CAMPUS MASTER PLAN

Olds College

October 21, 2021

OLDS COLLEGE
OF AGRICULTURE & TECHNOLOGY

View from the north showing the full campus build out (Highway 2A at image right)

Prepared for:

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Executive Summary

Olds College Master Plan aims to guide the development of its campus spaces sustainably in alignment with the College's social purpose of 'transforming agriculture for a better world'.

The Master Plan is designed as a roadmap to make the best use of the College's resources in order to have the strongest positive impact in the advancement of our Institutional Ends and our Strategic Drivers, as well as the experience of College community and visitors.

The Master Plan was developed through a vision-based and goals-driven planning process, enriched by stakeholder engagement to address day-to-day Campus experience opportunities and challenges.

Key directions of the Master Plan are:

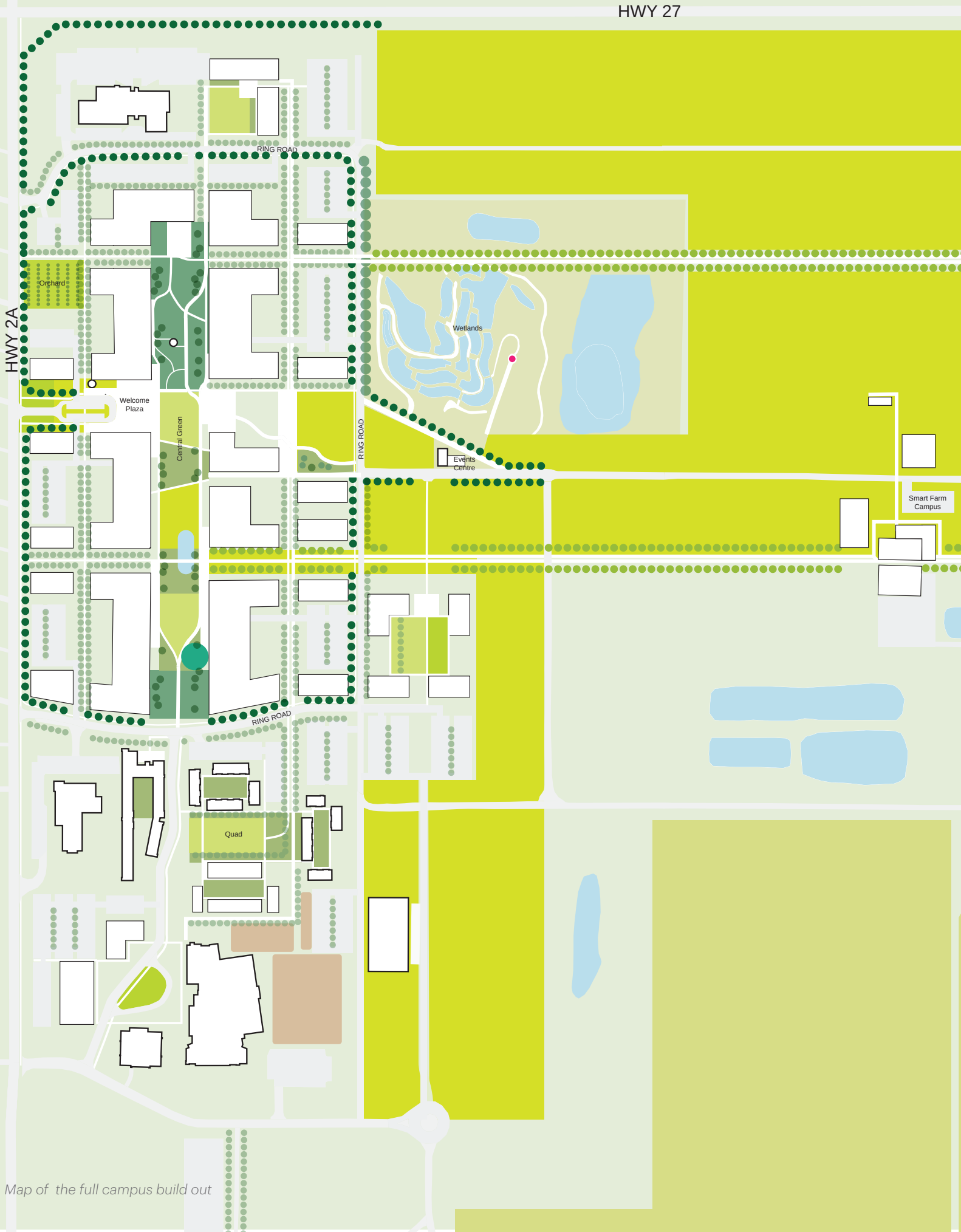
- Flexible and adaptable patterns of growth
- Main Campus Core as the priority growth area
- A new Campus Gateway and arrival experience
- Smart Farm and Agricultural Technology (Ag Tech) at the centre and made visible
- Near-term development prioritizes renewal and strategic replacement

Olds College Master Plan is designed to be a living document that will be enriched by subsequent supplementary detailed planning together with regular updates to stay relevant.

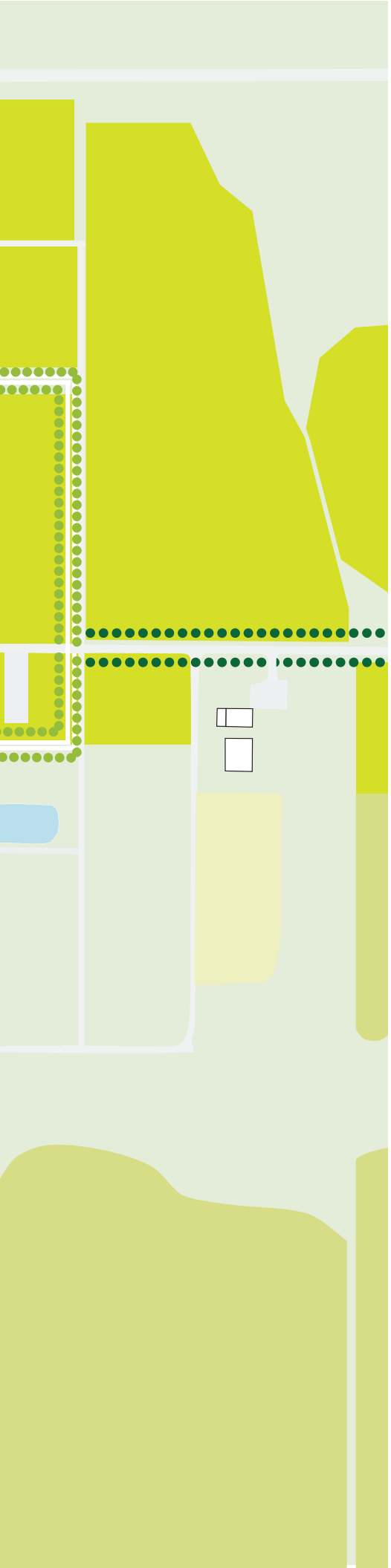
Implementation road map was developed to illustrate optimal sequence of future renewal and growth.

As part of the planning, near-term strategic projects are identified for vision-aligned, sustainable and resilient development on Olds College Campus:

- Frank Grisdale Hall (FGH) renewal
- the new Campus Gateway
- the renovated and expanded Farm Shop as the Field Operations Centre,
- improvements at Central Green,
- and renewed existing building interfaces at the Campus Core



Map of the full campus build out



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Master Plan Vision, Goals + Objectives

Campus Master Plan Vision

Olds College campus is a vibrant, resilient and agriculture-focused education and research environment, fueled by collaboration and innovation.

It is a welcoming and inclusive place that will grow to be a globally recognized agriculture and agri-food* technology centre of excellence.

**We embrace the broader food value chain, from primary production and raw ingredients through food processing and to consumption by communities near and far.*

Goals	Planning Objectives
1. Design a sustainable and resilient campus, incorporating flexibility, adaptability, and responsiveness for decades to come	1. Focus on creating a compact campus 2. Establish a Campus Core and prioritize building within it 3. Contain spread of campus footprint by replacing buildings that can not be re-purposed 4. Strategically renew existing facilities 5. Re-purpose under-utilized space where possible 6. Preserve existing farmland and reclaim underutilized land for farming or its best use 7. Minimize and remediate the footprint of brownfield uses 8. Minimize parking area through compact parking lot layouts 9. Improve water management and usage through infrastructure and landscaping improvement 10. Develop campus buildings and infrastructure in a way that anticipates future expansion or reconfiguration 11. Develop sustainable design guidelines for new buildings and retrofits 12. Transition to low-carbon energy systems
2. Prioritize agriculture-focused knowledge and work and agri-food whole system approach by making these visible and impactful in campus planning and design	1. Connect and bring Smart-farm related activities to the Campus Core (food production; horticulture production; animal husbandry and care; data visualization and management) and enable their visibility in the experience of the Campus 2. Create spaces and features within Campus Core that showcase recent research and academic work 3. Create spaces and features within Campus Core and social or hospitality space that showcase the agricultural essence and technology of the College 4. Improve and expand indoor communal food spaces 5. Showcase campus activities and services to wider community (such as the Smart Ag Innovation Centre, brewery, meat store, orchard seed bank, botanical gardens, wetlands, and others) 6. Integrate technology into signage / wayfinding / building and interior design as appropriate 7. Plan for AV/IT infrastructure on campus and building scale 8. Integrate and showcase vertical farming in Core Campus 9. Explore opportunities and safeguard space for next generation agriculture production (for example, vertical agriculture)

Goals	Planning Objectives
3. Strategically incorporate excellence and innovation in planning and design of buildings, public realm, and college lands	1. Strategically modernize appearance of robust older buildings to represent the College's vision 2. Identify projects with significant identity-building potential and pursue more innovative designs 3. Encourage the creation of work spaces that encourage excellence, collaboration and innovation. 4. Incorporate research and learning into building and public realm design as interpretive and educational elements 5. Improve specific key areas of public realm with innovative design strategies 6. Create a land management strategy based on operational needs and the strategic plan to support the social purpose of Olds College 7. Consider current and future leases on Olds College Main Campus from a vision-alignment perspective, and regulate form of development and use on these areas accordingly 8. Preserve farmland assets and consider site improvements (e.g. facilities for research and maintenance) to support field activities of the College
4. Support learning practices that are diverse, current and evolving, through Campus design and planning for both interior and exterior spaces	1. Provide a spectrum of formal and informal learning spaces 2. Prioritize and showcase applied learning spaces 3. Pursue and implement living lab opportunities for indoor and outdoor campus spaces 4. Develop an innovation, training, and education hub

Goals	Planning Objectives
5. Enhance and showcase existing and future research spaces, and make applied research visible throughout the campus	1. Improve AgTech and industry-specific research facilities/ infrastructure on campus 2. Locate any new research space at grade and make research visible from common areas and paths 3. Locate research spaces along popular routes for students and visitors
6. Create a sense of togetherness and connection that inspires collaboration and innovation through the planning and design of Campus spaces	1. Focus academic and research spaces within Campus Core 2. Create clusters of uses within campus and buildings to facilitate interdisciplinary and interdepartmental interaction and collaboration 3. Create social and amenity spaces at points of intersections and connections, activated by opportunities for food service and eating 4. Create mixed-use buildings and shared spaces 5. Develop spaces that facilitate industry collaboration (e.g. co-location; accelerator spaces; incubators) 6. Create amenities and opportunities for private and public partners to use while working on campus or visiting campus

Goals	Planning Objectives
7. Create an appealing and welcoming campus for visiting, learning, working, and living	1. Create a clear and cohesive campus arrival experience 2. Create a clear and cohesive parking experience and entry into Campus Core 3. Improve wayfinding on campus 4. Articulate a street/road network and a civic address system 5. Improve sense of safety and ease of use in parking areas 6. Enhance visual and physical connections between the Campus and the Town 7. Enhance public realm and landscape at the centre of the Campus Core and at major entrance points 8. Improve areas that offer services to the Campus community and beyond
8. Create a vibrant and livable campus, with amenities, activities, and opportunities to engage socially, academically, and professionally	1. Emphasize and reinforce the Central Green, and ensure the continuity of it at roads and at potential future extensions 2. Identify, delineate, and design a 'Campus Heart' - an area of concentration of communal spaces, services, and amenities, with well-developed matching public realm character 3. Introduce additional 'Hearts' by improving and expanding communal spaces and food options along the Central Green and in the Smart Farm Precinct 4. Enliven the Campus public realm by providing visual and physical connections between buildings and exterior spaces. 5. Enhance exterior space and public realm with landscape design and programming (e.g. play areas, gathering areas, seating) to encourage educational, communal, recreation use opportunities 6. Improve year-round campus walkability by design and operations (footpaths and sidewalk surfaces, connectivity between circulation areas inside buildings) 7. Improve visibility and accessibility of campus enterprises 8. Expand campus housing availability, affordability and options

Goals	Planning Objectives
9. Create an inclusive, accessible, and safe campus environment that fosters wellness and sense of place	1. Identify and eliminate barriers to accessibility on Campus 2. Implement universal design and accessibility features in Campus open spaces and buildings, and improve existing ones (e.g.barrier-free mobility; quiet work, study and testing areas) 3. Enable campus space accessibility and use for extended programming hours 4. Encourage physical activity through design 5. Create spaces of respite 6. Improve lighting in outdoor areas, and implement safety features on Campus 7. Improve ground cover on roads and parking areas for ease and safety of use year-round 8. Create and expand places of gathering and physical opportunities for representation for the Indigenous community 9. Create an Indigenous garden and celebration space 10. Integrate Indigenous art and artefacts 11. Consider place and building naming 12. Support inclusion of international students through designated service and advising areas, and expanded housing availability on Campus

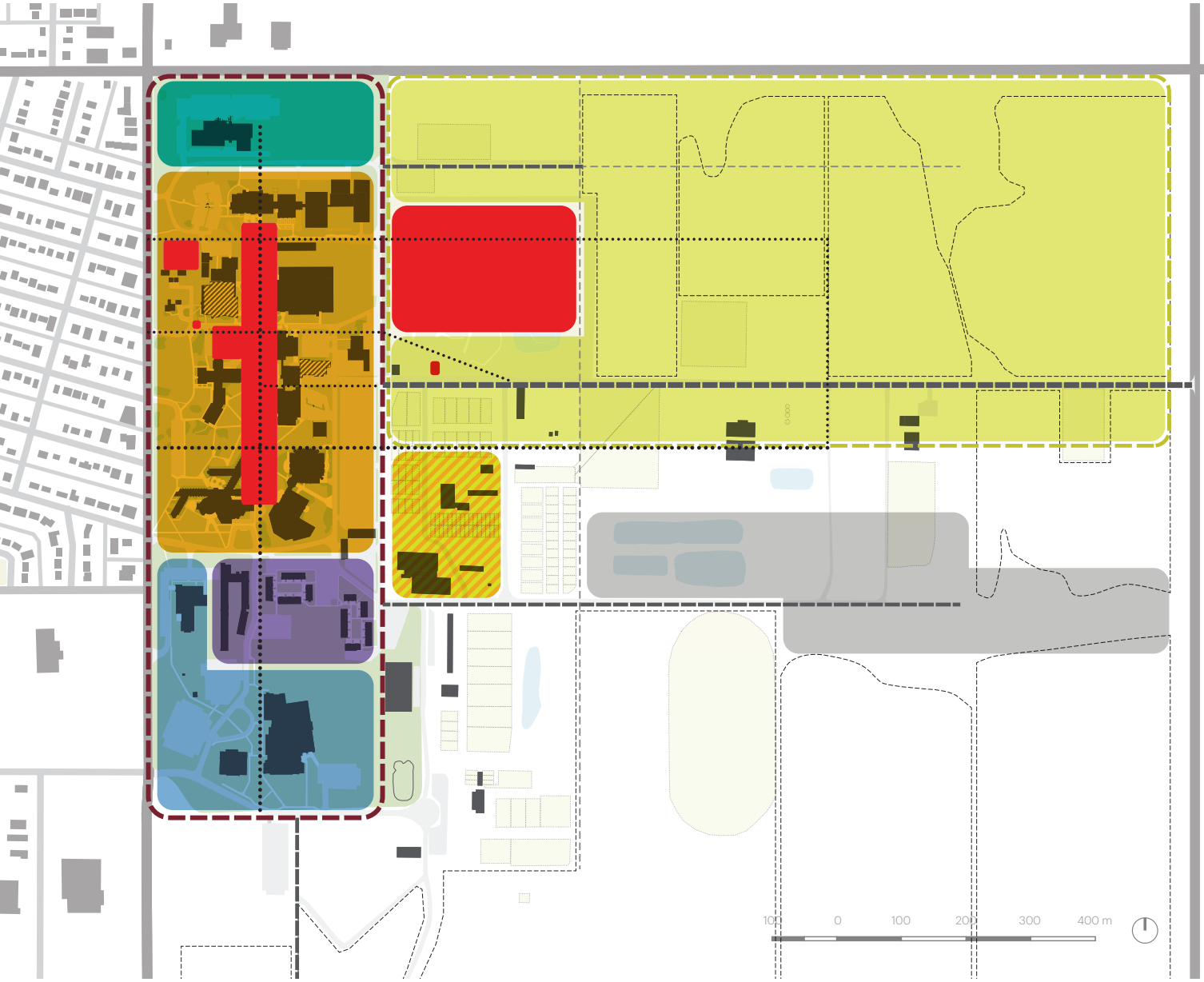
Master Plan Framework

Aerial rendering of Olds College Campus Core (looking south along Centreal Green) showing phase 3 state for illustrative purposes

Introduction

The framework diagrams are the primary means of translating the vision, goals, and planning objectives. A visual representation of the strategic parameters, together these represent a comprehensive and integrated planning approach.

Whereas these diagrams show strategic intent and alignment, they are not meant to be rigid rules. Furthermore, these are provided at a level of detail suitable to allow for flexibility and future revisions to the campus plan.



Olds College Main Campus Land Use Map

Land Use Framework

Main Campus will be a compact campus, composed of a Campus Core and surrounding areas or 'precincts' altogether forming a Main Campus Centre.

While most renewal and new development will be concentrated in the Main Campus Centre, additional academic development may be accommodated immediately to the east.

The demonstration farm area along Highway 27 will be preserved and designated as a smart ag showcase to ensure Olds College creates and maintains an authentic connection between the Smart Farm and the campus Campus Core in a manner that reinforces the fundamental principle that the farm is core to the programs and services delivered to students and customers.

- Campus Core (Primarily Academic)
- Academic Residential
- Recreational, Community & Institutional
- Hospitality & Hosting
- Special Features
- Demonstration Farm Land
- Demonstration Farm Land (Long Range: Academic)
- Service areas (Staff only; no students / faculty /visitors)
- Main Campus Centre
- Smart Farm
- Vehicular Arterials
- Pedestrian arterials

Olds College Main Campus Development Areas and Parcels Map

Development Framework

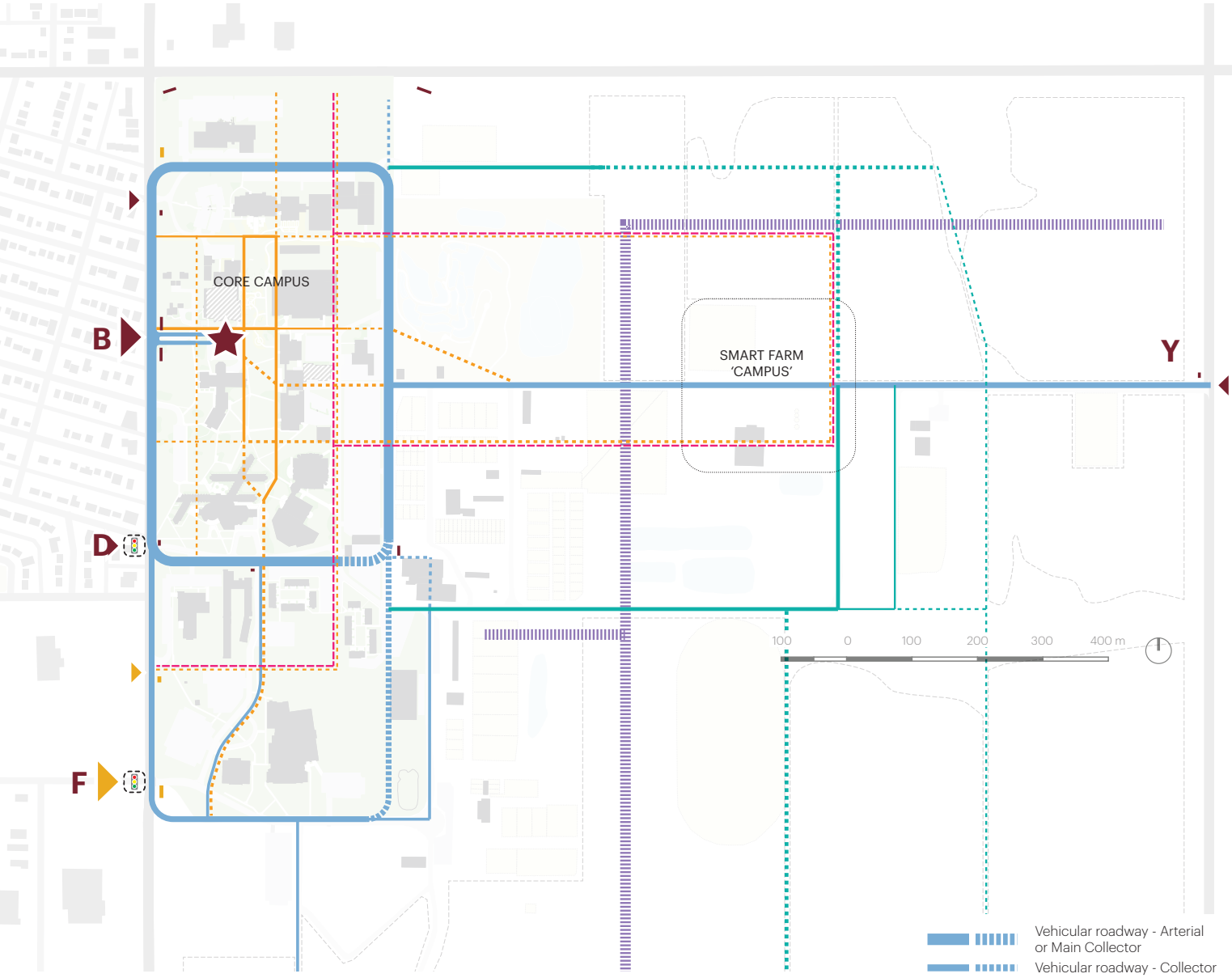
Splitting of the Main Campus into parcels is done strategically to keep a compact footprint and concentrate development in the Main Campus Centre and Campus Core, while safeguarding the Central Green and Constructed Wetlands, yet enhancing them with upcoming and renewed facilities around them.

Cross-block connections between or through buildings are encouraged for ease of mobility and public realm activation.

Campus Plan Core / Precinct

Development Parcel

Building Lot (if defined within a Parcel)



Olds College Main Campus Mobility Map

Wayfinding and Mobility Framework

The Main Campus will be a place where multi-modal transportation is encouraged. Vehicle traffic is necessary for most of the Olds College community to reach the Campus, and most of that traffic will be concentrated around a Campus Ring Road.

To facilitate the Smart Farm's natural connection to the Campus Core and create greater public access for conference services and events at the proposed Red Barn Conference Centre and the staging of AgSmart in the fields along Highway 27, a main Arterial roadway will be developed, running west-east, connecting the main collector road that circles the Campus Core (Campus Ring Road) to a new public (east) entrance off Highway 27 and Range Road 13.

Wayfinding will be reviewed and improved periodically: Gateway B will serve as the Campus 'Front Door' for visitors, Gateway D as the main day-to-day entry point, Gateway F will be the key entry point for CLC and community users, and Gateway Y will be the key entry point for the Demonstration Farm and conference centre.

Olds College Main Campus Landscape Map

Landscape and Urban Design Framework

The Campus Green and Botanic Gardens (Phases I and II on Campus Green and Phase III Constructed Wetlands) are key elements of the Campus and will be maintained and enhanced for facility of use and public accessibility year-round. Additional quadrangles and courtyards on Campus precincts will be connected to the existing sequence of outdoor rooms.

In addition to active transportation through Core Campus, into southern parts of the Main Campus Centre, east-west connections to the town and to the demonstration farm along Highway 27 will be defined and enriched by landscape design.

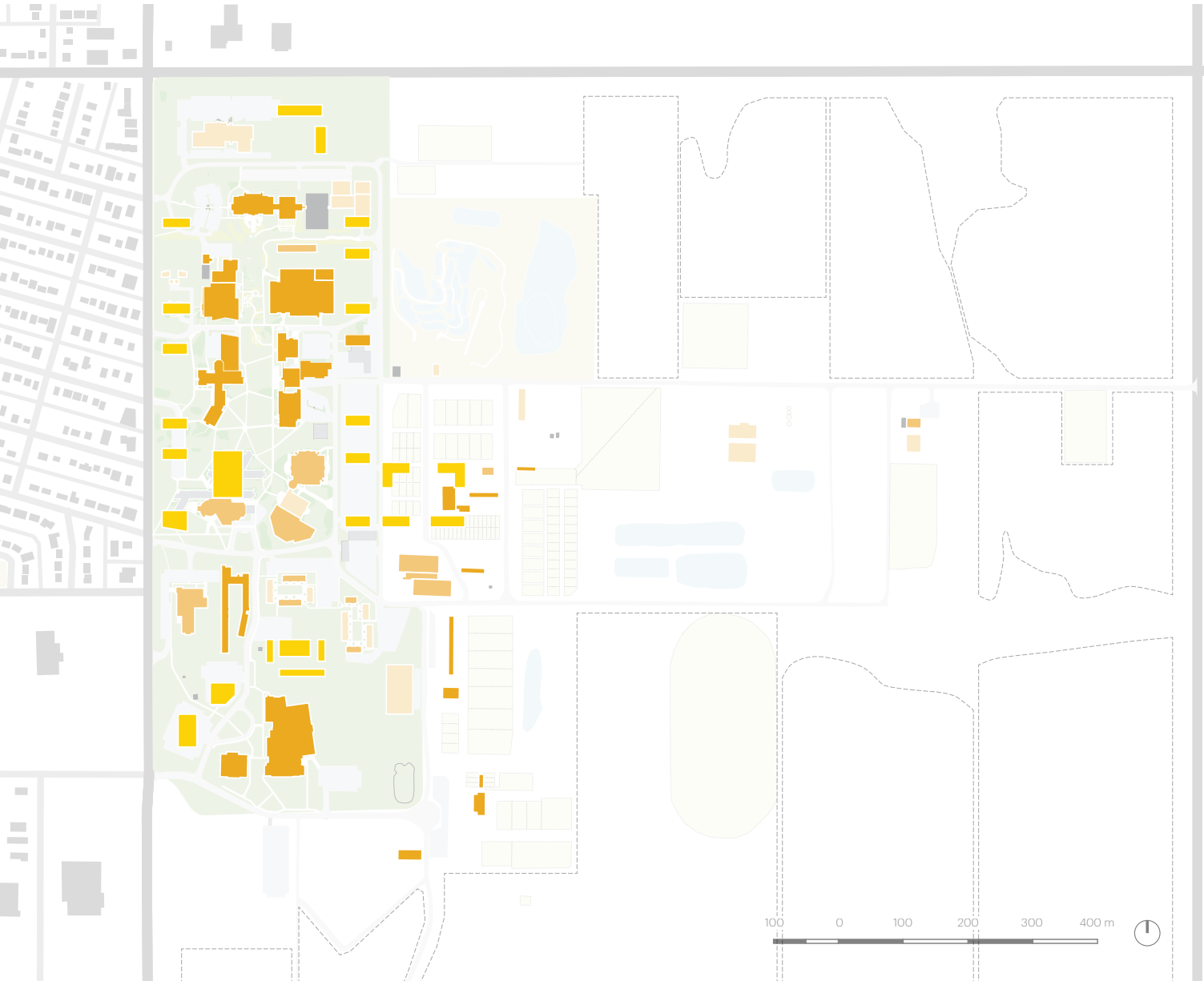
Low-maintenance, drought-resistant and perennial-priority planting will be the primary landscape type. Refer to Design Guidelines for details on the distinct landscape types illustrated here.

Olds College Main Campus On-Site Storm Water Management Strategies Map

Hydrology Framework

The Campus will implement on-site measures integrated into the public realm to handle stormwater. Green-blue streets - pedestrian/bike paths or streets with rain gardens or swales continuous along their alignment - will run north-south in the Main Campus Centre, and will run eastward into the fields. Stormwater retention ponds will be part of the Central Green and precinct quadrangles. Existing retention and treatment ponds (including the Constructed Wetlands) will be maintained, New retention and treatment ponds or swales will help improve water management and drainage at certain field areas and outdoor recreation facilities.

- Stormwater retention / treatment areas - existing
- Stormwater retention / treatment areas - new
- Landscaped catchments
- Blue / green streets
- Swales - existing
- Swales - proposed

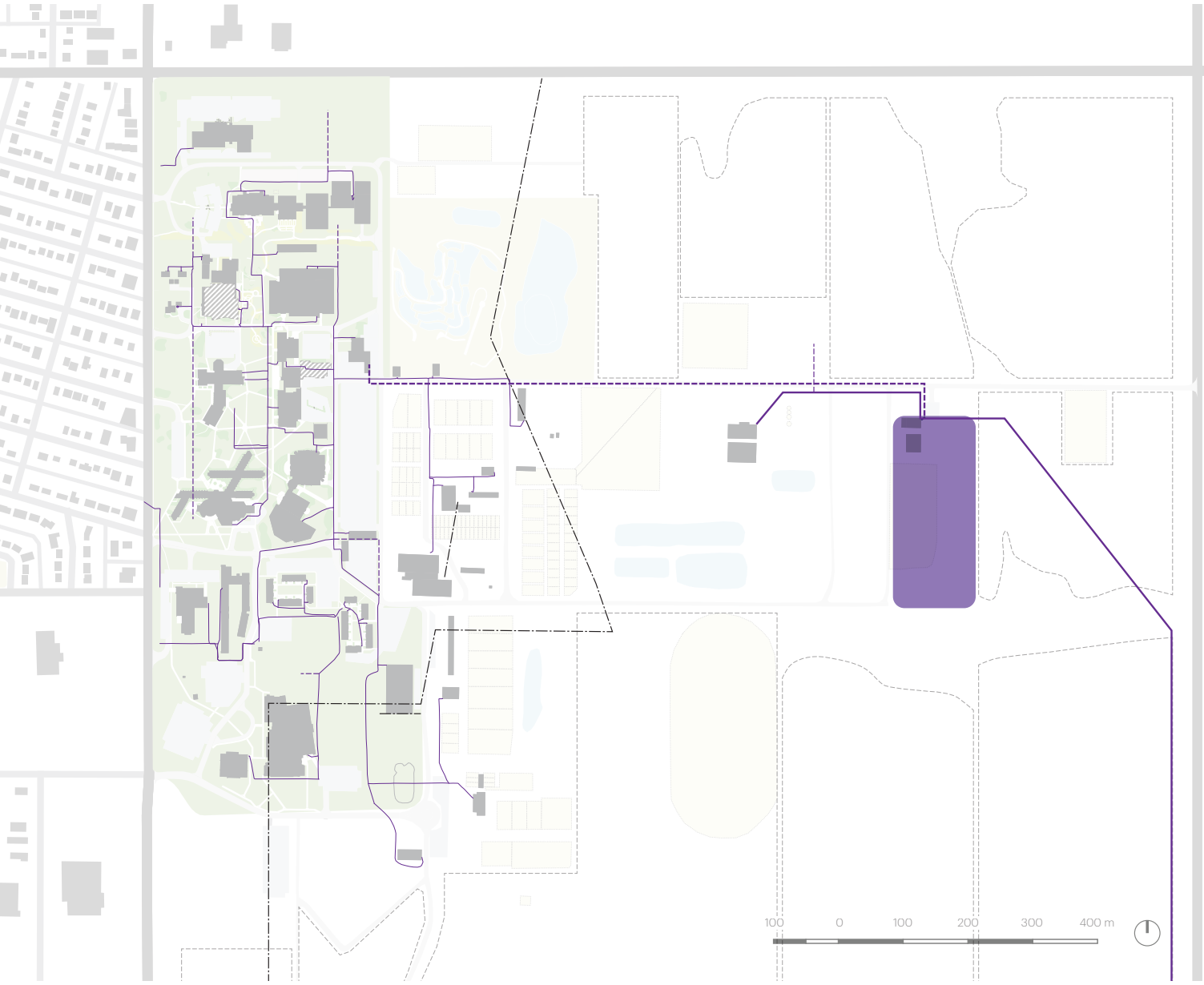


Olds College Main Campus Anticipated Solar Potential Map

Energy Framework: Passive and Solar

The renewal of Campus building stock will be carried out to College-wide sustainable design guidelines that require energy modelling and encourage passive strategies. Given the high solar potential of Olds, photo-voltaic systems, integrated into building design, will be explored for on-site energy generation and, consequently, a low carbon footprint.

- Solar – High Potential
- Solar – Future High Potential
- Solar – Moderate Potential
- Solar – Low Potential
- Solar – Not Applicable



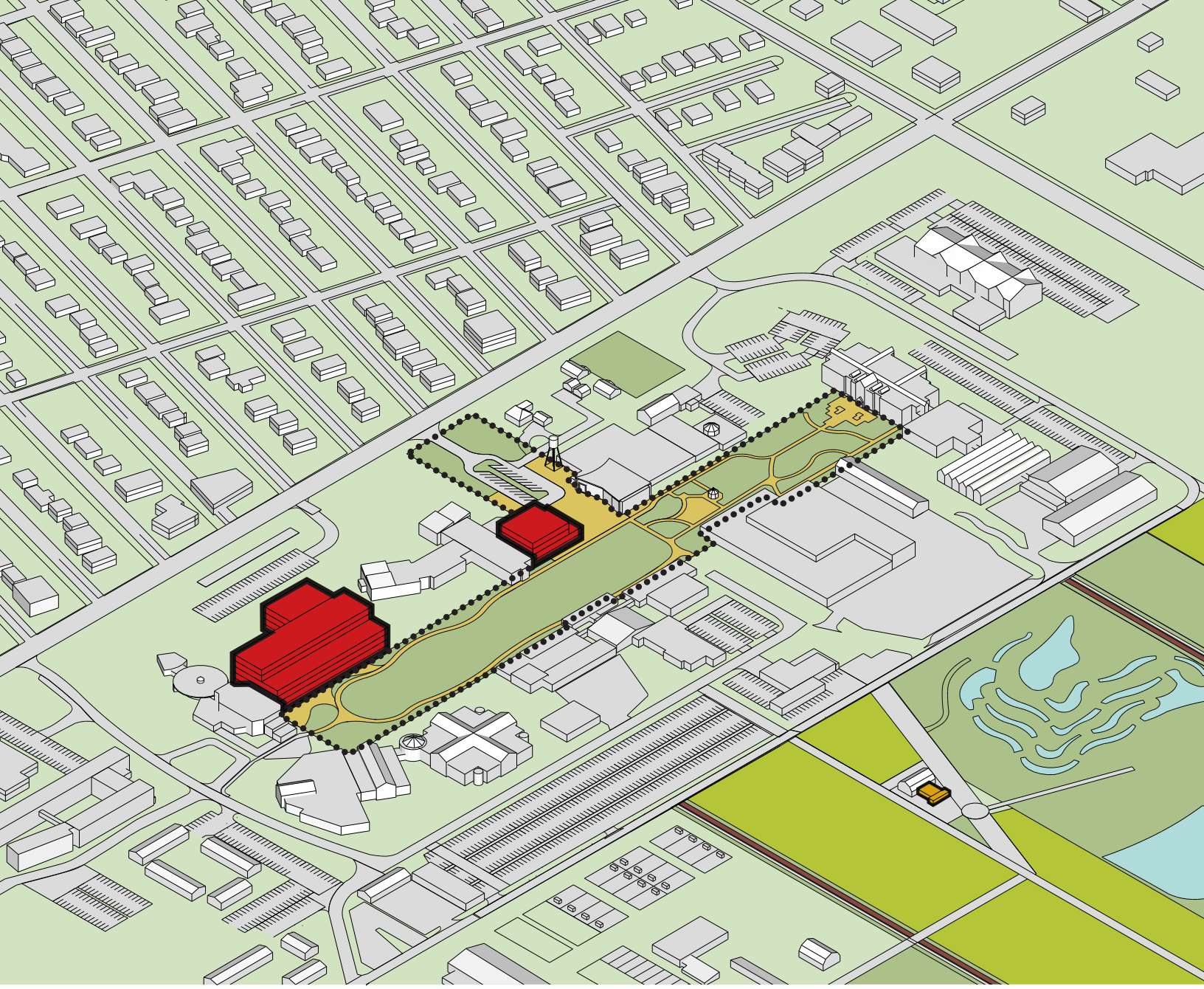
Olds College Main Campus Natural Gas and Composting Conceptual Map

Sustainability: Gas and Waste

Synergies between farm operations and low-carbon systems will be a potential direction towards a reduced carbon footprint for Olds College Campus. The existing Composting Centre can be the prime candidate site for processing of a limited amount of organic waste stream generated by the Campus (e.g. food waste, crop residue, animal manure) into compost for re-use in the College's agricultural and landscape operations. Depending on the technical feasibility of renewable natural gas production (e.g. anaerobic digestion and methanization of manure), it can also help offset the natural gas use on the Main Campus.

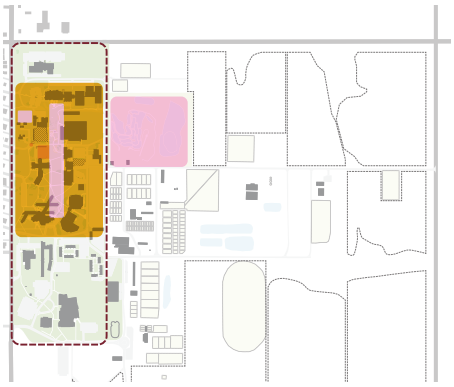
- Composting Facility Area
- Connection to Campus Gas Lines or Central Energy Plant
- Existing Campus Gas Lines
- Existing Local Low-Pressure Gas Grid Connection
- Existing Gas Pipeline

Campus Core



Axonometric diagram of Olds College Campus Core showing phase 1 projects for illustrative purposes

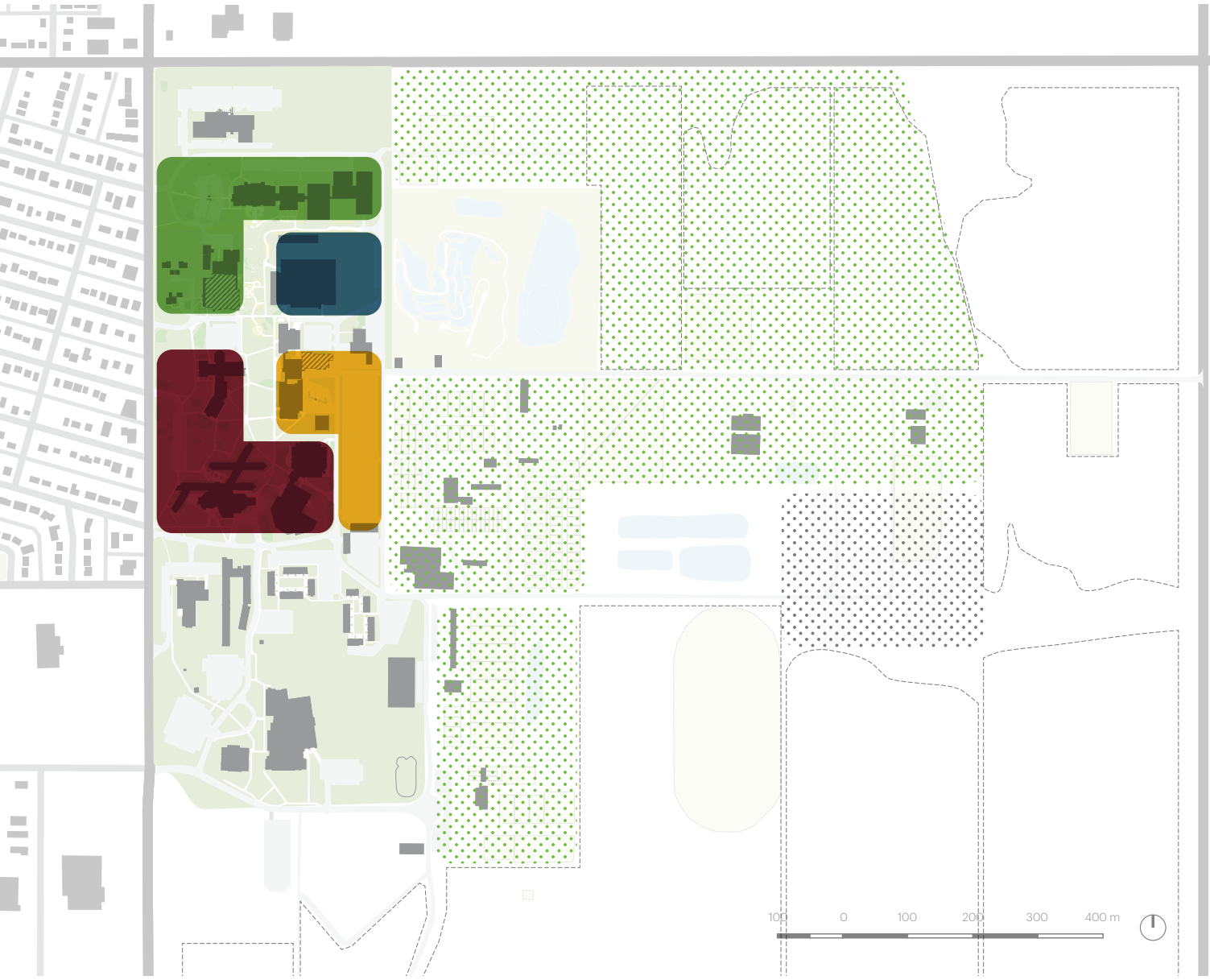
Campus Core



The Campus Core is the heart of Main Campus Centre. It will keep and expand its predominantly academic and community services uses, while also defining and activating the Central Green, composed of the Botanic Gardens (Phases I and II) as well as the softscape open area immediately to the south.

Gateway B (Campus Front Door and Ag Tech Plaza) and Gateway D (the main day-to-day entry point to the Campus) will be key locations for arrival to Campus and future development.

Aerial rendering of Olds College Campus Core (looking south along Centreal Green) showing phase 3 state for illustrative purposes

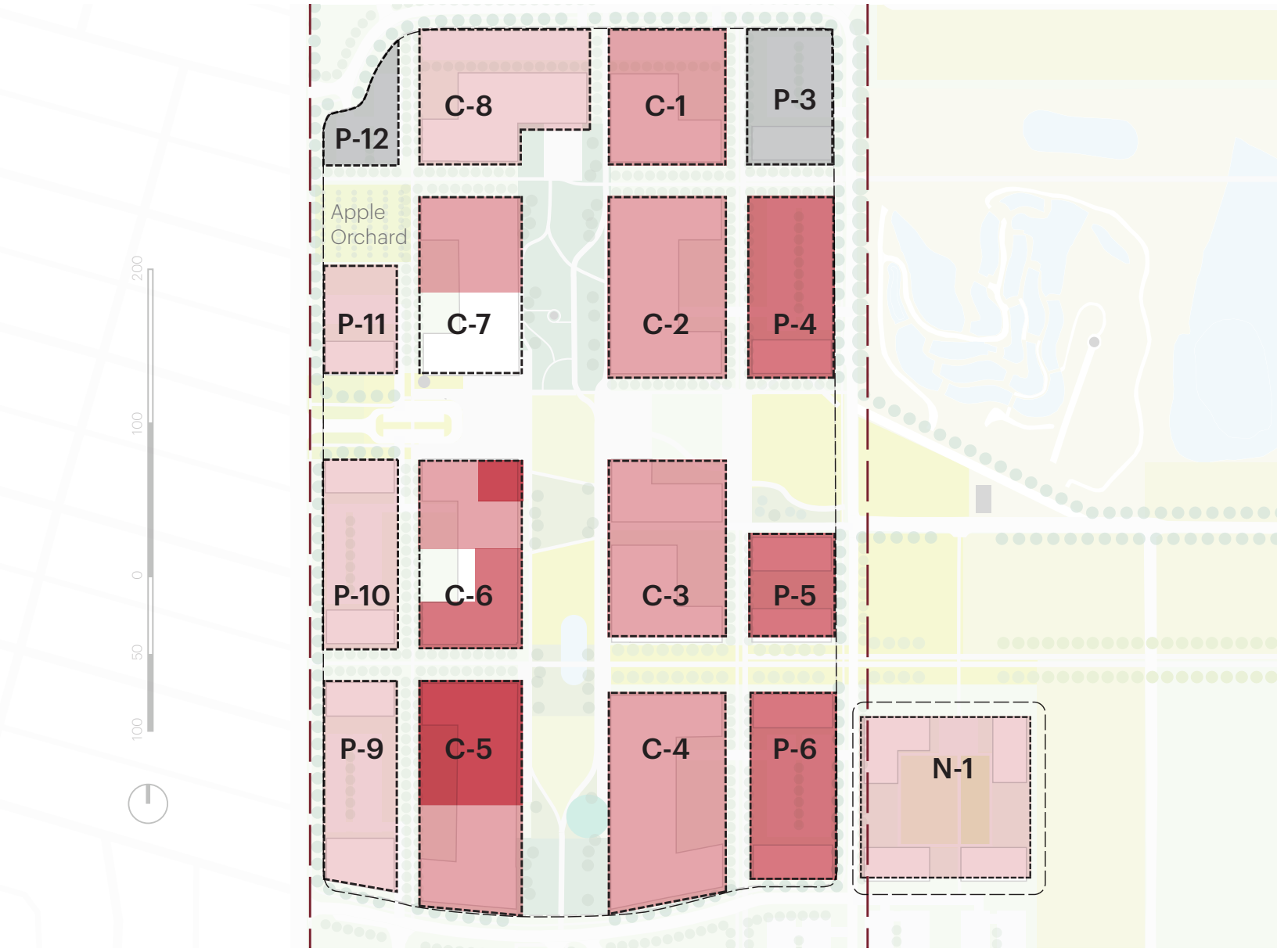


Near-term academic use priorities in the Campus Core and field areas of strategic importance

Campus Core: Land Use

Campus Core is a place where different academic facilities (general purpose, animal-priority, plant-priority and trades-priority) come together around the Central Green. Future development will be mindful of near-term facility priorities, while being open to mixing uses. Field areas in proximity to the Campus Core will be maintained and developed with strategic considerations showcasing applied Ag Tech work adjacent to Campus Core, proximity of field facilities to learning and research areas, and setbacks of intensive livestock operations from certain uses (e.g. dwellings) per municipal and provincial guidelines.

- General Purpose Academic
- Animal-related Studies
- Plant and Non-animal Organism Studies
- Trades
- Demonstration Fields & Plots
- Heavy Equipment Training Areas

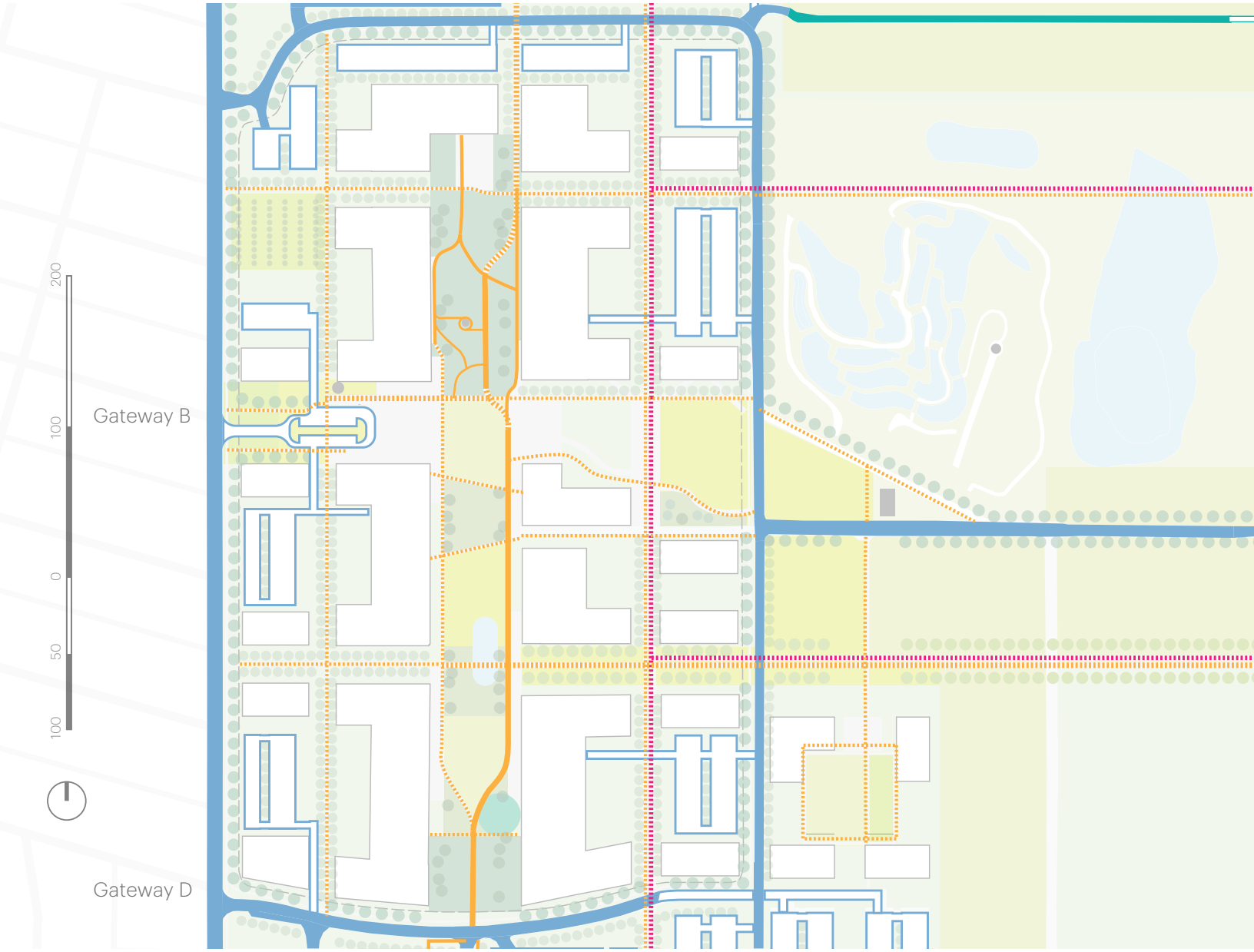


Development parcels at Campus Core

Campus Core: Development

Development parcels in Campus Core are designated to reinforce the Central Green, and to keep the development compact, utilizing existing lands and renewal opportunities first. Larger parcels immediately around the Central Green will be priority development sites, particularly around Gateway B (Parcels C-7 and C-6 at Campus Front Door and Ag Tech Plaza) and Gateway D (Parcels C-5 and P-7 or the Frank Grisdale Hall site at the main day-to-day entry point to the Campus).

- Phase 1 - Short-Term Timeline
- Phase 2 - Mid-Term Timeline
- Phase 3 - Long-Term Timeline
- Phase 4 - Far-Term Timeline
- Phase 5 - Timeline Open



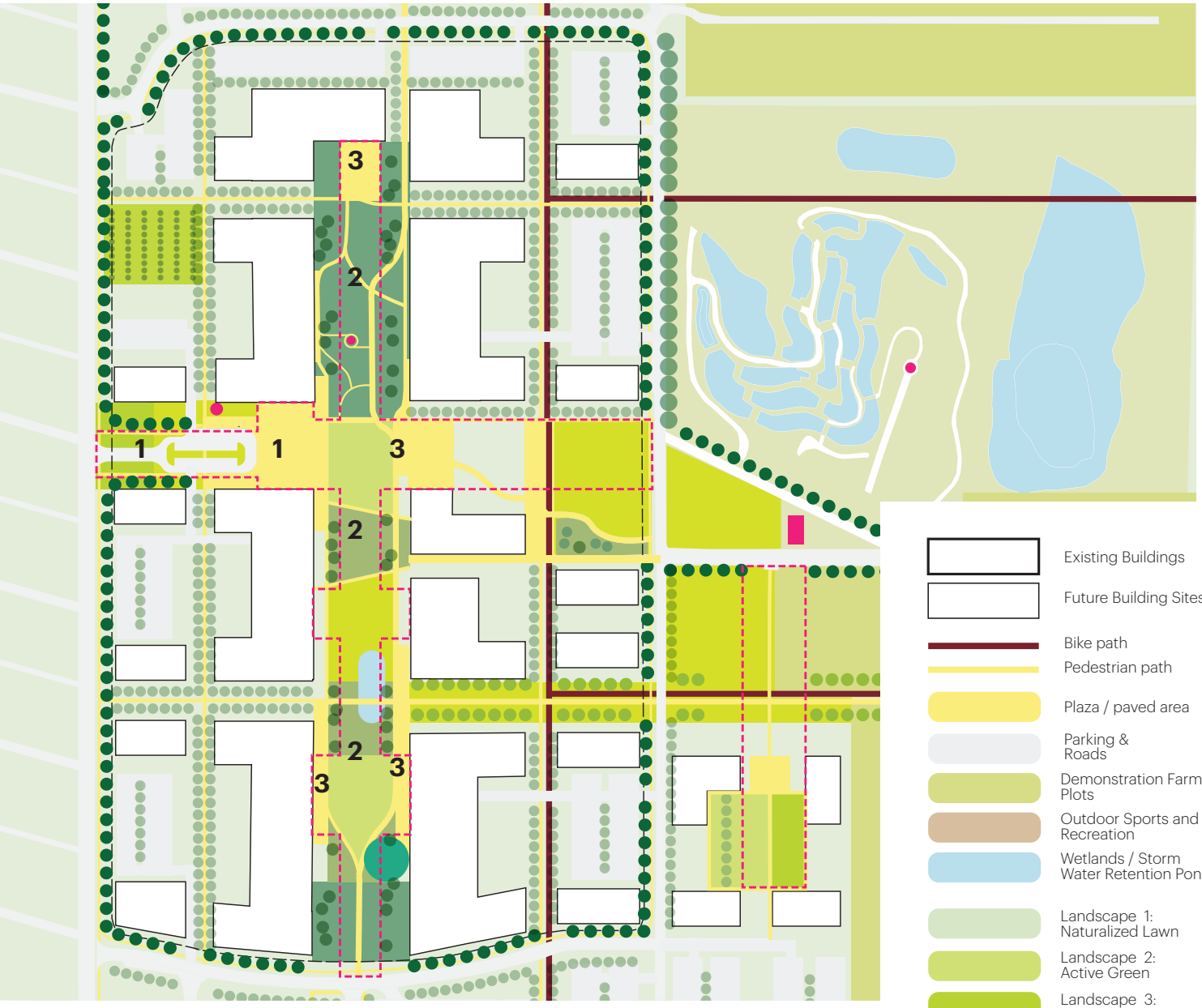
Wayfinding and mobility at Campus Core

Campus Core: Wayfinding and Mobility

Campus Core will be a predominantly active transportation-oriented area with passenger vehicle traffic concentrated to the Ring Road. Low-speed vehicular access for visitor and short-term parking will be provided at Gateways B and D.

Active transportation opportunities for pedestrians and cyclists will be enhanced and enhanced, particularly through the Central Green to neighbouring precincts, and also in the east-west sense with connections to Uptown Olds and the Olds College field areas.

Existing roads & parking
New roads & parking
Existing farm roads
New farm roads
Existing paths
New paths
New bike paths



Conceptual landscape plan for Campus Core, for illustrative purposes

Campus Core: Landscape + Public Realm

Central Green (Botanic Gardens Phases I and II, and the lawn to the south) will be maintained and enhanced as the main sequence of outdoor rooms on Campus. New plazas and softscape open areas, connected to the sequence of outdoor rooms will be created as Ag Tech Plaza (at Gateway B) and FGH Site (at Gateway D) are developed. Shading of outdoor areas by new built form will be kept to a minimum, especially for Botanic Garden areas. Selective reduction of evergreen trees (especially at locations where visibility and access are important), planting of deciduous trees will provide seasonal shading and comfort.

1. Campus Arrival & Ag Tech Plaza

2. Central Green

3. Secondary Plazas

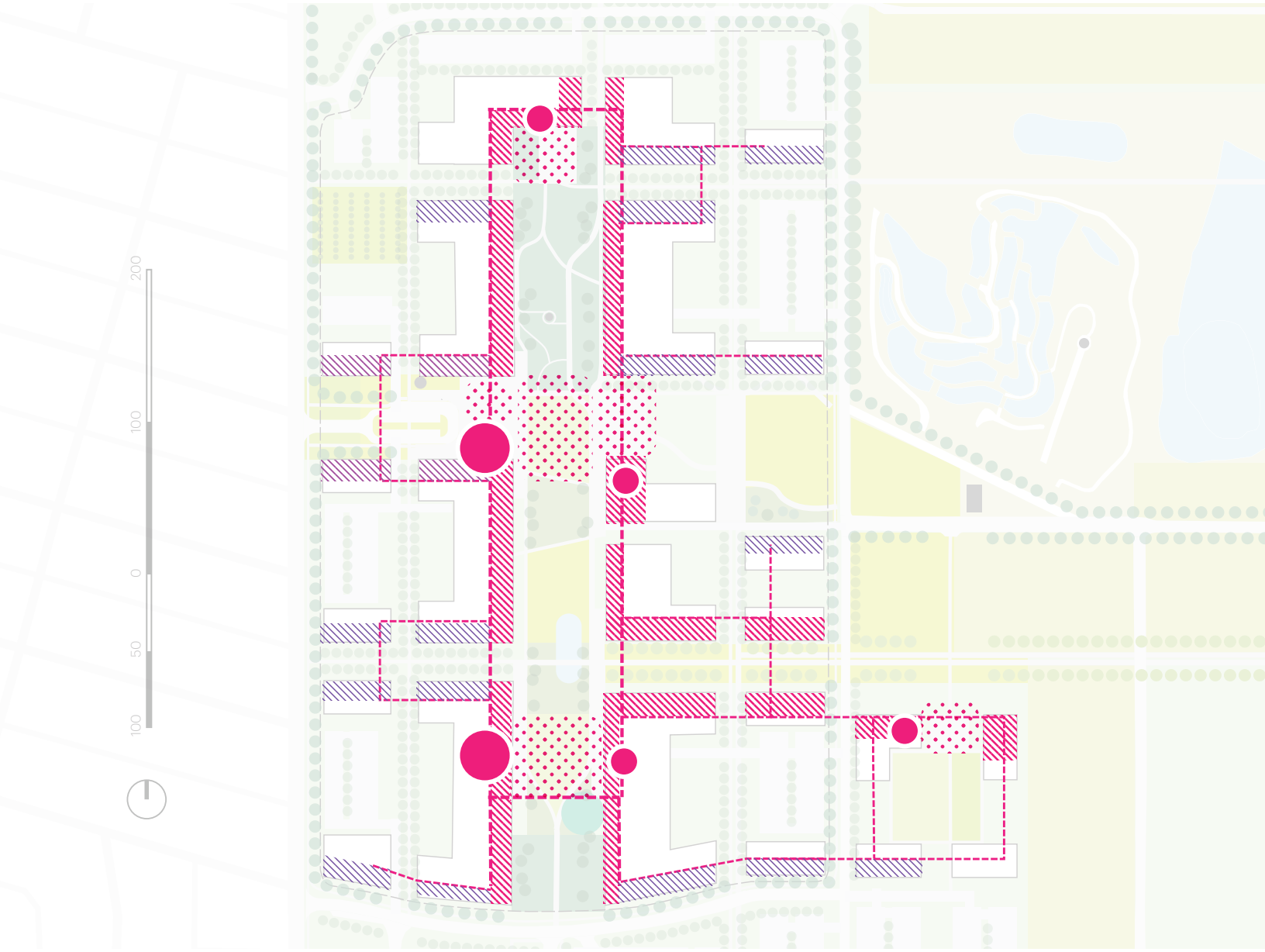
Future built form (for illustrative purposes) at Campus Core, and their base parameters for numbers of storeys, lot coverage and building faces

Campus Core: Built Form & Parking

Future buildings in Campus Core will have two to four storeys to the east and they can be up to six storeys tall to the north and to the west, in order to let sunshine into the Central Green while providing academic uses room for growth. Massing should be articulated further with step-backs on a case by case basis to ensure solar access, especially at key outdoor locations, i.e. Botanic Gardens and Ag Tech Plaza. Future buildings will be developed to physically define and emphasize the Central Green and key thoroughfares, and will activate these outdoor spaces with combinations of physical and visual access, spill-out areas and architectural expression.

- Development Parcel 60% coverage
- Development Parcel 80% coverage
- Near-Term Strategic Development Sites
- Parking lot
- 4-6 — Approximate Building Footprint and recommended Number of Storeys*
- Build-to-Edges for Future Buildings

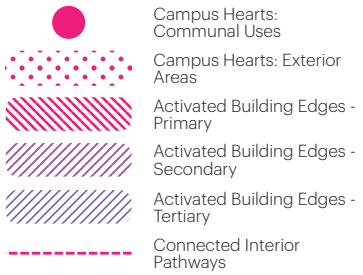
* Where not indicated, maximum building height is 4 storeys.



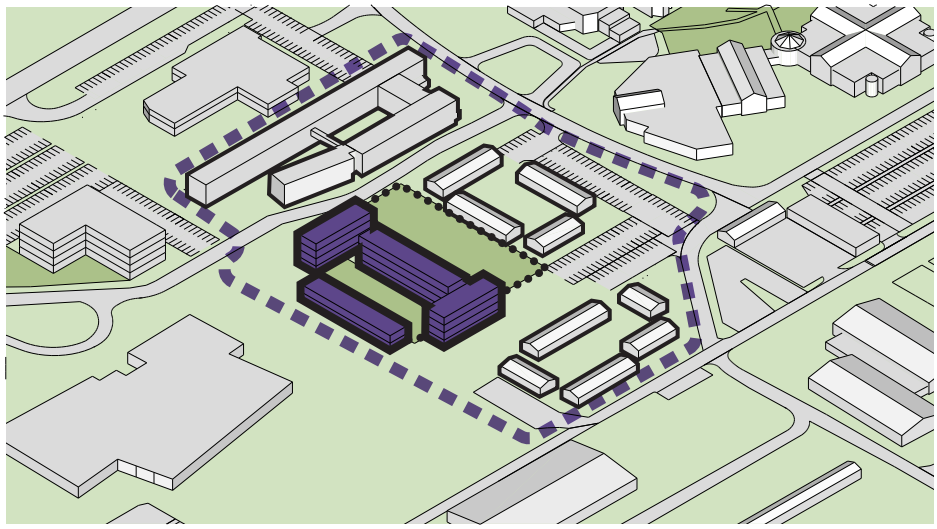
Nodes of communal spaces, connecting interior and exterior circulation, exterior spill-out areas and active edges at Campus Core

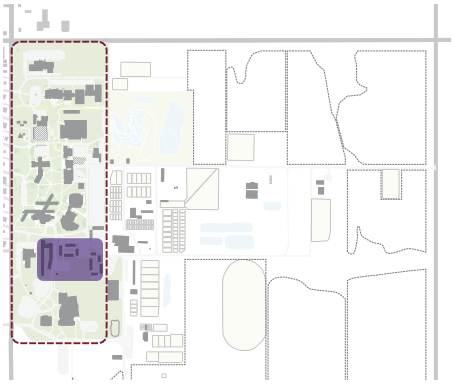
Campus Core: Nodes + Interior Movement

The Campus Core will be activated by a collection of existing and future concentrations of communal areas for semi-formal gathering and study areas, energized by food service where possible. These nodes will be connected to one another (and to those in surrounding precincts) via interior circulation in buildings and exterior pathways that bridge them, facilitating movement through campus during colder months. Activated building edges will ensure continued interest throughout the Central Green and on key thoroughfares via transparency, access and enhanced physical comfort (e.g. awnings, benches).



Precincts Around the Campus Core

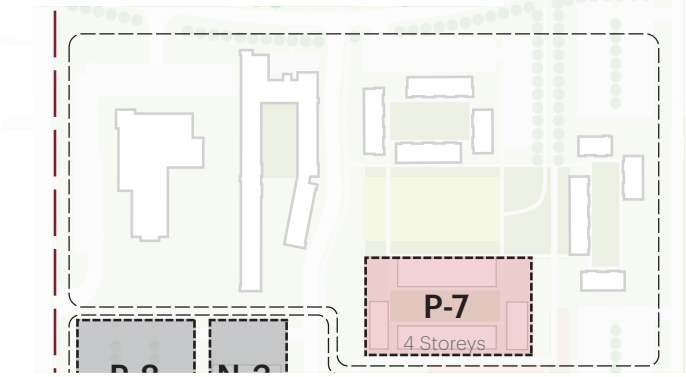




Residential Precinct

This area will keep its predominantly residential character with existing student residences operated by campus housing and future ones, linked to one another and to the existing Aquatic Centre by footpaths connecting the Precinct Quadrangle, residential courtyards and the Community Garden. Existing and future student residence amenities will activate the open space. The Residential Precinct will be connected to Campus Core via traffic-calmed crossing points over the 53 Street segment of the Campus Ring Road.

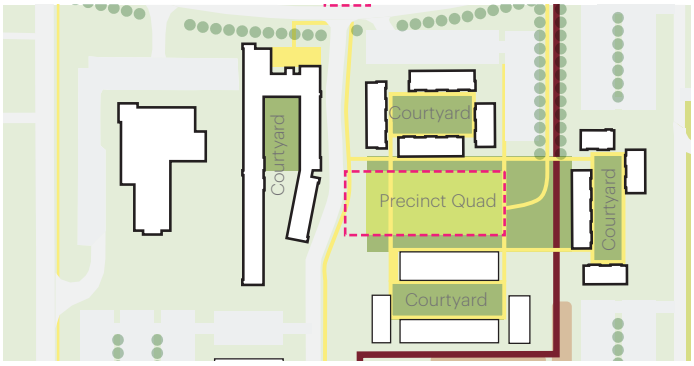
Residential Precinct: Development and Built Form



Existing student housing development (Centennial Village and College Courts townhomes), as well as the Aquatic Centre will remain

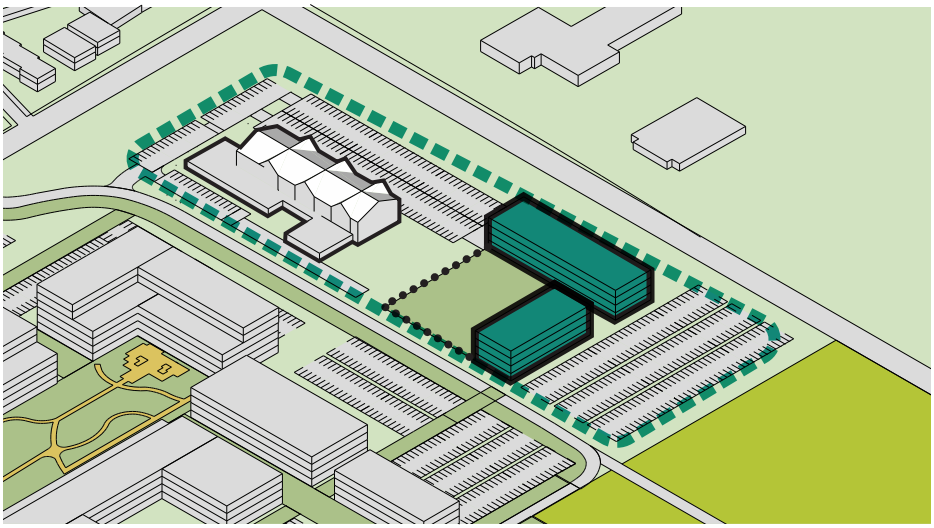
New development will be student housing with supporting communal spaces. It will be formed around a courtyard, and will help define a quadrangle for this precinct. It will be a mix of 1-2-storey forms and a taller form to the north, offering diverse housing options, including mature student housing.

Residential Precinct: Landscape



The precinct quadrangle will be an open softscape area framed by deciduous trees and footpaths. It will offer opportunities for exterior seating and physical activity.

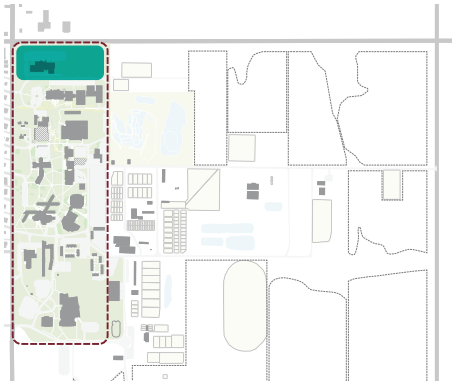
Courtyards defined by existing and future student housing will offer some opportunity for student residence amenity spaces to spill out, but will have planting and physical access for less traffic, with landscape buffers acting as exterior thresholds to student housing entrances.



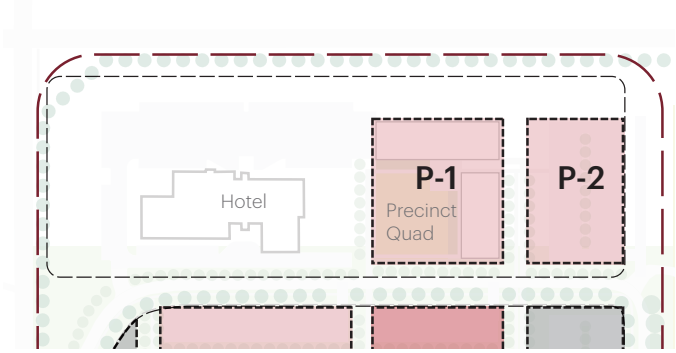
Axonometric diagram of the Hospitality Precinct

Hospitality Precinct

This area will be visible from Highway 27 (46 Street) and new development will have an architectural expression aligned with Olds College identity. It will accommodate existing hospitality uses (including Olds College Brewery) and those that support events held by the College (such as academic meetings, industry trade shows or demonstrations) or upon rental, by third parties.



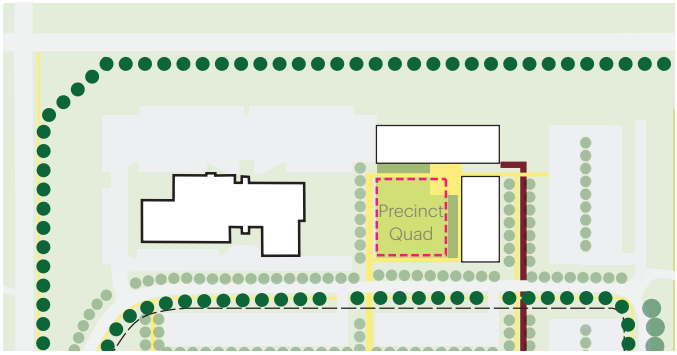
Hospitality Precinct: Development and Built Form



The new developments of one to four storeys will define a precinct plaza. It will be prominent and visible from Highway 27 (46 Street) and its architectural expression will be developed to align with the College's vision.

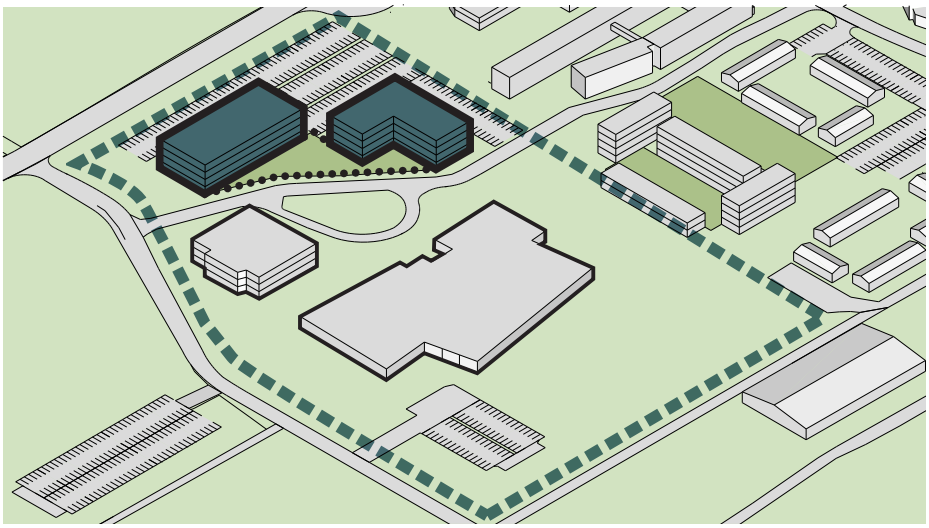
It will house uses that support College-related events (e.g. agricultural convention or trade show) and external ones on Campus (e.g. weddings). R&D office space for industry partnerships can also be accommodated here.

Hospitality Precinct: Landscape



A new quadrangle will be defined by new built form on the eastern part of the Pomeroy Hotel subdivision.

In addition to softscape areas, lined by deciduous trees, it will also include hardscape areas to facilitate outdoor events.

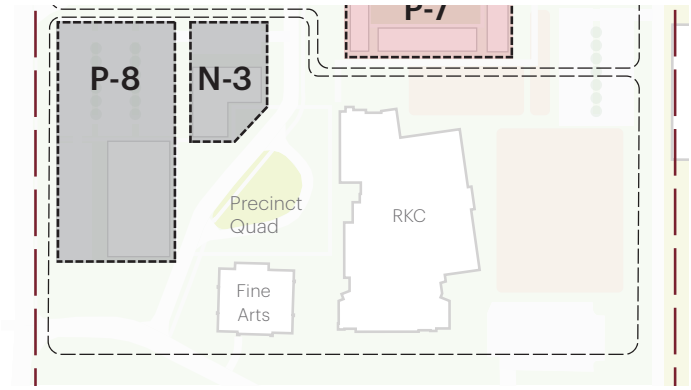


Axonometric diagram of the Recreational Precinct

Recreational Precinct

This area will continue to be the location for the Community Learning Campus (CLC - Ralph Klein Centre, including the Fitness Centre, Olds High School, Olds Campus Community Health Centre and various government administration offices) and will become more pedestrian in character with vehicle traffic on the periphery and a precinct quadrangle at the centre. Expansion to CLC can take place immediately adjacent to RKC or on sites P-8 and N-3 upon agreements with Olds College or campus housing. In order to accommodate future growth, outdoor recreation areas in this area can be relocated to the south, adjacent to existing CLC sports fields.

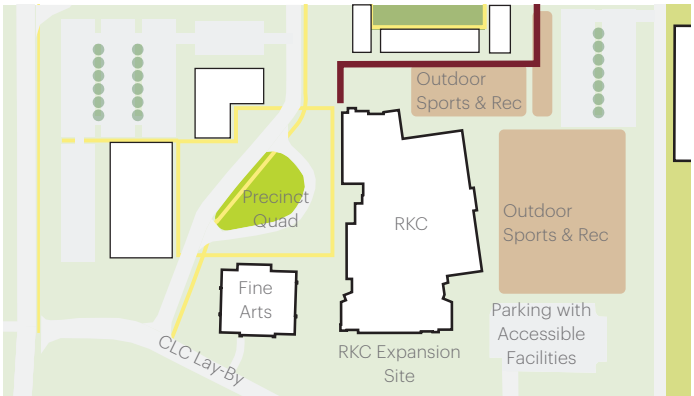
Recreational Precinct: Development and Built Form



The existing Fine Arts & Multi-Media Centre and the Community Learning Campus (CLC) will remain.

New development up to four storeys tall will be located to the west and north of the existing arrival court to define a precinct quadrangle. It will offer room for the expansion of CLC components (especially Olds High School), and will also be able to offer expansion of campus housing offerings.

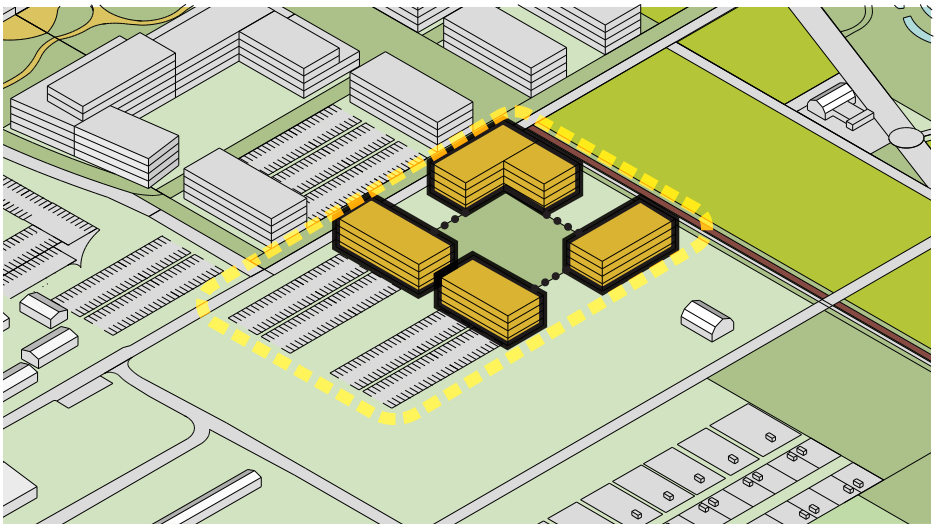
Recreational Precinct: Landscape



Ralph Klein Centre (RKC) arrival court on 45 Avenue will be developed into a quadrangle, serving the CLC, and future buildings to the west.

Outdoor sports and recreation areas will remain and may be re-organized.

The northern and southern ends of RKC will be kept available as sites for additions to RKC and Olds High School.

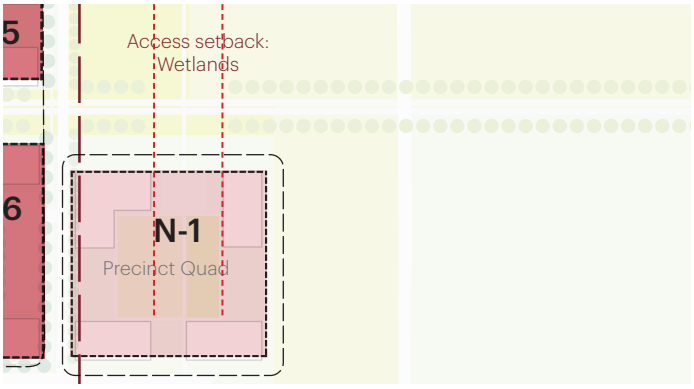


Axonometric diagram of the Future Academic Precinct

Future Academic Precinct

This long-term development area will accommodate expansion of teaching, learning and research spaces that require proximity to field activities. New built form will be located around a precinct quadrangle that will also frame views and means of physical access to the Constructed Wetlands (Botanic Garden Phase III) to the north and to some of the demonstration farm areas to the east.

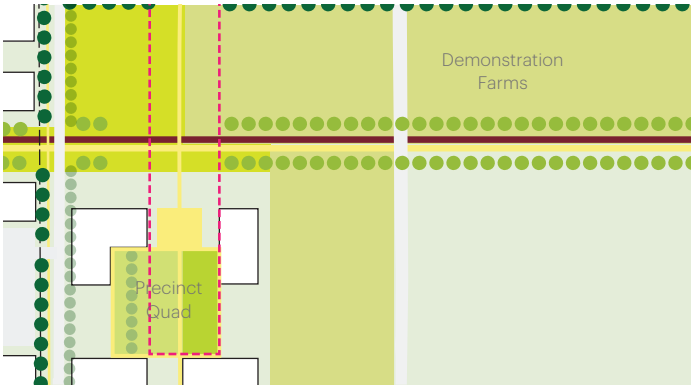
Future Academic Precinct: Development and Built Form



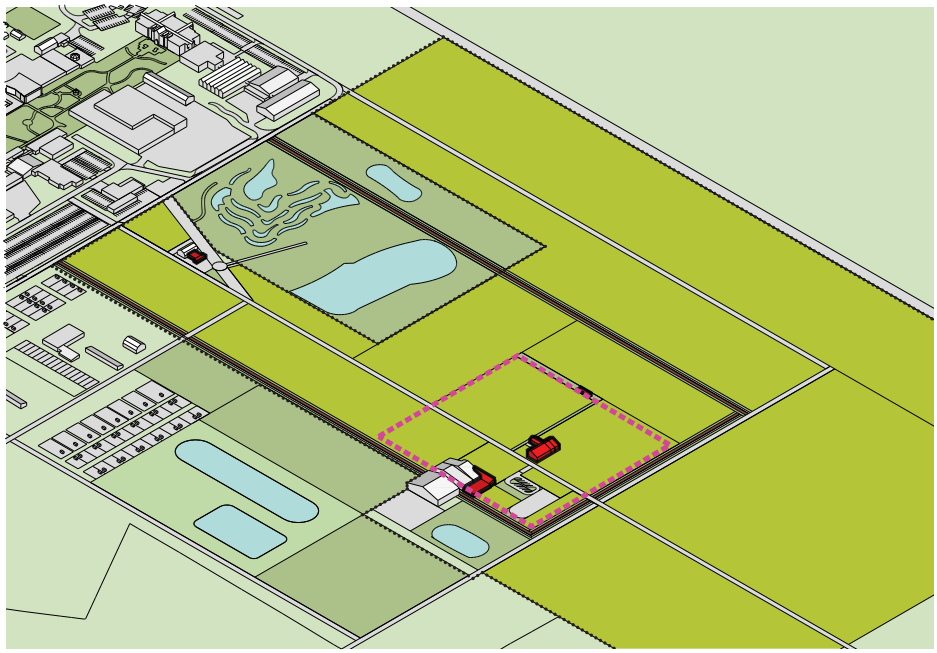
Future development that will anchor this precinct will replace some of the existing feedlots and pens with one to four-storey built form around a precinct quadrangle, bisected by an east-west corridor connecting the Campus Core to the fields.

Visual and physical connection to the Constructed Wetlands and the Heritage Barn will be emphasized by access setbacks on parcel N-1.

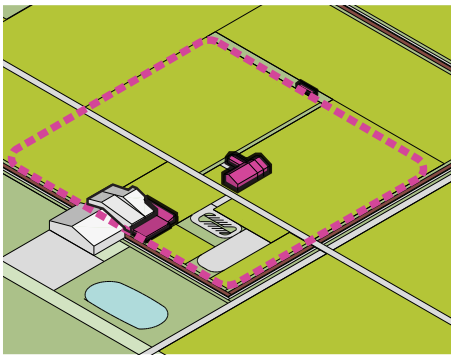
Future Academic Precinct: Landscape



A tree-lined quadrangle will be the key landscape element in this precinct. It will extend northward to emphasize the visual and physical connection to the Constructed Wetlands.



Axonometric diagram of the Demonstration Farm Precinct. Dashed line shows "Smart Farm Campus" within the precinct.



Demonstration Farm Precinct: Olds College Smart Farm

The Olds College Smart Farm continues to evolve and develop as a living lab in an interconnected environment through which the college is leveraging its land and applied research programming in order to provide a product development and demonstration venue to accelerate agriculture technology and company development. At the same time, the Smart Farm provides a cutting-edge learning environment for students, producers and the agriculture sector here in Alberta and throughout the globe.

The demonstration portion of the Olds College Smart Farm will be designated as the 40 acres of land running parallel to Highway 27 (ending at Range Road 13) and will be managed and developed as the primary public use and student access to the Olds College Smart Farm. This 'publicly-facing' land will feature applied research and technology demonstration activities, such as autonomous agriculture, sensors and data collection, in a manner that is inclusive to our learners and the general public. The site will also be identified as the permanent location for the Ag Smart Expo and other large-scale extension activities.

The location will further benefit from the development of Olds College Conference Services as an extension to the existing historic Red Barn (located in the Botanical Gardens). Focusing conference services in this location will facilitate guest and customer interactions with the 'publicly-facing' demonstration portion of the Smart Farm, which will assist in building awareness and interest for agriculture technology and agri-food production among all stakeholders including school-aged children.

Future Smart Farm Precinct: Development and Built Form

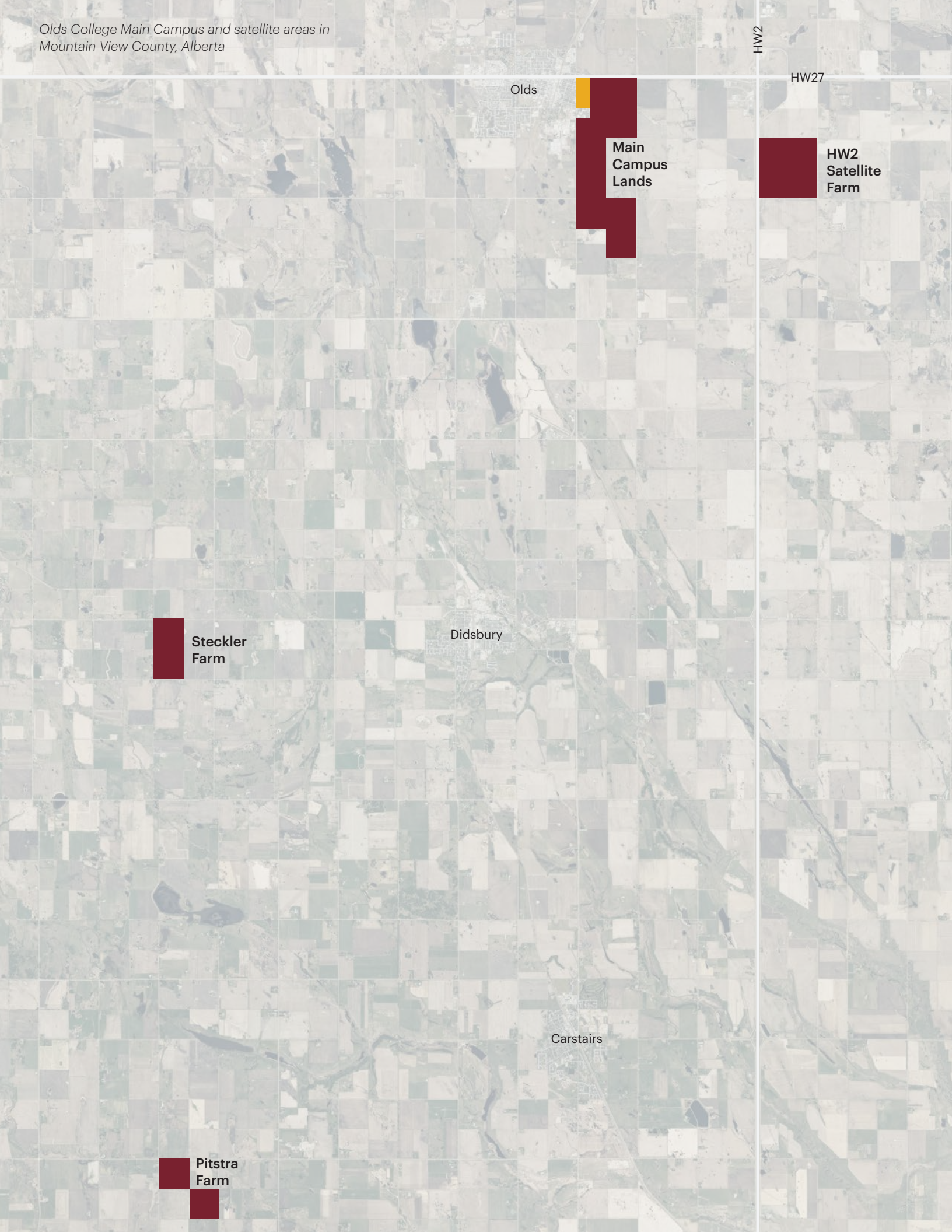
The buildings and structures in this area will be small buildings arranged as a mini-“campus”. The character of these will be a modern interpretation of agricultural buildings. There are no specific prescribed building lots withinthe overall area boundary, but all buildings must function as an integrated “campus” wherever they are placed.

Future Smart Farm Precinct: Landscape

The landscape within this precinct will be aligned to design guidelines set out in the following section. Overall, this must be a visitor-friendly and inclusive public realm and a thoughtfully designed landscape with a particular focus on integration with demonstration agriculture.

Satellite Areas

Olds College Main Campus and satellite areas in Mountain View County, Alberta



Satellite Areas

The Satellite Areas are Olds College land holdings outside of the Core Campus. Their use will be in accordance with the College's land management strategy, reviewed and updated based on the available assets and financial considerations of the institution. Satellite sites will communicate Olds College presence and identity via signage and/or wayfinding elements at highly visible locations on sites and at points of access.

Sites that will be developed will provide setbacks to creeks and ponds, and to neighbouring residential uses per municipal and/or provincial guidelines, and the development process will incorporate faculty, researcher, and staff review for soil and watershed health (erosion control, nutrient management planning, integrated pest management) measures.

Main Campus Lands

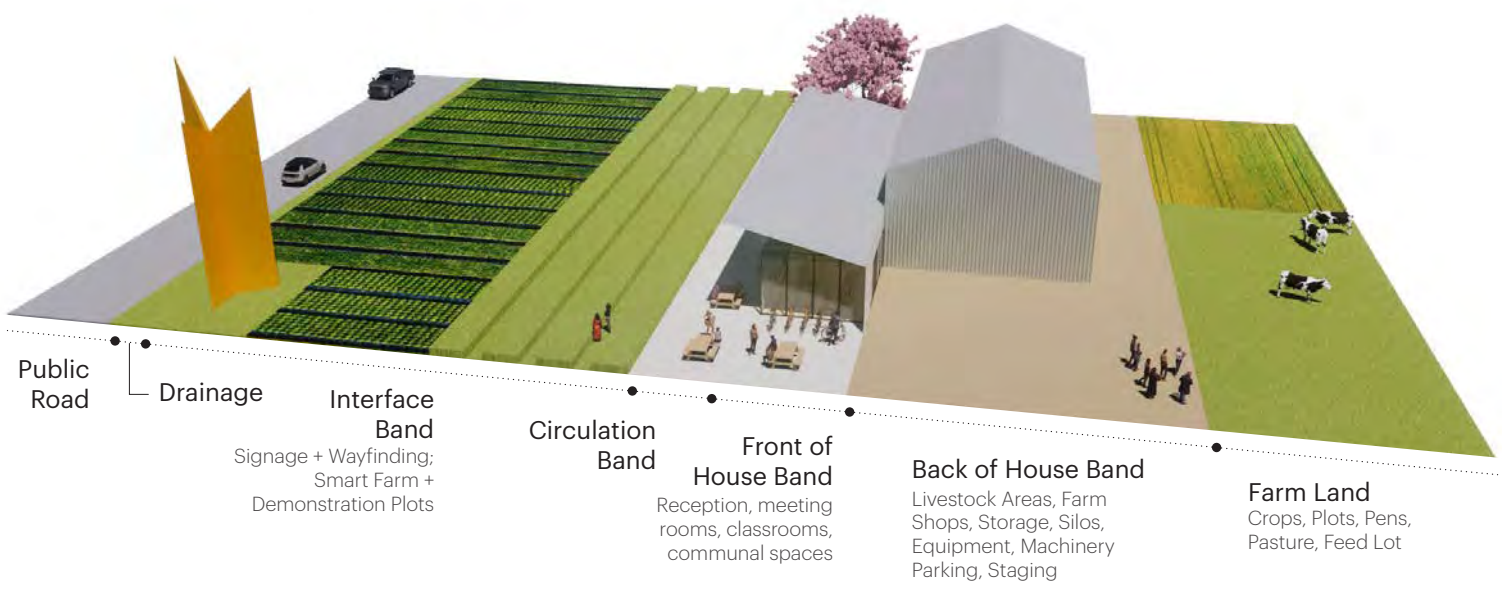
Type 1a

This type of satellite area development is most intensive and comprehensive, including both a public and/or communal components (including wayfinding, demonstration farm facilities, learning and research space, lounge area among others) and utilitarian ones (e.g. farm shop and storage areas).

They will be structured as low-impact development bands along/near major roads, sited carefully to provide setbacks from waterways and neighbouring residential uses. This type will have design guidelines applied to publicly accessible areas.

On-campus with public or student access / component

- prominent signage
- demonstration farm in front
- visitor parking
- visitor indoor spaces
- working spaces indoor & outdoor
- screening for yard storage areas



Conceptual drawing of Satellite Development Type 1a

Type 1b

This type of development is comprised of only utilitarian areas (e.g. silo, barn, storage) with simple vehicular access, parking and wayfinding that support occasional field activities.

The facilities will be sited carefully to provide setbacks from waterways and neighbouring residential uses.

On Campus - no public access

- working spaces indoor & outdoor
- parking
- screening for yard storage areas

Off-campus Lands

Type 2A

This area development is simply comprised of open field with simple vehicular access, short-term parking and signage. This type will have design guidelines applied to publicly accessible areas.

Example: HW2 Satellite Farm

Off-campus with public access

- prominent signage
- distincitve gateway structure
- branded mobile kiosk (if required)

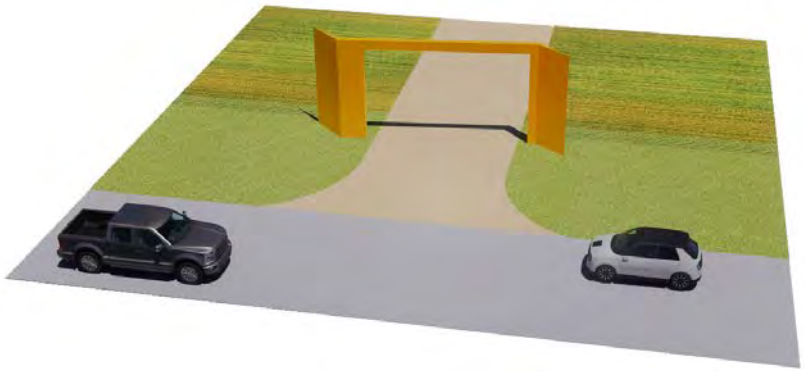
Type 2B

This is the least intensive satellite area development, simply comprised of open field with simple vehicular access and signage.

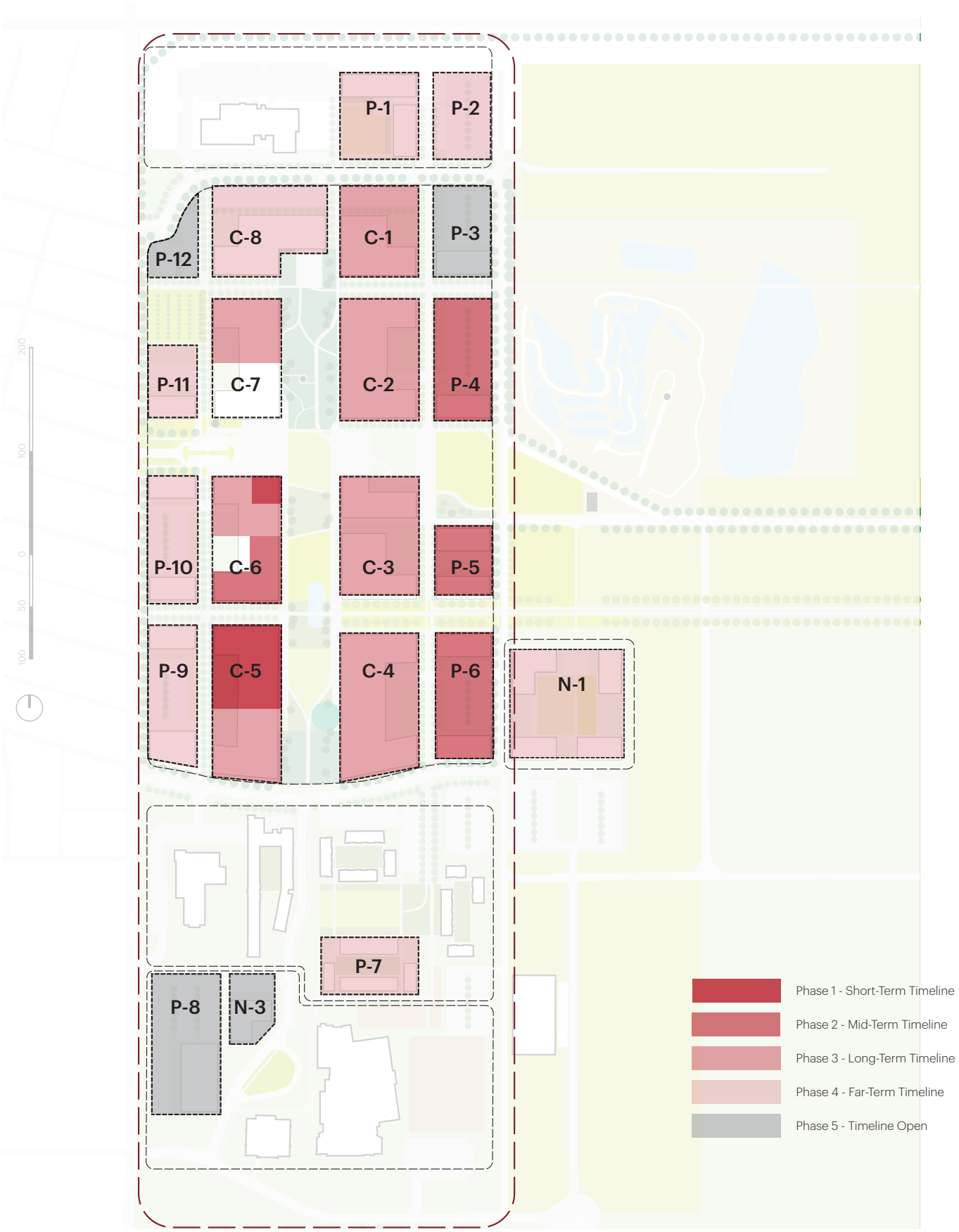
Example: Steckler Farm, Pitstra Farm

Off-campus without public access

- prominent signage
- distincitve gateway structure



Implementation Plan



Phasing plan for the Main Campus

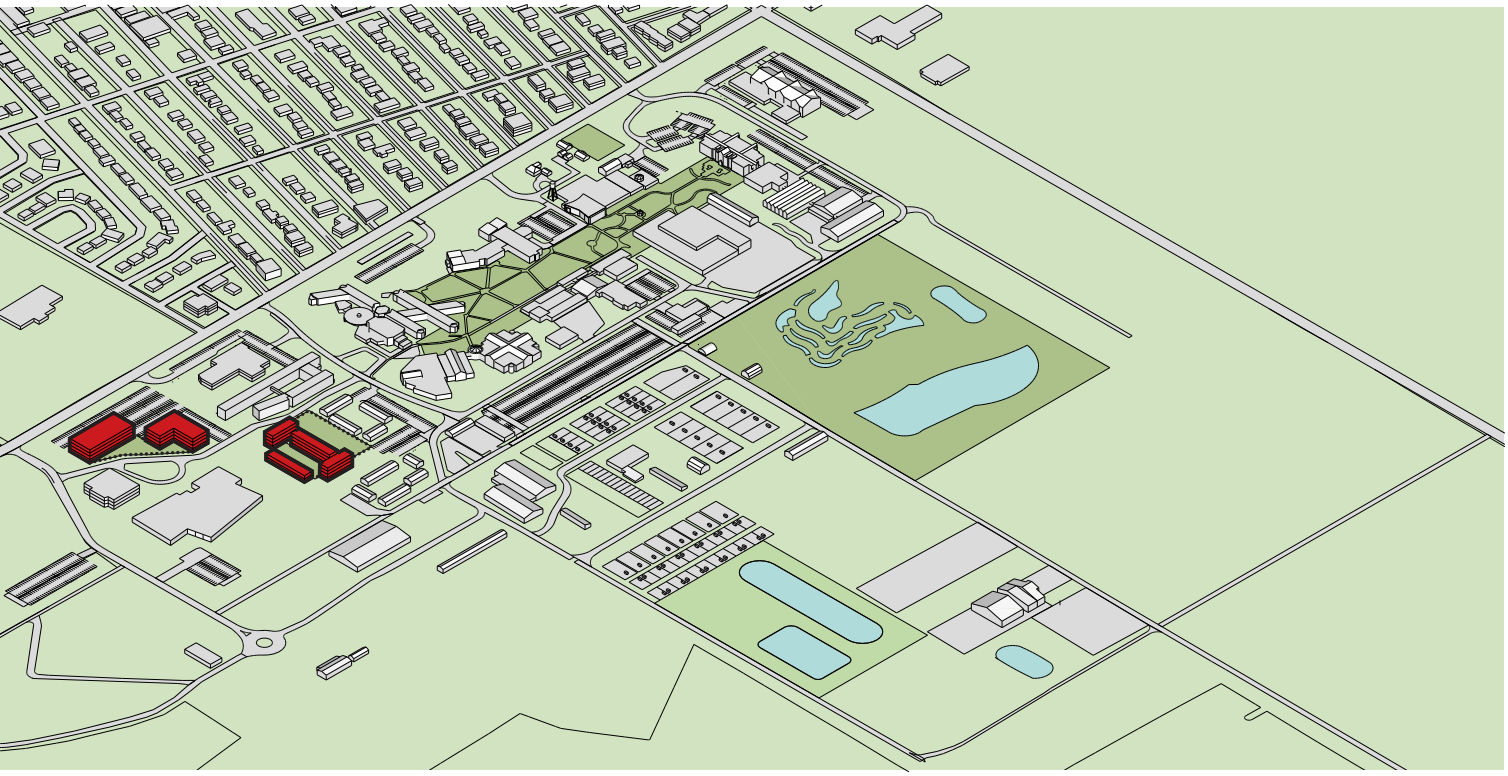
Phasing

The implementation plan further supports the overall vision, goals, and planning objectives as set out in the framework. The primary intent of the implementation as set out is to correlate the growth of the college with the aging of its facilities and their replacement.

Broadly there are four phases of implementation that allow flexible way of adding significant density incrementally through both expansion of the built footprint – new buildings or additions - and through replacement of the existing buildings as the age.

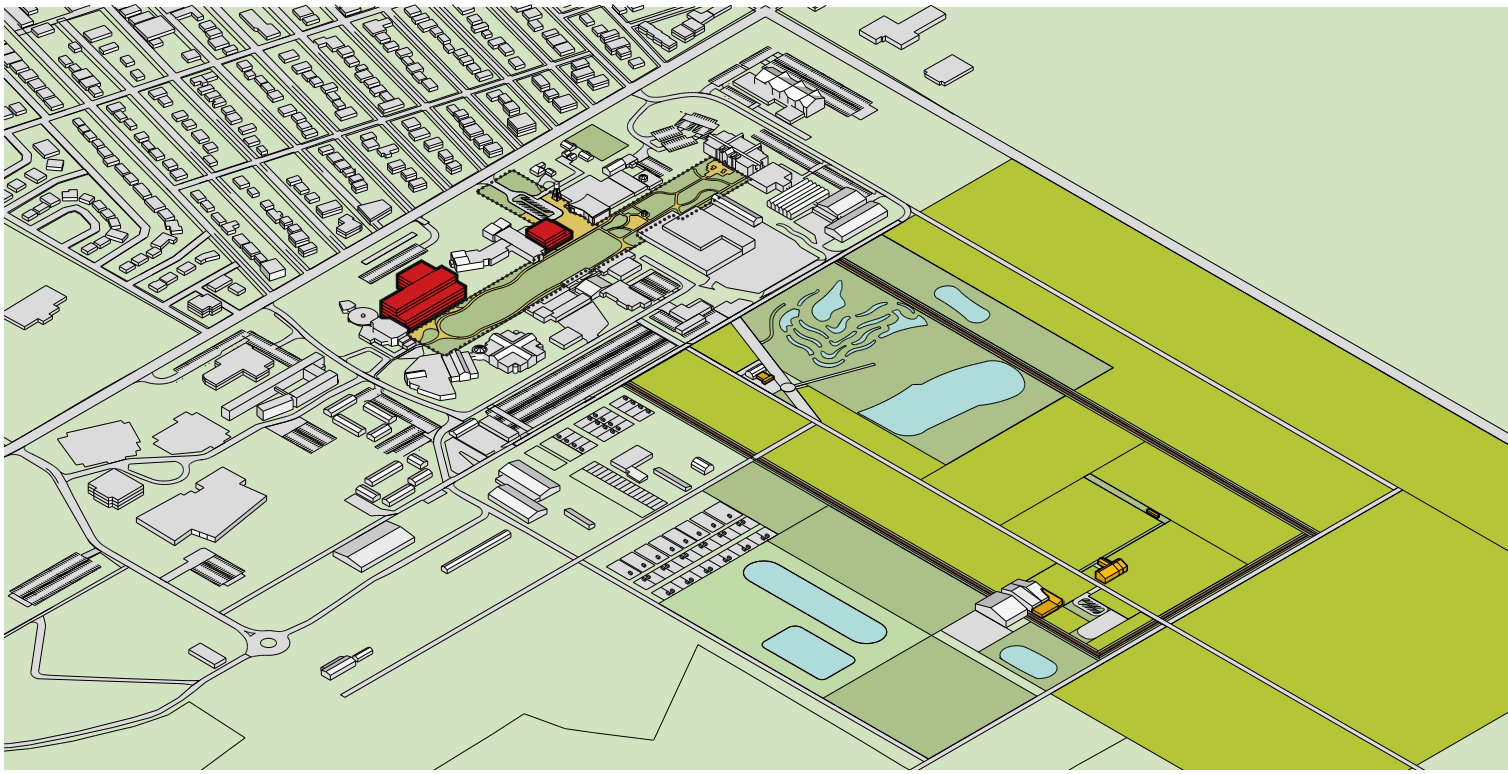
Several potential areas are not tied to any specific phase as these would be driven by a need for specific project type – such as student residences in the residential precinct or recreation and leisure facilities the community precinct. Similarly, farm and facilities buildings outside the campus core will be driven by specific operational needs or programmatic need.

Design guidelines comprise a significant complementary component to the implementation plan for the new buildings or additions, but, even more significantly, for the renewal of the existing buildings, and outdoor spaces and landscapes (including parking lots). The strategic vision of the college and of the campus are embodied not only at high level, but also at mid- and small-scale levels down to space planning and to appearance of architecture and landscape. As such the masterplan framework and the design guidelines should be implemented continuously whenever opportunities are present.



Several areas are not tied to specific phases as they are for specific uses and will be developed as needed. These are uses such as student residences and recreation / community facilities. The latter are also tied to potential partners and partners' needs and requirements.

Development of the Smart Farm demonstration areas and supporting buildings, such as the Barn addition / Events Centre, can proceed opportunistically. Very few built facilities are needed and much of the work relates to land use, signage, and improvements in landscaping.



Phase 1 is primarily that of renewal and strengthening of existing assets in a way that provides significant value to the strategic aims of the college. In addition to the planned renewal and expansion efforts this short range phase includes two expansion projects, both of which will deliver key spaces addressing specific strategic facility needs.

Phase 2 anticipates replacement of certain aging academic facilities and construction of new academic spaces when additional spaces is required. This phase is of a mid-term range and includes ongoing asset renewal as well as their reconfiguration to suit the college's strategic needs.

Phase 3 shows long-term range and addresses eventual asset replacement around the main central green: most of the existing buildings that currently have a good facilities condition index rating and are more likely to be renewed in the two earlier phases rather than replaced.

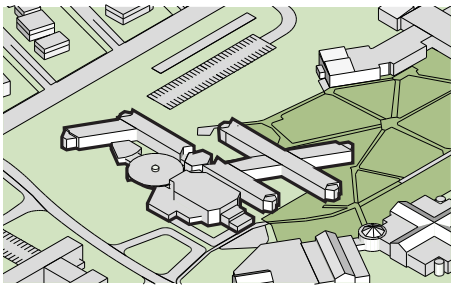
Phase 4 is far term range – it is presented here as a speculation on the build-out of academic space within the main ring road and the potential pattern of expansion beyond the campus core footprint. This speculation is intended to set up a template for safeguarding of sites and connections, embedding flexibility into the far future.

Strategic Projects

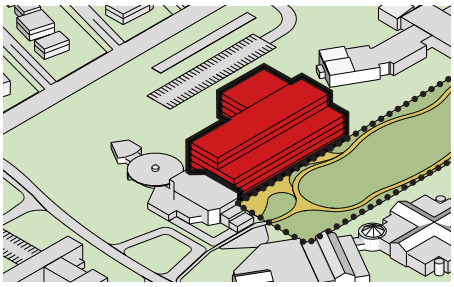
To support the strategic campus vision and the overall College's vision and current strategic plan, several high-impact projects are identified for immediate consideration. These projects include several projects that are currently in early planning stages. The projects as described are not prioritized in any specific manner rather than these broad groupings: buildings, hybrid, and public realm / landscape.

Buildings

Frank Grisdale Hall transformation



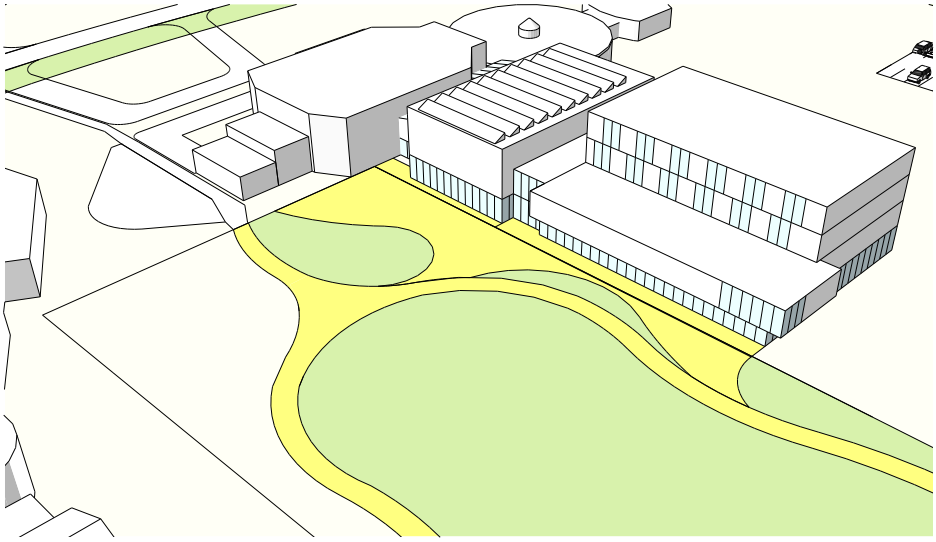
Existing



Proposed

- an innovation, training, and education hub
- New gymnasium is needed*
- Athletic training facility is needed
- Wellness & health hub to support strategic goals
- Informal learning spaces to enhance student learning and experience
- First Nations event / partnership space

* existing gymnasium is co-managed by the Community Learning Campus partnership



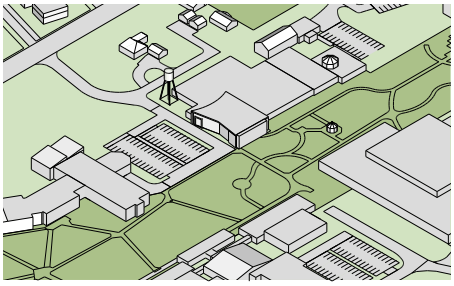
FGH is a significant building that has played a key role in the history of the Olds College. A former student residence, it is currently underused due to its physical and infrastructural limitations. While the use of its gym and cafeteria, recently renewed, are high, the use of its residential spaces has been very limited – a portion of these are used as swing spaces for office uses in renovation projects.

The College has undertaken a slate of studies for potential reuse of FGH, as well as for its removal. The persistent loss aversion of this sizeable asset combined with capital expenses associated with FGH removal has resulted in the College making considerable financial efforts to keep and to try to repurpose this underperforming asset. However, its physical form and conditions make it ill-suited to the College's actual needs and strategic aspirations.

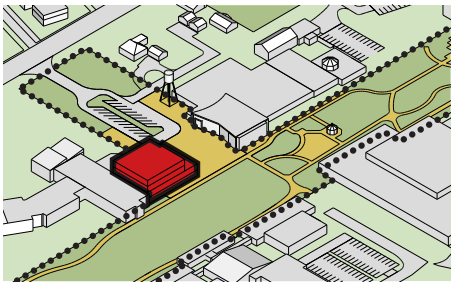
The highest use of such a central campus core site – especially as it occupies a key position relative to the residential and community precincts – would be to support strategic goals of the College. The high-level benchmarking review and use review suggest that student support spaces, health, wellness, recreation, and leisure will need to grow with the enrollment growth. By keeping the existing gymnasium and the cafeteria and adding these new spaces, the renewed FGH will revitalize this area and deliver on strategic student life and learning aims.

Aerial rendering of south end of the Central Green with FGH on the right

A New Gateway

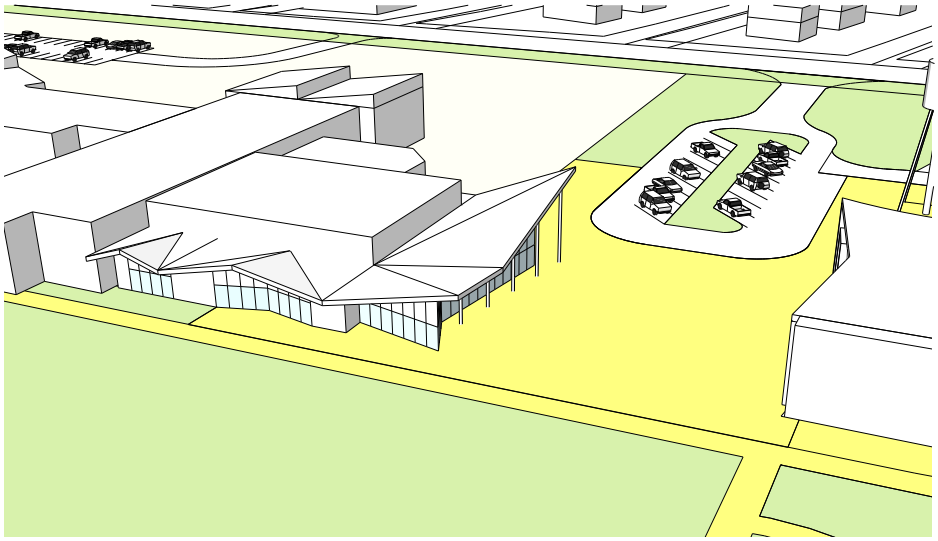


Existing



Proposed

- New gateway, arrival route, and public realm
- Addition to Duncan Marshal place
- Welcoming facilities
- Ag-Tech showcase gallery
- Cafe (relocated) oriented to plaza with outdoor patio



The confusion over the “front door” to the campus has been a persistent complaint from visitors and from college members. The linear extension of the core campus along highway 2A, resulted in five entries, each with their own character, however none stand out as the singular gateway and none have a specific welcoming space catering to visitors (for example, event attendees, prospective students, employees, faculty, research partners, and others).

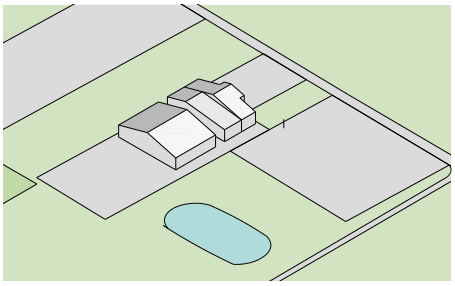
Recently the College has recently undertaken a significant new project: the Ag-Tech Learning Hub - right in the centre of the core campus - will house Werklund School of Agriculture Technology. Both the School and the Hub represent a vital strategic direction for the College. Enhancing the access to the Hub and increasing its visibility will signal this significance to the college community and to its visitors.

Creating a new arrival experience at existing entrance B, will emphasize this as the new front door experience. Additionally, it will bring prominence to the Ag Smart Innovation Centre and to one of the defining heritage artefacts of the College – the water tower, linking its past and its future landmarks.

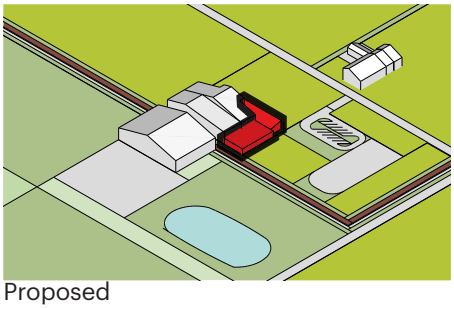
The arrival experience will include a new public realm, an Ag-Tech plaza, and a new visitor arrival point in a proposed addition to the Duncan Marshall place. The latter contains many key staff spaces and with relocation of certain student support service components from the Learning Resource Centre, the new addition can become a natural landing place for visitors.

The new gateway project has potential to be the new image the College projects to its community and beyond, one that matches its vision.

Field Operations Centre



Existing



Proposed

- Learning and working collaboration space - Smart Farm hub
- Research presence on site
- Visitor parking
- View of demonstration fields
- Facility and functional upgrades required for robust operations
- Improved appearance that aligns with Ag Tech expectations

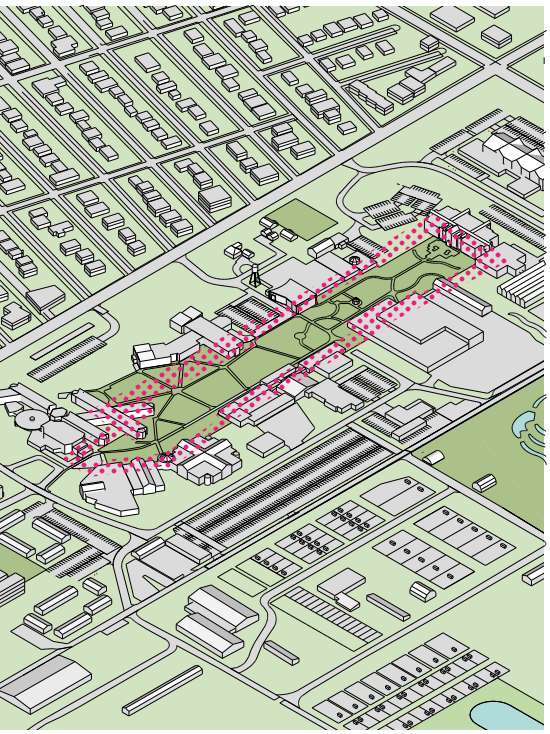
Changes in farming practices as well as necessary upgrades require an update to the existing farm shop. As the nature of agricultural practice itself is undergoing a profound transformation, the Farm Shop project will be transformative as well – in addition to supporting farming operations, it will also serve to amplify the college's strategic directions and to enhance student learning, act as a lab, and a showcase of applied research in the field:

- It will be able to open its doors to students, faculty, visitors, and research partners as needed

- It will have a collaboration space that will be able to support classroom, research, and operational functions. Equipped with technical resources and collaboration tools, it will be the central hub of the space.
- Adjacent field research space will be visible and will be an important bridging anchor between Smart Farm operations and academic and partner research in the Core Campus.
- It will be an important stop on future campus tours and an important image representing next phase of what agriculture can be, aiding with forming of partnerships, recruitment, and retention.

Public Realm / Landscape

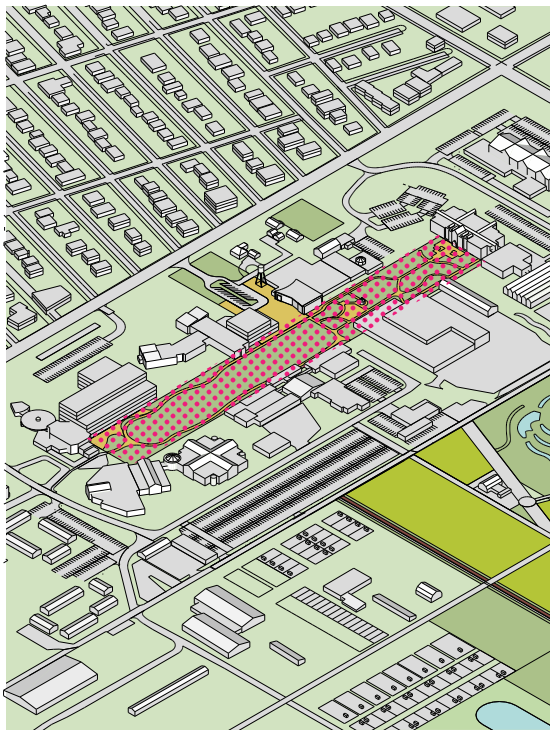
Activating the Edges



Activating the Edges would be an outcomes-based ongoing strategic project. In supporting the goals of the campus master plan, all future renewal and upgrade projects located within campus core should endeavour to activate the edges of the Campus Green at ground level by:

- Designing and locating applied research, social, and community spaces along and oriented to the Campus Green so that the project:
  - Enhances the visibility into these interior spaces from the Campus Green pathways
  - Enhances the porosity of the buildings to the campus green by opening up with doors to the Green as appropriate
  - Incorporates these and / or enhances the visibility into these interior spaces from the internal circulation loop
- Integrating audio visual technology into the activated edges so that it can be see from the inside and outside of the building serving as learning resources as well as exhibition of Smart Agriculture activities and work on campus
- Designing and locating enhanced public realm and landscaping along active edges of the buildings in a way that does not obstruct visibility into the interior space
- Designing complementary outdoor spaces where appropriate along the active edges – eg. informal learning space that opens to outdoor picnic area

Refreshing the Central Green



All collegial campuses endeavour to create welcoming and vibrant environments inside and outside to improve student, faculty, staff, and visitor experience of their institutions. For a college with a predominantly agricultural focus, such spaces can take on much more: serving as research and educational opportunities that reflect this focus and can help shape that as a perception to casual observers.

The Central Green is at once one of the most beloved and most underutilized outdoor assets on campus. The overall landscaping has affinity to many such landscapes in Albertan communities. However, while Botanical garden components provide interest and engagement year around, and are particular delightful during the warm months, the remainder of the Campus Green is more of a space in-between rather than a place-in-between.

The green can be programmed to be many things for the campus:

- to support both learning and research as a an outdoor lab / classroom
- to enjoy casually – reading in the sun, playing frisbee, picnicking on the grass, etc.
- to host college events – pancake breakfasts, Ag Tech conference site, end-of-year barbeques, music performances, etc.
- to be an important place for reconciliation – including an outdoor indigenous event and gathering space, indigenous agricultural spaces, opportunities to locate art, and for place-naming.
- to address health and wellness – quiet contemplative spaces, running trails, yoga platform, etc.
- to continue to contribute to revenue through event rentals to the wider community

Functionally several key improvements to the green are necessary to respond to strategic aims:

- Clarity around path hierarchy and path maintenance to ensure year-round accessibility.
- A variety of additional outdoor seating – fixed and moveable, chairs only, chairs and tables
- Tree maintenance to improve visibility on campus across spaces and buildings: Removal of overgrown evergreen trees (not cypresses) that subdivide and hide key spaces and building elements; trimming and limbing of deciduous trees up to 4m above grade.

Olds College Presence

There are many opportunities to not only improve wayfinding with signage at the main campus and satellite areas, but to enhance the presence and identity of the Olds College through memorable signage that reflects Olds College vision (as embodied by the new Ag Tech Hub and the College's brand identity work).

New landmarking signage is needed at:

- About 200 m east of intersection of Highways 27 and 2A
- At intersection of Highways 27 and 2A
- At gateway B – the main formal entrance to the college
- All satellite lands, with a significant one at Highway 2 Satelite farm (consider co-location with a support space / pod for campus staff)

Reconfiguration of existing signage at gateways A, C, and D should be done to provide directional road signage. Significant elements (i.e.masonry signs) should be removed for clarity. Directional road signage improvements are needed throughout the campus.

Gateway E signage should signify entrance to community facilities, with reduced College branding.

Living Document

This campus masterplan is living document that is intended to be revised to suit the College's evolving needs.

Frequency

The existing document should be updated minimum every five years. Additionally, the design guidelines will be updated as necessary.

Roles

Director for the Campus Development and Facilities will initiate the update process. The update process will be managed and led by the Director, and guided by the Campus Masterplan steering committee. The steering committee will advance update work to the College Leadership Team and Executive Leadership Team for review and recommendation to the College's board.

Update requirements

The requirements set out below are minimum, any additional requirements may be set out by steering committee as needed.

Update Vision, Goals, and Planning objectives per:

- Strategic plan
- Academic plan
- Research plan
- Broad stakeholder consultation

Update all other sections if needed based on revisions to Vision, Goals, and Planning objectives.

Planning and Design Guidelines

General Guidelines

Design Guidelines aim to supplement the framework and to translate vision and goals into more detail. The guidelines are a mix of performance-based and prescriptive approaches. As the guidelines do not require but advise, the designers can reference the campus plan vision, goals, and objectives to guide their decision-making.

Images in this chapter are not intended as exact examples to follow, but to provide precedents and clarify intent described in the text.

Sense of place

- Olds College should have a sense of place that is welcoming and inviting; modern and vibrant. Planning, architecture, and landscape design should endeavour to convey this sense of place.
- Upon visitor's arrival, the campus must convey the feeling of excitement about Olds College
- To everyday users the campus should feel lively and dynamic

Openness and integration of technology into campus built form and expression

Warm-but-sleek form and materials and low-impact foundations at field buildings

Scale and Character

- Form and landscapes will generally continue the horizontal character of the campus, height will be used to keep the building footprints compact and to make special statements.
- Overall, the buildings will be compact, and the landscape will spread out.
- Character of future buildings will blend effective elements of existing campus and local vernacular with elements and forms that represent a "globally recognized agriculture and agri-food technology centre of excellence."

Visual prominence

- Provide visibility into buildings, between buildings, and to fields beyond within the campus core, both on the exterior and interior of buildings
- Frame views and spaces in a way that enhances the visual experience

Landmark Elements

- Respect and enhance existing landmark elements:
- Built structures:
- Water tower
- Botanical garden's gazebo
- Life Sciences Centre atrium
- Landscapes:
- Botanical Gardens
- Heritage orchard
- Constructed wetlands
- Actively consider creation of future landmark elements or develop a distinct language of expression, especially for marquee buildings and open spaces:
- Campus Gateway
- Ag Tech welcome plaza
- Central Green
- Student centre

Warm and natural communal space at indoor atrium spaces

Agricultural landscape and applied research visuals superimposed

Campus Character

Welcoming

- Use canopies and overhangs to signal entrances and active building edges
- Use fenestration and glazing at ground level to blur boundaries between interiors and exteriors
- Use wood on inside and outside at ground level and near entries and main circulation routes – as allowable by regulations – to add warmth
- Create natural and rich landscapes with ample seating
- Use natural materials like brick and stone to add texture and detail
- Locate demonstration and exhibition opportunities in buildings and in public realm
- Use colour and art in key locations

Modern

- Integrate technology into signage / wayfinding / building and interior design as appropriate
- Plan for AV/IT infrastructure on campus and at building scale
- Provide ample power and wireless connectivity for individual use inside and outside
- Use modern expression for materials and details

Agriculture made Visible

- Prioritize agriculture-focused knowledge and work and agri-food whole system approach by making these visible and impactful in campus planning and design
- Keep Smart Farm-related activities at the Campus Core (food production; horticulture production; animal husbandry and care; data visualization and management) and enable their visibility in the experience of the Campus
- Create spaces and features within Campus Core and social or hospitality space that showcase the agricultural essence and technology of the College
- Showcase campus activities and services to wider community (such as the Smart Ag Innovation Centre, brewery, meat store, orchard seed bank, botanical gardens, wetlands, and others)
- Preserve existing farmland and reclaim underutilized land for farming

Indigenous pavilion helps acknowledge the campus as an Indigenous place

Multi-purpose gathering space for non-linear exchange of knowledge

Naming in the local Indigenous language(s) is a symbol of inclusivity

Social Campus

- Design for fostering community and learning
- Use transparency and porosity for visual connectivity
- Emphasize social condensers, especially campus “hearts” through programming, planning, and design

Diversity, Equity, Inclusion

Accessibility

- Enhance accessibility of campus buildings and landscapes
- Consider all-season, year-around maintenance approaches to ensure accessibility
- Provide programming that is inclusive to people of different abilities

Inclusion and Indigenization

- In each instance, design for greater inclusion (gender, origin, age, religion, etc)
- Create multiple spaces and landscapes that are suited to Indigenous learning and ceremony
- Incorporate Indigenous design strategies and approaches in all projects, if possible
- Consider Indigenous place-naming early in the projects
- Develop opportunities for integration of Indigenous art

Wellness

- Integrate spaces of respite into buildings and landscapes
- Create a variety of food options on campus
- Design for active living so that landscapes and buildings can be opportunities for fitness and recreation
- Design to encourage pedestrian and cycling movement to campus and on campus.
- Provide access to daylight and views to nature & sky from as many occupiable spaces as is viable
- Design HVAC and artificial lighting for occupant comfort and wellness
- Avoid materials in interior design that adversely affect human health

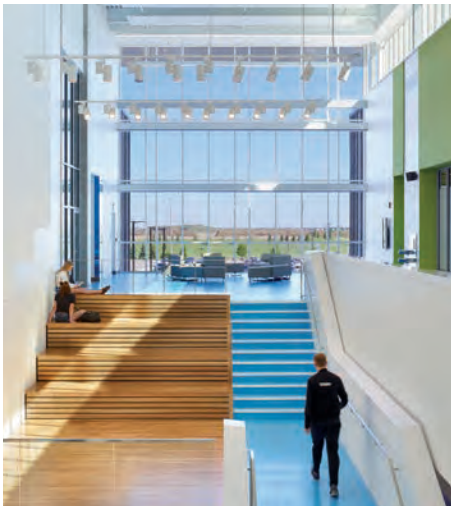
Daylighting improves usability and energy performance at workshops (e.g. trades)

*Green wall at reception(above) and at the main entrance (right_*

Aerial rendering of Core Campus

Architectural Guidelines: Main Campus

Transparent building envelope provides visual connection to significant landmark



Landscape framed by fenestration at the key communal space / atrium

Built Form

Key Spatial Relationships

Enhance key spatial relationships:

- "Spokes of the wheel" Core Campus pattern and expansion approach
- Block divisions within Core Campus
- Central Green and edges of its perimeter buildings
- Significance of terminus points of the Central green (Botanical Gardens, Life Sciences Centre)
- New campus gateway and Ag Tech Plaza
- Precinct compactness
- Visibility of agricultural activity from highways and from campus roads.

Setback and Build-to Lines

- Maintain 5m setback along the interior to ring road
- Reinforce physical definition of open spaces and connective paths with build-to boundaries of development lots/parcels
- Shape massing with setbacks and stepbacks to avoid shading on the key exterior locations

Siting and Orientation

- Projects should be sited based on academic or precinct affiliation, safeguarding future building sites and expansion opportunities, as well as future open spaces and pathways.
- Siting, planning, and building design should incorporate adaptability & flexibility
- Co-location is preferred between programs within same academic area.
- Buildings should be oriented to the Central Green and its connective pathways.
- Buildings should be planned to align with interior circulation of its neighbours to simplify circulation in inclement weather.
- Orientation should consider solar exposure / shading as well as shading of other buildings and spaces.

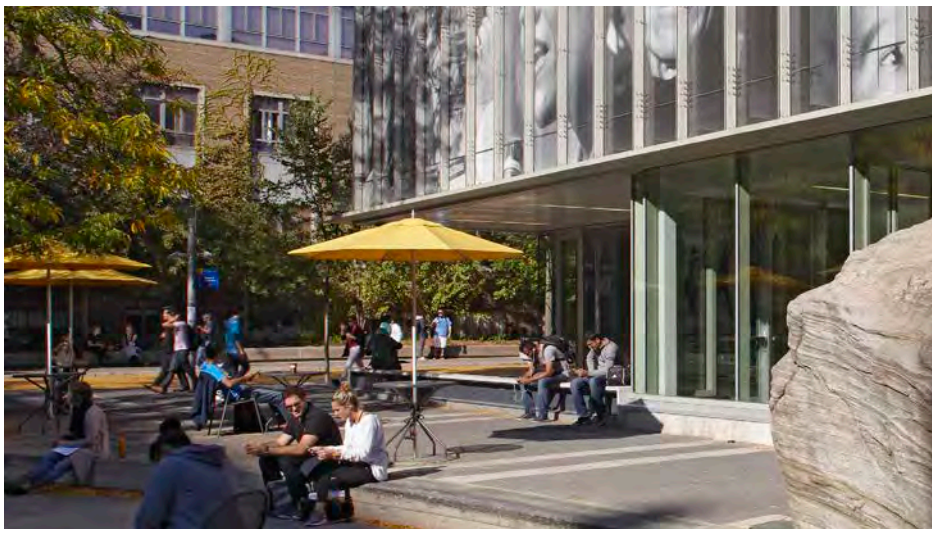
Building and its interface helps present applied research to the community

Form & Massing

- Maximize volume to surface ratio by creating compact buildings
- Height and stepping of form should ensure access to sunlight for key outdoor spaces.
- Balance avoiding large unbroken masses and form over-articulation
- Break up masses into smaller segments by introducing interior atria or pathways between buildings
- Emphasized horizontality of the built fabric that complements the rural landscapes of Alberta

Active Edges

- Use programming, fenestration, glazing and landscape design to enliven active edges
- Provide a spectrum of formal and informal learning spaces at interiors and exterior of active edges
- Locate applied learning and living lab opportunities for indoor and outdoor campus spaces at active edges
- As viable, locate any new research space at grade and make research visible from common areas and paths
- Locate seating opportunities at active edges, inside and outside
- Porosity of active edges shall be encouraged through physical access accompanying transparency, and offering opportunities for interior uses, especially communal ones, to 'spill' outside.



Transparency, glazed wall setback, and awning at building entrance

Transparency as an educational and institutional identity tool for sustainability

Building entrance and glazed lobby align with outdoor space with clear sightlines

Continuous benches serving communal areas indoors and open space outdoors along the building-public realm interface

Visibility and Transparency

- Transparency is encouraged in general, and especially at interfaces with parts of Central Green adjacent to key communal spaces ('Campus Hearts'), encouraging social interaction and staying through seating inside and outside.
- Where applicable, interpretive displays and signage shall be installed indoors, on the built form - public realm interface, or immediately outside to showcase applied learning and research.
- Strategically located openings with vision glass will maximize ground-level transparency, which may be balanced with a greater degree of opacity on the upper levels as needed to achieve sustainability objectives
- In residential design, balance privacy with "eyes on the street"

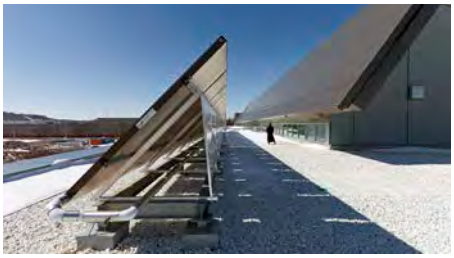
Accessibility and Circulation

- Visual connections (e.g. signage, wayfinding) and/or physical connections (e.g. covered colonnades) to neighbouring buildings' entrances and active edges shall be provided, where applicable.
- Create social and amenity spaces at points of intersections and connections, activated by opportunities for food service and eating
- interior circulation: transparency, ensure connectivity to entrances and public realm elements, encourage functioning as a network of encounter, discovery and community
- Improve visibility and accessibility of campus enterprises
- Simplify and make legible interior and exterior campus circulation

Entrances

- Entrances should be easily visible and architectural design to be legible and attractive
- They shall have easily visible signage, per signage and wayfinding guidelines.
- Canopies or overhangs should be provided at entrances.

Facade as an element of wayfinding and institutional identity



Roof form as a means of enabling on-site solar energy generation and daylighting

Horizontal expression transitioned via roof form to highlight a key outdoor space and building entrance

Built Fabric

Facades

- Balance abundant transparency at grade with more opaque upper facades
- Design facades to respond to the orientation of built form
- Design facades within a visual and material hierarchy – the most significant facades are located facing the Central Green, reducing in significance as buildings are sited further from the centre.
- Place material and detailing care at grade or other locations where occupants are likely to appreciate these.
- Avoid articulation for its own sake

Roof forms

- Roof forms should provide either:
  - Shaped forms that reference sloped roofs of the vernacular in a modern take
  - Provide location for solar energy generation or solar thermal
  - A green roof surface
  - Or a combination of thereof
- Where other buildings will overlook roofs, roofs should be considered “the fifth elevation”

Modernization of brick expression with fabrication and high-performance glazing

Mass timber expression, panel cladding and glazed walls complement brick

Place-making with daylighting and green wall where existing building meets addition

Materiality

Cladding materials will balance appealing appearance with robustness.

The materials primarily recommended for harmonization with the existing built fabric are:

- Brick as part of a building enclosure system, carefully specified and detailed to minimize risk of deterioration or efflorescence. Explorations in computational design, digital fabrication and craft are recommended for modernized expression.
- Panel Cladding (Attentive design of reveals and joints are recommended to impart a sense of texture and scale to complement brick) as part of a rainscreen building enclosure system. For example, composite panels or cement panels.

Adaptability

- Develop campus buildings and infrastructure in a way that anticipates future expansion or reconfiguration
- Design buildings to include flat floors, regular structural grids, medium-to-long structural spans, generous floor heights, and largely orthogonal layouts. Avoid overly angled or curvilinear buildings.
- Encourage the creation of multi-purpose that can be used for a variety of uses – from classrooms to meeting rooms to project rooms to event spaces.

Architectural Guidelines: Agricultural Lands

Built Form

Siting and Orientation

- Site future buildings on previously disturbed sites whenever possible, preserving agricultural land and natural landscapes
- Keep built footprints as small as functionality allows and locate footprints as close together as viable to preserve land as an agricultural resource
- Development in agricultural lands shall be set back from waterways and neighbouring residential uses per municipal and provincial guidelines.
- Site buildings in a manner that considers visitor experience as one whole of fields and built structures together as a composition.
- Plan sites and site buildings in a way that allows for future expansion that will take into consideration these guidelines as well.
- Built form shall generally be parallel to roads, as described for Satellite Areas in this Master Plan.

Massing

- Referencing horizontal rural and natural Albertan landscapes, massing shall be in generally horizontal
- Height of structures shall be of 1 to 3 storeys tall, or as needed for the housing of equipment.
- Where present, publicly oriented programs should be massed in a way to provide visitors with visual cues and to be welcoming.
- Where possible use gabled or sloped roof forms and where suitable consider a simple but modern take on sloped roofs.

Active Edges

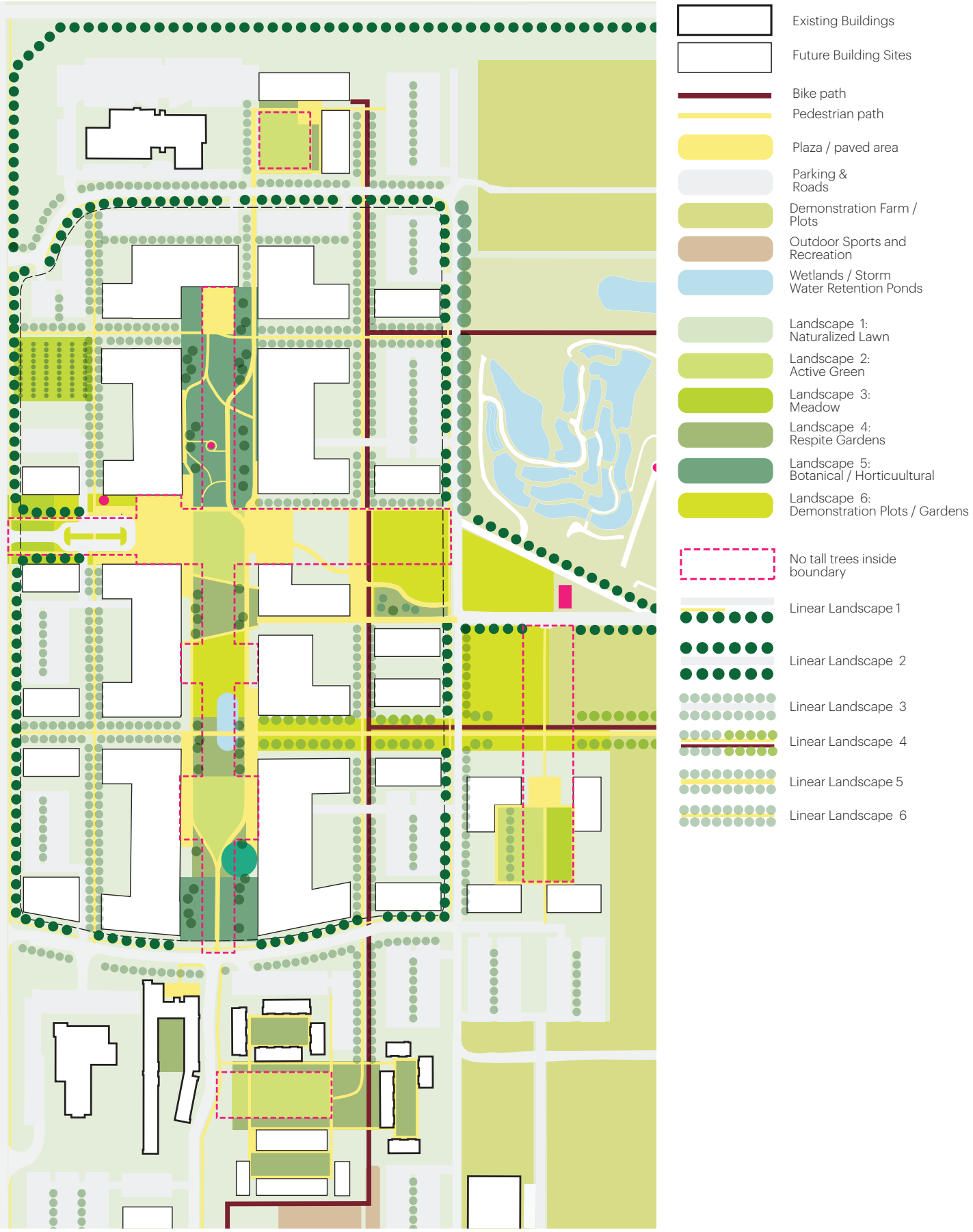
- Where present, publicly oriented programs should be transparent to arrival area, with entries forming part of the active edge
- These active edges should dissolve boundary condition further with porches, terraces, and seating areas.
- Where possible, built form shall frame, by using massing and roof form, outdoor areas offering views, passage, communal space and/or sheltered field uses (e.g. outdoor storage or staging).

Entrances

- Entrances shall face primarily the road, be clearly designated, and may front communal outdoor areas, where applicable.

Materiality & detailing

- Built form shall borrow exterior finishes, textures and colours from the agricultural vernacular, and may utilize them in a contemporary idiom.
- In buildings with publicly oriented programs, the public component should utilize materials with welcoming colour, texture, etc. (wood, brick, stone, etc).
- For utility buildings, select sheet metal cladding in colours that reference the metal's original colour (silver metallics) and have high solar reflectance values.
- Elevate simple forms and materials through elegant proportion and clean and "crisp" detailing.



Conceptual landscape plan for Campus Core, for illustrative purposes

Landscape and Public Realm Design Guidelines

Design guidelines are intended to provide guidance for stand-alone landscape design, public realm improvements connected to architectural or mobility projects, and renewal projects.

The guidelines include special landscape spaces as well as describing standard approach to all other landscape and public realm design.

Unique Open Spaces & Landscape Features

The list below describes significant unique public spaces or landscape features: existing features that should be maintained and existing or new features that will require specialized design:

Heritage Orchard:

Maintain and enhance. Improve visibility, public access, and educational / learning opportunities through interpretive signage.

Constructed Wetlands:

Maintain and enhance functionality, and improve connectivity.

Central Green:

The defining place-making open space of the Olds College. To be enhanced and redesigned per components:

- Botanical Gardens North: existing gardens to be used for botanical, horticultural, learning, and research properties. Maintain and enhance public access and seating opportunities.
- Botanical Gardens South: to be created in the south portion of the Central Green
- Indigenous People's garden: to be created in the south portion of Central Green near the Learning Resource Centre. To include large outdoor gathering / celebration / learning space.
- Respite Gardens: to be created to provide respite and to connect to nature – denser planted landscapes with plenty of both sun and shade and seating opportunities. Naturalized landscapes are intended to encourage biodiversity.
- Active greens: Central and South: to be created. Intent is to create flat natrualized lawn or meadow that can be used for events (talks, concerts, BBQ's, picnics, etc) or recreational and wellness activities (spontaneous frisbee, yoga, soccer, etc).
- Demonstration area: to be created to showcase the work within campus – bringing the field, the pasture, the orchard, or the greenhouse into the centre, focusing on agriculture and food-production. This area can include low structures such as pop-up kiosks, small greenhouses, or animal enclosures.
- Water retention pond: to be constructed to collect and infiltrate storm water. To be designed as a landscape feature with visual significance.

South end of Central Green

Welcome Plaza

Welcome Plaza

To be created as the first landing place for any visitors. The welcome plaza will be hardscaped with site furniture and fittings to both welcome new arrivals, and to serve as the social heart of the Campus. The plaza will connect and unite the campus entry, the new AgTech Centre, the Central Green, and the new welcoming pavilion (a future project). The plaza will also create a significant indigenous public art opportunity.

Precinct Plazas

Precinct Plazas will be designed as part of the future planning phases. In the interim, endeavour to safeguard the open space.

Demonstration alley

- Connection between Campus Core and Agricultural Lands - to be created; and will showcase orchard trees.

Poplar Border

To be created. Intent is to make the college more cohesive & distinct through visually impactful tree species use and to make activities on collage land more visible from major routes.

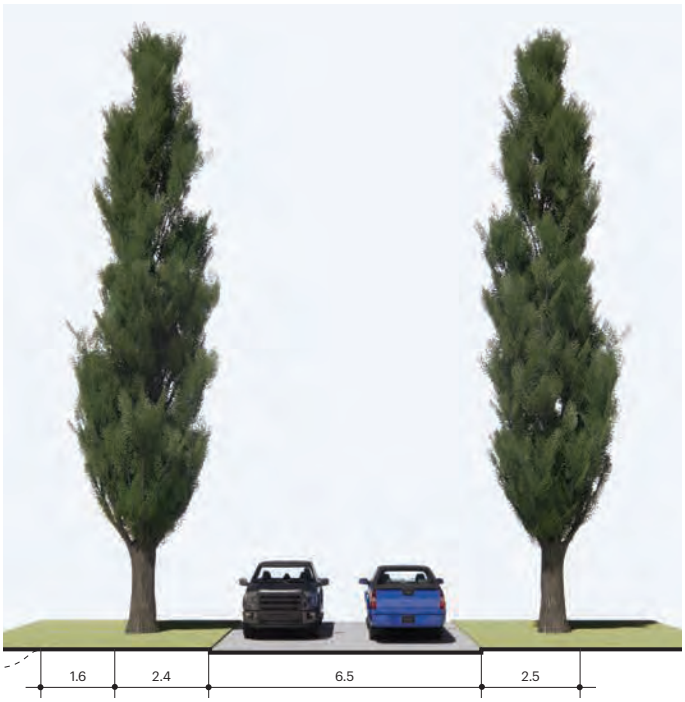
Add poplar borders:

- On the inside of the Ring Road
- Along south side of highway 27

Landscape Typologies

Landscape typologies provide a standardized approach to all other landscapes on campus.

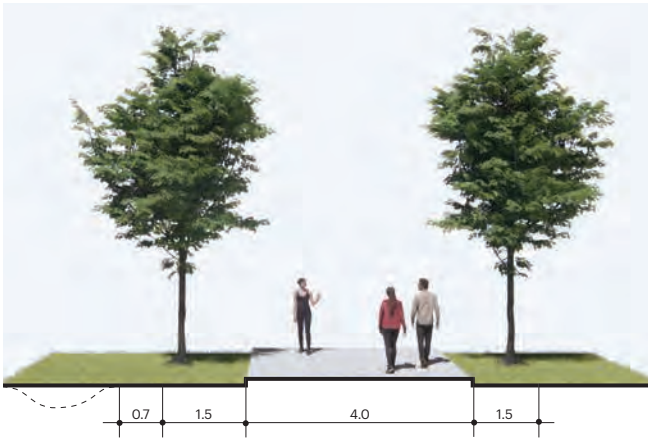
Linear Landscape 1



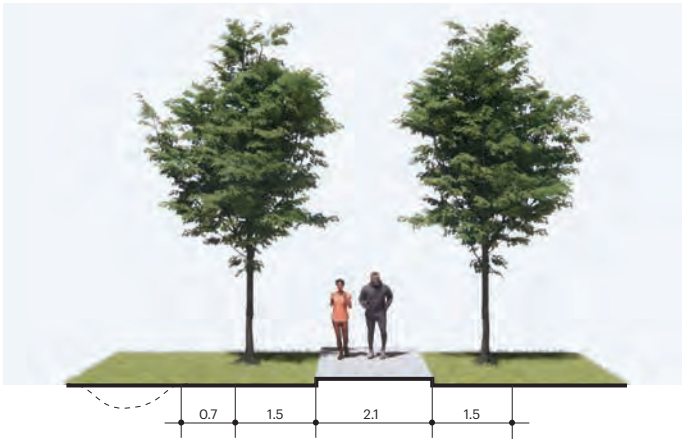
Linear Landscape 2

Linear Landscape 3

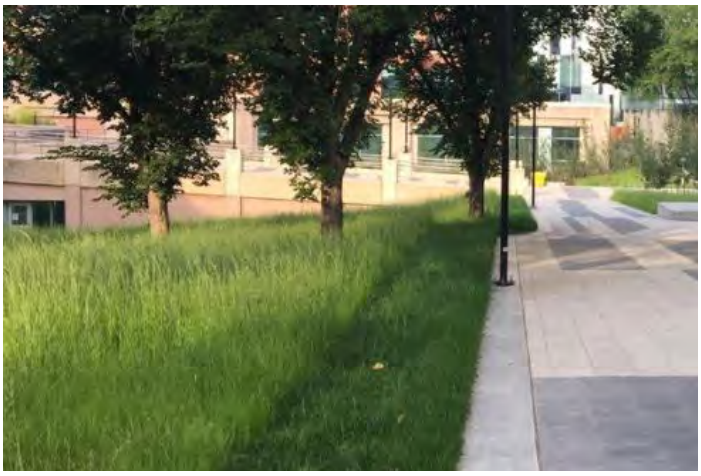
Linear Landscape 4



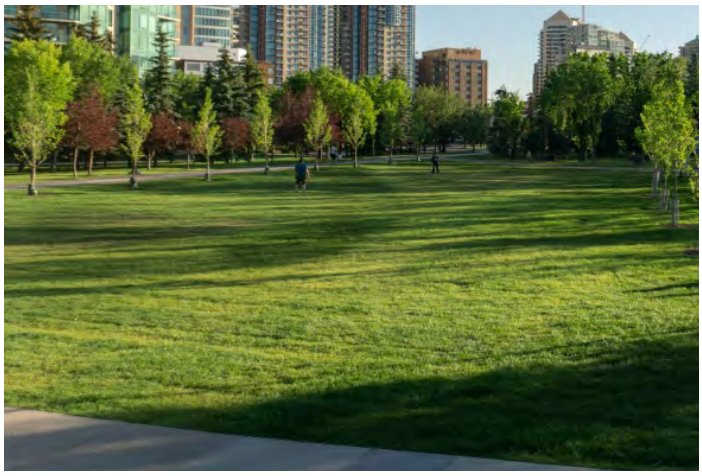
Linear Landscape 5



Linear Landscape 6



Landscape 1: Naturalized lawn



Landscape 2: Active Green

Landscape 3: Meadow

Landscape 4: Respite Gardens

Landscape 5: Botanical / Horticultural Gardens

Landscape 6: Demonstration Areas

Pre-cast concrete pavers and cast-in-place slabs (above)

Hardscape Plaza at University of Connecticut New Social Sciences by Stimson Studio (Photography: Charles Mayer)

Hardscape

General:

- Extent of hardscaped areas should be minimized, especially surface parking.
- Consider all season maintenance prior to design and installation and use & mobility challenges during winter.
- All hardscape pavement should drain to bioswales, raingarden, or storm drains that connect to rain water collection cisterns.

There are several types of hardscape:

- Plazas & Entries
- Pathways
- Bikeways
- Parking

Plazas & Entries

Plaza and entry pavement are limited to boundaries of Campus Core and Precincts, used sparingly with the exception of the main arrival and ceremonial plaza at the Ag Tech Centre.

Paving: Type A: Concrete slab strips with stone bands

- 3 wide strips of large natural coloured concrete slabs arranged in running bond pattern
- 1 narrow strip Charcoal grey concrete slab or large paver accent strip
- Overall pattern to be oriented to the served buildings, in a way that complements the building's design.
- Where pattern runs into a perpendicular edge of the softscape, pattern to "dissolve" into landscape (avoid creating a uniform edge by creating shorter slabs)

Integration of trees, landscaping, and swales in parking lot design (above)

Pathways & Bikeways

Three paving types can be used for pathways around the campus. Avoid creating mulch paths as these pose a mobility challenge.

Campus core & Precincts

Paving: Type B: Pavers (horticultural areas only)

- Standard concrete pavers in red-brown arrange in herringbone paver
- Concrete curb edge (natural concrete colour)

Paving: Type C: Concrete path

- Cast in place concrete with medium broom finish perpendicular to path's direction

Paving: Type D: Cycling path

- Asphalt

Agricultural Lands:

At publicly accessible facilities: Paving type C

Recreational paths:

Paving: Type E: Crushed stone

- Compacted / granular limestone dust

Parking

- Minimize surface parking area through efficient and compact parking lot layouts
- Layout dimensioning to be per City of Olds or Mountainview County bylaws.
- Include planted buffer between parking and public realm
- Break up large parking lots into smaller segments with bioswales / raingarden buffer planting
- Slope parking lots to planting buffers for naturalized drainage
- Create & demarcate pedestrian access routes – separate with plating where possible.
- Incorporate regular tree planting to shade parking surfaces at edges and in planted dividers (consider ratio of 1 tree per 5 parking stalls)
- Plan to include snow storage areas in the parking spaces furthest from centre of the Campus Core

Naturalized landscaping supports biodiversity and reduces maintenance (above)

Softscape

General:

- All landscape plantings – with exception of horticultural / botanical planting designated areas and demonstration plots – should be low-maintenance, drought-tolerant, hardy, and resilient species.
- Wherever possible native North American and native or adoptive to Alberta parklands / grasslands species should be use.
- Generally landscape should reference and reinforce a sense of place – one that is a mix of Alberta's woodlands, parklands, and prairies native to this area.
- Landscaped areas should be designed as biologically diverse varied landscapes. Avoid monoculture landscaping.
- Invasive species should be excluded

Ensure that for deciduous and coniferous trees location and maintenance, lines of sight from roads and pathways are considered and preserved to:

- Signage
- Building entrances
- Active building edges at areas of fenestration
- Demonstration lands, plots, structures

Turf:

For non-sports turf fields plant a mix of native tolerant grasses (fescue, rye-grass, and green needle grass).

Flowers & Grasses:

Recommended Grasses species:

- Blue grama Grass (Bouteloua gracilis)
- Green Needle Grass (Nassella viridula)
- Indian rice grass (Oryzopsis hymenoides)
- June Grass (Koeleria macrantha)
- Needle & Thread Grass (Hesperostipa comata)
- Rocky Mountain Fescue (Festuca saximontana)
- Rough Fescue (Festuca scabrella
- Tickle Grass (Agrostis scabra)

Recommended Flower species:

- Blue columbine (Aquilegia brevistyla)
- Black-Eyed Susan (Rudbeckia hirta)
- Blazing Star (Liatris spicata)
- Canada Anemone (Anemone canadensis)
- Canada Goldenrod (Solidago canadensis)
- Canada Milk Vetch (Astragalus canadensis)
- Common Yarrow (Achillea millefolium)
- Golden Alexanders (Zizia aurea)
- Harebells (Campanula rotundifolia)
- Marsh Marigold (Caltha palustrus)
- Meadowsweet (Filipendula ulmaria)
- Northern Bedstraw (Galium boreale)
- Purple Prairie Clover (Dalea purpurea)
- Northern Bedstraw (Galium boreal
- Tall Larkspur (Delphinium glaucum
- Smooth Blue beard tongue (Penstemon nitidus)
- Wild Bergamot (Monarda fistulosa)
- Yellow Coneflower (Ratibida pinnata)

Shrubs:

Recommended shrub species:

- Beaked Hazelnut (Corylus cornuta)
- Swamp / Bracted honeysuckle (Lonicera involucrate)
- Russet Buffaloberry (Shepherdia canadensis)
- Dart's Golden Ninebark (Physocarpus opulifolius 'Dart's Golden')
- Dwarf Birch (Betula nana)
- Virginia Rose (Rosa virginiana)
- Fragrant Sumac (Rhus aromatica)
- Globe Cedar (Thuja occidentalis)
- Golden Ninebark (Physocarpus opulifolius 'Luteus')
- Golden Dogwood (Cornus alba 'Aurea')
- Horizontal Juniper (Juniperus horizontalis)
- New jersey Tea (Ceanothus americanus)
- Red Osier Dogwood (Cornus stolonifera)
- Sagebrush (Artemisia cana)
- Siberian-Coral Dogwood (Cornus alba 'Sibirica')
- Silver Buffaloberry (Shepherdia argentea)
- Snowberry / Buckbrush (Symphoricarpos albus)
- Wild Currant (Ribes oxyacanthoides)
- Wild Rose (Rosa acicularis)

Trees:

Within Core Campus and precincts, deciduous trees should be used to facilitate solar access and to provide solar shading to south and west glazing. Coniferous and evergreen trees can be used in wind breaks as needed on edges of precincts, and agricultural lands.

With exception of areas designated “tree-free”, trees maybe placed wherever at the discretion of the Campus Planning department.

Recommended deciduous tree species:

- American Elm (Ulmus americana)
- Brandon Elm (Ulmus americana ‘Brandon‘)
- Bur Oak (Quercus macrocarpa)
- Mountain Ash (Sorbus americana)
- Northwest poplar (Populus x ‘Northwest‘)
- Tower poplar (Populus x canescens ‘Tower‘)
- Paper Birch (Betula papyrifera)
- Patmore Green Ash (Fraxinus pennsylvanica ‘Patmore‘)

Recommended coniferous tree species:

- Colorado Blue Spruce (Picea pungens ‘Glauca‘)
- Colorado Spruce (Picea pungens)
- Lodgepole Pine (Pinus contorta latifolia)
- Ponderosa Pine (Pinus ponderosa)
- White Spruce (Picea glauca)

Horticultural and Demonstration Landscapes

- To showcase and to align with academic and reserach planning & programming
- Should be supplemented with signage and Interpretive installations along adjacent paths

Red arch creates a memorable gateway

Bold and modern logo sign

Clear and distinct campus map sign

Signage and Wayfinding

All planning, public realm, and building design should reference a detailed signage and wayfinding guidelines (currently in development). Signs should be located so line of sight will not be obscured by landscape or built elements from primary direction of travel; maintenance and installation of future landscape or elements must preserve these lines of sight. All signage should be designed to be accessible for visually-impaired persons.

Street Signs:

Significant unique signs that embody the campus vision and character that will be custom designs that harmonize with the signage and wayfinding guidelines and with each other. Both visibility from pedestrian routes and vehicular routes (especially as related to direction of traffic) must be considered. These signs will also be singular branding opportunities and should reflect this significance.

- City sign will be located at intersection of Highways 2A and 27 and should have a landmarking quality.
- Main campus entry sign will be located at entrance B and should incorporate gateway elements.

Gate Marker signs:

Smaller gateway markers that are intentionally minimal indicating Olds College logo and gate letter. Letter name should be large enough to be easily visible from moving vehicles from 50m away.

Welcome Signage & wayfinding:

Ag Tech plaza should have suitable signage to welcome new visitors to campus including:

- Campus Logo sign – a free-standing sign; welcoming and clear; visually striking
- Campus Map – a free-standing sign with two large and clear maps – campus core on one side, and overall campus map on the other. Consider how to accommodate future changes.
- Information Boards (incorporating digital displays or similar where possible)
- Infrastructure for large banner mounting so that double sided banners can be mounted to be easily read from arrival area and from Campus Green.

General signage and Wayfinding:

- Campus maps should be located at the north end of central green and south entrance to Central green.
- Directional signs are minimal horizonal signs that direct visitors to parking lots or hard-to-find buildings outside of Core Campus. Typically these are free-standing and include a name of the destination and a directional arrow. Signs that include multiple place names can be used when the places are all in one direction. Where possible combinations such as “visitor parking lots” are preferred to individualized multiple place names such as “ Parking lots B, J, and M”
- Building ID signs are minimal free-standing signs at primary and secondary entrances (where applicable) to a building.
- Anchor buildings and donor-named building signage – custom signage comprised of individual letters mounted directly on the building will be of high quality materials and special design.
- Parking lot ID signs are minimal free-standing signs at primary entrance to a parking lot.
- Modality signs are painted on pavement to indicate if pavement is for pedestrian, bike, or shared use.
- Accessible path and building entry signs are pole mounted

Informational and Interpretive signage:

Informational and interpretive signage should be designed to showcase learning, research, and work performed on campus. Where possible this signage should:

- Be located outside or in common public areas such as lobbies, corridors, and lounges, preferably in a way that makes it visible on the inside and from the outside.
- Integrate digital displays to enable dynamic changing content

This signage should be strongly considered for all projects within campus core.

Satellite Lands Signage:

All satellite lands should have a free-standing sign with Olds Campus branding, a place name, and an interpretive or informational component. The design should incorporate a landmarking feature (a gate, a post, a vertical form, etc) and be visible and legible from moving vehicles.

Portable / Temporary Signage:

Event and special program signage can be conveyed as moveable / removeable banners, sandwich boards, etc. Consult Campus Communications for further information.

Platform serves as a seat and as a stage (above and right)

Custom benches are integral to the design (below)

Site Furniture, Fittings, and Lighting

Furniture:

Three types of site furnishings are encouraged:

- Custom: Furniture that is inherently integrated into the landscape concept and is integral to the concept. Custom furniture is justified when use of standard furniture is incompatible with design. Significant care should be taken to ensure custom furniture will be robust and long-lasting. May be site or off-site built.
- Standard: Furniture that is year-round, permanently fixed, robust but attractive. Standard furniture list will be available from College Facilities department.
- Casual: Furniture that is moveable & stowable. Furniture can be ordered through College Facilities department.
    - Central Green: Wood picnic tables & wood Adirondack-style chairs
    - Beyond Campus Core: Wood picnic tables & wood Adirondack-style chairs
    - Other locations: To be associated with design of an interior program & complementary to that use.

Considerations:

- Outdoor seating and table-seat combinations are in high demand and should be included in landscape design / renewal projects whenever possible.
- Configure to allow a variety of use scenarios (single user, group) for all ages and abilities.
- Create seating, table-top and platform surfaces to encourage a variety of outdoor use
- Locate as needed but especially near active edges to encourage interior uses to spill outside

Parking lighting with LED luminaries at Johnson Controls campus, Glendale, WI

Campus lighting with LED luminaries at University of Colorado, Boulder, CO

Lighting:

Three types of lighting are encouraged:

- Roadway & utilities: Road and street lights, as well as lighting for outdoor workspaces.
- Pathway: Pathway lights, pole-mounted or bollard style.
- Landscape & wayfinding: Uplights, downlights, and others that enhance the design of special landscape features, special site furniture configurations, and aid wayfinding (lighting at the main campus entries, lighting building names, etc).

Standard fixture list will be available from College Facilities department. Custom selection may be considered for landscape and wayfinding lighting.

Sport field lighting to be designed as part of field design.

Considerations:

- Select modern or classic style fixtures rather than traditional or themed.
- Locate street and pathway lighting with consideration for safety of cars, bikes, pedestrians, and other users. Ensure sufficient coverage.
- Use shielded street and pathway lighting to minimize light pollution.
- Design and locate landscape lighting in significant landscape spaces to enhance the effect at night. Consider using sparingly for highest visual impact.
- Consider combining lighting with safety pylons and / or wayfinding.
- Minimize and phase out metal halide luminaries

Power:

Provide power for special events to Ag Tech Plaza and FGH field.