

WESTHILL ON DUKE  
HIGH SITE PLAN APPROVAL PRE-APPLICATION SUPPORTING DOCUMENTS  
DECEMBER 6, 2013

ARCHITECTS:  
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PROPERTY OWNER:



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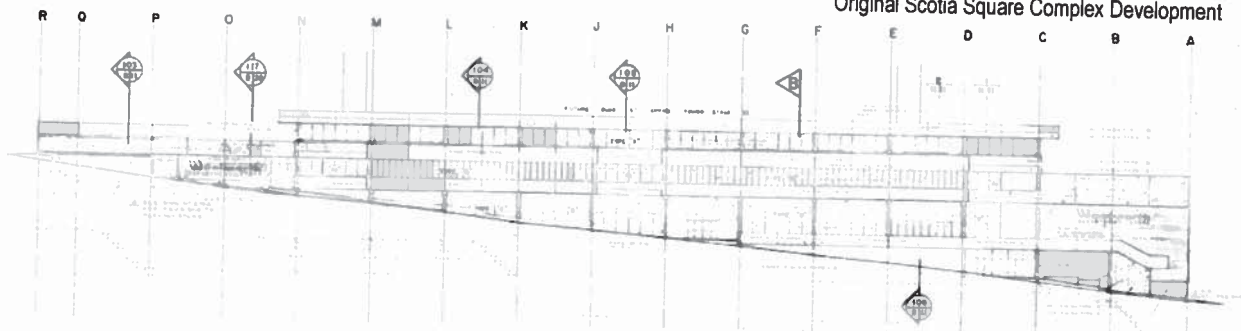


## 1. Existing Site Condition

The Scotia Square mixed use development was constructed in phases between the late 1960's to the early 1970's. Spanning over several acres, it was one of the largest developments in Canada at the time. One of the main challenges of the Scotia Square complex was the significant grade change between the lowest point at the northeast corner and the highest point at the southwest corner.



Original Scotia Square Complex Development



Original Duke Street Elevation

### 1.1 Duke Street and Albemarle Street

The proposed building site is the southwest corner of the existing complex, at the corner of Duke Street and Albemarle Street. The addition will be constructed above the existing building at the podium level. Being the highest point of the Scotia Square complex, the existing building sits only a couple metres above the highest grade elevation. The new building height falls well within the maximum streetwall height as prescribed in the HRM Land Use By-Law. The existing low building sets up an ideal infill project location for the Scotia Square complex, as encouraged within the Cogswell Precinct described in the HRM Design Manual.



View of Proposed Building Site at the Corner of Duke Street and Albemarle Street



## 1.2 Usage

Over the years, the building has received numerous interior and exterior renovations to follow suit with the changes in tenancy. The southwest corner of Scotia Square was originally occupied by the Woolco Department store until 1994. The lack of windows along Duke Street and Albemarle Street is a reflection of the department store typology, where the circulation and concentration of activities are internalized. Since its' vacancy, it has been converted for office use.

## 1.3 Materiality

The existing elevations are composed predominantly out of textured concrete. Along the north edge of the Albemarle façade, red coloured brick was introduced. The combination of textured concrete and brick wraps around the northwest corner of the building and carries through to the breezeway along the north façade. Glazing is limited only to entrances.

## 1.4 Pedestrian Interaction

Due to the existing solid streetwall elevation, there is very little pedestrian interaction at the street level. The current entrances are also not successful in engaging the public.

The current Duke Street entrance provides access to the existing Scotia Square mall level and the Bell Aliant offices below grade. The glazed enclosure is part of Aliant's dedicated entrance. Two access points to the mall level are provided on either side of the enclosure. The recessed design results in passageway being dim and hidden.

A secondary entrance to the mall level is located on Albemarle Street. The entrance is emphasized by a raised roof top with signage that is inconsistent with other signage on site. The low ceiling also creates an undesirable entrance condition.

At the northwest corner of the site, there is an exit stair doorway and a dedicated tenant entrance. Although they are within close proximity to one another, the design and height are significantly different.



View of Existing Duke Street Entrance



View of Existing Albemarle Street Entrance



View of Existing Dedicated Tenant Entrance and Breezeway

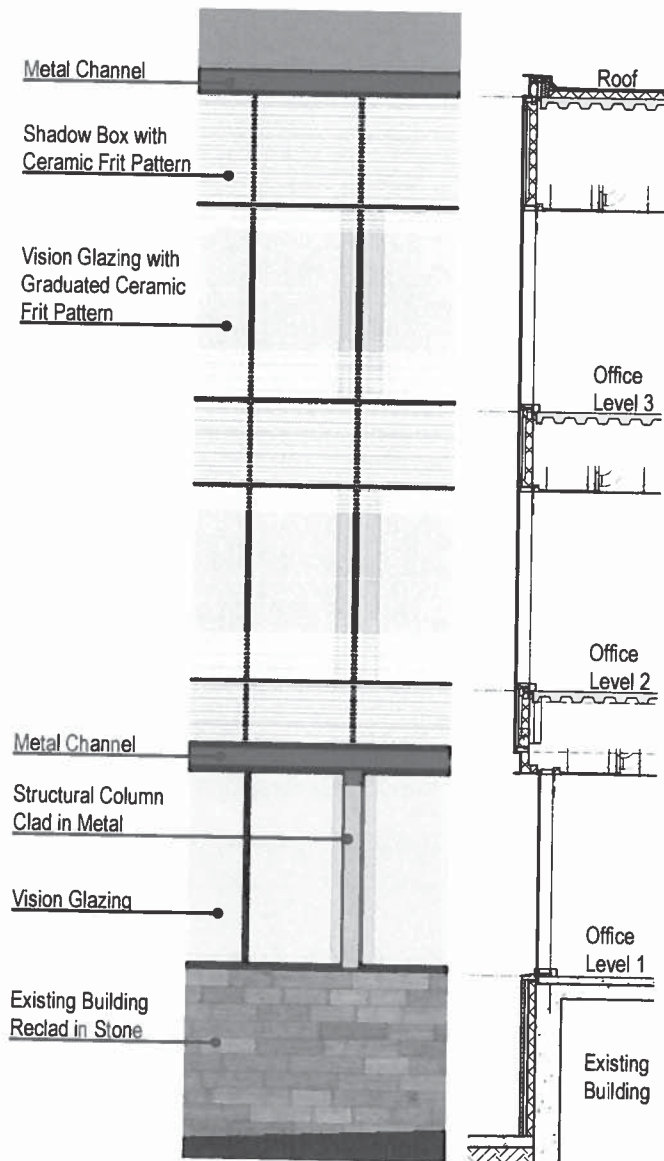


View of Existing Exit Stair and Dedicated Tenant Entrance

## 2. Design Rationale

The proposed building is a lowrise addition to the Scotia Square complex. The three-storey development offers large floor plates of Class A office space for over 125,000 square feet of gross area. Following the HRM By-Law and Design Manual, this project offers a new modern landmark for Scotia Square and introduces a visual upgrade to the streetscape at the corner of Duke Street and Albemarle Street.

<b>Gross Area</b>	Entrance level	1,768 sf
	Office Level 1	37,578 sf
	Office Level 2	41,822 sf
	Office Level 3	41,822 sf
	Rooftop Mechanical	4,928 sf
	<b>Total</b>	<b>127,919 sf</b>



### 2.1 Built Form

The basic built form articulation is derived from the Scotia Square podium and the adjacent Duke Tower. In order to reinforce continuity from the existing environment, the design borrows the horizontal plane from its surrounding to define the base, the interstitial level and the floating mass. Through the use of setbacks and cantilevers, the building façade is stratified to create a more interesting streetscape and to give a human scale to the façade.

#### Floating Mass

The top two levels of the building addition are distinguished as a cantilevered mass over the recessed interstitial space. Continuous metal channels encase the curtainwall glazing, reinforcing the crown condition. Curtainwall panels are composed of 9'-0" floor to ceiling vision glass and shadow box panel at the ceiling. A graduated ceramic frit pattern spans from below finished ceiling to desk height for the floor above. Ceramic frit provides shade and introduces additional appeal to the crown element.

#### Interstitial Level

The glazing for the first level of office is setback from the new stone base. Columns are clad in metal and flush with glazing to emphasize the support for the floating mass above.

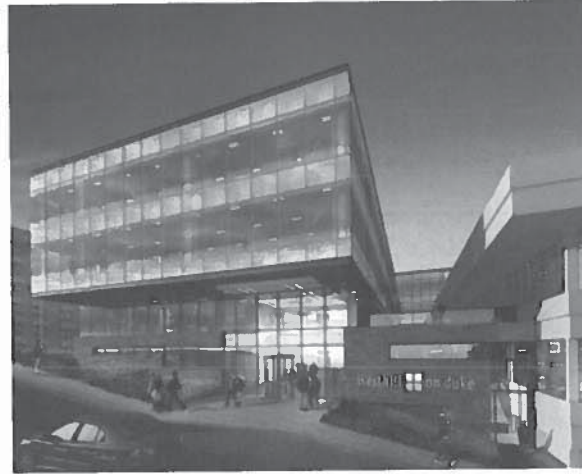
#### Base

The existing concrete facade is reclad in stone, reminiscent of buildings within the downtown core. The existing podium level provides the datum line for the extent of stone recladding. This new stone base serves as a solid foundation for the light glazed office floors above.

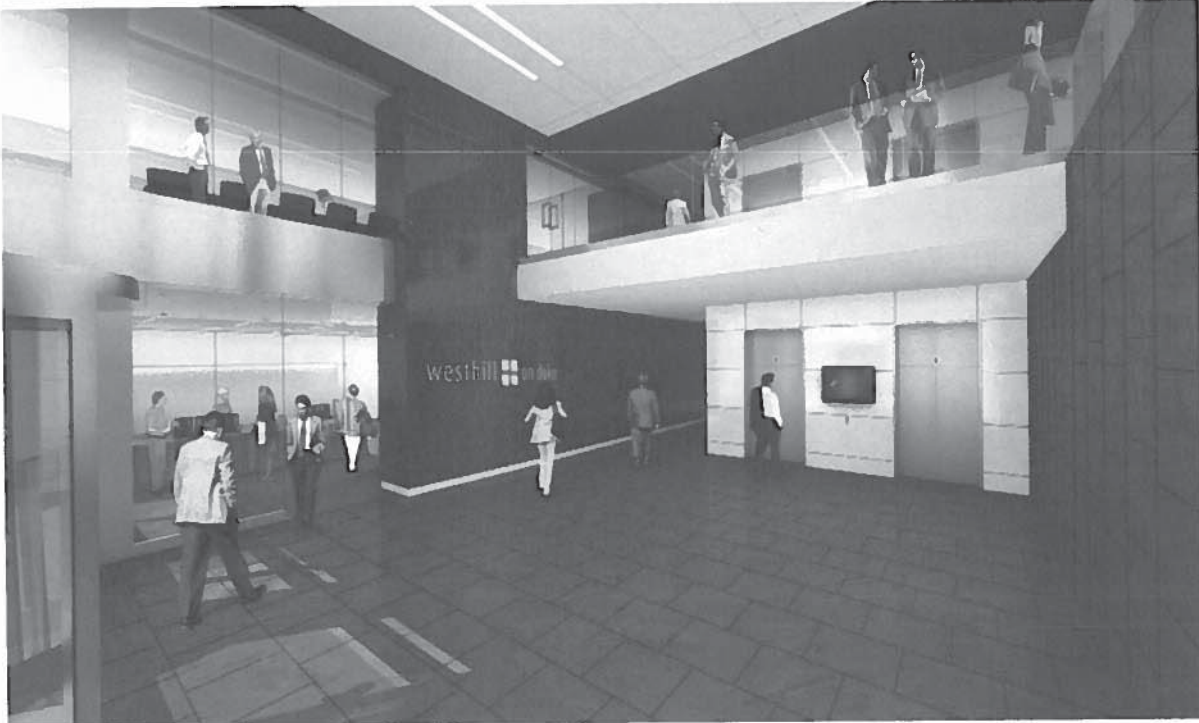
## 2.2 Duke Street Entrance

The primary building frontage is along the south façade on Duke Street. The first two levels of the building follow the existing building outline. The existing planter and building signage are removed to allow for an extended open space at the street level. Clad in stone, the base of the building is cut to accentuate a prominent glazed office entrance. The remaining stone wall, east of the entrance, offers an ideal location for a new surface mounted, stainless steel building signage. The walkway to the main entrance is flanked by stepped landscaped areas on either side, leading visitors to the double height lobby. The cantilevered upper office floors provide weather protection and a ceiling to the exterior forecourt. A feature ceiling element visually connects exterior and interior spaces, directing visitors to the main elevator bank. The combination of the upper cantilevered floors and feature ceiling element offers a great opportunity for exterior downlight to highlight the main building entrance and to provide general lighting to the pedestrian level.

A combined secondary entrance is located east of the Duke Street building entrance. It provides access to the existing Scotia Square level and to the Bell Aliant office space below.



Proposed Duke Street Entrance



Proposed Duke Street Entrance Lobby



### 2.3 Albemarle Façade

The existing building at grade is completely reclad in stone. The quality of proposed new building palette dramatically improves the existing building condition.

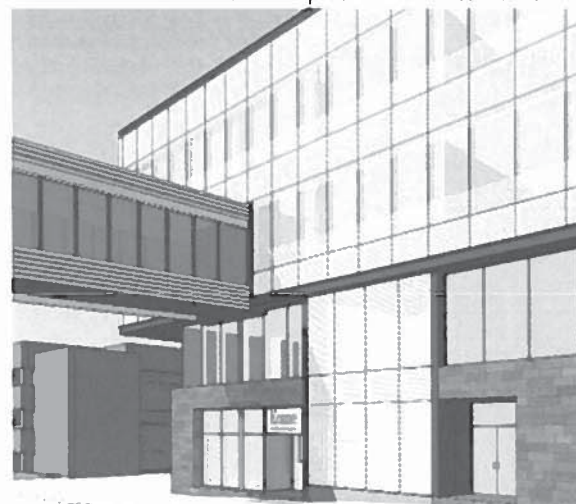
One of the main challenges of the Albemarle façade is the length of the building. The proposed design takes advantage of the Albemarle Street entrance and exit stairwell as opportunities to introduce interruptions to the 300' long façade.

While smaller in scale, the secondary mall entrance on Albemarle Street mimics the architectural language of the Duke Street main entrance. The recessed entrance extends beyond the existing podium floor plate to create a more welcoming access point to the Scotia Square complex. This increase in height results in a pair of 7' high windows on either side of the entrance alcove. Similar to the main entrance, the entrance is announced by a projecting ceiling element. In addition, it is articulated vertically through the entire height of the proposed building, hence creating a break in the floating mass above. The massing interruption is enhanced with a continuous ceramic frit pattern and the upward continuation of the typical metal channel.

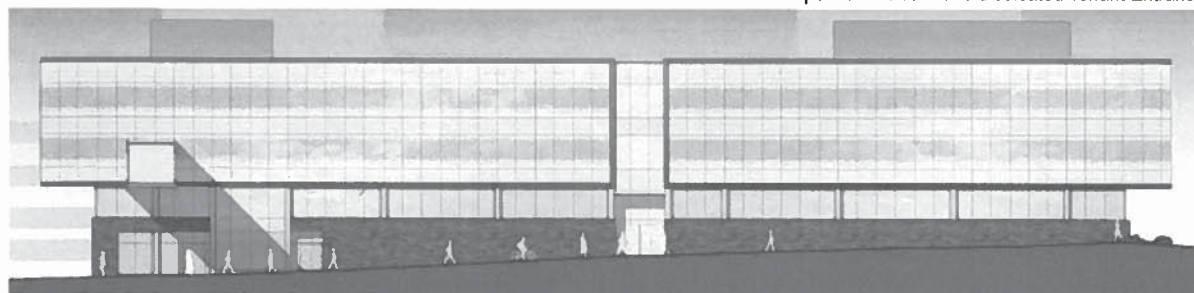
The exit stairwell at the northwest corner of the building adapts a similar approach as the secondary Albemarle entrance. However, at this location, only the two storey below the floating mass is accented with the continuous ceramic frit pattern. The pause in the stone base announces the exit stair doorway and dedicated tenant entrance. The two entrances share the same material and height to allow for a smooth integration with the reclad façade at grade. Potential signage is shown within the recessed entrance.



View of Proposed Albemarle Street Entrance



View of Proposed Exit Stair and Dedicated Tenant Entrance



Proposed Albemarle Street Elevation

## 2.4 Interior Layout

In order to maximize the access to view and daylight throughout the large office floor plate, all building services including elevators, stairs, washrooms and building services are located within the north and south cores.

Office levels have floor to ceiling glazing with 9'-0" clear ceiling heights. An innovative ceramic frit pattern provides shading from excessive glare and solar heat, and also screens clutter typically found below desk height. The addition is elevated above the existing podium level, giving unobstructed views from all office areas.

Office levels are served by two passenger lifts at the Duke Street entrance as well as two additional lifts at a secondary north core. One of the lifts in the north core will serve as a shared duty service lift for building tenants. Pedestrian access to the rest of the Scotia Square complex including the mall, parkade, hotel, and other offices is provided in an enclosed walkway on the podium level.

## 2.5 Landscaping

In addition to the landscape framing the Duke Street entrance at grade, landscaping treatment incorporating living green roof will also be provided on the proposed building rooftop. Due to the fact that the entire addition is to be constructed over existing structure, the building's live load and dead load pose a structural challenge. Even with foundation and column reinforcing on the existing structural frame, there is a limit to the amount of additional load that can be applied to the roof.

Designing with this unique restriction, approximately 50% of the area will be living green roof. The vegetated roof is separated in two large rectangular patches around the mechanical enclosures and linked by a paved walkway. The planted area will be composed of an assortment of sedum that can flourish in approximately 4" of soil. The patterning will be created by the arrangement of different colour sedum with varied blooming season. The plants will be chosen based on the colour palette as well as their suitability for the Halifax climate.

The remaining rooftop landscape elements will include a system of stone pavers and roof membrane, both of which will be light colour with high reflectance. The light colour roofing material has a high solar reflectance and reduces building heat gain. It contributes to the overall energy efficiency of the building.

This combination of living green roof and light colour roofing material provides a visually interesting and appealing roofscape, especially for the tenants occupying the surrounding buildings. It also incorporates sustainable design in the proposed building addition, as encouraged in HRM's Sustainability Guidelines.



### 3. Downtown Halifax Land Use By-Law - Relevant Criteria

The property is situated within the Downtown Halifax Zone (DH-1) as per Map 1.

The property is situated within the Cogswell Precinct as per Map 2.

The property has a Maximum Pre-Bonus Height of 49 metres as per Map 4.

The property has a Streetwall Setback of 0-1.5 metres as per Map 6.

The property has a maximum Streetwall Height of 18.5 metres as per Map 7. The proposed building has a streetwall height of 16.51 metres, measured from the site median grade. Due to the building being within 33.5 metres in height, the building stepback requirement is not applicable.

As per Section 8(12), "All buildings erected or altered, with a flat roof shall provide a fully landscaped area on those portions of the flat roof not required for architectural features or mechanical equipment."

As per Section 8(18), the proposed building addition does not exceed 20 metres in height and it is substantially shorter than Duke Tower to the east and Halifax Apartments to the west. It is anticipated the proposed building will have negligible wind impact at the street level beyond the existing condition. See page 14 of this report for the complete qualitative wind impact assessment report. As per HRM requirement, no quantitative wind impact assessment is included with this submission.

As per Section 8(20), the existing building will be re-clad in stone and the new building will be constructed with curtain-wall glazing and metal channel accents. Exposed columns and mechanical enclosures are clad in metal panel with concealed fasteners.

As per Section 9(7), a minimum 3 metres stepback is required above the Streetwall Height.

As per Section 14(15), for general office usage, 1 space per 500 square meter GFA is required. Based on the size of the building addition, 23 bike parking spaces, 50% Class A and 50% Class B, are required to meet the Downtown Halifax Land Use By-Law. The proposed building includes 12 bike parking spaces to be provided in the breezeway north of the building and 12 bike parking spaces to be provided in the Barrington Tower lobby.

## 4. Schedule S-1: Design Manual - Relevant Criteria

### 2.8 Precinct 8: Cogswell Area

#### 2.8(e) *"Define the area with modern landmark buildings."*

The objective of this project is to provide additional office area while setting an exemplary standard to improve the built environment within the downtown core. This new development will be a dramatic improvement to the built form within the existing context. With the combination of stone and glass as the basic palette, the proposed building interprets the existing building articulation and develops a contemporary approach and architectural language. The simplicity of the design and materiality along with the dramatic cantilevered massing on Duke Street present a timeless landmark building.

#### 2.8(f) *"Redevelop larger existing sites such as Scotia Square and Purdy's Wharf with street-oriented infill."*

### 3.1 The Streetwall

#### 3.1.1 *"Pedestrian-oriented commercial uses are encouraged but not required on all remaining street frontages. These areas include streetwalls with an inconsistent retail environment due to a variety of at-grade uses or different building typologies such as house forms."*

The current street level usage only pertains to offices. Pedestrian-oriented commercial uses are not expected in the near future.

#### 3.1.1(b) *"High levels of transparency (non-reflective and non-tinted glazing on a minimum of 75% of the first floor elevation)."*

The first floor elevation is part of the existing building with no window openings. However, in the proposed design, all existing entrances are extended to allow for more transparency at grade.

#### 3.1.1(d) *"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."*

The Duke Street main entrance is protected with a 13' building cantilever. All secondary entrances are recessed to provide adequate protection from the elements.

#### 3.1.1(f) *"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."*

While the existing office usage is to remain, the renovated entrances allow for the possibility of retail or commercial usage in the future.

#### 3.1.2(a) *"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 building follows the existing building outline at the first and second levels. The top two levels cantilever within the setback requirement.

#### 3.1.3 *"Streetwall Height"*

The proposed building measures 16.51 metres from the site median grade and falls within the maximum streetwall height of 18.5 metre as prescribed by the land use by-law.

### 3.2 Pedestrian Streetscapes

#### 3.2.1(e) *"Streetwalls should be designed to have the highest possible material quality and detail."*

The existing building is reclad in stone that is a reference to other buildings within the Halifax downtown core. The upper office floors are clad in curtainwall of vision glazing and shadow box glazing, with metal channel accent.

#### 3.2.1(f) *"Streetwalls should have many windows and doors to provide 'eyes on the street' and a sense of animation and engagement."*

The Duke Street entrance lobby is a significant improvement to the existing recessed mall entrance. The glass exterior wall opens up the south building façade to allow for pedestrian level interaction.

Along Albemarle Street, due to the drastic grade change and existing interior configuration, new street level window is unattainable. However, the proposed building addition will dramatically improve the 'eyes on the street' by introducing floor-to-ceiling glass office spaces directly above the street level. In addition, existing entrances are extended vertically to provide a sense of interest at the street level.

#### 3.2.2(b) *"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."*

The Duke street entrance follows the existing building outline. It allows for an extended public area at the corner of Duke Street and Albemarle Street. Stepped landscaped areas frame the entrance providing a generous forecourt to the lobby.

#### 3.2.3(c) *"Where retail uses are not currently viable, the grade-level condition should be designed to easily accommodate conversion to retail at a later date."*

See 3.1.1(f).

#### 3.2.3(e) *"Avoid deep columns or large building projections that hide retail display and signage from view."*

Along the Duke Street entrance, columns are recessed within the building to allow for an uninterrupted view of the primary building frontage.

#### 3.2.5(d) *"Articulate the façade to express internal floor or ceiling lines; blank walls are not permitted."*

The ground floor of the existing building is articulated by the reclad stone wall. The second floor is glazed and setback from the stone base. The two uppermost floors are emphasized by a continuous metal channel and an extended cantilever at the north and south façades; internal floors within this zone are highlighted by ceramic frit pattern on the glazing and shadow box panels.

### 3.3.1 Building Articulation

#### 3.3.1(a) *"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...Middle...Top..."*

See Section 2.1 of this report.



- 3.3.1(b) *"Buildings should seek to contribute to a mix and variety of high quality architecture while remaining respectful of downtown's context and tradition."*

The existing building at grade will be reclad in stone reminiscent to other buildings within the downtown core.

- 3.3.1(c) *"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."*

In addition to the building articulation as described in Section 2.1 of this report, vertical recesses are strategically located along Albemarle façade to reflect the interior usage and also to introduce breaks in the 300' street frontage.

- 3.3.1(d) *"Street facing façades should have the highest design quality, however, all publicly viewed façades at the side and rear should have a consistent design expression."*

The quality of design and material is extended beyond the street facing façades and carried throughout all elevations of the proposed building. Similar to the Duke Street and Albemarle Street façade, the north façade facing the "breezeway" also expresses consistent building articulation and materials.

### 3.3.2 Materials

- 3.3.2(b) *"Too varied a range of building materials is discouraged in favour of achieving a unified building image."*

The proposed building is composed from a very basic material palette of stone, curtainwall, accent metal channel, and metal cladding for roof enclosures and structural elements expressed on the exterior.

- 3.3.2(c) *"Materials used for the front façade should be carried around the building where any façades are exposed to public view at the side or rear."*

See 3.3.1(d).

- 3.3.2(d) *"Changes in material should generally not occur at building corners."*

All building material wraps around at building corners.

### 3.3.3 Entrances

- 3.3.3(a) *"Emphasize entrances with such architectural expressions as height, massing, projection, shadow, punctuation, change in roof line, change in materials, etc."*

See Section 2.2 and 2.3 of this report.

- 3.3.3(b) *"Ensure main building entrances are covered with a canopy, awning, recess or similar device to provide pedestrian weather protection."*

See 3.1.1(d).

### 3.3.4 Roof Line and Roofscapes

- 3.3.4(b) *"The expression of the building 'top' 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."*

The building 'top' and roof are clearly defined by a continuous metal channel and massing projection at the north and south ends of the building. See Section 2.1.

- 3.3.4(c) *"Landscaping treatment of all flat rooftops is required... The incorporation of living "green roofs" is strongly encouraged."*

See Section 2.5 of this report.

- 3.3.4(d) *"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."*

Two mechanical penthouses will be required to serve the large floor plates. All mechanical equipment, elevator machine rooms and stairways are incorporated within these two roof top structures.

- 3.3.4(e) *"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."*

Mechanical penthouses will be clad with metal panel with concealed fasteners. The penthouses are setback from the streetwall with limited visibility from the street level. Special consideration will also be taken in colour selection to minimize their visual impact.

- 3.3.4(f) *"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."*

The top of the building is emphasized by a continuous metal channel which wraps around all façades of the building.

### **3.4.2 Corner Sites**

- 3.4.2(c) *"Developments on all corner sites must provide a frontal design to both street frontages."*

While the Duke Street façade is considered the main entrance to the building, special attention is also given to the secondary entrances along Albemarle Street. See Section 2.3 of this report.

- 3.4.2(c) *"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 3.2.2(b).

### **3.5.1 Vehicular Access, Circulation, Loading and Utilities**

- 3.5.1(c) *"Locate loading, storage, utilities, areas for delivery and trash pick up out of view from public streets and spaces, and residential uses."*

All back of house area is accommodated from existing facilities within the Scotia Square complex.

### 3.5.4 Lighting

- 3.5.4(b) *"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."*

Downlights are to be provided at exterior cantilever soffit and recessed entrances. At the Duke Street entrance, uplights may be considered to highlight the front entrance of the building. Full cut-off uplight fixtures can be accommodated within the planted area and the cantilever soffit will ensure there will be no light pollution.

### 3.5.5 Signs

- 3.5.5(a) *"Integrate signs into the design of building façades by placing them within architectural bay, friezes or datum lines, including coordinated proportion, materials and colour."*

Wherever required, building signage is to be suspended within the recessed entrances or under the building cantilever at the north and south elevations. Signage support shall be constructed with material and colour complimentary to the building palette.

- 3.5.5(f) *"Street addressing shall be clearly visible for every building."*

The stone wall just east of the Duke Street main entrance is an opportunity for clearly visible building name and street address signage.

## 5.2 Sustainability Guidelines

- 5.2.1(f) *"Use light-coloured roofing materials with high reflectance."*

Exposed roofing membrane will be light-coloured with high reflectance. Also, white, reflective pavers shall be used following roof landscape design.

- 5.2.1(i) *"Design exterior lighting to be shielded or full cutoff as required. Exterior lighting shall fall within the property."*

Exterior lighting is limited to cantilever soffit and recessed entrances.

- 5.2.2(a) *"Provide bicycle storage and convenient changing facilities for 5% of building occupants."*

Bicycle storage and changing facilities are available within the Scotia Square complex.

- 5.2.2(b) *"Provide transit and pedestrian-friendly physical links to mass transit infrastructure. Bus stops or ferry terminals must within 500 metres of the site."*

Scotia Square Complex is one of the best served developments for public transit in downtown Halifax. In addition to the existing bus stop in front of the Duke Street entrance, there are a major bus stop on Barrington Street, a Metro Link stop and a Metro X bus stop. Also, the site is within walking distance to the ferry.

- 5.2.3(a) *"Eliminate potable water for landscape irrigation."*

Roof landscaping is comprised of non irrigated vegetated roof.



## 5. Wind Impact Assessment Report

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August 1, 2012

**RE: WESTHILL ON DUKE - PROPOSED SCOTIA SQUARE BUILDING ADDITION  
WIND IMPACT ASSESSMENT REPORT**

With regards to the proposed design for a new office building addition to the Scotia Square Complex, situated at the corner of Duke Street and Albermarle Street, we hereby address the requirements for a qualitative wind impact assessment.

Situated on a street corner site, the proposed building addition provides street wall at two of its elevations, facing Duke and Albermarle Streets. Along these proposed building elevations, articulations such as relief in the building mass and projecting canopies will promote comfortable conditions at the sidewalks with respect to wind impact. Due to the relatively low height of the proposed building, its massing and shaping will affect wind levels to a degree that has been deemed low enough to not require further wind tunnel study.

Halifax Regional Municipality (HRM) requires a quantitative wind impact assessment for new building proposals that exceed a height of 20 meters. Existing buildings surrounding the site of the proposed building addition such as the Duke Tower and the Barrington Tower to the east, as well as the Halifax Apartments to the west, are each significantly taller than the proposed building addition. The proposed building addition will, at its highest elevation, stand 16.15 meters above the median sidewalk grade. The existing conditions of the pedestrian spaces surrounding the site are such that wind levels are consistently comfortable for standing and walking. It is anticipated that the relatively low height of the proposed building addition will not significantly alter the existing wind conditions.

Regards,

Original Signed

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