen Streets, and; • to allow tall buildings on the western blocks of the precinct.	N/A	
3	**General Design Guidelines**		
3.1	**The Streetwall**		
3.1.1	**Pedestrian-Oriented Commercial** On certain downtown streets pedestrian-oriented commercial uses are required to ensure a critical		

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	mass of activities that engage and animate the sidewalk These streets will be defined by streetwalls with continuous retail uses and are shown on Map 3 of the Land Use By-law. All retail frontages should be encouraged to reinforce the 'main street' qualities associated with the historic downtown, including:		
3.1.1a	The articulation of narrow shop fronts, characterized by close placement to the sidewalk.	Yes	
3.1.1b	High levels of transparency (non-reflective and non-tinted glazing on a minimum of 75% of the first floor elevation).	Yes	
3.1.1c	Frequent entries.	Yes	
3.1.1d	Protection of pedestrians from the elements with awnings and canopies is required along the pedestrian-oriented commercial frontages shown on Map 3, and is encouraged elsewhere throughout the downtown.	Yes	
3.1.1e	Patios and other spill-out activity is permitted and encouraged where adequate width for pedestrian passage is maintained.	Yes	
3.1.1f	Where non-commercial uses are proposed at grade in those areas where permitted, they should be designed such that future conversion to retail or commercial uses is possible.	N/A	
3.1.2	**Streetwall Setback** *(refer to Map 6 of the LUB)*		
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	
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	
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	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
3.1.3	**Streetwall Height** *(refer to Map 7 of the LUB)* 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 B 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.		
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	
3.2.1b	The streetwall should generally be built to occupy 100% of a property's frontage along streets.	Yes	
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.	Yes	
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	
3.2.1f	Streetwalls should have many windows and doors to provide eyes on the street and a sense of animation and engagement.	Yes	
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.	Yes	
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	Yes	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	Terminus sites identified on Map 9 of the Land Use By-law.		
3.2.2c	Sideyard setbacks are not permitted in the Central Blocks defined on Map 8 of the Land Use Bylaw, except where required for through-block pedestrian connections or vehicular access.	N/A	
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.	N/A	
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	A sloping condition exists on Brenton Street. A pedestrian entrance is provided to the retail entrance at grade with the abutting section of sidewalk. A set of stairs within the building then leads up from the grade 1.2 m (4 feet) to the retail level.
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**		
3.2.4a	Individually accessed residential units (i.e. town homes) should have front doors on the street, with appropriate front yard privacy measures such as setbacks and landscaping. Front entrances and first floor slabs should be raised above	N/A	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	grade level for privacy, and should be accessed through means such as steps, stoops and porches.		
3.2.4b	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	
3.2.4c	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	
3.2.4d	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	
3.2.4e	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.	Yes	
3.2.4f	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.	Yes	
3.2.5c	Provide windows, doors and other design articulation along facades; blank walls are not permitted.	Yes	
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.	Yes	
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.	Yes	A sloping condition exists on Brenton Street. A pedestrian entrance is provided at grade with the

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
			abutting section of sidewalk to ensure compliance with this criteria.
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.	N/A	
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 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.	Yes	
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.	Yes	
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.	Yes	
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.	Yes	
3.3.2	**Materials**		
3.3.2a	Building materials should be chosen for their functional and aesthetic quality, and exterior finishes should exhibit quality	Yes	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	of workmanship, sustainability and ease of maintenance.		
3.3.2b	Too varied a range of building materials is discouraged in favour of achieving a unified building image.	Yes	
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.	Yes	
3.3.2d	Changes in material should generally not occur at building corners.	Yes	
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	
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 guidelines 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.	Yes	
3.3.3b	Ensure main building entrances are covered with a canopy, awning, recess or similar device to provide pedestrian weather protection.	Yes	
3.3.3c	Modest exceptions to setback and stepback requirements are possible to achieve these goals.	Yes	
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	Yes	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	downtown, so their roof massing and profile must include sculpting, towers, night lighting or other unique features.		
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.	Yes	
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, which abut Citadel Hill and are therefore pre-eminently visible. The incorporation of living Agreen roofs is strongly encouraged.	Yes	
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.	Yes	
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.	Yes	
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.	N/A	
3.4	**Civic Character** *(not applicable)*		
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	
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.	Partial	Condition is met by utilizing functional and high quality materials of translucent nature.
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,	N/A	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	landscaping and well-designed doors and entries.		
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	
3.5.2	**Parking Structures**		
3.5.2a	Where multi-storey parking facilities are to be integrated into new developments they should be visually obscured from abutting streets by wrapping them with 'sleeves' of active uses.	N/A	
3.5.2b	Animated at-grade uses should occupy the street frontage, predominantly retail, with 75% transparency.	Yes	
3.5.2c	At-grade parking access and servicing access to retail stores should be provided to the rear and concealed from the street.	Partial	Condition is met by utilizing functional and high quality materials of translucent nature.
3.5.2d	Provide articulated bays in the façade to create fine-grained storefront appearance.	Yes	
3.5.2e	Provide pedestrian amenities such as awnings, canopies, and sheltered entries.	Yes	
3.5.2f	Provide façade treatment that conceals the parking levels and that gives the visual appearance of a multi-storey building articulated with 'window' openings.	N/A	
3.5.2g	Design of parking structures such that they can be repurposed to other uses (i.e. level floor slabs) is encouraged.	N/A	
3.5.2h	Provide cap treatment (at roof or cornice line) that disguises views of rooftop parking and mechanical equipment.	N/A	
3.5.2i	Utilize high quality materials that are compatible with existing downtown buildings.	Yes	
3.5.2j	Locate pedestrian access to parking at street edges, with direct access. Ensure stairs to parking levels are highly visible from the street on all levels.	Yes	
3.5.2k	Ensure all interior and exterior spaces are well lit, inclusive of parking areas, vehicular circulation aisles, ramps,	Yes	

Attachment D – Design Manual Checklist – Case 20371			
Section	**Guideline**	**Complies**	**Discussion**
	pedestrian accesses, and all entrances.		
3.5.2l	Maintain continuous public access to parking at all hours and in all seasons.	N/A	
3.5.2m	Minimize the width and height of vehicular access points to the greatest practical extent.	Yes	
3.5.2n	Provide clear sightlines for vehicles and pedestrians at sidewalks, by setting back columns and walls, and providing durable low-maintenance mirrors.	Yes	
3.5.2o	Bicycle parking must be provided in visible at-grade locations, and be weather-protected.	Yes	
3.5.3	**Surface Parking** *(not applicable)*		
3.5.4	**Lighting**		
3.5.4a	Attractive landscape and architectural features can be highlighted with spot-lighting or general lighting placement.	Yes	
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.	N/A	
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 Afull cutoff fixtures.	Yes	
3.5.4f	Lighting shall not create glare for pedestrians or motorists by presenting unshielded lighting elements in view.	Yes	
3.5.5	**Signs** *(no plans have been provided about specific signage – signs will be subject of separate future permit applications)*		
3.6	**Site Plan Variance**		
3.6.2	**Side and Rear Yard Setback Variance:** Side and rear yard setbacks may be varied by Site Plan Approval where:		
3.6.2a	The modified setback is consistent with the objectives and guidelines of the Design Manual; and	Yes	
3.6.2b	The modification does not negatively impact abutting uses by providing insufficient separation.	Yes	