EVERGREEN Neighbourhood Area Structure Plan



EVERGREEN

Naturally Exquisite

Alleini

Melcor Developments Ltd.

City of Red Deer Bylaw 3217/C-2014 Adopted September 29, 2014

Prepared by: Stantec Consulting Ltd. Executive Place #1100, 4900 Ross St Hed Deer, AB

Stantec

DEVELOPMENTS LTD.

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executive summary

HISTORY

The NW quarter of Section 26-38-27-W4M, hereafter referred to as the Evergreen "Plan Area", has historically been agricultural land. This property has been owned by the Larratt family since 1948, when David Larratt purchased the land from Robert Lund. Since 1975 the Plan Area has been owned by Mr. Larry Larratt.

Shadow Plan

In the northwest portion of the quarter section there is an existing, privately-owned, country residential property. The Developer intends to purchase a portion of this property for inclusion in Evergreen, as such, this area has been incorporated into the NASP boundary shown as "shadow plan". If the Developer is unsuccessful in the purchase of this property, the Evergreen concept will be revised to ensure adequate traffic movement and access to the residential areas adjacent to this area.

EVERGREEN'S VISION

The Evergreen neighbourhood will be a vibrant residential community in northeast Red Deer that is home to approximately 2,212 residents. Evergreen will respect the unique natural features in an effort to protect wildlife habitats, enabling residents and visitors to enjoy beautiful natural surroundings. As a result of its unique open space features, access to primary roadways, and proximity to nearby amenities; Evergreen will be one of the most desirable residential areas in the entire City.

Located approximately 7.0km from Red Deer's downtown, 8.0km from Highway 2, and 5.0km from Highway 11; Evergreen is a convenient place to call home for those employed both in and out of town. In addition, Evergreen attracts new residents by providing a wide range of residential and recreation opportunities based on its extensive open space network and connections to

neighbouring park spaces.

The Land Use Concept for the Evergreen creates a predominantly residential community that supports residents in accessing their daily needs by using alternative methods such as walking or cycling. Access to employment areas, larger-scale retail, destination leisure and cultural spaces is facilitated by excellent pedestrian, transit, cycling, and road connections.

PLANNING PROCESS

The NASP has evolved through a visioning process involving both the Developer and the City's Administration. Through this process, detailed policies and guidelines were developed that were used to direct land use through subdivision and development permit stages. Applications during this time will be developed to collectively shape the development as outlined in Evergreen's Vision.

NASP PURPOSE

The Evergreen Neighbourhood Area Structure Plan (NASP) refines and implements the strategic objectives and policies identified within the Section 26 Multi-Neighbourhood Plan, East Hill Major Area Structure Plan, Neighbourhood Planning and Design Standards, City of Red Deer Municipal Development Plan, and many other plans as previously prepared. It is also informed by specific engineering and transportation studies and servicing constraints in the area.

Interpretation

All images as shown in this NASP have been included for visioning purposes only and should not be used to identify exact locations or be considered an indication of what will be constructed.

background

The purpose of the Evergreen Neighbourhood Area Structure Plan is to describe the land use framework and development objectives for the NW quarter of Section 26-38-27-W4M, which is intended to accommodate residential, commercial, community, and recreational uses.

RELEVANT PLANNING DOCUMENTS

As shown on **Figure A1 - Plan Hierarchy**, the Evergreen NASP has been created to function with and respect existing planning documents. The following relevant documents have been reviewed and referenced in preparation of this NASP:

- Province of Alberta Municipal Government Act (2000)
- Stantec Consulting Ltd Northland Drive/20 Avenue Functional Planning Study (2008)
- The City of Red Deer 2004 Growth Study (2005)
- The City of Red Deer 2012/2014 Strategic Direction (2011)
- The City of Red Deer Commercial Opportunities Study (2010)
- The City of Red Deer East Hill Major Area Structure Plan (2005/2012)
- The City of Red Deer Intermunicipal Development Plan (2007)
- The City of Red Deer Land Use Bylaw (2006)
- The City of Red Deer Mobility Playbook (2013)
- The City of Red Deer Municipal Development Plan (2008)
- The City of Red Deer Neighbourhood Planning and Design Standards (2013)
- The City of Red Deer River Valley and Tributaries Park Concept Plan (2010)
- The City of Red Deer Section 26 Multi-Neighbourhood

Plan (2013)

• The City of Red Deer – Trails Master Plan (2005)

Municipal Government Act (2000)

The Municipal Government Act (MGA) of Alberta outlines the purpose and powers of Municipalities. One of these powers is to require an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land. As stated in s633(2), an Area Structure Plan must describe:

- the sequence of development proposed for the area,
- the land USES proposed for the area, either generally or with respect to specific parts of the area,
- the density of population proposed for the area either generally or with respect to specific parts of the area, and
- the general location of major transportation routes and public utilities.
- and may contain **any other matters** the council considers necessary.

2012-2014 Strategic Direction (2011)

The City of Red Deer's Strategic Direction guides the City along a path and provides focus and purpose. It is the City's most important plan as it shapes the organization, the municipal programs, and services they provide. In 2011, the strategic direction for 2012-2014 was created which strived to make Red Deer a healthy community.

A healthy and happy community is sustainable when people have opportunities for meaningful work and volunteerism, have great relationships, and take pride in the place they call home. Wellused and popular amenities exist for active living and for formal and informal interaction. People



regularly participate in physical activity and intellectual experiences.

Red Deer's community wellness is fundamentally founded on a balanced, proactive, and responsive approach to environmental health, cultural health, economic health, and social well-being -- our pillars of sustainability.

The following are two of six themes from the City's Strategic Direction highlighted for their direct impact on the Evergreen NASP:

Design

Design and plan our community to reflect our character and values.

Our City's planning and urban design has resulted in a welcoming, more walkable and environmentally sustainable community which accurately reflects our character and values. It provides housing options, pedestrian routes, and allows for alternate forms of transportation and deliberate connections to our parks, trails, and well designed public spaces where people can meet and interact and feel a sense of belonging.

Movement

Design for and facilitate integrated movement.

Our deliberate decision to create viable alternatives to single occupant vehicle travel in our transportation network encourages healthy active lifestyles, environmental stewardship, supports safety for people of all ages, increases use of our public and green spaces, and integrates our sidewalks, trails, bike lanes, transit service, rail, and roads with our built environment.

Intermunicipal Development Plan (2007)

The City of Red Deer/Red Deer County Intermunicipal Development Plan (IDP) establishes a broad growth framework. It provides policy direction for the preservation of Natural Capital, areas of common land use planning interest, long range planning, infrastructure and services provision (including opportunities for cooperation), and Annexation Areas for The City. As identified in the IDP, the Evergreen Plan Area is located within the City of Red Deer's Growth Area.

Municipal Development Plan (2008)

The City of Red Deer Municipal Development Plan (MDP) outlines broad policies for guiding growth and changes in the City for the next twenty-five years. Among many other things, the MDP sets out the following policies regarding neighbourhood designs:

- Density in new neighbourhoods shall ensure a minimum of 14.80 dwelling units per net developable hectare.
- The City shall continue to require a mix of housing types and forms in all residential neighbourhoods.

The Evergreen Plan Area is identified in the MDP for future residential development; there are no constraints listed for the development.

2004 Growth Study (2004)

The purpose of the 2004 Growth Study was to focus on land absorption rates and suture land inventory requirements for industrial, residential, and commercial land uses within the City of the following 50 years. The Study was also to consider future need to open space, environmental preservation areas, and public service uses. In this Study, the Evergreen Plan Area was identified in Growth Sector B, for future residential development at the population threshold of 90,000-115,000.

River Valley & Tributaries Park Concept Plan (2010)

The Red Deer River and Tributaries Park Concept Plan identifies lands that are best suited for potential trails and parks within the City of Red Deer Growth Area. This Plan identifies the Evergreen Plan Area as a wetland with associated streams. This area is also identified as "East Hill Park" a minor park node.

Commercial Opportunities Study (2010)

The City of Red Deer Commercial Opportunities Study defines a vision for commercial growth for the City of Red Deer and aids in the forecasting of retail/service/office development. The Evergreen Plan Area was identified Figure A2 - Municipal Development Plan and Northland Drive Alignment.





as a possible location of a District Centre; however, that direction was not reflected in the East Hill MASP or Section 26 Conceptual Plan.

Mobility Playbook (2013)

The Red Deer Mobility Playbook is a user-friendly tool to identify the strategies and actions needed to provide Red Deerians with more mobility choices. The following action items were identified in the playbook:

- Put pedestrians first by using human scaled streets
- Create walkable hubs
- Build quality footpaths and maintain them
- Place transit stops where other things are happening
- Ensure access for pedestrians, motorists, cyclists
- Improve the transit waiting experience
- Tie urban networks into recreation
- Plan with the entire street cross-section in mind
- Create a Red Deer model for cycling
- Establish new housing standards
- Require transit-oriented development
- Enforce and provide incentives for minimum density targets

- Define a set of street typologies based on the desired end users
- Balance the network with all users in mind
- Ensure drivers have a place without infringing on quality for other models

Trails Master Plan (2005)

The City of Red Deer Trails Master Plan does not identify future trails near the Evergreen Plan Area; however, a proposed extension of Waskasoo Trail is shown along the east bank of the Red Deer River. This extension would span 3,860m from Mackenzie Recreation Area to River Bend Golf Course and consist of a 3.0m asphalt trail with furnishings and wayfinding signage.

Highway 11A/Northland Drive/20th Avenue/McKenzie Road Functional Planning Study

The City of Red Deer prepared a Functional Planning Study for the Highway 11A/Northland Drive/20th Avenue/ Mckenzie Road corridors from Highway QE2 north to Highway QE2 south. In preparation of the Evergreen Concept Plan, the *Northland Drive/20 Avenue Functional Planning Study* was reviewed for its potential road alignment and to ensure an adequate right-of-way

Figure A3 - East Hill Major Area Structure Plan.



in the Plan Area. The roadway improvements and various intersection options for 30th Avenue/Northland Drive have been incorporated into the Concept Plan.

East Hill Major Area Structure Plan (2013)

The City of Red Deer East Hill Major Area Structure Plan (MASP) sets out the broader transportation and land use objectives for multiple quarter sections in east Red Deer.

The following elements were shown within the MASP which may affect the planning of the Evergreen Lands Plan Area.

Transportation

30th Avenue

30th Avenue runs along the west boundary of the Plan Area; this roadway is currently constructed to a paved rural standard utilized primarily to access rural residential homes and the River Bend Golf and Recreation Area. The East Hill MASP identifies 30th Avenue as a major northsouth arterial roadway which will require upgrading to meet such a standard.

Northland Drive

Northland Drive is an expressway that will run along the northern boundary of the Plan Area. As part of this roadway, a major intersection is envisioned to be located at its crossing with 30th Avenue. The Evergreen Plan Boundary has been designed to accommodate this intersection.

Transmission Corridors

Two transmission corridors are proposed to run along the Plan Area boundary. The right-of-way to the east will be utilized by the City of Red Deer's Electrical Light and Power department. The right-of-way to the north will run along Northland Drive and be registered to AltaLink.

These transmission rights-of-way, along with the roadways along the north and west will also act as firebreaks in support of Alberta's FireSmart design principles.

School Site

A school and major recreation site has been identified for location one quarter section south of the Plan Area. It is anticipated that this site will contain city-wide sports fields and high school sites for the Catholic, Francophone, and Public School authorities. Although located off-site of the Evergreen Plan Area, providing connections toward this area will be importance for the neighbourhood.

Neighbourhood Planning and Design Standards (2013)

The City of Red Deer's Neighbourhood Planning Design Standards states the following matters must be considered when preparing a Neighbourhood Area Structure Plan:

- Major Area Structure Plan
- Natural, historical, and constructed features
- Lane versus laneless subdivision
- Street classification and layout
- Oil wells, gas wells, and pipelines
- Traffic, rail, industrial, and/or commercial noise
- Traffic volume, capacities, and constraints
- Drainage routing and detention
- Erosion and sediment control
- Municipal Reserve parcels
- Transit system
- Development phasing
- Community mailboxes
- Enhances optional subdivision amenities

In addition, nine guiding principles are identified for all neighbourhoods. This principles are as listed below and are discussed throughout the remainder of this NASP.

- 1. Natural areas and ecosystem enhancement
- 2. Mixed land uses
- 3. Multi-modal choice and connectivity
- 4. Compact urban form and density
- 5. Integrated parks and community spaces
- 6. Housing opportunity and choice
- 7. Resilient and low impact neighbourhoods
- 8. Safe and secure neighbourhood
- 9. Unique neighbourhood identify

Section 26 Multi-Neighbourhood Plan (2014)

The City of Red Deer undertook a planning exercise to examine the entire Section 26 area.

The purpose of a Multi-Neighbourhood Plan was noted as to establish a high level conceptual plan that achieves the 9 Neighbourhood Planning Principles, as identified in the Neighbourhood Planning and Design Standards; identifies synergies, features, and connections; and creates distinct neighbourhood character.

The Section 26 Multi-Neighbourhood Plan outlines broad land uses, including environmental reserve and open space, and arterial and collector road patterns. Although Neighbourhood Area Structure Plans may vary in design and layout from the Section 26 Multi-Neighbourhood Plan, the intent is that the overall multi-neighbourhood plan is retained.

The following are a few of the key directions identified for guiding the development of the Section. Evergreen has been designed to be consistent with this Multi-Neighbourhood Plan.

Key Directions Natural Areas

- Protect, connect, and integrate the key natural features of the site
- Create ecological connections via a looped trail

Mixed Land Uses

- Create three neighbourhood nodes, featuring housing with easy access to daily services, and schools. Apply a family of public design elements
- Neighbourhood nodes will provide medium and high density housing alongside neighbourhood commercial uses.

Multi-modal Choice

- Create a connected network of off-street trails for pedestrians and cyclists, connecting regional trail system to Commercial District
- Strive for a grid-like network of streets and trails, while avoiding large, unattractive parking lots
- Strong connections between proposed high

Figure A4 - Section 26 Multi-Neighbourhood Plan.



LEGEND



schools and adjacent properties will make schools an integral part of the neighbourhood

Compact Urban Form and Density

- Create small, tight blocks to improve connectivity
- Transition from higher density to lower density development focused around the nodes

Integrated Parks and Open Spaces

- Create a variety of park types, and link to open spaces
- Emphasize high quality park design and diversity rather than amount of park space achieved

Housing Opportunity and Choice

- Incorporate diverse housing types: single family, duplexes, townhouses, apartments.
- Mitigate visual impacts of the ELP sub-station

Resilient, Low Impact Neighbourhoods

 Manage stormwater on the surface and use features to create resilient, low impact neighbourhoods

Safe and Secure Neighbourhoods

• Use environmental design principles that naturally reduce speeds, create safe on-street pedestrian trails, and utilize effective crime prevention

Unique Neighbourhoods

• Allow Developers to create and apply their own styles, building materials, and architecture

Concept Plan Elements

The following elements were identified in the Section 26 concept plan for location within the Evergreen Plan Area.

Open Space

Evergreen is shown focused around the existing central water body with enhanced open space connections surrounding. These open spaces will be developed with trails to provide pedestrian short cutting to community nodes and destinations.

A north-south open space connection is shown along the east boundary of the Plan Area via the use of the utility transmission corridor.

Amenities

A community node is shown at the terminus of the main gateway road adjacent the open space.



Land Use Bylaw (2006, 2013)

The City of Red Deer Land Use Bylaw (LUB) describes all available land use districts to be utilized throughout the City and identifies any potential land use constraints available at the time of its creation. There are no constraints listed for the development of the Plan Area in LUB. This Plan has been developed to conform to the bylaw and all its land use regulations.

Subsequent to NASP approval, the Land Use Map will be amended to redesignate the Evergreen Plan Area to the land uses as described in this Plan.

On behalf of Melcor Developments Ltd., Stantec Consulting Ltd. has prepared this NASP; which meets the requirements as previously identified.

LEGEND



setting

EVERGREEN NEIGHBOURHOOD AREA STRUCTURE PLAN MELCOR DEVELOPMENTS LTD.

Figure 1 - Location Plan.

♠ N **River Bend** Golf Course & Recreation Three Mile River Boundary Cit√ Height 67th St Clearview Ridge Timberland Gaetz Lakes Hwy 11 55th St Ave 30th

LOCATION

The Evergreen Plan Area is located in northeast Red Deer within the northwest quarter of Section 26-38-27-W4M. This area is located northeast of the 67th St/30th Ave intersection and is sized at 153.2ac (62.0ha).

NATURAL FNVIRONMENT

The most prominent feature of this site is a water body located in the center of the Plan Area. This water body was caused by the introduction of a levee restricting natural flow patterns and is recorded as not naturally occurring.

In addition, a ravine runs at a diagonal across the northeast corner of the Plan Area. This ravine consists of mature tree growth and surrounds a seasonal stream.

Topography

The site is relatively flat with a gentle slope toward the central water body and in the northeast corner surrounding the ravine. Overall, the site drains into the central water body.

Vegetation

The existing vegetation located on site is agricultural in nature with the exception of that surrounding the water body and the northeast ravine.

As noted in the Environmental Site Assessment completed for the Plan Area, vegetation on the property includes cultivated agricultural grasses and plant species which are representative of the Aspen Parkland.

Conservation

The Evergreen neighbourhood has been designed to support existing natural vegetation, minimize potential negative impacts, and enhance the overall community by maintaining ties to the natural environment.

Steps will be taken during construction to minimize the impact on the previously noted water body and vegetation.







LEGEND

	Abandoned Fresh Water Pipeline 7154-5
	Discontinued Fresh Water Pipeline 7154-21
	Oil Well Effluent - 16696-10
	Oil Well Effluent - 16696-11
	Abandoned Oil Well Effluent - 16703-1
	AltaLink Instrument 962 214 807
	Conserve Oil & Gas Right-of-Way
1000	Conserve Oil & Gas Lease Agreement
	Well Site
	NASP Boundary

BUILT ENVIRONMENT

Buildings

One temporary structure is located in the northwest portion of the Plan Area.

Utilities

As shown on **Figure 3.0** - **Nature Resources**, there are several natural resource rights-of-way running through the Plan Area. The following descriptions of these utilities are based on a Phase One Environmental Site Assessment, completed in 2012 by ParklandGEO, the Abacus Datagraphics database, and the property's land title.

Pipelines

At time of submission, all Conserve Oil & Gas pipelines listed below are in the process of being removed from the Evergreen Plan Area. The Developer will provide confirmation that the pipelines have been removed, the caveat removed from land titles, and a pipeline amendment has been submitted to Alberta Energy Regulator (AER).

R/W Plan 1418 RS - 7154-5

Caveat 2178RJ, registered to Conserve Oil & Gas No. 11 Corporation is a blanket Caveat over the entire quarter section for an easement. This Caveat possibly pertains to the R/W Plan 1418 RS which contains one abandoned fresh water pipeline registered to Conserve Oil & Gas (7154-5). This right-of-way is not listed on the title of the property.

R/W Plan 4432KS - Multiple Pipelines

This right-of-way contains three pipelines registered to Conserve Oil & Gas No. 11 Corporation:

- Discontinued fresh water pipeline 7154-21
- Abandoned oil well effluent 16703-1
- Oil well effluent, level II pipeline 16696-10

R/W Plan 5407 KW - 16696-11

This right-of-way contains an oil well effluent pipeline registered to Conserve Oil & Gas No. 11 Corporation (16696-11) that ties into the 16696-10 line running north-south.

Instrument 962 214 807

This right-of-way runs along the north boundary and is 7.5m in width. It is registered to AltaLink Management Ltd.

Outside of Plan Area

Two rights-of-way run parallel outside the northern boundary of the Plan Area:

- R/W 832 0928
- R/W 565J KS

Well Sites

Abandoned Well Site (12-26)

This former well site was owned by Conserve Oil and Gas. It was abandoned in 1991. Remediation of impacted soil at this site was completed in the summer of 2012 (Rec. Cert. No 1130). The environmental risk associated with the facility is considered to be low to moderate as impacts are considered to be limited to the Lease Area. A Lease Area surrounds this well which has not been in use since the well's abandonment in 1991.

The Developer will provide written confirmation that the Licensee has been contacted and the exact well location confirmed and temporarily marked prior to any construction (includes top soil stripping).

WELL SITE ACCOMMODATION

The Evergreen concept plan has been designed to accommodate the well site using a 5.0m radius development setback and providing a convenient access to the site via the collector roadway and open space systems. This 5.0m radius setback has been provided using a 10.0m wide linear park, approximately 34.0m in length, which will allow for future access to the well and associated working room, if needed. This setback will also ensure minimal disruption to the surrounding areas and prevent accidental contact of construction equipment with the well.

The requirements regarding development setbacks surrounding abandoned wells are outlined in the Alberta Energy Regulator's *Directive 079: Surface Development in Proximity to Abandoned Wells* (2012).

Outside of Plan Area

- Abandoned Well Site (07-26)
 - Registered by Chevron Canada Limited, this well site was abandoned in 1953 and was reported to be reclamation certificate exempt.

• Abandoned Well Site (04-35)

Registered by Chevron Canada Limited, this will site was abandoned in 1952 and was reported to be reclamation certificate exempt.

• Abandoned Well Site (03-35)

Registered by Chevron Canada Limited, this well site was abandoned in 1953 and was reported to be reclamation certificate exempt.

ENVIRONMENTAL SITE ASSESSMENT

The 2012 Environmental Site Assessment completed for the Evergreen Plan Area by Parkland GEO identified three areas of potential environmental concern that would necessitate further investigation prior to subdivision:

- Completion of remediation efforts for the abandoned lease area located on the Subject Property within LSD 12-26-38-27-W4M.
 - » This well site was reclaimed in 2012.
- Identification and investigation of the two former well sites owned by Chevron Canada Limited were located southeast and northeast of the Plan Area. Investigation should be looking for typical impacts associated with lease areas such as possible sumps and flare pits. A phased drilling program is recommended to verify the presence or absence of environmental impacts.
 - » The Developer will contact Chevron Canada to recommend further testing during the predesign and detailed design stage of Evergreen.
 - » All testing will be completed by Chevron Canada in coordination with the land owners as listed below.
 - The northwest well site is located within the City of Red Deer's Northland Drive right-ofway.
 - The southwest well site is located on the quarter section southeast of Evergreen, within the AltaLink transmission right-ofway.

Figure 4 - Opportunities & Constraints.





Other

A minor pipeline release of crude oil was reported by the ERCB on the southwestern portion of the Property in 1999. The environmental site assessment provides no further detail regarding where this spill was; however due to the low volume (0.1 m3) of the release, the environmental risk relating to the spill is considered to be low.

A remediation certificate from Alberta Energy Regulator (AER) is required by the City to confirm that the contaminated area has been remediated and is suitable for the proposed land use. Development approvals will not be issued until a remediation certificate has been issued (includes top soil stripping).

OPPORTUNITIES & CONSTRAINTS

The Evergreen Plan Area provides an opportunity for a unique residential development with ties to the existing open space network. Many trail connections are possible throughout the central and west portion of the Plan Area, as well as along 30th Avenue and Northland Drive.

Several constraints exist on site as previously noted including limited vehicle accessibility due to the eastern transmission line and Northland Drive. In addition, there are three utility rights-of-way with pipelines that will require removal, and one well site which will require a 5m radius development setback.

Figure 5 - Surrounding Uses.



SURROUNDING LAND USES

Land in all directions of the Plan Area is currently undeveloped, utilized for agricultural farming purposes with residential homesteads and accessory buildings. Both the Plan Area and lands surrounding have been identified for future residential development in both the City of Red Deer's MDP and East Hill MASP.

Nearby Amenities



Open Space and Trails

Located approximately 400m west of the Plan Area is the Red Deer River which will provide opportunities for trail linkages into the Waskasoo Trail network that runs throughout the City and Red Deer River Valley.

The River Bend Golf and Recreation Area is located approximately 3.5km (42min walk) northwest of the Plan Area. This area is a recreational destination in Red Deer and includes River Bend Golf Course, Discovery Canyon - a naturalized water tube park, cross-country ski trails, a biathlon

range, wooded hiking trails, canoeing and fishing areas, a boat launch, and extensive outdoor passive recreation space.

Commercial

The Clearview Market Square, a large commercial area, is located south of the Plan Area at the corner of 67th Street and 30th Avenue. The Timberlands commercial area is not currently constructed; however, it has been approved for development and will include 6.7ha of mixed use and arterial commercial space. Additional areas for commercial development have also been identified for location in the quarter section immediately south of the Plan Area running along 67th Street. This area is located 1.5km south of the Plan Area (18min walk).



Population by Age Group, Red Deer, AB, 2011

DEMOGRAPHICS

The following information is based on the City of Red Deer's 2013 Municipal Census, and 2011 Statistics Canada Information.

The demographics of Red Deer demonstrate that Red Deerians are generally younger, with smaller families, and a higher income than average Canadians. This information can be utilized to determine what types of land uses or housing types would be best suited in Evergreen.

Population

In 2013 the City of Red Deer was the third largest city in Alberta with a population of 97,109. Located directly between Calgary and Edmonton, Red Deer is at the center of the Calgary/Edmonton Corridor, one of the fastest growing regions in Canada. Red Deer's population has steadily increased at a compound growth rate of 2.94% over the past 10 years, from 72,691 persons in 2003. According to Statistics Canada, the two main factors of growth in this area are: migration from other provinces, and natural increase.

The City's population was recorded as being 49.4% female and 50.1% male with an average age of 32 and a mode age (age most frequently recorded) of 25; lower

than the provincial average of 36 and national average of 40. Red Deer's younger population may result in more single residents or young families.

Income

In 2010 Red Deer's families experienced a median aftertax income that was almost \$10,000 above the Canadian average. In addition, the percentage of after-tax lowincome families was 11.6% in Red Deer compared to 14.9% Canada-wide.



Household Information

Based on the 2013 Municipal Census, Red Deer's total private dwelling unit count was 40,893; more than half of which were single-detached dwellings.

Confirmed by the 2011 Federal Census, this makes Red Deer's average household size 2.4 persons per dwelling unit. Also recorded by the census was an average of 1 child at home per census family, primarily under 14 years of age.

In 2011 the home ownership rate in Red Deer was 67.5% meaning only 32.5% of the population were living in rental units.

Vision

Umu









IMPORTANCE OF VISIONING

Visioning early in the process is an important part of planning any community or area. The vision for a community lays the foundations from which goals, objectives, and principles can be formed. A clear and concise vision provides the project team with a record to check-back with as the project moves forward.

Visioning Process

The Evergreen project team met on several occasions to form a vision for the community, including meetings to review past projects both inside and outside the region, municipal standards, local trends; as well as site visits to explore the site's natural opportunities and constraints. This information formed the basis of discussion during the final visioning process.

Characteristics

The following characteristics were identified during the visioning process:

Overall Feel

- Natural or "earthy"
- Simple, elegant, and refined
- Sophisticated
- High-end (in location, finish, and style)
- Wildlife-friendly and areas where residents may encounter wildlife

Special Features

- Stormwater runoff reduction
- Wildlife crossing
- High level architectural details
- Open space amenities utilizing natural characteristics

"NATURALLY EXQUISITE"

Taking its cue from the simplicity of nature, Evergreen is the destination for relaxed living. Embracing the natural beauty of water features, native green spaces, and mature woodlands; this sustainable neighbourhood is designed for exploration and outdoor recreation. With modern architecture reflecting the natural surrounding and contemporary amenities nearby, you'll have the best of both worlds. Find yourself grounded in the serenity of Evergreen - *naturally exquisite*.

Figure 6 - Perspective Massing Illustration.



Additional massing illustrations are located in Appendix A.

Community Features Natural Environment

Evergreen will showcase strong ties to the natural environment through its inclusion of an extensive open space network that spans from north to south. This open network will include the only naturalized pond in Red Deer and will provide residents with scenic recreation spaces and alternative transportation routes.

Amenities

Evergreen's close proximity to neighbouring amenities such as the Waskasoo Trail network, River Bend Recreation Area, Clearview Market Square, and future school sites will afford residents the opportunity to conveniently access daily services while enjoying the privacy and comfort of suburban living.

In addition, a neighbourhood commercial area, located at the entry of the community and near the central park, will provide local services and areas for residents to meet and mingle.

Population

Approximately 2,212 residents will call Evergreen home, living in a mix of housing types comprised of 896 dwelling units. The variety of housing types in Evergreen will allow young couples to find starter homes, college students to find affordable rental units, professionals to grow their families, and empty-nesters to retire comfortably.



Legend



EVERGREEN NEIGHBOURHOOD AREA STRUCTURE PLAN | MELCOR DEVELOPMENTS LTD.

Figure 8 - Land Use Concept Plan over Aerial.



Legend





PLANNING PRINCIPLES

The following are planning principles for the development of new communities, as identified by the City of Red Deer. Many of these principles have been used to create development objectives for Evergreen.



1. Natural Areas

Evergreen has been designed around its existing natural environment. The neighbourhood preserves its significant existing vegetation and utilizes its natural drainage pattern.

Support environmentally sensitive areas.

Preserve the existing water body where possible.

Although the existing water body was not naturally made, it is currently home to a variety of aquatic plant materials and attracts water fowl. For this reason, the northern portion of the water body will be conserved. To increase circulation and health of the water, the water body will be reshaped to remove areas where the water tends to be stagnant.

Preserve existing areas of significant vegetation

Areas of existing, healthy, vegetation have been identified for preservation. These areas are intended to contribute to the overall health of the water body and provide shelter to wildlife.

Accommodate wildlife.

Create areas of aquatic habitat.

Areas of aquatic habitat will also be constructed during the landscape design surrounding the water body. This will include planting additional vegetation that provides the water with oxygen and nutrients.

Provide wildlife corridor linkages.

Although the Plan Area is not officially recognized as a wildlife corridor, the location of its water body and large stands of trees makes it a safe area for animals to travel to and from the Red Deer River Valley. To minimize the impact the development has on these animals, and their

impact on residents, corridor linkages will be provided for the animals to safety pass through the community to the River Valley.

🚮 2. Mixed Land Uses

A mix of land uses has been identified in Evergreen to provide residents a range of residential options and access to commercial and recreational areas. A community node has been identified at the terminus of the primary gateway roadway which branches off of 30th Avenue to blend residential, commercial, community, and recreation uses.

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3. Multi-Modal Choice

In addition to motorized vehicle routes, an extensive trail network has been created in Evergreen to provide connectivity for pedestrians, bicyclists, and alternative transportation modes such as scooters, wheelchairs, skateboards, or rollerblades.

4. Compact Urban Form & Density

Evergreen increased its density and decreased the footprint of the development by increasing the amount of developable area. This has been done by preserving much of the neighbourhood as open space, minimizing areas consumed by lanes, reducing roadway widths, and reducing overall lot depths.



5. Integrated Parks & Community Spaces

Evergreen has been designed around public open spaces. These areas range from natural areas surrounding the water body and ravine, to more programmed areas where residents can gather for picnics and social get-togethers. These open spaces are linked to the surrounding residential areas by linear park connections.

Provide community gathering areas.

The provision of public or private gathering areas is an important part of creating communities, it allows residents to relate to one another on common ground and build social capital.

Social capital is the understanding that social networks have a real value. In residential communities, this is typically seen through neighbours offering mutual support, providing child-minding to one another, borrowing tools or supplies, carpooling to school, or working together for a common purpose like fund-raising for a cause or event. By being part of the community, residents are provided the opportunity to build this social capital and benefit emotionally and financially from this network of neighbours.

Provide public access to the wetland area.

To ensure this amenity can be enjoyed by all residents and visitors, a public trail and associated park space will be provided circumnavigating the water body. This trail will be connected to the overall City of Red Deer trail network and utilized for recreational purposes.



6. Housing Opportunity & Choice

A mix of housing options is envisioned for Evergreen to provide a range of single family and multifamily homes. Each type of home has been considered with regards to its location near a community amenity such as the gateway street with increased landscaping or near public open spaces.

Provide a range of housing options.

Create housing options for a variety of age groups, income levels, and lifestyles.

Providing a variety of homes to suit different lifestyles allowing residents the opportunity to stay within the community as they age.

Maximize the amount of premium lots.

Many times there are certain areas in neighbourhoods that are considered to be 'premium lots' due to their view, proximity to open space, lot size, etc. In this community, the idea of premium lots is taken one step further to share these features across the neighbourhood and

ensure the type of lots that would typically be considered as 'premium' are a variety of housing styles at a range of price points.

Provide residential areas with views of the wetland.

There is a very small amount of lots within the City of Red Deer that provide views to a water body. Although the water body located in Evergreen will be accessible to the public, it will also provide scenic views for lots surrounding it.

Provide lots fronting onto public spaces.

Public spaces are intended to be enjoyed and used. By locating homes along public spaces, residents are encouraged to extend their activities into these spaces. This proximity also encourages residents to provide visual surveillance of the park sites.



7. Resilient & Low Impact Neighbourhood

Evergreen has been designed to work with the natural environment by utilizing the existing vegetation and drainage of the site. The central water body will be used for stormwater management purposes and, where possible, overland drainage will transport stormwater into the pond thereby filtering the stormwater naturally prior to its eventual release into the Red Deer River.

In addition to these design features, home builders and residents will be encouraged to construct their homes and yard in energy and water efficient manners.

Increase economic efficiency. Utilize energy efficient lighting throughout the neighbourhood.

Choosing efficient lighting can reduce the amount of electricity used and amount of infrastructure required for maintenance; as well as increase the quality of lighting throughout the neighbourhood. Lighting in Evergreen will be chosen with these ideas in mind during the detailed design stage.

Provide enhanced amenities by collecting ongoing funding for their maintenance.

The Evergreen community will be run via a Home Owners Association that will collect funds from residents on an ongoing basis to support maintenance of the neighbourhood's enhanced amenities.

An agreement with the City of Red Deer will be required to identify what the role of the HOA will be in association City will be, describe what the standard level of service in the City is, and how the HOA can supplement that service level. Although Evergreen's amenities will be partially funded by an HOA, access of the open space system and trails will be open to everyone.

Reduce environmental impact. Provide incentives to home builders for green construction.

Canada has several guidelines that can be utilized for builders to construct 'green' homes, including the LEED Canada Rating System and Build Green Alberta. The highlights of each program include maximizing water and energy efficiency to reduce environmental impacts, decrease costs to home owners, and elongate the life of the home.

Working with a selected group of builders to construct housing in Evergreen provides the Developer with an opportunity to work closer to achieve green building standards.

Provide educational information regarding how to utilize hearty plants in yard landscaping.

Utilizing hearty plants which are accustomed to Red Deer's climate can reduce the amount of excessive watering and pesticides necessary to have a thriving yard.

Implementing this technique is an aesthetically pleasing alternative which is also beneficial to the environment and can save home owners money from the reduced maintenance required.

Suggested plant materials include: Colorado Blue Spruce, Blue Juniper, Red Osler Dogwood, Creeping Juniper, Thyme, Purple Coneflowers, and many more.



8. Safe and Secure Neighbourhood

Evergreen has been designed with pedestrians and residents in mind by enhancing sidewalks, pedestrian crossings, and public park spaces. The location of homes surrounding public open spaces, as well as the use of low level lighting throughout, provides increased safety and passive surveillance in parks.



Evergreen is truly unlike any other neighbourhood in the City of Red Deer. The preservation of an existing water body, community branding, wayfinding signage, high quality landscaping, unique play equipment, and diverse public gathering spaces will set this neighbourhood apart.

Provide creative outdoor spaces. Incorporate a natural playground.

Natural playgrounds are consistently being recognized for their benefits to the improved health and wellbeing of children of all ages by providing opportunities to incorporate native landscapes and land forms into a play space. Natural playgrounds introduce ecological processes, diversity, and new and challenging play opportunities back into urban landscapes, thus engaging children in these natural processes and promoting more creative and spontaneous play.

Incorporating a natural playground into Evergreen will not only reflect the natural theme of the community but will also encourage children to explore the outdoors during play times and throughout their lives.

Evergreen's natural playground is discussed further on page 36.

Require a high level of public landscaping.

Locations with a strong sense of place have a recognizable character, which can be seen visually. By requiring a high level of public landscaping, a character can be showcased throughout the community.

Encourage outdoor activity by using winter city design.

If there is one thing that Red Deer is guaranteed, it is dark winters. Throughout the course of the year, Red Deer sees an average of 12hrs of sunlight: between Mid-March to late September, Red Deer's hours of sunlight increase from 11.5 up to around 16.5 and back down, dropping over the winter to around 7.5 in December.

Regardless of the weather, winters can keep even the most active people inside due to the dark. The outdoor world can become more enjoyable by using simple winter city design technique to manage dark days and nights, provide shelter from the wind, and encourage snow-based activities.

As part of a winter city design, Evergreen's outdoor realm may be designed using a variety of lighting in public spaces, including in street trees and along park pathways.

Evergreen's winter city design is discussed further on page 54.

Create a visually striking community.

Create a theme that is reflective of the community's vision.

To build on the Evergreen vision, as previously described, a theme will be created. This theme will guide the visual aesthetic of the neighbourhood toward the community's vision: naturally exquisite.

Create a set of guidelines that provide requirements and recommendations to builders and home owners.

A set of community guidelines, for use by the Developer, and Architectural Guidelines, for use by home builders, will be created for this community to thoroughly outline the neighbourhood's theme and detail how the public and private realm can be shaped to reflect the theme. Utilizing and adhering to the guidelines throughout the community will provide a continuity throughout the streetscape, open spaces, and community as a whole.

More information regarding these guidelines is provided on page 67.



RESIDENTIAL USES

Overview

The Evergreen neighbourhood has been designed to create highly desirable properties for residents of all age, lifestyle, and income. By providing a variety of lot sizes and housing types, a range of residents will be able to call Evergreen home.

Table 1 - Housing Mix.

Housing Mix	Hectares	Acres	# of Dwelling Units
Total Housing Stock	31.02	76.65	923
R1 Residential (Low Density) District	15.78	38.99	362
*R1 Secondary Suites (15% of R1 units)			54
R1G Residential (Small Lot) District	3.96	9.80	100
R1WS Residential (Wide/Shallow Lot) District	3.87	9.57	106
R1A Residential (Semi-Detached Dwelling)	1.76	4.34	51
R2 Residential (Medium Density)District	2.78	6.86	101
R2T Residential (Town House) District	1.87	4.63	65
R3 Residential (Multiple Family) District	0.99	2.45	84

Types of Housing Single Family



Single-detached house with recessed garage.



Single-detached house with front garage.

R1 Single Detached

Though the majority of lots within Evergreen have been zoned using the R1 Residential Low Density District, housing types in these areas may vary from standard single family homes to those listed below. The location of these particular housing types shown on **Figure 9 - Residential Concept Plan**.

APPROPRIATE HOUSING STYLES

Standard

The assumed average size of a single detached home lot in Evergreen is 464.0m²; although, the minimum lot area is 360.0m² with a minimum width of 12.0m and depth of 30.0m respectively. The majority of these homes will be constructed with front attached garages.

Design of standard single family homes should consider a high level of architectural detail in particular to minimize the impact of the front garage.



Reverse house fronting onto open space.



Reverse house fronting onto open space.



Reverse house rear garages.



Walk-out basement.

Reverse Housing

Typically homes are designed with their primary entrance off the front public roadway and secondary entrance from the rear of the property. The front door typically enters into an entryway whereas the rear door enters directly into a living space such as a dining area, living room, or kitchen. Unlike typical homes, reverse housing is just that - the primary entrance into the home faces the rear property and is designed to enter into an entryway or boot room rather than living space. The secondary entrance into the house is then off of the public road or lane, which is also designed to include a small entryway.

This type of design is commonly used in cottage homes where the home highlights views and access to the area behind the house, away from the roadway. To facilitate this reverse home style, houses are constructed with duel facades of equal architectural design: one facing the front street, and one facing the rear property.

Reverse housing has been located in areas with open space between the homes to create a public park space that will extend the outdoor amenity area of each home by visually connecting their lots to public green space. This style of housing appeals to a variety of residents including those who enjoy the immediate physical and visual access to the open space along their property.

Walk-Out Basements

Homes located on slopes or along open spaces are often designed with walk-out basements. These type of homes will be designed with a deck off the main floor, and a door to the backyard from the basement. Walk out basements appeal to a variety of residents for different reasons including: an increased amount of natural light in basements making the space more livable, the ability to have bedrooms in the basement with full size windows, and increased air quality/reduced moisture in the basement.

Secondary Suites

Secondary suites are self-contained dwelling units located inside singledetached dwellings. These suites have a separate entrance either from a common area or outside. Secondary suites are an increasingly popular and make housing more affordable both for the renter and the home owner.



Walk-out basement.



Secondary suite entrance.

DENSITY

The maximum density in this district is 27.7 du/ha; however, it is estimated that density will be approximately 23.0 du/ha. This assumption is based on an assumed average lot size of 435.2m².

HEIGHT

The maximum height for homes in this district will be 2 storeys or 10m measured from the average lot grade.

PARKING

The majority of parking in the R1 district will be via front attached garage and driveway. As per the City's LUB, two on-lot parking spaces will be provided per home. Additional parking will be available on-street.

ACCESS

Access to R1 homes will be via the front street. Some R1 lots will also be accessible via the rear lane for municipal servicing purposes; this will also allow for additional rear parking or storage of recreation vehicles.

SECONDARY SUITES

Secondary suites will be accommodated as per the City of Red Deer Land Use Bylaw which states that the maximum for any neighbourhood is 15%. Homes with secondary suites will require additional parking as per the

City's LUB. For this reason, secondary suites are not envisioned in reverse housing as it may not be possible to meet additional parking requirements in these areas.

R1WS Wide-Shallow Homes

Wide-shallow lots provide a similar home to a wide R1 lot, with a shallower yard. The increased width of the home itself minimizes the prominence and appearance or the garage while allowing more interaction between the home and the streetscape via windows, porch areas, etc. This increased frontage also provides for a more diverse and appealing streetscape. The wide-shallow housing style is more affordable than an R1 lot by offering a reduced lots size while still including a single or double-car attached garage.

The City of Red Deer's Land Use Bylaw contains several building design regulations which must be followed for building these types of homes. Regulations include those addressing the garage size, driveway width, windows along the front street, use of porch, and other design features such as gables.



Wide-shallow lot house with no garage.



Wide-shallow 2-storey with front garage.



Wide-shallow lot house and side garage access.

APPROPRIATE HOUSING TYPES

Housing types in this district could include bungalow, bi-level, or two-storey homes.

DENSITY

The maximum density in this district is 34.7 du/ha; however, it is estimated that density will be approximately 27.6 du/ha. This assumption is based on an assumed average lot size of 362.1m².

HEIGHT

The maximum height for homes in this district will be 2.5 storeys or a 12m height measured from the average lot grade.

PARKING

Parking in the R1WS District will be via front attached garage and driveway. As per the City's LUB, two on-lot parking spaces will be provided per home. Additional parking will be available on-street.

ACCESS

Access to R1WS homes will be via the front street. A portion of these lots will also be accessible via the rear lane for municipal servicing purposes; this will also allow for additional rear parking or storage of recreation vehicles.

SECONDARY SUITES

Although secondary suites are permitted in this land use district; most R1WS housing in Evergreen will not have rear lanes which will not allow for the additional parking required by secondary suites.

R1G Small Lot Front Garage

Small Lot housing with attached front garages offer a more affordable attached-garage housing option to residents due to the decreased lot width. At a minimum of 10.5m, housing in this district has less interaction between the house and streetscape; for this reason architectural controls are important to enhance the visual appeal of the garage.



Small lot 2-storey with front attached garage.



Small lot 2-storey with front attached garage.



Small lot 2-storey with front attached garage.

APPROPRIATE HOUSING TYPES

Housing types in this district could include bi-level, or two-storey homes.

DENSITY

The maximum density allowable in this district is 31.2 du/ha; however, it is estimated that density will be approximately 25.4 du/ha. This assumption is based on an assumed average lot size of 393.7m².

HEIGHT

The maximum height for homes in this district will be 2 storeys or a 10m height measured from the average lot grade.

PARKING

Parking in the R1G District will be via front attached garage and driveway. As per the City's LUB, two on-lot parking spaces will be provided per home.

ACCESS

Access to R1G homes will be via the front street; however, some will also be accessible via the rear lane for municipal servicing purposes; this will also allow for additional rear parking or storage of recreation vehicles.

SECONDARY SUITES

As per the City's LUB, secondary suites are not permitted in this land use area.



Semi-detached housing is a popular housing option for those looking for a more affordable solution that still offers a private yard. These houses are constructed as two independent dwelling units attached side-by-side with a common wall extending from the foundation to the roof.

A minimal amount of semi-detached homes are anticipated for development in the Evergreen neighbourhood. This type of housing will be located south of the main gateway street and along the east boundary of the Plan Area.



Semi-detached housing without front garage.



Small lot 2-storey semi-detached housing.



Semi-detached housing with front garage.

APPROPRIATE HOUSING TYPES

Appropriate housing types for this district include bungalow, bi-level, or twostorey semi-detached housing. These units may or may not include front garages.

DENSITY

The maximum density allowable in this district is 43 du/ha; however, it is anticipated that the density will be approximately 29.2 du/ha. This assumption is based on an assumed average lot size of 342.04m².

HEIGHT

The maximum height for homes in this district will be 2 storeys or a 10m height measured from the average lot grade.

PARKING

The majority of parking in the R1A district will be via front attached garage and driveway. As per the City's LUB, two parking spaces will be provided per home.

ACCESS

Access to R1A homes will be via the front street. Those lots located along the west boundary of the Plan Area will also be accessible via the rear lane for municipal servicing purposes; this will also allow for additional rear parking or storage of recreation vehicles.

SECONDARY SUITES

As per the City's LUB, secondary suites are not permitted in this land use area.
R2T Townhouse/Row Homes

As based on the definition provided by Statistics Canada, row homes are essentially three or more dwellings joined side-by-side which do not have dwellings either above or below. Often called town houses, these structures include common walls extending from the foundation to the roof.

Row homes provide an alternative and more affordable housing form suitable to a range of residents. Row homes will be located along the gateway collector roadway to provide massing and a continuous, consistent building form with high architectural controls.



2-storey row homes with front garage.



2-storey row homes with rear garage.



Row home rear garages.



2-storey row homes with park frontage.

APPROPRIATE HOUSING TYPES

Appropriate housing types for this district include bungalow, bi-level, twostorey, or two and half storey row homes. These units may be developed in a tradition row fashion or clustered condo-style development with an internal roadway. R2T homes may or may not include front garages.

DENSITY

The maximum density allowable in this district is 54.0 du/ha; however, it is anticipated that the density will be approximately 35.0 du/ha. This assumption is based on the City of Red Deer's recommendations.

HEIGHT

The minimum height for homes in this district is 2 storeys, with a maximum height of 2.5 storeys or a 12m height measured from the average lot grade.

PARKING

All resident parking in the R2T district will be at the rear of the lot. As per the City's LUB, 2 parking spaces will be provided per home. Rear lanes in these areas will be paved to facilitate and encourage residents to utilize rear parking.

Limited protected parking will be provided along the main gateway roadway to provide some visitor parking to guests of homeowners along this road as continuous on-street parking will not be permitted.

ACCESS

Access to R2T homes will be primarily via the rear lane where garages will be located. The majority of these lots will also be accessible via the front street which will allow for pedestrian access and guest parking.

SECONDARY SUITES

As per the City's LUB, secondary suites are not permitted in this land use area.

R2 Medium Density

The medium density residential district is intended to provide a range of compatible housing types such as single detached homes and multi-unit buildings.



2-storey rowhomes with rear parking.



2-storey single family without attached garage.



2-storey row homes with rear parking.

APPROPRIATE HOUSING TYPES

Housing types in this area may include single family dwellings, semi-detached structures, multi-attached, or multi-family buildings.

DENSITY

The maximum density allowable in this district is 54.0 du/ha; however, it is anticipated that the density will be approximately 36.4 du/ha. This density is an average of densities associated with the possible housing types envisioned for development in this area (semi-detached, row homes, or low rise multi-family buildings). The actual density will be completely dependent on which type of housing is constructed.

HEIGHT

The maximum height for single detached homes in this area is 2 storeys or a 10m height measured from the average lot grade; however, multi-family buildings may by over this limit.

PARKING

All parking will be determined by what type of units are constructed; however, all will be located on-site as per the City of Red Deer's Land Use Bylaw.

ACCESS

Access to the R2 sites will be via the front roadway.

SECONDARY SUITES

Secondary suites will be permitted in detached dwelling units only. Secondary suites require 1 parking space for suites with 2 or fewer bedrooms, and 2 parking spaces for suites with greater than 2 bedrooms.

R3 Multiple Family

R3 Multiple Family areas can take a variety of forms as further described below. This type of housing provides a more affordable residential option that appeals to a variety of residents including but not limited to renters, first time home buyers, and retirees. One R3 area has been located in Evergreen at the terminus of the gateway roadway as part of the community node. This location was chosen based on the anticipated location of public transit stops and proximity to the open space network and community amenities.



Apartment style building with internal roadways



14-unit multiplex with internal roadways.



Row home development with first floor parking.



Apartment style building with street access.

APPROPRIATE HOUSING TYPES

This R3 multi-unit housing will be constructed based on market conditions at the time of development and could include one of the following. All building types listed below can take the form of rental or condo facilities. Regardless of building type, this site should be designed as a focal feature of the community with a high level of architectural detail and visual interaction at street-level.

Apartment-Style

Apartment style buildings have shared entries, hallways, and often building amenities such as fitness centres or hot tubs.

Multiplex Building

Multiplex buildings commonly range from 4 to 18 units and share no common spaces: all units have separate entries and utilities.

Row homes

Row homes consist of three or more attached units which do not overlap one another and have shared common walls from foundation to roofs.

DENSITY

The anticipated density in this district is approximately 85.0 du/ha for apartments of multi-unit buildings, assuming a four-storey building with underground parking. The density for rowhomes is approximately 35.0 du/ha.

HEIGHT

Should the R3 site be developed as one or more multi-family building, the maximum height is 4 storeys; however, if the R3 site is developed for row homes, the maximum height is 2 storeys or a 10m from the average lot grade.

PARKING & ACCESS

All parking will be determined by what type of units are constructed; however, all will be located on-site as per the City of Red Deer's Land Use Bylaw. The primary access to the R3 sites will be via an internal roadway network; however, front street access will be provided for pedestrian and visitor use.

SECONDARY SUITES

As per the City's LUB, secondary suites will not be accommodated in the R3 District.



Legend







- Possible Walk-Out Basement
 Municipal Reserve (MR)
 Environmental Reserve (ER)

Public Utility Lot (PUL) Stormwater Management (PUL) Potential PUL or Lane Shadow Plan

DENSITY & UNITS

The estimated population of Evergreen is 2,212 persons. This number is based on the land uses proposed and will change after final build-out. The overall housing density of the Evergreen community is 18.0 du/net developable hectare. Full land use calculations are located on page 31.

Land Use	Area (ha)	Units	Density	% Of Housing Stock
R1 Residential (Low Density) District	15.78	362	23.0	39.2%
*Secondary Suites		54		5.9%
R1G Residential (Small Lot) District	3.96	100	25.4	10.8%
R1WS Residential (Wide/Shallow Lot) District	3.87	106	27.6	11.5%
R1A Residential (Semi-Detached Dwelling)	1.76	51	29.2	5.5%
R2 Residential (Medium Density) District	2.78	101	36.4	10.9%
R2T Residential (Town House) District	1.87	65	35.0	7.0%
R3 Residential (Multiple Family) District	0.99	84	85.0	9.1%
Total	31.02	923		100.0%

Table 2 - Residential Land Use Calculations.

*Calculated assuming that 15% of all R1 units will include secondary suites; these suites are counted as 1 unit each.

Densities calculations are based on the assumptions as outlined following assumed averages, exact density and unit counts may differ at the time of subdivision. :

- R1 Average lot size: $435.2m^2$
- R1G Average lot size: $393.7m^2$
- R1WS Average lot size: 362.1m²
- R1A Average lot size: $342.04m^2$
- R2 36.4 du/ha housing type may vary; density average of possible housing types anticipated (R1A, R2T, R3-3storey)
- R2T 35.0 du/ha as per the City of Red Deer's Planning Guidelines
- R3 85.0 du/ha estimated density for a four storey building with underground parking

Residential Land Use Calculation	Hectares	Acres	# of Units	Household Size	Population
Single Detached Residential	23.62	58.36	622		1,491
R1 Residential Low Density	15.78	38.99	362	2.4	868
*R1 Secondary Suites (15% of R1 units)			54	2.4	129
R1G Residential Small Lot	3.96	9.80	100	2.4	240
R1WS Wide Shallow Lot	3.87	9.57	106	2.4	254
Semi-Detached and Multi-Family Residential	7.40	18.28	301		721
R1A Residential Semi-Detached	1.76	4.34	51	2.4	122
R2 Residential Medium Density	2.78	6.86	101	2.4	242
R2T Residential Town House	1.87	4.63	65	2.4	156
R3 Residential Multiple Family	0.99	2.45	84	2.4	201
Total	31.02	76.65	923		2,212
Density: 18.0 du/ha (923 Dwelling Units / 51.37 Developable Hectares)					

Table 3 - Population Projection.

Figure 10 - Neighbourhood Node.

LEGEND









REIGHBOURHOOD NODE

Evergreen's neighbourhood node consists of a variety of uses with streetorientation to provide an array of services to residents and an opportunity for neighbours to socialize. The central park site forms the basis of this node which is supported by commercial, higher density residential, and community type uses. The location of this node was chosen to facilitate both pedestrian and vehicular access.

Commercial Use

A neighbourhood commercial area has been identified at the terminus of the primary gateway road. This location was chosen for it's proximity to vehicular and pedestrian traffic routes, and to form part of a community node. The types of commercial businesses envisioned for this area include: a coffee shop, small restaurant, doctors office, child minding, hair salon, or similar.

Site and building design for this commercial area will be guided using the City's LUB and architectural controls created by the Developer. The location of parking and use of screening should be specifically addressed to minimize visual impact from the roadway and rear walking trails.

Should this area not be successfully sold for its intended purpose, this site will be converted to an R3 use.







Community Amenity Sites

Two community amenity sites have been located within the Evergreen neighbourhood to accommodate the possible development of community uses such as: temporary care, assisted living, adult or regular day care, place of worship, or other uses proposed and approved by the City.

Both sites have been located as part of the Evergreen community node in close proximity to walking trails and transit stops to facilitate their use. These sites will be advertised for sale through local media and the City of Red Deer website for one year; if the sites are not purchased for their intended use, they will be developed as R3 multi-family or R1WS residential development as shown on **Figure 7 - Land Use Concept Plan**.

If both the central community amenity site and neighbourhood commercial site are not sold for their intended purpose, and both are rezoned to R3, the two sites may be combined into one R3 site.

LAND USE CALCULATIONS

Table 4 - Land Use Calculations.

Land Use Category	Hectares	Acres	% of Developable Area	# of Dwelling Units
Gross Plan Area	62.00	153.20		
Environmental Reserve	5.06	12.51		
Major Streets (Expressway)	2.59	6.41		
Major Streets (30th Ave)	0.94	2.32		
Commercial	0.35	0.86		
Stormwater Management Facility SWMF (PUL)	1.69	4.17		
Developable Plan Area	51.37	126.93	100.00%	
Residential	31.02	76.65	60.4%	923
R1 Residential (Low Density) District	15.78	38.99	30.7%	362
R1 Secondary Suites (15% of R1 units)				54
R1G Residential (Small Lot) District	3.96	9.80	7.7%	100
R1WS Residential (Wide/Shallow Lot) District	3.87	9.57	7.5%	106
R1A Residential (Semi-Detached Dwelling)	1.76	4.34	3.4%	51
R2 Residential (Medium Density)District	2.78	6.86	9.0%	101
R2T Residential (Town House) District	1.87	4.63	6.0%	65
R3 Residential (Multiple Family) District	0.99	2.45	1.9%	84
Other	20.35	50.28	39.6%	
Community Amenity Sites	0.44	1.10	0.9%	
Community Amenity Site (R1WS)	0.10	0.24	0.2%	3
Community Amenity Site (R3)	0.34	0.85	0.7%	29
Open Space	6.86	16.95	13.4%	
Municipal Reserve (MR)	6.77	16.73	11.9%*	
Public Utility Lot Excluding SWMF (PUL)	0.09	0.22	0.2%	
Public Utility Lot SWMF (PUL)	1.69	4.17	N/A	
Environmental Reserve (ER)	5.06	12.51	N/A	
Transportation	13.04	32.23	25.4%	
Collector Roadways	3.60	8.91	7.0%	
Local Roadways	7.50	18.54	14.6%	
Lanes	1.94	4.79	3.8%	
Other Uses				
Emergency Services Site				
Institutional Service Facility				

* MR calculation is a % of Gross Plan Area less Environmental Reserve.

Table 5 - Roads and Utilities Percentage.

Roads and Utilities	Hectares	Acres	% of Net Plan Area
Gross Plan Area	62.00	153.20	
Environmental Reserve	5.06	12.51	
Net Plan Area	56.94	140.69	100.00%
Allowable Area for Roads & Utilities	17.08	42.21	30.00%
Actual Area of Roads & Utilities	18.36	45.36	32.24%
Municipal Improvements	3.53	8.73	6.20%
Northland Drive Expressway	2.59	6.41	
30th Avenue Arterial	0.94	2.32	
Evergreen Roadways and Utilities	14.82	36.63	26.04%
Collector Roadways	3.60	8.91	
Local Roadways	7.50	18.54	
Lanes	1.94	4.79	
Public Utility Lots	1.78	4.40	
Over Dedication	1.27	3.15	2.24%

out do offe

EVERGREEN NEIGHBOURHOOD AREA STRUCTURE PLAN



View of pathway's seating area and housing along east side of central water body. Note the use of pedestrian-level lighting along the pathway.

OVERVIEW

Evergreen has been developed with 33.63ac (13.61ha) of public open spaces, 22% of the total Plan Area. Four different types of open spaces make up the overall open space network as indicated in **Table 6.0 - Green Space Amenities**.

Table 6 - Green Space Amenities.

Green Space		Total No. of Parcels	Area (ha)	Area (ac)
Open Spaces	Neighbourhood Park (Including SWMFs)	3	7.19	17.76
	Parkettes	2	0.58	1.44
Natural Areas		7	3.82	9.43
Linear Parks & Pedestrian Links		16	2.02	4.99

Table 7 - Municipal Reserve Calculation.

Municipal Reserve Dedication	Acres	Hectares	% of MR Developable Area
Gross Plan Area	62.00	153.20	
Environmental Reserve	5.06	12.51	
MR Developable Area	56.94	140.69	100.0%
Required MR Dedication	5.69	14.07	10.0%
Actual MR Dedication	6.77	16.73	11.9%

It is recognized that Evergreen has dedicated 11.9% of its MR Developable Area as Municipal Reserve; however, the City of Red Deer will not be required to purchase 1.9% of excess from the Developer.



LEGEND







Covered picnic area.



Natural playground.

Neighbourhood Park

The intent of the neighbourhood park site is to provide a centrally-located and primary recreational space for the neighbourhood. This space is designed around the central water bodies and is envisioned primarily for passive or unstructured recreation. This park also acts as a scenic destination for walking trails or children's play.

Location and Size

The neighbourhood park in Evergreen is located in the center of the Plan Area at the terminus of the gateway roadway.

Evergreen's neighbourhood park is 7.19 acres (3.21ha) in size including the stormwater management facilities, existing treed areas, or connecting and linear parks.

Proposed Amenities

Amenities located within the neighbourhood park site include walking trails, a children's play structure, picnic areas, pond lookouts, and two stormwater management facilities.



Covered picnic area and natural playground in the central park, to the west of the central water body, during a summer day and winter night.



Natural playground.



Scenic lookout.

Picnic Area

To extend residents' activities outdoors, several picnic areas will provide spaces for outdoor dining. These areas may include picnic tables, bench seating, and outdoor grilling facilities.

Natural Playground

Natural playgrounds may be constructed in Evergreen to encourage children's imaginative play in the outdoors. These play structures would be located in close proximity to picnic sites to provide a mix of uses including those for parents as well as children. The design of these structures will be determined during the detailed design phase in consultation with the City of Red Deer.

Scenic Lookouts

Lookouts may be constructed along the water body. These area will be designed as resident gathering areas where friends can meet and visit, children can watch the ducks, or joggers can stop to stretch. The location of these lookouts will be determined during the detailed design phase.

Stormwater Management Facilities

The Evergreen ponds are designed to retain stormwater, act as a habitat area for wetland creatures, and provide a visual amenity to residents. The ponds have also been utilized as the focal element of the neighbourhood's trail and park system.



Example of passive recreation activity.



Multi-use pathway.



Stormwater management pond.



Trail system through naturalized area.

Parkettes

The intent of parkette sites is to provide smaller open spaces for passive recreation activities such as playing frisbee, tag, building snowmen, etc. These areas are within easy and short walking distance to residents.

Location and Size

Two parkettes have been identified in the Evergreen neighbourhood: one in the northwest and one south of the stormwater management facilities surrounded by existing vegetation. The northwest location has been chosen to provide convenient access to an open space for residents in this area; whereas. The remaining parkette was designated based on its isolation from surrounding areas due to existing vegetation and the stormwater management facility.

Evergreen's parkettes are sized at 0.22 - 1.22ac (0.09 - 0.49 ha) in size.

Proposed Amenities

Constructed elements within parkettes may include small seating areas, refuse containers, and a children's play structure in the northwest park. In addition, a fence may be required along the perimeter of the northwest parkette to ensure roadway setbacks to children's play areas are maintained; this will be determined during detailed design.

Natural Spaces

Evergreen has been designed to incorporate natural spaces intended to add to the overall feel of the community and provide areas that residents can enjoy in a less structured way; via views or organic and unprogrammed nature trails. The Environmental Reserve areas as shown in this NASP are an estimate only; the final ER boundaries will be determined at the time of subdivision and will be based on the regulations of the MGA.

Ravine

The ravine located in the northeast corner of the community will remain in its natural state and act as a wildlife corridor. To preserve the vegetation, no formal trails will be developed through the ravine; however, trails will be constructed surrounding this area for pedestrian connectivity.

Existing Trees

Existing trees surrounding the south stormwater management facility have been preserved to provided wildlife shelter and habitat. No formal trails will be developed through these areas.

Stormwater Management Facility

The south stormwater management facility has been identified as an Environmental Reserve to preserve existing vegetation.





Homes fronting onto linear park space.



Homes backing on to linear park space.

Reverse housing fronting onto linear park space in southeast portion of Evergreen.

Linear Parks & Pedestrian Connections

Linear parks have been used to provide continuous off-street connectivity throughout the Plan Area for pedestrians. This pedestrian network has been designed to connect residents to the 30th Avenue multi-purpose trail system to the west, Northlands Drive regional trail to the north, joint school site to the south, and transmission Corridor trail to the east.

Location and Size

A variety of linear parks are located throughout the community, namely providing connectivity through the center of the Plan Area to the east, a continuous shared linear park along the south boundary, and those surrounding the reverse housing in the southeast.

Linear parks vary in length and are generally between 6 to 10m in width.

Proposed Amenities

Amenities in linear parks will be limited to trails, landscaping, and occasional seating areas with refuse containers. These areas are not intended for prolonged visits; therefore, to minimize redundancy and prevent loitering, they will not contain gathering type amenities.

Figure 12 - Open Space and Trail Network.







Winding trail with pods of landscaping.



Trail system through naturalized area.

Trails

The linear park and trail system in Evergreen is intended to provide shortcutting options for pedestrians and a recreational area for walkers, joggers, cyclists, etc. This network will connect to adjacent neighbourhoods and the City's overall Waskasoo Trail System to provide connectivity to surrounding areas and recreational amenities.

Three levels of trails are proposed in the neighbourhood as part of this overall system: hard surface connections, hard surface recreational, and shale recreational. Hard surface connections will take the form of concrete sidewalks located along roadways, hard surface recreational trails will be paved trails throughout open spaces, and shale trails will be constructed in areas intended for walkers only. No trails will be developed in the north ravine area.

Connections

A north connection will be provided to connect with the Northland Drive expressway's regional trail network and a west connection will be provided to connect with the 30th Avenue trail and facilitate commuter bicycling by the west utilizing Evergreen's main entry road.

movement & connectivity

Figure 13 - Multi-Modal Movement.

LEGEND



CIRCULATION Multi-Modal Movement

The Evergreen neighbourhood has been planned to facilitate integrated movement of residents throughout the community and provide connections to destinations outside of Evergreen. In addition to providing connections for residents, a multi-modal transportation network has been incorporated to accommodate a variety of transportation modes including walking, rolling, riding, and driving. All portions of Evergreen have been designed with pedestrians in mind putting their safety, comfort, and overall experience first by creating an enhanced streetscape.

Mobility	Location	User Experience	Accessibility & Integration	Safety
Pedestrian	Sidewalks, trail connections	Local destinations or those in adjacent neighbourhoods	Fully integrated into neighbourhood via separated sidewalks and paved open space trails to promote accessibility	Separated sidewalks, intersection bump-outs, highlighted mid-block crossing
Bicycle	Trail connections, on-road routes	Recreation: destinations inside neighbourhood or those adjacent	Fully integrated into neighbourhood via paved open space trail network	Off-street trail connections, intersection bump-outs
		Commuter: destinations outside of neighbourhood		
Transit Rider	Sidewalks, trails connections, collector roadways	Destinations outside of neighbourhood	Routes along collector roadways only with pedestrian connections	To be determined by City of Red Deer
Vehicle	Collector and local roadways, lanes	Destinations outside of neighbourhood	Local roadways linking to collectors, minimize unnecessary through traffic	Curvilinear street pattern

Table 8 - Multi-Modal Movement.

Figure 14 - Sidewalk Type.





- 2.5m Separated Sidewalk
- 2.0m Separated Sidewalk
- 1.5m Separated Sidewalk
 - 1.5m Monolithic Sidewalk
- **Off-Street Trail Network**



Example of monolithic sidewalk.



Recreational cycling on off-street trail.

Walking

Walking is not only a healthy and active mode of transportation, it is also one of the most popular for school-aged children and seniors. Evergreen has been designed to facilitate and encourage walking throughout by providing a welcoming pedestrian environment using separated sidewalks and offstreet trails, pedestrian nodes and rest stops, and pedestrian short-cutting to increase convenience and reduce distances between destinations.

Rolling

Rolling is intended to describe cycling, rollerblading, skateboarding, scootering, and any other self-propelled wheeled modes of transportation. Whether these forms of transportation are used for commuting or recreation, trail connections have been provided alongside the roadway to provide a safe and comfortable environment for these users. The use of paved trails rather than shale also increases the accessibility of park spaces to those with reduced mobility.

LEGEND





Sample photo of Red Deer's transit buses.



Example of separated sidewalk.

Riding

Transit locations will be chosen by the City of Red Deer's Transit department along the primary collector roadway, based on the City's standards and preferences. All transit stops will be located 500m apart and within 500m of the majority of residents; this represents a 6min walking time. These locations are intended to be in reasonable walking distance from all homes within the neighbourhood.

A small area of the Plan Area falls outside of the 500m distance from the potential transit stops; however, these areas are anticipated to be within the 500m catchment boundary of transit stops in future surrounding developments.

Special attention will be given to locate transit routes near multi-family areas to facilitate higher density use. It is also recognized that many middle and high school students in Red Deer utilize transit to get to school; therefore, a focus has been put onto providing safe pedestrian routes to and from bus stops as part of the Safe Route to School program.

Driving

Driving is the most prominent form of commuter transportation. The Evergreen neighbourhood has been designed to create a comfortable environment for motorists without sacrificing the comfort and safety of alternative transportation types. More information regarding roadways is discussed on page 45.





Intersection bump-outs and landscaping.



Example of mid-block crossing with bump-outs.



Highlight cross-walk at roundabout.

Safety

To enhance pedestrian and motorist safety, traffic calming measures have been identified in various areas throughout Evergreen. Though exact locations will be determined during detailed design; they will include: intersection bump-outs, mid-block crossings, a roundabout, and on-street parking.

Utilizing intersection bump-outs extends the curb out into the street reducing the distance pedestrians are required to travel across the roadway and making them more visible. Intersection bump outs will not be permitted crossing collector roadways.

Important Trail Connections

Two important trail connections have been identified in the Evergreen neighbourhood. Additional trail crossings may be considered at the detailed design stage. Consideration for additional trail crossings will be based on operational requirements, pedestrian safety, and user needs.

Roundabout

A roundabout is located at the terminus of the gateway collector roadway. This method of intersection has been chosen to slow and disperse traffic at the three-way intersection and provide a focal feature for the roadway in the form of enhanced landscaping or the accommodation of public art.



Northland Drive - 30 Avenue to 20 Avenue Cross-Section with berm.



Example of an existing berm along 30th Avenue.

ROADWAYS

External Roadways Northland Drive

Northland Drive will run along the north boundary of Evergreen. This portion of the roadway is intended to be a six-lane expressway at full build-out, anticipated to coincide with the City's 188,000 population horizon (estimated sometime around 2038). The City of Red Deer currently has the initial roadway construction budgeted from 2016 through 2018, at which time it will function as a two lane arterial roadway.

As traffic demands increase, the roadway will be expanded in stages to a four-lane roadway, before it is ultimately upgraded to a the six-lane expressway.

Note: The Northland Drive cross-section and project is in no way tied to the development of Evergreen and is subject to change.

30th Avenue

30th Avenue runs along the west boundary of Evergreen connecting 67 Street to Northland Drive. This roadway is intended to be a four-lane arterial at full build-out; however, it will function as a two-lane arterial until such a time when traffic demands a larger roadway. Construction of 30 Avenue is scheduled to begin in 2015.

Note: The 30th Avenue cross-section and project is in no way tied to the development of Evergreen and is subject to change.

Berms and Screening

Berms will be built on either side of Northland Drive and 30th Avenue roadways to minimize visual and acoustic impact of traffic from adjacent developments. These berms will be consistent to that found elsewhere along main arterials.

LEGEND



Internal Roadways

Typical cross-sections of all roadways are shown on page 49. All non-standard cross-sections will be considered by the City and finalized at the Servicing Study stage.

Collector Roadways

The Evergreen neighbourhood will be accessed via two collector roadways: the gateway collector and main looping collector.

32m Divided Collector Roadway

Evergreen's gateway roadway enters the neighbourhood from the west off of 30th Avenue and extends to the roundabout. This roadway has been designed to provide a grand entrance to welcome both residents and visitors into the community. It it also recognized as the primary access roadway until such a time that connections to the surrounding lands are developed.

This roadway has been designed using a 32.0m wide right-of-way with two lanes of travel in either direction and protected parking areas. To accommodate multimodal movement, separated sidewalks have been provided on both sides of the road separated from traffic by landscaped boulevards.

Limited protected parking will be accommodated to provide some visitor parking to guests of homeowners along the gateway roadway.

This roadway will be further designed during detailed design to provide a transition at the terminus of this roadway into the one-lane roundabout.

As shown on Figure 18 - 32m Divided Collector Roadway, Figure 19 - 32m Divided Collector Roadway Cross-Section at Boulevard, and Figure 20 - 32m Divided Collector Roadway Cross-Section at Protected Parking, this crosssection is not standard in the City of Red Deer and will be subject to review by the City prior to implementation at the Servicing Study stage.

24m Looping Collector Roadway

The main collector roadway in Evergreen loops through the community from southwest to northeast. This roadway has been designed with a 24.0m wide right-ofway, one travel and one parking lane in either direction, a





landscaped boulevard, and a 2.5m and a 1.5m separated sidewalks on either side of the roadway.

In addition to providing functional access to the community, the collector roadway identifies a sense of place for the neighbourhood by incorporating high levels of landscaping providing continuity and themeing throughout.

As shown on **Figure 21 - 24m Looping Collector Roadway Cross-Section**, this cross-section is not standard in the City of Red Deer and will be subject to review by the City prior to implementation at the Servicing Study stage.

20m Modified Local Roadway

An expanded local roadway is located along the east portion of the Plan Area stretching from north to south. This roadway provides access from the main collector to residential areas east of the water body. To facilitate traffic in this area and allow the inclusion of a transit route, a 20.0m wide right-of-way with one travel lane and parking in either direction is used. This roadway also has 1.5m wide sidewalks separated from traffic by a

Evergreen's gateway collector roadway looking east on a winter night.

landscaped boulevard.

As shown on Figure 22 - 20m Modified Local Roadway Cross-Section, this cross-section is not standard in the City of Red Deer and will be subject to review by the City prior to implementation at the Servicing Study stage.

Local Roadways

The system of local roads within the community has been designed to create exclusive pods of homes and provide access to individual development clusters while discouraging outside traffic.

Driveways will be designed to meet roadways at 90 degrees and are not permitted to "flair out". This will preserve boulevard space, accommodate trees, and improve on-street parking.

17m Two-Way Local Roadway

All typical local roadways will have a 17.0m wide right-ofway with 1.5m separated sidewalks. Utilizing this crosssection in place of the City's current standard allows for an enhanced streetscape by incorporating street trees in the landscaped boulevard, separated sidewalks in either direction increasing the pedestrian experience, and increases safety by providing a buffer between pedestrians and motorists.

As shown on Figure 25 - 17m Two-Way Local Roadway Cross-Section, this cross-section is not standard in the City of Red Deer and will be subject to review by the City prior to implementation at the Servicing Study stage.

13.3m and 11.75m One-Way Local Roadways

Two one-way local roadways have been used in Evergreen. Neither one-way cross-sections is standard in the City of Red Deer and will be subject to review by the City prior to implementation at the Servicing Study stage.

To provide access to homes along the southern boundary of the Plan Area, a 13.3m width right-of-way is used with a 9.0m carriage and 1.5m monolithic sidewalks. This roadway is shown on **Figure 24 - 13.3m One-Way Local Roadway Cross-Section**.

The entry point to this roadway have a 17.0m wide two-land local road right-of-way, then a transition to a 25.0m wide road with divided centre median to facilitate emergency access. The 25.0m wide portion of this roadway is shown on **Figure 23 - 25m Entry to 13.35m One-Way Local Roadway Cross-Section**.

Homes in the northwest portion of the Plan Area surrounding a park will utilize a road with 11.75m wide right-of-way. This roadway is shown on **Figure 26** - **11.75m One-Way Local Roadway** and will not have a sidewalk along the park side as a multi-use trail will be designed within the park.

Lanes

Many lots in the Evergreen neighbourhood have been designed with rear lanes; however, lanes have not been provided for lots adjacent green spaces, including parks and preserved natural areas. All standard rear lanes will be designed to The City of Red Deer standards and will be 7.0m wide as shown on **Figure 28 - 7m Gravel Lane Cross-Section**. Any lanes adjacent to Municipal Reserves or public utility lots will have bollards installed to prevent vehicular access and short-cutting.

9m Paved Lanes

Homes fronting onto public green spaces and the rowhomes along the gateway roadway will utilize a lane for their only vehicular access. These lanes will be paved to facilitate access, ease of use year-round, allow snow clearing, increase aesthetics, and allow for snow storage during winter months.

As shown on **Figure 27 - 9m Paved Lane Cross-Section**, this cross-section is not standard in the City of Red Deer and will be subject to review by the City prior to implementation at the Servicing Study stage.

REVERSE HOUSING LANE ILLUMINATION

Special attention to the lanes utilized for reverse housing in the southeast portion of the Plan Area will be required to ensure there is clear illumination of house numbering for use by Emergency Services, delivery vehicles, taxis, etc.

The Developer will work with the City of Red Deer's Electrical Light and Power department during the Servicing Study stage to determine the most appropriate solution for providing this lighting in the lane. If municipal lighting is deemed inappropriate, an architectural control will be used to require lighting be provided on the rear garages to facilitate home address recognition.

Turn-Arounds

Until such time that development occurs to the east or south, connecting roadways in Evergreen will be constructed with turn-arounds at their terminus.

Parking

On-street parking will be permitted on all roadways within Evergreen except along the 32.0m Divided Collector gateway roadway where there will be limited protected parking stalls. The provision of on-street parking acts as a safety feature to pedestrians by acting as a buffer between sidewalks and motorists. It also narrows the roadway and adds uncertainty into drivers' path of travel which has been shown to slow traffic and make drivers more aware of their surroundings.





This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 20 - 32m Divided Collector Roadway Cross-Section at Protected Parking.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 21 - 24m Looping Collector Roadway Cross-Section.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 23 - 25m Entry to 13.3m One-Way Local Roadway Cross-Section.

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This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 25 - 17m Two-Way Local Roadway Cross-Section.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 26 - 11.75m One-Way Local Roadway.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 27 - 9m Paved Lane Cross-Section.



This cross-section is not standard and will be subject to review by the City prior to implementation at the Servicing Study stage.

Figure 28 - 7m Gravel Lane Cross-Section.



sense of place

EVERGREEN NEIGHBOURHOOD AREA STRUCTURE PLAN | MELCOR DEVELOPMENTS LTD.





View of seating area along pathway and housing along east side of central water body.

FEATURES

Evergreen has been designed around the stormwater management facilities in the center of the Plan Area. This area will act as a focal point for all activities and terminus for major roadways and trails.

View points towards this area will be maximized and these areas will include high-quality landscaping to showcase the neighbourhood.

Gateways

There are two gateways identified in Evergreen: an entrance off of 30th Avenue, and the southwest entrance along the looping collector roadway. These areas provide a first impression of the neighbourhood to residents and visitors and convey the overall theme of the community.

To highlight these gateways areas, a high level of landscaping will be provided along with a community marker. In addition, a high standard for detail will be required along the main west-east gateway roadway.

Winter City Design As part of a winter city, Evergreen has been designed to encourage outdoor activity year round. To encourage this type of activity, public open spaces have been designed to embrace winter, and its darkness.

Colours

Encouraging the use of rich colours on homes, commercial buildings, and in the community's design elements; through the use of architectural guidelines; is one way that Evergreen will warm up winter by adding colour to an otherwise snow-white neighbourhood.

Lighting

The long dark days of winter can often feel daunting which is why Evergreen's streetscapes are proposed to be designed to incorporate street tree lighting that will transform the darkness into a palette on which to create a whimsical environment of illumination.

Public park areas may also be been designed to include pedestrian-scaled lighting to illuminate pathways throughout the winter months. This illumination will





Reverse housing fronting onto linear park space in southeast Evergreen.



Evergreen's gateway collector roadway looking east.

Evergreen's central park, natural playground, and picnic area.



All-season use of cleared trails.



Use of illuminated bollards along trail.

accommodate outdoor play for children in the winter and enhance safety surveillance.

Various levels of lighting may be used in different areas of Evergreen to provide appropriately scaled lighting for pedestrians and motorists, and to create focal areas in the community.

The intention of providing lighting in open spaces is primarily for use of public spaces during the winter time when day lengths are shorter. The lighting in open spaces would be limited to immediately along primary trails and could be designed to run for only a few hours after the sun has set. All determination of lighting will be done during detail design.

The responsibility for maintaining proposed lighting will be determined through future negotiations with the City of Red Deer.

Maintenance

Although the average temperature in Red Deer during the winter months is around -10°C, snowfall can quickly pile up and create significant barriers to outdoor recreation. To combat this, on-going trail maintenance throughout the winter months is important to allow continued access and safe use of the community's open spaces for residents.



Street tree lighting during the summer.



Coloured street tree lighting in winter.



Continuous fencing along public areas.



Coloured concrete in median paving area.

BUILT FORM

The overall design of Evergreen is intended to connect residents and visitors with the outdoors. To achieve this, a variety of concepts may be utilized which will be further determined subsequent to NASP approval. Concepts that may be considered include the following.

- Community entry features
- Illuminated street trees
- Pedestrian-scaled lighting along major pathways
- Wayfinding signage
- Continuous fencing along public areas
- Enhanced median paving

Architectural Design

All buildings in Evergreen will be built to conform to the existing City of Red Deer Land Use Bylaw.

Built forms in Evergreen may take their design elements from nature, focusing on visual and physical connections to outdoor spaces. A set of Architectural Guidelines will provide direction toward the overall aesthetic of the community as described on page 67.





OVERVIEW

The proposed trunk utility connection points for the sanitary and storm utilities shown in this NASP deviate from the City's current trunk infrastructure planning identified in the Greater East Hill Functional Servicing Study (GEHFSS). As a result of this deviation, Evergreen's Developer may be required to register City of Red Deer utility rights-of-way to facilitate the installation of deep utility extensions connecting to the adjacent quarter section to the east, if development is anticipated to proceed on this adjacent parcel prior to utilities reaching the quarter section boundary.

This requirement will be imposed by way of a Supplementary Condition in a future Development Agreement for a development phase in Evergreen if the City's Development Section determines it to be necessary in order to allow the adjacent quarter to the east timely access to utility service connections.

STORMWATER SERVICING

The City of Red Deer recently completed the installation of a new storm trunk up the escarpment of the Red Deer River Valley. This trunk line, currently being constructed to the intersection of 30th Avenue and The North Highway Connector, will ultimately service a large portion of the future development in east Red Deer. The City is proposing to extend trunk servicing south along 30th Avenue in 2014, in conjunction with the intersection improvements proposed at the intersection of 30th Avenue and 67 Street. The Evergreen development will connect to this new 30th Avenue trunk sewer at the northwest corner of the development. Storm mains will also be designed to convey the controlled release rate from NE 26 while providing temporary pick up of overland drainage from adjacent quarter sections until they are built out.

As previously discussed in this report, there is a large existing wetland feature situated in the middle of the development area. The north portion of this wetland is proposed to be reconstructed in order to act as the primary storm water management facility for the Evergreen development. In order to allow for a conventional City of Red Deer storm pipe system, complete with gravity weeping tile connections to all the homes, the reconstruction will consist of re grading this area to lower the normal water level in the wetland by approximately 2.0m. All storm sewer pipes in Evergreen will connect to this facility, which will provide both water quality enhancement and storm detention, before the storm water outlets into the 30th Avenue trunk system and ultimately into the Red Deer River.

It is proposed that a majority of the south component of the wetland feature be retained in its natural state. This includes maintaining the current normal water elevation in order to protect the existing plant ecology along edge of the wetland. In order to enhance the water quality, it may be necessary to deepen this wetland area though the normal water level elevation will be maintained. To ensure a source of water to recharge this wetland area, some surface runoff from the development will be introduced into the wetland at certain low points in the roadway. These locations are illustrated in the figure on page 61.

Also, to maintain some base flow into the existing ravine, which stretches into the north end of this development, some consideration should be made to installing a small pipe connection from the proposed storm pond facility. This would allow from some water recharge into the ravine but at a very low rate that would prevent downstream erosion which has been an issue in other ravine areas in the City.

All the storm sewer facilities will be designed in accordance with The City of Red Deer Design Guidelines and will be developers responsibility to maintain until the end of the two year maintenance period when this infrastructure will be turned over to The City of Red Deer.

Stormwater Runoff Initiatives

As part of a continuing effort to reduce stormwater runoff in the neighbourhood, home owners will be encouraged to design their lots to capture stormwater and reduce runoff, as shown above. This education program could include how to best utilize their rain barrel, how to construct rain gardens, or how to increase the amount of organic materials in their yard to absorb more water. By providing this information to new home buyers, residents would be encouraged to continue to reduce stormwater runoff throughout the life-cycle of their homes.

The developer may work with home builders to create this information package.

SANITARY SERVICING

Similar to the stormwater servicing, the City of Red Deer recently completed the installation of a new sanitary trunk up the escarpment of the Red Deer River Valley. This trunk line, currently constructed to the intersection of 30 Avenue and Northland Drive, will ultimately service most of the future development lands in east Red Deer. The City is proposing to extend trunk servicing south, along 30 Avenue, in 2014 in conjunction with the intersection improvements proposed at the intersection of 30th Avenue and 67 Street. The Evergreen development will connect to this new 30 Avenue trunk sewer at the northwest corner of the development. The sanitary sewer system will also designed to convey the design flows generated in NE 26.

All the sanitary sewer facilities will be designed in accordance with The City of Red Deer Design Guidelines and will be the developer's responsibility to maintain until the end of the two year maintenance period when this infrastructure will be turned over to The City of Red Deer. The overall conceptual sanitary sewer system for this development is shown on **Figure 28 - Sanitary Servicing** on page 62.

Sanitary Reduction Initiatives

Sanitary reduction will take place on a household basis by encouraging builders to install more efficient plumbing solutions during the time of home building.

WATER SERVICING

There is an existing 300mm watermain that is located at the intersection of the 30 Avenue and Carrington Drive. When this watermain is extended north up 30 Avenue in 2015, it will provide water service to the Evergreen development area. There will be a minimum of two connections to this 300mm water line along the west boundary of the neighborhood in order to provide water looping throughout the development. Ultimately there will be an additional looping provided to the future development area to the south. Also as shown there are future water stubs provided to the adjacent land parcel to the east.
All waterlines will be designed in accordance with the City of Red Deer Guidelines and will become the responsibility of The City of Red Deer to maintain after a two year maintenance period.



Water Reduction Initiatives

Reduction in water use will take place on a household basis by encouraging builders to install more efficient appliances during time of home construction, and encouraging home owners to utilize water-efficient landscaping techniques. In addition, the Developer will also be utilizing landscaping techniques throughout the neighbourhood's public spaces that will reduce the amount of water needed for its maintenance.



Evergreen has been designed to utilize front servicing rather than the City of Red Deer's standard lane servicing model. This has been done for the following reasons:

- minimize the use of lanes thereby increasing the amount of developable land and increasing residential density
- allow for enhanced streetscapes
 - » provide separated sidewalks on both sides of all collector and two-way local roadways
 - » include landscaped boulevards to increase visual appeal, provide future shade to pedestrians, and increase safety by providing a barrier between pedestrians and motorists
 - create strong pedestrian connections by increasing pedestrians' comfort level within the roadway network
- maximize the amount of homes backing onto green spaces
- increase the level of interaction between homes and open spaces

SHALLOW UTILITIES

Shallow utility services will be provided by the following companies:

- ATCO Gas (Natural Gas)
- The City of Red Deer E.L. & P. Department (Electricity and Streetlights)
- Telus Communications (Telephone)
- Shaw Cable (Cable Television)

These utility providers are intended to extend their infrastructure from the North Highway Connector in order to service the Plan Area. The shallow utility alignments will be established during preparation of the servicing study of Evergreen.

Location of all shallow and deep utilities within roadway rights-of-way will be determined during the Servicing Study stage in association with roadway cross-section review and finalization.



LEGEND







LEGEND

Water Servicing

Water Stub

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EVERGREEN NEIGHBOURHOOD AREA STRUCTURE PLAN | MELCOR DEVELOPMENTS LTD.



PHASING

Infrastructure to service the first phase of Evergreen will be extended east from the sanitary and storm trunks located along 30th Avenue. Each successive stage will be developed with the logical and economical extension of municipal services with the intent of meeting the needs of the regional and local housing market.

The early phases are expected to start along the gateway roadway into Evergreen, including the main stormwater pond, and proceed south, north, and west. The phasing boundaries shown are conceptual in nature and may vary from those shown when redesignation and subdivision applications are made. Phasing boundaries also may be adjusted to accommodate the abandonment and removal of the Conserve Oil pipeline running north to south along the western boundary of the Plan Area. Portions of separate phases may be developed concurrently if there is sufficient demand and/or if municipal servicing is made more efficient as a result. To minimize the impact to the existing ravine, Phase 7 is intended to be developed in cooperation with the adjacent quarter section to the east. This coordination would facilitate providing access and servicing to the area.

In areas adjacent open space, a construction boundary will be set prior to home construction to protect existing vegetation and prevent encroachment.

For the residential area located the southeast corner of the plan, allocated for R1G – residential small lot development, further analysis is required to identify adequate snow storage capacity. Evergreen's Developer shall work with the City of Red Deer to determine a solution for snow storage in the R1G area prior to subdividing the R1G phase.

Connections into Adjacent Areas

In addition to the servicing negotiations identified on page 58, Evergreen's Developer may be required to register City of Red Deer rights-of-way to facilitate the



installation of roadway extensions connecting to the adjacent quarter section to the east, if development is anticipated to proceed on this adjacent parcel prior to roadways reaching the quarter section boundary.

This requirement will be imposed by way of a Supplementary Condition in a future Development Agreement for a development phase in Evergreen if the City's Development Section determines it to be necessary in order to allow the adjacent quarter to the east timely access.

REDESIGNATION AND SUBDIVISION

Redistricting and subdivision applications, to conform to the land use designations described in this NASP, will be undertaken as necessary. Guided by The City of Red Deer Municipal Development Plan, The City of Red Deer East Hill Major Area Structure Plan, and the Evergreen NASP, redesignation and subdivisions must conform to The City of Red Deer Land Use Bylaw and all applicable statutory plans in addition to the informational requirements necessary for each application.

DETAILED DESIGN AND MAINTENANCE



Design Report & Architectural Guidelines

To guide the visual aesthetic of the neighbourhood, subsequent design documents will be created. These documents will not be approved by the City of Red Deer as they are intended for Developer use only.

Community Conceptual Design Report

The Community Conceptual Design Report describes the overall theme and feeling of the community's public spaces. Topics addressed within this Report may include but will not be limited to the following:

- Explanation of community name and logo
- Entry feature locations and design

- Areas of enhanced landscaping with design
- Description and design of streetscape
- Identification of lighting style and decorative banners
- Identification of streetscape furniture
- Description of trail and open space network
- Location and design of community fencing

Architectural Guidelines

Architectural Guidelines will be created for the Evergreen community to guide home builders towards the outlined vision for the neighbourhood. Topics covered in these guidelines will include the following:

- Site planning: house placement, setbacks, grades, walkways, driveways, etc
- Architectural design: housing product, style, repetition, corner lot requirements, backing onto public green space, walkout lots, roof pitch, chimneys, windows, dormers, exterior lighting, porches, etc
- Building materials: primary and secondary walls, masonry, trim, roofing, doors, colours, etc
- Built Green guidelines



All parks and public spaces will be designed using the principles of Crime Prevention Through Environmental

Design. Such design features may include:

- Increasing natural surveillance by facing house windows toward public areas
- Utilizing semi-transparent fencing around park spaces
- Reducing glare by choosing appropriately scaled lighting
- Implementing a high quality maintenance program to reinforce pride and ownership of public spaces

These design features will be integrated into the design of Evergreen during the detailed design process for public open spaces and may be incorporated into the Architectural Controls where appropriate to enhance safety in private areas such as the commercial site.



Home Owners' Association

The Evergreen community may be run via a Home Owners Association (HOA). An HOA provides the opportunity for long term maintenance for enhancements of the Evergreen neighbourhood, which are over and above the standards set by the City of Red Deer's *Neighbourhood Planning and Design Standards*. Residents pay an annual fee which contributes to the management and maintenance of Evergreen. Details regarding what the HOA will provide for residents will be determined by the Developer prior to lot sales.

It should be noted that a Home Owners Association is registered as a Restrictive Covenant on the title of each home.

An agreement with the City of Red Deer would required to identify what the responsibility of the City and the HOA will be. Although Evergreen's amenities will be partially funded by an HOA, access of the open space system and trails will be open to everyone.

appendix a



Figure 34 - Perspective Massing Illustration - North Stormwater Management Facility.





Figure 36 - Perspective Massing Illustration - R2T Housing North of Gateway Roadway.





Figure 38 - Perspective Massing Illustration - View from Northwest.



appendix b



Updated 14/08/20, 10:43 AM;By: GLAU

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