The Conservancy

Urban Design Brief

THE CONSERVANCY

BARRHAVEN

prepared by

NAK design strategies

August 2020

PREPARED FOR

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1.0 | Introduction: Scope & Intent

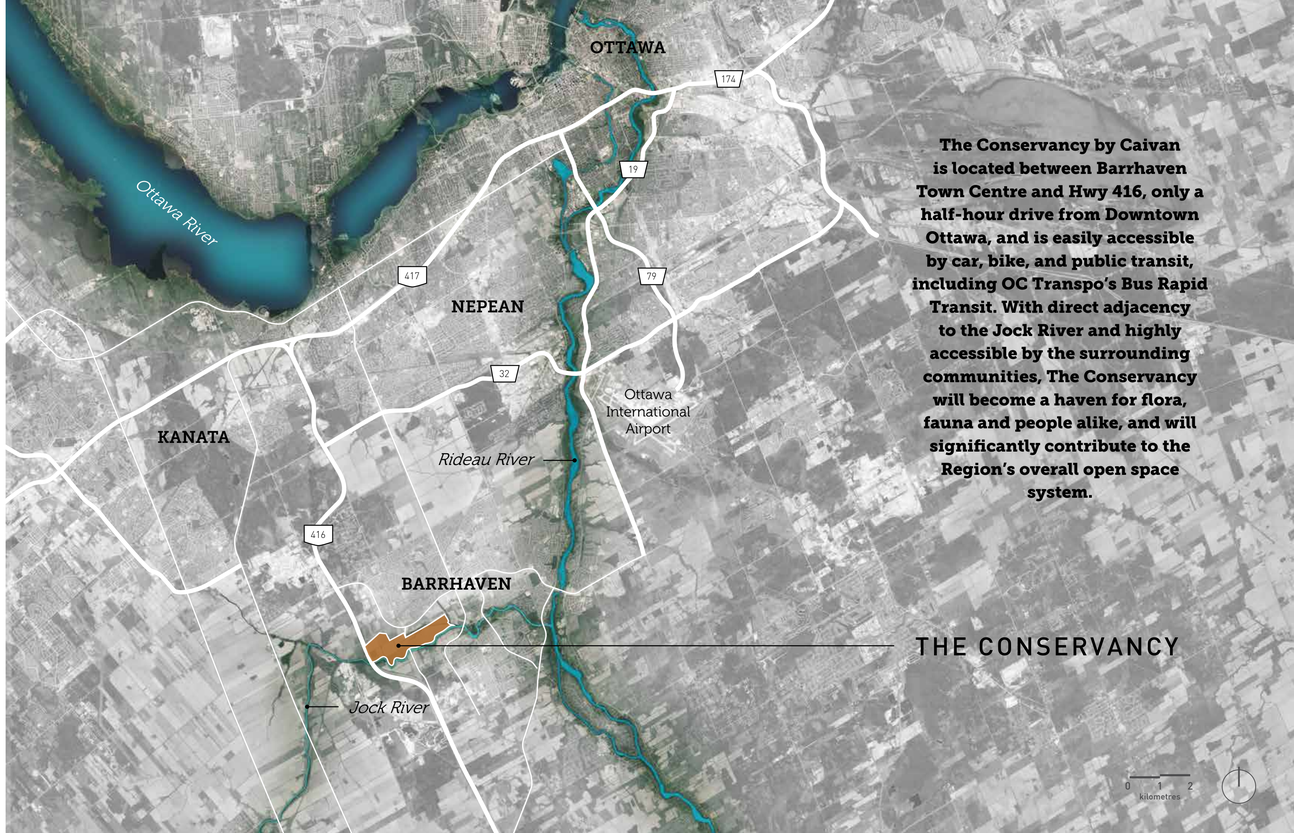
The Conservancy Urban Design Brief is intended to provide vision and design direction for an innovative, unified, and rational approach to the development of this river centric community, one equipped with key vistas and nodes, transit integration, and inter & intra-mobility. The intents highlighted within this document reflect objectives set out in the City of Ottawa Official Plan, The Nepean Area 8 Secondary Plan, Urban Design Guidelines for Greenfield Neighbourhoods (Ottawa, 2007), Building Better and Smarter Suburbs (Ottawa, 2015), Designing Neighbourhood Collector Streets (Ottawa, 2019), Park Development Manual (Ottawa, 2017), and Traffic Calming Design Guidelines (Ottawa, 2019).

This design brief contains insight, analysis and direction on the following:

- The Barrhaven Context;
- The Site Context and Conditions;
- The Vision and Design Principles;
- The Community Structure;
- The Concept Plan;
- The Jock River Open Space;
- The Parks and Open Spaces;
- The Built Form and Housing Typologies;
- The Street Network and Character;
- The Parking Plan;
- The Traffic Calming Strategies; and
- The Active Mobility.

The directives outlined in this document will foster the expansion of an existing community into one centred on innovation, sustainability, connectivity and accessibility.

*Note: The directives with parenthetical citations in **green** will be referencing the Urban Design Guidelines for Greenfield Neighbourhoods (Ottawa, 2007), and the directives in **blue** will be references those from Building Better and Smarter Suburbs (Ottawa, 2015). References to any other documents will not be colour-coded.*



The Conservancy by Caivan is located between Barrhaven Town Centre and Hwy 416, only a half-hour drive from Downtown Ottawa, and is easily accessible by car, bike, and public transit, including OC Transpo's Bus Rapid Transit. With direct adjacency to the Jock River and highly accessible by the surrounding communities, The Conservancy will become a haven for flora, fauna and people alike, and will significantly contribute to the Region's overall open space system.

Figure 1 Regional Context Diagram

2.0 | Site Context

The Conservancy will provide a sense of completion to Central Barrhaven. Due to the opportune location, just west of Barrhaven Town Centre, southeast of the enterprise/employment district, north of the Jock River, and within proximity to the approved extension of the Bus Rapid Transit route, The Conservancy will showcase compatible yet innovative community design and a commitment to environmental stewardship.

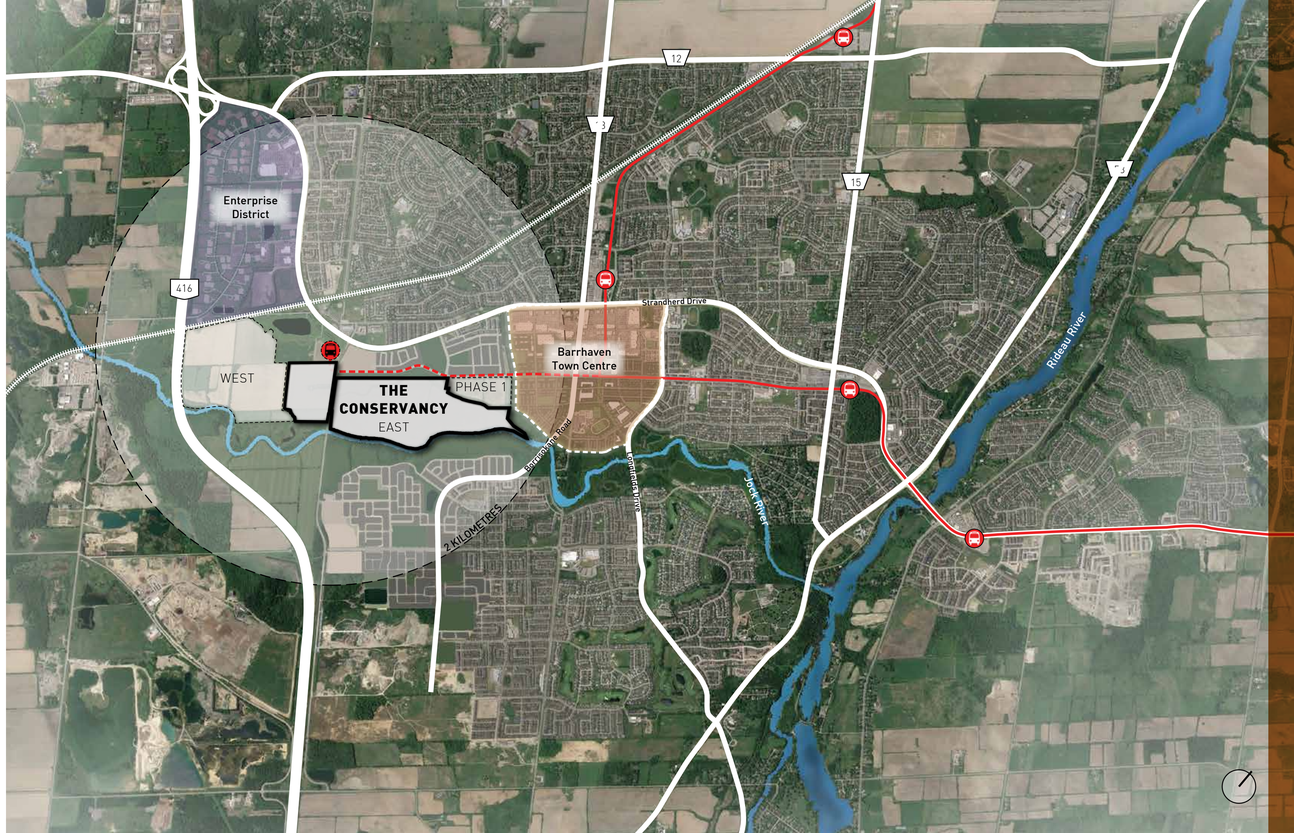


Figure 2 Barrhaven Context Diagram

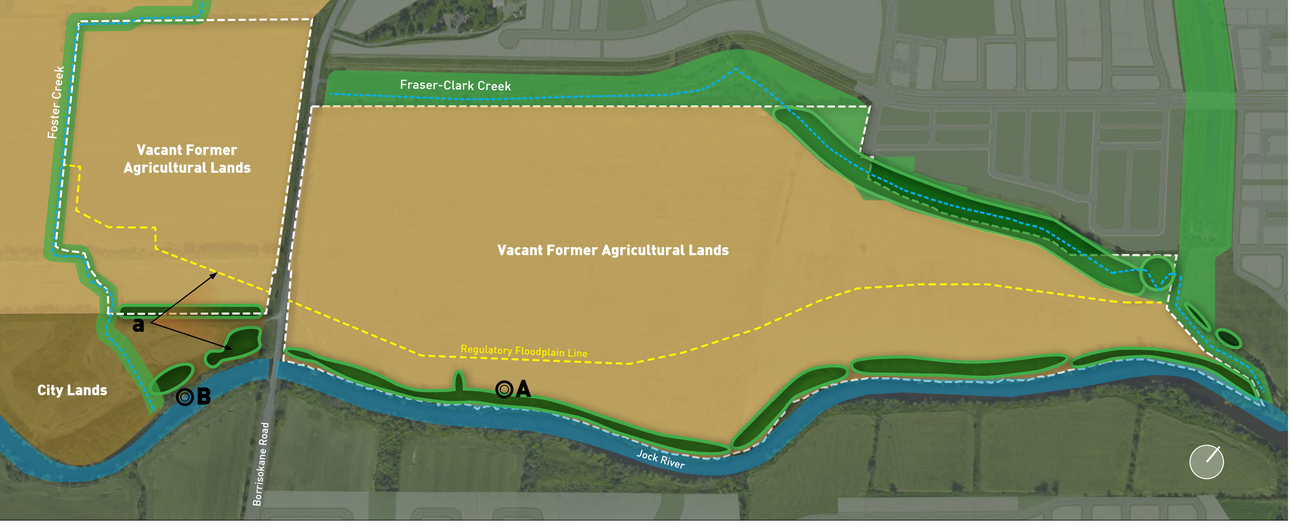


Figure 3 Existing Site Conditions & Key Map

3.0 | Existing Site Conditions: Inventory & Analysis

The existing conditions of The Conservancy are defined primarily by agricultural lands, extending to the banks of the Jock River on the south, the Fraser-Clarke Creek to the east and north, and the Foster Creek to the west. The river, and associated tributaries, are lined with sparse vegetation, varying from large trees and shrubs, to riparian hedgerows. Natural drainage courses, such as the Foster Creek and Fraser-Clarke Creek will be preserved, as well as their vegetated shorelines.

LEGEND

- Sparse Vegetation
- A — Image Letter
- a — Bird's Eye View
- Existing Drainage Corridor
- Creek Centreline
- Jock River
- The Conservancy
- Regulatory Floodplain Line

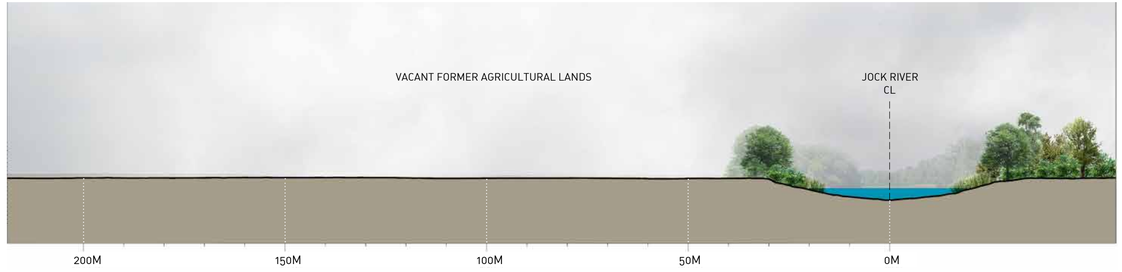


Figure 4 Existing Conditions Cross Section

Figure 5 Site Photos

> Conservancy will be an interwoven community showcasing the vibrancy of the rich environment, lacing sustainable solutions into the urban fabric, and fostering relations between the defined neighbourhoods and their natural surroundings.

Enhanced Jock River Open Space Corridor

Located on the southern banks of the site, the Conservancy will be host to the enhanced Jock River Open Space, showcasing sustainable practices and environmental stewardship through the creation of an innovative open space system.

Variety of Open Spaces

A variety of passive and active open spaces will be foundational to the development of the Conservancy, highlighting Caivan's commitment to foster healthy living through the provision of accessible and community-centred parks and open spaces.

Abundance of Trails & Community Connections

Creating a community that promotes walkability and connectivity is essential to the design of the Conservancy. Embedding the community with an innovative network of trails, pathways and streets, aligning with existing connections, will enhance the community's ability to foster healthy and active living.

Built Form

The Conservancy will be composed of a variety of new housing designs and a diversity of product. The built form will showcase Caivan's commitment to quality architecture and thoughtful community design.

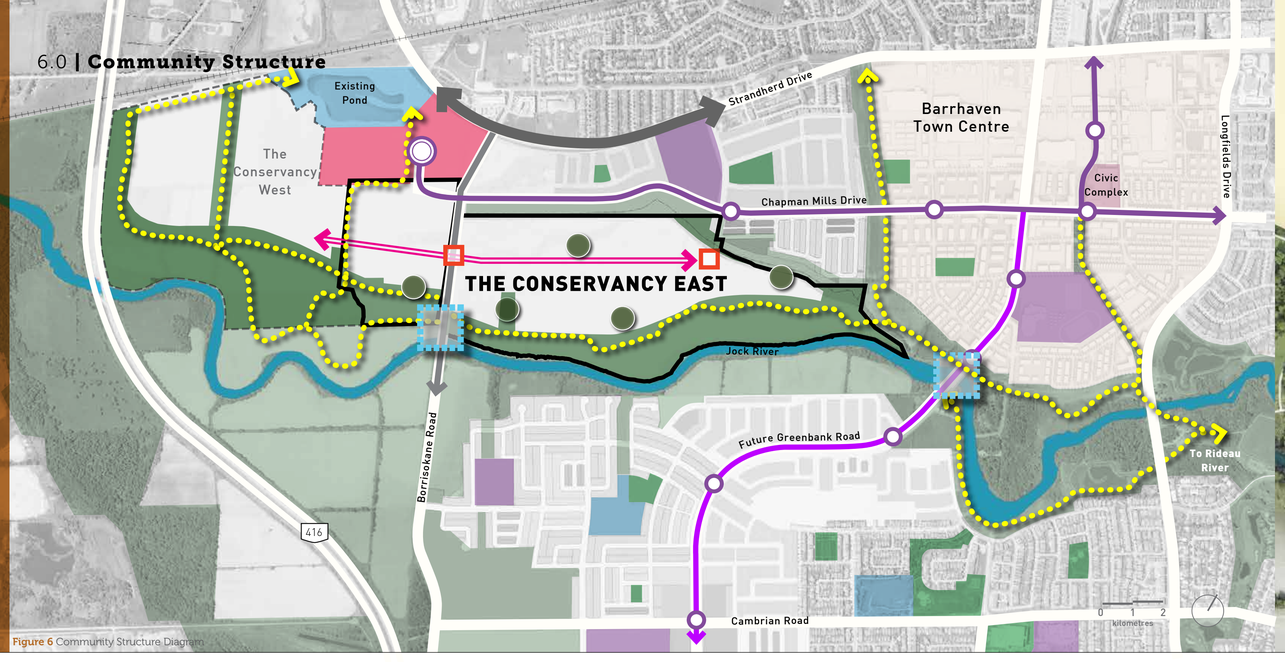


Figure 6 Community Structure Diagram

Figure 7 Community Plan Rendering

LEGEND

- Jock River Open Space
- Existing Park
- Existing Pond
- Town Centre
- City Lands/TOD District
- School
- East-West Corridor
- Key Gateway
- Major Trailhead
- BRT Route
- BRT Stop
- Open Space Trail
- Proposed Park
- The Conservancy

The Conservancy Area:
85.8ha

The Conservancy will be a community defined by its direct adjacency to the Jock River, its interconnected network of streets and parks, and its proximity to Barrhaven's Town Centre and the rich open space system.

8.0 | Jock River Open Space

The Jock River Open Space System (JROS) will be a key feature of this community, promoting physical activity and public health, structuring existing natural features and creating a new destination within Barrhaven. These lands, south of the residential development, will be transformed from an area barren of activity and natural habitat, to lands embedded with environmental and sustainable practices, aimed at increasing biodiversity, showcasing ecological strategies and improving overall community health.
In an effort to ease accessibility to this key open space feature, neighbourhood streets and the interface of the residential development will be supported by well-activated streetscapes, clear connections, terminating views and lookouts. Many of the parks within The Conservancy will also serve as gateways into the JROS.

Design Guidelines & Strategic Directions:

- The JROS will be directly accessible by municipal parks, roads, and pathways, offer a variety of passive recreational opportunities, create new seasonal wetlands, reintroduce native plant zones, and preserve the existing riparian ecosystem.
- The JROS will contribute to a connected network of parks, greenspaces and public lands, structured by existing natural features and connected by pathways and sidewalks. This network will be easily accessible by pedestrians or cyclists from homes throughout the neighbourhood *(G2)*.
- Natural features, such as woodlots, wetlands and creeks, and the natural connections between them, will be conserved to sustain healthy habitats for plants and animals *(G3)*.
- Existing green corridors, such as those along watercourses, will be preserved as connections for wildlife, pedestrians and cyclists. The natural character of these features will be preserved, where possible *(G4)*.

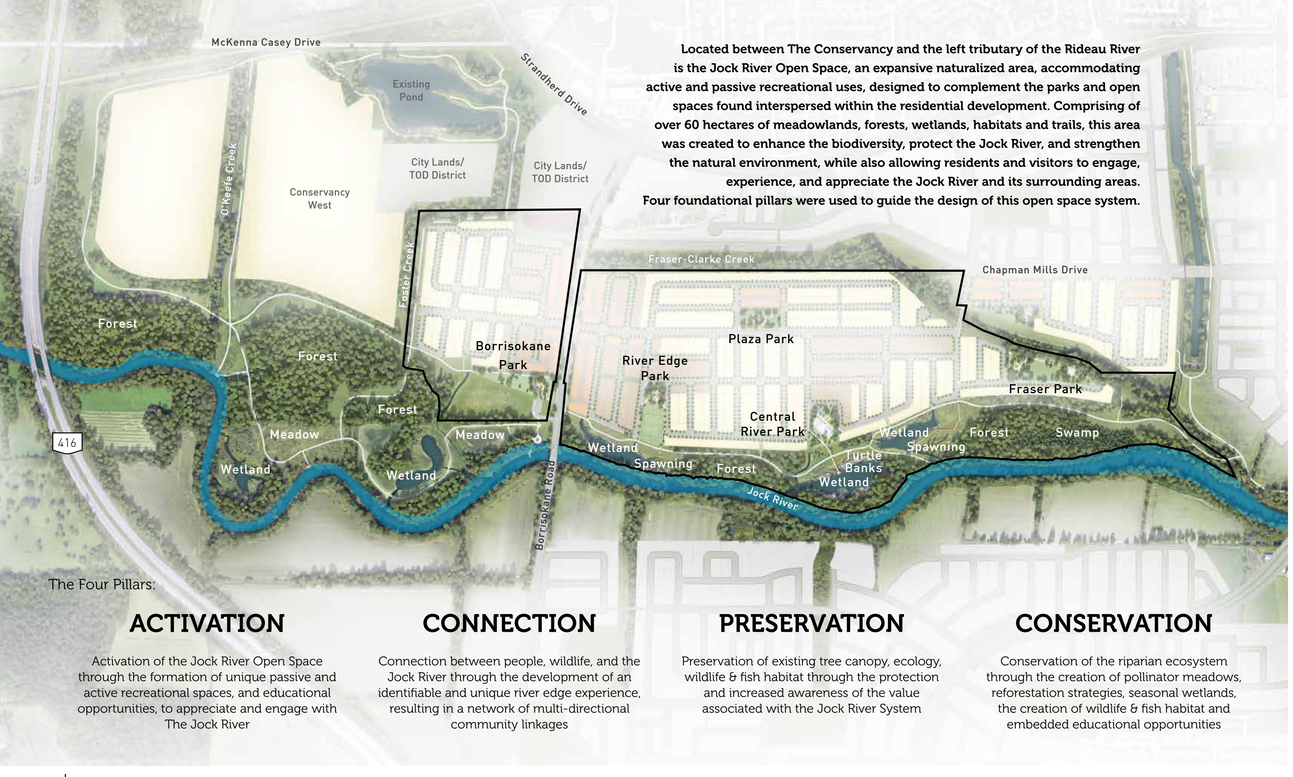
Figure 8 Cross Sections of Existing versus Proposed Conditions


Nature Trails & Wetlands


Habitat Creation


Shoreline Vegetation Preservation

Figure 9 Jock Open Space Diagram



Located between The Conservancy and the left tributary of the Rideau River is the Jock River Open Space, an expansive naturalized area, accommodating active and passive recreational uses, designed to complement the parks and open spaces found interspersed within the residential development. Comprising of over 60 hectares of meadowlands, forests, wetlands, habitats and trails, this area was created to enhance the biodiversity, protect the Jock River, and strengthen the natural environment, while also allowing residents and visitors to engage, experience, and appreciate the Jock River and its surrounding areas. Four foundational pillars were used to guide the design of this open space system.

The Four Pillars:

ACTIVATION

Activation of the Jock River Open Space through the formation of unique passive and active recreational spaces, and educational opportunities, to appreciate and engage with The Jock River

CONNECTION

Connection between people, wildlife, and the Jock River through the development of an identifiable and unique river edge experience, resulting in a network of multi-directional community linkages

PRESERVATION

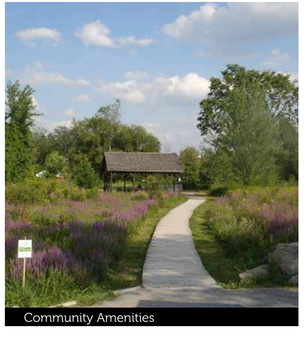
Preservation of existing tree canopy, ecology, wildlife & fish habitat through the protection and increased awareness of the value associated with the Jock River System

CONSERVATION

Conservation of the riparian ecosystem through the creation of pollinator meadows, reforestation strategies, seasonal wetlands, the creation of wildlife & fish habitat and embedded educational opportunities


Seating Opportunities

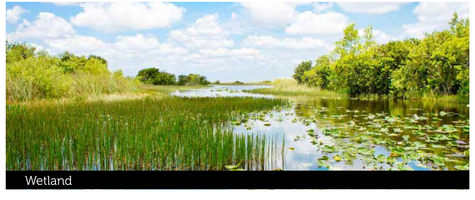

Spawning Habitat

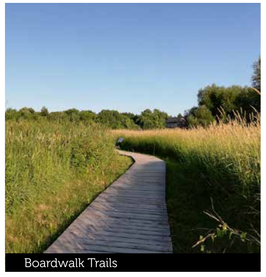

Community Amenities

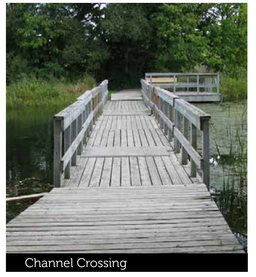

Trails & Pathways


Habitat Creation


Boat Launch


Wetland


Boardwalk Trails


Channel Crossing


Winter Activities


Lookout Opportunities

Jock Open Space Demonstration.

Precedents.

Shade Structure

Boardwalk Lookout

Boat Launch

Winter Trails

Interpretive Signage

Armour Stone Seating

Spawning Habitat

Boardwalk Trail

Forested Granular Trail

Naturalized Corridor

Open Space Trail

Walkway Block

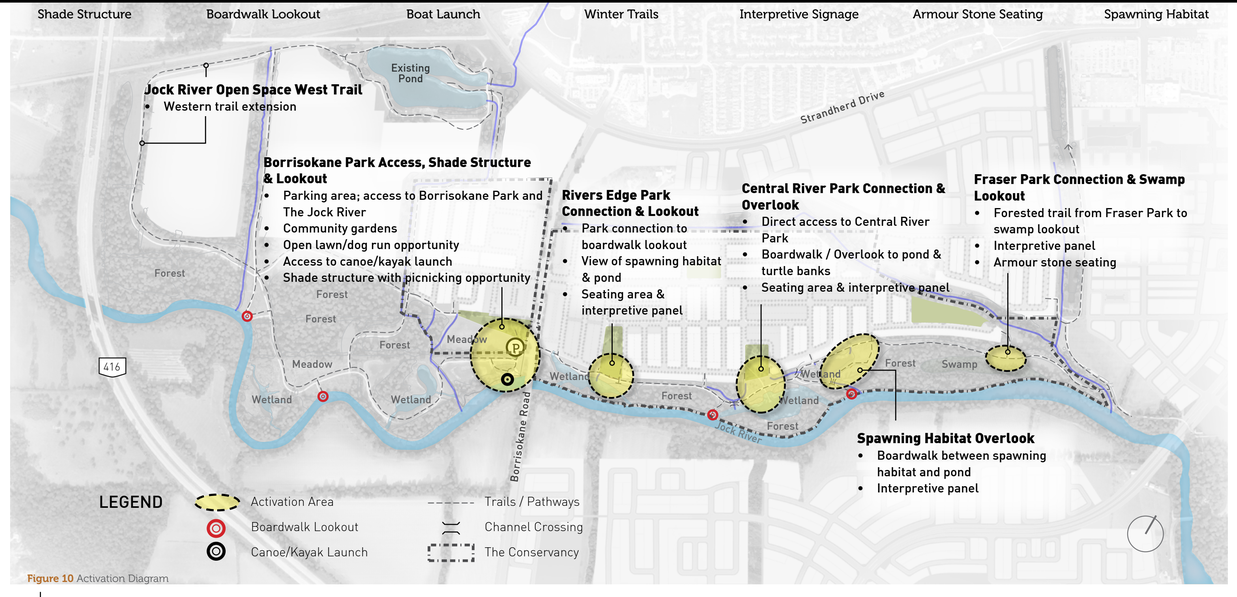


Figure 10 Activation Diagram

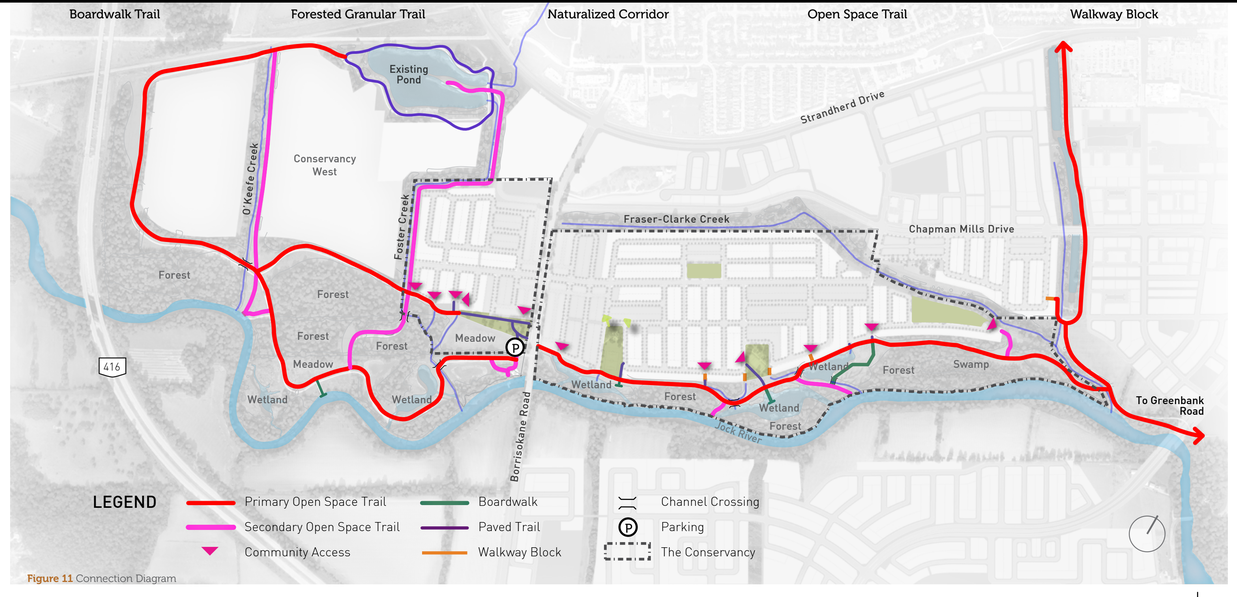


Figure 11 Connection Diagram

River Edge Conditions | Existing Channel | Existing Pond | Shoreline Vegetation

Figure 12 Preservation Diagram

Preservation.

Pollinator Meadow | Pond/Wetland | Swamp | Spawning Habitat | Forest | Turtle Bank

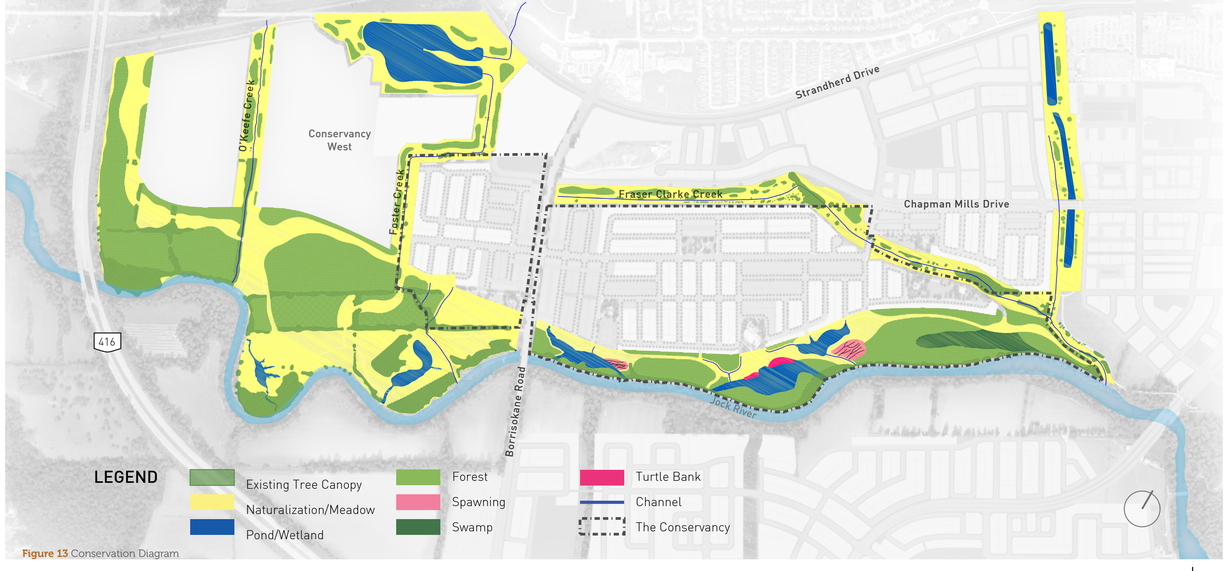


Figure 13 Conservation Diagram

Conservation.

9.0 | **Parks & Open Spaces**

The Parks within The Conservancy will be key features of the open space system. These nodes will showcase a variety of amenities and will embody unique characteristics, appealing to a diversity of ages and abilities. All residential development within The Conservancy will be within a 400m radius of a park. In order to ensure good and safe connections, these parks will be accessible through the community's active mobility and street network. Four of the five parks will also act as gateways to the Jock River Open Space, exhibiting transitional vegetation and wayfinding features.

Design Guidelines & Strategic Directions:

- Municipal parks have been strategically placed within a 5-minute walking radius (400-metres) of all residential units, will be easily accessible by various modes and users (walking, biking, transit, and vehicle), and connected by a series of streets, sidewalks, cycle tracks, and trails *(BBSS, p.25)*.
- Parks are located along collector or local streets, and are generally square or rectangular, with a couple exceptions where parks are adjacent to natural heritage features, and are greater than 0.4ha in size *(G19)*.
- With the exception of Borrisokane Park, which fronts onto Borrisokane Road and the JROS, all parks front onto at least two streets *(G20)*.
- All parks and open spaces have been designed to offer a variety of year-round passive and active recreational opportunities including playgrounds, sports fields, courts, rinks, splash pads, flex spaces (open areas), seating/gathering zones, and trails *(Park Development Manual)*.
- Each municipal park and parkette will be able to accommodate both small and large groups, and offer spaces, amenities, and activities for a variety of user groups and demographics (young children to seniors) *(BBSS, p.25)*.
- Landscape elements, such as shade structures, fencing, decorative paving, and planting, will be consistent with the established community character and theme *(G60)*.
- Park features and elements have been sited to ensure visibility from surrounding streets and homes, and to instill a sense of safety and put eyes on the park; applicable CPTED principles will be implemented *(Park Development Manual)*.
- Most greenspaces have been designed with the majority of their frontage onto public roads to make a visible contribution to the neighbourhood *(GS4)*, while appearing open and accessible *(GS6)*.
- Trees and sidewalks will be provided along the edges of parks and greenspaces to complement the treatment across the street *(GS8)*.
- Street, lot patterns and building orientations will frame and enhance the presence of all parks, regardless of size *(BBSS, p.27, SD3)*.

Splash Pads

Play Structure and Seating Amenities

Sports Fields

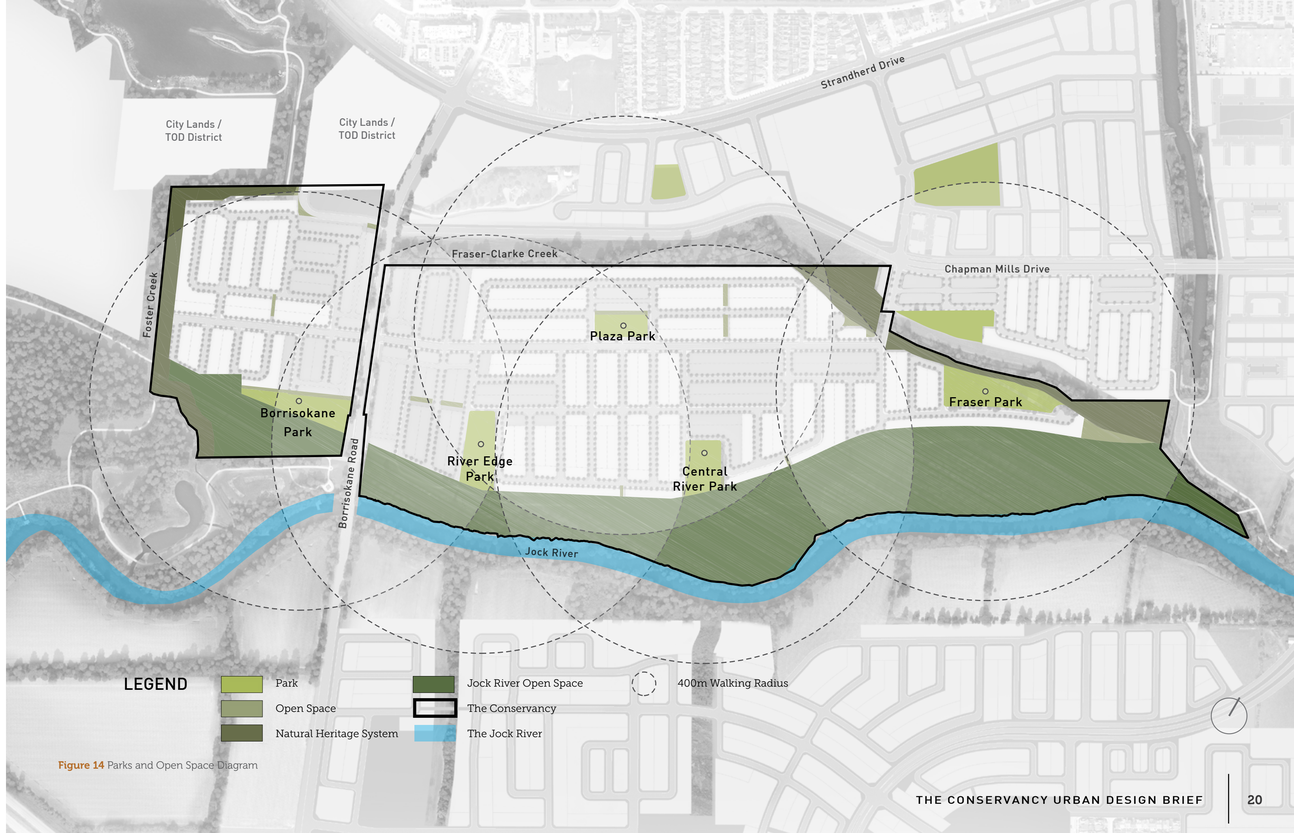
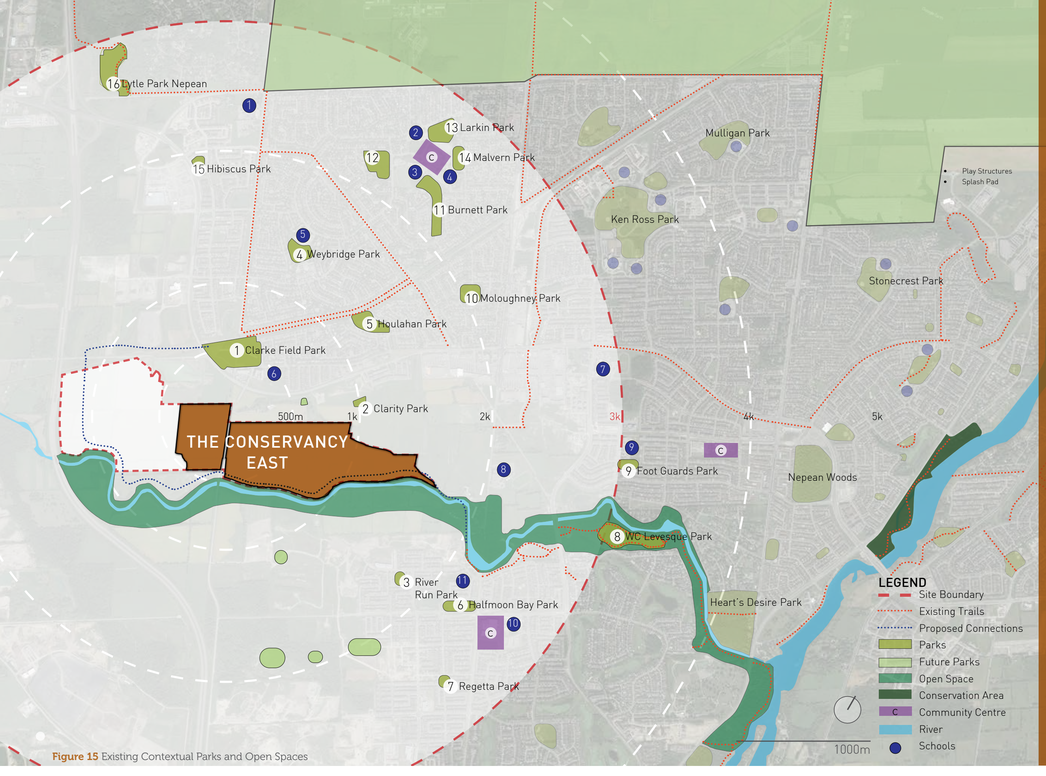


Figure 14 Parks and Open Space Diagram



Parks (3 km radius)

1. Clarke Field Park
   - Play Structures
   - BMX Track
   - Ball Diamond
   - Soccer Field
2. Clarity Park
   - Soccer Field
   - Play Structure
   - Open Lawn
   - Shade Structure
   - Splash Pad
3. River Run Park
   - Boarded Rink
   - Shade Structure
   - Play Structure
4. Weybridge Park
   - Play Structures
5. Houlohan Park
   - Ball Diamond
   - Play Structures
6. Halfmoon Bay Park
   - Play Structures
   - Art Installation
   - Tobogganing Hill
   - Splash Pad
7. Regatta Park
   - Play Structures
   - Splash Pad
8. WC Levesque Park
   - Stonebridge Trail
   - Soccer Field
9. Foot Guards Park
   - Play Structures
10. Moloughney Park
    - Play Structures
    - Ball Diamond
    - Ball Court
11. Burnett Park
    - Play Structures
12. Mowat Farm Park
    - Play Structures
    - Soccer Field
13. Larkin Park
    - Play Structures
    - Tennis Court
14. Malvern Park
    - Soccer Field
15. Hibiscus Park
    - Play Structures
    - Splash Pad
16. Lytle Park Nepean
    - Ball and Softball Diamonds
    - Soccer Field

Schools (3 km radius)

1. Cedarview Middle School
2. St Patrick School
3. John Mcrae Secondary School
4. Jockvale Elementary School
5. Saint Elizabeth Ann Seton Elementary
6. Ottawa Christian School
7. École secondaire catholique-Pierre-Savard
8. Chapman Mills Public School
9. St. Joseph Secondary School
10. St. Cecilia School
11. Halfmoon Bay Public

Community Centres (3 km radius)

1. Walter Baker Sports Centre
   - Fitness centre
   - Ice Rinks
   - Pool
2. Minto Recreation Centre-Barrhaven
   - Pool
   - Fitness/Weight Room
   - NHL Rinks
   - Tarzan Rope

LEGEND

- Site Boundary
- Existing Trails
- Proposed Connections
- Parks
- Future Parks
- Open Space
- Conservation Area
- C Community Centre
- River
- Schools

Figure 15 Existing Contextual Parks and Open Spaces

Figure 16 Fraser Park Conceptual Rendering

Fraser Park (1.16ha) | Potential Programming

1. Pickleball Court
2. Fitness Area/Fitness Stations/ Older Adult Amenities
3. Junior/Senior Play Area
4. Open Lawn/Flexible Space
5. Stonedust Pathway
6. Sand Play
7. Swings
8. Shade Structure with Seating & Picnic Tables
9. Connection to Jock River Trails

Programming Context.

Park Vignette.

Figure 17 Central River Park Conceptual Rendering

Central River Park (0.67ha) | Potential Programming

1. Permanent Boarded Rink/Multi-Use Courts
2. Puddle Rink
3. Shade Structure & Picnic Tables
4. Splash Pad/Water Play
5. Junior/Senior Play Area with Sand Play
6. Pathways
7. Open Lawn/Flexible Space
8. Connection to Jock River Trails

Figure 18 River Edge Park Conceptual Rendering

River Edge Park (0.85ha) | Potential Programming

1. Mini Soccer Field
2. Junior/Senior Play Area
3. Swings
4. Pathways
5. Sand Play
6. Shade Structure & Picnic Tables
7. Connection to Jock River Trails

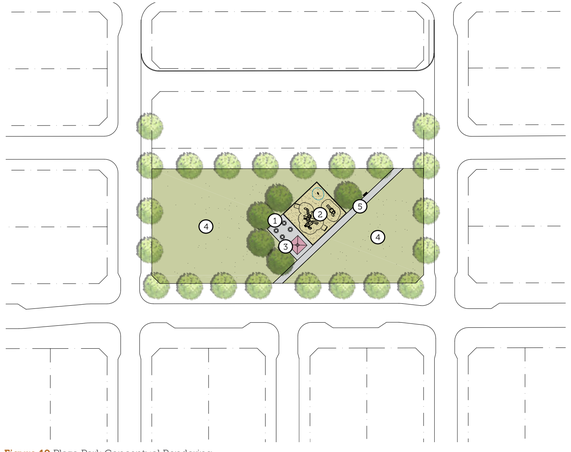


Figure 19 Plaza Park Conceptual Rendering

Plaza Park (0.42ha) | Potential Programming

1. Plaza Space with Games Tables and Public Art
2. Junior/Senior Play Area with Sand Play
3. Shade Structure & Picnic Tables
4. Open Lawn/Flexible Space
5. Pathways

Figure 20 Borrisokane Park Conceptual Rendering

Borrisokane Park (0.77ha) | Potential Programming

1. Junior/Senior Play Area and Swings
2. Pathways
3. Shade Structure & Picnic Tables
4. Open Lawn/Flexible Space
5. Jock River Lookout with Interpretive Signage & Seating
6. Access from Borrisokane Road
7. Connection to Jock River Trails

The Jock River Open Space system will be a unique open space getaway within Barrhaven, celebrating the history of the tributary while creating a cohesive open space system to unite the Rideau River to the western extents of Barrhaven. This ecologically mindful open space system will highlight the importance of the Jock River as a vital contributor to the health of the surrounding environment, while also showcasing the potential health benefits to the community.

The Conservancy Area:
85.8ha
Total Open Space %:
39.4%

Parks	Open Space (Walkways, MUPs, Open Spaces)	Natural Heritage System	Jock Open Space (Wetlands, Meadows, Forested Areas)
3.9ha	**1.0ha**	**5.1ha**	**23.8ha**
11.5%	3.0%	15.1%	70.4%

TOTAL PARKS & OPEN SPACE AREA: 33.8ha

10.0 | **Built Form**

The built form within The Conservancy will demonstrate Caivan's unique architectural character, yet reflect similar arrangements found within the surrounding communities, primarily composed of low to medium density forms. The community will primarily showcase single detached housing typologies, traditional townhomes along with rear lane product, strategically interspersed. In addition, a mid-rise block will be incorporated into the TOD lands north-west of Borrisokane Road.

The figures in the subsequent pages illustrate the varying built form typologies in The Conservancy:

- Single Detached
- Traditional Townhomes
- Rear Lane Product
- Mid-Rise

Design Guidelines & Strategic Directions:

- A variety of residential typologies and styles will be provided throughout the community to reduce monotony, create visual diversity, and cater to various homebuyers, while complementing the existing architecture in surrounding communities *(BBSS, p.12, G35)*.
- Homes will be located close to the property line, with their primary face addressing the street, while maintaining minimum setbacks and making room for trees and utilities, to help define street edges and create visually ordered streetscapes *(G34)*.
- Primary entrances, windows and porches will be clearly visible, articulated, and identifiable from the street *(G37)*. Garages will not dominate the width of the front façade, and will not project past the front wall *(G44)*.
- Key corridors & collector streets will be priority for enhanced architectural elevations / materiality.

- All homes will be designed using high-quality building materials and be well articulated and detailed to help define and establish a harmonious community identity.

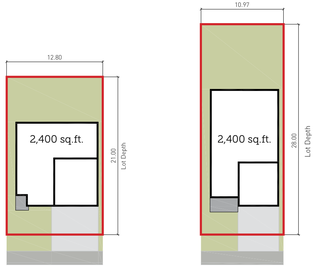
Inspirational Rear Lane Product along Collector Road

Corner Lots:
Corner units will be provided in the single detached and rear lane townhome typologies. These units will exhibit the following characteristics:

- Where possible, corner units, with driveways and front doors addressing separate streets, will be included to create more active street frontage and reduce the need for long stretches of privacy fences *(G38)*.
- Where possible, incorporate porches, which are big enough to accommodate sitting areas, into the overall architecture of the building *(G39)*.

Inspirational Single Detached Corner Unit

OpenPlan™ Designs:



Caivan's OpenPlan™
lot area: 268.8m²

Typical Ottawa Standard
lot area: 307.2m²

- Compared to the typical lot size in Ottawa, Caivan's OpenPlan™ designs decreases lot depth, while increasing lot width. This in turn makes collector and local right-of-ways appear less car-dominated, due to the wider lot widths, while providing additional on-street parking frontage between driveways *(BBSS, p.42, SD5; p.38)*. In addition, Caivan's OpenPlan™ designs allow for greater community density compared to a community with typical lot sizes.

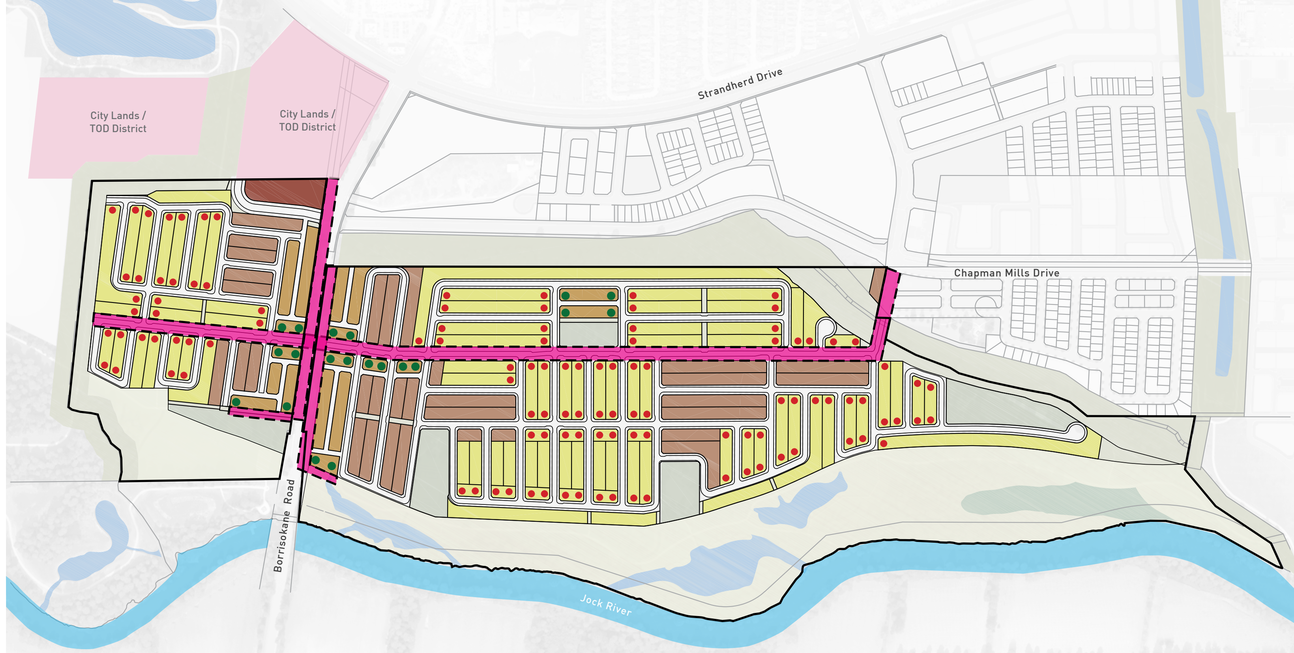


Figure 21 Built Form Diagram

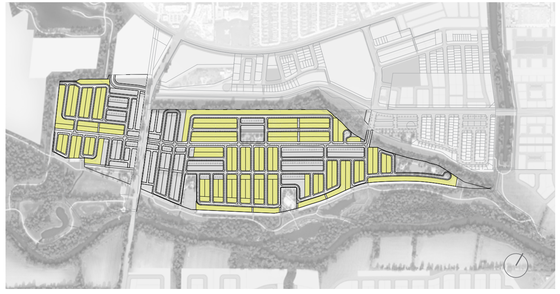


Figure 22 Single Detached Key Plan

Front Drive Single Detached Homes will exhibit unique and distinct characteristics. These homes will be offered in a variety of sizes to cater to a variety of homebuyers.

Single detached housing typologies that will be incorporated into the Conservancy neighbourhood will include:

- 35' Single Detached Homes
- 37' Single Detached Homes
- 42' Single Detached Homes
- 50' Single Detached Homes
- 35' Bungalows
- 50' Bungalows

Inspirational Imagery

Single Detached.

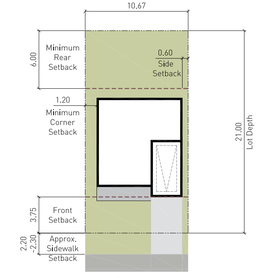


Figure 23 35' Single Detached Lotting Standard

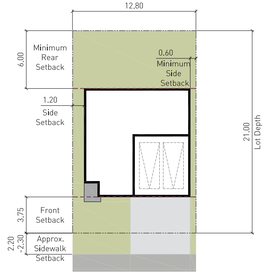


Figure 24 37' Single Detached Lotting Standard

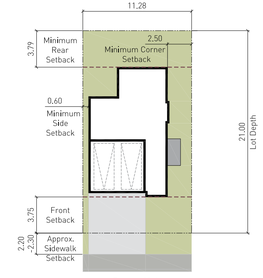


Figure 25 42' Single Detached Lotting Standard

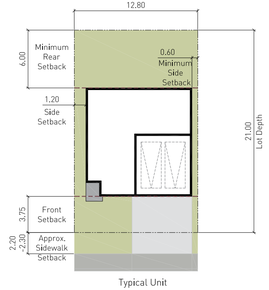


Figure 26 50' Single Detached Lotting Standard

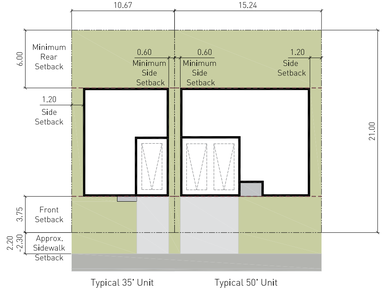


Figure 27 35' & 50' Single Detached Bungalow Lotting Standard

Lotting Standards.

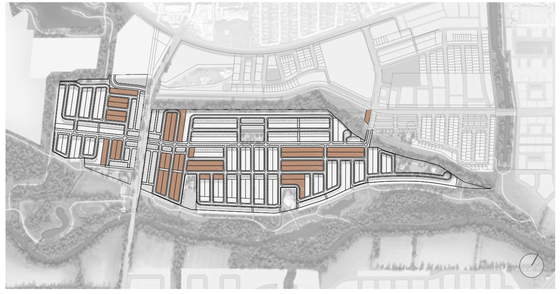


Figure 28 Traditional Townhomes Key Plan

Two-Storey Traditional Townhomes will complement the aesthetics found within the single detached housing units, showcasing similar features, materials and setbacks. Connected units will vary in style and size to create architectural interest within the facade of each townhome block. These blocks will contribute to the diversity of housing typologies within the Conservancy neighbourhood.

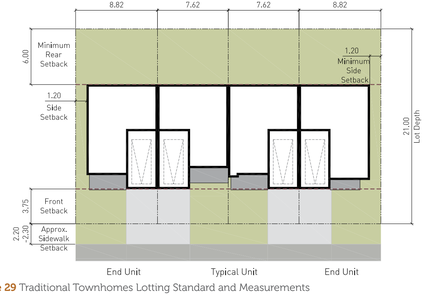
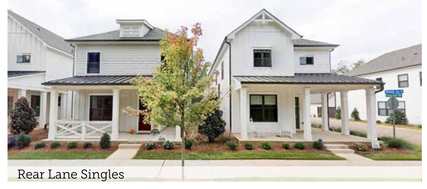


Figure 29 Traditional Townhomes Lotting Standard and Measurements

Inspirational Imagery

Traditional Townhomes.

Inspirational Imagery



Rear Lane Singles

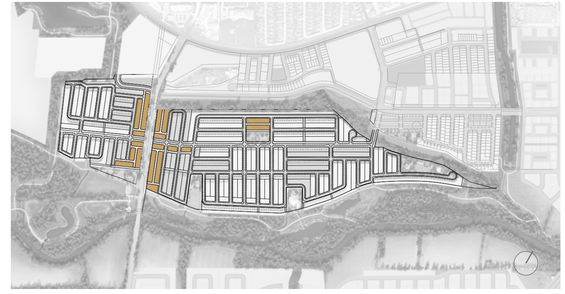


Figure 30 Rear Lane Product Key Plan

Rear Lane Products will create an aesthetic facade along streetscapes, pathways, and open spaces while reducing the negative visual impacts of surface parking. More space will also be alotted for tree planting. The architecture will complement the other built form typologies within the community and will contribute to the diversity of housing typologies within the Conservancy neighbourhood. In addition to the rear lane townhomes, rear lane singles will be incorporated in key locations to soften the streetscape.

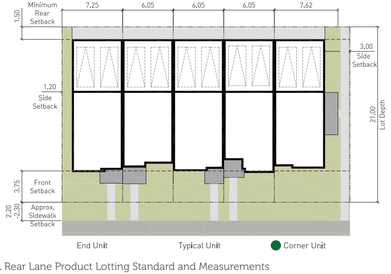


Figure 31 Rear Lane Product Lotting Standard and Measurements

Rear Lane Product.

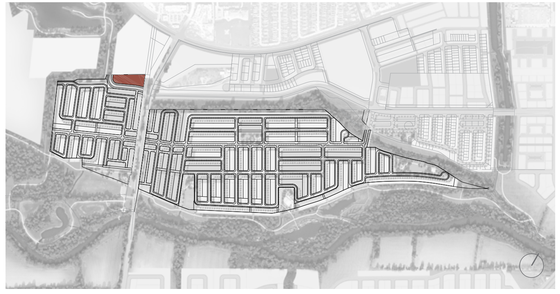
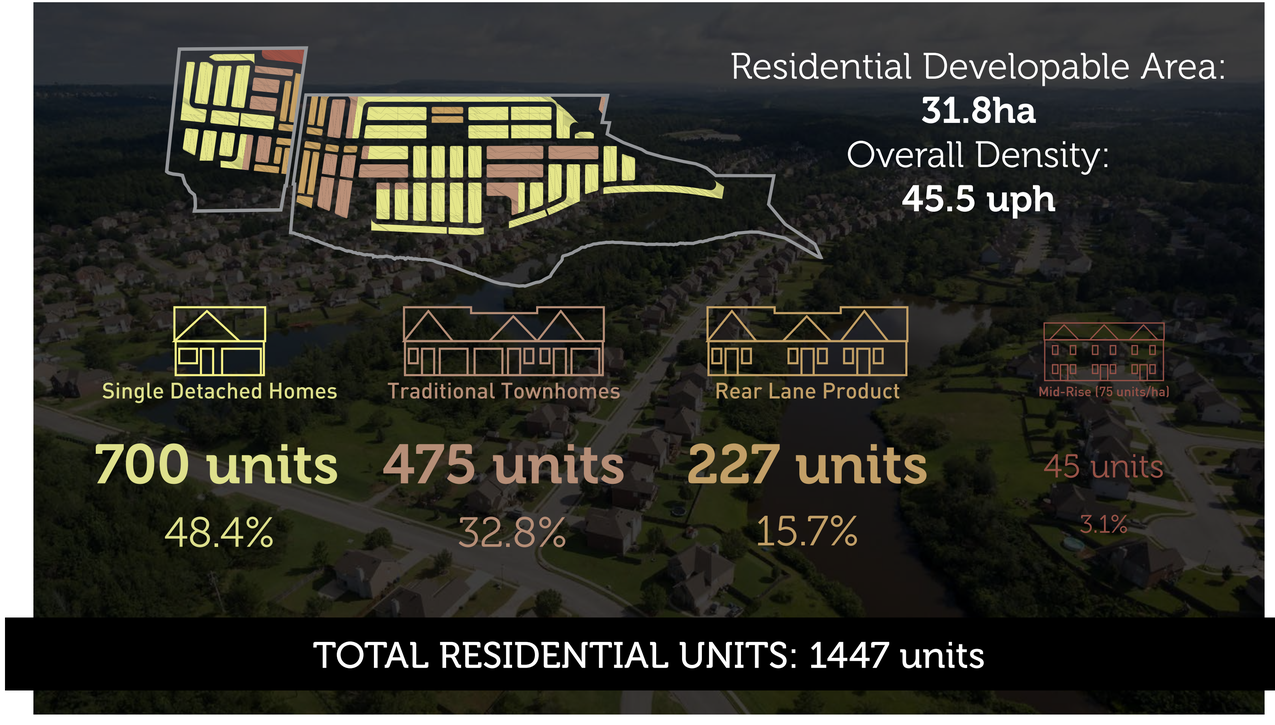


Figure 32 Mid-Rise Key Plan

Mid-rise built form will be developed along with the City lands to the north in future phases. This high density block will be integrated into the envisioned Transit-Oriented Development district and will be within proximity to the proposed higher-order transit hub.

Inspirational Imagery



Mid-Rise.

Summary.

11.0 | Street Hierarchy

The Conservancy will host a variety of streetscapes that encourage connectivity while enhancing the visual appearance of the community. The network will prioritize pedestrians over vehicles and will be embedded with hard and softscaped features to enhance the comfortability and experience. Community gateways will be designed to create a sense of arrival and welcome for both residents and visitors.

The figures in the subsequent pages illustrate the varying street right-of-way cross sections in The Conservancy:

- Collector Road (24.0m)
- Local Road (16.5m)
- Window Street (14.0m)
- Lane (8.5m)
- Bus Rapid Transit Route (23.5m)

Design Guidelines & Strategic Directions:

- The modified grid street network will be functional to all modes and users (pedestrians, cyclists, vehicles, transit), and include furnishings, such as signage, mailboxes, wayfinding, and lighting, that are consistent with the existing character and style of neighbouring communities *(BBSS, p.48, SD10)*.
- The street network will create great intra-community connectivity to local amenities and features, while also providing convenient inter-community connections to surrounding destinations, such as the future Barrhaven Town Centre to the east and the Jock River Open Space to the south. New streets will connect to existing and future streets in adjacent developments that have yet to be developed *(G11, BBSS, p.22, SD1 & 3)*.
- Community gateways and nodes will be designed with enhanced landscape treatments, such as signage walls, masonry columns, fencing, decorative paving, and planting, to signify a sense of arrival *(G25)*.
- Large canopy street trees will be planted at regular intervals while being in coordination with street furnishings and utilities. Native plant species, tolerant of urban conditions (salt, drought, pollution), are encouraged wherever possible and will be selected from the City's approved list of street trees *(G27)*.
- Local street patterns will be between 80-260 metres in length. Where block lengths exceed 200m, a mid-block walkway and crossing will be integrated to ease walkability, enhanced with landscaping, fencing, and facing windows, to support an accessible, safe, and attractive environment *(G13, 46)*.
- Suitable zoning setbacks and road right-of-way widths will be provided, with sufficient space for various elements such as trees, sidewalks, utilities, cycling facilities, parking and travel lanes *(G21)*.
- A range of appropriately sized roadways will be provided to complement the character and functional needs of each community area *(BBSS, p.22, SDS)*
- The design of the street network will be based on a modified or offset grid to maximize the choices of travel routes *(BBSS, p.22, SD2)*

Front Drive Singles on Local Road

Fence Feature with Stone Column

Rear Lane Product on Collector

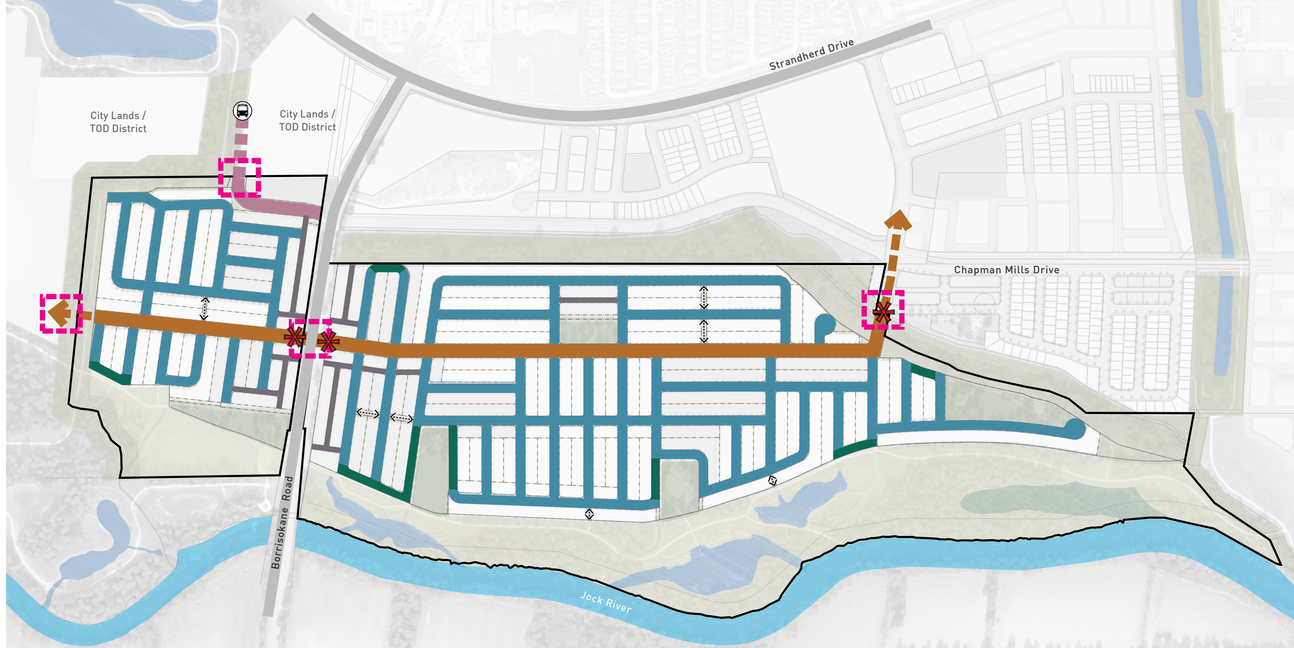


Figure 33 Street Hierarchy Plan

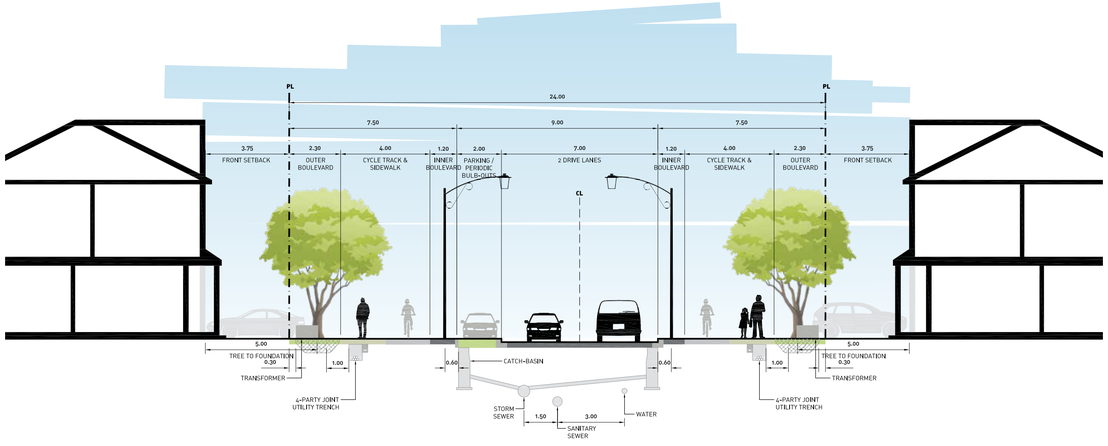


Figure 34 24.0m Collector Road Right-Of-Way Section

- The 24.0m Collector Road will serve as the primary east-west throughfare within The Conservancy
- All three housing typologies will front or flank onto the right-of-way, providing dynamic interest along the streetscape
- The Plaza Park will also front onto the Collector, and will be lined with street trees and aesthetic features along the park interface
- The right-of-way will consist of the following elements: sidewalks, cycle tracks, and street trees on both sides, as well as an alternating one-sided parking lane with periodic bulb-outs

Figure 35 Intersection of 24.0m Collector Road with 16.0m Local Road

Design Guidelines:

- Segregated active transportation routes will line the east-west Collector Road
- Prioritization and visibility measures will be placed at intersections, with crosswalks designed at 3.0m width and crossrides at 1.5-2.5m in width
- One-sided street parking will be provided, alternating from side to side
- Drive lanes will be no less than 7.0m width at pinch points

(Figure 35)

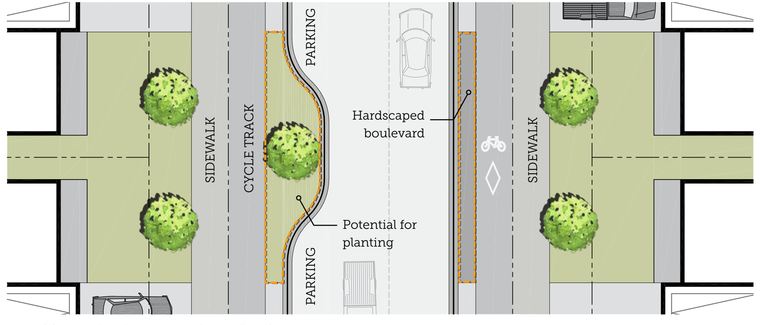


Figure 36 Collector Road Plan View with Periodic Bulb-Out

- Sidewalks and cycle tracks will be segregated from the drive lanes and located offset from the street curb line by a narrow, hard-surfaced boulevard
- Street trees are to be located along both sides of the street, within the right-of-way close to the buildings, with additional opportunities for planting at periodic bulb-outs (where soil volumes allow)
- Private driveway parking will be provided partially within the right-of-way

(Figure 36)

**Source: Designing Neighbourhood Collector Streets, Ottawa & Traffic Calming Design Guidelines, Ottawa*

24.0m Collector Road.

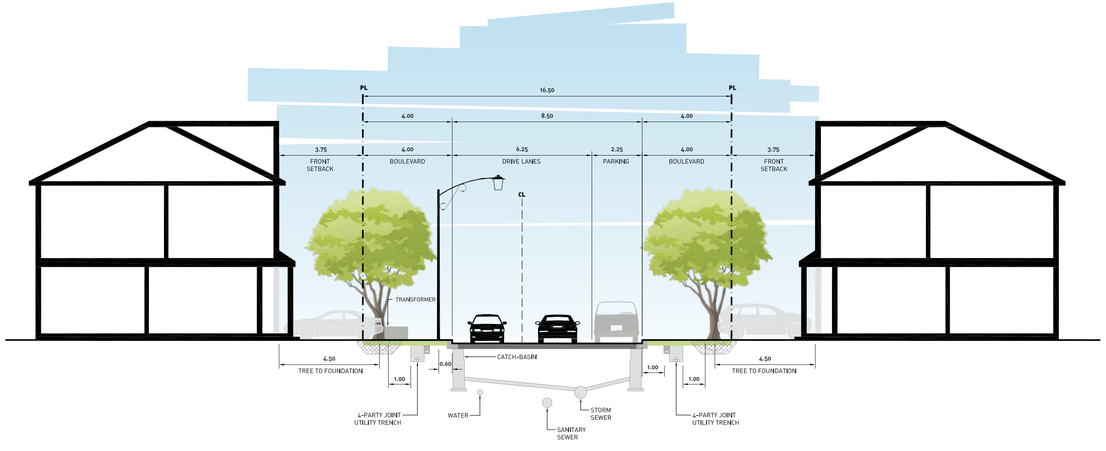


Figure 37 16.5m Local Road Right-Of-Way Section

- The 16.5m Local Road will be the predominant road typology throughout the Conservancy community
- The right-of-way will be more private in nature, catering to the residential blocks and providing access to the open spaces and parks
- 16.5m right-of-ways will consist of the following elements: street trees and a parking lane on one side
- Select local roads will be highlighted as key connections and will include a curb-face sidewalk on one side (see Figure 38)

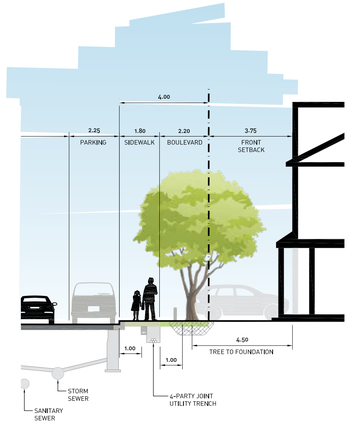


Figure 38 16.5m Local Road with Curb-Face Sidewalk

- Select 16.5m local roads will be highlighted as key connections and will include a curb-face sidewalk on one side (see Figure 38)

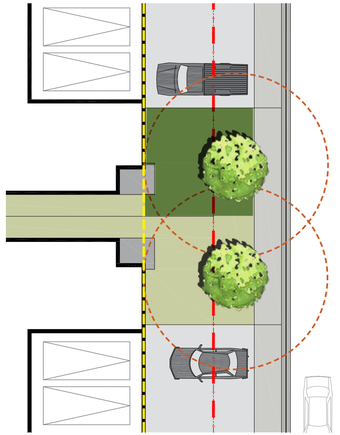


Figure 39 Tree Planting Setback - Front Drive Singles

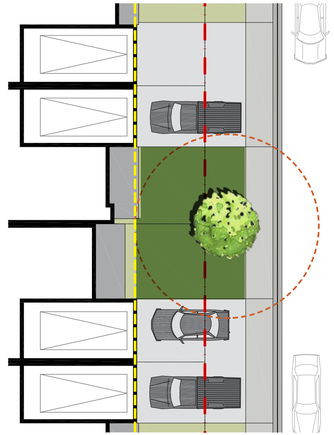


Figure 40 Tree Planting Setback - Front Drive Townhomes

Street Tree Soil Volumes

- 4.5m setback from tree to foundation must be provided for small to medium size trees
- Small trees must be provided with 25m^3 soil volume; medium trees must be provided with 30m^3 soil volume

Front Drive Singles Soil Volume:

- Length: 11.96m
- Width: 6.00m
- Depth: 1.5m

Soil Volume (per tree) = 53.8m^3

Front Drive Townhomes Soil Volume:

- Length: 8.38m
- Width: 6.00m
- Depth: 1.5m

Soil Volume = 75.42 m^3

16.5m Local Road.

Alternate 16.5m Local Road & Soil Volumes.

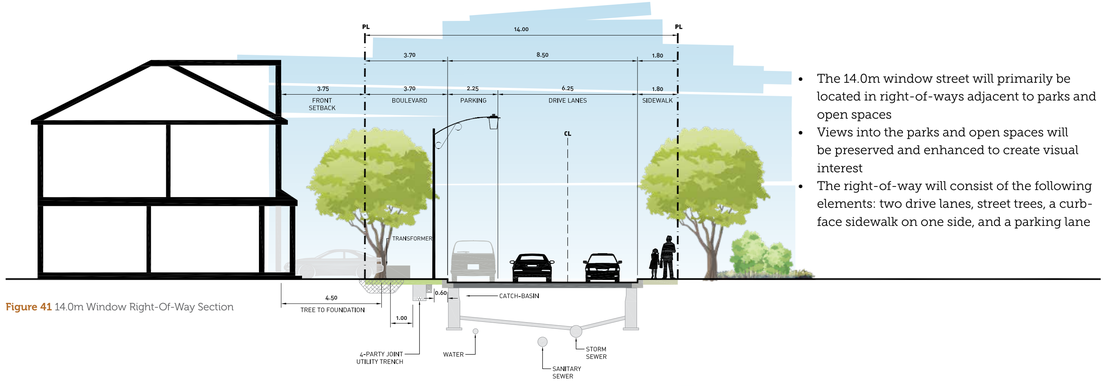


Figure 41 14.0m Window Right-Of-Way Section

- The 14.0m window street will primarily be located in right-of-ways adjacent to parks and open spaces
- Views into the parks and open spaces will be preserved and enhanced to create visual interest
- The right-of-way will consist of the following elements: two drive lanes, street trees, a curb-face sidewalk on one side, and a parking lane

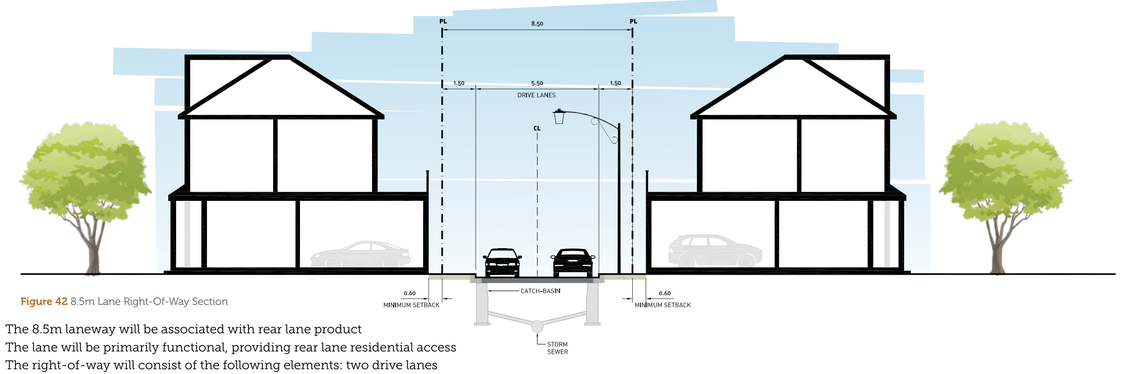


Figure 42 8.5m Lane Right-Of-Way Section

- The 8.5m laneway will be associated with rear lane product
- The lane will be primarily functional, providing rear lane residential access
- The right-of-way will consist of the following elements: two drive lanes

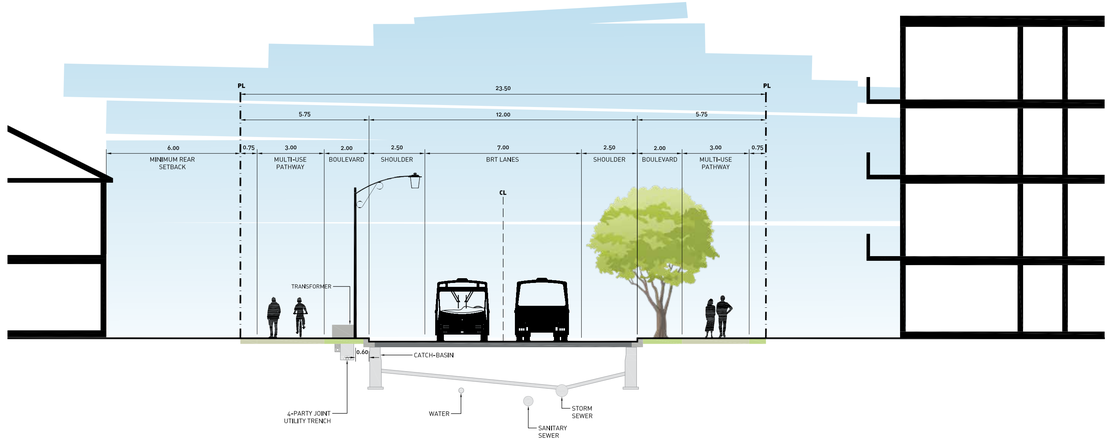


Figure 43 Bus Rapid Transit Route Right-Of-Way Section

- The approved 23.5m Bus Rapid Transit (BRT) extension right-of-way will demarcate the termination of the rapid transit corridor, linking The Conservancy to Downtown Ottawa
- Traditional townhomes and future mid-rise built form will back onto this section of the corridor
- The right-of-way will consist of the following elements: two drive lanes, two shoulder lanes, two multi-use pathways, and street trees on one side

14.0m & 8.5m Sections.

Bus Rapid Transit Route.

12.0 | **On-Street Parking**

On-street parking will be provided on collector roads and select local roads throughout The Conservancy community to accommodate short-term visitor parking, loading and delivery opportunities. On-street parking will be one-sided only, due to respective right-of-way widths. Periodic bulb-outs will act as a traffic calming measure and will be placed within these areas to book-end sections of parking, allow for breaks within longer uninterrupted stretches and to accommodate vegetative elements, such as trees.

The two main forms of on-street parking that will be explored within this section include:

- Local On-Street Parking
- Collector On-Street Parking

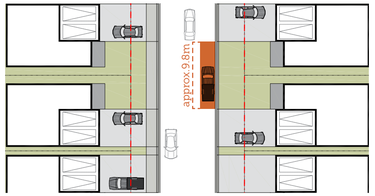
Design Objectives & Strategic Directions:

- On-street parking has been provided on all local and collector streets, offering additional short-term parking for residents and visitors, including 24-hour on-street parking with permits *(BBSS, p.42, SD6)*.
- Slower vehicular speeds will be encouraged throughout the community. Along with traffic calming strategies, collector roads will have alternating on-street parking, having an increased impact on travel speeds *(TCDG, p.16)*.
- Providing more on-street parking will remove the need for surface parking at parks and open spaces.
- The visual impact of curb face-to-curb face paving will be reduced.
- On-street parking will contribute to the creation of 'complete streets' *(BBSS, p.48, SD10)*.

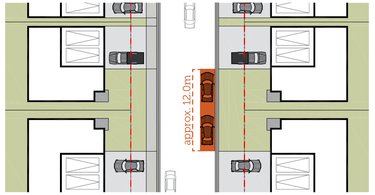
OpenPlan™ Designs:

In creating a community with increased lot widths, Caivan's OpenPlan™ designs will allow for increased on-street parking opportunities between separated or paired driveways, on all local and collector roads.

Ottawa Standard Lot Size



Caivan's OpenPlan™ Lot Size




On-Street Parking Along Collector Road


On-Street Parking Along Local Road


On-Street Parking Along Window Street

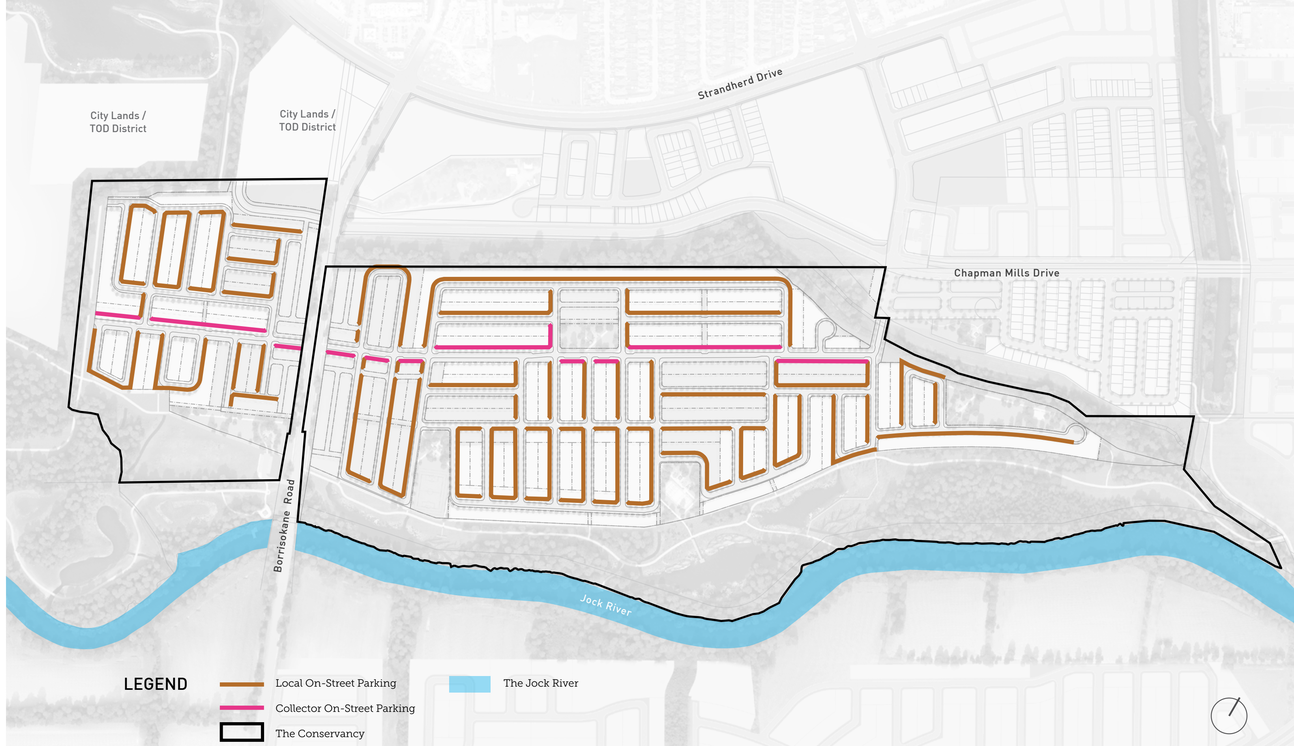


Figure 44 On-Street Parking Diagram

Figure 45 On-Street Parking Demonstration on Collector Road

- One-sided on-street parking will be located within the right-of-way, alternating from side to side throughout the length of the collector
- Bulb-outs will be placed periodically to break-up longer stretches of on-street parking, act as a traffic calming measure and provide an opportunity for tree planting

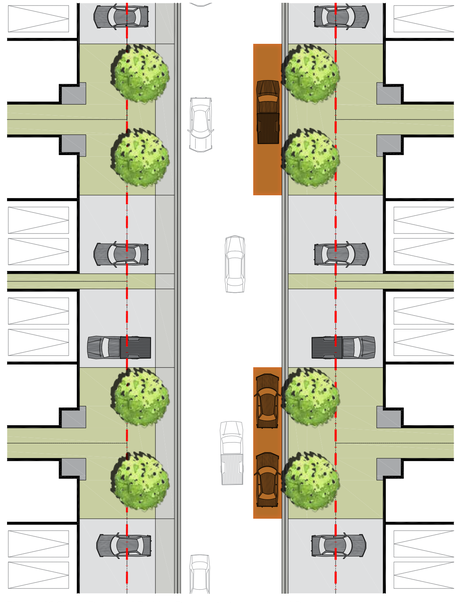


Figure 46 Single Detached Parking Demonstration on Local Road

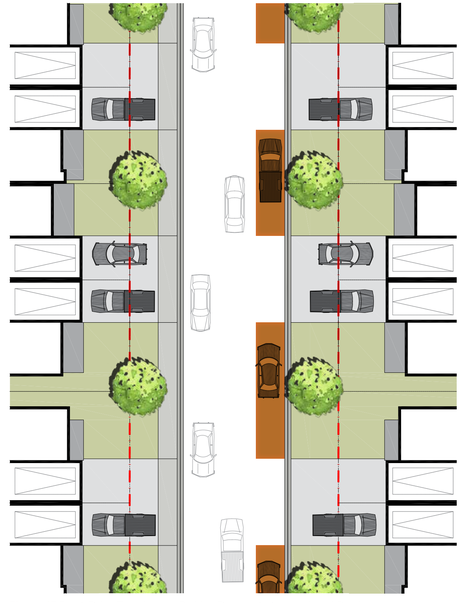


Figure 47 Front-Drive Townhomes Parking Demonstration on Local Road

- One-sided on-street parking will be located on the side of the right-of-way, opposite the sidewalk
- Parking opportunities will be available between separated or paired driveways

Parking Demonstrations.

Parking Demonstrations.

13.0 | **Traffic Calming**

Ensuring the safe, efficient and innovative approach to community-wide connectivity will be an important feature in the design of The Conservancy street network. Due to the various modes of travel that will be designed into and anticipated in this new community, a series of traffic calming strategies will be put in place along active mobility routes and areas of higher foot traffic.

These measurements, appropriately dispersed throughout The Conservancy will include (as seen in Figure 48):

- Single Bulb-Outs
- Double Bulb-Outs
- Enhanced Mid-Block Crossings
- Double Bulb-Out Enhanced Intersection

Design Objectives & Strategic Directions:

- Prioritization and improvement of pedestrian and cyclist connectivity by including traffic calming measures *(BBSS, p.35, SD4)*.
- Traffic calming measures will be implemented at the outset of road design for local and collector streets *(BBSS, p.48, SD7)*.
- Tree lined streets will be encouraged, as they contribute to traffic calming measures *(BBSS, p.56)*.
- Localized vehicular speeds will be reduced to improve safety *(BBSS, p.21)*.
- Safe and convenient crossings and intersections for pedestrians and cyclists will be provided *(G17)*.
- Create additional opportunities for enhanced landscaping and decorative paving *(G17)*.

Double Bulb-Out

Upgraded Crosswalk

Single Bulb-Out with On-Street Parking

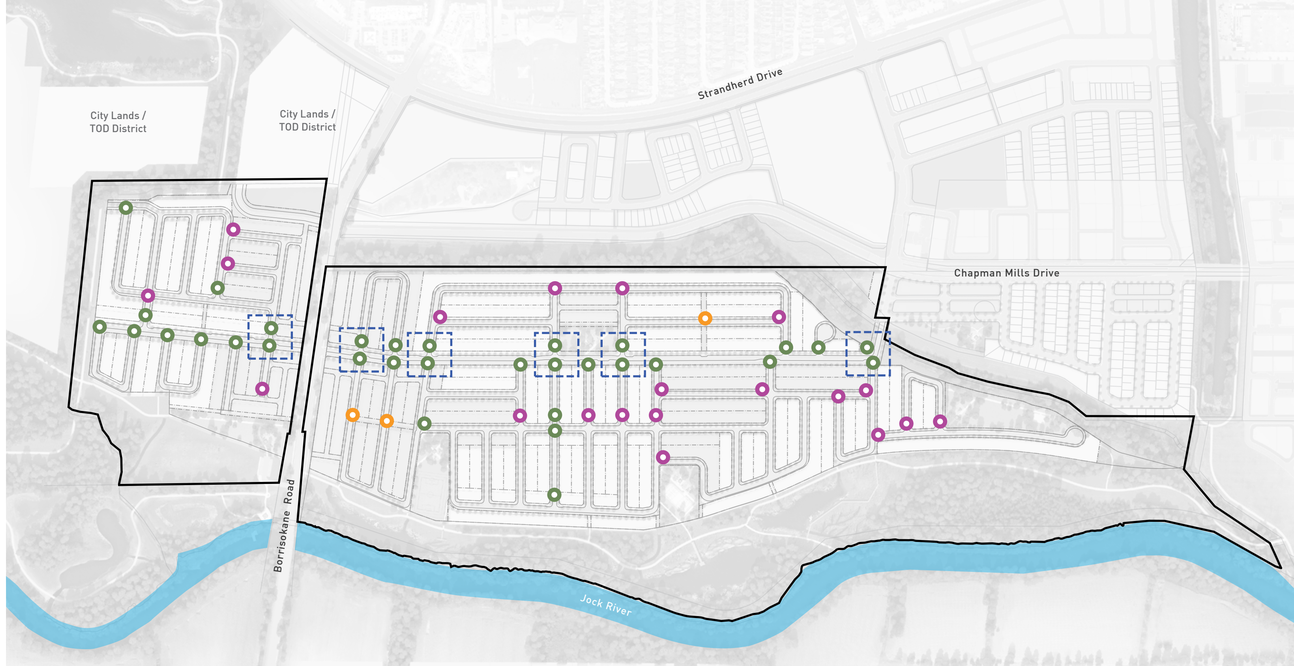


Figure 48 Traffic Calming Diagram

Figure 49 Single Bulb-Out at Local Road Intersection

- Single bulb-outs will be located primarily at the intersections of major local roads
- Bulb-outs will be located on the same side as on-street parking

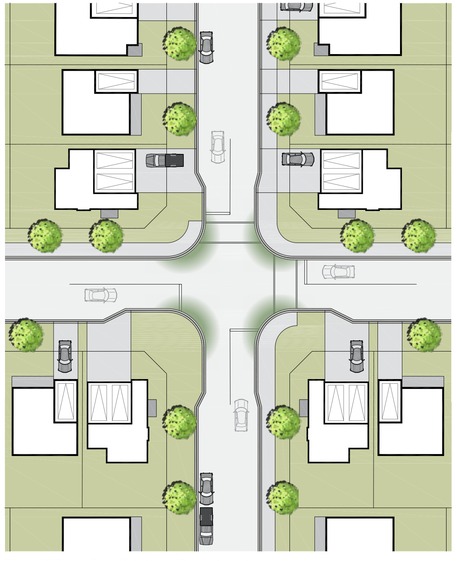


Figure 50 Double Bulb-Out at Local Road Intersection

- Double bulb-outs will be located along primary active transportation routes
- Increased traffic calming measures will enhance pedestrian and cyclist safety
- Bulb-outs will be located on the same side as on-street parking

Intersection Treatments.

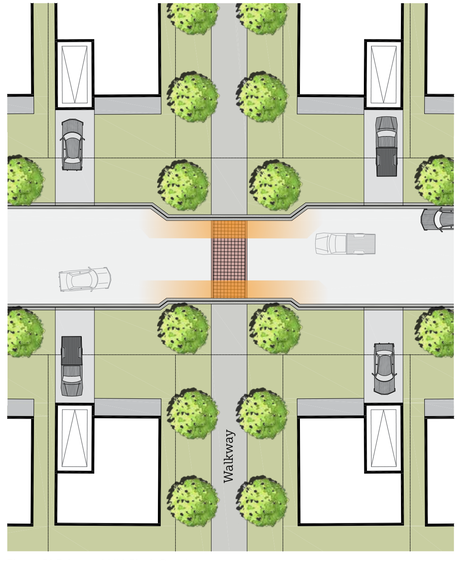


Figure 51 Enhanced Mid-Block Crossing

- Mid-block walkways will enhance connectivity and walkability, by providing linkages and breaks along longer residential blocks
- Landscaping, fencing, and facing windows will foster a safer and more attractive environment within the walkway block
- Pinch points will be asymmetric to encourage slower vehicular speeds, with larger bulb-outs located on the same side as on-street parking

Figure 52 Double Bulb-Out at Collector Road and Local Road Intersection

- Enhanced crosswalks will be located at major intersections along active transportation routes with high pedestrian traffic; crossrides are to be incorporated where applicable
- Textured or coloured crosswalk/crossride treatments will aid to increase the visibility and awareness of potential pedestrian and cyclist activity
- Crosswalks should be universally accessible

Intersection Treatments.

14.0 | **Active Mobility**

The Conservancy will be equipped with a variety of different mediums for travel throughout the community, aligning with the larger vision of creating a highly connected and accessible community that promotes healthy living and social opportunities. These mediums aim to connect users to major greenspace elements, such as parks and the Jock River Open Space.

The mediums that will encourage active mobility in The Conservancy are (as seen in Figure 53):

- Sidewalks
- Cycle Tracks
- Walkway Blocks
- Recreational Pathways
- Nature Trails
- Boardwalks

Design Guidelines & Strategic Directions:

- Sidewalks have been strategically located to create more walkable streets, provide direct access to all parks and open spaces, and reinforce the notion of a pedestrian prioritized community.
- A connected network of parks, greenscapes and public lands has been created, structured when possible by existing natural features and connected by pathways and sidewalks. This network will be easily accessible on foot or bike from homes throughout the neighbourhood *(G2)*.
- The community will be equipped with pathways. tails, and sidewalks that are accessible year round and that connect destinations such as transit stops, commercial areas, schools, community facilities and parks, to increase walkability *(G10)*.
- Cycle tracks, located along community collectors, will expand regional cycling facilities, connect to the existing network, and create connections to surrounding destinations and amenities. Routes include wide shared-use curb lanes, designated on-road bicycle lanes or multi-use pathways *(G31)*.
- Walkways blocks, park pathways, and open space trails will be designed using appropriate landscape treatments to ensure sightlines are maintained and applicable principles of CPTED are adopted *(G46)*.
- Pedestrian lighting will be provided along streets, walkways, and pathways to ensure safe and comfortable nighttime user experience *(G59)*.
- Major greenspace elements, like community parks and natural features with well integrated street fabric, will create enhanced walking and cycling environments *(G30, BBSS, p.22, SD3)*.
- Design pathways, trails and walkways that are connected to the road right-of-way so that they link to a sidewalk and cross at an intersection *(G32)*.
- Street furnishings, such as benches, waste receptacles, bike racks, and lighting, will have a similar design aesthetic (style, colour, and/or materials), be complementary to the established community theme, and be provided throughout the community *(G60)*.


Open Space Boardwalk


Recreational Pathways


Collector Road Cycle Track

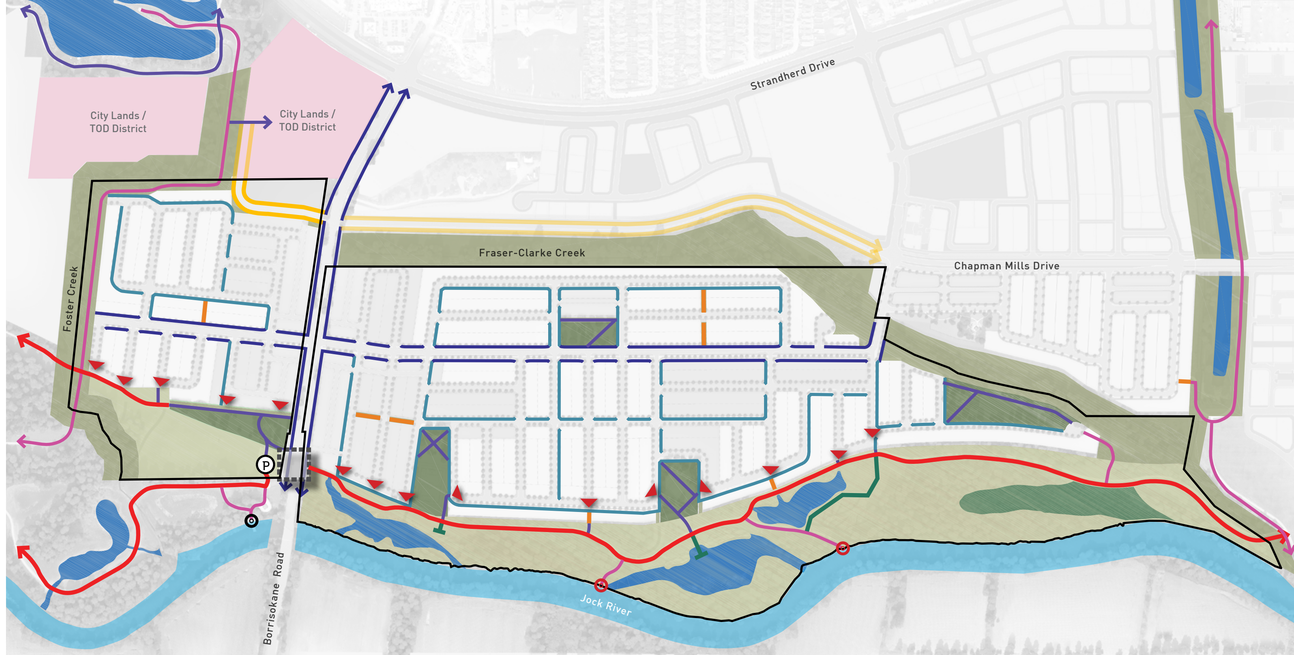
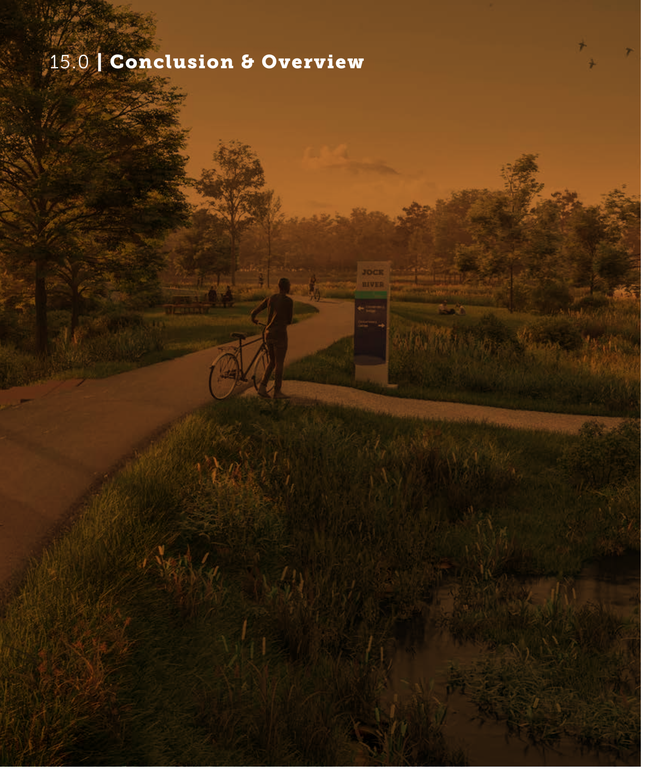


Figure 53 Active Mobility Diagram



The Conservancy Urban Design Brief provides direction and insight into the design intentions for this new riverside community. These guidelines showcase the importance of The Conservancy to be structurally consistent with neighbouring communities, yet provide architectural and community-centric designs that set this neighbourhood apart. The Jock River Open Space will be a key feature to this community, showcasing Caivan's commitment to environmental sustainability, and providing opportunity to experience and engage with the rich natural heritage system that surrounds the site.

The Conservancy will be a community focused on creating accessible opportunities for a diversity of connections, through safe routes and passageways, social relationships, and open space linkages.

36 Hectares of New Green Spaces

Connection to River

Accessible & Interconnected

Variety of New Housing Forms

Educational Opportunities

Wildlife & Fish Habitat Creation

Park & Channels

Network of Community Trails

Preserved Shoreline

Wetland Creation

Well-Connected Community

Building Partnerships

Overview.


C
Est.
2018
B
THE CONSERVANCY
BARRHAVEN
CAIVAN
COMMUNITIES
NAK
design strategies