

Section

01.

Welcome to Kitstone Commons



**A NEW VISION FOR
SMALL TOWN GROWTH**

Imagine yourself in a garden, at a table full of fresh food, surrounded by friends and family. Kitstone Commons is a neighbourhood built around that moment.

**The idea is simple:
we live happier and healthier lives
when we are immersed in beautiful
natural spaces, sustained by
healthy local food, and supported
by strong communities.**

The opportunities that emerge from this idea go much farther. They ask us to re-imagine the future of small town growth in Alberta.

Section

01.



LEGACY

Build with a connection to the past and a responsibility to the future.



PATIENCE

Pursue authentic growth. Take the time to get it right.

CORE VALUES

Kitstone Commons is founded on four key values that help keep the vision grounded as it grows and evolves. These values are woven through the design concept and are explored in greater detail in the following pages.



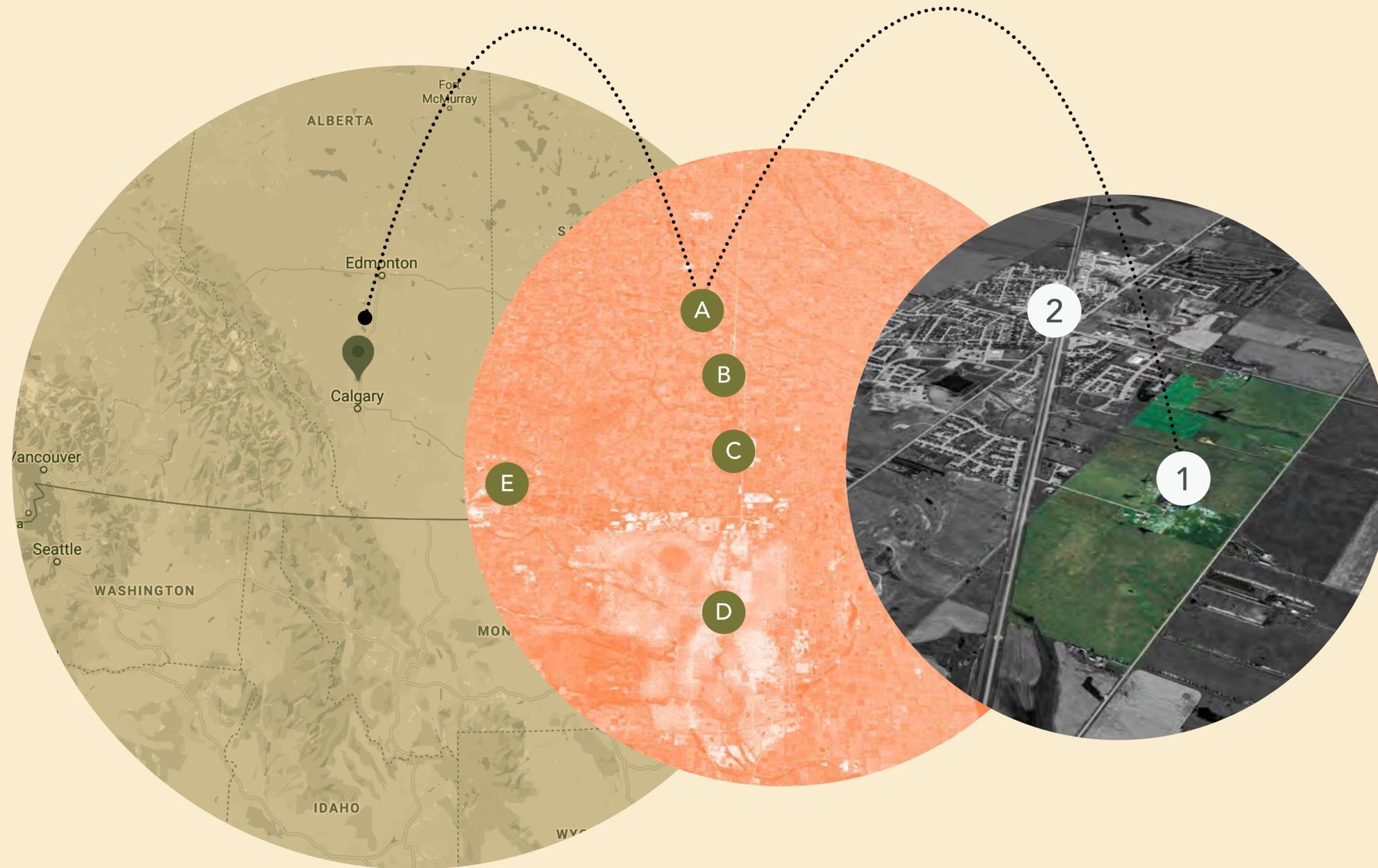
COMMUNITY

Set the stage for meaningful public life. Inspire a sense of ownership.



CREATIVITY

Seek out unexpected pairings. Celebrate beauty, detail, and craft.



THE SITE

Carstairs, Alberta Kitstone Commons sits on a 440-acre parcel of land in the southeast corner of Carstairs, a town in the prairie parkland north of Calgary, Alberta. The north edge of the site is framed by Highway 581, and the southwest corner is defined by Highway 2A – a secondary highway that links Calgary to Edmonton. The site presents a singular opportunity to explore new ideas for town development. It is a short drive from Calgary, offering access to the city’s amenities and services, but remains fully embedded in the thriving rural heart of central Alberta.

- 1 | KITSTONE COMMONS**
- 2 | TOWN OF CARSTAIRS**

- A. Carstairs
- B. Crossfields
- C. Airdrie
- D. Calgary
- E. Cochrane

AGRI HOOD



THE AGRIHOOD OPPORTUNITY

There is nothing new about trying to balance the benefits of 'town' and 'country'. Ever since industrial cities emerged, urbanists have been seeking ways to inhabit a 'happy medium' that offers the best of the nitty-gritty city and its idyllic counter-part, the pastoral countryside. And yet the most pervasive response to this question – the suburbs – seem to fall short of both charges. The suburbs leave behind the best of the city, while never quite achieving the finest qualities of rural places.

Agrihoods present a potent new opportunity to provide an enduring answer to the question of town-country balance.

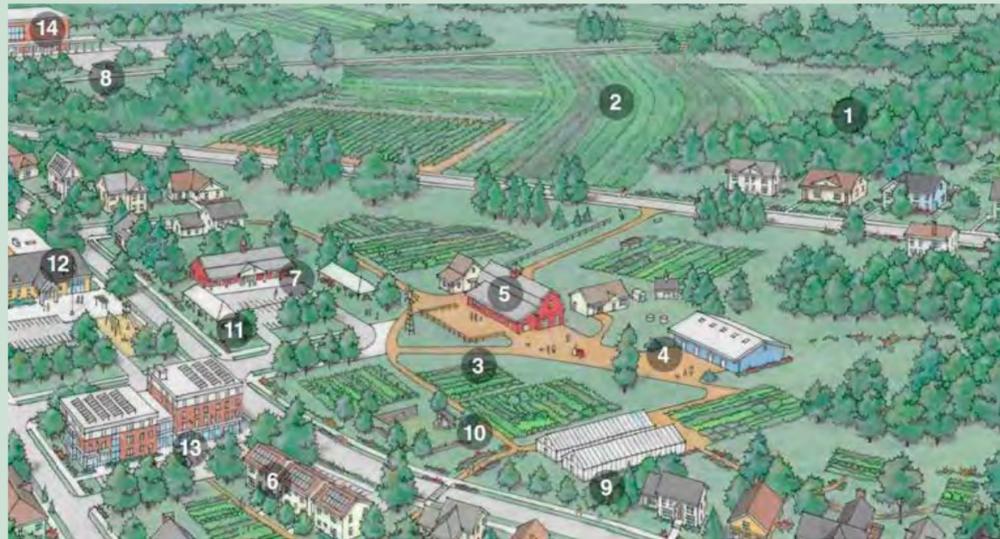
They also present a new model that can help us design the next century of rural growth in Alberta.

Section

02.

What is an Agrihood?

An agrihood is a comprehensively designed community that integrates agricultural production with residential, commercial, open space, innovation, and industrial uses. Agrihood communities contain a mix of uses that revolve around farming, greenhouses, community gardening spaces, food markets, agricultural processing, food production, and agricultural research. The graphic below, from the Urban Land Institute, outlines typical components of an agrihood. The opposite page shows a selection of conceived and built agrihoods and agrihood components from around the world.



- 1. Conservation area
- 2. Protected farmland
- 3. Food-production space
- 4. Farm service corridor
- 5. Event space
- 6. Clustered homes
- 7. Farm stand
- 8. Well-connected streets
- 9. Pathways
- 10. Trails
- 11. Edible landscaping
- 12. Community centre
- 13. Shops & restaurants
- 14. Schools & community amenity



The Carstairs Opportunity

CALGARY'S HINTERLAND

Carstairs is one of nearly twenty smaller towns and cities within commuting range of Calgary. While a handful of these present a unique offering (either by their scale or natural amenity), the rest tend to carry a very similar value proposition. When you look to growth in these towns, the differences become even more narrow. Most small town growth is highly conventional, deriving its parameters, from the suburban development seen at the edge of Calgary – and indeed most Canadian cities.

Here, the Kitstone Commons agrihood sets itself apart. With a few innovations and key gestures, and a shift in perspective, it stands not only to compete with growth in other similar towns, but to draw growth from the city and the broader region.



A NEW PROPOSITION

What would drive people toward living, working, or running a business in Kitstone Commons? The following list, adapted from the Urban Land Institute (2018), summarizes the trends that give shape to the agrihood opportunity:

- People may not want to be personally engaged in agriculture every day, but they want high-quality food and agriculture to be part of their lives.
- Consumers have an increased desire to be part of the “story of their food.”
- Farms bring people together to share in food growing and related events.
- Residents often value farms and fresh food access over other development components like golf courses.
- Community farmers have a unique ability to inspire and educate area residents.

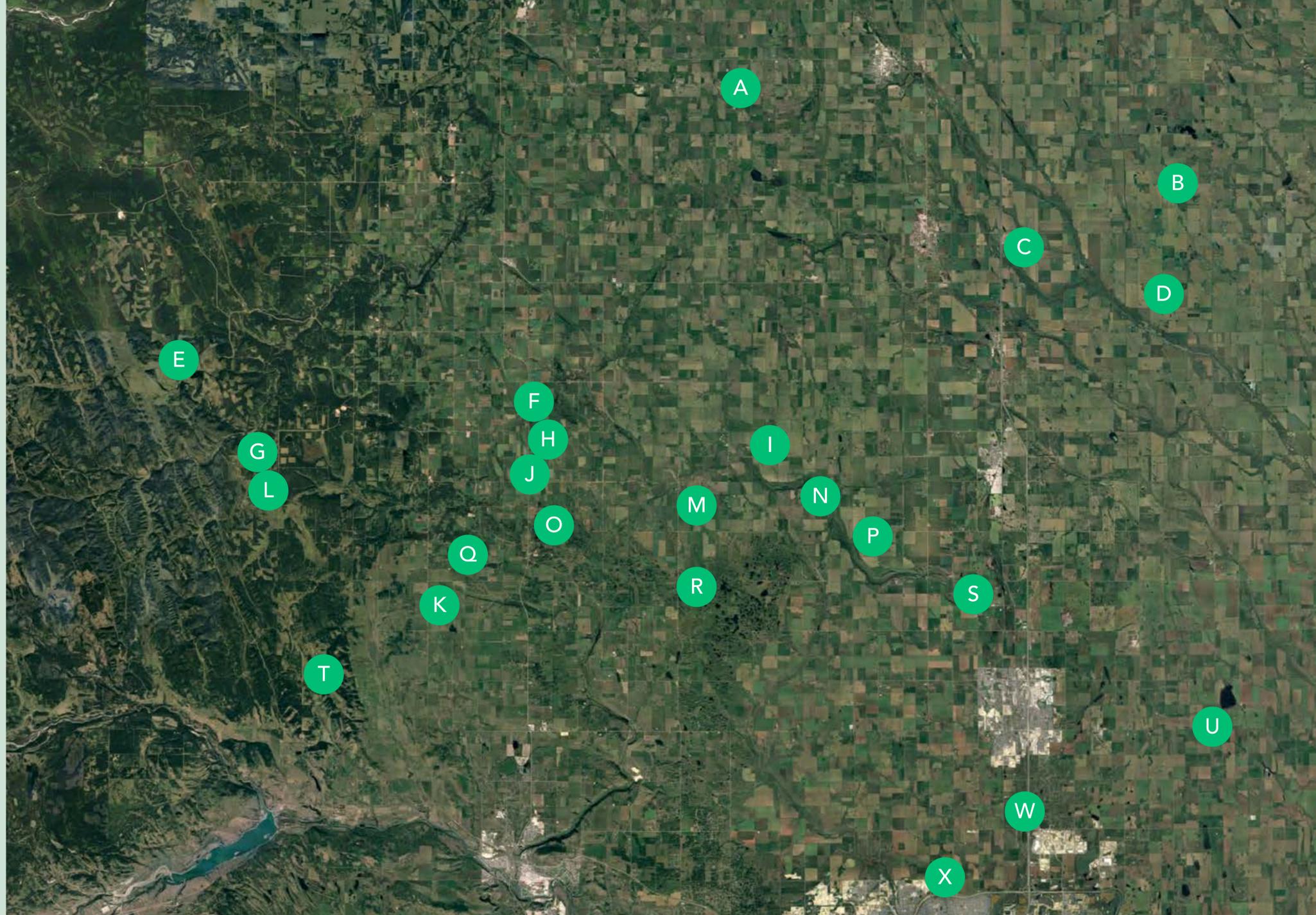
An Anchor for a Re-emerging Economy

BUILDING ON A HISTORY OF MIXED FARMING

Carstairs emerged as a settlement in the early 1880s and was incorporated as a village in 1903. Located along the train line north to Edmonton, and surrounded by fertile land, the place quickly garnered a reputation as excellent land for a wide range of farming. Wheat from Carstairs was sent to England to attract further settlement in the Dominion; the area was also known for its high quality dairy, cattle, and vegetables.

A HUB FOR THE FOOD ECONOMY IN ALBERTA

This section of the Calgary-Edmonton corridor is already bursting with the next generation of investment in food and agriculture. Kitstone Commons is positioned to become a node that helps establish a stronger regional identity that builds on this tremendous existing momentum.



OTHER TOWNS



- A. Prairie Crocus Greenhouse
- B. Kohut Farms
- C. Shirley's Greenhouse
- D. Custom Woolen Mills
- E. Allen Tumber Meadery
- F. Silver Willow
- G. Wilber Ellise

- H. Bonavista
- I. Jim Bob's
- J. La Greenhouse
- K. Solstice Berry Farm
- L. Dalziel
- M. Big Horn
- N. Wessex

- O. Pasu
- P. Davis-Rardan
- Q. Aspen Lane Tree Farm
- R. Viterra
- S. Irvine Tack & Western Wear
- T. Badger Farms
- U. Pleasant View U-Pick

- V. Taoa Enmax
- W. High Line Mushrooms
- X. Alta Custom

A Natural Community Extension

STRENGTHENING CARSTAIRS

Kitstone Commons presents a strong vision for growth and a reinvention of how we think about rural and urban spaces. The strength of this vision is a binding force, rather than a barrier, to the existing community. Kitstone Commons imagines itself as an integrated and well-connected community within a thriving town, where both the neighbourhood and the town benefit from a new engine of growth and identity.



VISION
DECK



Emerging Value

THE DRAW OF SMALL PLACES

Recent trends have reinforced the allure of small places. In particular, the rapid rise in remote work has reduced (but not removed) the friction of distance. The reduced reliance on central working environments raises a distinct value proposition for places in periphery of large cities. These places can offer an affordability and lifestyle outside the reach of the city while still remaining within striking distance for occasional commutes.

CONNECTION TO FOOD & LAND

While the local food movement has been growing for over a decade, the arguments for local production seem to be shifting from the ethical to economic. There is a strong opportunity to build on the emerging desire for less fragile and more locally reliant supply and production chains. The agrihood concept addresses this in a visceral way for residents, and in a systemic way for the urban region.





Drawing Growing and Living
Spaces Together.

Section

03.



KITSTONE
COMMONS



- 1 | CENTRAL COMMONS
- 2 | MIXED RESIDENTIAL
- 3 | COMMERCIAL CENTRE
- 4 | INNOVATION CAMPUS
- 5 | ECO INDUSTRIAL PARK

- 6 | AGRIVOLTAICS
- 7 | PRODUCTION & DEMO
- 8 | SOUTH POND
- 9 | WETLANDS



Key Features

THE CONCEPT

The Kitstone Commons concept begins with two central elements: a large central green and an encircling road. These two elements work together to produce a large loop of development, focusing either inward on the green or outward to the surrounding countryside. The site is then carefully programmed in a radial pattern around the loop, allowing uses to blend dynamically while also leveraging the central green as a buffer. Roads and trails radiate outward, linking existing and planned connection points.

The agrihood concept allows for a wide variety of uses to be combined in innovative ways. These include **natural spaces, agricultural uses, multi-scale residential buildings, commercial buildings, office and research facilities, industrial uses that might include fields, greenhouses, warehouses, and light-medium production spaces, and energy generation spaces.** The concept for Kitstone Commons finds a suitable home for all of these uses, and carefully organizes them to maximize beneficial adjacencies and minimize potential conflicts in a visceral way for residents, and in a systemic way for the urban region.



KITSTONE
COMMONS



1 | CENTRAL COMMONS

- A. School
- B. Playground
- C. Sports Field
- D. Mixed Cultivation
- E. Campground
- F. Forest

2 | MIXED RESIDENTIAL

- G. Demonstration Residential
- H. North Gateway
- I. Mixed Housing
- J. Mixed Use

3 | COMMERCIAL CENTRE

- K. Community Centre
- L. Plaza
- M. Shops & Patios

4 | INNOVATION CAMPUS

- N. Office/Residential Lofts
- O. Campus Heart
- P. Industrial Research

5 | PRODUCTION & DEMO

- Q. South Gateway
- R. Greenhouses
- S. Demonstration Plots

6 | ECO INDUSTRIAL PARK

- T. Industrial Research
- U. Med-scale Buildings
- V. Large-scale Buildings

7 | AGRIVOLTAICS

8 | SOUTH POND

9 | WETLAND

Central Commons

The Central Commons is the defining space of the Kitstone Commons concept. It provides the neighbourhood's green heart; a mixed-use green space that provides a wide range of amenity, buffer, ecology, and production functions. The Commons is interlaced with trails and pathways, offering many routes for both mobility and discovery. One might begin a tour at the north end of the Commons, which is anchored by a naturally-occurring wetland. A bit to the south, we encounter a school, the only large building embedded within the central green. Specializing in agricultural knowledge and hands-on learning, it becomes a symbol of community cultivation and a significant draw for young families. Southward then to the core of the Commons, we encounter a range of agricultural plots: vegetable crops, flower beds, orchards, and smaller fields of grains and other cultivars. This is an ever-changing space. To the east there lies a forest, build out around an existing tree stand. The forest hosts trail loops and a campground, providing respite from the large open space and enriching the area with more diverse habitats. For the uses and users that surround the space, the Commons is a constant reminder of Kitstone Commons' core identity, an opportunity to be surrounded by living things, and a dynamic reminder of the seasons.



“It provides the neighbourhood’s
green heart”



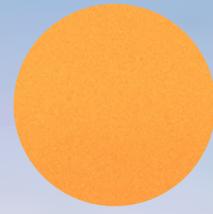
Wetlands

The wetland anchors the north end of the Central Commons and provides a buffer between the commercial uses to the north and the agricultural production to the south. A naturally-occurring feature, it has been developed into a functioning storm pond, a rich ecosystem, and a beautiful recreational amenity. Trails surround the wetland, and main roads cross its threshold over beautiful bridges.

Commercial Centre

The central market at Kitstone Commons provides the space with its core public experience: a market/community centre with a large plaza ground the space, surrounded by a row of restaurants, shops, and services. It provides a place for locals to gather, mix with visitors, and share the story of Kitstone Commons. The main barn is a singular landmark and becomes a destination clearly seen from the highway. It looks out southward over the plaza and onward across the wetland into the Central Commons. The plaza is a node along the promenade face of the restaurants and shops, offering opportunities for gathering and events, including outdoor markets. Restaurants and patios face out along the southwest edge, warmed by the afternoon sun and looking out over the Commons.





Multi-Use Residential

Oriented mostly along the north and west edges of the neighbourhood, the mixed residential districts of Kitstone Commons offer a wide range of housing types within an innovative urban fabric. From greenhouse-equipped acreages to conventional single homes, stacked town-homes, and a range of multi-family buildings, there are accessible and affordable options for everyone. Simple block forms mirror the old town of Carstairs, but houses are flipped to address green spaces, and most roads are treated as shared lanes. Wherever possible, edible landscaping fills boulevards, shared green spaces, and trails. Food production space of some kind is afforded to every resident. Along the north edge, innovative residential configurations include power generation, growing spaces, and attached green-houses, telling a compelling story to visitors approaching along Highway 581. Additional uses, like home businesses, cafes, and art studios are scattered throughout the districts.

Eco Industrial Park & Agrivoltaics

The east edge of the site is well suited to larger-scale buildings with employment and production functions. A dedicated access road running north-south along the site's east edge keeps heavier traffic out of the neighbourhood's internal roadways. At the very south end of this precinct, solar fields and agrivoltaics (solar panels over cultivated fields) help provide power for the area. Further to the north, industrial scale-buildings gradually drop in scale as they approach the innovation campus to the north. Carefully configured to minimize interaction with residents and the trail network, this area provides a wide range of opportunities to enable secondary and tertiary economies in the area.



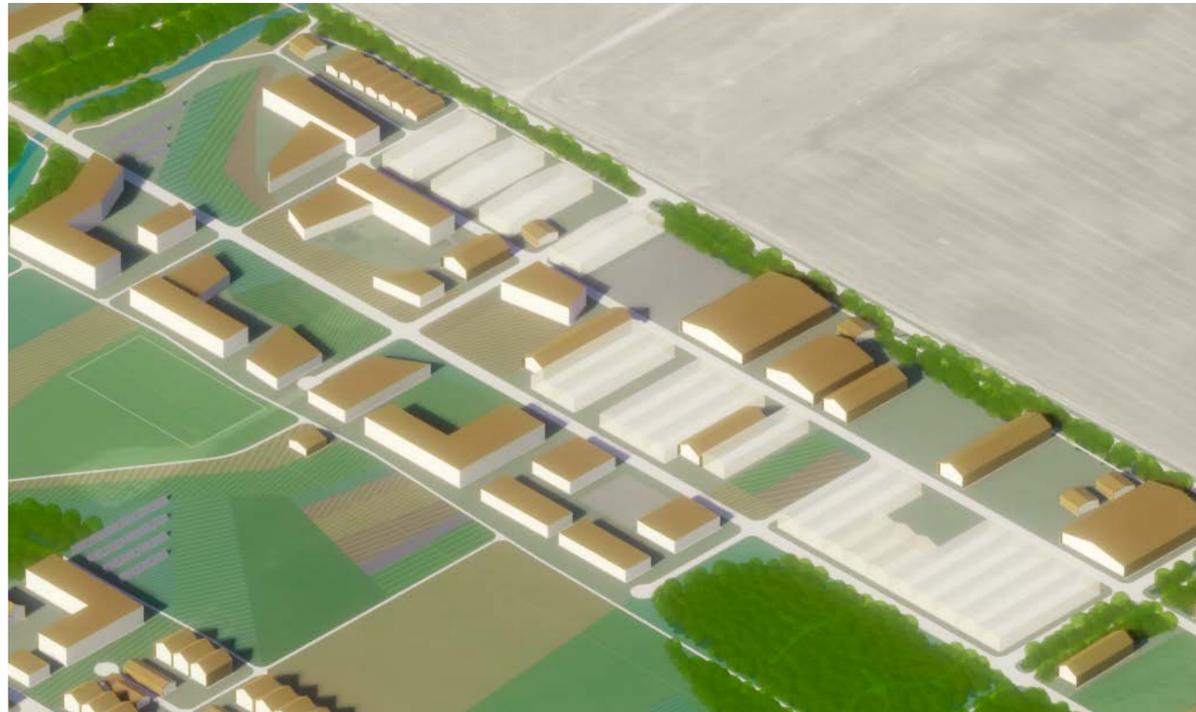
Demonstration & Production Space

The demonstration and production space sits along the stretch of Kitstone Commons that addresses the 2A highway, which sees the highest traffic on the site. Demonstration plots stretch toward the highway from a dynamic backdrop of greenhouses. This too is a story about the larger-scale production and research. It forms the southern gateway to the neighbourhood, carrying traffic past the demonstration fields, past a wetland, and along the southern edge of the Central Commons. This experience allows for the option of a secondary commercial node at the terminus of the entry road.

Innovation Campus

North of the eco-industrial park, the innovation campus blends light industrial, research and development, and loft-style residences. The campus environment is defined by dynamic contemporary architecture and a series of smaller internal quads. It provides a gradient between the multi-use residential to the north and the more industrial uses to the south. It provides research and office space, co-work offices, business incubation, residency opportunities, and satellite links to local and international universities.

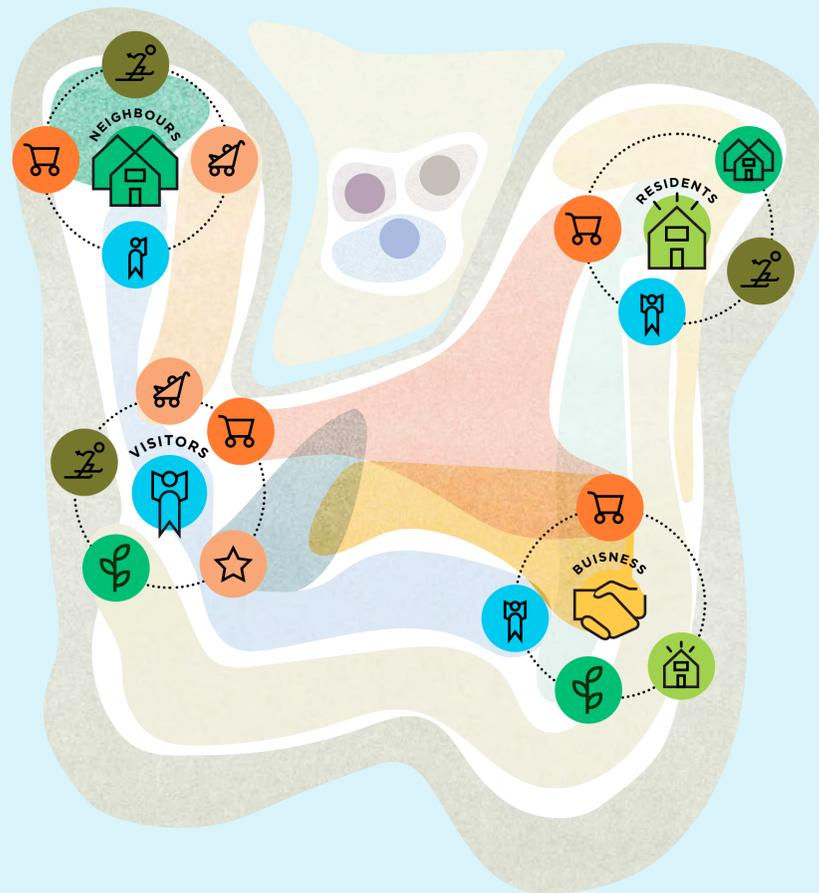
Innovation Campus



Integrating Uses

The following diagram shows how program arrangements in the concept respond to desired adjacencies and buffers for key user types. The central commercial area becomes the territory of exchange between all users, who otherwise seek out their own preferences. A winding system of trails ensure continuity of experience and functional connectivity, breaking down barriers between the precincts.

Uses Diagram



Design Principles



**DRIVEN BY
CORE VALUES**

The following section begins to delve deeper into the intents that will guide Kitstone Commons.

These statements are the first step in translating the project's core values into more detailed policies and decision-drivers.

Section

04.

Legacy

WORKING WITH THE NATURAL LANDSCAPE

Existing natural features are respected and celebrated in all facets of the plan.

- Existing wetlands and tree stands are preserved, maintaining green corridors through the neighbourhood and anchoring all future development on a spine of publicly accessible open space.
- A multi-tier trail network extends through all areas of the neighbourhood, providing access to natural areas, public amenities and the existing town.
- A clear understanding of natural processes is integrated into all facets of food production and ecological systems management in the community.
- The plan prioritizes the use of native plant species in new development.
- Ecosystem services that make growing possible are protected and enhanced through development and community operations wherever possible. Processes to protect include pollination, genetic diversity, soil retention, nutrient cycling, pest control and more.





WORKING WITH THE NATURAL LANDSCAPE

Kitstone Commons aims to be self-sufficient in the areas of food and energy production, reducing the community's reliance on largescale industrial systems and increasing opportunities for residents and small businesses.

- Sustainable building practices and new economic systems support people looking for a more sustainable way of living.
- Community gathering places and shared amenities help develop social infrastructure
- Active modes of transportation are encouraged throughout the community. Streets, sidewalks and pathways weave through residential communities and intersect with local destinations, increasing opportunities for interaction among residents.
- The plan encourages innovative approaches to alternative energy sources as well as the use of passive energy systems.

BUILDING ON LOCAL TRADITION

Kitstone Commons is rooted in the community's identity as a regional agricultural centre.

- The plan builds on Carstair's existing identity and traditions, recognizing and respecting that they were built by generations of working families before us.
- Kitstone Commons is deeply grounded in the history of the region as a major agricultural hub, known for grains, cattle and mixed farming.
- Traditional farming is supported and complemented by technological advances and innovations in food production and processing.

A COMMUNITY ROOTED IN PARTNERSHIP

Kitstone Commons promotes relationships that are built through a shared vision.

- Existing partnerships with business are supported by ensuring new development maintains strong links to the existing town.
- New business partnerships are embraced by innovative development and business structures, supporting new residents who want to live and work in the community.
- Mutually beneficial partnerships with institutions, research groups and the town are actively pursued, increasing potential for innovation in the community. These partnerships may result in an increase in test facilities and research space.
- Research and innovation in Kitstone Commons provides benefits beyond the borders of the town. The community has potential to contribute to:
 - Regional food systems through food production and distribution, such as in large centres like Calgary and neighbouring towns
 - International research and development in the field of agriculture, food production, processing and distribution



Community

SMALL-TOWN LIFE RE-DEFINED

Kitstone Commons celebrates the history of the neighbourhood and draws on the best parts of small-town living, but does not look to recreate the past.

- Kitstone Commons celebrates the aspects of small-town living that draw people to these communities, including:
 - A familiarity with neighbours, local businesses and systems
 - A different pace of life
 - A visceral connection to the natural environment
 - The concept embraces new ways of living and builds on everything we've learned about what makes great places.
- As an agricultural centre, work and life in Kitstone Commons is centred around community, natural systems and food. Pest control and more.



“Parks, open spaces and working landscapes become the focal point ...”



A CENTRAL HEART TO WELCOME RESIDENTS AND GUESTS

The central heart is representative of the Kitstone Commons community - one that encourages equal access to opportunities, new ways of thinking and a strong connection to natural systems.

- Kitstone Commons is centred on a large productive green space, setting it apart from other communities. This space anchors the neighbourhood structure, provides access to green space for all residents and creates an inviting and memorable first impression for guests to the community.
- The central heart will include a mix of open spaces, including working landscapes, parks, recreation spaces, schools, diverse natural ecologies, and more.

WORLD-CLASS PUBLIC SPACES

Parks, open spaces and working landscapes become the focal point for all developments in Kitstone Commons.

- The open space system builds on existing natural resources including the existing wetland and forest in the heart of the neighbourhood.
- Parks and open spaces are designed to promote health, wellbeing, and a connection to natural systems.
- Working landscapes blend with publicly accessible park spaces in a safe and harmonious way.
- The community's built form is shaped by the agricultural and ecological systems in the landscape.
- All open spaces, from residential lanes, community gardens, neighbourhood parks and school grounds to green roofs, agricultural fields, pathway networks and regional parks, are designed to enhance the local ecology.

ALL ARE WELCOME

The plan aims to remove barriers to living, learning and working in Kitstone Commons, promoting diversity and reflecting the values of inclusivity by:

- Promoting opportunities for families, professionals, students, creatives, community workers, retirees, farmers, and people of all walks of life to set down their roots in Kitstone Commons.
- Fostering an environment that cultivates community stewardship and awareness among residents and businesses.
- Supporting investment incentives help to increase resources for local businesses, schools, the community and the environment.
- Supporting policies that make it easier to live and work in new ways, including:
 - Flexible/shared work spaces or home work spaces
 - Non-typical business models (e.g. co-ops, bartering systems, etc.)
 - New roles for businesses in research and innovation
 - Partnerships between the private and public sectors agriculture, food production, processing and distribution

Providing a new mix of building types and flexible zoning to support the needs of those who live and work in Kitstone Commons, such as:

- Live/work environments
- Multi-family dwellings
- Childcare facilities nearby work environments
- Flexible senior living facilities integrated with other community services
- Indoor and outdoor cultural spaces to support a wide variety of uses
- Affordable housing



Patience

AUTHENTICITY REQUIRES PATIENCE

Kitstone Commons allows for flexible phasing that promotes coherent, sustainable development over time.

- A large, central green offers flexible programming opportunities as the community grows.
- The looping development pattern allows for multiple starting points for growth.
- Innovative architecture allows for a range of uses over time. Loft-style campus buildings can easily flex between residential and commercial/research uses.
- Trail segments can be connected through early phases in many ways, offering tremendous recreational amenity regardless of the level of build-out.

PHASING THAT IS SMART AND ADAPTABLE

The vision for the community allows growth to change and emerge naturally, responding organically to environmental, social and economic cues.



“Agricultural practices are highly visible across the entire neighbourhood...”

- Slow growth is not a negative thing. The concept for Kitstone Commons is designed to support and nurture development that responds to demand over time.
- Agricultural systems and initial business investments help support the first phase of development while the second and third phases are built to respond to opportunities as they arise in various fields, including manufacturing, research and development, education, health, retail, and more.
- Smart and responsive development ensures sustainable growth that can support businesses and residents over time.

AN ALL-SEASON NEIGHBOURHOOD

The thoughtful integration of built form and open space in Kitstone Commons ensures the neighbourhood can be enjoyed by residents and guests throughout the year.

- Agricultural practices are highly visible across the entire neighbourhood in spaces like demonstration plots, farmers markets, community gardens and block farms. Because these practices are so deeply entrenched in the make-up of the community, seasonal changes are accentuated and begin to influence the local vernacular and rhythm.
- Connections between buildings and open spaces are designed with the winter in mind, providing protection from the elements at key locations.
- Trails and pathways are created for all-season use, connecting people to local amenities and the regional open space network to provide a broad range of experiences throughout the year.
- Greenhouses and other indoor spaces are carefully considered to integrate multiple uses, offering opportunities for innovative winter uses, especially for seniors. agricultural fields, pathway networks and regional parks, are designed to enhance the local ecology.

Creativity

AGRI-NEIGHBOURHOOD: A NEW/OLD COMMUNITY FOCUS.

Living and working in Kitstone Commons expands our understanding of agriculture and its role in our community and economy.

- The Agrihood is a vision for the growth of Carstairs, which centres on food in all areas of our lives and economy, including research, production, manufacturing, processing, sales and food services.
- The concept of the Agrihood supports and expands the community's diverse regional identity linked to food through its design and growth framework.

FOOD, LEARNING AND TECHNOLOGY

- As an internationally recognized leader in research and education in the food and agricultural sectors, Kitstone Commons attracts jobs and investment into the local economy. page 53
- The plan promotes investment in higher learning opportunities and research and development.
- Diversity in both the community and business sector supports innovation.



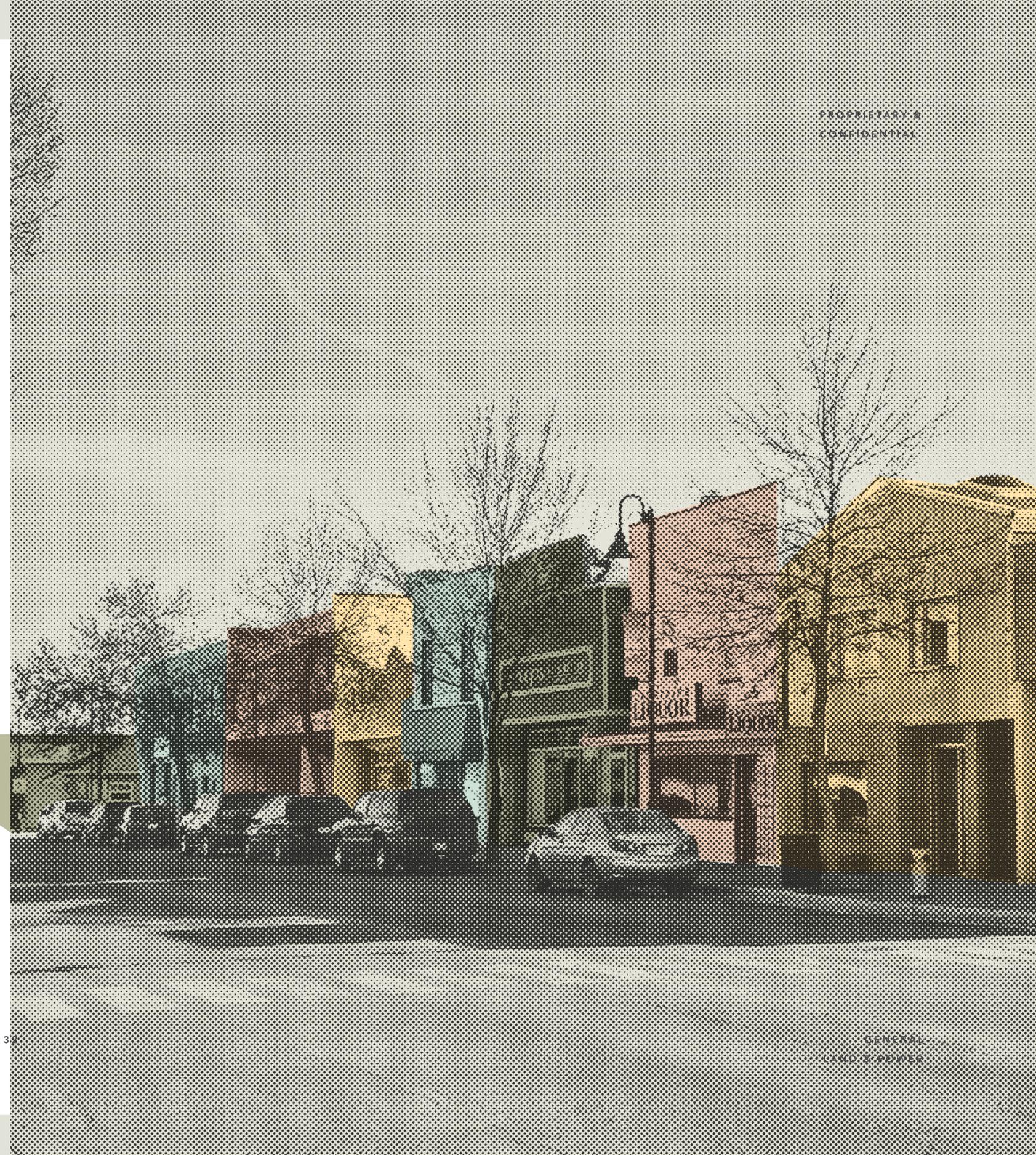
INTEGRATION: CONNECTING TO DOWNTOWN CARSTAIRS.

Kitstone Commons is closely connected to and integrated with the existing Carstairs community.

- Safe, shared streets and multi-modal pathways encourage active transportation throughout the neighbourhood and provide physical connections to downtown Carstairs.
- New social capital and infrastructure support existing neighbourhoods in Carstairs.
- Kitstone Commons promotes increased investment in the region and provides opportunities for businesses in the existing town, including:
 - Serving food grown in Kitstone Commons in local restaurants
 - An increased demand for goods and services from new residents and visitors
 - New business opportunities resulting from increased research and innovation

INNOVATIVE ARCHITECTURE AND URBAN DESIGN.

- New ways of living necessitate new ways of designing, producing and organizing structures for all aspects of life.
- Architecture is consistent with the values of the community and grounded in the ideals of simple living, simple form, and hardy, expressive local materials.
- The concept includes new community forms and hybrids that help us imagine a new way of approaching our day.



VISION
DECK

PROPRIETARY &
CONFIDENTIAL

Thank you



KITSTONE
COMMONS

KITSTONE
COMMONS

GENERAL
LAND & POWER