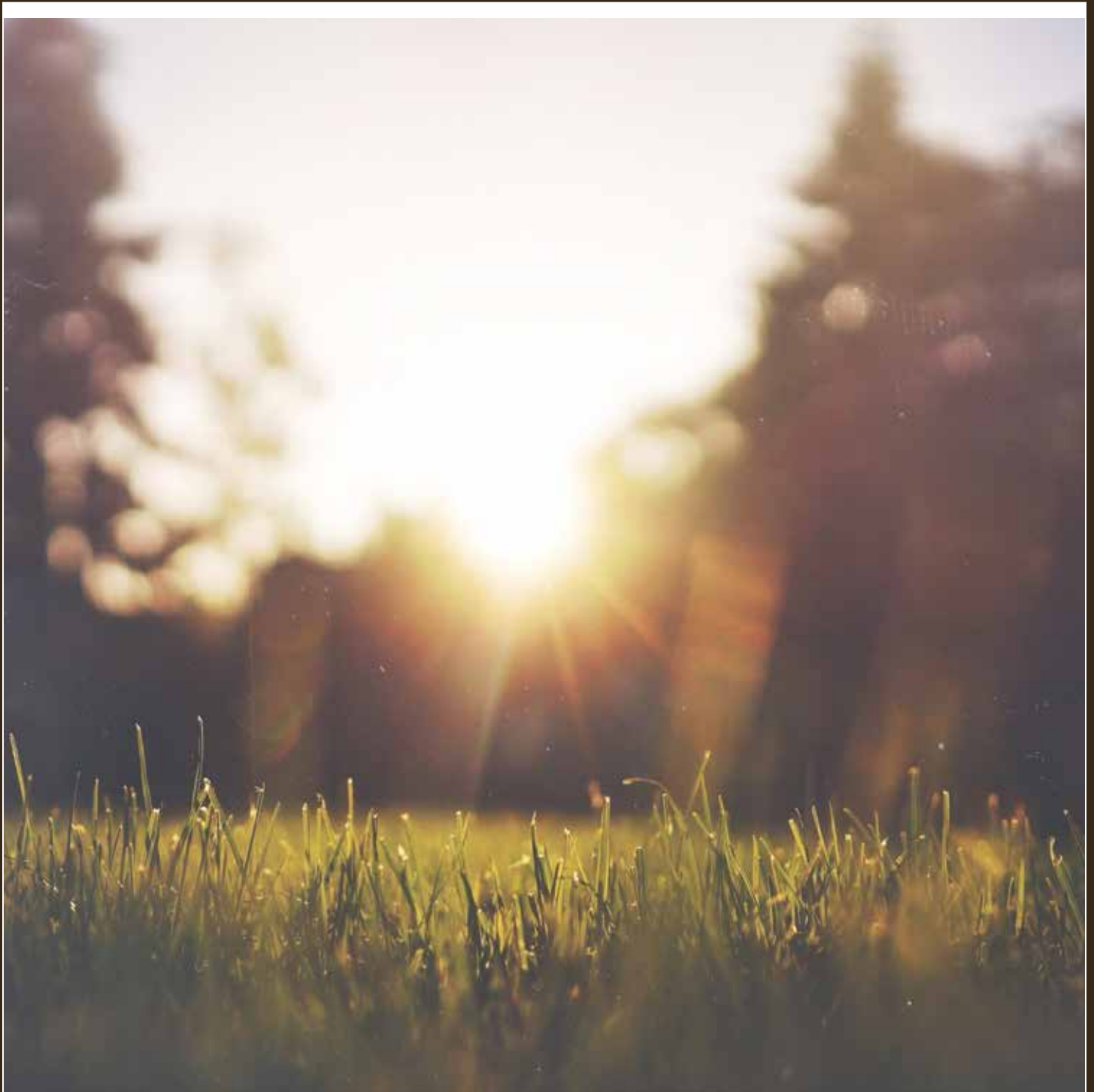


HERITAGE CROSSING



Area Structure Plan

October 2022



Heritage Crossing Area Structure Plan

Prepared By

Township Planning + Design Inc.

Prepared For

2291463 AB Ltd.

October 2022

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Indigenous Acknowledgment

Foothills County acknowledges that we live, work, play, and steward lands within the traditional territories of the people of the Treaty 7 region in Southern Alberta, which includes the Blackfoot Confederacy (Siksika, Piikani, and Kainai), the Tsuut'ina, the Îyâxe Nakoda Nations (Bears paw, Chiniki, Wesley), the Métis Nation of Alberta, Region 3, and all those people who have made Treaty 7 lands their home.

We recognize the achievements and contributions of Indigenous people and their role in and influence on the history and culture of this region.

We are committed to respecting Indigenous people and their culture, to working towards reconciliation, and to promoting awareness of indigenous issues.

We recognize the land and the benefits it provides all of us, as an act of reconciliation.



1.0 Introduction





1.1 Plan Purpose

The Heritage Crossing Area Structure Plan (the Plan) is a statutory document that establishes the vision for the Plan Area. The Plan guides development of ± 39.11 acres (15.83 ha) on two separate titles all contained within the northwest quarter section 32-21-29-W4M, located in Foothills County immediately east of Second Street East and south of Dunbow Road (**Figure 1: Site Location**).

The Heritage Crossing ASP provides the planning and regulatory framework that enable the goals and objectives of the Plan to be realized. An area structure plan must outline the goals, objectives, land use, density, phasing, infrastructure and servicing requirements, environmental considerations, and housing types proposed for the site. The Heritage Crossing ASP provides the policy and the implementation to realize the resulting community as a welcoming, sustainable neighbourhood that celebrates the transitional character of Foothills County in this location.

1.2 Vision

Heritage Crossing is thoughtfully designed as a fully serviced residential neighbourhood with a variety of housing forms that integrate into the neighbouring Heritage Pointe community. The site design celebrates open space amenity and protects the environment, demonstrates efficiency in design and servicing, and provides a unique balance of rural and urban living for Foothills County residents to call home.

Offering one form of single-family housing and two multi-family housing types (villa and bungalow), this extension of the Heritage Pointe community is situated within an extensive open space network which connects areas within the community and offers passive and active recreational opportunities. Strategic landscaping and a buffer area maintain the privacy of adjacent residents. Environmental Reserve preserves significant environmental features to both retain natural processes and to protect the site in perpetuity for future generations. **Figure 1: Site Location** identifies the Plan Area location.

1.3 Objectives

The Plan objectives reflect the aspirations of applicable Foothills County policies, the existing and future area residents, regional stakeholders, and the developer. These objectives provide the framework to guide development over time and achieve the vision for Heritage Crossing as an integrated and economically viable community. The overarching objectives of the Plan are:

- To establish a land use strategy that aligns with and is supported by existing local and regional policy;
- To establish a land use strategy with sound planning rationale to benefit Foothills County and its residents;
- To present a comprehensive review of the existing site conditions, constraints, and opportunities within the Plan Area; and,
- To determine the general configuration of land uses, transportation networks, and utilities within the Plan Area.

1.4 Background

The Heritage Crossing Area Structure Plan has evolved from ongoing planning efforts involving the developer, area residents, the Foothills County administration, and Foothills County Council. The result is a planning framework for the sensitive development of a unique parcel of land at the intersection of Dunbow Road and Second Street East, south of the Heritage Pointe hamlet boundary. **Figure 2: Regional Context** identifies the plan area in relation to the surrounding rural/urban transition..

Heritage Crossing is a vibrant mix of integrated residential and open space land uses designed to thrive as a new neighbourhood immediately South of the existing Hamlet of Heritage Pointe. The “Hamlet” designation and boundary was established following a public hearing of Council on 4 May 2000. The Hamlet boundary is, as yet, only recognized at the

1.0 Introduction



1.5 Interpretation & Definitions

municipal level. Over time the hamlet boundary has varied to include the Pinehurst community and additional publicly and privately owned lands.

Heritage Crossing draws on the aesthetic character and architectural style of the Hamlet to provide Foothills County residents with a stunning residential neighbourhood. The Plan takes its cues from the adjacent residential developments and addresses the needs of new residents, while supporting existing commercial businesses, and offering an integrated and efficiently serviced community.

The meaning of some of the key words used throughout the Plan are described below:

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

Should: a directive term, indicating a strongly preferred course of action, 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, depending on the circumstances of the application.

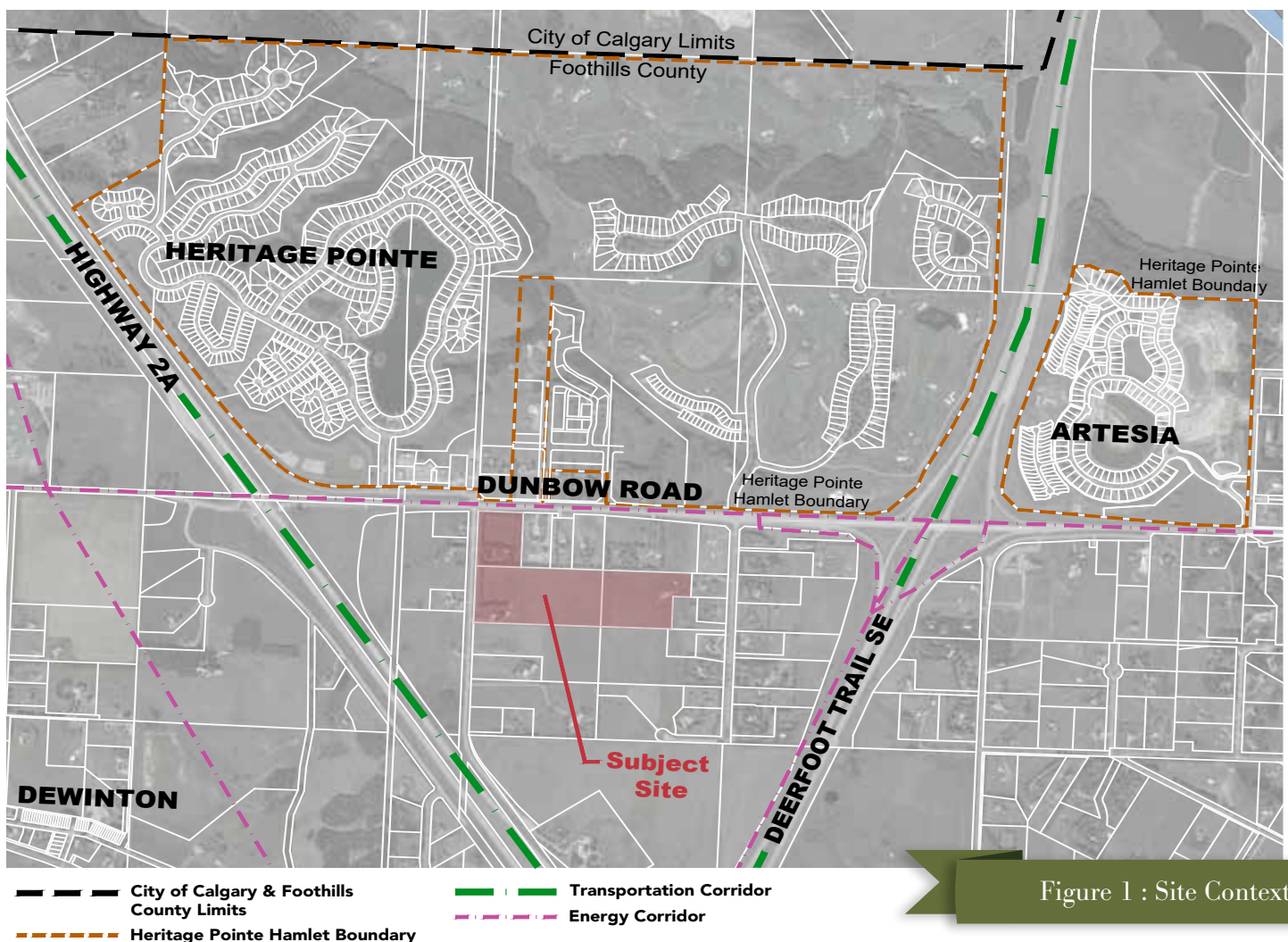



Figure 1 : Site Context



 2.0 Regulatory Process





2.1 Authority of the Plan

The Plan was prepared in accordance with the provincial requirements outlined in section 633 of the Municipal Government Act (MGA) (Statutes of Alberta, RSA 2000 Chapter M-26.1), specifically:

633(1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may by bylaw adopt an area structure plan.

(2) An area structure plan

(a) must describe

(i) the sequence of development proposed for the area,

(ii) the land uses proposed for the area, either generally or with respect to specific parts of the area,

(iii) the density of population proposed for the area either generally or with respect to specific parts of the area, and

(iv) the general location of major transportation routes and public utilities, and

(b) may contain any other matters, including matters relating to reserves, as the council considers necessary.

The current MGA also states that an ASP must conform to the MGA, any existing Intermunicipal Development Plans (IDP), the Municipal Development Plan (MDP), and all other statutory plans.

2.2 Governing Policies

Due to its location within Foothills County and its proximity to the City of Calgary, Heritage Crossing is subject to several statutory plans which are summarized below. These plans include the South Saskatchewan Regional Plan (SSRP), the Regional Growth Plan (GP), the Foothills County/City of Calgary Intermunicipal Development Plan (IDP), the Foothills County Municipal Development Plan 2010, the Growth Management Strategy, and the Foothills County Land Use Bylaw.

2.2.1 South Saskatchewan Regional Plan

In effect since 2014 and amended in 2017, the South Saskatchewan Regional Plan (SSRP) is the highest-level policy in the South Saskatchewan region; as such, all plans in the region must align with its directives. The SSRP provides the long term vision for the region, and guides all municipalities under its influence. The SSRP promotes efficient use of land; this encourages municipalities to infill and develop properties that can be serviced communally and do not prematurely fragment agricultural land.

2.2.2 Calgary Metropolitan Region Growth Plan

Adopted in August 2022, the Growth Plan establishes the vision and policy framework to guide sustainable, efficient development in the Calgary Metropolitan Region through a collaborative, intermunicipal process.

The Heritage Crossing ASP aligns with the Growth Plan's Regional Vision to create a thoughtfully designed, sustainable, fully-serviced, diverse community that serves the needs of the local residents with an eye for the needs of the future.

The Heritage Crossing ASP aligns with the regional policies 3.1.1.3 related to identifying impacts of development on agricultural land and providing mitigation measures.

The Growth Plan identifies specific placetypes to guide efficient development of new communities in the Calgary Region. Heritage Crossing will align with policies in section 3.1.5 Rural and Country Cluster Placetype. The Rural and Country Cluster Placetype provides opportunity for a lower density community that maximizes open space in the Plan Area and integrates with the rural character.

2.2.2.i

In accordance with the REF policy 4.1 c), the Plan shall be submitted to the CMRB for evaluation as it is a new Area Structure Plan.

2.0 Regulatory Process



2.2.3 City of Calgary, Foothills County Intermunicipal Development Plan

The Heritage Crossing plan area is within the Foothills County / City of Calgary IDP as it is located 1.6 kilometres south of the City of Calgary Limits. The IDP identifies this area as a place that can accommodate residential growth in Foothills County. The ASP is required to be referred to the City of Calgary as the site is within the identified circulation referral area.

Section 2.3 includes policies to protect regional assets such as the Pine Creek Watershed and other environmentally significant features, which also require circulation to the City of Calgary for comment. Furthermore, policies in section 3.7 Transportation Infrastructure will apply to the development, specifically 3.7.1.3 related to development along provincially administered transportation networks, which states:

"The two municipalities should consult jointly with Alberta Transportation to coordinate planning and development along provincially administered transportation links in areas of mutual interest. This consultation may include, among other things; advocating for mutually beneficial improvements, promoting opportunities for cost sharing, consideration of transportation design principles for wildlife migration, compliance with dark skies regulations in each municipality, and/or a consideration of scenic landscapes" (p 26).

2.2.3.i

In accordance with policy 4.1.1 of the IDP, the Heritage Crossing Area Structure Plan shall be circulated to the City of Calgary for review and comment prior to development commencing.

2.2.4 Foothills County MDP

Under the Municipal Government Act (MGA) every municipal council must adopt a Municipal Development Plan (MDP). An MDP is a high-level planning document that establishes the overall vision for future growth and development in a municipality. Foothills County's MDP provides the following vision:

"The MD of Foothills (sic) encompasses a diverse rural landscape in which leadership and planning support a strong agricultural heritage, vibrant communities, a balanced economy and the stewardship of natural capital for future generations" (p 4).

2.2.4.i

Heritage Crossing should adhere to the vision and policies outlined in the MDP to ensure an integrated, sustainable, efficient, and fiscally viable community that contributes to life in the County.



2.2.5 Foothills County Growth Management Strategy

The Foothills County Growth Management Strategy (GMS) builds on the direction provided in the MDP 2010 by identifying opportunities for growth and development and allocating it to logical areas “where it can be supported by a formal planning framework” (Foothills GMS, 2013, pg. 1) The strategy divides the County into five (5) districts and identifies the Central District as the area that will accommodate most of the municipality’s growth. This district is located directly south of Calgary and contains the Hamlets of Heritage Pointe, DeWinton and Aldersyde, both the Highway 2 and Highway 2A corridors, and surrounds the towns of Okotoks and High River. It also contains a number of recreational features, including five (5) golf courses and Spruce Meadows, a globally recognized equestrian facility.

Heritage Crossing is located in the Central District. Due to its proximity to major highways, existing urban development, and available piped water and wastewater servicing, this area is recognized as the growth engine for the County. The Central District is where most development is intended to occur within Foothills County.

Foothills County intends to undertake further planning (including a plan for the Central District) to provide guidance on the principles, locations, and desired future growth and development.

2.2.6 Foothills County Land Use Bylaw

The Foothills County Land Use Bylaw (LUB) divides municipal lands into a variety of land use districts (or zones). These districts determine the rules and requirements for developing the land. The LUB outlines the processes for redesignation, subdivision and development permit applications within Foothills County.

The Heritage Crossing ASP proposes to utilize the following land use districts:

Environmental Reserve (ER) to protect in perpetuity the environmentally significant features throughout the Plan Area;

Residential Community District (RC) to accommodate Single Family homes;

Residential Multi Family District (RMF) to accommodate a variety of options for multi-family units including villas;

Municipal Land Reserve (MLR) to provide public lands, an open space network, and parks or schools throughout the community; and,

Public Utility Lot (PUL) to provide for two stormwater retention ponds and lift stations.

2.0 Regulatory Process



2.3 Approvals Process

Foothills County requires the preparation of an Area Structure Plan (ASP) to provide a framework for subsequent subdivision and development within the Plan Area.

Foothills County will consider adoption of this ASP pursuant to the requirements of the Municipal Government Act. Following circulation of the ASP to the affected landowners in the area and a formal review conducted by County planning staff, the ASP will be presented to Foothills County Council. Council will consider the ASP at the First Reading and Public Hearing, at which time landowners have the opportunity to speak in support or opposition of the proposed ASP. Should the ASP be passed by Council at First Reading, the ASP must be submitted to the Calgary Metropolitan Region Board (CMRB) for review in accordance with the Growth Plan. Following CMRB approval, the ASP must be considered again by Foothills County Council for third and final reading before it can be adopted through bylaw.

Subsequently, consideration of land use amendment, subdivision, and development permit applications will follow in accordance with the policies of this ASP and other Foothills County requirements.

2.4 Plan Implementation, Review and Amendment

This section describes the implementation process to ensure development within Heritage Crossing achieves the aspirations of this Plan in accordance with guiding policy.

The Plan is a statutory document that must be passed by Foothills Council following a statutory hearing and enacted through passing of a bylaw in accordance with the Municipal Government Act. The Plan does not supersede or replace any higher order statutory policy and is implemented in accordance with the Municipal Government Act and the CMRB Growth Plan, Intermunicipal Development Plan, Municipal Development Plan, Land Use Bylaw, and Foothills Growth Management Strategy.

The Plan provides a framework of policies that must be considered prior to approval of subsequent land use amendment and/ or subdivision applications for residential and development with the plan area.

2.4.i

Periodic plan review and amendment may occur as required due to the evolving nature of the natural environment, changing market demands, and local economies. Any amendment to the Heritage Crossing Area Structure Plan that may be required shall be conducted in accordance with the Municipal Government Act.



📍 3.0 Site Context





3.1 Regional Context & Plan Location

Heritage Crossing is a ±39.11 acre (±15.83 ha) residential development located south east of the Heritage Pointe Hamlet in Foothills County. The new community is strategically located 1.6 km south of the City of Calgary limits and is bound by Dunbow Road to the north, Second Street E to the east, and Eighth Street E to the west (refer to Figure 2: Regional Context). This location offers an alternative to high-density urban living while maintaining convenient access to the provincial highway system to connect residents to the nearby amenities. Heritage Crossing is within a 10-minute drive of a major activity centre, regional hospital, and shopping within the community of Seton. Fire services and emergency response is provided by the Heritage Pointe Fire Hall which is in direct proximity to the

site north of Dunbow Road. Heritage Crossing sits approximately 2.5 kilometres south of the Bow River and offers residents access to the Provincial Park system.

The lands surrounding the Heritage Crossing Plan Area possess a distinctively mixed rural and urban character. The regional landscape varies and includes urban communities such as Legacy, semi-urban communities such as Heritage Pointe and Artesia, and Country Residential acreage developments. Other existing land uses in the vicinity include home-based businesses, as well as three (3) world class golf courses (Heritage Pointe, Cottonwood, and Carmoney golf courses) a commercial centre, and places of worship.

Figure 2: Regional Context, identifies the Plan Area in its regional context.

3.2 Legal Description

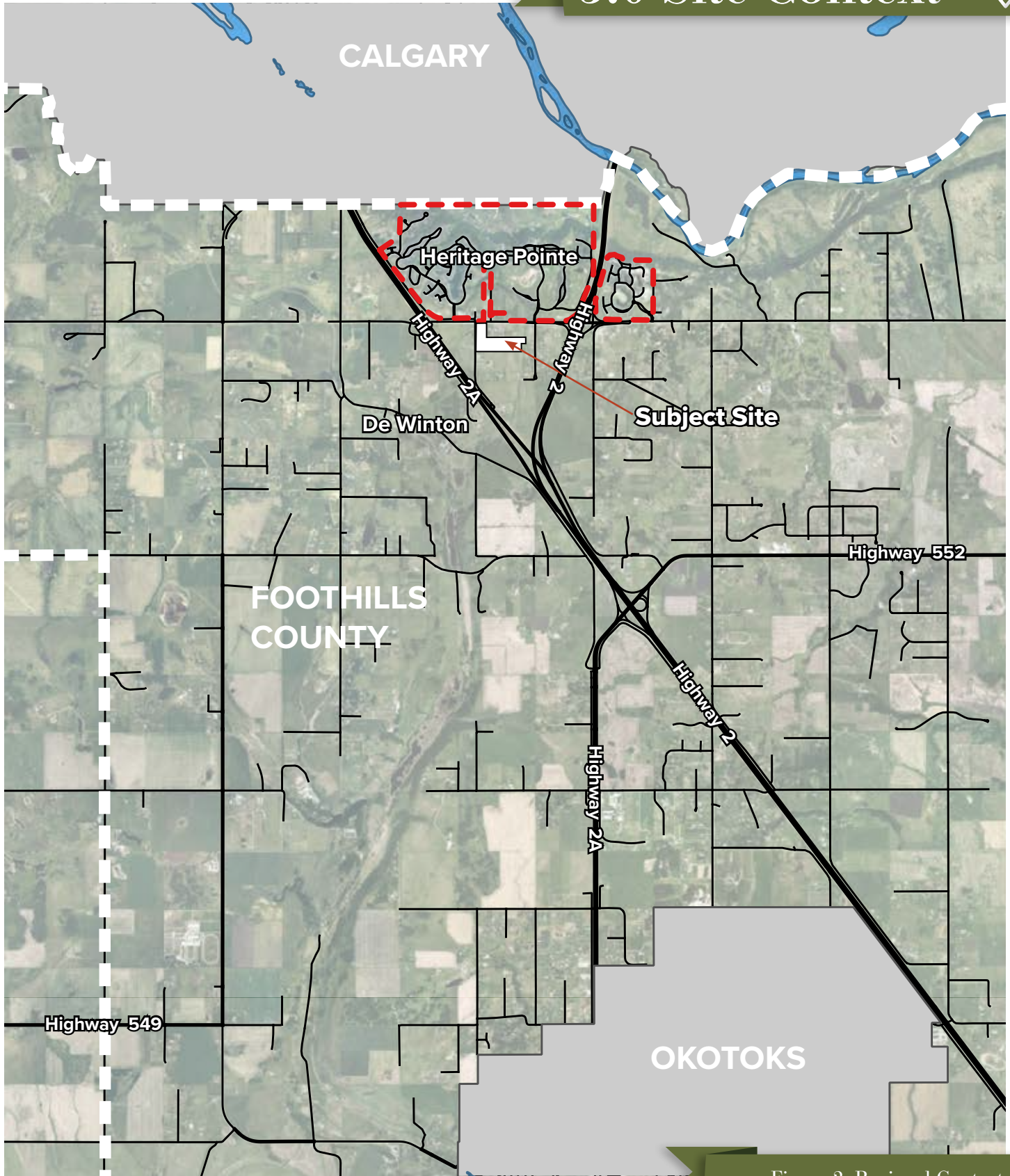
Heritage Crossing is located on lands described below:

Table 1: Legal Description

Owner	Legal Description	Title Number	± Acres/Ha
2291463 Alberta Ltd.	Plan 1530 LK, Block 1	201 206 605	6.89 / 2.78
2291463 Alberta Ltd.	Plan 1530 LK, Block 2	211 218 791	32.22 / 13.04
TOTAL			39.11 / 15.83

NOTE: the red text will be revised and updated subsequent to issuance of new land titles for this site by the Land Titles Office. The areas are confirmed.

3.0 Site Context



- Subject Site
- Hamlet of Heritage Pointe
- Central District (Growth Management Strategy)

Figure 2: Regional Context



3.3 Physical Description & Land Use

The Heritage Crossing Plan Area is located on the uphill side of a large ravine that leads under Dunbow Road eventually to Pine Creek. The concept design takes advantage of a relatively flat area with minimal topographic variations. The eastern most boundary of the site is bordered by a ravine that is protected as Environmental Reserve which provides a buffer between Heritage Crossing and the existing single-family residences.

The site supports three (3) kinds of dwelling units: a seniors' bungalow, a semi-detached villa product, and the traditional single-family home. The seniors' bungalows and villas are set back from Dunbow Road and buffered by a stormwater pond. Semi-attached units are planned south of the bungalows along Second Street E. The primary access to these residences is a new internal road between the multi-family units and the single-family homes. The land adjacent to Second Street East is dedicated as Municipal Land Reserve District (MLR) and contains a walk pathway. This MLR provides a buffer between the street and the residences, attempts to retain existing trees, and makes efficient use of the natural green space to connect the community.

The remainder of the community is primarily single-family residences connected by an internal transportation network. The design follows the natural contours of the land and preserves the environmentally sensitive areas through ER and surrounded by MLR, which features the continuation of the community pathway network. The central pond in the community is designed as a stormwater attenuation facility and will be a wet pond and a destination within the centre of the community. The pond that is close to Dunbow Road, and within the seniors' bungalow area, is a dry pond and would only be inundated in the 1:100 year rainfall event.

3.4 Environmental Considerations

Heritage Crossing will protect and enhance the natural environment and create a balance between development and the protection of environmental features. These features will be integrated into the community design in order to foster long-term preservation and oversight of these areas. An environmental reserve is planned to protect unique features and provide public access for passive recreation opportunities. Heritage Crossing will maintain the rural character of the area through preservation of functional natural areas, enhancement of recreational opportunities and open space, and protection of wildlife habitats and vegetation that are critical to the foothills landscape.

3.0 Site Context



- Subject Site
- Natural Drainage Draw
- 0.5m Contours
- 1.0m Contours



Figure 3: Environmental Considerations



3.5 Existing Topographic Conditions

The site drops from 1061 metres above sea level (masl) at the southwest corner to 1052.5 masl on the north with an average 2% slope. There are two drainage courses that bisect the study area; the major drainage course runs from south to north along the east boundary of the proposed development and a minor course runs from south to north along the middle of the proposed development. Both natural drainage courses are protected as environmental reserve.

A stormwater study was prepared by LGN Consulting Engineering Ltd. The study addresses overall surface water runoff in the study area to assess pre-development runoff discharge and the operation of the proposed ponds under post-development conditions. No structural, geotechnical, or hydrogeological engineering considerations, assessment of subsurface drainage conditions, underground piped drainage system, or the drainage of individual development lots was undertaken by this study. That information is included in the Associated Engineering Feasibility Assessment.

The stormwater study by LNG and the Feasibility Assessment conducted by Associated Engineering are detailed in Section 5 of this ASP and have been submitted to Foothills County under separate cover. **Figure 3** identifies the site topography and drainage.

3.6 Historical Resources

Consideration of historic resources is a crucial component of sensitively and sustainably planning a new community. Given that many historic resources are not visible on the surface, the project team may be required to submit an application for approval through the Online Permitting and Clearance (OPaC) system. Depending on the results of the OPaC assessment, the project team may be required to conduct a Historic Resources Impact Assessment (HRIA).

4.2.i

The Heritage Crossing ASP shall adhere to the rules and regulations established in the Foothills County Community Standards Bylaw.

3.0 Site Context



3.7 Existing Transportation Infrastructure

The Plan Area is currently accessed by private driveways from Second Street East and Dunbow Road. The Plan Area is located approximately two (2) kilometres east of the intersection of Highway 2A and Dunbow Road and 2.5 kilometers west of Deerfoot Trail. This location provides Heritage Crossing with convenient access onto these major provincial highways connecting the residents to the adjacent communities and the region.

3.7.i

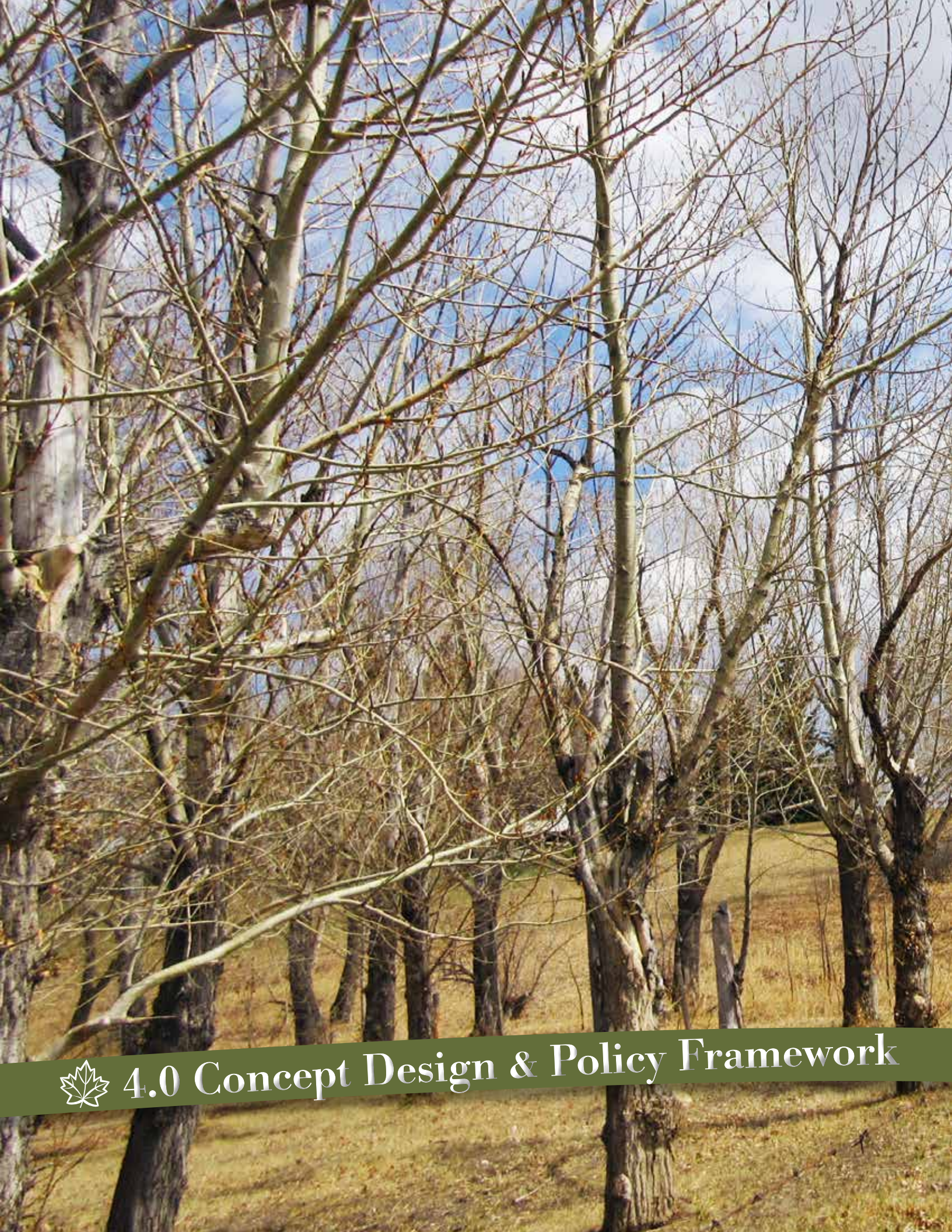
The design of future access points to the community shall be reviewed and approved by Alberta Transportation and Foothills County to ensure the design meets the development requirements for new Area Structure Plans and access to provincial highways.

3.7.ii

Foothills County completed a Functional Planning Study of Dunbow Road, and the Heritage Crossing ASP shall be required to accommodate the resulting improvements from the study.

3.8 Easements & Right of Ways

There are shallow utility gas line Right of Ways registered on title. These utility Right of Ways have been reviewed and are not affected by the development of this site.



4.0 Concept Design & Policy Framework





4.0 Concept Design Overview

The following section outlines the community planning framework including the land use concept for the Plan Area which highlights the intended form, use, and character of the various forms of residential design within the Plan Area.

The policy framework reinforces the vision for Heritage Crossing as a vibrant, mixed-housing form community that celebrates and protects the environment, champions efficiency in design and servicing, and balances the benefits of rural and urban living. The rural character of the community is derived from the existing adjacent communities of Heritage Pointe and Artesia to create a cohesive pattern and context across all three communities.

The open space system consists of a series of pathways, public green spaces, and environmental reserves that create a connected and cohesive network throughout the community. Integrating Heritage Crossing with the surrounding context while adhering to the design standards for rural communities results in a strong sense of place and community character.

4.1 Community Structure

Heritage Crossing will be a holistically planned community with a series of unifying urban design elements that respond to the natural environment and foster a sense of character. The community is intentionally organized around the environmentally significant features and connected by a network of pathways. The pathway system is thoughtfully designed and sensitively integrated into the residential areas to maintain the rural character of the area and create a cohesive community. Intentionally placed focal points provide destinations within the community and enhance the local landscape.

4.2 Community Standards Bylaw Compliance

The Foothills County Community Standards Bylaw applies to the entire municipality. The purpose of this bylaw is to protect the health, safety, and welfare of the people and property of the County through the enforcement of nuisances and unsightly property. Nuisances are generally defined as audible activities being carried out by an individual that infringe on the ability of others to enjoy their neighbourhood. This could range from operating a motorized snow blower outside of allocated daytime hours (7am to 9pm on weekdays, 9am to 9pm on weekends) to excessive vehicular noise at any time. Unsightly property infractions are more visual in nature: premises must be maintained to a certain working standard and be kept clear of garbage and refuse.

4.2.i

The Heritage Crossing ASP shall adhere to the rules and regulations established in the Foothills County Community Standards Bylaw.

4.3 Land Use Concept

The land use concept design, as pictured in **Figure 4**, reflects the land use policies and how these inform the design of the Plan Area to create a cohesive community. The concept is derived from the vision and objectives identified in this Plan (sections 1.2 and 1.3) and should be reviewed when land use redesignation and/or subdivision applications within the Plan Area are submitted.

The following sections contain detailed policies and descriptions of each policy area as illustrated in **Figure 4**: Land Use Concept. **Table 2** details the Plan Area statistics and **Table 3** the projected population density.

4.0 Concept Design

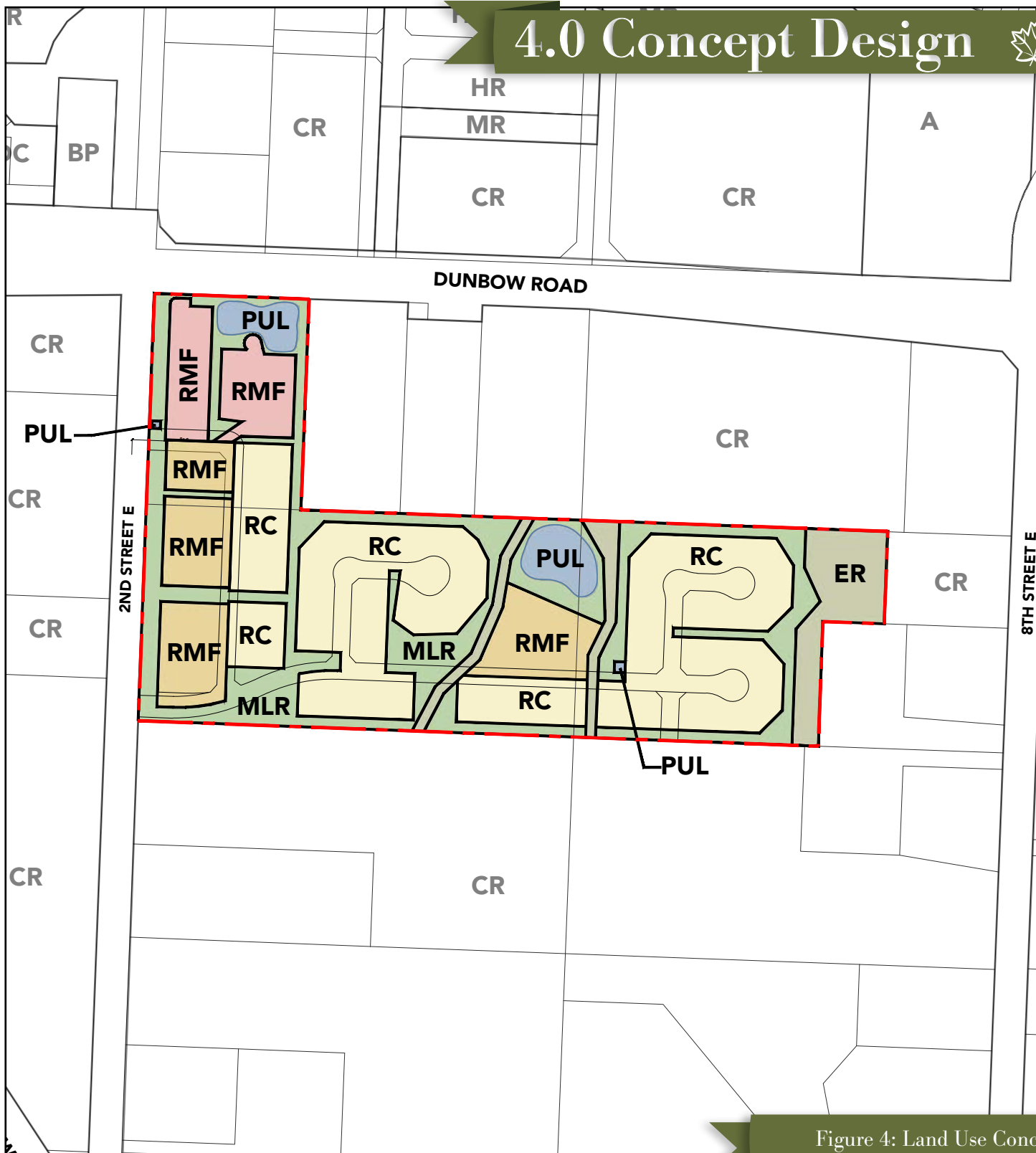


Figure 4: Land Use Concept

CR	Country Residential District	MLR	Municipal Land Reserve	A	Agricultural District
RC	Residential Community District	ER	Environmental Reserve	BP	Business Park
RMF	Residential Multi-Family District	PUL	Public Utility Lot	DC	Direct Control



Table 2: Plan Area Statistics

Land Use	Estimated Units By Type	Area (ac)	Area (ha)	% of Net Developable area
Gross Developable		39.11	15.83	
Environmental Reserve		3.29	1.33	
Net Developable		35.82	14.50	
Residential Community (RC)	94	12.08	4.89	33.7
Residential Multi-Family (RMF) Villas	42	3.45	1.39	9.63
Residential Multi-Family (RMF) Bungalows	20	1.82	0.73	5.08
Municipal Land Reserve (MLR)	N/A	9.43	3.81	26.33
Public Utility Lot (PUL)	2	1.46	0.59	4.08
Road/Road Dedication	N/A	7.58	3.09	21.16

Table 3: Proposed Densities

Maximum Residential Units	Persons per dwelling	Estimated population	Units per net acre	Units per net hectare
156*	2.7 **	421.2	4.36	10.76

* if seniors' bungalows are duplex (not single) the lot count increases to 176 and density to 4.91 upa.

** 2016 census

4.0 Concept Design



4.3.1 General Residential Policies

Heritage Crossing is an intentionally designed neighbourhood with a variety housing options incorporated to meet the needs identified by residents of the area and Foothills County. The result is a mix of residential villas, seniors' bungalows, and single-family residential homes.

The lot sizes have all been designed to align with the appropriate districts in the Foothills County Land Use Bylaw.

4.3.1.i

Housing typologies shall be suitably integrated and compatible with surrounding land uses and the existing community.

4.3.1.ii

All residential lots, regardless of size, shall be connected to piped water and wastewater servicing system;

4.3.1.iii

A detailed Stormwater Management Plan is required at the LU/OP stage and shall be prepared by a Professional Engineer. The detailed Stormwater Management Plan shall be consistent with the Preliminary Stormwater Management Plan prepared by LGN to the satisfaction of Foothills County and any other applicable regulatory body;

4.3.1.iv

The gross residential density of Heritage Crossing may be 4.27 dwelling units per gross residential acre across the Plan Area.

4.3.1.v

For all residential lots, the front yard setback shall be a minimum of 4 metres from the internal road;

4.3.1.vi

Setbacks on corner lots can be relaxed up to ninety (90) percent provided the front yard is designated by the developer; and

4.3.1.vii

As a condition of subdivision approval the developer shall provide the following, to the satisfaction of Foothills County:

- i.) architectural guidelines;
- ii.) a conceptual landscape plan which outlines the transitional areas and buffers if the parcels are located adjacent to the north of this Plan.
- iii.) a Construction Management Plan that addresses development phasing and provides detailed mitigation strategies that will help reduce the impacts of construction and development.



4.3.1.1 Residential Community Policies

The areas designated Residential Community (RC) will consist of single-family dwellings designed to complement the country residential neighbourhoods adjacent to the Plan Area. This development typology offers the benefit of fully serviced, single-family homes in a semi-urban neighbourhood surrounded by ample natural amenities.

4.3.1.1.i

On lots designated Residential Community, the housing form shall be single-family detached and shall align with the Foothills Land Use Bylaw and this ASP.

4.3.1.1.ii

On lots designated Residential Community, no lot should be smaller than 469.3m² (0.12 acres);.

4.3.1.1.iii

The maximum allowable density shall be one single-family home per parcel designated Residential Community District.

4.3.1.1.iv

The maximum density shall be the maximum units listed in Table 3. Any additional density will require an amendment to the Area Structure Plan.

4.0 Concept Design



4.3.1.2 Residential Multi-family Policies

The semi-attached villas and seniors' living bungalows provide a moderate density option within the country residential context. These housing typologies may be permitted in close proximity to the ravines and other recreational opportunities in the immediate area. The villas and seniors' living bungalows provide options for a variety of home owners, including the bungalows tailored to an exclusive senior lifestyle. Identifiable neighbourhood patterns are to be achieved through the use of architecture that is sensitive to surrounding development.

4.3.1.2.i

On lots intended for the bungalow typology, no lot should be smaller than 352.6m² (0.09 acres).

4.3.1.2.ii

For the bungalow housing typology, individual buildings shall be comprised of no more than two (2) dwelling units;

4.3.1.2.iii

On lots intended for the villa typology, no lot should be smaller than 587.6m² (0.15 acres).

4.3.1.2.iv

The maximum allowable density for the villa housing typology should be 12 units per net acre designated for the villas;

4.3.1.2.v

Multi-family residential development should be encouraged to occur off the service/collector roadway in close proximity to the active recreational opportunities in the area;

4.3.1.2.vi

Clear development patterns composed of clusters of buildings with complementary architectural character should be created that are sensitive to the surrounding single-family developments;

4.3.1.2.vii

Clear circulation patterns which relate in a positive manner to the internal collector road should be created.



4.4 Open Space & Pathways

The Heritage Crossing Open Space system, as outlined on **Figure 5: Open Space and Pathways**, promotes, conserves, and enhances an interconnected ecological and recreation network. The design concept features a linear parkway system deliberately designed to provide for internal circulation within the community and connect people to the active recreation opportunities, and passive destinations. The Plan Area integrates two environmental reserve corridors that retain and support the natural environmental processes while adding to the open space system.



Figure 5: Open Space and Pathways

4.0 Concept Design



4.4.i

The design of the Open Space system recognizes the need to create an overall sense of individual well-being and to encourage social gathering. To achieve this, the following should be incorporated into the open space design at the LU/OP stage where appropriate and feasible to the satisfaction of Foothills County:

- a.** Integrate the Open Space into the wider community through safe, pleasant and efficient pathway routes.
- b.** Ensure seasonal adaptability for year-long usability through appropriate landscaping, site design, provision of street furniture and recreational facilities.
- c.** Provide public visibility to the open space through visual corridors.
- d.** Encourage a diversity of user activities and opportunities through provision of recreational equipment or interpretive trails and signage.

e. Promote “eyes on the street” by using active building edges to frame and define neighbourhood parks, and playgrounds where possible.

f. Support linear parkways and linkages where appropriate to promote connectivity and to facilitate walking and cycling.

g. Ensure open spaces and amenities are located and designed in accordance with principles of universal access and barrier-free design.

4.4.ii

At the LU/OP stage, the developer shall provide a breakdown of the lands designated as part of the open space system including those lands that may be Municipal Land Reserve, Environmental Reserve, or Public Utility District, and how those lands will be owned and maintained to the satisfaction of Foothills County.

4.4.iii

The developer shall be responsible for construction of all pathways, the type and location of which shall be detailed at the LU/OP Stage, and the responsible party for the pathway maintenance shall be that of the Community Association upon completion of the maintenance period and issuance of the Final Acceptance Certificate to the satisfaction of Foothills County.

4.4 iv

Landscape and Maintenance plans shall be completed at the subdivision stage to the satisfaction of Foothills County.



4.4.1 Municipal Land Reserve

As depicted in **Figure 5: Open Space and Pathways**, the interconnected Municipal Reserve (MR) / Municipal Land Reserve (MLR) and Environmental Reserve (ER) systems comprises a series of public spaces, natural areas, and other open spaces that will provide social, biophysical, and aesthetic functions.

Municipal Reserve (MR) lands, that are zoned using the Municipal Land Reserve (MLR) District provide passive and active recreation amenities for community residents to foster a sense of connection and enhance well-being. In Heritage Crossing, MLR offers linear and connected green spaces that act as buffers between different land uses and provide passive recreational opportunities through the network of trails and public green spaces. A pickleball/multi-sport court is included as a more active recreational amenity in this proposed community.

All lands identified as MR/MLR are intended to meet the requirements of the Municipal Government act for Municipal Reserve.

Figures 4 and 5 illustrate the proposed MLR parcels within the Plan Area. The Open Space Master Plan completed by Navagrah Landscape Architecture and Urban Design proposes a network of pathways connecting the active and passive recreational amenities. The result is a cohesive system of open space elements that support the well-being of residents and enhance the experience of Heritage Crossing.

4.4.1.i

Reserves shall be dedicated during the subdivision stage, in the full amount owing , in accordance with the requirements of the Approving Authority, pursuant to the MDP and MGA.

4.4.1.ii

The allocation of reserve shall be determined at the of land use stage to the satisfaction of Foothills County. As a result of phasing development, certain phases in the Plan Area may be deficient of reserves while others may be over dedicated. The developer shall ensure that the required amount of reserve is dedicated throughout the course of the development to the satisfaction of Foothills County.

4.4.1

4.0 Concept Design



4.4.2 Environmental Reserve

Dedicating lands as Environmental Reserve (ER) preserves significant natural features or systems that play an important role in the biophysical functions of the region. ER lands are intended to be left in their natural state as much as possible, but public trails could be incorporated where conditions are suitable as determined by Foothills County. In Heritage Crossing, the ER is left primarily undeveloped. A preliminary geotechnical study has been completed to inform the setbacks required from the ravine.

4.4.2.i

Reserves shall be dedicated through the subdivision process in the full amount owing in accordance with the requirements of the Approving Authority, pursuant to the MDP and MGA.

4.4.2.ii

Where there are significant slopes identified on the site, these lands shall be protected from development through the dedication of environmental reserve at the discretion of Foothills County.

4.4.2.iii

Foothills County shall be responsible for the operation and maintenance of environmental reserve.

4.4.2.iv

Where appropriate, methods to delineate private from public lands may be utilized. This could include chain link fence, post-in fence, or other naturalized methods of making this distinction.

4.4.2



4.5 Environmental Assessment

One of the objectives of the ASP is to minimize the impacts of development on the environment. There may be lands throughout the Plan Area that are not protected by the Environmental Reserve designation but may still be significant to the natural systems in the area. In these instances, additional studies may be required, at the discretion of Foothills County.

In this instance, a Geotechnical Slope Stability Assessment was prepared for the lands adjacent to the ravine to determine the appropriate setbacks.

4.5.i

Foothills County may require that developers, in support of a proposal for redesignation, subdivision or development, and at their sole expense, prepare and submit the following to the satisfaction of the Municipality and in accordance with all provincial requirements:

- a. a geotechnical report pursuant to the provisions of the MDP.
- b. any additional environmental testing or study deemed necessary by Foothills County (i.e. slope stability testing, percolation testing, high water table testing).
- c. any additional soil and groundwater study as deemed necessary by Foothills County and/or Alberta Environment.

4.5.ii

The assessment should identify and analyze any environmentally sensitive or significant areas and recommend ways to protect these features and address topography, geology, hydrology, soils, vegetation, and wildlife.

4.0 Concept Design



4.5.1 Biophysical Impact Assessment

Foothills County's MDP contains policy that suggests that proponents of development or redesignation of land that Foothills County believes would be wholly or partly within an environmentally significant area, shall demonstrate that the proposal will not jeopardize or significantly damage the characteristics of the resource. Foothills County may ask that specialized studies such as a Biophysical Impact Assessment (BIA) be prepared at the developers expense. In this instance, there are no sites that are considered to be environmentally significant and a BIA was not required by Foothills County Administration.

4.5.1.i

A Biophysical Impact Assessment may be prepared by the developer, at the request of Foothills County, to determine the impacts of development and wherever possible provide for mitigation of those impacts at the subdivision stage.



4.5.2 Geotechnical Testing

A preliminary geotechnical assessment has been completed to provide a general overview of site conditions and establish requirements for additional assessments at future phases. To assess the geotechnical site conditions including stratigraphy, groundwater conditions, and soil properties, eleven (11) boreholes were drilled across the site and samples tested from each. Laboratory testing included natural moisture content, soluble sulphate, and Atterberg limit testing. Groundwater was also evaluated including any slough and presence or absence of free water. The results are summarized below:

- The soil assessment revealed near-surface soil conditions of glaciolacustrine deposits consisting of a conglomerate of types of materials ranging from silts and clays to well-sorted silty sand and gravelly deposits.
- The thicknesses of topsoil ranged from 50 – 200mm and varied significantly across the site. The material encountered below the topsoil consists of the following from 1.8 metres below grade to a maximum of 12.2 metres below grade: silty sand, sand, glacial till, sandy/silty gravel, siltstone/sandstone bedrock. The sandy gravel soils provided effective refusal at depths of 5.2 and 5.5 metres below existing grade. The bedrock encountered between 6.1 and 9.1 metres below existing grade and was augerable.
- It is recommended that final site grading be provided to direct water to areas remote from all proposed structure. Minimum landscape gradients of 2 percent are recommended to reduce the risk of run-off ponding in localized areas. Furthermore, downspouts should be positively directed away from the buildings.
- The geotechnical report conducted by Englobe concluded that the site primarily consists of suitable bearing soils provided several recommendations in the report are followed.

4.5.2.i

The recommendations of the Geotechnical report prepared by Englobe dated February 14, 2022 shall be followed during the construction period.

4.5.2.ii

Groundwater levels fluctuate seasonally and annually, therefore additional groundwater testing may be conducted by the developer at the discretion of Foothills County.

4.5.2.iii

The footing design parameters of multi-family residential structures should be determined by a site and project specific geotechnical evaluation once further development plans are known, at the discretion of Foothills County.

4.5.2.iv

As a condition of subdivision approval, additional geotechnical assessments may be required at the expense of the developer and to the satisfaction of Foothills County.

4.5.2.v

All organic topsoil, deleterious soils and vegetation should be removed from areas to be filled, and placed in uniform lifts as specified in the Geotechnical and Slope Stability Report.

4.0 Concept Design

4.5.3 Open Space Master Plan

The Open Space Master Plan completed by Navagrah (**Figure 5:** Open Space Master Plan) transforms the land use concept into a tangible vision of the community. The plan describes the materials, pathway network, interface details, vegetation and parks, to provide a sense of place and reflect the experience of the Heritage Crossing community. It is the landscaping and amenity package that help set the tone of the community and contribute to the feeling of being within the context of the communities of Heritage Pointe.

The plan proposes a green, walkable community connected by a network of paved pathways and sidewalks. These pathways connect people to each other and to destinations in the community such as parks and rain gardens. The open space design suggests how the open space amenities will function as destinations as well as critical infrastructure to maintain and protect the environment.

The detailed plans of amenities offer insight into the design of parks and how these could be used as active and passive activity areas that bring people together. These areas celebrate the environment, and create a strong sense of place in this semi-urban community. Furthermore, the detailed elevations of design elements provide a standard for all landscaping infrastructure which reflects the character of the community and creates a strong identity for Heritage Crossing.

4.5.3.i

The landscaping plan should inform the type of uses, vegetation, pathway and sidewalk locations and widths, and design of natural infrastructure.

4.5.3.ii

Detailed landscaping plans, including maintenance provisions, shall be provided to Foothills County at the subdivision stage.



-  Sod
-  Trees
-  Shrubs
-  Perennials

1. Residential Area
2. Park Entry
3. Entry Feature
4. Grass Berm with Planting
5. Boulevard Trees
6. Kids Play Area
7. 2m Wide Asphalt Pathway
8. Green Open Space/ Winter Skating Area
9. ER
10. Planting Bed
11. Crosswalk
12. 1.5m Wide Concrete Sidewalk



Figure 6: Park Detail

4.0 Concept Design



4.6 Community Association

A Community Association (CA) for Heritage Crossing will be established by the developer to provide resources to members and assist with maintaining public community spaces. The CA will be established and governed by residents of the community who volunteer to be on the CA board. The CA will be based on a mandatory membership model whereby residents pay an annual maintenance fee. This fee is used to fund community events and initiatives, such as community gardens and maintenance of public open space. The CA board has the opportunity to work closely with Foothills County to ensure the needs of the community are met by the CA or a partnership between the CA and the County. The CA will not take over maintenance of public spaces until such time as the County has relieved the developer of their maintenance obligation.

4.6.i

A Community Association shall be established upon issuance of the Final Acceptance Certificate at which point responsibility for Heritage Crossing is transferred from the developer to Foothills County. At this time the developer will continue to maintain the open spaces until the Community Association has reached 50% of the community residents.

4.6.ii

Members of the Community Association shall pay an annual fee, to be determined by the Community Association, to support and maintain Heritage Crossing.

4.6.iii

The Community Association shall be responsible for the operation and maintenance of municipal reserves (MLR district) in collaboration with the County.

4.6.iv

Maintenance of Heritage Crossing shall be conducted in accordance with the Foothills County Community Standards Bylaw.

4.6.v

The Community Association shall be responsible for maintenance of pathways upon issuance of the Final Acceptance Certificate, and release of the development to the CA, to the satisfaction of Foothills County.



DUNBOW ROAD

2ND STREET E



0.5m - 0.75m Height Grass Buffer
 Planting Buffer along North
 Spruce Species: White Spruce

- 1.5m Wide Concrete Sidewalk
- 2m Wide Asphalt Pathway
- Sod
- 0.9m Height Farm Fence
- Trees

- 1 - Refer
- 2 - Refer
- 3 - Storm
- 4 - 2m V

Figure 7: Open Space Master Plan

4.0 Concept Design



Berm with Spruce
Property Line.
Spruce, Colorado Spruce

0 20 50
METERS



8TH STREET E

STREET E

to Pg 38
to Pg 35
Inwater Pond
Wide Asphalt Pathway

5 - Residential Area
6 - Bridge to Cross ER
7 - ER
8 - Grass Berm with Tree Buffer Planting

9 - Rain Garden
10 - Triangle Park
11 - View Point with Seating
12 - Property Line

13 - Entry Feature with Planting





2ND STREET E

-  Sod
-  Trees
-  Shrubs
-  Perennials
-  Bench
-  Property Line

- 1. Main Entry
- 2. Entry Feature
- 3. Residential Area
- 4. Boulevard Trees
- 5a. 1.5m Wide Concrete Sidewalk
- 5b. 2m Wide Asphalt Pathway
- 6. Planting Bed
- 7. Grass Berm
- 8. Grass Berm with Planting
- 9. Pickle ball Court
- 10. Community Board
- 11. Corner Plaza
- 12. Seating Node
- 13. Crosswalk



Figure 8: Pathway Detail

4.0 Concept Design

4.7 Dark Skies Bylaw Compliance

Foothills County adopted a Dark Skies Bylaw to minimize the factors that contribute to light pollution in the rural environment. The Bylaw regulates the type of light source and fixtures that can be installed in the County in order to prevent future light pollution.

The bylaw actively seeks to prevent three types of light pollution:

- Glare, where bright lights reduce visibility and safety for both pedestrians and motorists.
- Up-lighting, where illumination is directed skyward for no reason, and
- Light trespass, where the glow cast by a fixture moves from a place requiring illumination to one that does not.

4.8 Transitional Buffer Areas

Design guidelines have been developed in this ASP to provide a thoughtful approach to interfaces between the Plan Area and adjacent country residential lands. These design guidelines provide a tangible guide to respecting the needs of adjacent country residential lots and the needs of the residents of Heritage Crossing. The buffering strategy provides landowners with a sensitive transition from their lands to other development while promoting a comprehensive open space plan that incorporates pathways and low impact design.

Within Heritage Crossing, a minimum width of 10m is maintained, and expanded in some areas, around the perimeter of the community through the use of MLR which introduce vegetation, integrate with the existing topography, and introduce man-made features, such as the stormwater ponds, to provide a physical and visual separation to reduce dust, trespassing, and noise. These spaces create a pathway network throughout the community as part of the plan's dedication to sustainability and efficient use of land. The North Property Line Transition is picture in **Figure 9**.

4.7.i

The Heritage Crossing ASP plan area shall adhere to the policies of the Foothills County Dark Skies Bylaw.

4.7.ii

The Heritage Crossing ASP may support streetlights in areas where public safety is critical (e.g. major intersections). Any streetlight fixture shall be Dark Skies compliant and implemented to the satisfaction of Foothills County.

4.8.i

Transitional buffer areas may be incorporated at the discretion of Foothills County. If required Transitional buffer design shall be submitted for review and approval by Foothills County at the LU/OP stage.

4.8.ii

Buffers should result in sensitive transition utilizing vegetation, topography, low impact development strategies, and pathways where required.

4.8.iii

Transitional buffer areas shall be designed by a Landscape Architect, and constructed and maintained at the expense of the developer, to the satisfaction of Foothills County.

Key Plan



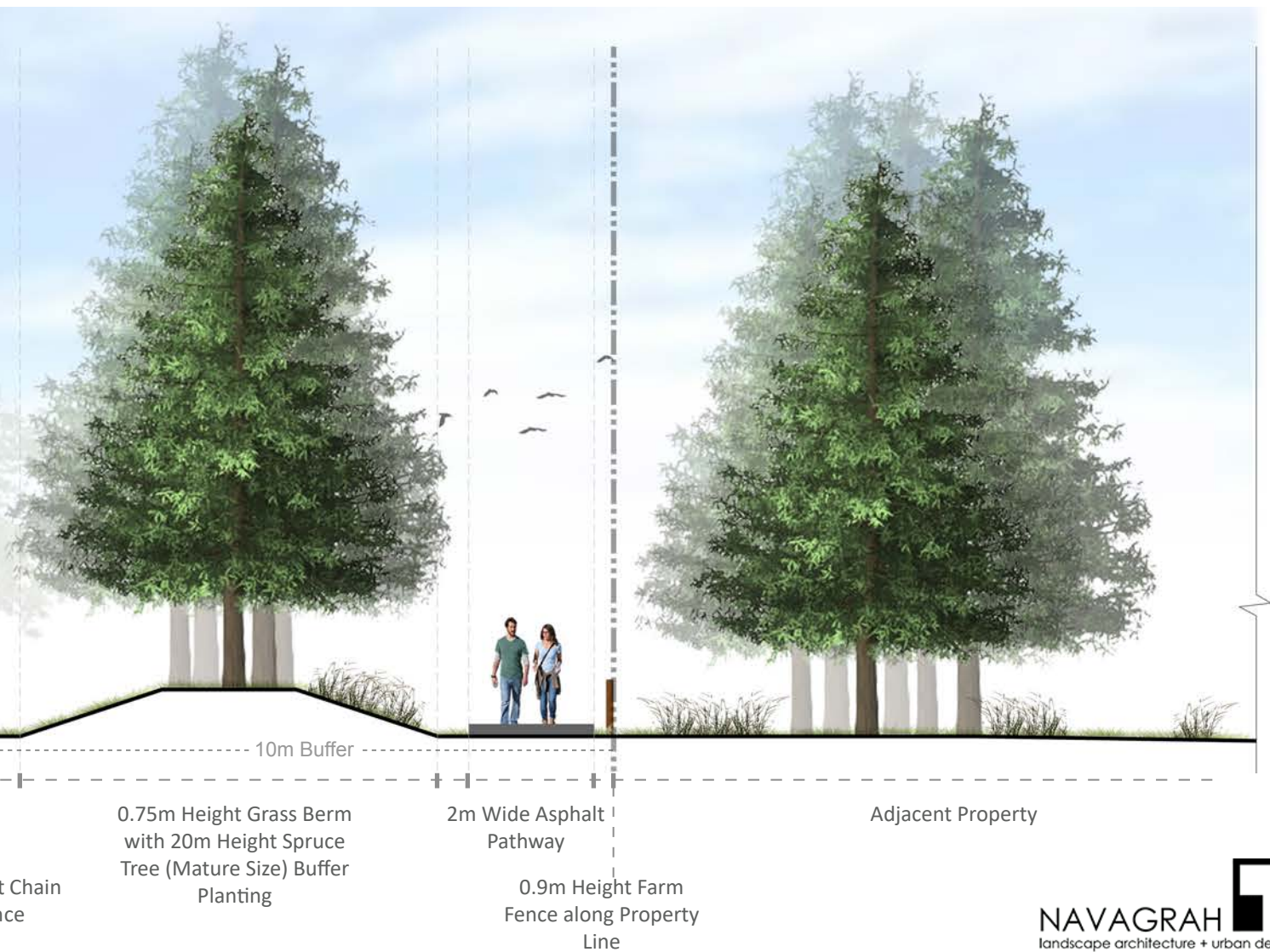
Section 2 - 2



Figure 9: Transitional Buffer Section

1.2m Height
Link Fence

4.0 Concept Design





5.0 Architectural Controls





5.1 Purpose

The intention of Heritage Crossings' Architectural Controls are to create a visually cohesive built form environment while allowing enough variety to create interest and represent the character of Heritage Crossing. These controls are meant to inspire and guide developers in a manner that provides a variety of housing options while achieving a balance of form, colour, and theme.

5.2 Architectural Theme

The various housing forms in Heritage Crossing should possess their own individual character while contributing to a cohesive community aesthetic and experience. This balance shall be achieved through the architectural controls that allow a variety of housing types while drawing on themes established in the prevailing architectural form, style, and detailing of the homes in local developments such as the Lake at Heritage Pointe, Artesia, and Serenity.

Inspiration has been drawn from the local aesthetic and traditional architectural styles to create a cohesive architectural theme for Heritage Crossing. Developers should adhere to more traditional styles of French County, Tudor, Prairie, and Craftsman. These styles will be thoughtfully applied to the residential housing typologies outlined in section 4.3. Topography in the Plan Area will further influence locations and orientations of buildings with respect to views, privacy, and park access.

5.1.i

The development of Heritage Crossing shall conform with the architectural controls established by the developer to the satisfaction of Foothills County and registered on title by restrictive covenant.

5.2.i

Similar themes, materials, massing and architectural styles shall be repeated in all phases within the Plan Area.

5.2.ii

The architectural controls shall contain a review and approval process that outlines the requirements for compliance and approval from the developer. This will ensure all architectural controls have been met by the builder prior to submission of a formal building permit to Foothills County.

5.0 Architectural Controls



5.3 Architectural Style Examples

The photos on this page provide examples of appropriate built form and urban design within the project area.









6.1 Deep Utility Servicing

Based on the proposed land use, there will be an estimated 156 residential units. Given an assumed average occupancy of 2.7 persons per unit the total projected population of the development is 421 people (156 x 2.7 = 421). A study completed by Associated Engineering determined that the existing potable water and sanitary wastewater system operated by Corix Utilities has the capacity to service Heritage Crossing. This new service area is proposed to connect to the existing infrastructure that services Heritage Pointe. There is an existing water line in place serving a single home south of Dunbow road.

6.1.1 Water Servicing

Water demands were estimated based on the proposed land uses and the assumed design population of 421 residents. Design demand of 370 l/s per capita was used for planning purposes. Peaking factors were applied to calculate maximum day and peak hour flow rates, as summarized in **Table 4**.

Table 4: Water Demand Scenario

Water Demand Scenario	Design
Estimated Population	421
Average Day Demand	1.8L/s
Maximum Day Demand Peaking Factor	2.9
Maximum Day Demand	5.2 L/s
Peak Hour Factor	4.0
Peak Hour Demand	7.2 L/s

Based on these assumptions, water service for the Plan Area will require installation of new water mains within the proposed roadways and utility right-of-way within the Plan Area. Two offsite water main connections will be required to connect to the existing Heritage Pointe water system. These offsite water mains will create a looped water system that will be sized to provide sufficient capacity to meet the normal operating needs of the system as well as the fire protection requirements for the development.

Connection 1: One water main connection is required northwest of the Plan Area at the intersection of 2 St East and Dunbow Rd. Construction of the new water main would be completed along the existing right-of-way on 2 St East, and connect to the existing water main in Dunbow Road. The construction would have limited impact on motoring traffic in the area.

Connection 2, Option 1: The first option for the second looped connection would be an extension of the watermain east through private lands to 8th Street East, then turning north to connect to the existing water main north of Dunbow Road. Portions of the work would need to be installed by trenchless methods. The first segment would be under the environmental reserve on the east end of the development. The second trenchless segment would be under Dunbow Road. Easements and/or land acquisitions would be required to protect the utility right-of-way of the proposed water main.

6.0 Servicing



Connection 2, Option 2: The second connection could be routed north through the site, past the proposed storm pond, and across the private lands to the north. The watermain could be installed by trenchless methods to eliminate impacts to the private lands that would be crossed. Easements and/or land acquisitions would be required to protect the utility right-of-way of the proposed water main.

The conceptual water distribution system and water tie-in connections are shown on **Figure 10: Water System Servicing**. This figure is subject to change upon confirmation from Corix.

The design of the servicing for the development should proceed based on the criteria defined in the Conceptual Design Report completed by Associated Engineering and in cooperation with the utility service providers.

Opportunities for potential future water servicing connections from the Heritage Crossing Plan Area to future communities within close proximity should be considered at the Land Use/Outline Plan stage.

6.1.1.i

The predicted design flows for the potable water system are not expected to cause the existing water system to operate outside of its existing capacity. This shall be verified with the utility provider at the subdivision stage, to the satisfaction of Foothills County.

6.1.1.ii

Final watermain alignments shall be determined by detailed design engineering at the subdivision stage, to the satisfaction of Foothills County.

6.1.1.iii

The developer shall be responsible for all costs necessary to expand and/or upgrade the water utility system to service Heritage Crossing, including Water Act and Environmental Protection and Enhancement Act approvals to the satisfaction of the utility provider and provincial regulatory agencies.

6.1.1.iv

The Municipality encourages the reduction and reuse of water in accordance with provincial laws and regulations. Development and buildings within Heritage Crossing shall use low-flow fixtures and appliances to promote water conservation. No exterior irrigation utilizing treated potable water should be permitted.

6.1.1.v

The developer shall execute and comply with a development agreement to the satisfaction of Foothills County for the construction of all required on site utility infrastructure.

6.1.1.vi

Future connections shall be at the discretion of the utility provider and Foothills County. Endeavors to Assist to support the existing developers responsible for bringing services to the area shall be considered at the subdivision stage.

6.1.1.vii

The location of all water utilities and the provision of rights-of-way, easements, and related line assignments should be addressed to the mutual satisfaction of Foothills County, the developer, and the utility provider.

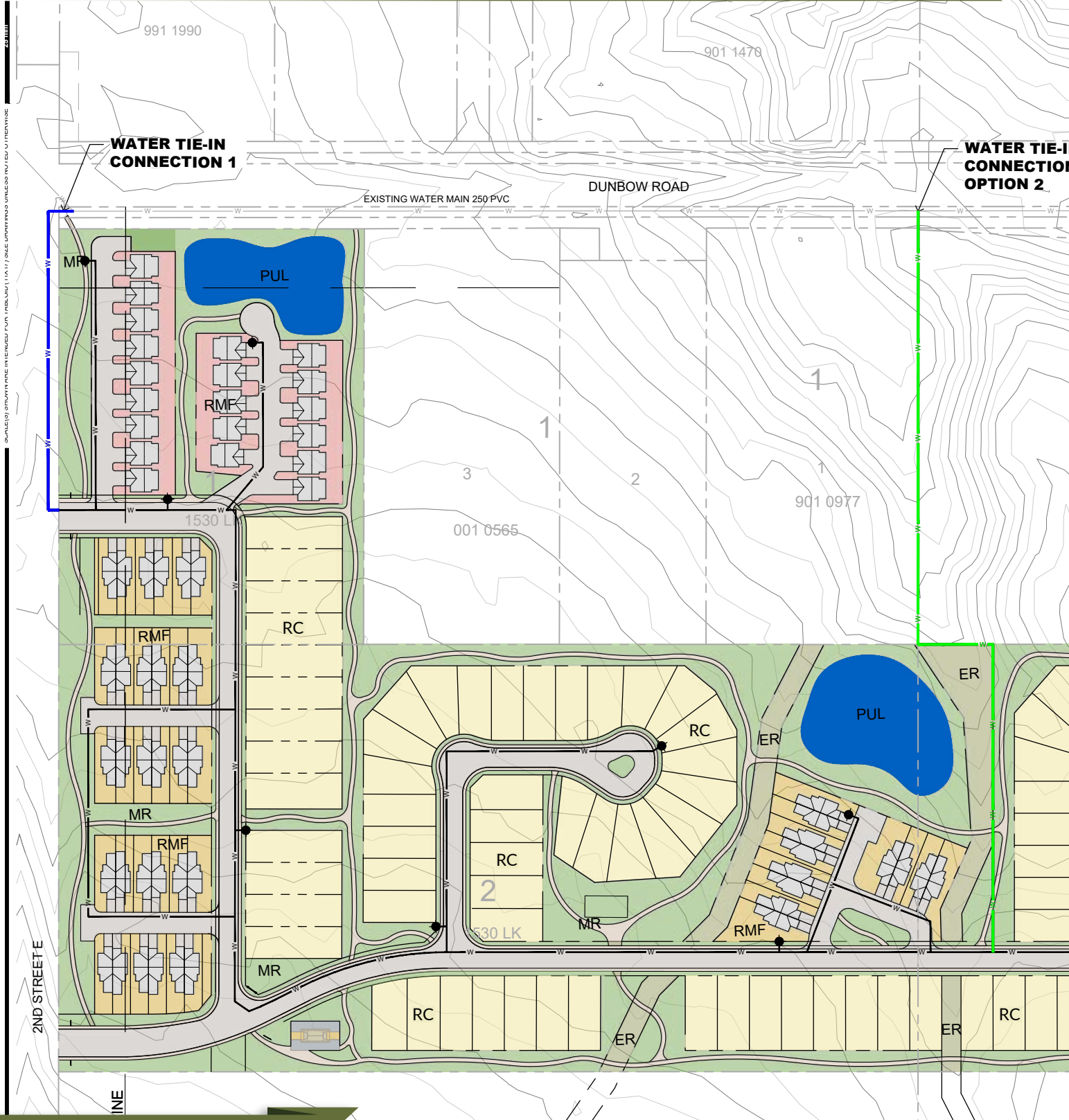
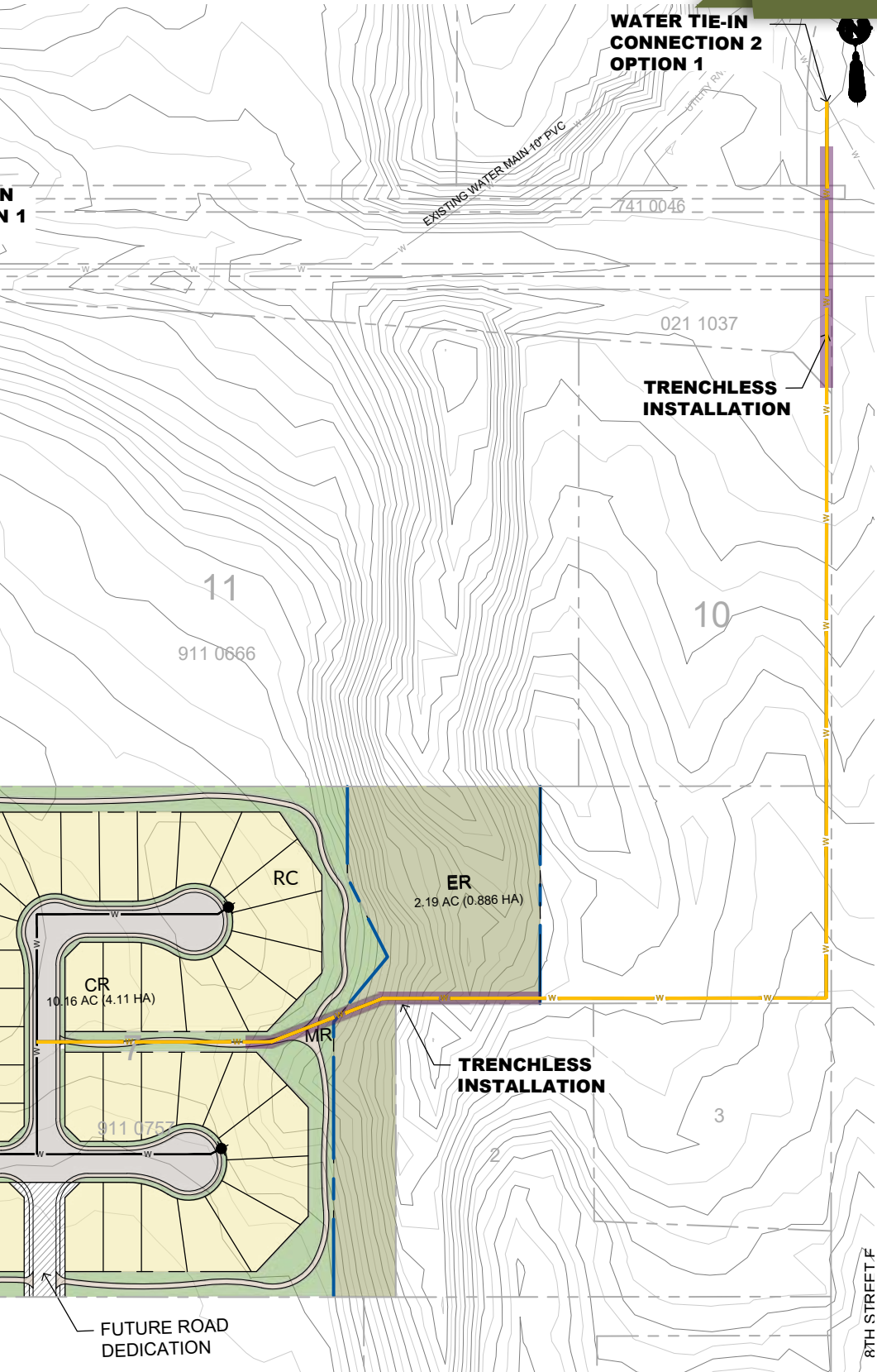


Figure 10: Water System Servicing

6.0 Servicing



LEGEND

EXISTING WATER MAIN	
PROPOSED WATER MAIN	
PROPOSED FIRE HYDRANT	
PROPOSED OFFSITE WATER MAIN CONNECTION	
PROPOSED OFFSITE WATER MAIN LOOPING CONNECTION OPTION 1	
PROPOSED OFFSITE WATER MAIN LOOPING CONNECTION OPTION 2	
TRENCHLESS INSTALLATION	

FIGURE 1

2291463 ALBERTA LTD
HERITAGE POINTE SOUTH



6.1.2 Sanitary Servicing

Sanitary Sewer Servicing will require installation of new sanitary sewers within the proposed roadways and utility right-of-way within the Plan Area. The servicing concept also includes two lift stations that will pump sewage collected in gravity mains to the existing wastewater system in Heritage Pointe. The area has been divided into two sewage catchments:

- 1) Sanitary Catchment Area 1 will flow by gravity to a low point east of the multi-family site located in the central part of the site. A small lift station will be constructed to handle flows from the upstream development. Lift Station 1 is proposed to pump west via forcemain to the high point of Sanitary Catchment Area 2 (West Entrance).
- 2) Sanitary Catchment Area 2 will flow by gravity to the low point of the site located at the corner of Dunbow Road and 2nd St E. A lift station will be constructed to handle flows from catchment 1 and 2. The upstream gravity system will also need to accommodate these flows. Lift Station 2 will pump sewage off site to the Heritage Pointe Development. The forcemain is proposed to run along Dunbow Road, and ultimately crossing Dunbow Road at 8th Street E. The proposed forcemain will connect to the existing system at Ranche Drive and Heaver Gate, to avoid potential capacity constraints in the upstream existing system.

The final connection point within the existing system will be identified during detailed design.

At the time this report was developed, the design flows were predicted to be greater than the existing capacity of the closest connection points in the existing Heritage Pointe sewer system. As a result, it is recommended that the connection to the existing system be completed at the intersection of Ranche Drive and Heaver Gate, subject to final confirmation of the capacity of the system at that location.

For the tie-in to the existing gravity system, a temporary access and traffic deviation will be required. Communication with private landowners is also required, as there will be a temporary disturbance during the installation.

To minimize impacts along Dunbow Road, construction of the force main should be installed by horizontal directional drilling to avoid impacts to traffic along the busy road. Easements and/or land acquisitions would be required to protect the utility right-of-way of the proposed water main.

Two lift stations will be required to service the development lands. The second lift station will pump the sewage from the development area to the Heritage Pointe system upstream of the existing Wastewater Treatment Plant (WWTP).

Opportunities for potential future servicing connections for wastewater servicing from the Plan Area extending to future communities within close proximity, to the Plan Area should be considered at the LU/OP stage.

The proposed sanitary sewer system and proposed tie-in connections area shown on **Figure 11: Sanitary Servicing System**.

6.0 Servicing



6.1.2.i

Final sanitary sewer mains and force main alignments shall be determined by detailed design engineering at the subdivision stage, to the satisfaction of Foothills County.

6.1.2.ii

Sump pumps and stormwater drainage systems shall not be connected to the wastewater system.

6.1.2.iii

The developer shall be responsible for all costs necessary to expand and/or upgrade the wastewater utility system to service Heritage Crossing, including Water Act and Environmental Protection and Enhancement Act approvals to satisfaction of the utility provider and the provincial regulatory approvals agencies.

6.1.2.iv

The developer shall execute and comply with a development agreement to the satisfaction of Foothills County for the construction of all required on site utility infrastructure, including that required for wastewater.

6.1.2.v

Future connections are at the discretion of the utility provider and Foothills County. Endeavors to Assist shall be considered at the subdivision stage to reimburse existing area developers for bringing services to the area.

6.2.iii

The location of all wastewater utilities, the provision of rights-of-way, easements, and related line assignments should be addressed to the mutual satisfaction of Foothills County, the developer, and the utility provider.



UTILITY PLAN
(041 1507)

IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE

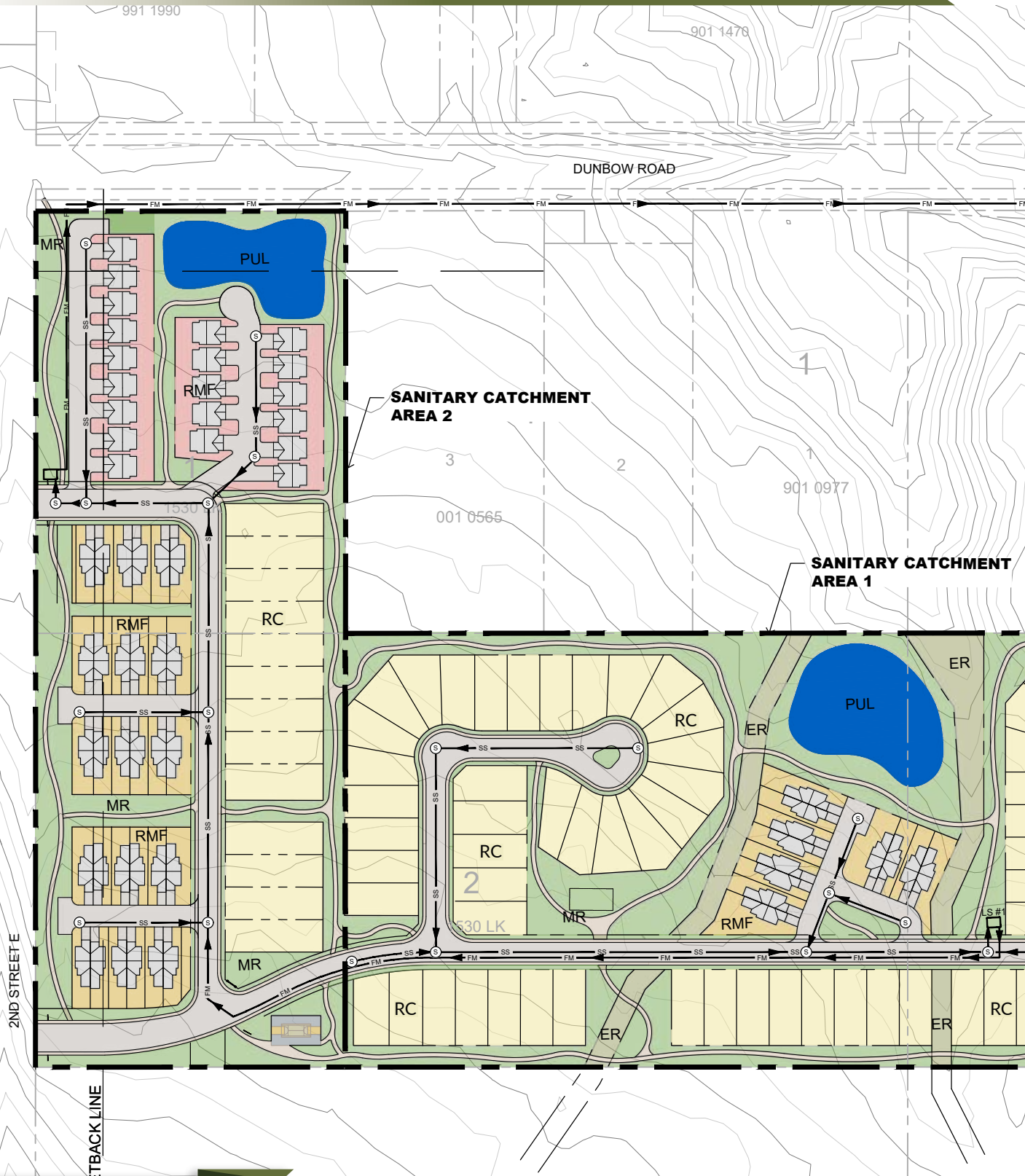
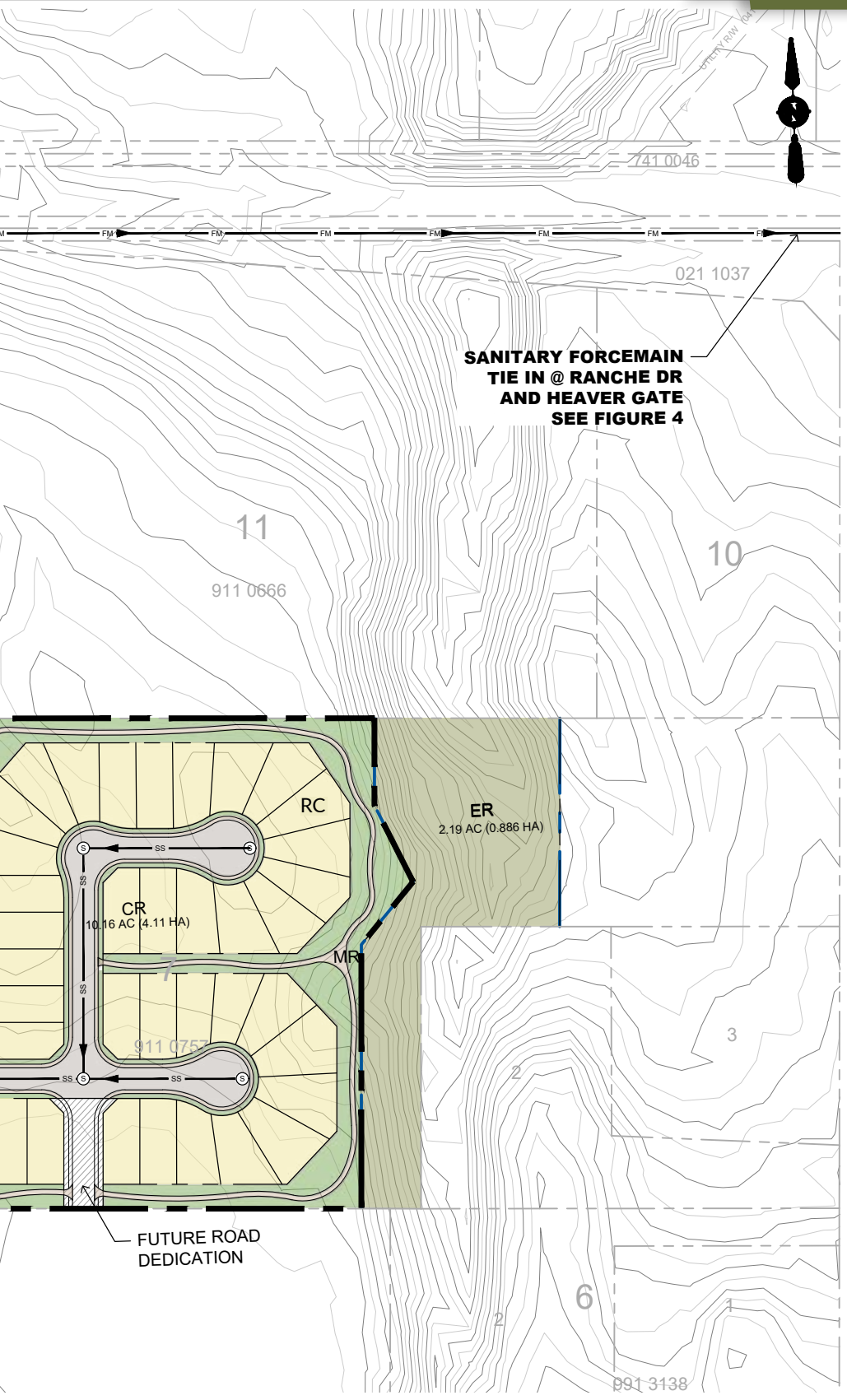


Figure 11: Sanitary Servicing System

6.0 Servicing



LEGEND

- PROPOSED GRAVITY MAIN
- FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED FORCE MAIN
- PROPOSED LIFT STATION

FIGURE 2

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HERITAGE POINTE SOUTH



6.1.3 Stormwater Servicing

The stormwater management system concepts presented are based the Stormwater Management Plan by LGN Consulting Engineering Ltd. The Stormwater Management Plan outlines the drainage concepts that will be implemented in the development. The stormwater management system will follow a traditional dual drainage system with a minor pipe system and a designed overland drainage system that incorporates the roads, curbs, and other designed overland flow paths as well as stormwater management facilities. Catchment boundaries were defined in the Stormwater Management Plan, divided into the North Pond and South Pond areas. The pond in the middle of the development will be designed as a wet pond, the pond to the north, closest to Dunbow Road, will be a dry pond.

The proposed stormwater management system is shown on **Figure 12: Stormwater Management System**.

The storm water runoff drains from the high point in the South West corner into two catchment areas. This runoff will drain into respective stormwater ponds through major and minor systems, before being released into the downstream drainage system.

An oil grit separator will be required upstream of both ponds and 70 l/s/ha for minor system flows.

North Pond Catchment

The proposed dry pond facility will generally be designed to meet the following criteria:

Upstream Drainage Area: 4.88 ha
Active Storage, Volume: 2,612 m³, Depth: 1.5 m
Freeboard Elevation 1055.3 m
Approximate HWL: 1055.0 m
Pond Bottom: 1053.5 m
Design detention release rate of 22.9 l/s

The north pond outlet will be connected to the existing ditch located on the south side of Dunbow Road. Construction of the pond outlet will require a control structure that will limit the offsite discharge to the defined design release rate.

The outlet to the ditch will require erosion protection. Easements and/ or land acquisitions would be required to protect the utility right of way of the proposed water main. The final arrangement for the discharge will be subject to municipal, Environmental Protection and Enhancement Act, and Water Act approvals.

South Pond Catchment

The proposed wet pond facility will generally be designed to meet the following criteria:

Upstream Drainage Area: 9.2 ha
Permanent Pool: Volume: 1,561 m³
Depth below water line: 2.5 m
Active Storage: Volume: 4,526 m³
Depth Above NWL: 2.0 m
Freeboard Elevation 1,053.8 m
Approximate HWL: 1,053.5 m
Pond NWL: 1,051.5 m
Pond Bottom: 1,053.5 m
Design detention release rate of 43.2 l/s

South Pond Outlet Option 1: The south pond outlet could be to the existing overland flow path that runs through the proposed development. The flow path continues across the private lands north of the site, ultimately discharging to the ditch on Dunbow Road.

South Pond Outlet Option 2: The south pond outlet could be to the existing natural drainage channel at the east edge of the development site. The flow path continues across the private lands north of the site, running through a culvert under Dunbow Road.

6.0 Servicing



South Pond Catchment cont.

Construction of the pond outlet will require a control structure that will limit the offsite discharge to the defined design release rate. The outlet will require erosion protection. Easements and/or land acquisitions would be required to protect the utility right-of-way of the proposed storm outlet. Each agreement will need to protect the outlet drainage path from alteration or removal. The final arrangement for the discharge will be subject to Municipal, Environmental Protection and Enhancement Act, and Water Act approvals.

Management of stormwater should not exceed pre-development runoff discharge (both volume and peak discharge). The analysis supporting such a stormwater management strategy shall be undertaken using a continuous simulation, Water Balance Model approach.

6.1.3.i

At the subdivision stage, where a stormwater management facility is proposed, the developer shall submit a detailed Stormwater Management Plan that is consistent with the Preliminary Stormwater Management Plan prepared by LGN Consulting Engineering Ltd. The Stormwater Management Plan should address operations and maintenance, include a conceptual design plan, and a landscape plan, and any other information determined to be necessary by Foothills County to evaluate the proposed facility.

6.1.3.ii

Land identified as a PUL contains either stormwater features or lift stations required for wastewater services. The Municipality shall take responsibility of these PUL parcels upon issuance of a final acceptance certificate to the satisfaction of Foothills County.

6.1.3.iii

The location of all stormwater utilities and the provision of rights-of-way and easements, and related line assignments shall be addressed to the mutual satisfaction of Foothills County, the developer, and the utility provider.



UTILITY R/W
34' 1507'

IF NOT 25 mm ADJUST SCALES
25 mm

SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11x17) SIZE DRAWINGS UNLESS NOTED OTHERWISE

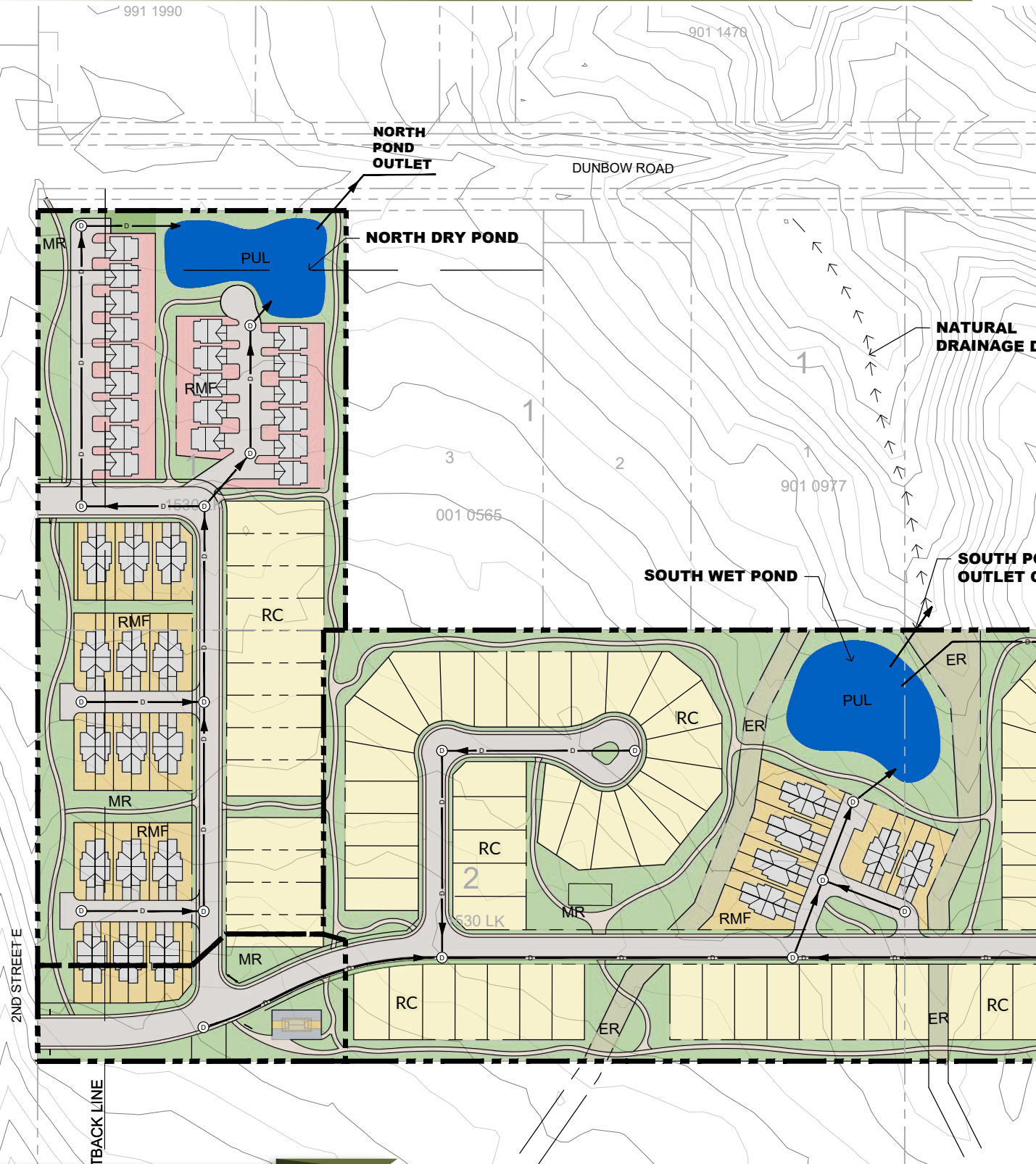
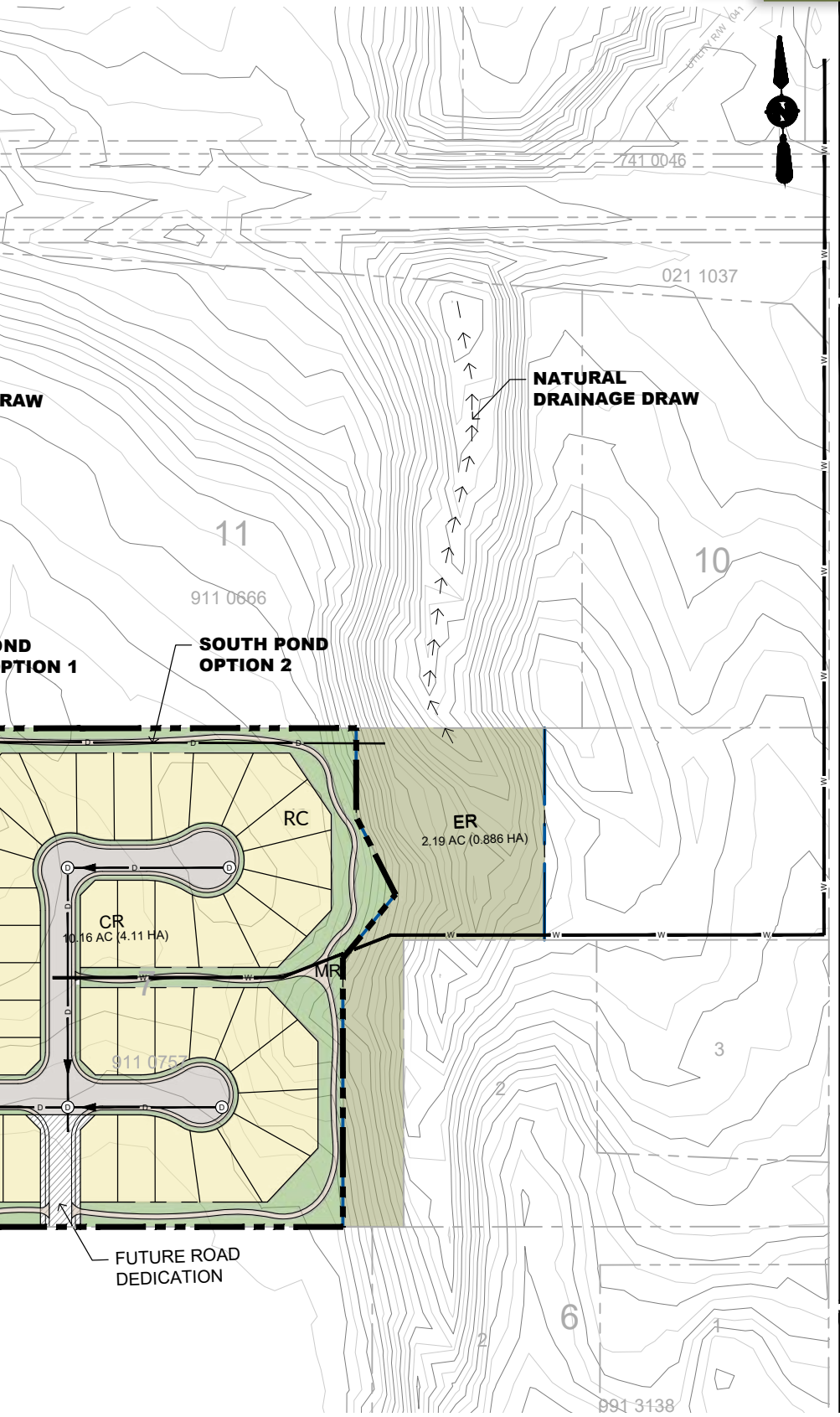


Figure 12: Stormwater Management System

6.0 Servicing



Associated Engineering



LEGEND

- PROPOSED GRAVITY MAIN
- FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED MINOR STORM CATCHMENT AREAS

FIGURE 3

2291463 ALBERTA LTD
HERITAGE POINTE SOUTH



6.2 Shallow Utility Servicing

It is expected that the shallow utility needs of the development (natural gas, electrical, communications, and cable) will be provided by an extension of existing infrastructure in the area. Utility providers in the area should be engaged during subsequent planning and design to determine specific utility requirements onsite, as well as potential upgrades to offsite infrastructure that may be required to support the development.

6.2.i

The Plan Area shall be serviced by shallow utilities including electricity, gas, cable, telephone, and high-speed internet, and must be installed at the sole expense of the developer to the extent required in the Development Agreement. Any upgrades required for shallow utility service shall be the responsibility of the developer to the satisfaction of the utility provider and Foothills County.

6.2.ii

Utility rights-of-way and easements, public utility lots, and road rights-of-way may be required as determined necessary to facilitate order and sequential development. A developer may be required to provide the utility rights-of-way or easements necessary to accommodate the extension of Municipal utilities through or adjacent to a site to allow for its servicing.

6.2.iii

The developer shall execute and comply with a Development Agreement to the satisfaction of Foothills County for the construction of all required on site utility infrastructure.

6.2.iv

The location of all shallow utilities and the provision of rights-of-way and easements and related line assignments should be addressed to the mutual satisfaction of Foothills County, the developer, and the utility provider.



7.0 Infrastructure





7.1 Transportation

7.1.1 External Transportation Network

In 2005, Alberta Transportation completed a study to determine the land requirements and design of an interchange at Dunbow Road and Macleod Trail. **Figure 15: Dunbow Road Interchange**, depicts the interchange as recommended by the Province. In 2015, Foothills County installed the signalized intersection at Dunbow and Highway 2A as an interim measure to improve safety.

In 2019, Foothills County undertook a Functional Study of the Dunbow Road corridor between Highway 2A (Macleod Trail) and Deerfoot Trail to accommodate additional growth and ensure efficient access to Dunbow Road for emergency vehicles. Dunbow Road has been constructed to a two-lane rural standard between Deerfoot Trail and Macleod Trail. It functions as a major collector and will be upgraded to a four-lane standard. 2nd Street East has been identified as requiring upgrades to accommodate Heritage Crossing.

The intersection of Dunbow Road and 8th Street was constructed to a flared standard with a dedicated left turning lane and two through lanes in both the eastbound and westbound directions. The intersection of Dunbow Road and 2nd Street East has also been equipped with left turning bays but it has only one through lane eastbound and one through lane westbound. Acceleration and deceleration lanes have been constructed to accommodate right turns on its southbound approach.

Foothills County and Watt Consulting Group completed a Functional Planning Study in March of 2022, which outlines options for improving conditions at the intersections of Dunbow Road and 2nd Street East and Dunbow Road and 8th Street. Bunt & Associates completed a Transportation Impact Assessment (TIA) in August of 2022, which determined that the functional planning work completed to date, including the recommendations regarding the treatment at Dunbow Road and 2nd Street East intersection, meets the requirements to facilitate Heritage Crossing to the satisfaction of Foothills County.

7.1.1.i

The developer shall contribute to the improvement of Dunbow Road by way of Foothills County's Community Sustainability Fee, as outlined in the County's Development Agreement, and paid for at the subdivision stage to the satisfaction of Foothills County.

7.1.1.ii

The developer shall execute and comply with the County Development Agreement for all transportation related construction and contributions to the satisfaction of Foothills County.

7.1.1.iii

2nd Street East shall be upgraded to a nine (9) metre paved surface within a 30 metre right of way in accordance with the Bunt & Associates Transportation Impact Assessment, at the sole expense of the developer and to the satisfaction of the Foothills County. The developer shall dedicate land necessary to accommodate the upgrade to the satisfaction of Foothills County.

The long-term conceptual illustration on **Figure 15: Dunbow Interchange** is for illustrative purposes only. The illustration identifies how the long term road system could be supported, and it can be revised without amendment to this plan.

7.0 Infrastructure



7.1.2 Internal Transportation Network

Internal roads are intended to be constructed by the developer and owned and maintained by Foothills County upon issuance of a Final Acceptance Certificate. In order to allow for walkable connections throughout the community, it is proposed that a 16 metre Residential Road Standard be utilized as depicted in **Figure 16**.

A second internal road standard has been developed for the connections to the multi-family villas and bungalows, and provides a 12 meter road right of way as depicted in **Figure 17: Villa/Bungalow Street Section**. The final design and construction of internal roads will be engineered in conjunction with the Public Works department to the satisfaction of Foothills County.

7.1.2.i

The designation and design of local roadways within the internal transportation network, such as the classification and intersection/access spacing, shall be designed to the satisfaction of Foothills County.

7.1.2.ii

All internal roads shall be constructed by the developer to the satisfaction of Foothills County. The County will own and maintain the internal roads upon issuance of a Final Acceptance Certificate.

7.1.2.iii

Endeavors to Assist should be considered, in collaboration with Foothills County, to address planned excess capacity (i.e. - oversizing) or in providing assistance to benefiting areas, as a result of constructing infrastructure improvements or boundary roads. This consideration ensures appropriate compensation is provided to the developer who front ended the cost for benefiting lands. Applicable Endeavors to Assist are typically determined at the subdivision stage and shall be to the satisfaction of Foothills County.

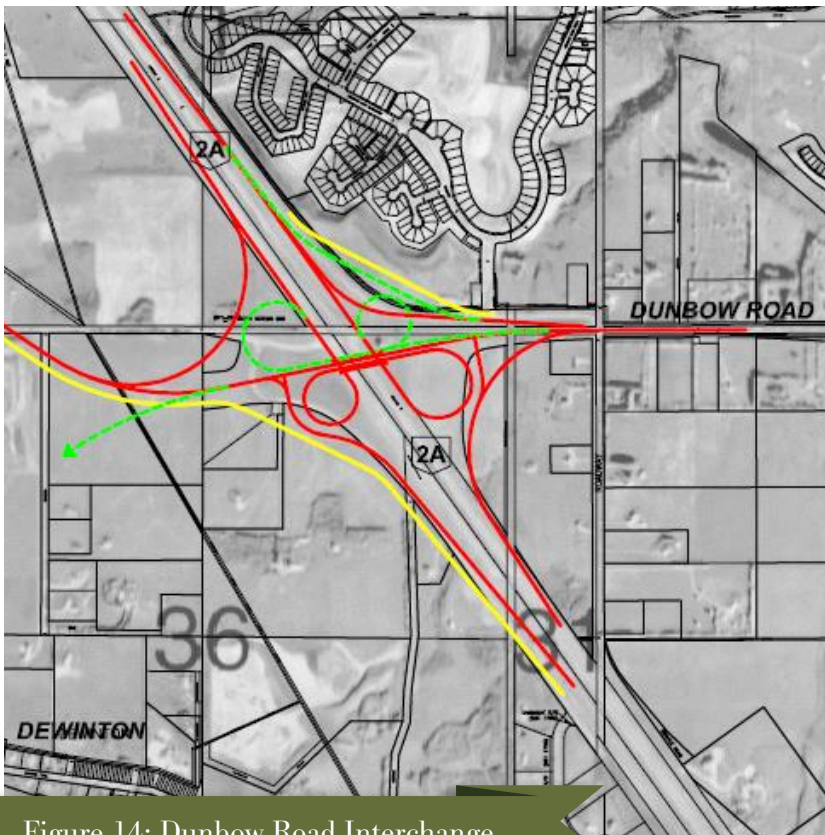


Figure 14: Dunbow Road Interchange



Figure 15: 16m Residential Street



Figure 16: 12m Villa/Bungalow Street



7.0 Infrastructure



7.2 Emergency Services

Emergency services include fire, EMS, and protective service needs. Fire and EMS services will be provided by the Foothills Fire Department from the Heritage Pointe station, while the protective services will be provided from local Royal Canadian Mounted Police (RCMP) detachments. As growth and development occurs within the Plan Area, the developer needs to ensure an appropriate and efficient level of fire and protective service is made available for current and future residents in order to provide a safe and livable community.

7.2.i

At the land use stage, the developer, in association with Municipal Fire Services, the RCMP, and other emergency service providers, shall ensure an adequate level of service is provided, as established by the provincial authority, to meet current and future needs based on projected population growth and demographic change in the Plan Area.

7.2.ii

All development within the Plan Area shall provide fire suppression in accordance with Foothills County requirements.

7.2.iii

Policing will be provided by the RCMP as per the Provincial Police Service Agreement, until such time as another policing solution is required or sought out.

7.2



Key Plan



Section 1 - 1

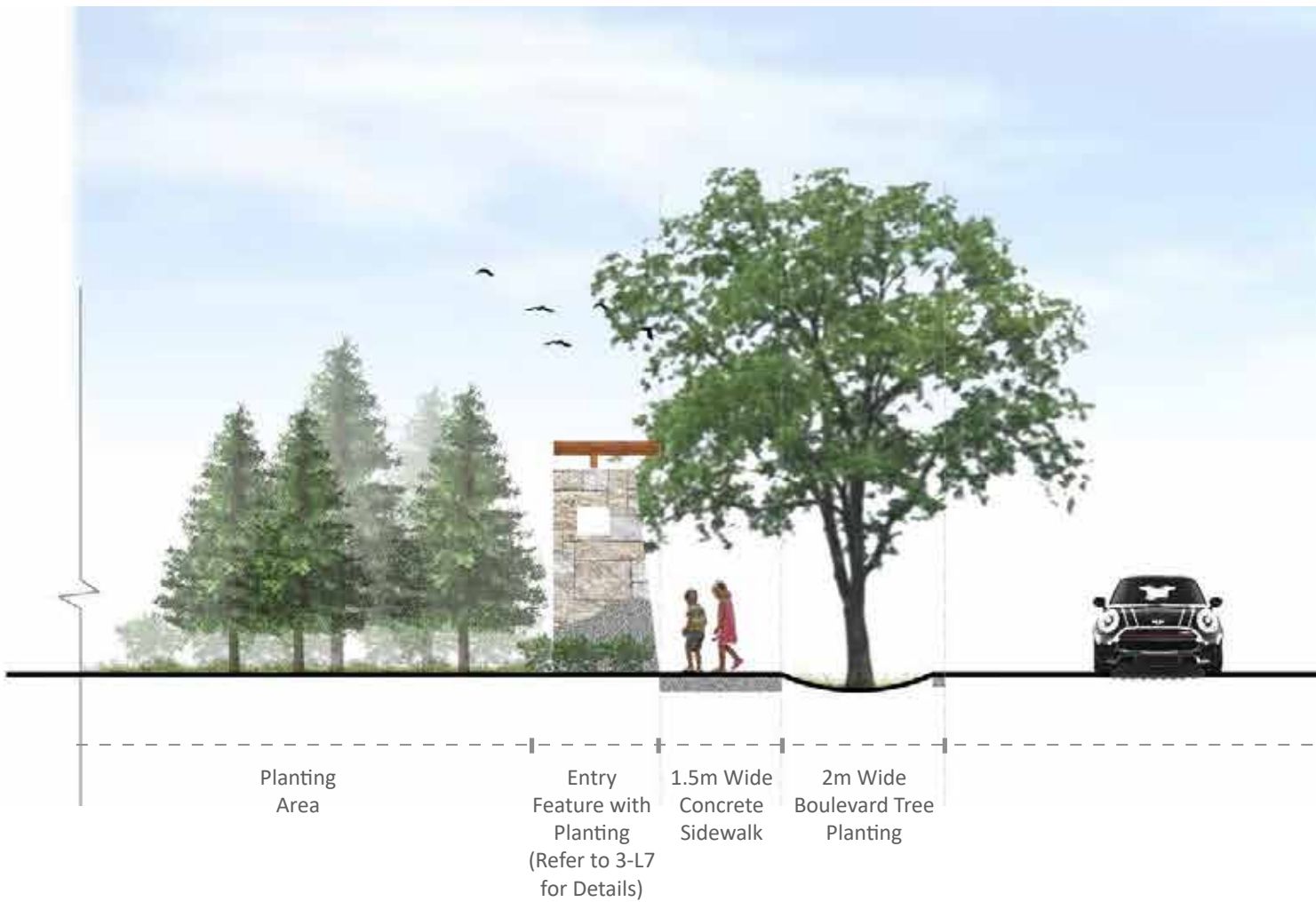
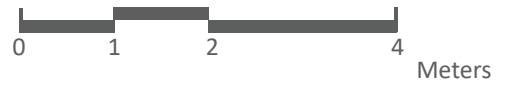


Figure 17: Entry Street Section

7.0 Infrastructure





 8.0 Implementation Framework





8.1 Phasing

Phasing within Heritage Crossing will be determined by market demand and servicing efficiency at the discretion of the developer. A phasing strategy may be developed at a subsequent stage once the correct location for offsite and onsite servicing upgrades have been confirmed. More than one phase may proceed at the same time and the order and size of phases may change without amendment to this plan.

8.2 Plan Amendment

The Heritage Crossing ASP falls within a hierarchy of applicable statutory plans at the regional and municipal levels. Any amendment to the plan will align with the applicable statutory plans and Foothills County's process for amending Area Structure Plans.

8.1.i

Each stage of development may contain one or more phases at the discretion of the developer.

8.2.i

Any changes to the Heritage Crossing ASP, be they text or map alterations, may require amendment of the ASP unless otherwise stated or deemed necessary by the Approving Authority. Applicants within the ASP area shall submit all necessary supporting information to Foothills County to allow for evaluation of the potential amendment.



8.3 Public Engagement

The project team has initiated a robust engagement strategy to communicate key goals with area residents, stakeholders, Foothills County councilors, and the general public. The overarching goal was to effectively engage with the public and stakeholder groups to raise awareness of the plan, encourage feedback on its details, and gain support for the resulting Heritage Crossing ASP.

The project team is dedicated to a transparent and inclusive engagement process. We recognize that the experts about a site are those who live in the area and are committed to working with stakeholders to achieve our client's vision.

Tools and Strategies

The project team provided an array of feedback mechanisms that allowed both event attendees and those who could not attend the opportunity to provide their thoughts and concerns to the project team in a variety of ways. The team aimed to be transparent, inclusive, responsive, and timely throughout the process to build community and stakeholder trust.



A project website was created to provide updated information regarding the vision, objectives, and progress of the project. The website allows updates to be provided as they happen to keep residents and stakeholders apprised of progress and encouraging feedback at each stage.



A letter detailing the vision, site specifics, and objectives was sent to all residents in a 1.0 mile radius of the Plan Area and all residents of HeritagePointe. The letter included the website and an email address which respondents could use to provide their feedback.



An open house was held on Thursday June 09, 2022 prior to submission of the ASP Application. The open house was framed as a community conversation with members of the Township



“What We Heard” Report

All input from participants in the engagement process has been recorded and compiled into a “What We Heard” report. This “What We Heard” document was made available to the public through the associated project website and has been included under separate cover with this ASP application. Every effort will be made to listen to and incorporate public feedback.

We acknowledge that not all suggestions from stakeholders have been incorporated into the final design. In light of this, the “What We Heard” Report identifies participant suggestions and concerns and outlines which feedback has been incorporated. When input has not been integrated the team has addressed why these changes were not applied.



9.0 Glossary





9.1 Terminology

Architectural Controls: a set of guidelines to create a unified and cohesive visual community. In this case, the architectural controls aim to create a rural residential neighbourhood theme and provide for balance in forms, colours, and materials to make a beautiful and architecturally varied community.

Area Structure Plan: is a statutory plan, adopted by Bylaw which provides a framework for redesignation, subdivision and development of a specific area of land.

Biophysical Impact Assessment: A Desktop Analysis with some field verification, identifying any potential biophysical constraints or issues and providing recommendations for potential future Biophysical Impact Assessment work required.

Built Form: the shape, configuration, and appearance of buildings and the relationship of these buildings to the streetscape and one another.

Density: the number of units per acre.

Gross density: the number of dwelling units per acre of the entire Plan Area (gross area).

Net density: the number of dwelling units per acre of the developable acreage.

Development Agreement: an agreement between the developer and Foothills County that outlines the terms and responsibilities for the completion of the community.

Easement: means a dedication of land, or an interest or right held by the municipality, for the purpose of locating public utilities.

Environmental Reserve: lands that are considered unsuitable for development to protect the natural environment, people, and property from hazardous conditions (e.g. flooding) and provide public access to or along lakes and rivers. ER lands are intended to be generally left in their natural condition as much as possible. Public trails may be developed where conditions are favourable.

Forcemain: a pipeline dedicated to conveying wastewater from one point to another with the aid of a pump, typically pumping wastewater from a lift station to a catchment area or discharge point.

Hierarchy of Roads

Local: local roadways serve traffic within a localized area. The local roadways are typically the main access for developments and agricultural, resource and natural areas of the province.

Collector: collector roadways convey traffic from major centres such as communities, and / or commercial, or industrial developments but with overall shorter travel distances. These roadways provide the connection between local roads and arterials, and generally serve traffic between municipalities only.

Arterial: arterial roadways convey people, goods and services inter-provincially only and support traffic over long distances. Access is limited to connections with Highways and Collector roads.

Highway: these highways accommodate the movement of people, goods, and services inter-provincially and internationally. Access is limited and generally only provided for connection to arterial roads.

9.0 Glossary



Land Use Concept: The proposed community planning framework inclusive of the Land Use Concept for the Plan Area. The land use concept highlights the intended form, use, and character from a community design perspective within the Heritage Crossing.

Lift Station: a point along the conveyance path of wastewater that pumps the wastewater from a lower elevation to a higher elevation.

Municipal Land Reserve District: a land use district in the Foothills County Land Use Bylaw used to allow for schools, parks, community facilities, and recreation facilities on municipally owned recreation or educational properties, and land dedicated as reserve, municipal school reserve, community reserve, public reserve, and reserve pursuant to the Municipal Government Act.

Municipal Reserve: lands that are intended for the allocation of recreation facilities for public use. MR may provide important access links to other lands such as river access, and can offer undeveloped green spaces.

Oil Grit Separator: Oil/grit separators are underground storage tanks with multiple chambers designed to remove heavy particulates, floating debris and hydrocarbons from stormwater.

Outline Plan: a non-statutory plan that provides the planning framework for the subsequent redesignation, subdivision, and development of an area of land.

Open Space: lands that are dedicated to the passive

or active recreational uses throughout the plan area for public use. These could be designated as MR, MLR, or ER.

Public Utility Lot: Public Utility Lots retain stormwater and are often designed as public amenity spaces for use during dry periods.. These areas, often empty during dry periods, and are low points in the Plan Area that water is conveyed to in times of 1:100 year events, heavy rainfall, snow melt, or flood events.

Restrictive Covenant: a condition placed on a portion of land through an instrument on Title that restricts the uses allowed on that land.

Stormwater Management Plan: A report outlining the strategies for stormwater conveyance and retention for the entirety of a Plan Area. A more detailed version of the SWMP will be required at subsequent stages and will focus on smaller areas of land.

Transportation Impact Assessment: A Transportation Impact Assessment is completed by a transportation engineer and determines the road network upgrades required over time to support population growth from buildout.

Villa: a housing form characterized by two units side-by-side on a lot. In Heritage Crossing, these are a single-storey residence.

