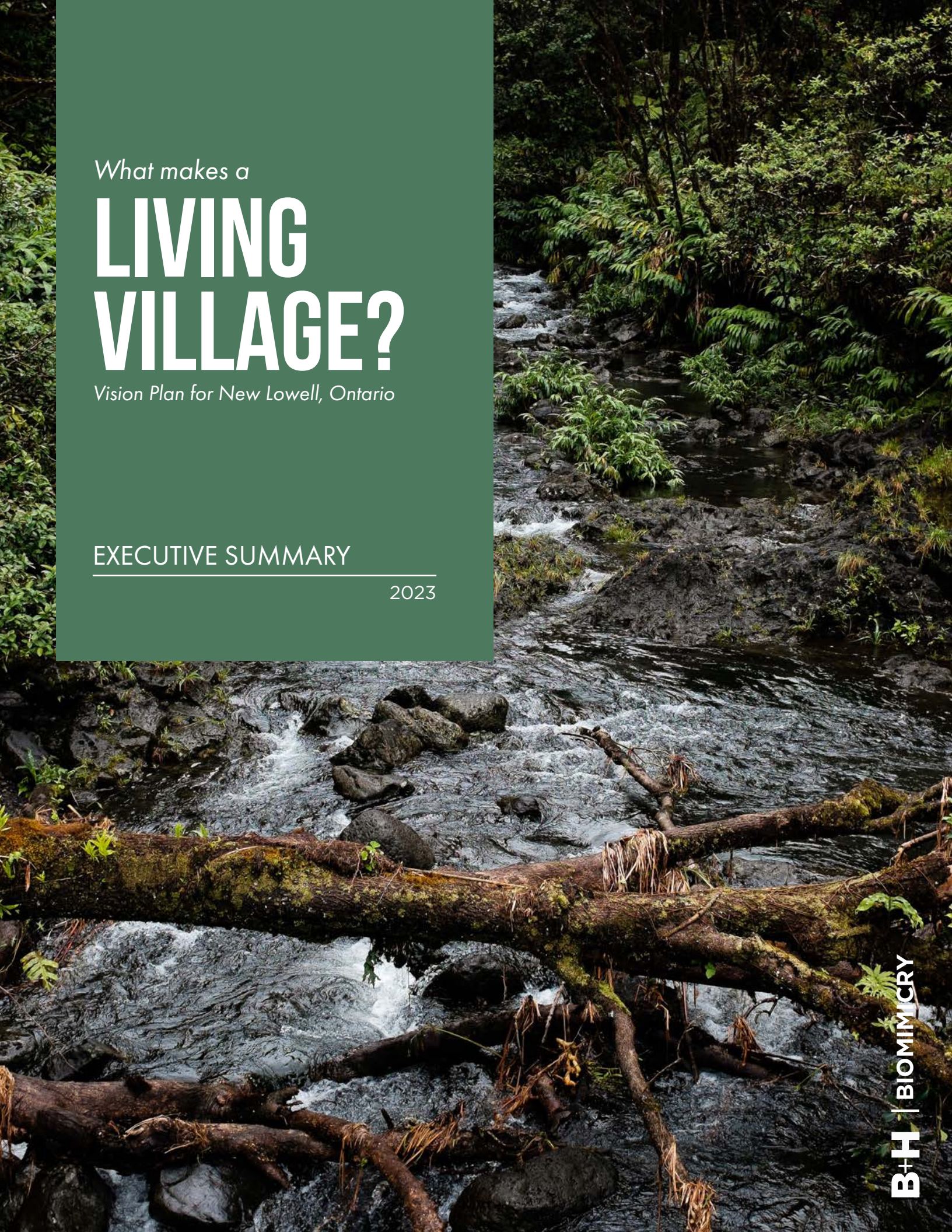


A photograph of a forest stream with mossy logs and ferns. The stream flows over dark rocks, and the surrounding forest is dense with green foliage. The image is used as a background for the report cover.

What makes a

LIVING VILLAGE?

Vision Plan for New Lowell, Ontario

EXECUTIVE SUMMARY

2023

The background image is a vibrant, high-quality rendering of a park or urban landscape. In the foreground, a shallow stream flows through a lush green area, with several large, grey, sculptural birds (resembling herons or egrets) standing in the water. To the left, a person is partially visible, seemingly interacting with the water. A wooden bridge with a metal railing spans the stream in the middle ground. On the right, a modern, multi-story building with a white facade and large windows is visible, surrounded by trees and greenery. The sky is filled with soft, white clouds, and a few birds are flying in the upper left corner. The overall atmosphere is peaceful and natural, suggesting a harmonious blend of nature and urban development.

NEW LOWELL LAND ACKNOWLEDGMENT

New Lowell is located within the boundaries of Treaty 18, the traditional lands of the Anishinaabeg, Haudenosaunee, Tionontati, Wendat, and is the home of many First Nations, Metis, and Inuit peoples as part of an intricate nationhood that reaches across Turtle Island. We are grateful to have the opportunity to work on this land and create the vision for a Living Village. The Living Village is a response to giving back to the land, respecting the land and letting nature guide and dominate once again. At this time of truth and reconciliation, we welcome the opportunity to work together towards new understandings and new relationships to continue to build our vision.



TABLE OF CONTENTS

INSPIRATION 4

VISION & PRINCIPLES 10

What makes a Living Village?	10
Principles	14

VISION PLAN & BIG MOVES 16

Vision Plan	16
Organic Pattern	22
Meadows & Wetlands	23
Forest Fingers	24
Fruits Orchards & Community Farms	25
Flexible & Dynamic Infrastructure	26
Assembly Spaces	27
The Spine	28
Porous Infrastructure	29

CASE STUDY 30

CABN	30
Tecumseh Road	32

Main Street



Food Future Community



Social Gathering



Community in four seasons



Efficient patterns inspired by nature



Built form that works with its place



VISION & PRINCIPLES



What makes a Living Village?

The Living Village of New Lowell is a re-imagining of a suburban settlement. It is a way of living that works harmoniously with the land and draws on the ancient principles of village living to build community resilience.

At its core, the Living Village is about letting nature lead. Knowing that nature holds the genius for how to thrive in a place, the work in the Living Village is to learn from this genius. It's about being in conversation with something greater than yourself; giving nature her space to engage and teach us. It's about recognizing ourselves as a young species in a billion-year old evolution and to find awe in the spontaneity and uncertainty of engaging nature to learn about ourselves. The Living Village is designed to inspire the individual to find their path and to self-actualize their talents; to add to the beauty of the canvas that nature has already provided and to do so for the betterment of the community.

The Living Village is also about letting nature in. Our current model of suppression and control of nature is too costly. It takes energy to fight nature and we now need to find ways of creating harmony between the built and natural environments. We do this by first learning what the land wants to do, what it will support us in doing, and it permit us to do. In this way we honour the services that nature provides, and through biomimicry, the designs it can teach us. And it's about finding clever ways of bringing those services and designs into our communities.

To do this, however, the Living Village must be adaptive and fluid, with less rigid management hierarchies. Our environments are forever changing and in response we must change too. It takes energy to conserve unnatural systems, which nature will disrupt. In order to move forward, the Living Village evolves from this old way, to create blurred boundaries, flexible strategies, and mass-customization.



It is a strategy that will take place iteratively, using information rather than materials, building from the bottom-up, in order to slowly shift and adaptively fit our dynamic context.

The heart of the Living Village is its people. This is a community that is designed to engage the individual to find their niche and their offering. It's about the beautiful burden of responsibility to carve a path in a diverse landscape and to continually improve for the sake of our community. It is about constantly learning, being comfortable on the edge, and finding your place in the greater context. It's a place where all voices contribute, where communities come together through seasonal or weekly assemblies, and where, like a flock of birds, issues are managed through facilitation rather than governance.

Here, the Village is about promoting entrepreneurship and innovation. It's about

celebrating evolution through small-scale releases and reorganizations, continually learning how to harmonize with our place. It's about a new market economy that is based on job creation through biological emulation. It's about learning from the time-tested genius of the natural world to inspire new techniques, technologies, and designs, recognizing that nature solves many of the same problems we do but in much more elegant ways. It's also about looking to nature as a mentor and a measure for how we can improve as a species.

In the Living Village, your hobby is your job and there's no need to go on vacation. We live in patches that inspire community and that relish in the spontaneity, awe, and wonder of living in dynamic harmony with the natural world.

THERE IS MORE
WHEN YOU GO THE
NATURAL WAY



A VILLAGE THAT IS...

- dynamic, fluid, adaptive
- with less rigid management hierarchies
- relying on local governance (villages within the city)
- designed through facilitation rather than hierarchies (flock of birds)
- where there is no one “truth” (natural evolution through feedback)
- where all perspectives are respected (diversity of a forest)
- where the forest infiltrates the community
- where nature has her space to be engaging with us
- where we dance and in the dance learn how to dance better
- a place that honours seasons, adheres to rhythms
- a place with blurred boundaries with its environment
- a place where the dynamic state inspires awe, spontaneity and wonder
- where it inspires innovation and motivates to learn more
- where entrepreneurial spirit is awoken and job creation is through biological emulation
- a place of constant connection, positive agitation, inspiration, and evolution

MADE UP OF INDIVIDUALS WHO ARE...

- naturally inspired
- entrepreneurial
- learning through agitation (competition) finding freedom in boredom
- finding purpose in their responsibility to their neighbour

- in constant conversation with something beyond themselves
- constantly challenged
- working in diverse collaborations leveraging different perspectives to actualize their gifts
- recognizing that all eyes provide the best resolution
- constantly recognizing their interconnectedness
- that there is no end

WITH INFRASTRUCTURE THAT IS...

- dynamic and nature-inspired
- that leverages new metaphors and emerging technologies
- customized to place, decentralized
- built from the bottom-up, locally attuned and adaptive
- iterative and modular
- regenerative, a contribution instead of seeking to do “less harm”
- contributing to the social and ecological systems
- leveraging wasted opportunities instead of importation and exportation
- circular
- ebb and flow, weaving with the natural world
- ever changing, ever evolving as a living prototype
- collecting direct feedback, constantly, through new technology

Principles



Work with Nature

- Celebrate ecological services of existing waterways, wetlands and forests
- Use biomimicry to inspire patterns of the plan (fit form to function)
- Avoid using energy to control nature and create pathways for forests to grow into the village
- Let nature in and bridge the contrast between built and natural environments



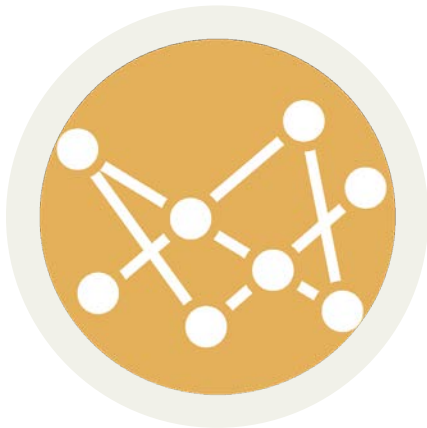
Promote Positive Agitation

- Explore through continual engagement with nature and encourage constant learning
- Learn through failure (safe fail vs. fail safe)
- Be surprised, find awe, release preconceptions through network of pathways and locally-attuned village design
- Grow through discomfort by embracing change and innovation
- Release to allow reorganization, at multiple scales



Allow things to grow, unfold and emerge

- Constantly evolve ('never done design')
- Facilitate rather than dictate through designs that work with the land rather than importing energy to control and engineer the land
- Allow for flexible management and zoning
- Celebrate spontaneity, change in design and process
- Build from the bottom-up through iterative design process



Create points of connection

- Follow seasons, rhythms
- Create spaces for weekly, seasonal, assemblies as feedback mechanisms
- Build jobs through biological emulation in education and maker hubs
- Build villages within the city (patches)
- Allow villages to self-organize through patch designs (clusters) that are attuned to place



Elevate the responsibility to community

- Follow your question, find your niche - allow for diverse designs and diverse individuals to inhabit those designs
- Hone those skills through entrepreneurship and action in maker and education spaces
- Be in constant conversation with something beyond yourself through engagement with nature and innovation
- Serve the community, build for the benefit of the village



Celebrate Diversity

- Respect all perspectives, no one "truth", which is representative of a diverse and locally-attuned design
- Avoid hierarchies
- Celebrate the genius in each individual by encouraging
- No one is smarter than everyone
- Foster continual collaborations through pathways, interactive points and central amenity space

VISION PLAN & BIG MOVES



Vision Plan

The Vision Plan is a demonstration of the application of the guiding principles and the Living Village exemplifies a place for healthy community living in which biodiversity is a core driver.

In our strategy, we let the water dictate our design, we bring in the forests through ribbons of no development, and protect riparian pathways by using them for agriculture and parks. We do this to bring back the land to its natural state. All built elements – buildings, spaces, movement corridors, servicing systems work in harmony with the natural environment.

The renewed ecosystem aims to bring in wildlife that contributes to regeneration of the

natural environment. We focus on building in and around riparian zones in a way that the infrastructure contributes to the natural processes and supports a dynamic environment.

The Plan reflects a mosaic of “patches” - a built environment that reflect the diversity and decentralization of place, creating resilience through redundancy, flexibility and adaptability. The patches work together to form an ecosystem that supports the functions of human development, healing and growth through a mix of uses spread across patches, creating layers of programming and destination uses sprinkled throughout as opposed to the mono-culture of residential development we see in suburbs today.



The community amenities form the core of the Living Village and are tied to the experience of the land, demanding stewardship, social interactions, and interdependency. They aim to create a culture of art, exploration, knowledge exchange and wonderment. The interspersed pedestrian paths, for example, are not just connections between places but they are designed to foster human connections and interactions.

The County Road becomes the Main Street, acting as a connecting spine providing support and structure to the community. The spine is designed to connect the patches together, foster movement, interaction and perform vital economic functions of the Living Village.

THE PLAN REFLECTS A MOSAIC OF "PATCHES" - A BUILT ENVIRONMENT THAT REFLECT REDUNDANCY, DIVERSITY AND DECENTRALIZATION OF PLACE.

Community with deep connections to the ecosystem

A LIVING VILLAGE

1. Existing Woodland
2. Meadows and Stream
3. Forest Fingers
4. Forest Trails
5. Water Trails and Parks
6. Orchards
7. Flexible Living Patch
8. Mixed Use / Retail Patch
9. Mixed Use / Live- Work Patch
10. Learning Patch
11. Healing Patch
12. Community Hub
13. Agricultural Farms
14. Sports Amenities
15. Wetland Park
16. Existing Community
17. Main Street - Commercial Corridor





0m 100m 200m 500m



BIG MOVES



ORGANIC PATTERN



MEADOWS &
WETLANDS



FOREST FINGERS



FRUIT ORCHARDS &
COMMUNITY FARMS



FLEXIBLE & DYNAMIC
INFRASTRUCTURE



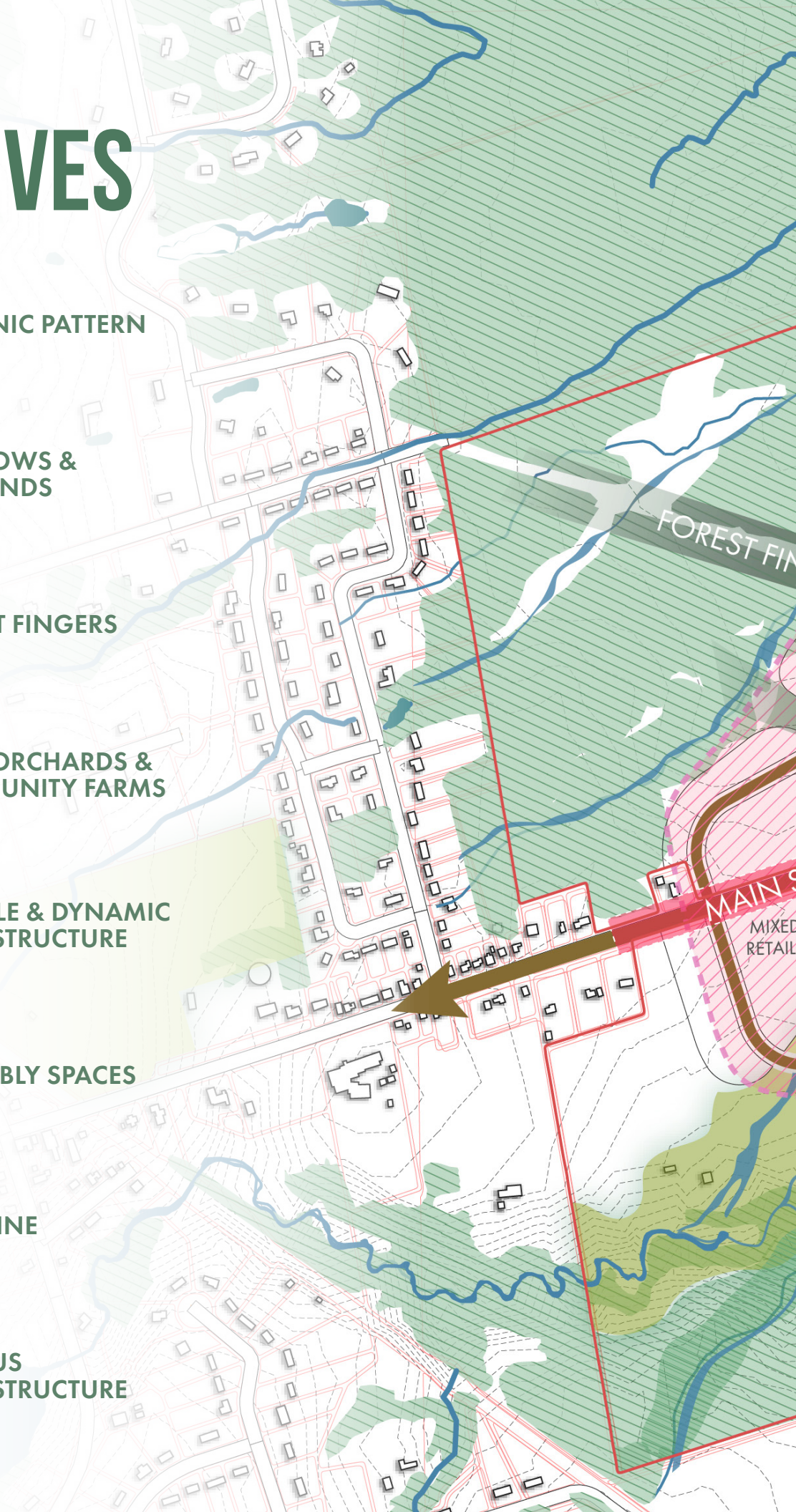
ASSEMBLY SPACES

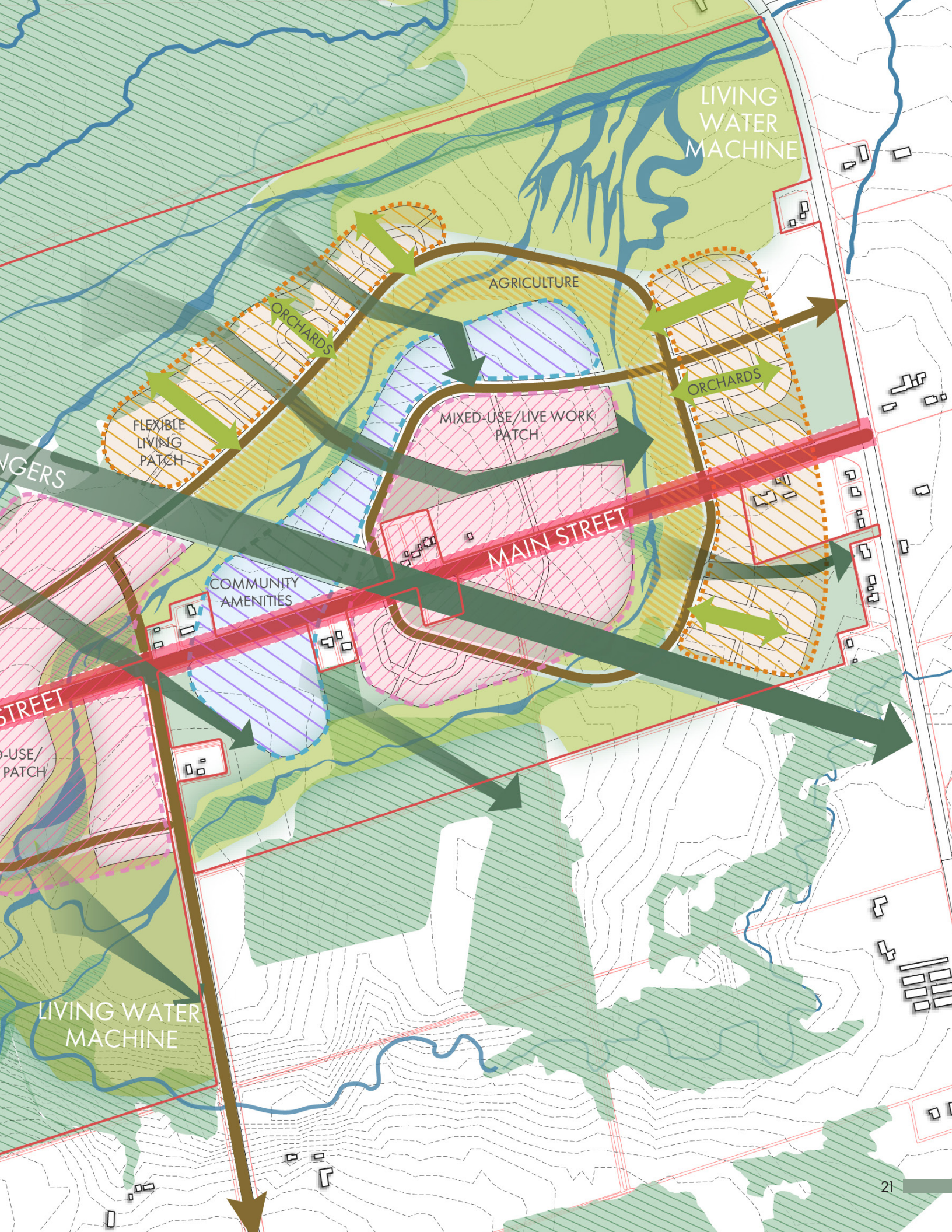


THE SPINE



POROUS
INFRASTRUCTURE





LIVING
WATER
MACHINE

AGRICULTURE

ORCHARDS

FLEXIBLE
LIVING
PATCH

MIXED-USE/LIVE WORK
PATCH

ORCHARDS

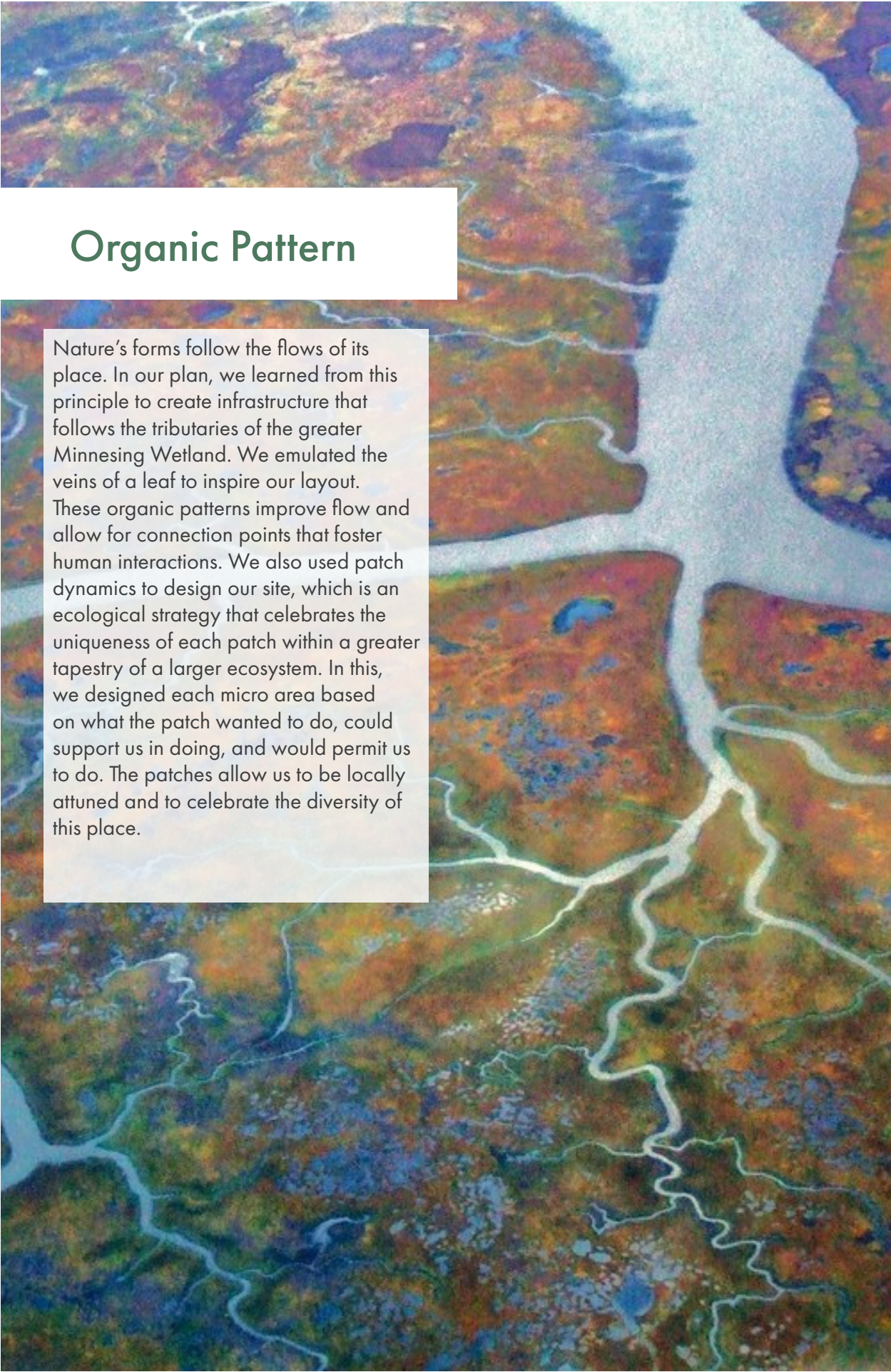
MAIN STREET

COMMUNITY
AMENITIES

STREET

-USE/
PATCH

LIVING WATER
MACHINE



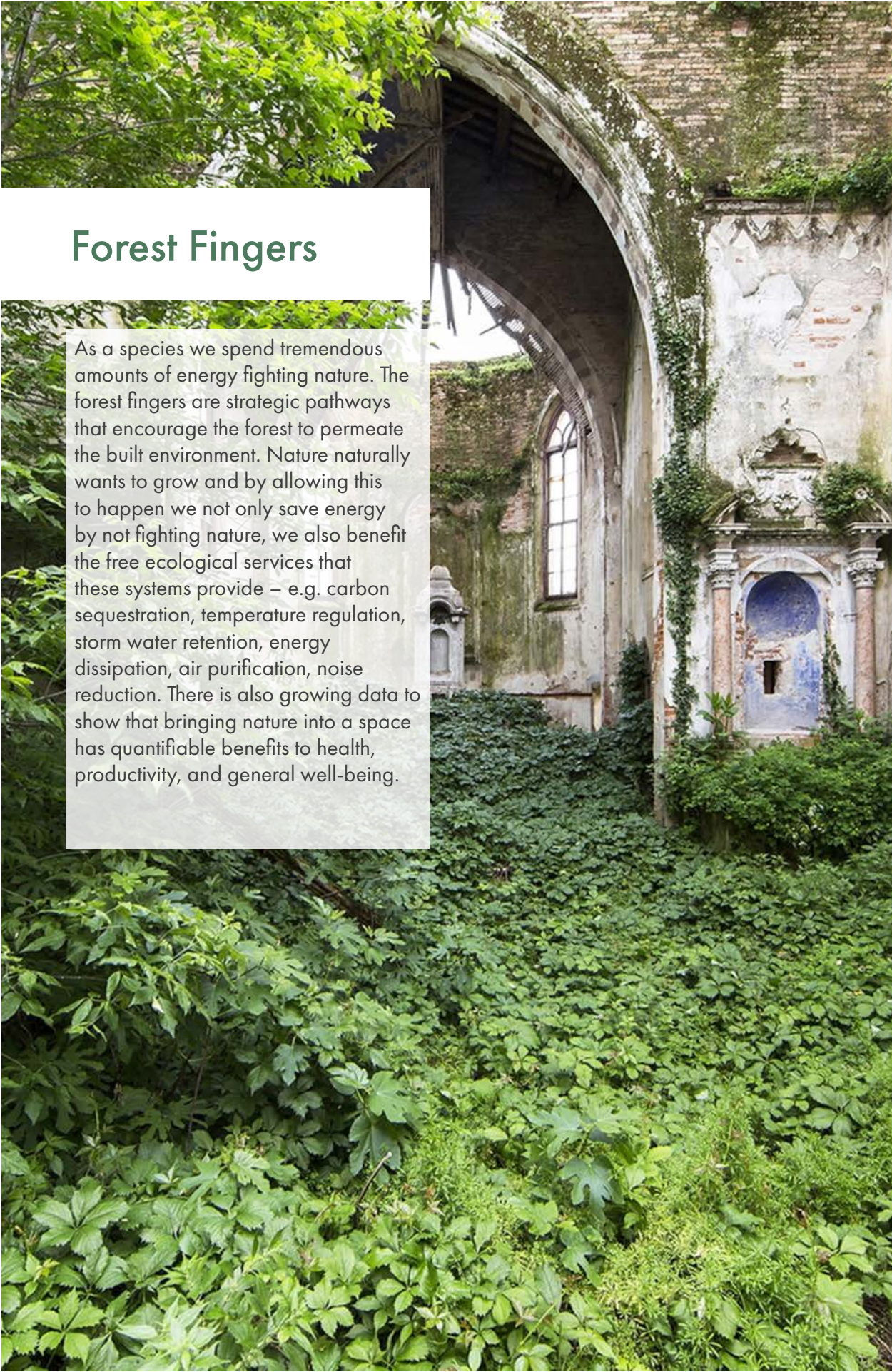
Organic Pattern

Nature's forms follow the flows of its place. In our plan, we learned from this principle to create infrastructure that follows the tributaries of the greater Minnesing Wetland. We emulated the veins of a leaf to inspire our layout. These organic patterns improve flow and allow for connection points that foster human interactions. We also used patch dynamics to design our site, which is an ecological strategy that celebrates the uniqueness of each patch within a greater tapestry of a larger ecosystem. In this, we designed each micro area based on what the patch wanted to do, could support us in doing, and would permit us to do. The patches allow us to be locally attuned and to celebrate the diversity of this place.

Meadows & Wetlands

The Living Village goes beyond the paradigm of doing less harm to consciously find ways for humans to be a contribution to their place. The meadows and wetlands are an example of this. These existing systems are not just maintained but strategically enhanced. We slow down rain events, direct them with the natural topography of the site and leverage the ecological services of the site without overwhelming them. We prioritize ecological and hydrological connectivity to the larger region and in doing so, create conditions conducive to more life. We invite more biodiversity in these areas, use them for community recreation, and support a dynamic environment where the residents engage their natural environment.





Forest Fingers

As a species we spend tremendous amounts of energy fighting nature. The forest fingers are strategic pathways that encourage the forest to permeate the built environment. Nature naturally wants to grow and by allowing this to happen we not only save energy by not fighting nature, we also benefit the free ecological services that these systems provide – e.g. carbon sequestration, temperature regulation, storm water retention, energy dissipation, air purification, noise reduction. There is also growing data to show that bringing nature into a space has quantifiable benefits to health, productivity, and general well-being.



Fruits Orchards & Community Farms

A forest can feed countless species without monocultural techniques or industrial agriculture methods. Learning from natural agriculture practices including food forests and permaculture, we are leveraging the patch model to plant and grow diverse polyculture food strategies in strategic areas. The orchards and community farms are placed in areas that are most successful for food production and community engagement. They also engage the community in the growth of their own food and by doing so, create a culture of sharing, reciprocity, food security, and overall resilience.



Flexible & Dynamic Infrastructure

In the Living Village context, the structuring of land use supports a “living”, dynamic structure that allows for a high degree of flexibility to respond to natural, ecological, demographic, cultural, and economic change over time. The biomimetic land use structure creates a framework for development that adheres to maintaining the key structural elements important to supporting the vision and guiding principles, such as establishing the main street which is the heart and spine of the community. This is similar to the importance and function of the main spine of a leaf in that it is critical to holding the leaf form together. If climate change demands a more robust wetland park,

the plan needs to adjust accordingly to allow more land area for nature to adjust and correct. Other elements such as housing typologies within the residential forest communities may change as demographic needs change, but the assembly must adhere to the prescribed principles of forest protection and enhancement, and collaborative and interdependent community dynamics. The flexible and dynamic land use concept allows for checks and balances of the plan which needs to be revisited and reviewed at regular intervals as the plan unfolds, through plan governance and through continued engagement with the community and key stakeholders.



Assembly Spaces

The Living Village is defined by four key community patches: Mixed-Use Retail, Flexible Living, Mixed-Use Live-Work, and Community Amenities. Together, they assemble to create a consolidated, complete and resilient community. These patches are like the cells within a beehive structure. They define the form, character, and substance of the system, and house, feed, and nurture the system as well. Like veins in a leaf, these patches are interwoven by natural pathways. The main street spine, agricultural lands, or the living water streams and riparian zones create connection points between patches and allow for random and planned connections with people from other patches. Like ants, these interactions allow for feedback

and non-hierarchical connections, which is what makes ants so resilient. Yet, like bees in a hive, each patch is structured to also cultivate cooperative internal relationships - within each patch are opportunities for community gardens, collaborative workshopping, health and well-being. Assembled within the natural environment, these patches are strategically positioned to bring all people within the Living Village to nature, where nature functions as a means of patch cross-pollination, to foster daily health and wellness lifestyles, and for each patch to be part of a beautiful, socially enhancing, interactive, and experiential learning environment.



The Spine

The main street is the heart of the Living Village. It functions as a diverse transect that straddles several of the natural corridors and three of the core community patches. It is also the bridge to the adjacent communities. As a spine, the main street is the structural support that brings the community together socially. It provides the main commerce of services and amenities, and is the platform to showcase and exchange local art, market goods, technology, and culture. It is the place of convergence, the magnet and a destination that draws both the village community and the adjacent communities together.

The most successful main streets are those that reflect the communities they serve and are allowed to change over time. They can adapt in response to changing demographics, population growth, cultures, and service and amenity needs. To achieve the Living Village main street's viability, the diversity of offerings, the access to place, the integration of open spaces, the close relationship to the built form, and establishing a critical population mass has to be maintained.



Porous Infrastructure

The Living Village is meant to breathe and flow. Think of a forest in which the built structure, the open spaces, the natural systems, the circulation patterns all respond to creating a fluid, connected, organic village that let's the sunshine in, allows the fresh air to circulate, allows nature to forage through and that absorbs the water that flows through.

In the Living Village, permeability means that there is free access to the forest, the agriculture, water and gardens both visually and physically. Permeability creates flux between natural elements, creating a continuous and cyclical cycle of depletion and replenishment. Permeability is achieved by avoiding stark contrasts. It means lines are blurred and that there is an inability to distinguish nature and infrastructure. It's where the natural world is free to permeate the built form, and where all aspects of design - form, materiality, and relationships respond to synergies with nature or are of nature.

CASE STUDY | Community Patches

CABN

A Shared Vision of Resilient and Connected Community
Inspired by nature's way of living

A community inspired by the working of ant colonies. Ants have no top down governance and are one of the most resilient communities on the planet. Their success comes from communication - literally bumping into each other every time they meet to touch antenna (share info) and through pheromones trails that they release when they find pathways for food. It's about working together, rather than working for themselves. A shared vision for a community. The clusters and "random" patterning allows for more "collision" opportunities amongst neighbors.

The vision is to transform the bare land and transforming it to: rebuild the forest, restore natural habitat, accommodate affordable housing, increasing biodiversity, using the forest for recreation and nutrients. The plan reinforces compact cluster development, mixing units for residential diversity, clustering with a central courtyard, working gardens, diverse open spaces to ensure walkability, interdependency, safe places to play and enhance wellness of the residents.



VISION FRAMEWORK

BUILT FORM



SETTING GOOD
ADJACENCIES



SHARED COMMUNITY
SPACES



DIVERSITY OF
UNIT TYPES



FLUID MOVEMENT
BETWEEN CLUSTERS

OPEN SPACE



LINEAR
RECREATIONAL
CORRIDOR



AMENITY ORIENTED
COMMUNITY SPACES



FOREST AS
PLAYGROUND



STREAM
REJUVENATION

MOBILITY



DECENTRALIZED
AND CONSOLIDATED
PARKING



EXPANSIVE BIKE AND
TRAIL LINKAGES



WALKABLE AND
ACCESSIBLE
COMMUNITY



ENSURING SAFE
EMERGENCY ACCESS

SUSTAINABLE INFRASTRUCTURE



SOLAR POWERED
COMMUNITY



CELEBRATING
AND PROTECTING
THE FOREST



LOCALIZED WASTE
WATER TREATMENT



FOOD RESILIENCE



CLOSED LOOP CYCLE

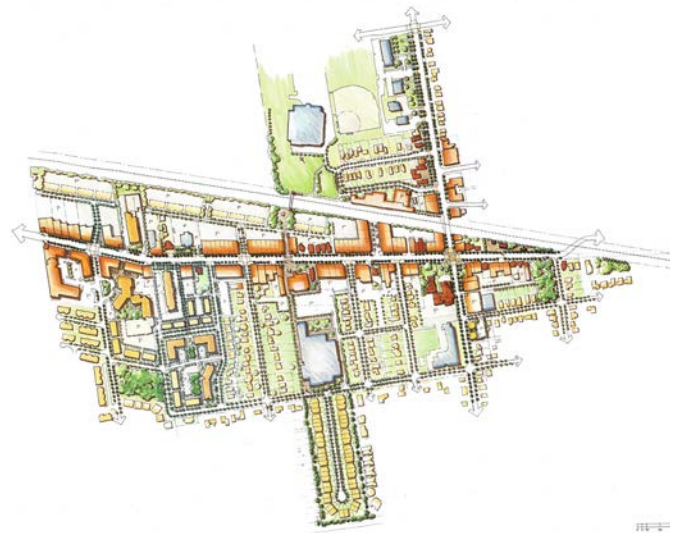


CASE STUDY | Revived Main Street

Tecumseh Road

Tecumseh's Main Street is a community place for commerce and gathering. Designed for walking and anchored by its historic buildings, the street is both a place to live and a regional destination. As the heart of the Tecumseh community, it is a gathering place with unique amenities and supported by great festivals and events.

The future Tecumseh Road CIP area will support this vibrancy with new mixed-use developments and open spaces framing a renewed street environment that reconnects with the residential neighbourhoods to the north and south, provides a clear gateway into the community, and creates a new identity for the area. The Vision is supported by the Land Use, Built Form, Public Realm, and Movement Framework Policies, as well as a Streetscape Improvement Program that guide the development of the Tecumseh Road CIP area.



BEFORE



AFTER

"This Plan is the Town's first step toward the revitalization and transformation of the traditional 'Main Street' and surrounding community into a unique, vibrant, walkable and mixed-use destination."

The Streetscape Master Plan included significant "big moves" to achieve the vision garnered through a robust engagement process and support from community councilors.

The full burial of the hydro wires to be able to accommodate:

- A full streetscape with less barriers for pedestrian movement
- Much improved aesthetics
- Full tree canopy growth with soil cells
- A tightened corridor and intersections
- Eliminating clearance constraints related to façade improvements
- Eliminating risks related to extreme weather
- Greater flexibility in design of the street for future development.

Coordinating below grade infrastructure with above grade design

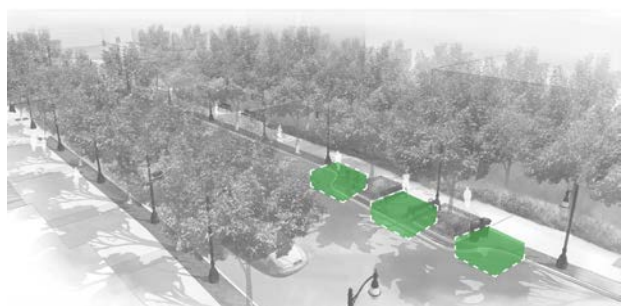
- The right-of-way is congested with

existing infrastructure.

- The right of way must accommodate all proposed infrastructure, including new buried utilities
- 2.0 m wide sidewalks to replace the existing narrow concrete sidewalk.
- Existing underground infrastructure also impacts the placement of trees, street lighting and furnishing.
- Property acquisition required to accommodate burial of overhead utilities and wider sidewalks.

An attractive, green, sustainable streetscape design that:

- Creates a welcoming, accessible, and inclusive destination for the community to shop, play, work, dine, socialize, exercise
- Puts Tecumseh on the map as a destination
- Attracts and encourages new businesses
- Creates a quality environment and builds community identity
- Creates a beautiful, vibrant people place to celebrate history and foster a culture of place
- Integrates and showcases the Town's sustainable initiatives



B+H | BOLD + human

B+H

Americas • Asia • Middle East

bharchitects.com