



Area Structure Plan



GLENBOW RANCH

**APPROVED JULY 25, 2017
BYLAW C-7667-2017**

AMENDED APRIL 24, 2018 BY MGB ORDER 024/18



BYLAW C-7667-2017

A Bylaw of Rocky View County to adopt the Glenbow Ranch Area Structure Plan, pursuant to Section 633 of the Municipal Government Act

The Council of Rocky View County enacts as follows:

PART I – TITLE

This Bylaw shall be known as the “Glenbow Ranch Area Structure Plan”.

PART II – EFFECT OF BYLAW

THAT Schedule ‘A’ to Bylaw C-7667-2017 is adopted as the “Glenbow Ranch Area Structure Plan” to provide a policy framework for land use, subdivision, and development in a portion of central west Rocky View County.

PART 3 – TRANSITIONAL

Bylaw C-7667-2017 is passed when it receives third reading, and is signed by the Reeve/Deputy Reeve and the CAO or Designate, as per the *Municipal Government Act*.

Division: 8 and 9

File: 1013-265

READ A FIRST TIME IN COUNCIL this

25th day of April, 2017

READ A SECOND TIME IN COUNCIL this

25th day of July, 2017

~~UNANIMOUS PERMISSION FOR THIRD READING~~

~~25th day of , 2017~~

READ A THIRD TIME IN COUNCIL this

25th day of July, 2017


Reeve


CAO or Designate


Date Bylaw Signed

SCHEDULE 'A'
FORMING PART OF BYLAW C-7667-2017

An Area Structure Plan to guide land use and development within the area surrounding Glenbow Ranch Provincial Park and herein referred to as the Glenbow Ranch Area Structure Plan.



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PREFACE

The Glenbow Ranch area is a spectacular landscape. The narrow plateau south of Highway 1A provides outstanding views of the Rocky Mountains and the dramatic transition of the rolling foothills into the prairie grasslands. From the escarpment, a relatively undisturbed landscape of coulees, wetlands, and rough fescue grasses flows down terraced slopes to the Bow River.

The area, situated between Calgary and Cochrane and isolated by Highway 1A, contains three small country residential communities situated on the plateau adjacent to Highway 1A. The primary land use activity in the Plan area is currently ranching.

In 2008, the Government of Alberta created Glenbow Ranch Provincial Park (Provincial Park), which operates as a working ranch and protects some, but not all, of this important landscape.

This combination of landscape, the Provincial Park, and proximity to neighbouring centers provides the opportunity, and the challenge, of creating distinctive residential communities that embrace and successfully retain the natural values that are present within the Glenbow area.

Figure 1: View of the Glenbow Ranch area looking north.



Patrick Price

PART I. INTRODUCTION

1. PLAN PURPOSE

What is an Area Structure Plan?

An area structure plan is a statutory document approved by Council and adopted by bylaw. An area structure plan outlines the vision for the future physical development of an area with regard to land use, transportation, protection of the natural environment, emergency services, general design, and utility service requirements.

An area structure plan provides Council with a road map to follow when considering land use changes, subdivision, and development. When making decisions regarding development within an area structure plan, Council must consider the plan and a wide range of other factors, such as: the economic goals of the County, County-wide growth, and the ability to provide servicing.

An area structure plan does not predict the rate of development within the plan area; ultimately, growth is determined by market demand, which reflects the overall economic climate of the region.

The Alberta Municipal Government Act states an area structure plan must describe:

- proposed land uses;
- density of population and sequence of development;
- general location of major transportation routes and public utilities; and
- any other matters Council considers necessary.

The policies in an area structure plan form a bridge between the general planning policies contained in the County Plan, and the more detailed planning and design direction contained in a conceptual scheme or a master site development plan. Area structure plan policies must align with the County Plan and applicable County policies, which take policy direction from the South Saskatchewan Regional Plan.

Local Plans

For brevity, this document uses the term *local plan* to refer to a conceptual scheme or a master site development plan. The County anticipates the majority of *local plans* within the area structure plan boundary will be submitted as conceptual schemes.

Local plans are developed within the framework provided by an area structure plan. Based on this framework, the *local plan* must demonstrate how development in the local area will retain the integrity of the overall area structure plan concept, and how development will be connected and integrated with adjacent areas. Policy sections in the area structure plan identify the unique requirements that must be addressed in the *local plan* due to the location and specific development conditions of the area. The standard technical requirements of a conceptual scheme or a master site development plan are identified in Section 29 and Appendix C of the County Plan.

Local plan is a term that refers to a conceptual scheme or a master site development plan (County Plan - Section 4). A *local plan* will have unique planning requirements based on the planning direction provided in the area structure plan. *Local plans* must also address the general requirements for preparing a conceptual scheme or a master site development plan identified in Section 29 and Appendix C of the County Plan.

Plan Interpretation

The meanings of some of the key words that are contained in a policy are described below:

Shall: a directive term, indicating the actions outlined are mandatory; therefore, Administration, the developer, the Development Authority, and Subdivision Authority must be in compliance, without discretion.

Should: a directive term, indicating a strongly preferred course of action by Council, Administration, and / or the developer; but one that is not mandatory.

May: a discretionary term, meaning the policy in question can be enforced by the County if it chooses to do so, dependent on the particular circumstances of the site and / or application.

2. PLAN ORGANIZATION

The Glenbow Ranch Area Structure Plan (the Plan) is organized into three parts, followed by appendices.

Part I: Introduction: This Part outlines the Plan purpose, boundaries, policy terminology, relationship to other plans, and the public engagement process, as well as key issues, opportunities, and design ideas that informed the plan preparation process. It also contains a history of the Glenbow Ranch area from its early beginnings to today, including the establishment of Glenbow Ranch Provincial Park. Finally, it presents a vision of what Glenbow Ranch could be like 20 – 25 years into the future, and provides ten broad goals that will guide the development of the area over this period.

Part II: Plan Policies: This Part is the core of the Plan, containing the policy direction to guide development in the Glenbow Ranch area. This part contains 17 sections, each of which contains a purpose statement, a list of objectives, introductory paragraphs, and a series of policies addressing the subject area.

Part III: Implementation and Interjurisdictional Coordination and Cooperation: This Part presents the Plan implementation process, and provides information on *local plan* areas and phasing. It specifies requirements to ensure the area structure plan policies and strategies are adhered to, and provides direction regarding the process for the review and amendment of the Plan. Finally, it addresses the interjurisdictional cooperation and coordination needed for successful development of the Glenbow Ranch ASP.

Appendices: There are six appendices that provide additional information related to the Plan. They include a summary of the definitions for words italicized in the Plan, detailed *parcel* information regarding *Transferrable Development Credits* assigned to individual *parcels*, and design guidelines for residential and commercial areas.

3. PLAN AREA

The Glenbow Ranch Area Structure Plan (the Plan) applies to the area within the boundary shown on Map 1: Plan Area Location and Map 2: Air Photo.

The Plan area is located on the northern side of Glenbow Ranch Provincial Park, south of Highway 1A, and between Cochrane and Haskayne Legacy Park in Calgary. The Plan area is composed of about 7,359 acres of land (Table 1) and includes the following:

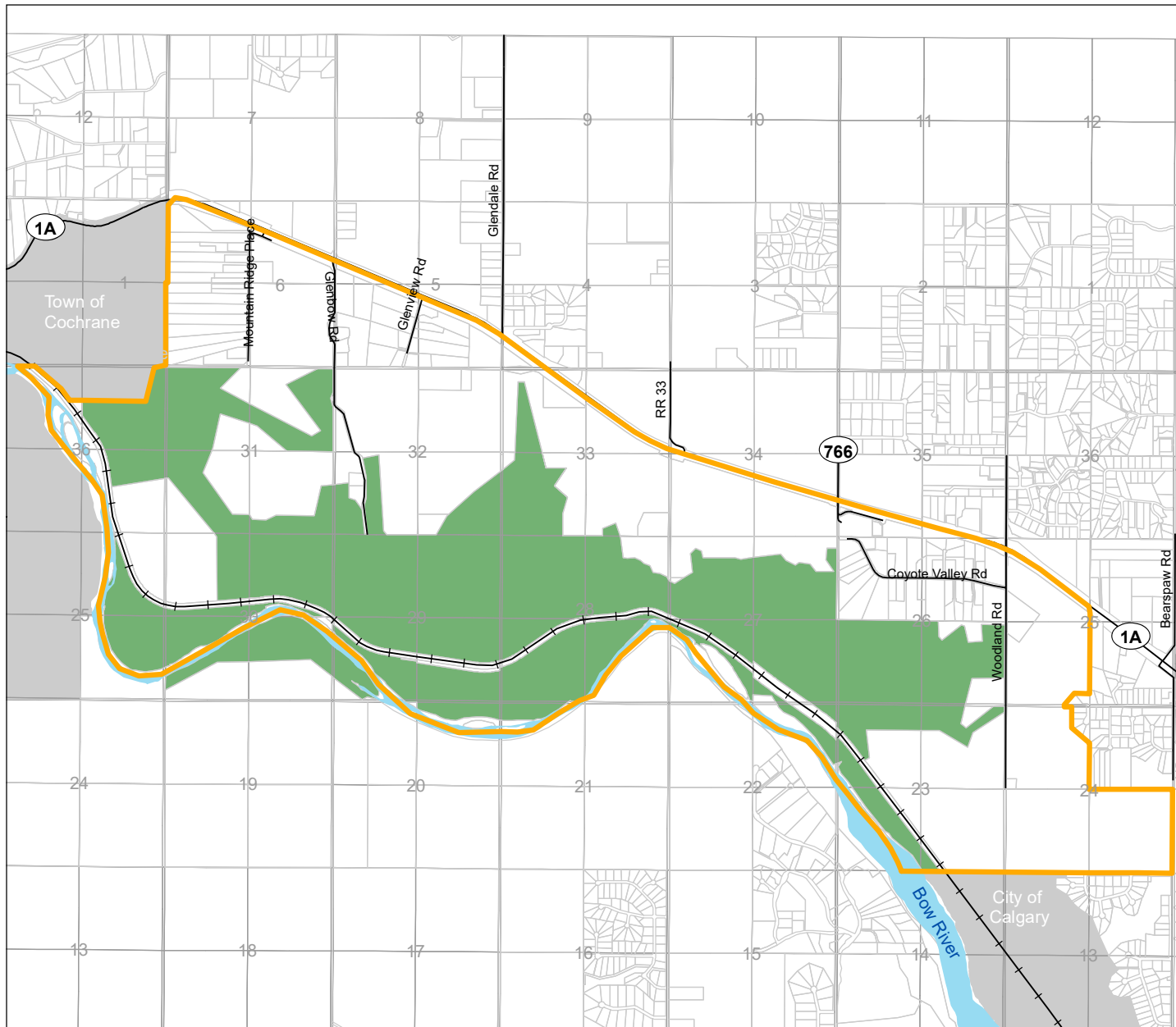
- the provincially significant Glenbow Ranch Provincial Park (Provincial Park);
- environmentally significant grasslands, wildlife corridors, escarpments, and steep slopes;
- valued viewscales, both into and from Provincial Park; and
- three existing country residential communities: Coyote Valley, Glenview, and Mountain Ridge.

Table 1: Land Areas (see Map 5, Section 7).

	Acres	% of the total area
Undevelopable land <ul style="list-style-type: none">• Slopes > 45%, floodways, road rights-of-way, rail line, wetlands, major drainages, and riparian land	617	8.4
<ul style="list-style-type: none">• Glenbow Ranch Provincial Park	3,078	41.8
<i>Conservation Area</i>	1,787	24.3
<i>Build Area</i>	1,877	25.5
Total ASP area	7,359	100 %

Plan Area Maps

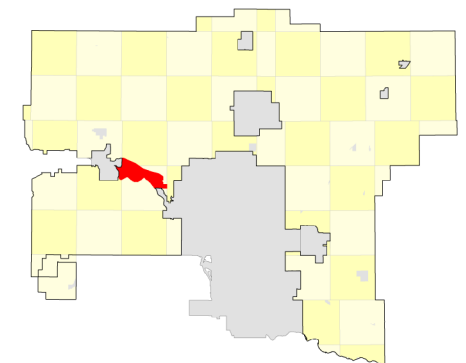
The boundaries and locations of areas shown on the maps within the Plan boundary are not intended to define exact areas, except where they coincide with clearly recognizable features or fixed boundaries, such as municipal boundaries, property lines, or road or utility rights-of-way. Furthermore, the locations of symbols depicting specific features on the maps are approximate only, not absolute, and should be interpreted as such. Where the precise locations of the *build* and *Conservation Areas* are required, the digital shape files on which these maps are based can be obtained from the County.



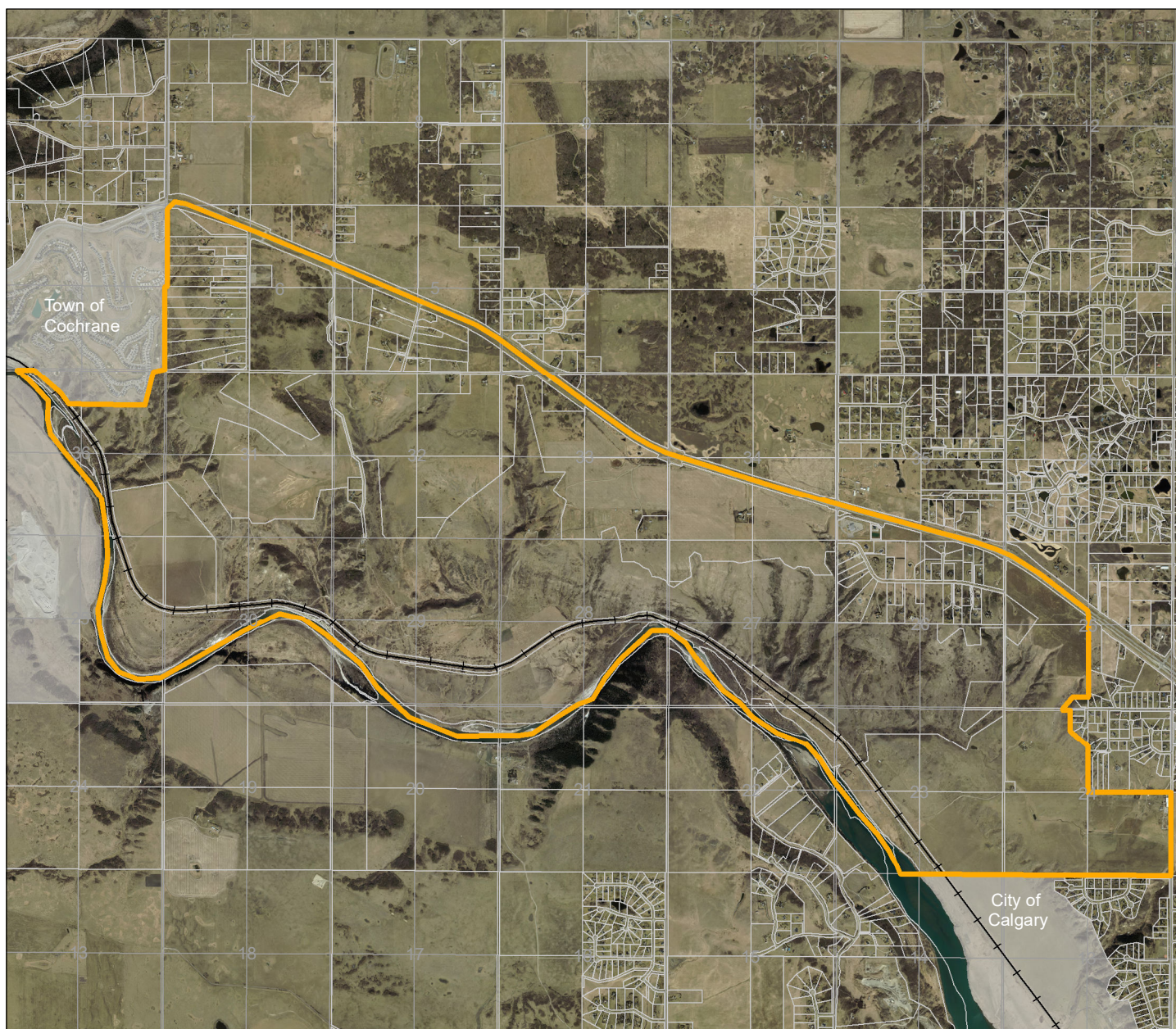
This map is conceptual in nature. No measurements or area calculations should be taken from this map.

Map 1: Plan Area Location

- Plan Area
- CP Railway
- Glenbow Ranch Provincial Park
- Roads
- Municipal Neighbours





0 0.5 1 2 Km

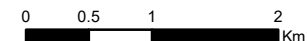


Map 2: Air Photo

Spring 2016

-  Plan Area
-  CP Railway

This map is conceptual in nature. No measurements or area calculations should be taken from this map.



4. POLICY DIRECTION AND ENGAGEMENT

The Glenbow Ranch Area Structure Plan (the Plan) was originally part of the Bearspaw Area Structure Plan (adopted in 1994). The need for a new area structure plan was based on the age of the Bearspaw Area Structure Plan and the establishment of Glenbow Ranch Provincial Park (Provincial Park), changing community demand for different housing types, new residential areas in adjacent municipalities, overall development pressure, and the need for the land use policy to reflect the County Plan and other County policies.

The preparation of the Glenbow Ranch Area Structure Plan has been a multi-faceted and complex process. In addition to the requirements of the Municipal Government Act, as outlined in Section 1, the preparation of the Plan considered a number of elements, including the:

- requirements of the Alberta Land Stewardship Act (ALSA);
- direction of the South Saskatchewan Regional Plan (SSRP);
- strategic directions and policy of the County Plan and other applicable adopted County policies;
- ideas and input gathered throughout the public and stakeholder engagement process;
- key issues and opportunities identified by Administration, residents, landowners, stakeholders, and municipal neighbours; and
- physical constraints and attributes of the area.

An overview of the key factors informing the preparation of the Plan follows, while physical constraints and attributes are discussed in Section 5 (Glenbow History).

Relevant Planning Documents and Stakeholders

Alberta Land Stewardship Act

The Alberta Land Stewardship Act (ALSA) provided for the creation of the South Saskatchewan Regional Plan. The legislation also enabled the use of conservation and stewardship tools, notably a Transfer of Development Credit (TDC) Program, which will be used in the Glenbow Ranch Area Structure Plan to facilitate the conservation and development of land. Under the ALSA, the use of a TDC Program requires approval by an Order-in-Council of the Provincial Government.

South Saskatchewan Regional Plan

The South Saskatchewan Regional Plan (SSRP) sets the stage for the region's robust growth, with vibrant communities and a healthy environment over the next 50 years. The SSRP establishes a long-term vision for the region, aligns provincial policy, places importance on engagement, sets desired economic, environmental and social objectives, describes the strategies to meet the objectives, provides guidance to decision makers on land use management, and establishes an evaluation, monitoring, and reporting process.

The SSRP provides municipalities with strategies that allow for flexibility in their planning and decision-making. These strategies are presented in a general manner to allow for interpretation

and application in a locally meaningful and appropriate fashion. Each municipality must prepare statutory plans and policies to align with the principles of the SSRP. Rocky View County's Municipal Development Plan (the County Plan) was prepared in alignment with the SSRP, and subsequently, all area structure plans must follow the direction of the County Plan. The SSRP provides a number of principles to assist municipalities with strategic planning.

A key premise of the SSRP is to use land more efficiently and to preserve large tracts of agricultural land. The County Plan implements these principles by directing growth to identified growth areas and limiting development outside of these areas. The Glenbow Ranch Area Structure Plan was formed from a portion of the Bearspaw Area Structure Plan. The Bearspaw Area Structure Plan is identified as a residential growth area in the County Plan and a County residential growth corridor in the Rocky View / Calgary Intermunicipal Development Plan.

In addition, the Glenbow Ranch Plan specifically achieves the following key SSRP principles:

- use land efficiently by reducing the amount of land taken up by development, and building at higher densities than current practice, using existing infrastructure and minimizing the need for new or expanded infrastructure (SSRP Section 5, Objective 1, Strategy 5.1);
- minimize fragmentation and conversion of agricultural land by providing opportunities for voluntary actions by landowners to preserve and maintain agricultural land (SSRP Section 1, Objective 1, Strategy 1.1);
- conserve and maintain the benefits of biodiversity, using conservation tools (SSRP Section 3, Outcome 1, Strategy 3.15); and
- establish land-use patterns that feature a range of housing types (SSRP Section 8, Strategy 8.14).

The SSRP principles are achieved through the Plan's use of existing transportation and wastewater infrastructure and its vision of employing conservation tools, specifically *Transferrable Development Credits*, to concentrate development and conserve approximately half of the Plan area as agriculture land. This will result in higher density development than was previously achieved in the Bearspaw area, a range of housing types to serve a multi-generational community, and the protection of valuable wildlife habitat.

County Plan

The Glenbow Ranch Area Structure Plan is consistent with the policies of the County Plan. The County Plan provides an overall policy framework on a variety of matters, ranging from the development of residential and commercial areas, to the provision of emergency services and infrastructure.

A key direction of the County Plan is to use land efficiently by directing growth to defined areas, thus conserving the remaining large blocks of land for agricultural use. Prior to the adoption of the Glenbow Ranch Area Structure Plan, the Glenbow planning area was located within the boundaries of the Bearspaw Area Structure Plan, which is identified as a growth area in the County Plan.

The County Plan encourages efficient use of land by reducing the development footprint through the use of compact residential development. It supports conservation design and allows for conservation communities within existing country residential areas. The County Plan emphasizes the importance of retaining rural character through the use of adjacent open space, community design, and hamlet size.

Section 10 of the County Plan provides policy support for the Glenbow Ranch ASP, particularly policies 10.5, 10.6, and 10.10. These policies provide direction for reviewing existing area structure plans and for preparing conservation communities which can include commercial development and have hamlet-like qualities.

Bearspaw Area Structure Plan

Prior to adoption of the Glenbow Ranch Area Structure Plan, the Plan area was under the policy direction of the Bearspaw Area Structure Plan. The Bearspaw Area Structure Plan, adopted on January 18, 1994, encompassed approximately 40,000 acres of land both north and south of Highway 1A and provided for traditional country residential development of primarily two and four acres lots.

The Bearspaw Area Structure Plan also recognized the unique natural features of the area with the following plan objective:

“protect, conserve and / or enhance the unique natural features of the Plan Area by requiring proposals for redesignation, subdivision and / or development to consider these features and implement measures that will avoid or mitigate any resulting potentially negative impacts” (Objective 6.5).

Over the past decade, there have been a number of applications within the Bearspaw Area Structure Plan for developments with lots smaller than two acres, due to the decreased demand for traditional sized acreages but the continued desire of residents for a rural lifestyle. Added to this trend was the creation of the Glenbow Ranch Provincial Park in 2008 which introduced a significant new use south of Highway 1A. The result was a need to review portions of the Bearspaw Area Structure Plan to ensure planning guidance was appropriate and responded to changing conditions.

Policies 28.3 and 28.4 of the County Plan provide direction to review area structure plans every ten years. The review of the southern portion of the Bearspaw Area Structure Plan, and subsequent writing of the Glenbow Ranch Area Structure Plan, followed this policy direction. At the time of preparation of this Plan, the Bearspaw Area Structure Plan was 23 years old.

The conservation design elements of the Glenbow Ranch Plan expand on the direction of protecting the unique natural features, as identified in the Bearspaw Area Structure Plan, and provide a different form of rural housing than prescribed in the Bearspaw Area Structure Plan.

City of Calgary: Rocky View / Calgary Intermunicipal Development Plan and City of Calgary Haskayne Area Structure Plan

The Rocky View / Calgary Intermunicipal Development Plan recognizes the Highway 1A area as a County residential development corridor. Portions of the Glenbow Ranch Area Structure Plan

are affected by this Intermunicipal Development Plan; specifically, the southeast edge of the Plan area that abuts Haskayne Legacy Park. This means that there is a higher degree of intermunicipal collaboration and coordination required for this area. Areas of coordination may include transportation, servicing, trails coordination, and land use transition. Conservation lands (Section 7) were intentionally located adjacent to the Haskayne Legacy Park in order to enhance and protect Haskayne Legacy Park.

Town of Cochrane: Town of Cochrane Intermunicipal Development Plan, GlenEagles Area Structure Plan, and The RancheHouse Accord

A portion of the Glenbow Ranch Area Structure Plan borders the Town of Cochrane. The Town of Cochrane / M.D. of Rocky View No. 44 Intermunicipal Development Plan extends two miles into the western portion of the Glenbow Ranch Plan area. The Intermunicipal Development Plan aims to improve coordination and consistency across the border, especially with regard to highway development, and the protection and enhancement of natural areas.

Within Cochrane, the GlenEagles Area Structure Plan, which has facilitated the development of a residential community, is located adjacent to the border of the Glenbow Ranch Area Structure Plan.

The RancheHouse Accord is a collaborative agreement between the Town of Cochrane and Rocky View County. The Accord provides a commitment and a framework with guidelines, processes, and strategies to assist the County and Town to sustain a cooperative, open, and communicative relationship with each other.

Alberta Parks

Glenbow Ranch Provincial Park (Provincial Park) was established by the Government of Alberta in 2008 as part of the Alberta Parks system of protected areas. The Glenbow Ranch Provincial Park falls within the Foothills Parkland Natural Sub-region. It is home to significant ecosystems, such as riparian habitats, native grasslands, shrub lands, and aspen communities. The land where the Provincial Park is today was used in the past by First Nations, and by European settlers for ranching and quarrying. Today, the Provincial Park is a working ranch and an important ecological and natural area; retaining native grasslands, and significant natural and historical areas.

Alberta Parks manages Glenbow Ranch Provincial Park (Provincial Park) and was a key stakeholder in the development of the Glenbow Ranch Area Structure Plan. While the Provincial Park may benefit from the discovery and enjoyment of its landscape by nearby residents who become its stewards, the change in use on lands adjacent to it will have a direct effect on wildlife, the sensitive grasslands ecosystem, and operations within it. Alberta Parks shares Rocky View County's commitment to careful design considerations in terms of viewsapes, access, trails, invasive species, utility servicing, and infrastructure. An ongoing collaborative relationship between Rocky View County and Alberta Parks will be crucial to the long-term sustainability of the Provincial Park and the success of the Glenbow Plan.

Glenbow Ranch Provincial Park Foundation

The Glenbow Ranch Park Foundation supports and enhances Glenbow Ranch Provincial Park through a formal cooperative partnership with the Government of Alberta. The Harvie family sold and donated the land for the Provincial Park, and endowed the Foundation with funds to support initial infrastructure development and ongoing community engagement and stewardship initiatives. The Foundation is a key stakeholder in the long-term planning and development of the Provincial Park, and makes recommendations on major strategic initiatives and policies.

Public Engagement

Rocky View County's commitment to an open, transparent, and inclusive process with respect to the preparation of the Glenbow Ranch Area Structure Plan began with a Terms of Reference (February 2015) and included the implementation of an engagement strategy that provided stakeholders with opportunities for discussion and input. A summary of this engagement is described below:

Phase 1 – Foundations: Education & Awareness

Awareness, Issues & Goals: The initial public start-up phase ran from April to the end of June, 2015. The first engagement session included an 'Ideas Fair,' which was intended to raise awareness of the Plan preparation process and gather feedback on issues, opportunities, and priorities. This phase included an online questionnaire and an in-person workshop to explore residents' ideas with respect to 'Hopes & Fears,' 'Glenbow Today,' and the 'Future Glenbow.' Over 125 people attended the workshop and 96 responses to the online questionnaire were received.

In June 2015, a panel discussion on conservation design was held. Industry experts provided information on conservation-designed communities and *Transferrable Development Credits*. Approximately 80 people attended the event.

Phase 2 – Setting Directions: Vision & Objectives

Evaluating Options & Setting Direction: The second phase ran from September through the end of October 2015 with an interactive Open House, two landowner workshops, and an online survey to help inform the development of concept options. The County engaged participants in discussing: (i) the vision, goals, values, and principles; (ii) potential areas for development and conservation; and (iii) initial policy directions for the Glenbow Ranch Area Structure Plan. About 60 people attended the open house, another 60 people attended the two landowner workshops, and 22 responses to the online questionnaire were received.

Phase 3 – Exploring: Options & Trade-Offs

Options & Trade-Offs: From November, 2015, to February, 2016, Rocky View County engaged with area landowners, residents of the Mountain Ridge, Glenview, and Coyote Valley communities, and the broader Bearspaw community to gather input on *Conservation Areas*, *Build Areas*, population scenarios, and a Transfer of Development Credit (TDC) Program for the Glenbow Ranch Area Structure Plan. Two landowner meetings were held, each with an attendance of 40 people. More than 70 people also attended an interactive Open House.

Phase 4 – Drafting the Plan: Draft & Final Plans

Draft Plan: In this phase, which extended from March to July, 2016, two additional open houses were held to present draft directions and the first draft of the Plan. The draft was refined through further public consultation, agency circulation, online feedback, and technical review. A full draft was released in July 2016 for public and agency comment. Over an eight month period the draft was revised based on public and agency comment and dialogue. An open house for the final draft was held in April 2017, followed by a Public Hearing on April 25, 2017.

5. GLENBOW HISTORY

Early Beginnings

The earliest artifact found in the Glenbow area is a spear point, dated to 11,000 years ago. Two recent archaeological surveys of the Bow Valley have identified prehistoric sites within, or close to, the boundaries of Glenbow Ranch Provincial Park and the Plan area.

European Arrival

One of the first recorded meetings between First Nations and Europeans occurred along the Bow River corridor, in the winter of 1787 and 1788. The meeting was between a group of Pikuni people and David Thompson, a Hudson's Bay Company employee who lived with the Pikuni through the winter. The Hudson's Bay Company established the first fur trading fort on the Bow River in 1833, west of the Glenbow Ranch area in what is now the area occupied by the Bearspaw, Chiniki, and Wesley First Nations (Stoney).

In 1872, whisky traders arrived at the confluence of the Elbow and the Bow rivers. The North-West Mounted Police came to the area to suppress the whiskey trade in 1874, and by 1875, Fort Calgary had been established at the confluence of the Bow and Elbow rivers.

Ranching Begins / Cochrane Rancho

With the extirpation of the bison due to hunting, extensive tracts of prairie grasslands were left un-grazed. Ranching was seen as an opportunity to fill this void and encourage European settlement. In 1881, a Federal Order in Council laid out the rules for western Canada's lease ranches. A penny per acre, per year, for up to 100,000 acres was the established rate. By the time the law was passed, the Cochrane Rancho Company already existed and Senator Cochrane was awarded the first lease, which included the majority of the Plan area.

The CPR railway, which was built in the early 1880s, included stops in Cochrane and Bearspaw. This was advantageous for the Cochrane Rancho. Cattle could be loaded onto the trains from the home ranch, as it was located along the railway in what is now Cochrane.

1884 – 2009

A number of factors, including harsh winters and unsuccessful ranching practices, caused the Cochrane Rancho to be unprofitable. In 1884, the Rancho switched from cattle to horses and sheep, and was renamed the British American Company. By 1888, due to increasing pressure from homesteaders, the portion of the ranch north of the Bow River was subdivided into smaller homesteads, and sold. Since then, the lands have changed hands but have largely been used for ranching.

Many individuals and families have been involved in the stewardship of the Glenbow area lands. Each family has their own special bond and story to tell:

In 1905, William Bancroft, a stone mason from Yorkshire, England moved to the Glenbow area to establish a homestead that overlooks the Bow Valley and Rocky Mountains. Upon arrival he hand dug a 120-ft. water well that is still in use today. In 1920, Bertha May Holloway arrived in Canada as a mail order bride and married William. The Bancroft's milked 20 cows, bred and

raised horses, and in 1958 moved in an aluminum dairy barn that remains as a landmark today.

Harry Hollas came to Canada from England in 1905 and homesteaded in the Glendale district. He had a wooden frame shack and barn, and used horses and horse machinery to farm the land. Harry grew one of the first crops of oats in the country.

Mr. Hollas did not have a high school education, but saw its value and served on the “Glendale School Board” as secretary and treasurer for a number of years. His hobby was music; he played violin for community dances that were held every two weeks, and also played trumpet and organ.

Chester de la Vergne purchased the land along the Bow River between Calgary and Cochrane in 1908 to operate a horse and sheep ranch. A sandstone quarry adjacent to his ranch produced the sandstone for the Alberta legislature building.

Eric L. Harvie purchased the Glenbow Ranch property from Chester de la Vergne in 1934. By 1951, the ranch had been enlarged to include the Bearspaw and Bowbend Ranches. His son, Neil Harvie, took over the ranching operations from him in 1953. Glenbow Ranch Provincial Park was created from these lands.

The Spanier family purchased land in 1965 to enjoy the rural lifestyle; the property has been in use by the family since that time, and has provided a home for three generations of the family. The property is home to a long barn that was used by Earnest Thompson’s ranching operation, which dates back to 1904, and housed the ranch’s riding team.

Glenbow Today

An understanding of the current landscape in the Plan area can be gained from Map 3: Existing Land Use, and Map 4: Existing Conditions. The Plan area is bound by the Bow River to the south, Highway 1A to the north, Cochrane to the northwest, and Calgary to the southeast. The CP Railway follows the Bow River along the southern boundary of the Plan area.

Agriculture, particularly ranching, is still the dominant land use in the Plan area. Glenbow Ranch Provincial Park has an agricultural land use, and ranching is still practiced within the Provincial Park. The Plan area contains a cemetery, municipal fire station, and the RockPointe Church.

Over the past forty years, country residential development in this area has resulted in the establishment of the communities of Mountain Ridge, Glenview, and Coyote Valley, along with individual country residential *parcels* scattered throughout the Plan area.

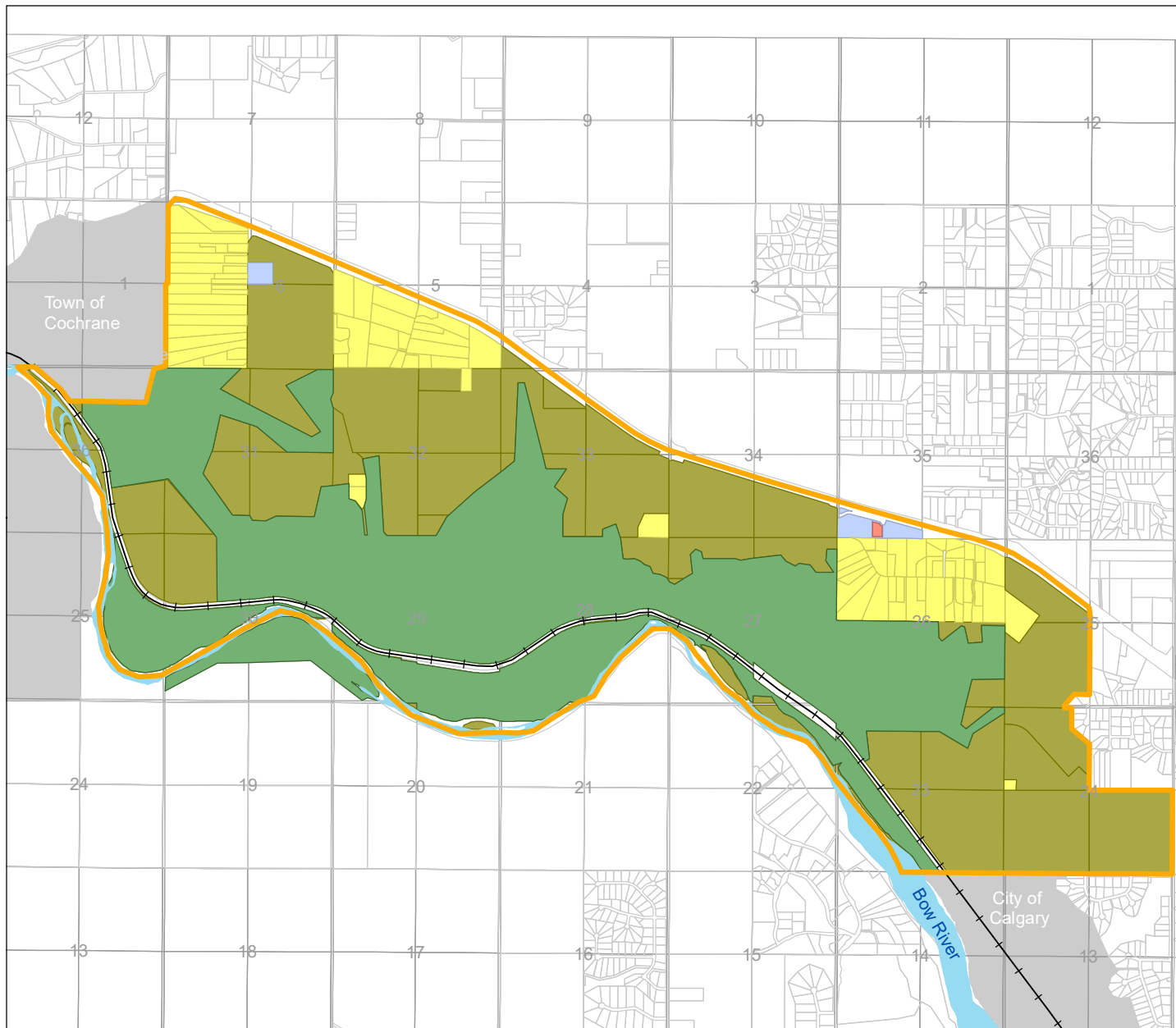
Across the County, demand for country residential acreages has declined and requests for new forms of rural residential development has occurred. The results are smaller communities with higher densities and smaller lot sizes than traditional country residential *parcels*. Examples of this new form of development include Watermark, to the east, and Silverhorn, to the north. Servicing feasibility for increased development density has become available in the Plan area, providing opportunities for smaller lots and different forms of residential development.

In 2008, the Harvie family donated and sold land to the province for the development of the Glenbow Ranch Provincial Park (Provincial Park). The family also endowed the Glenbow Ranch Park Foundation to support infrastructure and operating expenses for the Provincial Park, which opened in August 2011 and provides the public with access to 30 kilometers of paved and gravel trails that extend from Cochrane to Haskayne Legacy Park, within Calgary. Glenbow

Ranch Provincial Park provides visitors with views of the Bow River and Rocky Mountains, as well as many points of historical and cultural interest along its trails.

The natural beauty of this area makes it a desirable place to live. The Glenbow Ranch Area Structure Plan provides a framework to develop the area in a comprehensive and cohesive manner, conserving large tracts of land for agricultural and conservation purposes, and providing varying forms of housing for a multi-generational community.

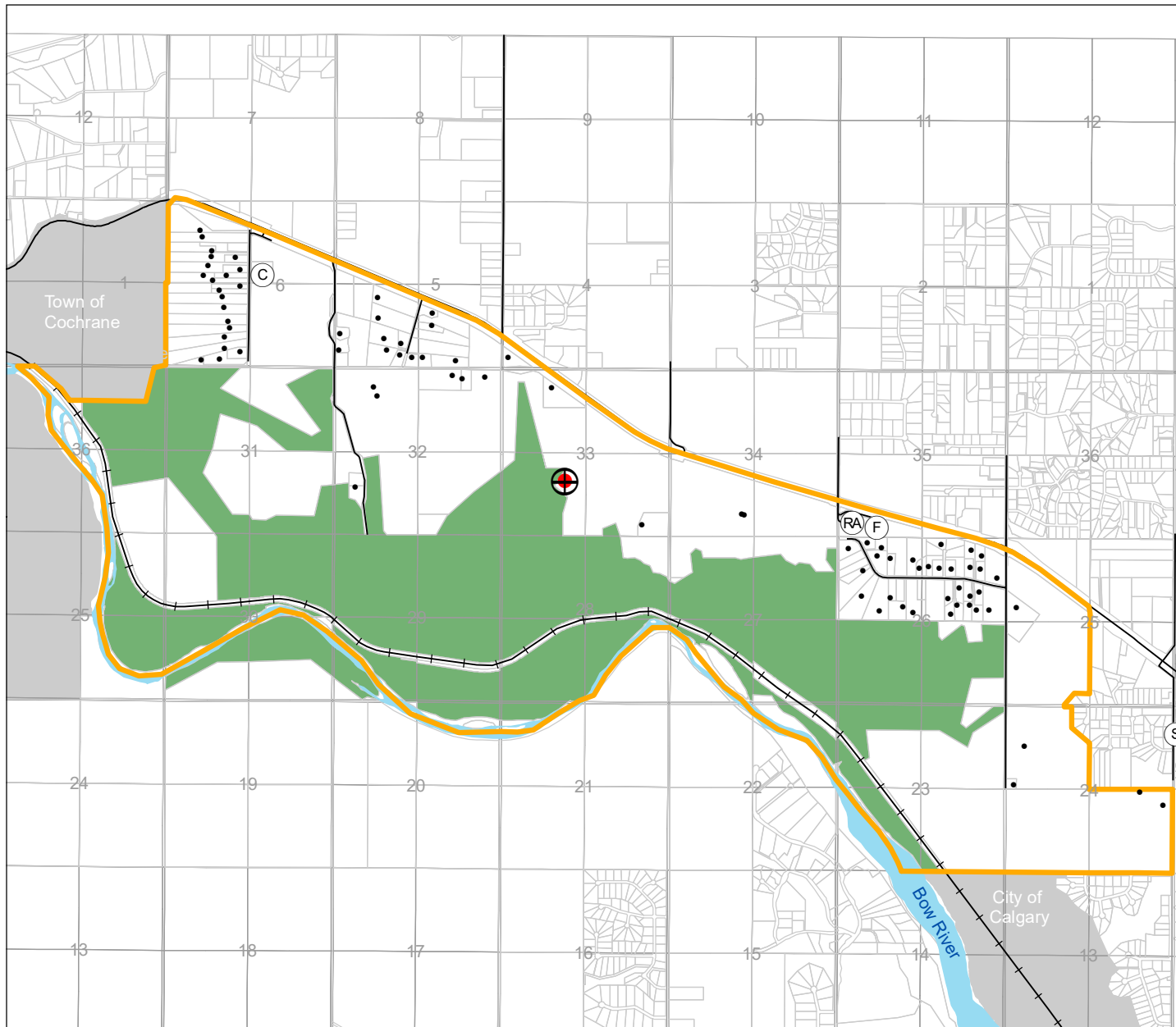
Map 3: Existing Land Use



- Plan Area
- CP Railway
- Glenbow Ranch Provincial Park
- Agriculture
- Community Services Reserve
- Country Residential
- Institutional

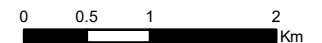
This map is conceptual in nature. No measurements or area calculations should be taken from this map.

Map 4: Existing Conditions



- Plan Area
- CP Railway
- Glenbow Ranch Provincial Park
- Homes
- RA Religious Assembly
- S School
- C Cemetery
- F Fire Station
- Abandoned Well
- Roads

This map is conceptual in nature. No measurements or area calculations should be taken from this map.



6. PLANNING FOR TOMORROW

GLENBOW VISION

The Glenbow Ranch area is a showcase example of a conservation community, where natural landscapes have been sensitively integrated with residential communities that vary in size and housing type. Central to the area is an attractive, friendly, and



welcoming hamlet centre where residents go to pick up milk, bread, and prescriptions, or even catch up over a coffee. This multi-generational community supports people in all stages of their lives, from young families to seniors. People feel safe, knowing their neighbours are looking out for them, and everything is just a quick walk away on the attractive pathway network. The views of both the mountains and the Bow River are spectacular. However, once people walk into Glenbow Ranch Provincial Park, they would have little idea that there are homes nearby. With close attention paid to conserving and maintaining natural landscapes, wildlife thrives and is connected to the region, the Provincial Park is enhanced, and this working ranch remains a living reminder of heritage and culture.

GOALS

1. To conserve and enhance valued landscapes, while allowing complementary residential development with supporting services to occur in other areas. These landscapes include: views, wildlife habitat, natural areas, slopes, coulees, wetlands, and riparian areas.
2. To protect and enhance Glenbow Ranch Provincial Park by preserving views seen from the Provincial Park, by buffering it from development, and improving access and connections to the Provincial Park.
3. To create separate, compact, residential communities that vary in size, each with a distinct sense of place, created to coexist with the natural landscape, and to celebrate the area history, heritage, and culture.
4. To create a centrally located Hamlet community with a welcoming and friendly village atmosphere that meets the diverse needs of a multi-generational community. The residential community will include community gathering places, schools, and attractive shops; it may also serve as a gateway to Glenbow Ranch Provincial Park.
5. To improve the connection of Glenbow Ranch Provincial Park with the wider Bearspaw community through a well-designed and safe network of pathways.

6. To enhance the experience of existing residents by preserving open space, maintaining views of the Glenbow Ranch Provincial Park, and creating connections to that Park.
7. To mitigate the impacts on existing residents from traffic and new forms of residential development.
8. To support planned and logical development that can be adequately serviced with water and wastewater, and manages stormwater in a way that maintains or enhances Bow River water quality.
9. To enhance wildlife and habitat connections between the Glenbow Ranch Plan area and other areas of natural significance.
10. To collaborate with government agencies, adjacent municipalities, and other stakeholders to address regional growth.

PART II. PLAN POLICIES

A. CONSERVATION: NEED, APPROACH, TOOLS, AND METHOD

Glenbow Ranch Landscape

The Glenbow Ranch area is a spectacular and important landscape. The narrow plateau south of Highway 1A provides outstanding views of the Rocky Mountains and the dramatic transition of the rolling foothills into the prairie grasslands. From the escarpment, a relatively undisturbed landscape of coulees, small drainages, and native rough fescue grasses flows down terraced slopes to the Bow River.

Dotted throughout the native and seeded grasses are groves of aspen and willow, as well as shrub lands with buck brush, silverberry, prickly rose, and saskatoon berry. These plant communities provide habitat to species such as cougars, badgers, coyotes, bobcats, mule deer, prairie falcons, bald eagles, and pileated woodpeckers.

The value of this landscape is recognized by local landowners and residents of the Bearspaw community, who identified wildlife, habitat and corridors, wetlands, views, grasslands, archaeological areas, ranching, and coulees as important features.

Figure 2: Looking west from Glenbow Ranch Provincial Park



Don Dabs

Landscape Protection

In 2008, the Government of Alberta created Glenbow Ranch Provincial Park which opened in 2011, operates as a working ranch, and protects some, but not all, of this important landscape.

Protection of landscapes, in the context of growth and development, is a strategy of the South Saskatchewan Regional Plan (SSRP). The SSRP directs municipalities to:

“encourage and support the continued stewardship of Alberta’s private lands through the development and piloting of regionally appropriate conservation tools” (Strategy 3.15).

Section 7 of the County Plan sets complementary goals such as:

“Manage private development ... in a way that maintains and improves the quality of the natural environment,” and;

“Practice sound land use planning in order to protect agricultural operations, native habitat, environmentally sensitive areas, and wildlife corridors.”

Can the competing objectives of preserving a valued landscape be reconciled with the desire to develop land for financial and social benefit? What tools are available that would assist in ensuring an equitable approach to protection and development? How do you ensure the protection of land over time and circumstance?

The following three sections describe an approach to protection and development, which informs the Glenbow Ranch Area Structure Plan.

Section 7: Conservation Design discusses the conservation design approach, along with the rationale and process for identifying *Conservation Areas*. Section 8: Enabling Legislation and Tools introduces the legislative tools used in this Plan, which allows and guides conservation, while Section 9: Glenbow Ranch TDC Program provides specific details on the application of the tools to the Glenbow Ranch area. Finally, related policy and background information can be found in Section 24: Implementation and Appendix B: *Conservation Area* and *Build Area* by Roll Number.

7. CONSERVATION DESIGN

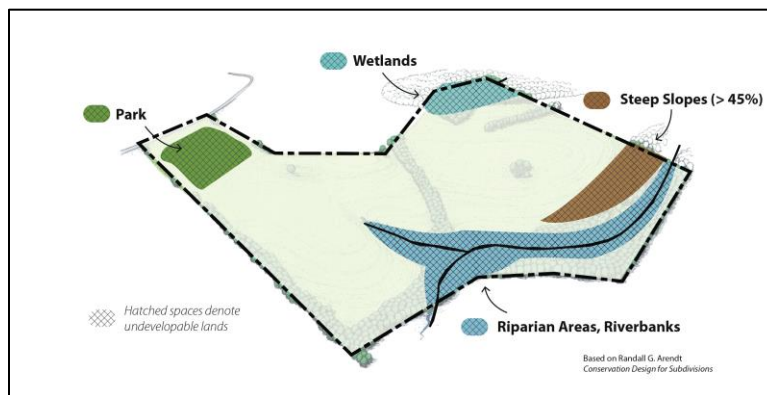
Conservation design is a planning approach that balances the competing goals of landscape preservation with the development of land for human use and occupation. The County Plan supports the use of this approach in Sections 7 (Environment) and 10 (Country Residential):

- Encourage and support conservation design as a form of compact residential development in new or amended area structure plans – County Plan pg. 32.
- Compact residential design sensitively integrates housing with the natural features and topography of a site by grouping homes on smaller lots, while permanently preserving a significant amount of buildable land for conservation, recreation, or agriculture uses - County Plan pg. 48.
- Principles of compact development suggest, “half or more of the buildable land area is designated as undivided permanent open space” - County Plan pg. 48.

Conservation Design - Mapping

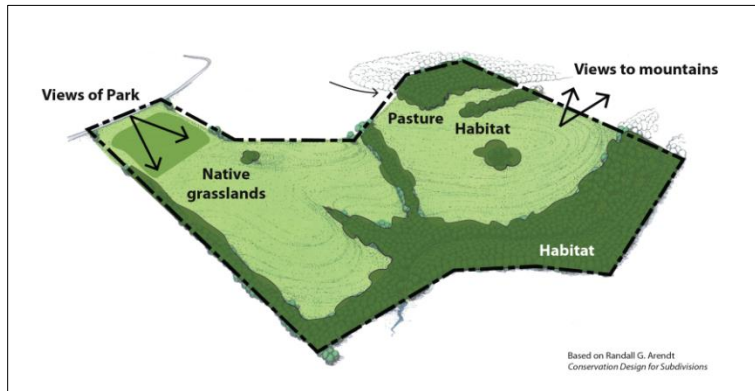
The conservation design process begins by mapping land that is physically and / or legally unable to accommodate residential or other types of development. These areas might include: parks, steep slopes, floodways, permanent road rights-of-way, wetlands, and major drainages with a riparian setback.

Figure 3: Undevelopable Land



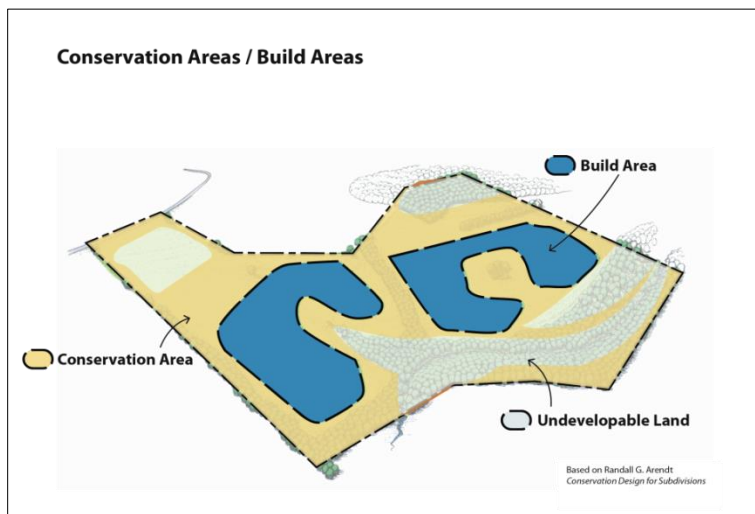
Next, areas that are valued for their environmental and natural scenic attributes, and which, under normal circumstances, could be developed are identified and mapped (Figure 4).

Figure 4: Conservation Values



Once the *Conservation Area* is identified, contextually sensitive development and building may occur on the remaining land (*Build Area*). The requirement to conserve and permanently retain a minimum percentage of the potentially developable lands as open land is fundamental to the conservation design process, and often becomes the defining feature of the community's character and sense of place.

Figure 5: Conservation Area and Build Area



Mapping the Glenbow Ranch Area

Using Geographic Information System (GIS) analysis, LIDAR elevation data, aerial photography interpretation, field analysis, and mathematical modeling, a series of maps were created and used to identify *Conservation Areas* and *Build Areas* (Map 5). The process steps included:

- a. The mapping of undevelopable land and developable land.
- b. Identifying and mapping the conservation values within the developable land area that were recognized as being important in the public engagement process. The second step resulted in a preliminary conservation map, which was derived from the

mechanical process of mapping areas where two or more conservation values overlapped.

- c. The preliminary conservation map was then adjusted to determine the final *Build Area* and *Conservation Area* (Map 5). Adjustments included opportunities to conserve large blocks of undeveloped land, conserve areas where a single conservation value was deemed important, and balance the conservation and *Build Area* land at an approximately 50:50 ratio.

Undevelopable land includes the Glenbow Ranch Provincial Park, slopes greater than 45%, floodways, permanent road rights-of way, rail line, Class 3 and above wetlands (Stewart and Kantrud), and major drainages with a 30 metre riparian setback.

Developable land means land that has the physical ability to accommodate residential, commercial, and / or institutional land uses.

In the context of the Glenbow Ranch Area Structure Plan the **Conservation Area** is land that could be developed for residential or other uses, but has natural or scenic values that are desirable to retain.

Natural or scenic values were identified in a series of public workshops. These values were refined by the addition of large blocks of relatively undisturbed land. These large blocks of land have significant conservation value because of remaining wildlife habitat, reduction of fragmentation and edge effect, and tendency to have fewer roads and buildings.

Values were modeled and / or field surveyed to determine the *Conservation Area* (Map 5) including:

- viewscales;
- undisturbed grasslands;
- slopes between 15% and 45%;
- wildlife habitat and connectivity;
- minor drainages; and
- large blocks of undeveloped land (areas greater than 80 acres with no homes).

The initial conservation map was derived from the mechanical process of mapping areas where two or more conservation values overlapped. The resulting map was then adjusted to determine the final *Conservation Area* (Map 5). Adjustments included opportunities to conserve large blocks of undeveloped land, conserve areas where a single conservation value was deemed important, and balance the *conservation* and *Build Area* land at an approximately 50:50 ratio.

OBJECTIVES

- Identify a *Conservation Area* that protects, conserves, and enhances the environmental and natural scenic values of the Plan area and the Haskayne Legacy Park.
- Identify a *Build Area* that is suitable for the purposes of residential development and its accompanying land uses.
- Conserve approximately 50% of the developable land within the Glenbow Ranch Area Structure Plan Boundary as conservation land.

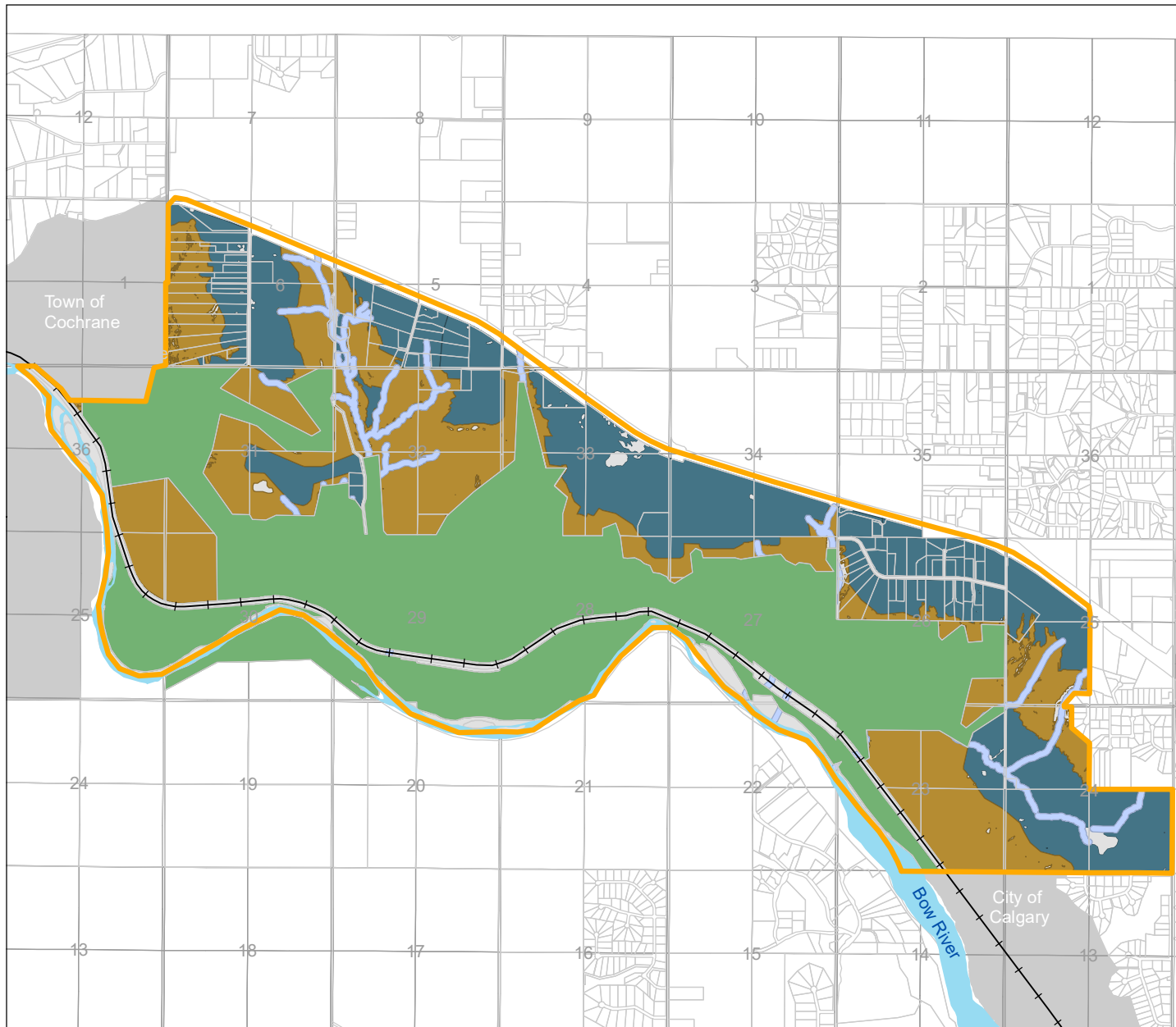
- Allow for minor changes to the *Conservation Area* and *Build Area* boundaries to reflect site-specific conditions.

POLICIES

- 7.1 *Local plans*, land use, subdivision, development permitting, building, and conservation shall be guided by Map 5: *Build Area* and *Conservation Area*.
- 7.2 Within the Plan area, the ratio of *Conservation Area* to *Build Area* should be approximately 50%.
- 7.3 In order to conserve approximately 50% of the developable land, *local plans*, land use, subdivision, and development shall not result in changes to the identified *Conservation Area* and *Build Area* boundary (Map 5).
- 7.4 Notwithstanding Policies 7.1 to 7.3, individual communities (*TDC Build Areas* and *non-TDC Build Areas* - Map 6: TDC Program Areas) may be adjusted at the *local plan*, land use, or subdivision stage if:
 - a. the variance results in an exchange of land between the *Conservation Area* and *Build Area* for any individual *TDC Build Area* or *Build Area* of no more than 5% of the *Build Area* (Section 9, Table 3); and
 - b. the maximum increase in the *TDC Build Area* or *Build Area* is no more than 0.5% of the individual *TDC Build Area* or *Build Area* (Section 9, Table 3).

TDC Build areas refer to residential communities that are established by participation in the Transfer of Development Credit Program. For an explanation of the Transfer of Development Credit Program refer to Section 8 and the introduction to Section 9. Map 6 and Table 3 (Section 9) show the various *TDC Build Areas* and their related densities.

Map 5: Conservation Area and Build Area



- Plan Area
- CP Railway
- Glenbow Ranch Provincial Park
- Build Area
- Conservation
- Undevelopable Land
- Undevelopable Land - Riparian Protection Area

This map is conceptual in nature. No measurements or area calculations should be taken from this map.

8. CONSERVATION: ENABLING LEGISLATION AND TOOLS

The Alberta Land Stewardship Act (ALSA) establishes various conservation and stewardship tools including Transfer of Development Credit Scheme and Conservation Easements, which play a central role in implementing the Glenbow Ranch Area Structure Plan. These and other tools are listed in the province's Efficient Use of Land Implementation Tools Compendium.

Transfer of Development Credit (TDC) Program

The TDC Program is a planning tool established in Part 3, Division 5 of ALSA which identifies a number of features that a TDC Program must have and requires the scheme to be approved by the Lieutenant Governor in Council.

The tool is used where there is both pressure for development and a desire to conserve certain landscape features. A TDC Program, when combined with a conservation design approach, provides a market-based mechanism for balancing these often competing goals. A TDC Program begins by identifying *Conservation Areas* and development areas (*Build Areas*), as described in Section 7.

Conservation Areas are assigned *development credits* that can be sold and transferred to *TDC Build Area* landowners. This gives landowners within the *TDC Build Area* the ability to develop at a higher density than would normally be allowed, through the purchase of *development credits*.

Table 2: TDC Terminology

For the purposes of the Glenbow Ranch Area Structure Plan, the following terms have the same meaning as defined in the Alberta Land Stewardship Act.	
Glenbow Ranch Area Structure Plan	Alberta Land Stewardship Act
Transfer of Development Credit Program	Transfer of Development Credit Scheme
<i>TDC Conservation Area</i>	Designation of an area or areas of land as a <i>Conservation Area</i> for the purpose as set out in Section 49(1)(a)
<i>TDC Build Area</i>	Designation of an area or areas of land as a development area for the purpose as set out in Section 49(1)(e)
<i>Transferrable Development Credit(s), development credit(s), or credit(s)</i>	Stewardship Units in the context of a Transfer of Development Credit Scheme - Section 49(1)(c) and in general Part 3, Division 5
Rocky View County or County	Means "local authority" – Section 2(1)(p)

Conservation Easements

Conservation easements are voluntary legal agreements between a landowner and a *qualified organization* in which the landowner agrees to restrictions on the use of his or her property in favour of conservation. They are enabled under Division 2 of ALSA.

A conservation easement safeguards a *parcel's* conservation values by imposing a list of land use restrictions that protect the natural values of the land (e.g. restrictions on subdivision or further buildings). A landowner who grants a conservation easement continues to own the land and can continue to use it, subject to the list of restrictions in the easement. The landowner is not required to allow public access as part of a conservation easement. The *qualified organization* that receives the conservation easement monitors the property for infractions against the easement. The conservation easement is registered on title and runs with the land, regardless of ownership.

Qualified organizations are organizations eligible to receive and hold conservation easements as described in the Alberta Land Stewardship Act. They include the Government of Alberta and its agencies, local government bodies such as a municipality, and land trusts or conservancies.

The conservation easement tool anchors the Transfer of Development Credit (TDC) Program. A successful TDC Program requires, upon the sale or transfer of a *development credit*, the placement of a conservation easement on the *parcel* of land from which the *credit* was transferred. The conservation easement limits development in accordance with the restrictions identified in the easement, and provides certainty that these *parcels* will not subsequently be made available for development.

Conservation easements have been used in Alberta since 1996 and have been placed on the title of approximately 1,600 *parcels*.

OBJECTIVES

- Meet the legislative requirements for the approval of a Transfer of Development Credit (TDC) Program under the Alberta Land Stewardship Act (ALSA).

POLICIES

Coming Into Effect and Amendments

- 8.1 All sections and policies of this Plan related to the Transfer of Development Credit (TDC) Program, as legislated in Division 5 of the Alberta Land Stewardship Act, are not in effect until such time as the Transfer of Development Credit (TDC) Program is approved by the Lieutenant Governor in Council.
- 8.2 Subsequent to the approved Order in Council, Rocky View County Council may amend the policies of this Plan related to the Transfer of Development Credit (TDC) Program, subject to amendments being in compliance with the Transfer of Development Credit Scheme, as approved by the Lieutenant Governor in Council.

Conservation Easements

- 8.3 A conservation easement granted to a *qualified organization* will be the instrument used to protect the *Conservation Area parcel*.

9. GLENBOW RANCH TRANSFER OF DEVELOPMENT CREDIT PROGRAM

Program Characteristics

The Glenbow Ranch Transfer of Development Credit (TDC) Program promotes the protection, conservation, and enhancement of the environmental and natural scenic values of the Glenbow Ranch area. *Conservation Areas* are assigned *development credits* that can be sold or transferred by the *Conservation Area* landowners. The purchase or transfer of *development credits* gives *TDC Build Area* landowners the ability to develop at a higher density than would normally be allowed. When a *development credit* is sold, a conservation easement is placed on the title of the conservation land from which the *credit* was assigned.

The Glenbow Ranch TDC Program has the following characteristics:

- Voluntary – A landowner can elect whether to participate in the TDC Program in the following manner:
 - Participating *TDC Build Area* landowners must purchase *development credits* to build at a higher density;
 - Participating *TDC Conservation Area* landowners can sell their *development credits*; and
 - Non-participating landowners may develop lots to a minimum of 3.95 acres in size;
- Simplicity – The TDC Program is based on the *Conservation Areas* and *Build Areas* mapped in Section 7 (Map 5). The TDC Program does not assign a higher value to any one conservation feature or area;
- Residential focus – The TDC Program requires the purchase of *development credits* in order to build at a higher residential density than is allowed as a *base density*. One *development credit* is needed to build one additional *bonus residential unit*. Complimentary land uses such as agriculture, commercial, and institutional do not require the purchase of *development credits*;
- Market driven – The sale of *development credits* occurs as a market transaction. A willing buyer and willing seller must negotiate a mutually agreeable price for the *credits*. Rocky View County plays no active role in the market; and
- Municipally administered – Rocky View County will issue *credits*, track their sale, and provide an online registry for the voluntary marketing of *development credits*.

Transferrable Development Credits, development credits, or credits are assigned to a *Conservation Area*. The *Conservation Area* landowner can sell or transfer their *credits* to a *TDC Build Area* landowner and thereby allow the *Build Area* landowner to build at a higher density than they otherwise would be allowed (the *TDC density*).

Base density means the base residential units per acre (0.175 upa) assigned to a *TDC Build Area* when participating in the TDC Program.

- Base Residential Units = **Base density** x area

TDC density means the higher residential units per acre that are allowed, on average, within a *TDC Build Area*, when the landowner participates in the Transfer of Development Credit (TDC) Program. Each *TDC Build Area* is assigned its own **TDC density**.

- Total Residential Units = **TDC density** x area

Bonus residential units means the number of residential units, on average within a *TDC Build Area*, which can be acquired through the purchase of *development credits*.

- **Bonus Residential Units** = Total Residential Units - Base Residential Units

See Table 3 for Base, Total, and *Bonus residential units*

TDC Program Area

The Plan's TDC Program consists of multiple *parcels* within eight *TDC Build Areas* and a *TDC Conservation Area* (Maps 5 and 6). Other lands within the Area Structure Plan boundary that are not part of the TDC Program include two non-*TDC Build Areas* (C and H), institutional land, undevelopable land (assigned no *development credits*), and the Glenbow Ranch Provincial Park, which falls under the jurisdiction of the Government of Alberta (Map 6).

Part B (Land Use Strategy) details overall Plan densities and population numbers, and provides rationale for the residential density assigned to each *TDC Build Area* and non-*TDC Build Area*.

OBJECTIVES

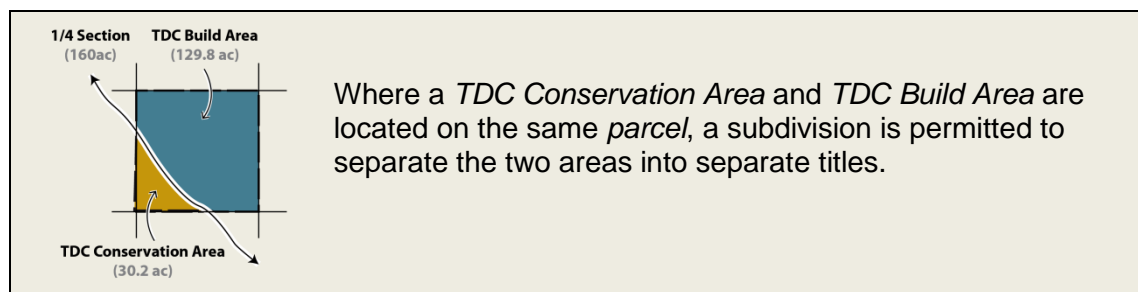
- Promote the protection, conservation, and enhancement of the environmental and natural scenic values of the Plan area.
- Encourage voluntary participation in the Transfer of Development Credit (TDC) Program.
- Establish a TDC Program for landowners within the Glenbow Ranch Area Structure Plan that achieves the vision and goals of the Area Structure Plan (Section 6).
- Facilitate a market-based system for transferring *development credits* from *TDC Conservation Areas* to *TDC Build Areas*.
- Identify and implement the requirements and process steps for participating in the Glenbow Ranch TDC Program.
- Establish the conservation easement requirements that must be placed on a titled *parcel* concurrent with the sale of a *Transferrable Development Credit*.

POLICIES

- 9.1 Conservation of developable land is encouraged through voluntary participation in the Transfer of Development Credit (TDC) Program by the:
- sale or transfer of *development credits* and placement of conservation easements on *parcels* of land identified as having conservation value (Table 9, Map 5: *Conservation Area* and *Build Area*, and Map 6: TDC Program Areas); and
 - development of *TDC Build Area* communities A, B, D, E, F, G, I, and J through the purchase of *development credits* (Map 6).
- 9.2 Landowners within a *TDC Build Area* that participate in the TDC Program shall be allowed to develop at a *TDC density* subject to the policies of this Plan.
- 9.3 Landowners of developable land within either the *Conservation Area* or the *Build Area* (Map 5) may choose to not participate in the TDC Program. Non-participating landowners shall be allowed to develop residential lots to a minimum of 3.95 acres in size, subject to the policies of this Plan.

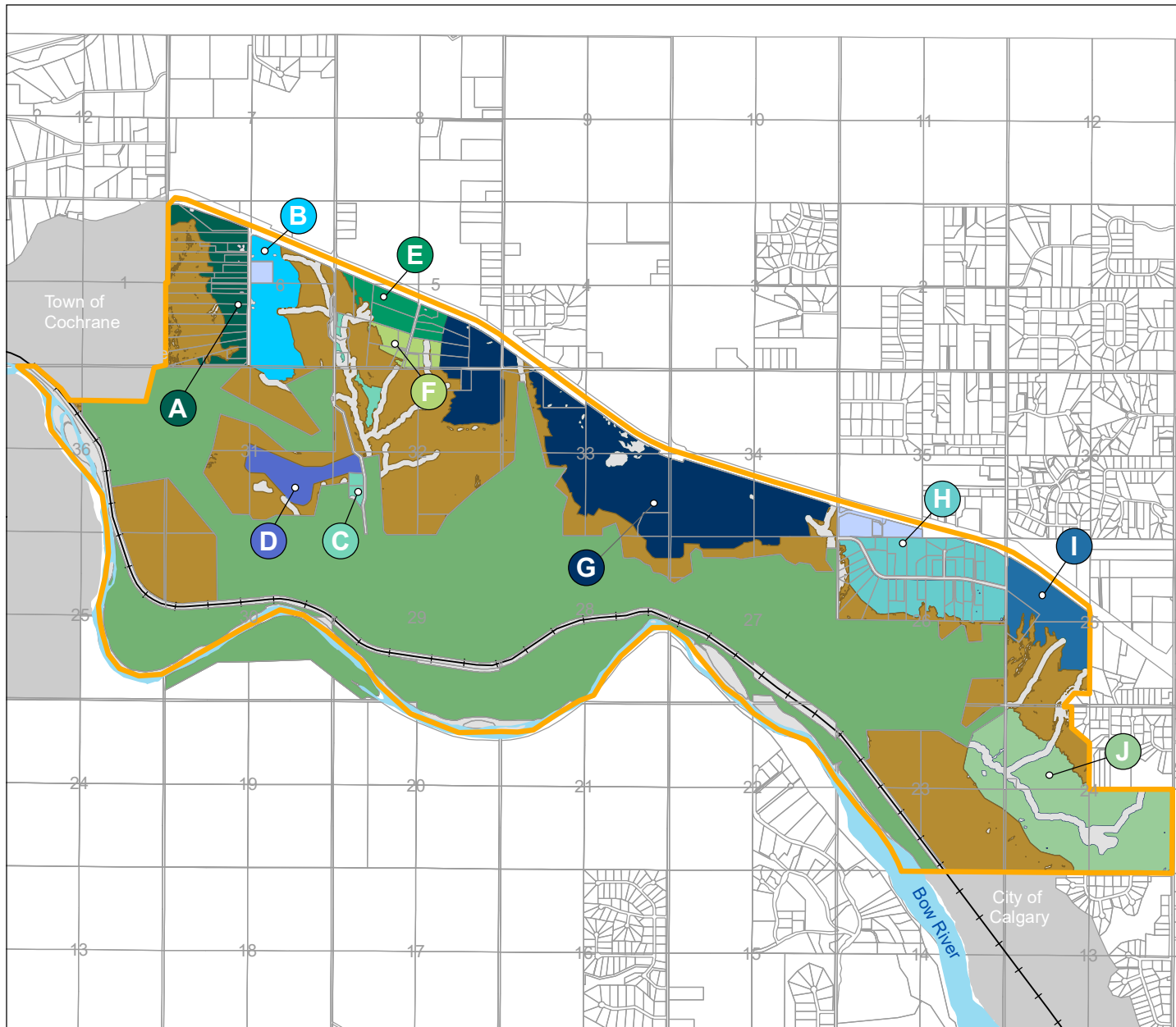
Parcel means the area identified by Rocky View County's assigned tax roll number.

- 9.4 Where a landowner owns a *parcel* that contains both a *TDC Build Area* and a *TDC Conservation Area*, that landowner may develop within the *TDC Build Area* of the *parcel* at the *TDC density* when:
- the parcel's Transferrable Development Credits have been transferred or sold to either the TDC Build Area on the parcel or to another TDC Build Area parcel, and
 - there is a conservation easement registered on the *parcel's TDC Conservation Area*.
- 9.5 Where a *TDC Conservation Area* and *TDC Build Area* are located on the same *parcel*, a subdivision should be permitted to separate the two areas into separate titles.

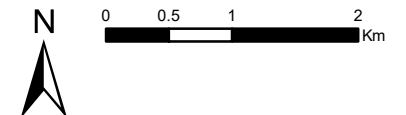
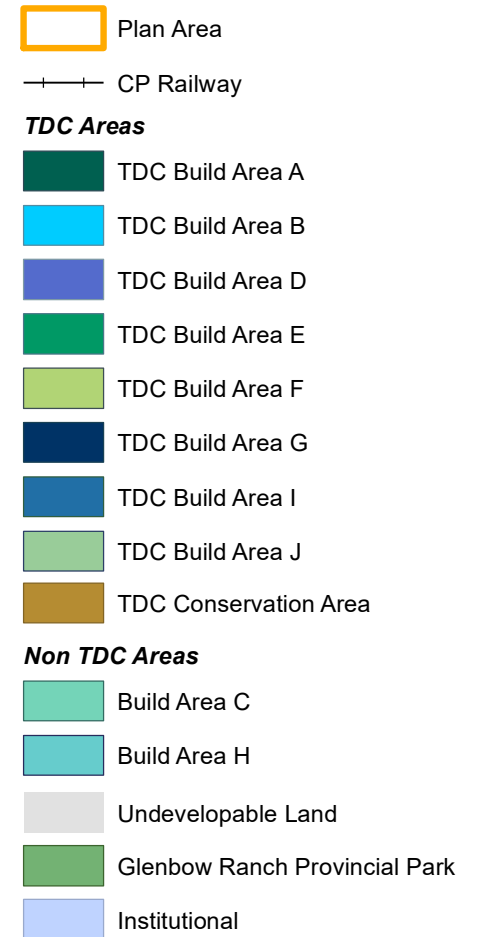


Map 6: TDC Program Areas

Transferable Development Credit



This map is conceptual in nature. No measurements or area calculations should be taken from this map.



TDC Build Area

Base Density

- 9.6 A landowner participating in the TDC Program is assigned a *base density* of 0.175 units per acre for the *TDC Build Area*.

A landowner who owns a *parcel* that contains both a *Build Area* and a *Conservation Area* shall not develop the *Conservation Area* for residential use when the *TDC Build Area* is developed at the *TDC density*.

TDC Density

- 9.7 A residential *TDC density* may be achieved, only in *TDC Build Area* communities A, B, D, E, F, G, I, and J, by the purchase of *transferrable development credits* assigned to the *TDC Conservation Area parcels*.
- 9.8 The acquisition of one *transferrable development credit* shall be required for each additional *bonus residential unit*.
- 9.9 The *TDC density* for each *TDC Build Area*, identified on Map 6 and Table 3 is an average density. The *TDC density* for an individual *parcel* in *TDC Build Areas* G, I, and J may vary within the *TDC Build Area* and will be determined during *local plan* preparation.
- 9.10 The County shall not consider any other mechanism for increasing the allowable *density*.
- 9.11 Notwithstanding Policy 9.10, accessory dwelling units (ADU) are permitted without the purchase of a *development credit* where the ADU remains on the title of the primary residential unit.
- 9.12 *Local plan* preparation, approval, and implementation for *TDC Build Areas* G, I, and J shall require the purchase of a minimum of 75% of the allowed *bonus residential units*.

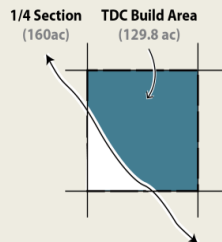
In order to achieve the land conservation goals of the Glenbow Ranch Area Structure Plan, the County requires *TDC Build Areas* G, I, and J to achieve the minimum of 75% of the *TDC density*. For example, 245 units are allowed in *TDC Build Area* I; the approved *local plan* must achieve 75% of that target, or 184 units, in order to be approved.

Table 3: TDC Build Area and Bonus Density

TDC Build Area Communities	Area (acres)	Base Density (upa)	Base Residential Units = area x base density (rounded up)	TDC Density (upa)	Total Residential Units = area x TDC density (rounded up)	Bonus Residential Units = total units - base units (with purchase of credits)
A	128.3	0.175	23	0.7	90	67
B	122.1	0.175	22	0.7	86	64
D	68.9	0.175	13	0.7	49	36
E	69.0	0.175	13	0.7	49	36
F	38.8	0.175	7	0.35	14	7
G	628.7	0.175	111	5.57	3,502	3,391
I	122.2	0.175	22	2.0	245	223
J	371.3	0.175	65	1.0	372	307
Total	1,549		276		4,407	4,131
Non-TDC Build Area Communities	Area (acres)	Minimum Parcel Size	Existing Units	Possible New Units	Total Non-TDC Units	
C	25.6	3.95 ac	5	5	10	
H	252.3	3.95 ac	31	24	55	
Institutional	49.5	NA	NA	NA	NA	
Total	327.4		36	29	65	
ASP Total	1,876.71				4,472	

When referring to residential density, the word 'unit' means a 'dwelling' or 'home'. The abbreviation 'upa' means units per acre and is based on the gross area of the *parcel* in which no additional area has been removed for roads, pathways, parks, schools, etc.

Each community (TDC Build Area) is assigned an average TDC density (Table 3). Like most residential communities, density will vary across the community. Therefore, the actual TDC density for an individual parcel may be higher or lower than the average TDC density for the community. *Parcel* density will be determined at the *local plan* stage (policy 9.9).



The following is an **Example Calculation** of how community density might vary and how the number of required credits is determined:

TDC Build Area I has an average density of 2.0 upa. When designing the *local plan*, it was determined that existing country residential homes should be buffered from higher density new development by providing for lot sizes of 1 upa for a *parcel* of land located on the edge of TDC Build Area I. The *parcel's* TDC Build Area is 122.2 acres; therefore, it may develop a total of 244.4

units 122.2×2.0 upa, which would be rounded up to 245 units.

The landowner has a *base density* of 0.175 upa, which provides 21.4 base residential units (122.2×0.175 upa), which would be rounded up to 22 units.

In order to develop all 245 units, the landowner would have to purchase an additional 223 *credits* ($245 - 22 = 223$) from a *development credit* owner(s) to build the 223 bonus units.

During ***local plan preparation***, other *parcels* in *TDC Build Area I* may be assigned a *TDC density* greater than 2.0 upa to balance out the reduced density in the above example. In total, *TDC Build Area I* would be allowed 245 units.

Timing of Credit Acquisition

9.13 Where a landowner elects to build in a *TDC Build Area*, the acquisition of *transferrable development credits* shall be required as a condition of subdivision approval.

Proof of Credit Acquisition and Registration of the Conservation Easement

- 9.14 To build at the *TDC density*, the landowner shall provide the County, as a condition of subdivision approval, with:
- Proof of *credit(s)* acquisition;
 - Identification of the *parcel(s)* from which the *credit(s)* were transferred; and
 - Copy(s) of the current certificate(s) of title for the *parcel(s)* showing registration of the conservation easement.

TDC Conservation Area

Determining the number of development credits

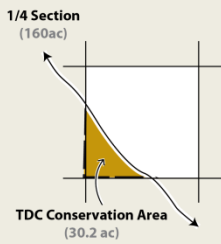
9.15 *Parcels* within the *TDC Conservation Area* (Map 6 and Appendix B), shall be allocated *transferrable development credits* at a rate of 2.8 *credits* per acre.

- Development credits* shall be determined by multiplying the number of acres in the *TDC Conservation Area parcel* by 2.8. Where the calculation results in a fraction, the number of *credits* will be rounded up.

Development credits per acre were determined by dividing the number of *bonus residential units* (4,131 Table 3) by the *Conservation Area* (1,787 acres).

$$\bullet 4,131 / 1,787 = 2.31 \text{ credits per acre.}$$

As there may not be 100% participation by *Conservation Area* landowners, a 20% oversupply of *credits* has been provided, which results in 2.8 *development credits* per acre.



1/4 Section
(160ac)

TDC Conservation Area
(30.2 ac)

Example Calculation - A 160 acre *parcel* was mapped as having 30.2 acres in the *TDC Conservation Area* (Map 6).

The *parcel* has the potential to receive $30.2 \times 2.8 = 84.56$ development *credits*, which would be rounded up to 85 *credits*.

The calculated number of *development credits* available for each *parcel* located in a *TDC Conservation Area* is shown in Appendix B.

Credits for Certification

- 9.16 The County shall certify the number of *development credits* available for a *TDC Conservation Area parcel*, and shall assign those *credits* to the landowner upon request of the landowner.
- a. The County shall maintain a publicly accessible registry of *transferrable development credits* that lists *credits* available for sale.
 - b. Placement of *development credits* for sale in the registry is voluntary, and shall be the responsibility of the *credit* holder to request placement.

Sale or Transfer of Credits

- 9.17 At the discretion of the landowner, all or a portion of the *development credits* assigned to a *TDC Conservation Area parcel* may be sold or transferred to a second party for use on any *TDC Build Area parcel*.
- 9.18 Sale or transfer of a *development credit* shall require notification to the County as to the number of *credits* sold or transferred and the *TDC Conservation Area parcel* to which they were assigned.

Registration of the Conservation Easement

- 9.19 A conservation easement shall be registered on the title of the *parcel* to which the *credit* was assigned, at the time of sale or transfer of the first *development credit*.
- a. The conservation easement area shall be that portion of the *parcel* identified as the *TDC Conservation Area* on Map 6 and Table 9. The *TDC Conservation Area* may cover only a portion of the *parcel*.
 - i. The areas identified in Table 9 may be subject to minor changes due to detailed survey information and / or as per policy 7.4.
 - b. The conservation easement area shall be described in any form satisfactory to the Alberta Land Titles Office.
 - c. The seller shall provide the County with a copy of the current certificate of title to the *parcel* showing registration of the conservation easement.

Land transferred to the Government of Alberta

The Government of Alberta may, with the agreement of the *Conservation Area* landowner, include portions of the *Conservation Area* within the boundary of the Glenbow Ranch Provincial Park.

- 9.20 Notwithstanding Policy 9.19, land that is to be transferred to the Government of Alberta may not, at the County's sole discretion, require the placement of a conservation easement.
- 9.21 Where an existing conservation easement has been placed on land that is to be transferred to the Government of Alberta, the easement may be removed at the discretion of the qualified easement holder and easement grantor, as per Section 31(a) of the Alberta Land Stewardship Act (ALSA).
- 9.22 The transfer of land within the *Conservation Area* to the Government of Alberta shall have no effect on the *development credits* assigned to that land.

Conservation Easement Requirements

- 9.23 The conservation easement shall be granted to a *qualified organization* as defined by the Alberta Land Stewardship Act.
- 9.24 A conservation easement eligible for the Glenbow Ranch TDC Program shall be in perpetuity and contain, at a minimum, the following restrictions:
 - a. no subdivision of the conservation easement area shall be permitted, unless portions of the *Conservation Area* are to be transferred to Glenbow Ranch Provincial Park;
 - b. no new residential, institutional, commercial, or industrial buildings shall be permitted;
 - c. no new permitted or discretionary agricultural uses, with the exception of *agriculture, general* as per Rocky View County's Land Use Bylaw;
 - d. accessory buildings related to the existing use shall not exceed the size permitted in Rocky View County's Land Use Bylaw for the applicable land use district; and
 - e. no public pathways, with the exception of those pathways that are consistent with the intent of the pathway concept within Section 15 of this Plan or the Glenbow Ranch Provincial Park pathway design strategy.
- 9.25 The conservation easement shall be provided to the County for approval prior to registration to ensure it meets the intent of the policies of this Plan.
- 9.26 Proof of the grant of a conservation easement shall be provided by the *TDC Conservation Area* landowner to the purchaser of their *credits* and to Rocky View County in a manner satisfactory to the County.

Conservation Easement and Municipal Reserve

- 9.27 Where a conservation easement has been placed on a *parcel* or portion of a *parcel*, the easement area shall not be subject to municipal reserve requirements or infrastructure levies.

B. LAND USE STRATEGY

There are two primary land uses resulting from the conservation design approach to development:

Conservation Areas and Build Areas.

Conservation Areas are intended to remain undeveloped and privately owned. *Conservation Areas* uses could include undeveloped open space as part of a residential *parcel*, an agricultural operation, or park land absorbed into the Glenbow Ranch Provincial Park, if deemed appropriate by the Government of Alberta.



Jim Heia

Build Areas encompass a variety of residential communities that are sensitively integrated into the natural landscape. Land uses ancillary, and complementary, to residential development will be allowed. These include a limited amount of commercial development to service the Plan area and the Bearspaw community to the north. Institutional uses that are complimentary to the community are also provided for such as, schools, places of worship, municipal facilities, a possible policing station, and visitor facilities related to the Provincial Park. The majority of policies in Sections 10 through 23 provide design and technical direction that will achieve the Plan's vision and goals (Section 6).

Density

The Glenbow Ranch Area Structure Plan accommodates approximately 13,400¹ residents in 4,472² dwellings, at full build-out through complete participation in the Transfer of Development Credit (TDC) Program. Approximately 10,000 residents would be accommodated in the proposed Hamlet community (*TDC Build Area G*).

In determining the number of dwellings, the following was considered:

- The South Saskatchewan Regional Plan (SSRP) policy direction is to build at a higher density than current practice, and to make more efficient use of land by reducing the amount of land taken up by development (SSRP Strategy 5.1);
- The County Plan principles of moderate growth and retention of rural character (County Plan – Section 2.0);

¹ The population projection was based on a conservative assumption of 3.0 residents per dwelling. The 2013 County census suggests an average of 2.7 residents per household. The higher number was used in estimating wastewater and water capacities.

² The projection includes existing dwellings and potential dwellings in *TDC Build Areas* and *Non-TDC Build Areas*.

- The Glenbow Ranch ASP's goals to conserve and enhance valued landscapes, while allowing complementary residential development, and to protect and enhance Glenbow Ranch Provincial Park (Section 6);
- The density of development required to cover the capital cost of infrastructure and the purchase of *development credits*; and
- The outfall wastewater capacity for the Plan area and costs to upgrade the existing system.

Density Distribution

The Glenbow Ranch ASP identifies eight *TDC Build Area* communities, which are assigned an average *TDC density* that ranges from 0.7 to 5.57 units per acre (upa). In addition, two non-*TDC Build Areas* (C and H) are identified. The non-*TDC Build Areas* will continue to develop at their current country residential designation (R-2), which allows for a minimum lot size of 3.95 acres. Table 4 lists the considerations used to determine the density of each *Build Area*.

Table 4: Build Area Density Considerations

TDC Build Areas & Build Areas	Average Gross Density - upa or lot size (acres)	Considerations
All		<ul style="list-style-type: none"> • To create separate, compact, residential developments that vary in size, each with a distinct sense of place.
A – Mountain Ridge	1 acre	<ul style="list-style-type: none"> • Compatibility with the existing Mountain Ridge community. • Existing building pattern makes higher density development difficult. • Distance from piped wastewater services is cost prohibitive. • Connection to a communal septic system for 1 acre lots is required.
B	1 acre	<ul style="list-style-type: none"> • Greenfield site. • Compatibility with Mountain Ridge community to the west. • Distance from piped wastewater services is cost prohibitive. • Connection to a communal septic system for 1 acre lots is required.
C	3.95 acres	<ul style="list-style-type: none"> • Small area, mostly built out. • Compatibility with existing development. • Distance from piped wastewater services is cost prohibitive. • Ability to develop using advanced private septic systems.
D	1 acre	<ul style="list-style-type: none"> • Greenfield site. • Distance from piped wastewater services is cost prohibitive. • Onsite wastewater treatment is feasible. • Cost to upgrade Glenbow Road.
E - Glenview	1 acre	<ul style="list-style-type: none"> • Compatibility with the existing Glenview community. • Existing building pattern makes higher density development difficult. • Piped wastewater services are cost prohibitive. • Connection to a communal septic system for 1 acre lots is required.
F - Glenview	2 acres	<ul style="list-style-type: none"> • Compatibility with the existing Glenview community. • Existing building pattern makes higher density development difficult.

TDC Build Areas & Build Areas	Average Gross Density - upa or lot size (acres)	Considerations
		<ul style="list-style-type: none"> Piped wastewater services are cost prohibitive. Ability to develop using advanced private septic systems for 2 acre lots.
G	5.57 upa or to a maximum of 3,502 units	<ul style="list-style-type: none"> Large greenfield site. Three points of access to Highway 1A. Development size is sufficient to fund water and wastewater infrastructure. Opportunity to provide centralized local commercial services for Rocky View residents. Opportunity to provide a variety of housing types and sizes to support a multi-generational community.
H – Coyote Valley	3.95 acres	<ul style="list-style-type: none"> Compatibility with existing Coyote Valley community. Preferred density of the majority of the community residents. Ability to develop using advanced private septic systems.
I	2.0 upa	<ul style="list-style-type: none"> Large greenfield site. Access to piped water and wastewater services. Compatibility with the existing adjacent communities. Cost to purchase <i>development credits</i>. Cost of piped infrastructure.
J	1.0 upa	<ul style="list-style-type: none"> Large greenfield site. Access to piped water and wastewater services. Compatibility with the existing adjacent communities Cost to purchase <i>development credits</i>. Cost of piped infrastructure.

Plan Density

There are eight *TDC Build Area* communities of varying density. These communities will be located on 1,877 acres of land and will result in the conservation of 1,787 acres of land. *TDC Build Area* densities range from 0.7 to 5.57 upa for an overall density of 2.8 units per acre, which is significantly higher than the County's current country residential development and is consistent with SSRP policy direction. When existing traditional country residential development is accounted for (C and H), the overall Plan density is 2.38 units per acre (Table 5).

Participation in the *TDC* program is voluntary. If all landowners choose not to participate, development would be similar to that allowed under the Bearspaw Area Structure Plan, with a potential development area of 3,664 acres at a building density of 0.175 upa, for an approximate unit count of 659 homes.

Table 5: Plan Densities

	Units
<i>Non-TDC Build Area – residential and institutional</i>	327.4 ac
<i>TDC Conservation Area</i>	1,787 ac
<i>TDC Build Area</i>	1,876 ac
<i>Average TDC Build Area density</i>	2.8 upa
<i>Total units per acre (Build Area)</i>	2.38 upa

10. RESIDENTIAL LAND USE

Residential development is intended to result in a number of well-balanced communities, with a variety of housing types and sizes, to accommodate residents in various stages of life.

Centered around a new hamlet (*TDC Build Area G*), the residential areas will be designed to maximize efficiency in the provision of municipal services, schools, and neighbourhood amenities. Across the various TDC and non-*TDC Build Areas*, communities will be connected through a park and pathway system that promotes physical activity. Sensitive community design and a focus on community transition will ensure that new communities within the Plan area seamlessly integrate and respect the existing residential areas.

OBJECTIVES

- Support innovative and compact community design by providing for a variety of residential developments at different densities within the Plan area.
- Support the development of comprehensively designed residential communities that promote interaction between residents.
- Provide for human scale design and attractive neighbourhoods through the use of architectural and community design guidelines that reflect the County's rural heritage.
- Provide for a range of lot sizes and housing types to accommodate varying age and income levels.
- Allow for land uses that are complimentary to residential development and the Glenbow Ranch Provincial Park.
- Ensure development is undertaken in a manner that minimizes its impact on the *Conservation Area* and Glenbow Ranch Provincial Park.
- Successfully integrate new and existing developments to create community connections while mitigating the impact of new development.

POLICIES

Location

- 10.1 Residential development shall be in accordance with Map 6: TDC Program Areas and Map 7: Land Use.

- 10.2 Residential development participating in the Transfer of Development Credit (TDC) Program shall only occur in *TDC Build Area* communities A, B, D, E, F, G, I, and J, as identified on Map 6.
- 10.3 Notwithstanding Policies 10.1, landowners not participating in the TDC Program shall be allowed to develop within the *Conservation Area* or *Build Area* subject to the policies of this Plan (see policies 9.3, 10.7, 10.8, and 10.14 to 10.18).

Density and Lot Size

- 10.4 Maximum average residential *TDC density* for *TDC Build Areas* G, I, and J shall be in accordance with Table 6 and the policies of the Glenbow Ranch TDC Program (Section 9).
- 10.5 Minimum / maximum lot size and maximum average residential *TDC density* for *TDC Build Areas* A, B, D, E, and F shall be in accordance with Table 6 and the policies of the Glenbow Ranch Transfer of Development Credit (TDC) Program (Section 9).
- 10.6 Development within *Build Areas* C (Glenbow) and H (Coyote Valley) communities shall have a minimum lot size of 3.95 acres.
- 10.7 Country residential development not participating in the *TDC* program shall have a minimum *parcel* size of 3.95 acres.

Table 6: *TDC Build Area* Density and Minimum Lot Size

<i>Build Areas</i>	Average TDC Density (upa)	Minimum Lot Size (acres)	Maximum Lot Size (acres)
A	0.7	1	1.98
B	0.7	1	1.98
C	NA	3.95	NA
D	0.7	1	1.98
E	0.7	1	1.98
F	0.35	1.98	1.98
G	5.57	TBD	TBD
H	NA	3.95	NA
I	2.0	TBD	TBD
J	1.0	TBD	TBD
NA – Not Applicable, TBD – To be determined at the <i>Local Plan</i> stage			

Conservation

- 10.8 The impact of residential development adjacent to Glenbow Ranch Provincial Park shall be minimized by:
- using buffers to physically separate residential development from the Provincial Park;

- b. carefully considering dwelling placement;
- c. developing a stormwater management plan that minimizes run-off impacts;
- d. limiting pathway access in accordance with the management goals of the Provincial Park;
- e. minimizing the development of roads within the *Conservation Areas*; and
- f. preserving viewscales from the Provincial Park.

Buffers may include *Conservation Area* land, building setbacks, fronting homes onto the Glenbow Ranch Provincial Park, municipal reserve, and environmental reserve.

Residential Design – *Build Areas G, I, and J*

10.9 *Local plans* for *TDC Build Areas G, I, and J* shall:

- a. promote pedestrian use and connections to the open land and the regional trail system;
- b. maximize pedestrian and vehicular connectivity within and between *Build Areas*;
- c. minimize the number of cul-de-sacs;
- d. provide dark sky friendly lighting;
- e. provide multi-family residences such as semi-detached homes, row houses, and townhouses; and
- f. provide a range of lot sizes and housing types within the local neighbourhood.

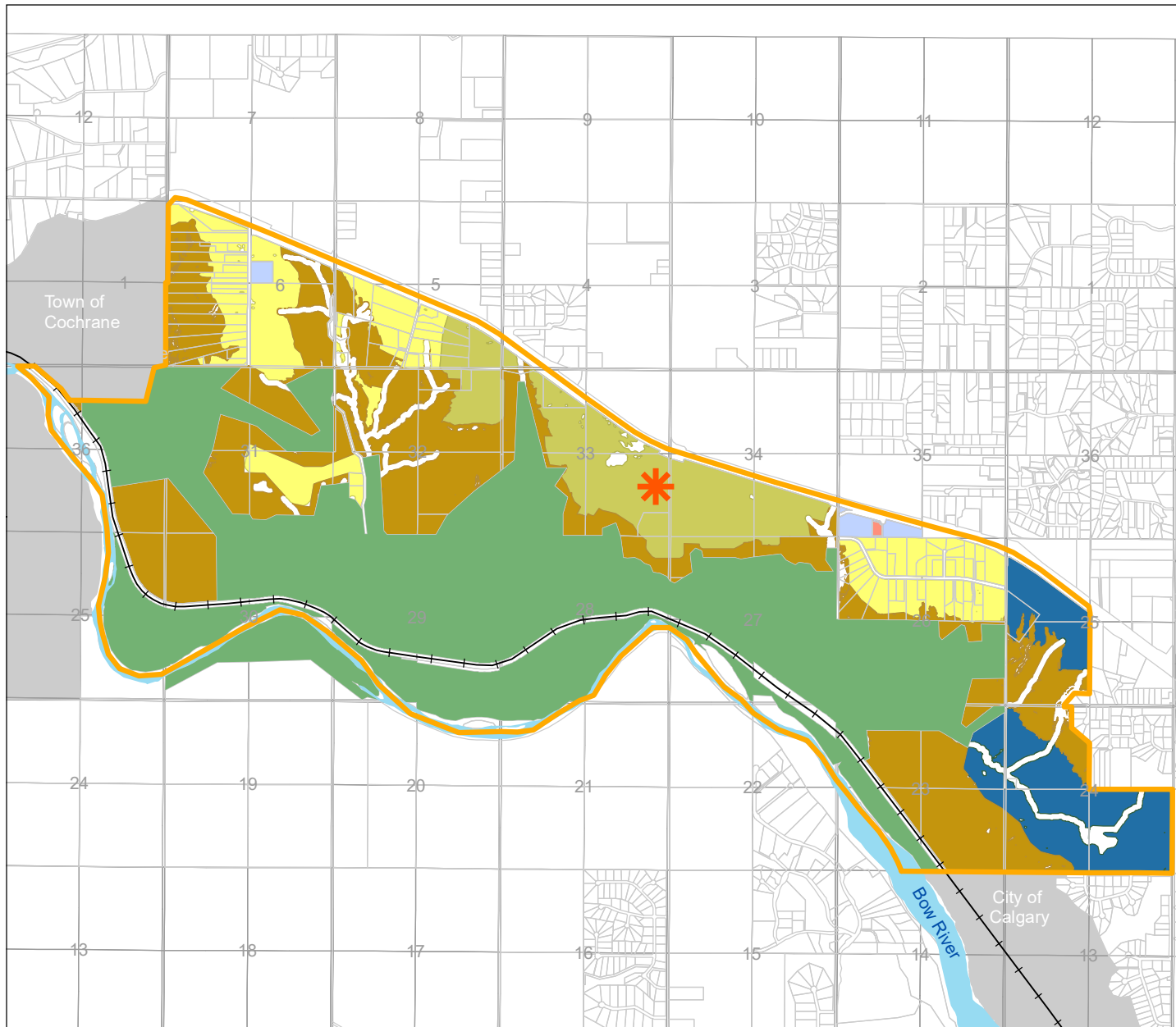
10.10 *Local plans* for *TDC Build Areas G, I, and J* should provide architectural design guidelines that promote street oriented design. Design guidelines should address:

- a. building materials and palette;
- b. front yard aesthetics such as street oriented porches or patios, and recessing garages from front facades; and
- c. planting standards and street trees.

10.11 Residential *TDC Build Areas G, I, and J* should follow the community design guidelines identified in Appendix C.

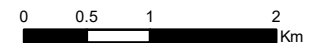
Street oriented design affects the character of the street and how neighbours interact with each other. A vital street with good design encourages activity by providing a safe and inviting pedestrian environment, a home design that encourages interaction, and a road design that calms traffic movement.

Map 7: Land Use Strategy



This map is conceptual in nature. No measurements or area calculations should be taken from this map.

- Plan
- CP Railway
- Glenbow Ranch Provincial Park
- Conservation Area**
- Various land uses with a conservation easement
- Residential**
- Country Residential
- Residential
- Hamlet Residential
- Other**
- Community Services Reserve
- Institutional
- ✱ Hamlet Commercial



- 10.12 Street design should include single-loaded residential access streets adjacent to the ridgeline of the Glenbow Ranch Provincial Park in *TDC Build Areas G and I* to maximize the number of residents that may enjoy views of the Provincial Park and limit the nuisance potential of homes backing onto the Provincial Park.
- 10.13 Development within *TDC Build Areas G and I* should provide a variety of building forms adjacent to the ridgeline of the Glenbow Ranch Provincial Park that balance the desire to maximize views while respecting the visual sensitivity and natural qualities of the ridgeline.

Country Residential Areas

The Plan area includes four existing country residential communities:

- Mountain Ridge (*TDC Build Area A*),
- Glenview (*TDC Build Areas E and F*),
- Glenbow (non-*TDC Build Area C*), and
- Coyote Valley (non-*TDC Build Area H*).

The Plan also provides for 1 acre new country residential development in *TDC Build Areas B and D*.

- 10.14 Development within country residential areas (A, B, C, D, E, F, and H) should:
- a. promote pedestrian use and connections to the open land and regional trail system;
 - b. minimize lot grading and incorporate the natural contours of the land into the residential design;
 - c. provide dark sky friendly lighting where it may be required, such as a road intersection; and
 - d. avoid the use of panhandles.

Country residential acreages throughout the County typically have the land use designation of Residential One, Two, or Three District, with a minimum *parcel* size of 1.98, 3.95, and 9.88 acres, respectively. Lots may have been subdivided as part of a *local plan* or created on an ad hoc, individual basis. Wastewater is treated on-site through private sewage treatment systems, while water is provided by well or a local water co-op.

The Glenbow Ranch Area Structure Plan recognizes 1 acre lots as a form of country residential development. As part of the development of these areas, a higher standard of private sewage treatment is required as per County Policy 449: Requirements for Wastewater Treatment Systems.

Non-Participating Development

The conservation goals of the Glenbow Ranch Area Structure Plan are based on the voluntary participation of landowners in the Transfer of Development Credit (TDC) Program. The Plan provides for development options in the *Conservation Area* or *Build Area* for the landowners choosing not to participate in the *TDC* program.

10.15 Non-participating development may include:

- a. the continuation of existing agricultural uses,
- b. institutional land uses compatible with community development or the values of the Glenbow Ranch Provincial Park, and
- c. country residential development.

Non-participation does not exclude this form of development from an obligation to minimize impacts on the *Conservation Areas* and sensitively integrate with the Provincial Park. The following policies apply where landowners not participating in the TDC Program propose institutional or residential development.

10.16 Non-participating landowners shall provide a *local plan* for:

- a. all *parcels*, or combination of *parcels*, twenty acres or greater in size for residential development; and
- b. any proposed institutional development.

10.17 At the discretion of the County, non-participating landowners proposing residential development with a *parcel* size less than twenty acres may be required to prepare a *local plan*. Where a *local plan* is not required, the landowner shall provide a technical assessment of the proposed development that includes:

- a. the internal road network, water supply, sewage treatment, and stormwater management;
- b. any other assessment required by unique area conditions, such as topography; and
- c. the requirements of policies 10.8 and 10.14 being addressed.

10.18 In addition to the conservation requirements of policy 10.8, non-participating residential development should undertake an environmental impact assessment and be sited away from mature tree stands, natural areas, native grasslands, and / or wildlife corridors, in order to minimize impact on the *Conservation Area*.

Institutional Uses

10.19 Institutional land uses proposed in *Build Areas* or *Conservation Areas* may be considered when compatible with:

- a. community development; or
- b. the values of the Glenbow Ranch Provincial Park.

- 10.20 Institutional land uses proposed in *Build Areas* (Map 5) do not require the purchase or transfer of *development credits*.
- 10.21 Institutional land uses proposed in *Conservation Areas* (Map 5) do not require the purchase of *development credits* and are not assigned *development credits*.

Transition: New Development to Existing Communities

- 10.22 New residential density shall create a transition zone using similar density and dwelling types, topography, landscaping, and other appropriate buffering techniques.
- 10.23 Development within *TDC Build Area J* shall be designed to improve connectivity to and from Glenbow Ranch Provincial Park, Bearspaw Village, and Watermark.
- 10.24 Projects adjacent to an existing development should be designed to integrate the existing community built form and fabric into the overall design concept for the area.
- 10.25 Inter-community connections, in the form of pedestrian and cycling pathways between new and existing communities, should be provided.

11. HAMLET COMMERCIAL

The commercial area will be centrally located in the hamlet community (*TDC Build Area G*). This comprehensively designed, connected, and vital commercial area is intended to meet the day-to-day needs of local Rocky View residents and act as a community gathering place that fosters a sense of identity and strengthens community.



OBJECTIVES

- Provide a main street or central commercial area that:
 - serves as a gathering place and focal point for the community; and
 - supports a mix of commercial, institutional, and residential uses designed to meet the needs of Rocky View residents and Glenbow Ranch Provincial Park visitors.

POLICIES

Location

- 11.1 Commercial land uses shall only be located in *TDC Build Area G*, in general accordance with Map 6 and 7.
- 11.2 Commercial land uses proposed for *TDC Build Area G* (Map 6 and 7) do not require the purchase or transfer of *development credits*.
- 11.3 The commercial area shall provide a range of small-scale business and commercial services, sized to support hamlet residents, local Rocky View residents, and visitors to Glenbow Ranch Provincial Park.
- 11.4 The commercial area should provide a mixed-use development form with residential dwellings and / or institutional uses located as part of the commercial area.

Mixed-use is a type of development that physically blends and integrates residential, commercial, or institutional uses into a single development at the building, block, or neighbourhood scale. The intent of a mixed-use development is to create an attractive and active community and streetscape to be used throughout the day and evening.

- 11.5 The commercial area shall provide for a well-designed, attractive public space that:
 - a. respects and enhances community identity and character;
 - b. encourages community interaction;

- c. is pedestrian and cyclist-friendly, with connections between building entrances, building sites, the commercial area, and adjacent neighborhoods;
- d. addresses the needs of residents of all ages and abilities; and
- e. is connected by pathways and sidewalks.

Gross Floor Area

11.6 Commercial development shall not exceed 125,000 square feet of gross floor area.

Design

- 11.7 In order to create a cohesive business district, retail and commercial service uses occupying a single site (or sites) should be comprehensively grouped, be designed to function as a single site through shared access and parking, and be complementary in design and landscaping.
- 11.8 Commercial development should be attractively designed, fit with existing development, and address the County's Commercial, Office, and Industrial Design Guidelines, as well as the design requirements of Appendix D.
- 11.9 Commercial main streets or central areas shall develop and maintain a consistent, coherent aesthetic, and incorporate critical public realm elements that promote the area as a public gathering and meeting space, which may include the use of a central plaza, square or park with benches, sidewalk tables, and public art installations.
- 11.10 The highest density of residential development and high-traffic service areas should be concentrated within, or adjacent to, the commercial area along the main street or central crossroad area, with a gradual decrease in density to provide a transition to the adjacent residential areas.
- 11.11 Buildings in the commercial area should be built close to the street, with on-site parking located on the side and to the rear; front yard parking areas are strongly discouraged. Angled street parking should be considered as a design feature consistent with rural prairie towns.
- 11.12 Ground-floor retail locations should incorporate design elements such as street windows, outdoor display spaces, and direct entrances off the street.
- 11.13 All private lighting, including security and parking area lighting, shall be designed to respect the County's 'Dark Sky' Land Use Bylaw requirements, conserve energy, reduce glare, and minimize light trespass onto surrounding properties.
- 11.14 The use of fencing in commercial areas should not be permitted, with the exception of patios, screening of outside storage, screening of garbage bins, or for security purposes, provided the security area is adjacent to the side or rear of the primary building.

Pedestrian Design

- 11.15 Main Street shall be designed as a comfortable and walkable pedestrian-oriented corridor with street-facing uses, wide sidewalks, and street trees.
- 11.16 The pedestrian realm within the commercial area should promote a walkable environment and be enhanced through the use of human-scale structures, street furniture, and plantings.

12. AGRICULTURE

Agriculture, in the form of ranching, has been the dominant land use in the Plan area since the late 1800's. The Glenbow Ranch Provincial Park remains a working ranch and the conservation of land outside the Provincial Park allows for agriculture to continue indefinitely as a land use in extensive portions of the Plan area.

OBJECTIVES

- Support *agriculture, general* as a use that is compatible with the *Conservation Area*.
- Support existing agricultural operations within the *Build Areas* until alternative forms of development are determined to be appropriate.
- Minimize the impacts of subdivision and development on existing agriculture operations.
- Allow for the continuation of existing agricultural operations within the *Conservation Area*.
- Limit the fragmentation of agricultural *parcels* within the *Conservation Area*.

POLICIES

- 12.1 Agricultural lands shall be developed in accordance with the policies of this Plan.
- 12.2 Existing agricultural operations may continue within the identified *Conservation Area*.
- 12.3 Existing agricultural operations within the *Build Areas* are encouraged to continue until such time as development of those lands to another use occurs, in accordance with the policies of this Plan.
- 12.4 Proposals for non-agricultural development adjacent to agricultural lands shall address the requirements of the Agricultural Boundary Design Guidelines.
- 12.5 Agricultural subdivision, other than Farmsteads as per County Plan policy, shall not be supported.
- 12.6 Applications for Confined Feeding Operations shall not be supported.

C. SERVICES

13. SCHOOLS

The school authorities administering the schools in the County, Rocky View Schools and Calgary Catholic School District, have determined that three schools may be required within the Plan Area: two public schools to accommodate kindergarten to grade 9 students, and one Catholic middle school. School locations will be determined at the *local plan* stage, in consultation with the school authorities.

OBJECTIVES

- Identify school needs and potential school sites in the Glenbow Ranch Plan Area.
- Collaborate with school authorities on site selection and development.
- Explore the feasibility of joint use community and school facilities with school authorities.

POLICIES

General

- 13.1 The hamlet (*TDC Build Area G*) shall contain a minimum of two of the three required school sites to service the Plan area.
- 13.2 The specific location of future school sites shall be determined during the preparation of the *local plan*, in consultation with the school authorities.
- 13.3 The need for additional school sites shall be determined during preparation of local plans, in consultation with the school authorities.
- 13.4 The amount of land dedicated for a future school site should be consistent with the size requirements delineated in the Reserves Agreement between Rocky View County and the school authorities.
- 13.5 Proposals for school sites that vary from the agreed-upon size requirements (as per Policy 13.4) shall require the agreement of the appropriate school authorities and the County.
- 13.6 Redesignation and subdivision applications for school sites shall address land use compatibility, servicing needs, and transportation requirements, and shall ensure the site is of sufficient size to accommodate parking needs.
- 13.7 School sites should provide suitable land for active playfields and park space to meet the needs of students, and should be connected to the community through trails, pathways, and / or sidewalks.

Joint Use

The County strongly supports joint use opportunities for the benefit of the public and residents on municipal land and school sites.

Joint Use refers to lands that contain a school and associated playing fields and may also contain other community amenities and facilities such as parks, recreation, and libraries.

- 13.8 The County may partner with the school authorities and / or other organizations to facilitate the creation of joint use facilities or amenities.

14. RECREATION, CULTURE, AND COMMUNITY

Providing public spaces and facilities for recreation, culture, and community events is an important component of building a community. Once the land is provided, recreational, cultural, institutional, and social programs can be supported through a variety of partnerships and appropriate mechanisms, to achieve desired service levels. Given the location of the Plan area, collaboration with the Town of Cochrane and The City of Calgary is required to ensure complementary service delivery and appropriate cost-sharing.

OBJECTIVES

- Provide public and private facilities and amenities for recreational, cultural, and community uses that foster the quality of life, health, and social well-being of residents.
- Support recreational, cultural, institutional, and community uses, in accordance with the recommendations of the County.
- Collaborate with the Town of Cochrane, City of Calgary, government agencies, and private stakeholders to assess community service needs and delivery mechanisms for residents within the Glenbow Ranch Area Structure Plan.

POLICIES

Recreational, Cultural, Institutional, and Community Facilities

14.1 *Local plans* shall:

- a. address the need for recreational, cultural, and community facilities / amenities in consultation with the County; and
- b. where required, identify land for recreational, cultural, and community uses.

14.2 The County shall support the development of recreational, cultural, and community facilities and amenities through appropriate funding mechanisms, including infrastructure levies.

14.3 The County shall encourage both public and private partnerships to provide recreational, cultural, and community facilities and / or amenities.

14.4 The County shall consult with The City of Calgary, the Town of Cochrane, applicable provincial agencies, and other stakeholders to deliver community recreation, culture, and community service needs as identified through collaborative planning, studies, and agreements. (See Action item 7 p 98).

15. OPEN SPACE AND PARKS

Open space contributes to community building by preserving rural landscapes and providing residents with opportunities for passive and active recreation. Communities need a wide range of accessible, connected, inviting, and safe parks and open spaces to meet the diverse needs of residents, businesses, schools, and other institutions. Within the Plan area, over 70% of the land will be preserved as open space or open land.



Karol Dabbs

Glenbow Ranch Provincial Park is located within the Glenbow Ranch Area Structure Plan boundaries. The Provincial Park preserves environmentally sensitive areas, protects cultural, historical, and archaeological sites, and provides open space and active recreational activities. The Glenbow Ranch Area Structure Plan recognizes that residential development has the potential to cause ecological, operational, social, and enforcement impacts to the Provincial Park. The policies within Section 15 guide development in the Plan area in a manner that prevents and mitigates negative impacts, while encouraging and facilitating positive improvements.

Open space means all land and water areas, either publicly owned or offering public access, that are not covered by structures. *Open space* may include current and future parks, environmentally significant areas, other natural areas, pathways and trails, greenways, parks, land for schools and recreation facilities, utility corridors, and cemeteries.

Open land includes *open space* and other areas that do not provide public access but contribute to the sense of spaciousness in an area. The County Plan notes the primary uses of open land are for conservation, recreation, and / or agriculture.

OBJECTIVES

- Promote, conserve, and enhance an interconnected open space system.
- Ensure that open space and parks have an ecological, social, cultural, recreational, and / or aesthetic function, and that each space operates in a sustainable manner.
- Provide for a variety of parks within certain *Build Areas* that are well designed, and accommodate residents' recreational and cultural needs.
- Provide opportunities for passive and active recreation within residential, institutional, and commercial areas.
- Facilitate a network of pathways, trails, and open space connections that link residential areas, *Conservation Areas*, and Glenbow Ranch Provincial Park.
- Facilitate a network of pathways, trails, and open space connections with intermunicipal connections to the Town of Cochrane, and the City of Calgary, including Haskayne Legacy Park.
- Support the values and objectives of Glenbow Ranch Provincial Park by ensuring the transition areas between the Provincial Park and adjacent uses are well designed and complementary to the Provincial Park's function.

POLICIES

Open Space

- 15.1 An interconnected system of open space shall be provided in the Plan area that is in general accordance with Map 8: Pathways and Trails.
- 15.2 Open space shall be planned and integrated into the Plan area so that the function of each space will provide a positive and safe social, cultural, and / or recreational experience for the community.
- 15.3 Open space should have an ecological, social, cultural, recreational, and / or aesthetic function.

Parks, Pathways, Trails and Sidewalks

- 15.4 The County encourages community groups and other organizations to collaborate on the multi-purpose and joint use of sites for schools, parks, and recreational facilities.
- 15.5 Residential, commercial, and institutional development shall create a regional and local network of pathways, trails, and sidewalks that promote walking and cycling.
- 15.6 Residential development in *TDC Build Areas G, I, and J* shall:
 - a. include sidewalks within the road right-of-way; and
 - b. provide public parks that connect to the open space network.

- 15.7 *Local plans* shall include pathways, trails, and / or sidewalks that generally align with the network shown on Map 8 and:
- contribute to the regional trail and pathway system and, where opportunities exist, connect with other municipalities' pedestrian networks;
 - wherever possible, are located within, or align with, a park, wetland, stormwater conveyance system, natural water course, riparian area, or natural area;
 - promote access to Glenbow Ranch Provincial Park in areas deemed appropriate by the Government of Alberta; and
 - incorporate Crime Prevention Through Environmental Design (CPTED) features.
- 15.8 Trails and pathways should align with, and overlay, utility alignments wherever possible within the *Conservation Area* and the Glenbow Ranch Provincial Park.
- 15.9 Trail and pathway development adjacent to the Haskayne Legacy Park shall be coordinated between Rocky View County, the City of Calgary, and, where required, the Government of Alberta.

Glenbow Ranch Provincial Park

Glenbow Ranch Provincial Park is under the jurisdiction of the Government of Alberta. The Provincial Park inspires users to value, protect, and enjoy the natural world through:

- stewardship and conservation of Alberta's rare and sensitive Foothills Parkland ecosystem, including native grasslands, open viewsapes, and riparian habitats;
- protection of the ecological, cultural, historical, and archaeological sites;
- collaborative planning with adjacent communities, municipalities, and developments;
- facilitation of unique and memorable visitor and educational experiences; and
- provision of appropriate trails and facilities for outdoor recreation and healthy activity.

- 15.10 The values and objectives of Glenbow Ranch Provincial Park shall be respected and, where possible, enhanced by adjacent development.
- 15.11 The location, design, and scale of residential, institutional, and commercial development shall be sensitively integrated with Glenbow Ranch Provincial Park in a comprehensive and supportive manner. As part of a *local plan* preparation, the Government of Alberta shall be consulted to determine the *local plan's* effect on the Provincial Park. Where required, the developer shall collaborate with the Government of Alberta with respect to:
- shared and mutually supportive facilities and / or amenities;
 - gateways for the Provincial Park;
 - pedestrian, vehicular, or other means of access to the Provincial Park;
 - pathways and open space;
 - stormwater management;
 - utility services;
 - preserving viewsapes into and within the Provincial Park;

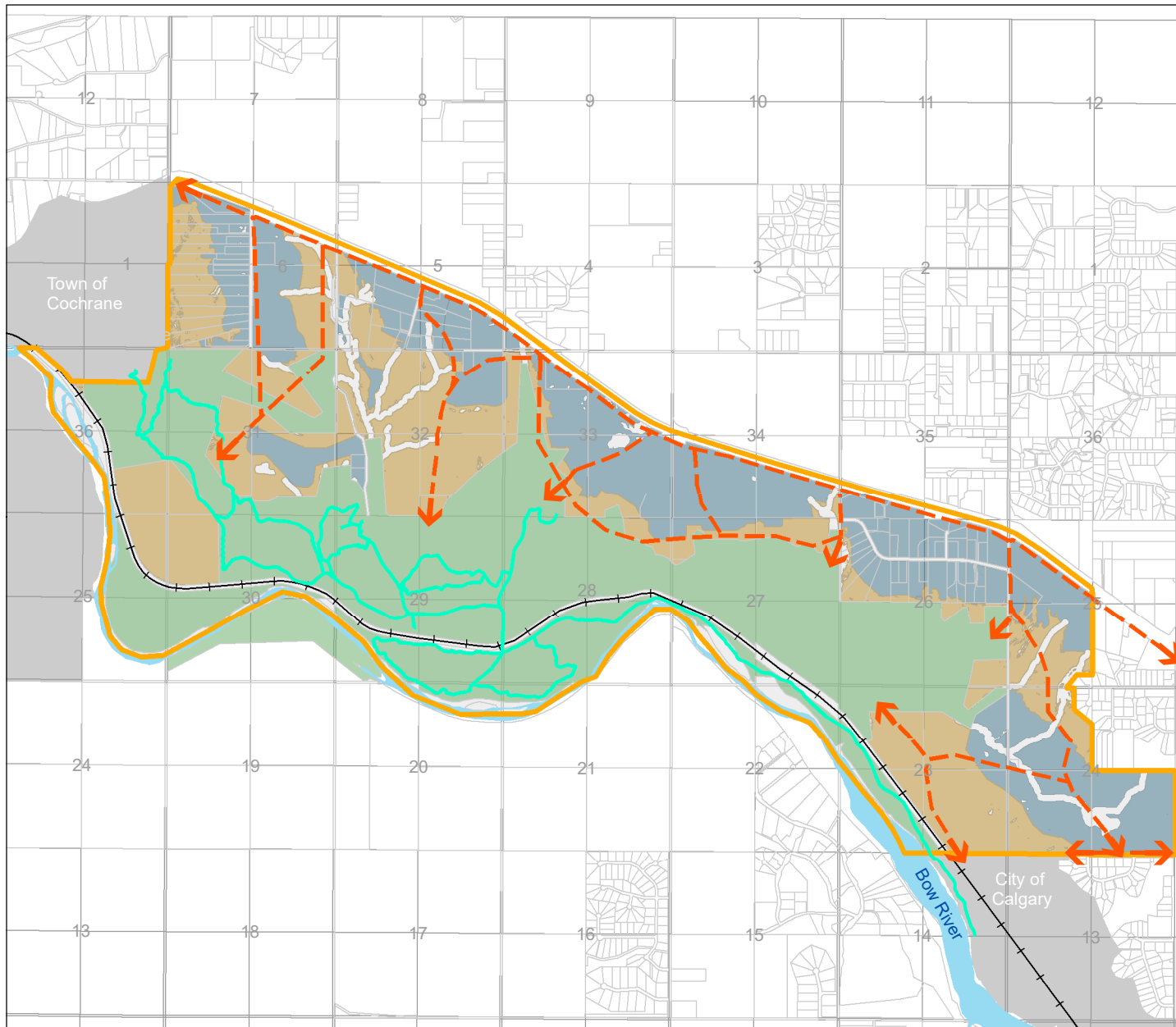
- h. vegetation and invasive species management;
 - i. wildlife corridor identification and development; and
 - j. other transitional considerations.
- 15.12 *Local plans* and other development adjacent to Glenbow Ranch Provincial Park Ministerial Order Closures shall respect the intent and requirements of the Ministerial Order, with particular attention paid to access and buffering, in order to minimize the impact of development.

Related Policies

In addition to the policies located in this section that affect the Provincial Park, other objectives and policies related to specific subjects are located elsewhere in this Plan. To provide a cross reference, these objectives and policies are identified in Table 7.

Table 7: Related Park Policies

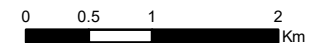
Section	Goals, Objective and / or Policies
Section 6: Planning for Tomorrow	Goals: 1, 2, 4, 5, 6, 9, 10
Section 9: TDC Program	Objective 1; Policies: 9.20, 9.21, 9.22, 9.24(a) and (e)
Section 10: Residential Land Use	Objectives: 5, 6; Policies: 10.8, 10.9(a), 10.12, 10.13, 10.14, 10.15, 10.19, 10.23, 10.25
Section 11: Hamlet Commercial	Objective: 1; Policy: 11.3, 11.5(c)
Section 15: Open Space and Parks	Objectives: 5, 7; Policies: 15.1, 15.5, 15.6(c), 15.7, 15.8, 15.9, 15.10, 15.11, 15.12
Section 17: Reserves	Policies: 17.7, 17.8
Section 19: Transportation	Objective: 1; Policy: 19.15, 19.19
Section 20: Utility Services	Policy: 20.12
Section 21: Stormwater	Policies: 21.3, 21.4, 21.5, 21.6, 21.8, 21.11(a), 21.12, 21.13, 21.21
Section 24: Implementation	Action: 9
Section 25: Interjurisdictional Coordination and Cooperation	Objective: 3; Policy: 25.13
Appendix: C Residential Design Guidelines	Guideline: 3, 9, 11, 12, 16, 19, 25.



Map 8:
Pathways
And Trails

- Plan Area
- CP Railway
- Glenbow Ranch Provincial Park
- Pathway and Trail Concept
- ↖ Conceptual Park Access
- Existing Trails
- Build Area
- Conservation Area
- Undevelopable Land

This map is conceptual in nature. No measurements or area calculations should be taken from this map.



16. NATURAL ENVIRONMENT

The Glenbow area contains a limited number of wetlands and numerous overland drainage features. Natural drainage within the Plan area flows south, to the Bow River through the Glenbow Ranch Provincial Park. The purpose of these policies is to provide for the long-term conservation of important wetlands, and to protect and enhance the riparian area associated with existing drainage courses.

A **wetland** is land saturated with water long enough to promote wetland aquatic processes, as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity that are adapted to a wet environment.

A **wetland complex** is two or more permanent or intermittent wetlands, connected by natural vegetation and drainage. Riparian areas surround wetlands with a distinct vegetative community that is a result of increased soil moisture and different soil types. Wetlands and riparian areas connect ground water to surface water, provide important wildlife and waterfowl habitat, clean and purify water, and provide recreational opportunities.

Riparian land is the vegetated (green zone) area adjacent to rivers, creeks, lakes, and wetlands. These areas have a distinct vegetative community that is a result of increased soil moisture and different soil types. Wetlands and riparian areas connect ground water to surface water, provide important wildlife and waterfowl habitat, clean and purify water, and provide recreational opportunities.

OBJECTIVES

- Provide for the protection of wetlands.
- Assess wetlands in more detail through the preparation of *local plans*.
- Provide for the protection of riparian areas adjacent to wetlands and watercourses.
- Provide guidance regarding building and development in, and through, riparian areas.

Wetland value is based on the function of the wetland (e.g. abundance and biodiversity) and the benefits it provides to society (e.g. water quality improvement and flood protection).

POLICIES

Wetlands

- 16.1 Wetland protection shall be guided by County and provincial policy.
- 16.2 *Local plans* shall identify wetlands within the *local plan* area using the Alberta Wetland Classification System to determine wetland classification and relative wetland value.
- 16.3 *Local plans* shall determine, through consultation with the Government of Alberta, whether wetlands are Crown owned land.

The Province has published a “**Guide for Assessing Permanence of Wetland Basins**” as a tool to assist in the identification of Crown owned land.

- 16.4 Wetlands not claimed by the Crown, that have a high relative value, as per the Alberta Wetland Classification System, should be dedicated as environmental reserve or environmental reserve easement and will be considered as *Conservation Areas* eligible for *TDC credits*.
- 16.5 Where wetlands are not retained, appropriate compensation shall be required, in accordance with provincial policy.

Riparian Areas

The riparian setback areas were based on the Province’s “Stepping Back from the Waters: A Beneficial Management Practices Guide For New Development Near Water Bodies in Alberta’s Settled Region” and are identified as undevelopable land (Map 5: *Build Area* and *Conservation Area*).

- 16.6 Building and development in the riparian protection area shall be in accordance with the County’s Land Use Bylaw and the County’s Riparian Land Conservation and Management Policy.
- 16.7 The riparian protection area may be publicly or privately owned.
- 16.8 The riparian area should be protected by the following mechanisms: environmental reserve, environmental reserve easement, conservation easement, municipal reserve, or other means satisfactory to the County.
- 16.9 A *local plan* shall provide a detailed riparian assessment based on the Province’s Stepping Back from the Water guide. The assessment should determine the applicable mitigation requirements to protect the riparian area.
- 16.10 The riparian protection area should remain in its natural state. Development proponents should maintain the natural riparian function through the use of native plant species.
- 16.11 Riparian protection area uses may include: linear infrastructure, parks, pathways, and trails, when designed to minimize impact on the riparian area.
- 16.12 Public roads and private access roads may be allowed in the riparian protection area. All roads shall be located, designed, and constructed so as to minimize disturbance to the riparian area.

17. RESERVES

Reserves and environmental reserves are lands dedicated to the County as public land during the subdivision process. Reserves enhance the community by providing land for parks, schools, and recreational amenities. Environmental reserves protect the community and natural environment by preventing development in hazardous areas such as ravines and floodways.

Reserves are lands dedicated to the County by the developer through the subdivision process, as defined in the Municipal Government Act. They include:

- municipal reserves;
- community services reserves;
- school and municipal reserves; and
- school reserves.

Instead of a land dedication, the County may accept the equivalent value of the land as money. This cash-in-lieu is shared between the school boards and the recreation districts.

Environmental reserves are defined in the Municipal Government Act as lands dedicated to prevent development in unsuitable areas (e.g. floodways or escarpments), reduce water pollution, and provide access to lakes and rivers. Environmental reserves are dedicated as public land.

OBJECTIVES

- Provide for the dedication of reserves to meet the educational, recreational, cultural, social, and other community service needs of the community.
- Provide for the taking of money in place of land for municipal reserve, school reserve, or municipal school reserve.
- Provide for the identification and protection of land unsuitable for development through the dedication of environmental reserve or environmental reserve easements, in a manner consistent with the Municipal Government Act.

POLICIES

17.1 Reserves owing on a *parcel* of land shall be provided as:

- a. municipal reserve, school reserve, or municipal and school reserve;
- b. money in place of reserve land; or
- c. a combination of land and money.

17.2 Municipal reserve, school reserve, municipal and school reserve, and / or money in place of reserve land shall be provided through the subdivision process, to the maximum amount allowed by the Municipal Government Act.

17.3 Prior to the disposition of municipal or school reserve land declared surplus by the school board, the County will determine if the land is required for community services reserve land.

Community services reserves are reserve lands declared surplus by the school boards.
Community services reserve land may be used for:

- a public library;
- a police station, a fire station, or an ambulance services facility;
- a non-profit day care facility, senior citizens facility, or special needs facility;
- a municipal facility providing service directly to the public; or
- affordable housing.

- 17.4 Voluntary dedication of reserve land beyond the maximum amount allowed by the Municipal Government Act may be considered if it is demonstrated that the additional reserve will benefit the community and / or conservation objectives.
- 17.5 The acquisition, deferral, and disposal of reserve land, and the use of money in place of reserve land, shall adhere to County Policy, agreements with local school boards, and the requirements of the Municipal Government Act.
- 17.6 The dedication of reserves should address the conservation objectives of this Plan, the Parks and Open Space Master Plan, and the *local plan*.
- 17.7 The amount, type, location, and shape of reserve land shall be suitable for public use and readily accessible to the public, unless the reserve dedication is in support of conservation objectives and / or integration of Glenbow Ranch Provincial Park, all to the satisfaction of the County.
- 17.8 Municipal reserves are not required for the *Conservation Area* of a *parcel* of land, or portion thereof, which is to be conserved by the placement of a conservation easement or by dedication to Glenbow Ranch Provincial Park.
- 17.9 Notwithstanding Policy 17.8, municipal reserve dedication may be required where it facilitates pathway and open space connectivity in accordance with Map 8: Pathways, and Trails.
- 17.10 Municipal reserves may be required of development within the *Conservation Area*, where the landowner has elected not to participate in the TDC Program.

Reserve Analysis

- 17.11 A reserve and environmental reserve analysis shall be required with the preparation of a *local plan* to determine the amount, type, and use of reserves owing within the *local plan* area.

18. EMERGENCY SERVICES

Emergency services within the Glenbow Ranch Area Structure Plan area include fire and protective service needs. The area is currently served by a fire station located near the intersection of Highway 1A and Lochend Road (Map 4).

OBJECTIVES

- Ensure an appropriate and efficient level of fire and protective services is made available for current and future residents in order to provide a safe and liveable community.
- Ensure communities are designed and constructed to optimize the delivery of fire and protective services.

An **Emergency Services Facility** is a site and building(s) containing the staff, equipment, and other apparatus required to deliver fire and / or protective services within the County; it may also include facilities and space for other related services.

POLICIES

- 18.1 In association with County Fire Services, the RCMP, and other emergency service providers, emergency services shall be provided to meet current needs, as well as future needs, based on projected population growth and demographic change in the Plan area.
- 18.2 Policing shall be provided by the RCMP as per the Provincial Police Service Agreement, until such time as another policing solution is required or sought out.
- 18.3 Prior to the approval of a *local plan* for the hamlet (*TDC Build Area G*), the County shall review the policing requirements for the area and identify additional resources needed.
- 18.4 *Local plans* shall address fire and protection response measures, as well as on-site firefighting requirements, through consideration of such factors as efficient road design, safe and efficient access for emergency service vehicles, wildland fire protection, and fire control measures.
- 18.5 Crime Prevention Through Environmental Design (CPTED) features should be considered and incorporated into the design and construction of all new development wherever possible.

D. INFRASTRUCTURE

19. TRANSPORTATION

The transportation network must develop in a manner that is safe, functional, and efficient. The network should minimize impacts of development on: existing communities, *Conservation Areas*, major wetlands, and natural features. Implementation of the Glenbow Ranch Area Structure Plan will result in an integrated vehicular network, opportunities for future public transit, and regional and local opportunities for walking and cycling.

OBJECTIVES

- Support integration with the regional road network by:
 - efficiently accessing and aligning with the provincial and regional highway network;
 - encouraging the separation of existing and proposed residential traffic; and
 - accommodating and managing access to Glenbow Ranch Provincial Park.
- Provide for an internal road network that contributes to a high quality built environment, has secondary and emergency access to all development areas, and efficiently and safely aligns to the regional road network.
- Provide for connections to regional pathway and trail systems.
- Provide opportunities for regional transit connections in collaboration with the County's municipal neighbours.
- Recognize the importance of the *Conservation Areas*.

POLICIES

Regional Transportation Network

- 19.1 The regional transportation system should be developed in general accordance with Map 9: Transportation and the Glenbow Master Transportation Plan. The classifications of the road network and detailed alignment may be refined through further transportation analysis and / or at the *local plan* stage.
- 19.2 Access to Highway 1A shall be in general accordance with Map 9, unless otherwise determined by Rocky View County and Alberta Transportation.
- 19.3 The County shall collaborate with the Government of Alberta regarding regional road connections and interchange/intersection design with respect to Highway 1A. A future functional study to determine ultimate cross section and intersection/interchange requirements for Highway 1A is anticipated.
- 19.4 Land required for future highway improvements or interchanges / intersections, as well as for screening and noise reduction measures, shall be identified as part of *local plan* preparation and subdivision application processes.

- 19.5 The County should explore, with the Government of Alberta, the inclusion of a pedestrian and bicycle network as part of the provincial highway interchange / intersection design and construction processes.

The City of Calgary and Town of Cochrane

The Glenbow Ranch Area Structure Plan is adjacent to the City of Calgary and the Town of Cochrane. This area requires coordinated transportation planning, in accordance with the principles and policies described in Section 25 of this Plan.

- 19.6 Rocky View County shall work collaboratively with The City of Calgary, the Town of Cochrane, and Alberta Transportation to ensure *local plans* identify regional transportation connections and infrastructure phasing that must be in place at each stage of development.
- 19.7 Rocky View County shall work collaboratively with The City of Calgary to:
- identify transportation infrastructure needs along 12 Mile Coulee Road; and
 - develop recommendations for transportation priorities and appropriate County cost contribution based upon proportional impact and / or benefit related to development within the Glenbow Ranch Area Structure Plan.

Regional Transportation – Impact of the Glenbow Ranch Area Structure Plan

As part of the transportation analysis, the County modeled two scenarios to show the impacts of vehicular traffic associated with development on Highway 1A:

- A baseline scenario modeling **regional traffic growth** to the year 2035 **excluding** traffic associated with the Glenbow Ranch ASP.

The scenario assumed traffic growth based on the City of Calgary's projection, plus growth rates of 3% and 5% in the Bearspaw and Cochrane areas, respectively. The baseline increase in traffic requires 8 lanes, narrows down to 6, and then 4 lanes as traffic dissipates to the north and west.
- A scenario that **adds** the Glenbow Ranch ASP vehicular traffic to the 2035 baseline scenario.

This scenario results in small lane extensions and the addition of 3 lights along Highway 1A, in addition to the 2035 baseline Highway 1A improvements. Based on the results of the traffic analysis, with these improvements, the network will have capacity to accommodate the Glenbow Ranch ASP.

See Appendix D for maps.

Local Transportation Network

- 19.8 The design and construction of roadways within the local transportation network, and between the local network and the provincial and regional transportation networks, shall use sound access management principles.

- 19.9 The designation and design of local roads within the transportation network, including classification, street sizing, and intersection / access spacing, shall be determined at the time of *local plan* preparation.
- 19.10 The local road network shall be designed to support interconnected road, pathway, trail, and sidewalk linkages that provide efficient, safe, and direct access to new and existing development.
- 19.11 Cul-de-sac design should be discouraged within *TDC Build Areas* G, I, and J.
- 19.12 Secondary and / or emergency access shall be provided to all residential communities. Access requirements shall be identified as part of the *local plan* preparation.
- 19.13 The type of road cross section shall be determined at the time of *local plan* preparation. Rural cross sections should only be considered for country residential areas (A, B, C, D, E, F, and H).
- 19.14 The design of the transportation network within the hamlet (*TDC Build Area* G) shall accommodate the provision of future regional transit within the Plan area. Bus stop, parking, and other needs shall be identified at the *local plan* stage.
- 19.15 *Local plans* shall evaluate the need for parking at trailheads and *Conservation Areas*, which provide access to Glenbow Ranch Provincial Park.

The need to connect Bearspaw Village Road to *TDC Build Area* J will be determined at the *local plan* stage. This road could provide:

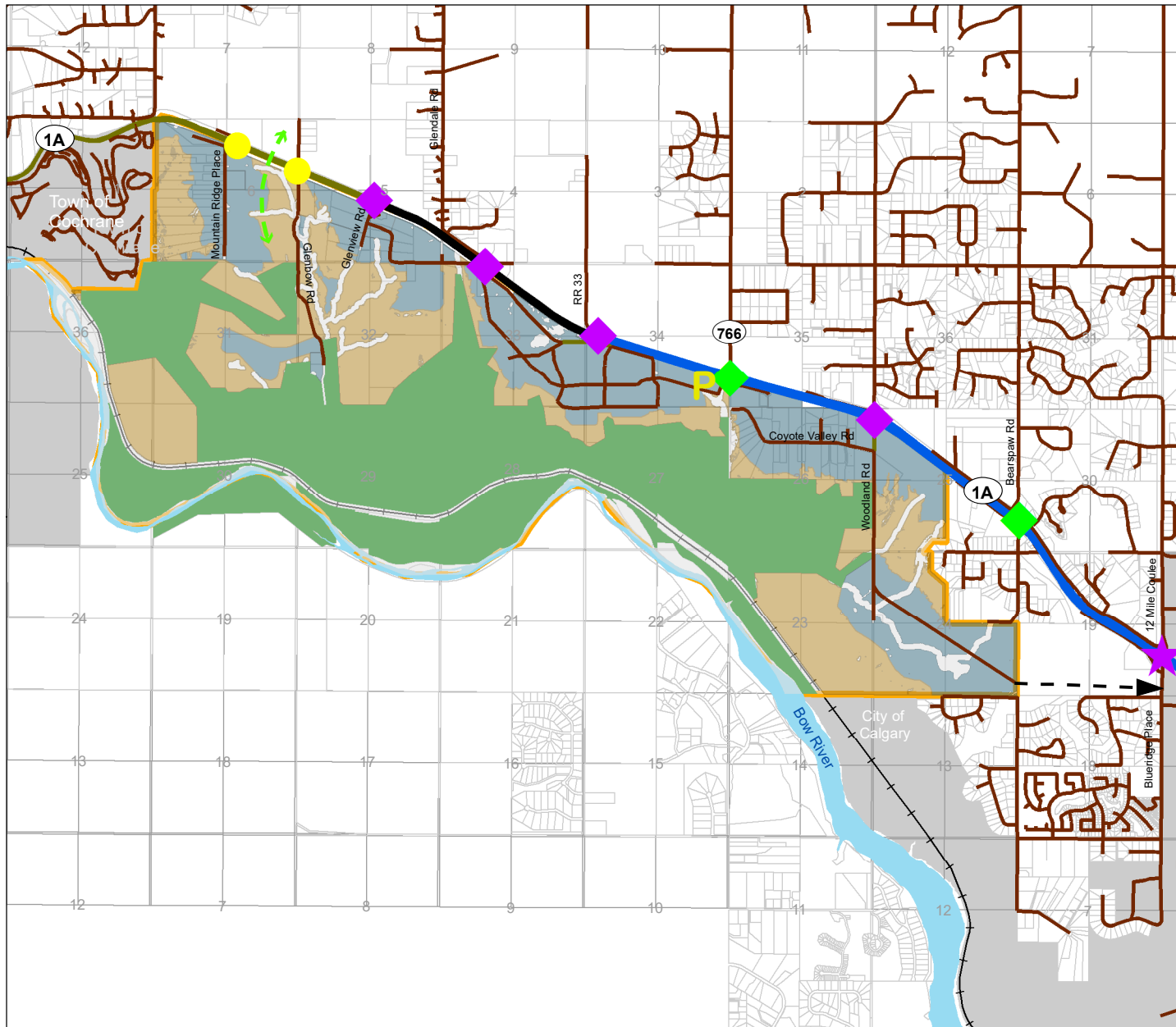
- Local community connections; and
- A secondary means of egress for residents south of *TDC Build Area* J to Highway 1A should 12 Mile Coulee Road be closed in an emergency.

When considering this connection it is important to note that it is not intended as a primary commuter egress to Highway 1A or 12 Mile Coulee Road.

General

- 19.16 A Transportation Impact Assessment shall be required as part of the local plan preparation and / or subdivision application process to determine if potential off-site road improvements are required to support a proposed development, including consideration of the two potential interchanges as per Map 9. In addition to the requirements of the County's Servicing Standards, each Traffic Impact Assessment prepared to support Local Plans in Cells G, I, and J shall include the following:
- a. Statement of current status of regional transit planning affecting the plan area and anticipated completion dates of ongoing studies;
 - b. Evaluation of current use and impacts on existing City of Calgary Park and Ride facilities and proposed mitigating measures, to the County's satisfaction;
 - c. Estimate of potential mode share for transit based upon comparisons in The City of Calgary forecast model, field measurements of other sites, and other methods as appropriate;

- d. Funding sources and status for require upgrades; and
 - e. Evaluation of impact on Highway 1A intersections and identification of any appropriate mitigation measures.
- 19.17 Any costs associated with transportation improvements identified through a Transportation Impact Assessment shall be the developer's responsibility.
- 19.18 Developers shall be required to pay the County Transportation Off-Site Levy.
- 19.19 The County should examine the cost and benefits of a wildlife corridor / underpass through Highway 1A, including possible funding mechanisms, prior to the adoption of a *local plan* for any *Build Area*.



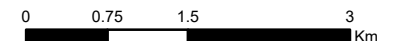
Map 9: Transportation

- Plan Area
- ↔ Potential Wildlife Under Pass
- ★ Interchange
- ◆ Signalized Intersection
- Stop Controlled Intersection
- ◆ Signalized Intersection with potential for future Interchange
- P Potential Park and Ride Location TBD

Planned Roads

- ➔ Future 12 Mile Coulee Connection
- Collector - 2 Lanes
- Major - 4 Lanes
- Expressway - 6 Lanes
- Highway - 8 Lanes
- Build Area
- Conservation Area
- Undevelopable Land
- Glenbow Ranch Provincial Park
- + + CP Railway

This map is conceptual in nature. No measurements or area calculations should be taken from this map.



20. UTILITY SERVICES

Well-designed and effective utility services are the foundation of a well-planned community. Traditionally, developments in the Bearspaw and Glenbow areas have relied on a range of servicing methods. Examples include private piped water service and stand-alone utilities, such as private septic fields.

Private piped water services and stand-alone utilities will continue to offer sustainable servicing solutions to country residential areas (A, B, C, D, E, F, and H). *TDC Build Areas G, I, and J* will be serviced by piped water and wastewater utility systems.

OBJECTIVES

- Ensure environmentally sustainable potable water and waste water systems are provided to the Plan area in a safe, cost-effective, and fiscally sustainable manner.
- Use existing water systems for the servicing of country residential areas (A, B, C, D, E, F, and H).
- Provide for piped water and waste water systems for *TDC Build Areas G, I, and J*.
- Identify and protect utility service routes within the Plan area.
- Support water conservation and low impact development.
- Ensure shallow private utility systems are provided to new developments.
- Ensure fire suppression and water supply infrastructure is provided to deliver the appropriate level of fire protection for each *Build Area* within the Plan area.

POLICIES

In support of the Glenbow Ranch Area Structure Plan, a technical assessment of water and waste water servicing options was completed. The key objective of the assessment was to determine if a cost effective servicing system(s) that provides efficient, economic, and sustainable municipal services to residents is feasible for the Plan area. The “Glenbow Ranch ASP Servicing Strategy” evaluated multiple servicing solutions and determined there are a number of cost effective and sustainable options. Map 10: Water and Map 11: Wastewater depict the most feasible utility system at the time of Plan writing. The final utility system will be determined as part of the *local plan* preparation. All proposed utility alignments through Glenbow Ranch Provincial Park will require approval by the Government of Alberta, at the *local plan* stage.

- 20.1 Development within the Glenbow Ranch Area Structure Plan shall be supported by an efficient, economic, and environmentally sustainable municipal utility system.
- 20.2 Municipal piped water and wastewater systems shall be provided for *TDC Build Areas G, I, and J* (Map 6). The final water and wastewater systems shall be determined as part of the *local plan* preparation.

- 20.3 Country residential areas A, B, C, D, E, F, and H (Map 6) shall connect to either an existing piped water system or to a new system developed for *TDC Build Areas G, I, and J*.
- 20.4 All new development in country residential areas A, B, C, D, E, F, and H (Map 6) shall connect to a wastewater system in accordance with County Policy.

County Policy 449: Requirements for Wastewater Treatment System was revised on November 1, 2016 to require all *parcels* of land 1.98 acres in size or less to undergo communal treatment and disposal.

One communal treatment option is a “Decentralized Wastewater Treatment System” that collects typical wastewater effluent from multiple lots, conveys effluent to a wastewater treatment plant, and discharges to an approved location. These systems are transferred to the County after construction for long term operations and maintenance.

System Capacity

- 20.5 Servicing requirements, staging, and cost contributions for regional infrastructure shall be identified at the *local plan* stage.
- 20.6 Land use applications relying on piped utility services shall not be supported until the County has confirmed servicing capacity and raw water licensing either exists, or will be provided.
- 20.7 The County shall determine servicing capacity requirements and allocations within and external to each *Build Area*, at the *local plan* stage.

Utility Costs

- 20.8 Developers relying on regional piped utility services shall be required to front-end the costs of utility service upgrades.
- 20.9 Costs associated with local utility service improvements, including private water systems, shall be the responsibility of the developer.
- 20.10 Developers relying on utility infrastructure improvements provided by other developments shall be required to pay their proportionate allocated costs.
- 20.11 Developers relying on proposed regional piped water and wastewater utility services shall be required to pay the Rocky View County Water and Wastewater Off-Site Levy.

Utility Location

- 20.12 The detailed location and size of utility rights-of-way and easements, and related line assignments, should be determined at the *local plan* stage to the mutual satisfaction of the County, the developer, the utility companies, and the Government of Alberta, with respect to alignments in Glenbow Ranch Provincial Park.
- a. Utility alignments should align with trails and pathways wherever possible when proposed within the *Conservation Area* and the Glenbow Ranch Provincial Park.

- 20.13 Utility rights-of-way and easements shall be provided to accommodate shallow utilities at the subdivision or development permit stage, as deemed necessary by the County and the utility provider.

Water

- 20.14 A Water Use Assessment, conforming to the 'Glenbow Ranch ASP Servicing Strategy,' shall be required with *local plan* preparation, subdivision applications, and development permit applications to determine water demand and infrastructure required to meet that demand.
- 20.15 Development and buildings shall use low-flow fixtures and appliances to promote water conservation.
- 20.16 The County encourages the reduction and reuse of water in accordance with provincial laws and regulations.

Wastewater

The wastewater utility system must ensure that there are no negative impacts to the water supply for The City of Calgary. The current servicing option locates the wastewater discharge downstream of the City of Calgary's water intake. All wastewater utility systems must meet the regulatory requirements of the Government of Alberta.

- 20.17 A Wastewater Servicing Study, conforming to the 'Glenbow Ranch ASP Servicing Strategy,' shall be required with *local plan* preparation, subdivision applications, and / or development permit applications to determine the wastewater demand and the infrastructure required to meet that demand.
- 20.18 Sump pumps and stormwater drainage systems shall not be connected to the wastewater system.

Shallow Utilities and Commercial Communications

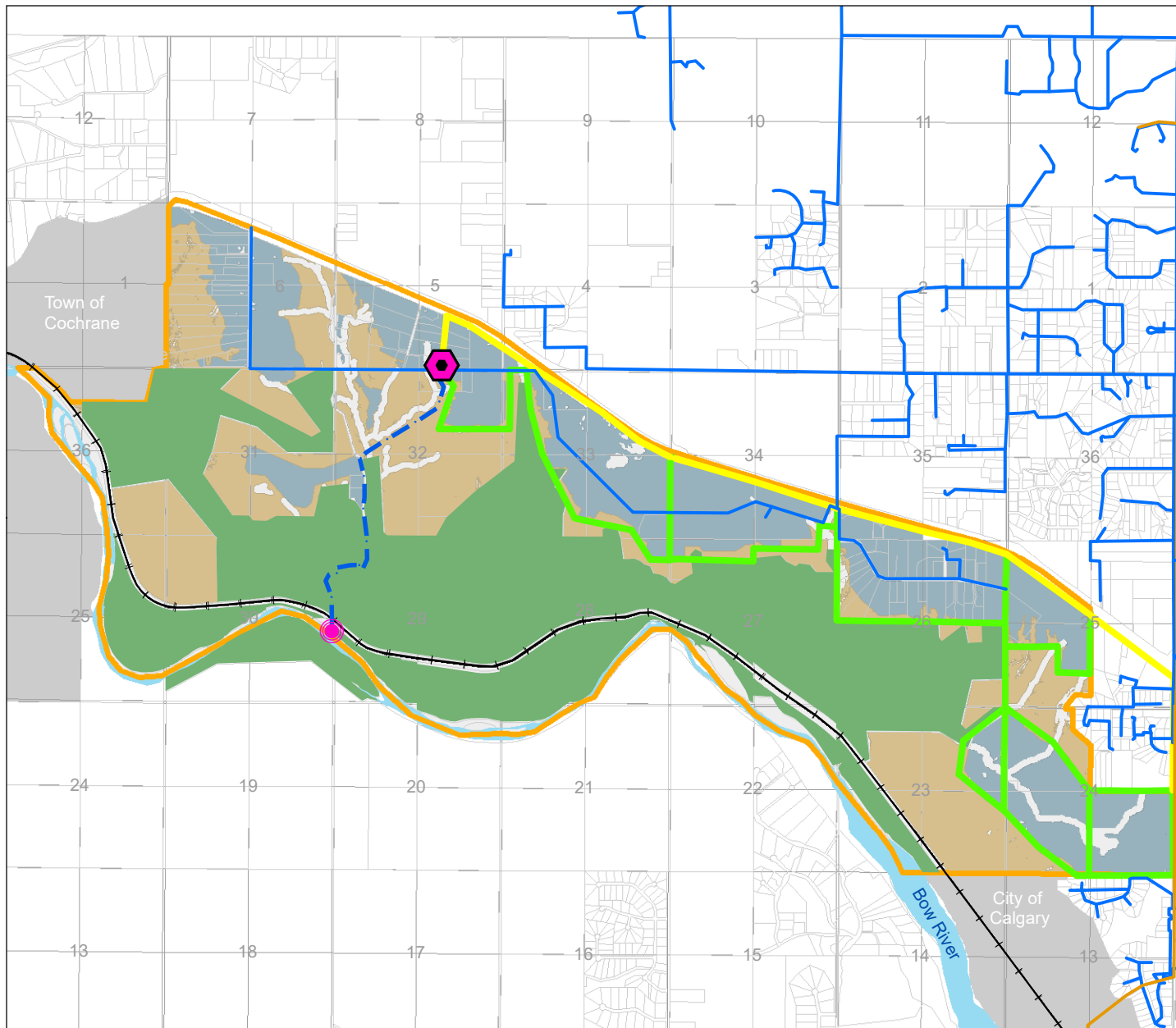
- 20.19 All *Build Areas* shall be serviced with shallow utilities.
- 20.20 Provision of shallow utilities shall be at the expense of the developer.
- 20.21 Commercial Communications Facilities shall be located within the *Build Areas*; not within *Conservation Areas*.

Emergency Service Infrastructure

- 20.22 All public services and commercial buildings shall be required to provide and maintain fire suppression systems, in accordance with Alberta Fire Code and Alberta Building Code requirements.
- 20.23 The proposed water system serving developments within *TDC Build Areas G, I, and J* shall be designed to provide fire flow, pressure, and water storage to combat fires. The flow rate and storage requirements for each *TDC Build Area* will be confirmed at the *local plan* stage.

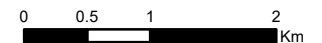
- 20.24 Development in country residential areas (A, B, C, D, E, F, and H) shall provide the fire flow, pressure and storage applicable to country residential development. Methods and strategies for each *Build Area* shall be identified at the *local plan* stage.
- 20.25 All other development within the Plan area shall provide fire suppression abilities in accordance with County bylaws and Servicing Standards, Alberta Fire Code, and Alberta Building Code requirements.

Map 10: Water

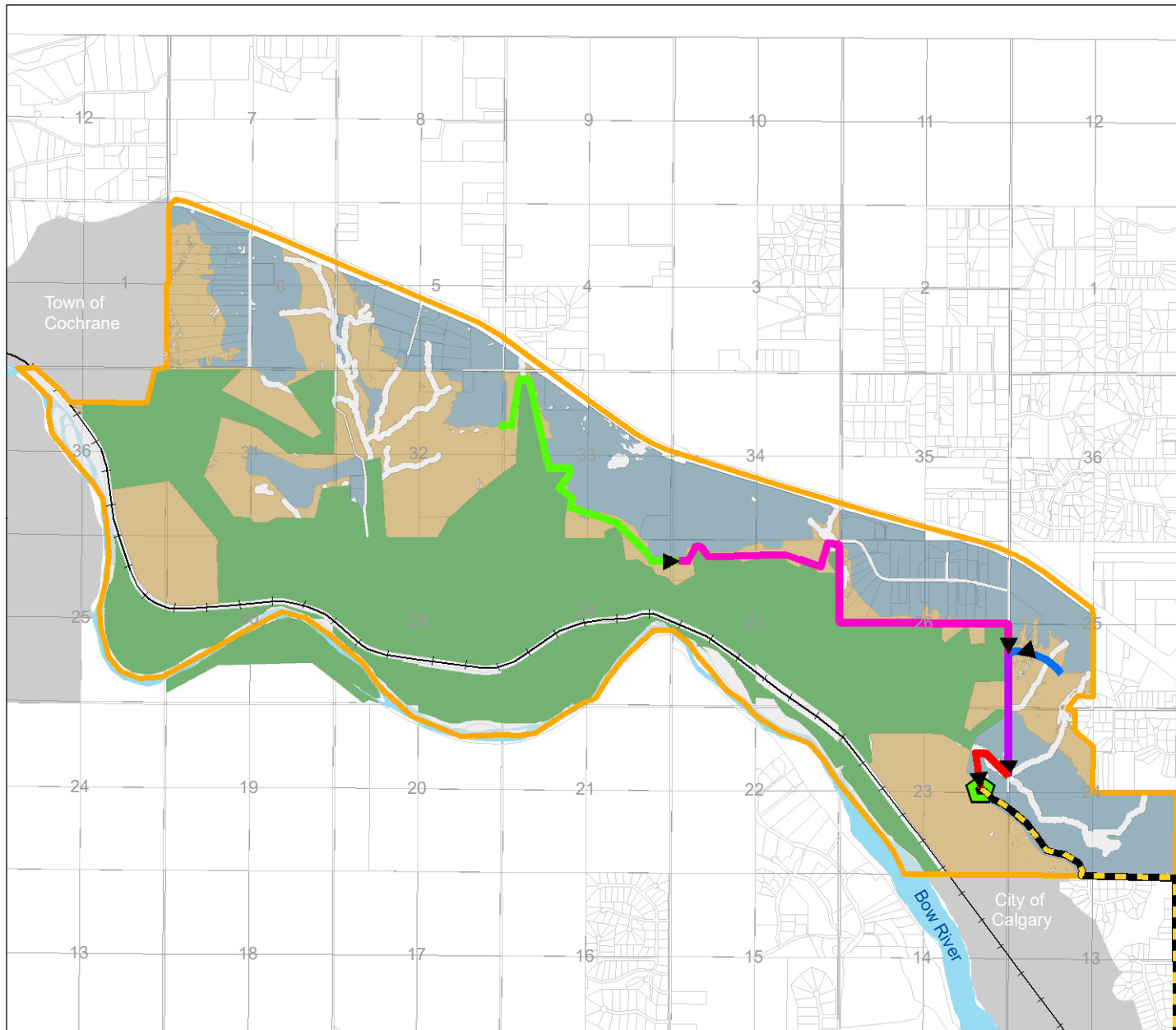


- Plan Area
- CP Railway
- Glenbow Ranch Provincial Park
- Existing Private System**
 - Raw Watermain
 - Treated Watermain
- Proposed System**
 - 300mm Watermain
 - 400mm Watermain
 - 350mm Supply Line
- Water Reservoir & Treatment Plant
- Water Intake & Pumping Station
- Build Area
- Conservation Area
- Undevelopable Land

This map is conceptual in nature. No measurements or area calculations should be taken from this map.
Actual Facility locations subject to change at more detailed planning stages.



Map 11: Wastewater



Gravity Main

- 250mm Sewer
- 300mm Sewer
- 600mm Sewer
- 675mm Sewer
- 750mm Sewer

Forcemain

- 200mm Forcemain
- ⬢ Waste Water Treatment Plant
- Plan Area
- +— CP Railway
- Glenbow Ranch Provincial Park
- Build Area
- Conservation Area
- Undevelopable Land

This map is conceptual in nature. No measurements or area calculations should be taken from this map.
Treatment Facility location is conceptual and is subject to change.

21. STORMWATER

Stormwater servicing and site drainage in the Plan area must ensure that there are no negative impacts to: Glenbow Ranch Provincial Park, the escarpment, the Bow River, and the downstream water supply for The City of Calgary. In addition, the Plan will result in the creation of a significant open-space system that can be complimented by well-planned stormwater management facilities. All proposed stormwater drainage alignments in Glenbow Ranch Provincial Park will require approval by the Government of Alberta.

OBJECTIVES

- Ensure effective, sustainable, and responsible stormwater services to the Plan area while protecting important features such as riparian areas and escarpments.
- Provide and protect stormwater storage areas and conveyance routes.
- Provide for stormwater reuse and recycling opportunities.
- Support innovative conservation methods, low-impact development planning, and best management practices with respect to stormwater management.

POLICIES

Master Drainage Plan

- 21.1 A sub-catchment master drainage plan in the Plan area shall be completed at the *local plan* stage and shall meet the requirements of the 'Glenbow Ranch ASP Master Drainage Plan.'
- 21.2 All development shall conform to the recommendations for storm outfalls, release rates, volume control targets, setbacks, and treatment requirements of the 'Glenbow Ranch ASP Master Drainage Plan.'

Regional Stormwater Management

- 21.3 The County shall work collaboratively with the Government of Alberta, and in consultation with The City of Calgary and Town of Cochrane, to develop a comprehensive stormwater system to service the Plan area, in accordance with the principles and policies described in Section 25 of this Plan.
- 21.4 Post development stormwater flows shall be directed to the drainage systems in general accordance with Map 12: Stormwater and the Glenbow Ranch ASP Master Drainage Plan.
- 21.5 Stormwater facilities located within Glenbow Ranch Provincial Park or *Conservation Areas* shall be developed collaboratively with The Government of Alberta.
- 21.6 Conveyance of post-development flows down the escarpment from *TDC Build Areas G, I and J* shall be detailed at the *local plan* stage, and shall be designed to protect the slope and minimize erosion impacts, in accordance with the 'Glenbow Ranch ASP Master Drainage Plan.'

The **Glenbow Ranch ASP Master Drainage Plan** determines the rate and volume of stormwater flow and addresses the methods and infrastructure requirements for stormwater treatment and conveyance. The Master Drainage Plan was based on topographic Lidar data and covers the entire catchment area draining into the Bow River, including lands north of Highway 1A (Map 12). The catchment area is formed from smaller drainages features that may or may not be connected. The smaller drainage areas are referred to as sub-catchments.

Local Stormwater Management

- 21.7 The location of the stormwater conveyance systems shall be protected and acquired as part of the development process, in general accordance with Map 12.
- 21.8 Stormwater shall be conveyed downstream in a manner that protects the escarpment, *Conservation Areas*, Glenbow Ranch Provincial Park, and other downstream properties such as the Haskayne Legacy Park.
- 21.9 Where required by the County, development proponents shall secure the downstream stormwater conveyance system, regardless of development sequencing.
- 21.10 Stormwater conveyance systems must provide a right-of-way of sufficient width to accommodate upstream stormwater flows from the Bearspaw area.
- 21.11 Stormwater systems design should address subsurface connections to the Bearspaw Reservoir for TDC Build Areas G, I, and J, in accordance with the Glenbow Ranch ASP Master Drainage Plan.

Stormwater Ponds, Constructed Wetlands, and Wetlands

- 21.12 Stormwater ponds or constructed wetlands should be located:
 - a. in general accordance with the locations identified in the Glenbow Ranch ASP Master Drainage Plan;
 - b. on an accessible public utility lot; and
 - c. outside of the riparian setback area.
- 21.13 Stormwater ponds or constructed wetlands constructed within *Conservation Areas* or Glenbow Ranch Provincial Park should be designed to enhance the natural environment. These ponds or wetlands must be designed in accordance with Sections 5.3 and 7.2 of the Glenbow Ranch ASP Master Drainage Plan.
- 21.14 Stormwater ponds or constructed wetlands should be designed to complement open-space connectivity to the natural environment. At the *local plan* stage, a sub-catchment master drainage plan will be prepared for each *Build Area* to identify the location of key storage facilities and conveyance routes through sensitive areas.

A **stormwater pond** is an artificial pond that is designed to collect and treat stormwater to an acceptable provincial standard. The stormwater pond disposes of stormwater through controlled release, absorption into the ground and / or evaporation.

A **constructed wetland** is an artificial wetland created as a new or restored habitat for native vegetation and wildlife; it provides the same function as a stormwater pond.

A **wetland** is land saturated with water long enough to promote wetland aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity that are adapted to a wet environment.

Reduce, Recycle and Reuse

21.15 The County shall explore and support the collection of stormwater at the sub-regional level in order to filter and reclaim stormwater, bringing it to a purple pipe or potable water standard.

21.16 The County shall support lot level best management practices that reduce impervious surfaces, clean or filter runoff, and allow for reuse of stormwater for non-potable purposes.

Purple pipe refers to the colour of pipe used to transport water that has been recycled from a stormwater retention area or municipal waste system. Reclaimed water is filtered and processed to a required provincial standard.

Low Impact Development (LID) is an approach to land development that works with nature to manage stormwater runoff where it falls. LID preserves and recreates natural landscape features and minimizes hard surfaces to create functional and appealing site drainage. Low impact development treats stormwater as a resource, rather than a waste product. LID includes a variety of landscaping and design practices that slow water down, spread it out, and allow it to soak in. These practices ultimately improve the quality and decrease the volume of stormwater entering our waterways.

21.17 As part of the preparation of a *local plan* and the supporting sub-catchment master drainage plan, best management practices and alternative solutions for the improvement of stormwater quality and reduction of stormwater quantity shall be required. Solutions include:

- a. design of stormwater facilities to incorporate source controls in order to reduce the amount of water moving downstream, and the need for end-of-pipe stormwater treatment solutions;
- b. use of Low Impact Development methods, such as constructed wetlands and bio-swales;
- c. reduction of impermeable surface runoff;
- d. reuse of stormwater for irrigation within an individual lot; and
- e. consideration of stormwater ponds at the sub-regional level to support the reuse of stormwater.

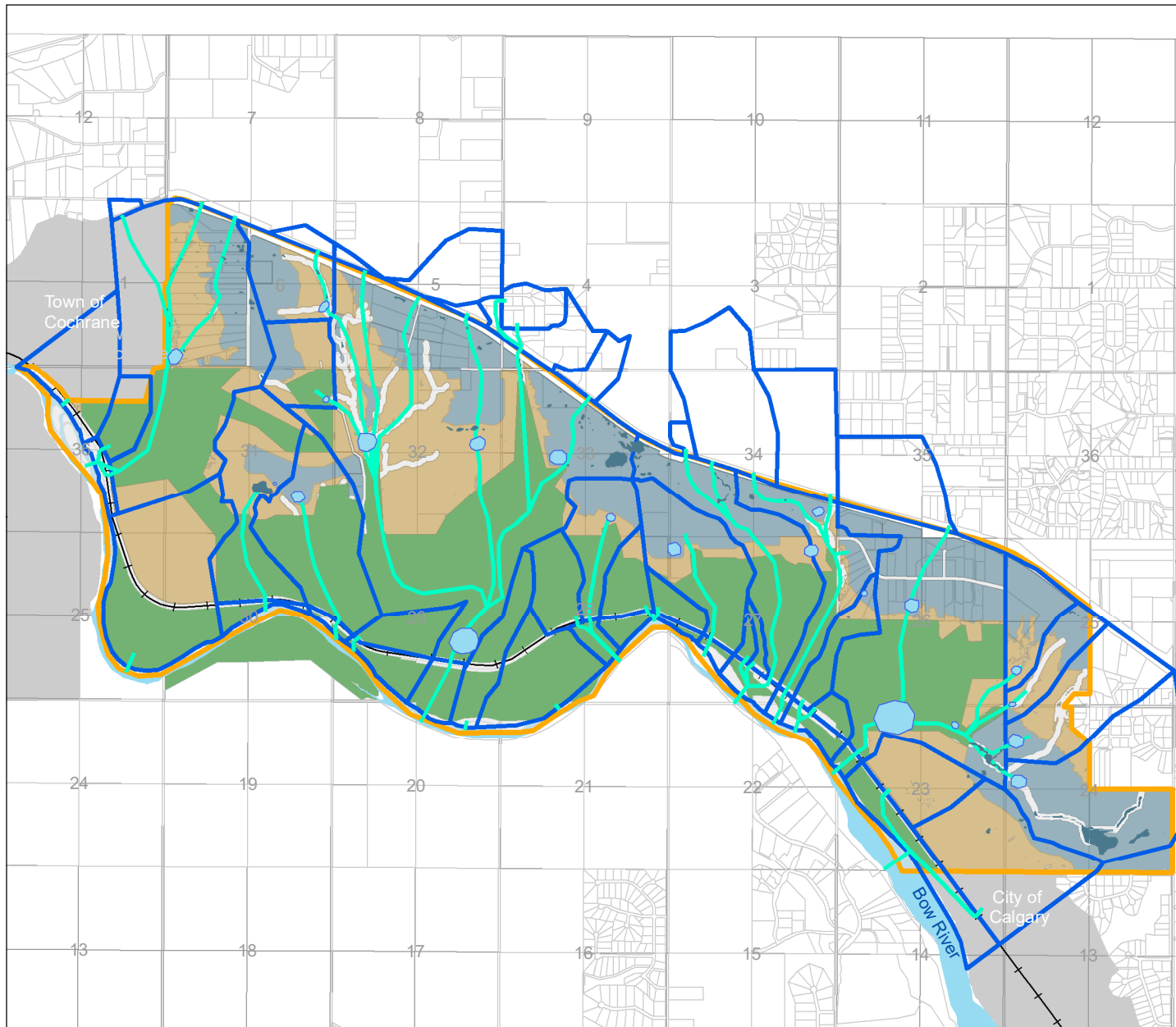
Utility Costs

- 21.18 Developers relying on regional County stormwater services shall be required to front-end the costs of service upgrades where deemed necessary by the County.
- 21.19 Developers relying on stormwater infrastructure improvements provided by other developments shall be required to pay cost recovery as per the requirements of the applicable cost contribution agreement and / or stormwater offsite levy bylaw.
- 21.20 Developers relying on County stormwater services shall be required to pay the Rocky View County Stormwater Off-Site Levy.

Standards and Design

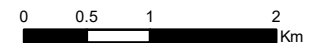
- 21.21 The stormwater management system should be designed to:
- a. operate on a gravity basis;
 - b. accommodate stormwater flows from adjacent transportation networks;
 - c. preserve the function of existing wetlands and Conservation Areas; and
 - d. conform to an urban standard, where a curb and gutter transportation system is provided.
- 21.22 Stormwater conveyance alignments and ponds are shown conceptually on Map 12. Alternate and more cost effective alignments may be considered at the *local plan* stage if it can be shown that the impact on the environment, escarpment, Glenbow Ranch Provincial Park, and downstream sub-catchments within the identified conveyance system is reduced through the use of an alternative alignment.
- 21.23 A sub-catchment master drainage plan in support of a *local plan* area shall comply with the 'Glenbow Ranch ASP Master Drainage Plan' and any new stormwater plans, watershed management policies, and servicing policies.

Map 12: Stormwater



- Plan Area
- Glenbow Ranch Provincial Park
- CP Railway
- Wetlands
- Pond Area
- Regional Conveyance Corridor
- Sub-Catchment Boundaries
- Build Area
- Conservation Area
- Undevelopable Land
- CP Railway

This map is conceptual in nature. No measurements or area calculations should be taken from this map.



22. SOLID WASTE

This section addresses the management of solid waste through all stages of development, from construction and demolition to full build-out. The policies emphasize the reduction and diversion of waste through the recycling and reuse of materials. Each development stage has different solid waste requirements; the policies below provide guidance to developers and residents on managing solid waste effectively.

OBJECTIVES

- Ensure *local plans* address solid waste management during all stages of development, and are in alignment with the County's Solid Waste Master Plan.
- Promote proper disposal and recycling of solid waste material from construction sites.
- Provide direction on the expected level of post-construction waste management service.
- Increase the level of participation in waste diversion within Rocky View.
- Increase the volume of waste materials diverted from landfills.

POLICIES

General

- 22.1 The developer shall be responsible for the management and disposal of solid waste generated through all stages of construction.
- 22.2 Waste minimization and waste diversion practices are encouraged in the Plan area.
- 22.3 A *local plan* should:
- a. address solid waste management through all stages of development, including occupancy;
 - b. identify the appropriate waste transfer stations / sites that serve the *local plan* area;
 - c. conform to the policies of the County's Solid Waste Master Plan;
 - d. set a solid waste diversion target for the construction stage and for the occupancy stage.

The Province of Alberta has developed a provincial waste strategy document titled **Too Good to Waste: Making Conservation a Priority** in order to promote the diversion of waste from landfills through the reuse and recycling of materials.

Commercial

- 22.4 Commercial business owners shall be responsible for providing their own solid waste services.

Hamlet and other Residential Areas

In most areas of the County solid waste services have been successfully managed by lot owner associations.

- 22.5 Prior to the approval of a local plan for Cells G, I, and J the County shall assess the manner in which solid waste services shall be provided.
- 22.6 Solid waste management will be the responsibility of a Lot Owners Association within TDC Build Areas G, I, and J until such time as County service is provided.
- 22.7 Solid waste management shall be the responsibility of a Lot Owners Association in country residential areas (A, B, C, D, E, F, and H),
- 22.8 Solid waste management shall remain the responsibility of the property owners in non-participating development, and agricultural areas.

23. OIL AND GAS

Oil and gas facilities, infrastructure, and operations are industrial land uses that have the potential to affect public safety, quality of life, and the natural environment. Within the Glenbow Ranch Area Structure Plan area, there is one identified abandoned well, and no petroleum facilities (Map 4: Existing Conditions).

OBJECTIVES

- Ensure appropriate and safe land development in relationship to any abandoned wells.

Petroleum facilities are plants, pipelines, and batteries used to process and transport oil and gas.

Petroleum wells are producing, suspended, or abandoned oil and gas wells.

POLICIES

General

- 23.1 Applicants proposing to develop land in the vicinity of a petroleum facility or well shall adhere to the setback requirements and policies of this Plan, and the Directives and Bulletins of the Alberta Energy Regulator (Appendix F).

Directives are documents that set out Alberta Energy Regulator (AER) requirements or processes for implementation. Licensees, permittees, and other approval holders under the jurisdiction of the AER are required to obey all directives.

Bulletins inform the energy industry and the public of an Alberta Energy Regulator activity, such as a consultation, new regulatory requirement, new program, or electronic submission of data.

- 23.2 At the time of subdivision or development, the developer shall register a restrictive covenant that prevents the construction of any building within the setback area associated with an active, suspended, or abandoned petroleum well.
- 23.3 As part of a *local plan* preparation process, applicants shall obtain a Land Development Information package from the Alberta Energy Regulator and identify the locations of all petroleum wells and petroleum facilities (if any) in the *local plan* area.

Abandoned Petroleum Wells

Within the Plan area, there is one (1) known abandoned petroleum well. The following policies apply for land located in proximity to this site.

- 23.4 All buildings located in proximity to an abandoned petroleum well site shall comply with the Alberta Energy Regulator setback requirements, or provide a minimum building setback of 40 metres for residential development and 20 metres for all other development.

- 23.5 Vehicular access to an abandoned petroleum well site shall:
- a. be determined through discussion with the abandoned petroleum well licensee;
 - b. be identified in the local plan; and
 - c. be protected by easements in favour of the County at the time of subdivision or development approval.
- 23.6 In conjunction with the preparation of a *local plan*, or a subdivision or development permit application for any *parcel* containing an abandoned petroleum well, the applicant shall provide:
- a. surveyed locations of the abandoned petroleum wells and confirmation of the setback requirements;
 - b. a Phase I Environmental Site Assessment specific to the abandoned petroleum well; and
 - c. a Phase II Environmental Site Assessment specific to the abandoned petroleum well or pipeline, as deemed necessary by the County.
- 23.7 Public roads should not be located over an abandoned petroleum well.
- 23.8 During land development, all abandoned well sites shall be marked with temporary signage identifying the location of the abandoned petroleum well and providing contact information for the Alberta Energy Regulator. Such signage, as well as adequate fencing and any other necessary protective measures, shall be in place during the development process to prevent damage to the abandoned petroleum well bore.

PART III: IMPLEMENTATION

24. IMPLEMENTATION

The Glenbow Ranch Area Structure Plan outlines the vision for physical development of the Glenbow area and provides guidance with regard to infrastructure requirements, land use, subdivision, and development.

The purpose of this Section is to describe the implementation process, provide detail on the sequence of development, ensure the Glenbow Ranch Area Structure Plan policies and strategies are adhered to, and identify follow-up actions required for Plan success.

OBJECTIVES

- Implement the Conservation and Land Use Strategy, and associated policies of the Glenbow Ranch Area Structure Plan.
- Ensure *local plans* adhere to the vision and policies of the Plan.
- Provide for the sequencing of the build out of the *Build Areas* based on the provision of key infrastructure requirements.
- Provide for the review and amendment of the Plan as required.
- Identify and implement key actions and costs that facilitate conservation and building, provide guidance to *local plans*, and ensure coordinated planning.
- Implement a process for the facilitation, exchange, and monitoring of a Transfer of Development Credit (TDC) Program.

POLICIES

Local Plan Preparation, Redesignation, Subdivision, and Development Applications

Local plans are to be prepared as per the policies of this Plan. Policy sections may identify unique requirements of the various *local plans*. The standard technical requirements of a *local plan* (conceptual scheme or master site development plan) are identified in Section 29 and Appendix C of the County Plan.

- 24.1 Applications for redesignation, subdivision, and / or development shall require the concurrent or prior adoption of a *local plan*, unless otherwise directed by the policies of this Plan.
- 24.2 Notwithstanding Policy 24.1, applications for a Development Permit on a *parcel* of land where a land use has been approved prior to the adoption of this Plan shall not require a *local plan*.
- 24.3 *Local plans* shall address and adhere to the requirements of the Glenbow Ranch Area Structure Plan. In support of *local plans* and redesignation applications, the developer shall submit a rationale addressing how their proposal is consistent with the vision and policies of this Plan.

- 24.4 Subdivision and development applications shall address and adhere to the requirements of the *local plan* and the policies of this Plan.
- 24.5 Where a *local plan* is not required, or is silent on a subject, the relevant policies of the Glenbow Ranch Area Structure Plan shall apply.
- a. Applications for redesignation, subdivision, development and local plans shall comply with the policies and requirements of the following master plans and servicing standards, unless otherwise directed by the policies of this Plan:
 - i. Glenbow Ranch Network Study;
 - ii. Glenbow Ranch ASP Servicing Strategy;
 - iii. Glenbow Ranch ASP Master Drainage Plan;
 - iv. Rocky View County Solid Waste Master Plan;
 - v. Rocky View County Recreation Master Plan;
 - vi. Rocky View County Servicing Standards.

Local Plan Boundaries

- 24.6 *Local plan* planning boundaries are identified on Map 13: Local Plan Boundaries. The *local plan* boundary may be adjusted at the discretion of the County.
- 24.7 If a *local plan* is of sufficient size that further detail is required for a specific area, the subsequent document shall be referred to as a 'development cell' and shall be amended into the *local plan*.
- 24.8 Proposals for non-participating lands, and development in *Build Areas C and H* (Glenbow and Coyote Valley), shall provide a *local plan* for:
- a. all *parcels* or combination of *parcels* twenty acres or greater in size for residential development; and
 - b. any proposed institutional development.
- 24.9 Non-participating landowners with a *parcel* size less than twenty acres may be required to prepare a *local plan*, at the discretion of the County. Where a *local plan* is not required, the landowner shall provide a technical assessment of the proposed development which includes:
- a. the internal road network, water supply, sewage treatment, and stormwater management;
 - b. any other assessment required by unique area conditions, such as topography; and
 - c. the requirements of policies 10.8 and 10.14 being addressed.

Sequencing of Development

The Glenbow Ranch Area Structure Plan does not provide for a phased approach to the development for the following reasons:

- i. access to Highway 1A is available for all *Build Areas*;
- ii. there are different water and wastewater servicing opportunities (public and private) for different *Build Areas*; and
- iii. stormwater sub-catchment basins are unconnected and do not rely on each other for infrastructure.

Local plan and land use approval may occur when the standard technical requirements and unique policy requirements of this Plan are addressed, along with the planning for, and provision of, unique infrastructure components to each *Build Area*. Unique requirements include:

TDC Build Area A:

- Secondary access to the *TDC Build Area*.

TDC Build Area B:

- Secondary access to the *TDC Build Area*.

TDC Build Area D:

- Upgrade of Glenbow Road to a County standard; and
- Secondary / emergency access within the *TDC Build Area*.

TDC Build Areas E and F:

- Secondary / emergency access to the *TDC Build Areas*.

TDC Build Area G:

- Detailed water and wastewater strategy to be provided with the *local plan* submission;
- Water license sufficient to service the proposed land use area;
- Water and wastewater facility construction with the first subdivision; and
- Secondary access.

TDC Build Area I:

- Detailed water and wastewater strategy to be provided with the *local plan* submission;
- Water license sufficient to service the proposed land use area; and
- Water and wastewater facility construction with the first subdivision.

TDC Build Area J:

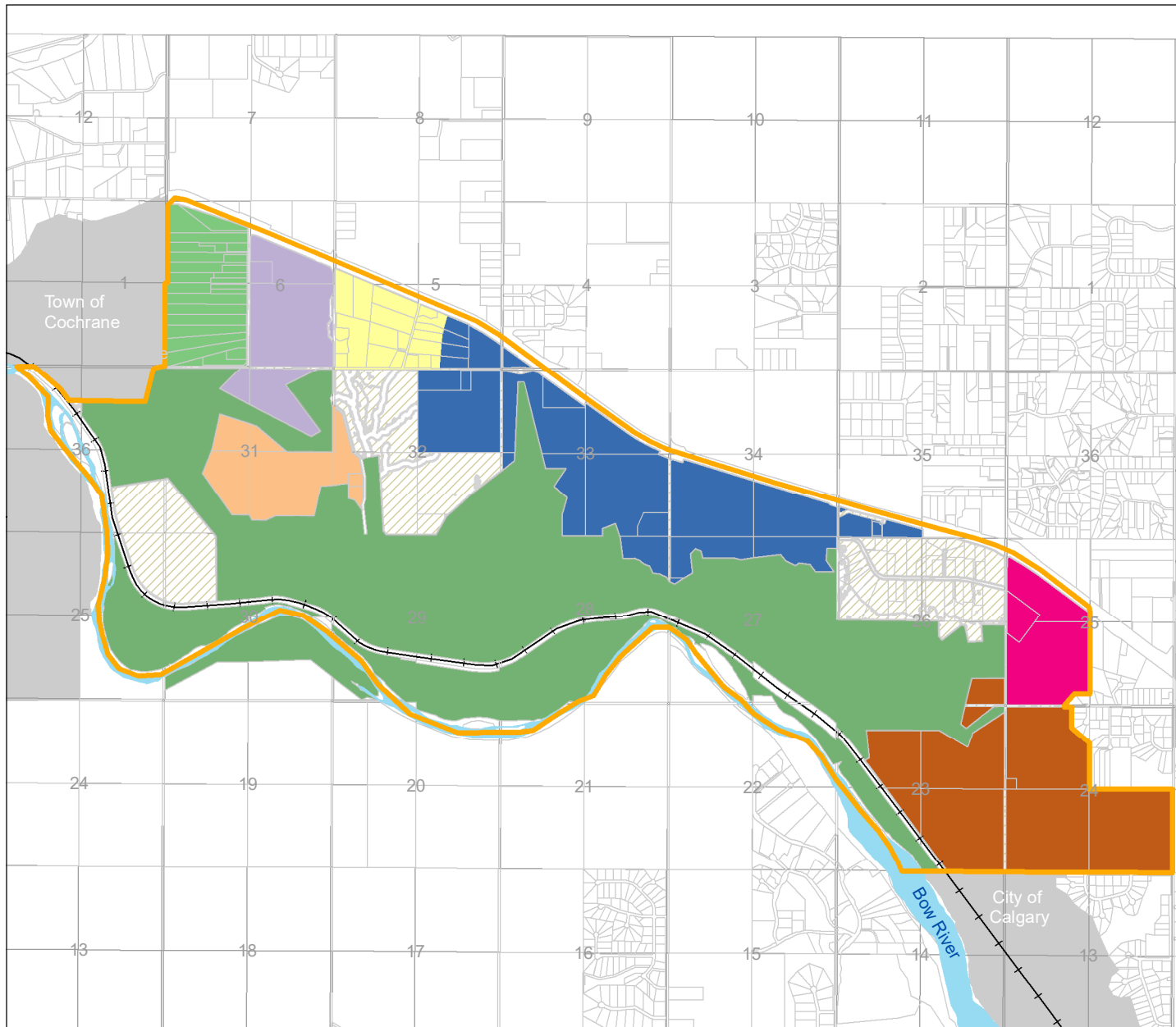
- Detailed water and wastewater strategy provided with the *local plan* submission;
- Water license sufficient to service the proposed land use area;
- Water and wastewater facility construction with the first subdivision; and
- Primary and secondary access as per the Plan direction.

Technical Requirements and Submissions

The various policy sections in the Glenbow Ranch Area Structure Plan identify specific requirements of a *local plan*. All other standard technical requirements of a *local plan* are identified in the County Plan.

- 24.10 *Local plans* shall address the requirements as set out in the policies of this Plan, and Section 29 and Appendix C of the County Plan.
- 24.11 All planning or development applications, and any associated infrastructure construction, shall be guided by the direction and technical requirements of the County Plan, Glenbow Ranch Area Structure Plan, Land Use Bylaw, relevant *local plan*, County Servicing Standards, County Parks and Pathways Development Guidelines, County Policy, and provincial and federal requirements.

Map 13: Local Plan Boundaries



This map is conceptual in nature. No measurements or area calculations should be taken from this map.

County Policy refers to policy adopted by Council to guide administration, developers and the public in various matters. County Policy can be found on the Rocky View County website.

Monitoring

The progress in implementing the Glenbow Ranch Area Structure Plan will be monitored from time to time, based on a number of performance measures including conservation easements, *development credit* purchase, *local plan* preparation, and infrastructure expansion. Where necessary, the County will make recommendations to Council as to how the Plan may be updated to ensure the conservation goals are met.

Plan Review and Amendment

The future land use and development outlined in the Glenbow Ranch Area Structure Plan is dependent on market conditions and landowner interest. Over time, changing conditions such as new provincial legislation and regulation, County policy, development requirements, and conservation goals, may require a review of this Plan.

24.12 The Glenbow Ranch Area Structure Plan shall be subject to an assessment and review in accordance with Section 28 of the County Plan.

Infrastructure Costs and Levies

The Glenbow Ranch Area Structure Plan recognizes implementation will require infrastructure improvements both within, and external, to the Plan area. Anticipated 'hard' infrastructure improvements include upgrades / construction of intersections / interchanges, roads, water, wastewater, and stormwater. 'Soft' infrastructure improvements may include police facilities, fire station improvements, and recreational facilities. Development costs will be covered through a variety of revenue sources, including developer funded and implemented improvements, development levies, County improvements, and provincial contributions.

The need, cost, and timing of infrastructure construction vary with the type of infrastructure improvement and development project. Off-site levies for hard and soft infrastructure will be developed for the Plan area. All levies are subject to periodic review, and include development costs associated with internal and external improvements to service the Plan area. Non-levy costs and improvements will be determined through periodic review of the master servicing documents, and at the *local plan* preparation stage.

It is important to note that infrastructure costs do not represent the full costs to service the Plan area. Complete community costs also include those associated with program and service delivery to residents and business owners (e.g. community recreation, fire and property protection, parks maintenance, waste and recycling operations, etc.), which serve community needs and are an essential part of a community.

24.13 As part of the *local plan* approval process, the identification, timing, and funding of any required off-site improvements relating to hard and soft infrastructure shall be required.

- 24.14 Off-site improvements that are:
- a. internal to the Plan area will be determined to the satisfaction of the County; or
 - b. external to the Plan area, including provincial or adjacent municipal infrastructure, will be determined to the satisfaction of the County, in consultation with the relevant municipality and / or provincial department.
- 24.15 Developers relying on regional utility services (water, wastewater, and / or stormwater) shall be required to front-end the costs of utility service upgrades where deemed necessary by the County.
- 24.16 Costs associated with transportation and / or utility service improvements shall be the responsibility of the developer.
- 24.17 Developers relying on transportation and / or utility infrastructure improvements (water, wastewater, and / or stormwater) provided by other developments shall be required to pay proportionally allocated cost recovery as per the requirements of the applicable cost recovery agreement(s).
- 24.18 Development proponents shall be required to pay Rocky View County's applicable:
- a. Water and Wastewater Off-Site Levy;
 - b. Stormwater Off-Site Levy;
 - c. Transportation Off-Site Levy; and
 - d. 'Soft' Infrastructure Off-Site Levies.

Actions

Actions are activities that need to be carried out by the County to achieve the objectives, and policies of the Plan. The following actions are required or recommended to assist in the implementation of the Glenbow Ranch Area Structure Plan.

1. Land Use Bylaw (Section 10):
 - i. Create *TDC Build Area* districts,
 - ii. Consider the creation of a *TDC Conservation Area* district.
2. Transfer of Development Credit (TDC) Program (Section 9):
 - i. Develop tracking mechanisms for the following:
 - a. Credits validated and assigned to TDC Conservation Area parcels,
 - b. *Credits* sold or otherwise transferred,
 - c. *Credits* that remain available for sale,
 - d. Conservation easements placed, and
 - e. *Credits* redeemed / extinguished.

3. Develop the following TDC forms (Section 9):
 - i. Assignment of credits certification,
 - ii. Transfer of Credit Agreement, and
 - iii. Confirmation of Grant of Conservation Easement.
4. Development of 'hard' and 'soft' Off-site Levies prior to the first local plan adoption, or approved subdivision (Sections 14, 15, and 18 – 21).
5. Investigate the cost of a wildlife underpass (Section 9).
6. Prior to the approval of a local plan for the hamlet (*TDC Build Area G*), the County will:
 - i. review the community's policing requirements and identify additional resources needed, if any (Policy 18.3);
 - ii. assess the community's requirements for recreation, community services, public transit service, and fire services, in consultation with adjacent municipalities.
7. Subject to funding availability, the County will work with the City of Calgary and, where appropriate, the Town of Cochrane, to conduct a joint study to assess the regional recreation and community service needs of residents in northwest Calgary, Bearspaw, Glenbow Ranch, and surrounding area (the "Joint Recreation Study"). The intent of the Study is to identify the needs of residents, regardless of jurisdiction, and identifying mechanisms for appropriate cost sharing and complimentary service provision.
8. Prior to the approval of a local plan for Cells G, I, and J, the County will assess the manner in which solid waste services are provided (Policy 22.5).
9. Establish a working group with Alberta Environment and Parks to manage issues related to the Glenbow Ranch Provincial Park as development proceeds. Where agreed to by Alberta Environment and Parks, the City of Calgary will be invited to participate in working group discussions with respect to issues related to stormwater, source water protection, and public access to the reservoir.
10. The County will participate in a potential Sub-Regional Transit Feasibility Study for Highway 1A including partners; City of Calgary, Cochrane, and Alberta Transportation, unless the Calgary Metropolitan Region Board has already initiated this work.

The Sub Regional Transit Feasibility Study should include:

- Estimate of ridership in the plan area.
- Phasing plan to introduce transit service, if appropriate.
- Capital and Operating Cost of the service.
- Recommendations on Park and Ride demand, phasing need, location, sizing, and transit priority treatments, if appropriate.
- Identification of regulatory requirements.

25. INTERJURISDICTIONAL COORDINATION AND COOPERATION

The Glenbow Ranch Area Structure Plan area is bordered by Calgary to the southeast and Cochrane to the west. Within the Plan boundaries is the Glenbow Ranch Provincial Park, which is under the jurisdiction of the Government of Alberta. The Plan recognizes the land use intent of these jurisdictions and provides for appropriate, compatible land use transitions at the interface areas. In addition, the Plan contains specific stormwater, utility service, transportation, and open-space policies that provide for compatible development and promote a coordinated and cooperative approach to planning.

Documents that guide coordinated planning in this area include: the Rocky View / Calgary Intermunicipal Development Plan (IDP), the Town of Cochrane / M.D. of Rocky View No. 44 Intermunicipal Development Plan (IDP), and the RancheHouse Accord. The IDPs are statutory plans that provide policy guidance in border areas and outline circulation protocols to promote effective information sharing and issue resolution. The Ranchehouse Accord is a collaborative agreement between the Town of Cochrane and Rocky View County that provides a commitment and a framework with guidelines, processes, and strategies to assist the County and Town to sustain a cooperative, open, and communicative relationship with each other. In the spirit of the Ranchehouse Accord, the two parties will work together, at appropriate levels of Administration and Council, to capitalize on opportunities and seek innovative solutions to challenges.

To meet the intent of the IDPs and the RancheHouse Accord, in the context of the Glenbow Ranch Area Structure Plan, the County will involve the City of Calgary and the Town of Cochrane in the various phases of development by circulating *local plans* and development applications, providing technical information for review, and working with the respective Administrations to identify concerns and solutions.

OBJECTIVES

- Ensure ongoing, meaningful consultation occurs between Rocky View County, The City of Calgary, the Town of Cochrane, and the Government of Alberta on matters related to the implementation of the Glenbow Ranch Area Structure Plan.
- Ensure a coordinated and cooperative approach to planning with adjacent municipalities as described in the applicable Intermunicipal Development Plan and the RancheHouse Accord.
- Respect and enhance Glenbow Ranch Provincial Park by controlling access, providing buffering, and minimizing impact to environmentally sensitive areas.

POLICIES

- 25.1 The County shall consult with The City of Calgary and the Town of Cochrane on planning processes affecting land that borders the adjacent municipality and / or on other matters identified through an Intermunicipal Development Plan as areas requiring planning coordination.
- 25.2 The County shall work with The City of Calgary and the Town of Cochrane to ensure continued, meaningful communication between the three municipalities, as subsequent *local plans* are prepared.

- 25.3 To achieve policies 25.1 and 25.2, the County shall circulate local plan applications, share technical information submitted in support of the *local plans*, and participate in ongoing communication and discussions with The City of Calgary and the Town of Cochrane to address concerns and seek mutually beneficial opportunities.
- 25.4 Intermunicipal circulation of planning proposals shall comply with the appropriate Intermunicipal Development Plan and any other agreement(s) jointly approved by adjacent Municipal Councils, including the RancheHouse Accord.
- 25.5 Notwithstanding policy 25.3, the County shall circulate local plans for *Build Areas G, I, and J* to The City of Calgary and the Town of Cochrane for review and comment, particularly with respect to transportation and stormwater management.

Rocky View County - Town of Cochrane

- 25.6 Development adjacent to Cochrane shall be coordinated between Rocky View County and the Town of Cochrane, or as otherwise required by The Town of Cochrane / M.D. of Rocky View No. 44 Intermunicipal Development Plan.
- 25.7 Development proposals adjacent to Cochrane, including country residential areas A, B and D, shall ensure that any servicing, transportation, stormwater, pathway and open space, and transitional considerations contained within The Town of Cochrane / M.D. of Rocky View No. 44 Intermunicipal Development Plan are implemented.
- 25.8 *Local plans* submitted for lands that are adjacent to Cochrane shall ensure that buffering, integration, and transitional elements are considered, in consultation with the Town of Cochrane and The Town of Cochrane / M.D. of Rocky View No. 44 Intermunicipal Development Plan.

Rocky View County – The City of Calgary

- 25.9 Development adjacent to Calgary shall be coordinated between Rocky View County and The City of Calgary, or as otherwise required by the Rocky View / Calgary Intermunicipal Development Plan.
- 25.10 Development proposals adjacent to Calgary shall ensure that any servicing, transportation, stormwater, pathway and open space, and transitional considerations contained within the Rocky View / Calgary Intermunicipal Development Plan are implemented.
- 25.11 *Local plans* submitted for lands that are adjacent to Calgary shall ensure that buffering, integration, and transitional elements are considered, particularly with respect to lands adjacent to Haskayne Legacy Park, in consultation with The City of Calgary and the Rocky View / Calgary Intermunicipal Development Plan.

Local Plans, Redesignation, and Subdivision

25.12 Rocky View County shall ensure that *local plans* and applications for redesignation and subdivision of lands in areas adjacent to Calgary and Cochrane shall address:

- a. regional drainage and stormwater quality;
- b. alignment and connectivity of pathways, roadways, and utilities with the adjacent municipality;
- c. land use compatibility with adjacent municipal land uses;
- d. gateway design elements; and
- e. other appropriate policies of this Plan.

Related ASP Policies

In addition to the policies of this section, other intermunicipal objectives and policies related to specific subjects are located throughout the Plan. To provide a cross reference, these objectives and policies are identified in Table 8 below.

Table 8: Related Intermunicipal Policies

Section	Goals, Objective and / or Policies
Section 6: Planning For Tomorrow	Goal 10
Section 14: Recreation, Culture, and Community	Objective: 3 Policy 14.4
Section 15: Open Space and Parks	Objective: 6 Policies: 15.1, 15.6, 15.8
Section 18: Emergency Services	Policy 18.1
Section 19: Transportation	Objectives: 1,3,4 Policies: 19.6, 19.7
Section 21: Stormwater	Policy: 21.3, 21.8
Section 24: Implementation	Policies: 24.12, 24.13, 24.14 Action Item: 6ii

Rocky View County – Government of Alberta

All current or future land within the Glenbow Ranch Provincial Park is under the jurisdiction of the Government of Alberta as per the Parks Act.

25.13 Rocky View County shall work collaboratively with the Government of Alberta to integrate development in the Plan area with the goals and values of the Glenbow Ranch Provincial Park.

Related ASP Policies

In addition to policies 25.10, 25.11, and 25.12, other objectives and policies relating to the Glenbow Ranch Provincial Park are located elsewhere in this Plan. Table 7 (Section 15) provides a cross reference to those policies.

APPENDICES

APPENDIX A: Definitions

Words or phrases that have a defined unique meaning when first encountered and are found throughout the Plan are italicized, where written, and repeated below.

Base density means the base residential units per acre (0.175 upa) assigned to a *TDC Build Area* when participating in the TDC Program.

- Base Residential Units = *Base density* x area

TDC density means the higher residential units per acre that are allowed, on average, within a *TDC Build Area*, when the landowner participates in the Transfer of Development Credit (TDC) Program. Each *TDC Build Area* is assigned its own *TDC density*.

- Total Residential Units = *TDC density* x area

Bonus residential units means the number of residential units, on average within a *TDC Build Area*, that can be acquired through the purchase of *development credits*.

- *Bonus residential units* = Total Residential Units - Base Residential Units

Conservation Area, in the context of the Glenbow Ranch Area Structure Plan, is land that could be developed for residential or other uses but has natural, environmental, or scenic values that are desirable to retain. The following conservation values were mapped to determine the *Conservation Area* map:

- viewscales;
- undisturbed grasslands;
- slopes between 15% and 45%;
- wildlife habitat and connectivity;
- minor drainages; and
- large blocks of undeveloped land (area greater than 80 acres with no homes).

Local Plan means a conceptual scheme or a master site development plan as defined in the County Plan (Section 4). A *local plan* will have unique planning requirements based on the planning direction provided in the area structure plan. *Local plans* must also address the general requirements for preparing a conceptual scheme or a master site development plan identified in the County Plan: Section 29 and Appendix C.

Parcel means the area identified by Rocky View County's assigned tax roll number.

Qualified organizations are organizations eligible to receive and hold conservation easements as described in the Alberta Land Stewardship Act. They include the Government of Alberta and its agencies, local government bodies such as a municipality, and land trusts or conservancies.

TDC Build Area is developable land that can be built at a higher density (*bonus density*) upon the purchase of *Transferrable Development Credits*. In the context of the Alberta Land Stewardship Act, the term equates to a designation of an area or areas of land as a development area for the purpose as set out in Section 49(1)(e).

TDC Conservation Area is developable land that has been identified as a *Conservation Area* and has been assigned *Transferrable Development Credits*. In the context of the Alberta Land Stewardship Act, the term equates to a designation of an area or areas of land for the purpose as set out in Section 49(1)(a).

Transferrable Development Credits, development credits, or credits are assigned to a *Conservation Area*. The *Conservation Area* landowner can sell or transfer their *credits* to a *TDC Build Area* landowner and thereby allow the *Build Area* landowner to build at a higher density than they otherwise would be allowed (the *TDC density*).

APPENDIX B: Conservation Area and Build Area by Roll Number

Table 9: Conservation Area and Build Area by Roll Number

Roll	Title Acreage	Build	Conservation	Undevelopable	Cell
05722002	17.6	-	-	17.60	
05723001	120.52	45.14	65.80	9.58	J
05723002	66.99	-	66.43	0.56	
05723003	148.62	7.34	140.92	-	J
05723004	15.82	-	15.48	-	
05723005	14.7	-	-	14.70	
05724002	145.79	76.05	49.27	20.46	J
05724003	160	139.62	-	20.37	J
05724004	160	100.38	44.20	15.42	J
05724015	2.39	1.60	-	0.79	J
05725002	60.19	60.19	-	-	I
05725005	146.3	44.04	77.63	24.62	I
05725016	22.64	18.89	3.62	0.13	I
05726001	4.15	4.15	-	-	H
05726002	7.52	5.68	1.27	0.57	H
05726003	38.47	0.24	37.95	0.26	H
05726005	4	4.00	-	-	H
05726006	14.49	11.06	3.43	-	H
05726007	4	4.00	-	-	H
05726008	17.41	17.18	0.09	0.14	H
05726009	15.19	15.19	-	-	H
05726010	17.54	12.57	4.91	0.05	H
05726011	4.03	4.03	-	-	H
05726012	8.85	8.85	-	-	H

05726013	17.74	14.25	3.49	-	H
05726014	4.61	4.61	-	-	H
05726015	4	4.00	-	-	H
05726016	13.41	6.04	5.44	1.93	H
05726017	4	4.00	-	-	H
05726018	17.94	6.95	10.91	0.08	H
05726019	5.36	3.35	0.94	1.07	H
05726020	4	4.00	-	-	H
05726021	13.4	13.40	-	-	H
05726022	4	4.00	-	-	H
05726023	8.83	5.93	2.88	0.02	H
05726024	4.05	3.98	-	-	H
05726025	4.05	4.05	-	-	H
05726026	4.5	4.50	-	-	H
05726027	4.38	4.38	-	-	H
05726028	4	4.00	-	-	H
05726029	4	4.00	-	-	H
05726030	4.17	4.17	-	-	H
05726031	13.36	13.36	-	-	H
05726032	4.58	4.54	0.04	-	H
05726033	4.81	4.81	0.00	0.00	H
05726034	4.15	4.15	-	0.00	H
05726035	4.67	3.39	1.28	-	H
05726036	4.45	4.04	0.41	-	H
05726037	4.77	3.53	0.52	0.72	H
05726038	4	4.00	-	-	H
05726039	4	4.00	-	-	H
05726040	4	4.00	-	-	H
05726041	4	4.00	-	-	H
05726042	3.98	3.98	-	-	H

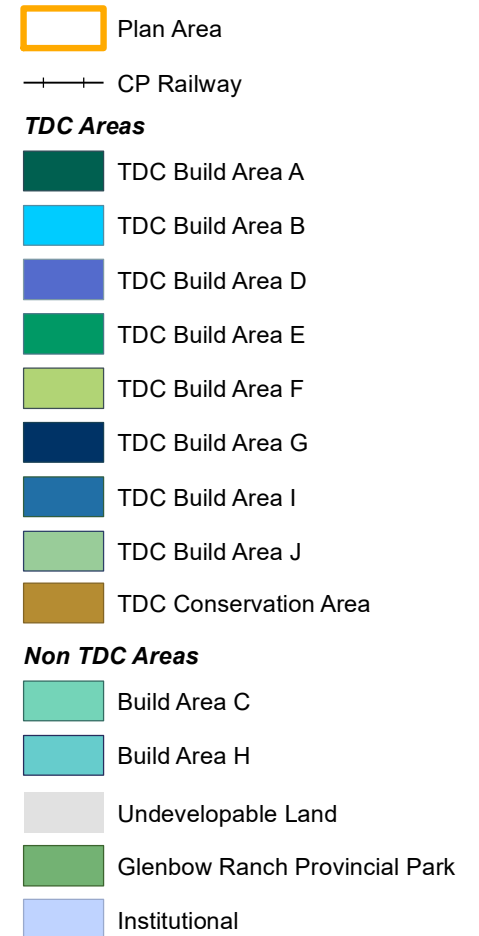
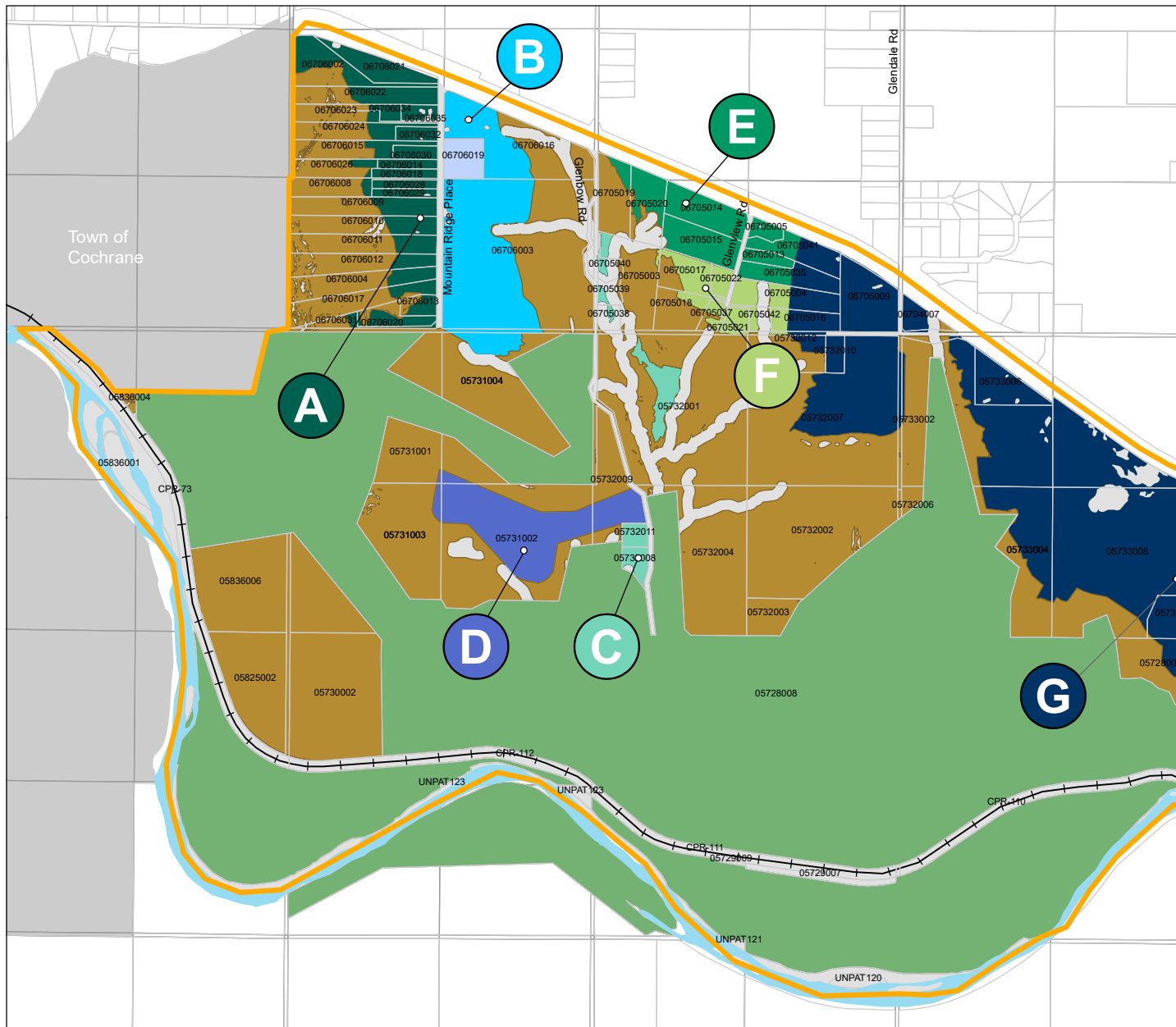
05726043	3.95	3.95	-	-	H
05726044	5.36	3.48	0.41	1.46	H
05727001	46.36	4.54	39.28	2.53	G
05727002	49.06	22.76	26.30	-	G
05727003	1.19	-	1.18	-	G
05727007	3.31	-	-	3.31	G
05728001	33.14	11.40	21.71	-	G
05728008	3214.27	-	-	3,076.92	G
05729007	6.72	-	-	6.70	G
05729009	0	-	-	0.58	
05730002	81.01	-	80.71	0.30	
05731001	41.6	0.35	41.22	-	D
05731002	115.69	54.65	52.53	8.51	D
05731003	84.88	1.89	82.44	0.54	D
05731004	75.63	8.46	60.67	5.00	B
		1.51			D
05732001	146.15	11.97	94.75	39.42	C
05732002	92.94	-	88.85	4.08	
05732003	12.4	-	12.33	0.04	
05732004	72.69	-	63.46	9.22	
05732006	1	-	0.97	-	
05732007	134.52	54.99	73.24	6.27	G
05732008	5.26	4.88	-	0.38	C
05732009	28.68	11.20	16.62	0.86	D
05732010	4.94	4.94	-	-	G
05732011	4.27	4.27	-	-	C
05732012	20.54	3.57	12.15	4.82	G
05733001	138.49	36.69	-	5.85	G
05733002	92.51	51.53	38.99	1.99	G

05733003	15.96	15.87	0.09	-	G
05733004	55.67	29.37	26.29	-	G
05733006	16.54	16.21	-	0.33	G
05733008	139.83	113.98	20.17	5.67	G
05734003	140.55	68.80	5.56	9.30	G
05734004	142.68	131.08	-	0.37	G
05735020	17.05	17.05	-	-	
05735091	2.82	2.82	-	-	
05735092	12.1	12.10	-	-	
05735093	1.19	1.19	-	-	
05825002	45.16	-	44.50	0.66	
05836001	26.1	-	-	26.10	H
05836004	0.48	-	-0.32	-0.06	
05836006	61.79	-	56.86	4.93	
06704007	6.9	5.11	0.58	1.21	G
06705003	25.99	0.47	19.37	5.45	C
		0.52			F
06705004	17.94	8.40	2.01	0.00	F
		7.53			G
06705005	4	3.95	-	0.05	E
06705009	25.11	24.93	-	0.18	G
06705013	4.37	4.37	-	-	E
06705014	17.92	17.92	-	-	E
06705015	17.96	17.60	0.01	0.35	E
06705016	10	2.82			F
		7.17	-	0.00	G
06705017	13.85	9.73	4.11	0.01	F
06705018	13.77	2.90	10.87	-	F
06705019	17.51	2.65	14.41	0.45	E
06705020	16.96	10.10	2.13	4.73	E

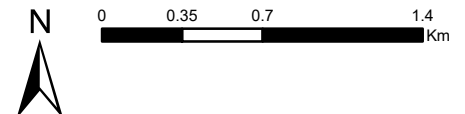
06705021	3.98	3.98	-	-	F
06705022	4	4.00	-	-	F
06705035	13.57	6.56	-	0.02	E
		6.99			G
06705037	4	2.58	1.18	0.24	F
06705038	4	0.64	0.06	3.31	C
06705039	4.03	0.99	0.42	2.62	C
06705040	4.1	1.10	0.57	2.41	C
06705041	13.99	6.07	-	0.10	E
		7.92			G
06705042	3.95	2.00	0.01	1.94	F
06705043	0	1.37	1.65	0.21	C
06706002	20.58	14.01	6.56	0.01	A
06706003	157.52	84.47	59.20	13.84	B
06706004	19.62	4.94	13.87	0.82	A
06706008	11.74	2.01	9.73	-	A
06706009	19.65	8.12	11.49	0.04	A
06706010	19.64	6.66	11.56	1.42	A
06706011	19.63	5.64	13.38	0.61	A
06706012	19.62	4.41	14.42	0.79	A
06706013	4.8	3.24	1.52	0.04	A
06706014	3.98	3.98	-	-	A
06706015	14.67	4.50	9.63	0.58	A
06706016	49.59	26.37	14.85	8.35	B
06706017	19.59	3.99	14.55	1.05	A
06706018	4.35	4.35	-	-	A
06706019	11.25	11.25	-	-	
06706020	8.8	5.85	2.77	0.18	A
06706021	13.08	12.82	-	0.26	A

06706022	17.94	10.62	6.81	0.51	A
06706023	9.93	1.46	8.24	0.23	A
06706024	13.81	4.48	9.08	0.25	A
06706026	10.82	1.97	8.55	0.30	A
06706028	3.95	3.95	-	-	A
06706029	3.95	3.86	-	0.09	A
06706030	4.5	4.50	-	-	A
06706031	5.16	2.40	2.63	0.13	A
06706032	4.11	4.07	-	0.04	A
06706034	4	3.17	0.78	0.05	A
06706035	4	3.43	-	0.57	A

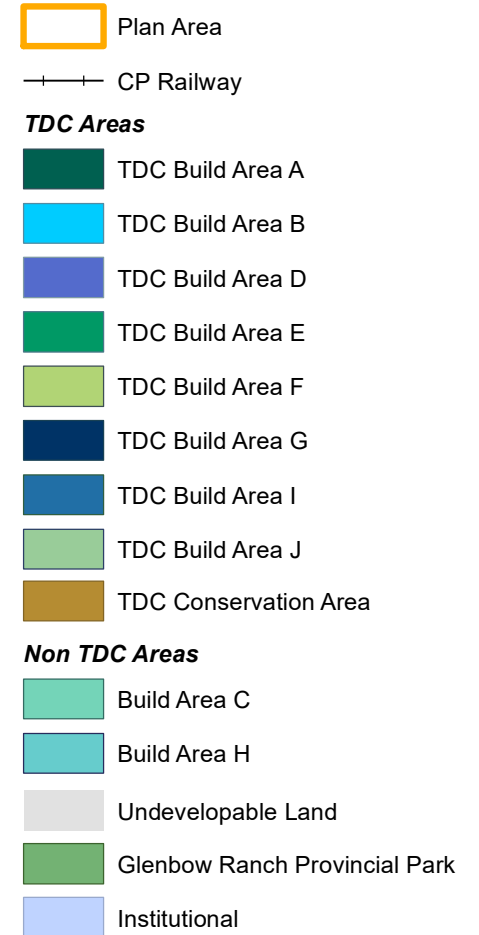
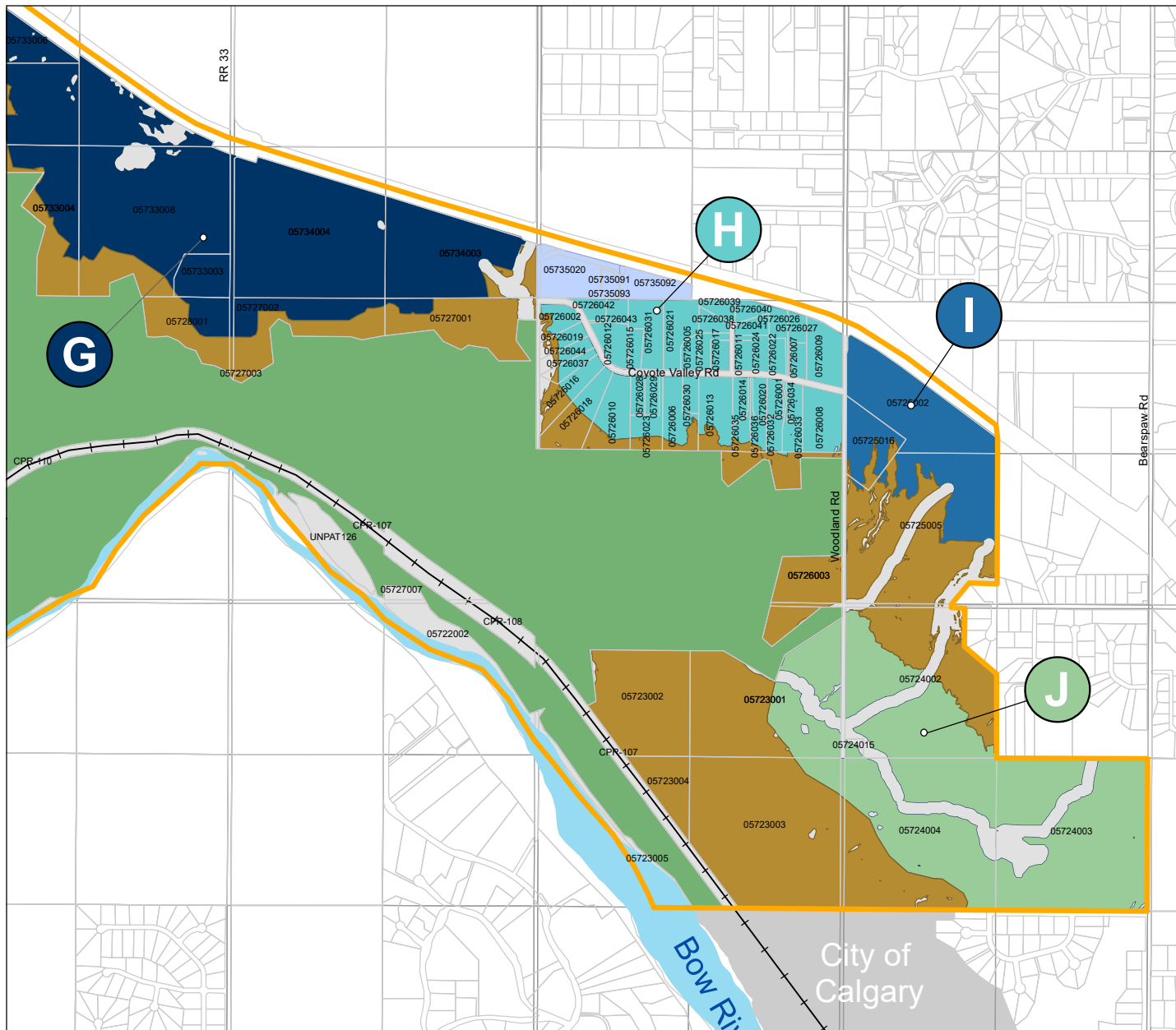
Map 14:
Conservation Area
and Build Area by
Roll Number - West



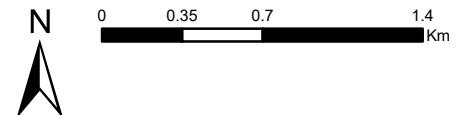
This map is conceptual in nature. No measurements or area calculations should be taken from this map.



Map 15:
Conservation Area
and Build Area by
Roll Number - East



This map is conceptual in nature. No measurements or area calculations should be taken from this map.



APPENDIX C: Residential Design Guidelines

The following design guidelines are intended to provide guidance for residential *TDC Build Areas G, I, and J*.

Land use

1. *Local plans* should ensure a diversity of land uses that:
 - a. support complete community development and diverse market demands; and
 - b. result in a range of housing types that include single family residential, semi-detached, townhouse, and condominiums.
2. The hamlet centre (*Build Area G*) should include residential, commercial, and institutional uses.

Community design

3. Roads and pathways shall provide visual and physical connections to key amenity areas, including Glenbow Ranch Provincial Park.
4. The road network should be intuitive and easy to understand, with corresponding block lengths that encourage walking and support multiple connections.
5. Community design should complement the natural characteristics and features of the land.
6. Higher density / intensity uses and building forms should be located within close proximity to the hamlet centre and its amenities and services.
7. The streetscape should ensure pedestrian activity and comfort.
8. Community gateways should be provided that reinforce the sense of entry into the community.

View protection

9. Streets and pathways should:
 - a. be oriented to capture significant views wherever possible; and
 - b. balance the need to preserve the natural qualities of area ridgelines while allowing development along the interface of the Provincial Park.
10. Window streets should be created in select locations to allow passive views that are accessible to the entire community.

Landscape

11. *Local plans* should:
 - a. encourage the use of native landscapes, such as fescues and grasses, throughout the community;
 - b. provide soft transitions in appropriate locations that allow the Provincial Park to naturally flow into the community; and

- c. plan for formal, direct, and highly visible pathway connections to the Provincial Park in order to limit informal pedestrian activity and natural landscape deterioration.
- 12. Landowners developing at the bonus densities should work with the Provincial Park to educate and advise the community on native landscape preservation.

Building form and siting

- 13. A variety of building forms that face the street and contribute to the streetscape is strongly encouraged.
- 14. *Local plans* should:
 - a. consider reduced front yard setbacks to create a strong street front;
 - b. consider alternate housing forms and arrangements to meet the varied needs of the market, including: panhandle lots, zero-lot line homes, and secondary suites; and
 - c. provide alternative building façade treatments to enhance the character of the street and prevent architectural monotony.
- 15. Multi-family development should be designed to soften the impact of massing and present a low-density residential scale toward the street and adjacent development.

Accessibility

- 16. Connections to the Provincial Park shall be strategically located to: connect to the pathway network, ensure proper stewardship of the land, reduce risk and liability, protect natural and cultural assets, and better manage the visitor experience of the Provincial Park.
- 17. Neighbourhoods should be designed to be intuitively navigable and understood, with multiple opportunities to make connections.
- 18. Laneways are encouraged to ensure a continuous and unbroken pedestrian realm along streets.

Interface

- 19. In order to prevent a repetitive, impermeable, and visually monotonous development edge with Glenbow Ranch Provincial Park, a variety of building conditions, such as development fronting, flanking, and backing onto the Provincial Park is encouraged.
- 20. Undulating berms, landscaping and other treatments should be used to limit the visual and physical impact of Highway 1A on the community, while reducing the sense of scale of the community as seen from the Highway.
- 21. Travelers along Highway 1A should experience breaks in building form and berming to allow mountain and valley views.
- 22. Sensitive interfaces should be developed between urban forms of development and existing / future rural residential.

Rural Character

23. A unique identity and sense of place that builds on the area's rural heritage should be created; this will foster a strong sense of community. Development should identify, highlight, and incorporate legacy and historical elements of the land into the development.
24. Opportunities to stimulate and promote a local agricultural economy should be encouraged through the use of farmers' markets, community gardens, and educational programs.

Integration of Glenbow Ranch Provincial Park into the Community

25. Ensure facilities within the Provincial Park, including those for park access, are integrated with the commercial area and the broader community to achieve common objectives.
26. Connection to the history of the land should be apparent in the naming of community elements, features, and roads.

APPENDIX D: Commercial Development Landscaping and Building Design Guidelines

The following design guidelines are intended to promote and ensure a coordinated and pleasant visual presence of commercial development within *Build Area G* of the Glenbow Ranch Area Structure Plan boundary.

1. *Local plans* shall consider the County's Land Use Bylaw landscaping and screening requirements, as well as the County's Commercial, Office, and Industrial Design Guidelines, and shall document how they meet those requirements and guidelines.
2. Buildings with multiple street frontages shall be designed to treat each frontage as a primary building façade.
3. All buildings shall be permanent structures, with good quality exterior finishing materials that may include quality metal panel products, pre-cast concrete, architectural site-cast concrete, architectural tile, and commercial grade stucco, brick, or stone masonry. Wood, unfinished concrete and concrete block, may be used as a secondary material only.
4. Façades of buildings facing adjacent residential areas shall include at least three of the following architectural elements:
 - a. colour change;
 - b. texture change;
 - c. material change; and
 - d. expression of an architectural or structural bay through a change in plane; such as an offset, reveal, or projecting rib.
5. Rooftop apparatus should be located and concealed to reduce or eliminate public view from adjacent roads or homes.
6. Roofs should have at least two of the following features:
 - a. parapets concealing flat roofs and / or rooftop mechanical and electrical equipment;
 - b. overhanging eaves extending past the supporting wall;
 - c. sloping or pitched roofs with two or more roof slope planes; and
 - d. roof-top gardens that support ecological functions such as: stormwater retention, building insulation, bird habitat, and / or outdoor green space, etc.
7. Each primary building shall have a clearly defined main entrance, featuring at least two of the following:
 - a. canopy or portico;
 - b. overhang or arcade;
 - c. raised, corniced parapet over the door;
 - d. outdoor amenity area;
 - e. upgraded window glazing areas; and
 - f. integrated planters or landscaped sitting areas.
8. Landscape plans are encouraged to:
 - a. promote the use of native plant material and plants proven for the climate of the region;

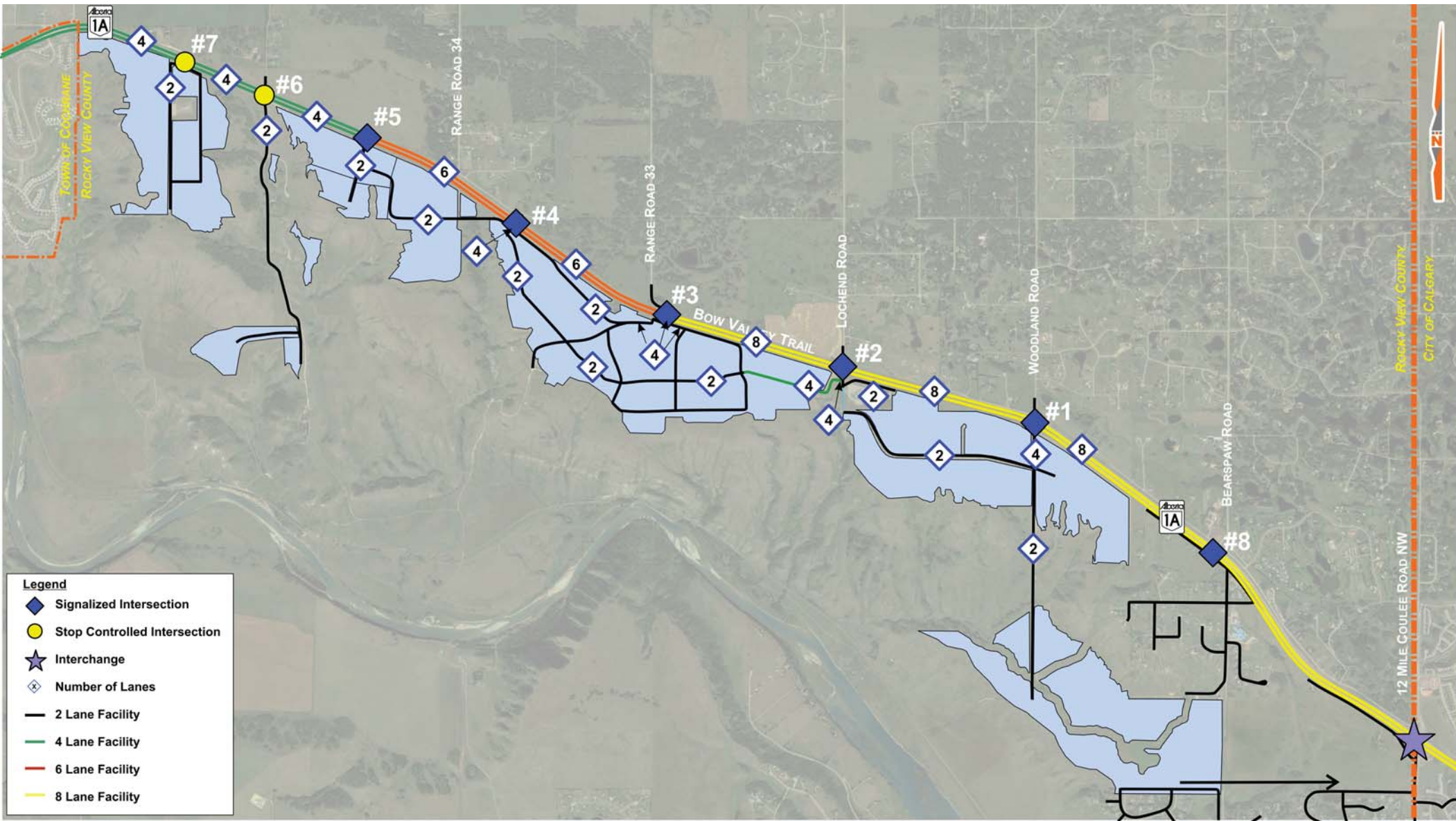
- b. not rely on potable water for irrigation once the landscaped areas are established;
- c. avoid species monoculture over large areas;
- d. provide for massing of plantings;
- e. ensure any retaining walls and / or front yard fencing is decorative as well as functional; and
- f. provide attractive landscape designs at key public intersections and entryways.

APPENDIX E: Regional Baseline Transportation Improvements

Map 16: Required Regional Baseline Transportation Improvements



Map 17: Additional Improvements to the Baseline Requirements - Glenbow Ranch ASP



APPENDIX F: Key Alberta Energy Regulator Information

- AER Bulletin 2013-03 Mandated Subdivision and Development Application Referrals, Setback Relaxations, Land Development Information Package, and Abandoned Well Information
- Directive 079: Surface Development in Proximity to Abandoned Wells