



**SCHEDULE "A"**

# **Cambrian Crossing** **Area Structure Plan**

---



<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	PURPOSE .....	1
1.2	LOCATION .....	1
1.3	VISION .....	1
1.4	PLANNING CONTEXT .....	2
<b>2.0</b>	<b>DEVELOPMENT CONCEPT .....</b>	<b>3</b>
2.1	OVERVIEW .....	3
2.2	LIVE, WORK, PLAY, LEARN .....	3
2.3	TRANSITIONAL PROVISIONS.....	4
2.4	LAND USE OVERVIEWS.....	4
2.4.1	<i>Industrial</i> .....	4
2.4.2	<i>Commercial</i> .....	6
2.4.3	<i>Residential</i> .....	7
2.4.4	<i>Institutional</i> .....	8
2.5	NEIGHBOURHOOD LAYOUT .....	8
2.5.1	<i>Light Industrial Park (1)</i> .....	9
2.5.2	<i>West Commercial Centre (2)</i> .....	9
2.5.3	<i>Transitional Business Employment (3)</i> .....	10
2.5.4	<i>West Village (4)</i> .....	12
2.5.5	<i>North Village (5)</i> .....	13
2.5.6	<i>Village Core (6)</i> .....	13
2.5.7	<i>South Village (7)</i> .....	14
<b>3.0</b>	<b>OPEN SPACE AND NATURAL AREAS.....</b>	<b>15</b>
3.1	OVERVIEW .....	15
3.2	STORMWATER MANAGEMENT FACILITIES.....	15
3.3	SCHOOL SITES .....	17
3.4	PARKS .....	18
3.5	CONNECTIVITY AND NOISE ATTENUATION .....	19
<b>4.0</b>	<b>MOBILITY NETWORK .....</b>	<b>20</b>
4.1	OVERVIEW .....	20
4.2	MODAL SPLIT & TRIP REDUCTION.....	20
4.3	ROAD NETWORK .....	22
<b>5.0</b>	<b>SERVICING .....</b>	<b>26</b>
5.1	OVERVIEW .....	26
5.2	STORMWATER MANAGEMENT .....	26
5.3	SANITARY SEWER.....	27
5.4	WATER SERVICE .....	27
5.5	FRANCHISE SERVICES.....	28
5.6	COMMUNITY ENERGY SYSTEMS .....	28
5.7	ECO-INFRASTRUCTURE CORRIDOR .....	28
<b>6.0</b>	<b>IMPLEMENTATION .....</b>	<b>29</b>
6.1	OVERVIEW .....	29
6.2	SUN GUIDELINES .....	30

6.3	ZONING .....	31
6.4	STAGING .....	31
6.5	ONSITE CONSTRUCTION AND SERVICING .....	31
6.6	OFFSITE INFRASTRUCTURE .....	32
<b>7.0</b>	<b>FIGURES .....</b>	<b>34</b>
	FIGURE 1: LOCATION.....	34
	FIGURE 2: NEIGHBOURHOOD OVERLAY.....	36
	FIGURE 3: DEVELOPMENT CONCEPT .....	37
	FIGURE 4: OPEN SPACE & PEDESTRIAN LINKAGE.....	38
	FIGURE 5: MOBILITY PLAN .....	39
	FIGURE 6: SANITARY SERVICING PLAN.....	40
	FIGURE 7: STORMWATER SERVICING PLAN .....	41
	FIGURE 8: WATER SERVICING PLAN .....	42
	FIGURE 9: STAGING PLAN .....	43
<b>8.0</b>	<b>APPENDIX A: DEVELOPMENT STATISTICS.....</b>	<b>44</b>
<b>9.0</b>	<b>APPENDIX B: SITE SPECIFICS .....</b>	<b>47</b>
<b>10.0</b>	<b>APPENDIX C: PUBLIC ENGAGEMENT .....</b>	<b>51</b>

## 1.0 INTRODUCTION

Strathcona County is part of Alberta's Capital Region. Growth in the region has steadily increased during the last decade, driven primarily by the oil and gas industry. However, the impending build out of Sherwood Park has placed additional pressures on the available land supply within the Urban Service Area. Located within the Urban Service Area, but also on the door step of Alberta's Industrial Heartland, Cambrian Crossing provides a logical choice for development to respond to these growth pressures. With the formation of the Capital Region Board in 2008, which became the Edmonton Metropolitan Region Board in 2017, regional cooperation has influenced the type and direction of growth within the region. Cambrian Crossing is well suited to respond to these immediate pressures for business, industrial, commercial and residential development and provides a much needed transition to future development nodes beyond the current Urban Service Area boundaries. A unique opportunity also presents itself for the creation of a community developed around the principle of living, working, playing and learning all within a stone's throw of each other. Cambrian Crossing encompasses these attributes and will serve to foster a new sustainable way of living and valued sense of place for the coming generations.

### 1.1 Purpose

The purpose of this ASP is to provide a statutory framework for land use planning, provision of municipal services and infrastructure, development staging and amenities in conformance with various planning policies, regulations, bylaws and requirements of Strathcona County.

### 1.2 Location

Cambrian Crossing is located in a unique setting where major transportation routes intersect, providing an accessible site for future businesses and residents. In addition, the significant natural features of the site make it a visually attractive location. This Area Structure Plan encompasses approximately 365 hectares of land, located at the north-western corner of Highway 16 and Highway 21. The plan area abuts the C.N.R. railway line to the south. The Realigned Township Road 534 forms the northern boundary. Range Road 231/Clover Bar Road forms the western boundary. The lands in question will be named Cambrian Crossing henceforth, and will be referred to as such in the text of this document (Figure 1).

### 1.3 Vision

The following vision statement was developed for Cambrian Crossing:

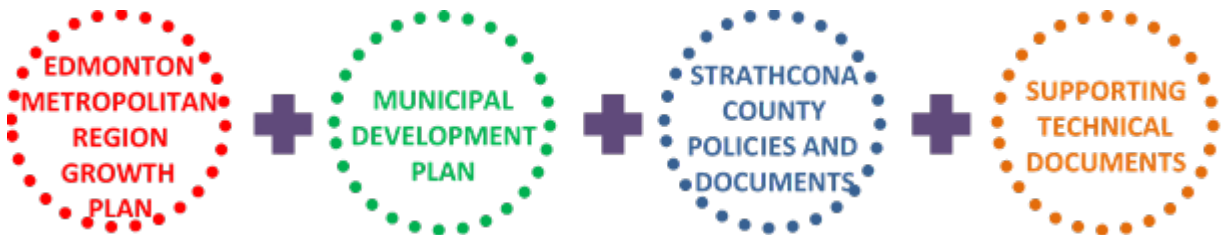
*This leading edge, sustainable community will be uniquely integrated for living, working, learning, playing and relaxing. Inspired by its rural roots, recognizable location and natural landscape features such as Oldman Creek, it will become a series of mixed uses that embrace sustainable development and sustainable living practices in an inclusive community where:*

1. *Diversity and choice of industry, business and housing are available;*
2. *Residents, business owners, workers and visitors choose walking, biking, and transit as preferred means of mobility in the community;*
3. *A variety of employment options are integrated throughout the community; and*
4. *The health, well-being and culture of the community and the environment are respected and realized*

## 1.4 Planning Context

Cambrian Crossing is a planning initiative that aims to build on the concepts outlined in the North of Yellowhead Area Concept Plan (ACP) document and develop them in a more specific manner. The need for comprehensive planning to accommodate logical development is the basis for the preparation of this document. The Cambrian Crossing ASP will provide a planning framework to transition to development of the Urban Reserve.

The Cambrian Crossing Area Structure Plan (ASP) should be read in conjunction with Strathcona County's MDP, supporting technical documents, as well as other Strathcona County policies and documents. Additionally, regional plans as well as provincial acts and regulations apply, such as the Municipal Government Act and the Edmonton Metropolitan Region Growth Plan.



**Objective:** to ensure Cambrian Crossing aligns with existing policy

*Policy 1.4.1: All developments within Cambrian Crossing shall comply with Strathcona County policies current at the time of development.*



## **2.0 DEVELOPMENT CONCEPT**

### **2.1 Overview**

Cambrian Crossing is a comprehensive community that incorporates residential, commercial, industrial and institutional land uses (Figure 3). To accommodate and organize these land uses, the Plan Area has been divided into seven distinct neighbourhoods (Figure 2). This development is based on a Sustainable Neighbourhood (SuN) Development approach. As such, the design of the site has resulted in the creation of a walkable, mixed-use community with extensive open space connectivity. Within this community there are opportunities for residents to live, play, work and learn. The policies set forth in this ASP will define the development of this type of community.

Cambrian Crossing is designed to be sustainable; therefore, policies herein are designed to provide guidance for this type of development based on current understanding of sustainability principles. As sustainable technology and neighbourhood design continue to change, this ASP document must remain flexible in order to allow for change to be incorporated into the plan area in an increasingly rigorous or progressive manner.

### **2.2 Live, Work, Play, Learn**

The Cambrian Crossing development will be a place to live, work, play and learn within a compact design. It will generate approximately 4,750 households which will accommodate approximately 11,450 residents. A number of industrial and commercial areas are available within Cambrian Crossing to provide residents with employment opportunities in close proximity to their homes. This increases the ability to choose alternative modes of transportation such as walking, cycling, and public transit. In total, it is estimated that up to 3,500 jobs may be created throughout the plan area in a variety of land uses including commercial, industrial and transitional business. If this estimated number is realized, it would create approximately 0.73 jobs per household within the plan area. Promoting a diversity of employment opportunities within the plan area will help to realize Strathcona County's sustainability objectives.

The design concept combines a mix of housing with work opportunities in an effort to provide options for many different lifestyles and an opportunity to grow and change within the same neighbourhood. The mixed-use style of development integrates commercial and public spaces throughout the community, increasing opportunities for social interaction and recreation within the plan area. Schools are anticipated for development in the plan area to provide opportunities for families to access educational opportunities within their own community, possibly further reducing vehicle trips. Institutional sites within the plan area which provide options for possible places of worship, aging in place opportunities, or any of a variety of other permitted uses.

## 2.3 Transitional Provisions

The development of Cambrian Crossing must take into consideration the connection to the Urban Service Area. Transitional provisions from one development area to the other will need to be considered when the land within Bremner to the east is developed in the future.

To the west of the plan area, there are industrial lands that require transitional considerations. Business employment land uses will be located on the western edges of the plan area to accommodate for this.

Transitioning between all other land uses from industrial uses will be required. Consideration has been taken in providing transitions between land uses within the development area including transportation corridors, open spaces, residential, commercial and industrial land uses. This consideration ensures the most efficient use of land and the least negative effects on land users. The Transitional Business Employment neighbourhood is located adjacent to the West Village to provide a transition from industrial use to the west and residential use to the east. Consideration has been given in providing transitions between industrial and other land uses including Public Utility Lots, open space areas, commercial uses and the Transitional Business Employment neighbourhood.

## 2.4 Land Use Overviews

### 2.4.1 Industrial

The Cambrian Crossing development includes an industrial area on the southwest side of the plan area that will provide employment opportunities for skilled workers. It is expected that the development of industrial uses will have a corresponding effect on the demand for residential housing.

The Light Industrial neighbourhood will be serviced to industrial standards and will provide opportunities for light industrial uses. It is located at the periphery of the plan area to provide a transition from the C.N.R. railroad track in the south, Range Road 231 and medium industrial uses to the west. In addition, it provides easy access to major arterial roadways which provide connectivity to the region and beyond.

Screening and buffering of all outdoor storage must be provided in industrial areas so that it is not visible outside of the lot. Associated nuisance factors will be limited to within the building.

**Objective:** to provide employment opportunities for residents of Cambrian Crossing within Cambrian Crossing

**Policy 2.4.1.1:** Cambrian Crossing will provide light industrial land within the Industrial Parks in the plan area in general accordance with the development concept.



**Objective:** to ensure an effective interface between industrial and other land uses in the plan area

Policy 2.4.1.2: Industrial uses in Cambrian Crossing shall be limited to light industrial and will not produce nuisance factors that extend beyond the building envelope.

Policy 2.4.1.3: All outdoor storage in industrial areas within Cambrian Crossing must be screened from view.

Policy 2.4.1.4: Industrial buildings that are visible to other land uses within Cambrian Crossing must maintain a high level of aesthetic appeal.

#### **2.4.1.1 Eco-Industrial**

An eco-industrial park is characterized by closely cooperating manufacturing and service businesses that work together to improve their environmental and economic performance by reducing waste and increasing resource efficiency. In the application of the SuN LIVING principles in this development, eco-industrial principles have been considered to increase opportunities for sustainability. As such, it is necessary that the Rights-of-Way requisite for future eco-industrial infrastructure be designed into Cambrian Crossing immediately, even if they are not immediately required. This will ensure that if eco-industrial infrastructure is desired for future use that it will be convenient to utilize it within the plan area. The Light Industrial Park has been identified as an appropriate location to accommodate this.

Resource sharing could be available for businesses in the Light Industrial Park to utilize. There is an opportunity for waste products from the industrial, commercial and residential land uses within the plan area to be used by the Light Industrial Park as feedstock. It will be the responsibility of Strathcona County to maintain a database system of eco-industrial networking opportunities.

Providing green infrastructure such as green roofs on industrial buildings in this plan area may provide opportunities to grow edible foods, increasing opportunities for urban agriculture within the plan area without utilizing additional land. Orientating buildings to maximize solar efficiencies for passive solar heating and utilizing thermal massing for heating and cooling can help to reduce energy requirements.

Other aspects of eco-industrial principles that are important to incorporate into the design of the Industrial Parks within Cambrian Crossing are social interaction and physical well-being. Providing opportunities for employees to improve their social and physical health during the work day is important for the long-term sustainability of a business and the longevity of its workforce.

**Objective:** to provide opportunities for eco-industrial principles to be incorporated into the Industrial Parks within the plan area

*Policy 2.4.1.5:* Industrial buildings within Cambrian Crossing shall be oriented to maximize solar efficiencies for passive and active applications and utilize thermal massing for heating and cooling with less energy requirements. Refer to the SuN Guidelines for development guidelines.

*Policy 2.4.1.6:* Industrial development throughout Cambrian Crossing shall encourage the use of green infrastructure. Refer to the SuN Guidelines for development guidelines.

*Policy 2.4.1.7:* A Right-of-Way intended for the piped distribution of liquid or gas resource sharing shall be designed into the Light Industrial Park within Cambrian Crossing.

*Policy 2.4.1.8:* Strathcona County shall maintain an eco-industrial database system for the purposes of resource sharing.

**Objective:** to provide increased opportunities for physical activity, access to nature and social interaction in Industrial Parks

*Policy 2.4.1.9:* Industrial development within Cambrian Crossing should provide accessible outdoor public spaces/amenities for socialization and enjoyment of nature. Refer to the SuN Guidelines for development guidelines.

## **2.4.2 Commercial**

There are four types of commercial opportunities within the Cambrian Crossing plan area. The first is proposed in the West Commercial Centre. This neighbourhood provides a diversity of businesses with convenient accessibility, for both motorized and non-motorized modes of transportation and has been designed to support the residents of Cambrian Crossing as well as residents of greater Strathcona County. The West Commercial Centre also includes the Main Street development which will support retail development at grade with residential development above. The West Commercial Centre's proximity to both the Transitional Business Employment and West Village neighbourhoods provides retail and service options for employees and residents in these areas.

A second type of commercial use within Cambrian Crossing is at the centre of the Village Core on the east side of the plan area. The Village Core, located between the North and South Villages, provides a location for a variety of services and retail to be situated around a gathering point for residents. This mixed-use core will provide ground-oriented commercial with residential opportunities on upper levels.

The third is the community commercial area within the Transitional Business Employment neighbourhood. The commercial area's proximity to the Light Industrial neighbourhood and the Transitional Business Employment neighbourhood provides retail and service options for employees working in these areas.

The final type of commercial use within Cambrian Crossing can be found within the North and South neighbourhoods on the east side of the plan area. These small scale mixed-use nodes will provide convenience commercial opportunities on the ground floor and residential units in upper floors. The provision of neighbourhood commercial nodes will provide opportunities for residents to access services required for day-to-day living within a walkable distance of their own community.

### **2.4.3 Residential**

There are a variety of residential options available within Cambrian Crossing. With a target density of 30-45+ units/nrha, a mix of low and medium density housing types will be required. The residential areas within Cambrian Crossing may include single family lots with densities ranging from 12 units/nrha to 30 units/nrha, which would provide opportunities for secondary suites. Medium density residential options include multiple townhouse styles, low-rise apartments, some with commercial opportunities on the ground floor. Proposed medium density housing may range from 30 units/nrha to 90 units/nrha.

Densities are spread out throughout the plan area. Generally, medium densities are located around mixed- use nodes, commercial uses, proposed school sites and major transportation routes. Lower density housing will be dispersed between medium densities. Optimum distances from transit opportunities and commercial options were taken into consideration to ensure the walkability of all residential neighbourhoods within Cambrian Crossing. Transitions from other land uses have been taken into consideration throughout the development to ensure high quality of life for all residents.

The provision of medium density residential sites allows for the possible integration of assisted living, or affordable housing into residential areas. Proposed apartment sites in close proximity to commercial neighbourhood nodes and with collector road access could accommodate these without deterring from the intended character of the neighbourhood. The developer will work with Strathcona County to identify affordable housing opportunities within the plan area. A variety of options are being explored at this point, as housing affordability is a priority within this development.

**Objective:** to accommodate a variety of residential options in a compact design

*Policy 2.4.3.1: Residential development in Cambrian Crossing shall meet a minimum average net residential density of 30 units/nrha.*

*Policy 2.4.3.2: Within Cambrian Crossing there shall be a range of housing types including single family, single family with secondary suites, townhouses and apartments.*

**Objective:** to provide mixed-use residential design

*Policy 2.4.3.3: Commercial nodes within Cambrian Crossing shall be mixed-use with service and retail opportunities on the ground floor and residential units on the upper levels.*

## **2.4.4 Institutional**

There are two institutional sites proposed within the plan area; one on the west side, and one on the east side of the plan area.

Institutional sites provide opportunities for a variety of functions including but not limited to: places of worship, care centres, health services, recreational facilities, emergency services, and various types of housing. Institutional uses provide additional amenities to the residents within the plan area and the surrounding communities. They are an important component of a complete community.

As demand for larger institutional sites increases, so does the associated traffic and congestion around these areas during times of peak use. The institutional sites within Cambrian Crossing are generally located along the edges of the plan area and in close proximity to business employment uses. These locations are optimal when use of these sites generates high volumes of traffic. Additionally, the placement of these uses provides buffering for the residential uses within the plan area from high traffic transportation corridors.

## **2.5 Neighbourhood Layout**

The size of the plan area, coupled with the development goal of creating a comprehensive community, has resulted in the identification of seven distinct neighbourhoods, each with its own unique identity. Some neighbourhoods are intended for one specific use, such as residential or industrial. Other neighbourhoods, however, include a variety of land uses. The combination of all neighbourhoods within the plan area creates a complete community.

The SuN Guidelines will be integral for a complete understanding of the internal design of each of these communities. Figure 2 provides an overlay of the plan area that identifies these neighbourhoods. The following section provides an overview of the seven identified neighbourhoods.

### 2.5.1 Light Industrial Park (1)

The Light Industrial Park is located in the southwest corner of the plan area, bounded by the C.N.R. railroad to the south, Range Road 231 to the west, the West Village to the north and the Oldman Creek to the east. Its location in the southwest corner will provide a buffer from the high-traffic C.N.R. railroad to the south for the rest of the plan area. This Industrial Park provides an easy transition from industrial to residential uses. This location is surrounded mainly by Environmental Reserve to the east and park and green space to the north which will assist in buffering associated nuisance factors produced on the site.

The Light Industrial Park will accommodate primarily light industrial and business employment land uses. There is an expectation that this area may attract large truck traffic because of its close proximity to Highway 16 and Clover Bar Road. Quick and easy access and egress from this area will be provided to reduce impacts to the rest of the plan area.

**Objective:** to provide opportunities for land intensive industrial users

Policy 2.5.1.1: Lot sizes within the Light Industrial Park of Cambrian Crossing shall be a minimum of 0.4 ha and a maximum of 4 ha.

Policy 2.5.1.2: Industrial uses in the Light Industrial Park within Cambrian Crossing shall meet a high standard of aesthetic appeal. Refer to the Architecture and Landscape Design Guidelines as set out by the developer's architectural controls, the Land Use Bylaw and the SuN Guidelines.

### 2.5.2 West Commercial Centre (2)

The West Commercial Centre is located in the northwest of the plan area and is the major commercial hub and focal point for the Cambrian Crossing area. The area incorporates commercial and residential uses to form a central node for retail, service and public amenities for use and enjoyment by the entire Cambrian Crossing community. The neighbourhood is centred around a main street with street-oriented retail on the main floor and medium-density residential above. The mixed use main street is the major connection through the neighbourhood and to the adjacent West Village. The main street promotes the development of a walkable commercial retail area and provides pedestrian connections to the Oldman Creek and further to the Village Core, North Village, and South Village.

Larger format commercial land uses are located at the northwest boundary of the neighbourhood to improve visibility and benefit from regional traffic along Range Road 231. The SuN Guidelines will provide guidelines for the design of this neighbourhood to ensure that it is developed as an attractive entrance and appropriate gateway to the community.

Residential development within this neighbourhood supports a variety of housing types from single-family dwellings to low-rise apartments. The West Commercial Centre provides an opportunity for more intense residential uses to be concentrated around the commercial core, where accessible transit options are also available. This neighbourhood supports the possible integration of assisted living into the residential component.

**Objective:** to provide commercial opportunities for the plan area and surrounding region

**Policy 2.5.2.1:** A variety of commercial uses, such as a grocery store, shall be provided in the West Commercial Centre of Cambrian Crossing to satisfy local and regional demands.

**Objective:** to encourage pedestrian use of commercial areas

**Policy 2.5.2.2:** *Parking shall be provided to the rear of commercial businesses in the West Commercial Centre of Cambrian Crossing.*

**Policy 2.5.2.3:** Commercial buildings within the West Commercial Centre shall meet aesthetic standards as outlined in the SuN Guidelines for Cambrian Crossing.

**Objective:** to provide for a range of housing types and densities while clustering development around commercial nodes

**Policy 2.5.2.4:** *Apartment development in the West Commercial Centre of Cambrian Crossing shall only be permitted adjacent to Commercial land uses at the centre of the neighbourhood or on institutional sites.*

**Policy 2.5.2.5:** *Retail space may be incorporated on the ground floor of apartment sites within the West Commercial Centre of Cambrian Crossing.*

**Policy 2.5.2.6:** The West Commercial Centre within Cambrian Crossing shall achieve a minimum residential density of 55 units/nrha and maximum residential density of 70 units/nrha.

### **2.5.3 Transitional Business Employment (3)**

The Transitional Business Employment neighbourhood is located west of the West Village neighbourhood. It will provide an aesthetically appealing corridor and provide a transition from industrial uses to the west of Range Road 231 and residential uses to the east in the West Village. Businesses in this area will be required to meet a high standard of aesthetic appeal as they



frame the Cambrian Crossing gateway and will be highly visible by automobile and pedestrian traffic along Range Road 231. This area will offer additional retail options, services, office space, and employment opportunities within close proximity to area residents. The permitted uses in the Transitional Business Employment neighbourhood will be limited to professional office buildings, retail, wholesale suppliers, personal services, etc. Emergency services are expected to be located within the Transitional Business Employment area. Outdoor storage facilities and manufacturing will not be permitted.

Development in the Transitional Business Employment neighbourhood will be subject to high architectural standards, continuous with the West Commercial Centre. This area is located adjacent to residential areas and as such, must be sensitive to those land uses and sight lines from the east.

An Institutional parcel is located directly south of the large green space in this area. This location provides a separation of institutional uses from residential uses within the plan area. It is on the periphery of the plan area which is more accessible for users that do not live within the community. Due to the nature of institutional uses, it is most likely that high traffic volumes will occur at off-peak hours when compared to business employment uses. Locating institutional uses within business employment areas reduces traffic congestions, and allow for opportunities for shared parking.

**Objective:** to provide local employment opportunities for neighbourhood residents and assist in the transition between industrial uses to the west and residential uses to the east"

*Policy 2.5.3.1: Businesses within the Transitional Business Employment neighbourhood in Cambrian Crossing shall not have associated nuisance factors.*

*Policy 2.5.3.2: Outdoor storage and manufacturing shall not be permitted in the Transitional Business Employment neighbourhood in Cambrian Crossing.*

*Policy 2.5.3.3: The Transitional Business Employment neighbourhood within Cambrian Crossing shall meet a high standard of aesthetic appeal and shall be considered contiguous in style with surrounding development. Refer to the Architecture and Landscape Design Guidelines as set out by the developer's architectural controls, the Land Use Bylaw and SuN Guidelines to provide an appropriate transition to residential land uses to the east.*

*Policy 2.5.3.4: A religious assembly may be developed in the Transitional Business Employment neighbourhood in the area designated for institutional.*

*Policy 2.5.3.5: A fire station may be located within the Transitional Business Employment Area to enable efficient and effective emergency services response within the Plan's boundary and surrounding areas.*

#### **2.5.4 West Village (4)**

The West Village is solely a residential neighbourhood. Its proximity to the West Commercial Centre, the Transitional Business Employment neighbourhood and the Village Core precludes a need to include a mixed- use node in this neighbourhood.

A number of large lot single-family home areas have been provided in close proximity to Oldman Creek. The linear open space along the creek will remain open to the public. Pedestrian trails will provide connectivity between this neighbourhood, those to the south and east across the creek. Additional residential options including townhouses and small single-family lots will provide housing variety in this neighbourhood. Small parks have been included adjacent to the ravine area along the Top-of-Bank throughout the neighbourhood as part of the open space plan.

In the west central portion of the plan area, with portions in both the Transitional Business Employment and West Village neighbourhoods, is a large grassed hill area. A large green space has been designated at this location to provide a public amenity as well as an opportunity to incorporate a school, which will provide opportunities for complementary uses. By combining multiple public uses in one area, increased public transit can provide more opportunities to access the site.

**Objective:** to provide opportunities for residential development within the plan area

*Policy 2.5.4.1: Provide a range of residential land uses, including single-detached, semi-detached, town houses, and low-rise apartments.*

*Policy 2.5.4.2: The overall residential density within the West Village of Cambrian Crossing shall be a minimum of 30 units/nrha.*

*Policy 2.5.4.3: In the West Village of Cambrian Crossing the majority of residential development adjacent to the West Commercial Centre and Transitional Business Employment neighbourhoods shall be medium density residential.*

**Policy 2.5.4.4:** Residential development adjacent to the Oldman Creek shall include low- and medium- density housing.

**Objective:** to preserve the natural integrity of the plan area

*Policy 2.5.4.5: Encourage the hill located within the west central portion of both the Transitional Business Employment and West Village Neighbourhoods be incorporated into the development to promote the natural feature to be utilized as a public amenity and focal point.*

### **2.5.5 North Village (5)**

The North Village is in the northeast corner of the plan area, directly north of the Village Core. It is bounded by Oldman Creek on the west and Highway 21 to the east. This neighbourhood is mainly residential with one mixed-use node in the centre. A number of large lot single-family homes are located in close proximity to Oldman Creek. The Top-of-Bank area will be dedicated as Environmental Reserve along the creek and will remain open to the public.

A number of other residential densities can be found in this neighbourhood. Single family homes of various types and townhouses are located north of the school site proposed in this neighbourhood. There is one apartment site proposed for the neighbourhood, adjacent to the mixed-use node.

In addition to the large school site in this neighbourhood, a natural wetland, two stormwater management facilities, three parks and the greenway buffering Highway 21 contribute to a large amount of open space.

**Objective:** to provide a variety of housing types and densities

*Policy 2.5.5.1: The North Village in Cambrian Crossing shall achieve a minimum residential density of 26 units/nrha and a maximum residential density of 32 units/nrha.*

*Policy 2.5.5.2: In the North Village of Cambrian Crossing single family residential shall be adjacent to Old Man Creek*

*Policy 2.5.5.3: In the North Village of Cambrian Crossing apartments shall be located adjacent to the mixed-use node.*

### **2.5.6 Village Core (6)**

The Village Core neighbourhood is located directly in between the North and South Villages on the east side of Oldman Creek. This neighbourhood provides a variety of local retail and service options as well as a number of medium density residential units. A mixed-use corridor is located on the "High Street" in the centre of this neighbourhood. It incorporates the community gathering place with a piazza creating a ground-oriented, vibrant, pedestrian-friendly commercial hub, and a centre for social interaction within walking distance for many residences in the North Village, South Village and Village Core. The piazza will be able to accommodate festivals, farmer's markets and other social events. A variety of community-oriented facilities

may surround the piazza such as a Performing Arts Centre with residences above.

The “High Street” is connected by a pedestrian greenway to a Top-of-Bank road along the southern part of the creek. The Village Core is accessible to all residents within the plan area due to its central location and the connectivity of the mobility network.

The Village Core neighbourhood includes medium and high density residential uses. The centre of the Village Core is a mixed use area which provides retail and service opportunities on the ground floor with residences above. Mixed use areas can lower vehicle dependence, and provide viable opportunities for senior’s housing.

**Objective:** to provide appealing residential options to individuals without automobiles

*Policy 2.5.6.1: All commercial areas within the Village Core of Cambrian Crossing shall be part of a mixed use development.*

*Policy 2.5.6.2: The Village Core of Cambrian Crossing shall have a minimum residential density of 65 units/nrha and a maximum residential density of 90 units/nrha.*

## **2.5.7 South Village (7)**

The South Village is in the southeast corner of the plan area. It is bounded by Oldman Creek to the west, Highway 21 to the east, the Village Core neighbourhood to the north and the plan area boundary to the south. The South Village is a residential neighbourhood with two mixed use nodes. Residential densities are spread throughout this mixed-use development, with emphasis on higher densities close to major transportation routes for transit accessibility. Generally, the residential density in the South Village is intended to be higher than the North Village as no large-lot single-family homes will be developed in this neighbourhood.

An institutional use has been proposed on the southern edge of the plan area. This site could possibly include a residential component in association with a place of worship. An institutional site could also possibly be developed as a healthcare facility if the need arises for this community. This could include long-term care or an assisted-living facility.

**Objective:** to provide a compact residential neighbourhood with attached and detached housing options

*Policy 2.5.7.1: The South Village in Cambrian Crossing shall achieve a minimum average residential density of 30 units/nrha and a maximum residential density of 40 units/nrha.*

## 3.0 OPEN SPACE AND NATURAL AREAS

### 3.1 Overview

The Cambrian Crossing development includes an integrated open space plan that incorporates a pedestrian network which provides connectivity between Oldman Creek, parks, wetlands, stormwater management facilities (SWMF) and school sites throughout all neighbourhoods. Components of the open space plan have a variety of functions (Figure 4). Greenway 21 is an open space corridor and provides a buffer to Highway 21 and connectivity along the edge of the development from a stormwater management facility in the northeast corner of the plan area past the school site in the southeast. Additional wetlands and stormwater management facilities are integrated into the open space plan as public amenities and to provide connectivity to park spaces.

There are a variety of park spaces within Cambrian Crossing including small neighbourhood parks both internally associated with activity nodes and abutting the Creek setback. This provides user-friendly access to the creek corridor, which extends through the entire plan area from north to south. The placement of school sites as well as a number of neighbourhood parks throughout the plan area provide for resident accessibility to open spaces within a reasonable distance from their home or place of work. Park spaces within the plan area may provide opportunities for urban agriculture to be integrated into all neighbourhoods within Cambrian Crossing.

The preservation of features such as the Oldman Creek and existing wetlands contributes to the natural amenities provided by this design. The retention of all natural vegetation in open spaces throughout the plan area is encouraged where possible to support biodiversity and to prevent the need for landscaping irrigation in the future. A poplar tree stand has been proposed for retention in an area adjacent to the creek.

**Objective:** to retain natural vegetation in open spaces

Policy 3.1.1: Strathcona County policies with respect to tree conservation and tree management shall be followed to encourage the preservation of existing natural vegetation within open spaces throughout Cambrian Crossing.

Policy 3.1.2: The poplar stand adjacent to Oldman Creek within the Cambrian Crossing plan area shall be conserved.

### 3.2 Stormwater Management Facilities

The stormwater management facilities that are required for proper drainage of the plan area have been incorporated into the open space plan throughout Cambrian Crossing as public amenities. These facilities will include both dry and wet ponds, wet meadows, as well as retained wetlands that already exist

naturally within the development. In the western portion of the plan, there are areas which are located within the Edmonton Garrison Heliport Approach Zone. The Edmonton Garrison Heliport Zoning Regulations state that "no owner or lessee of any lands described in Part 7 of the Schedule shall modify or improve the lands or any part of them in a manner that increases their attractiveness to birds". Therefore, the proposed SWMFs located within the plan area will be designed such that they will not increase the attractiveness of the area to waterbirds and thus maintaining the level of safety for aviation in the Edmonton Garrison Heliport Zoning Area. Details of the SWMF are further explored in the associated engineering documents. Detail of the SWMF designs and characteristics within the Heliport Approach Zone will be determined through further detailed analysis.

Outside of the Edmonton Garrison Heliport Approach Zone, constructed wetlands will be encouraged whenever possible. Figure 4 identifies the areas where stormwater management facilities should be located in the development area.

**Objective:** to incorporate stormwater management facilities as public amenities

Policy 3.2.1: Stormwater management facilities should be publicly accessible throughout the Cambrian Crossing plan area.

**Objective:** to develop naturalized stormwater management facilities

Policy 3.2.2: Stormwater management facilities shall be constructed wetlands whenever feasible throughout the Cambrian Crossing plan area.

### 3.2.1 Wetlands

Strathcona County requires that existing wetlands in new developments are retained whenever possible. Disturbed wetlands in a development are to be compensated for by a ratio in accordance with the Alberta Wetland Policy and Strathcona County policies with any compensation allocations being provided for within Cambrian Crossing. As per the recommendations of the Biophysical Assessment and the addendum, some existing wetlands within the plan area will be maintained in their original state. Figure 4 identifies the three wetlands on the plan area that will be retained. These wetlands will be incorporated into the open space plan and contribute to the public amenities and connectivity within the development.

**Objective:** to mitigate disturbed wetlands through retention and compensation.



**Policy 3.2.1.1:** Compensation for disturbed wetlands within Cambrian Crossing shall occur within the plan area at a ratio in accordance with the Alberta Wetland Policy and applicable Strathcona County policies.

### **3.2.2 Oldman Creek and Top-of-Bank Interface**

The corridor surrounding Oldman Creek is protected by a development setback determined through geotechnical and biophysical studies. This setback varies from 36 m to 10 m along the Top of Bank. This area will be designated Environmental Reserve in accordance with Strathcona County's MDP to protect its natural integrity. It will remain accessible to residents and visitors in the community through the proposed trail system. The natural landscape shall remain untouched and therefore the biodiversity of the area should be protected. The proposed adjustment to the set-back line allows for efficient use of the land in this area, while respecting the geotechnical setbacks required for bank stability. On the east side of the creek, the set-back change is proposed on the southern portion of the creek where a TOB roadway will increase public accessibility to the creek, and will not infringe upon geotechnical set-back recommendations for the area, nor contribute to pollution of the creek. Adjustment of the Top-of-Bank set-back policy statement in the MDP will have no negative effect on the intended purpose of the Environmental Reserve dedication as the area remains publicly accessible, pollution is prevented, and geotechnical requirements are met.

**Objective:** to preserve the natural environment surrounding Oldman Creek

*Policy 3.2.2.1: A development setback from the Oldman Creek shall be established through geotechnical and biophysical evaluation.*

## **3.3 School Sites**

Three school sites have been identified within Cambrian Crossing; two on the east side of Oldman Creek and one on the west side. The school sites are approximately 4.5 ha to 5.5 ha in size. A determination of public vs. private school district allocation of these sites will be made when the need arises. Before the construction of these schools is required in these neighbourhoods, the Municipal Reserve areas can be utilized as public amenities for the plan area. After construction, the associated sports fields, playgrounds, etc. on the school sites can be utilized by the community when they are not being used for school purposes. The schools' locations along prominent streets within their neighbourhoods provide a visually appealing open space which is visible from many parts of the neighbourhood.

The school sites' locations ensure that they are a walkable distance for most residents in their neighbourhoods. They are located on collector roadways for convenient access and provide opportunities for school and public transit vehicles to easily service the sites. The schools' proximity to multi-use trails

and sidewalks may contribute to a higher likelihood of students walking or cycling to school rather than parents driving them. School locations are adjacent to the highest density residential areas of their neighbourhoods, further contributing to the likelihood of students cycling or walking to school. Opportunities for the integration of community facilities with the school sites will be explored.

**Objective:** to encourage alternative modes of transportation to access school sites

*Policy 3.3.1: School sites within Cambrian Crossing shall be located on collector roadways in locations that are accessible by school buses, public transit, automobile, cyclists and pedestrians.*

*Policy 3.3.2: School sites within Cambrian Crossing shall be integrated into a continuous pedestrian network.*

*Policy 3.3.3: School sites within Cambrian Crossing shall be located to minimize travel distance from residences within their respective neighbourhoods.*

### 3.4 Parks

A variety of parks have been defined throughout most of the neighbourhoods in the plan area for residents to use as recreational amenities. They provide connectivity through the plan area as part of the mobility network. These parks are primarily neighbourhood parks a minimum 0.4 hectares in size for use by neighbourhood residents. In addition there are opportunities to effectively utilize areas adjacent to the Oldman Creek ravine as trail heads and rest areas. These small parks are generally 0.2 hectares and smaller, but will provide convenient gathering places for all trail users.

The large park space spanning the Transitional Business Employment and West Village neighbourhoods serves as a focal point for the entire Cambrian Crossing area. The park space provides additional active and passive recreational opportunities for neighbourhood residents, including walking, and cycling, and gardening. Additionally an opportunity for a school to be integrated within this large park provides opportunities for complementary uses.

**Objective:** to provide public amenities throughout the plan area

*Policy 3.4.1: Municipal Reserve lands within Cambrian Crossing shall be available for public use.*

### **3.5 Connectivity and Noise Attenuation**

A strip of greenway running north-south on the east side of the plan area will provide a buffer from Highway 21 as it provides a physical separation of land uses. Greenway 21 will also provide connectivity between stormwater management facilities on the east side of the plan area. It will function as a wildlife corridor and include planted berms. The location of Greenway 21 along the Highway provides opportunities to incorporate noise attenuation strategies in accordance with Strathcona County and Alberta Transportation standards. Noise attenuation requirements along transportation corridors, highways and arterial roads will be determined prior to development approvals.

Connectivity between open spaces is provided whenever possible. In an effort to encourage pedestrian use of these spaces, a network has been created which will provide opportunities for individuals to access the open spaces by foot including sidewalks, paved and unpaved trails. Section 6 provides a comprehensive description of the pedestrian and cyclist network for the development. Figure 4 shows these proposed connections between open spaces in the plan area.

## 4.0 MOBILITY NETWORK

### 4.1 Overview

The mobility network for the Cambrian Crossing development area incorporates public transit service considerations, pedestrian and bicycle linkages as well as a road network that considers regional connectivity and efficient transportation within the plan area. Cambrian Crossing is designed to reduce automobile trips, therefore attention was paid to the provision of other convenient modes of transportation. The mobility network attempts to integrate all transportation options seamlessly. All facets of the mobility network in Cambrian Crossing will comply with and support Strathcona County's Integrated Transportation Master Plan.

### 4.2 Modal Split & Trip Reduction

Cambrian Crossing is designed to encourage individuals to utilize methods of travel other than personal automobiles. As such, the proximity of residential areas to employment is crucial in promoting pedestrian travel within the area. It is estimated that 10 percent of all commuting trips from residents within Cambrian Crossing will be as pedestrians or cyclists to businesses within Cambrian Crossing due to the close proximity of employment areas and the available pedestrian transportation network within the plan area. A transit transfer station is planned for Cambrian Crossing the northwest area in the West Commercial Centre neighbourhood.

Additional assumptions about modal split in Cambrian Crossing include 7 percent of residents using transit to move around within the plan area, and 7 percent of residents using transit to get to other areas within Strathcona County, which will reduce peak time automobile trips from this area by 14 percent. Due to these assumptions, residential neighbourhoods should be permitted where appropriate to incorporate reduced on-site parking requirements and as such, there may be less land required for off-street parking in the plan area. Details of these reductions will be dependent on the intended uses and will be determined as development proceeds.

**Objective:** to reduce vehicle trips within, to, and from the plan area

**Policy 4.2.1:** Cambrian Crossing will provide contiguous, user-friendly transit, pedestrian, and cyclist networks to encourage a modal shift away from the personal automobile.

**Objective:** to reduce personal automobile infrastructure requirements within the development

**Policy 4.2.2:** Cambrian Crossing will have reduced on-site parking availability to levels below what is expected in traditional development in order to encourage alternative modes of transportation.

#### 4.2.1 Public Transit

Strathcona County is committed to providing accessible, user-friendly public transit to Cambrian Crossing. It is understood that bus services will be necessary and will serve to reduce the amount of private intra- and inter-neighbourhood automobile trips. The service will include both local routes within the community and local routes to bus terminals and transfer points within Strathcona County that will connect people to the service beyond Strathcona County, some of which is already provided by Strathcona County. With increased densities in this and other future growth areas, public transit accessibility will increase which will result in a corresponding increase in public transit ridership. A transit transfer station is planned for Cambrian Crossing in the northwest area in the West Commercial Centre neighbourhood. The station will consist of a lay-by that can accommodate three buses initially and six buses at full build out. Additional details about the transit transfer station will be determined in consultation with Strathcona County Transit and Planning and Development Services.

Inter-neighbourhood trips are currently almost non-existent within Strathcona County. In an effort to promote sustainability and transit ridership, Cambrian Crossing has set a target goal of 7% reduction of intra-neighbourhood peak hour work trips by automobile in favor of transit, plus an additional 7% of inter- neighbourhood peak hour trips by automobile to other destinations within Strathcona County. Transit stops will be conveniently located within 400m of all residences and detailed routing analysis will be required as development proceeds to further encourage regular transit use. Transportation assessments within Cambrian Crossing reflect this target reduction.

**Objective:** to provide user-friendly public transit opportunities within Cambrian Crossing

**Policy 4.2.1.1:** The Cambrian Crossing development shall provide bus stops to be within a 400 metre walking distance of all residences.

#### 4.2.2 Pedestrian and Bicycle Linkages

Connectivity is an important part of the open space plan in the Cambrian Crossing development. A combination of multi-use trails and unpaved trails that meet the intent of the Intensive Urban trail classification has been included providing connectivity throughout the plan area. Connectivity in the development area also includes sidewalks along streets and creek crossings. Future upgrades to Clover Bar Road will meet Strathcona County standards which will incorporate pedestrian and cyclist trails, providing connectivity across the C.N.R. Railroad and Highway 16. The Cambrian Crossing trail system has been developed in a pattern that can be extended to meet regional trail systems and the proposed extension of the Trans Canada Trail near to the plan area. The pedestrian and bicycle network connection to the Trans-Canada Trail will provide active transportation linkages with Sherwood

Park as well as regional linkages with Edmonton and Fort Saskatchewan.

Multi-use trails have been incorporated parallel to most major collector roadways including the Civic Parkway providing a north-south connection, the east-west road which bisects the plan area, and the collector roadway that provides a loop around the entire development. Along the Top-of-Bank of the creek a multi-use trail has been proposed to follow the length of the Creek which runs north-south through the entire development. Where sidewalks do not provide adequate connectivity, additional paved trails may be necessary. Figure 4 outlines the location of all proposed trails in Cambrian Crossing.

**Objective:** to provide connectivity throughout the plan area

*Policy 4.2.2.1: The Cambrian Crossing development will provide multi-use trails along all major roadways and adjacent to Oldman Creek for pedestrian and cyclist use throughout the plan area.*

**Objective:** to provide connectivity to regional trail systems

*Policy 4.2.2.2: Trail linkages from the Cambrian Crossing development area shall connect to and comply with Strathcona County's Trails Strategy.*

*Policy 4.2.2.3: The trails developed within Cambrian Crossing shall comply with Strathcona County's Trails Strategy and accommodate connectivity to the Trans Canada Trail and Sherwood Park via Range Road 231.*

**Objective:** to encourage travel by pedestrians

*Policy 4.2.2.4: All roadways within Cambrian Crossing shall incorporate separate sidewalks on both sides of the street.*

## **4.3 Road Network**

### **4.3.1 Regional Connections**

A logical and efficient transportation system is imperative for the functionality and connectivity of any development. All-directional access to the plan area will be possible along Range Road 231 at three locations as shown on Figure 5 – Mobility Plan. In addition, several 'right-in right-out' intersections will provide access to the business employment and commercial uses along Range Road 231. The location of the 'right-in right-out' access points will be determined through consultation with the Planning and Development Services. This right-in only design will serve to allow safe, easy and efficient access into the neighborhood off Clover Bar Road without the requirement for stopping or traffic control devices. Details of the exact



locations of all of these access points will be further determined at the subdivision stage and in accordance with Strathcona County standards and good engineering practices.

Township Road 534 will be realigned and one all-directional access provided, generally as shown on Figure 5. Additional access points may be determined with the future development immediately north of Cambrian Crossing, however, do not form part of this ASP. The Clover Bar Road connection to the proposed Township Road 534 alignment will be examined in detail given the potential for geometric design challenges. Highway 21 and Highway 16 will not be directly accessible from the plan area.

#### **4.3.1.1 Future East Neighbourhood Connection**

Strathcona County has experienced significant growth in the past decade and land absorption within the current urban service area is nearing completion. Cambrian Crossing will provide a much needed source of additional development lands for the immediate future. However, following the development of Cambrian Crossing, new growth areas are expected. The Bremner Urban Service Area has recently been identified by County Council to the east of Cambrian Crossing as Strathcona County's next growth efforts. To that end, Cambrian Crossing has recognized that future development possibility and has provided for a connection point. It is anticipated that if a new neighbourhood is developed, that some connectivity to that neighbourhood might benefit both the Cambrian Crossing community and Bremner. Details of the development and requirements of the crossing will be explored as part of detailed engineering.

#### **4.3.1.2 Local Road Network**

Within the development, a functional roadway hierarchy will ensure appropriate circulation opportunities. The transportation system within Cambrian Crossing will consist of a series of major and minor collector roads providing connectivity from surrounding areas and through the development. Figure 5 outlines connectivity to the arterial roads surrounding the development site.

**Objective:** to provide connectivity to surrounding transportation routes

**Policy 4.3.1.1:** The mobility network within the Cambrian Crossing development shall link the plan area to greater Strathcona County through an integrated trail network and hierarchical circulation system for vehicles, pedestrians, cyclists and transit to connect to.

**Objective:** to provide a gateway to the community and distinguish major collector roadways

*Policy 4.3.1.2: Guidance on cross sections of all new roadways within Cambrian Crossing shall follow the development guidelines provided in the SuN Guidelines, Strathcona County Engineering Standards, and the Alternative Development Engineering Standards.*

#### **4.3.1.3 Urban Collector**

The urban collector network will accommodate a landscaped median in the centre of the roadway, generous sidewalks and grassed boulevards on both sides and a multi-use trail. The urban collector network may allow for on street parking during off-peak hours and will provide natural traffic calming measures with the introduction of parking in off-peak hours. Figure 5 outlines this road pattern and the associated trails throughout the development. Details of the cross-sections for the collector roads are included in the Design Brief.

#### **4.3.1.4 Roundabouts**

Due to the safety benefits and traffic accommodation, roundabouts are experiencing a resurgence of popularity in many North American cities. They provide many traffic management and traffic calming benefits, work well with pedestrian/vehicle conflicts, and are aesthetically pleasing. Roundabouts will be incorporated into the traffic design, primarily at the community nodes within Cambrian Crossing, the details of which will be determined as the neighbourhood develops.

#### **4.3.1.5 Top-of-Bank Roadway**

The South Village incorporates a Top-of-Bank roadway that runs from the Village Core southward along the east side of Oldman Creek. This road is located adjacent to the Top-of-Bank setback from the Creek. The Top-of-Bank (TOB) roadway provides physical separation of the housing from the ravine corridor while providing an opportunity for unlimited access to the ravine by all residents. Townhouse units are intended to front onto Oldman Creek along the TOB roadway. This design will allow those residents excellent opportunities for creek views and vistas. This separation will also allow for the Creek amenity to be shared by the public without infringement on private property. By connecting this roadway from the Village Core to the south of the plan area, a loop is created through the South Village providing additional connectivity through the east side of the plan area.

In some areas, additional dedication of Municipal Reserve for parks provides a protected area in addition to the setback from the Oldman Creek recommended by geotechnical and biophysical analysis, creating greater access to the Creek. This set-back may be reduced where geotechnical and topographical circumstances allow, thereby increasing public access to the Creek and maximizing efficiency of land use while not compromising the intentions of the Municipal Government Act to protect environmentally sensitive lands. In some areas, additional dedication of Municipal Reserve for

parks provides a protected area of more than 36 metres from the Creek creating greater access to the Creek. In combination, these measures create the most efficient land use pattern in this area, while preserving the ecological integrity of the Creek.

**Objective:** to provide access to the Top-of-Bank area of Oldman Creek.

*Policy 4.3.1.3: A Top-of-Bank roadway shall be provided adjacent to Oldman Creek within the South Village of Cambrian Crossing.*

*Policy 4.3.1.4: The Top-of-Bank roadway may be developed within the 36m Strathcona County recommended MDP Top-of-Bank setback, provided that it can be confirmed through geotechnical investigation that the setback reduction will not affect the slope stability of the ravine banks.*

## 5.0 SERVICING

### 5.1 Overview

Servicing for the Cambrian Crossing plan area will be provided in accordance with Strathcona County urban standards and requirements unless it can be demonstrated that alternative methods of servicing better meet the requirements for sustainability as set out in this ASP.

The Design Brief submitted to Strathcona County in association with this ASP details how the proposed servicing for Cambrian Crossing will be implemented.

Policy 5.1.1: Servicing for the Cambrian Crossing plan area will be provided in accordance with Strathcona County urban standards and requirements unless it can be demonstrated that alternative methods of servicing better meet the requirements for sustainability as set out in this ASP.

### 5.2 Stormwater Management

There are six areas that need to be addressed regarding stormwater management within this development. The proposed stormwater management facility locations are based on the implications of these six principles. Proposed Stormwater Management Facilities are shown on Figure 7.

1. The major drainage system for the Cambrian Crossing plan area will follow the natural topography as much as possible in order to minimize earth-moving requirements.
2. Stormwater management facilities within new developments in the Oldman Creek drainage basin must provide storage to hold all the runoff with no discharge to the creek during rainfall events.
3. Three wetlands will be retained within the Cambrian lands. These wetlands will be incorporated into the stormwater drainage system in order to provide water to the wetlands and ensure their long-term viability.
4. Part of the western side of the plan area is located in the Edmonton Garrison Heliport Approach Zone. As such, no stormwater management facilities with standing water will be permitted in this area. In the Heliport Approach Zone, stormwater management facilities must be developed as either dry ponds or wet meadows.
5. Stormwater management facilities will be developed as natural treatment facilities whenever possible with the intention of improving stormwater runoff water quality through biological processes. The location of the southern-most stormwater management facility respects the natural drainage patterns of the site's existing topography and will provide

amenity spaces to surrounding businesses. Consideration should also be given to the integration of bio-swales into the roadway network to transport flows and further promote infiltration, rather than incorporating all stormwater into underground piping systems.

6. The plan area is divided into seven basins which drain generally to the north and toward Oldman Creek. Within each basin, stormwater management facilities have been located for retention and storage of stormwater. This will ensure that stormwater does not flow directly into the creek and is filtered prior to its release into the Creek.

**Objective:** to ensure that stormwater will be managed appropriately within the plan area

*Policy 5.2.1: Prior to issuance of a development permit, a Surface Runoff Management Plan shall be developed to the satisfaction of the approving agency. The Plan shall address Low Impact Development strategies to be used on site and the projected amount of run-off that will not be managed on-site.*

**Objective:** to recognize the Edmonton Garrison Heliport Approach Zone as a significant constraint to development

*Policy 5.2.2: Stormwater Management facilities within the Edmonton Garrison Heliport Approach Zone in Cambrian Crossing shall not include bodies of standing water. Refer to the SuN Guidelines for guidance.*

### 5.3 Sanitary Sewer

The sanitary servicing for the plan area can be generally divided into two basins, one on the east side and one on the east side of the creek. Wastewater collected from the development is to be conveyed from south to north within each of the basins along either side of the creek. The sanitary collection system on the east side conveys waste water to a lift station located on the east side of Oldman Creek. Figure 6 shows the proposed trunk sanitary sewer alignment to service the Cambrian Crossing plan area.

Wastewater is then conveyed west to the Southeast Regional Trunk System (SERTS), via a sanitary sewer forcemain. A gravity trunk sewer is required from the development aligned north and west to the regional system.

### 5.4 Water Service

Potable water supply for the development will be provided by a connection to an existing 400 mm water main that is located south of Highway 16. A water supply pipe will be extended north to service the development, continuing north along Range Road 231 to Township Road 534. The North of Yellowhead Engineering Design Brief (2006) identified the preliminary water distribution

main sizing which will be used as a guide for trunk main sizing. Figure 8 shows the proposed alignment of the trunk mains for the plan area, along with future extensions outside the development, to the north and east.

The construction of the water distribution system will take into consideration the ultimate development on the land North of Yellowhead with connections being provided for future extension of the distribution system beyond the limits of the Cambrian Crossing plan area.

## **5.5 Franchise Services**

Franchise Services are provided by ATCO Gas, Fortis Alberta Inc., Telus Communications and Shaw Cable Systems. According to the North of Yellowhead Engineering Design Brief (2006), upgrades to services along Range Road 232 (Sherwood Drive) are required to meet the demand of development within the plan area. Significant improvements may be required in natural gas servicing infrastructure. Shaw Cable has plans to expand their fibre optics network to service the plan area with costs recovered from respective developers. Fortis has three phase power lines in the area and needs to evaluate projected demand before identifying their infrastructure plans. A plan for upgrading this infrastructure to properly provide services to Cambrian Crossing is outside the scope of this plan.

## **5.6 Community Energy Systems**

When providing servicing to Cambrian Crossing, consideration should be made for the provision of community energy systems throughout the plan area. Rights-of-Way for standard utility servicing should accommodate for the needs of community energy servicing, therefore no additional ROW provision will be required. Consultations have been ongoing between the developer, the City of Edmonton, and Strathcona County regarding the integration of community energy systems in accordance with the North of Yellowhead Area Concept Plan.

## **5.7 Eco-Infrastructure Corridor**

Eco-infrastructure corridors provide opportunities for eco-industrial networking by facilitating piped sharing of liquid or gas product. It is anticipated that some resource sharing may evolve and occur in the Light Industrial Park. Land dedication for eco-industrial infrastructure within this area may be considered for the purposes of this ASP (Figure 3 – Development Concept)

**Policy 5.7.1:** Adequate Right-of-Way provisions for piped liquid or gas resource sharing should be provided for within the Light Industrial Park in Cambrian Crossing



## 6.0 IMPLEMENTATION

### 6.1 Overview

The Cambrian Crossing ASP provides a policy framework for development. Once adopted, policies contained within the Plan will be binding and will direct the manner in which development occurs within the plan area. Implementation of these policies shall be achieved through a number of processes that are defined in this section including SuN LIVING, zoning, staging, engineering design and approval, and on-site construction.

Some development objectives apply to the entire plan area. The following outlines some of the policies that must be followed prior to the issuance of a development permit in any part of the plan area:

**Objective:** to incorporate crime prevention considerations into the design of the development

Policy 6.1.1: Crime Prevention through Environmental Design (CPTED) principles shall be incorporated into public spaces and overall site design throughout Cambrian Crossing to increase public safety through natural surveillance, natural access control and territorial reinforcement. Refer to the SuN Guidelines for guidelines.

**Objective:** to incorporate Low Impact Development principles into landscaping techniques

Policy 6.1.2: A Landscaping Plan for all development within Cambrian Crossing shall be developed to the satisfaction of the approving agency. The Plan shall incorporate regionally-appropriate, native and drought-resistant plantings. Refer to the SuN Guidelines, Strathcona County Open Space Design Standards and Architecture and Landscape Design Guidelines.

**Objective:** to guide the development of the business employment and mixed use land uses through the application of the Strathcona County Land Use Bylaw.

Policy 6.1.3: New land use districts that meet the intent of the business employment and mixed use land uses shall be prepared by the plan proponent in consultation with Strathcona County. These districts must be adopted by Strathcona County Council prior to development in these areas.

## 6.2 SuN Guidelines

The SuN Guidelines further details the development concept and provides guidelines for fostering sustainability in the development. This document will be adopted by resolution of Council and will serve to guide those tasked with implementing this sustainable neighbourhood project. The project is passed forward to the implementation teams with workshops on applying the SuN Guidelines.

The SuN Guidelines will outline the proposed design that must be followed for specific aspects of the development area. This SuN Guidelines is one of the guiding documents for the development area and must be followed in order to obtain permission from the development authority to build on the site.

The vision and the goals of a sustainable neighbourhood plan – no matter how technically sound or innovative – require committed, positive resident buy-in and participation (Mayhew and Campbell, 2008). As an extension of the SuN Guidelines, a sustainable living program will be developed for Cambrian Crossing which will aid in the ongoing support for the principles of sustainability incorporated into Cambrian Crossing by its residents. A potential scenario for sustainable living may include the formation of community leagues or resident's associations which would have access to new and innovative information regarding sustainable living. Part of the ongoing educational component may also include a Lifestyles Coordinator who could work with residents to help them implement their sustainable lifestyles within Cambrian Crossing into the future. Details of these and other education and awareness campaigns will be further explored in the SuN Guidelines and through the ongoing development and implementation of the plan.

**Objective:** to guide the development of a sustainable, pedestrian friendly, and aesthetically pleasing community.

Policy 6.2.1: Developers shall create SuN guidelines for Cambrian Crossing to the satisfaction of Strathcona County prior to rezoning.

Policy 6.2.2: Developers shall create architectural guidelines for Cambrian Crossing.

**Objective:** to ensure that development is in line with SuN LIVING principles

Policy 6.2.3: All development within Cambrian Crossing shall adhere to the guidelines in the SuN Guidelines.

Policy 6.2.4: A Sustainable Living Program should be developed for the ongoing integration of sustainable practices in Cambrian Crossing.

### 6.3 Zoning

Figure 3 Development Concept identifies several parcels of land in the northeast of the plan area (portions of N ½ 24-53-23-W4M) which have not completed the required technical studies. Prior to rezoning, landowners must submit the necessary technical studies as determined by Strathcona County. Technical studies may include, but are not limited to, biophysical, geotechnical, transportation, and servicing engineering studies.

**Objective:** to ensure land within N ½ 24-53-23-W4M are suitable for development.

**Policy 6.3.1:** Prior to rezoning, landowners of parcels within N ½ 24-53-23-W4M shall complete appropriate technical studies as determined by Strathcona County.

Most land is currently zoned as Agriculture: Future Development (AD) within the subject area. A rezoning application will be required prior to any subdivision or development. Appropriate land use zones will be applied to the Cambrian Crossing development where necessary as development proceeds. Zoning must align with the new Land Use Bylaw currently being developed for Strathcona County. In cases where an appropriate land use district does not exist, a new district or site specific zoning may be developed for areas within Cambrian Crossing.

### 6.4 Staging

In order for Cambrian Crossing to be developed in accordance to the development concept in this ASP, a number of major infrastructure projects must be undertaken. Staging of the development will be dependant on the delivery of the major infrastructure that will be required before development can start. Market forces may also play a role in determining final staging decisions. Staging will be in general accordance with the development pattern depicted in Figure 9.

**Policy 6.4.1:** *Prior to the development of the first stage, a development agreement addressing construction of off-site water, wastewater and stormwater infrastructure shall be entered into between the developer and Strathcona County.*

### 6.5 Onsite Construction and Servicing

Onsite construction and development within the plan area will be in accordance with sustainable practices. Strathcona County's servicing standards may require amendments in order to achieve some of the development goals proposed in this plan. Any amendments will be subject to proper circulation and review by Strathcona County and will be subject to all applicable Provincial and National standards and codes.

**Objective:** to ensure construction complies with development objectives

- Policy 6.5.1: Prior to the issuance of a development permit, Engineering Design and Construction drawings shall be provided for all development within Cambrian Crossing to the satisfaction of the approving agency and shall address all of the required guidelines as defined in the SuN Guidelines, Strathcona County Engineering Standards and Alternative Development Engineering Standards.
- Policy 6.5.2: Proposed amendments to Strathcona County servicing standards shall be supported by engineering analysis.

## **6.6 Offsite Infrastructure**

Offsite servicing is integral to the successful implementation of Cambrian Crossing. All of the infrastructure necessary for full development build-out is or will be available in the vicinity of Cambrian Crossing. Extension of necessary offsite infrastructure will be completed in a logical manner and in accordance with good engineering practices. All infrastructure noted below are major facilities and are intended to facilitate future growth of not only Cambrian Crossing, but also several other adjacent or nearby developments. Details of the construction, including timing and appropriate cost sharing arrangements shall be determined as development proceeds and will be subject to the County's various infrastructure policies and programs. A summary of information regarding various offsite infrastructure issues has been provided below for reference.

### **6.6.1 Offsite Water**

A 450mm diameter watermain currently exists within Clover Bar Road, approximately 500 m south of Highway 16. This waterline will be extended, including appropriate looping, for development of the initial stages of Cambrian Crossing using funds provided by levy contributions.

### **6.6.2 Offsite Sanitary**

The South East Regional Trunk Sewer (SERTS) feeds the regional needs in the area, including Sherwood Park. Cambrian Crossing will discharge into the SERTS line using a proposed new 675mm – 900mm gravity sewer. The sewer will extend 2.6 km west from Cambrian, and will be sized to provide sanitary sewer servicing to an estimated 550 hectares of primarily industrial land in the vicinity, north of Highway 16. Details of the sewer extension and connection requirements will be further explored when development proceeds.

### **6.6.3 Offsite Roadways**

Cambrian Crossing is adjacent to an excellent provincial highway system and two national railways – CN and CP. As such, Cambrian Crossing has superior locational advantages over other communities, however, it also has some

access challenges for direct site access.

**Clover Bar Road** – Clover Bar Road will require widening to accommodate the ultimate build-out in accordance with the requirements as set out in the Transportation Impact Assessment for Cambrian Crossing and the County Transportation Master Plans.

**CN Rail Crossing** – A grade separation of the CN Rail crossing will be necessary with the initial stages of development.

**TWP. Rd. 534** – TWP. RD 534 will require land acquisition and construction between Anthony Henday Drive and Highway 21. The roadway exists within both Strathcona County for 3.6 km and within the City of Edmonton for 3.2 km. Acquisition and construction of these roadways will be in accordance with the arterial roadway policies relevant for each Municipality.

**Clover Bar Road / Highway 16 Interchange** – Improvements to the Highway 16 / Clover Bar Road interchange will be required prior to full build out of Cambrian.

**TWP. RD. 534 / Highway 21 Interchange** – Highway 21 / TWP. RD. 534 interchange will be required with the connection of TWP. RD. 534 to Highway 21.

*Policy 6.6.3.1: A Traffic Impact Assessment for the Plan Area and the Highway 16/Clover Bar Road and the Highway 21/Township Road 534 interchanges shall be completed to the satisfaction of Strathcona County and Alberta Transportation prior to development.*

## **7.0 FIGURES**

Figure 1: Location

Figure 2: Neighbourhood Overlay

Figure 3: Development Concept

Figure 4: Open Space Plan

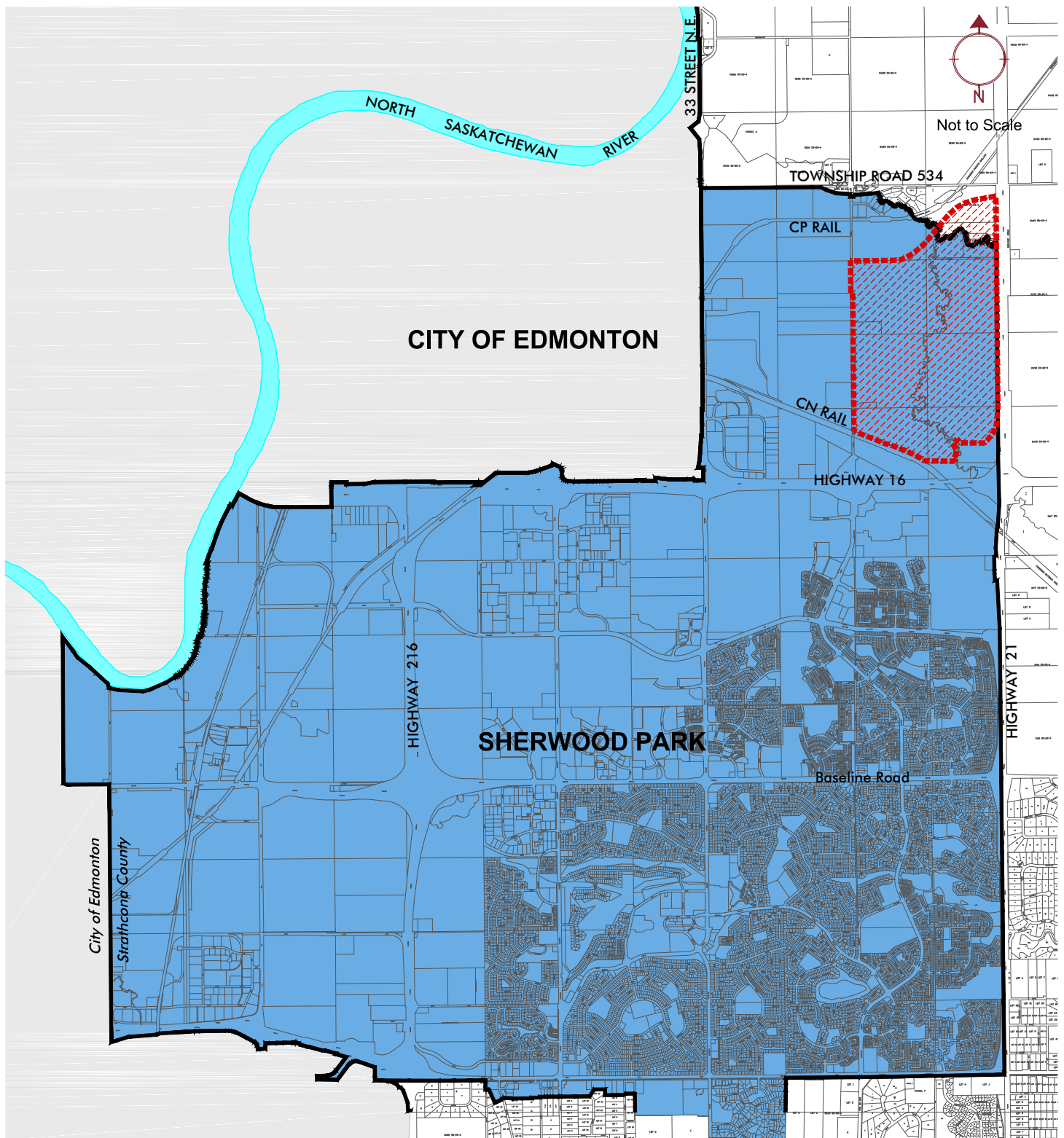
Figure 5: Mobility Plan

Figure 6: Sanitary Servicing Plan

Figure 7: Stormwater Servicing Plan

Figure 8: Water Servicing Plan

Figure 9: Staging Plan



11 | JUN | 2013

Legend



Area Structure Plan Location



Urban Service Area Boundary

CAMBRIAN CROSSING  
STRATHCONA COUNTY

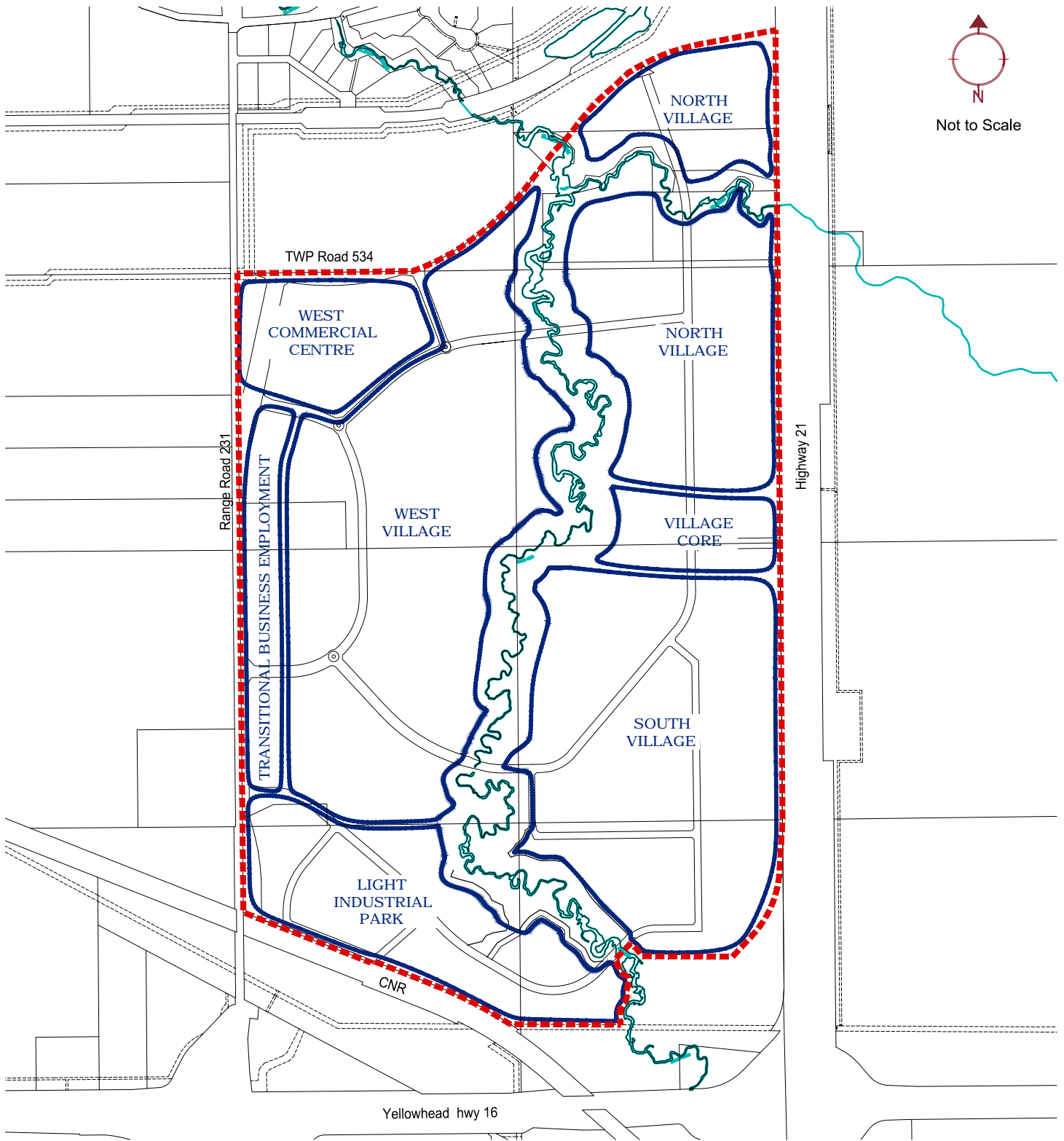
Figure No.

1.0

Title

Location  
Plan





25 | JUL | 2013

Legend

- Neighbourhoods
- ASP Boundary

CAMBRIAN CROSSING ASP  
STRATHCONA COUNTY

Figure No.  
2.0

Title  
**Neighbourhood  
Overlay**



November 2020

#### Legend

	Residential		Stormwater Facility		Possible Access Point
	Medium Density Residential		Retained Wetlands		Top of Bank Road
	Business Employment		Ravine Park		Arterial Roadway
	Light Industrial		Greenway 21		Collector Roadway with Boulevard
	Institutional		Park/ School Site		Collector Roadway
	Arterial Commercial		Environmental Reserve		Eco-Industrial Right-of-Way
	Community Commercial		Bioswale		Arterial ROW
	ASP Boundary		Further Studies Required at Rezoning Stage		Mixed Use Node
					Main Street

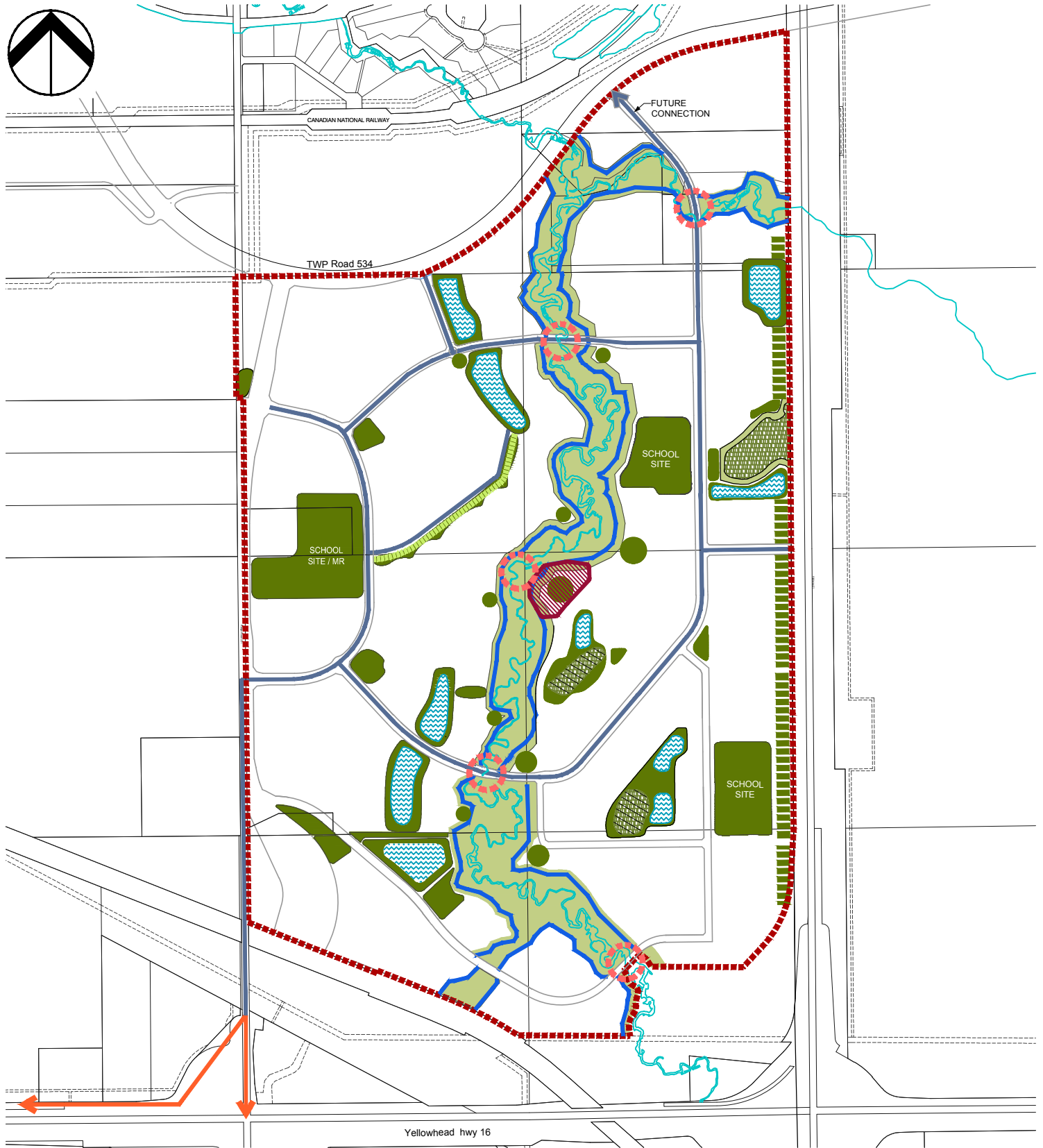
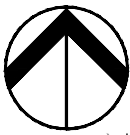
#### CAMBRIAN CROSSING STRATHCONA COUNTY

Figure No.

3.0

Title

#### Development Concept Plan



OCTOBER 2020

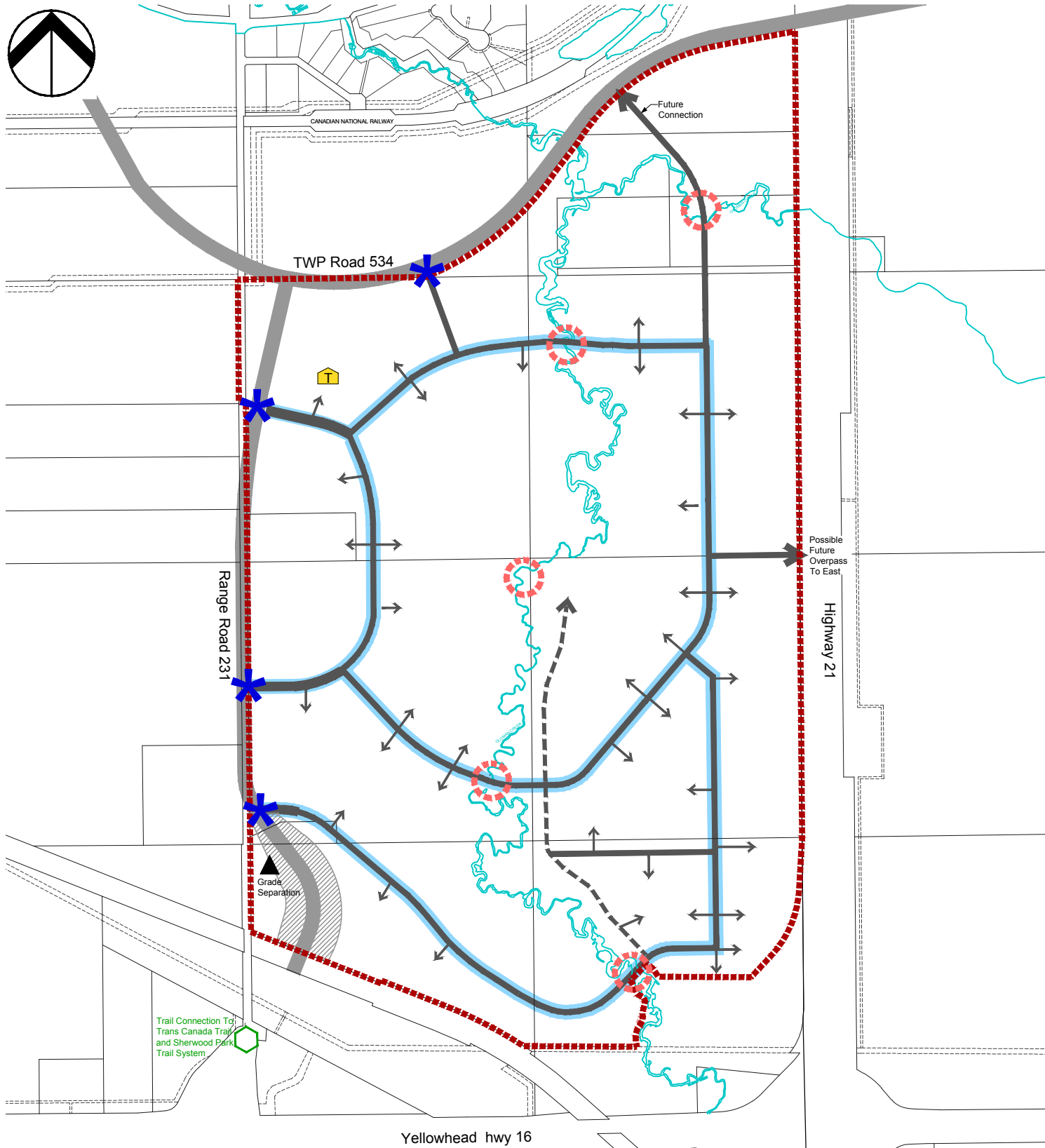
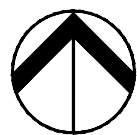
Legend

- |  |                                    |  |                           |
|--|------------------------------------|--|---------------------------|
|  | Stormwater Facility                |  | Bioswale                  |
|  | Retained Wetlands                  |  | Pedestrian Creek Crossing |
|  | Existing Tree Stand to Be Retained |  | Multi-Use Trail           |
|  | Ravine Park                        |  | Proposed Trail            |
|  | Greenway 21                        |  | Trans Canada Trail        |
|  | Open Space/Park                    |  | ASP Boundary              |
|  | Environmental Reserve              |  |                           |

CAMBRIAN CROSSING  
STRATHCONA COUNTY

Figure No.  
4.0

Title  
**Open Space &  
Pedestrian Linkage**



NOVEMBER 2020

Note: Access points depict possible vehicular access to neighbourhoods. The locations are conceptual only and the actual locations will be determined as development occurs.

Legend

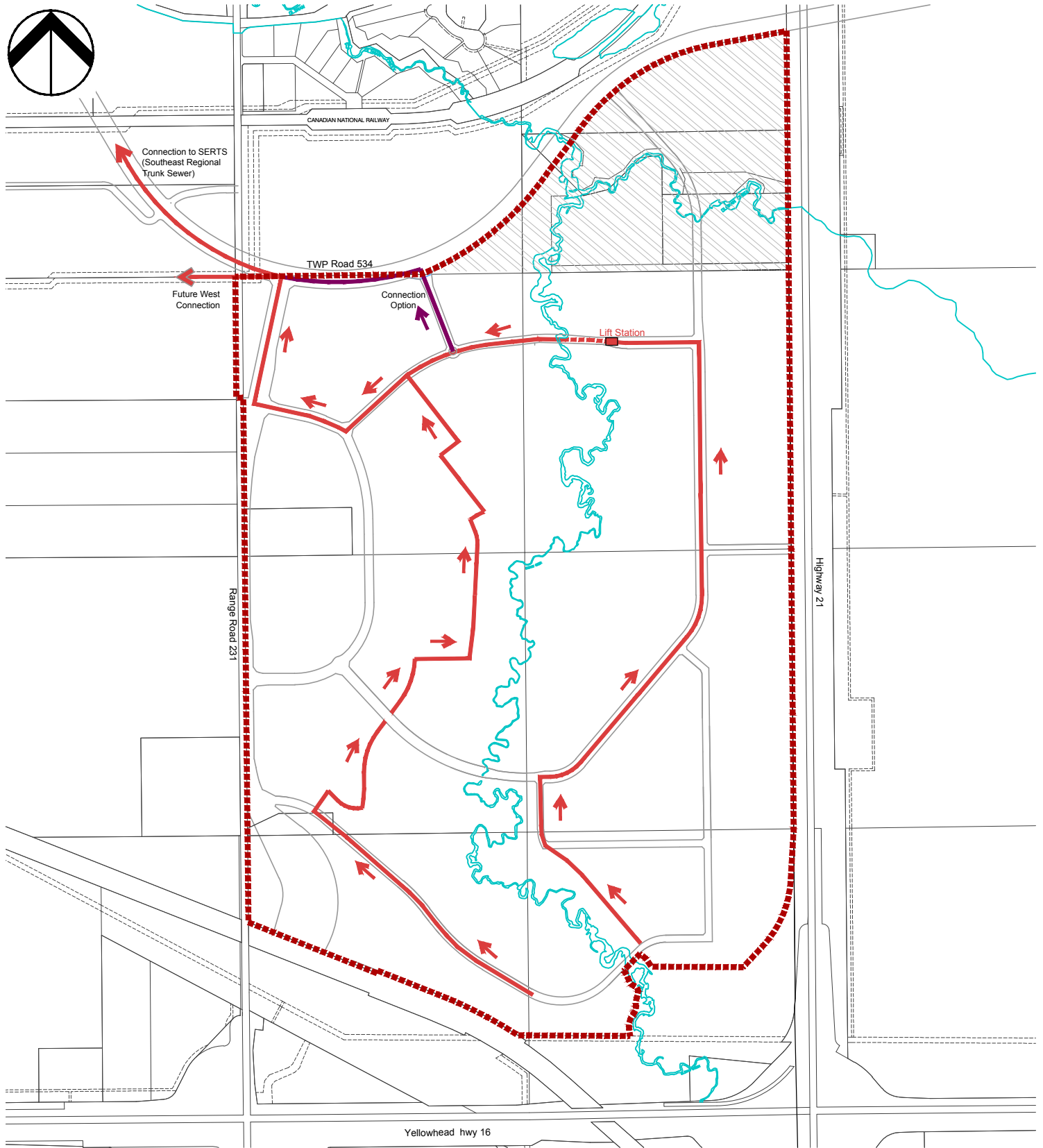
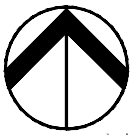
- Top of Bank Road
- Arterial Roadway
- Divided Civic Parkway
- Urban Collector
- Arterial ROW
- Bus Route

- Transit Hub
- Potential Intersection Location (Location to be determined)
- All-Directional Intersection
- Pedestrian Creek Crossing
- ASP Boundary

CAMBRIAN CROSSING  
STRATHCONA COUNTY

Figure No.  
5.0

Title  
**Mobility  
Plan**



NOVEMBER 2020

Legend

- Sanitary Sewer Forecmain
- Sanitary Sewer System
- Sanitary Sewer System Alternative Option

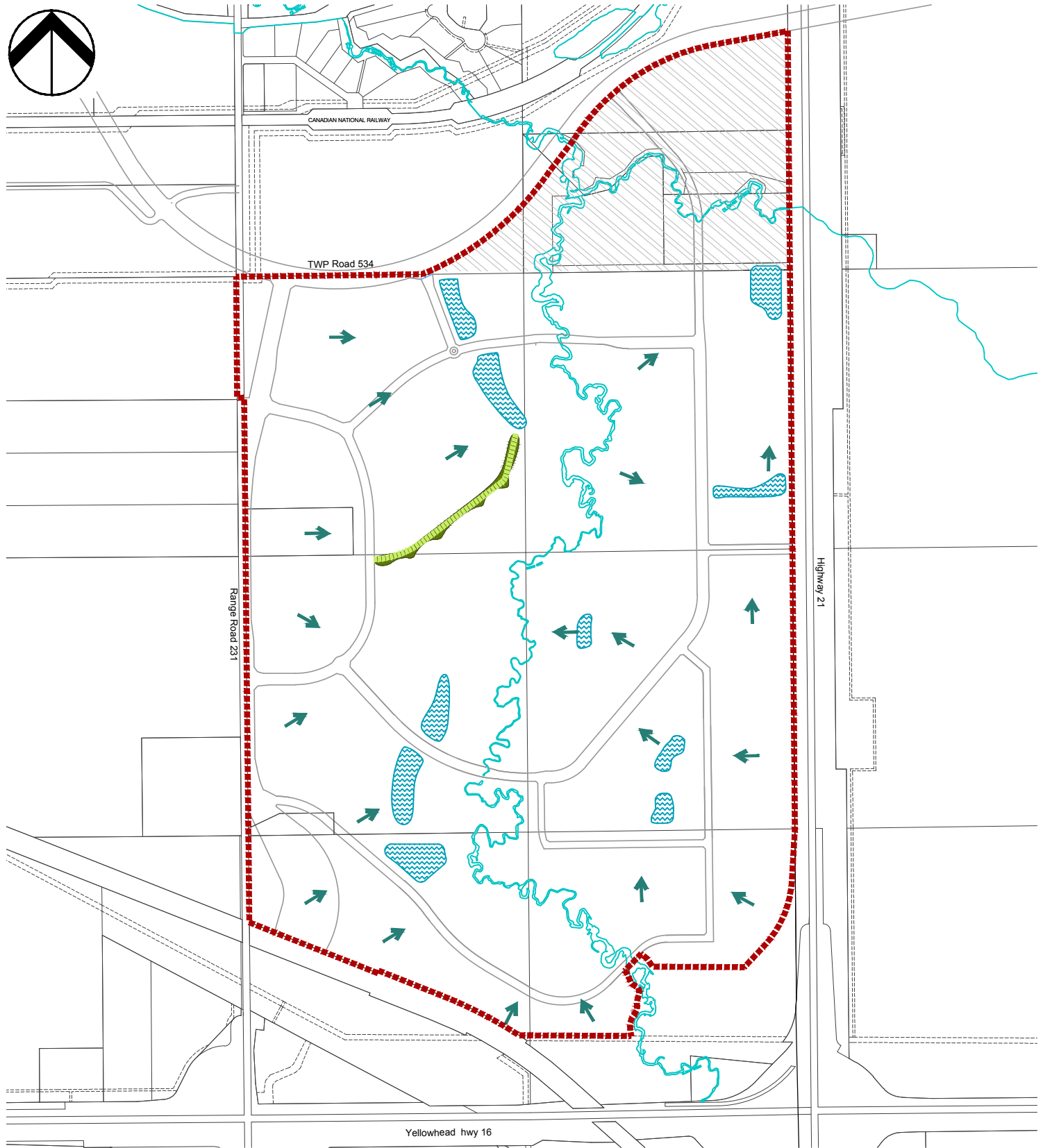
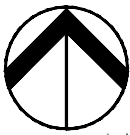
- Further Study Required at Rezoning Stage
- - - - - ASP Boundary
- ➔ Direction of Flow

CAMBRIAN CROSSING  
STRATHCONA COUNTY

Figure No.  
6.0

Title  
**Overall Sanitary  
Servicing Plan**





NOVEMBER 2020

Legend



Direction of Flow



Stormwater Facility



Eco-Infrastructure Corridor



Further Study Required at Rezoning Stage



ASP Boundary

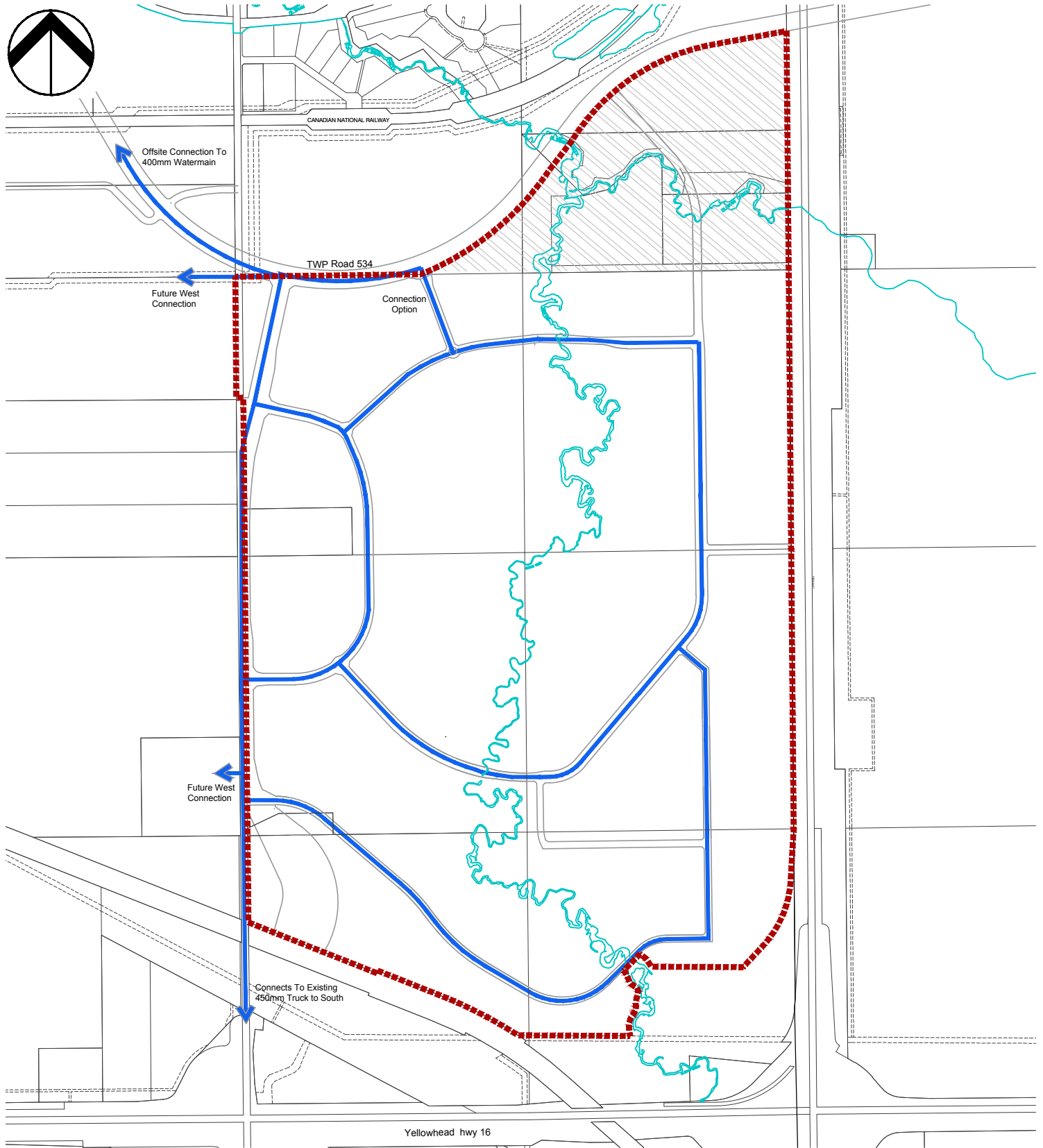
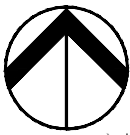
CAMBRIAN CROSSING  
STRATHCONA COUNTY

Figure No.

7.0

Title

Overall Storm  
Servicing Plan



NOVEMBER 2020

Legend

Water Service



Further Study Required at Rezoning Stage

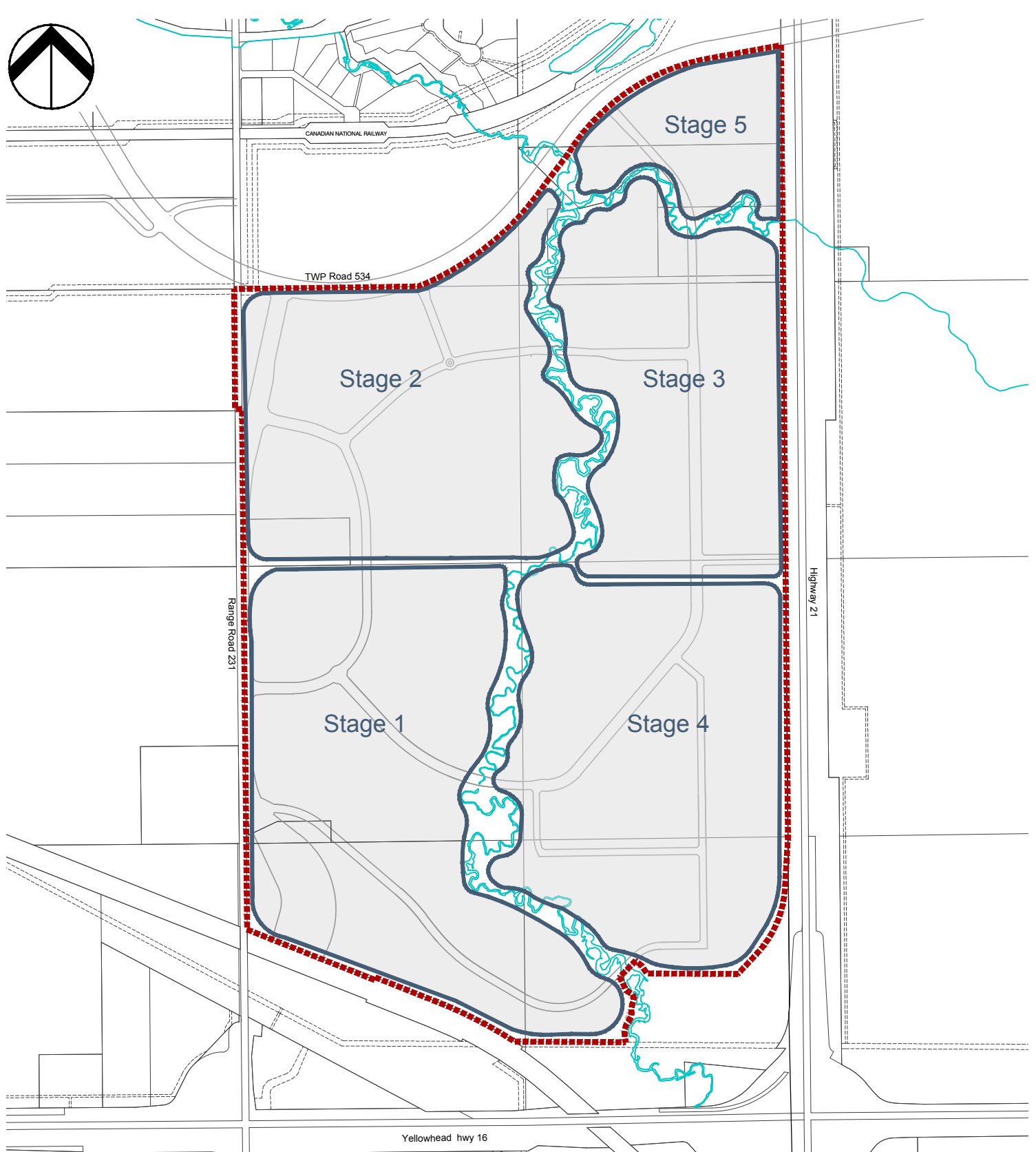
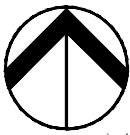
ASP Boundary

CAMBRIAN CROSSING  
STRATHCONA COUNTY

Figure No.  
8.0

Title  
Overall Water  
Servicing Plan






OCTOBER 2020

Legend

 Staging Boundary

 ASP Boundary

CAMBRIAN CROSSING  
STRATHCONA COUNTY

Figure No.  
9.0

Title  
**Staging  
Plan**

## 8.0 APPENDIX A: DEVELOPMENT STATISTICS

### 8.1 Table 8.1 Overall Development Statistics

#### Cambrian Crossing Area Structure Plan LAND USE AND POPULATION STATISTICS

	Area (ha)	% of GA	% of GDA
<b>Gross Area</b>	<b>365.3</b>	<b>100.0%</b>	
Arterial Roadway	12.6	3.4%	
Environmental Reserve	51.4	14.1%	
Wetland - Crown Claimed	2.0	0.5%	
Wetland	2.1	0.6%	
<b>Gross Developable Area</b>	<b>297.2</b>		<b>100%</b>
Municipal Reserve	33.4		11.2%
<i>Parks</i>	15.5		5.2%
<i>School / Park</i>	17.9		6.0%
Bioswale	1.6		0.5%
Circulation	60.5		20.4%
Stormwater Management	19.8		6.7%
Business Employment	18.8		6.3%
Light Industrial	8.5		2.9%
Institutional	4.3		1.5%
Arterial Commercial	5.2		1.7%
Community Commercial	1.0		0.3%
Mixed Use Commercial*	1.2		0.4%
<b>Total Non-Residential Area</b>	<b>154.3</b>		<b>51.9%</b>
<b>Net Residential Area (NRA)</b>	<b>142.8</b>		<b>48.1%</b>

#### RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units /ha	Units	% of NRA	People / Unit	Population
Single / Semi -Detached	100.3	24	3,388	70.2%	2.80	6,687
Townhouse	24.8	35	859	17.4%	2.80	2,404
Mixed Use Residential**	3.7	69	257	2.6%	1.80	462
Low-Rise / Medium Density Housing	14.0	90	1,263	9.8%	1.50	1,894
<b>Total</b>	<b>142.8</b>		<b>4,766</b>	<b>100.0%</b>		<b>11,447</b>

\* Calculated at 25% of total Mixed Use area

\*\* Calculated at 75% of total Mixed Use area

#### SUSTAINABILITY MEASURES

Population per Net Hectare (p/nha)	80.1
Dwelling Units per Net Residential Hectare (du/nrha)	33.4

Student Population	Public	Separate
Elementary	1764	572
Senior High	620	95
<b>Total</b>	<b>2383</b>	<b>667</b>

Student Generation	Public	Separate
	0.37	0.12
	0.13	0.02

## 8.2 Table 8.2 Development Statistics (West of Old Man Creek)

### Cambrian Crossing Area Structure Plan LAND USE AND POPULATION STATISTICS West of Old Man Creek

	Area (ha)	% of GA	% of GDA
<b>Gross Area</b>	182.6	100%	
Arterial Roadway	12.6	6.9%	
Environmental Reserve	20.1	11.0%	
Wetland-Crown Claimed	0.0	0.0%	
Wetland	0.0	0.0%	
<b>Gross Developable Area</b>	<b>149.9</b>		<b>100%</b>
Municipal Reserve	14.6		9.7%
Parks	6.7		4.5%
School/ Park	7.9		5.3%
Bioswale	1.6		1.1%
Circulation	31.0		20.7%
Stormwater Management	10.9		7.3%
Business Employment	18.8		12.5%
Light Industrial	8.5		5.7%
Institutional	2.3		1.5%
Arterial Commercial	5.2		3.5%
Commercial	1.0		0.7%
Mixed Use Commercial*	0.4		0.2%
<b>Total Non-Residential Area</b>	<b>94.3</b>		<b>62.9%</b>
<b>Net Residential Area (NRA)</b>	<b>55.6</b>		<b>37.1%</b>

### RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units /ha	Units	% of NRA	People / Unit	Population
Single / Semi -Detached	40.9	25	1,023	73.6%	2.80	2,865
Townhouse	3.7	38	140	6.6%	2.80	392
Mixed Use Residential**	1.1	69	76	2.0%	1.80	136
Low-Rise / Medium Density Housing	9.9	90	889	17.8%	1.50	1,334
<b>Total</b>	<b>55.6</b>		<b>2,128</b>	<b>100.0%</b>		<b>4,726</b>

\* Calculated at 25% of total Mixed Use area

\*\* Calculated at 75% of total Mixed Use area

### SUSTAINABILITY MEASURES

Population per Net Hectare (p/nha)

85.0

Dwelling Units per Net Residential Hectare (du/nrha)

38.3

Student Population		
	Public	Separate
Elementary	787	255
Senior High	277	43
<b>Total</b>	<b>1064</b>	<b>298</b>

### 8.3 Table 8.3 Development Statistics (East of Old Man Creek)

#### Cambrian Crossing Area Structure Plan LAND USE AND POPULATION STATISTICS East of Old Man Creek

	Area (ha)	% of GA	% of GDA
<b>Gross Area</b>	182.7	100%	
Arterial Roadway	0.0	0.0%	
Environmental Reserve	31.4	17.2%	
Wetland-Crown Claimed	2.0	1.1%	
Wetland	2.1	1.1%	
<b>Gross Developable Area</b>	<b>147.2</b>		<b>100%</b>
Municipal Reserve	18.8		12.7%
Parks	8.8		5.9%
School/ Park	10.0		6.8%
Bioswale	0.0		0.0%
Circulation	29.5		20.0%
Stormwater Management	8.9		6.0%
Business Employment	0.0		0.0%
Light Industrial	0.0		0.0%
Institutional	2.0		1.4%
Commercial	0.0		0.0%
Mixed Use Commercial*	0.9		0.6%
<b>Total Non-Residential Area</b>	<b>60.1</b>		<b>40.7%</b>
<b>Net Residential Area (NRA)</b>	<b>87.1</b>		<b>59.3%</b>

#### RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units /ha	Units	% of NRA	People / Unit	Population
Single / Semi -Detached	59.3	23	1,365	68.0%	2.80	3,822
Townhouse	21.1	34	719	24.2%	2.80	2,013
Mixed Use Residential**	2.6	69	181	3.0%	1.80	326
Low-Rise / Medium Density Housing	4.1	90	374	4.8%	1.50	560
<b>Total</b>	<b>87.1</b>		<b>2,638</b>	<b>100.0%</b>		<b>6,721</b>

\* Calculated at 25% of total Mixed Use area

\*\* Calculated at 75% of total Mixed Use area

#### SUSTAINABILITY MEASURES

Population per Net Hectare (p/nha)	77.0
Dwelling Units per Net Residential Hectare (du/nrha)	30.2

Student Population		
	Public	Separate
Elementary	976	317
Senior High	343	53
<b>Total</b>	<b>1319</b>	<b>369</b>

## **9.0 APPENDIX B: SITE SPECIFICS**

### **9.1 Location and Context**

The subject site is located in the northeast corner of the urban services area of Sherwood Park (Figure 1). The site contains approximately 365 hectares of land. It is immediately north of Highway 16 (Yellowhead Trail); Highway 21 forms the eastern boundary and Range Road 231 runs along the western boundary. The plan area abuts the C.N.R. railway line to the south and the realigned Township Road 534 will form the northern boundary. The land to the east of the site is proposed for future Urban Growth for Strathcona County.

### **9.2 Topography and Vegetation**

Oldman Creek bisects the plan area from north to south creating a significant riparian corridor through the middle of the site. The topography therefore drops significantly at the centre of the plan area as the stream cuts through the property. The remainder of the plan area consists of gently rolling terrain generally sloping down from the highest point at the northwest of the site.



Image 2.1 Existing Topography

Although much of the plan area has been cleared for agricultural uses, some of the natural features of the site have been retained, including a large poplar stand on the east side of the Creek and three significant wetland areas also east of the Creek.



Image 2.2 Existing Vegetation

A biophysical assessment of the site was performed by Spencer Environmental Management Services Ltd. (December 2008) and updated by Stantec Consulting (December 2012). The biophysical assessment and updated study identified a number of natural features of the site that have been recommended for preservation. These features include the Oldman Creek riparian corridor, the aspen/balsam poplar stand adjacent to the Top-of-Bank of the creek, and the three large deep marshes, one of which connects to Oldman Creek through trenches, as being the key features of the site.

The report provides recommendations for the conservation of Oldman Creek riparian corridor, along with some restoration and management strategies. The report describes a total of 49 wetlands within the subject site, of varying sizes and states of functionality, which total 8.42 ha of land. Spencer Environmental recommended that the wetlands at three sites noted on Figure 2 be protected. It was suggested by Spencer Environmental that the wetlands and the Oldman Creek riparian corridor should be provided with a protective buffer to maintain their integrity. A review by the Province pursuant to the Public Lands Act has determined that Oldman Creek and a wetland near Highway 21 are to be claimed by the province. The poplar stand adjacent to Oldman Creek has been recommended for conservation based on the size of the stand and its location adjacent to the riparian corridor.

The Biophysical Assessment in Support of North Yellowhead ASP in S ½ 24-53-23-W4M and N ½ 13-53-23-W4M conducted by Spencer Environmental (December 2008) has been submitted to Strathcona County with this ASP.

Hoggan Engineering and Testing Ltd. was retained in 2012 to complete additional geotechnical analysis in support of the amendment to Cambrian Crossing ASP. The study focused on the west side of the Cambrian Crossing plan area, specifically S.W. ¼ 24-53-23-W4M and N.W. ¼ 13-53-23-W4M.

### **9.3 Historical Resources Overview**

A Historical Resources Overview was completed by Bison Historical Services in 2009. This report states that the Cambrian Crossing development occurs on cultivated lands and native vegetation in the Aspen Parkland ecoregion. A Historical Impact Assessment is not required for this site according to Alberta Culture and Community Spirit.

The Historical Resources Overview conducted by Bison Historical Services (January 2009) has been submitted to Strathcona County with this ASP.

### **9.4 Environmental Site Assessment**

A Phase 1 Environmental Site Assessment completed by Focus Corporation in February, 2009 revealed no areas of potential environmental concern on the

subject property based on historic documentation, employee interviews, and a site inspection. There is no recommendation for further inspection.

The Phase 1 Environmental Site Assessment for Cambrian Projects Corporation on Section: 13-053-23W4M NE & S1/2 24-053-23W4M conducted by Focus Corporation (February 2009) has been submitted to Strathcona County with this ASP.

## **9.5 Geotechnical Evaluation**

A Geotechnical Evaluation from J.R. Paine & Associates Ltd. (October 2007) outlined the subsurface conditions found in the plan area. Field investigations found that topsoil was present at the surface of all 29 testhole locations. In addition to the presence of topsoil, clay soil with considerable organics was encountered below the topsoil of 5 of the 29 testholes. The locations of these testholes were adjacent to localized low lying areas of the development. Lacustrine deposits were encountered in most of the testholes and were typically silty with a clay silt seam. Out of the 29 testholes, 10 contained traces of coal and pebbles. Claytill and Bedrock was also encountered within the site. The geotechnical evaluation should be consulted for details of construction practices and recommendations. However, the report has also recommended that a more detailed, separate geotechnical investigation should be performed prior to subdivision of the development.

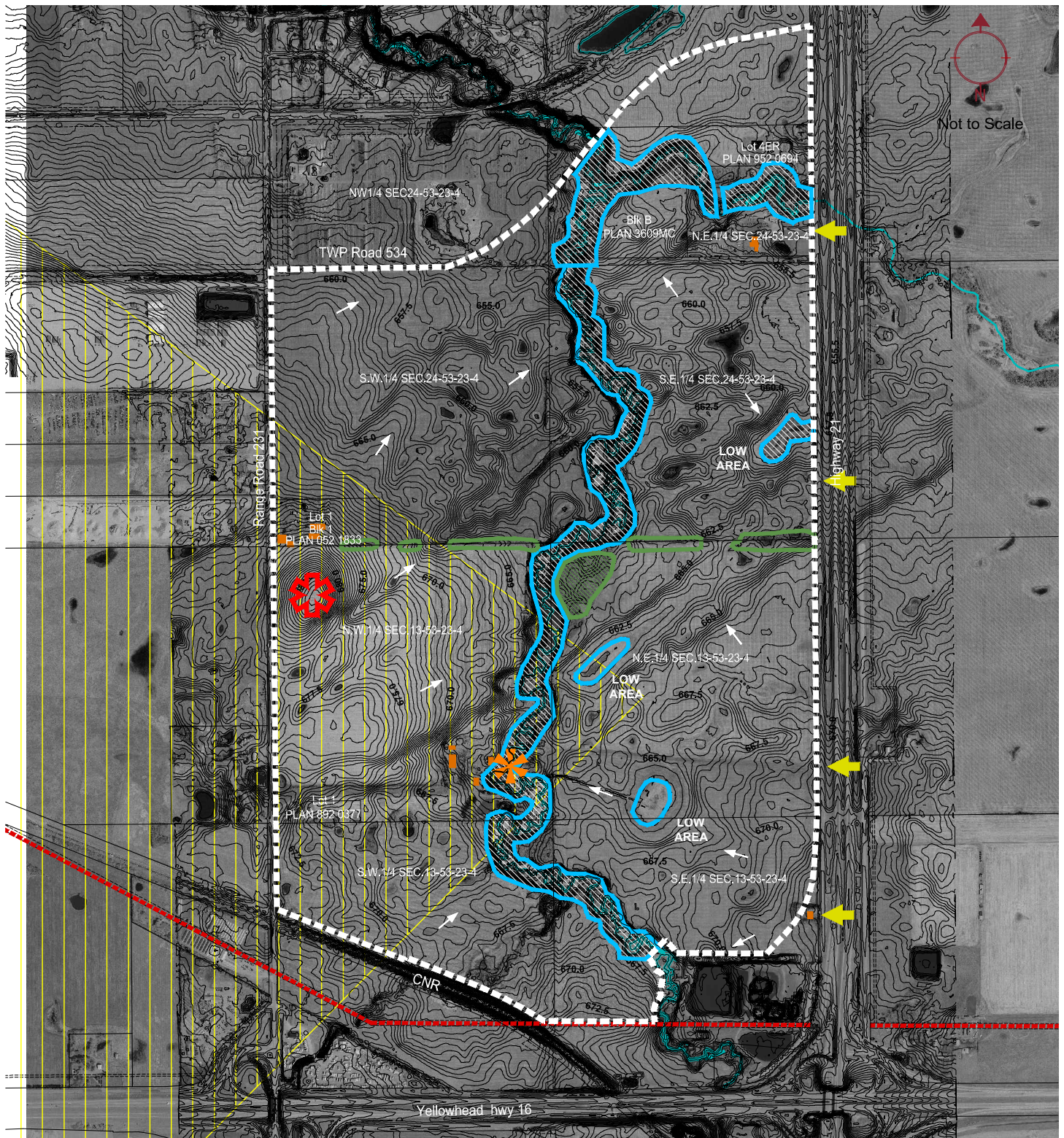
There is land within the plan area that was not included in the October, 2007 Geotechnical Evaluation. A completed detailed Geotechnical Evaluation will be required for all land within the subject area prior to subdivision.

The Geotechnical Evaluation. Proposed Industrial Subdivision SE and SW 24-53-23 W4M Strathcona County, Alberta conducted by J.R. Paine & Associates (October 2007) has been submitted to Strathcona County with this ASP.

## **9.6 Existing Development**

Currently there are some existing buildings on the ASP subject lands. These buildings consist of farmhouses and their associated outbuildings. These buildings will need to be removed from the plan area in order to develop Cambrian Crossing in general accordance with the development concept in this ASP.





25 | JUL | 2013

#### Legend

	Surface Drainage		High Point		Existing Shelterbelt
	Edmonton Garrison Approach Zone		Existing Buildings		Existing Tree Stand To Be Retained
	Contour		Low Area		Existing Gas Line
	Existing Approach		Crown Owned Land \ Low Area		ASP Boundary
	Existing Creek Crossing				

#### CAMBRIAN CROSSING ASP STRATHCONA COUNTY

Figure No.

11.0

Title

Existing  
Conditions



## 10.0 APPENDIX C: PUBLIC ENGAGEMENT

### 10.1 SuN LIVING Process

SuN LIVING is an approach, framework and work plan for planning, designing, and implementing the development of sustainable neighbourhoods (SuN) with a one planet footprint. Cambrian Group of Companies and Strathcona County have embraced the SuN LIVING process and are working in partnership to apply it to the Cambrian Strathcona Joint Planning Initiative as outlined in the Memorandum of Understanding between Cambrian Group of Companies and Strathcona County dated December 17, 2009.

Application of the SuN LIVING process results in sustainable neighbourhood development that:

- *Systematically applies both sustainable neighbourhood principles and a sustainable living lens to all decision-making throughout planning, design and implementation;*
- *Provides planning and design decisions that balance local impacts on economic prosperity, social responsibility, environmental stewardship and cultural vitality with a global context;*
- *Creates opportunities that enable residents to live within the Earth's capacity while making sustainable living easy, attractive and affordable;*
- *Fosters sustainable living so all residents achieve a high quality of life without sacrificing a modern, urban and mobile lifestyle; and Gets all participants on the common path toward achieving a neighbourhood with a one planet footprint (Mayhew & Campbell, 2008).*

The SuN LIVING process adheres to a framework that includes 5 distinct steps. Step 1 is to "Commit" to the process for the plan area. Step 2 is to "Initiate" the process by identifying stakeholders and including them in workshops. Step 3 is to "Explore" the plan area and the possible design implications associated with it. Step 4 is to "Synthesize" targets, goals and the design for the plan area. Finally, step 5 is to "Implement" the plan through the necessary planning processes and by producing the SuN Guidelines for the development area.

Following the commitment of both the Cambrian Group of Companies and Strathcona County to develop this site using the SuN LIVING model (Step 1), a series of next steps were taken to develop the plan. The following section highlights the important aspects of the next steps of the process.

### 10.2 Vision Statement

One of the key elements of step 2 "Initiate" of the SuN LIVING process is the development of a vision statement for the project. A vision statement outlines what the long-term outcome of the project should be. It is meant to be a source of inspiration for the project and focus the decisions made throughout the process on specific achievements. The following vision statement was developed for Cambrian Crossing:

This leading edge, sustainable community will be uniquely integrated for living, working, learning, playing and relaxing. Inspired by its rural roots, recognizable location and natural landscape features such as Oldman Creek, it will become a series of mixed uses that embrace sustainable development and sustainable living practices in an inclusive community where:

- 1. Diversity and choice of industry, business and housing are available;*
- 2. Residents, business owners, workers and visitors choose walking, biking, and transit as preferred means of mobility in the community;*
- 3. A variety of employment options are integrated throughout the community; and*
- 4. The health, well-being and culture of the community and the environment are respected and realized.*

### **10.2.1 Workshop**

Step 3 “Explore” of the SuN LIVING process includes a number of workshop activities that are meant to generate potential strategies and actions for the project. From November 2 to 5, 2009, a workshop was held in Strathcona County. Members of the team working on this plan assembled for a series of lectures and working group meetings about the principles of the SuN LIVING process, the particular details of the site, the principles of sustainability in general, and to develop a stakeholder engagement strategy. At the conclusion of the four day workshop a presentation was made to Strathcona County staff and landowners on the Cambrian Crossing plan area. As a result of this workshop, a charrette was determined as an appropriate course of action as part of the design process for the development. Additionally, next steps in the process were confirmed and tasks assigned to the design team and external players involved in the design of Cambrian Crossing.

### **10.2.2 Design Charrette**

During the design charrette performed as part of the preparation of this plan, Strathcona County had a section on Sustainability and Growth Management in their Municipal Development Plan (1-2007). This section focuses on developing in a sustainable manner based on four principles. In application of these four principles, the County had established twelve themes that need to be incorporated into all development to ensure its sustainability. These themes included: Land, Natural Habitat, Water, Carbon, Transport, Food, Materials, Economy, Waste, Well-Being, Culture and Equity. Each of these themes was examined during the design charrette to ensure that they were adequately incorporated into the development.

In Step 4 “Synthesize” of the SuN LIVING process, a design charrette is to be conducted, which is meant to result in a Master Concept and a Course of Action for the project. From January 24-28, 2010 a design charrette was held for Cambrian Crossing. At the charrette, members of the team worked on incorporating the twelve themes of sustainability into the design of the Cambrian Crossing site. A public workshop held during the charrette allowed

stakeholders to be involved in the design process and to contribute their feedback as the design progressed in its early stages. Following the workshop, the team members discussed the public feedback that they had received. These comments were considered in the next stages of the design.

On the last night of the charrette a public presentation was made including an opportunity for those in attendance to ask questions and fill out a questionnaire. Fifteen questionnaires were received with results noted as follows:

**Table 1.1 Statistical Summary of the Results of Public Consultation done at the Design Charette for Cambrian Crossing**

Question	Strongly Support %	Somewhat Support %	Total Strong Support & Somewhat Support %	Non Support %
1. Project Principles	64%	29%	93%	7%
2. Parks, Open Space & Wetland Amenities	64%	29%	93%	7%
3. Land Use	29%	57%	86%	14%
4. Road Layout & Transportation Concept	14%	64%	78%	22%
5. Overall Development Concept Plan	29%	57%	86%	14%

A summary of the comments from the public consultation at the Design Charette has been compiled. The following chart outlines these comments in three general categories. It can be said that those that contributed their comments were generally supportive of the development.

**Table 1.2 Summary of the Results of the Public Consultation at the Design Charette**

Category	Key Issue	Have the comments been addressed by this plan (Y or N)
Environment and Surroundings	Minimize noise impacts	Y
	Preserve Oldman Creek	Y
	Consider green or district energy	Y
	Maintain pre-development stormwater run-off volumes	Y
Design	Provide trail access	Y
	Provide transitions and buffers	Y
	Provide appropriate traffic management	Y
	Ensure economic sustainability	Y
	Be innovative	Y
Implementation	Provide access by rail	N
	Provide commercial amenities	Y
	Ensure servicing is progressive and accommodates future development	Y
	Utilize architectural controls	Y

### 10.2.3 Public Open House

In addition to the charrette process, a public Open House was held for this development on May 5, 2010. At this meeting, information about the current design for the plan area was featured. Members of the public were invited to attend and provide comments and feedback on the design at that time. Stakeholders and landowners surrounding the plan area were contacted prior to the Open House to invite them to attend and provide their insight on the design.

A total of 40 landowners were in attendance at the public Open House. Out of those 40, a total of 14 people filled out a questionnaire regarding the development. Generally, disapproval with the proposed plan came from individuals who do not reside within the subject lands. A total of 9 individuals out of the 40 that attended the public consultation reported being unsupportive of the proposed development of Cambrian Crossing. Overall, there were three major themes that came out of the questionnaires that were returned: no additional written comments were made about the sustainability features of the proposed development, negative respondents would prefer industrial to residential development, and the proposed transportation plan caused some concerns. The following chart provides a statistical summary of the respondent's support of the project.

**Table 1.3 Statistical Summary of the Results of Public Consultation from the Public Open House for Cambrian Crossing**

Question	Yes	Somewhat	No	N/A
Do you feel the sustainable planning and design principles of the project are appropriate?	2	2	8	2
Do you feel the proposed land uses are appropriate?	3	1	9	1
Do you feel the proposed parks, open space and wetland amenities are sufficient?	4	3	3	4
Do you feel the transportation network, including roads and trails is adequate?	1	2	7	4
Overall, are you supportive of the proposed concept plan for Cambrian Crossing?	4	1	9	0

### 10.2.4 Amendment Consultation Process (2012-2013)

A third consultation process has been undertaken as part of the amendment to the Cambrian Crossing ASP for lands located between Range Road 231 and the Oldman Creek.

#### 10.2.4.1 Workshop – December 11-12, 2012

A workshop was held to bring together stakeholders to review the existing Cambrian Crossing ASP and the proposed changes to the plan. A brief presentation was given, providing background information and the intent of the amendment. Stakeholders were then split into three groups where additional discussions and design work were completed. The workshop ended with a presentation on the conceptual design for submission to the County.

#### **10.2.4.2 Public Meeting – April 18, 2013**

A public meeting was held to present the amendment to the Cambrian Crossing ASP to the public. The open house was held concurrently with the proposed Municipal Development Plan and North of Yellowhead ACP amendments.

Approximately 40 landowners attended the open house along with representatives from Strathcona County, the developer, and consultants. A presentation was provided by the consultant and developer which was followed by a question and answer period. Display boards with the proposed concept were also provided to those who attended.

As the public meeting was held in conjunction with the amendment to the Cambrian Crossing ASP, comments received were in specific relation to that proposal. The majority of comments received were positive and in favour of the proposed changes.

#### **10.2.5 Public Input (2020)**

The impetus for further amendments to the ASP was the design of a vehicle overpass at the Canadian National Railway. The opportunity was taken to update the ASP as part of the amendment to make it more user friendly and address information and direction in the ASP that had become outdated or further refined during the detailed design stages of development. As part of the process, adjacent landowners were provided an information package by mail and invited to provide input on the proposed amendments. No objections to the amendments were received.