



Orbit Potential and Innovation Plan (OPIP)

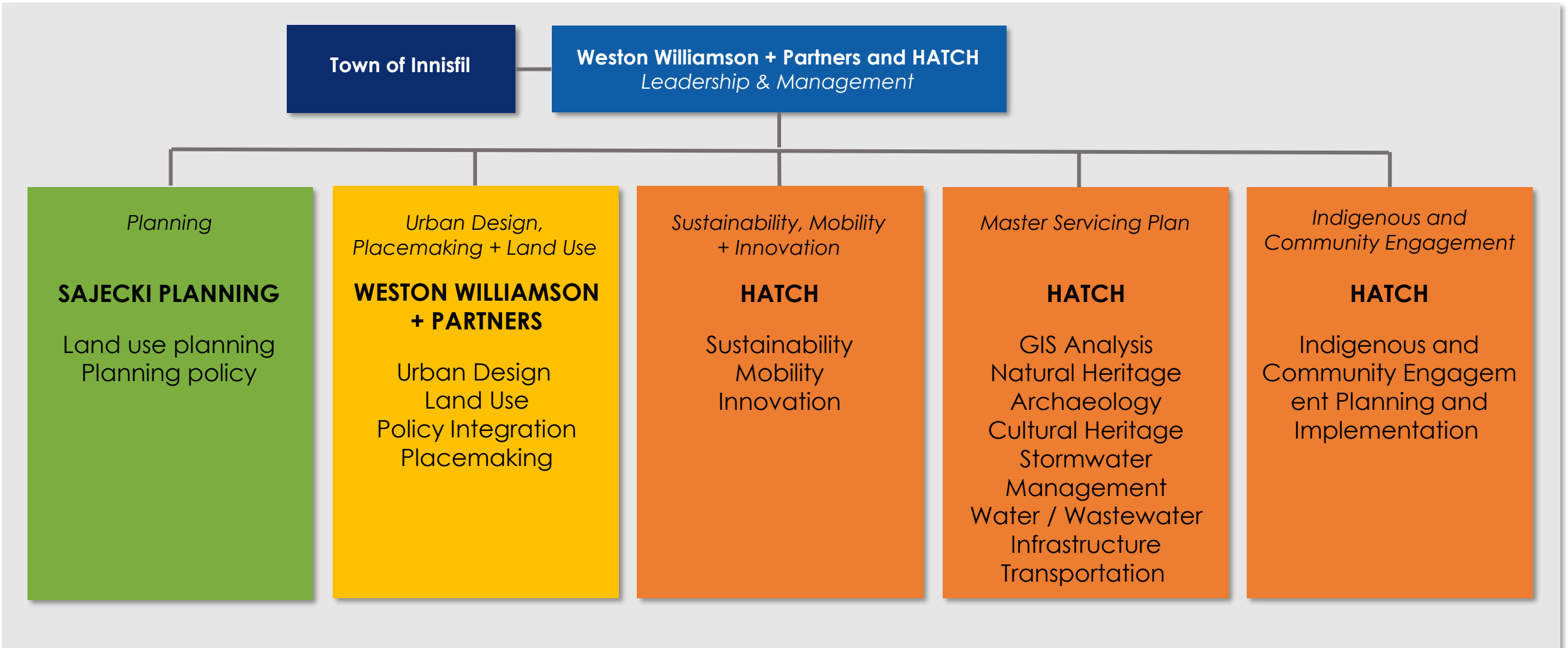
Landowner Meeting | 06.14.2022

Agenda

- Introduction to the Orbit Potential & Innovation Plan (OPIP) (15 minutes)
- Site parameters and initial population estimates (5 minutes)
- The Orbit vision (10 minutes)
- Implementing the vision (20 minutes)
- Design development (15 minutes)
- Your feedback: discussion and Q&A (25 minutes)

Introduction

OPIP Project Team



Orbit Goals

The Council has resoundingly and unanimously endorsed the Orbit Vision. The Orbit Vision doesn't necessarily strive to re-create city building, but rather blend the best of proven and 'next' practice ideas into the context of the Town and how it wants to grow by achieving the following five goals as stated in the RFP document:



Achieving a sense of place

Greater time in your neighbourhood creates new opportunities for placemaking resulting in more social interactions within better designed spaces



15 Minute Neighbourhoods

Creating 15 Minute Neighbourhoods designed with a People-First approach and integrated greenspaces



Higher quality density

Promote density and diversity within different types of buildings, integrating larger balconies and outdoor spaces to improve living quality



An 'Insightful' City

Make day-to-day life easier using technology and Smart Cities concept without losing the focus on good neighbourhood design



Sustainable community

Build a community in a manner that minimizes carbon emissions through the entire process from design to construction to living

Orbit Vision

Urban structure and form

- 1 Radial movement centred on the transport hub
- 2 Concentric circulation patterns
- 3 Linear park along railway
- 4 High density surrounding station and decreasing towards edges

Design considerations

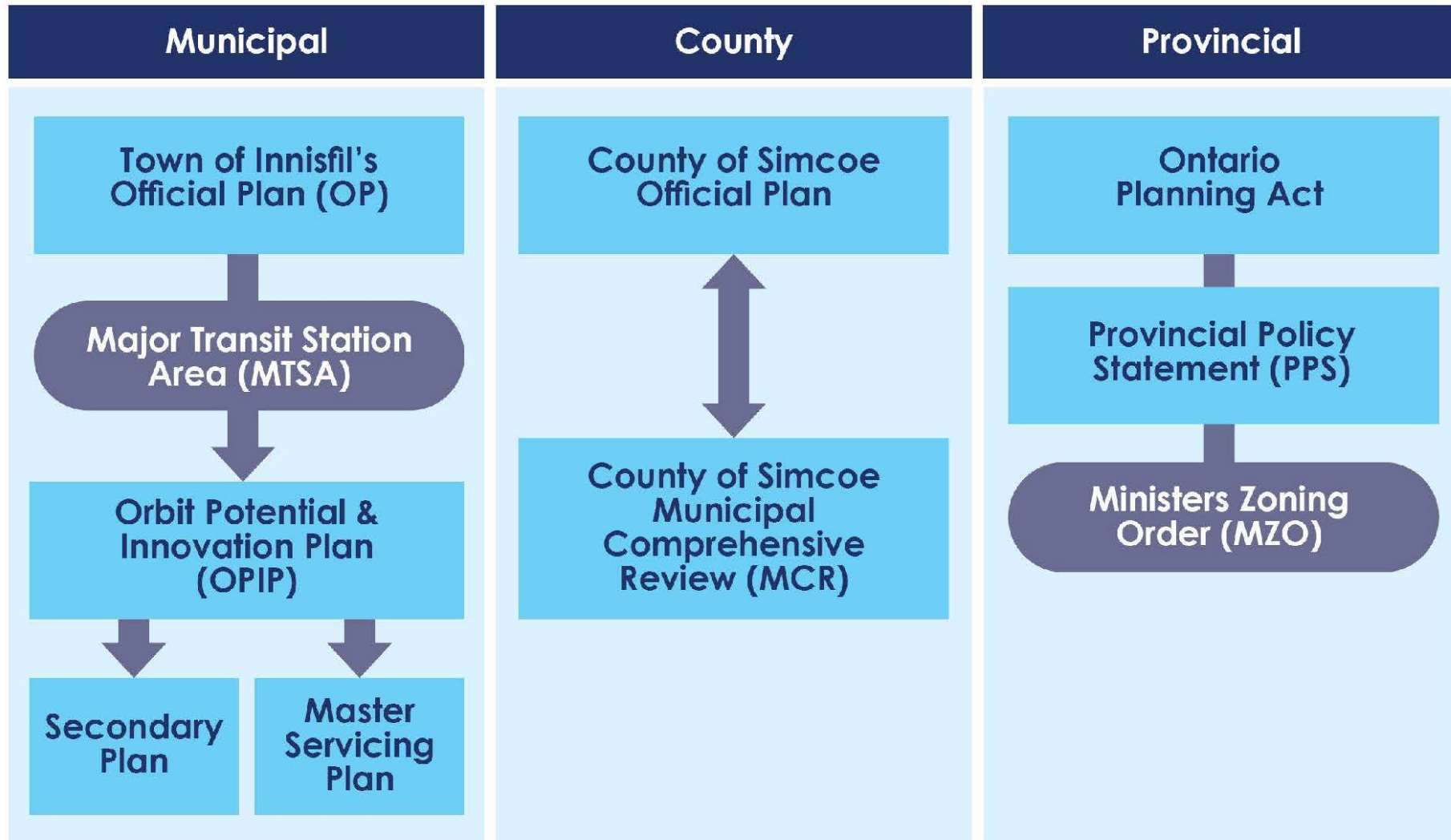
- 5 One single focal point (the station and relative public space)
- 6 Enhance/strengthen access to public space from outer areas
- 7 Avoid repetition in urban pattern and street frontages
- 8 Provide more variety in road hierarchy and typology and enhance pedestrian and cycle movements



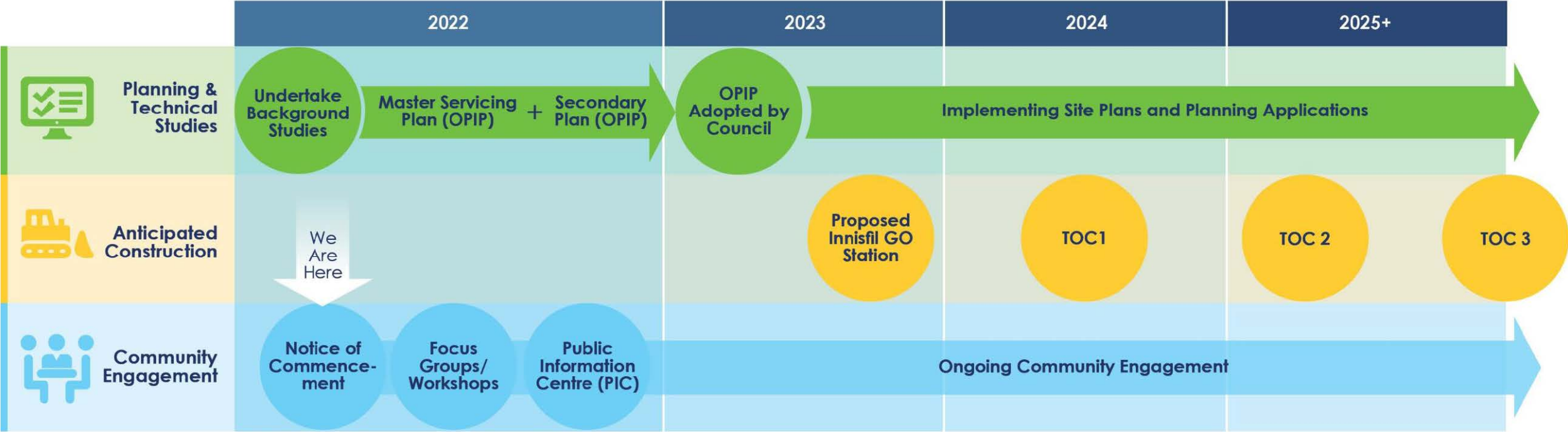
Proposed Orbit Location



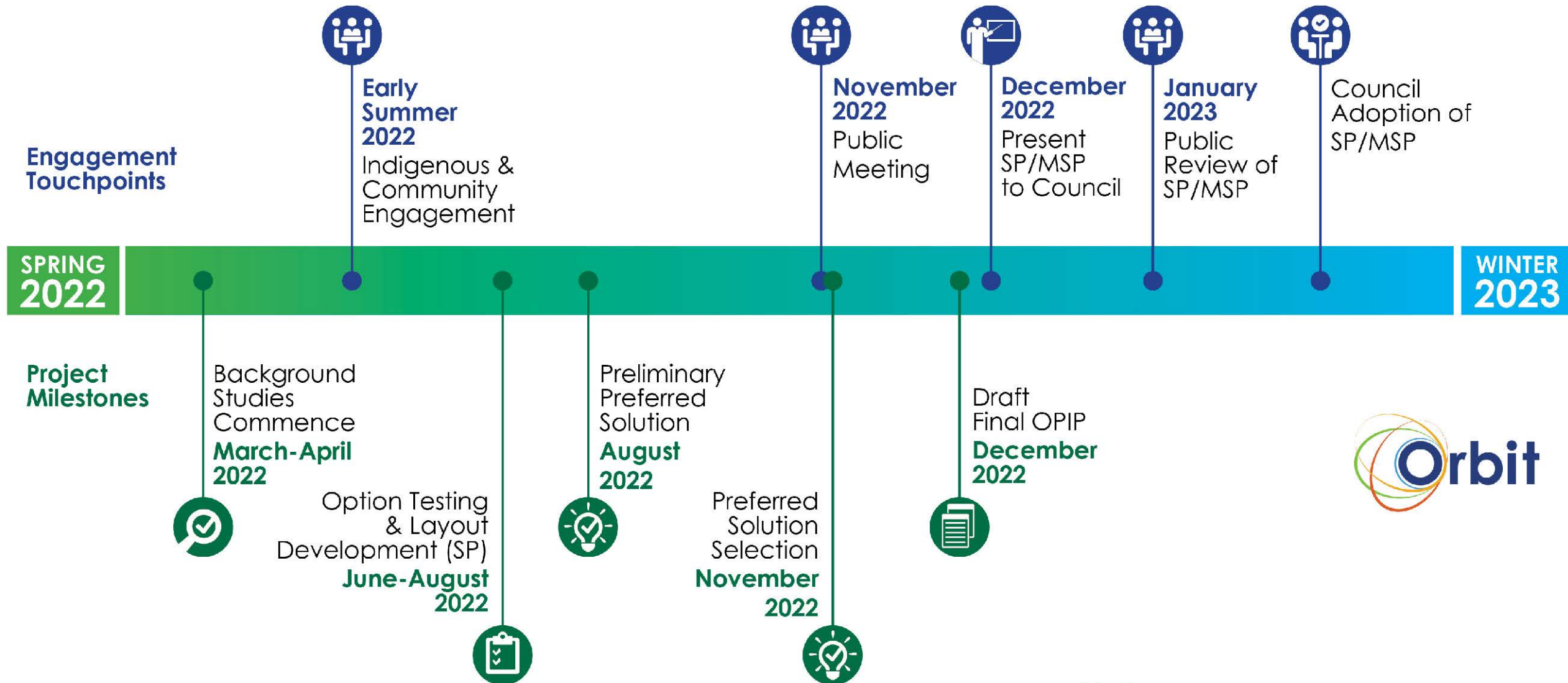
OPIP's role in the Planning Process



Proposed Orbit Timeline



OPIP Timeline & Engagement Touchpoints

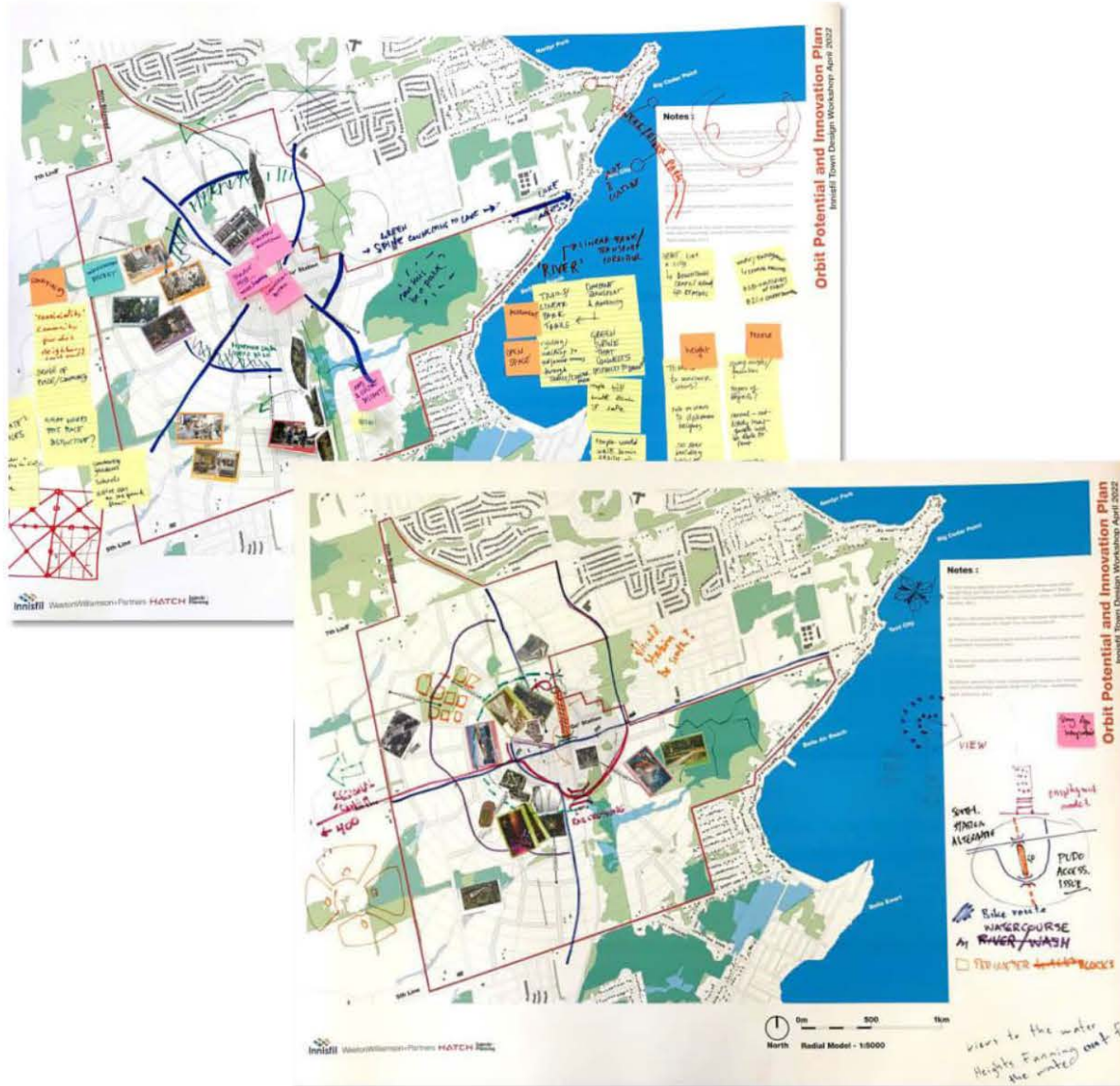


OPIP engagement to date

<p>Town Staff Workshop Workshop themes:</p> <ul style="list-style-type: none"> • Districts and character areas, placemaking functions • Building heights • Mobility and active travel • Public spaces and parks • Employment spaces typology and location 	<p>April 19th, 2022</p>
<p>Developer/owner follow-up meeting (2019)</p>	<p>April 21st, 2022</p>
<p>Town Staff Report providing update on OPIP engagement and station development</p>	<p>April 27th, 2022</p>
<p>Orbit website release</p>	<p>May 26th, 2022</p>
<p>Notice of Commencement: Posted in Innisfil Journal May 26th and June 26th</p>	<p>May 26, 2022</p>



Concept ideas - Town Workshop



Group 1:

- A **linear green spine** could be a major park and attraction for Orbit, combining movement routes and amenity spaces. This could follow the radial layout or be a linear spine connecting East and West of the site.
- This linear park could be intended like a **'river' or a green transport corridor** that connects the different centres and districts of Orbit.
- Consideration should be given at how to connect this green spine to the Lake, and at how to turn major woodland areas as public parks.

Group 2:

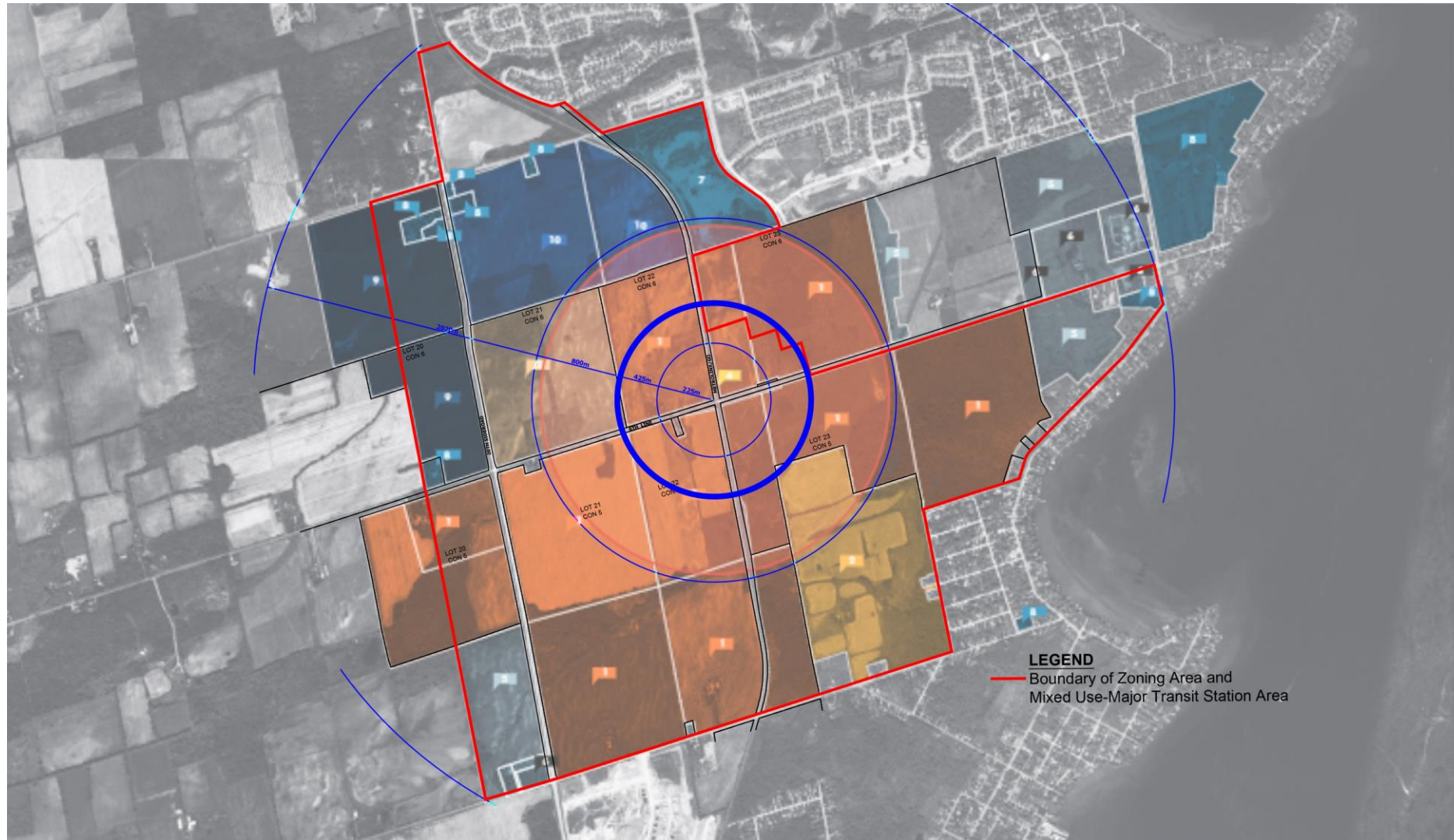
- Explore **'orbital' public route - culture route installed as an early destination** and linked to public functions.

'Virtual' Group 2:

- **Linear parks, as linear connections, leading to larger parks** are proposed ideas. E.g., downtown pubs in Europe are connected by parks. linear connections are also gateway opportunities to an experience. E.g., forest, lake, skiing, greenspace, trees, etc.

Site Parameters and Initial Population Estimates

OPIP Study Area



What is a Secondary Plan?

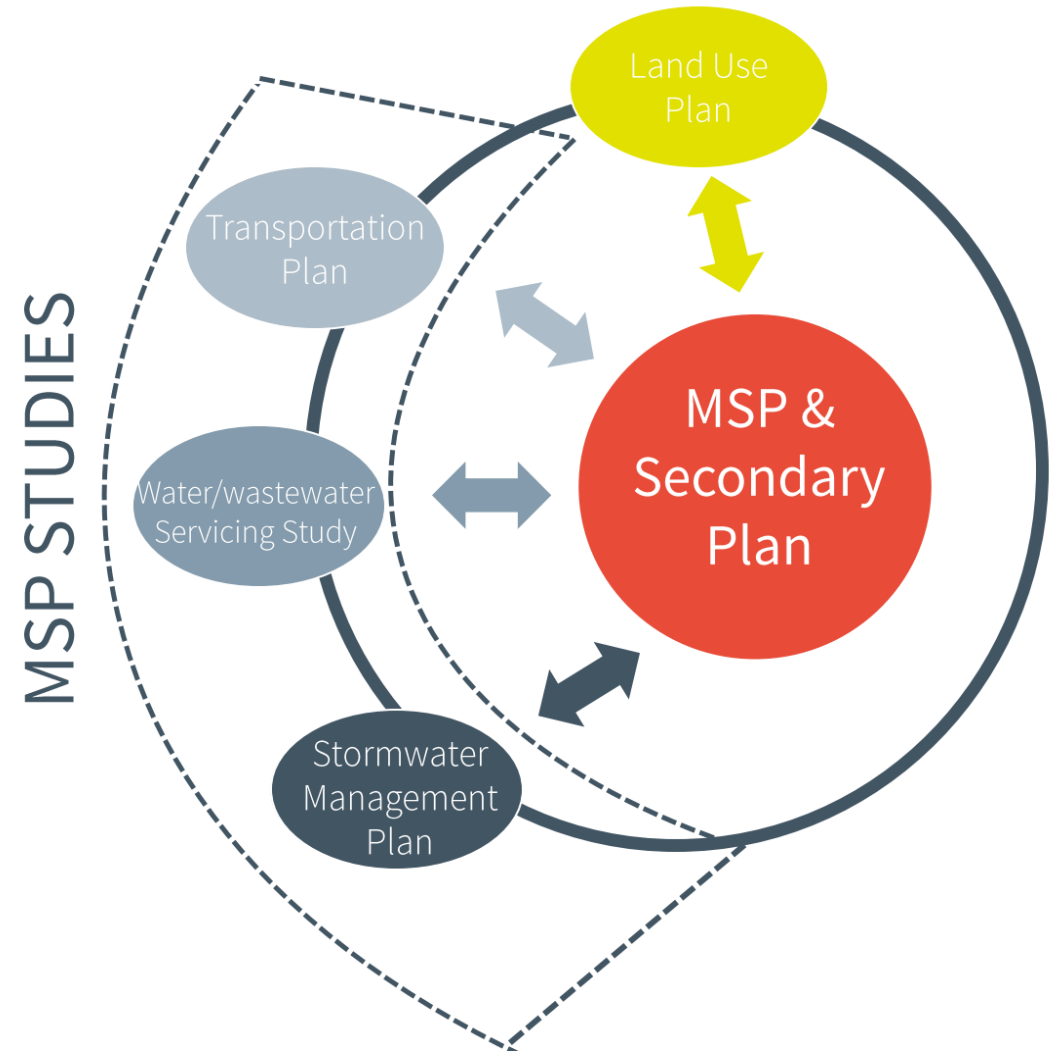
A **Secondary Plan** provides detailed objectives and policies for a specific area, related to topics such as:

- Growth
- Housing
- Economic Development
- Parks and Open Space
- Transportation
- Heritage
- Urban Design
- Infrastructure



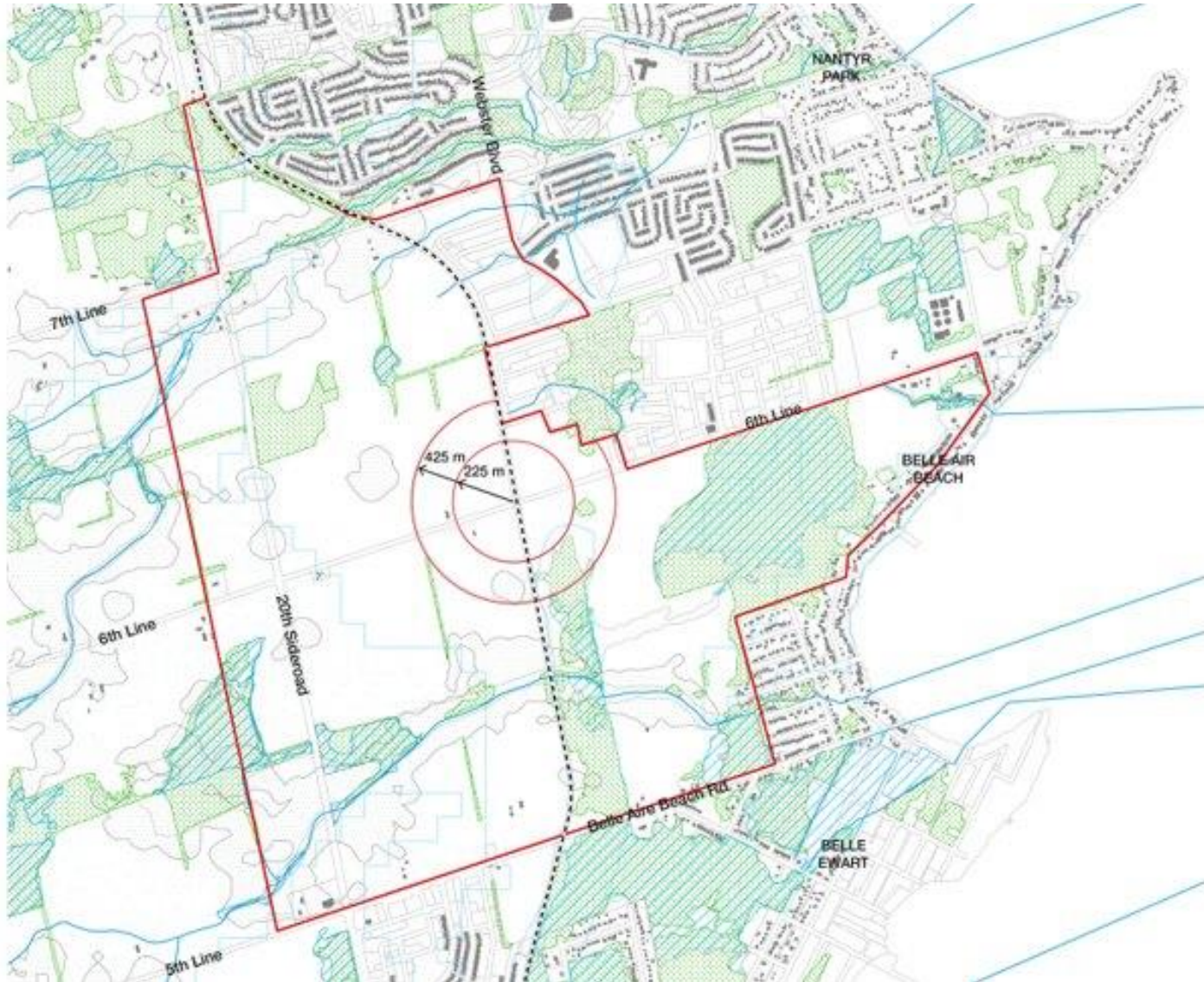
What is a Master Servicing Plan?

- The **Master Servicing Plan** will determine the preferred servicing strategies (water, wastewater, stormwater and mobility) required for the OPIP Secondary Plan Area.
- The study will be undertaken in consultation with regulatory agencies, Indigenous Communities, affected stakeholders and the public.



Site Parameters

Natural Environment



Assumptions

- Evaluated wetlands are protected under provincial policy and no development is permitted
- Environmental features are to be confirmed by future technical studies
- Development is subject to future environmental assessment and appropriate mitigation measures

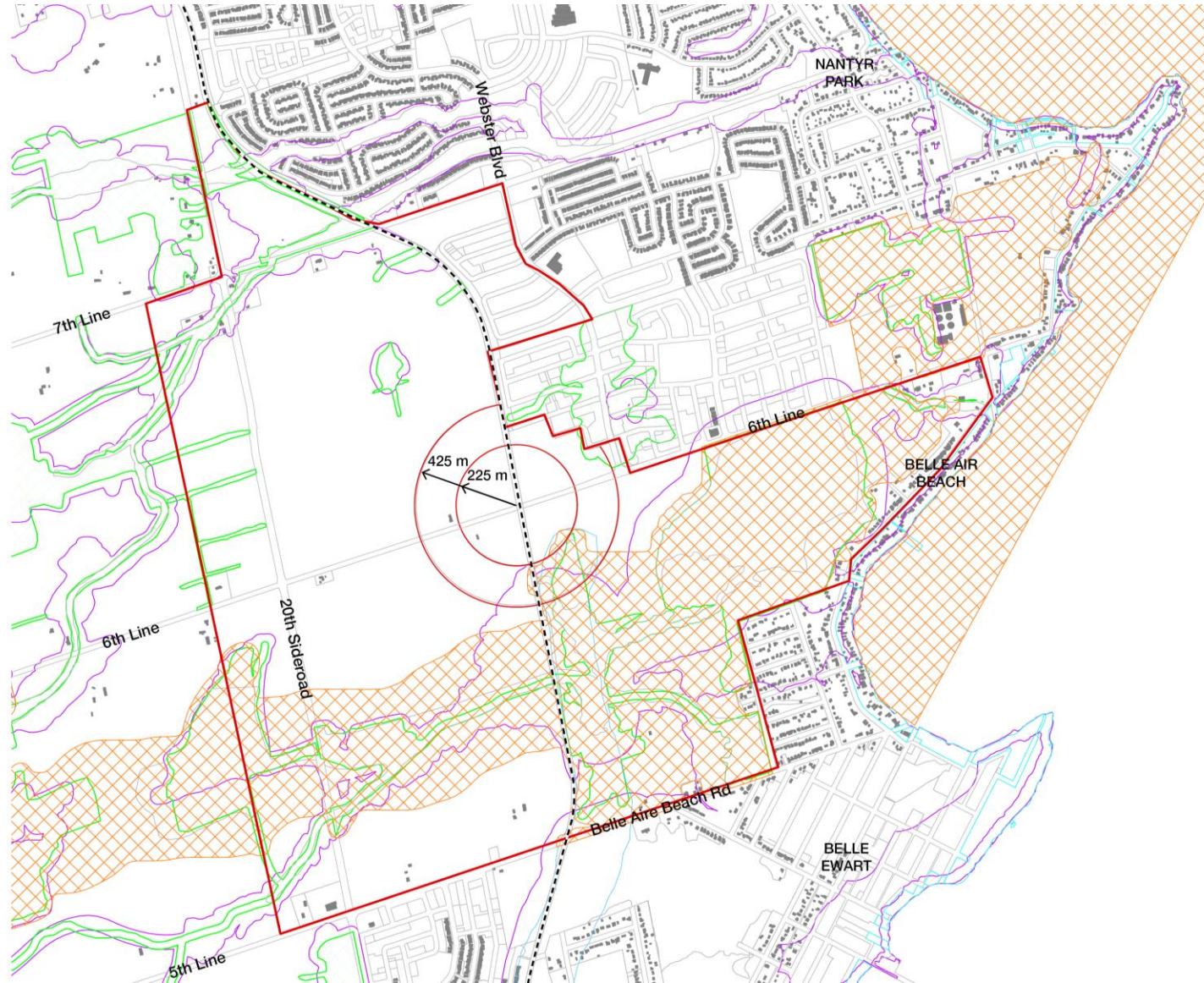
Key

- WATERCOURSES
- ENVIRONMENTALLY SIGNIFICANT GROUNDWATER RECHARGE
- HIGHLY VULNERABLE AQUIFER
- ▨ PROVINCIALY SIGNIFICANT WETLANDS
- ▨ UNEVALUATED WETLANDS
- ▨ WOODLANDS



Site Parameters

Planning Policies



Assumptions

- Development is only permitted in natural environmental areas when it can be demonstrated that there will be no negative impacts on the natural heritage features or ecological function
- Development may be permitted within the Official Plan Natural Heritage System and LSRCA regulated area subject to future studies

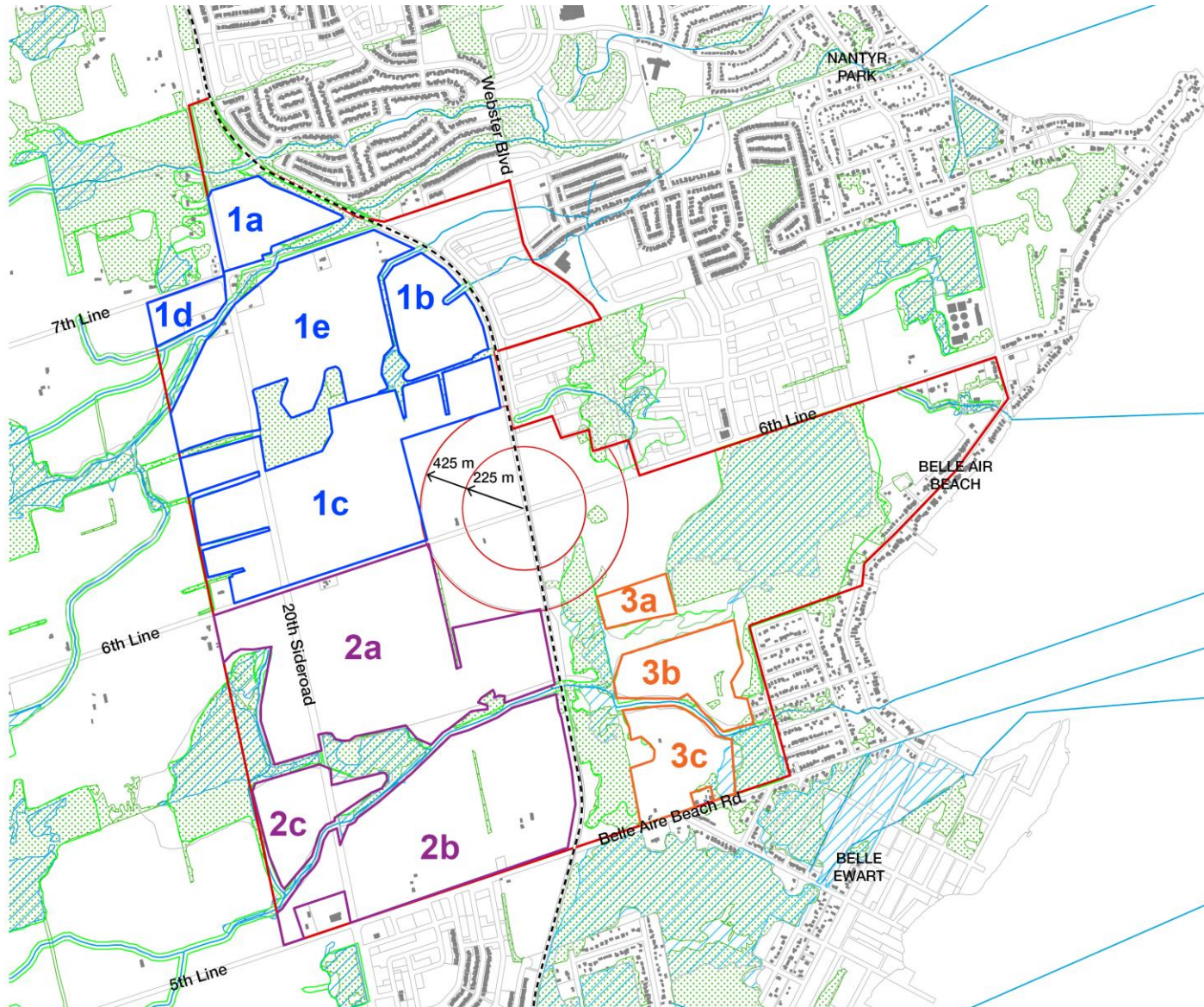
Key

- LSRCA REGULATION AREA
- NATURAL ENVIRONMENTAL AREAS
- OFFICIAL PLAN NATURAL HERITAGE SYSTEM
- OMBA APPROVED 2015 SAND GRAVEL RESOURCES
- ZONING MZO
- ZONING SHORELINE CPPS



Site Parameters

Developable Zones



Key

- DEVELOPMENT ZONE 1
- DEVELOPMENT ZONE 2
- DEVELOPMENT ZONE 3
- WATERCOURSES
- ▨ NATURAL ENVIRONMENTAL AREAS
- ▨ OFFICIAL PLAN NATURAL HERITAGE SYSTEM
- ▨ PROVINCIALLY SIGNIFICANT WETLANDS
- ▨ UNEVALUATED WETLANDS
- ▨ WOODLANDS



Site Parameters

Heights and Densities



TOC 1

Minimum Density: 200 dwelling units per ha

Heights: 6 – 40 storeys





TOC 2

Minimum Density: 150 dwelling units per ha

Heights: 4 – 15 storeys; 25 storeys if fronting onto 6th Line.

Detailed planning in later stages will determine where heights and densities are allocated within each area and lands outside MZO.

LEGEND

-  Minister's Zoning Order
-  Open Space
-  Environmental Protection Area
-  Roads
-  Assessment Parcel
-  Transit Oriented Community 1 (TOC 1)
-  Transit Oriented Community 2 (TOC 2)

Planning Policy

Population estimates by area

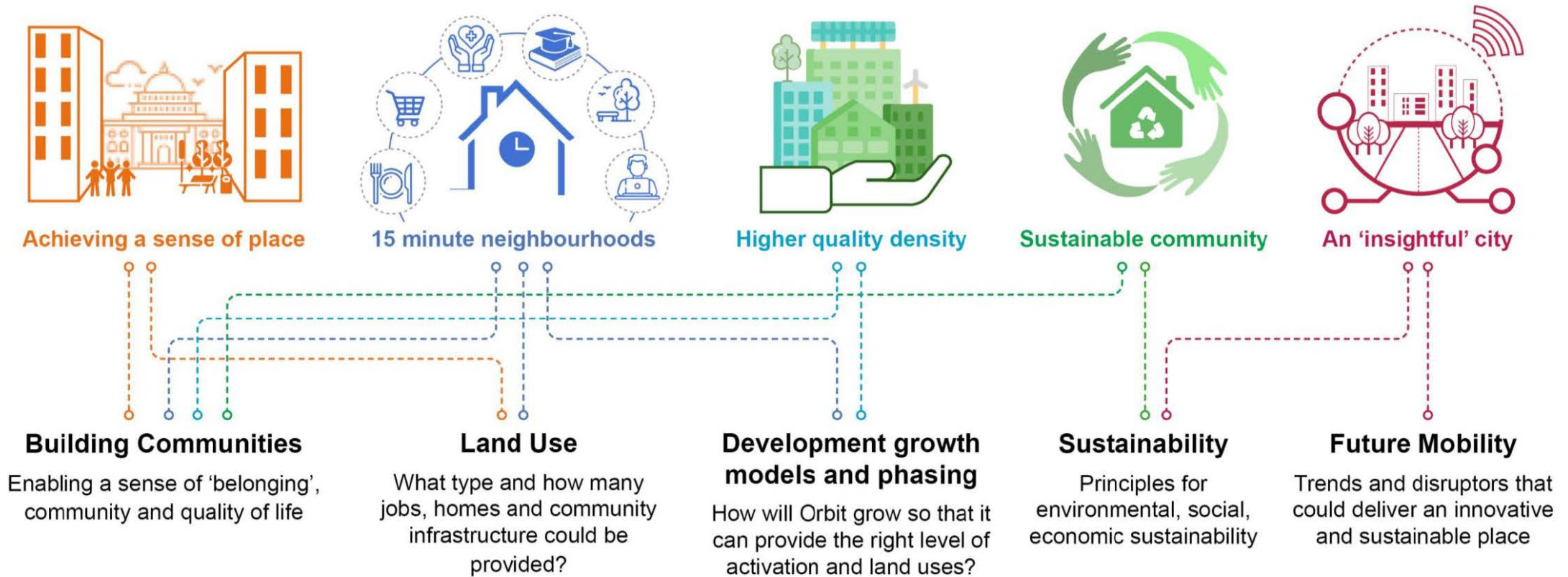
- Minimum densities from MZO correspond to minimum populations for TOC 1, 2 and 3
- Realized populations will depend on site constraints, market demand and planning policies, among other factors



Implementing the Vision

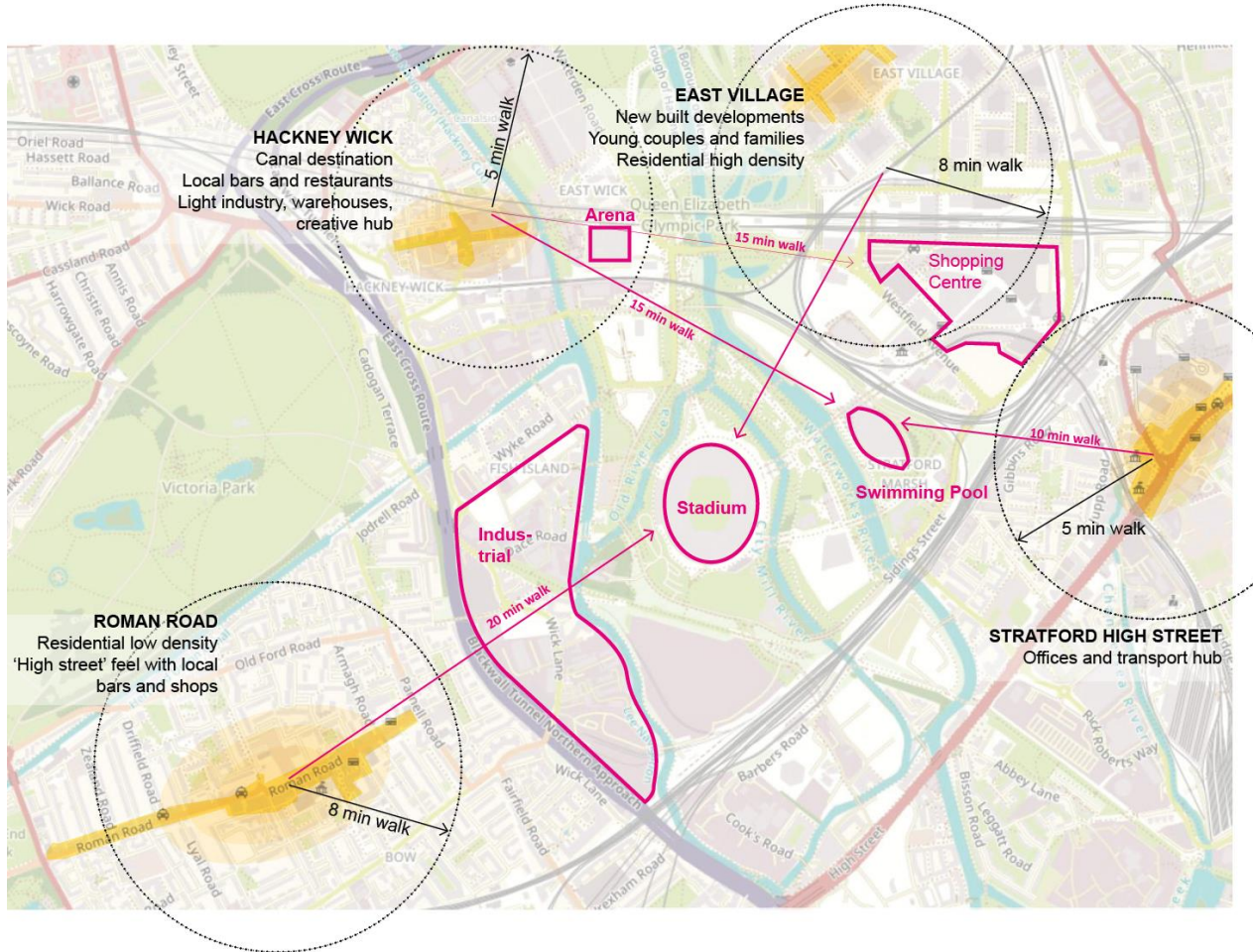
Key Concepts

Implementing the Vision



Building Communities

Districts, character and local centers



Major challenge for new developments: **achieving a sense of place and community.**

How do we provide variety and diversity in urban space to activate the streetscape and attract diverse users and communities?

A greater variety of public spaces and characters could be provided at Orbit - for communities to build upon

Orbit could offer different districts and characters: each district could provide primary facilities to its neighborhood, as well as having its own vocation, so that residents and visitors can move within each area and enjoy a great and diverse offer of public spaces and uses.

Land Use

Homes: ensuring an inclusive mix

Aspirations:

Attracting young people and diversifying age group

Ensuring mix of individuals and families from all socio economic backgrounds

Project Exploration:

- *Ensure an inclusive mix of home typologies*: Apartment living through to Retirement Homes, ensuring a 'lifetime-living' offer; mindful of current Innisfil housing stock, current demographic and Vision population objectives;
- *Initial development density/FAR (Floor Area Ratio) testing* to explore population targets against 'livable' neighbourhoods and city placemaking;
- *Develop a strategy of homes typologies which would be attractive to the market*, across various scales of delivery partners;
- *Consider 'alternative' delivery models* such as self-build, co-living;
- *Phased delivery which aligns to social infrastructure provision* (schools, health, leisure, open space etc.)



Low rise apartments with semi-private open space



Co-living/retirement homes



High rise apartments



Town houses with communal gardens

Land Use

Jobs: economic growth and activation

Assumptions:

Inclusive employment target numbers to be in the range of 2:1(MN) to 5:1(Draft MZO) residents : jobs

Project Exploration:

- *Trends and Disruptors* - Covid 19 influence on Work from Home scenarios
- *Test scenarios* based on employment types, job densities and land take requirements, placemaking and inclusivity as anchors:
 - Traditional 'Grade A' through to flexible co-working
 - Manufacturing/Light Industry/Last Mile Logistics
 - Work opportunities within local service offer (tourism, culture/attractions, retail, education, health, professional services, agriculture, etc.
 - Opportunities for Further/Higher Education establishments and associated Industry Partners collaboration/innovation



Land Use

Community Infrastructure: providing services to local communities

Project Exploration:

- *'Walkable Neighborhood'* Community Infrastructure provision within your local area
- *'Placemaking functions'* to be shared between neighborhoods / characterizing districts
- *Impacts on phased delivery and activation* across the MTSA



Services

Local medical practice, pre-school, elementary school, local shops, community center...



Public open and green spaces

Sports pitches, playgrounds, communal gardens, 'village' greens, pocket parks...

Land Use

Community infrastructure: creating a dynamic center for residents and visitors



Destinations and attractors

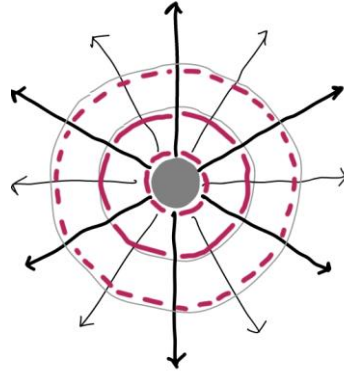
*Further/higher education,
hospital, religious institution,
theatre, gallery, museum, retail
hub...*



Public open and green spaces

*Major 'urban' park, events
space, civic squares...*

Development Growth Models

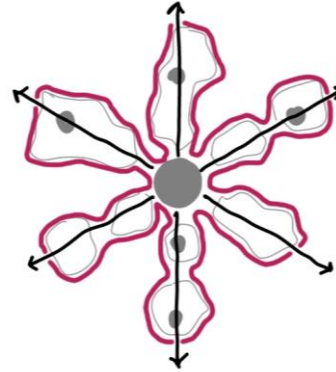


Radial

Build out around the edge of the MZO delivered phases

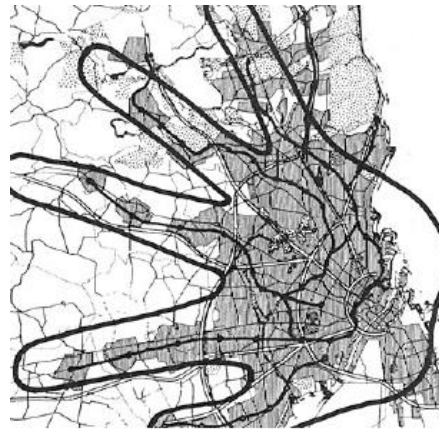


MOSHAV CITIES - RICHARD KAUFFMANN

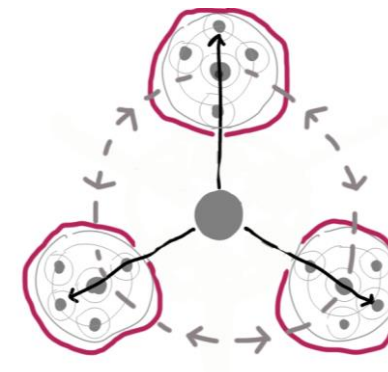


Arterial

Develop along transport corridors radiating from the 'central focus'

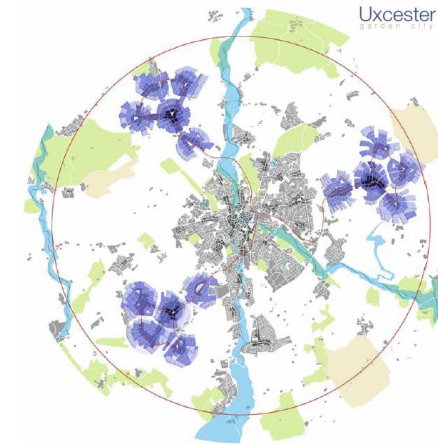


COPENHAGEN FINGER PLAN (1947)



Polycentric

Independent centers/districts linked by movement corridors



Uxcester

Future Mobility

ORBIT and the Car

Assumptions

- Vehicles, both public and private, will electrify over the coming two decades, reducing social pressure to eliminate cars
- The present built form of Innisfil's surrounding areas and the GTA mean there will still be some role for point-to-point car travel, and ORBIT will have to accommodate that role
- ORBIT's choices in built form will facilitate residents' approach to car use in the future

Options

ORBIT's built form could aim to accommodate:

- 1) **No privately-held vehicles**, like Culdesac in Arizona; residents would rely on micromobility, ridehail, carshare, and transit for their mobility needs
 - 2) **Single-vehicle households**, like The Point in Utah; residents would balance private vehicle use with other modes
 - 3) **Traditional multi-vehicle households**, as predominates in Ontario
- The decision on which built form to accommodate must be made early as it has many downstream effects; parking is expensive to build and precludes other uses.



Counter-clockwise from top:
Artistic renditions from overhead of
Culdesac, the Point, and traditional
suburban built form



Future Mobility

Four Actions for Orbit

1. Local trips predominate; regional trips are important
2. AV taxis or minibus are plentiful
3. Mobility as a Service (MaaS)
4. Acknowledge mobility transition



Future Mobility

Don't Pick the Winner; Build the Podium

Fortunately, while ORBIT *does* need to take a strong early position on how to accommodate automobiles, ORBIT *does not* need to make a strong bet on what future mobility will be like. It can instead build the spine upon which all these visions depend and will be poised for success no matter what happens.

Elements common to all these scenarios, and which ORBIT should certainly feature, are as follows:

- **Ubiquitous, high-quality, wide, pedestrian pathways and linear parks** that connect every parcel
- **Ubiquitous, high-quality, segregated low-speed rights-of-way**, for bikes, scooters, robots, and more (but *not* pedestrians and *not* automobiles)
- **Access roads for automobiles, but designed for Vision Zero:**
 - Narrow
 - Curved
 - Local-access only (no through travel)



Typical high-quality pedestrian infrastructure

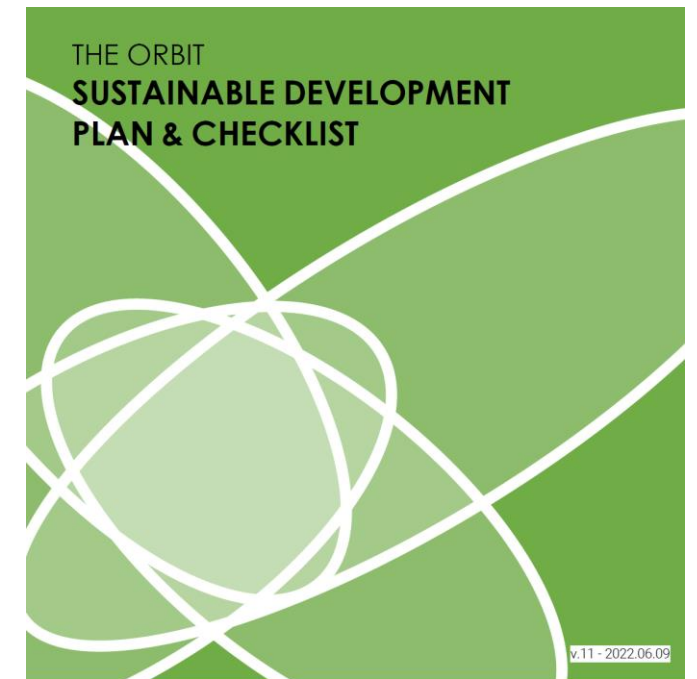
Implementing Sustainability Principles

Considerations

- Goal setting and the preparation of municipal planning documents can **establish a framework for achieving sustainability targets**
- **Orbit Vision and MZO** process established Sustainability Principles to be reflected in future policies
- Town's existing **Official Plan** established policies for future implementation through a **Sustainability Checklist**
- Orbit offers the opportunity to **embed sustainability** through the principles and Orbit specific checklist.
- **Flexibility is key** to encourage development to embrace sustainability and contribute to Town wide goals.
- Draft **Orbit Sustainable Development Plan and Checklist** is to create a framework with existing sustainability measures and third-party certification processes to minimize duplication.
- Draft document being **released on June 22** with Council consideration on August 10, 2022.
- Engagement period with stakeholders during this time.

Sustainable Considerations

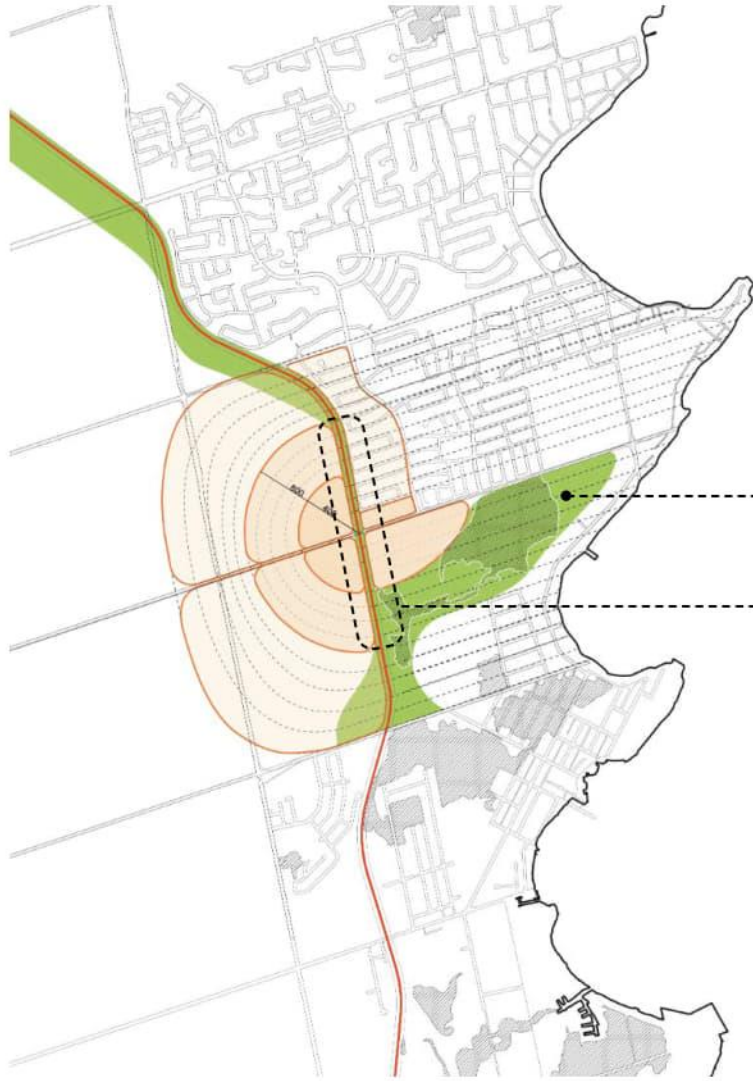
- Renewable energy
- Green belts and multi-functional green spaces (including watercourse corridors)
- Conservation and restoration of natural features (streams, wetlands)
- Building design for reduced energy use
- Water conservation



Design Development

Green infrastructure - Integrating the rail park concept

Rail park (Partisan's scheme)



Potential to make woodland publicly accessible?

Park becomes is effectively a 'buffer' to railway in this section

For example...



Park becomes a green route 'buffer' to railway

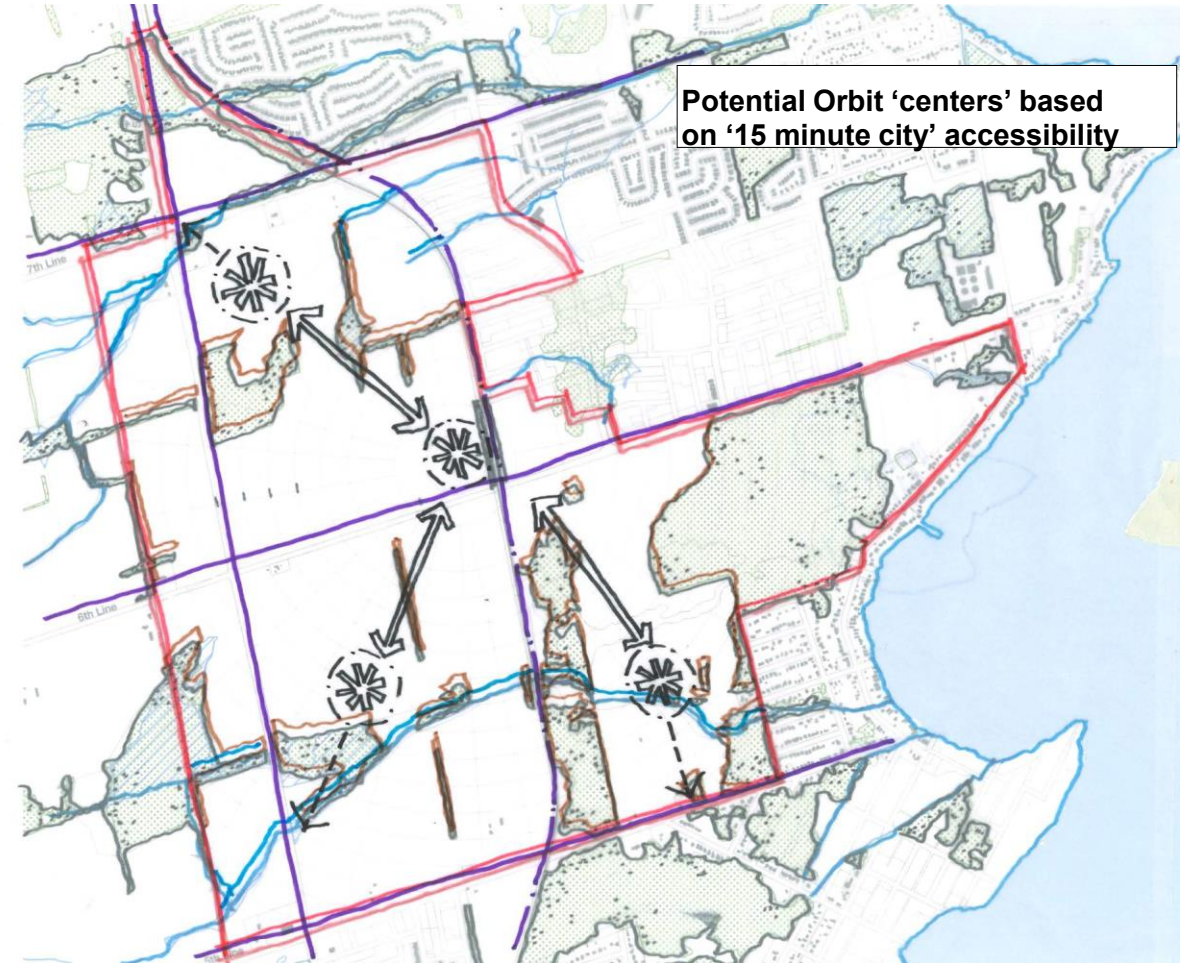
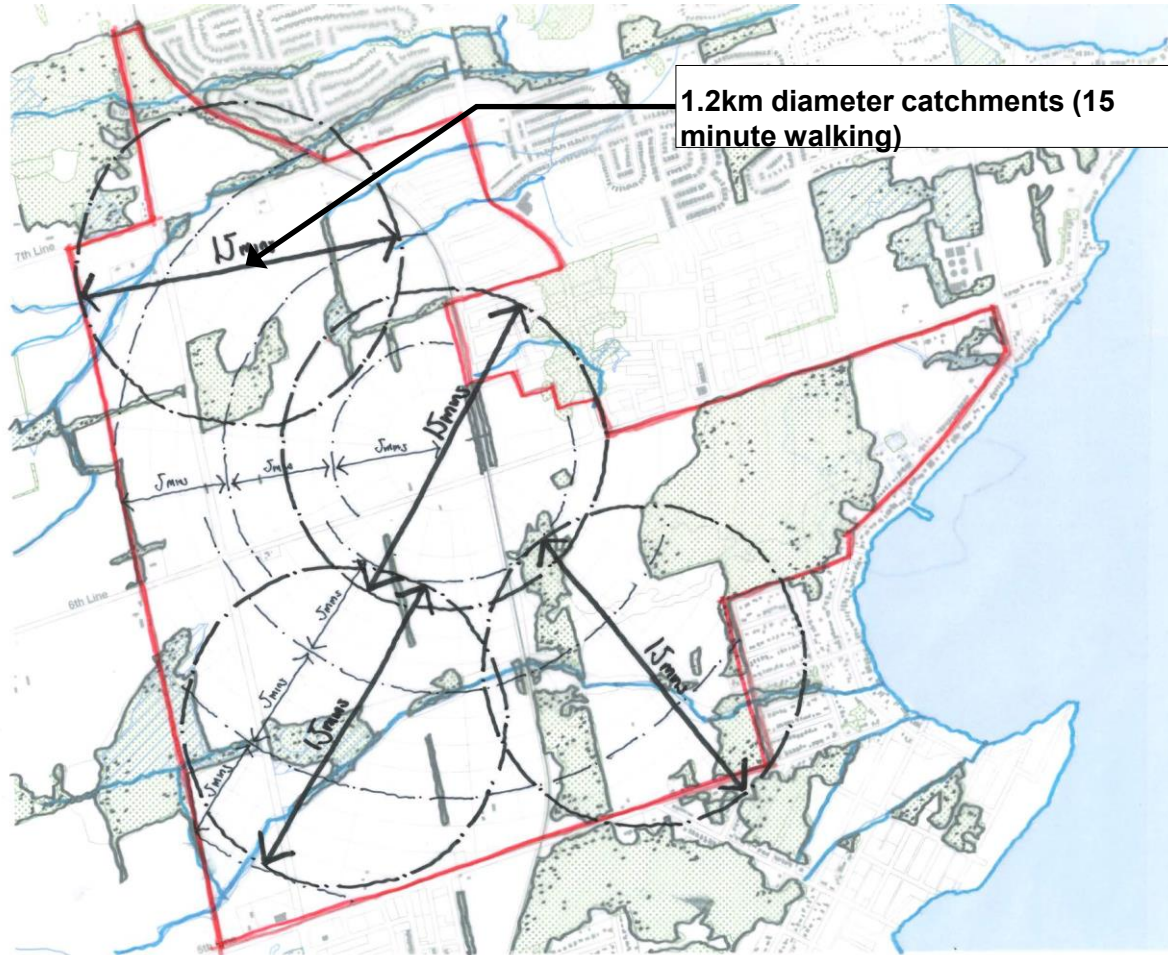
Potential to make woodland publicly accessible?

Incorporate woodland into rail park / buffer

Retain existing woodlands for carbon offsetting

Additional public green space as catalyst for area / 'feature parks' closer to Orbit 'centres'

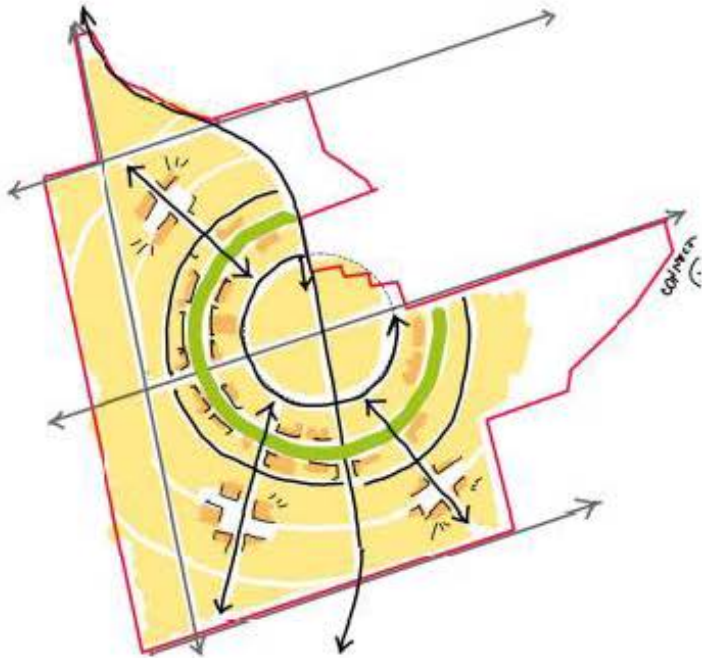
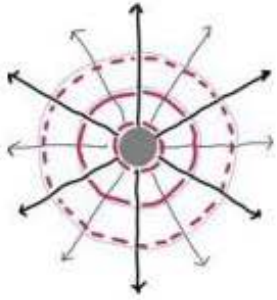
15-minute walking 'cities'



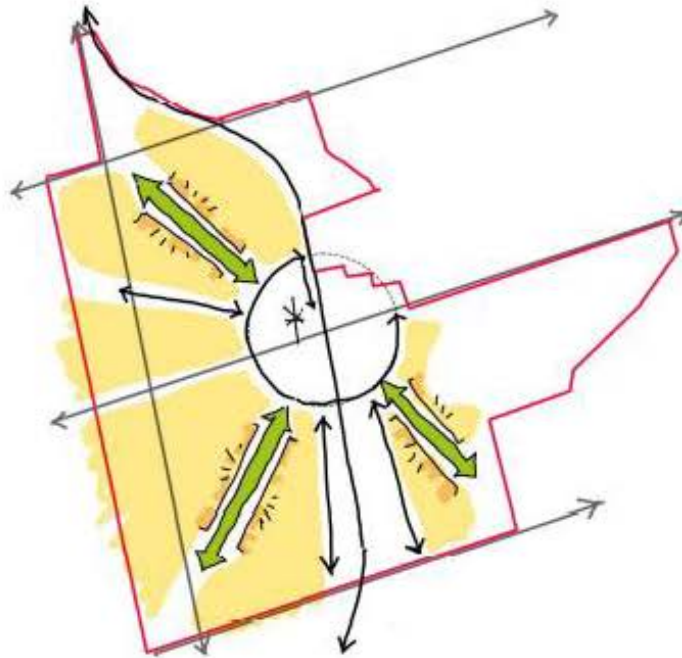
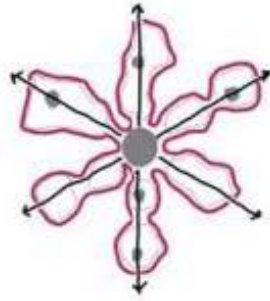
Note: the polycentric concept is maintained through the satellite 'centers' and land use - not through the base grid

Area organisational models

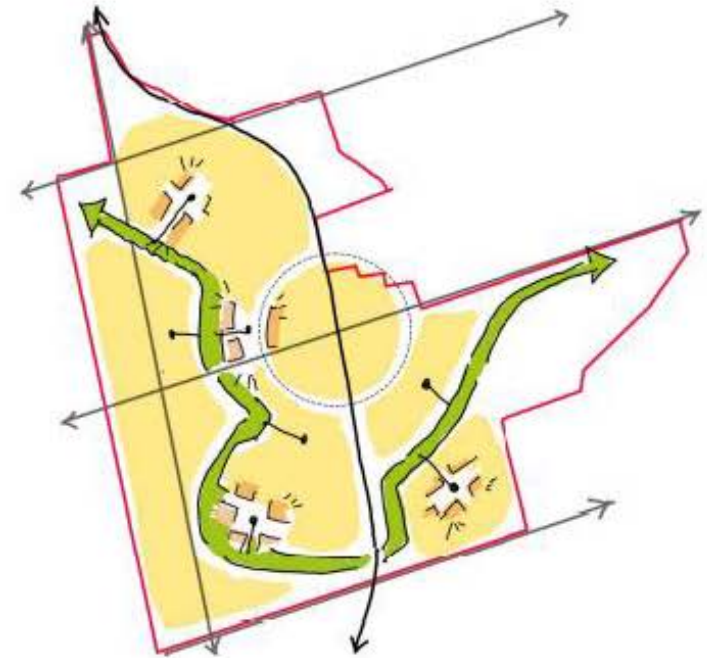
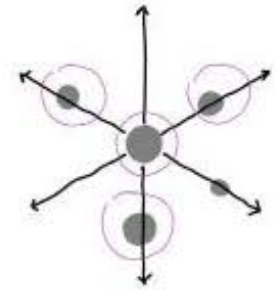
Radial



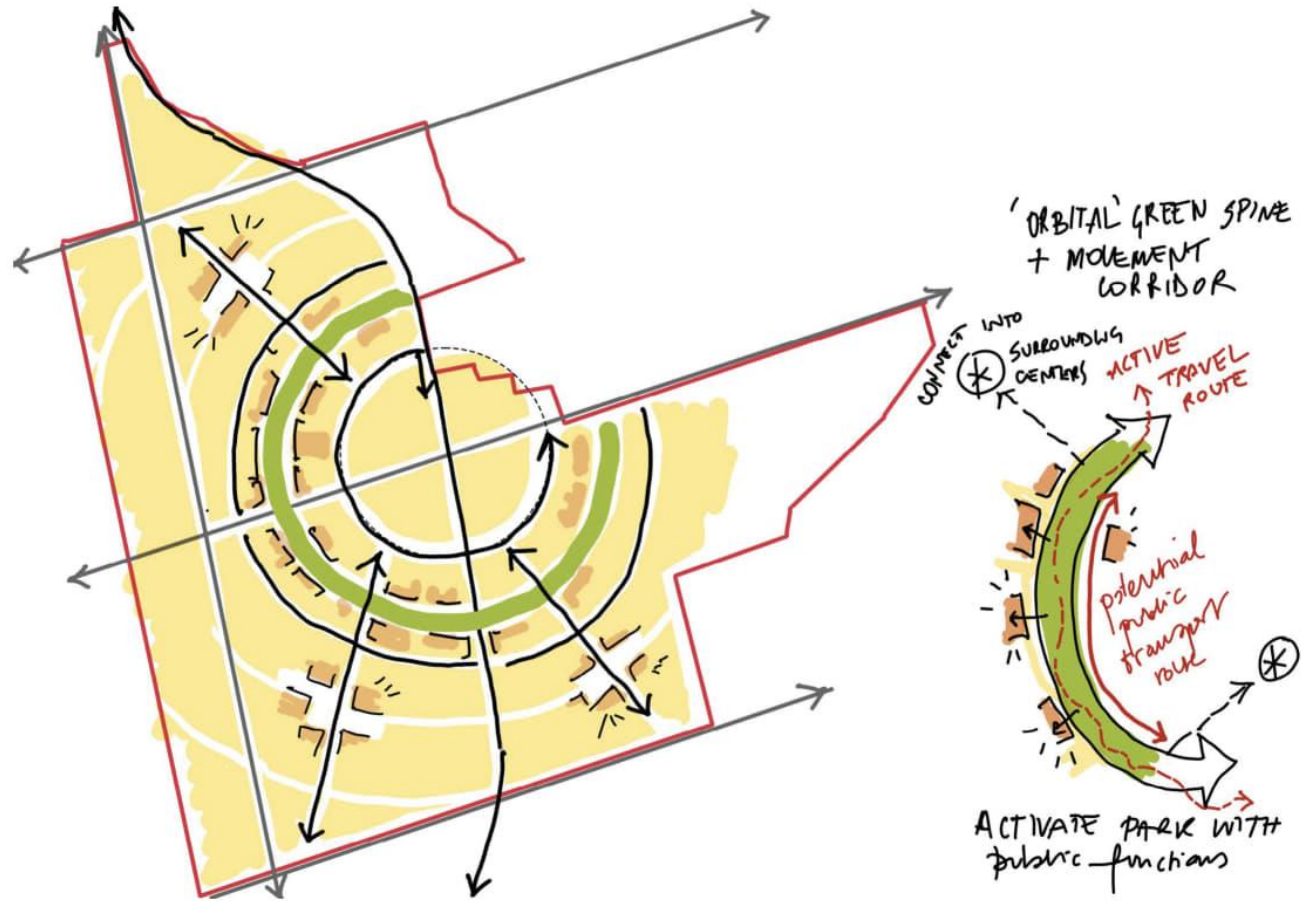
Arterial



'Dispersed'

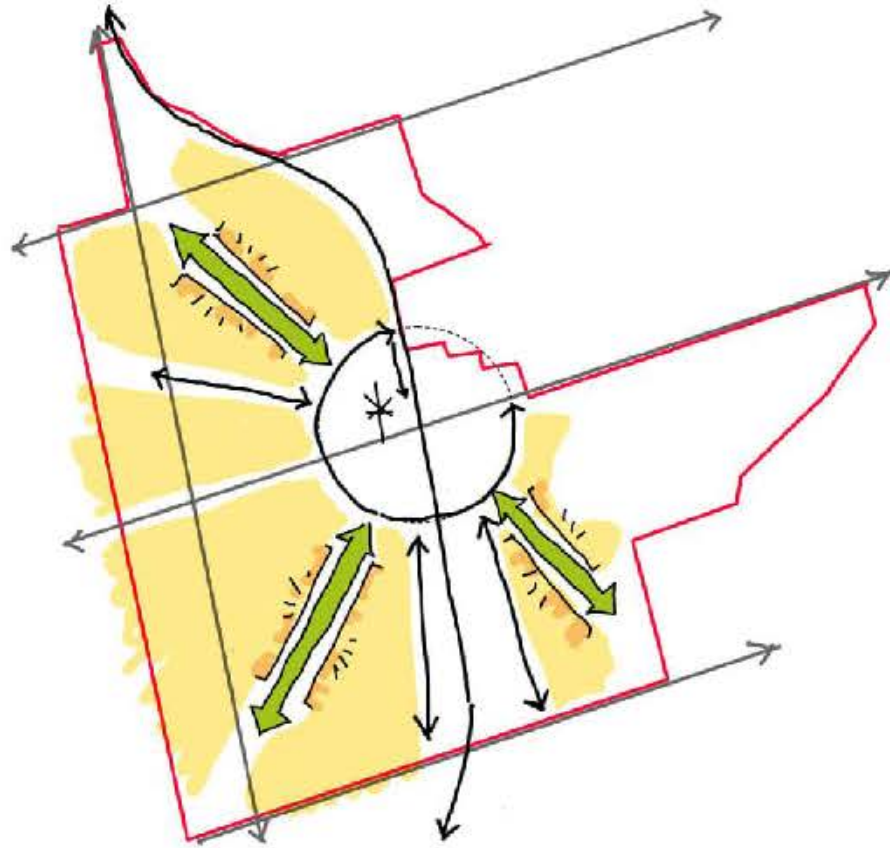


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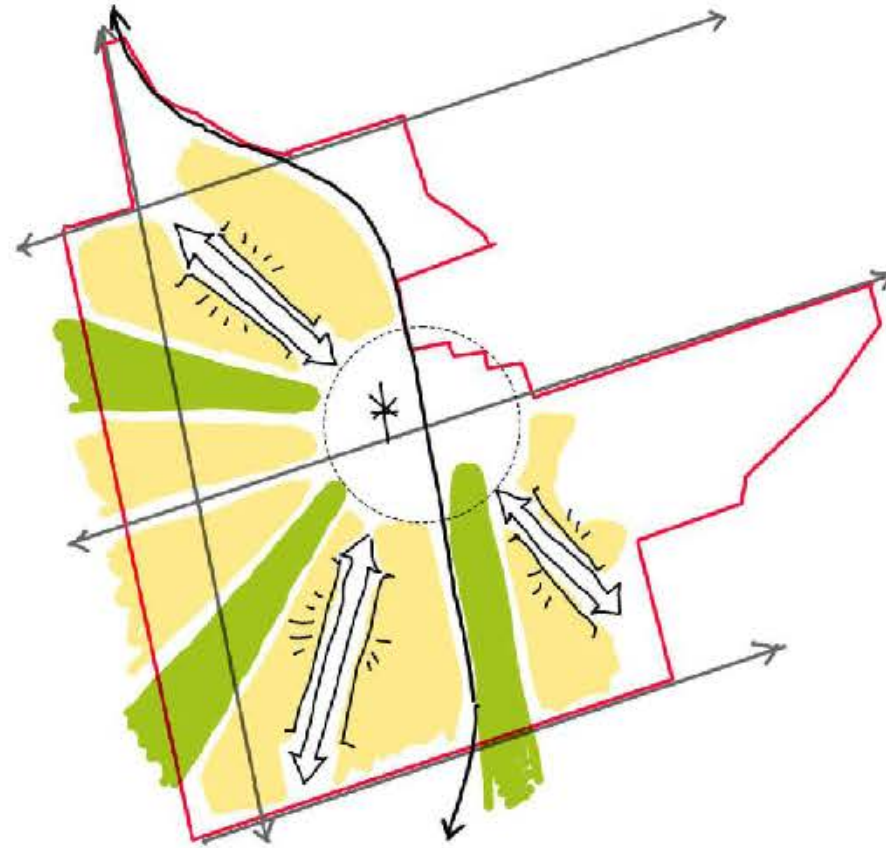


- “Orbital” green spine with access to civic/public functions
- Green spine could act as main movement corridor for active travel and public transport

Arterial

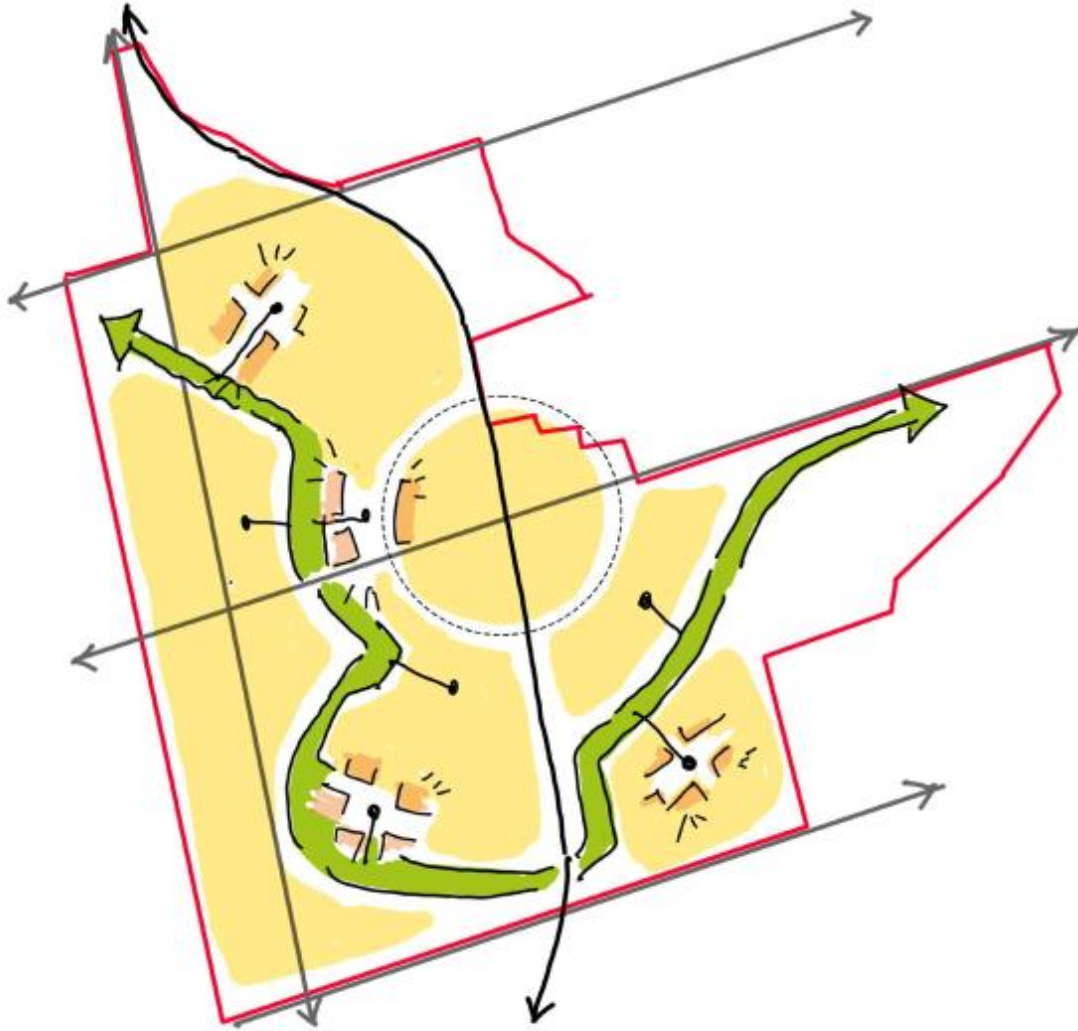


Model 1 - Linear centres pedestrian / active travel and public transport only?



Model 2 (variation) - 'high street' vehicular linear centre separated from park

Dispersed



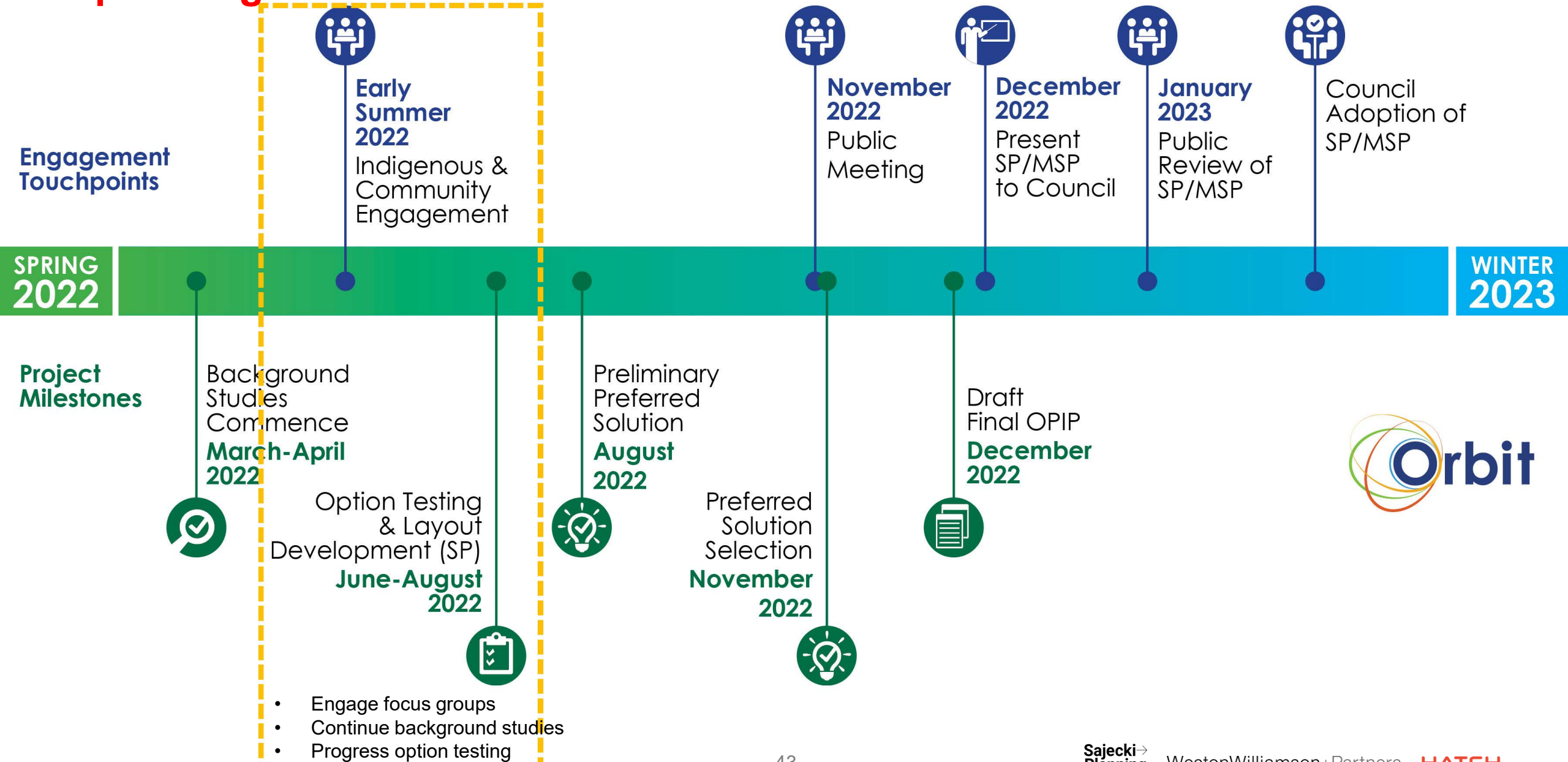
- **Linear green spine connecting to satellite centers and green spaces**
- **Green spine could have more of a 'trail' / feel rather – for pedestrians and bikes**
- **Different centers and 'villages' independent from one another**

Discussion and Q&A

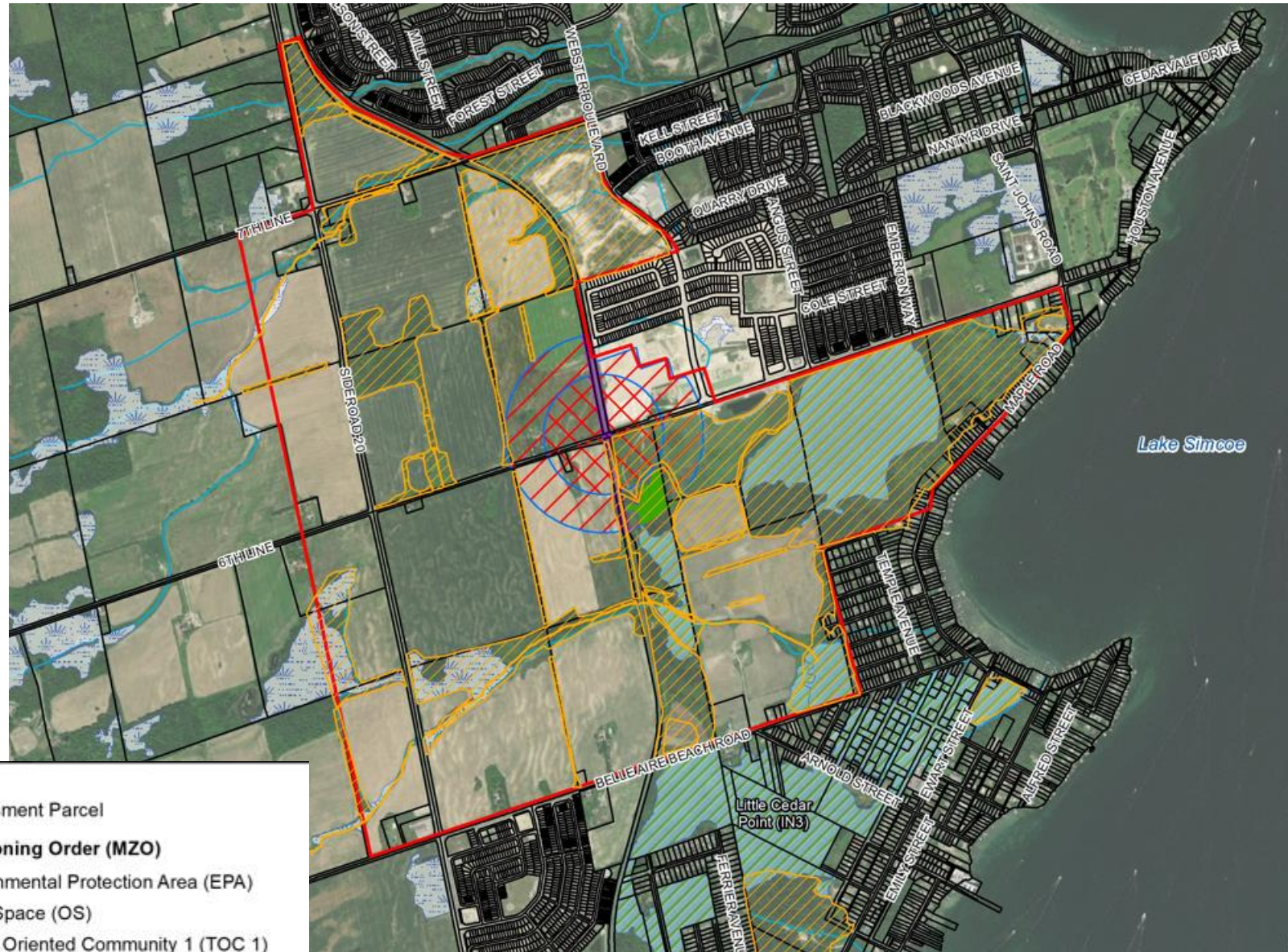
- What excites you about the Orbit Vision?
- What would you like to see in your neighbourhood?
- What do you think will work for Orbit in terms of built form (building configuration, shapes, types)?
- What do you see as a challenge when developing the Secondary Plan?
- What are your longer-term aspirations for your property?
- What thoughts do you have, what would you like us to understand or know so we can consider these as we move forward with this planning exercise?

What's Next

Upcoming Milestones and Activities



Anticipated field work



Legend

- Study Area
- Watercourse
- Road
- Provincially Significant Wetland
- Not Provincially Significant or Unevaluated Wetland
- Field Work Areas
- Assessment Parcel

Minister's Zoning Order (MZO)

- Environmental Protection Area (EPA)
- Open Space (OS)
- Transit Oriented Community 1 (TOC 1)
- Transit Oriented Community 2 (TOC 2)

Feedback Survey



Orbit