TAGGART REALTY MANAGEMENT

3930 & 3960 Riverside Drive
Residential Community
DESIGN BRIEF

FOTENN Planning + Design
HOBIN ARCHITECTURE
CSW
IBI GROUP
WSP GOLDER

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3930 & 3960 Riverside Drive

DESIGN BRIEF

CURRENT SITE CONTEXT

WESTWARD – The subject site is adjacent to the Rideau River. While the development boundary is set back from the water line and riparian slopes, the change in grade provides both protection from water level changes and also views of the river corridor, river bank zone, and toward the existing forested areas towards the northwest. Across the river there are a series of residential streets and, more distantly, the industrial areas surrounding Hunt Club.

There is an existing pumping facility associated with the Ottawa Hunt and Golf Club that will remain along with a route through the subject site to provide service access.

EASTWARD – The eastern edge of the site is bounded by Riverside Drive. The roadway sits significantly higher that the existing high point of the development area. The new access road will be required to traverse down the slope.

Beyond Riverside Drive is the Ottawa Hunt and Golf Club.

NORTHWARD – To the north of the site there are variety of conditions. To the northwest the grade falls signifantly to a low lying pond. Directly to the north, there is an existing residential development of detach homes. To the north east is an existing City of Ottawa Park containing playing fields and a play structure. The City will be seeking an expansion of that park area as part of this application's park land dedication.

Site location

View from Riverside looking south

SOUTHWARD – The southern edge of the site is bound by Hunt Club Road and the Michael J.E. Sheflin Bridge. To the south side of Hunt Club, there are a couple retail plazas (on either side of Riverside Drive) providing amenities such as cafes, restaurants, gas, and groceries to the immediate neighhourhood.

Also to the south east is the Ottawa Airport. The subject side sits just to the east side of the approach path of one of the two primary runways. As such, the development envelop for the site is restricted by the approach paths and margins for the airport operations.

View from Hunt Club - Riverside intersection looking north west toward site

MASTER PLAN CONCEPT

The Client, St. Mary's Land Corporation, care of Taggart Realty Management (TRM) has owned this subject property for over 20 years. In the past, the property was used as a sand pit, with the land later filled in an effort to create a normalized plateau suitable for development. In the past 10 years, Hobin Architecture has engaged in a variety of planning exercises to find a suitable use and development strategy for the site. Previously explored options have included: a long term care and commercial development, a mix of car dealership and long term care with a small amount of retail, and a hotel. An overview of these options is included further in this document.

As these uses are all relatively high traffic generating uses and reliant on visibility to Hunt Club Road and Riverside Drive, the primary site challenges of access and of managing the depressed grading of the site presented strong negatives and, ultimately, none of these options proceeded.

With the need for housing in the Ottawa area steadily increasing, TRM requested that Hobin Architecture view the site from a mixed residential lens.

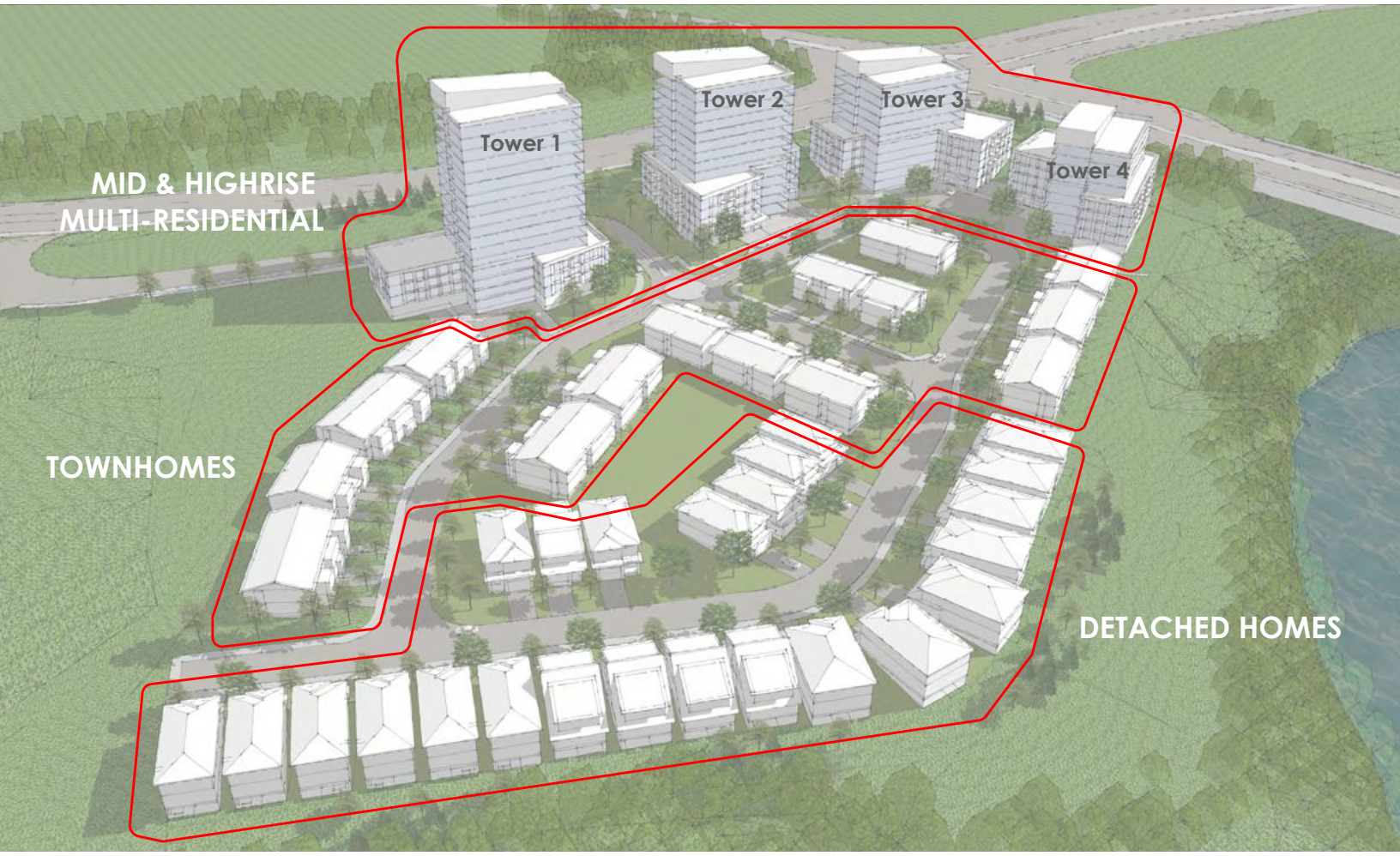
The property is currently zoned as GM1 aimed at accomodating the range of previous proposed uses. The maximum permitted height is 137m ASL. With the new proposal for mixed residential, TRM will be seeking to amend

the allowable uses and to adjust the permitted height for development to meet the underside of the airport approach paths (providing an angular plane limiting development).

The proposed development is intended to include a variety of residential typologies ranging from detached homes, townhomes, mid-rise residential and high-rise buildings (up to 17 floors). It is TRM's intention that the low-rise development portions would be built out by Tamarack Homes (one of Taggart Group's home building divisions), while the four multi-residential buildings would be built either as purpose-built rental or as condominium; dependant on the market dynamics over the next several years. The north portion of the site, consisting of low-rise wood frame housing types, is seen as a phase one of development while the mid and high-rise blocks to the south would represent future phases.

The general site layout is arranged to provide for a series of key objectives:

- Provide a diverse offering of residential typologies
- Create a buffer from Hunt Club Road and Riverside Drive
- Manage challenging grading
- Create a sense of arrival
- Capitalize on the proximity to River and green space
- Provide options for phasing.

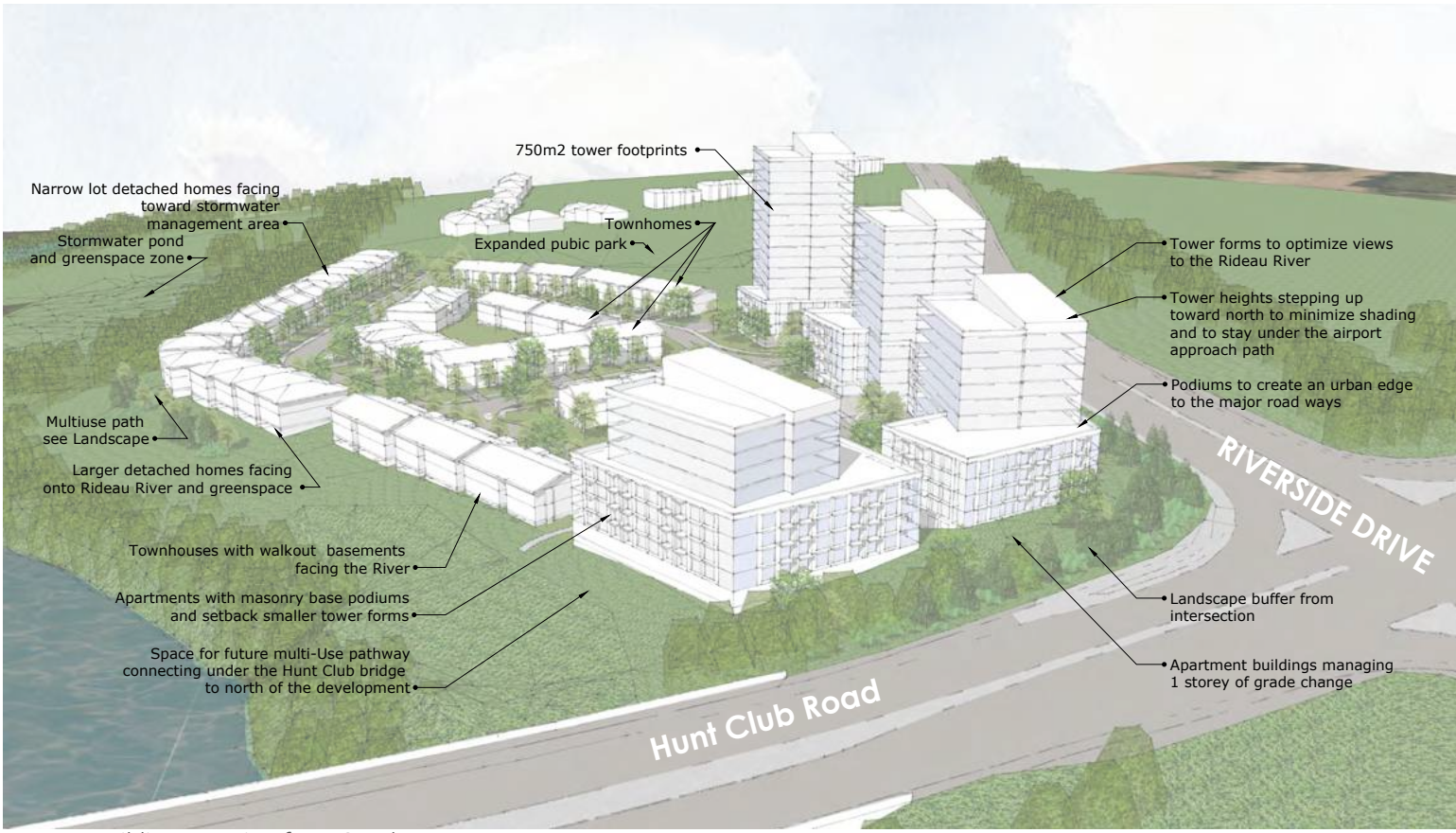


Basic Site Arrangement

APPROACH TO MASSING AND SCALE

Building Massing

The overall development approach places the highest density and tallest buildings adjacent to the major road ways. This approach allows for these building elements to create a high profile presence for the development at this significant cross-roads of two key traffic routes in Ottawa. Additionally, the positioning of the largest masses provides a sheltering effect to the public and private spaces internal to the site development - effectively providing separation - both visually and with respect to sound - for the greatest number of residents of the new development from busy-ness associated with the intersection.



Building Massing from South

These taller building forms, with broad podiums also serve the purpose of managing the most significant grade transitions from Riveride Drive and Hunt Club Road down to the new public street network within the site.

As one gets further from these two roads, the development pattern becomes more granular as scale decreases. There is an intermediate zone of townhomes sharing some of the same finishes and exterior patterning of the podiums of the multi-residential buildings. Toward the north end of the site, and facing onto the Rideau River, single family homes provide for smaller scale development forms and more porosity from the public streets to the river. Surrounding the outer northwest edge of the site, a new multi-use pathway gives access to nature for all residents.

Views

The aforementioned transition of building heights also provides for focusing the greatest number of views towards the northwest, the river and greenspaces. The four taller building forms, toward the south east corner of the site, have unrestricted views over the low-rise portions of the site, while lower building profiles are set to follow the general contouring of the site toward the river. Approximately 29 units of the 77 that form part of the low-rise offering are directly facing the river or green space, while tower position, separation, and transition of heights will provide quality views for over two thirds of the units.

From Riverside Drive, one approaching the site is also provided a series of unfolding views as they enter the site. The initial segment of roadway runs roughly parallel to Riverside, but as it passes Tower 1 (the northern most and tallest of the multi-residential blocks), the viewer is presented with a view down the central boulevard toward the River, immediately revealing a sense of the site's context and natural attributes.

View Key

C. View from above Riverside between Building T1 and T2

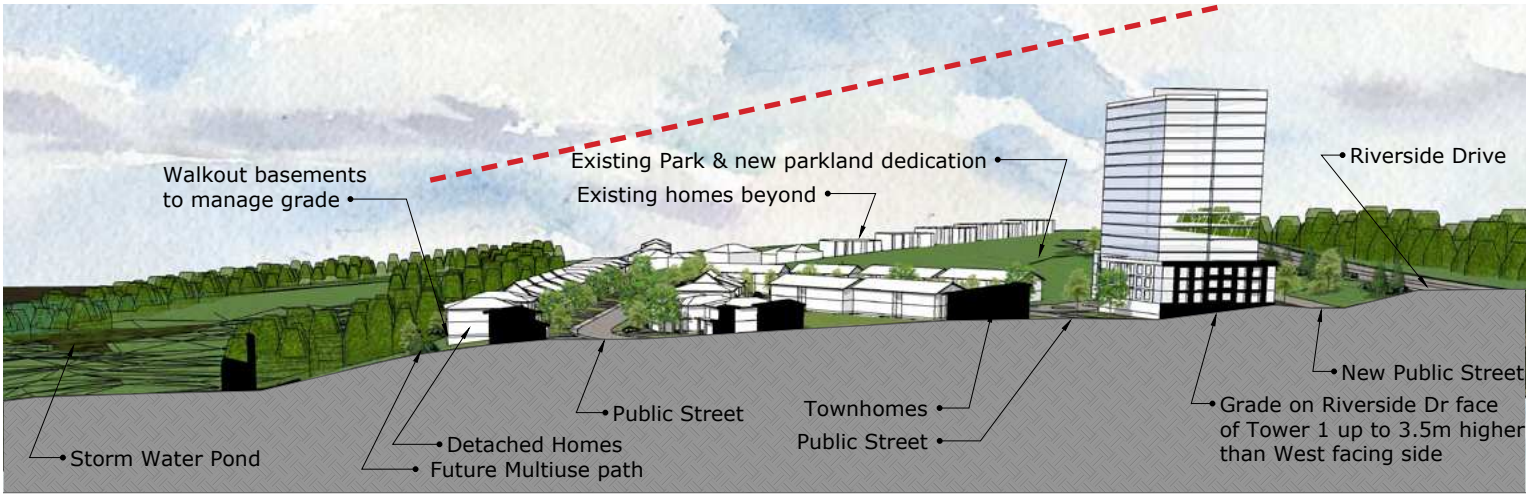
C. View from Detached Homes towards Apartments

C. View from podium of Building T2 toward north

Project views

Building Transition

The proposed development locates the greatest heights and densities adjacent to the intersection of Riverside Drive and Hunt Club Road. The building heights transition moving north according to the regulations per the Airport Zoning Regulations. This provides for a transition in height from the tallest buildings furthest south, transitioning to lower heights moving north to the existing low-rise residential neighbourhood. There is also a transition in height moving from east to west, with heights decreasing closer to the Rideau River.



Building Transition from Riverside to Rideau River

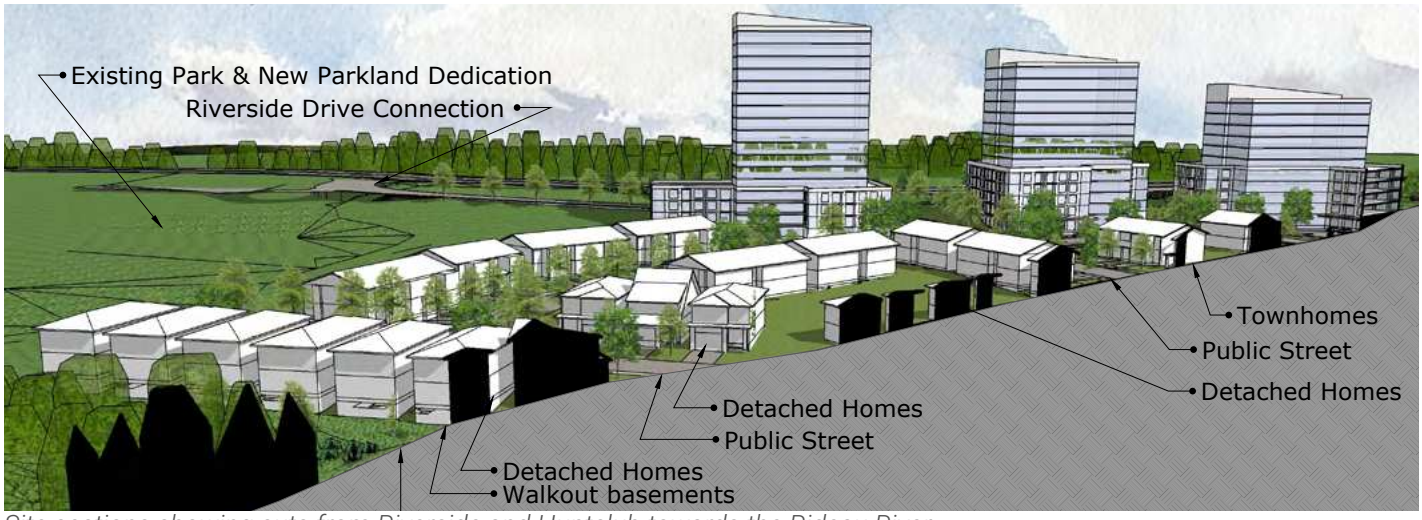
Grading

As there is significant grading fall from the roadways down to the river, management and alteration of the grade is required. The objective of the site layout, in this respect, is to work as closely with the existing grades as possible through the introduction of a series of 'development terraces'. These terraces will serve to provide relatively level datums for each section of develpoment and allow for reasonable street slopes and comfortable relationships between streets and front doors of homes and apartment lobbies.

To the end of creating these 'development terraces' a number of design strategies are used.

First of all, where possible, building forms are used to manage signficant grade changes. The most significant example of this is the use of the multi-residential podiums to create a 1 storey (~3.5m) grade change from the southeast to the internal street network. The ground floor building areas that are below the grade on Hunt Club and Riverside will be used for functions such as parking lot entrance ramps, garbage rooms, bicycle parking, move-in rooms, and other utilities that do not require views and access to light.

A similar building-managed grade change also occurs at the townhomes and detached homes facing the river. The units help manage a 1.5 - 3m grade transiton between the street and the rear yards while allowing for brighter and more usable basement spaces.

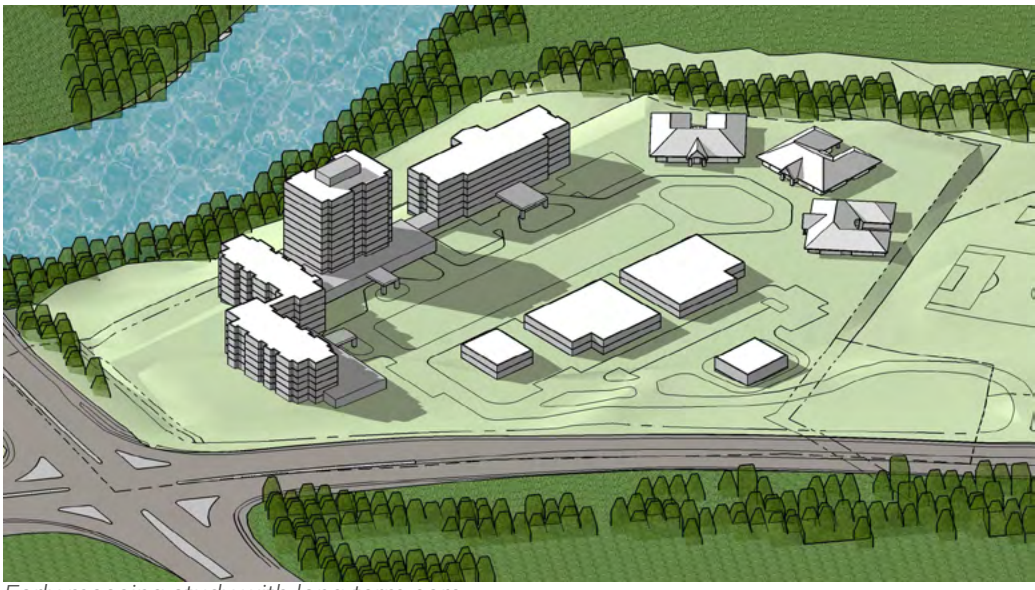


Site sections showing cuts from Riverside and Huntclub towards the Rideau River

Alternate Options Explored

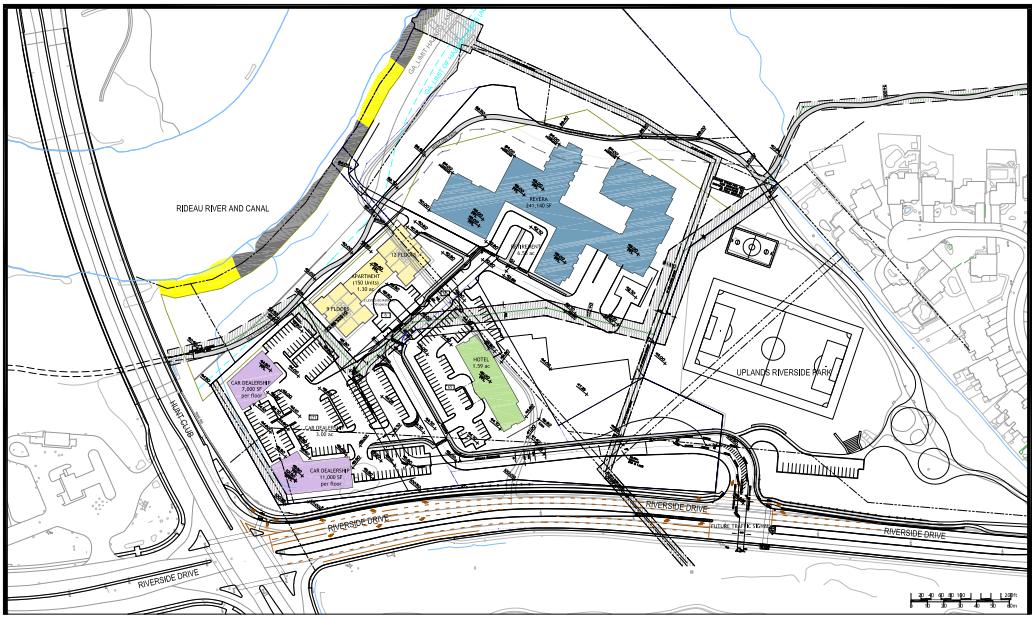
As mentioned early in the document, the current iteration of the development concept was preceded by a lineage of other options for which the design team felt the limitations on location of the primary site entrance and the challenging grading were detrimental to the long-term success of the concepts.

The team feels confidently that the current proposal of a mixed residential site providing a diverse range of dwelling types is the 'highest and best use' for the property and provides a natural extension of the types of uses found in the existing residential communities to the north.



Early massing study with long-term care

Alternate massing study with long-term care



Alternate massing with car dealerships, hotel, apartment and long-term care

PUBLIC REALM

Streetscape

The development proposes a combination of 18m and 20m public streets. The anticipated higher traffic flow roads such as the main entrance, the central boulevard toward the water, and the streets to the south half of the site are proposed as 20m sections. The streets at the north portion of the site servicing the townhomes and detached homes are proposed as 18m. All sections are designed with an 1.8m wide sidewalk on one side, with the busier sections having sidewalks on both sides occuring on the central boulevard.

At the main internal intersection, the development proposes a mini roundabout to provide some traffic calming and smooth flow without having to introduce a stop sign at the bottom of the entrance grade. Cross walks are provided at all intersections.

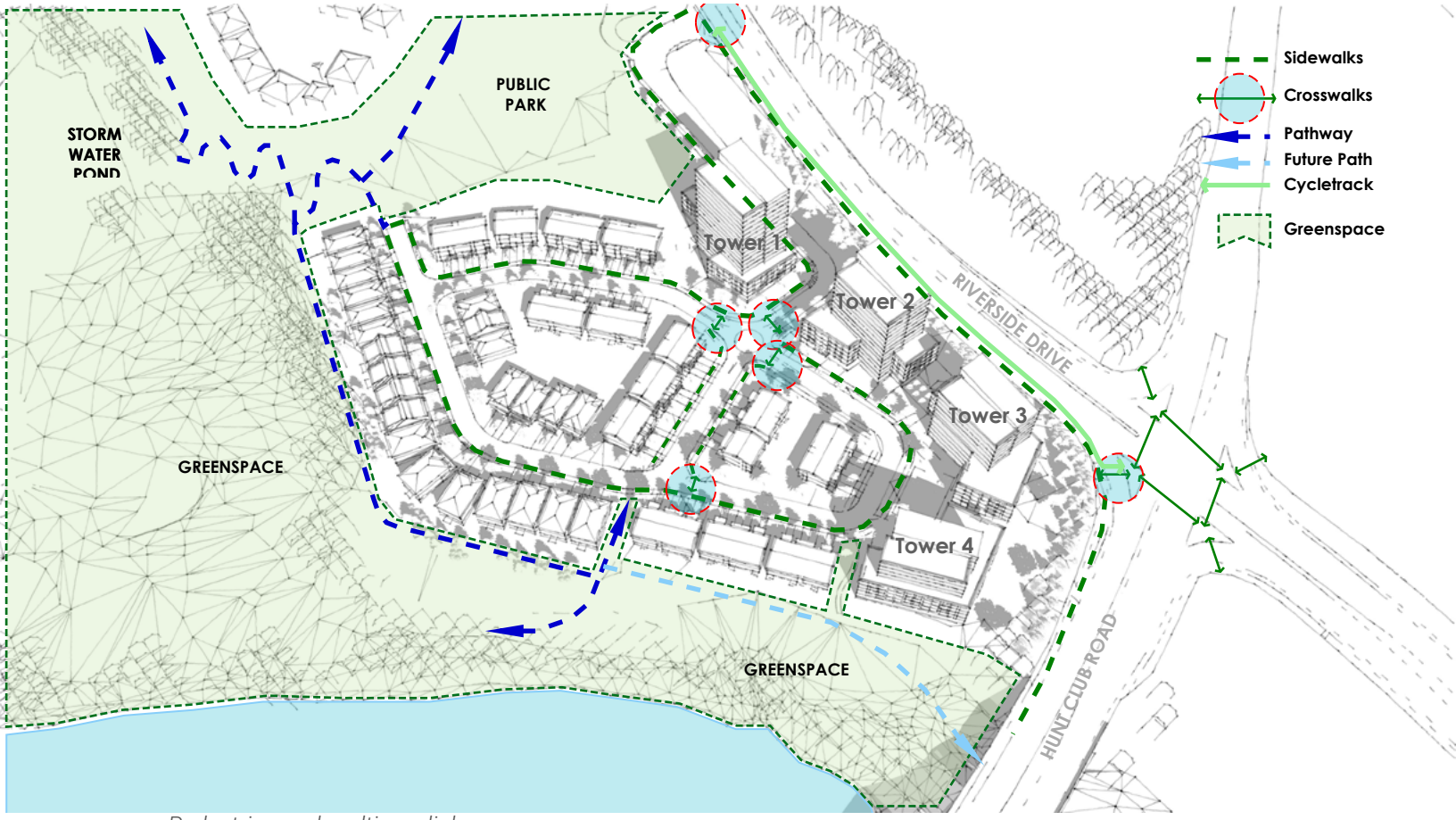
The street section and typical 6m setback for the units will provide adequate space for street trees on both sides of the street and also provision for vehicle parking in driveways. At a few key locations, additional street parking will be provided to allow additional space for visitors' vehicles.

Landscape Plan (CSW Landscape)

Relationship to the Public Realm

Pedestrian links will be provided to the surrounding existing and future pedestrian pathways at four points on the site - at the new entrance to Riverside Drive; near Tower 4 toward the Rideau River; at the existing pumphouse access road, and at the north end of the site adjacent to the park. Future links to the Riverside and Huntclub intersection are possible when the multi-residential buildings are developed.

As part of the project, a new pathway will be developed following the crest of the slope behind the detached homes facing the river. This pathway will form part of a future larger network that will connect under the Michael J.E. Sheflin Bridge and to the retail plaza space to the south. A pedestrian new link will also be constructed toward the stormwater pond and nature trails to the north. These new links will help provide this development with access to recreation spaces and adjacent amenities.



Pedestrian and multi-use linkages

BUILDING DESIGN

Mid And High-rise Apartments

The mid-rise and high-rise apartments are intended to provide additional housing typologies to the site by offering both small units (some affordable) and a range of unit sizes including 1, 2, and 3 bedroom units. These units will provide alternatives to the lowrise typologies for those residents desiring to avoiding the maintenance associated with home ownership or who need accessible units without stairs.

The basic form of all four building is that of podium and tower. The podium heights vary with both of the buildings closest to the Hunt Club and Riverside intersection having the tallest podiums (5 stories) while those closer to the river and to the lower rise town homes have lower podiums (4 stories) to provide a transition that is more in scale with the adjacent townhomes.

The design of the podium units will be ground oriented with walk-out units occuring at grade and exterior finishes that reflect the brick masonry types and more human-scale character of the adjacent town homes.

Sample project - The Rideau (Minto and Hobin Arch)

Sample project - The Wellington (Tamarack and Hobin Arch)

The roofs of the podiums are intended to provide outdoor amenity space with views over the lowrise units and toward the green space and river.

As per the City of Ottawa high-rise building guidelines, the tower portions of the buildings are setback from the podiums and are of a reduce footprint (approximately 750m square). The material palette of these portions of the building will also reinforce the separation between podium and tower.

Each building will be provided with below grade parking (with a small number of at-grade visitor parking spaces) in order to provide the maximum amount of exterior landscape and amenity area and to mimimize the impact of motor vehicles within the site area.

Townhomes

Tamarack Homes will be providing the design for the townhomes in the development. Each town home will be providing a single front accessed garage. Their material palette will be coordinated throughout the development to provide a cohesive overall urban feel. The locations of street trees will be coordinate with driveways to provide the opportunity for a mature urban tree canopy along all residential frontages. The divisions of each townhome block have been arranged to minimize stepping within blocks while allowing the townhomes to follow the fall in grade from the Riverside Drive entrance toward the Rideau River.

The river facing townhomes on the west edge of the site will have walk out or partially exposed basements to help transition the grade from the street level to the future pathway that is 1 to 3 m lower on west side.

Tamarack Homes townhome model

Tamarack Homes detached home model

Detached Residential

Similar to the townhomes, Tamarack Homes will be providing the basis of the design of the detached homes. There are two typical lot widths provided for in the siteplan. The larger homes face toward the River while the narrower singles face toward the greenspace areas to the northwest. There are also seven detached homes proposed internal to the site.

Each of the river-facing detached homes will have a front garage and walkout basement. This will allow for the reduction in the amount of regrading and retaining walls required, as each home will work to manage the grade changes in a similar fashion as the larger multiresidential blocks.

SUSTAINABILITY

As the project is currently at the Plan of Subdivision stage, the project team is exploring various different sustainablity paths. Some of these include:

- Financing models (such as CMCH MLI Select) for constructing buildings at higher than OBC baseline energy efficiency and building envelop performance. This is particularly relevant to the multi-residential blocks.
- Providing high levels of connectivity for walking and cycling to encourage local trips (to recreational amenities, transit, and local retail) and to achieve a high level of active transportation.
- Rainwater recovery for site irrigation and use of bioswales to reduce peak storm rainfall outflows.
- Landscape site design using native and polinator friendly species and maintenance plans.
- High level exploration of ground source heating and cooling sytems for the multi-residential scale buildings.
- Options for including standard Level 2 charging in new homes and in multi-residential parking structures.
- Inclusion of higher than zoning required rates of secure indoor bicycle parking for multi-residential buildings. Inclusion of e-bike charging facilities in multi-residential bicycle parking.
- Inclusion of Bird Safe glass in multi-residential building glazing and balcony guards.
- Managing exterior lighting in such a way to protect night skies particularly in those building faces toward the riparian edges of site.

SUMMARY

We believe with thoughtful design and planning, this challenging site, both in terms of topography and adjacencies, can become a vibrant residential community. This new community will offer a wide variety of housing types catering to a broad spectrum of demographics, family types, and varying physical needs. This community will provide excellent recreational opportunities, benefit from it's proximity to local retail amenities, and provide good connectivity for mixed-modal mobility through the extension of, and connection to, local pathway networks.

APPENDICES

A- Site Plan (Hobin Architecture)

B- Landscape Plan (CSW Landscape

C- Servicing Plans (IBI Group)

D- Shadow Analysis (Hobin Architecture)

E- Wind Analysis (Gradient Wind Engineering)