

RIVERRIDGE NEIGHBOURHOOD PLAN





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1.1 Purpose

The RiverRidge Neighbourhood Plan (NP) is a non-statutory plan that seeks to facilitate the planning and development of RiverRidge neighbourhood.

The purpose of a Neighbourhood Plan is to provide a framework for the development of a community. A Neighbourhood Plan describes the community layout, the placement of parks, the built form, and transportation and servicing requirements.

1.2 Vision

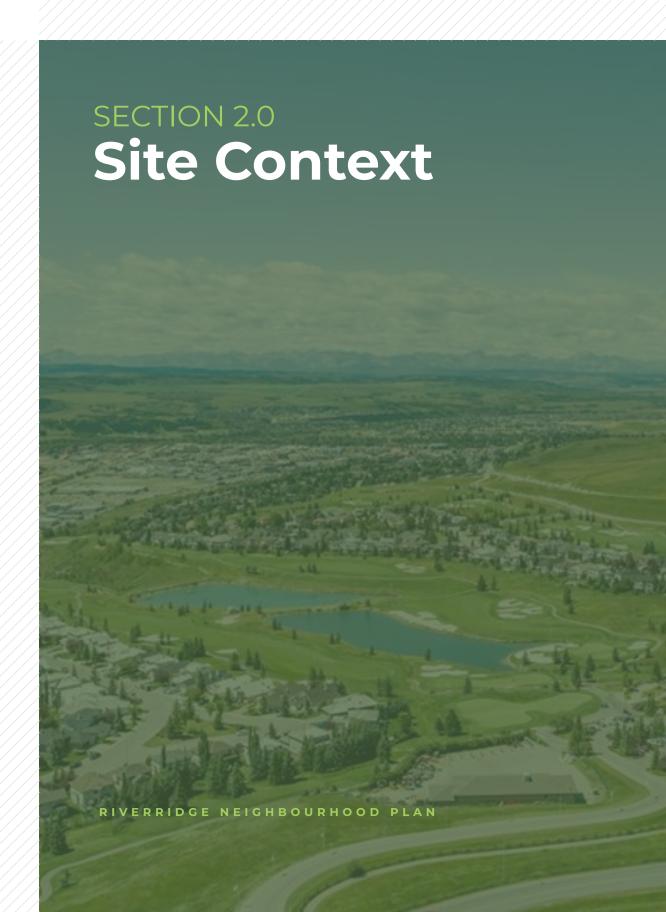
The RiverRidge NP is a new residential development in the southeast of Cochrane. The neighbourhood features diverse housing options and convenient access to a wide array of amenities. Designed to be compact and pedestrian-friendly with transit connectivity, the neighbourhood promises future residents' easy access to shopping, recreation, municipal services, and employment opportunities within close proximity to their homes.

The neighbourhood design responds to its unique development constraints, leading to creative site design solutions that enable a range of housing options and green space connections that preserve and integrate with the environmentally sensitive lands adjacent to the Bow River. Neighbourhood parks have been strategically located to take advantage of the sites' topography, fostering a sense of place and extending views.

RiverRidge benefits from access to numerous existing and planned amenities, both within and beyond the Plan Area. The community will be well served by schools and open spaces and includes easy access to extensive natural areas and extended pedestrian connections along/across the Bow River to the North.







2.1 Location & Context

The Subject Lands are comprised of 4 parcels that collectively make up 31.68 hectares (78.28 acres) and are located in Southwest Cochrane within the River Heights Ares Structure Plan (ASP). The Plan Area directly bound by the Bow River to the north and adjacent to Cowboy Trail (Hwy 22) on the west side. It is bound by River Heights Lane to the south, and River Heights Rise to the east. In a greater context, the Plan Area is defined by:



To the North:

The River Avenue Bridge connects the Plan Area to the communities of Riverview and Greystone.



To the East:

River Heights Drive connects the Plan Area to Riviera and Rivercrest, including the Bow Valley High School.



To the South:

Is the existing St. Mary's Catholic Parish, the River Heights Garden Seniors Residences, auto dealerships, a gas station and convenience store, and the retail strip at River Heights Place.



To the West:

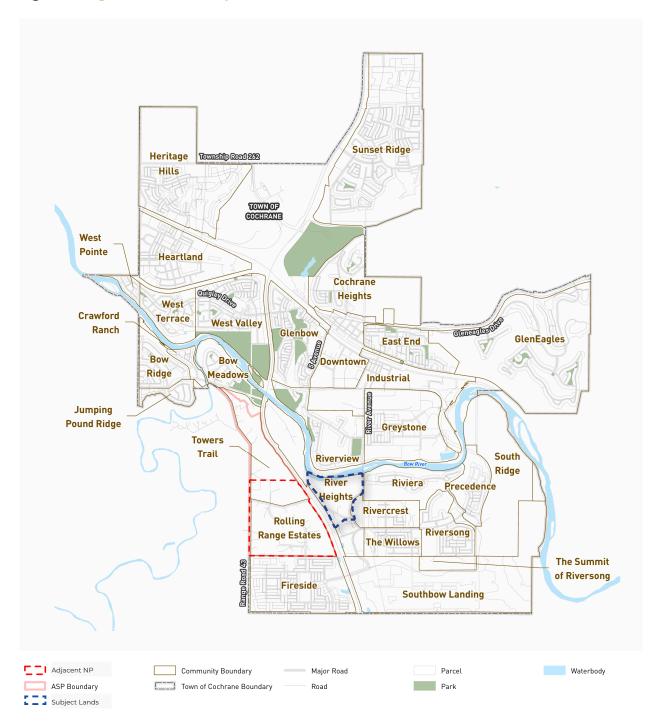
Is the developing communities of Rolling Range Estates and Tower Trails.

Figure 1 Local Context Map



- A Senior Living / Church
- B Commerical Node
- Bow Valley High School
- Future Commerical
- **E** To Downtown Core

Figure 2 Regional Context Map



2.2 Legal Description & Land Ownership

The following are the legal descriptions for the subject lands within the Neighbourhood Plan area:

- Lot 1, Block B, Plan 247LK within the SE ½ Section 34-25-4-W5M;
- Lot 2, Plan 741 0941 within the SE 1/4 Section 34-25-4-W5M and NE 1/4 Section 27-25-4-W5M;
- Lot 3, Plan 741 0941 within the SE 1/4 Section 34-25-4-W5M and NE 1/4 Section 27-25-4-W5M;
- Lot 4, Plan 741 0941 within the SE ¼ Section 34-25-4-W5M and NE ¼ Section 27-25-4-W5M;
- ◆ Lot 2, Block 12, Plan 941 1606 within the NE 1/4 Section 27-25-4-W5M;

The municipal addresses for the Subject Lands within the Neighbourhood Plan are as follows:

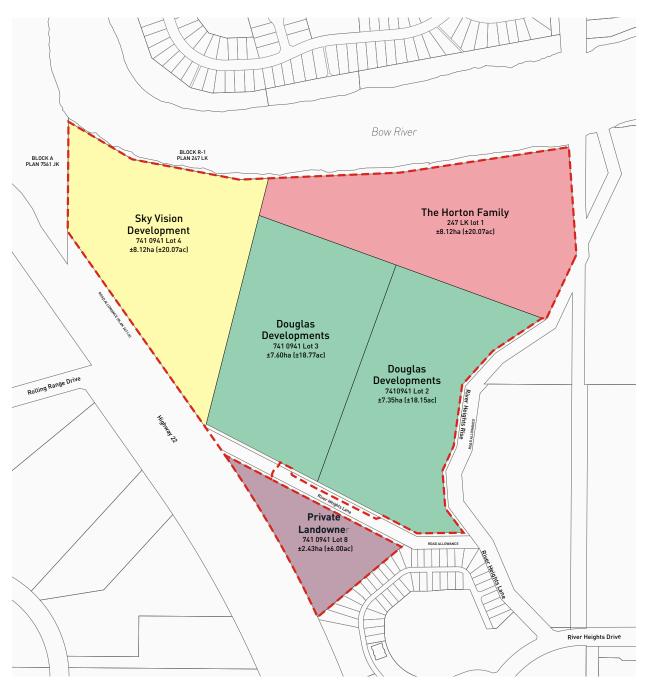
- 105 River Heights Rise;
- + 42082 River Heights Lane;
- + 42116 River Heights Lane; and
- + 42085 River Heights Lane

The Ownership for the parcels included in the River Heights Neighbourhood Plan is illustrated and summarized in the figure and table below:

Table 1: Land Ownership				
Land Owner	Legal Description	Area (ha)	Area (ac)	%
The Horton Family	Lot 1, Block B, Plan 247LK	8.15	20.13	26%
Douglas Developments	Lot 2, Plan 741 0941	7.35	18.16	24%
Douglas Developments	Lot 3, Plan 741 0941	7.60	18.77	24%
Sky Vision Development	Lot 4, Plan 741 0941	8.13	20.10	26%
Total		31.23	77.16	100%
Private Landowner	Lot 2, Block 12, Plan 941 1606	2.43	6.00	-
Total with additional Parcel		33.66	83.16	-

Lot 2, Block 12, Plan 941 1606 is excluded from all calculations as it already has land use applied. The parcel previously received land use approval outside of a Neighbourhood Plan process. Therefore to include it within a policy document the parcel has been included within the Neighbourhood Plan boundaries solely for the purpose of future land use, subdivision, development and/or building permit applications.

Figure 3 Landownership



2.3 Caveats & Utility Rights of Way

There are several caveats and utility rights of way (ROW) that apply to the Titles for the subject lands. A Utility ROW Easement with Canadian Western Natural Gas Company from 1975 notes that there is a 20 ft ROW that runs through Lot 3 and Lot 1, with a 20 ft easement connecting to Lot 4 for access. Fortis Alberta is also the Grantee of a 20 ft Utility ROW from 1974 that is on the Titles for Lots 3 and 4. A separate 6m Fortis Utility ROW from 1994 is on the Titles for Lots 1 and 2 that connects to River Heights Rise. Lastly, an Encroachment Agreement with the Town of Cochrane was placed on Lot 3 and pertains to improvements within the River Heights Lane ROW. Full Titles and Registered documents are included with the submission of this Neighbourhood Plan Report.

2.4 Existing Conditions and Natural Features

The subject lands within Douglas Developments River Heights NP area are currently developed as country residential acreages and undeveloped Urban Holdings (UH) lands.

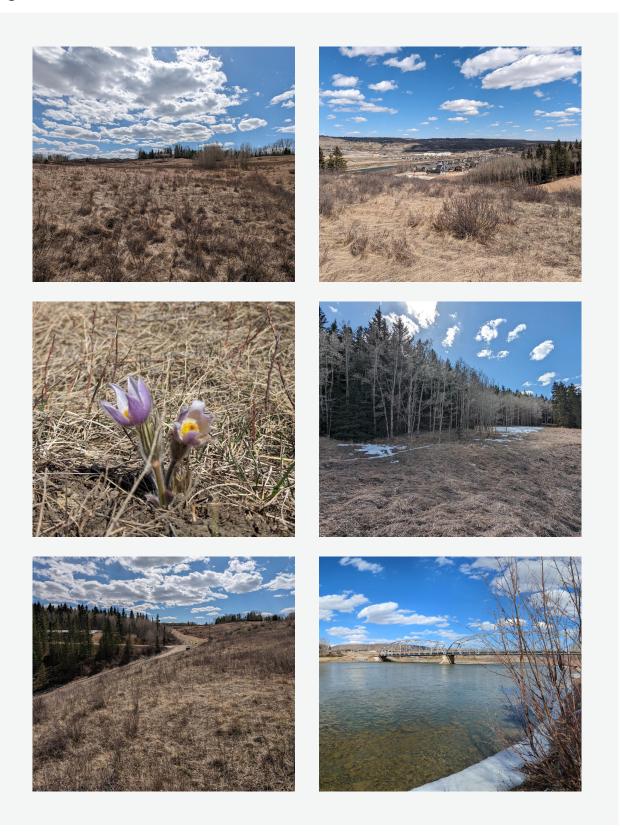
The topography of Douglas Developments' River Heights Neighbourhood Plan varies, with relatively flat areas in the central and southern sections, while the northern portion of the plan area adjacent to the Bow River experiences significant elevation changes. Additionally, there are varying grades on the eastern side of the site towards River Heights Rise that are the result of grading and development of the road.

The River Heights Area Structure Plan (ASP) identifies a portion of the Subject Lands south of the Bow River to include environmentally significant features, overlapping with areas of slope greater than 15%. Moreover, the ASP confirms the absence of significant wetlands within the designated area. These conclusions are further detailed by the supporting studies prepared in support of this Neighbourhood Plan and summarized in Section 8.

Figure 4 Existing Conditions Map



Figure 5 Site Photos



2.5 Policy Context

The River Heights Area Structure Plan is the statutory planning policy document for the NP area and sets the standards, policies, and expectations for all future development within its planning boundary.

The NP area is identified as "Residential Development" and "Special Study Area" within the River Heights Area Structure Plan Land Use Concept (see Figure 6). The proposed land uses within the RiverRidge NP comply with the policies in Section 5.2: Residential and 5.7 Special Study Areas of the River Heights ASP, and therefore no amendments are being requested to the ASP. The NP also meets the policies set in the Town of Cochrane Municipal Development Plan (MDP), Connecting Cochrane (Transportation Master Plan) and other relevant policies and guiding documents, as detailed in Section 7.

2.6 Existing Land Use

The existing land use district of the Neighbourhood Plan is Urban Holdings (UH) which prevents land intended for future development from premature subdivision and development until urban development can proceed in an orderly fashion consistent with the MDP, ASP, and Neighbourhood Plans.

The adjacent land uses to the west of the Subject Lands are also designated as Urban Holdings but are currently undergoing a planning process of their own for the development of the Rolling Range Estates Neighbourhood. Lands to the east, within the neighbourhood of Riviera, are comprised of both Residential Mixed district (R-MX), Residential Low Density (R-LD), Parks and Recreation (PR) and UH parcels. The lands to the south are designated R-MX, Community Service (CS), Highway Commercial (C-H), Neighbourhood Commercial (C-N), Business Industrial (I-B), and General Industrial (I-G). Lastly, the lands north of the Bow River, in Riverview, are zoned R-LD and PR.

Figure 6 River Heights ASP Map

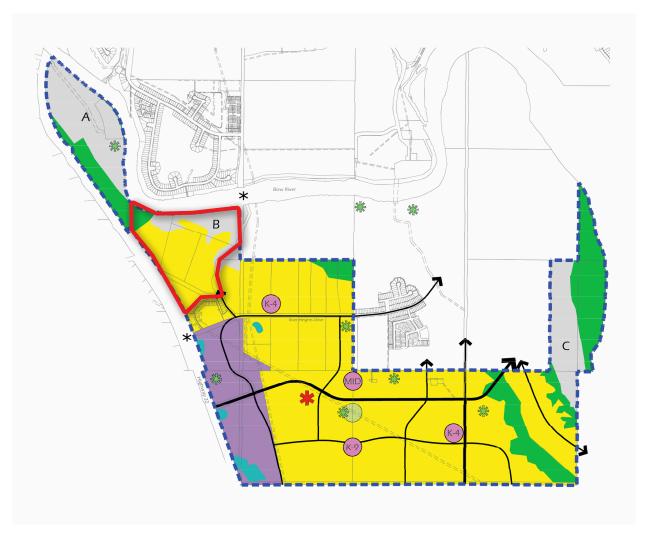
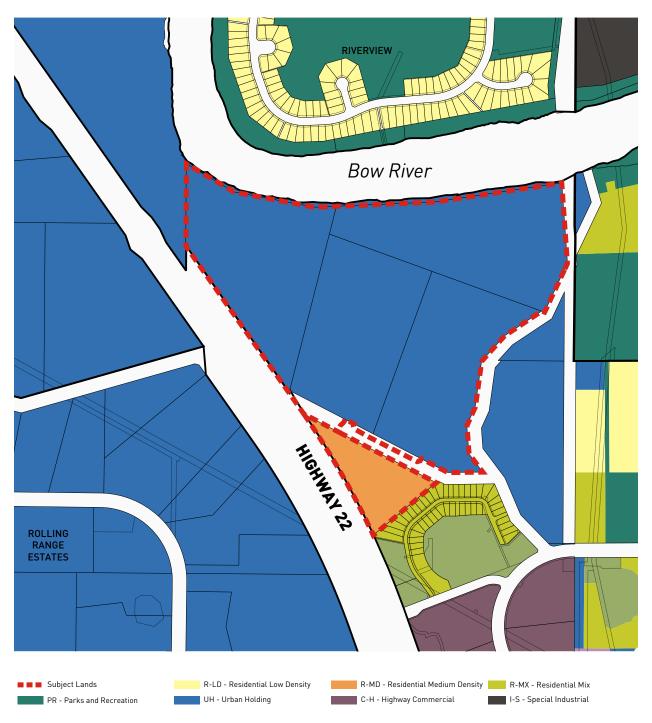
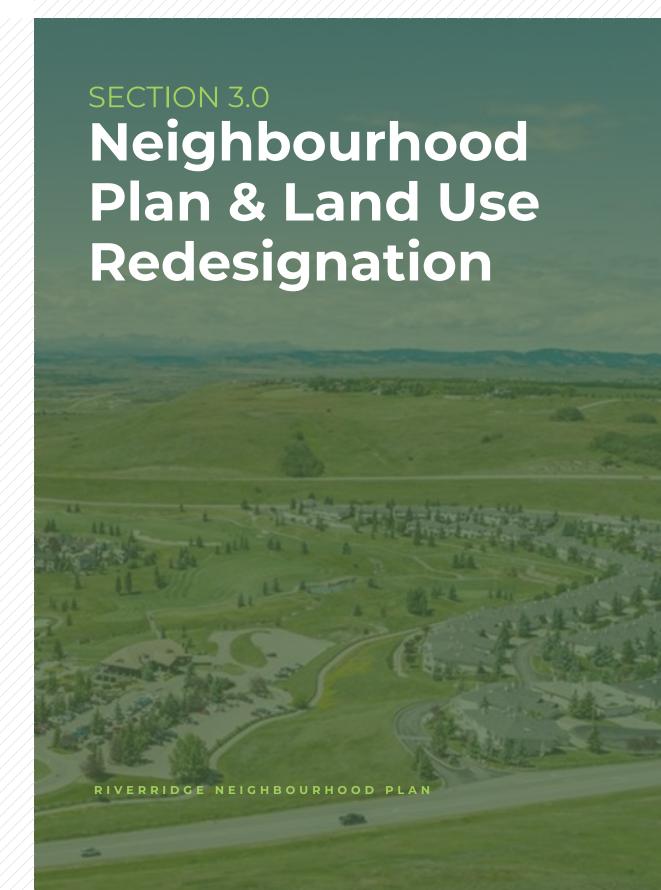




Figure 7 Existing Land Use Map





3.1 Neighbourhood Character & Guiding Principles

NEIGHBOURHOOD CHARACTER

The name of the neighbourhood, RiverRidge, pays homage to the existing landscape on which it is planned. The lands are located along the south side of the Bow River primarily above a steep incline populated with trees and natural vegetation. The naming convention aligns with the surrounding neighbourhoods including Riviera, Riversong, Rivercrest, and Riverview. The character of the neighbourhood will promote the Western Small-Town sense of place that depicts much of Cochrane. While the Western Heritage Design Framework (2022) do not apply to the Subject Lands, inspiration is drawn from the Framework to inform the design elements of the plan. Key Small-Town Characteristics implemented in the plan include:

- Rectilinear street grid (where possible based on topography);
- Small-scale, walkable block structure;
- Small-scale urban town lots; and,
- + A mix of residential building forms in close proximity.

GUIDING PRINCIPLES

The following guiding principles have been developed to emphasize the benefits of the existing landscape, illustrate alignment with Town goals, and implement sustainable planning practices.

Neighbourhood Nestled in Nature

The Subject Lands are characterized by open fields, rolling hills, and dense forested areas along the escarpment leading down to the Bow River. The NP is designed to work with these existing landscapes to minimize the need to cut and fill, and integrate with the protected environmental areas wherever possible.

Missing Middle Housing

The NP provides a range of housing options including:

- A range of shapes and sizes of single detached homes
- Semi-detached homes
- Back-to-back townhomes
- Rowhouses

The residential developments on Lot 4 are made up entirely of rowhouses and are proposed as condominium style developments. Each housing type within Lots 2 and 3 makes up a minimum of 24% within this area of the NP. This variety of housing types addresses the missing middle housing issue by providing alternative housing types typically underrepresented from residential communities, promoting the evolution of a diverse and robust community made up of people and families from a wide variety of backgrounds.

Aging in the Community and Lifecycle Housing

This NP is well situated to provide housing for residents of all ages and stages of life, from singles and couples, to new and growing families, to those looking to downsize. RiverRidge will be able to provide residents what they need for comfortable and convenient day-to-day living with the adjacency to existing commercial development along River Heights Drive, future commercial development in Rolling Trails, existing and future school sites, and direct access to the Bow River and the active transportation network that runs throughout Cochrane. With the neighbouring River Heights Garden Residences Retirement community directly south of RiverRidge, residents will be able to comfortably live in this neighbourhood from birth through retirement.

Active Connections

Proximity to the Bow River is a key feature of RiverRidge and the neighbourhood concept proposes convenient pedestrian and active transportation access to the river. This is achieved through a permeable pathway network that connects to the wider Cochrane pathway network through Riviera and across the River Avenue Bridge which links up with the proposed extension of the TransCanada Trail on the north side of the Bow River.

3.2 Planning Considerations & Design Elements

The RiverRidge NP is located in a unique position, directly south of the Bow River, east of Highway 22, west of the closed road ROW of River Heights Rise, and access to River Heights Drive to the south via River Heights Lane. The planning, design, and development of the intersection at Highway 22 and the existing Rolling Range Drive will be vital for access to RiverRidge and has informed the transportation network and block structure of the concept plan as illustrated in Figure 17 below.

As the landowners of Lot 1 are not yet prepared to plan and develop their lands, Douglas Development and Sky Vision Development propose a comprehensive plan for Lots 2, 3, and 4 with careful consideration for integration with future development for Lot 1. As noted in the Site Context above, the lands south of River Heights Lane have already been granted land use and have been considered in the plan so far as boundary and access. These lands are not considered in regard to plan statistics related to residential and parks and recreation land uses.

Figure 8 Concept Plan





HOUSING DIVERSITY

The NP directly addresses the residential objectives of the River Heights ASP by providing a diversity of housing options that cater to all housing needs and income levels. The Plan achieves an overall density aligned with the Town's objectives by providing a mix of multi-family, semi-detached, and single-detached homes. In addition, housing types are strategically located in consideration of mobility, traffic, and access to local and nearby commercial and natural amenities.

The diversity of built forms and housing products offered, from single family homes to rowhouse developments, provides housing for a variety of people at different ages and stages of life. The intention of the NP is to attract an inclusive community including everyone from first time home buyers to empty nesters looking to downsize. With the adjacency to the River Heights Garden Residences, this Plan provides the ideal location for residents to age in within their community.



GREEN & OPEN SPACES

The north portion of the plan area will be preserved as Environmental Reserve. The lands slope beyond 15% grade down towards the River, providing an opportunity for majestic views overlooking the Bow River Valley. These views will be accessible to residents and members of the public with both lots backing onto the green space and through park spaces and walkways where transportation corridors terminate. These park spaces and walkways not only provide direct public access, but also provide beautiful views at the end of these corridors overlooking the valley making the entire neighbourhood feel open and connected to the Environmental Reserve.

Preserving the north portion as Environmental Reserve also ensures that this slope, which is visible from all of Cochrane, north of the Bow River, remains as a key placemaking feature of the Town, preserving part of Cochrane's unique natural identity.





CONNECTIVITY

Key connection points have been noted on the plan area to ensure the connection to adjacent neighbourhoods and Rolling Range Estates and Towers Trail to the west. The collector road that runs through the community connects directly to Highway 22 on the west and to River Heights Drive, via River Heights Lane, to the south. With the development of the new intersection at Highway 22, the community will have quick and convenient access to the heart of Town. With the connection to River Heights Drive, the community will have convenient access to James Walker Trail and the developing communities on the south side of Cochrane.

Due to significant slopes and the closed road ROW along River Heights Rise connectivity to the east is limited for vehicle access. However, the pathways and trails through the Plan connecting to River Heights Rise and the River Avenue Pedestrian Bridge provide pedestrian and active transportation access to the greater Cochrane pathways through a largely offstreet network. A future transit route will run through the community along the collector road. The modified grid is ideal for transit and pedestrian connectivity.



SAFETY

Pathways and park spaces will be designed with principles focusing on the visibility, lighting, and comfort of these spaces to make sure they are inviting for everyone to use at anytime. At the time of detailed design, a pedestrian scale lighting solution will be considered to provide effective pedestrian-scale lighting throughout the community while minimizing light pollution at night.





Figure 9 Design Elements





Green & Open Space

• • • • River Avenue Pedestrian Bridge



Connectivity

3.3 Neighbourhood Plan Concept & Statistics

The total lands included in the Neighbourhood Plan area differ from the lands included in the calculations for the Neighbourhood Plan Statistics. As noted above, Lot 2, Block 12, Plan 941 1606 has been included in the Neighbourhood Plan to correct a clerical error, thus is not accounted for in the statistics of the Plan. This parcel is designated R-MD, intended for street facing multi-unit dwellings. In addition, there are significant environmental reserves on the north and east sides of the plan area, these areas are also excluded from the calculations.

Table 2: Neighbourhood Plan Statistics			
	Area (ha)	Area (ac)	%
Total Landownership	33.62	83.06	
Road Purchase Area	0.29	0.71	
Total Neighbourhood Plan Area	33.90	83.77	
Area with Land Use (South parcel) - Not included in calculations	2.43	6.00	
Less Environmental Reserve	10.06	24.87	
Gross Developable Area	21.41	52.91	100%
Residential - Single detached R-LD	2.66	6.58	12%
Residential - Residential Mix R-MX (Single, Duplex)	2.78	6.87	13%
Residential - Residential Mix R-MX (Laned Single, Duplex)	1.89	4.68	9%
Residential - Residential Mix R-MX (Laned Townhomes)	0.71	1.75	3%
Direct Control Back-to-Back Townhomes DC(B2B Towns)	1.12	2.76	5%
Residential - Residential IMedium Density (R-MD)	2.73	6.75	13%
Special Study Area*	3.67	9.06	17%
Open Space (P-R)**	2.14	5.30	10%
Roads	3.71	9.17	17%

^{*} Indentified as developable land, land use to be determined at the time that the landowner is prepared to proceed with planning and development. This will require an amendment to the NP.

Note: numbers may vary due to rounding.

^{** 2%} total P-R accounted for within the Special Study Area, making up 10% of the developable lands within the Special Study Area.

LOT 1

Lot 1 is currently identified as a special study area as the landowner is not yet ready to develop their lands. Based on geotechnical slopes and adjacency to the Bow River nearly 55% of the property is proposed as environmental reserve. To ensure fairness between landowners the layout of the plan is devised in a manner that ensures each landowner is responsible to provide 10% of their developable land as Parks and Recreation (PR, or "municipal reserve") within their own land holdings.

LOT 2 AND LOT 3

Within the proposed development on Lots 2 and 3, as noted in Table 2 above, the residential land split is near an even split between larger single detached dwellings, smaller single detached and semidetached dwellings, single and semi-detached laned dwellings, and townhomes (laned and back-to-back), with all land uses between 8 and 13% of the total plan area. The mix of dwelling types based on number of units, illustrated in Table 3, shows a balance between housing types. 45% single detached, 22% semi detached, and 33% townhomes. The Parks and Recreation parcels make up 10% of the developable land within Lots 2 and 3.

Table 3: Lot 2 and 3 Residential Statistics				
Dwelling Type	# of Units	% of Total Units		
Single Detached	99	33%		
Single Detached Laned	35	12%		
Semi-Detached	40	13%		
Semi-Detached Laned	28	9%		
Laned Townhomes	29	10%		
Back-to-Back Townhomes	68	23%		
TOTAL	299	100%		

LOT 4

Lot 4 is proposed as two condominium sites, one north and one south of the collector. The sites include townhouses, a portion of a larger PR site, smaller private open spaces, internal private roads and parking spaces for visitors. In total there are 159 rowhouses proposed for Lot 4 as per the draft concept provided in Figure 10. The Parks and Recreation parcel make up 10% of the developable land within Lots 4.

note: The draft concept shown in Figure 10 illustrates slightly different road alignment at the roundabout. The concept will be revised and align with the overall Neighbourhood Plan concept at resubmission.

Figure 10 Lot 4 Site Concept



DENSITY

Combining the units from both Lots 2/3 and Lot 4, the Plan includes a total of 458 units. The overall density of the Plan is 21.4 units per hectare (uph) or 8.7 units per acre (upa). For clarity, the density calculation does not include the Special Study Area on Lot 1 nor the already zoned R-MD parcel to the south.

Table 4: Density Statistics			
Developable Area (ha/ac)	# of Units	Density (uph)	Density (upa)
21.41 / 52.91	458	21.4	8.7

3.4 Land Use Redesignation

The NP contains predominantly residential uses, with supporting Parks and Recreation and Environmental Reserve uses.

RESIDENTIAL LAND USES

The residential areas are primarily Residential Mix Districts (R-MX) – including single detached, semi-detached, and townhomes – due to the flexibility they afford to provide a variety of housing types and forms that can meet market demand and create a varied streetscape. The larger single detached homes (R-LD) are primarily located adjacent to the local streets along the north and east sides of the NP area. The laned and front drive single and semi-detached homes (R-MX) are more centrally located, and along the collector. This facilitates more street facing housing forms that provide visual appeal, sense of community, and concentrates density in areas with better access to future transit. The back-to-back townhomes (DC) are located in the central area of the plan with access to the central park space and effective pedestrian connections to the ER to the east, providing access to River Heights Rise, the pedestrian River Avenue bridge across the river, and to nearby amenities along River Heights Drive.

On Lot 4, adjacent to Highway 22, condominium townhouse developments are proposed. This form of development is better suited closer to major road infrastructure. The parcel shapes and varied topography in the area preclude the ability to efficiently create traditional blocks. The land use designation for these parcels is R-MD, with a private internal road network as shown in Figure 10.

PARKS AND RECREATION / MUNICIPAL RESERVES

Parks and Recreation (Municipal Reserve) pocket parks are distributed throughout the Plan area to provide convenient and direct access to greenspace to all residents and members of the public. These parks are connected through the environmental reserves to the greater Cochrane pathway network. Section 4 provides greater detail on these open spaces.

ENVIRONMENTAL RESERVES

For this NP, the geotechnical setback line primarily determines the edge of the Environmental Reserve areas. The majority of these areas are defined by slopes over 15% down to the Bow River and along the east boundary of the Plan. The Reserve areas are natural amenities for residents and visitors to enjoy while protecting the environmentally sensitive areas from development. Several streets and park spaces are aligned with the sight lines to the Environmental Reserves. This allows the proposed development to maintain public access to the banks of the Bow River and views toward Downtown Cochrane.

Table 5: Land Use Statistics				
From	То	Area (ha)	Area (ac)	
Urban Holdings (UH)	Residential Low Density (R-LD)	3.27	8.09	
Urban Holdings (UH)	Residential Mix District (R-MX)	7.45	18.40	
Urban Holdings (UH)	Residential Medium Density (R-MD)	3.27	8.08	
Urban Holdings (UH)	Direct Control - Back-to-Back Townhomes (DC)	1.74	4.29	
Urban Holdings (UH)	Parks & Recreation - Municipal Reserve (PR)	2.02	4.98	
Urban Holdings (UH)	Parks & Recreation - Environmental Reserve (PR)	10.06	24.87	
Total		27.81	68.71	

LAND USE STATISTICS

All lands within Lots 1-4 are currently designated Urban Holdings (UH). The Land Use statistics align with the Neighbourhood Plan statistics with the exception of the Special Study Area in Lot 1. The Special Study Area will remain as UH until such time that the landowner of Lot 1 proceeds with planning and development.

Figure 11 Land Use Plan





Front Exterior-Duplex Front Garage



Front Exterior-Duplex Laned



Front Exterior-Single Front Garage



Front Exterior-Single Laned



Back to Back Townhomes

4.0



4.1 Open Space Concept

RiverRidge NP integrates open spaces throughout the Plan area that provide local amenities for residents and foster a distinct community identity.

The open space network is designed to take advantage of the Subject Lands' unique topography, with strategically located pocket parks that extend ecological connections from the Environmental Reserves into the neighbourhood. In addition, the open space network is designed to maximize permeability for residents and take advantage of natural viewpoints and access to the Bow River.



Figure 12 Open Space Concept



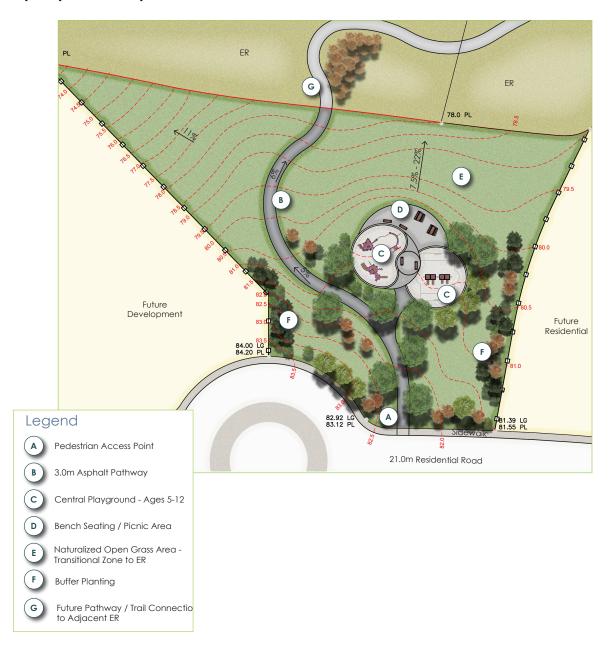
Figure 13 Viewpoints



4.2 Northwest Park

The Northwest Park is a large centrally located park on the north side of the collector road roundabout, adjacent to single family and townhouse developments. On the northside of the park the pathway connects to the Environmental Reserve that leads down to the Bow River Valley. The park features a playground, picnic and seating areas, and open grass areas providing active and passive recreation opportunities for users of all ages. Buffer planting areas are located adjacent to residential development providing the community a comfortable screening and transition from development to the natural world next door.

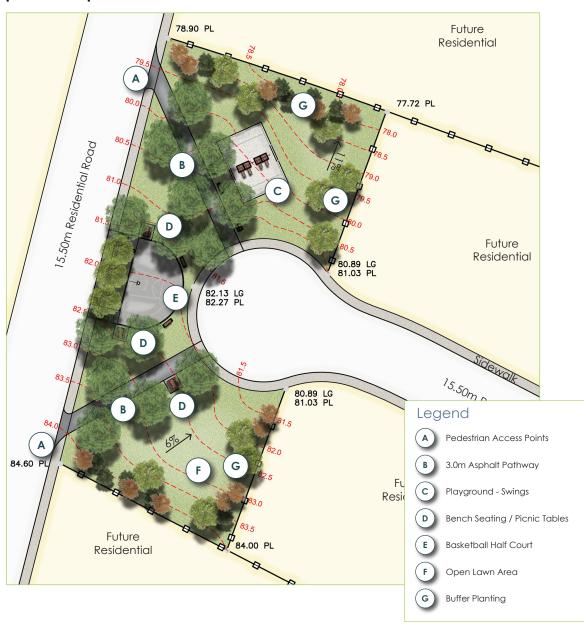
Openspace Concept - Northwest Park



4.3 Central Park

The Central Park is located in the middle of the NP surrounded by residential development. The key active recreational features of the park include a central playground and a half basketball court. The park provides effective buffer plantings to screen adjacent homes while providing visibility from the street. Passive features include a bench seating and picnic area and an open lawn area.

Openspace Concept - Central Park



4.4 East Park

The East Park provides fantastic views over the bluff across the Bow River and towards Downtown Cochrane. The Park includes a large playground, seating areas, and open lawn spaces. Towards the south end of the park is a seating node with natural elements such as boulders integrated throughout. In the southeast corner a proposed entry features welcomes visitors and residents alike to RiverRidge. A pathway network connects residents from the playground area south towards the entrance of the community and north through the Environmental Reserve towards River Heights Rise and the River Avenue Pedestrian Bridge.

Openspace Concept - East Park | North End



Openspace Concept - East Park | South End



4.5 Environmental Reserve Integration

The River Heights ASP identifies environmentally significant features along the northern portion of NP boundary. Currently, this predominantly sloped area is occupied by an ecologically significant stand of trees, which provides slope stability along the river and extends northwest across Highway 22.

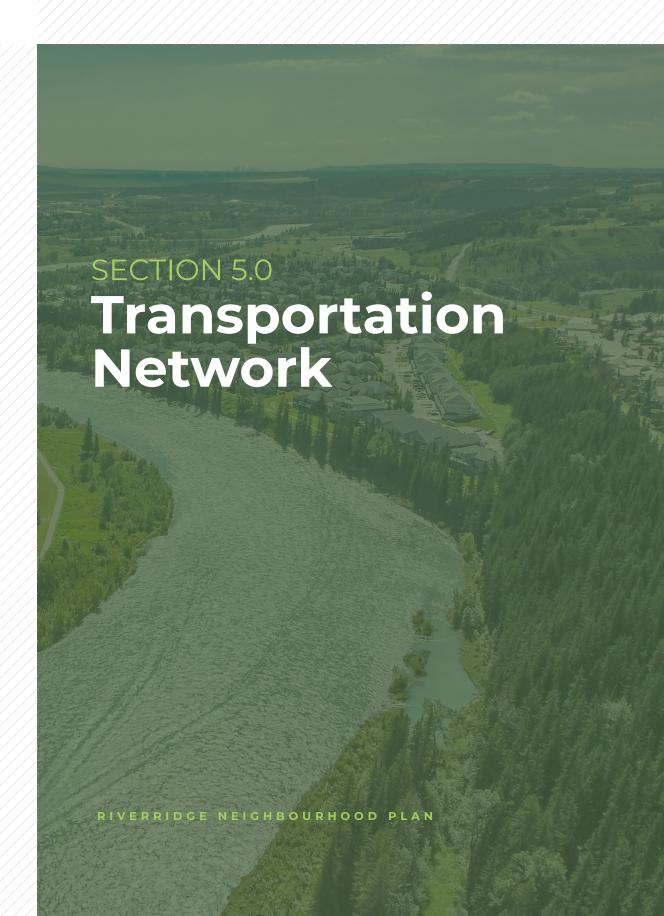
The NP includes approximately 10.06 ha (24.86 ac) of Environmental Reserve within its boundary. These lands are a key feature of the NP, defining a sense of place for residents, while simultaneously weaving ecological connections into the residential areas through the pocket parks. In addition, a potential future trail system may be located through the Reserves, connecting the Neighbourhood to the edge of the Bow River, the Trans Canada Trail, and greater Cochrane regional pathway network.







5.0



5.1 Neighbourhood Plan Access and Context

The ultimate primary access to the NP will be provided by connections to Highway 22 and River Heights Drive (via River Heights Lane) on the west and south of the plan, respectively. This will be achieved by extending the River Heights Lane collector road northwest through the Subject Lands.

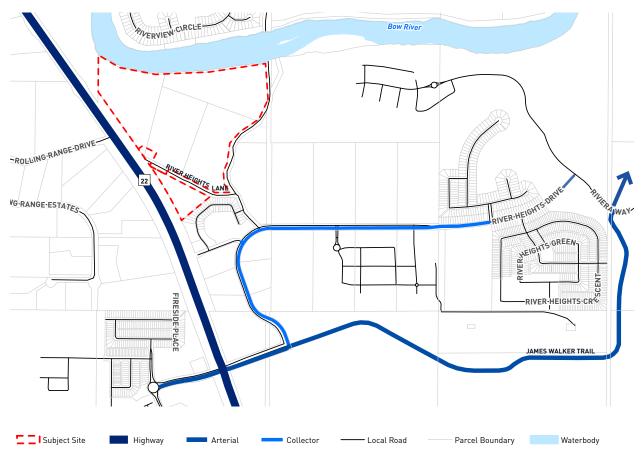
The Plan Area is already accessible by public road right-of-way from River Heights Lane, which connects to River Heights Drive. The River Heights Lane right-of-way currently has more than sufficient space to support a collector road. The first phase of development, see Figure 21, can be developed using this connection. Phases 2 and 3 can be developed with an additional emergency access connecting to Highway 22.

At full buildout, the completion of the new Highway 22 / Rolling Range Drive intersection will provide the community with a convenient access westward to the developing communities of Rolling Range Estates and Tower Trails, and northward to the heart of Cochrane. This outlet will serve as direct access for emergency services. With the connection to River Heights Drive, the Neighbourhood will have convenient access to James Walker Trail and the developing communities on the south side of Cochrane. Based on a discussion with the Town on July 26, 2024, it is currently understood that River Avenue Bridge will be closed to all vehicular traffic. Existing traffic on River Heights Rise will be directed through a connection to the Riveria neighbourhood.

A full TIA is currently being prepared by ISL and is prepared in coordination with the Rolling Trails Neighbourhood TIA. The TIA will include the growth in the River Heights ASP and Fireside Neighbourhood Plan. From the TIA, the roadway infrastructures (i.e. timing of Highway 22 / Rolling Range Drive, twinning of Highway 22) required in various time horizons to support the area growth will be identified.







5.2 Internal Road Network

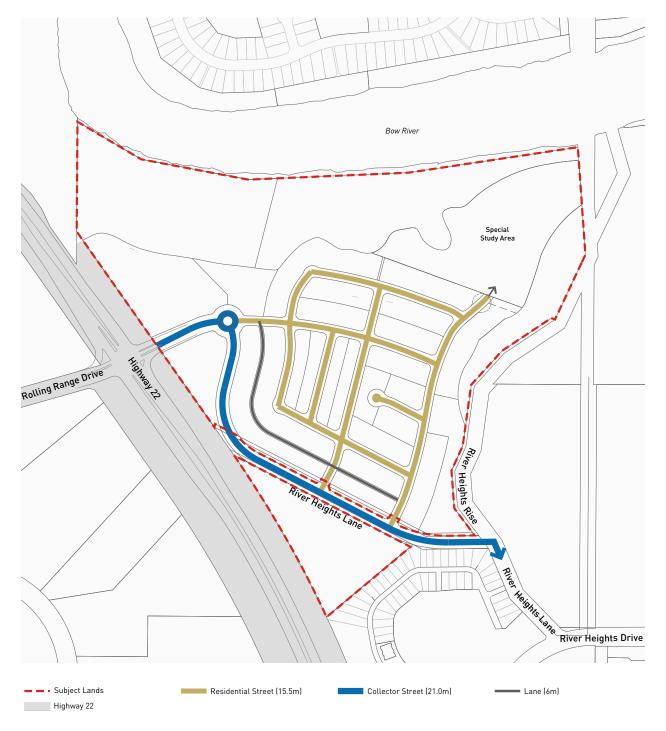
The internal road network follows a modified grid layout designed to optimize development efficiency, adapting to the natural contours of the land wherever feasible.

A 21.0m collector road serves as the primary movement corridor through the Subject Lands, connecting River Heights Lane with Highway 22. A network of local roads supported by laneways provide well-connected access to the remainder of the Plan area.

Due to significant slopes, and the closed road right-of-way along River Heights Rise connectivity to the east is restricts vehicle access. However, the pathways and trails through the Plan connect to River Heights Rise and the River Avenue Pedestrian Bridge, providing pedestrian and active transportation access to Riverview to the north, and Riviera and Riversong to the east.



Figure 15 Road Network



5.3 Transit

Per Connecting Cochrane, the future public transit routes are anticipated on River Heights Drive and on Highway 22. A potential future public transit route connecting through the NP would provide access to public transportation within a 400m (~5 minute) walking distance of nearly the entire plan area, with the exception of the northeast corner of the Subject Lands which is within a 500m (~6 minute) walking distance, as shown in Figure 16.

5.4 Pedestrian and Active Transportation Network

The Plan accounts for sidewalks and a pathway system that will connect to established active trail networks throughout Cochrane. Creation of a grid-based plan makes it more efficient and easier to walk or wheel throughout the neighbourhood without the need for a vehicle. The protected pedestrian access to River Heights Rise and River Avenue Bridge makes use of vehicle free spaces in a manner that encourages residents to get outside using active transportation by foot or wheel for both recreation and commuting. The Plan includes pathways, potential future trails, and sidewalks to ensure convenient pedestrian access for all residents, linking the Bow River Valley, neighbouring communities, and the wider Town active transportation system.

The Plan includes pathways, trails, and sidewalks to ensure convenient pedestrian access for all residents, linking the Bow River Valley, neighbouring communities, and the wider Town active transportation system.



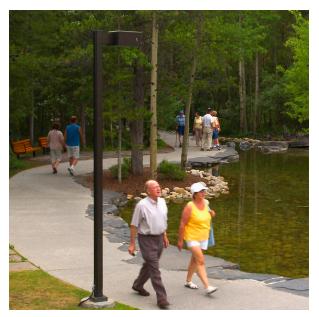


Figure 16 Transit Network

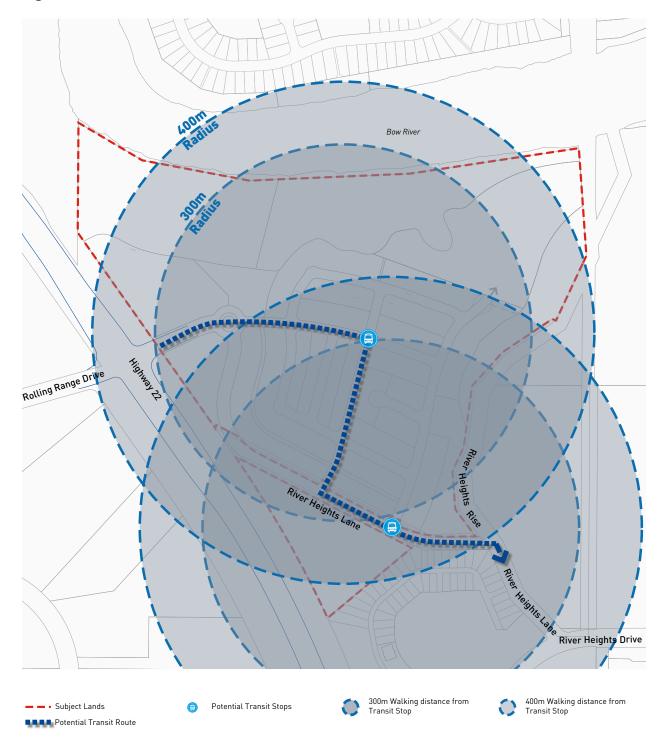


Figure 17 Pathway Network



6.0



6.1 Water

Water servicing will be initially from River Height Rise by connecting to the existing 400mm water line at the intersection of River Heights Lane. Looping will be through a second connection to River Height Rise in the north located near the northeast property line. Because of the nature of the elevations of this property it is anticipated that pressure reducing valves will likely be required for this area on the main lines connecting to these existing mains on River Height Rise. The exact location of the pressure reducing valves will be part of the detailed design process at the subdivision stage.

Figure 18 Water Servicing



6.2 Sanitary

Sanitary servicing will be through a gravity onsite system. This system will drain by gravity to the northeast end of the project then through gravity mains to the existing 300mm gravity pipes located on River Heights Rise. This existing 300mm pipeline acts as a syphon near the river and under the Bow River and north of the River ties back into a gravity system again. The invert of the gravity manhole on the north side of the River is 1125.50m per the as-builts received from the Town. The invert of tie in location proposed is approximately 1140.40m which based on received information puts this invert 14.90m above the tie in invert north of the River which means this section of pipe that this subdivision will tie to is not in the syphon section of pipe and is open gravity pipe. This gravity sanitary system can be sized to accommodate other developments west of Highway 22 as long as cost sharing agreements can be reached.

Figure 19 Sanitary Servicing



6.3 Stormwater

Stormwater servicing will follow the ASP with no storm ponds included in this development. Discharge is ultimately into the Bow River through the existing storm pipes on River Heights Rise. Per the staged Master Drainage Plan (SMDP) discharge will be controlled to 70 L/s/Ha. An onsite gravity system will be designed at the subdivision stage. Up to two connections to the existing storm main on River Height Rise are planned to tie into the existing manholes. Internal trap low ponding will be incorporated on the roadway network to help manage stormwater events; these will be located with the detailed design. Oil and grit separators which will be designed with the subdivision application will control the quality of water to ensure it meets with AEP guidelines for discharge into the River. The exact location of these oil and grit separators will be determined at the detailed design stage. All stormwater treatment will meet or exceed AEP guidelines.

Figure 21 Stormwater Servicing



6.4 Shallow Utilities

All shallow utilities (ie cable, phone, power, gas) are planned to be installed typically in the front yards in utility right of ways. Where required some sections will be serviced from rear lanes.

6.5 Phasing

Phase 1, located on the southeast side of the Plan area, connects directly to River Heights Lane and is intended to be developed within the limits of a single required access. The first phase includes laned and back-to-back townhomes and single detached homes. Phase 2 includes the northeast portion of the Plan, with single and semi-detached homes, and provides access to the Lot 1 Special Study area. Phase 3 is located in the center of the Plan area and will conclude the development of the proposed back-to-back townhomes and low-density housing. Phases 4 and 5 are located on the west side of the Plan and include the townhome condominium developments.



Figure 21 Phasing Map





7.1 Cochrane Municipal Development Plan (MDP)

The MDP was adopted in October 2008 and outlines the Town's vision for development. The RiverRidge NP provides the required elements to be addressed in a Neighbourhood Plan as per section 14.3.2 of the MDP.

7.2 Connecting Cochrane – Transportation Master Plan (TMP)

The Connecting Cochrane – Transportation Master Plan was adopted in November 2017 and assists in informing/supporting existing plans and policies, charting Cochrane's transportation future, creating plans for major transportations modes, and determining implementation priorities.

Over the next 40 years, the Town anticipates an increase of approximately 13,000 people and 11,000 jobs, with a substantial number of new inhabitants expected to settle in the River Heights area. This plan identifies both the Bow River and Highway 22 as core features that shape the transportation network of the Town, both of which border this NP area.

The plan strikes a balance between incorporating and buffering these features to provide sufficient permeability while protecting resident privacy and natural areas. Considering the future intersection at Highway 22, through the Highway 22 Functional Planning Study (FPS), the plan will ensure that the transition between highway and residential road conditions is safe, effective, and comfortable for both drivers and pedestrians. The plan area will also benefit from and will be able to tie into, identified 20-year Capital projects such as the completion of the regional trail connecting Rivercrest to the River Avenue Bridge.

7.3 River Heights Area Structure Plan (ASP)

The River Heights ASP is a statutory document that provides long term development direction with a vision for a complete community of River Heights, and adheres to the principles of the Cochrane Sustainability Plan and the Town of Cochrane Municipal Development Plan.

Section 4.1 of the River Heights ASP identifies the desire to provide a complete community. Additionally, Section 4.2 provides guidance on the vision for a sustainable community and Section 4.3 identifies the importance of preserving environmentally significant areas in addition to providing parks, pathways and public open space as well as a variety of housing types. The RiverRidge NP embraces these goals and principles by providing a compact and pedestrian-friendly neighbourhood, well services by transit, that promises future residents' easy access to shopping, recreation, municipal services, and employment opportunities within close proximity to their homes.

The RiverRidge NP adheres to all policies within the River Heights ASP, particularly the Policies in Section 5.2: Residential and 5.7: Special Study Areas which outline the need for a mix of housing types within each neighbourhood and providing connectivity for residents in addition to supporting information that provides direction on whether/where development can occur along the slope adjacent to the Bow River.

7.4 Growth Management Strategy

The Town of Cochrane Growth Management Strategy is a non-statutory planning document approved in May 2013 that aligns other plans, policies and strategies for the orderly and appropriate growth of Cochrane, as identified in the vision and objectives of the Cochrane Sustainability Plan and Municipal Development Plan.

The Growth Management Strategy identifies the River Heights ASP as an important area for future industrial, commercial and employment growth over the next 50 years. This NP provides a prime opportunity for responsible growth and environmental stewardship while preserving the small-town atmosphere. This NP directly addresses the growth principles of:

- Compact building design (back-to-back townhomes)
- Create a range of housing opportunities
- Create a walkable neighbourhood
- Foster distinctive, attractive communities with a strong sense of place
- Direct development towards existing communities (filling out the existing River Heights ASP)





7.5 Cochrane Strategic Plan 2022 – 2025

Cochrane's Strategic Plan acts as a road map for Council and Administration. The plan provides clarity on organizational priorities, informs decisions and sets an overall direction for Council. Council adopted the current plan in July 2022.

The plan reflects Council's commitment to the five community aspirations identified in the Cochrane Community Vision, including: Identity, Open spaces & natural areas, Livability, Vibrant economy, and connectivity. The Neighbourhood Plan advances all five community aspirations through its site design, connections to surrounding planned and existing amenities, diversity of housing and access to nature.

7.6 Envision Cochrane 2050

From now until early 2025, Cochrane is developing a new Municipal Development Plan that will guide long-term decision making for their new community. Envision Cochrane 2050 is being developed to make sure residents have a say in how their community evolves and thrives. The NP takes into account the five Town values, central to Envision 2050 and the 2022-2025 Cochrane Strategic Plan. These values, particularly identity, open spaces and natural areas, and livability, have been central in developing the concept for this NP. The intention is to provide a wide mix of housing that meets the Town's target of 8 – 10 units per acre in an environment that residents can confidently call home while protecting the natural environment in the River Valley. These goals outlined above were fundamental to the creation of the NP and are reflected in the site design, road network, access to amenities, nature, and transit.

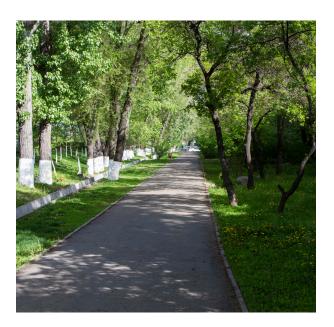




7.7 Cochrane Open Space Master Plan (OSMP)

Adopted by Council in November 2012, the Cochrane Open Space Master Plan guides the management of the Town of Cochrane's open space system over the next 20 years. The Open Space Concept within the OSMP (Map 11) provides support for open space to be provided within the Neighbourhood Plan area south of the Bow River. In addition, the Open Space Master Plan identifies a pathway connection through the NP area along the south edge of the environmental reserve. The proposed NP plan indicates a pathway in this location with connections throughout the NP area and connecting to the greater Cochrane pathway network.

Natural features will be preserved in the environmental reserve and integrated throughout the development where feasible. The NP will also provide a variety of open space types pertaining to more natural and more urban settings. The landscaping of streets and boulevards will create a cohesive sense of place throughout the neighbourhood. These spaces and routes will be further explored through the Neighbourhood Planning Process.





7.8 Cochrane Sustainability Plan

The Cochrane Sustainability Plan (CSP) was adopted by Council in May 2009. The CSP identifies 13 Pathways to the Future that represent goals for guiding sustainable future developments in Cochrane, as seen below:

- We are a socially responsible and empowered community
- We treat water as a precious resource
- We use energy responsibly and innovatively
- We contribute to the solution on climate change
- We consume the bounty of our local economy
- Our local economy is healthy and diverse
- Everyone has an opportunity to pursue their potential in Cochrane
- We are a caring community that lives and celebrates together
- Everyone has a roof over their head
- + There's enough room for everything a community should have
- Wherever you are in Cochrane, you're close and connected
- There are diverse options for getting around
- We build Cochrane on the strengths of our natural and cultural heritage
- These goals outlined above were fundamental to the creation of the NP and are reflected in the site design, road network, access to amenities, nature, and transit.

8.0



8.1 Geotechnical Assessment

The residential development will include up to one level of below-grade construction, with a strip and spread foundation system recommended for single-family homes, provided that foundations are placed on undisturbed native soils or approved engineered fill to prevent differential settlement. Site soils are generally suitable for use as engineered fill. Groundwater levels vary but are not expected to pose significant issues; however, drainage measures may be necessary. Excavations will require careful consideration of soil types, and development setbacks have been established based on a slope stability assessment. All organic material, poor-quality fill, and vegetation should be removed before construction, and backfill should meet the specified standards. The attached Geotechnical Evaluation includes Lots 1, 2, and 3. A report for Lot 4 will be submitted under separate cover and will be prepared for consideration with DTR1 comments.

8.2 Phase 1 Environmental Site Assessment (ESA)

The Phase I Environmental Site Assessment (ESA) found no significant environmental concerns that would warrant further investigation. The Site was undeveloped until 1949, with residential structures added around 1976 and before 1984. No substantial issues were identified regarding air emissions, wastewater, surface and groundwater, hazardous materials, or noise were noted during the completion of the Phase 1 ESA. Based on these findings no further environmental work is recommended at this time.

8.3 Biophysical Impact Assessment (BIA)

Trace personnel assessed the impacts of the River Heights Neighbourhood Plan received in July 2024 and provided their findings in the attached Biophysical Impact Assessment. Key findings from the assessment include: the site has moderate to steep slopes with significant elevation changes and no provincially identified significant landforms; soils are varied with some erosion observed; surface water features include ephemeral waterbodies and wetlands subject to provincial regulations; the vegetation is primarily native grassland and mixedwood forestland with no rare plant species but some noxious weeds; the site is within key wildlife zones with some species of conservation concern observed; historical resources approval has been granted; and ecological sensitivity areas were identified, with varying values. The proposed development is not expected to have significant impacts on ecological components, although some residual effects such as wetland removal and habitat loss are anticipated but considered minor in the context of cumulative effects.

8.4 Transportation Impact Assessment (TIA)

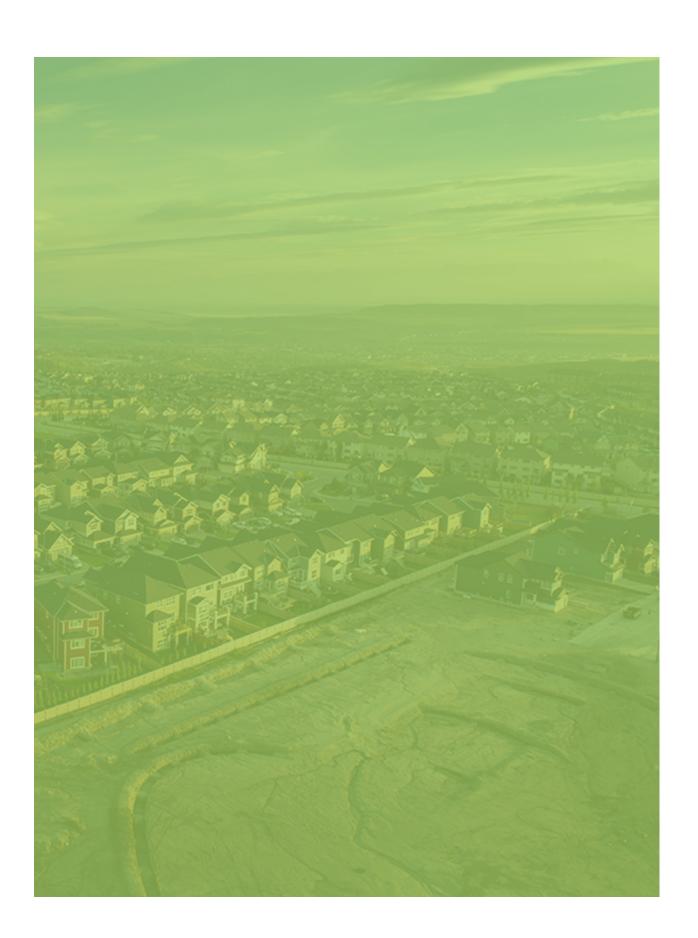
The proposed RiverRidge development, at the east leg of Highway 22 / Rolling Range Drive, generated 264 and 347 trips in the AM and PM peak, respectively. This added a small increase of trips to Rolling Range Drive when compared to the assumptions of the Subject Lands in the Highway 22 Functional Planning Study (FPS). As a result, no updates to the Highway 22 FPS should be required. In addition, the undivided Collector road as proposed in the Highway 22 FPS has sufficient capacity to accommodate the small increase of trips.

8.5 Staged Master Drainage Plan (SMDP)

Because of the site topography, the study area has been divide into two (2) subcatchments. The north and south subcatchments will discharge into two separate existing manholes. Preliminary analysis indicates that the north subcatchment will require approximately 977 m3 of surface storage (traplows) to control the discharge to the prescribed 70 L/s/ha and the south catchment will require 744 m3. To meet the water quality requirements, two (2) Oil/Grit Separator (OGS) units are proposed to be installed prior to discharge into the existing storm system that discharges into the Bow River. During subdivision detail design the best suited OGS unit will be selected.

8.6 Historical Resources Impact Assessment (HRIA)

The HRIA for Lots 2 and 3 within RiverRidge was conducted by Lifeways in July 2024. The assessment involved a pedestrian survey and nine shovel tests across the project area, which covers approximately 15 hectares of high ground overlooking the Bow River. No cultural materials were found, though evidence of historic ploughing was noted. The area was determined to have limited archaeological potential. Lifeways recommends that the proposed development be granted Historical Resources Act approval to proceed with no further archaeological requirements. The HRIA for Lot 4 will be submitted under separate cover and an HRIA will be required for Lot 1 at such time that the NP is updated to include development on Lot 1.



RIVERRIDGE NEIGHBOURHOOD PLAN

