



Kings Wood Apartments, 1000 Micmac Blvd., Dartmouth

Development Agreement Application

Application for two multi-unit residential buildings ranging from eight to fourteen storeys and containing approximately 205 units

Application Submitted to:

HALIFAX | Planning Approvals
40 Alderney Drive, 2nd Floor
Halifax, NS B3J 3A5

Application submitted by:

The Armour Group Limited
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ARMOUR GROUP

September 10, 2018

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Project Team

The Armour Group Limited

"The Company has focused on quality developments that create a 'sense of place' and thus allows for a long term view of economically sustainable buildings of enduring value within the community."

- Armour (Ben) McCrea, Founder of The Armour Group Limited

For over 40 years The Armour Group Limited has been recognized as one of the leading real estate development companies in Atlantic Canada. The firm has been driven by an overriding philosophy - creating a "sense of place." This philosophy has led to our structure and guided our work for the past several decades. The Company is unique in its integration of the concept, development, construction and management of all assets internally.

Ultimately, our approach is product-based. We seek to establish "places" of enduring value for the long term, in an inter-generational sense. In accordance with this belief, the Company has not sold developed assets in its history - we are not speculators or syndicators of real estate. The work of the Company is for its own account and that of its closely-held shareholders - there are no partners, investment companies, or institutional funds affecting decision making at the firm.

Architecture49

Architecture49 boasts a history spanning over half a century of profoundly significant contributions to cities and communities across Canada and beyond. Our people share a depth of experience in designing award winning, high-profile projects around the globe. Together, we create inspiring spaces that elevate the health, social vitality and sustainability of our communities.

We believe that our communities are enriched by a broader, more enlivened collaboration between clients, builders, architects, engineers, interior designers, landscape architects and urban planners. We believe in the strength of a multi-disciplinary view and in the ability to shape urban infrastructure to Canadian principals of honesty, diversity, practicality and regionalism.

Co:Work Architecture

As Owner and Architect of Co:Work Architecture, Heather Bown has been involved in all aspects of project delivery including conceptual planning, development agreements, and community consultation, through to contract documents and construction. Over the past 16 years Heather has acquired a roster of local, successful mixed-use residential and commercial projects where she has acted as the project team leader, many of which were developed under Development Agreements.

For this project Heather has teamed up with the planning and architectural teams at WSP and A49 respectively. With a focus on collaboration and community, Heather often joins forces with other designers to lend her experience to projects by forming specially selected consultant teams specially chosen for the needs of each Client, site, and project.

WSP

WSP is one of the world's leading professional services firms in its industry, working with governments, businesses, architects and planners and providing integrated solutions across many disciplines. WSP's Dartmouth office provide services in urban planning, civil and municipal engineering, land surveying, environmental, geotechnical, traffic and transportation and structural engineering. Our team is made up of highly motivated, skilled and experienced individuals and are recognized for providing practical and effective solutions that are creative and innovative.

Our Project Approach is to engage with, learn from and maintain ongoing communication with our clients, municipal staff, key stakeholders and the public as each party provide unique perspectives and visions. We believe that our projects should reflect all aspects of life, and should support the goals and objectives of the people who will live, work and play in the community in which the project is located.

Proposal

The Armour Group Limited (The Armour Group) is proposing to construct two multi-unit residential buildings on their existing property located at 1000 Micmac Boulevard, Dartmouth, Nova Scotia (PID 40173627). There is currently a 130-unit multi-unit residential building located on the property; however, there is excess land which can support additional development and residential density.

The proposed new development will consist of two new buildings: Building 'A', which will contain approximately 130 units within a fourteen-storey building (comprised of a three-storey podium and an eleven-storey high-rise component); and, Building 'B', which will contain approximately 75 units within an eight-storey building (comprised of a three-storey podium and a five-storey mid-rise component). Overall, the proposal represents an urban infill development opportunity on an existing underutilized lot, which is supportive of existing and proposed Regional and Municipal land use policies and regulations.

Background

The existing Kings Wood building was constructed by The Armour Group in 1979 in accordance with the land use regulations at the time. For nearly 40 years, the property has remained an Armour Group property holding, as well as an established home to hundreds of Dartmouth residents. The Armour Group continues to manage, maintain and invest in building upgrades, which, to date, includes the addition of residential amenities such as a pool and gym; however, there have been no major site improvements completed to date. As such, the subject property remains largely underutilized, particularly as an opportunity urban development site. Now, in response to changing market demographics and demands – as well as supportive Municipal planning policies and regulations – The Armour Group is prepared to reinvest in the property, and community at large, as is reflected in this Application.



Image 1: Existing Kings Wood Building looking west through the tree garden

Enabling Policy and Regulatory Framework

Dartmouth Municipal Planning Strategy

Within Dartmouth, all multiple-unit development is subject to a Development Agreement (DA) in accordance with Policy IP-5 of the *Dartmouth Municipal Planning Strategy* (MPS).

Furthermore, the subject property is designated Residential (Map 2, pg. 21). Within all Residential areas, MPS policy preamble expresses a need and opportunity to accommodate additional residential growth, particularly on underutilized lots. Under both the “Directions for Growth” and “Housing” sections, there is recurring language supporting the ‘infilling’ of ‘undeveloped lots’ within the development boundary in order to better utilize existing services and support additional residential density.

Dartmouth Land Use By-Law

The subject property is zoned Multiple Family Residential – Medium Density (R-3). In recognition of Policy IP-5, a DA is required in order to accommodate all proposed multiple unit developments.

Regional Municipal Planning Strategy

According to the *Regional Municipal Planning Strategy’s* (RMPS, 2014), the subject property is designated Urban Settlement (Map 2) and is located in the area generally identified as the Mic Mac Mall Regional District Growth Centre (‘Growth Centre’, Map 1). The Growth Centre encourages a mix of uses, including high-density residential, which are intended to act as focal points to transit oriented development. The boundaries of the Growth Centre will be established through a secondary planning process which will more specifically determine appropriate land uses. At present, the boundaries of the Centre are not defined; regardless, the subject property is well within the general area of policy intent.

Furthermore, the subject property is located within the Regional Centre where medium to high density residential uses on opportunity sites are envisioned in support of the RMPS’s growth objective: 75% of all new housing starts should occur in the Regional Centre and urban communities (RMPS, “Vision and Principles”, pg. 10). In furtherance of this objective, a “Regional Centre Plan” (Centre Plan) is currently in draft form which aims to establish new urban development policies and land use regulations for all lands located in the Regional Centre.

Centre Plan

Although this Planning Application has been submitted under the existing policy and regulatory framework, it is also important to consider the *Draft Regional Centre Secondary Municipal Planning Strategy* (Centre Plan, 2018) policies and by-laws. To begin with, Centre Plan has designated the property Higher-Order Residential (HR, Map 1: Urban Structure). In suit, the property is zoned Higher-Order Residential 2 (HR-2, Schedule 3: Zone Boundaries) according to the *Draft Regional Centre Land Use By-Law*.

Generally speaking, the HR designation is **comprised** of “*areas that contain under-utilized lands which can accommodate the addition of mid-rise and high-rise buildings. The **intent** of this Designation is to accommodate some additional growth that supports better transit and pedestrian environment.*” (Centre Plan, pg. 22, emphasis added) Furthermore, the HR designation establishes four main objectives (Centre Plan, pg. 41), which are outlined in **Table 1** below. Each objective includes compliance rationale in relation to the development proposal.

Table 1: Proposed Development's Compliance with Centre Plan's Objectives

Centre Plan: HR Policy	Development Proposal
Land Composition:	The subject property is underutilized and represents an infill development opportunity on an existing surface parking lot. The property can accommodate both mid and high-rise buildings.
Intent:	In support of Regional Planning – as well as <i>Centre Plan</i> – growth objectives, the proposed development will add upwards of 205 residential units (approx. 461 people) within the Regional Centre. The subject property is within walking distance to a major transit hub (Mic Mac Terminal) and other public amenities such as parks and schools.
HR1: <i>Protect and increase access to housing choices through infill and redevelopment that is complementary to the surrounding neighbourhood.</i>	The proposed development represents an infill development opportunity that protects and complements the existing residential market in the area in two ways: 1) there are no demolitions of existing low-rise, single or two-unit family properties, and; 2) the proposed development will offer a variety of housing types, including townhouse-style units and a range of studio to three-bedroom apartment-style units.
HR2: <i>Allow home-based businesses, work-live units, professional offices, daycares and other businesses that are supportive of the neighbourhood.</i>	Nothing in the proposed development restricts the opportunity to provide supportive business uses in the neighbourhood.
HR3: <i>Improve access to pedestrian, active transportation and transit transportation networks.</i>	The proposed development is within walking distance to the Mic Mac Transit Terminal, the Maybank Field Park & Ride, Crichton Park Elementary School and the Mayfield park facilities. The infill, urban development opportunity supports active and transit transportation objectives.
HR4: <i>Create a safe and comfortable public realm for people of all ages and abilities.</i>	The proposed development is maintaining a twenty (20) foot naturally landscaped setback from Micmac Boulevard. This preserves the park-like, 'treed' pedestrian experience of the street. Building 'B' will also provide walk-up townhouse-type units with walkways connecting to the sidewalk in order to create a safe and comfortable relationship with the public realm.

Centre Plan also recognizes that “*there are large parcels within the Regional Centre that could benefit from a comprehensive planning approach to development.*” (Centre Plan, Section 3.4.2, pg. 43). Accordingly, Policy 23 dictates that “*developments of lots larger than one hectare (2.47 acres)...shall be considered by a development agreement to ensure that the development achieves the objectives of this Plan...*” (Centre Plan, Policy 23, pg. 23). As the subject property is 2.16 hectares (5.34 acres), an application for a DA would be required as part of the approval process whether applying under Centre Plan or existing regulations (MPS). Municipal policies, therefore, recognize that the subject property requires a site specific, comprehensive approach to development where prescriptive land use by-laws and built-form regulations should be considered differently.

Discussion

Whereas much of today's planning policy and regulation in urban-defined areas promotes active street frontages and 100% lot coverages, Kings Wood, in fact, represents an antithesis to this perspective. The existing Kings Wood development – and the nearby Kings Arms development, which is also owned and managed by The Armour Group – is largely defined by its treed canopy, integration with nature and setback from the street. The vast lot size, coupled with the neighbourhood's forested aesthetic, argues for development that treats urban design and densification differently. Accordingly, the current development proposal embraces an alternative site and building design approach that focuses on landscaping and tree retention, neighbourhood compatibility, and, in essence, insular 'campus-style' development.



Image 2: Bird's Eye View showing neighbourhood vegetation (Google Maps)

Landscaping & Tree Retention in the Neighbourhood Context

Contrary to an 'urban street frontage' approach, the proposed development's ideology reflects a 'house in the garden' perspective. Micmac Boulevard, and the nearby Crichton Park neighbourhood, is largely defined by its meandering (arguably suburban) road typology which is flanked by trees and other vegetation. Similarly, lower density homes in the area are defined by generous lot sizes, pocket parks and backyard greenbelts, all within proximity to lakes, parks and schools. Although densification is a Regional Planning objective, the subject property deserves a balanced approach to achieving this whereby the surrounding neighbourhood context is respected.

To begin with, the proposed development maintains a 20 foot (6.1 metre) landscaped setback along Micmac Boulevard. This visual buffer not only helps to diminish the appearance of building mass from street level, it also preserves the existing tree-lined street vernacular that currently exists on the south side of Micmac Boulevard. And, in order to not completely orphan the development from the street, some walkways and paths are being proposed with connections to walk-up style townhomes at the base of Building 'B'. There is also a 12 foot (3.7 metre) landscaped setback being maintained along the rear property line (beneath the existing power

line easement) which allows for the steep grades to blend into the podium of Building 'A'. As such, the subject property is completely surrounded by nature, which is further reinforced by its neighbouring uses: HRM Parkland to the south (completely treed); an HRM property at the end of Crichton Avenue (completely treed); an Armour Group Property near the end of Crichton Avenue (completely treed); and, The Armour Group's Kings Arms Property, which echoes the same 'house in the garden' design parti. The nearest single family dwelling to the proposed development is located approximately 230 feet (70 metres) away.

The driveway entrance to the development will also be enhanced with trees, sidewalks and pathways, and will be flanked by walk-up style townhomes at the base of both buildings. Although not a public street, the driveway entrance is intended to create a true 'sense of entry', as if recreating a low-density urban streetscape. By formalizing the entrance driveway (and not having a garage door entrance fronting directly on the street, which is common practice in so many urban infill developments), an insular campus approach is maintained as if entering a garden off the main road.

Building Scale, Design and Density

The proposed buildings are appropriately scaled in the context of the neighbourhood and surrounding land uses. The existing Kings Wood building is seven storeys tall and is situated in the centre of the property away from neighbouring uses and the street. Building 'A', the taller of the two proposed buildings, which stands at fourteen storeys total (an eleven storey high-rise resting atop a three storey podium), is pushed towards the south-west corner of the property. This was done strategically for two main reasons: first, the building's podium can blend into the steep grades along the southern property line and Micmac Boulevard; and, second, the tower portion of the building can be sensitively located far enough away from nearby low-rise residential uses as well as the street. Building 'B' sits at only eight storey tall, with a small mid-rise section resting atop a three storey podium. As the smaller of the two buildings, it seemed appropriate to locate the mid-rise closer to the street as a balance between the 'urban street frontage' approach and the 'house in the garden' perspective.

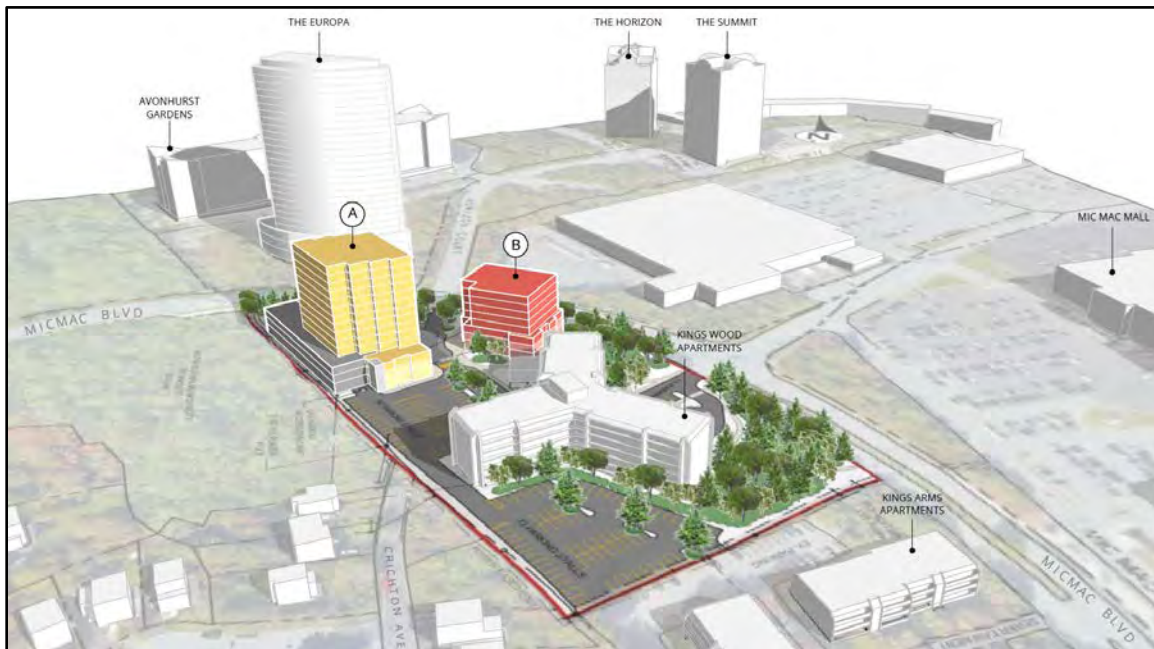


Image 3: Building Scale in the Neighbourhood Context (Architecture49)

The buildings are also appropriately scaled to transition in height from the Crichton Park neighbourhood to the South East, to the CanEuro developments to the North West. As a complete development, the Kings Wood's buildings will range from seven storeys, to eight, to fourteen. Across Micmac Boulevard, the approved 'Europa' development will rise up to 29-storeys, which is scattered amongst other mid to high-rise buildings ('The Summit': 19-storeys; 'The Horizon': 17-storeys; and, 'Avonhurst Gardens': 9-storeys).

With respect to density, the proposed buildings will add approximately 205 new units (461.25 persons, at an assumed 2.25 persons per unit) to the Kings Wood development. In total, Kings Wood will have approximately 335 units (754 persons) spread across a 5.34 acre lot (62.7 units per acre or 141.15 persons per acre). This density is consistent with similar developments in the area. For example, 'Avonhurst Gardens' (DA Case No. 18755) contains 214 units (plus 13,900 sq. ft. of commercial) on a 3.69 acre lot (57.9 units per acre or 130 persons per acre); and, 'The Europa' (DA Case No. 17143) contains 216 units on a 3.48 acre lot (62.1 units per acre or 140 persons per acre).

Furthermore, when considering density from the perspective of Gross Floor Area Ratio (GFAR), which is the approach being considered in the Centre Plan documents, the proposed development falls well short of policy maximums. Centre Plan is currently proposing a GFAR of 4.25 on the subject property. At a combined building gross floor area of 398,850 square feet (existing Kings Wood Building plus Building 'A' and Building 'B'), the overall development only represents a GFAR of 1.71. Accordingly, the proposed density is well within existing and proposed policy limitations.

A Servicing Plan was also prepared to evaluate potential impacts of the proposed development on the Municipality's existing infrastructure, and can be referenced as an Appendix to this application.

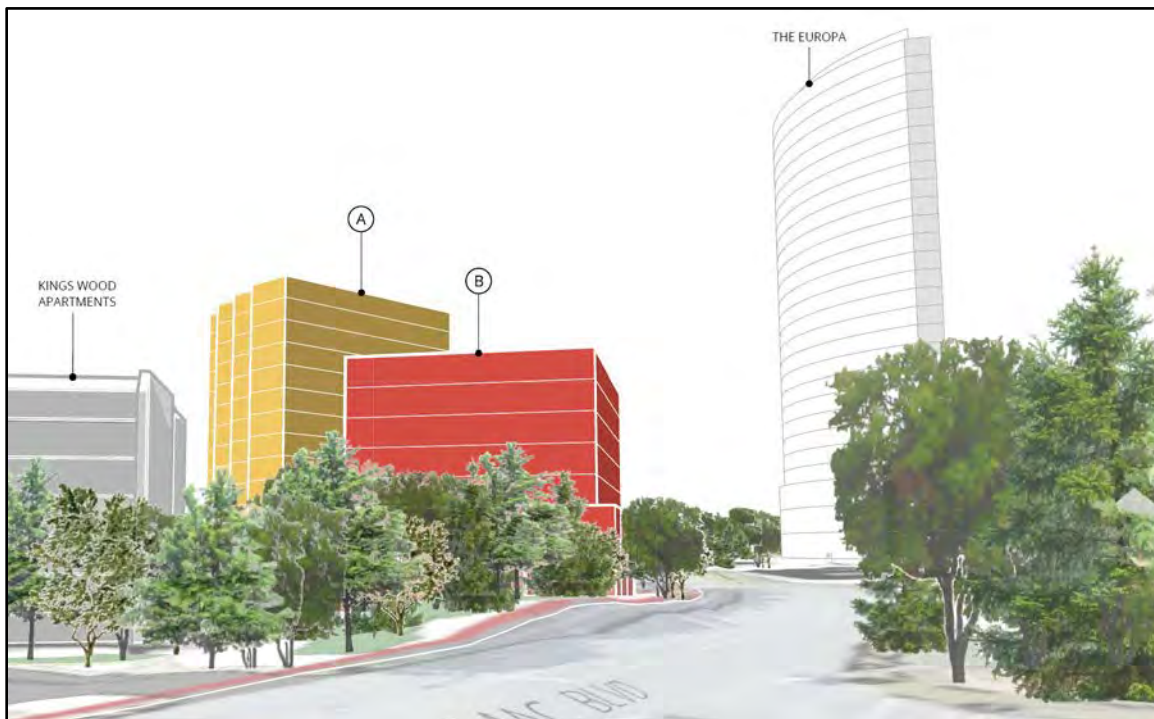


Image 4: Perspective Streetview looking south-west on Micmac Boulevard (Architecture49)

Traffic, Transit and Mobility

A traffic impact study was prepared to evaluate potential impacts of the proposed development on adjacent streets and intersections, and can be referenced as an Appendix to this application.

The proposed development is exceptionally connected to HRM's Transit Services. The Micmac Terminal is located immediately across the street from the proposed development, which services Routes 10, 54, 55, 56, 66 and 72. Furthermore, the Maybank Field Park & Ride is located within a 500 metre walk from the proposed development.

The subject property is located in proximity to HRM parks, schools and employments notes such as Mic Mac Mall, Downtown Dartmouth and Dartmouth Crossing. The added density and mix of unit types and residents will help support active transportation initiatives as walking and biking to and from the development will be a major benefit to the neighbourhood.

Conclusion

The proposed Kings Wood development represents an excellent infill development opportunity on an existing underutilized lot within the Regional Centre. The application is consistent with existing RMPS, MPS and LUB policy and regulation (including similarly approved DA's in the area), as well as the draft Centre Plan policies and regulations. The new density has been delicately scaled and massed through the proposed building design, and the site planning has consciously respected the treed and natural surroundings currently found throughout the neighbourhood.

APPENDIX A:

MPS Policy IP-5 and Ip-1(c) Compliance Tables

Policy IP-5		
<p>It shall be the intention of City Council to require Development Agreements for apartment building development in R-3, R-4, C-2, MF-1 and GC Zones. Council shall require a site plan, building elevations and perspective drawings for the apartment development indicating such things as the size of the building(s), access & egress to the site, landscaping, amenity space, parking and location of site features such as refuse containers and fuel storage tanks for the building.</p> <p>In considering the approval of such Agreements, Council shall consider the following criteria:</p>		
a)	adequacy of the exterior design, height, bulk and scale of the new apartment development with respect to its compatibility with the existing neighbourhood;	<p>Exterior Design: At this stage in the planning application process, the proposed building materiality has yet to be determined. That being said, it is likely that the proposed buildings will take design cues for the existing Kings Wood and Kings Arms buildings in order to foster a cohesive design approach to the residential “campus” that current exists along Micmac Boulevard.</p> <p>Height:</p> <ul style="list-style-type: none"> - Building ‘A’: fourteen (14) storeys total; three (3) storey podium and an eleven (11) storey ‘tower’ - Building ‘B’: eight (8) storeys total; three (3) storey podium and a five (5) storey ‘mid-rise’ <p>Bulk:</p> <ul style="list-style-type: none"> - Building ‘A’: the bulk of the podium is intended to blend into the steep slopes along Micmac Boulevard and the property line bordering HRM’s parkland property to the west. Here we are able to hide the underground and above-grade parking structure against these slopes. The front of Building ‘A’, however, is lined with townhouse-style units to give the entrance a human scale and active frontage. Above the podium, a slender ‘high-rise’ structure will house the majority of the residential units. Approximate areas are provided below: <ul style="list-style-type: none"> o Podium Footprint: 25,600 square feet (2,378 square metres) o High-rise Footprint: 9,750 square feet (906 square metres)

		<ul style="list-style-type: none"> - Building 'B': Building 'B's' podium is entirely flanked by townhouse-style units which provides and active frontage along Micmac Boulevard as well as the internal residential 'campus'. The mid-rise portion of the building is only five (5) storeys and houses typical apartment-style units. Approximate areas are provided below: <ul style="list-style-type: none"> o Podium Footprint: 9,600 square feet (892 square metres) o Mid-Rise Footprint: 7,800 square feet (725 square metres) <p>Scale: The proposed development is located in between two residential neighbourhood-types: the low-density Crichton Park neighbourhood, which primarily consists of single or two-bedroom units; and, the high-rise, high-density neighbourhood consisting of several large apartment buildings ranging from nine (9) to twenty nine (29) storeys (future approved development). The existing Kings Wood building itself is seven (7) storeys, and, across Micmac Boulevard, Mic Mac Mall one of Atlantic Canada's largest shopping centres and one of Halifax's identified 'Future Growth Nodes' (Draft Centre Plan, 2018). Accordingly, the proposed scale – and transitioning of scale of the two buildings – of the development is exceptionally responsive and respectful to the surrounding existing community and future identified growth objectives.</p>
b)	adequacy of controls placed on the proposed development to reduce conflict with any adjacent or nearby land uses by reason of:	A development approval will require a Development Agreement which will control and regulate built-form requirements and density. This will reduce conflict with any adjacent or nearby land uses.
(i)	the height, size, bulk, density, lot coverage, lot size and lot frontage of any proposed building;	<p>Existing Building:</p> <ul style="list-style-type: none"> - <u>Height</u>: seven (7) storeys or 70 feet (21.3 metres) - <u>Bulk/Size (Total GFA)</u>: 147,000 square feet (13,657 square metres) - <u>Density</u>: 130 Units (292.5 persons) - <u>Lot Coverage</u>: 9% - <u>Lot Size</u>: 5.34 acres - <u>Frontage</u>: 921.03 feet (280.73 metres)

		<p>Building 'A':</p> <ul style="list-style-type: none"> - <u>Height</u>: fourteen (14) storeys or 140 feet (42.7 metres) - <u>Bulk/Size (Total GFA)</u>: 184,050 square feet (17,099 square metres) - <u>Density</u>: 130 Units (292.5 persons) - <u>Lot Coverage</u>: 11% <p>Building 'B':</p> <ul style="list-style-type: none"> - <u>Height</u>: eight (8) storeys or 80 feet (24.4 metres) - <u>Bulk/Size (Total GFA)</u>: 67,800 square feet (6,299 square metres) - <u>Density</u>: 75 Units (168.75 persons) - <u>Lot Coverage</u>: 4% <p>Total New (A+B):</p> <ul style="list-style-type: none"> - <u>Height</u>: 8-14 storeys - <u>Bulk/Size (Total GFA)</u>: 251,850 new square feet (23,398 square metres) - <u>Density</u>: 205 new units (461.25 persons) - <u>Lot Coverage</u>: 15% new coverage <p>Total (New + Existing Building):</p> <ul style="list-style-type: none"> - <u>Lot Size</u>: 5.34 acres (232,610 square feet) - <u>Frontage</u>: 921.03 feet (280.73 metres) - <u>Bulk/Size (Total GFA)</u>: 398,850 square feet (37,054 square metres) - <u>Density</u>: 335 Units (753.75 persons or 141 persons per acre or FAR: 1.71) - <u>Lot Coverage</u>: 24%
(ii)	traffic generation, access to and egress from the site; and	Please refer to the enclosed 'Traffic Impact Statement'.
(iii)	parking;	All parking for the proposed development is located on site using a combination of surface and underground parking. In total, there are 312 parking stalls (179 underground and 133 surface) which represent a 0.93:1 parking ratio for all three buildings on site (312 parking stalls to 335 total units).
c)	adequacy or proximity of schools, recreation areas and other community facilities;	Crichton Park Elementary School is located within a 450 metre walk from the proposed development. The Maybank Sports Fields, which include three baseball diamonds, two soccer fields and two tennis courts, among other amenities, is all located within a 500 metre walk from the proposed development.
d)	adequacy of transportation networks in, adjacent to, and leading to the development;	The proposed development is exceptionally connected to HRM's Transit Services. The Micmac Terminal is located immediately across the street from the proposed development, which services Routes 10, 54, 55, 56, 66 and 72. Furthermore, the Maybank Field Park & Ride is located within a 500 metre walk from the proposed development.

e)	adequacy of useable amenity space and attractive landscaping such that the needs of a variety of household types are addressed and the development is aesthetically pleasing;	<p>Amenity Space:</p> <p>The existing Kings Wood Building contains a common room, fitness area, and pool, all of which are intended to be upgraded as part of the overall redevelopment project. These amenities are also intended to be shared with the entire Kings Wood residential campus, when complete. Within each new building, as well, amenity spaces will likely be proposed such as common rooms and roof terraces on the podium. There is also ample outdoor amenity space in the vegetative areas and access to Municipal Parks is exceptionally convenient. All amenities are attractive to a wide variety of household types and users.</p> <p>Landscaping:</p> <p>In addition to the untouched natural landscape that will be maintained in buffer zones and existing treed areas, new landscaping elements will be introduced in order to enhance the overall property. For example, mature trees will be preserved, where possible, in parking islands and walkways; new hardscaped sidewalks and pathways will be introduced leading directly to townhouse-style units; and, the podium rooftops will be landscaped to include amenity areas for building residents. The range in landscaped open spaces will cater to a variety of household types.</p>
f)	that mature trees and other natural site features are preserved where possible;	In support of the overall 'Development Vision', tree retention is one of the most important objectives of the proposed development. In support of this objective, we are proposing a 20 foot vegetative setback along Micmac Boulevard consisting of preserved trees. Furthermore, the development proposal does not propose altering any of the trees in front of the existing Kings Wood building. Where we are proposing new surface parking lots, efforts will be made to preserve mature trees in islands or buffered edges.
g)	adequacy of buffering from abutting land uses;	A 20 foot (6.1 metre) setback is being proposed along Micmac Boulevard which helps mitigate the appearance of building 'height' and mass from the street. Furthermore, neither building is located adjacent to existing low-rise residential uses. Both buildings are pushed towards Micmac Boulevard and the closest single family dwelling is located approximately 230 feet (70 metres) away from the nearest new building (Building 'A').

h)	the impacts of altering land levels as it relates to drainage, aesthetics and soil stability and slope treatment; and	The proposed development represents an infill development opportunity on an existing surface parking lot which will have minimal impacts on altering land levels.
i)	the Land Use By-law amendment criteria as set out in Policy IP-1(c) .	See Table 2 – Policy IP-1(c)

Policy IP-1(c)		
<p>The Zoning By-law is the principal mechanism by which land use policies shall be implemented. It shall set out zones, permitted uses and development standards which shall reflect the policies of the Municipal Development Plan as per Section 33 (3) of the Planning Act. The zoning by-law may use site plan approval as a mechanism to regulate various uses.</p> <p>In considering zoning amendments and contract zoning, Council shall have regard to the following:</p>		
(1)	that the proposal is in conformance with the policies and intent of the Municipal Development Plan	The proposal is in conformance and consistent with the policies and intent of the <i>Dartmouth Municipal Planning Strategy</i> .
(2)	that the proposal is compatible and consistent with adjacent uses and the existing development form in the area in terms of the use, bulk, and scale of the proposal	The proposed development is located in between two residential neighbourhood-types: the low-density Crichton Park neighbourhood, which primarily consists of single or two-bedroom units; and, the high-rise, high-density neighbourhood consisting of several large apartment buildings ranging from nine (9) to twenty seven (27) storeys (future approved development). The existing Kings Wood building itself is seven (7) storeys, and, across Micmac Boulevard, Mic Mac Mall one of Atlantic Canada's largest shopping centres and one of Halifax's identified 'Future Growth Nodes' (Draft Centre Plan, 2018). Accordingly, the proposed scale – and transitioning of scale of the two buildings – of the development is exceptionally responsive and respectful to the surrounding existing community and future identified growth objectives.
(3)	provisions for buffering, landscaping, screening, and access control to reduce potential incompatibilities with adjacent land uses and traffic arteries	A proposed 20 foot (6.1 metre) setback is being proposed along Micmac Boulevard which provides natural landscaping as well as visual screening from the street. For the most part, this is an existing buffer which adequately reduces potential incompatibilities with adjacent land uses and traffic arteries. Furthermore, no new access/egress points to the development are being proposed which will mitigate any new traffic to the local street network. Refer to the 'Traffic Impact Statement' for more information.

(4)	that the proposal is not premature or inappropriate by reason of:	-
(i)	the financial capability of the City is to absorb any costs relating to the development	N/A – there are no apparent financial implications for the City.
(ii)	the adequacy of sewer and water services and public utilities	Please refer to the enclosed ‘Servicing Plan’.
(iii)	the adequacy and proximity of schools, recreation and other public facilities	Crichton Park Elementary School is located within a 450 metre walk from the proposed development. The Maybank Sports Fields, which include three baseball diamonds, two soccer fields and two tennis courts, among other amenities, is all located within a 500 metre walk from the proposed development.
(iv)	the adequacy of transportation networks in adjacent to or leading to the development	The proposed development is exceptionally connected to HRM’s Transit Services. The Micmac Terminal is located immediately across the street from the proposed development, which services Routes 10, 54, 55, 56, 66 and 72. Furthermore, the Maybank Field Park & Ride is located within a 500 metre walk from the proposed development.
(v)	existing or potential dangers for the contamination of water bodies or courses or the creation of erosion or sedimentation of such areas	N/A – the property does not contain, nor it adjacent to, any water bodies or courses.
(vi)	preventing public access to the shorelines or the waterfront	N/A – the property is not accessible to a shoreline or waterfront.
(vii)	the presence of natural, historical features, buildings or sites	N/A – the property does not contain historical features, buildings or sites.
(viii)	create a scattered development pattern requiring extensions to truck facilities and public services while other such facilities remain under utilized	The proposed development will not create a scattered development pattern. The project represents an infill development opportunity on an already Municipally serviced property which will support servicing efficiencies.
(ix)	the detrimental economic or social effect that it may have on other areas of the City.	The proposed development will contribute to the economic vitality of the City and immediate surrounding area. As a multi-unit residential development, future tenants will support nearby employment nodes, such as Mic Mac Mall, Dartmouth Crossing, and Downtown Dartmouth, among all other areas of the City accessible via Transit or other means.

(5)	that the proposal is not an obnoxious use	Residential uses are non-obnoxious uses and are compatible with the surrounding area.
(6)	that controls by way of agreements or other legal devices are placed on proposed developments to ensure compliance with approved plans and coordination between adjacent or nearby land uses and public facilities. Such controls may relate to, but are not limited to, the following:	A development approval will require a Development Agreement which will control and regulate built-form requirements and density. This will reduce conflict with any adjacent or nearby land uses.
(i)	type of use, density, and phasing	<p>Use: The proposed use is Multi-Unit Residential, which is a common and consistent land use found throughout the area.</p> <p>Density: <u>Existing:</u></p> <ul style="list-style-type: none"> - The property (PID 40173627) is 5.34 acres - The existing building contains 130 units - Average persons/unit: 2.25 - Existing Population: approx. 292.5 persons - Existing Density: 54.77 persons/acre <p><u>Proposed:</u></p> <ul style="list-style-type: none"> - Building 'A' will contain approx. 130 units - Building 'B' will contain approx. 75 units. - Total Proposed Units: approx. 205 units - Average persons/unit: 2.25 - Proposed Population Increase: 461.25 persons - Proposed Density Increase: 86.38 persons/acre <p><u>Total:</u></p> <ul style="list-style-type: none"> - Proposed Overall Population: 753.75 persons - Proposed Overall Density: 141.15 persons/acre <p>According to the above calculations, 141.15 persons per acre is well within the Municipality's level of acceptance for urban environments within the Regional Centre. When compared to other multi-unit residential buildings in the area, their Development Agreements have allowed for similar densities. For example, DA Case No. 18755/00728 permitted 130.28 persons/acre, and DA Case No. 17143 permitted 139.61 persons/acre.</p>

		Phasing: At this time, development phasing is unknown. However, it is likely that the Building 'A' and Building 'B' will be built at separate times in response to market conditions.
(ii)	emissions including air, water, noise	The proposed use does not generate obnoxious air, water or noise emissions.
(iii)	traffic generation, access to and egress from the site, and parking	Please refer to the enclosed 'Traffic Impact Statement'.
(iv)	open storage and landscaping	Open Storage: Open storage has yet to be located at the stage in the Application process. Any open storage will be screened from the street using a combination of fencing and vegetation. Landscaping: There are two main approaches to landscaping the site: the first is non-disturbance, which is implemented by maintaining vegetative setbacks; and, the second, will be to introduce new hard and soft landscaping elements around pedestrian walkways, common open spaces and surface parking areas.
(v)	provisions for pedestrian movement and safety	No new access/egress points to the public right-of-way are being proposed. At the existing intersections, new crosswalk pavement markings may be considered. The development proposal also considers new walkways and sidewalks leading directly to individual residential units and lobbies.
(vi)	management of open space, parks, walkways	The Armour Group Limited owns and manages all of their residential properties, which includes maintenance of all on site (private) open spaces, parks and walkways.
(vii)	drainage both natural and sub-surface and soil-stability	The property is a municipally serviced lot, and all storm water drainage will managed on site and via Municipal infrastructure. A storm water management plan will be provided at a later stage.
(viii)	performance bonds.	N/A
(7)	suitability of the proposed site in terms of steepness of slope, soil conditions, rock out-croppings, location of watercourses, marshes, swamps, bogs, areas subject to flooding, proximity to major highways, ramps, railroads, or other nuisance factors	The proposed development represents an infill development opportunity on an existing surface parking lot which will have no impact on environmentally sensitive areas. There are, however, steep slopes in two locations: in between Micmac Boulevard and Building 'A' (north-west street frontage) as well as in between the Municipality's parkland property (PID 40401879) and the rear/side wall of Building 'A' (west property

		boundary). In both instances, property line setbacks are introduced which avoid cutting into the slopes and their associated vegetation.
(8)	that in addition to the public hearing requirements as set out in the Planning Act and City by-laws, all applications for amendments may be aired to the public via the “voluntary” public hearing process established by City Council for the purposes of information exchange between the applicant and residents. This voluntary meeting allows the residents to clearly understand the proposal previous to the formal public hearing before City Council	The Planning Application shall follow all required public processes.
(9)	that in addition to the foregoing, all zoning amendments are prepared in sufficient detail to provide:	-
(i)	Council with a clear indication of the nature of proposed development	The proposed development is multi-unit residential.
(ii)	permit staff to assess and determine the impact such development would have on the land and the surrounding community	The proposed development is an infill development opportunity which will provide positive impacts and benefits to the already existing Kings Wood and Kings Arms residential communities, as well as the surrounding residential neighbourhood and employment nodes.
(10)	Within any designation, where a holding zone has been established pursuant to “Infrastructure Charges - Policy IC-6”, Subdivision Approval shall be subject to the provisions of the Subdivision By-law respecting the maximum number of lots created per year, except in accordance with the development agreement provisions of the MGA and the “Infrastructure Charges” Policies of this MPS.	N/A – the property is zoned R-3

APPENDIX B:

Parcel Description

All that certain block of land on the southwestern side of Micmac Boulevard, in the City of Dartmouth, Province of Nova Scotia, shown as Block M-4 on a subdivision plan of Micmac Village signed by Granville Leopold, N.S.L.S., dated April 9, 1976, approved July 20, 1977, and more particularly described as follows:

BEGINNING on the curved southwestern boundary of Micmac Boulevard at the most northern corner of Block M-5;

THENCE S 40 degrees 48 minutes 21 seconds W, 378.37 feet along a northwestern boundary of Block M-5 to a northeastern boundary of lands owned by the City of Dartmouth;

THENCE N 50 degrees 40 minutes 30 seconds W, 732.70 feet along said northeastern boundary of lands owned by the City of Dartmouth to the curved southern boundary of Micmac Boulevard;

THENCE easterly and southeasterly on a curve to the right which has a radius of 520.0 feet for a distance of 490.61 feet to the end of said curve;

THENCE S 58 degrees 08 minutes 51 seconds E, 79.98 feet along a southwestern boundary of Micmac Boulevard to a point of curvature;

THENCE southeasterly on a curve to the right which has a radius of 1,017.0 feet for a distance of 350.44 feet to the place of beginning.

CONTAINING 232,710 square feet (5.342 acres).

SUBJECT TO Rights granted with respect to that 7 and one half foot wide portion of a 15 foot wide Pole Line Easement lying adjacent to the southeastern boundary of the herein described Block M-4 as shown on the above referred to plan.

ALSO SUBJECT TO that 12 foot wide portion of a 20 foot wide Pole Line Easement lying adjacent to the southwestern boundary of the herein described Block M-4 as shown on the above referred to plan.

ALL bearings are referred to a transverse Mercator grid, 3 Degree Zone.

*** Municipal Government Act, Part IX Compliance ***

Compliance:

The parcel originates with an instrument (registration details below) and the subdivision is validated by Section 291 of the Municipal Government Act

Registration District: HALIFAX COUNTY

Registration Year: 1977

Book: 3174 Page: 338 Document Number: 50998

APPENDIX C:

Survey Plan

LEGEND

- Utility Pole & Anchor
- Light Pole
- SN . . Sign
- Light Standard
- PID . . Parcel Identification Number
- CONC. . Concrete
- B/F . . Board Fence

SURVEYOR'S LOCATION CERTIFICATE

MICMAC BOULEVARD (WIDTH VARIES)

PID 40173627
BLOCK M-4
BOOK 3174 PAGE 338

CIVIC NO. 1000
KINGS WOOD APARTMENTS
(FOUNDATION)

LOT M-5-1

LOT M-5-2

PARCEL CD-2

PARCEL CD-3

LOT AG

LOT GG-2X

LOT GG-2A

- NOTES
- CLEARANCES SHOWN ARE TO A TOLERANCE OF 0.2' AND ARE PERPENDICULAR TO THE BOUNDARY.
 - THIS SURVEYOR'S LOCATION CERTIFICATE SHALL NOT BE USED FOR BOUNDARY DEFINITION OR AS A DOCUMENT FOR THE PREPARATION OF LEGAL DESCRIPTIONS.
 - ALL BOUNDARY DIMENSIONS ARE DERIVED FROM THE SUBJECT PLAN UNLESS OTHERWISE NOTED.



Servant, Dunbrack, McKenzie & MacDonald Ltd.
NOVA SCOTIA LAND SURVEYORS & CONSULTING ENGINEERS
36 OLAND CRESCENT
BAYERS LAKE BUSINESS PARK
HALIFAX, NS B3S 1C6
PHONE: (902) 455-1537
FAX: (902) 455-8479
WEB: www.sdmm.ca

SCALE 1"= 60'
FILE NO. 1-6-227 (29924)
SLC 81446

Certified to: KINGSWOOD APARTMENTS LIMITED and ROYAL BANK OF CANADA
Re: BLOCK M-4
1000 MICMAC BOULEVARD, DARTMOUTH, HALIFAX COUNTY, NOVA SCOTIA

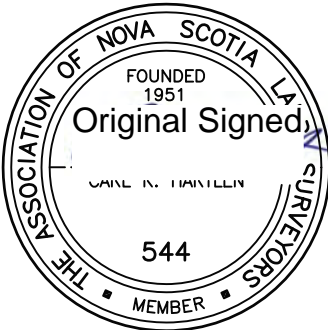
I, CARL K. HARTLEN, Nova Scotia Land Surveyor, hereby certify that :

- This Surveyor's Location Certificate was prepared under my supervision and in accordance with Part VII of the Nova Scotia Land Surveyors Regulations made pursuant to Section 8 of the Land Surveyors Act.
- The BUILDING shown hereon is located entirely within the boundaries of the subject lands as said boundaries are defined by Servant, Dunbrack, McKenzie & MacDonald Ltd. Plan No. 4-189-K, dated April 9, 1976, approved July 20, 1977.

Dated June 13, 2013

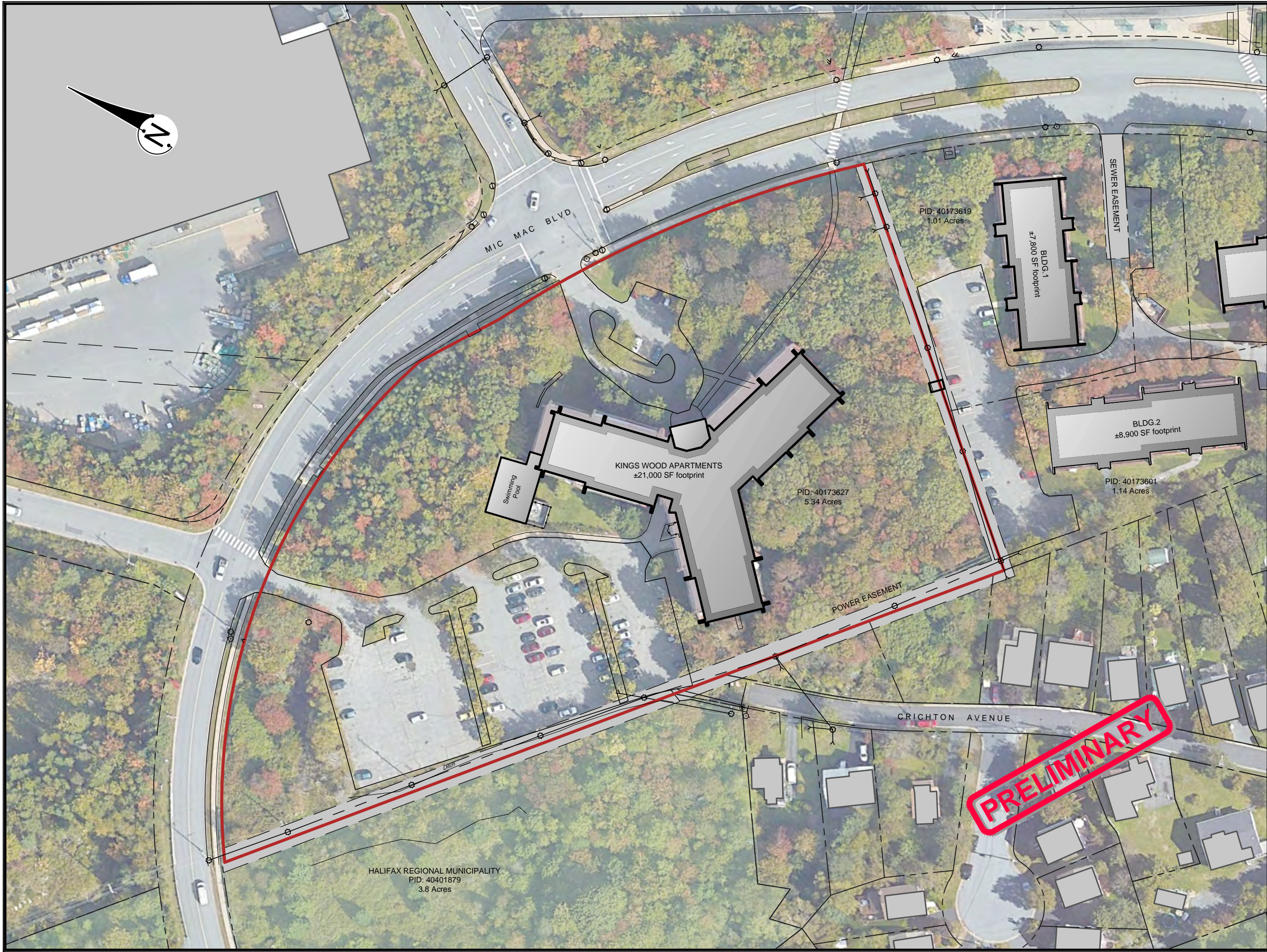
Original Signed

N.S.L.S.



June 11, 2013
Date of Field Survey

APPENDIX D:
Site Plan



LEGEND

- Site Boundary
- Adjacent Property Boundary

SITE SUMMARY:

- Land Area: 5.34 acres
- Existing Zone: R-3 (Multi. Family Res. Zone)

Sheet 1 of 4

SOURCES:

- Plan based on SDMM survey '2016-09-30_Kings Wood & Kings Arm Survey Plan.dwg'
- Adjacent property lines from provincial property mapping.

Designer: KWATTERS	VERSION
Planner: CWALLACE	100

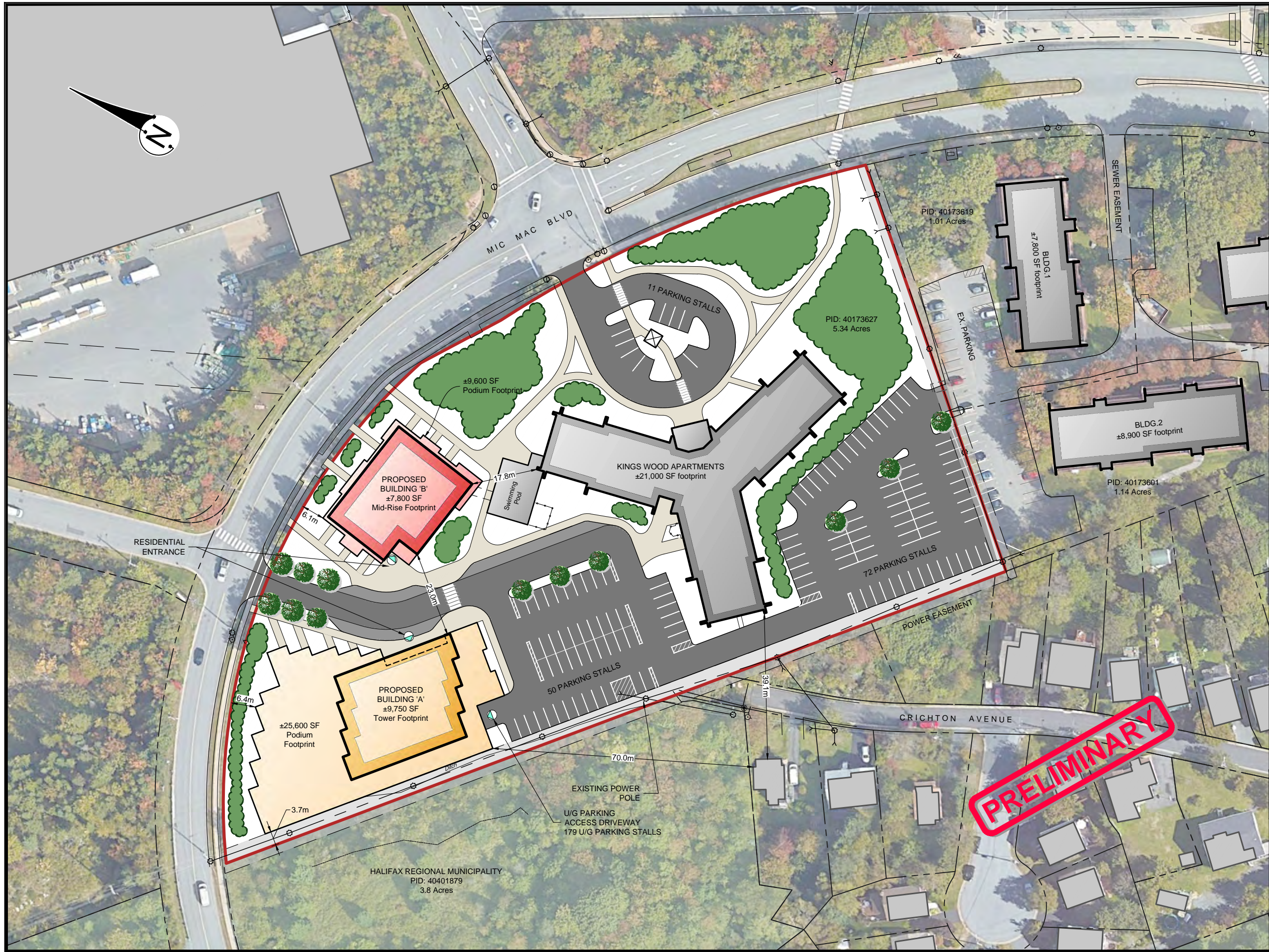
EXISTING CONDITIONS
KINGS WOOD / KINGS ARMS APARTMENTS
DARTMOUTH, NOVA SCOTIA

ARMOUR GROUP
AUGUST 30, 2018189-00152-100

SCALE
15 10 5 0 25 m
1 : 1,000

1 SPECTACLE LAKE DRIVE, DARTMOUTH, NS, CANADA B3B 1X7
PHONE: 902 835-9955 WSP.COM

PRELIMINARY



LEGEND

- Site Boundary
- Adjacent Property Boundary

SITE SUMMARY:

- Land Area: 5.34 acres
- Existing Zone: R-3 (Multi. Family Res. Zone)
- Total Surface Parking Provided: 133 stalls

LOT COVERAGE:

Existing Building:	21,000 SF	(9%)
Proposed Building 'A':	25,600 SF	(11%)
Proposed Building 'B':	9,600 SF	(4%)
Total Lot Coverage:	56,200 SF	(24%)

Sheet 2 of 4

SOURCES:

- Plan based on SDMM survey '2016-09-30_Kings Wood & Kings Arm Survey Plan.dwg'
- Adjacent property lines from provincial property mapping.

Designer: KWATTERS

Planner: CWALLACE

VERSION

102

CONCEPT PLAN

KINGS WOOD / KINGS ARMS APARTMENTS

DARTMOUTH, NOVA SCOTIA

ARMOUR GROUP

SEPTEMBER 05, 2018

189-00152-102

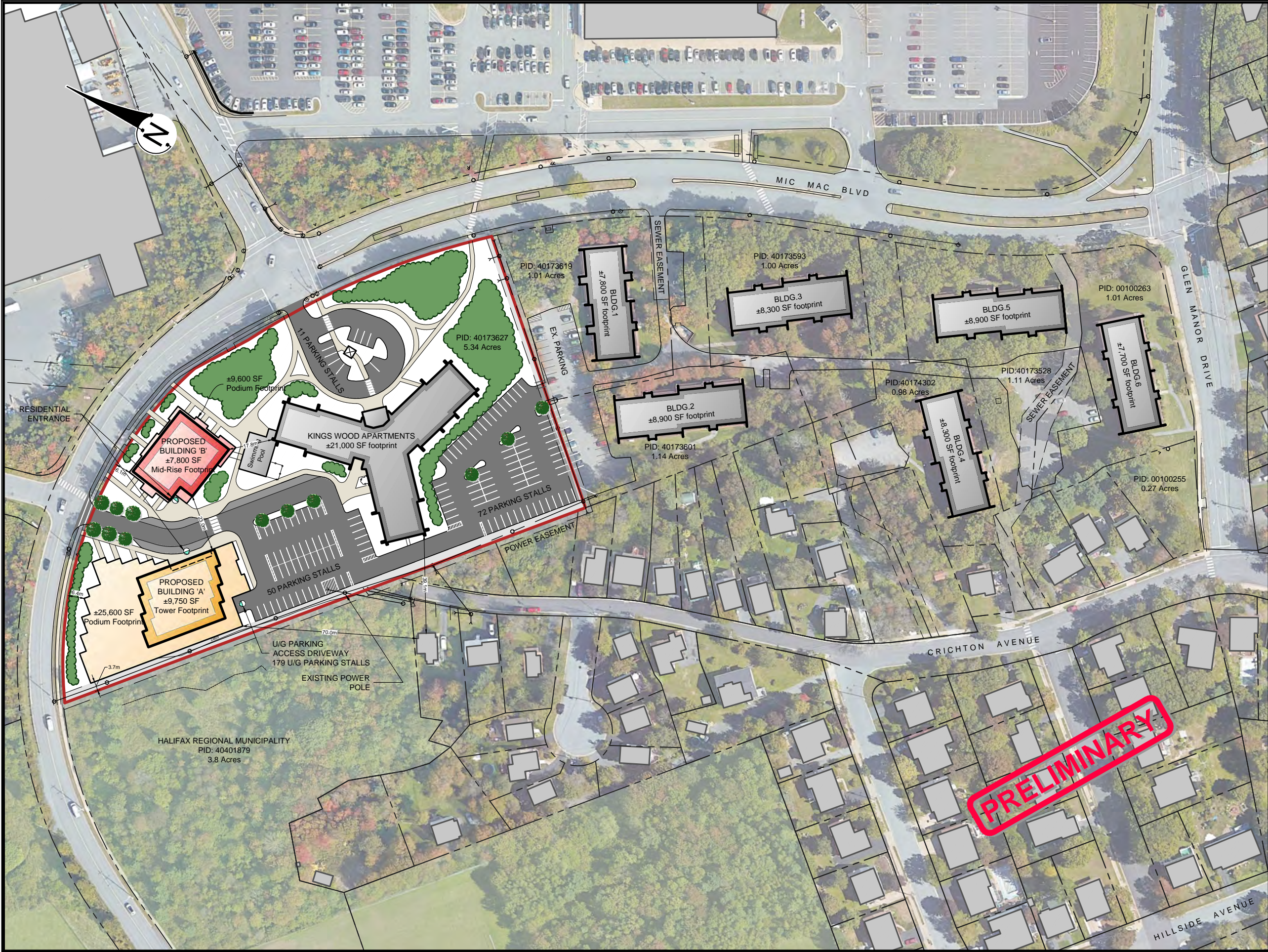
SCALE

15 10 5 0 25 m

1 : 1,000

1 SPECTACLE LAKE DRIVE, DARTMOUTH, NS, CANADA B3B 1X7
PHONE: 902 835-9955 WSP.COM

FILE: \SV\2015\DATA\01\SHARED\189-00152-00 KINGS WOOD PLAZA\04 DRAWINGS\CONCEPT\189-00152-102.DWG Sheet: 11x17 (1000)



LEGEND

- Site Boundary
- Adjacent Property Boundary

SITE SUMMARY:

- Land Area: 5.34 acres
- Existing Zone: R-3 (Multi. Family Res. Zone)
- Total Surface Parking Provided: 133 stalls

LOT COVERAGE:

Existing Building:	21,000 SF	(9%)
Proposed Building 'A':	25,600 SF	(11%)
Proposed Building 'B':	9,600 SF	(4%)
Total Lot Coverage:	56,200 SF	(24%)

Sheet 3 of 4

SOURCES:

- Plan based on SDMM survey '2016-09-30_Kings Wood & Kings Arm Survey Plan.dwg'
- Adjacent property lines from provincial property mapping.

Designer: KWATTERS	VERSION
Planner: CWALLACE	102

CONCEPT PLAN
KINGS WOOD / KINGS ARMS
APARTMENTS
DARTMOUTH, NOVA SCOTIA

ARMOUR GROUP

SEPTEMBER 05, 2018189-00152-102

SCALE

24168040 m

1 : 1,500

1 SPECTACLE LAKE DRIVE, DARTMOUTH, NS, CANADA B3B 1X7
PHONE: 902 835-9955 WSP.COM

FILE: \\SV201DATA01\SHARED\189-00152-00 KINGSWOOD PLAZA\04 DRAWINGS\CONCEPT\189-00152-102.DWG Sheet: 11x17 (1500)



LEGEND

- Site Boundary
- Adjacent Property Boundary

SITE SUMMARY:

- Land Area: 5.34 acres
- Existing Zone: R-3 (Multi. Family Res. Zone)
- Total Surface Parking Provided: 133 stalls

LOT COVERAGE:

Existing Building:	21,000 SF	(9%)
Proposed Building 'A':	25,600 SF	(11%)
Proposed Building 'B':	9,600 SF	(4%)
Total Lot Coverage:	56,200 SF	(24%)

Sheet 4 of 4

SOURCES:

- Plan based on SDMM survey '2016-09-30_Kings Wood & Kings Arm Survey Plan.dwg'
- Adjacent property lines from provincial property mapping.

Designer: KWATTERS
Planner: CWALLACE

VERSION
102

**CONCEPT PLAN
KINGS WOOD / KINGS ARMS
APARTMENTS**
DARTMOUTH, NOVA SCOTIA

ARMOUR GROUP
SEPTEMBER 05, 2018
189-00152-102

SCALE
45 30 15 0 75 m
1 : 3,000

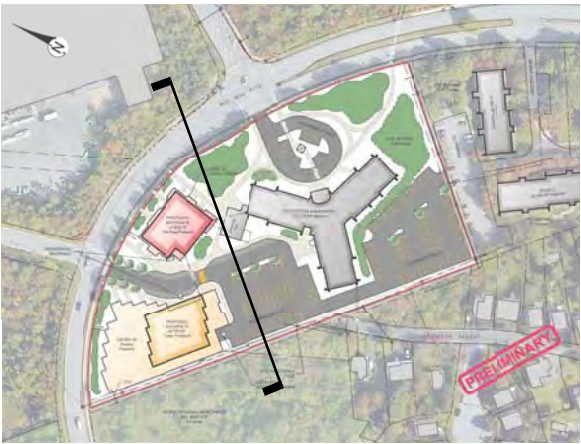
1 SPECTACLE LAKE DRIVE, DARTMOUTH, NS, CANADA B3B 1X7
PHONE: 902 835-9955 WSP.COM

PRELIMINARY

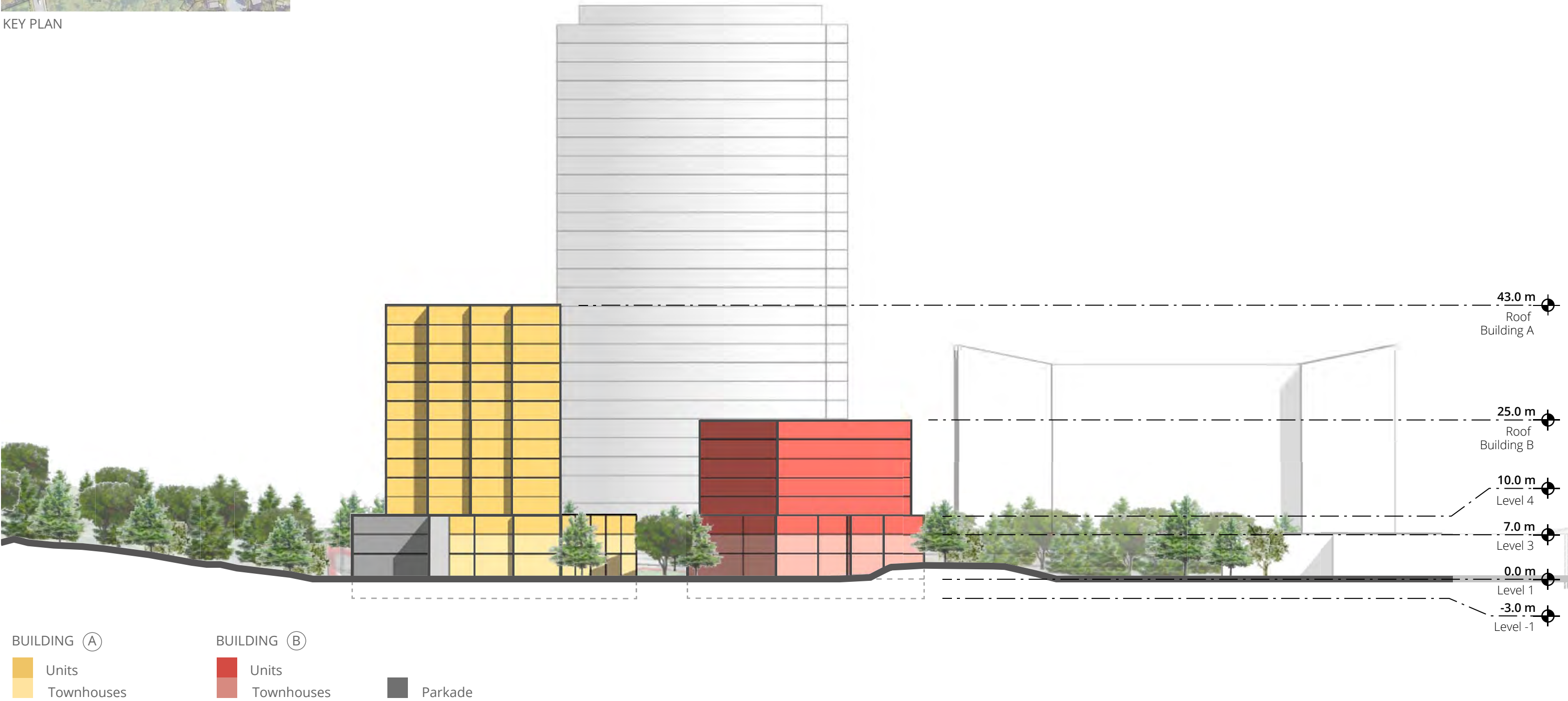
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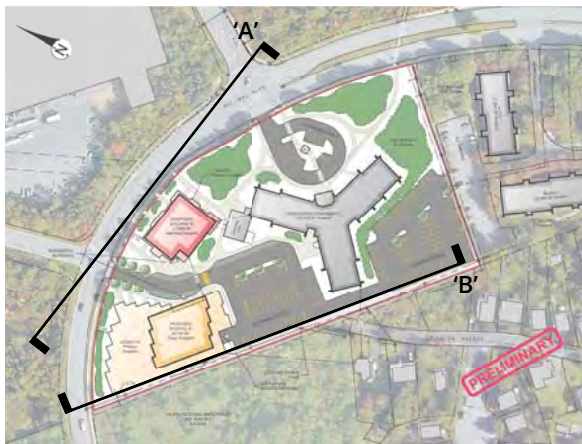
APPENDIX E:

Building Elevations and Perspectives

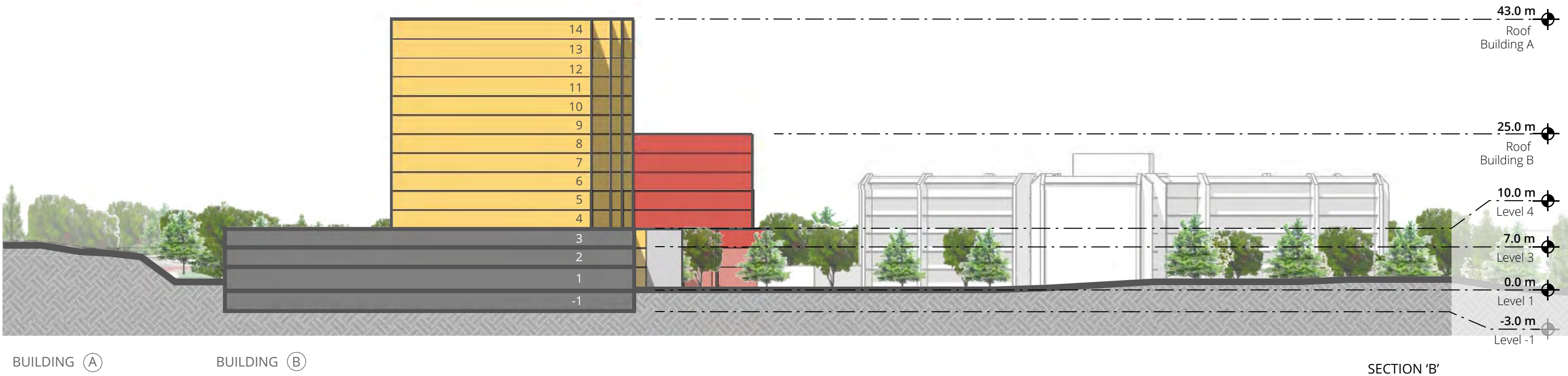


KEY PLAN





KEY PLAN



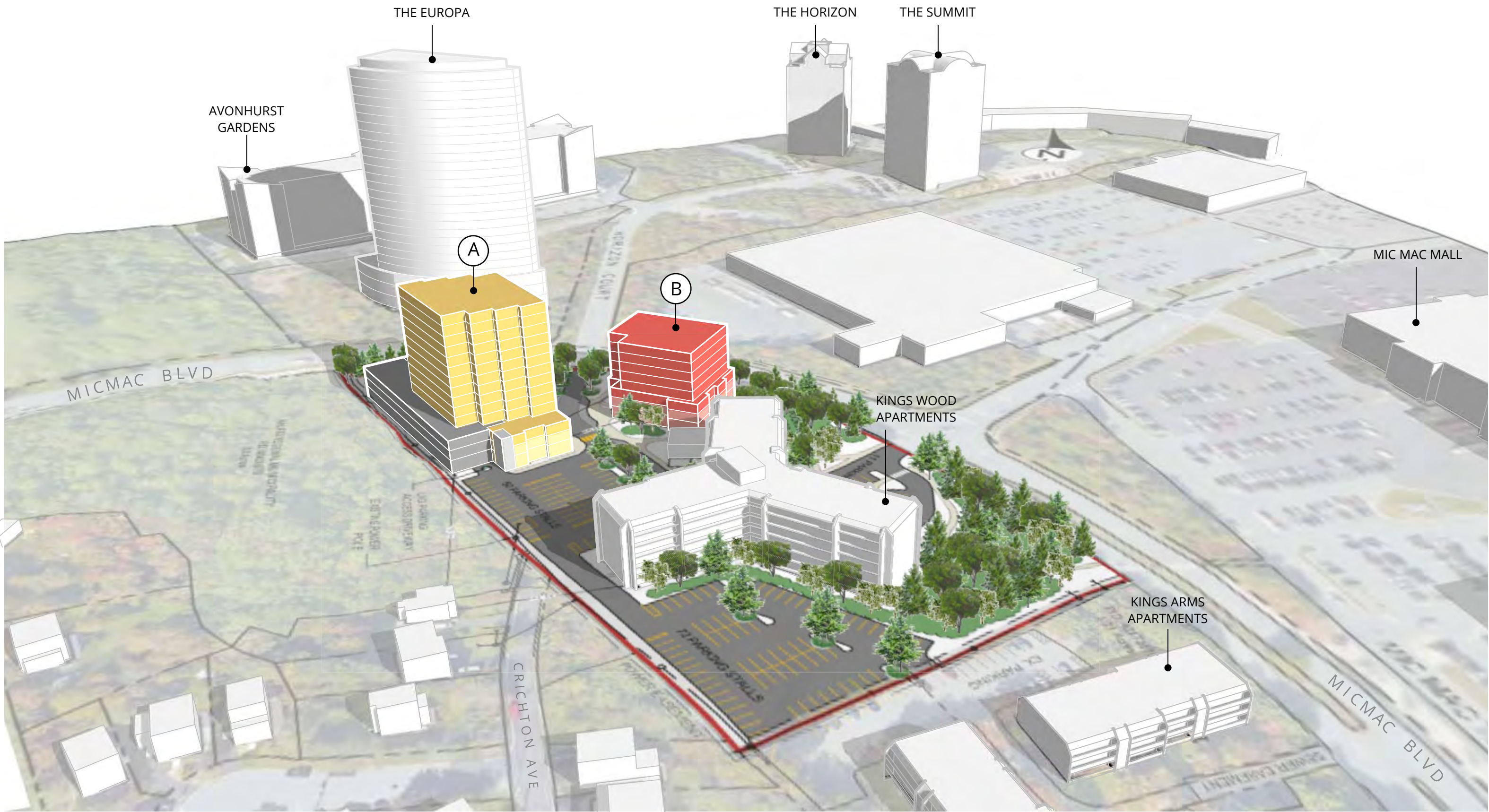
BUILDING (A)

Units
Townhouses

BUILDING (B)

Units
Townhouses

Parkade





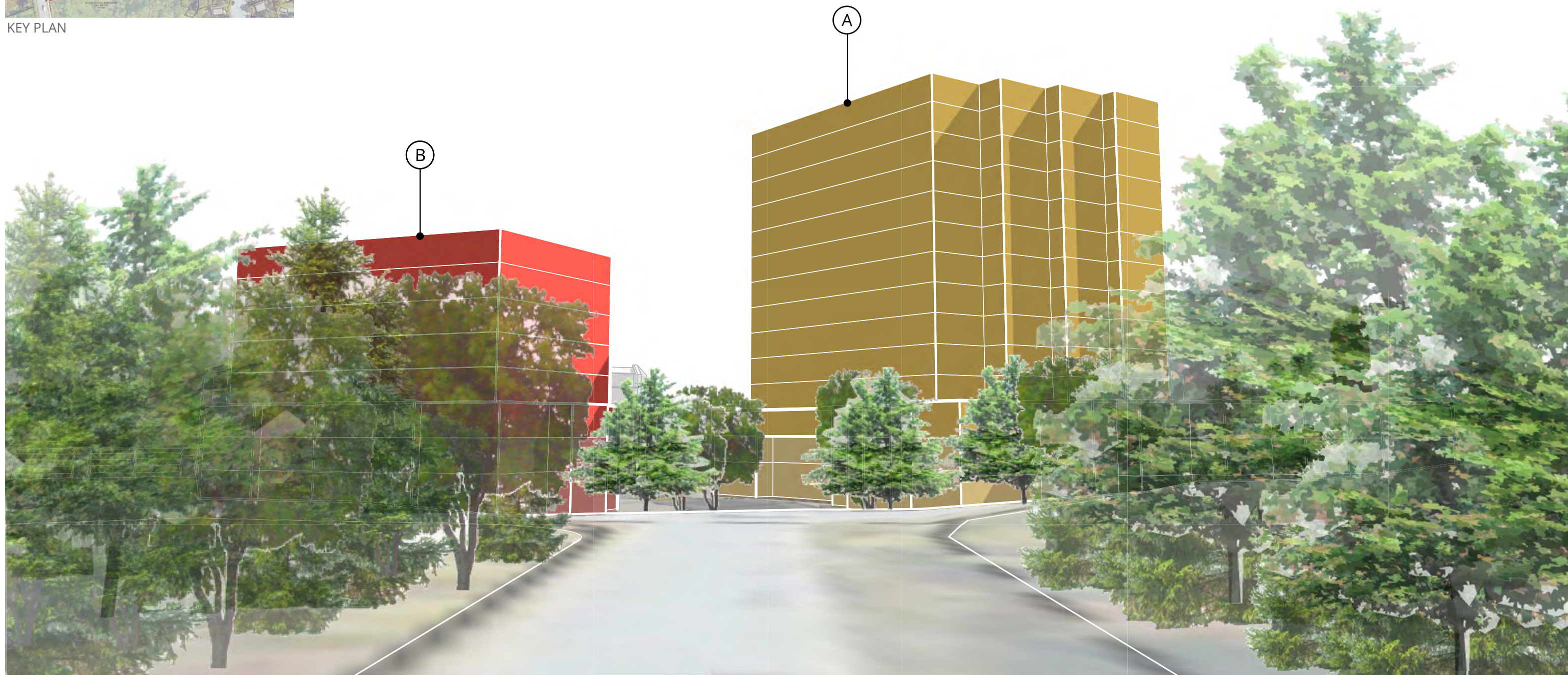


KEY PLAN



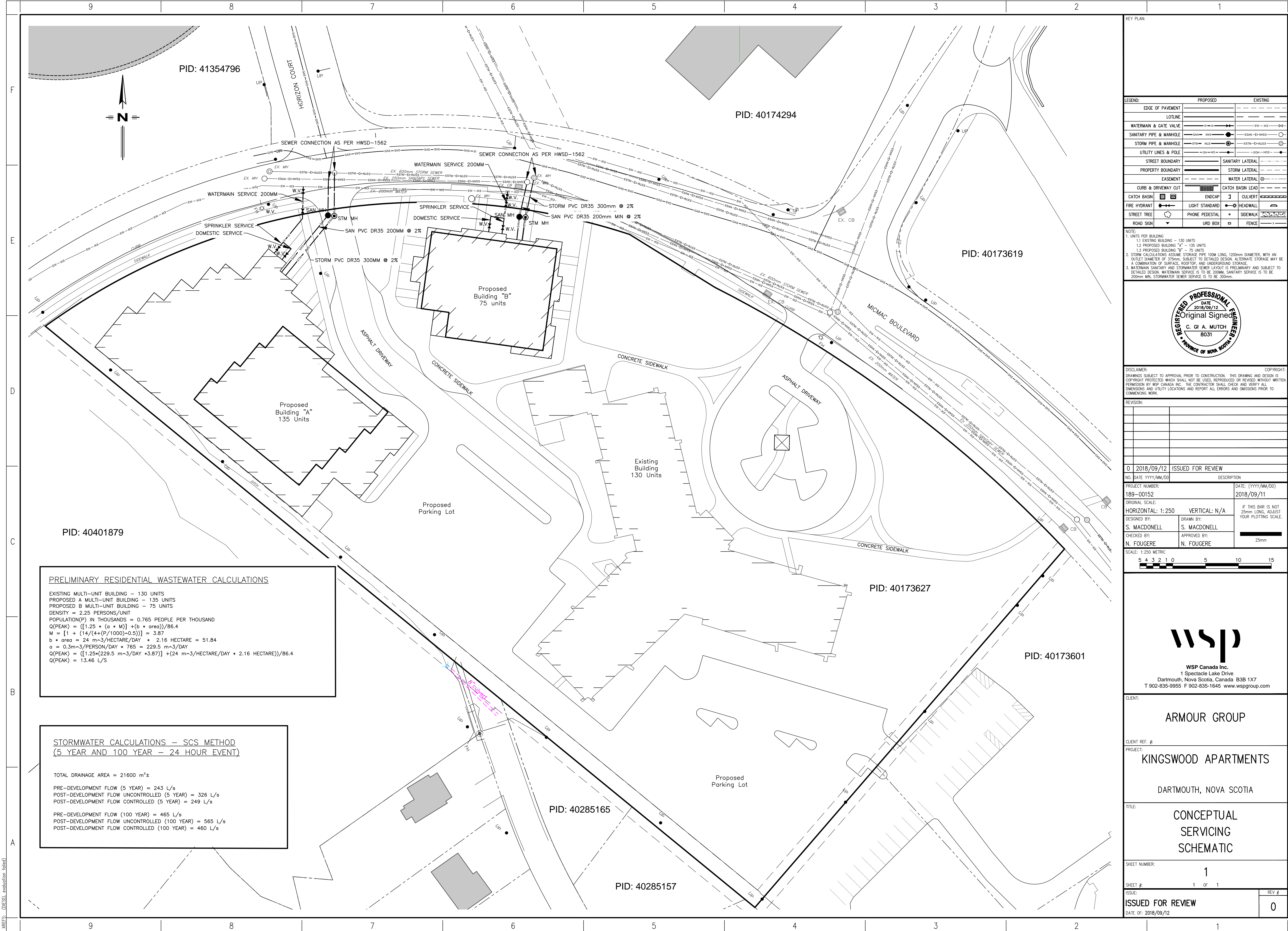


KEY PLAN



APPENDIX F:

Servicing Plan



KEY PLAN:

LEGEND:	PROPOSED	EXISTING
EDGE OF PAVEMENT		
LOTLINE		
WATERMAIN & GATE VALVE		
SANITARY PIPE & MANHOLE		
STORM PIPE & MANHOLE		
UTILITY LINES & POLE		
STREET BOUNDARY		
PROPERTY BOUNDARY		
EASEMENT		
CURB & DRIVEWAY OUT		
CATCH BASIN		
FIRE HYDRANT		
STREET TREE		
ROAD SIGN		

NOTE:

1. UNITS PER BUILDING

1.1 EXISTING BUILDING - 130 UNITS

1.2 PROPOSED BUILDING "A" - 135 UNITS

1.3 PROPOSED BUILDING "B" - 75 UNITS

2. STORM CALCULATIONS ASSUME STORAGE PIPE 100M LONG, 1200MM DIAMETER, WITH AN OUTLET DIAMETER OF 375MM. SUBJECT TO DETAILED DESIGN. ALTERNATE STORAGE MAY BE A COMBINATION OF SURFACE, ROOFTOP, AND UNDERGROUND STORAGE.

3. WATERMAIN, SANITARY AND STORMWATER LAYOUT IS PRELIMINARY AND SUBJECT TO DETAILED DESIGN. WATERMAIN SERVICE IS TO BE 200MM, SANITARY SERVICE IS TO BE 200MM MIN, STORMWATER SEWER SERVICE IS TO BE 300MM.

REGISTERED PROFESSIONAL ENGINEER

DATE: 2018/09/12

Original Signed

C. GI. A. MUTCH

8031

PROVINCE OF NOVA SCOTIA

DISCLAIMER:

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COPYRIGHT:

REVISION:

NO.	DATE	DESCRIPTION
0	2018/09/12	ISSUED FOR REVIEW

PROJECT NUMBER: 189-00152

DATE: 2018/09/11

ORIGINAL SCALE: HORIZONTAL: 1:250 VERTICAL: N/A

DESIGNED BY: S. MACDONELL

DRAWN BY: S. MACDONELL

CHECKED BY: N. FOUGERE

APPROVED BY: N. FOUGERE

SCALE: 1:250 METRIC

5 4 3 2 1 0 5 10 15

WSP

WSP Canada Inc.

1 Spectacle Lake Drive

Dartmouth, Nova Scotia, Canada B3B 1X7

T 902-835-9955 F 902-835-1645 www.wspgroup.com

CLIENT: ARMOUR GROUP

CLIENT REF. #:

PROJECT: KINGSWOOD APARTMENTS

DARTMOUTH, NOVA SCOTIA

TITLE: CONCEPTUAL SERVICING SCHEMATIC

SHEET NUMBER: 1

SHEET # 1 OF 1

ISSUE: ISSUED FOR REVIEW

DATE OF: 2018/09/12

REV # 0

PRELIMINARY RESIDENTIAL WASTEWATER CALCULATIONS

EXISTING MULTI-UNIT BUILDING - 130 UNITS
PROPOSED A MULTI-UNIT BUILDING - 135 UNITS
PROPOSED B MULTI-UNIT BUILDING - 75 UNITS
DENSITY = 2.25 PERSONS/UNIT
POPULATION(P) IN THOUSANDS = 0.765 PEOPLE PER THOUSAND
 $Q(PEAK) = [(1.25 * (a * M)) + (b * area)] / 86.4$
 $M = [1 + (14 / (4 + (P / 1000) - 0.5))] = 3.87$
 $b * area = 24 m^3 / HECTARE / DAY * 2.16 HECTARE = 51.84$
 $a = 0.3 m^3 / PERSON / DAY * 765 = 229.5 m^3 / DAY$
 $Q(PEAK) = [(1.25 * (229.5 m^3 / DAY * 3.87)) + (24 m^3 / HECTARE / DAY * 2.16 HECTARE)] / 86.4$
 $Q(PEAK) = 13.46 L / S$

STORMWATER CALCULATIONS - SCS METHOD
(5 YEAR AND 100 YEAR - 24 HOUR EVENT)

TOTAL DRAINAGE AREA = 21600 m²±

PRE-DEVELOPMENT FLOW (5 YEAR) = 243 L/s
POST-DEVELOPMENT FLOW UNCONTROLLED (5 YEAR) = 326 L/s
POST-DEVELOPMENT FLOW CONTROLLED (5 YEAR) = 249 L/s

PRE-DEVELOPMENT FLOW (100 YEAR) = 465 L/s
POST-DEVELOPMENT FLOW UNCONTROLLED (100 YEAR) = 565 L/s
POST-DEVELOPMENT FLOW CONTROLLED (100 YEAR) = 460 L/s

APPENDIX G:
Traffic Impact Statement

September 7, 2018

Mr. Blaise Morrison
Manager, Development & Planning
The Armour Group Limited

[Via Email: b Morrison@armourgroup.com]

**RE: Traffic Impact Statement
Kings Wood Apartments, Dartmouth, NS**

Dear Mr. Morrison:

Plans are being prepared for an infill development at the site of Kings Wood Apartments at 1000 Micmac Boulevard in Dartmouth, NS (PID 40173627). This is the Traffic Impact Statement (TIS) required to accompany the development application.

SITE DESCRIPTION AND PLANNED DEVELOPMENT

The site is currently developed with the existing Kings Wood Apartments building, containing approximately 130 units and approximately 130 spaces of surface parking for residents and visitors. The site is bounded by Micmac Boulevard in the north and east, existing apartment developments in the south, and HRM greenspace in the west.

The proposed development includes the construction of two additional apartment buildings (14-storey apartment 'Building A' and 8-storey apartment 'Building B'). These new buildings are expected to combine for a total of up to 210 units. No modifications are planned for the existing 130 unit apartment building (Kings Wood Apartments, See Figure 1). With development, there is expected to include approximately 300 parking spaces including surface and underground parking.



Figure 1 – Site Plan

DESCRIPTION OF EXISTING STREETS AND INTERSECTIONS

Micmac Boulevard (See Photos 1 and 2) is a 2-lane collector street that runs just north of the site and connects to Woodland Road, Mic Mac Mall, and Highway 111 (at Exit 5). Traffic volume data provided by HRM Traffic Management indicate the two-way volume on Micmac Boulevard in this area is approximately 340 and 810 vehicles during the AM and PM peak hours, respectively. In the vicinity of the site, there is concrete sidewalk on the south (site) side of the street. The posted speed limit is 50km/h.



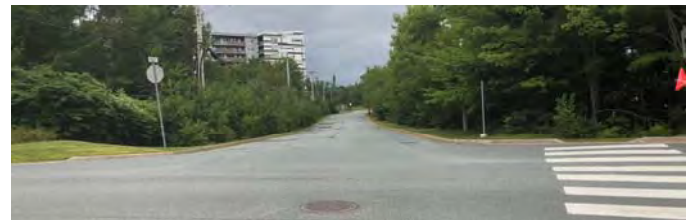
**Photo 1 – Looking Left (to the west) on
Micmac Boulevard from the site access**



**Photo 2 – Looking right (to the east) on
Micmac Boulevard from the site access**

Horizon Court (See Photo 3) is a 2-lane private street that runs north from Micmac Boulevard and serves as a driveway for existing apartments.

The intersection of Micmac Boulevard at Horizon Court / Site Driveway (See Photos 1, 2, and 3) operates as a four-legged intersection with STOP control on Horizon Court and the site driveway with free flow traffic on Micmac Boulevard. There is an existing marked crosswalk crossing Micmac Boulevard at the east leg of the intersection.



**Photo 3 – Looking north from the site
toward Horizon Court**

The intersection of Micmac Boulevard at Mic Mac Mall (the Bay) / Kings Wood Apartments (See Photo 4) is a four-legged signalized intersection with signalized pedestrian crossings at the north and east approaches.



**Photo 4 – Looking west along Micmac Boulevard
toward the signalized site access (the site is on the left)**

SITE ACCESS

Vehicular access to the developed site will continue to be via the driveway at Micmac Boulevard opposite Horizon Court (See Photos 1 and 2) with secondary site access to Micmac Boulevard opposite the signals at Mic Mac Mall (near The Bay, See Photo 4). There is a shrub that should be removed or pruned and growth monitored to improve visibility of eastbound traffic on Micmac Boulevard approaching the Horizon Court access (See Photo 1).

PUBLIC TRANSIT

The site is well served by public transit with stops in each direction immediately in front of the site (See Photo 2). The site is also within 200 metres of the Micmac Terminal (See Photo 5) and its six Halifax Transit routes (#10, 54, 55, 56, 66, and 72).



**Photo 5 – Looking east from the site toward
the Micmac Terminal**

TRIP GENERATION

Trip generation estimates using both the average rate (top section, Table 1) and fitted curve equations (bottom section, Table 1) have been included for comparison, however, the average rates have been used. Trip generation estimates, prepared using published rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, Washington, 2017) for the new development units are included in Table 1. It is estimated that the new development will generate:

- 76 two-way trips (20 entering and 56 exiting) during the AM peak hour; and,
- 92 two-way trips (56 entering and 36 exiting) during the PM peak hour.

Table 1 – Trip Generation Estimates

Land Use	Units ³	Trip Generation Rates				Trips Generated ⁴			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Trip Generation Estimate for new Residential Development (Average Rates) ¹									
Multifamily Housing (Mid-Rise) (Land Use 221)	210	0.09	0.27	0.27	0.17	20	56	56	36
Trip Generation Estimate for new Residential Development (Fitted curve equations) ²									
Multifamily Housing (Mid-Rise) (Land Use 221)	210	Fitted Curve Equations have been Used				18	52	55	35
Notes: 1. Trip generation rates are 'vehicles per hour per unit' for the indicated land use, prepared using published rates from <i>Trip Generation, 10th Edition</i> (Institute of Transportation Engineers, Washington, 2017). 2. Trip generation rates use the fitted curve equation for indicated Land Use from <i>Trip Generation, 10th Edition</i> (Institute of Transportation Engineers, Washington, 2017). 3. Units are number of residential units. 4. Vehicles per hour for peak hours									

SUMMARY

- Plans are being prepared for the expansion of the Kings Wood Apartments at 1000 Micmac Boulevard in Dartmouth, NS (PID 40173627) to include up to an additional 210 apartment units.
- Vehicular access to the site will continue to be from Micmac Boulevard opposite Horizon Court. Access to the existing apartments within the site will continue to be via the driveway at Horizon Court and at the signalized intersection at Mic Mac Mall.
- Using published rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, Washington, 2017), it is estimated that the (up to 210) additional apartment units will generate about 76 two-way trips (20 entering and 56 exiting) during the AM peak hour and 92 two-way trips (56 entering and 36 exiting) during the PM peak hour.

CONCLUSION

- With convenient access to transit (Micmac Terminal) and adjacent shopping (Mic Mac Mall), the trips generated by the proposed apartment units are not expected to have a significant impact on the level of performance of Mic Mac Boulevard or on other nearby streets and intersections.

If you have any questions or comments, please contact me by email at patrick.hatton@wsp.com or by telephone at 902-536-0954.

Sincerely,

Original Signed

Patrick Hatton, P.Eng.
Traffic & Transportation Engineer
WSP Canada Inc.

