

Petrie's Landing III

Design Brief
7 June 2024

BDP.
Quadrangle

FOTENN
Planning + Design

brigil

Contents

1	Site, Context and Analysis		Page 3
2	Policy Direction		Page 6
3	Design Evolution		Page 8
4	Project Description		Page 11
5	Design Research		Page 14
6	Sun Shadow Studies		Page 32
7	Appendix		Page 64

Existing Site Conditions & Surrounding Areas

1 | Site, Context and Analysis

The site is located between Jeanne-d’Arc Boulevard to the north and Queensway to the south and is surrounded by suburban neighbourhoods and local businesses. The site is currently vacant and has the opportunity to transform into a lively mixed-use neighbourhood that increases residential density and contributes to the local community.



Looking Southeast on Jeanne-d’Arc Blvd



Looking West from Centre des métiers Minto



Looking South to Taylor Creek



Looking Northwest on Queensway

Opportunities & Constraints

1 | Site, Context and Analysis

LEGEND

5 & 10 Minute Walk (400m & 800m)

Contextual Development | Proposed

600m Transit Area Boundary

Protected Major Transit Area Boundary

Active Transportation Bridge
(Schedule C - OCSP)

Transit Bus Route

- ① 1009 Trim Road (32, 28 & 24-ST)
93780633 Quebec Inc.
- ② 3277 St. Joseph Boulevard (9-ST)
Landric Homes
- ③ 3459 and 3479 St. Joseph Boulevard (6-ST)
8417709 Canada Inc.
- ④ 1154, 1172, 1176, 1180 and 1208 Old Montreal
Road (2-4-ST)
DCR Phoenix Group of Companies



OTTAWA OFFICIAL PLAN
NEIGHBOURHOOD & GREEN SPACE



GENERAL DISCLAIMER: For the purpose of this preliminary study, the property lines shown are approximate. The information has been obtained from the City of Ottawa online property data maps.

Context Plan

1 | Site, Context and Analysis

LEGEND

- Subject Site
- Floodplain
- 15m Setback from Top of Slope
- Potential Location for POPs (Schedule C - OCSP)
- Multi-purpose Trail

OTTAWA ZONING BY-LAW 2008-250

- DR - Development Reserve Zone**
- Permitted uses: Agriculture, environmental preserve, group home, one detached dwelling accessory, park, secondary dwelling unit
 - Not permitted: new buildings
 - Max. HT 11m
 - Max. 30% lot coverage

- O1 - Parks and Open Space Zone**
- Permitted uses: Environmental preserve, education, park, urban agriculture

OTTAWA OFFICIAL PLAN

- Policy Area: Suburban
 - Land Use Corridor: Neighbourhood and Open Space

ORLEANS CORRIDOR SECONDARY PLAN (OCSP)

- Land Use Neighbourhood : Station Periphery/Core
 - mid-rise with opportunity for some high-rise
- Max. HT 9 & 40-ST

OTTAWA HIGH RISE GUIDELINES

- Max. 750sm tower floor plate (Residential)
- Max. 2000sm floor plate (Office)
- Min. 23m tower separation (29-ST & below)
- Min. 25m tower separation (30-ST+)
- Min. 1.5m-3m podium to tower stepback, including balconies

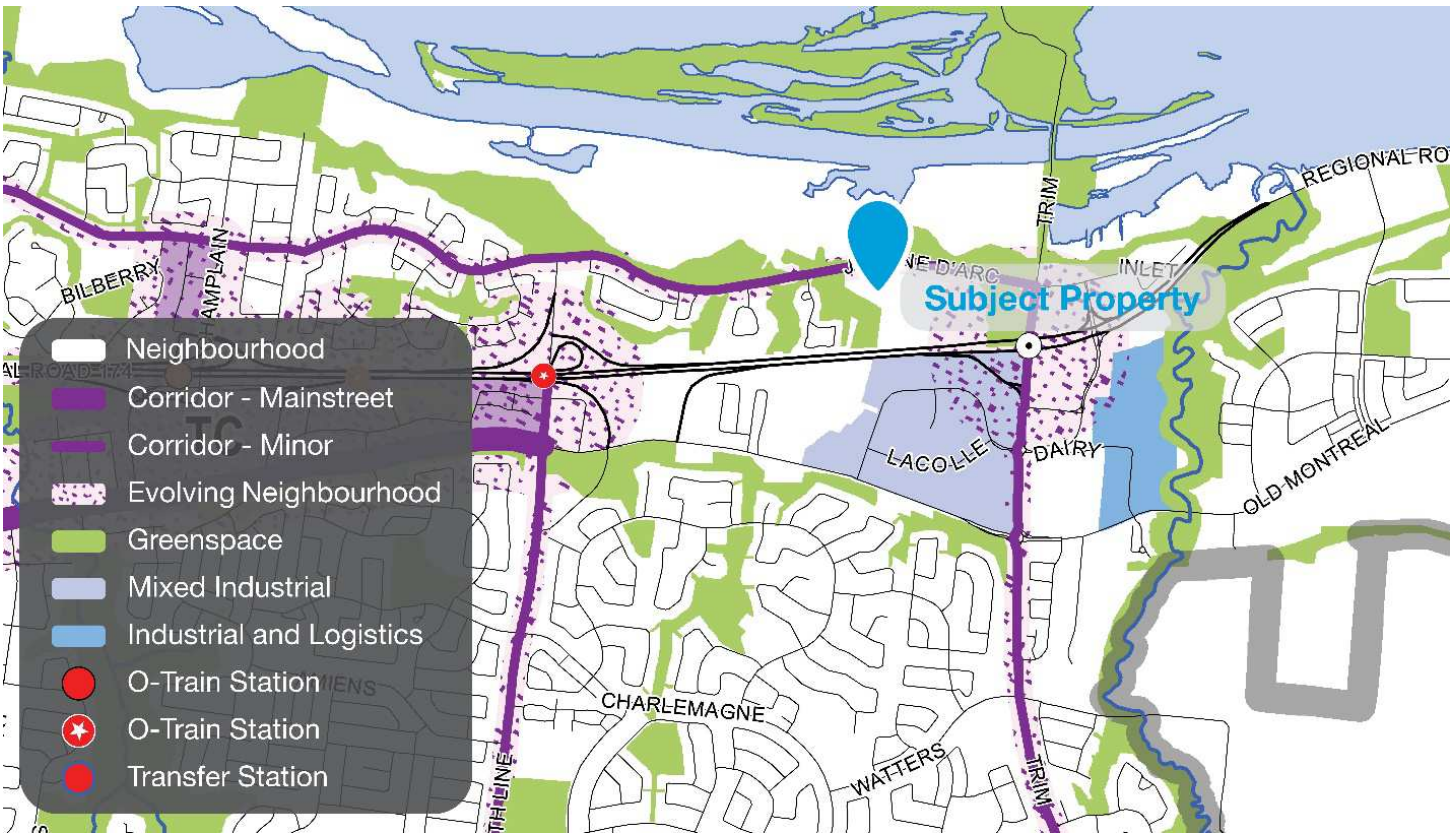


GENERAL DISCLAIMER: For the purpose of this preliminary study, the property lines shown are approximate. The information has been obtained from the City of Ottawa online property data maps.

City of Ottawa Official Plan

2 | Policy Direction

- / The proposed development is consistent with the policies of the Official Plan as they relate to growth management and intensification, as outlined in Section 3.2, policies 2, 3, 4, and 8. The proposed development provides a new residential community and represents residential and non-residential intensification of an undeveloped parcel of land within the urban area of the City. The proposed development will contribute to creating a 15-minute neighbourhood, which will include both residential and non-residential uses, as well as parkland and connections to nearby public transit. The proposed development exceeds the minimum density requirements, while also providing an opportunity for large-household dwellings to be provided (although this will be determined through a future Site Plan Control application).
- / The subject property is located within the Suburban Transect and is split-designated “Minor Corridor” and “Neighbourhood” with the “Evolving Overlay”. Conforming with the policies of Section 5.4 and 6.3, the proposed development will seed the conditions to support a wide variety of housing types within each subdivision block. The proposed development will include buildings with a range of heights from low-rise to high0-rise, consistent with the height direction of the Orleans Corridor Secondary Plan. Future development is intended to frame the proposed new public street and Jeanne d’Arc Boulevard, creating an active public realm and street frontage. The proposed development as currently demonstrated represents a density of approximately 304 dwelling units per gross hectare.
- / The subject property is within the Trim Protected Major Transit Station Area (PMTSA). The proposed development exceeds the required density targets as outlined in Table 3a, as the proposed development achieves a density of 304 dwelling units per gross hectare (429 units per net hectare). Despite achieving the proposed density target, the proposed development does not meet the required 70 percent lot coverage as required in Policy 4(b) of Section 6.1.2. The proposed development achieves a lot coverage of 25% when removing the proposed public street and proposed park block.



City of Ottawa Official Plan - Urban Design Direction

- / Policies of Section 4.6 which influence the proposed development include:
 - / Policy 3, 4, and 5 of Section 4.6.2;
 - / Policy 2 of Section 4.6.3;
 - / Policy 1, 2, 3, and 4 of Section 4.6.5;
 - / Policy 2, 3, 4, 5, 6, 7, 8, 9, and 10 of Section 4.6.6.

City of Ottawa Orleans Secondary Plan

2 | Policy Direction

- / The subject property is located within the Trim Station Area and has been split-designated “Station Core”, “Station Periphery”, and “Neighbourhood” on Schedule A – Designation Plan in the Orleans Corridor Secondary Plan.
- / The portion of the subject property that has been designated as Station Core is guided by the policies of Section 5.1. All buildings greater than 6 storeys have been located within the portion of the subject property designated Station Core, with high-rise buildings primarily south of the new private street that bisects the new public street, consistent with the policy direction of the Station Core. The proposed public street that is fully located within the Station Core designation will be designed in accordance with City right-of-way standards, ensuring there is adequate space to accommodate pedestrians, cyclists and vehicles. The Station Core Area has also been designed to have shorter block lengths, contributing to pedestrian and cyclist connectivity and permeability throughout the site.
- / The vision for the Station Periphery is to provide for high density pedestrian-oriented development of neighbourhoods in close proximity to the station in a 15-minute neighbourhood. The applicable policies of Section 5.2 requires the proposed development to locate low- and mid-rise buildings ranging from four (4) to six (6) storeys and the new public park within the Station Periphery designation. The development block that will contain the low- and mid-rise buildings will be accessible via new private streets, connected to both Jeanne d’Arc Boulevard North and the new public street that will traverse through the subject property.
- / A small portion of the subject property on the west side of Taylor Creek has been designated Neighbourhood. No development is proposed on this portion of the subject property.
- / The proposed development is located in the Trim Station Area. The applicable policies are intended to promote intensification around the O-Train stations, particularly on key sites designated as Station Core and Station Periphery, where high-density mixed-use development can be built on vacant or underutilized properties within proximity to the station.



- / The Secondary Plan has established policies that apply to the entire planning area, and the applicable policy sections include:
 - / Section 4.2 – Built Form & Public Realm
 - / Section 4.6 – High-Rise
 - / Section 4.7 – Mid-Rise
 - / Section 4.9 – Street Network
 - / Section 4.10 – Parks and POPS
 - / Section 4.11 – Vehicular Parking
 - / Section 4.12 – Bicycle Parking
 - / Section 4.20 – Demonstration Plan

Site Plan & Massing Options

3 | Design Evolution



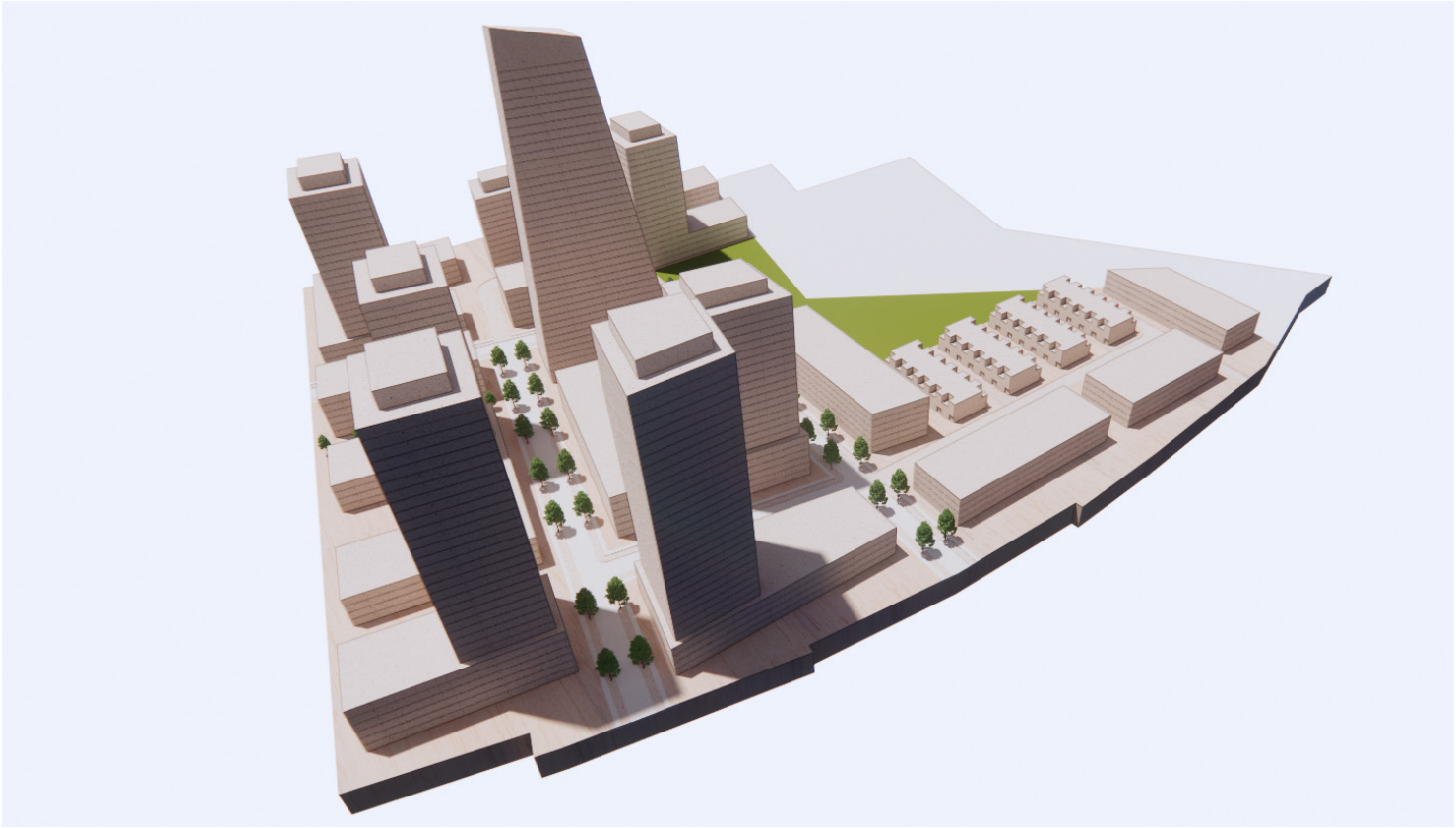
2017

Site Plan & Massing Options

3 | Design Evolution



PERSPECTIVE N



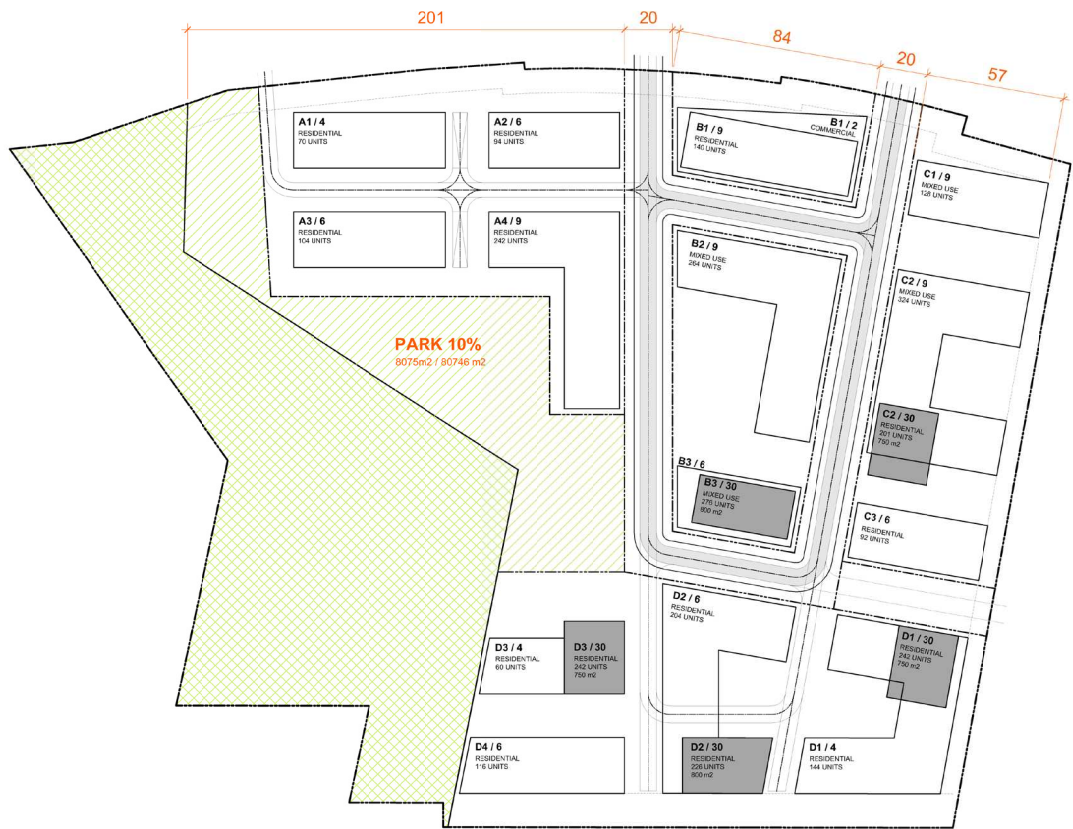
PETRIES III 2022-02-21

brgil

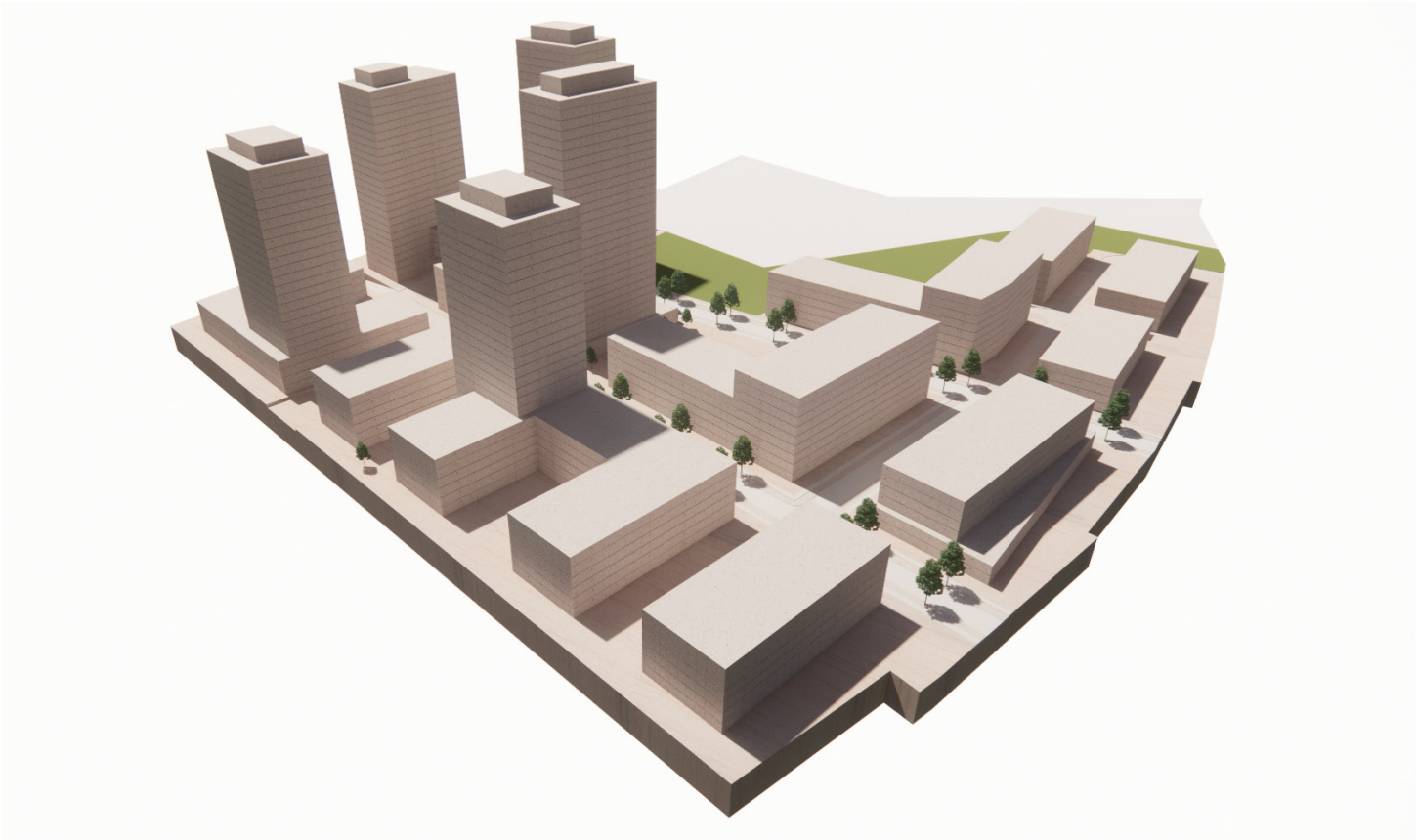
February 2022

Site Plan & Massing Options

3 | Design Evolution



PERSPECTIVE N.W.



PETRIES III 2022-04-22

brgil

April 2022

Demonstration Plan

4 | Project Description

Tower Separation Dimensions

Tower Separation Dimensions

Phasing Line

Future Connection

Public Road

Private Road

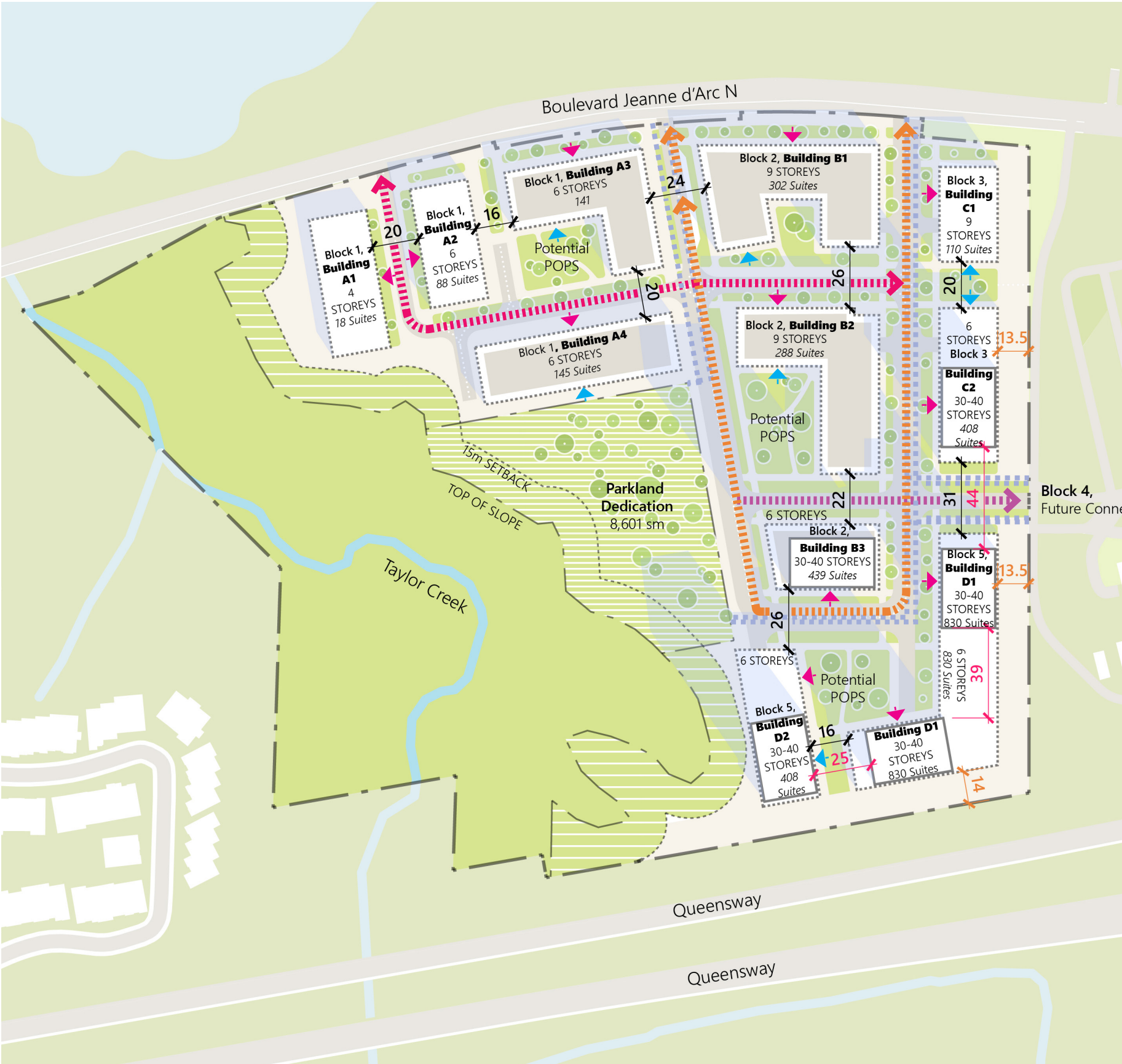
Primary Entrance

Secondary Entrance

Non-Residential Podium

Block	Use*	Unit Total	Gross Floor Area Total
Block 1 "A" buildings	Residential Low-Rise Residential / Mixed-Use Mid-Rise	392	39,150 m ²
Block 2 "B" buildings	Residential / Mixed-Use Mid-Rise Residential / Mixed-Use High-Rise	1,029	82,795 m ²
Block 3 "C" buildings	Residential / Mixed-Use Mid-Rise Residential / Mixed-Use High-Rise	518	41,036 m ²
Block 5 "D" buildings	Residential / Mixed-Use High-Rise	1,238	96,654 m ²
Total		3,177 units	259,635 m ²

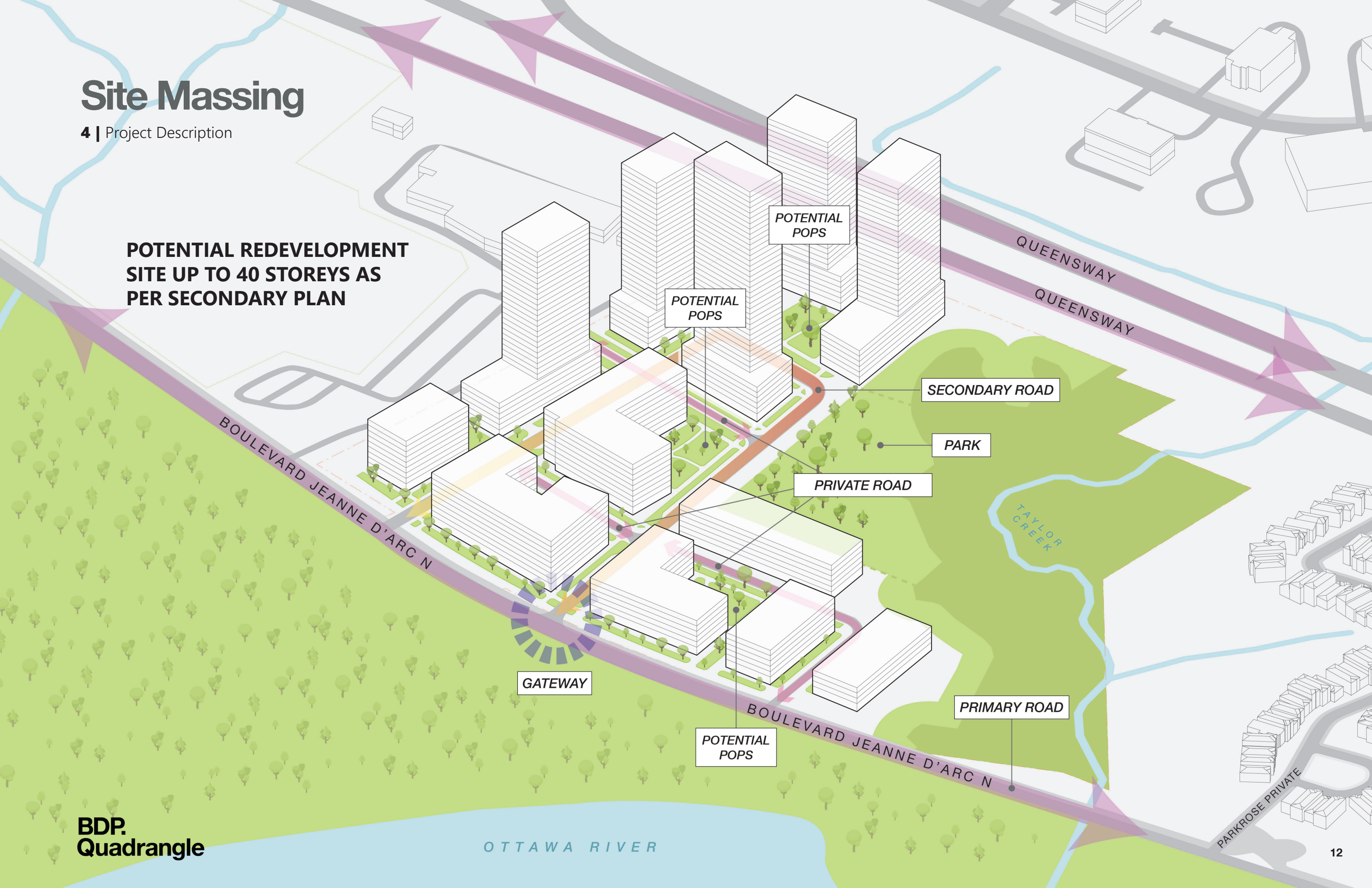
*the proposed uses are subject to change, and through the refinement of the Draft Plan of Subdivision, the location of non-residential uses will be confirmed.



Site Massing

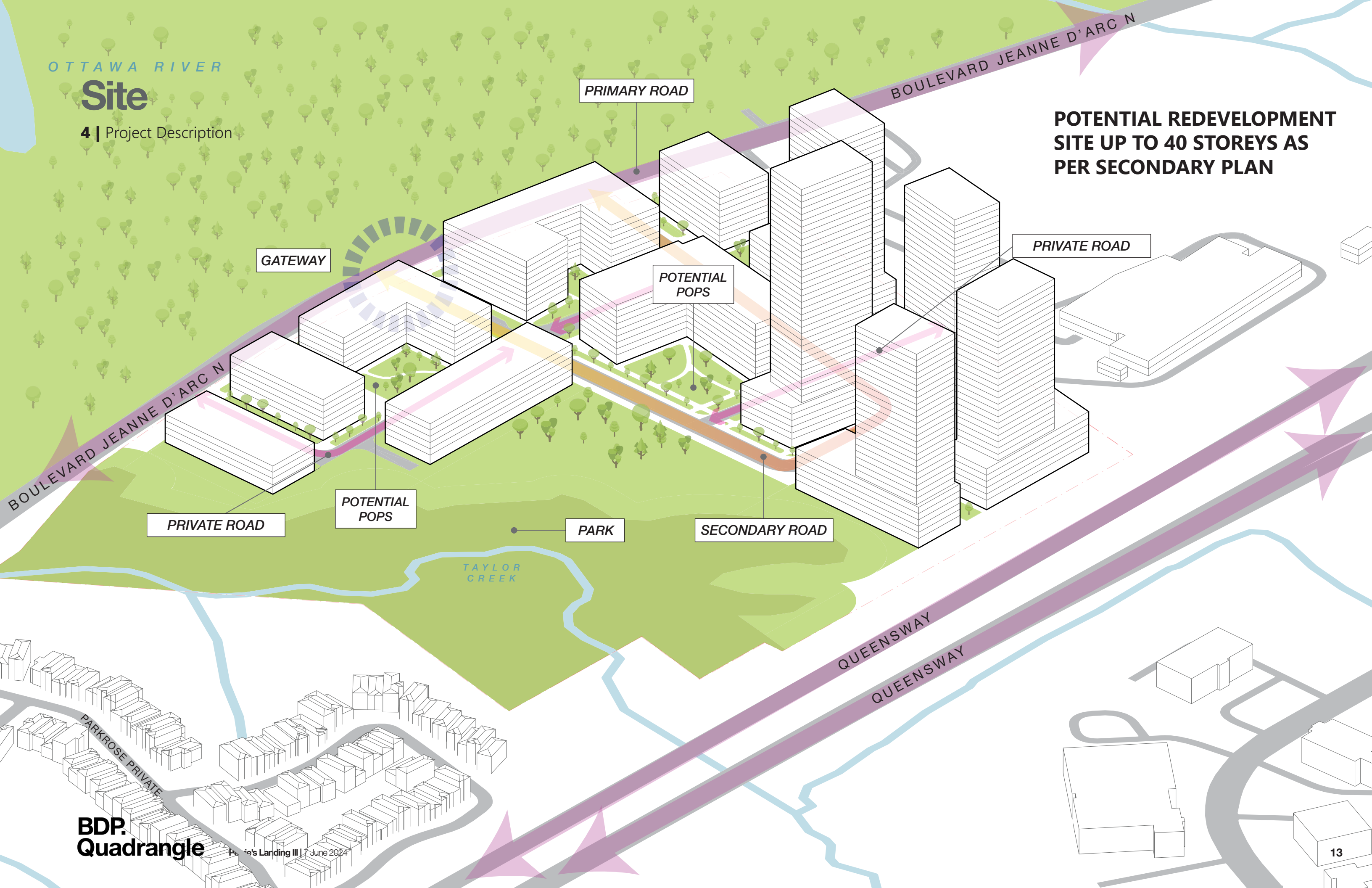
4 | Project Description

POTENTIAL REDEVELOPMENT
SITE UP TO 40 STOREYS AS
PER SECONDARY PLAN



Site

4 | Project Description



**POTENTIAL REDEVELOPMENT
SITE UP TO 40 STOREYS AS
PER SECONDARY PLAN**

Concept Plan

5 | Design Research

Petrie's Landing III has potential to create a mixed-use walkable development that introduces commercial and residential areas, open landscape areas, and create a variety of public spaces that foster a community atmosphere. The edges of the site have the opportunity to create frontages along Jeanne-D'Arc Boulevard and activate the streetscape. Within the site itself new blocks and buildings are organized with higher density on the south by the Queensway and transition to mid-rise buildings along Jeanne-D'Arc Boulevard. The massing strives to maximize frontage and create a hierarchy in the site. The towers are arranged to provide generous separations which ensure views and natural light for both the residents of the towers and to allow sun light and airflow to adequately pass through the towers to the public realm. The network of sidewalks and various open spaces and parks encourage pedestrian movement, which generates more commercial activity for new commercial spaces and frontages which connect and attract pedestrians to the new developments within the site.

- Tower Separation Dimensions
- Tower Separation Dimensions
- Phasing Line



Public vs. Private Roads

5 | Design Research

The site introduces three entrances from Jeanne d’Arc Boulevard. A new public road that loops into the development that the majority of people entering the site will use. Two new private streets will connect the site to the adjacent property to the east in a future scenario. The streets will be designed to enhance the streetscape and contribute to maintaining safety within the development. Parking will be provided below grade and will be publicly accessible.



Landscape + Public Space

5 | Design Research

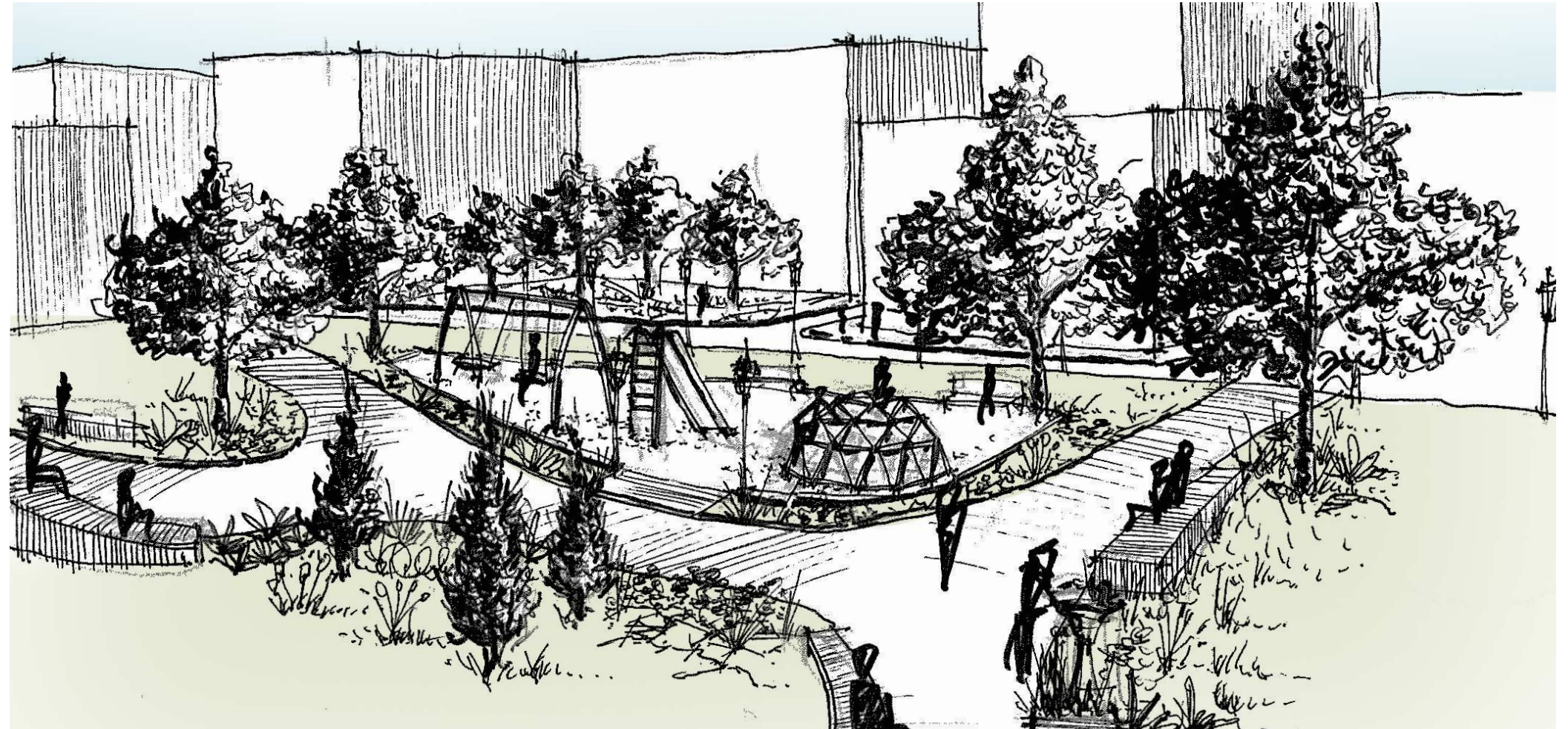
The landscape and public spaces are made up of a variety of typologies that relate to the planned character and use of their adjacencies. All proposed open spaces should be designed to encourage use throughout all seasons by providing weather protection and flexibility to support seasonal programming and events. The Public Realm should be designed to focus on placemaking and creating active and vital spaces that provide for, and encourage, the activities that will occur daily and seasonally. Flexibility is required to allow for future potential opportunities to support new mobility infrastructure and technology.



Approach to Open Space

5 | Design Research

Open spaces provides important opportunities for recreation and social interaction. Some desired uses may include passive recreation, active recreation, spaces for cultural events, playgrounds and picnic areas. The open spaces should be designed with a focus on accessibility, inclusivity and flexibility. Open spaces should be designed to be well-connected to streets, buildings, and other open spaces. This might involve designing the open space to function as a greenway or linear park that connects different neighborhoods or districts within the development. The open space should also be designed with ecological sustainability in mind. This might involve incorporating features such as rain gardens, bioswales, green roofs to manage stormwater, using native plants to provide habitat for wildlife, or incorporating sustainable design strategies such as permeable paving or energy-efficient lighting.



Complete Streets

5 | Design Research

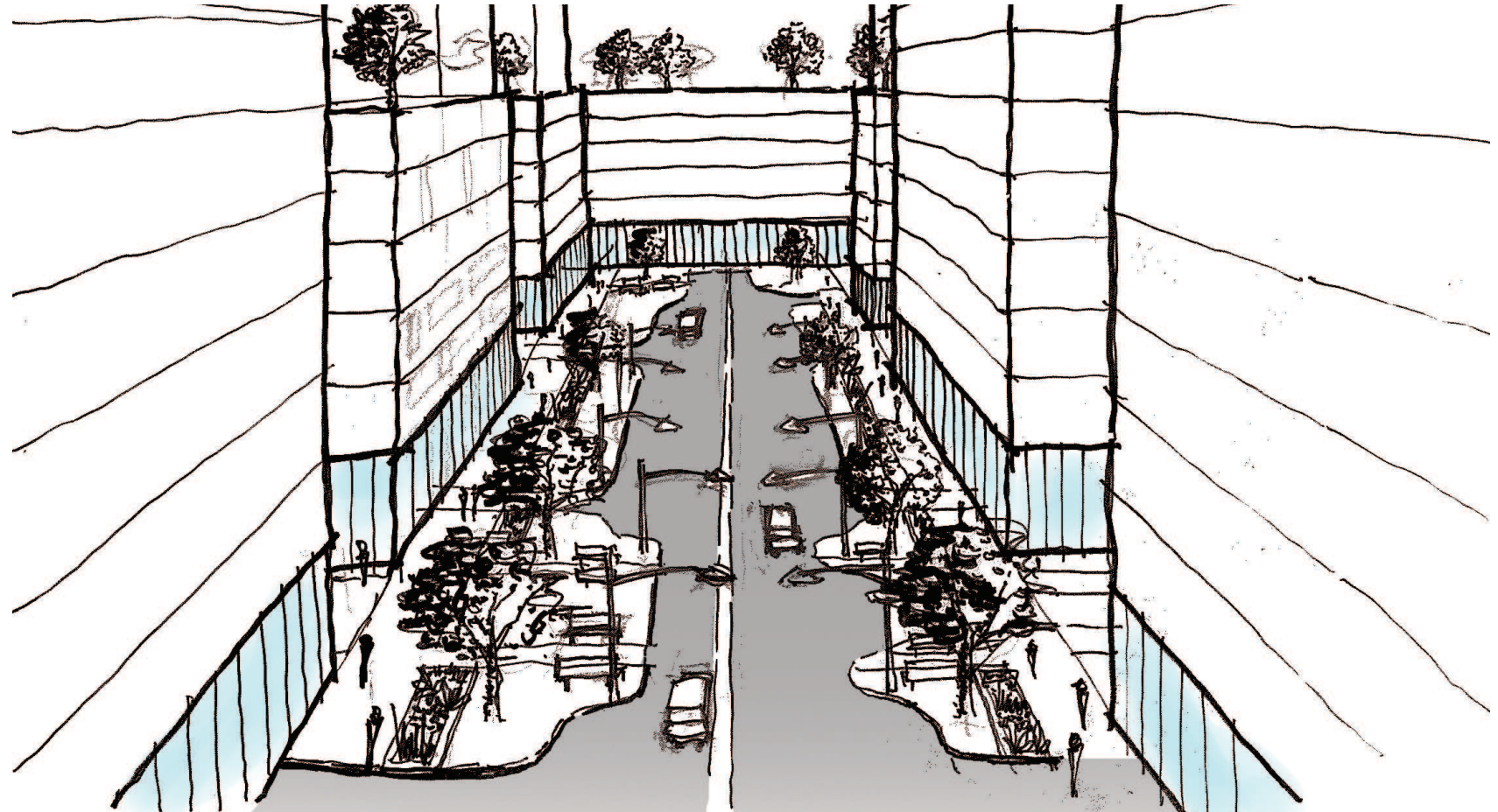
Complete streets are streets that are designed and operated to be safe, comfortable, and convenient for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Safety is a critical consideration when designing complete streets. This might involve adding traffic calming measures, such as speed humps or chicanes, to slow down traffic, as well as adding lighting, improving visibility, and reducing the number of conflict points between users. Dedicated bike lanes, sidewalks, and crosswalks, as well as reducing travel lane widths or adding medians to slow traffic, increase the safety of pedestrians and cyclists. Complete streets should be designed to be accessible to all users, regardless of age, ability, or income. This might involve adding curb ramps, tactile warning strips, and other features to assist those with disabilities, as well as designing sidewalks and crosswalks to accommodate strollers, wheelchairs, and mobility devices. Complete streets can also incorporate green infrastructure elements, such as trees, rain gardens, or bioswales, to manage stormwater and provide ecological benefits. These elements can also help create a more attractive and pleasant streetscape. The goal is to create streets that are safe, accessible, and comfortable for all users, and that support a vibrant and sustainable community.



Approach to Streetscape

5 | Design Research

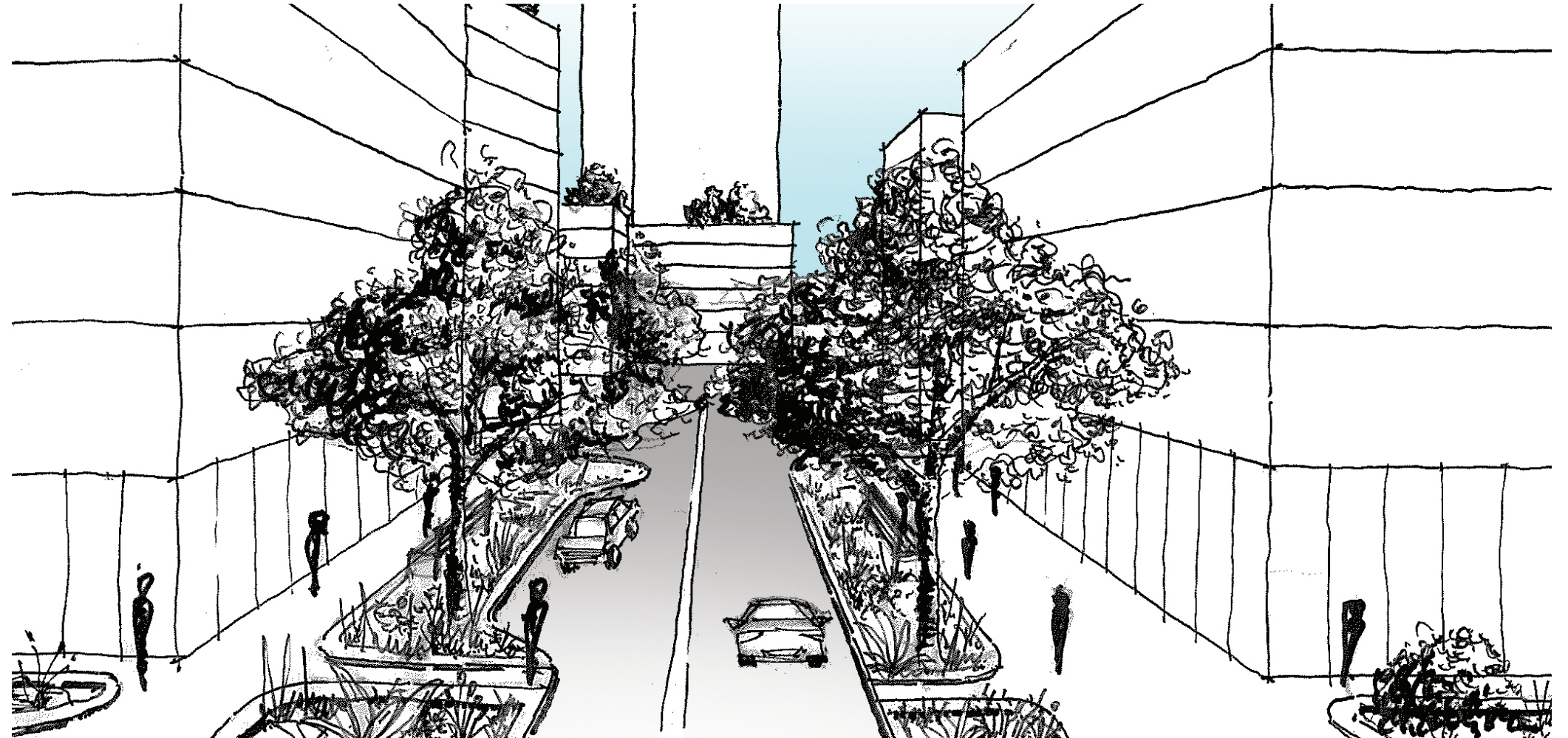
The streetscape is an important aspect of the development as it shapes the overall character of the community. The streetscape should be designed with a pedestrian orientation in mind, it should be welcoming, accessible, and safe for pedestrians. This might include features such as wide sidewalks, street trees, benches, lighting, and wayfinding signage. In addition to accommodating pedestrians, the streetscape should also accommodate other forms of active transportation, such as bicycling and scootering. This might include bike lanes, bike parking, and dedicated spaces for shared mobility devices. The streetscape should be designed to accommodate a variety of active ground-floor uses, such as retail, offices and amenities. The goal is to create a vibrant, safe, and welcoming environment that supports a variety of activities and uses, and that reflects the values and aspirations of the community.



Approach to Gateway

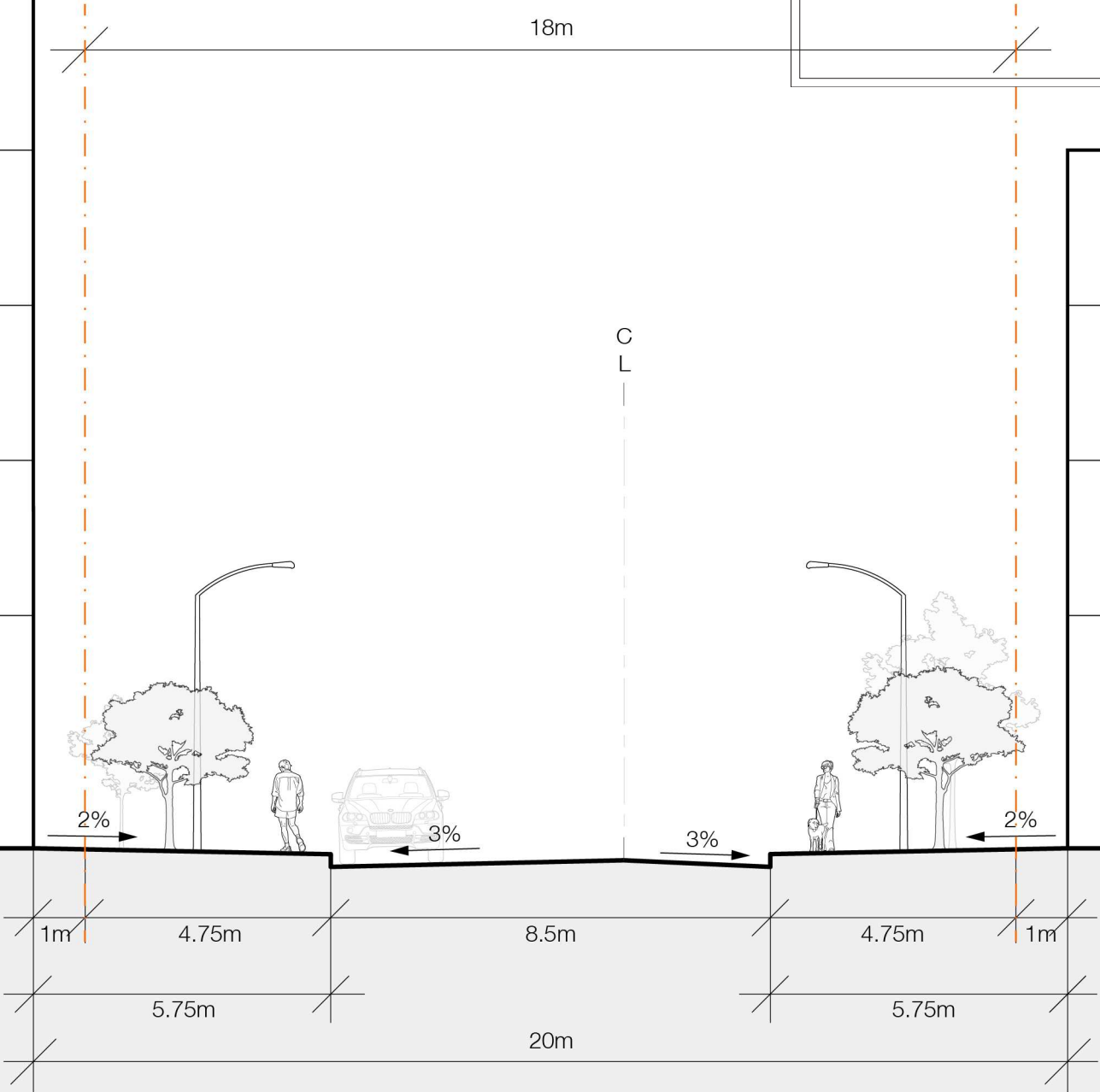
5 | Design Research

The Gateway is one of the primary entry points to the site and is likely to form the first phase of development and will therefore act as a preview of the community. Enhanced streetscape conditions will be a natural focal point, encouraging and drawing pedestrians and commuters to the area. The mix of complementary programs such as office, retail, and residential uses within the site will become an integral part of the day-to-day life of the community.

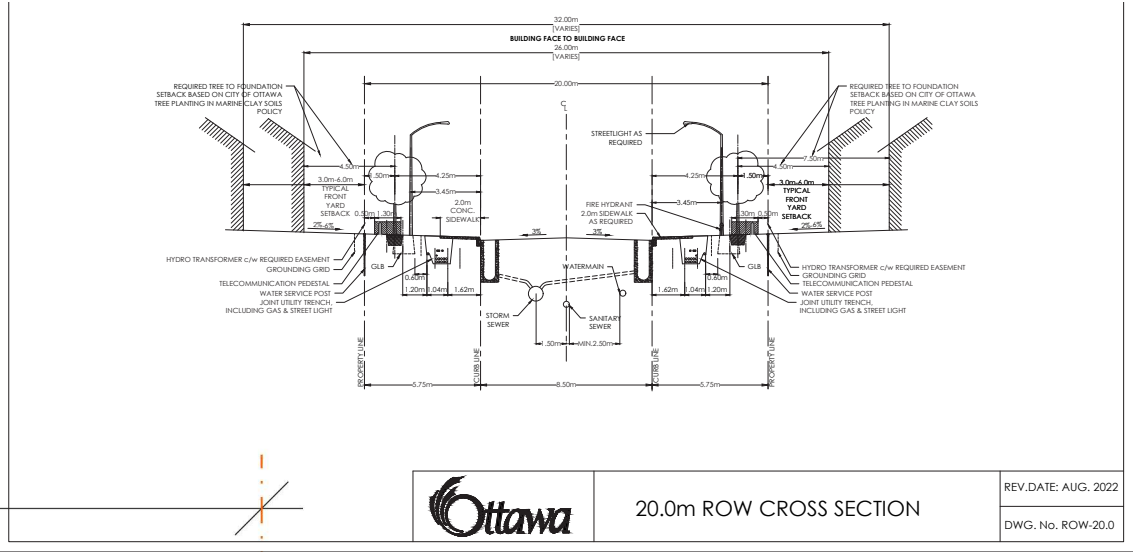


Site Sections

5 | Massing - Height, Density & Transition

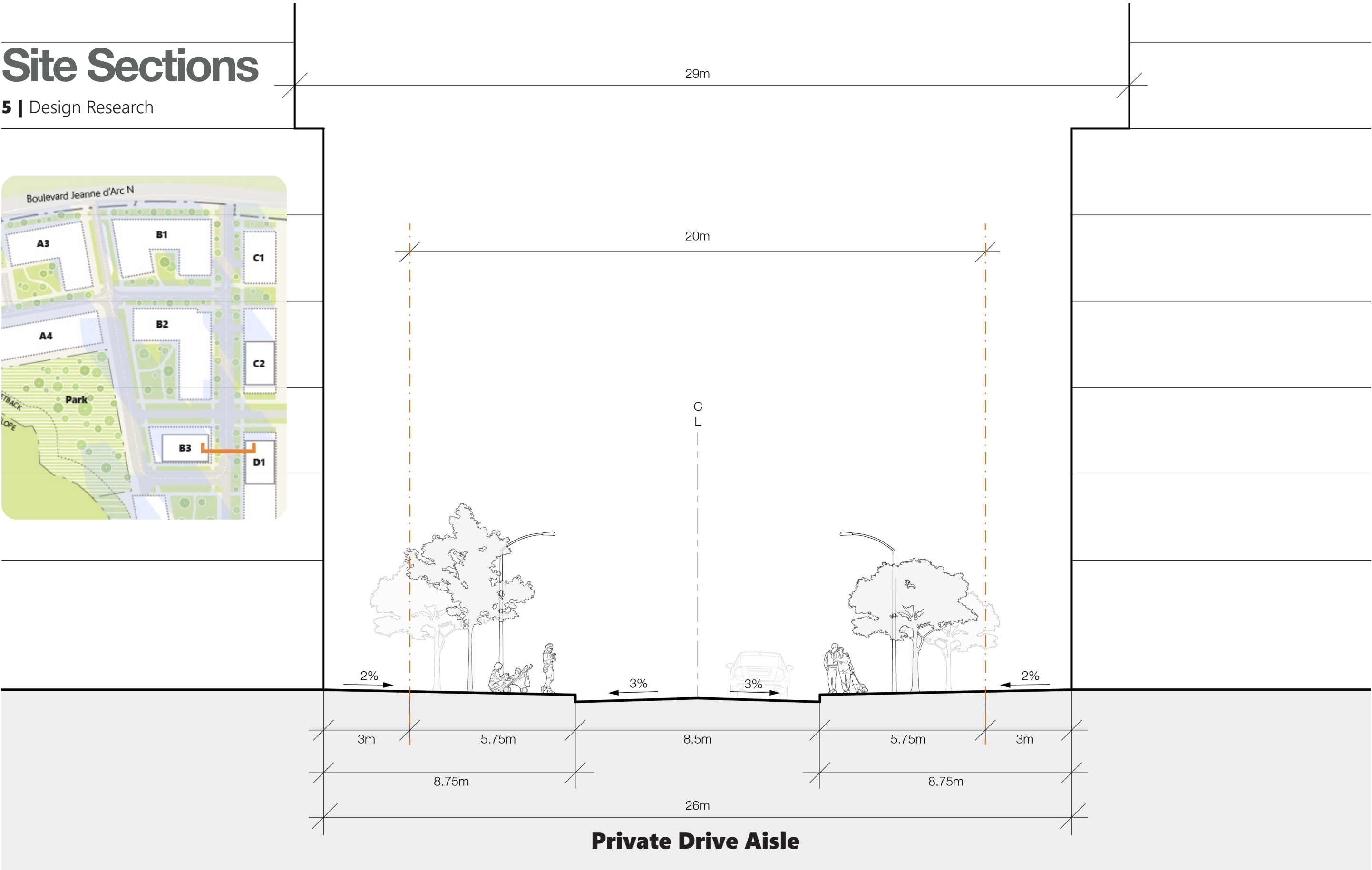
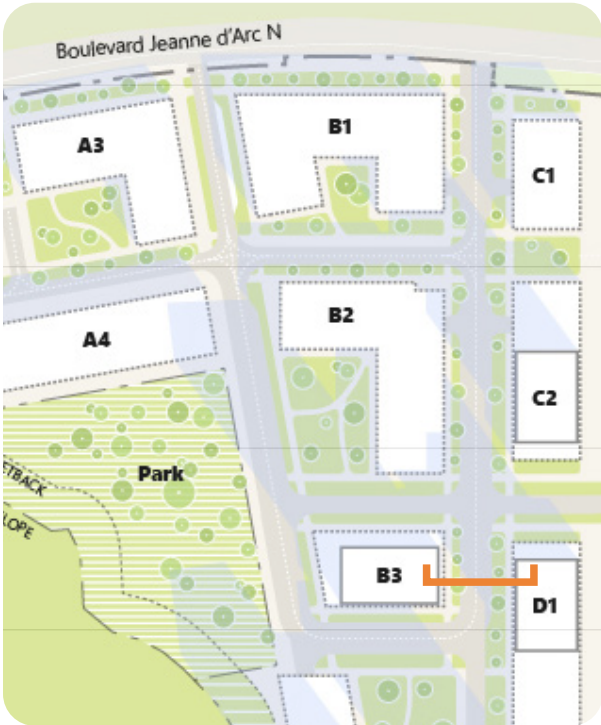


Public Road



Site Sections

5 | Design Research



Approach to Podium

5 | Design Research

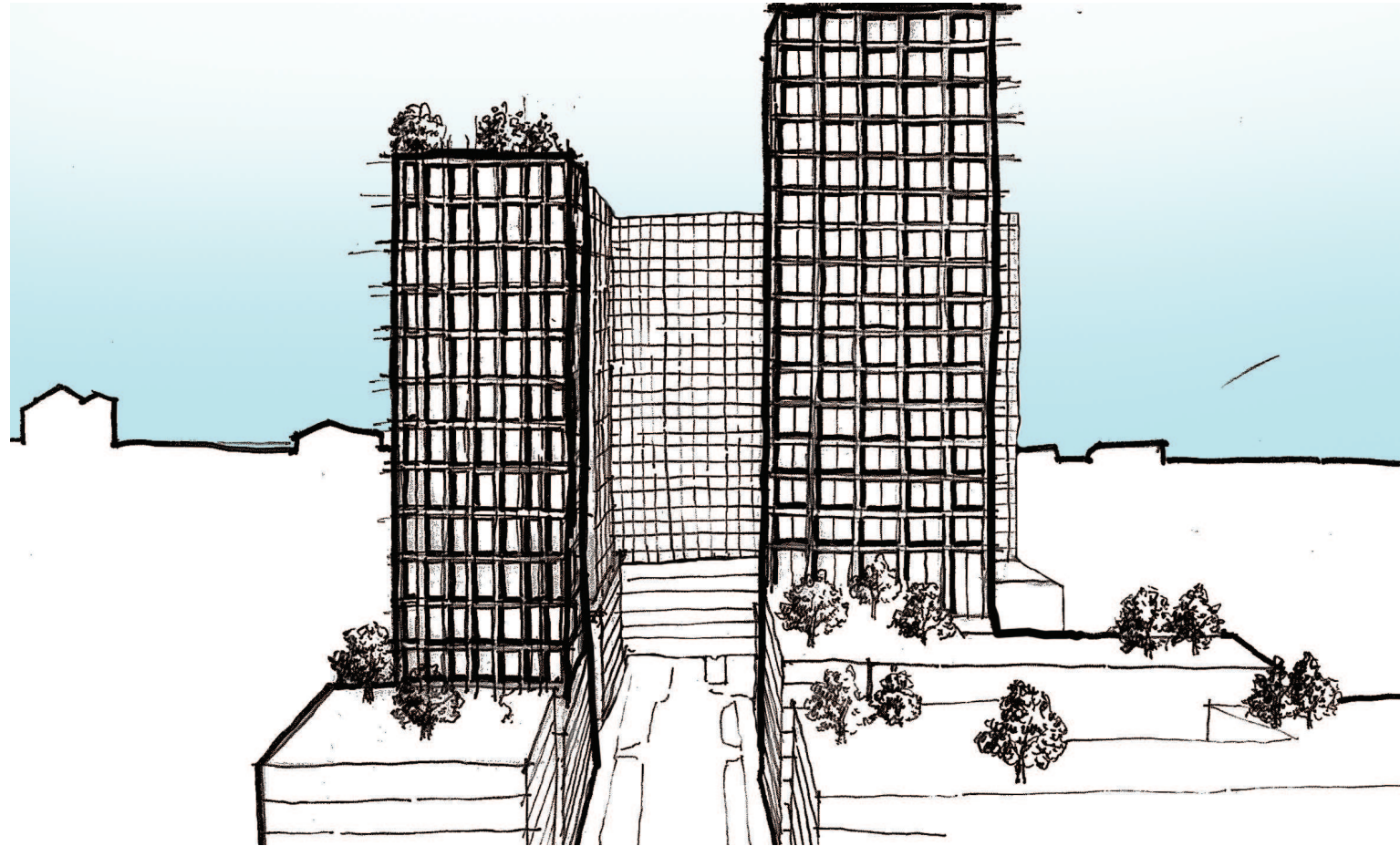
The massing of the podium determines the overall size, shape, and visual impact of the building. Several approaches can achieve the desired result of breaking down the building into smaller components to create a cohesive design. Façade articulation breaks up the massing of the building using a variety of materials, colors, textures, and forms to create a visually interesting façade that reduces the perceived scale of the building. Setbacks and terracing can also be used to create a more visually interesting and transition of massing while also providing terraces or green spaces for the residents. The massing and design should also consider the scale of the surrounding buildings and how the podium will interact with and contribute to the streetscape.



Approach to Tower

5 | Design Research

The towers will be highly visible from the Queensway and should be designed with consideration to views. The facades should be visually interesting and materials used should take into consideration the surrounding context. The buildings should offer a range of unit sizes and layouts to accommodate different family sizes and lifestyles. Common areas and amenities should be designed to promote social interaction and community-building. Minimizing the appearance of mechanical penthouses and integrating and screening any rooftop equipment will ensure a cohesive design approach. Green roofs and rooftop amenities should also be considered.

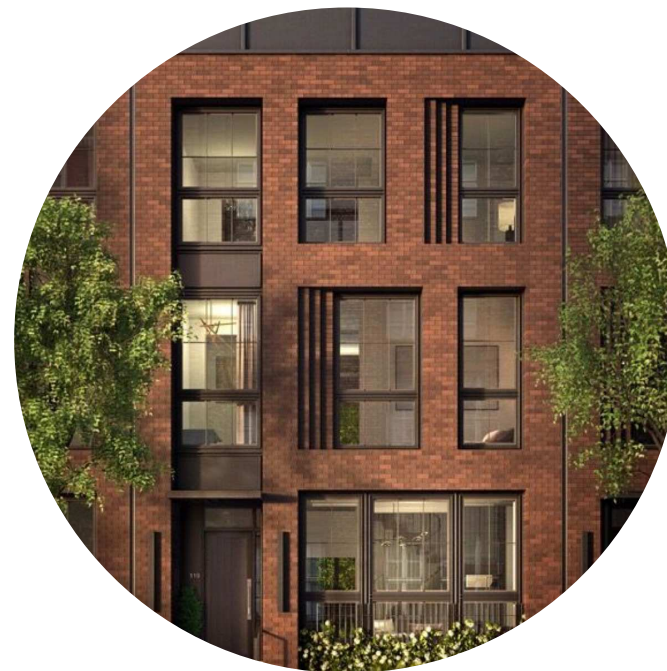


Approach to Townhouse

5 | Design Research

Townhouses are designed to optimize space while maintaining a high level of functionality. A clean, contemporary aesthetic that emphasizes simplicity and minimalism. This can be achieved through the use of sleek materials, such as glass, steel, and concrete, with simple geometric shapes.

Large windows and skylights should be used to maximize natural light and create a bright, open feeling and outdoor living spaces, such as rooftop terraces or balconies, provide additional living space and allow residents to connect with nature.



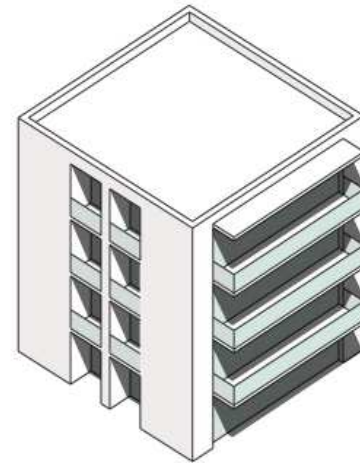
Site, Orientation, Massing

5 | Design Research

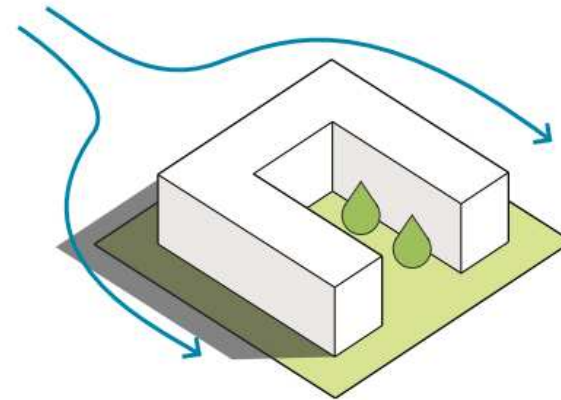
Site orientation and massing are important considerations in the design of buildings. Site orientation refers to the direction in which a building is oriented on its site. The orientation of a building can have a significant impact on its energy efficiency and overall sustainability. In general, a building should be oriented to maximize passive solar gain, which means that the building should be designed to capture and retain as much solar energy as possible during the winter months, and to minimize solar gain during the summer months. This can be achieved through careful placement of windows, the use of shading devices, and the careful placement of the building on the site. Massing refers to the shape and form of a building. The massing of a building can also have a significant impact on its energy efficiency and overall sustainability. Buildings with compact, efficient shapes and forms are generally more energy efficient than those with complex, irregular shapes. This is because efficient buildings have a smaller surface area relative to their volume, which means that they lose less energy through their exterior walls and roof.

Sustainable measures refer to the strategies and technologies that can be used to make buildings more sustainable and can help reduce a building's environmental impact, lower energy and water consumption, as well as improve indoor air quality and comfort.

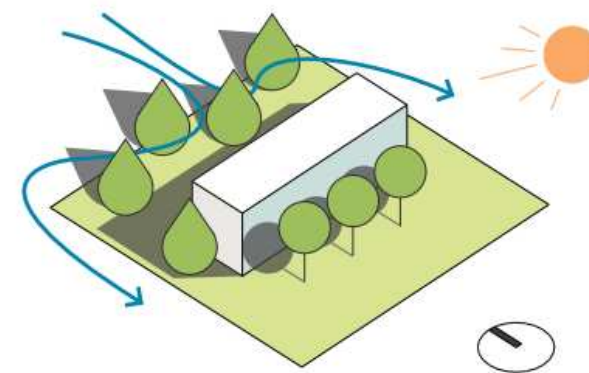
The Bird-Safe Design Guidelines will be considered to reduce high-threat features, such as enclosed glass walkways, glass railings, glass corners, fly-through conditions, ventilation grates and open pipes, landscaping, light pollution etc.



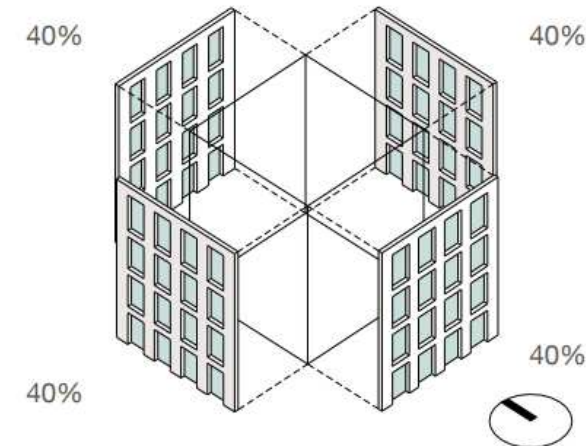
Locate projected balconies on South and inset on East and West for passive self-shading in summer and free heat in winter.



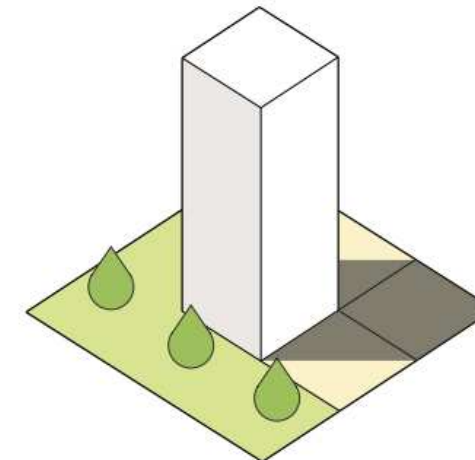
Built form can be used for wind protection and solar shading.



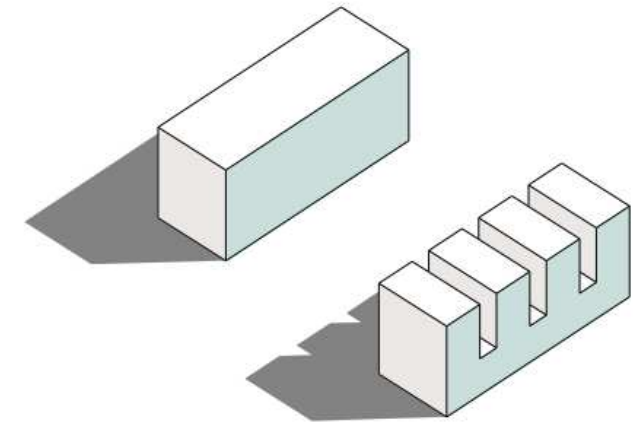
Use coniferous trees to protect from winter wind and deciduous trees to protect from summer sun.



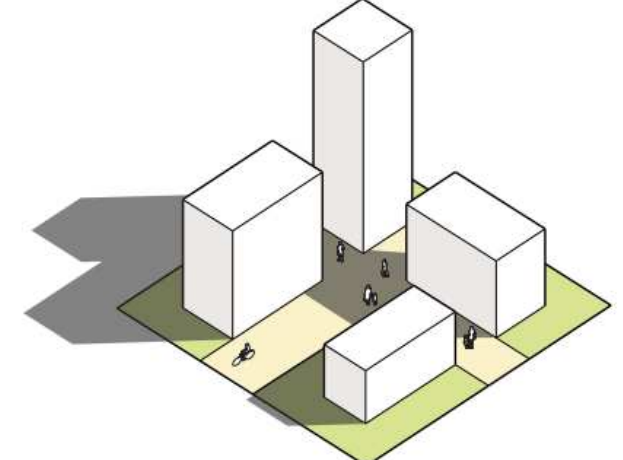
Keep the overall window to wall ratio to 40%.



Be mindful of shadow impacts on outdoor spaces.



**Less envelope = less heat loss
More envelope = sun & air penetration
Balance the two**



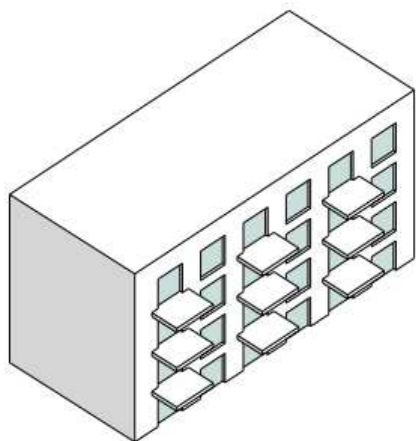
Encourage mid-block connections.

Potential Passive Systems + Renewable Energy

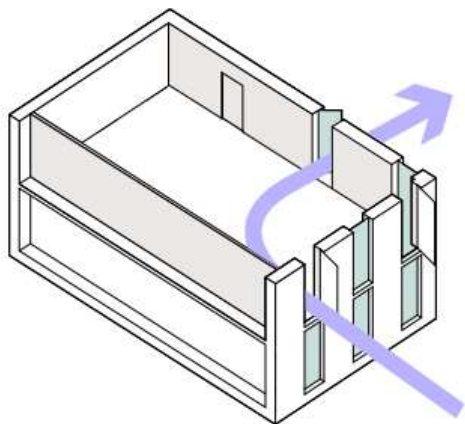
5 | Design Research

Passive systems are a type of energy-efficient design that can be incorporated into buildings to reduce the need for heating, cooling, and artificial lighting. Passive design uses natural energy sources, such as the sun, wind, and vegetation, to maintain a comfortable indoor environment without the use of active mechanical systems. Buildings can be oriented to maximize sunlight during the winter months and minimize it during the summer. Shading devices, such as awnings, can also be used to reduce the amount of direct sunlight entering a building. Well-insulated buildings retain heat during the winter and stay cool during the summer, reducing the need for artificial heating and cooling. Properly designed windows and ventilation systems can allow for natural air circulation, reducing the need for artificial cooling.

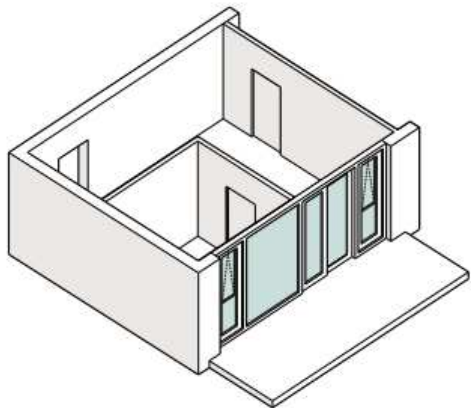
Renewable energy refers to energy that is generated from natural resources that are replenished over time and do not deplete, such as sunlight, wind, water, and geothermal heat. Renewable energy is often used as an alternative to non-renewable energy sources such as fossil fuels and can help reduce greenhouse gas emissions, improve energy security, and promote sustainable economic development.



Reduce balconies to 1/3 the length of the facade.



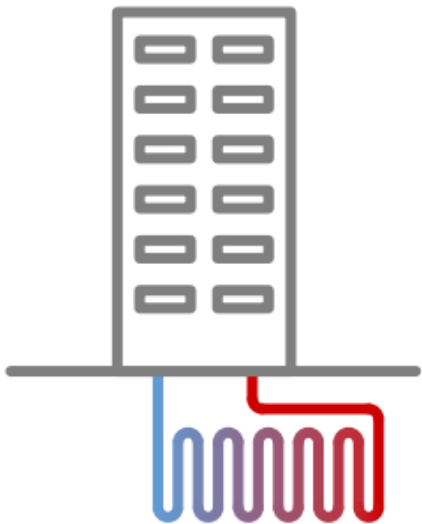
Encourage cross ventilation.



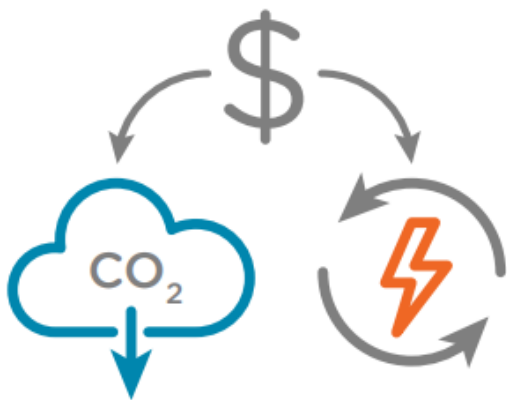
Provide operable windows in every room.



Connect to district energy systems where available



Geothermal/ground source heat pumps are efficient and reduce operational carbon



Purchase carbon offsets and renewable energy credits

Urban Design Pre-Consultation Comments & Next Steps

5 | Design Research

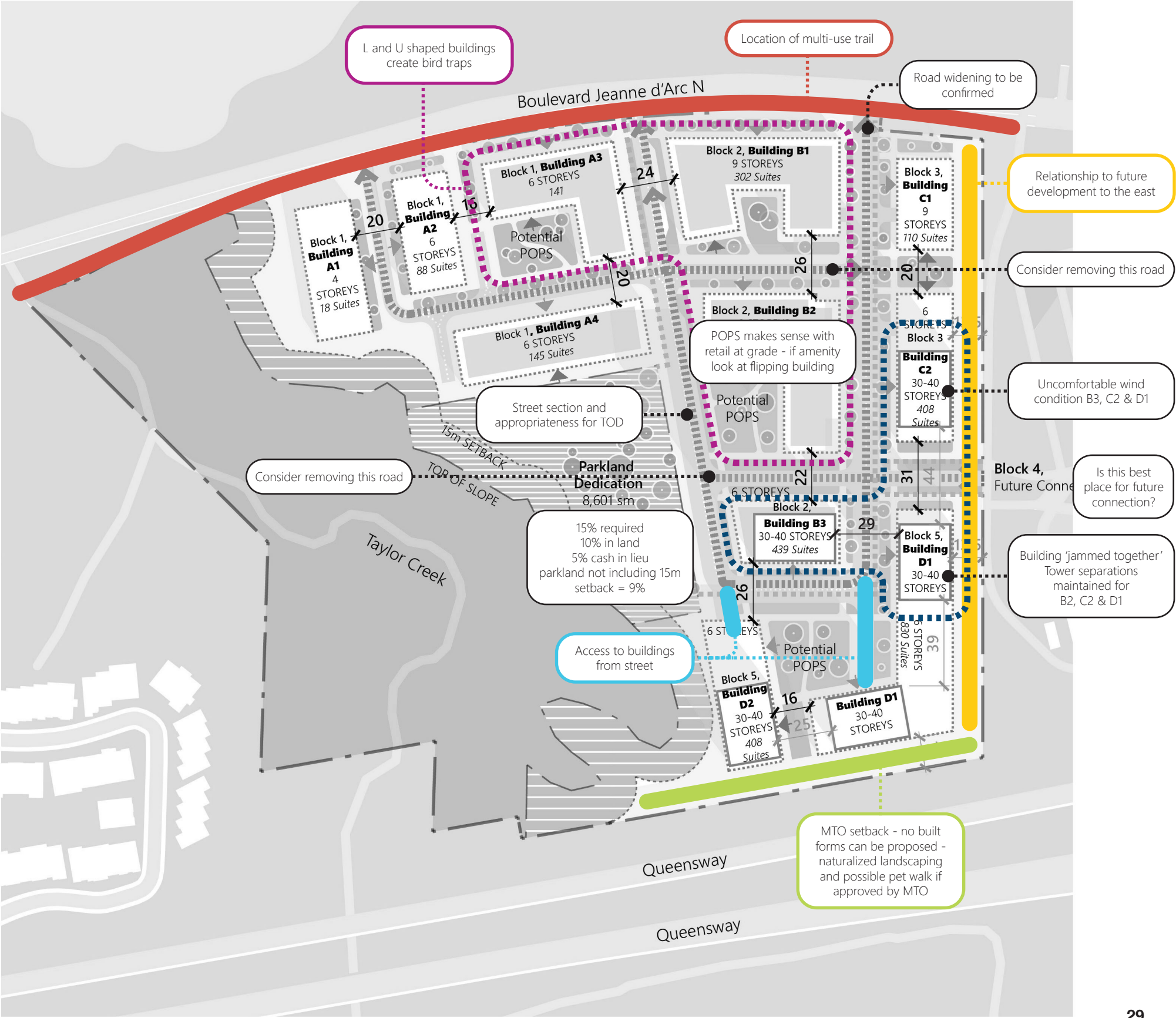
- / Multiple pre-consultation meetings have been held with the City for these applications, with the most recent meeting held on December 6, 2023. The following comments were provided to the team:
 - / The relationship with the abutting property to the east should be further studied. Is a series of “rear yard” the best approach to manage this relationship?
 - / Privately-Owned Public Spaces (POPS) are most useful in highly populated existing urban neighbourhood where acquisition of new park and other public open space is difficult. POPS is not the best tool to use to provide more public spaces in a master-planned new community. The properties labelled POPS on the conceptual master plan are more likely to serve as private amenities.
 - / What is the purpose and function of the large POPS across street from the new park? Is it an urban plaza or a soft-landscaped green space main serves the purpose of a private amenity space? If Building B2 is a mixed used building with commercial at grade, it will make good sense to have an urban plaza at the proposed location. However, if Building B2 is a residential building and the POPS will mainly serve as an amenity space for the residents, considerations may be given to flip the building and the space.
 - / Building D1 does not have direct access to a street. Access for Building D2 is a little bit awkward given its significant density. As a general principle, all buildings should have a street address with direct access to a public (or private) street.
 - / Some buildings appear to be surrounded by roads, which may be wasteful. Considerations should be given to reducing the number of roads. A careful re-examination of the street network is required.
 - / Considerations should be given to the location of B3, C2, and D1. The close proximity of these three towers has created “uncomfortable” wind conditions. Given the size of the site and the surrounding environment, there is no good reason to jam towers together to create a cluster. Space the tower widely and wisely may be beneficial to both the public realm and private residences.
 - / What is the designed function of the space between the development and the highway?
 - / The proposed street cross sections and built form diagrams show a densely urbanized environment with the characteristics of downtown. Is this direction most appropriate for this new transit-oriented community? Will the Vancouver style streetscape and built form design (3-storey podium vs the proposed 6-storey) be more appropriate and appealing?

Urban Design Pre-Consultation Comments

& Next Steps

5 | Design Research

- Tower Separation Dimensions
- Tower Separation Dimensions
- Phasing Line
- Future Connection
- Public Road
- Private Road
- Primary Entrance
- Secondary Entrance
- Non-Residential Podium



Summary of Wind Study

5 | Design Research

- / A pedestrian level wind study was undertaken by Gradient Wind for the proposed development. A full report is included with the OPA and Plan of Subdivision application package, while a summary is provided below:
 - / Most grade-level areas within and surrounding the subject site are predicted to experience conditions that are considered acceptable for the intended pedestrian uses throughout the year. Specifically, conditions over surrounding sidewalks, transit stops, the existing parking lot, laneways, and walkways to the east, the proposed internal walkways, and public and private roads, the potential P.O.P.S. southwest of buildings A3 and B2, and the building access points serving the proposed development are considered acceptable. Exceptions are described as follows:
 - / The windiest conditions are situated in between buildings C2 and D1, where conditions are predicted to be uncomfortable during the winter.
 - / Conditions along the east elevation of building B2, the north elevation of building B3, the south elevation of building C2, and the east elevation of building D2 are predicted to be suitable for strolling, or better, throughout the year, with a small, isolated region suitable for walking near the southeast corner of building D2 during the winter.
 - / Regarding the podia roofs, wind comfort conditions during the typical use period are predicted to be suitable for a mix of sitting and standing over the podia roofs of buildings A1, A2, A3, A4, B1, B2, and C1, suitable mostly for standing over the podium roof of building D2, suitable for strolling, or better, over the podia roofs of buildings B3 and D1, and suitable for a mix of standing and strolling within the podium roof of building C2.



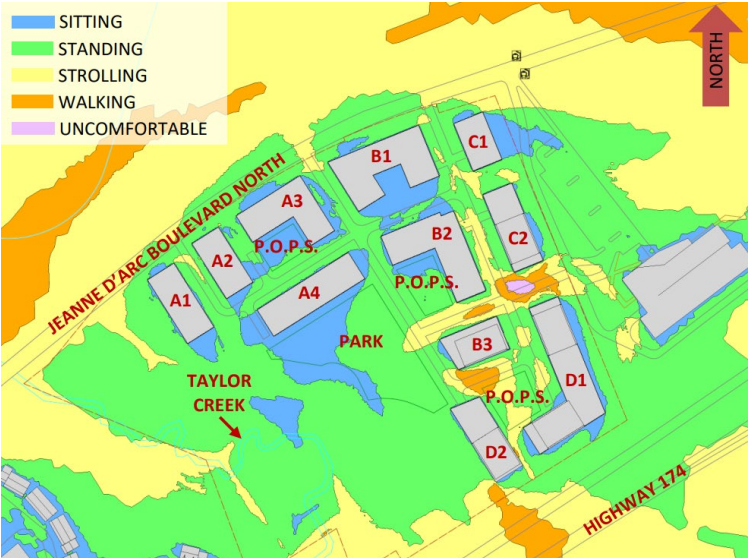
Spring – Wind Comfort, Grade Level – Proposed Massing



Summer – Wind Comfort, Grade Level – Proposed Massing



Autumn – Wind Comfort, Grade Level – Proposed Massing



Winter – Wind Comfort, Grade Level – Proposed Massing

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 8:00 am

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 9:00 am

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 10:00 am

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 11:00 am

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 12:00 pm

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 1:00 pm

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 2:00 pm

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 3:00 pm

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 4:00 pm

June Shadow Studies

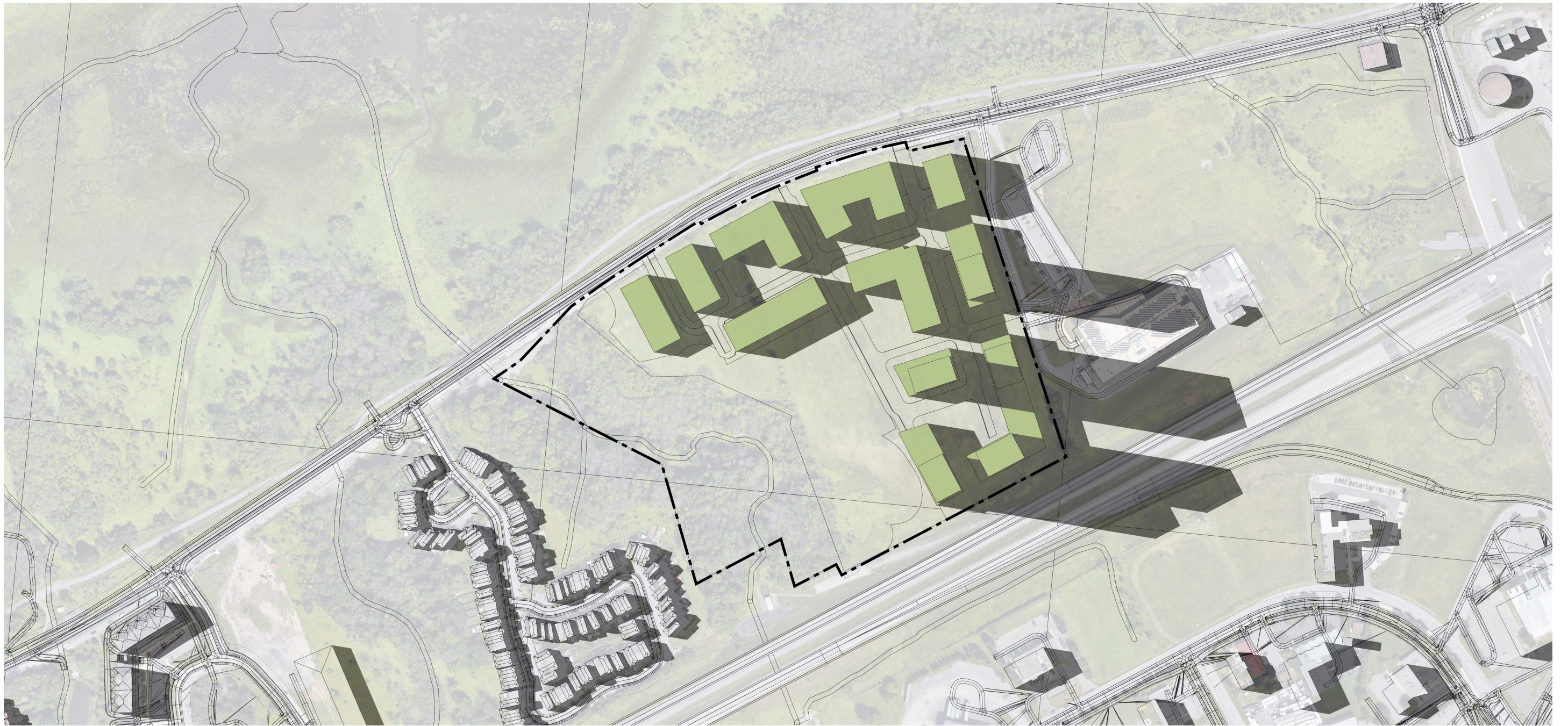
6 | Sun Shadow Studies



June 21 | 5:00 pm

June Shadow Studies

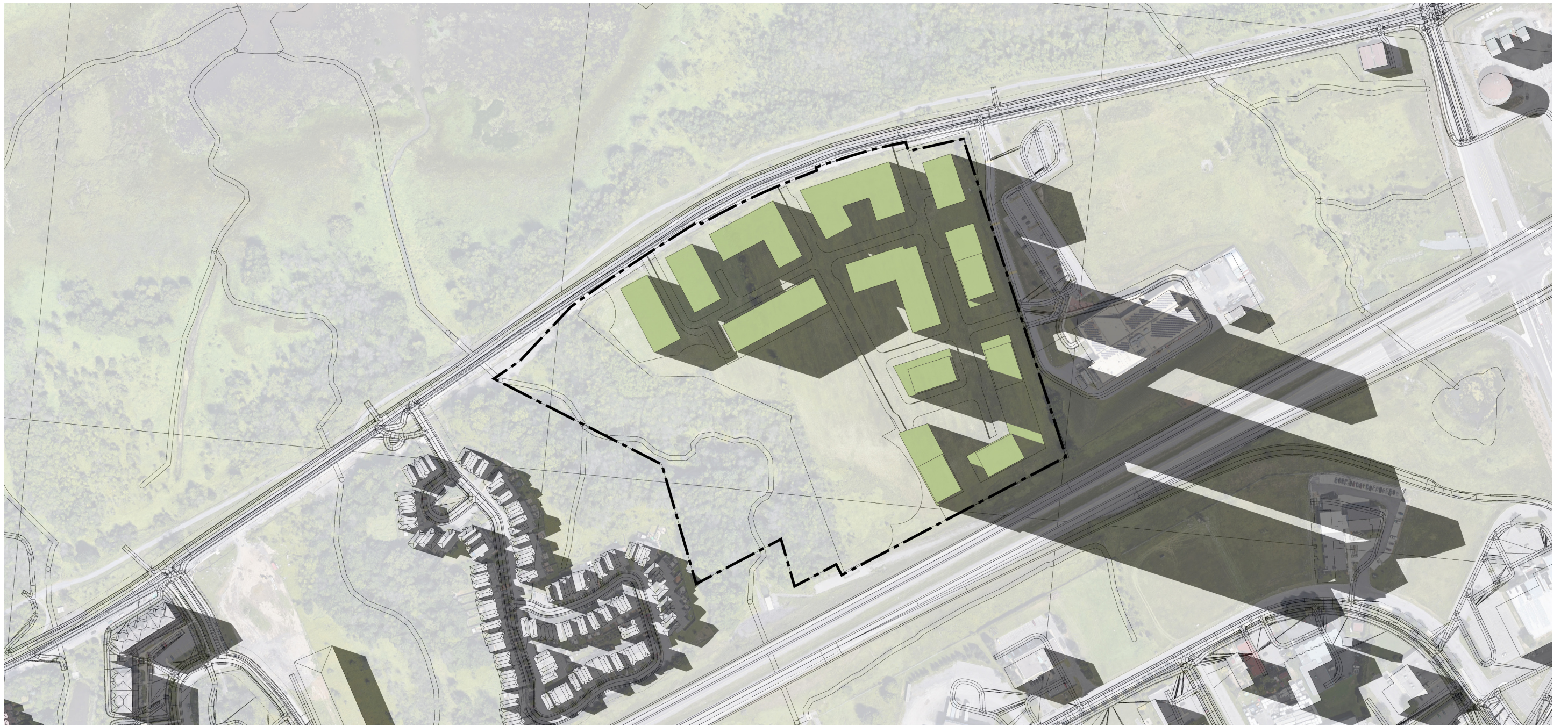
6 | Sun Shadow Studies



June 21 | 6:00 pm

June Shadow Studies

6 | Sun Shadow Studies



June 21 | 7:00 pm

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 8:00 am

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 9:00 am

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 10:00 am

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 11:00 am

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 12:00 pm

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 1:00 pm

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 2:00 pm

September Shadow Studies

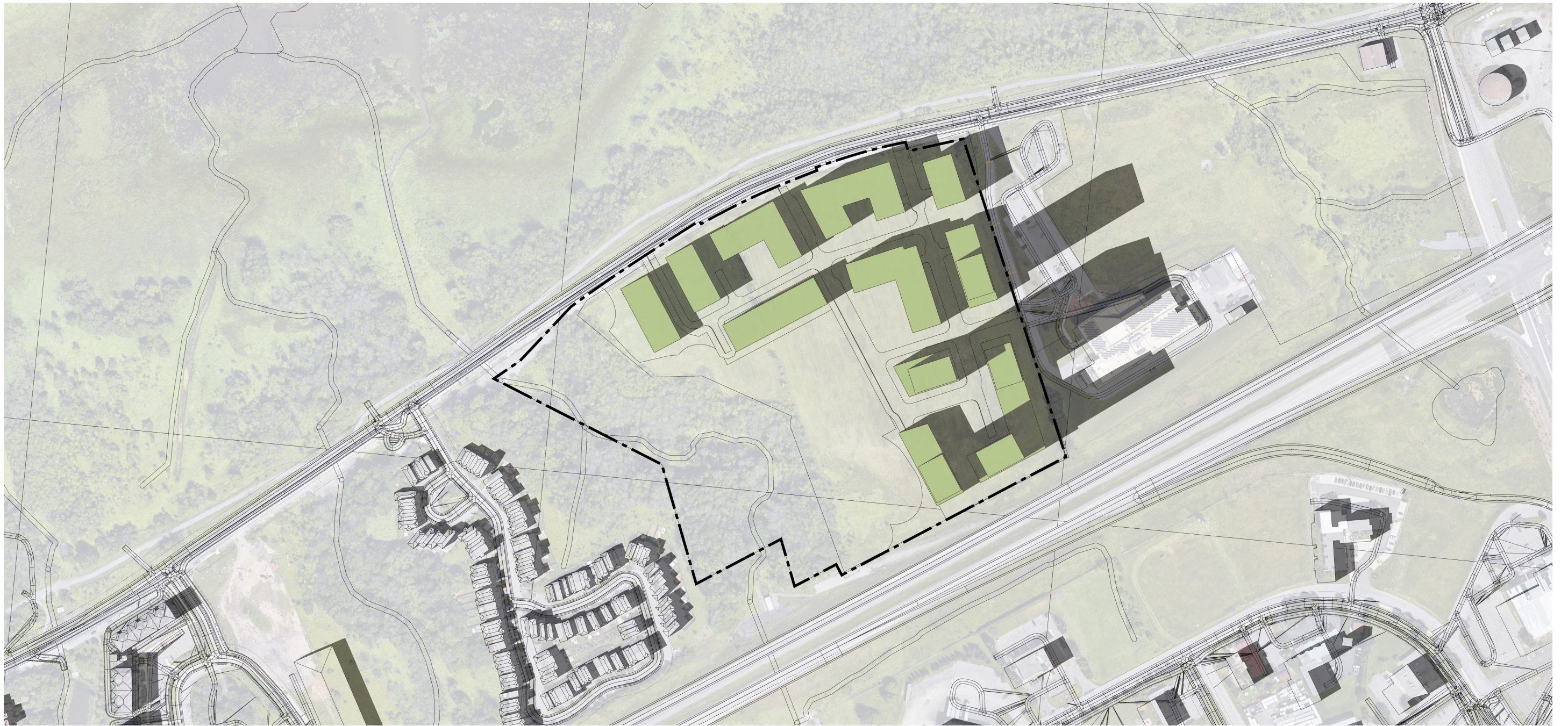
6 | Sun Shadow Studies



September 21 | 3:00 pm

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 4:00 pm

September Shadow Studies

6 | Sun Shadow Studies



September 21 | 5:00 pm

September Shadow Studies

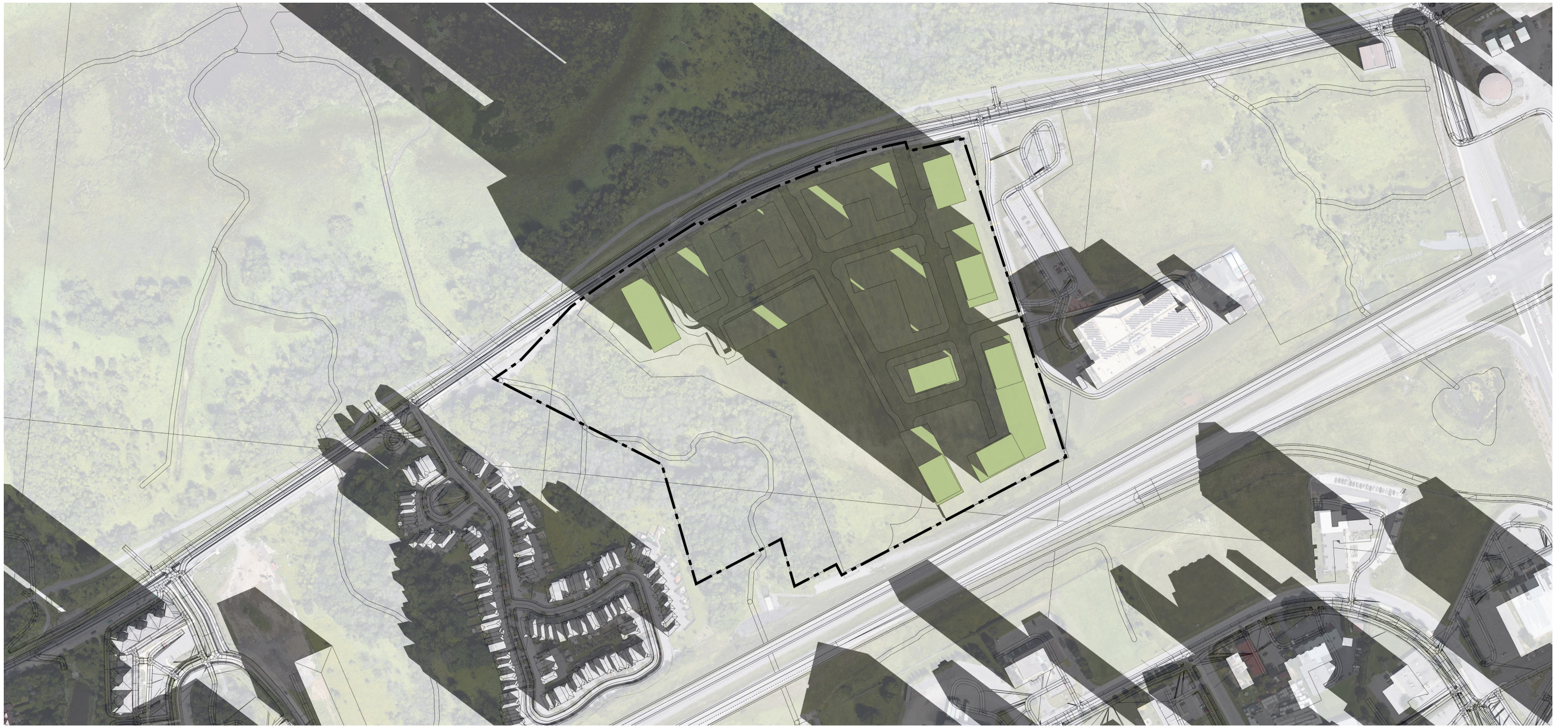
6 | Sun Shadow Studies



September 21 | 6:00 pm

December Shadow Studies

6 | Sun Shadow Studies



December 21 | 9:00 am

December Shadow Studies

6 | Sun Shadow Studies



December 21 | 10:00 am

December Shadow Studies

6 | Sun Shadow Studies



December 21 | 11:00 am

December Shadow Studies

6 | Sun Shadow Studies



December 21 | 12:00 pm

December Shadow Studies

6 | Sun Shadow Studies



December 21 | 1:00 pm

December Shadow Studies

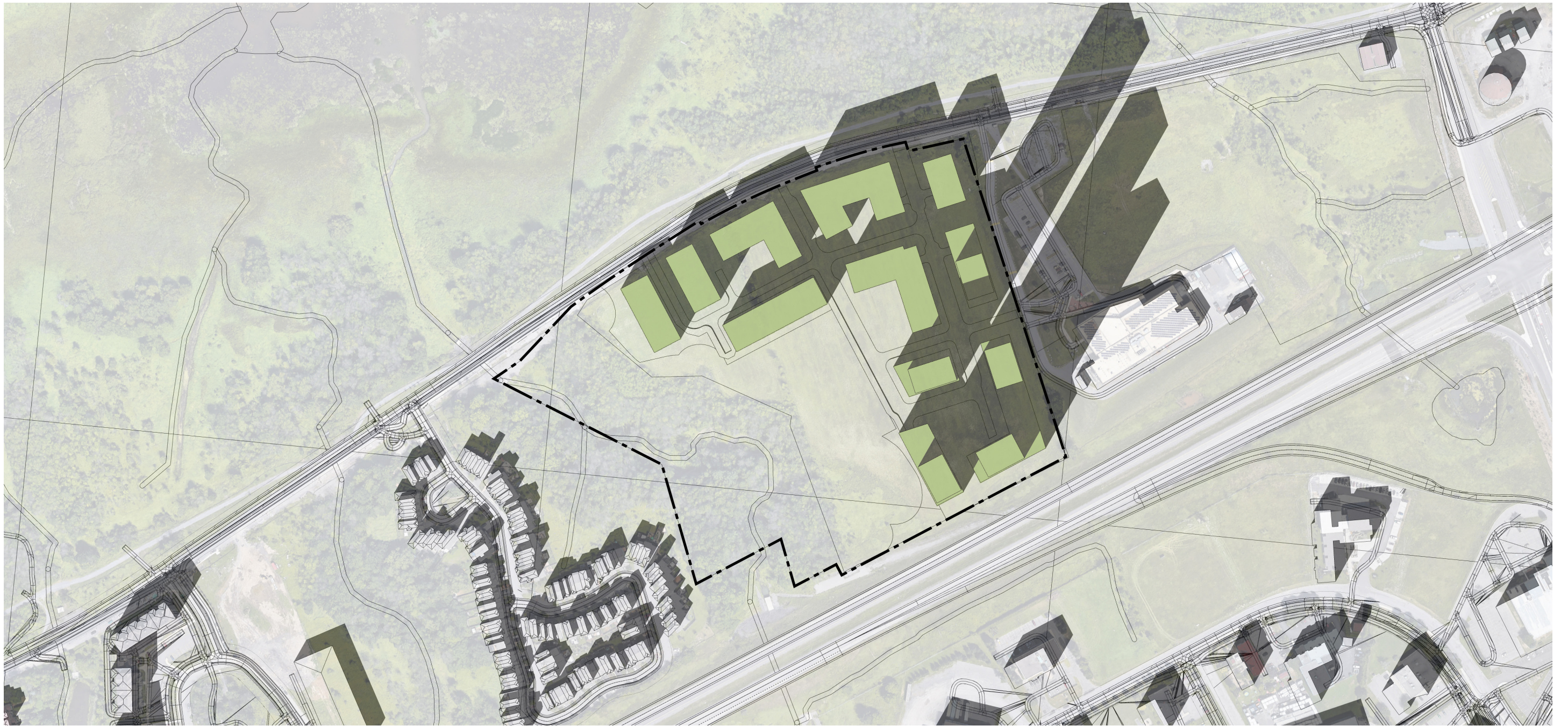
6 | Sun Shadow Studies



December 21 | 2:00 pm

December Shadow Studies

6 | Sun Shadow Studies



December 21 | 3:00 pm

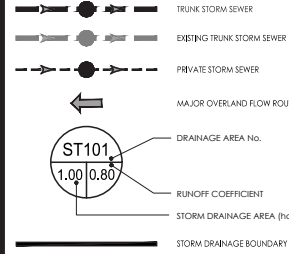


Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
Tel: 613.722.4420
www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Legend



Notes

0	ISSUED FOR DRAFT PLAN APPROVAL	MJS	RB	23.08.08
Revision		By	Appd.	YY.MM.DD
File Name:	160401751_DRAFT_LEVEL.dwg	MJS	RB	MJS
		Own.	Chkd.	Dgn.
				YY.MM.DD

Permit-Seal



Client/Project

BRIGIL
98 LOIS STREET
GATINEAU, QC J8T 3R7
PETRIES LANDING III
OTTAWA, ON

Title

OVERALL STORM SEWER SYSTEM

Project No.

160401751

Drawing No.

STM-1

Scale

1:1000

Sheet

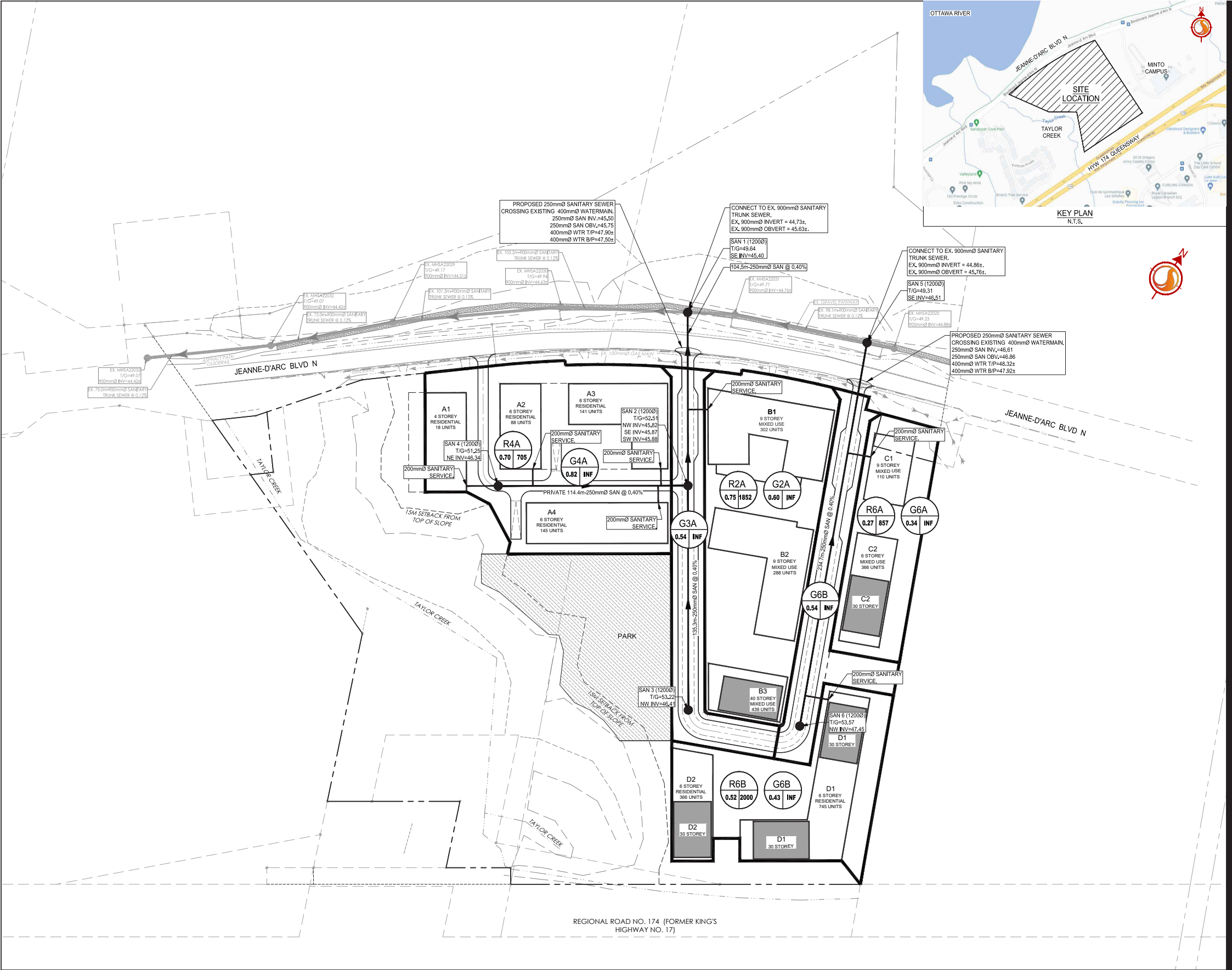
1 of 4

Revision

0

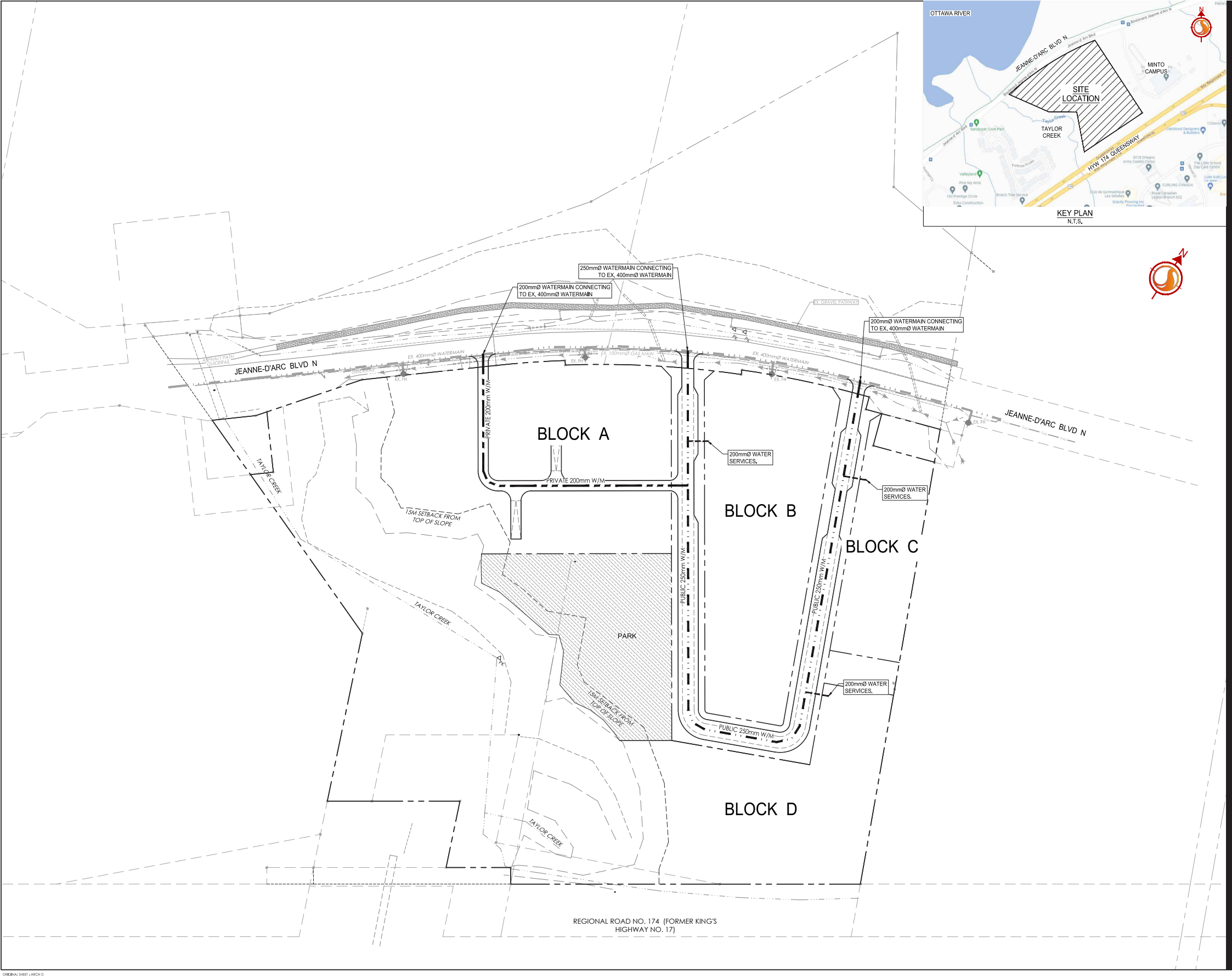
PLAN #

0



W:\architect\160401751\petrie's landing iii\160401751_DRAFT_LEVEL.dwg
2023/08/08 15:52 AM By: JDB/MSB

ORIGINAL SHEET - ARCH D



Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
Tel: 613.722.4420
www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Legend

- 400mmØ WATERMAIN
- 300mmØ WATERMAIN
- 250mmØ WATERMAIN
- 200mmØ WATERMAIN
- 150mmØ WATERMAIN
- EX. 400mmØ WATERMAIN
- EX. 300mmØ WATERMAIN
- EX. 250mmØ WATERMAIN
- EX. 200mmØ WATERMAIN
- EX. 150mmØ WATERMAIN

Notes

0	ISSUED FOR DRAFT PLAN APPROVAL	MJS	RB	23.08.08
Revision		By	Appd.	YY.MM.DD
File Name:	160401751 DRAFT LEVEL.dwg	MJS	RB	MJS 23.06.01
Own.		Chkd.	Dgn.	YY.MM.DD

Permit-Seal



Client/Project

BRIGIL
98 LOIS STREET
GATINEAU, QC J8T 3R7
PETRIES LANDING III
OTTAWA, ON

Title

OVERALL WATERMAIN SYSTEM

Project No.
160401751

Scale
1:1000

Drawing No.

Sheet

Revision

WTR-1

3 of 4

0

PLAN #



Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
Tel. 613.722.4420
www.stantec.com

Copyright Reserved
The Contractor shall verify and be responsible for all dimensions, DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Legend

87.65
89.40
MAJOR OVERLAND FLOW ROUTE
MAJOR SYSTEM DIVIDE

AREAS WHERE GRADE RAISES UP TO 0.0m ARE PERMITTED.
AREAS WHERE GRADE RAISES UP TO 1.0m ARE PERMITTED.
AREAS WHERE GRADE RAISES UP TO 1.5m ARE PERMITTED.

Notes

0	ISSUED FOR DRAFT PLAN APPROVAL	MJS	RB	23.08.08
Revision		By	Appd.	YY.MM.DD
File Name:	160401751 DRAFT LEVEL.dwg	MJS	RB	MJS
		Dwn.	Chkd.	Dgn.
				YY.MM.DD

Permit-Seal

Client/Project
BRIGIL
98 LOIS STREET
GATINEAU, QC J8T 3R7
PETRIES LANDING III
OTTAWA, ON

Title
OVERALL GRADE CONTROL PLAN

Project No. 160401751	Scale 1:1000
Drawing No. GP-1	Sheet 4 of 4
	Revision 0
	PLAN #