



## Design Rationale and Requested Variances

In Support of the Substantive Site Plan Approval Application by  
Westwood Developments Limited for the Proposed Mixed Use Building  
located at 5510-5504 Spring Garden Road, Halifax, Nova Scotia

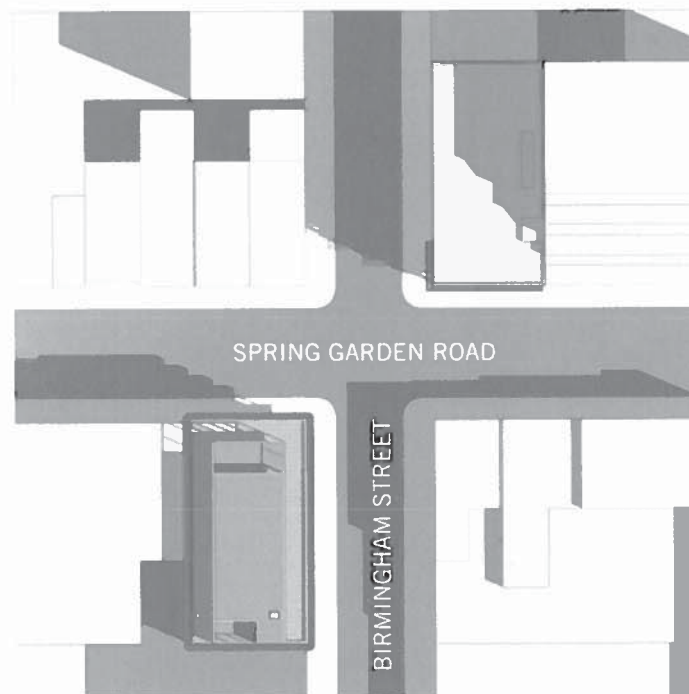
March 27, 2013

Prepared by

**DSRA**

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# Executive Summary



The proposed seven-storey building, situated at the southwest corner of Spring Garden Road, brings a vibrant mix of retail and residential spaces to this important commercial area. The ground floor bank and second floor, high-quality retail space are easily accessed off of Spring Garden Road and Birmingham Streets. The lower-level retail space and the additional five storeys of residential units are conveniently accessed from separate entrances along Birmingham Street, which also serve as the barrier-free entrances to all levels. In total, around 11,000 sf of retail space is provided.

The objective of this economically and environmentally sustainable urban development is to provide greater density and increased opportunities to live, shop and work in the heart of the Spring Garden Business District. The new building height falls within the maximum streetwall height as prescribed by the HRM Downtown Land Use By-Law and HRM-By-Design Guidelines. It also respects the relevant Viewplanes.

The material palette of high-performance clear glazing and terra-cotta siding responds to the masonry buildings on the south side of Spring Garden Road in a contemporary way, offering maximum transparency and visibility at street level.

# Design Rationale

## Relevant Criteria

### Downtown Halifax Land Use By-Law and Schedule S-1 Design Manual

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

The property is situated within Precinct 3 - Spring Garden Road as per Map 2.

The property is situated on a Primary, pedestrian-oriented commercial street as per Map 3.

The property has a Maximum Pre-Bonus Height of 22 metres as per Map 4.

The property has a Maximum Post-Bonus Height of 28 metres as per Map 5.

The property has a Streetwall Setback of 0 – 1.5 Metres as per Map 6.

The property has a Maximum Streetwall Height of 17 Metres (the lesser of 17m and 18.5m) as per Map 7.

## Land Use Requirements – Section 7

- (1) The proposed mix of commercial and residential uses are permitted in the DH-1 Zone
- (2a) The proposed Bank is permitted on the ground floor.
- (3) The bank entrance and lobby is permitted to face and have access onto Spring Garden Road
- (4) Out of the 19 total dwelling units anticipated for the building, seven will include two bedrooms in compliance with this section.
- (5) Currently, one elevator serves both the commercial and residential uses in the building. The Residential units have a separate entry lobby and direct access to a ground level entrance along Birmingham Street. The southwest stairwell is designated as “emergency exit only” from the lower retail level.
- (11A - 11E) A variance is being sought to be exempted from the Landscaped Open Space Requirement. See attached “Requested Variances” document.
- (12 thru 15) Proposed Building complies with Storm Surge Protection Criteria

## Built Form Requirements - Section 8

- (6 thru 11) The proposed building exceeds the Maximum Pre-Bonus Height by .5m. The Post- Bonus Height of 22.5m does not exceed the Maximum Post Bonus Height of 28m, pursuant to Section 12 of the Land-Use By Law (located later in this document)
- (10) The heights of the glass guardrails surrounding the exterior roof terrace space on the 6th Storey, and the mechanical units to be placed on the west side of the 6th storey are exempt from height requirements (railings as a "similar item"), pursuant to Section 8 (8). A variance is being sought to exempt the railings and mechanical equipment from the 3 metre setback from the outermost roof edge. See attached "Requested Variances" document.
- (12) Private Roof Terraces at 6th and 7th storeys to be fully landscaped. The high roof area will be paved with high-albedo concrete pavers to help in combatting the heat-island effect. As this area is not required to be fully accessible and maintenance is an issue, a vegetative roof is not a viable solution for this particular roof surface.
- (13) The floor-to-floor height of the ground floor measures 4.5m (14'-9")
- (14 thru 16) The proposed building does not violate either of the two applicable view planes – Viewplanes 9 and 10. This has been confirmed by the surveyor.
- (18) A qualitative wind assessment has been provided per HRM request. See attached Letter.

## Streetwalls - Section 9

- (1) The proposed building has a streetline setback of zero on Spring Garden Road and Birmingham. Entrances are set back so that doors do not swing out into the path of pedestrian traffic.
- (2) The building does not exceed the Maximum Streetwall Height of 17m.
- (3) The building exceeds the 11 Metre Minimum Streetwall Height.
- (5) The (2) streetwalls extend the full width of the lot abutting both streetlines.

## Building Setbacks and Stepbacks – Section 10

- (4,5) A minor variance is being sought. See attached "Requested Variances" document.

## Additional Requirements Precinct 3: Spring Garden Road Area – Section 11

- (3) The additional sloped setback has been applied to the building.

## Post-Bonus Height Public Benefit - Section 12

(1 thru 5, 7, 8) See Appendix C for a detailed description of the public benefit.

## Signs – Section 13

(1 thru 17) Future Building and Tenant signage shall comply with all guidelines and requirements.

## Parking – Section 14

- (15) A total of (8) Class A and (6) Class B Bicycle Spaces shall be provided as per the requirements.
- (17c) A bicycle storage room for Class A Parking, accessible by elevator, will be provided on the lower level.
- (18) Uncovered Class B parking shall be provided against the building along Birmingham Street no more than 15 metres from an entrance in compliance with HRM By-Law S-300

## Schedule S-1 Design Manual – Relevant Criteria

- 3.1 The Streetwall
  - 3.1.1 Pedestrian-Oriented Commercial
    - 3.1.1(a) “Articulation of Narrow Shop Fronts...close placement to sidewalk”

The three main entrances are setback from the sidewalk and are articulated to allow for window displays.
    - 3.1.1(b) “High levels of transparency”

The street level is characterized by clear-glazing over the entire first floor elevation
    - 3.1.1(c) “Frequent entries.”

The curtain wall system allows for entries along the length of the building; the current design has a main bank entry and upper level retail entry off of Spring Garden Road, and a main retail entry and a residential entry off of Birmingham Street.
    - 3.1.1(d) The building provides protection from the elements with a continuous glass canopy along Spring Garden Road and Birmingham Streets. Variances are being sought to permit this encroachment in order to provide this amenity for the

majority of the building frontage.

- 3.1.1(e) There is potential for “spill-out” activity along the entire Birmingham Street side walk, including the potential for covered café seating.

- 3.1.2 Streetwall Setback

- 3.1.2(a) “Minimal to no Setback”

The entire building has minimal to no setback, consistent with the Spring Garden Road Business District.

- 3.1.3 Streetwall Height

The proposed building respects the prescribed streetwall height and is formally consistent with surrounding buildings.

- 3.2 Pedestrian Streetscapes

- 3.2.1 Design of the Streetwall

- 3.2.1(a) The glazing at street level is articulated by bays at each entry and window display vitrines.

- 3.2.1(e) “Streetwalls should be designed to have the highest quality material and detail.”

The proposed building meets the street with an articulated glass façade and stone panels at the entry, with high-quality terra cotta panels above, which responds in a modern way to the masonry buildings nearby along the south side of Spring Garden Road.

- 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 street level of the building is completely clear glazing. The second floor retail space also features transparent glazing.

- 3.2.1(g) “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.”

Clear glazing dominates the pedestrian frontages. The south wall is a firewall and as such is restricted in terms of the amount of openings which are allowed. However, it is clad in terra-cotta panels and the module size and textures are varied to provide variety and interest.



3.2.2 Building Orientation and Placement

- 3.2.2(a) "All buildings should orient to, and be placed at, the street edge with clearly defined primary entry points that directly access the sidewalk."

The proposed building comes right to the sidewalk with multiple points of entry.

3.2.3 Retail Uses

- 3.2.3(b) "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."

Weather protection is provided by glass canopies at each entrance on both the Spring Garden Road and Birmingham Street frontages.

- 3.2.3(d) "Minimize the transition zone between retail and the public realm. Locate retail immediately adjacent to, and accessible from, the sidewalk."

There are retail entries from both Spring Garden and Birmingham Street

- 3.2.3(f) "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."

All retail entrances are at grade.

3.2.4 Residential Uses

- 3.2.4(b) The residential units are accessed by a common entrance and lobby located at ground level along Birmingham Street, and the entrance is clearly recognizable from the exterior through the use of full-height curtainwall and a distinctive canopy.

- 3.2.4(d) Penthouse Units with two bedrooms that have immediately accessible outdoor landscaped rooftop amenity space are provided.

- 3.2.4(f) The second floor retail space (possible restaurant) and third floor residences shall incorporate acoustic dampening building materials to mitigate unwanted sound transmission.

3.2.5 Sloping Conditions

- 3.2.5(a) The Building's floor level has been set to closely match that of the existing sidewalk grade.

- 3.2.5(c) "Provide windows, doors and other design articulation along facades; blank walls are not permitted."
- The glazed façade and entry doors provide visual connection to the sidewalk.
- 3.2.5(d) "Articulate the façade to express internal floor or ceiling lines; blank walls are not permitted."
- Ceiling and floor lines are registered by the articulation of mullions in the glass façade and through the patterns and modules in the terra cotta rainscreen system.
- 3.3 Building Design
- 3.3.1 Building Articulation
- 3.3.1(a) The proposed building is articulated differently as one moves up the building:
- Base: The street level is characterized by a protected, clear glazed base which provides visual connectivity with the sidewalk and multiple points of entry.
- Middle: The second level (Floor 2) includes a fully-glazed retail space, while The upper portion (Floors 3-5) houses residential units, clad in window wall and terra cotta, with no setback.
- Top: The roof level (Floors 6-7) consists of glazed rooftop lofts, setback from the streetwall, and provided with private terraces.
- 3.3.1(b) The utilization of a high-quality terra cotta rainscreen and ample street level glazing in the building provides high-quality contemporary architecture which is respectful of the downtown context - and is a great improvement on the existing building.
- 3.3.1(c) Articulation of the building massing provides architectural massing and visual interest.
- 3.3.1(d) "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."
- This has been achieved.
- 3.3.2 Materials
- 3.3.2(a) "Building materials should be chosen for their functional and aesthetic quality, and exterior finishes should exhibit quality of workmanship, sustainability and ease of maintenance".



The proposed building - a combination of glass, stone, terra cotta rainscreen and bits of composite metal panel- more than satisfies this requirement.

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

The proposed building exhibits a unified material concept.

- 3.3.2(c) "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."

Finishes wrap and cover the visible building elevations.

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

Building Corners are of continuous material and articulation.

- 3.3.2(e) "Building materials recommended for new construction include brick, stone, wood, glass, in-situ concrete and pre-cast concrete."

Glass and terra-cotta panels are the predominant materials.

- 3.3.2(f) "In general, the appearance of building materials should be true to their nature and should not mimic other materials".

The proposed building exercises many of the varying properties of glass, all of which are true representations of the visually flexible nature of the material. Stone is stone. Terra Cotta responds to the brick buildings surrounding the site. All materials are honestly deployed.

### 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."

The main entrance is signified by a tall volume of clear glazing above the recessed entry way.

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

All entrances are recessed and protected by canopies.

### 3.3.4 Roof Line and Roofscapes

- 3.3.4(c) "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 roof at levels 6 and 7 will be fully landscaped and accessible from the residential units. The high roof will feature high-albedo concrete pavers.

- 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.”

Mechanical equipment is located in a concealed and easily accessible location on the west side of the level six roof. Where exposed mechanical equipment is required on the high roof (exhaust fans, for example), they will be concealed with architectural metal mesh enclosures

- 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.”

See above 3.3.4(d).

- 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 back side of the building parapet is clad in ceramic rainscreen with no exposed fasteners to create a continuous look with rooftop mechanical equipment.

#### 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.”

Down-lighting is provided in soffits of recessed areas to illuminate the building perimeter. Internal lighting in the transparent second floor restaurant, street level restaurant and public circulation areas will provide an active and inviting glow while avoiding light pollution from direct illumination. Feature lighting will illuminate the major entrances.

#### 3.5.5 Signs

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

Building signage is to be located within the curtain wall as graphic elements in the plane of the glass. There will also be raised, pin-supported metal signage on stone panels near the entries. Signage occurs in two different scales: large scale signage identifies the building at an urban design level, while more human-scaled signage identifies building identity and entry at the pedestrian level.

- 3.5.5(c) "Sign scale should reinforce the pedestrian scale of the downtown, through location at or near grade level for viewing from sidewalks."

See above 3.5.5(a).

- 3.5.5(g) "The material used in signage shall be durable and of high quality, and should relate to the materials and design language of the building."

Signage that is incorporated into the curtain wall is of high durability. The use of signage as graphic elements within the plane of the glass reinforces the layered, planar formal language of the building.

## 5.2 Sustainability Guidelines

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

Light coloured materials will be employed.

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

Exterior lighting will comply with shielding/cutoff requirements whenever possible

### 5.2.2 Transportation

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

Bicycle storage is provided and tenant spaces shall be plumbed to easily accommodate showers.

- 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."

The proposed development is one of the most transit friendly sites in the HRM. Major bus routes servicing urban and suburban users exist immediately on the site.

- 5.2.3 Water Conservation
- 5.2.3(a) "Eliminate potable water for landscape irrigation."
- Low-maintenance "xeriscape" to be explored for landscaped roof planters
- 5.2.7 Indoor Air Quality
- 5.2.7(b) "The building shall be designed to provide daylighting to all full time occupied spaces."
- Full height glazing allows for daylighting to penetrate deep into all spaces.
- 5.2.7(h) "Provide views to the outdoors to as many occupants as possible."
- Full height glazing provides views for all occupants.
- 5.2.8 Building Materials
- 5.2.8(e) "Design buildings with durability in mind."
- Glazed curtain wall systems are extremely durable, maintaining functional and aesthetic qualities over time with very low required maintenance. Terra cotta rainscreen systems provide exceptional performance in a Maritime climate and offers the advantages of masonry (durability, beauty, urban character) without the problems often experienced with masonry (need for repointing due to freeze-thaw, efflorescence, site labour)
- 5.2.9 Energy Conservation
- 5.2.9(a) "Buildings should use natural ventilation and passive energy design where possible."
- The use of high performance, low-e glazing significantly reduces heat gain. Interior blinds integrated with a building automation system can be used to passively manage the balance of daylighting and heat gain, reducing the need for active heating and cooling.
- Operable glass walls in the residences allow for natural ventilation.
- 5.2.9(f) See above 5.2.9(a).
- 5.2.10 General Sustainable Development Guidelines
- 5.2.10(c) See above 5.2.9(a).
- 5.2.10(h) See above 5.2.9(a).

# Requested Variances

The following variances to the Downtown Halifax Land Use By-Law and Schedule S-1 are being sought for this project:

- 1) Section 7 (6) thru (11) - Landscaped Open Space Requirements  
3.6.12 - Landscaped Open Space Variance

We request a variance to waive the requirement to provide 95 square metres (5 square metres per dwelling unit \* 19 units) of rooftop landscaped open space which is fully accessible for the common use of the occupants of the building. Given the relatively small footprint of the proposed building, the zero-lot-line setbacks, and the extensive rooftop mechanical equipment sizes and requirements for servicing a mixed-use building of this type, the space to comfortably accommodate all occupants of the building on the roof are limited, and providing access on such a tight roof becomes a challenge. The four (4) penthouse residences each offer a private landscaped roof terrace along the entire length of Spring Garden Road and Birmingham Street. All told, the residences account for 57% of the gross floor area. We are seeking an increase in the percentage of residential space required to designate a building as PRIMARILY residential from 50% to 60% through the application of Section 3.6.12 (b) which allows for a modification not to exceed 10% of the requirement, which our 57% GFA falls within. Finally, we feel it is important to consider the close proximity of this site to several large public open spaces, including but not limited to the Public Gardens, Victoria Park, the new Halifax Central Library, the Old Spring Garden Library courtyard and the Halifax Citadel.

- 2) Section 8 (10) Building Height - Pre/Post Bonus - 3 metre setback  
Section 9 (8) Varying Streetwall Stepback  
Section 10 Interior Lot Line Setback

We request a variance to waive the 3m setback requirement for the glass guardrails at the 6th storey as per Section 9(8) to allow for roof terraces at the penthouse level, and for the mechanical equipment located on the west side of the 6th storey roof per Section 10(14) in order to conceal the equipment from view, allow for the most efficient runs of ductwork and refrigerant piping and allow for easy accessibility for maintenance personnel.

- 3) Section 10(4) and (5) – Mid-Rise Building Setbacks and Stepbacks

A variance is being sought to remove the Mid-Rise setback requirement for the southern portion of the building above 18.5 meters (60.7') A relaxation of this requirement in this location is required to allow the elevator to access the sixth floor residential units. Having the ability to add (4) more units to the project is consistent with the goal of increasing density and amenity in the Downtown Core.

While interior lot line setbacks make urban sense for large-scale developments at the scale of a city block or larger, they often severely restrict the ability to achieve reasonable density on smaller urban lots such as this one and to develop economically viable mixed-use infill projects.

The waiver of this requirement for the Central Blocks shown in Map 8 demonstrates the need for relaxation of the mid-rise setbacks for smaller-sized “infill” lots.

Finally, granting this minor variance has NO deleterious effects on the adjacent Sport Nova Scotia Building, nor would it negatively impact future development to the south.



# Appendix A: Traffic Impact Statement



# 5054 Spring Garden Road Traffic Impact Statement

February 2013

Prepared for

Servant Dunbrack McKenzie & MacDonald Ltd

**JRL consulting**

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Prepared by

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## 1.0 Introduction

### 1.1 Background

Servant Dunbrack McKenzie & MacDonald Ltd. in conjunction with DSRA Envision Architecture is working on a proposal to redevelop lands at 5054 Spring Garden Road for Westwood Developments that currently contains the Winsbys Shoe Store. Exhibit 1.1 shows the site in red in the context of the surrounding area in Halifax.

Exhibit 1.1 – 5054 Spring Garden Road in Halifax, Nova Scotia



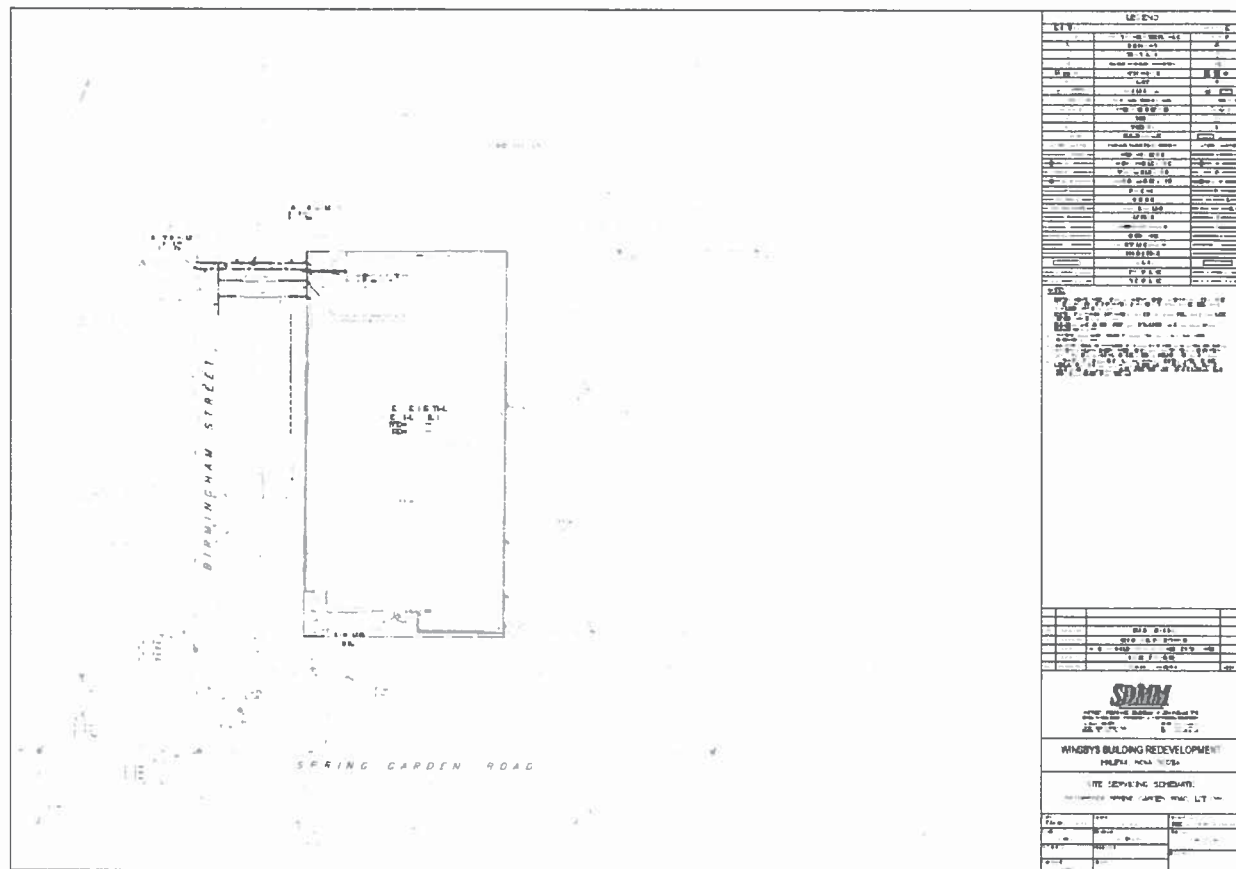
Source: Google Earth

The information provided for the proposed redevelopment shows a new 7-story building with a total area of 34,613 square feet that includes 10,898 square feet retail space on the lower level and 2<sup>nd</sup> floor with a 4,920 square foot Bank on the ground floor and 19 residential apartments on the remaining floors. The proposed building and property do not provide any on-site parking in this urban setting.

The proposed redevelopment will replace an existing building that includes 8,000 sqft of retail space along with 6 apartments.

Refer to Exhibit 1.2 for the concept plan of the proposed servicing schematic at 5054 Spring Garden Road in Halifax, Nova Scotia.

## Exhibit 1.2 – 5054 Spring Garden Road Proposed Servicing Schematic



Source: Servant Dunbrack McKenzie & MacDonald Ltd.

JRL consulting inc. was retained by Servant Dunbrack McKenzie & MacDonald Ltd. to prepare a Traffic Impact Statement (TIS) to assess the potential traffic impacts of the proposed redevelopment at 5054 Spring Garden Road in Halifax Nova Scotia.

The purpose of a Traffic Impact Statement is to provide a high level overview of a proposed development including estimates of site-generated traffic along with an initial review of existing traffic counts in the general area of the proposed development. This information will form part of the initial application to HRM which will be reviewed by staff and council. A detailed traffic impact study in accordance with Halifax Regional Municipality's *Guidelines for the Preparation of Transportation Impact Studies* may be required if the project proceeds to the next phase of the Development Application process.

We are pleased to submit this report which summarizes our findings and provides the information required by HRM for review.

## 2.0 Existing Traffic Conditions

### 2.1 Description

The principal routes affected by this proposed development are Spring Garden Road and Birmingham Street. Exhibit 2.1 summarizes HRM's Characteristics of Street Classes.

*Exhibit 2.1 - HRM Characteristics of Street Classes*

Characteristic	Arterial Street	Major Collector	Minor Collector	Local Industrial	Local Street
1. Traffic Service Function	First Consideration	Traffic movement primary consideration, land access secondary consideration, some parking	Traffic movement of equal importance with land access, parking permitted	Traffic movement secondary consideration with land access primary consideration, parking permitted	Traffic movement secondary consideration with land access primary consideration, parking permitted
2. Land Access Function	Limited Access with no parking				
3. Range of design traffic average daily volume	More than 20,000	12,000 to 20,000 or more	Up to 12,000	Less than 3,000	Less than 3,000
4. Characteristics of traffic flow	Uninterrupted flow except at signals; w/ pedestrian overpass	Uninterrupted flow except at signals and crosswalks	Interrupted flow	Interrupted flow	Interrupted flow
5. Average running speed in off-peak conditions	50-70 km/hr	40-60 km/hr	30-50 km/hr	15-30 km/hr	15-30 km/hr
6. Vehicle types	All types	All types but trucks may be limited	All types with truck limitation	All types	Passenger and service vehicles, transit buses; large vehicles restricted
7. Connects to	Expressways, arterials, major collectors, minor collectors	Expressways, arterials, major collectors, minor collectors, some locals	Arterials, major collectors, minor collectors, locals	Some major collectors, minor collectors, locals	Some major collectors, minor collectors, locals

Source: HRM's Municipal Service Systems Design Guidelines

Spring Garden Road is major collector that runs from Robie Street to Barrington Street in Halifax. It is a very busy retail area in Halifax that also provides access to many apartments, condos, restaurants, offices, parks as well as a library. It's one of the busiest streets in Halifax for pedestrian traffic including the area around the proposed redevelopment at 5054 Spring Garden Road. There are concrete sidewalks built to HRM specifications throughout its length and the posted speed limit is 50km/hr.

Birmingham Street is a local street that runs in a general north-south direction from Morris Street to Queen Street over a few blocks providing access to parking, retail, residential, office space and restaurants. There are concrete sidewalks built to HRM specifications on Birmingham Street and the posted speed limit is 50km/hr. It currently allows for two-way flow south of Spring Garden Road but only one way southbound traffic north of Spring Garden Road (temporary configuration to accommodate construction activities and will return to a full two-way operation once construction is completed).

Refer to Exhibit 2.2 for photos of the Study Area around the proposed redevelopment site at 5054 Spring Garden Road in Halifax, Nova Scotia and Exhibit 2.3 for the existing configuration at the Spring Garden Road/Birmingham Street intersection.



Exhibit 2.2 – Study Area Photos



Eastern view of Spring Garden Road at Birmingham Street



5054 Spring Garden Road (Existing Winsbys Shoe Store)



Southern view of Birmingham Street at Spring Garden Road



Western view of Spring Garden Road at Birmingham Street



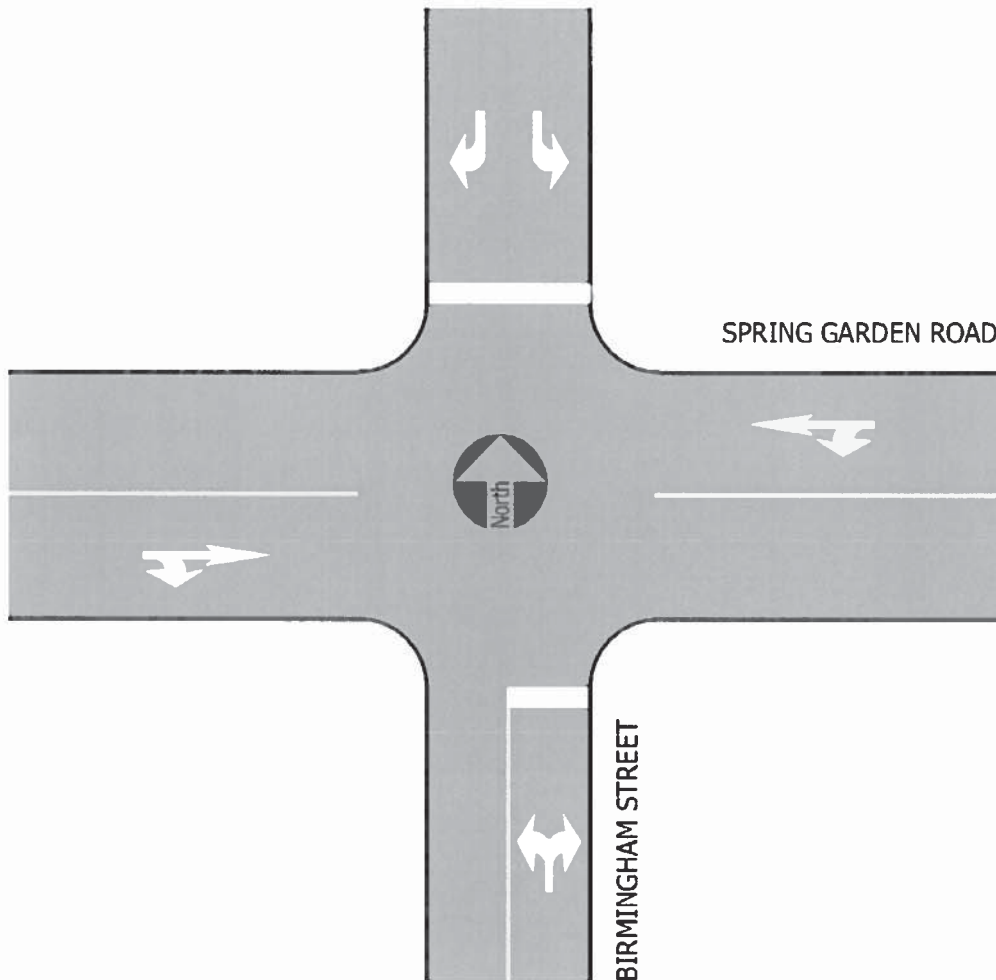


Northern view of Birmingham Street at 5054 Spring Garden Road



Spring Garden Road at Birmingham Street Intersection

Exhibit 2.3 – Spring Garden Road at Birmingham Street Existing Intersection Configuration

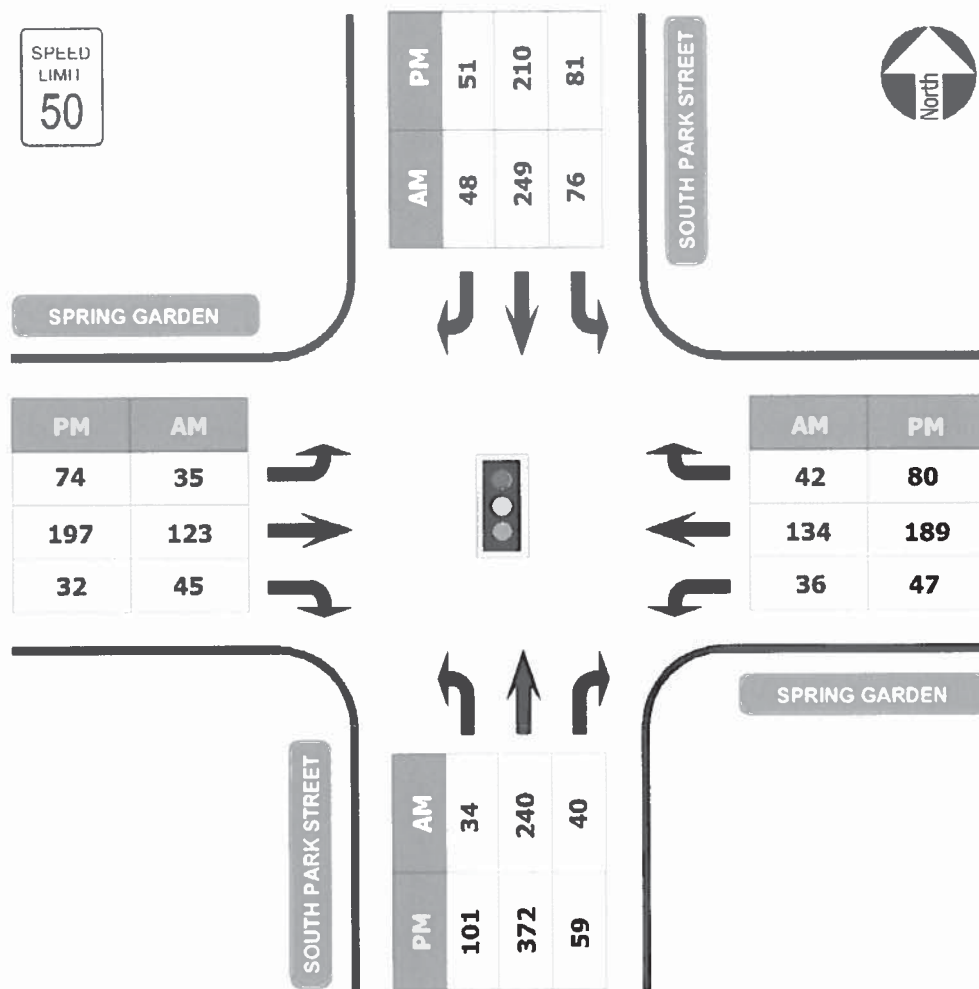


## 2.2 Existing Traffic Volumes

We completed a site review of the proposed redevelopment and analyzed the existing transportation network in the general area. Spring Garden Road and Birmingham Street in the area of the proposed redevelopment are very busy servicing a number of existing developments.

We checked with HRM for recent counts in the general area and they had completed AM and PM peak hour manual turning movement counts at the signalized Spring Garden Road at South Park Street intersection which is located a few blocks west of the proposed redevelopment. These volumes are summarized in Exhibit 2.3.

Exhibit 2.3 – Spring Garden Road at South Park Street Existing Traffic 2010



### 2.3 Existing Trip Distribution

HRM counts at the Spring Garden Road/South Park Street intersection provide an accurate picture of current trip distribution in the study area and we expect that traffic generated by the proposed redevelopment at 5054 Spring Garden Road to follow similar patterns.

### 2.4 Transit and Pedestrians

The study area is well serviced by Metro Transit through as a major transit link on routes 1, 3, 10, 14, 80 and 81, 42, 80 and 81 on Spring Garden Road as well as many other routes within walking distance.

There are concrete sidewalks on both sides of Spring Garden Road and Birmingham Street within the area of the proposed development and we expect pedestrians will use these sidewalks in normal volumes for this busy area. Spring Garden Road is one of the busiest pedestrian hubs in Halifax and the proposed redevelopment is within walking distance to Downtown Halifax and its Central Business District as well as local universities.

### 3.0 Site Generated Traffic

#### 3.1 Trip Generation

The proposed new 7-story building will have a total area of 34,613 square feet that includes 10,898 square feet retail space on the lower level and 2<sup>nd</sup> floor with a 4,920 square foot Bank on the ground floor and 19 residential apartments on the remaining floors. We have assumed that the existing BMO branch located nearby on Spring Garden Road will be relocated to this site so we don't expect a significant amount of net new traffic to the area as Banks generally service the local area only and do not attract regional traffic.

There is an existing building at 5054 Spring Garden Road that includes 8,000 sqft of retail space along with 6 apartments. We assessed the theoretical net increase in traffic that will be generated by the proposed redevelopment by estimating trips generated today by the existing development

We completed trip generation estimates using equations provided in Institute for Transportation Engineer's Trip Generation Manual Seventh Edition.

We used the following ITE Land Use Codes to assess site generated trips for the existing development after receiving feedback and recommendation from HRM Traffic and Transportation in a letter dated December 4, 2012:

- ITE Land Use 220 Apartment

*"Apartments are rental dwelling units that are located within the same building with at least three other dwelling units, for examples quadraplexes and all types of apartment buildings."* The unit of measurement for average vehicle trip ends is dwelling units.

- ITE Land Use 870 Apparel Store

*"An apparel store is an individual store specializing in the sale of clothing."* The unit of measurement for average vehicle trip ends is 1,000 Square Feet Gross Floor Area.

Source: ITE Trip Generation Manual Seventh Edition

Exhibit 3.1 -- Existing Estimated Site Generated Traffic Volumes at 5054 Spring Garden Road

LAND USE	QUANTITY	AM PEAK			PM PEAK		
		TOTAL TRIPS	ENTER	EXIT	TOTAL	ENTER	EXIT
Apartment	6	5	25%	75%	6	63%	37%
			1	4		4	2
Apparel Store	8,000	29	50%	50%	32	50%	50%
			14	14		16	16
TOTAL		34	16	18	38	20	18



We used the following ITE Land Use Code to assess site generated trips for the proposed development after receiving feedback and recommendation from HRM Traffic and Transportation in a letter dated December 4, 2012:

- ITE Land Use 220 Apartment

*"Apartments are rental dwelling units that are located within the same building with at least three other dwelling units, for examples quadraplexes and all types of apartment buildings."* The unit of measurement for average vehicle trip ends is dwelling units.

- ITE Land Use 911 Walk-in Bank

*"Walk-in banks are generally free-standing buildings with their own parking lots. These banks do not have drive-in lanes and may or may not contain automated teller machines (ATMs)."* The unit of measurement for average vehicle trip ends is 1000 square feet of Gross Floor Area.

- ITE Land Use 870 Apparel Store

*"An apparel store is an individual store specializing in the sale of clothing."* The unit of measurement for average vehicle trip ends is 1,000 Square Feet Gross Floor Area.

Source: ITE Trip Generation Manual Seventh Edition

Exhibit 3.2 – Estimated Future Site Generated Traffic Volumes at 5054 Spring Garden Road

LAND USE	QUANTITY	AM PEAK			PM PEAK		
		TOTAL TRIPS	ENTER	EXIT	TOTAL	ENTER	EXIT
Apartment	19	16	25%	75%	16	63%	37%
			4	12		10	6
Bank	4,920	106	50%	50%	207	50%	50%
			53	53		103	103
Apparel Store	10,989	44	50%	50%	46	50%	50%
			22	22		23	23
TOTAL		166	79	87	268	136	132

The addition of 13 residential units at this location has the potential to reduce traffic entering the Halifax Peninsula in this urban infill scenario as the location is very close to downtown Halifax which will promote use of transit and walking for its residents who work in the downtown core.

An urban infill development like this as proposed has the potential to generate significantly less traffic that ITE rates would estimate as we expect the proposed land use such as the Bank and retail to attract the majority of its customers from people who already live and work in the general area so these are not net new site generated trips. We do not expect the Bank to be a regional draw for new trips to this area as there are many other Banks throughout the region that provide the same service.

The potential estimated net increase in traffic by the proposed redevelopment at 5054 Spring Garden Road is summarized in Exhibit 3.3.

Exhibit 3.3 – Estimated Net New Future Traffic Volumes at 5054 Spring Garden Road

	AM PEAK			PM PEAK		
	TOTAL TRIPS	ENTER	EXIT	TOTAL	ENTER	EXIT
<b>TOTAL</b>	<b>132</b>	<b>63</b>	<b>69</b>	<b>230</b>	<b>116</b>	<b>114</b>

### 3.2 Pass By Trips

We expect that this proposed development will attract a significant portion of its trips from the existing traffic passing by the site. These pass-by trips do not add new traffic to the surrounding transportation network; however, they are included in the traffic volumes entering and exiting the site. Essentially, pass-by trips are intermediate stops of a trip that already exists on the transportation network. They are not diverted from another roadway.

## 4.0 Conclusions and Recommendations

- This Traffic Impact Statement has provided a high level overview of the proposed redevelopment of 5054 Spring Garden Road
- It includes an estimate of existing site generated trips; total new site generated trips as well as an analysis of existing traffic volumes in the surrounding area.
- An urban infill development like this as proposed has the potential to generate significantly less traffic than ITE rates would estimate as we expect the proposed land use such as the Bank and retail to attract the majority of its customers from people who already live and work in the general area so these are not net new site generated trips. We do not expect the Bank to be a regional draw for new trips to this area as there are many other Banks throughout the region that provide the same service.
- The residential component of the proposed redevelopment has potential to reduce traffic entering the peninsula if it attracts residents who currently live off the peninsula and work downtown. The close proximity to downtown as well as numerous key transit routes may reduce the estimated traffic generated by the residential suites as provided in this report.
- We have assumed that the existing BMO Bank branch on Spring Garden Road will be relocated to this new location so we don't expect a significant increase in traffic in the general area just a migration of the existing traffic to this proposed location.
- Based on ITE Trip Generation Rates, we estimate that the proposed redevelopment will generate additional net new traffic volumes of 132 vehicles in the AM peak hour and 230 vehicles in the PM peak hour after our analysis of the estimated trips generated by the existing buildings in comparison to the estimated future site generated traffic. (As mentioned above we expect the actual net new trips to the area to be significantly less than this especially for the Bank since it will not be a regional draw and will attract the majority of customers from people already living and working in the area).
- New site generated traffic will most likely follow existing trip distribution patterns along Spring Garden Road and Birmingham Street in the AM and PM peak hours.
- HRM may require that a detailed Traffic Impact Study be prepared if this project proceeds to properly assess the potential traffic impacts of the proposed development and to provide recommendations on how to introduce the traffic generated to the existing transportation network safely and efficiently.
- The traffic impact study would assess Level of Service (LOS) and Volume-to-Capacity Ratios at intersections within the defined study area and would also include traffic signal warrants, auxiliary turning lane warrants and traffic signal timing plan adjustments as required.

## Appendix B: Wind Impact Assessment



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HRM Planning Services  
Planning Applications  
Bayers Road  
PO Box 1749  
Halifax, NS B3J 3A5

February 20, 2013

**Re: Qualitative Wind Assessment**  
**Proposed Development for 5510-5504 Spring Garden Road**  
**PID #00077859**  
**Westwood Developments Ltd.**

To Whom It May Concern,

We thank you for the opportunity to present a qualitative wind assessment as per Schedule S-2 of the Downtown Halifax Land Use By-Law in support of the Substantive Site Plan Approval Submission for the above-noted project.

It is prudent at this stage of the HRM-By-Design Review Process to provide a qualitative estimate of the pedestrian wind conditions on and around the proposed development to be located at the site of the existing Winsby's Building on the southwest corner of Spring Garden Road and Birmingham Street. This qualitative estimate is based on the surrounding site context as it currently exists and relies on generally-understood characteristics of wind dynamics in an urban setting.

#### **Site Characteristics**

The proposed site is rectangular in shape with its long axis aligned in the north/northwest by south/southeast direction. It measures 15m x 30m, with the long side along Birmingham Street. It is bordered on the north by a three to five storey street wall, on the east by two-storey developments, on the south by open space/parking lots (to be developed) and on the west by the four-storey Nova Scotia Sport Building.

Publicly-accessible data on prevailing winds in this location show that winds are predominantly from the southwest in the summer months, and from the northwest in the winter months.

#### **Estimated Wind Effects of Proposed Building**

The proposed height of the Spring Garden street wall (the façade most affected by winter winds) is 17.37m, which is the approximate height of the adjacent Nova Scotia Sport Building. An additional two storeys of residential units totaling an additional 5m in height are setback 3m from both the Spring Garden and Birmingham streetwalls, effectively minimizing their impact w/r/t wind downwashing on the pedestrians at street level. For the purposes of a qualitative wind assessment, we have focused on the effects of a 17.37m tall building.

Given the massing and scale of the proposed development, no detrimental impact on the current wind patterns on site is expected. The resultant wind conditions are generally

expected to be comfortable for standing in the summer months and walking in the winter months. One would expect a bit more wind turbulence along the Spring Garden Sidewalk in the winter months due to a slightly taller elevation, but this would be mitigated by the fact that the sidewalk in front of the ground floor Spring Garden Road entrances is covered by a continuous canopy which provides protection from both precipitation and wind downwashing. The same situation occurs at the Birmingham Street entrances.

#### Conclusion

For the reasons stated above and due to the relatively small substantive change in current streetwall elevation due to this proposed project, the submittal of this qualitative wind assessment is consistent with the spirit of the regulations as prescribed in Schedule S-2 for a *"development where wind impact is not expected to be detrimental or may be improved upon in the opinion of the qualified professional..."*, and with the requirements of the Substantive Site Plan Approval process.

Thank you for your time and consideration.

Respectfully Submitted,

Original Signed

Hugh Davison, NSAA  
Principal  
DSRA Architecture



# Appendix C: Post-Bonus Height Public Benefit

In response to the Post-Bonus Height Public Benefit requirement as stipulated under section 12 of the Downtown Halifax Land Use By-Law, the developer has opted to provide the following public benefit:

12(7i):the provision of exemplary sustainable building practices

The following outlines our understanding and proposed approach:

- \* The gross floor area that has been gained as a result of the post bonus height option is 226 square metres
- \* The current value of the public benefit that is required to be provided as established under section 12 is \$9040, calculated per section 12(3) using a rate of \$4.00 per 0.1 square metres. This amount shall be adjusted in accordance with the Statistics Canada, Province of Nova Scotia Consumer Price Index when the applicant officially enters into a Public Bonus Agreement
- \* In order to fulfill the exemplary sustainable building practices requirement, the developer plans to engage the Mechanical Design Consultant to perform comprehensive energy modeling on the proposed design in order to prioritize which sustainable building initiatives/strategies are to be pursued on this project. Using this energy model, the Consultant will be able to assist the developer in selecting those strategies with the highest return on investment AND most significant environmental - and public - benefits. Such strategies include, but are not limited to:
  - \* maximizing efficiency of the heating/cooling systems
  - \* utilization of high-efficiency lighting
  - \* utilization of an automated energy management system
  - \* water conservation measures
  - \* sourcing of local materials

A quantitative breakdown of the public benefit of the sustainable building strategies pursued in the proposed development shall be available once the design of all building systems has been finalized.

