

PROPOSED

PUD2019-0692
ATTACHMENT 1

BYLAW NUMBER 61P2019

BEING A BYLAW OF THE CITY OF CALGARY TO ADOPT THE RICARDO RANCH AREA STRUCTURE PLAN (PUD2019-0692)

WHEREAS Section 633 of the *Municipal Government Act*, R.S.A. 2000, c.M-26, as amended, enables a municipal council to pass bylaws adopting area structure plans for the purpose of providing a framework for subsequent subdivision and development of an area of land;

AND WHEREAS it is desirable to adopt an area structure plan for Ricardo Ranch;

AND WHEREAS Council has held a public hearing as required by Section 692 of the *Municipal Government Act*, R.S.A. 2000, c.M-26, as amended:

NOW, THEREFORE, THE COUNCIL OF THE CITY OF CALGARY ENACTS AS FOLLOWS:

1. This Bylaw may be cited as the “Ricardo Ranch Area Structure Plan Bylaw.”
2. The Table of Contents and Sections 1 to 8, inclusive, of the document entitled “Ricardo Ranch Area Structure Plan” attached to this Bylaw as Schedule “A” are hereby adopted, as an area structure plan pursuant to Section 633 of the *Municipal Government Act*, R.S.A. 2000, c.M-26, as amended.
3. This Bylaw comes into force on the date it is passed.

READ A FIRST TIME ON _____

READ A SECOND TIME ON _____

READ A THIRD TIME ON _____

MAYOR

SIGNED ON _____

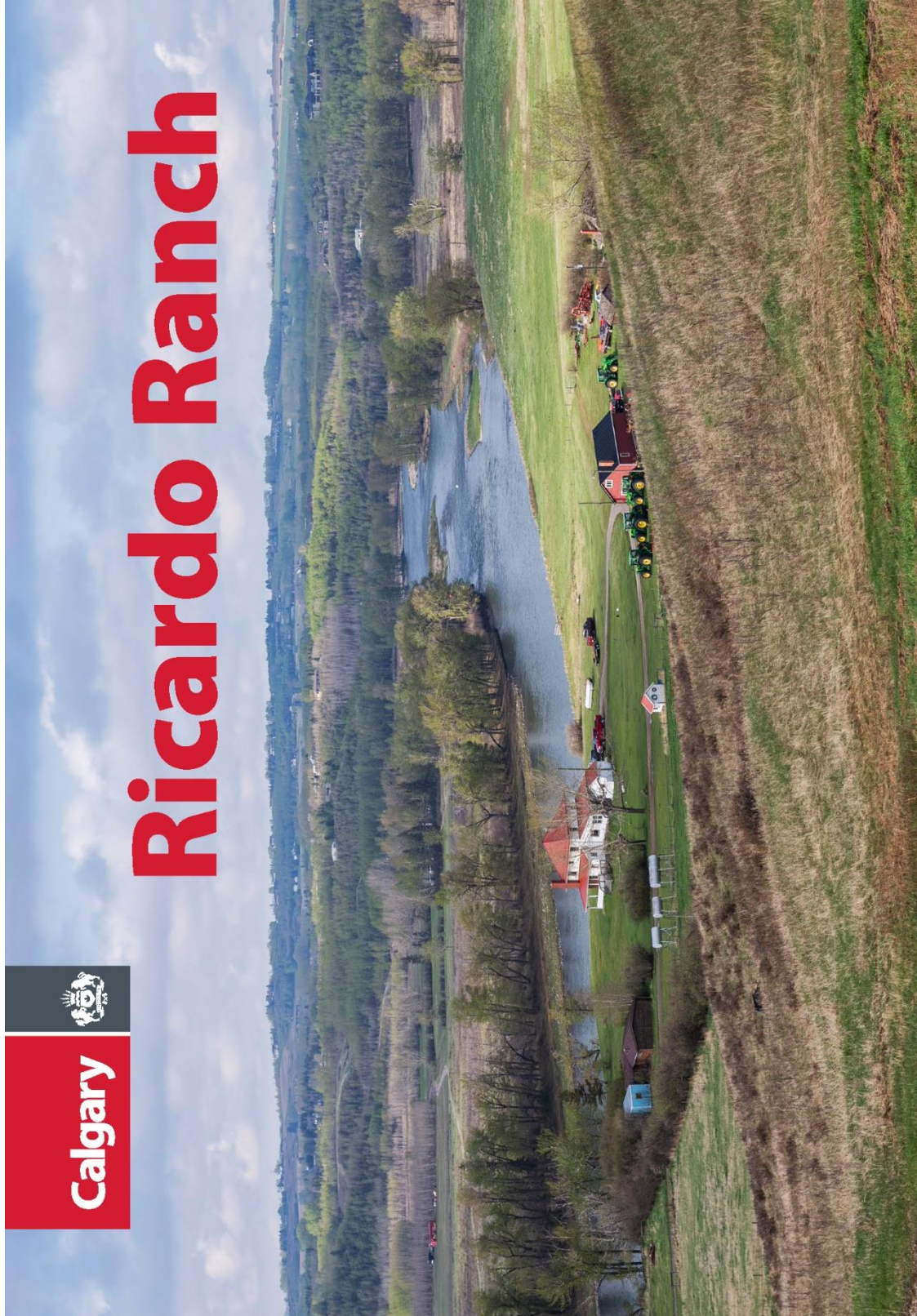
CITY CLERK

SIGNED ON _____

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SCHEDULE "A"



Ricardo Ranch

Area Structure Plan

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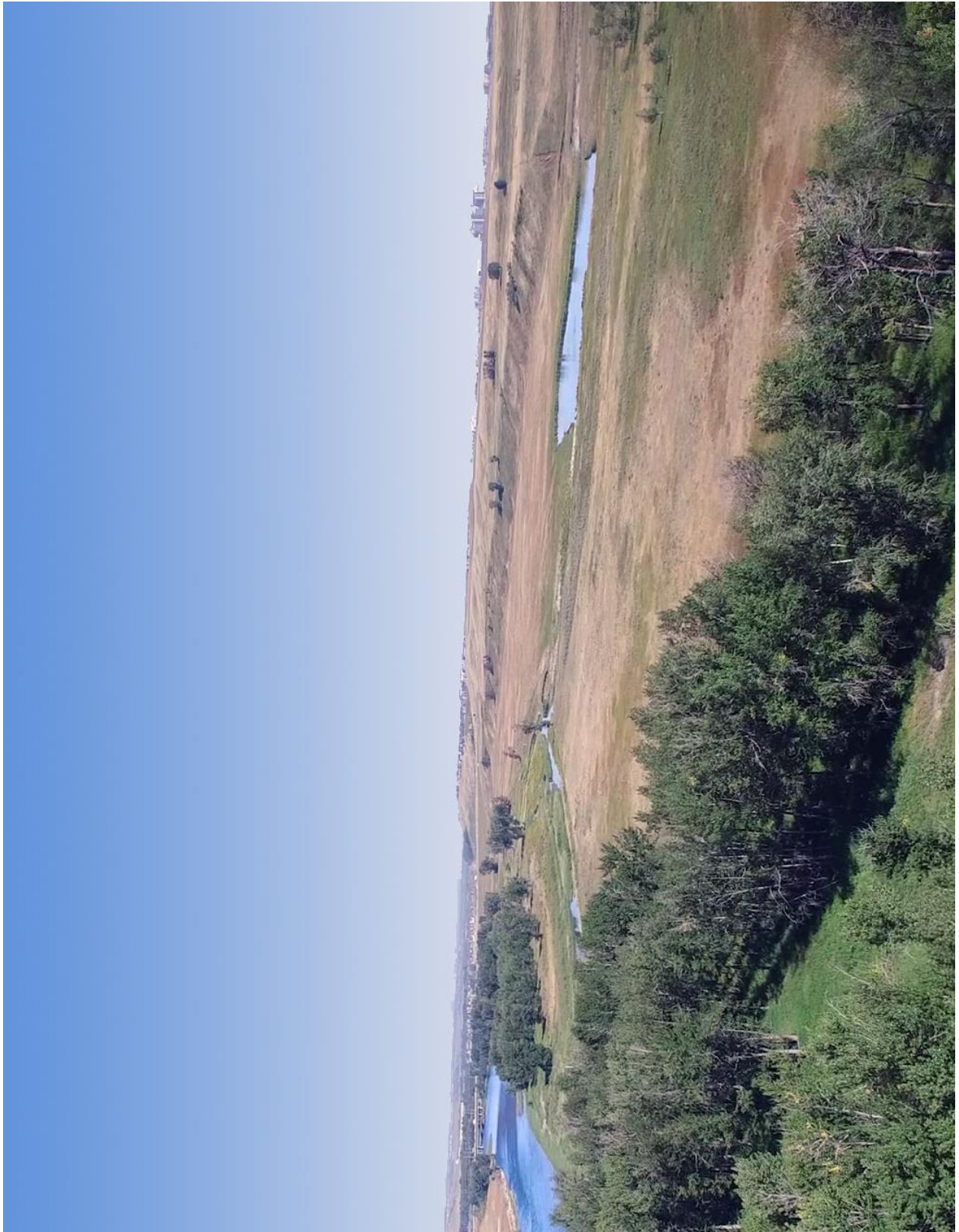
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Executive Summary

The Ricardo Ranch Area Structure Plan (the Plan) provides a vision and framework for the future development of approximately 635 hectares (1,570 acres) of land in southeast Calgary. The lands in the Plan (the Plan Area) are bound by the community of Seton to the north, Deerfoot Trail S.E. to the west, the Bow River to the south and 88 Street S.E. to the east.

Ricardo Ranch will be home to approximately 16,000 to 20,000 residents located in one community with four distinct neighbourhoods. The community will incorporate public amenities within walking distance for all residents. Pedestrian connections, public transportation and cycling facilities will provide access to parks, employment, retail, leisure, and cultural destinations. Conservation of natural environments within the Bow River valley will enable residents, workers and visitors to enjoy a healthy, active lifestyle and protect biodiversity within the city.

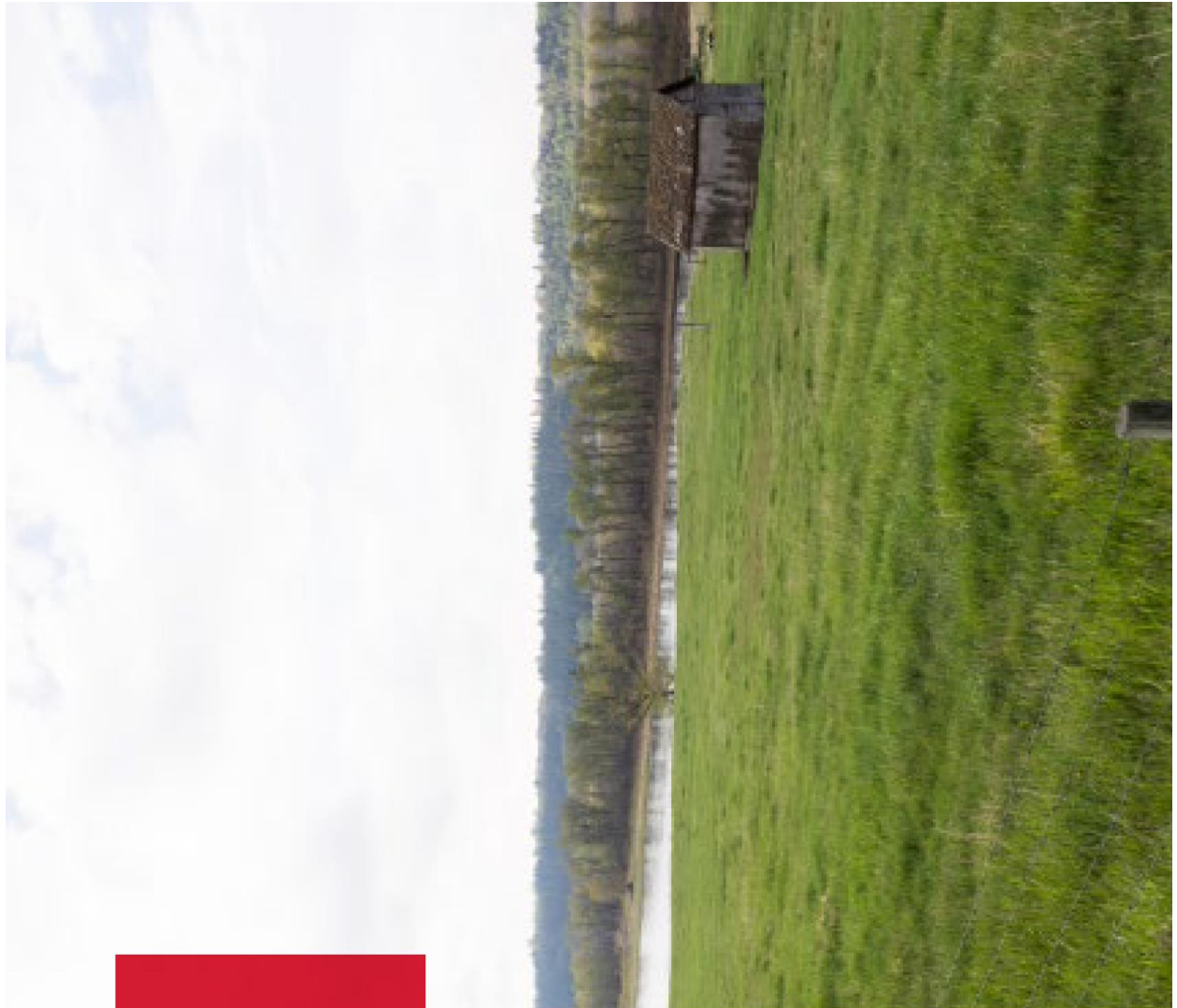
The Plan refines and implements the strategic objectives and policies of higher level plans including the South Saskatchewan Regional Plan, Municipal Development Plan and the Southeast Planning Area Regional Policy Plan. It is also influenced by The City of Calgary's planning and sustainability objectives. The Plan has been informed by engineering, transportation, and ecological studies that have analyzed and evaluated attributes and constraints in the Plan Area. The Plan has evolved through consultation with landowners, the public, City administration, the Province, school boards, and other stakeholders. Detailed policies and guidelines have been developed as a result of this consultation to direct the land use, subdivision and development permit applications that will collectively shape the development of the community.

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Introduction

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1.1 Plan Area

The Ricardo Ranch Area Structure Plan area (the Plan Area) is situated on the traditional territories of the peoples of the Treaty 7 region, which include the Blackfoot Confederacy (comprising the Siksika, Piikani, and Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda peoples (comprising the Chiniki, Bearspaw, and Wesley First Nations). The City of Calgary is also home to the Métis Nation of Alberta, Region 3.

The Plan Area consists of approximately 635 hectares (1,570 acres) of land in southeast Calgary (see [Map 1: Plan Area Location and Context](#)).

The Plan Area is bound by the community of Seton to the north, Deerfoot Trail S.E. to the west, the Bow River to the south, and 88 Street S.E. to the east. Foothills County is located adjacent to the Plan Area along its southern boundary.

The Plan Area falls within the boundaries of the 1,355 hectare (3,350 acres) Ricardo Ranch, a working cattle ranch. In 1888, the ranch was homesteaded by William Crawley Ricardo, who became one of the founders of the Calgary Ranchmen's Club. The name "Ricardo Ranch" has endured for 130 years, even as the land changed hands from William Crawley Ricardo to Senator Patrick Burns, and ultimately to the Soutzo family.

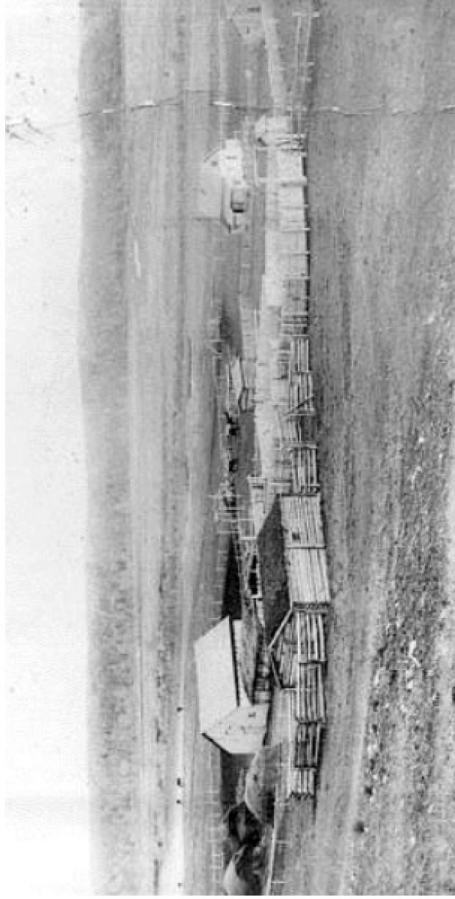


Photo of residence yard within the Plan Area, c. 1900. Source: Glenbow Archives

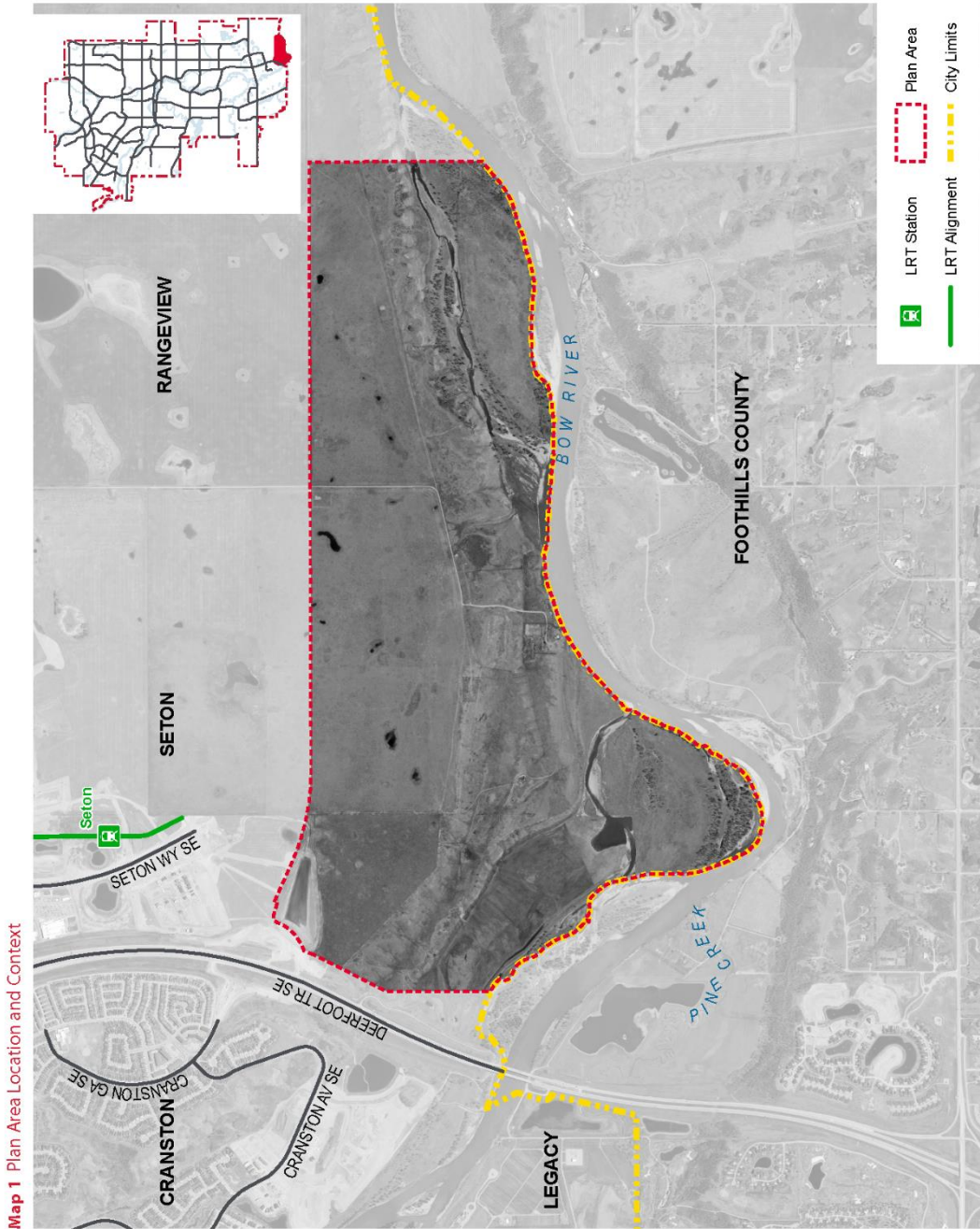


View looking southwest over a portion of the lower Plan Area.

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1.2 Regional Context

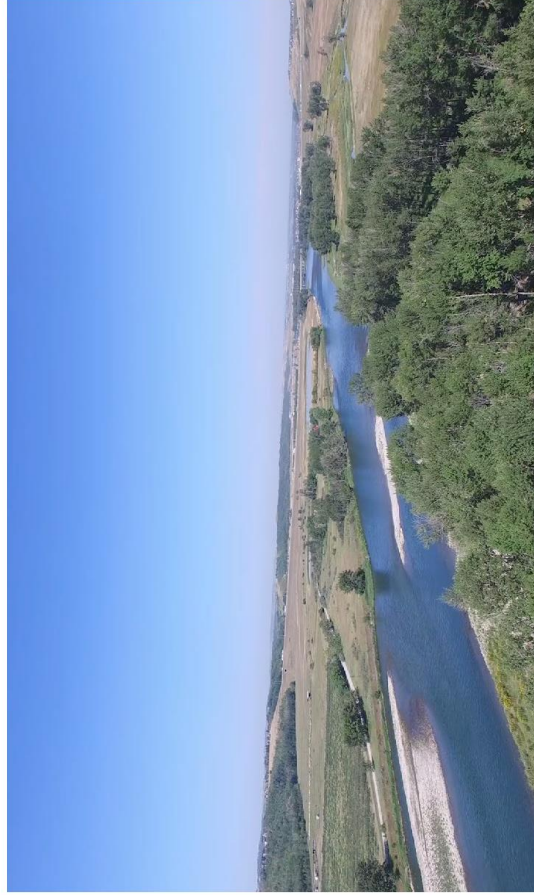
The City of Calgary (The City) is a member of the Calgary Metropolitan Region Board (CMRB), whose mandate includes ensuring long-term sustainable growth for the Calgary metropolitan region. The Plan is subject to referral to the CMRB for review and approval to ensure alignment with the regional planning policy and framework.

The Plan Area is located within the Intermunicipal Development Plan Area (IDP Plan Area) between The City and Foothills County. The purpose of the 2017 Intermunicipal Development Plan (IDP), entitled Our Shared Boundary, is to provide for intermunicipal circulation and evaluation of planning and development applications within the IDP Plan Area. The IDP ensures that both jurisdictions work collaboratively to coordinate planning initiatives for issues of mutual interest. The Plan is consistent with the policies in the IDP.

The Plan Area is part of the Southeast Planning Area Regional Policy Plan (SPARPP), which provides direction for approximately 2,280 hectares (5,635 acres) of land in southeast Calgary.

1.3 Plan Area Features

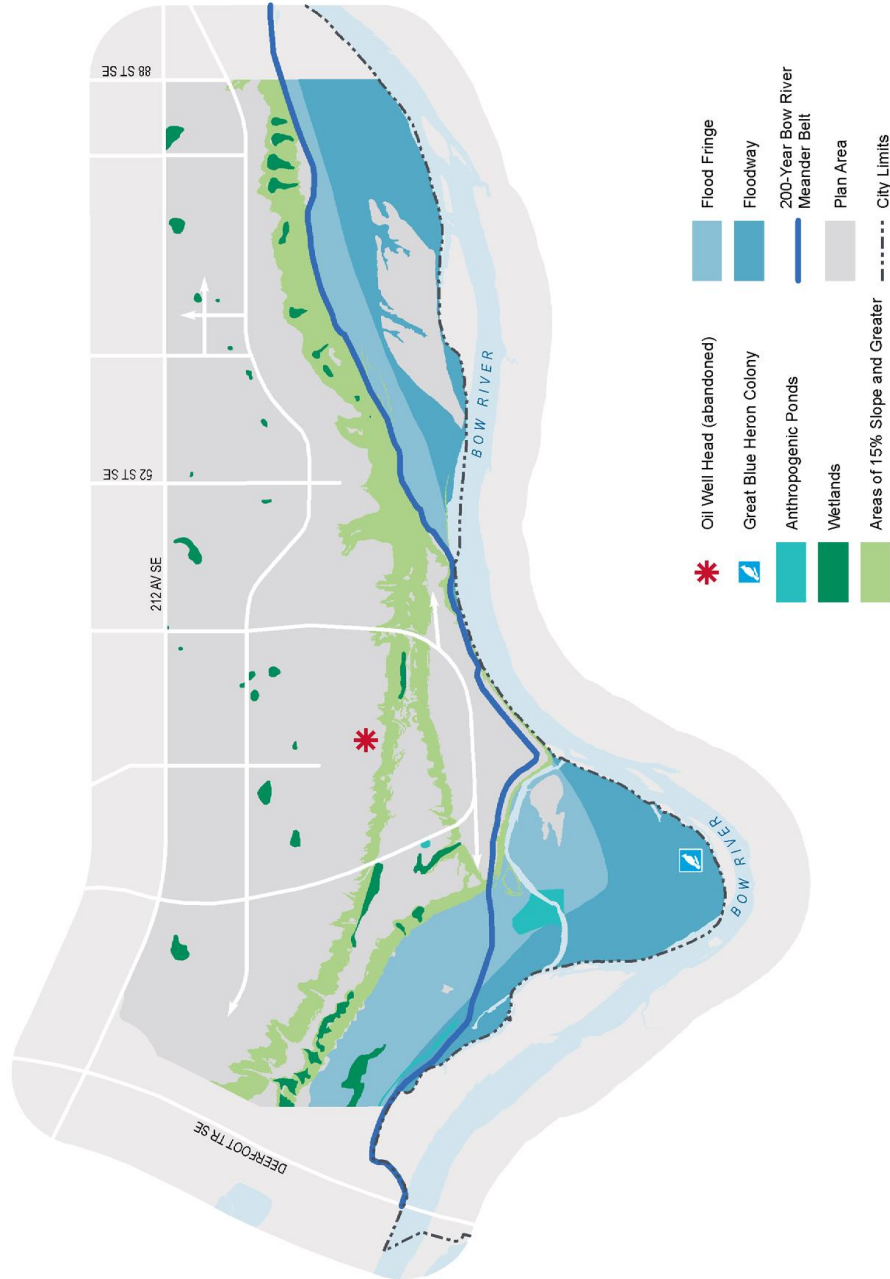
The Plan Area contains a number of natural and anthropogenic features, as depicted in Map 2: Plan Area Features. These features were considered in the development of the Plan and must be considered when evaluating planning and development applications in the Plan Area.



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Map 2 Plan Area Features



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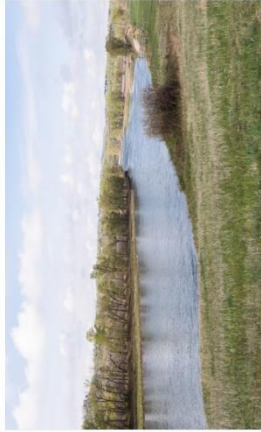
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Topography and Natural Features

The Plan Area is located in a transition area between the Foothills Fescue Natural Subregion and the Foothills Parkland Natural Subregion. Terrain in the Plan Area consists of flat to undulating topography in the northern portion and slopes downward from north to south. The southern portion of the Plan Area includes the Bow River valley comprising an escarpment, Floodway, Flood Fringe and associated meander belt. The Bow River valley has regional significance, acts as a natural wildlife corridor and provides opportunities for recreational activities.

Environmentally Significant Areas (ESAs) in the Plan Area include the escarpment, wetlands, drainages, channels, glacial features and wildlife habitat. Areas of the highest environmental significance are located within the Bow River valley.

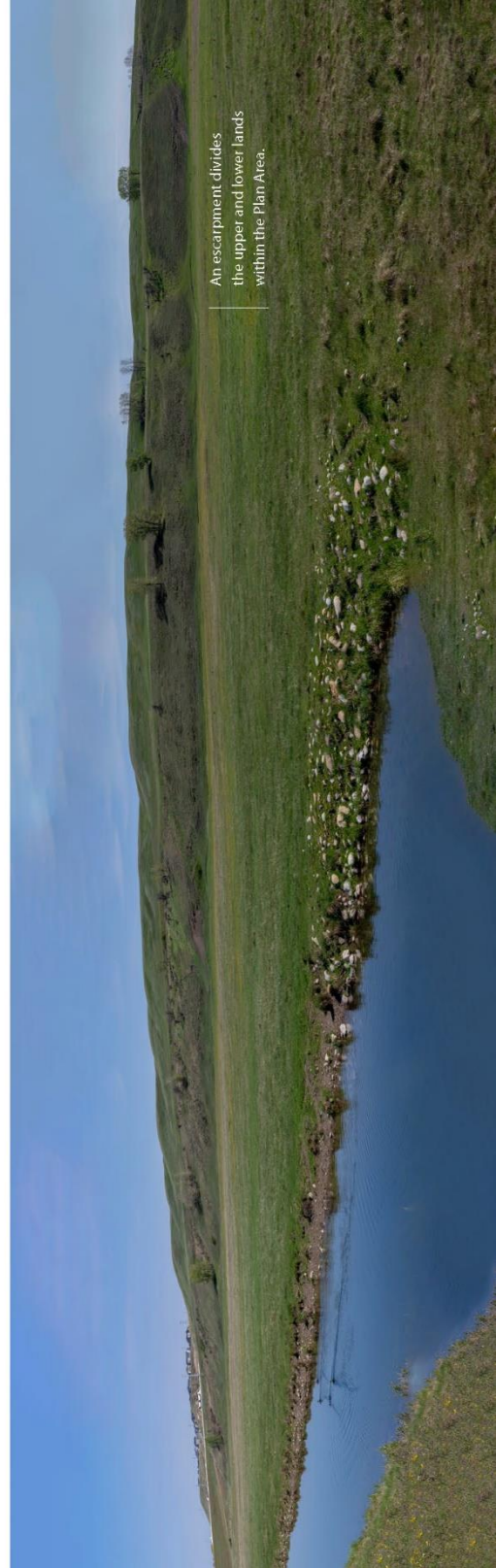
A great blue heron nesting colony exists in the Plan Area.



The Bow River frames the southern portion of the Plan Area.



Great blue heron in Calgary, AB. Photo Source: Tony Le Prieur

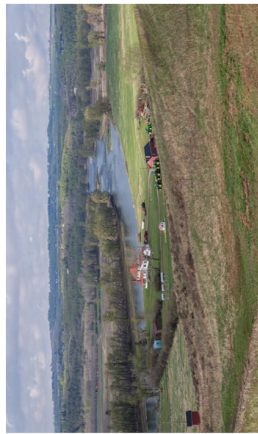


An escarpment divides the upper and lower lands within the Plan Area.

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Existing Land Use and Development

The lands within the Plan Area are currently used for ranching purposes. There is an existing Homestead in the southern portion of the Plan Area, south of the escarpment. The existing residence was constructed in 1918. Some of the existing outbuildings date back to 1891.



View of the Plan Area looking southwest.

Oil and Gas Infrastructure

Abandoned Well

Alberta Energy Regulator (AER) records indicate an abandoned oil well head is located within the Plan Area, as depicted on **Map 2: Plan Area Features**. Setbacks from and access to the abandoned well, as mandated by the AER, will be identified at the Outline Plan/Land Use Amendment stage.

Sour Gas

Lands to the north and east of the Plan Area are underlain by proven sour gas reserves and there is a history of sour gas extraction in these areas. Due to the high hydrogen sulfide content of sour gas, setbacks and Emergency Planning Zones (EPZ) are mandated by the AER. At the Outline Plan/Land Use Amendment stage, a review of any existing operating sour gas infrastructure in the general area should be completed to identify any potential constraints or impacts.

Historic Resources

Historic Resources include archaeological and paleontological sites, Indigenous traditional use sites of a historic nature, historic structures, and geological or natural resources. The lands within the Plan Area, particularly the lands below the existing escarpment, have high potential for undiscovered Historic Resources including archaeological and paleontological resources, and historic structures (see **Map 3: Historic and Potential Historic Resources**). As noted in the SPARPP, several pre-contact archaeological sites, including tipi rings and other stone features have already been identified within the Plan Area.

Under the Historical Resources Act, the existing Homestead is considered a historic structure. Such resources are governed under the Historical Resources Act, and managed by the Province of Alberta (the Province). Targeted Historic Resource Impact Assessments (HRIAs) for archaeological and palaeontological resources, and historic structures will be submitted at the Outline Plan/Land Use

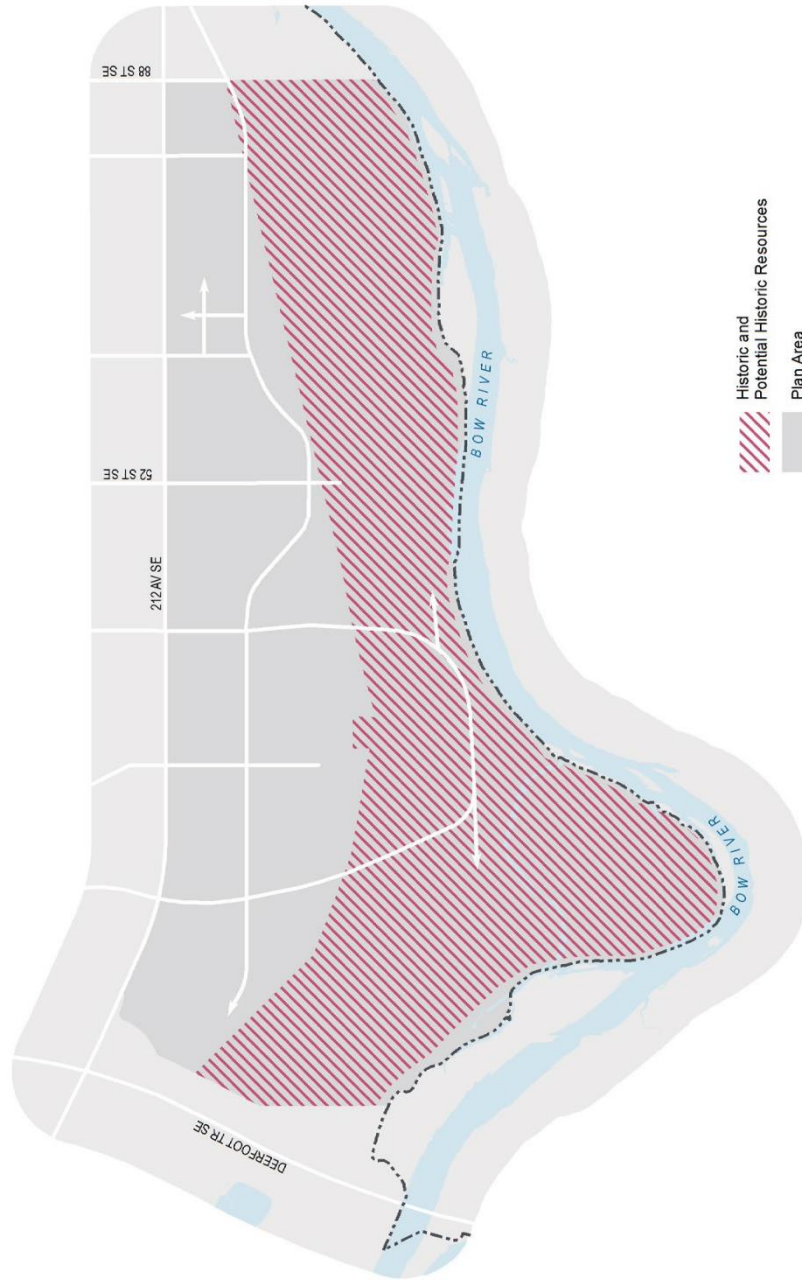
Amendment application stage. As a result, additional Historic Resources may be identified within the Plan Area. Using the information from these studies, the Province will determine the significance of these sites and identify any additional Historic Resource impact mitigation studies that may be required.

Archaeological resources and historic structures reflect thousands of years of human land use on Calgary's landscapes, and both are present within the Plan Area. Such information may be valuable in the design and development of the community.

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Map 3 Historic and Potential Historic Resources



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1.4 Legislative and Policy Framework

The Plan is to be read in conjunction with the documents listed in Figure 1: Relationship of Plans.

The Plan is a local area plan that provides statutory policy direction specific for the Plan Area.

The Plan is to be applied in conjunction with the South Saskatchewan Regional Plan, Municipal Development Plan (MDP) both Volume 1 and Volume 2, Part 2: New Community Planning Guidebook (NCPG); the Calgary Transportation Plan (CTP), and other City of Calgary policy and guiding documents, unless otherwise indicated.

The provisions of the NCPG apply. Where the policies within the NCPG and the Plan are different, the difference is intentional and not an inconsistency, because policy has been tailored to the Plan Area. Where there is an absence of a specific policy within the Plan, the NCPG prevails.

Figure 1 Relationship of Plans



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1.5 Vision

Ricardo Ranch is a one-of-a-kind community, boasting an unparalleled sense of arrival. Located at the southern gateway into the City of Calgary, the Plan Area provides the best of all worlds; access and connectivity to urban conveniences combined with the breathtaking diversity and beauty of a true Alberta landscape. Framed by a world class river and crystal clear views of the Rocky Mountains, Ricardo Ranch is the community for those who love and value nature, but still want to call the city home. Provision of interconnected open spaces and access to the Bow River valley will offer residents opportunities to enjoy active lifestyles within their community. Ricardo Ranch is a true reflection of old and new Calgary, embracing its Indigenous and ranching roots, while encompassing innovative and sustainable design, diverse housing options, and a dynamic four-season open space network.

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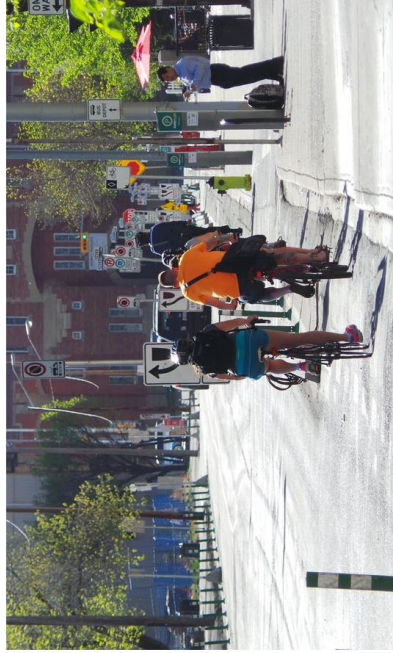
1.6 Core Ideas

The Plan's core ideas will support achieving the vision.



Vibrant mixed-use village core

Centrally located at the southern terminus of 52 Street S.E., and along the top of the escarpment, the pedestrian-focused village core will be connected to the transit and open space network. Distinctive mixed-use buildings, commercial uses, higher-density Multi-Residential Development, dynamic open spaces and a Community Association site will create a unique destination within the community.



Sustainable mobility

A permeable, block-based internal street pattern, efficient transit network and abundance of pathways and bikeways will facilitate multi-modal forms of travel and provide connectivity to neighbourhood amenities, natural features and the surrounding area.

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Healthy outdoor lifestyle

Residents and visitors to the community will enjoy active and healthy lifestyles through visible and physically accessible open space corridors along the top of the escarpment and along the Bow River. A series of public amenity areas along these corridors will foster a sense of place and provide extensive active and passive recreational opportunities. Access to the Bow River and a proposed park adjacent to the Bow River will provide valuable recreational space within the community.



Design with nature

Natural features, landscapes and viewsheds will be integrated into the community design. Site-specific Cluster Housing, innovative housing products and building forms sensitive to the Bow River valley will provide unique development opportunities and create a resilient, sustainable community.

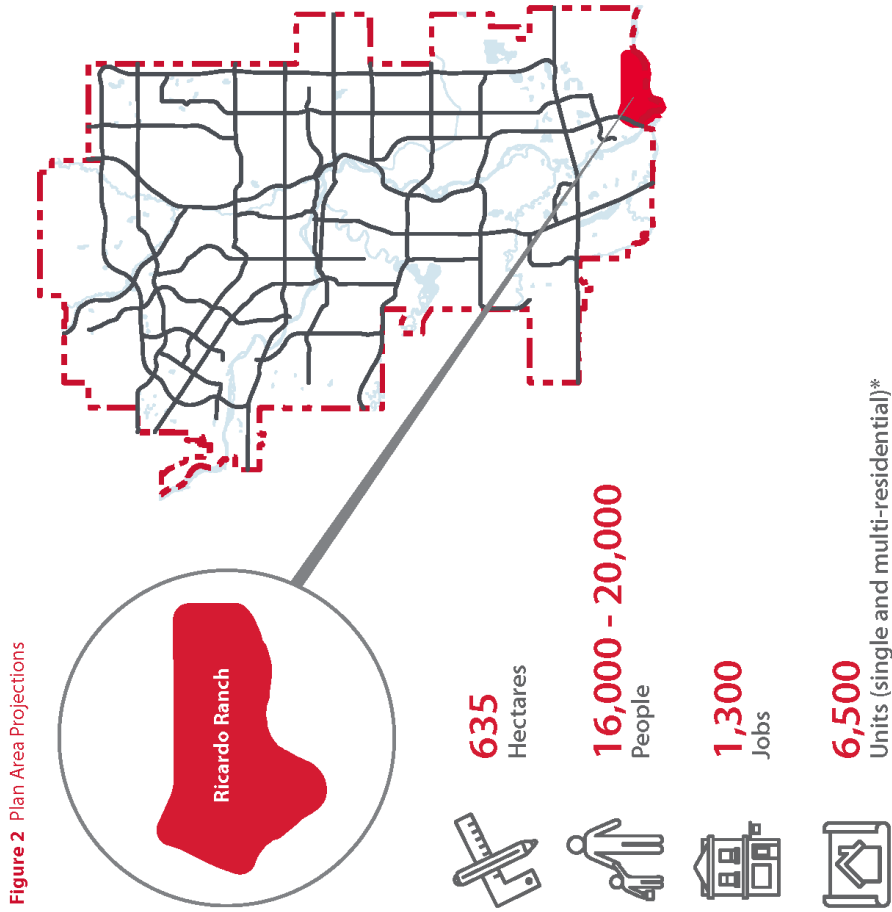
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Intent

To set the framework for the development of one complete community and four distinct neighbourhoods that provide a mix of land uses consistent with The City's planning and growth objectives.

Policies

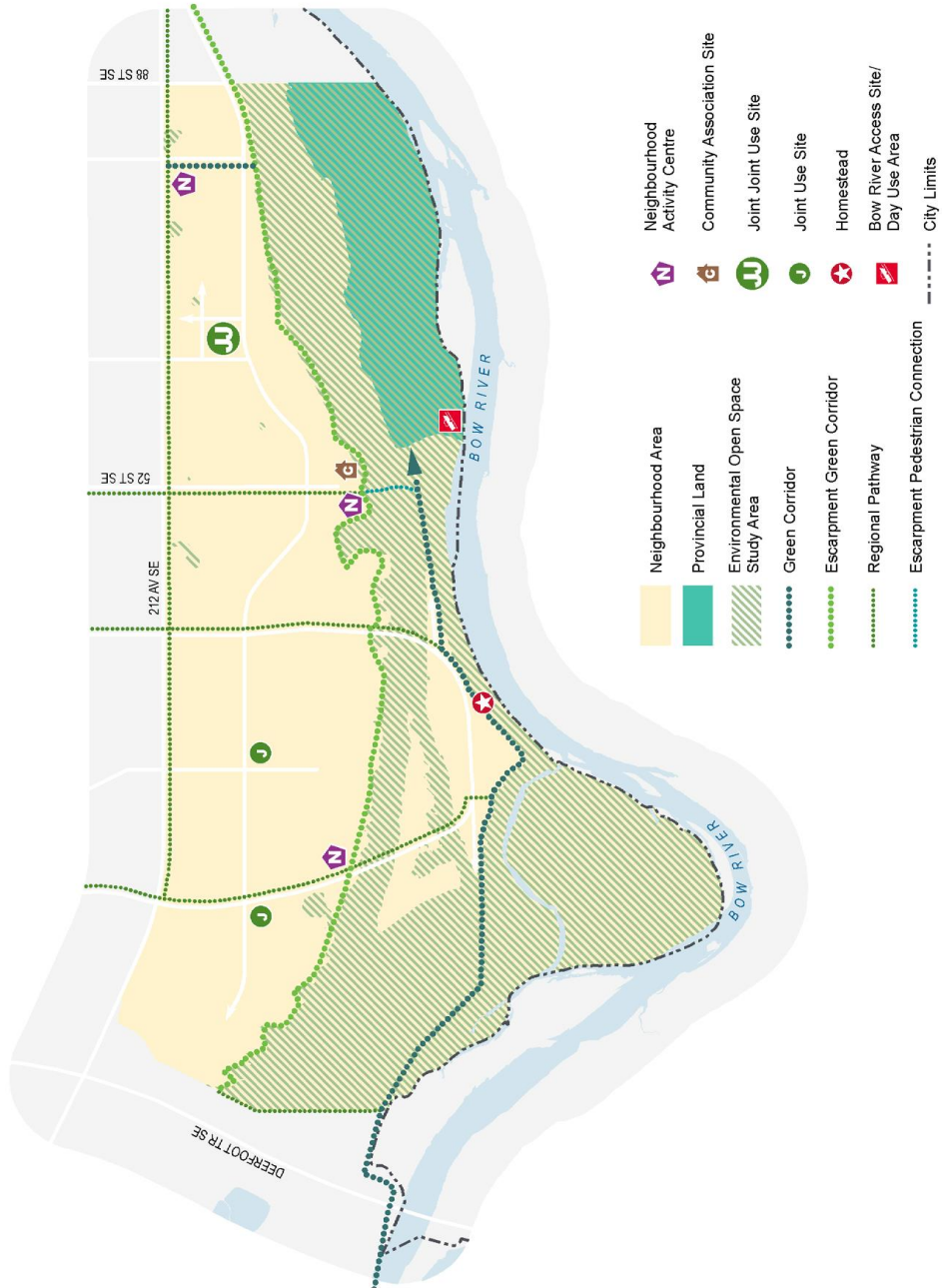
1. The elements on **Map 4: Land Use Concept** should be located as depicted.
2. Refinements to locations may be made during the Outline Plan/Land Use Amendment application stage in accordance with Section 7.1 Area Structure Plan Interpretation.

*Note: Jobs and population are estimates only and represent a blended development scenario that assumes a 60:40 split between single and multi-residential development. This number is subject to change as additional analysis and development scenarios are examined at more detailed stages of planning and development.

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Map 4 Land Use Concept



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Figure 3 Land Use Elements



Neighbourhood Area

Surrounding the activity centres, Neighbourhood Areas allow for an appropriate mix of residential and non-residential uses.



Neighbourhood Activity Centre

Neighbourhood Activity Centres (NACs) are the focal point of neighbourhoods and will feature higher density Multi-Residential Development, a central amenity area, a transit stop and non-residential uses.



Joint Use Site & Joint Joint Use Sites

Joint Use Sites (JUS) provide locations for schools and public recreation and community uses.



Community Association Site

A Community Association site (CA site) provides a location for Community Association uses.



Environmental Open Space (EOS) Study Area

Identifies lands that may be environmentally significant. Where land identified within the EOS Study Area is not protected or acquired by The City, it may be developed according to policies within the Plan.



Green Corridors

Green Corridors connect natural areas and provide places for people to walk and cycle in a natural environment.

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Escarpment Green Corridor

The Escarpment Green Corridor will be a contiguous natural, open space corridor, providing recreational opportunities along the top of the Bow River valley escarpment.



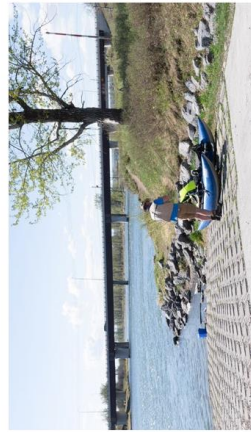
Homestead

An existing Homestead is located within the Plan Area. Opportunities will be explored to commemorate or preserve the Homestead while prioritizing public access to the river, minimizing flood risk and mitigating the potential for property damage.



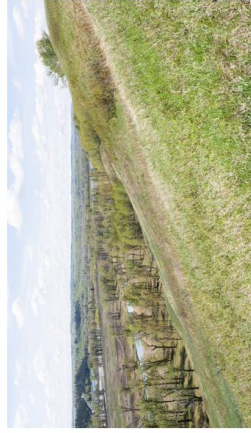
Provincial Land

A 60 hectare (150 acre) parcel of land owned by the Province is located within the Plan Area. Opportunities will be explored to create a natural environmental park within this land.



Bow River Access Site / Day Use Area

The Bow River Access Site and Day Use Area will provide opportunities for safe, environmentally responsible public access to the Bow River.



Escarpment Pedestrian Connection

The Escarpment Pedestrian Connection will provide a connection between the Neighbourhood 2/3 NAC and the green corridor located along the Bow River.



Regional Pathway

The Regional Pathway network provides cycling and walking connections within the Plan Area and to surrounding communities.

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3.1 Community and Neighbourhoods

Intent

To provide a framework for the development of a complete community with distinct neighbourhoods for approximately 16,000 to 20,000 residents. Urban design guidance throughout this section will ensure that the community is attractive, memorable and functional for future residents.

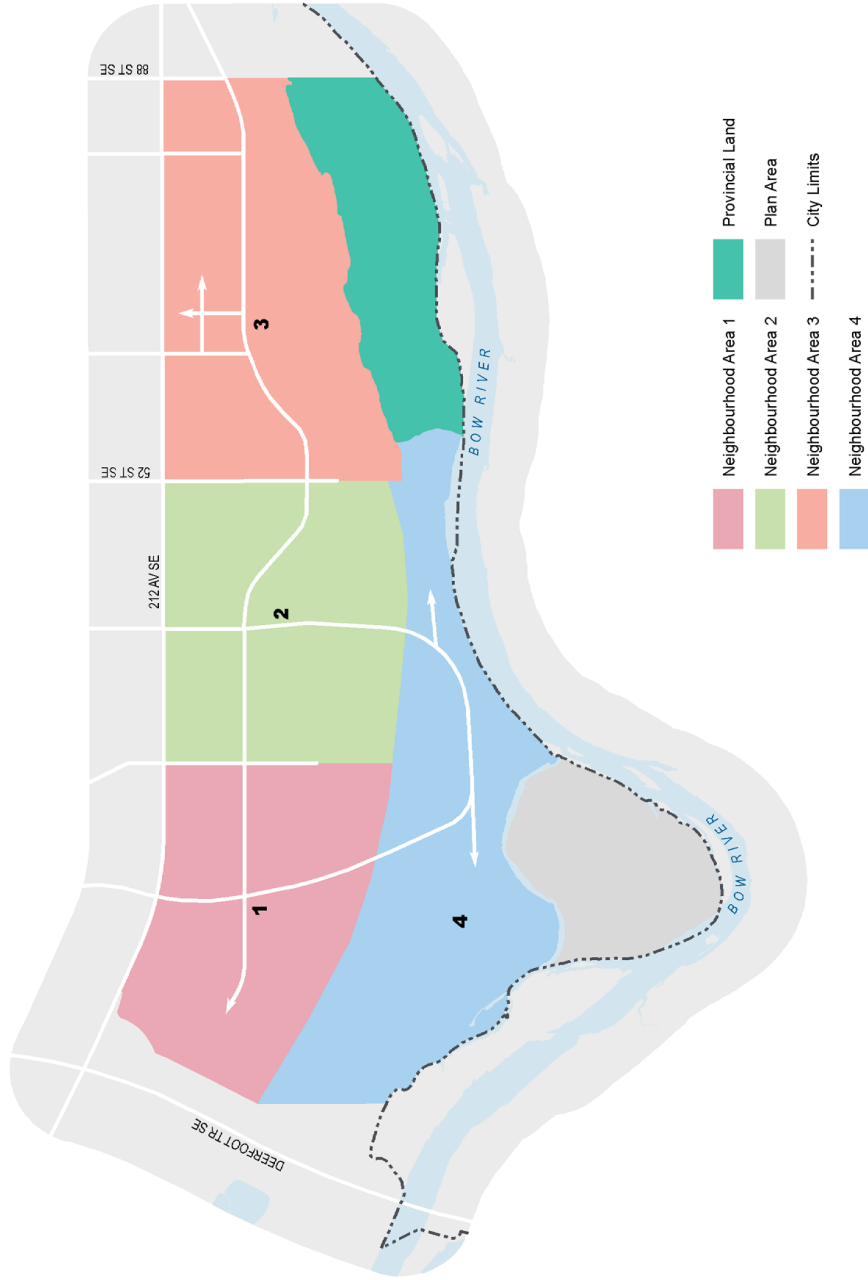
Policies

1. The Plan Area shall consist of one community with four neighbourhoods as depicted on Map 5: Community and Neighbourhoods.
2. Notwithstanding the NCPG policy on Neighbourhood size, the sizes of all Neighbourhoods as depicted on Map 5: Community and Neighbourhoods may be larger than the maximum size of 75 hectares (185 acres) due to significant natural features within those neighbourhoods.
3. The community name, street names, wayfinding infrastructure and other amenities such as signage, banners, landscaping and public art should reflect the Plan Area's natural features and Indigenous and ranching history.

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Map 5 Community and Neighbourhoods



3.2 Neighbourhood Areas

Four neighbourhoods will be provided within the Plan Area. Neighbourhoods 1, 2 and 3 are situated to the north of the Bow River valley escarpment. Neighbourhood 4 is situated within the Bow River valley.

Intent

To establish a variety of low- and medium-density residential development within pedestrian-oriented, vibrant Neighbourhood Areas.

Policies

1. Residential block lengths should not exceed 200 metres. Block alternatives greater than 200 metres may be considered, provided that a mid-block, publicly accessible pedestrian connection is provided. This connection can take the form of a walkway or open space.
2. Residential block structures should be designed to provide view corridors and sight lines to key destinations, amenity features and landmarks to promote community identity.
3. Development along the escarpment and within the Bow River valley should adhere to The City's Bird Friendly Urban Design Guidelines to reduce bird collisions with buildings.
4. Residential development should adhere to The City's Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Policy.

3.2.1 Neighbourhood 4

Located within the Bow River valley, development within Neighbourhood 4 will be sensitively integrated into this area through careful design consideration of access, building massing and form, and architecture to support the preservation of ESAs, provide regional open space connections and maintain the natural character of the Bow River valley.

1. All proposed access routes into Neighbourhood 4 shall be supported with appropriate studies and analysis during the Outline Plan/Land Use Amendment application stage to:
 - a. use existing access routes where possible; and
 - b. mitigate negative impacts to the slopes, escarpment and wetlands.

2. In accordance with Provincial guidelines, a setback distance of 1,000 metres is recommended from the existing great blue heron nesting colony. If development is proposed within 1000 metres of the great blue heron nesting colony, the applicant shall provide a mitigation plan, as a component of a Biophysical Impact Assessment (BIA), to determine strategies to minimize disruption to the colony. The strategies within the mitigation plan shall be implemented at the time of development.

3. To reduce the visual impact of development within the Bow River valley, reduce the impact on the natural environment and ensure the continuity of the open space network is maintained, design strategies should consider:
 - a. landscaping design and plant materials that are complementary to and supportive of the existing natural setting;
 - b. subdued earth tone cladding and natural building materials (e.g. composite and natural wood, stone) that reinforce the visual setting of the Bow River valley;
 - c. low-profile Cluster Housing, conservation subdivision design and/or Cottage Housing Cluster;
 - d. low-impact development stormwater management techniques such as bioswales, rain gardens, green roofs and pervious pavement;
 - e. sustainable building technologies including but not limited to green building standards, rainwater collection, natural daylighting and passive solar strategies; solar heating and passive homes;
 - f. reduced building heights to protect and maintain views of the Bow River valley;
 - g. use of the natural topography and avoidance of mass grading to create extensive level areas;
 - h. variation in roof heights and building form configurations to reduce building mass and provide architectural diversity and interest; and
 - i. screening portions of development by enhanced landscaping.

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4. Notwithstanding Policy 3.2.1 (3f), small pockets of medium density residential forms may be acceptable provided they meet the design considerations identified under Policy 3.2.1.

5. Frequent physical public access should be provided to the green corridor along the Bow River through parallel single-loaded streets, public walkways, and/or public open space entry points.

6. In accordance with the NCPG, each Neighbourhood within the Plan Area should achieve a minimum density of 20 units per gross developable hectare (8 units per gross developable residential acre). However, given potential access considerations, topographical constraints, presence of ESAs, and policies listed under Section 3.2.1, a lower density, to a minimum of 15 units per gross developable hectare (6 units per gross developable residential acre), may be permitted for Neighbourhood 4. Under this scenario, Neighbourhood 2 and/or Neighbourhood 3 must accept higher densities so the densities of these Neighbourhoods average to a minimum of 20 units per gross developable hectare (8 units per gross developable residential acre).



Solar thermal heating and solar photovoltaic panels.
Photo credit: David Dodge, GreenEnergyFutures.ca



An example of Cottage Cluster Housing.



The built environment will be designed to be compatible with the natural environment.



Neighbourhood 4 is located adjacent to the Bow River.

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3.3 Neighbourhood Activity Centres

Neighbourhood Activity Centres (NACs) are focal points within Neighbourhoods that contain transit supportive residential and non-residential uses. Connected to the surrounding Neighbourhood Area by a network of converging streets, bikeways, and pathways, NACs are designed to have a pedestrian-oriented environment and an active public realm.

Three NACs will be provided within each of Neighbourhoods 1, 2 and 3. NAC 1 will be located directly adjacent to the escarpment. NAC 2/3 will be located at the terminus of 52 Street S.E. directly adjacent to the escarpment. Given its location, NAC 2/3 may straddle the boundary of Neighbourhoods 2 and 3. NAC 3 will be located in the eastern portion of the Plan Area, close to 217 Avenue S.E.



NACs contain residential and non-residential uses with a focus on a pedestrian-oriented environment and the public realm.

Intent

To establish distinct elements and local characteristics of each NAC to ensure they are integrated into the Neighbourhoods and the overall community.

Policies

1. Each NAC should be located as depicted on **Map 4: Land Use Concept**.
2. Drive-thru commercial development should not be permitted within NAC 1 or NAC 2/3.
3. A NAC is optional in Neighbourhood 4 due to environmental constraints and proximity to amenities in other Neighbourhoods. The provision of a NAC in Neighbourhood 4 will be explored in more detail at the Outline Plan/Land Use Amendment application stage.

9. The non-residential component of NAC 1 and NAC 2/3 is encouraged to be integrated with the Escarpment Green Corridor to create a vibrant interface between the built and natural environment.
10. A NAC concept plan should be submitted at the Outline Plan/Land Use Amendment application stage. The concept plan shall address the integration of various land uses, the relationship between the buildings and the street, landscaping, amenity space and street character.

4. The boundaries of a NAC should not be bisected by an arterial or higher standard road.
5. NACs should be cohesively and comprehensively designed to ensure that strong, attractive pedestrian connections and circulations are provided.
6. Parking within a NAC should be provided on-street, underground or at the rear of buildings.
7. The walking distance of 700 metres from the surrounding Neighbourhood Area to a NAC may be exceeded in cases where the Neighbourhood is larger than the size outlined in the NCPG.
8. The amenity space required for NAC 1 and NAC 2/3 should be integrated with the Escarpment Green Corridor through direct pedestrian and cyclist connections.

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3.3.1 Neighbourhood Activity Centre 2/3 (NAC 2/3)

1. NAC 2/3 should be located at or near the terminus of 52 Street S.E. This NAC may straddle the Neighbourhood boundaries of Neighbourhoods 2 and 3.
2. Landmark buildings, with distinctive and iconic architectural features, may be located near the southern terminus of 52 Street S.E., provided that open views to the escarpment and the Bow River valley are provided.
3. NAC 2/3 shall be a minimum of 5 hectares (12 acres) and may include a portion of, or the entire Community Association site (CA site), subject to Section 3.7.
4. The amenity space requirement for NAC 2/3 may consist of a portion of the CA site provided that the design does not compromise the overall functionality of the CA site.

NAC 2/3 will be planned and designed as a vibrant mixed-use village core. Distinctive mixed-use buildings, commercial uses, higher-density Multi-Residential Development, dynamic open spaces and a CA site will create a unique destination within the community. Illustration is for conceptual purposes only.

3.4 Multi-Residential Development

Multi-Residential Development will be incorporated throughout the Neighbourhood Area and within the NACs in the Plan Area. To ensure that a fine grained network of streets and blocks supporting pedestrian connectivity is maintained, the ideal parcel size for multi-residential parcels is 1.0-1.5 hectares (2.5-3.7 acres). Larger parcels may be supported throughout the Plan Area provided that site permeability is facilitated.

Intent

To ensure that Multi-Residential Development in the Plan Area is pedestrian friendly, contributes to the neighbourhood scale street character, is integrated into the urban and natural environment, provides a variety of housing options, has good access to community amenities and services and is designed to maximize quality of life for Calgarians. Multi-Residential Development should be incorporated throughout the Neighbourhood Area of the Plan Area.

Policies

1. Multi-Residential Development should:
 - a. provide quality design that is visually interesting through the use of varied massing and generous façade articulation including the creative use of windows, doors, recesses, canopies, awnings, porches, balconies, mixed roof forms, and high-quality building materials;
 - b. minimize shadowing on adjacent development and open space;

- c. optimize sunlight exposure for all units;
- d. include a landscaped pedestrian connection between two or more adjacent multi-residential sites;
- e. contain a permeable internal street network that prioritizes pedestrian needs;
- f. have a continuous and comfortable internal pedestrian and green space network with design features such as a common amenity space, pocket parks, shared linear green space, pathways, and textured crosswalks to link to adjacent public sidewalks and surrounding developments;
- g. be street-oriented along all adjacent public streets and key internal streets with visible, well designed individual units and primary entrances;
- h. maximize landscaping and tree opportunities by discouraging surface parking, and
- i. diversify unit types and sizes with corner units addressing both streets.



Street-oriented Multi-Residential Development



Internal green space network

2. Multi-Residential Developments exceeding 1.5 hectares (3.7 acres) of land area should incorporate the following elements:
 - a. be designed in accordance with Policies 3.4 (1a-1i);

3.5 Flood Fringe

Portions of the Plan Area are within the Floodway and Flood Fringe of the Bow River, as depicted on Map 2: Plan Area Features. A significant portion of Neighbourhood 4 is in the Flood Fringe. During the flood of June 2013, the majority of the Flood Fringe in the Plan Area was inundated with flood waters. Development in the Flood Fringe is subject to municipal requirements for flood proofing, setbacks and building design.

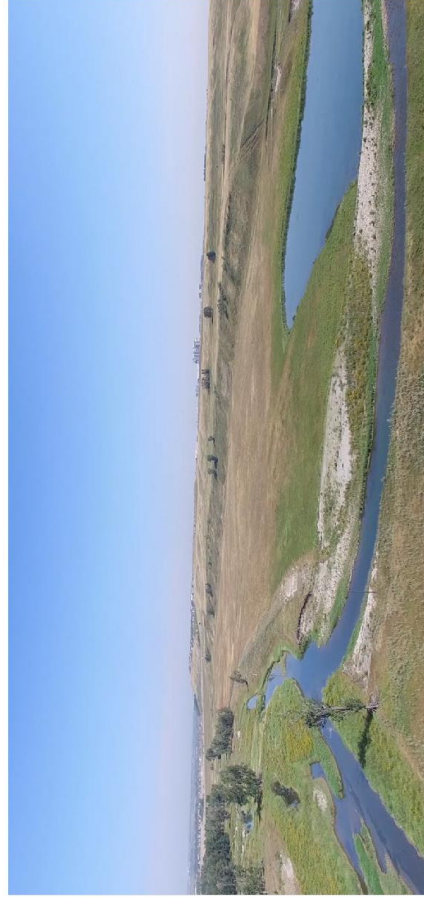
Through a collaborative process between The City, landowner groups, subject matter experts, and community and civic stakeholders prior to and during the Outline Plan/Land Use Amendment application stage, a detailed analysis will be performed to aid in the creation of optimized, resilient land use scenarios within the Flood Fringe lands. The analysis will comprehensively take into account development, flood and climate resilience, public safety, and environmental values. The process will help to reduce uncertainty and provide clarity for future resilient land use decisions within this tract of undeveloped Flood Fringe land along the Bow River.

Intent

To prioritize public safety and reduce private property risk associated with flooding and erosion, while protecting riparian functions, recreational opportunities, water quality, and aesthetics of the Bow River valley.

Policies

1. The policies within this section refer to the Flood Fringe as identified on Map 2: Plan Area Features, and correspond with lands identified as Flood Fringe on The City's regulatory flood maps. In the event that The City's regulatory flood maps are amended, the policies within this section will apply to lands identified by The City as Flood Fringe at the Outline Plan/Land Use Amendment or subdivision application stage.
2. The policies within Section 4.5: Environmental Open Space Study Area apply to the Flood Fringe area.
3. All development shall meet or exceed all applicable City Flood Fringe policies and regulations. A minimum 1 metre of additional freeboard above the Designated Flood Level should be incorporated into building, street and community design at the time of development permit or subdivision approval.
4. If residential land use is approved at the Outline Plan/Land Use Amendment application stage for lands within the Flood Fringe, the lands will be considered as part of the Neighbourhood Area within Neighbourhood 4 without requiring an amendment to the Plan.
5. Prior to the submission of an Outline Plan/Land Use Amendment application for lands within the Flood Fringe, the landowner should collaborate and engage with a working group convened by The City to optimize land use scenarios, increase flood and climate resilience, improve public safety, and promote environmental sustainability.



View of the Flood Fringe lands looking northwest.

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3.6 Joint Use Sites

Joint Use Sites (JUS) provide locations for the development of public or separate schools together with playfields on sites dedicated as reserve land. Joint Use Sites (JJUS) provide combined locations for elementary and junior/middle schools with shared playfields on sites dedicated as reserve land.



Intent

To provide appropriate locations for schools and playfields on sites dedicated as reserve land.

Policies

1. JUS and JJUS should be located in the Plan Area as depicted on **Map 4: Land Use Concept**.
2. JUS and JJUS should be allocated to the school boards as identified in **Appendix A: Joint Use Site Requirements**.
3. JJUS sites require two collector street frontages for each school building.

3.7 Community Association Site

The CA site provides for the recreational, cultural, physical and social needs of community residents. Facilities and amenities developed on the CA site may include community gardens, ice rinks, seasonal farmers markets, open air stages and gathering spaces.



Intent

To ensure that the CA site is suitably located and developed as a programmable, multi-functional space that creates a sense of identity and belonging in the community.

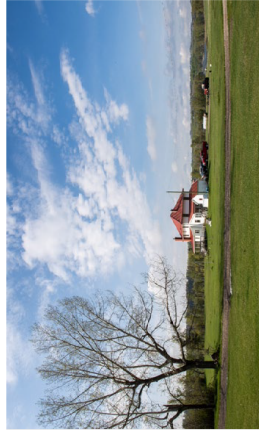
Policies

1. The CA site should be located as depicted on **Map 4: Land Use Concept**.
2. The CA site should have direct access to the Regional Pathway network.
3. The land required for the Escarpment Green Corridor shall not be part of the CA site.
4. As per The City's Development Guidelines and Standard Specifications: Landscape Construction, CA sites are to be allocated as parcels of 1.2-1.6 hectares (3 - 4 acres). Notwithstanding this standard size requirement, the CA site size may be reduced to 0.8 - 1.2 hectares (2 - 3 acres) if the following points are met:
 - a. the CA Site is located adjacent to or integrated with the Neighbourhood 2/3 NAC; and
 - b. the CA site is located directly adjacent to the escarpment and the Escarpment Green Corridor and not separated by a street or development.
5. Subject to Section 3.3.1, the amenity space requirement for NAC 2/3 and the CA site may be combined.
6. If the CA site is not allocated and designed as per Section 3.7 (1-4 inclusive), the CA site shall be allocated as a standard CA site size in the amount of 1.2 - 1.6 hectares (3 -4 acres).

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3.8 Homestead

An existing Homestead is located within the Plan Area as per **Map 4: Land Use Concept**. The existing residence within the Homestead was constructed in 1918. Some of the existing outbuildings within the Homestead date back to 1891.



Intent

To recognize the long-term and iconic presence of the Homestead at its current location by balancing efforts to preserve the existing Homestead, prioritize public access along the Bow River, minimize flood risk and mitigate the potential for property damage.

Policies

1. Portions of the existing Homestead, including the existing residence, are located within the Environmental Open Space (EOS) Study Area. At the Outline Plan/Land Use Amendment application stage, if the lands containing the existing Homestead are designated as a land use district in which the existing Homestead is not listed as a permitted or discretionary use, the existing Homestead will be permitted to remain at its current location as a non-conforming use and non-conforming building pursuant to the Municipal Government Act (MGA) and The City's Land Use Bylaw (LUB).
2. In the event that the lands containing the Homestead are designated as a land use district in which the Homestead is listed as a permitted or discretionary use at the Outline Plan/Land Use Amendment application stage, opportunities should be explored to retain and repurpose the Homestead as a component of private development.
3. If the lands containing the Homestead are subject to a subdivision application, they may be required to be dedicated as Environmental Reserve (ER) or Municipal Reserve (MR), at the discretion of the Subdivision Authority. If the lands are dedicated as ER or MR, the Homestead may be required to be removed or relocated from its current location, subject to subdivision approval conditions.
4. If the existing Homestead is added to The City's Inventory of Evaluated Historic Resources and/or designated as a Provincial Historic Resource, opportunities should be explored to incorporate it into the public open space network.
5. If the Homestead is required to be removed and/or relocated, opportunities should be explored to:
 - a. commemorate the Homestead with interpretative signage or a monument at its existing location; and/or
 - b. relocate and/or incorporate the Homestead, or portions thereof (e.g. existing residence) into development proposals within the Plan Area.

3.9 Older Adult Housing

The inclusion of older adult housing and seniors care facilities within the Plan Area will accommodate the needs of an aging population and allow members of the community to age in place. Access and exposure to the natural landscape will provide mental and physical health benefits for seniors.



Intent

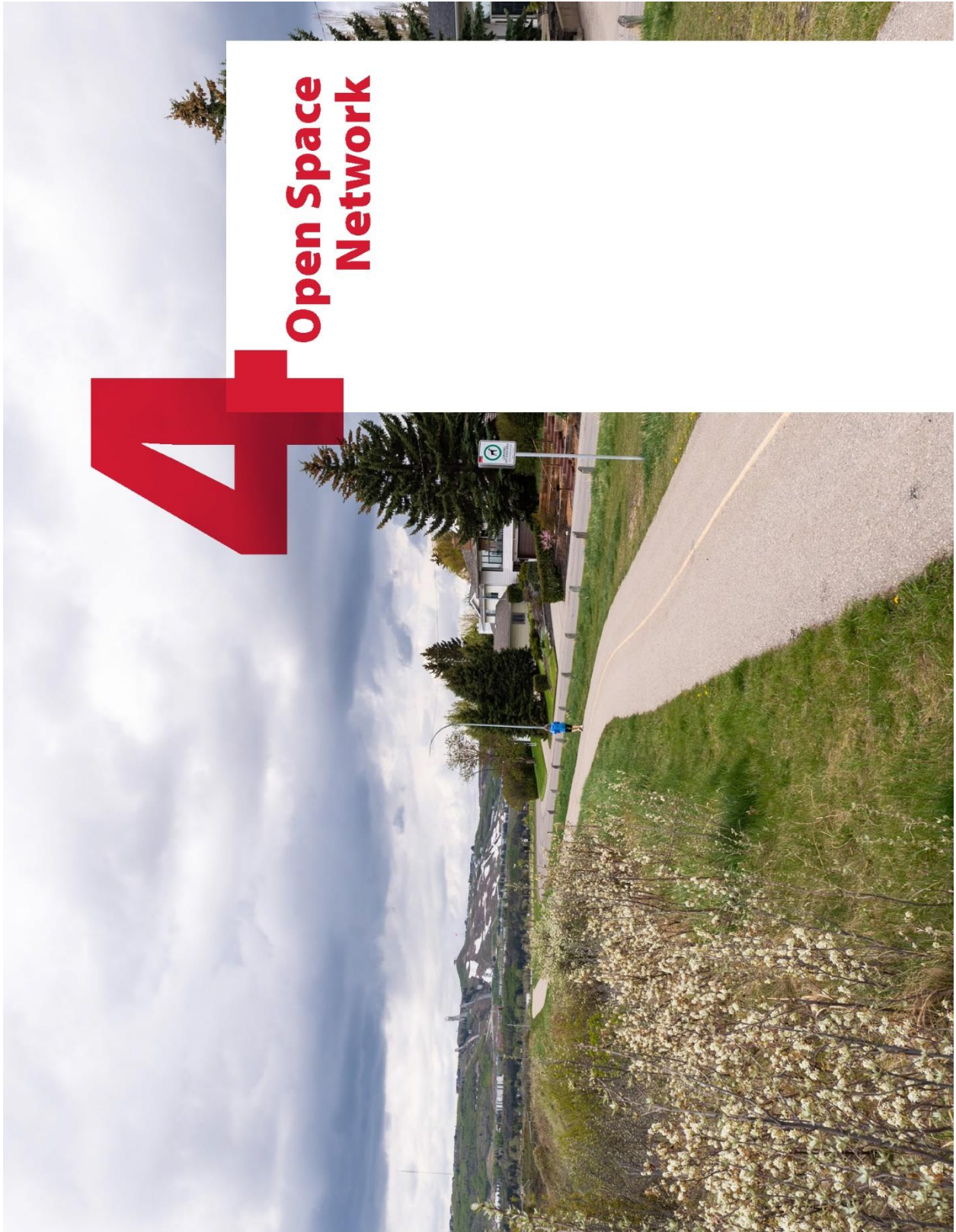
To accommodate the residential needs of an aging population and allow residents of the community to age in place in a manner that provides for inclusion and access to services and amenities.

Policies

1. Older adult housing should be:
 - a. located in close proximity to open space, green corridors, pathways, parks and transit stops;
 - b. located in close proximity to active neighbourhood uses such as the CA site and NAC;
 - c. designed to accommodate changing mobility needs to enable residents to age in place;
 - d. designed to be universally accessible; and
 - e. designed to provide a central outdoor amenity space that is universally accessible and includes:
 - i. an abundance of soft landscaping;
 - ii. hardscaping;
 - iii. weather-protected outdoor structures; and
 - iv. ample seating opportunities.

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4.1 Open Space

Intent

To create an open space network (see Map 6: Open Space Network) that provides a variety of publicly accessible recreational opportunities, while protecting environmentally and culturally significant areas. The design of the open space network will capitalize on views of the Rocky Mountains and the Bow River valley to provide a distinctive and memorable public experience for residents and visitors.



Parks and open space provide amenities within Neighbourhoods.

Policies

1. Open spaces should be situated at visible focal points and terminating vistas of streets.
2. MR dedication is encouraged within EOS areas that do not qualify as ER provided that:
 - a. adequate MR dedication has been provided for JUS, JJUS and the CA site; and
 - b. adequate MR dedication has been provided to ensure local open spaces are accessible within a five-minute walk of all residents.
3. Key viewsheds should be identified at the Outline Plan/Land Use Amendment application stage and should be incorporated into the design of the open space network.
4. The open space network should be designed to convey unique themes through the appropriate use of park naming, signage, wayfinding, planting, landscaping and other design features.
5. Where Historic Resources are located within the open space network, including City-owned lands, they should be left undisturbed. Celebration and preservation of Historic Resources and pre-contact land use associated with such sites is encouraged, in accordance with The City's Cultural Landscape Strategic Plan.



Key viewsheds incorporated into open space network



Open space located at the terminus of street.

4.2 Indigenous Elements

As part of the creation of the Plan, voluntary Indigenous engagement was undertaken with Traditional Knowledge Keepers from the Treaty 7 peoples, which include the Blackfoot Confederacy (comprising the Siksika, Piikani, and Kainai First Nations), the Tsuut'ina First Nation, the Stoney Nakoda peoples (comprising the Chiniki, Bearspaw, and Wesley First Nations), the Métis Nation of Alberta, Region 3 and urban Indigenous communities. Grounded in the principles of collective spirit and wisdom, the Traditional Knowledge Keepers shared their worldviews, experiences and knowledge based on their connections to the land, environment and to all other living beings.



Public art could include features such as this sculpture that sits on the original site of the Elbow River Camp, Sun Tree Park within the Calgary Stampede grounds. Designed to look like a half tipi, the semi-circle design depicts the historic iconography that represents the Kainai, Piikani, Siksika, Stoney Nakoda and Tsuut'ina Nations. Photo Source: Calgary Stampede.

Intent

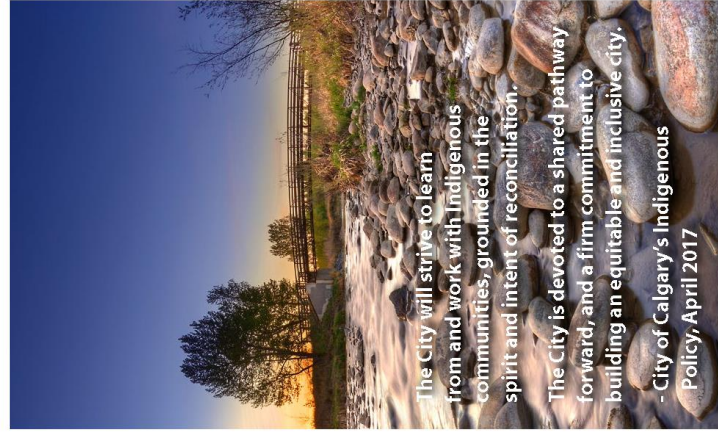
To recognize, understand, and respect the Bow River valley for its spiritual and traditional connections and purposes, as it is a significant and sacred feature for Indigenous peoples.

Policies

1. Areas of the open space network within and adjacent to the Bow River valley are encouraged to be planned and designed with collaborative input and insight from Treaty 7 First Nations and the Métis Nation of Alberta, Region 3 in sustained, respectful, and appropriate ways.
2. The open space network is encouraged to incorporate the worldviews, oral histories, understandings, and traditional practices associated with the Bow River valley. Application of elements may include, but are not limited, to the following:
 - a. creating interpretative signage and/or design elements that enable Indigenous worldviews from the traditional territory in relation to the Bow River valley to be understood and respected by a wider audience;

- b. integrating wayfinding that accounts for Treaty 7 First Nations and Métis languages;
- c. providing visual and physical connections to key natural landscape features through ecological corridors;
- d. recognizing and celebrating the sacredness of water through protection, restoration and/or enhancement.

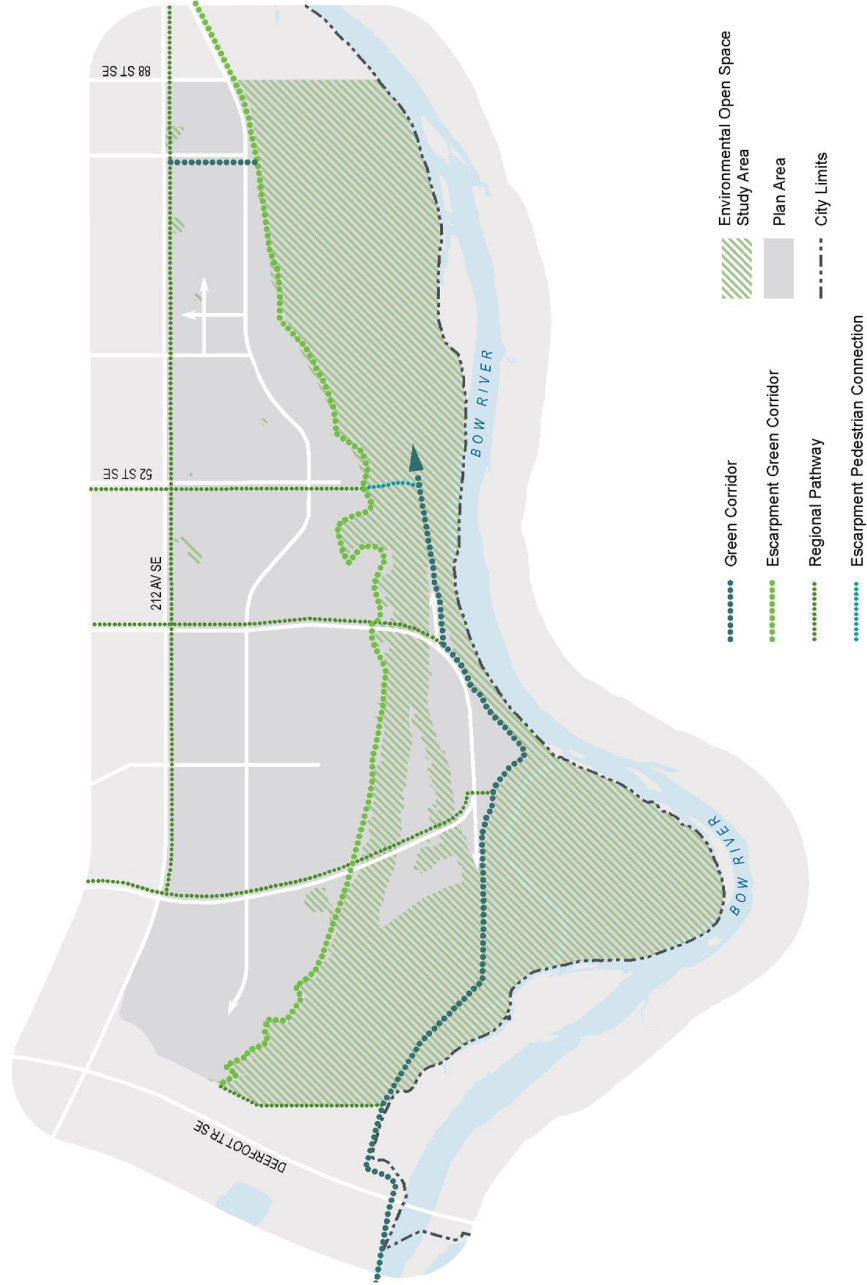
- e. protecting or re-establishing native plant and tree species that reflect the biodiversity of the traditional territory, which also act as seasonal markers and attractors of fauna;
- f. designing place-based public art and monuments; and
- g. preserving and celebrating Historic Resources.



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Map 6 Open Space Network



4.3 Escarpment Green Corridor

The Bow River valley escarpment is a unique, scenic landscape with significant intrinsic value. To celebrate this landscape feature, a contiguous, natural and publicly accessible open space corridor will be provided along the entire top of the escarpment from Deerfoot Trail to 88 Street S.E. The corridor will be comprised of a combination of MR, ER, and public road right-of-way. Infrastructure within the corridor will include a Regional Pathway and small amenity areas. Scenic stretches of residential streets adjacent to the escarpment, combined with quality public access points, will increase the visual presence of the escarpment and provide public access for the entire community. In addition, significant public access to the escarpment will provide natural surveillance of the corridor, facilitate social interaction and contribute to a sense of public ownership and neighbourhood identity. At-grade commercial uses within the NACS that front directly onto the Escarpment Green Corridor will create a vibrant interface while providing a unique place-making experience within the Plan Area.

Intent

To provide a contiguous, natural and publicly accessible open space corridor along the entire top of the Bow River valley escarpment that celebrates this unique landscape feature and provides amenity and recreational opportunities for residents and visitors. Enhanced visible and physical public access to the Escarpment Green Corridor will be balanced with private development interests.



Continuous Regional Pathway along the escarpment.



Small amenity areas should be provided along the Escarpment Green Corridor.

Policies

1. The Escarpment Green Corridor should be located as depicted on Map 4: Land Use Concept.
2. In the event that alterations are proposed and approved to the existing escarpment, the Escarpment Green Corridor should be relocated to the top of the retained escarpment.

3. The Escarpment Green Corridor should be a contiguous, natural open space comprising MR and ER lands and/or road right-of-way. See Figure 4: Escarpment Green Corridor (conceptual).

4. A series of small amenity areas should be located at intervals of 300 to 400 metres along the Escarpment Green Corridor and should be designed to:
 - a. incorporate elements such as native plantings, seating, public art, outdoor fitness equipment, wayfinding information and/or interpretive signage highlighting the Indigenous and/or ranching history and biophysical characteristics of the Plan Area; and

- b. locate programming elements within MR lands. The minimum size requirement for MR parcels as stated in The City's Open Space Plan, may be relaxed where deemed appropriate by the Approving Authority.

5. A continuous Regional Pathway:
 - a. shall be located along the entire length of the Escarpment Green Corridor;
 - b. should be located in MR lands or as part of the road right-of-way; and
 - c. may be located within ER, at the discretion of the Approving Authority.

6. Where the Regional Pathway is located within MR lands, the associated MR parcel should be a minimum of 10 metres wide.

7. In order to achieve the intent of Section 4.3, a target of 25-30 per cent of the length of the top of the escarpment should be bound by a combination of the following:

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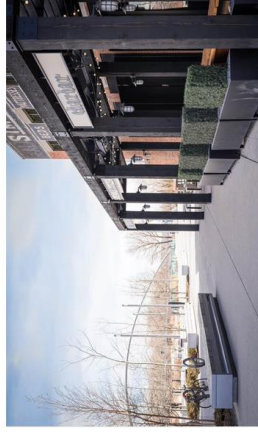
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Scenic escarpment streets provide high quality views of the Bow River valley and provide public access to the escarpment.



Public entry points provide public access to the Escarpment Green Corridor.



At-grade publicly accessible commercial uses fronting onto the escarpment will create a vibrant interface.

- a. **Scenic escarpment streets.** Scenic escarpment streets are residential streets that are directly adjacent to and parallel to the Escarpment Green Corridor. These streets should be located along key stretches of the Escarpment Green Corridor that provide high quality views of the Bow River valley. Additionally, scenic escarpment streets should be located within and adjacent to the NACs to enhance the character and identity of these mixed-use, pedestrian-oriented focal points.
- b. **Public entry points.** Public entry points are publicly accessible openings that connect a public street to the Escarpment Green Corridor. They are generally equal to a lot depth in length and range from a 3-metre wide engineered walkway, to a minimum 10-metre wide MR parcel. They should be located at the terminus of public streets that run perpendicular to the Escarpment Green Corridor and in other strategic locations. All

public entry points should provide quality access and safe passage for pedestrians and cyclists in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).

- c. **At-grade publicly accessible commercial uses.** The commercial component of NAC 1 and NAC 2/3 are encouraged to be directly accessible from the Escarpment Green Corridor to create a vibrant interface. Commercial spaces should be located and designed to have their primary entrance or outdoor amenity space directly adjacent to and/or accessible from the Escarpment Green Corridor.
- d. **Public parks.** High-quality publicly accessible open spaces, including the CA site and sub-neighbourhood parks (or larger), should be located along the escarpment to provide amenity space and enhance the recreational component of the Escarpment Green Corridor.

These spaces shall connect public streets to the Escarpment Green Corridor.

- 8. **With the submission of each Outline Plan/Land Use Amendment application that includes lands containing the Escarpment Green Corridor, a tabulated data table and supporting rationale shall be provided demonstrating how the intent of this section and the target identified under Section 4.3 (7) may or may not be achieved.**
- 9. **Development fronting onto scenic escarpment streets and adjacent to the Escarpment Green Corridor should have high-quality building materials and landscape design, and architectural interest.**
- 10. **Residential development and neighbourhood block design directly adjacent to the Escarpment Green Corridor should consider the following design strategies:**

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Public parks along the escarpment provide amenity space and enhance the recreational component of the Escarpment Green Corridor.



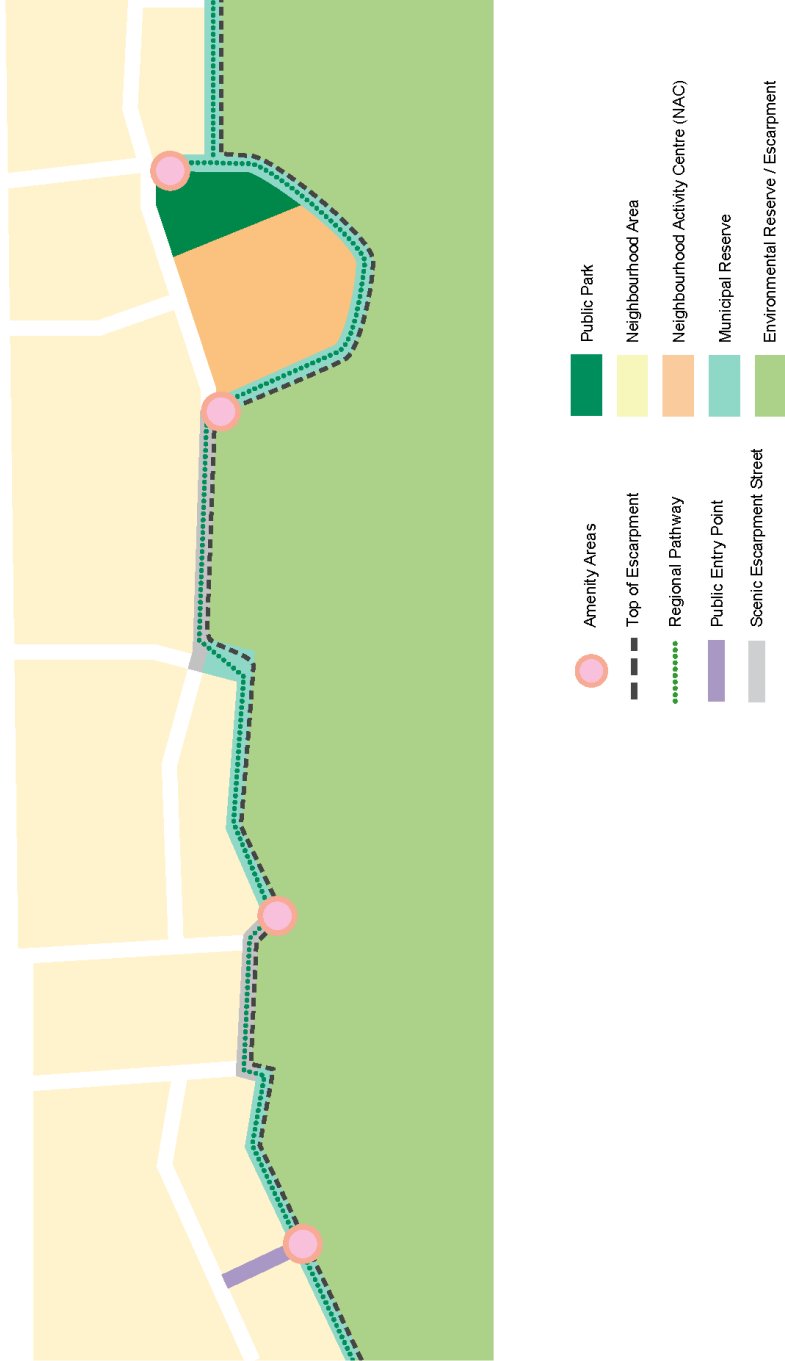
Visually permeable fencing provides an appropriate interface between private development and the Escarpment Green Corridor.

- a. installing visually permeable fencing including chain-link, post and cable or wrought iron;
 - b. connecting internal pathways of Multi-Residential Development to the Regional Pathway; and
 - c. orienting block structure so north-south streets terminate at public entry points or public parks.
11. Curb extensions should be provided at intersections along scenic escarpment streets, public entry points and public parks to facilitate pedestrian movement, mitigate vehicular speeds, and define on-street parking spaces.
12. An alternative design standard for scenic escarpment streets should be developed and submitted at the Outline Plan/Land Use Amendment application stage. The alternative design standard should include the following:
- a. travel lanes in both directions;
 - b. parking along the south side of the street;
 - c. curb and gutter along both sides of the street;
 - d. a Regional Pathway along the south side of the street, within the road right-of-way;
 - e. a sidewalk along the north side of the street;
 - f. street lighting with fixtures conforming to dark sky principles; and
 - g. street trees. (Note: While street trees are generally required along both sides of residential streets, this requirement may be relaxed on the south side of the street in order to accommodate a reduced cross-section width where appropriate).

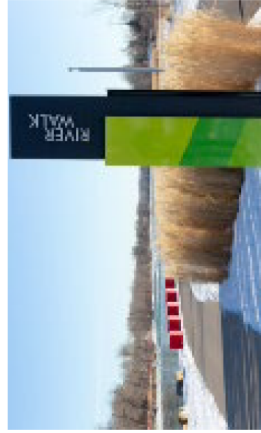
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Figure 4 Escarpment Green Corridor (conceptual)



4.4 Regional Pathway, Green Corridors, and Escarpment Pedestrian Connection



Intent

To provide pedestrian and cyclist connections between local destinations and among neighbourhoods within and outside of the Plan Area.

4.4.1 Regional Pathway

Policies

1. The Regional Pathway network should be located as depicted on **Map 4: Land Use Concept**.
2. The Regional Pathway network should connect to the existing Regional Pathway network in the community of Cranston. The Regional Pathway alignment should follow the course of the Bow River and the pathway design must be coordinated with Alberta Transportation and The City.
3. Regional Pathway alignments may be refined, but not removed, at the Outline Plan/Land Use Amendment application stage.

4. The Regional Pathway network should be located outside of the Floodway and outside of any areas of slope stability concern.
5. As per **Map 4: Land Use Concept**, a north-south Regional Pathway is identified adjacent to the Deerfoot Trail S.E. right-of-way. At the Outline Plan/Land Use Amendment application stage, if feasible and subject to provincial approval, a Regional Pathway should be located along the existing stormwater infrastructure access road located within the Deerfoot Trail S.E. right-of-way.

4.4.2 Green Corridors

Green corridors are the recreational component of Environmental Open Space, providing pathways and linking ecological networks. Two green corridor alignments will be located in the Plan Area. The green corridor alignment in the eastern portion of the Plan Area will connect the Escarpment Green Corridor to the green corridor in Rangeview to the north. The other green corridor will be located adjacent to the Bow River, connecting a Regional Pathway in Cranston to the provincial land.

Intent

To connect natural areas and community amenities through linear green spaces and to provide places for walking and cycling in a natural environment.

Policies

1. The green corridor network should be located as depicted on **Map 4: Land Use Concept**.
2. The green corridor should be characterized by native plantings.

3. The green corridor should be a minimum of 10 metres wide and accommodate a Regional Pathway.
4. Frequent physical public access should be provided to the green corridor along the Bow River through parallel single-loaded streets, public walkways, and/or public open space entry points.

4.4.3 Escarpment Pedestrian Connection

The Escarpment Pedestrian Connection will be a Regional Pathway, local pathway or trail that connects the Neighbourhood 2/3 NAC to the lower lands and the provincial land.

Intent

To provide a pedestrian connection between the Neighbourhood 2/3 NAC and the green corridor located along the Bow River.

Policies

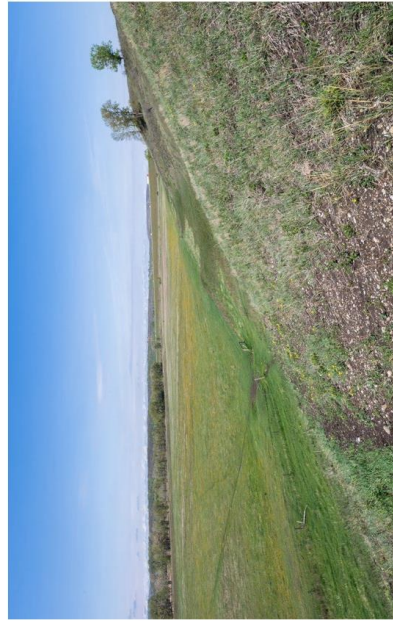
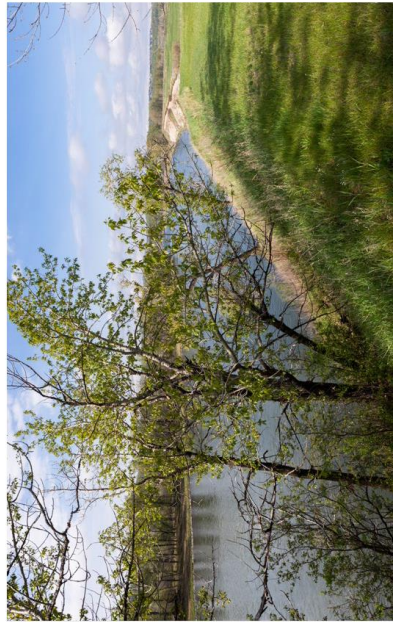
1. The Escarpment Pedestrian Connection should be generally located as depicted on **Map 4: Land Use Concept**.
2. The exact location of the Escarpment Pedestrian Connection will be further identified at the Outline Plan/Land Use Amendment application stage for Neighbourhood 2 or Neighbourhood 3.
3. If the Escarpment Pedestrian Connection cannot be accommodated at this general location due to grading constraints or significant impacts to the natural area, it may not be required at the discretion of the Approving Authority. If the Escarpment Pedestrian Connection is not provided, a Plan amendment will not be required.

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4.5 Environmental Open Space Study Area

The EOS Study Area includes wetlands, riparian areas, Flood Hazard Areas, escarpment, slopes, and ESAs. Refer to **Appendix B: Ecological Background Information** for additional information.



44 Ricardo Ranch Area Structure Plan

Intent

To conserve and protect natural areas and ecological services through the management of surface and groundwater quantity and quality, maintenance of riparian corridors, retention of natural features and landscapes, and connections between the ecological network and developed portions of the Plan Area. The Bow River valley has regional significance, is one of the main components of the city's open space system, and is one of the defining elements giving character to the city. Portions of the Bow River valley in the Plan Area should be conserved and protected as EOS and future development shall be appropriately integrated with this conserved area.

Policies

1. Lands in the Bow River valley that qualify as ER such as slopes, ravines, coulees, waterbodies and wetlands shall be dedicated as ER.
2. The existing topography of the Bow River valley escarpment should be maintained. Should development occur within and along the escarpment, all development should adhere to the City's Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Policy.
3. Streets and associated road rights-of-way and development should be designed to minimize disturbance to the escarpment. Any proposed impacts to the escarpment, including backslapping for any roads, should be identified at the Outline Plan/Land Use Amendment application stage.
 4. Where lands do not qualify as ER:
 - a. they may be dedicated as MR or acquired by The City through other means (e.g. ecological gifting,

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4.6 Provincial Land



Land owned by the Province is located within the Plan Area and generally identified on **Map 4: Land Use Concept**.

Intent

To explore opportunities for a public natural environment park within the provincial land.

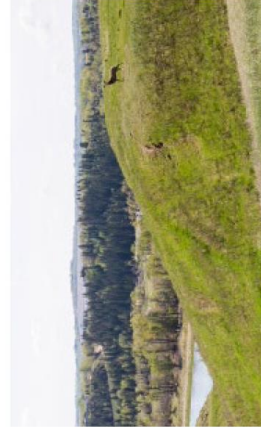
Policies

1. The City and the Province should explore opportunities to use the entire provincial land, or a portion thereof, as a natural environment park.
2. The City and the Province should explore opportunities to develop a Bow River Access Site and Day Use Area within the provincial land, subject to Section 4.7.

corridors through and around the community so wildlife is attracted to areas designed to allow safe movement; and

- c. collision mitigation planning for streets.
7. Multi-Residential Development and commercial development adjacent to EOS should:
 - a. provide pedestrian access between the private property and EOS;
 - b. provide a shadow study at the Development Permit stage to avoid shadowing impacts on EOS;
 - c. avoid solid fencing along the property line between the development and EOS; and
 - d. allow for privately owned, publicly accessible gathering space to be integrated with EOS.

8. Due to river morphology concerns and potential for flooding, buildings should not be located within the 200-year Bow River Meander Belt as identified on **Map 2: Plan Area Features**.



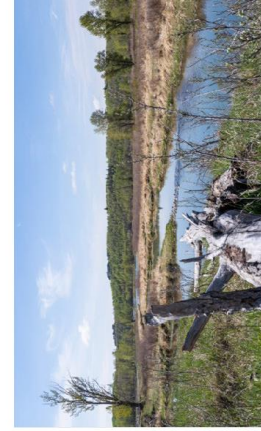
Conservation Easement, Conservation Reserve, donation, purchase);

- b. they may be protected through incorporation into community design through sensitive site and building design; or
- c. they may be developable in accordance with Policy 7.1 (4).

5. Natural drainage courses within the Plan Area should be preserved as per the approved Ricardo Ranch Master Drainage Plan. (Master Drainage Plan).

6. The Plan Area has higher wildlife conflict potential due to development being proposed in the Bow River valley and the Provincial Key Wildlife and Biodiversity Zone. Strategies to avoid wildlife conflicts should be developed during the Outline Plan/Land Use Amendment application stage and may include, but not limited to:

- a. appropriate buffers between wildlife use areas (e.g. escarpments, ravines, riparian areas) and developable areas;
- b. designing future development to allow wildlife



4.7 Bow River Access Site and Day Use Area



The Bow River provides opportunities for social, recreational, economic and environmental well-being in the city. An existing river access site, otherwise known as Policeman's Flats, is located directly across the river from the Plan Area in Foothills County. Due to river morphology movement, access and parking concerns, a new river access site has been identified in close proximity to the existing site. A future river access site is identified within the Plan Area in both The City's River Access Strategy and the Province's Bow River Access Plan.

Intent

To explore opportunities for easy, safe, legal and environmentally sustainable river access to the Bow River for watercraft launch and egress.



Policies

1. A new Bow River Access Site and Day Use Area should be generally located as depicted on Map 4: Land Use Concept. The precise location should be examined in combination with the review and acceptance of studies related to geomorphology, river hydraulic analysis and biophysical impacts.
2. The new Bow River Access Site and Day Use Area should be located, designed, constructed, maintained and operated in accordance with The City's River Access Strategy.
3. The new Bow River Access Site and Day Use Area shall be accessed via a public street that is designed to accommodate all users including pedestrians and cyclists.
4. Public street access to the new Bow River Access Site and Day Use Area should minimize impacts to slopes, ravines, ESAs, and other natural features within the Plan Area.



5. The existing Bow River Access Site and Day Use Area is a key recreational amenity within the Bow River valley that is enjoyed by people in the region. The City should consult with Foothills County to support enhanced communication regarding the potential redevelopment/relocation of the new Bow River Access Site and Day Use Area.
6. Ancillary infrastructure such as parking areas, washrooms and picnic areas associated with the new Bow River Access Site and Day Use Area, should be located outside of the Floodway.

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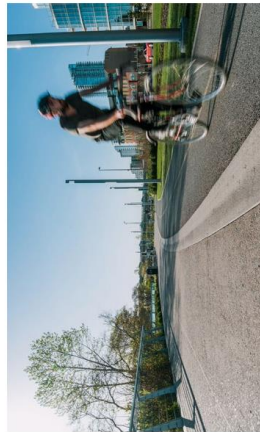
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5.1 Pedestrian and Cyclist Circulation

Pedestrian and cyclist circulation is essential to creating a vibrant and healthy community. Safe and accessible pedestrian and cyclist circulation provides residents, employees and visitors to the Plan Area with increased mobility options.



Intent

To provide safe, direct, well-connected, convenient and attractive pedestrian and cyclist connections within the Plan Area.

Policies

1. In accordance with The City's Complete Streets Policy, all streets within the Plan Area shall accommodate active modes.
2. A wayfinding system should be implemented throughout the Plan Area to provide directions to destinations for pedestrians and cyclists.

5.2 Transit Network

Transit is a high priority mode of transportation as it provides affordable and sustainable mobility options for the community. Transit service will be provided throughout the Plan Area, will connect to adjacent communities and connect to the nearby Seton LRT station.



Intent

To provide direct, convenient, and efficient transit service within the Plan Area that also connects to the wider transit network.

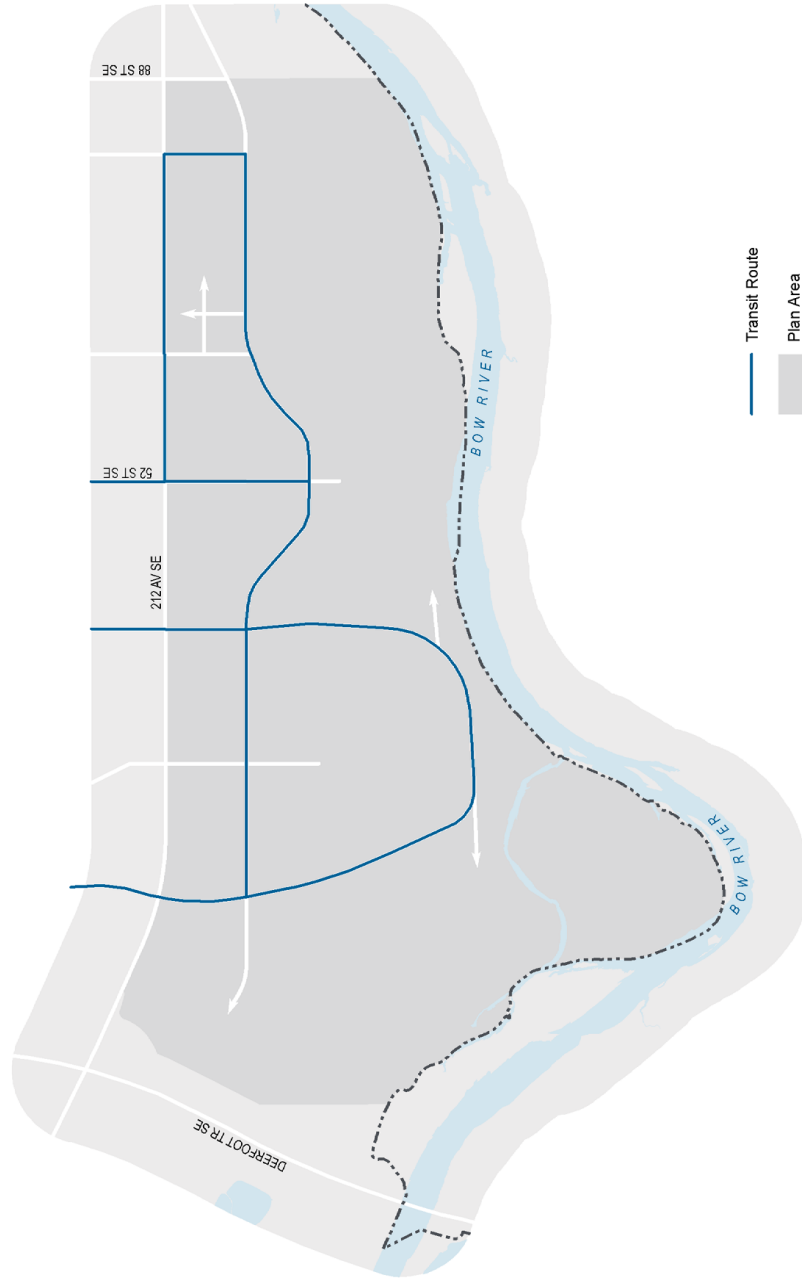
Policies

1. The transit network should be located as depicted on **Map 7: Transit Network**.
2. Community design should enable transit routes that minimize the number of turns while providing maximum community coverage.
3. All streets accommodating temporary phased or permanent transit service shall be a collector or higher-order street classification.
4. A transit coverage plan must be provided with the submission of any combined Outline Plan/Land Use Amendment applications within the Plan Area.
5. If development is approved in Neighbourhood 4 within the Flood Fringe lands as depicted on **Map 2: Plan Area Features**, the transit network may be modified to accommodate residents living within this area without an amendment to the Plan.

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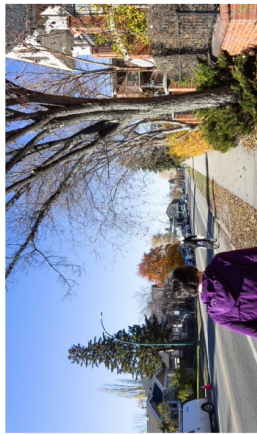
Map 7 Transit Network



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5.3 Street Network

The street network within the Plan Area will be an integrated, multi-modal transportation system that supports land use, provides increased mobility choices for citizens, promotes vibrant and connected Neighbourhoods, protects the natural environment and supports a local and prosperous economy. The street network, as depicted on **Map 8: Street Network**, identifies arterial streets, collector streets and liveable streets within the Plan Area. The residential street network will be delineated as part of an Outline Plan/Land Use Amendment application.



Intent

To delineate the street network within the Plan Area to ensure that all modes of transportation are functional, safe, efficient and responsive to the natural environment.

To value streets as character-building and place-making components of the community.

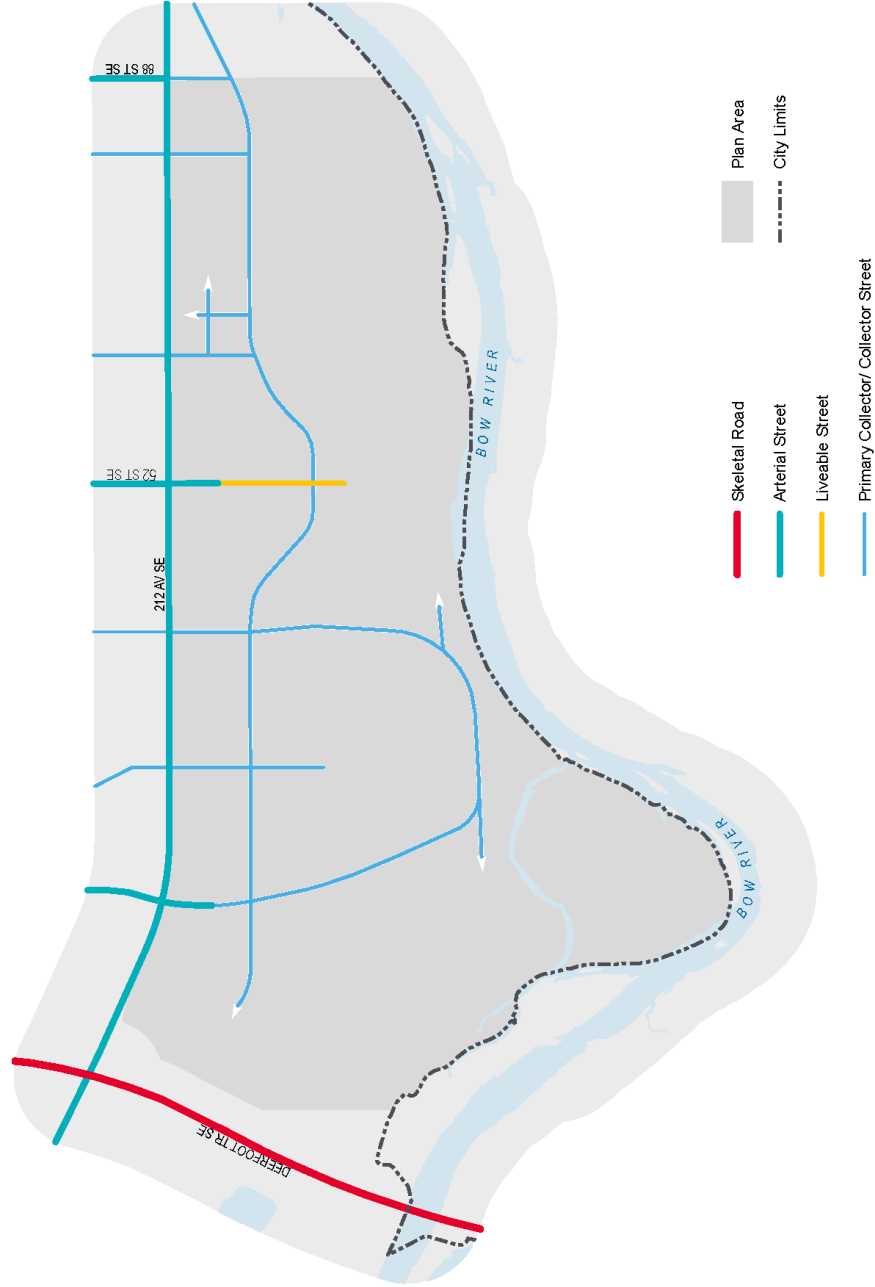
Policies

1. The street network should be located as depicted on **Map 8: Street Network**.
2. A Transportation Impact Assessment must be submitted with any combined Outline Plan/Land Use Amendment applications within the Plan Area to confirm street classifications and intersection treatments.
3. Alternate street classifications and alignments for the internal street network may be approved at the Outline Plan/Land Use Amendment application stage without requiring an amendment to the Plan.

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Map 8 Street Network



5.4 Arterial Streets

Policies

1. Sound walls are discouraged as sound attenuation solutions between arterial streets and development. Architectural design, street orientation and building siting should be used for sound attenuation solutions.
2. Private amenity spaces should be oriented away from arterial streets where feasible, to reduce the need for sound attenuation walls.
3. Where sound walls are required, they should be designed with high-quality materials, design elements and landscaping.
4. Gateway features such as landscaping, banners, community signage and/or public art should be provided at arterial street intersections.
5. Gateway features should be located on private land.

5.5 Primary Collectors and Collector Streets

Policies

1. Primary collectors and collector streets should be located as depicted on Map 8: Street Network.
2. The east-west collector street through the Plan Area should be designed to curve towards NAC 2/3 to provide access and sight lines towards the NAC. The final alignment of the collector street will be confirmed during the Outline Plan/Land Use Amendment application stage.
3. Enhanced streetscape features such as boulevard trees, landscaping, decorative flags and banners, enhanced utility boxes, lighting and custom street signage should be provided along the east-west collector street where the street curves towards NAC 2/3.
4. Development along primary collector streets and collector streets shall be street-oriented, with access from the rear lane where a rear lane is present.
5. Front driveways should not be permitted along primary collector and collector streets, where developments have access to a rear lane.

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5.6 Liveable Street

A liveable street is a street with an emphasis on active modes and transit. A liveable street is a route for travel, as well as a destination. High-quality street-oriented urban design and an enhanced streetscape are vital components of the liveable street.



Intent

To provide a high-quality, pedestrian-oriented streetscape with an emphasis on active modes and transit.

Policies

1. The liveable street should be located as depicted on **Map 8: Street Network** and may extend further south to the edge of the escarpment, as determined at the Outline Plan/Land Use Amendment application stage.
2. The liveable street should be designed with a high-quality pedestrian realm (e.g. wide sidewalks, pedestrian-scaled lighting, street furniture) and supported by on-street parking.

3. Street frontages should be designed to minimize interruptions to the pedestrian environment.
4. The liveable street should be designed as a neighbourhood boulevard or activity centre street.
5. Land use designations along the liveable street should provide for a mix of low and medium-density residential uses, commercial uses, institutional uses and recreational uses.
6. Development along the liveable street shall be designed to be street-oriented.
7. Surface parking areas shall not be located between the liveable street right-of-way and adjacent development.
8. Direct vehicular access to parcels along the liveable street should be from a rear lane or side street.

Intent

To ensure that development adjacent to key transportation connections into the city are visually attractive and create a positive civic image.

Policies

1. All outline plan, land use redesignation, subdivision and development permit applications with areas visible from Deerfoot Trail S.E. are subject to The City's Improving Calgary's Entrances: A Guide for Development Adjacent to Entrances.
2. Monuments, signage and/or public art visible to traffic from Deerfoot Trail S.E. are encouraged, subject to provisions within The City's LUB.

5.7 Entrances

Entrances are skeletal roads or arterial streets that serve as important transportation connections into the City of Calgary. These roads carry higher volumes of traffic and accommodate development that is highly visible to motorists.



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Map 9 Water Servicing



6.1 Water Servicing

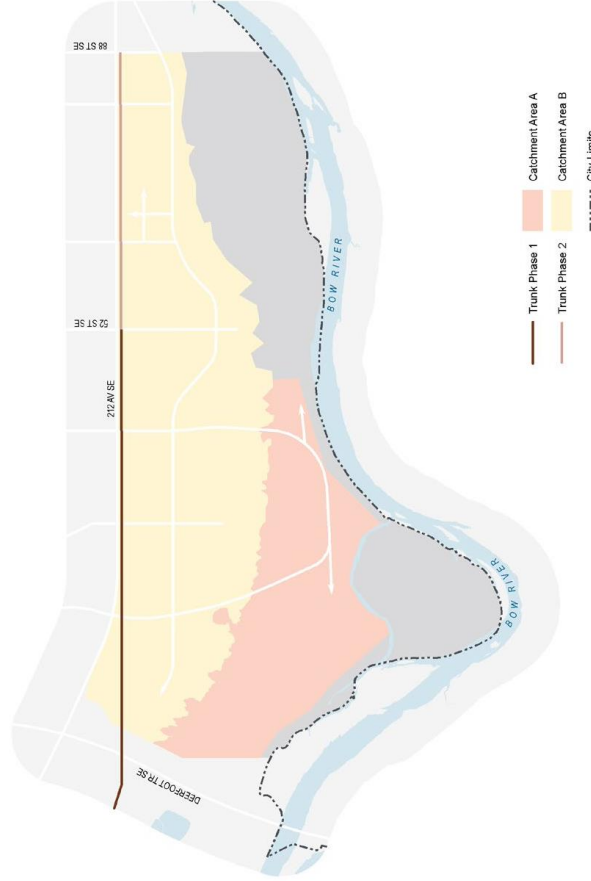
Intent

To provide a safe, suitable and efficient municipal water system to service the full build-out of the Plan Area.

Policies

1. The Plan Area is located within the Ogden Pressure Zone. Water servicing of the Plan Area will be achieved through developer-sized tie-ins, including pressure reducing valves, into the future Ogden Feedermain along 212 Avenue S.E. (see Map 9: Water Servicing).
2. As additional communities within the Ogden Pressure Zone develop, the Cranston water reservoir will be required for the ultimate servicing solution.
3. The Ogden Feedermain must be in place prior to release of building permits within the Plan Area.

Map 10 Sanitary Servicing



6.2 Sanitary Servicing

Intent

To provide a safe, suitable and efficient sanitary sewer system to service the full build-out of the Plan Area.

Policies

1. There are two sanitary catchments within the Plan Area, as shown on **Map 10: Sanitary Servicing**. To service all developable lands, including lower elevation lands within the western portion of the Plan Area (Catchment A), a developer-sized lift station and forcemain will be required, designed to City standards, and will be approved by The City's Water Resources Business Unit.
2. Sanitary servicing of the lands within the Plan Area will be achieved through the on-site sanitary collection network, tied into the future Rangeview Sanitary Trunk along 212 Avenue S.E.
3. The Rangeview Sanitary Trunk Phase 1 must be in place prior to release of building permits within the Plan Area.
4. Sanitary flow from a small area within the southeast corner of Sanitary Catchment B, at the existing ground elevation, may not be able to be conveyed to the future Rangeview Sanitary Trunk by gravity due to elevation constraints. Grading solutions should be explored further at the Outline Plan/Land Use Amendment application stage.

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6.3 Stormwater Management

Intent

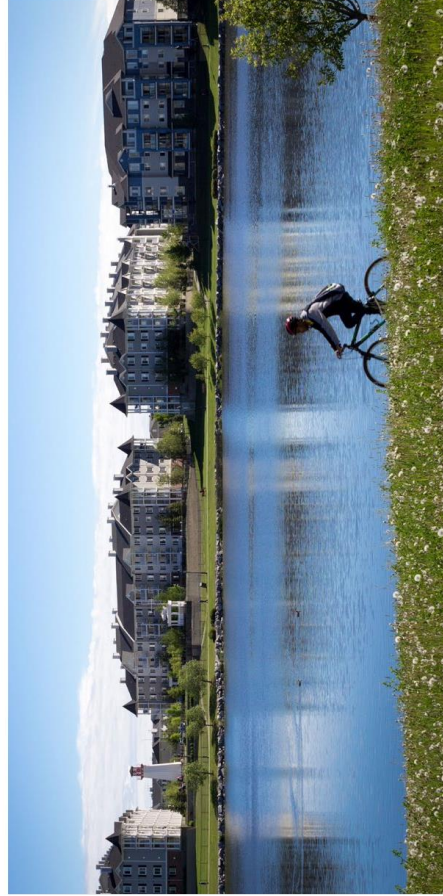
To provide a sustainable, resilient and efficient stormwater management system for the Plan Area. Watershed features such as the existing topography, natural drainage channels and springs, floodplains, riparian areas, wetlands and groundwater flow patterns will all be taken into account when designing and developing the stormwater infrastructure system in the Plan Area.

Policies:

1. Stormwater management infrastructure should be generally located as depicted on **Map 11: Stormwater Management**, and in accordance with the Master Drainage Plan.

2. The proposed stormwater management facility should not be located within NAC 2/3 or directly adjacent to the liveable street. If the stormwater management facility must be located within NAC 2/3 or adjacent to the liveable street for technical reasons, a concept plan should be provided at the Outline Plan/Land Use Amendment application stage that ensures that the facility will not impact the densities, urban design qualities, sustainable mobility, or interface with NAC 2/3 or the liveable street.
3. Staged Master Drainage Plans submitted for the Plan Area shall adhere to the recommendations of the Master Drainage Plan.
4. The Master Drainage Plan may identify requirements for the monitoring of natural drainage systems and bodies of water at, or prior to the Outline Plan/Land Use Amendment application stage.

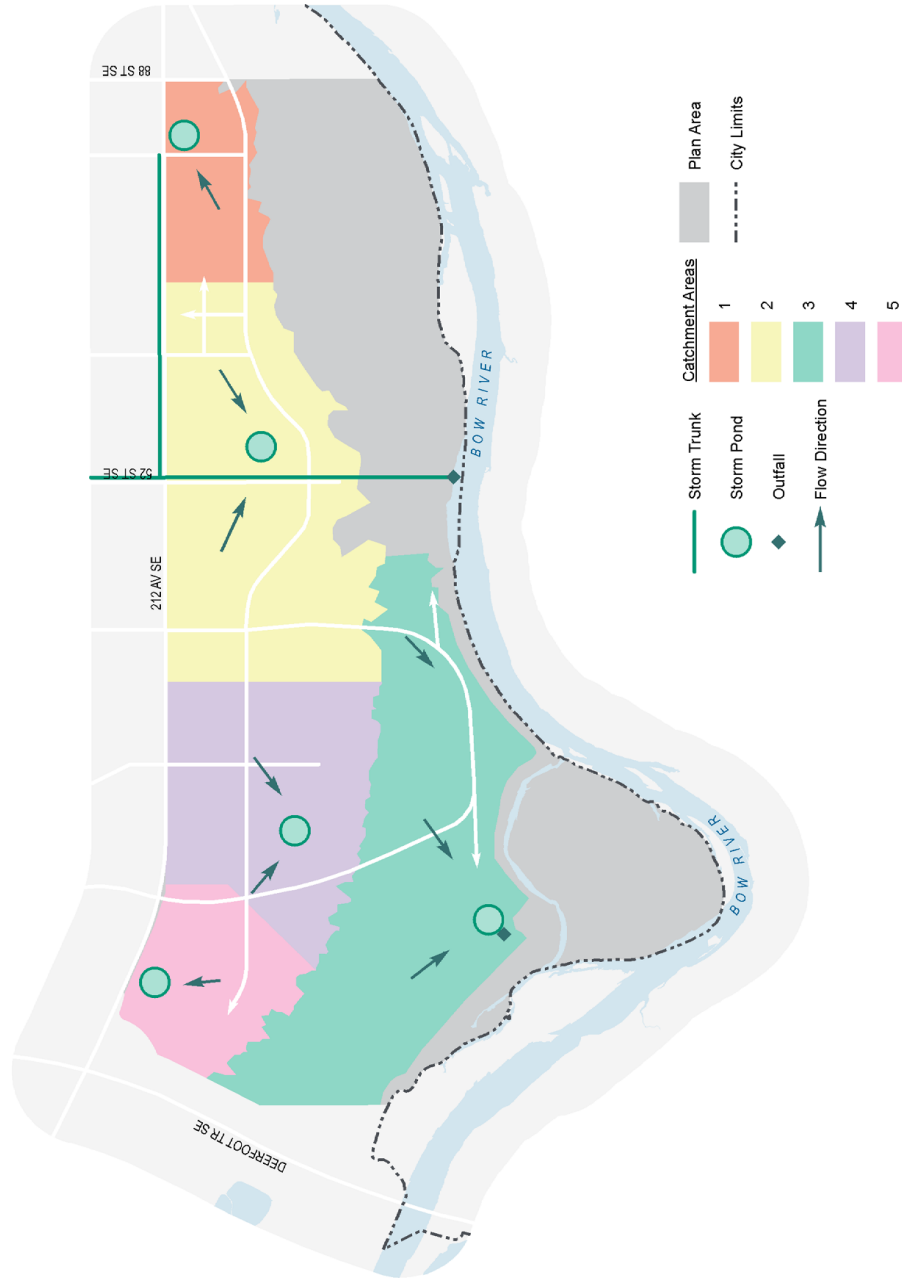
5. Conveyance of existing, pre-development overland drainage patterns, wetlands and watercourses should be integrated into Outline Plan/Land Use Amendment and Development Permit applications.
6. Mitigation of potential negative impacts of development to watercourses, waterbodies and adjacent landowners must be included in the Master Drainage Plan.
7. Outputs of the Master Drainage Plan significant enough to alter any Land Use Area may require an amendment to the Plan.
8. The Master Drainage Plan and Staged Master Drainage Plans should adhere to current City standards regarding climate change consideration as it relates to the design of stormwater infrastructure and Bow River flow levels, address current and future river flooding and stormwater management risks, and propose measures to mitigate and/or resolve these issues.
9. Setbacks from the 200-year Bow River Meander Belt, Bow River side channels, retained drainage courses, top of slope, and toe of slope shall be adhered to, as per the recommendations set out in the approved Master Drainage Plan and supporting technical studies. The approved Master Drainage Plan may identify requirements for further geotechnical and hydrogeological analysis, and for the monitoring of natural drainage systems, prior to Outline Plan/Land Use Amendment approval.



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Map 11 Stormwater Management



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6.4 Oil and Gas Infrastructure

Lands to the north and east of the Plan Area are underlain by proven sour gas reserves and there is a history of sour gas extraction in these areas. In addition, AER records indicate an abandoned oil well head within the Plan Area.

Intent

To minimize potential hazards associated with urban development in proximity to oil and gas infrastructure.

Policies

General

1. The City may limit, delay, or not allow subdivision, land use, and/or development in areas where it has determined, based on the recommendations in a Risk Assessment accepted by The City that the consequences of failure of oil and gas infrastructure or probability of failure is greater than can be reasonably removed or reduced to an acceptable level.

2. Landowners are encouraged to provide prospective buyers with information outlining the existence of sour gas facilities in areas determined to be at potential risk (based on an Oil and Gas Infrastructure Review and Risk Assessment accepted by The City).

Application Requirements

3. At the Outline Plan/Land Use Amendment application stage, an Oil and Gas Infrastructure Review must be undertaken to determine the existence and status of oil and gas infrastructure,

associated setbacks and/or EPZs that may impact future development within the Plan Area.

4. If oil and gas infrastructure is identified within the Oil and Gas Infrastructure Review, a Risk Assessment must be submitted as part of an Outline Plan/Land Use Amendment application.

5. The Risk Assessment must be updated during the review of each subdivision application involving oil and gas infrastructure to ensure it is current.

6. Landowners must consult with the operator of the facility and the applicable regulator prior to the submission of an Outline Plan/Land Use Amendment application for lands within 200 metres of oil and gas infrastructure.

7. The City will circulate all Outline Plan/Land Use Amendment applications within 1.5 kilometres of a sour gas facility to the AER.

8. The City will circulate all Outline Plan/Land Use Amendment applications within an EPZ to the AER.

Abandoned Well

An abandoned oil well is located in the Plan Area as identified on Map 2: Plan Area Features. Development around an abandoned well site is subject to AER directives and regulations, and all other applicable laws.

9. In conjunction with an Outline Plan/Land Use application or Development Permit application for any parcels containing the abandoned well, the applicant must provide the following:

- a. surveyed locations of abandoned wells and pipelines;
- b. confirmation from the AER of any setbacks from

any abandoned wells and pipelines;

- c. a Phase I Environmental Site Assessment specific to the abandoned well;

- d. a Phase II Environmental Site Assessment specific to the abandoned well, as deemed appropriate by the Approving Authority;

- e. an evaluation of the integrity of the well abandonment; and

- f. a reclamation certificate for the well.

10. Access to the abandoned well and the abandoned well setback will be established in consultation with the operator.

11. Pending the results of a Risk Assessment and other studies that may be required by The City, the incorporation of abandoned wells within MR or Municipal and School Reserve (MSR) may be considered at the discretion of the Approving Authority.

12. The City will not provide credit for MR or MSR dedication for lands located within AER abandoned well setbacks.

13. Public streets must not be located above abandoned wells.

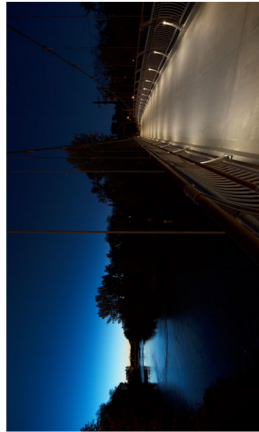
Removal

14. If oil and gas infrastructure within the Plan Area is removed and remediated in accordance with all applicable laws, the policies related to those facilities within the Plan will no longer apply. An amendment to the Plan may be required, at the discretion of the Approving Authority.

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6.5 Lighting

Light pollution can disrupt ecosystems, have adverse health effects and interfere with astronomical observation. Exterior lighting in the Plan Area should employ dark sky principles to reduce light pollution to conserve energy, reduce glare, safe guard wildlife and maximize views of the night sky for residents.



Policies

1. Due to the presence of the Bow River valley Key Wildlife Biodiversity Zone and proximity to Foothills County, development within Neighbourhood 4 and development adjacent to the Escarpment Green Corridor within Neighbourhoods 1-3 should apply dark sky principles to mitigate light pollution, including the following considerations:
 - a. a luminaire Backlight, Uplight and Glare value of 0 should be used for public infrastructure in consultation with The City's Parks and Roads departments;
 - b. post-top lighting, column lighting, in-pavement lighting and specialty lighting should not be used due to glare, backlight and other light pollution concerns; and
 - c. development should implement time of day restrictions and other best dark sky practices to ensure light spill into adjacent properties or the surrounding environment is minimized.
2. Development outside of Neighbourhood 4 and not adjacent to the Escarpment Green Corridor should also give consideration to the dark sky principles listed in Section 6.5 (1) when selecting appropriate lighting standards and fixtures in order to mitigate light pollution.

6.6 Emergency Response

Emergency response coverage is required as an essential service to meet the needs of a safe community, promote and maintain safe and healthy behaviours, provide emergency response and offer protection to residents and their property. Emergency response coverage will be provided to the Plan Area in order to meet Council directed response time targets.

Intent

To provide emergency response coverage for the Plan Area.

Policies

1. Emergency access and egress shall be provided to each Neighbourhood as per The City's Design Guidelines for Subdivision Servicing and Fire Department Access Standards. The number and location of access and egress points will be determined at the Outline Plan/Land Use Amendment application stage.
2. Emergency response coverage for the area west of 52 Street S.E. within the Plan Area is provided from the existing Seton Emergency Response Station.
3. Emergency response coverage for the area east of 52 Street S.E. within the Plan Area will be provided from a future Emergency Response Station identified in the Rangeview ASP.

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7.1 Area Structure Plan Interpretation

Intent

To ensure that the intent and policies of the Plan are understood and achieved.

Policies

Map Interpretation

1. Unless otherwise specified in the Plan, the boundaries or locations of any symbols or areas depicted on maps within the Plan and its appendices are approximate, not absolute, and must be interpreted as such. The locations of symbols are not intended to define exact locations, except where they coincide with clearly recognizable physical features or fixed boundaries, such as property lines or road or utility rights-of-way. The precise location of these boundaries, for the purpose of evaluating development proposals, will be determined by the Approving Authority at the time of application.

2. Measurements of distances or areas must not be taken from the maps in the Plan and its appendices.

3. Land Use Areas, community areas, Neighbourhood Areas, street alignments and classifications, and utility alignments may be subject to further study and may be further delineated at the Outline Plan/Land Use Amendment application stage, in alignment with applicable policies. Any major changes to the maps in this Plan and its appendices may require an amendment to the Plan.

4. In the case of the EOS Study Area, where adjustments to the extent of the EOS are made during the Outline Plan/Land Use Amendment application stage, the policies of the adjacent Land Use Area apply without requiring an amendment to maps within the Plan and its appendices, including but not limited to **Map 4: Land Use Concept**.

5. Any changes to the text or maps in the Plan may require an amendment, in accordance with the MGA. Where an amendment to the Plan is requested, an applicant shall submit the supporting information necessary to evaluate and justify the potential amendment and ensure its consistency with the MDP and other relevant policy documents.

Policy Interpretation

6. Terms that are capitalized are defined terms. Refer to Section 8.2 for definitions.

7. Where an intent statement accompanies a policy, it is provided as information only, and to illustrate the intent and enhance the understanding of subsequent policies. If an inconsistency arises between the intent statement and a policy, the policy takes precedence.

8. The word "should" is explicitly used to further clarify the directional nature of the statement. Policies that use active tense or "should" are to be applied in all situations, unless it can be clearly demonstrated to the satisfaction of The City that the policy is not reasonable, practical, or feasible in a given situation. Proposed alternatives will comply with the applicable policies and guidelines to the satisfaction of The City with regard to design and performance standards.

9. Policies that use the words "shall," "will," "must," or "require" apply to all situations, without exception, usually in relation to a statement of action, legislative direction or situations where a desired result is required.

Illustrations and Photo Interpretation

10. All illustrations and photos are intended to illustrate concepts included in the Plan and are not an exact representation of an intended development. They are included solely as examples of what might occur after implementation of the Plan's policies and guidelines.

Appendix Interpretation

11. The appendices do not form part of the statutory portion of the Plan. The intent of the appendices is to provide information and illustrate the policies of the Plan.

Monitoring, Review and Amendments

12. The Plan provides direction for the development of the Plan Area over an extended time period through a series of public and private sector initiatives. The time frame of this Plan will be determined by the criteria for prioritization and sequencing of growth areas determined as part of the MDP and the policies within the Plan.

13. The policies within the Plan will be monitored over time in relation to development and monitoring of the MDP and CTP. Where determined necessary, the Plan may be updated

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- through the plan amendment process either generally or in response to a specific issue.
14. To ensure the Plan is a living document that reflects new policies adopted by Council over time, the Plan should be reviewed and/or updated every 10 years from the time it is initially adopted by Council.
18. If Outline Plan/Land Use Amendment applications are submitted for partial neighbourhoods, the following information must be submitted with the application:
- shadow plan for residual lands in the Neighbourhood, conceptually demonstrating compatible future development;
 - density and intensity analysis demonstrating compliance with the NCPG; and
 - compliance with Section 4.3: Escarpment Green Corridor.

Plan Limitations

15. The Plan is a long-term planning document. As such, it promotes a vision for the community and includes policies and guidelines that work towards achieving that vision over time. The Plan may be amended from time to time, either in relation to a City initiative or an Outline Plan/Land Use Amendment application.

16. Policies and guidelines in the Plan must not be interpreted as approvals for specific uses on specific sites. No representation is made herein that any particular site is suitable for a particular purpose. Site conditions or constraints, including environmental constraints, must be assessed on a case-by-case basis during the Outline Plan, Land Use Amendment, Subdivision or Development Permit application stage.

Comprehensive Planning

17. In accordance with Policy 4.2(2) Application Scale within the NCPG, an Outline Plan/Land Use Amendment application should comprise an entire Neighbourhood. However, if this is not feasible due to land ownership boundaries or other technical reasons, an Outline Plan/Land Use Amendment application may be submitted for partial neighbourhoods.

7.2 Historical Resources Approvals

1. A Historical Resources Impact Assessment (HRIA) is required by the provincial regulator (Alberta Culture, Multiculturalism, and the Status of Women (CMSW)).
2. Concurrent with an Outline Plan/Land Use Amendment application submission, a HRIA shall be submitted to The City to assess opportunities for conservation of archaeological resources within the open space network.
3. Where avoidance of Historic Resources is not feasible, the applicant will, as required by and to the satisfaction of CMSW, undertake protective or mitigative measures.



7.3 Strategic Growth

A strategic approach to growth provides for a clear and effective decision-making process that allows City Council to decide directly on the coordination of growth and servicing within the Plan Area. This process helps to ensure that development in the Plan Area proceeds in an efficient and cost-effective manner in coordination with municipal budgeting and strategic growth implementation processes. This process involves the application of a Growth Management Overlay ("Overlay") to the Plan Area as depicted on Map 12: Growth Management Overlay. The Overlay is used to direct development in the Plan Area to lands where strategic growth issues have been resolved and the Overlay has been removed. Overlay decisions are made by City Council through the Comprehensive Citywide Growth Strategy, in alignment with the municipal budgeting process.

Intent

To ensure that development within the Plan Area is aligned to the municipal budgeting and strategic growth implementation processes.

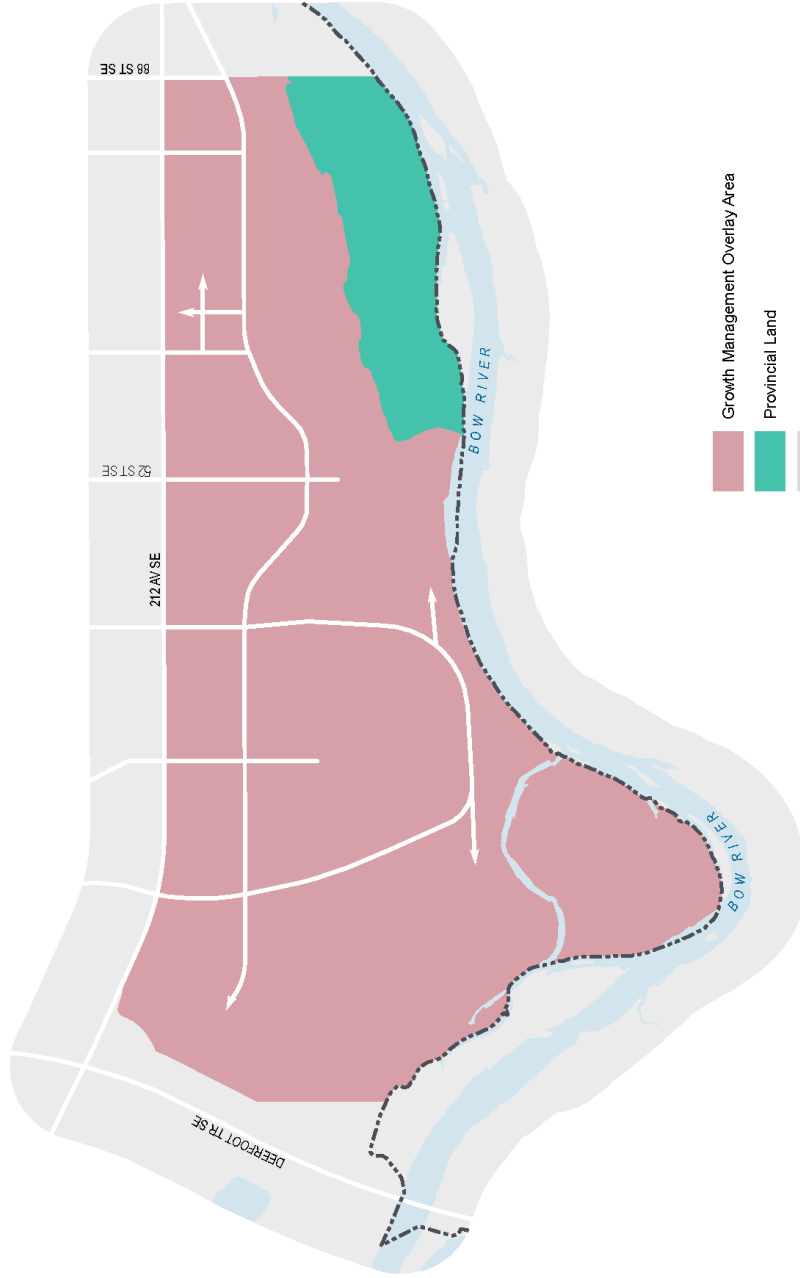
Policies

1. Development shall not occur on lands that have a Overlay.
2. An amendment to the Plan approved by Council is required to remove a portion of the Overlay prior to Land Use Amendment approval. The Overlay shall be removed in accordance with the NCPG and in alignment with the Comprehensive Citywide Growth Strategy process.
3. Consideration for Overlay removal will be conducted in alignment with The City's municipal budgeting process.

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Map 12 Growth Management Overlay



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7.4 Intermunicipal Coordination and Regional Review

The Plan Area shares a jurisdictional border with Foothills County. Historically, the lands in the Plan Area were part of the County but were annexed by The City in 1989. The Plan Area falls entirely within the IDP Plan Area between Foothills County and The City.

Intent

To ensure that The City and Foothills County work collaboratively to coordinate planning initiatives for areas of mutual interest. The City will consult with Foothills County on planning matters that may arise from development within the Plan Area to achieve a cooperative and coordinated outcome.

Policies

Intermunicipal Coordination Policies

1. All proposed Plan amendments and applications for Land Use Amendment, Subdivision, Development Permit, including Development Permit renewals, must be circulated to Foothills County in accordance with current IDP policy.

Bow River Valley Regional Asset

As per the IDP, the Bow River valley is interpreted as a Regional Asset due to the presence and concentration of several key existing features and activities, such as wildlife habitat, Indigenous significance, native landscapes, riparian zones, drainages and wetlands, Floodway, Flood Fringe, escarpment, viewsheds, and dark skies. These assets provide a diversity of interconnected benefits and ecosystem services to The City, Foothills County, and the region as a whole. The collective value of these features merits a greater level of consideration and analysis when evaluating land use activities and development proposals within the Bow River valley.

2. Development proposals within and adjacent to the Bow River valley should take into consideration the environmental/biophysical, recreational and cultural benefits it provides when considering land use activities and development proposals.
3. Planned amenities such as the Regional Pathways, green corridor, pedestrian connections, and Bow River Access Site and Day Use Area, should be sensitive to protecting or enhancing the key existing features of the Bow River valley while leveraging their collective value as a Regional Asset.

Regional Review

4. This Plan must conform to the Calgary Metropolitan Region Board Growth Plan and the processes set out in the Regional Evaluation Framework.



Abbreviations and Definitions

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8.1 Abbreviations

AER	Alberta Energy Regulator
ASP	Area Structure Plan
BIA	Biophysical Impact Assessment
CMRB	Calgary Metropolitan Region Board
CMSW	Alberta Culture, Multiculturalism, and the Status of Women
CTP	Calgary Transportation Plan
EOS	Environmental Open Space
EPZ	Emergency Planning Zone
ER	Environmental Reserve
ESA	Environmentally Significant Area
HRIA	Historical Resources Impact Assessment
IDP	Intermunicipal Development Plan

JJUS	Joint Joint Use Site
JUS	Joint Use Site
LUB	Land Use Bylaw 1P2007, as amended or replaced
MDP	Municipal Development Plan as amended or replaced
MGA	Municipal Government Act
MR	Municipal Reserve
MSR	Municipal and School Reserve
NAC	Neighbourhood Activity Centre
NCPG	New Community Planning Guidebook
SPARPP	Southeast Planning Area Regional Policy Plan

8.2 Definitions

The following definitions shall apply. In the case where a definition differs from The City of Calgary Land Use Bylaw (1P2007), the Land Use Bylaw shall prevail.

1:100 flood – A “one in one hundred” flood is a large flood that has a 1 per cent chance of occurring in any given year. It can also be called a 1 per cent flood or a 100-year flood. It is possible to have more than one 1 in 100 year flood in the same year. On the Bow River in the Plan Area, the estimated flow rate for a 1:100 flood is 3400 m³/s.

200-year Bow River Meander Belt: The area within which the Bow River is expected to move or erode due to normal flow processes within 200 years. The meander belt area was defined in a study conducted by Golder Associates (Ricardo Ranch – Bow River Morphology Study, July 2018).

A

Approving Authority: the Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City, as the context implies.

B

Biophysical Impact Assessment (BIA): Report used to define the environmental impact of a project on the biophysical features of an area. In preparing a BIA, baseline data is usually collected on soil, vegetation, wetlands, wildlife and hydrology.

C

Calgary Transportation Plan: Council approved document that guides the transportation system and its development in Calgary.

Cluster Housing: A grouping of residential dwellings relatively close together, with areas of open space within the development either provided or preserved.

Community Association Site (CA): Provides a location for community association uses.

Conservation Easement: A device whereby a landowner gives up certain rights or opportunities in order to protect the conservation values of all or part of their land.

Conservation Reserve: Type of land dedication collected during the subdivision process for lands that have an environmentally significant feature.

Cottage Housing Cluster: A grouping of cottage buildings around an open space.

Council: The elected Council of The City of Calgary.

D

Designated Flood Level: That theoretical level, indicated on the Floodway/Flood Fringe Maps, to which water would rise in the event of a flood of a magnitude that has a 1 per cent chance of occurring in any given year (1:100 flood). Flood levels were updated in 2015, which are not reflected on the Floodway/Flood Fringe maps. The most up to date information available at the time of design should be used – please contact The City’s Water Resources for this information.

E

Emergency Response Station: A building containing equipment for fire and emergency response as determined by Council.

Entranceways: Skeletal roads or arterial streets that serve as important transportation connections into the City of Calgary. These roads carry higher volumes of traffic and accommodate development that is highly visible to motorists.

Environmental Open Space (EOS) Study Area: Identifies lands that may be environmentally significant. Where land identified within the EOS Study Area is not protected or acquired by the City, it may be developable according to the policies of this Plan.

Environmental Reserve: Environmental Reserve as defined in the Municipal Government Act.

Escarpment Green Corridor: A contiguous, natural and publicly accessible open space corridor along the top of the Bow River valley escarpment.

Escarpment Pedestrian Connection: A Regional Pathway, local pathway or trail that connects the Neighbourhood 2/3 NAC to the lower lands and the provincial land.

F

Flood Fringe: The area outside of the Floodway that is flooded in a 1:100 year return period, but where flows are not as deep or fast as in the Floodway.

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- Flood Hazard Area:** In Alberta, the flood hazard area is the area that would be flooded in a 1:100 year flood. It is typically divided into two zones: Floodway and Flood Fringe. In some areas, such as Calgary, there may also be a third zone, called the overlaid flood zone, which is considered a special part of the Flood Fringe. The flood hazard areas are mapped by the Province of Alberta and are updated periodically, with an update currently underway (as of 2019).
- Floodway:** The Floodway includes the channel of a river and, in some places, the land next to the river. The Floodway carries the bulk of the floodwater downstream. Flow is usually fastest and deepest in the Floodway.
- H**
- Historic Resources:** Any work of nature or humans that is primarily of value for its palaeontological, archaeological, prehistoric, historic, cultural, natural, scientific or esthetic interest including, but not limited to, a palaeontological, archaeological, historic, or natural site, structure or object.
- Historical Resources Impact Assessment (HRIA):** An assessment that evaluates the presence of Historical Resources in an area and provides recommendations for whether preservation should take place.
- Homestead:** Existing residence and associated outbuildings in close proximity to the existing residence.
- I**
- Inter-municipal Development Plan (IDP):** A statutory plan that is jointly prepared by The City and Foothills County which includes areas of land lying within the boundaries of the municipalities, as they consider necessary. Inter-municipal Development Plans are further defined in the Municipal Government Act.
- L**
- Land Use Area:** One of the categories of land uses delineated on the Land Use Concept Map and described in one of the policy sections of the Plan.
- M**
- Master Drainage Plan:** A drainage report prepared by the Water Resources Business Unit of The City or on behalf of The City by qualified consultants. The report may include a conceptual strategy to implement a combination of stormwater management practices to ensure watershed deterioration does not occur and that water is returned to an appropriate location in the hydrogeological system.
- Multi-Residential Development:** A residential development of one or more buildings, each containing a minimum of three units in total.
- Municipal Development Plan (MDP):** The planning policy document guiding growth and development within The City. It reflects the kind of community Calgarians would like to see in the future. It is visionary, strategic and long-term, and provides the basis for actions and decisions to both protect and improve quality of life for all Calgarians, present and future.
- Municipal Reserve:** Municipal Reserve as defined in the Municipal Government Act.
- N**
- Neighbourhood:** A portion of a community generally based on a quarter section of land or equivalent area (65 hectares; 160 acres), in which most residents are within a five-minute walk of a Neighbourhood Activity Centre.
- Neighbourhood Activity Centre (NAC):** Centre providing opportunities for residential intensification, local jobs, retail services and civic activities. In new communities, NACs should be planned at the outset through the Plan process.
- Neighbourhood Area:** The residential catchment area outside of the Neighbourhood Activity Centre (NAC). It consists of primarily residential uses with a variety of housing types and a street network that connects residents, jobs and commercial services through direct automobile, transit, bicycle and pedestrian routes.
- New Community Planning Guidebook (NCPG):** Translates the MDP's vision and core policies into implementation level policies and forms the basis for new communities and ASPs.
- O**
- Oil and Gas Infrastructure Review:** A review undertaken at the Outline Plan/Land Use Amendment application stage to identify real and potential hazards associated with oil and gas infrastructure.

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P

Plan Area: The land that is the subject of the Plan.

Province: The government of the Province of Alberta.

Provincial Key Wildlife and Biodiversity Zone:

Lands that are considered to be a combination of key winter ungulate habitat and higher habitat potential for biodiversity. In some areas this zone consists of important riparian vegetation complexes that are important for biodiversity, while in other areas it indicates important winter ranges for ungulates.

R

Regional Assets: As defined in the Intermunicipal Development Plan, these are elements, such as physical features, amenities or activities in the Plan Area that are valued by residents and provide benefits to both The City, Foothills County and the region as a whole. Regional Assets may include lands that provide significant environmental/biophysical benefit, culturally significant areas, recreational opportunities or services.

Regional Pathway: A city-wide linear network that facilitates non-motorized movements for recreation and transportation purposes. It connects communities by linking major parks, recreation facilities and natural features. The Regional Pathway system may also link other major community facilities such as schools, community centres and commercial areas.

Risk Assessment: An evaluation of the potential long- and short-term risks associated with urban development in proximity to identified oil and gas infrastructure. The Risk Assessment will identify and document actual and perceived risks to human health or the environment, their likelihood, their consequences and any required mitigation. Terms of reference for this study will be developed in consultation with The City. This Risk Assessment will be used by The City to determine whether additional mitigation measures are required.

T

Transportation Impact Assessment (TIA): A study required to support the transportation aspects of a proposed development that has the potential of generating significant amounts of new transit users, pedestrians, and bicycle and vehicular traffic, or that could potentially change the mobility patterns in the area where it is proposed.

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Appendices

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Table A1 Joint Use Site Requirements

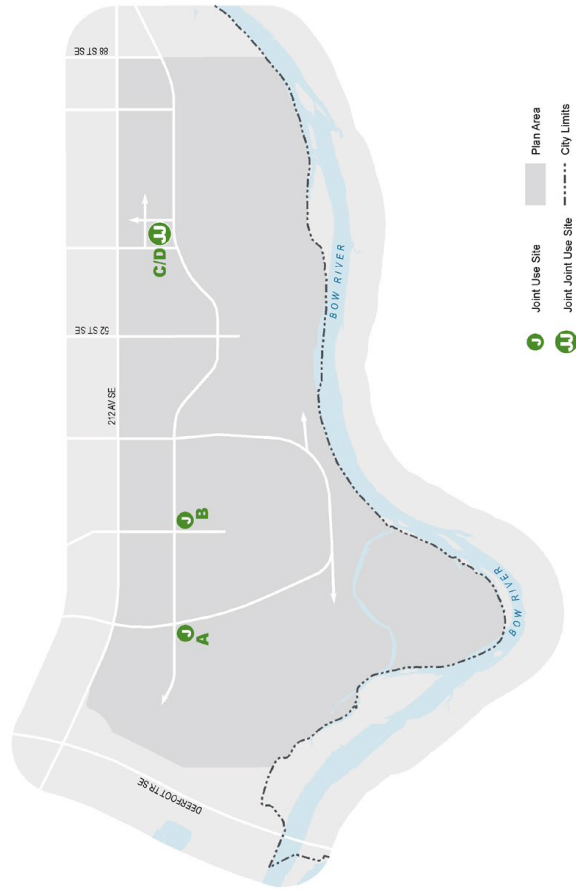
Site	School Board	School Type	Size
A	Calgary Board of Education	Elementary	4.0 hectares (10 acres)
B	Calgary Catholic School District	Kindergarten – Grade 9	4.9 hectares (12 acres)
C/D	Calgary Board of Education/Conseil Scolaire FrancoSud	Middle/Kindergarten – Grade 6	7.6 hectares ha (18.75 acres)

Total 16.5 hectares (40.75 acres)

Appendix A: Joint Use Site Requirements

A total of four Joint Use Sites (JUS) are required for the Plan Area. Of these four sites, one will be a Joint Joint Use Site (whereby two school building envelopes share a playfield). The Plan Area will also feature a Francophone school site. The anticipated site sizes are depicted in Table A1: Joint Use Site Requirements, and the general location of the JUS are depicted in Map A1: Joint Use Sites.

Map A1 Joint Use Sites



Appendix B: Ecological Background Information

The Plan Area is characterized by the Bow River valley dividing the Plan Area into three distinct portions: the relatively flat northern portion dominated by pasture and agricultural activities; the sloped escarpment of the Bow River valley and the southern portion at the bottom of the river valley. Historically, the Plan Area has been used for agricultural purposes including pasture and cropland. Gravel extraction operations have also occurred on the southwest portion of the lands adjacent to the Bow River. Areas of highest ecological significance are located along the escarpment as well as on the southeast portion of lands associated with fluvial channels and the Flood Fringe. These areas provide the highest potential for habitat and wildlife species of management concern, offer the highest densities of tracked vascular species and are important for watershed management.

The goal of the Plan is to ensure that development is sensitive to the existing topography, wildlife habitat, waterbodies and biophysical features while allowing for development opportunities consistent with The City's broader strategic plans. An Ecological Inventory was conducted on the Plan Area throughout 2017 and 2018. The Ecological Inventory provides an overview of biophysical features including soils, terrain, wetlands, drainages and streams, vegetation land cover, rare plants and wildlife habitat within the Plan Area.

The biophysical information gathered was used to determine which features and areas are considered to be ecologically significant. The areas ranked as having moderate and high environmental significance are then reflected within the Plan as the Environmental Open Space (EOS) Study Area shown on **Map 4: Land**

Use Concept and Map 6: Open Space Network.

The EOS Study Area requires additional studies for further consideration during future stages of the development planning process. Development may limit the retention of all features included within the EOS Study Area; however, the intent of the EOS Study Area is to focus additional studies and future efforts in areas that have the most potential to be retained. Where lands within the EOS Study Area are not dedicated as ER, or not otherwise protected, development may occur.

The following key biophysical features were identified within the Plan Area by Stantec Consulting Ltd. (2018) (see **Map B1: Biophysical Features**):

- Bow River valley including associated escarpment;
- Temporary (Class II) and seasonal (Class III) marsh wetlands, including regionally unique slope marsh wetlands along the escarpment;
- Ephemeral drainages and one intermittent drainage; concentrated along the escarpment;
- Fluvial channels and historic oxbows formed from the meander of the Bow River;
- Grassland, shrubland, and deciduous forested areas providing a variety of wildlife habitat;
- One species of Provincially tracked vascular plant species – western false gromwell; other rare plant species have the potential to occur;
- Wildlife species of management concern included great blue heron, bald eagle, American white pelican, four bat species, wandering garter snake, sora, osprey, mourning dove (nest), pileated woodpecker, western wood-pewee, Baird's sparrow, and American badger. Potential for At Risk species

also occur, such as western grebe, northern leopard frog, ferruginous hawk and peregrine falcon, as well as other May be at Risk species in the Plan Area.

- Great blue heron colony and bank swallow colony.
- Although out of scope for the EI, the Bow River and its side channels also have the potential for listed fish species, such as bull trout and wetslope cutthroat trout.

The environmentally significant areas are shown on **Map B2: Environmentally Significant Areas**. The significance of each area or feature were ranked based on uniqueness of features, habitat potential to support wildlife species of management concern, nativity of each area and species composition, and ecological function of the feature. BIAs completed at the Outline Plan/L and Use Amendment application stage will support the final delineation of the areas to be preserved as ER or other types of open space, or areas to be developed. The BIA will also supplement the previous surveys completed as part of the Ecological Inventory as well as identify any potential mitigation measures to minimize the impact of development on the biophysical features.

The Plan Area is located in a Provincial Key Wildlife and Biodiversity Zone (AESRD 2015):

The Key Wildlife and Biodiversity Wildlife Zones are considered to be a combination of key winter ungulate habitat and higher habitat potential for biodiversity. In some areas this zone consists of important riparian vegetation complexes that are important for biodiversity, while in other areas it indicates important winter ranges for ungulates.

Typically Key Wildlife and Biodiversity Zones occur along major river valleys. These landforms contain

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- b. Minimize activity during winter months to avoid displacing wildlife.
- c. Reduce access and/or do not create new access.
- d. Follow general timing restrictions

The environmental significance of each biophysical feature in the Plan Area has been ranked as low, moderate or high (Stantec 2018). The EOS Study Area incorporates the environmentally significant areas identified in the Plan Area, as summarized in Table B1: Summary of biophysical features included in the EOS Study Area and identified on Map B2: Environmentally Significant Areas.

the topographic variation and site productivity conditions that provide increased levels of biodiversity and good winter browse conditions in proximity to forest and topographic cover. Additionally, south-facing valley slopes have relatively lower snow accumulations and warmer resting sites for ungulate species. The valley landform itself provides protection from high wind chills.

Key Wildlife and Biodiversity Zones play a disproportionately large role in the landscape given their localized size and distribution, in maintaining the overall productivity of regional ungulate populations and source of biodiversity. These zones ensure that a significant proportion of the breeding population survives to the next year.

The Key Wildlife and Biodiversity Zone is intended to:

- protect the long term integrity and productivity of key ungulate winter ranges and river corridors where ungulates concentrate.
- protect locally and regionally-significant wildlife movement corridors.
- protect areas with rich habitat diversity and regionally-significant habitat types.
- protect key hiding and thermal cover for wildlife.

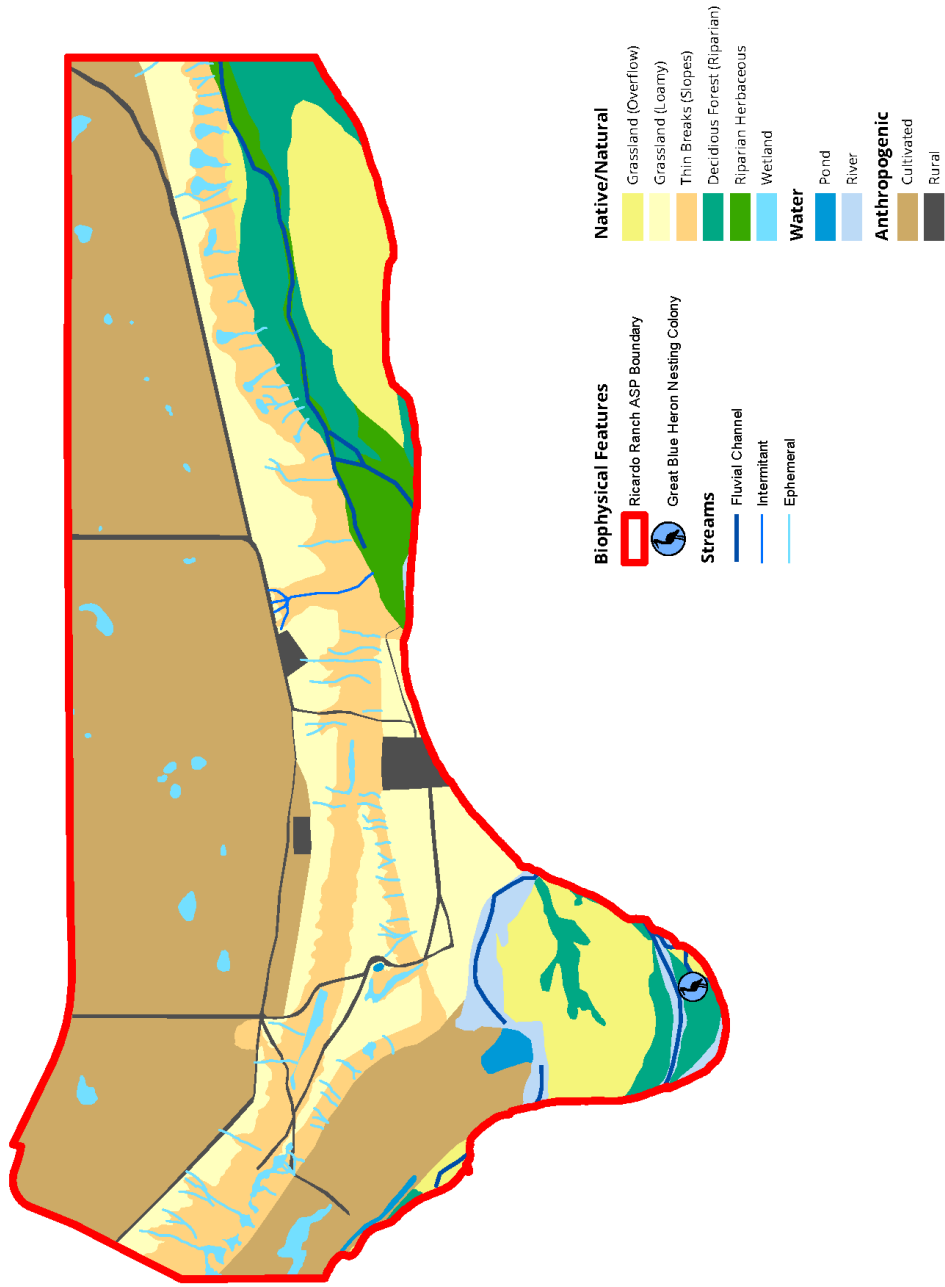
Primary strategies for protection in these zones are as follows:

- a. Protect vegetation from being cleared by minimizing all industrial activity. (This forest growth is essential for providing food and thermal protection for ungulates, and protecting the slopes from erosion and other degradation.)

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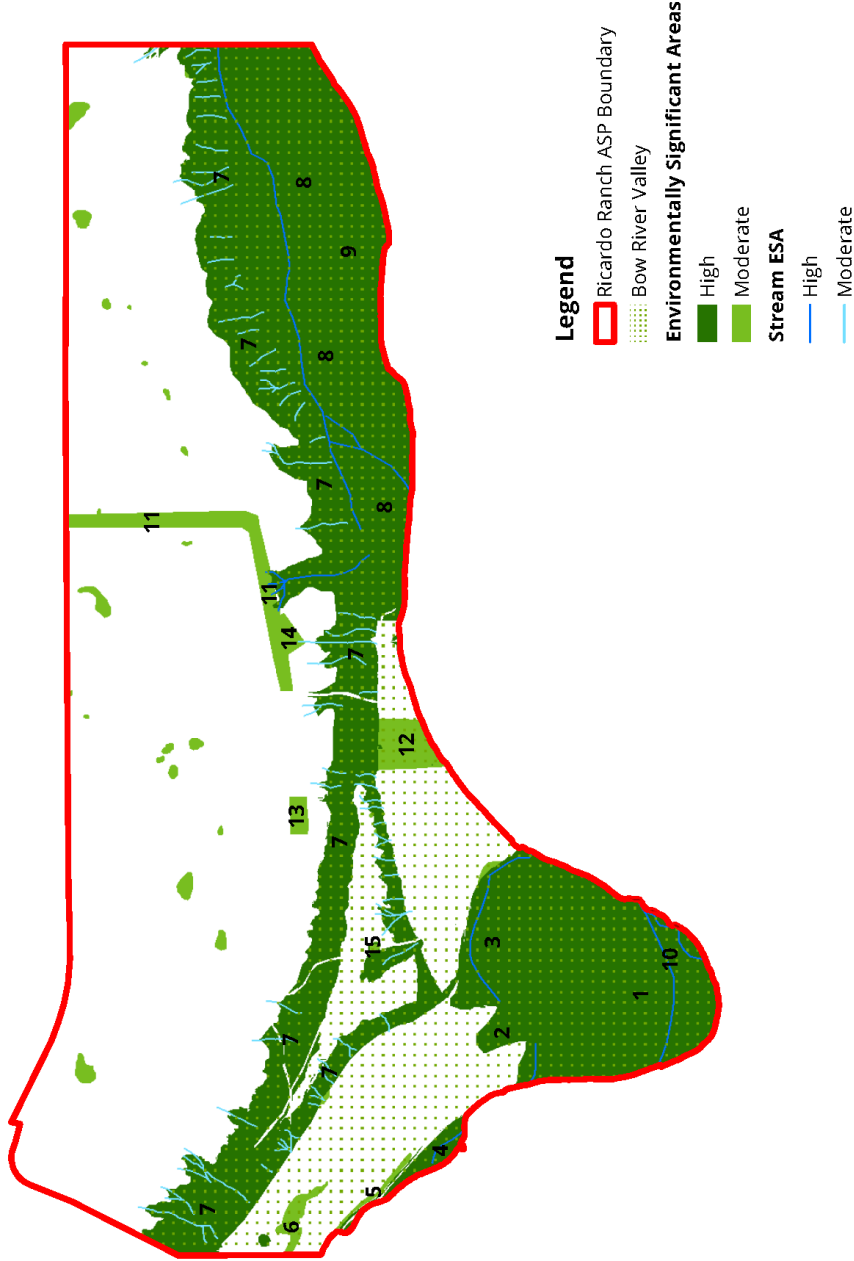
Map B1 Biophysical Features



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Map B2 Environmentally Significant Areas



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Table B1 Summary of biophysical features included in the EOS Study Area

Map ID	Feature	Environmental Significance Rating	Description and Planning Considerations
1, 8, 9	Riparian areas (deciduous forest and herbaceous); Areas with high densities of tracked or watched species	High	Deciduous forested areas contain high habitat suitability for a variety of species, particularly migratory songbirds, tree-nesting raptors, and bats in close proximity to high quality foraging areas. Habitat potential is high due to the presence of mature and decaying deciduous trees that provide structural complexity and increases the number and variety of potential nest or roost sites, thermal and security cover. Herbaceous non-forested areas contain high habitat suitability for amphibians, marsh birds, waterfowl, and aquatic mammals such as muskrat and beaver. The area also provides valuable foraging sites for songbirds and bats. Several large areas of the tracked species western false gromwell were observed in high densities on the isolated island, with the largest being in the southeast portion of the Plan Area. A priority for preservation as these areas provide the highest wildlife habitat potential for species of management concern and coincide with the intent of the Key Wildlife and Biodiversity Zone. This area has potential to remain sustainable post-development given the potential of integration into the regional natural area in consultation with Alberta Environment and Parks.
2	Pond	High	A dugout previously observed in historical aerial photographs to be anthropogenic in nature. The open water portion of the pond is large enough to support waterfowl species, and great blue heron as well as American white pelican were observed using the pond. Priority for preservation.
5, 15	Ponds	Moderate	These small anthropogenic ponds may provide some resting habitat for wildlife. American white pelican and bank swallows were observed near these features during wildlife surveys. Further study required.
3	Fluvial channel	High	Fluvial channels are considered high potential ESAs due to hydrological connectivity to the Bow River and the high-quality habitat that is associated with these areas. Priority for preservation.
4, 9	Grassland (overflow)	High	Grassland (overflow) areas occur close to the Bow River and were observed with a combination of native and non-native species. Grassland overflow areas on the west side of the Plan Area (Map A1) are considered high ESAs due to proximity to the great blue heron nesting colony, bank swallow colony and a variety of landscape classes. Overflow areas on the east side of the Plan Area (Map B1) are considered high ESAs as they contain high densities of western false gromwell, a tracked plant species. Priority for preservation.
6	Wetland within Bow River valley	Moderate	A Seasonal Marsh was observed in the Flood Fringe lands. This feature was previously disturbed by gravel mining operations. May be retained; further study required to determine ecological function, hydrology and post-development viability.
7	Escarpment and associated temporary and seasonal slope marshes	High	The escarpment associated with the Bow River valley is a regionally unique landscape feature. Slope marshes are regionally unique features observed with a relatively high vegetation species diversity. Groundwater input within these features increase the potential ESA ranking of these wetlands. A priority for retention and preservation as slope marsh features are regionally unique and uncommon. Further study needed to determine post-development viability. Slope stability and erosion considerations for this area should be considered.

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Map ID	Feature	Environmental Significance Rating	Description and Planning Considerations
10	Great blue heron colony	High	Great blue heron are a species of management concern and this nesting colony is considered regionally uncommon and unique. The proximity to the great blue heron colony as well as bank swallow colony, along with the variety of habitat potential this area provides, results in a high environmental significance ranking. A priority for retention and preservation as the great blue heron colony is regionally significant. AEP recommends a 1000m buffer from a known and identified great blue heron nesting colony; further study and mitigation plan will be required to maximize post-development viability and ensure long-term sustainability of the colonies.
11	Areas with moderate densities of tracked or watched species	Moderate	Several areas of western false gromwell were observed in moderate densities throughout the Plan Area. These areas are generally small and sporadic. Not a priority for retention as the scattered nature of the features will be challenging to retain. Further study needed to determine post-development viability and potential for relocation.
12, 13, 14	Rural (excluding roadways); high habitat potential for bats	Moderate	Rural buildings and structures anticipated to provide some bat species of management concern habitat for roosting. Further study required to determine significance for protected bat species; may be retained or mitigation measures to be identified in BIA.
Not labelled	Temporary and seasonal marshes (on plateau/not within Bow River valley)	Moderate	Temporary and Seasonal Marshes were considered moderate ESAs given the assemblage of native and non-native vegetation species observed. These areas are concentrated in the northern portion of the Plan Area and provide very limited amphibian and waterfowl habitat given the surrounding land uses, existing cattle disturbance, and temporary to seasonal hydrology. May be retained; further study required to determine ecological function, hydrology and post-development viability.
Bow River valley	Bow River valley	High	The Bow River valley is a defining feature of the Plan Area and an integral part of the Alberta landscape. It is a regional corridor providing excellent connectivity and includes escarpments, fluvial channels, extensive riparian areas and successional vegetation communities. While not all features within the Bow River valley are of high environmental significance when analyzed alone, they are part of an ecosystem of high significance. Priority for preservation. Further study required to address valley-bottom lands.
Drainage	Intermittent and Ephemeral Drainages	High (Intermittent) Moderate (Ephemeral)	The Intermittent Drainage provides hydrological connectivity for the northern portions of the Plan Area and down the escarpment. The intermittent drainage is the only drainage along the escarpment with a defined channel and flows at intermittent times of the year during extreme precipitation events and snow melts. Priority for preservation. The Ephemeral Drainages are topographic low areas that convey overland and groundwater flow, but flows are not consistent enough to form defined channels. May be retained.

References:

Alberta Environment and Sustainable Resource Development (AESRD). 2015. Recommended Land Use Guidelines: Key Wildlife and Biodiversity Zones. Available online: <https://open.alberta.ca/dataset/5c6e2826-50ab-4d2a-a673-9d703d6b5c52/resource/d8d1b269-3a72-471d-9479-56db5ee68210/download/keywildlifebiodiversityzones-apr08-2015.pdf>

Stantec Consulting Ltd., 2019. Ricardo Ranch Area Structure Plan: Ecological Inventory. Prepared for: Genesis Land Development, Brookfield Residential, and Mr. Sandy Soutzo.

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Map C1 Development Staging

Appendix C: Development Staging

Development of the Plan Area will follow the alignment of the proposed water, sanitary and stormwater services. As the ultimate infrastructure is built, development would be able to proceed west to east as depicted on Map C1: Development Staging. However, these stages are conceptual only and may not reflect actual build-out.

