

# FRONTIER INDUSTRIAL PARK PHASE I CONCEPTUAL SCHEME



Bylaw C-6489-2007, Adopted October 02, 2007

**MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44 Department of Planning and Community Services** 

#### THE FRONTIER INDUSTRIAL PARK PHASE I CONCEPTUAL SCHEME

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On behalf of: Remington Development Corporation



For: The Municipal District of Rocky View No. 44

#### MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44 BYLAW C-6489-2007

A Bylaw of the Municipal District of Rocky View No. 44, pursuant to Divisions 7 & 12 of Part 17 of the Municipal Government Act, to adopt the attached Schedule 'A' referred to as the "Frontier Park Conceptual Scheme".

**WHEREAS** 

the Council of the Municipal District of Rocky View No. 44 has received an application to adopt a Conceptual Scheme to establish a comprehensive policy framework to guide and evaluate future redesignation, subdivision and development applications within all of Section SW 6-24-28-W4M consisting of an area of approximately  $\pm$  160 acres, as shown on Schedule 'A', attached to and forming part of this Bylaw; and

WHEREAS the Council deems it desirable to adopt the Conceptual Scheme; and

WHEREAS

a notice was published on Tuesday, September 4, 2007 and Tuesday, September 11, 2007 in the Rocky View Weekly, a newspaper circulating in the Municipal District of Rocky View No. 44, advising of the Public Hearing for Tuesday, October 2, 2007; and

**WHEREAS** 

Council held a Public Hearing and have given consideration to the representations made to it in accordance with Section 692 of the Municipal Government Act, being Chapter M-26 of the Revised Statutes of Alberta, 2000, and all amendments thereto.

#### **NOW THEREFORE** the Council enacts the following:

- 1. That the Conceptual Scheme be adopted to provide a comprehensive policy framework to guide and evaluate future redesignation, subdivision and development applications within all of Section, SW 06-24-28-W4M, consisting of approximately ± 160 acres, as shown on Schedule 'A', attached to and forming part of this bylaw; and
- 2. The Bylaw comes into effect upon the date of its third reading.

Division: 5 File: 04306002-2006-RV-079

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, July 31, 2007, on a motion by Councillor Solberg.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, October 2, 2007, on a motion by Councillor Solberg.

Third reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, October 2, 2007, on a motion by Councillor Branson.

REEVE OR DEPUTY REEVE	MUNICIPAL SECRETARY

# SCHEDULE 'A' FORMING PART OF BYLAW C-6489-2007

A Conceptual Scheme affecting the area within Section SW 6-24-28-W4M consisting of approximately  $\pm$  160 acres, herein referred to as the "Frontier Park Conceptual Scheme" area.

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The following studies and reports have been submitted under separate cover:

- A. Traffic Impact Assessment
- B. Storm Water Management Report
- C. Phase I Environmental Site Assessment
- D. Phase II Environmental Site Assessment

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### 1.0 VISION, LOCATION AND PURPOSE

#### 1.1 Vision

Frontier Park is envisioned as a vibrant hub of transportation related industrial uses geared to contribute to the regional industrial market and the economic vitality of the MD of Rocky View. The site is ideally located next to future major transportation corridors including the East Freeway (TUC) and Peigan Trail.

The Park is designed to accommodate a range of industrial lot sizes within a simple and efficient road network. In addition, the design incorporates a Public Utility Lot (P.U.L.) lot designed to enhance and preserve wetlands while supporting the industrial park's storm water management. Development of the individual lots will be guided by a set of development and design guidelines to ensure that there is a level of cohesiveness in the overall building designs and lot layouts with special emphasis on the utilization of low impact development principals.

#### 1.2 Location

Frontier Industrial Park, Phase I (Frontier Park I) (Figure 1) is located in the Municipal District of Rocky View within the boundaries of the Shepard Area Structure Plan.

The lands are bounded to the west by  $84^{th}$  Street SE and to the south by Twp. Rd. 240 ( $50^{th}$  Avenue SE) and the CN rail line. The north and east  $\frac{1}{4}$  section lines form the east and north boundaries of the plan area.

**Policy 1.1.1:** Policies contained within the Frontier Industrial Park Phase 1 Conceptual Scheme shall apply to all lands within the Conceptual Scheme plan.

#### 1.3 Purpose

The Conceptual Scheme describes how  $\pm$  160 acres (65 hectares) of farmland will be developed into an efficient and orderly industrial park. The proposed development, Frontier Park, will feature one public utility lot and 12 to 16 industrial lots ranging in size from  $\pm$  1.5 acres (0.60 hectares) to  $\pm$  18.5 acres (7.48 hectares). The industrial park is intended to provide for those uses requiring large tracts of land with minimal or no servicing requirements.

The Conceptual Scheme for Frontier Industrial Park provides a foundation for the redesignation and subdivision of lands legally described as the SW ¼ of Section 6-24-28 W4M in the Municipal District of Rocky View. In preparation of this Conceptual Scheme, careful attention was paid to the policies and objectives set forth in the Shepard Area Structure Plan (ASP) Bylaw C-5330-2001, adopted on May 29, 2001. The Shepard Area Structure Plan provides a comprehensive policy framework for evaluating development proposals within its plan boundaries.

The following sections of this plan discuss the Conceptual Scheme objectives, policy framework, site characteristics, development concept and land uses, municipal reserve and open space requirements, transportation and access, proposed site servicing and implementation strategy.

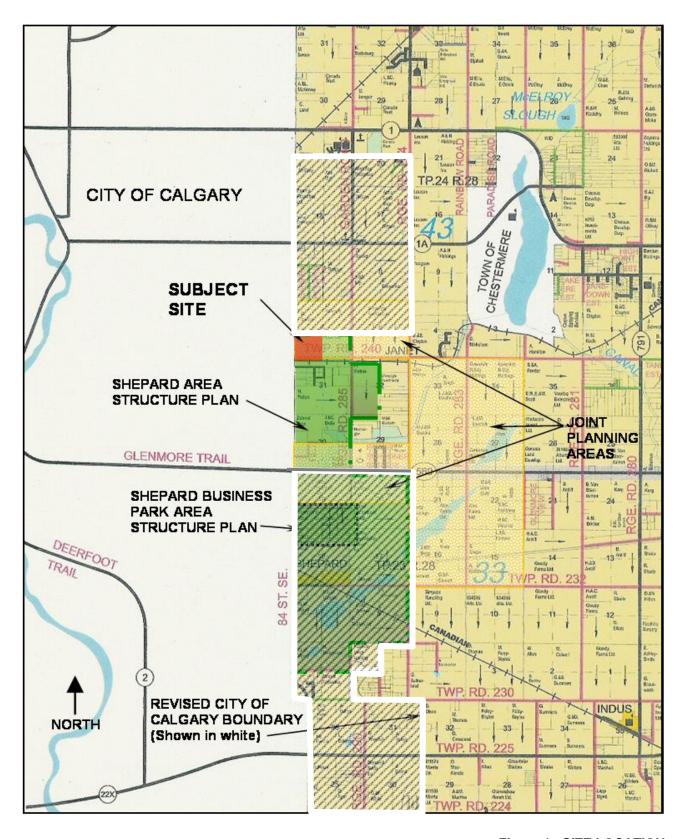


Figure 1 - SITE LOCATION

#### 1.4 Conceptual Scheme Objectives

The Frontier Park Conceptual Scheme has the following objectives:

- 1. To create a comprehensive plan that describes uses, designs and strategies for appropriate development of the SW 1/4 of Section 6-24-28 W4M in the Municipal District of Rocky View;
- 2. To provide a policy framework that guides development and subdivision within the plan area and is consistent with the requirements of the Shepard Area Structure Plan;
- 3. To identify a land use district that meets the needs of the development concept;
- 4. To detail a development concept that services the regional industrial market and is acceptable to local residents;
- 5. To illustrate the physical characteristics of the plan area and describe any physical impact on the natural environment by the proposed development;
- 6. To identify any constraints on the plan area and how these will be addressed in the proposed development;
- 7. To determine performance standards and development guidelines for industrial land uses within the Conceptual Scheme plan area; and
- 8. To address the servicing, transportation and open space requirements associated with the proposed development.

#### 2.0 POLICY FRAMEWORK

#### 2.1 Municipal Development Plan

The Municipal District of Rocky View's Municipal Development Plan (MDP) adopted as Bylaw C-4840-97 on July 6, 1998 provides the overall Municipal philosophy and vision, a land use strategy and planning policies all of which guide and shape the future of the Municipality. The MDP recognizes the significance of economic development and has the stated goal "to encourage and facilitate business opportunities which enhance and strengthen the economy of the Municipality". Policy 6.1.1 of the MDP specifically states that the Municipality "supports the development of its commercial and industrial land base". The MDP also provides criteria for evaluating proposals for business developments and related subdivisions that address such matters as the scale and compatibility of the proposed development, availability of infrastructure development and the provision for any area structure plan that may have to be adopted to accommodate the proposed development.

#### 2.2 Intermunicipal Development Plan

The Municipal District of Rocky View/City of Calgary Intermunicipal Development Plan (IDP) was approved by the Municipal District of Rocky View Council on October 6, 1998 as Bylaw C-4929-98 and by the City of Calgary Council on October 5<sup>th</sup>, 1998 as Bylaw 24P98. Frontier Park is situated within part of a Special Area in the IDP referred to as Proposed Shepard Area Structure Plan.

The IDP recognizes that business development within the Municipal District of Rocky View "may include a range of commercial and industrial uses" that "will be encouraged to locate in areas where proposed business is complementary to surrounding land uses".

The mediated annexation boundary removes a significant portion of the Shepard Plan area from the MD of Rocky View and transfers it to the City of Calgary, thereby reducing the amount of available industrial/general business lands in this part of the MD. The mediated agreement identifies this area of the MD as an industrial growth corridor.

#### 2.3 Shepard Area Structure Plan

The Shepard Plan approved by the Municipal District of Rocky View as an Area Structure Plan (ASP) on May 29<sup>th</sup>, 2001, Bylaw C-5330-2001 includes the Frontier Park area (Figure 1).

Figure B-1 Land Use Strategy in the Shepard Plan identifies the Frontier Park area as suitable for business development and suggests that this land should be developed as the third phase of development in the ASP area. The Frontier Park area is subject to the *Business Land Use Policies* of the ASP. Part 5 of these Policies states "the Plan area consists of existing and approved Business Uses. The business areas are intended to consist of large, limited service business parcels existing in harmony with other land uses".

#### 2.4 Land Use Bylaw

The Municipal District of Rocky View Land Use Bylaw (LUB) C-4841-97 currently designates the Frontier Park area as Ranch and Farm District (RF). The Purpose and Intent of this District is "to provide for agricultural activities as the primary land use on a quarter section of land or on large balance lands from previous subdivision". This is consistent with the current agricultural use of the land.

#### 3.0 SITE CHARACTERISTICS

#### 3.1 Legal Description and Ownership

The legal description and land ownership for the subject site are indicated below.

#### **Legal Description:**

Meridian 4, Range 28 Township 24 Section 6 South West Quarter Section

#### Land Ownership:

Boundary Industrial Park Ltd.

Remington Development Corporation has been authorized to act on behalf of the land owner.

#### 3.2 Site Area

The subject site contains approximately 160 acres (64.5 ha).

#### 3.3 Current Land Use Context

The lands to the north and immediately east of the Conceptual Scheme are designated as Ranch and Farm District (RF). The ¼ section directly to the east has been purchased by the developer and is intended to be developed for industrial uses as well. A small parcel in the southwest corner of the ¼ section to the north is designated Public Services District (PS) (Figure 2). This site houses a Microwave Station. Directly south of the property is the CN rail line and below that is a parcel designated as a Direct Control District (DC), which houses and allows for industrial and general business uses. The land south of the DC district is designated as a General Business District (B-2).

At the time of adoption of the Conceptual Scheme, the City of Calgary boundary is situated immediately to the west of the plan area along the east boundary of the 84<sup>th</sup> Street SE road right of way. Further to the west is the north-south Transportation and Utility Corridor (TUC) also referred to as the East Freeway. Future plans for the freeway include an extension of the Peigan Trail Expressway across the northern portion of the Conceptual Scheme area. In between the TUC and 84<sup>th</sup> Street SE is a pocket of land that has been designated as a Special Development Area (SDA) in the Shepard Plan. This SDA is designated UR – Urban Reserve District under the Calgary Land Use By-Law 2P80. The purpose of this district is *"to protect land from premature subdivision and development"*. It is anticipated that this area (identified as SDA 6) will be developed as general light industrial in the future.

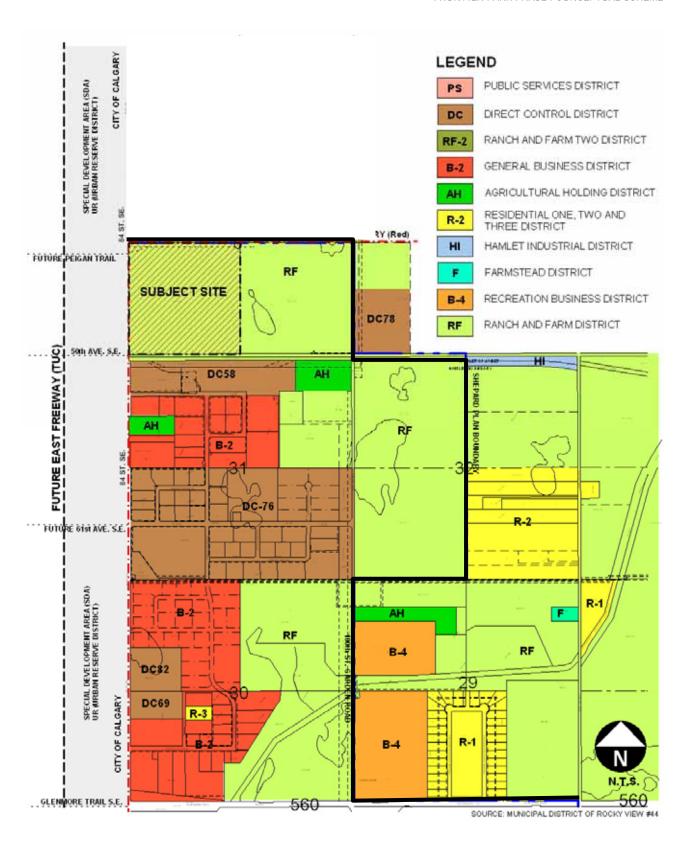


Figure 2 - CURRENT LAND USE CONTEXT

#### 3.4 Land Form

The topography of the site is gently undulating prairie with a slight slope from the north west corner to the south east corner that results in an elevation change of 6 metres. There are three low lying areas within the Plan area, one in the south west corner, one to the west of the northeast corner and one in the lowest area of the site along the south eastern side (Figure 3).



Figure 3 - LAND FORM

#### 3.5 Current Access

The subject lands are currently accessed from  $84^{th}$  Street SE. This paved rural cross-section road is located along the west boundary of the plan area and is under the jurisdiction of the City of Calgary.

Access is also gained from TWP. Rd. 240 (50<sup>th</sup> Avenue SE), a gravelled rural road located along the south boundary of the plan area.

#### 3.6 Environmental Considerations

The localized depressions on the east and north parts of the Plan area are of a temporary nature while the depression along the south boundary is of a semi-permanent nature. Western Ecological Systems Management Consulting Inc. carried out a site visit on May 23<sup>rd</sup>, 2006 and concluded that *"all wetlands on the site appear to be ephemeral/temporary"* and using the Steward and Kantrud Wetland Classification System (1971), that:

- The eastern boundary wetland is a Class II Temporary Pond, and
- The open-water wetland at the southwest corner of the subject site is classified as Class III or IV (Seasonal Ponds and Lakes or Semi-permanent Ponds and Lakes).

Western Ecological Systems Management Consulting Inc. also noted that "it appears that, historically, this (southwest corner) was a much larger wetland but has been bisected by 50<sup>th</sup> Avenue, thereby reducing its habitat effectiveness for waterfowl and other wildlife".

These drainage courses are to be replicated in the plan area and integrated into the Storm Water Management Plan in accordance with the requirements of Alberta Sustainable Resources and Development and the Municipal District of Rocky View.

#### 3.7 Vegetation

With the exception of the wetlands discussed in Section 3.6 the entire subject site is under cultivation.

#### 3.8 Environmental Site Assessment

A Phase I Environmental Site Assessment, (submitted under separate cover), was performed by Cirrus Environmental Services Inc. in November 2005. The Assessment concluded that there was reason to suspect that surface water, groundwater and/or soil on the subject site may be contaminated by road salt stored approximately 100m south of the subject property. The Assessment therefore recommended that a Phase II Environmental Site Assessment be carried out that would include:

- An electromagnetic survey using an EM31 to produce a terrain conductivity map of the southern portion of the subject site;
- An Electrical Resistivity Tomography (ERT) survey to determine the depth extent of any zones
  of elevated terrain conductivity values; and
- Physical Sampling and testing to determine if the road salt has contaminated soil, surface water and/or ground water on the subject site.

A Phase II Environmental Site Assessment, (submitted under separate cover), was carried out by Cirrus Environmental Services in January 2006. The Assessment concluded:

- The geophysical surveys determined that the electrical conductivity of the soil and groundwater was elevated in areas coincident with sloughs along the southern boundary of subject site from the surface to a depth of 4m.
- Analyses of soil and groundwater from the subject site indicate elevated levels of sodium and sulphate but not Chloride. This indicates that the elevated conductivity readings are likely due to naturally occurring salts (sloughs and solonetzic soils) and not as a result of contamination from the adjacent road salt storage facility.

- **Policy 3.8.1:** Based on the Phase I and Phase II Environmental Site Assessments no evidence of soil or groundwater contamination has been found and no further assessment of the subject site is required.
- **Policy 3.8.2:** Based on a search of the Alberta Energy and Utilities Board records, there are no petroleum wells, pipelines, and facilities on or within 100 metres of the subject land. Therefore no further assessment of the subject site is required beyond the normal circulation requirements of the subdivision application.

#### 3.9 Existing Structures

There are no existing structures on the subject lands.

#### 3.10 Historical Resources

A Historical Resources Overview was conducted by Lifeways of Canada Limited in February, 2007 and has concluded "there are no Historical Resource concerns for this project", and recommend "Historical Resources Act Clearance for this project". Alberta Tourism, Parks, Recreation and Culture have reviewed the Historical Resources Overview and have issued on February 20<sup>th</sup>, 2007 a Historical Resources Act clearance to proceed with development.

**Policy 3.10.1:** Should any historical resources be encountered during construction, Alberta Tourism, Parks, Recreation and Culture are to be contacted immediately.

#### 4.0 DEVELOPMENT CONCEPT

#### 4.1 The Shepard Plan - Development Phasing

With the current economic growth in Alberta, and specifically in the Calgary region, and the demand for industrial land over the past several years, there has been a significant amount of development and growth in the Shepard area. All indications are that this growth will likely continue.

Within the past six years the Transport Industrial Conceptual Scheme, the Boychuk Conceptual Scheme, the Patton Conceptual Scheme and the Kleysen Transport Conceptual Scheme, all situated along 84<sup>th</sup> Street SE, have been approved by the Municipal District of Rocky View Council and are under various stages of development (Figure 4). The Shepard Plan encourages businesses that enhance, strengthen and diversify the area's economy and recognizes the potential for limited services industrial land uses in the Plan area.

The Shepard Plan outlines three phases of industrial development in the Plan area. Frontier Park is located within Phase 3. Section 5.1c of the Plan recognizes that development may proceed out of sequence provided that the Municipality is satisfied with the rationale presented for doing so.

The rationale for developing out of Phase is based on a number of factors including the current market demand for limited serviced industrial land in the region and the limited amount of land available for this type of development. Frontier Park is the last parcel of undeveloped land located along the fast developing 84<sup>th</sup> Street S.E. corridor, between Highway 560 (Glenmore Trail SE) and the future east/west Peigan Trail. Its development is a logical step from the previously approved developments along 84<sup>th</sup> Street. From a Municipal District of Rocky View perspective, the mediated annexation boundary removes a significant portion of land from the Shepard Plan area currently under the jurisdiction of the MD of Rocky View and transfers it to the City of Calgary thereby reducing the amount of business lands in this part of the MD. The mediated agreement identifies this area of the MD as an industrial growth corridor.

Frontier Park will represent contiguous development, will be readily accessible and will be serviceable with the infrastructure necessary for the proposed land use. Furthermore, the planning and development of Frontier Park will complete this segment of the Plan area and will contribute to the development and upgrading of the road network in the area.

**Policy 4.1.1** Subdivision and development of Frontier Park may occur out of the phasing sequence as shown in the Shepard Plan.

#### 4.2 Development Concept

Based on the Developer's intentions, Municipal District of Rocky View Policy, market considerations and site characteristics, a Conceptual Scheme for the 160 acre Frontier Park has been prepared for the site as illustrated in Figure 5.

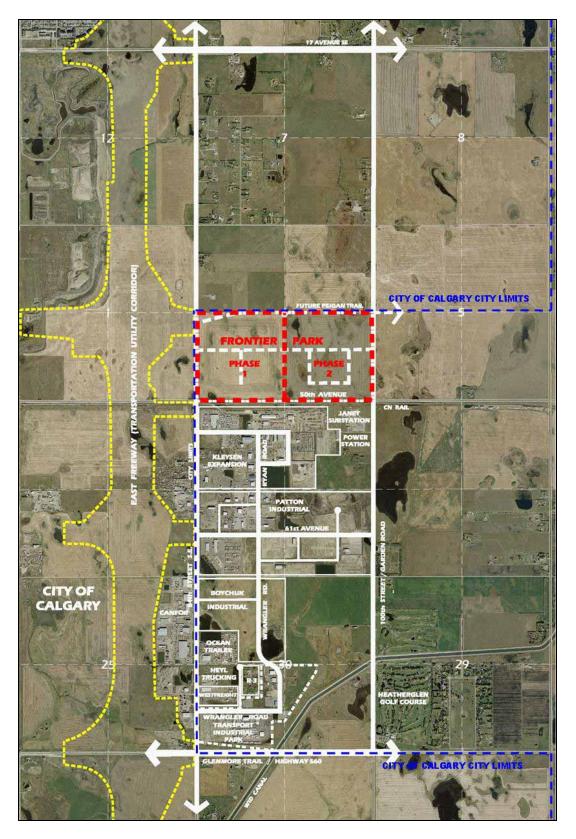


Figure 4 - SITE CONTEXT (2003)

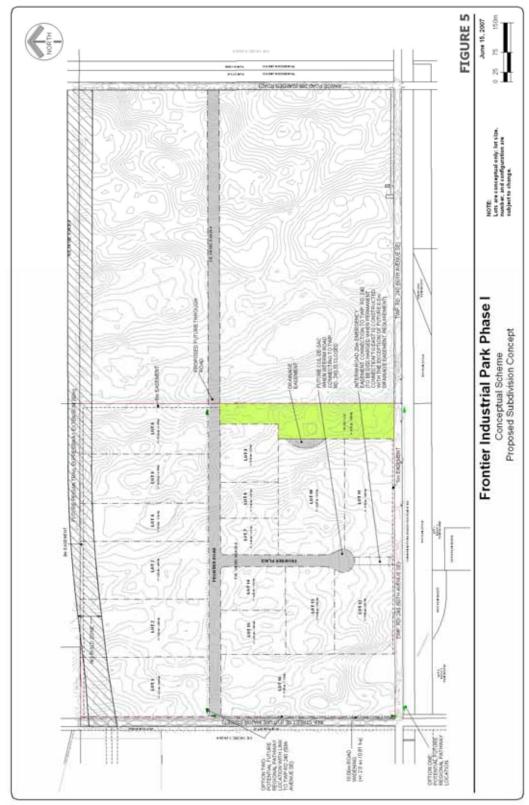


Figure 5 - CONCEPTUAL SCHEME PROPOSED SUBDIVISION CONCEPT

#### 4.3 Land Use

As noted in **Section 2.2** of this report, Figure B-1 of the Shepard Plan identifies the subject site as Phase 3 "Business". Section 5 of the Shepard Plan indicates that "the business areas within the Plan are intended to consist of large, limited service business parcels existing in harmony with other land uses" and Section 5.1(a) acknowledges that "the Municipality encourages businesses that enhance, strengthen and diversify the Municipality's economy".

Section 5.1 of the Shepard Plan also contains appropriate business area land use policies.

In conformance with Section 5.0 of the Shepard Plan the Conceptual Scheme proposes to redesignate the subject site from Ranch and Farm District to General Business District (B-2).

According to Municipal District of Rocky View Land Use Bylaw C-4841-97 the General Business District (B-2) "is intended to provide a wide range of business and associated uses which are compatible with each other and do not adversely affect the surrounding land use".

General Industry Type I and General Industry Type II are discretionary uses within this land use district. General Industry Type I and General Industry Type II are respectively defined as "those developments where activities and uses are primarily carried on within an enclosed building and no significant nuisance factor is created or apparent outside an enclosed building" and as "those developments in which all or a portion of the activities and uses are carried on outdoors, without any significant nuisance or environmental factors such as noise, appearance, or odour, extending beyond the boundaries of the site".

The General Regulations of the B-2 District include the following provisions:

- The maximum parcel size shall be 7.5 hectares (18.5 acres).
- The minimum front, side and rear yard shall be 6.0m (19.7 feet).
- The maximum building height shall be 18.0m (59.0 feet).
- A minimum of 10 percent of the site area shall be landscaped.

Policy 4.3.1: Land uses within the Conceptual Scheme area shall conform to the approved Land Use District contained within the Municipal District of Rocky View Land Use Bylaw C-4841-97 and with the Business Area Land Use Policies contained in Part B Section 5 of the Shepard Plan.

#### 4.4 Subdivision Layout

The proposed subdivision layout illustrated in **Figure 5** exemplifies a standard grid pattern which results in maximum efficiency and desired rectangular lots for large lot industrial users. The layout results in 12 to 16 industrial lots ranging from  $\pm 1.5$  acres (0.60 hectares) to  $\pm 18.5$  acres (7.48 hectares) in size. The precise number of lots will be determined by market demand. A Public Utility Lot (PUL) totalling  $\pm 8.0$  to 9.0 acres (3.23 to 3.64 hectares) is proposed to be utilized for storm water management. The final size of the PUL will be determined at the subdivision stage. The estimated Conceptual Scheme land use statistics are summarized in **Table 1**.

Table 1: Land Use Statistics

Land Use	Acres±	Hectares±	Percent
Industrial <sup>1</sup>	140.90	57.02	88.0
Public Utility Lot	8.37	3.39	5.3
Roads <sup>2</sup>	10.37	4.34	6.7
Total	160.00	65.16	100.0

The future Peigan Trail Expressway is intended to run along the north side of the Conceptual Scheme area; however its precise alignment is not known at this time.

Due to the proximity of the intersection of TWP. Rd. 240 (50<sup>th</sup> Avenue SE) and 84<sup>th</sup> Street SE to the Canadian National Railway crossing, the Plan proposes to relocate the east—west collector standard street (TWP. Rd. 240 (50<sup>th</sup> Avenue SE)) approximately 1465 feet (455m) to the north at approximately Frontier Road SE. **Figure 5** illustrates the future intentions for development of the internal road through lands owned by the developer of Frontier Park situated immediately to the east of the Conceptual Scheme area. It is the Developer's intent to construct the east—west road on these adjacent lands through to Range Rd. 285 (Garden Road) concurrent with the development of the Conceptual Scheme Plan area. Until such time as the realigned collector can be extended to the east, a temporary emergency access road within an access easement from Frontier Road to TWP. Rd. 240 (50<sup>th</sup> Avenue SE) is proposed, extending south from the bulb at the end of 86<sup>th</sup> Street SE. The easement will be situated entirely within Lot 12 and will be discharged once Frontier Road SE is extended to the east of the Plan area.

All internal roads will be dedicated as public roads with the rights of way reflecting the appropriate road design and transportation requirements. The roads will be constructed to Municipal District standards.

The Plan also allows for the dedication of a 10.06m strip of land along the westerly edge of the site for the widening of 84<sup>th</sup> Street SE.

The Plan also provides for various easements to accommodate storm drainage conveyance and storage. The proposed storm water easements illustrated in Figure 5 include:

- i) An 8m easement along the north and east boundary, the latter extending from the northeast corner to the Public Utility Lot.
- ii) A 5m easement along the south boundary of the Plan from proposed lot 16 to the Public Utility Lot.

 $<sup>^{1}</sup>$  Industrial includes  $\pm$  9.52 Ac (3.85 Ha) situated in the future Peigan Trail right of way.

 $<sup>^2</sup>$  Roads include  $\pm$  2.0 Ac (0.81 Ha) of area for the widening of 84<sup>th</sup> Street SE

**Policy 4.4.1** The subdivision of the Plan area shall proceed in general accordance with the parcel configuration and road alignments illustrated in Figure 5 and the minimum requirements of the Municipal District of Rocky View Land Use Bylaw.

#### 4.5 Open Space and Municipal Reserve

Pursuant to Section 666 of the Municipal Government Act, the Municipal District of Rocky View Council as the Approving Authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide up to ten (10) percent of the parcel as:

- i) land for municipal reserve, school reserve or municipal and school reserve,
- ii) money in place of municipal reserve, school reserve or municipal and school reserve, or
- iii) a combination of land or money.

The Shepard Plan indicates that open space and recreation areas should be created to serve the residents within the Plan area and that linkages with the existing linear park system in the City of Calgary and the Western Headwork's Canal pathway within the Plan area are encouraged.

In the City of Calgary Pathway/Bikeway Implementation Plan, a regional pathway alignment is identified along the 50<sup>th</sup> Avenue alignment and is intended to eventually connect with the Western Irrigation District Canal pathway system. The pathway would be accommodated in the right-of-way adjacent to the north side of the CN Railway line where it will pass under the future T.U.C.. Because of this alignment, provision will be made in the Conceptual Scheme for a regional path to link with this alignment and intersect the site from west to east. Two alternative locations for this regional pathway location are shown in **Figure 5**.

Given the nature of the proposed development, the need for non-linear open spaces providing recreation opportunities is not indicated, and the Conceptual Scheme proposes that the municipal reserve obligations be met by means of cash in lieu of reserve.

- **Policy 4.5.1:** Municipal Reserves for the Conceptual Scheme area will be provided as cash in lieu of Reserves in accordance with the provisions of the Municipal Government Act.
- **Policy 4.5.2:** A potential future regional pathway shall be accommodated in one of two locations in the Conceptual Scheme (as described below) that will ultimately provide a connection to the regional pathway that parallels the Western Irrigation District canal.
  - 1. The 3.0m regional path right-of-way shall be accommodated along the north part of the CN Rail R.O.W.; or
  - 2. The pathway shall be accommodated in a 3m easement within the 6m setback along the north side of the proposed east/west internal road connecting 84<sup>th</sup> Street SE to Range Rd. 285 (Garden Road), and within a 3m easement within the 6m setback along the east side of 84<sup>th</sup> Street SE, connecting the pathway to the anticipated future pathway from the City of Calgary along 50<sup>th</sup> Avenue SE.
- **Policy 4.5.3:** A Lot Owners Association shall be incorporated to manage and maintain the pathway system in accordance with the requirements of the MD of Rocky View.

#### 5.0 TRANSPORTATION

#### 5.1 Transportation Context

The industrial lands north of Highway 560 (Glenmore Trail) within the Shepard Plan have experienced significant growth in recent years. Access to these developments is mainly provided off 84<sup>th</sup> Street SE, a two-lane north-south rural road under the jurisdiction of the City of Calgary. Eighty fourth Street SE is the current boundary between the City of Calgary and the Municipal District of Rocky View. It provides connection to Highway 560 (Glenmore Trail) and Highway 1A (17<sup>th</sup> Avenue), both key eastwest routes. TWP Road 240 (50<sup>th</sup> Avenue SE), a two-lane rural road on the south boundary of the site, currently provides an indirect route into the City.

The Transportation Utility Corridor (TUC) was originally planned by the Province of Alberta and the City of Calgary in the late 1970's and is commonly referred to as the Calgary Ring Road. During the 1980's and 90's the Province of Alberta, who is responsible for the development of the Ring Road, purchased most of the lands required for this TUC. The East Freeway, which forms the eastern link of the Ring Road, is parallel to, and west of 84<sup>th</sup> Street.

The process is currently underway to build the northeast portion of the Ring Road, from Deerfoot Trail to 17<sup>th</sup> Avenue SE (Highway 1A), with construction scheduled to be complete by fall of 2009. It is anticipated that construction of the southeast portion of the Ring Road will follow within a five-year timeframe. However, construction scheduling will be determined based on Provincial priorities, as financing is entirely dependent on Provincial budgets.

With the construction of the East Freeway, 84th Street SE is proposed to become discontinuous with direct access to Highway 560 (Glenmore Trail) and Highway 1A (17th Avenue) removed, as a result of the proximity to the grade-separated interchanges on the East Freeway. When this occurs, Range Road 285 (Garden Road) will become the north-south roadway that provides access to Highway 560 (Glenmore Trail), and Highway 1A (17<sup>th</sup> Avenue) from this area. Ultimately, the at-grade intersection of Range Road 285 (Garden Road) / Highway 560 (Glenmore Trail) may be eliminated and an interchange introduced at Range Road 284 / Highway 560 (Glenmore Trail). Sixty first Avenue SE, a major road, is proposed to provide the direct main connection between 84th Street SE and Range Road 285 (Garden Road). In addition, 61st Avenue SE is anticipated to extend over the East Freeway into the City of Calgary via a grade-separated overpass. The east-west connection between 84th Street SE and Range Road 285 (Garden Road) will continue to be provided either at the existing TWP Road 240 (50<sup>th</sup> Avenue SE) or in the vicinity. However, TWP Road 240 (50<sup>th</sup> Avenue SE) will cease to extend west of 84<sup>th</sup> Street SE through the TUC. Peigan Trail is a long term future road that is proposed as an east/west connection between the Municipality and the City of Calgary. It will cross the East Freeway via a grade-separated overpass. With the construction of Peigan Trail, 84th Street SE will ultimately become discontinuous immediately adjacent to the subject lands.

As mentioned previously in Section 4.4, the future alignment of Peigan Trail Expressway along the north boundary of the property has not been precisely defined. Through discussion with the Municipal District of Rocky View, The City of Calgary and Alberta Infrastructure and Transportation, it has been concluded that a right of way of up to 60m in width be protected for the future Peigan Trail. The Municipal District of Rocky View supports the location of the right-of-way centred on the quarter section line if it is technically feasible and is agreed upon by all affected jurisdictions. If the right-of-way is centred on the quarter section line, the southerly 30m plus flare at the TUC of the anticipated 60m right of way as illustrated on **Figure 5** will be required. The form and method in which the land required for the Peigan Trail right-of-way will be acquired has not been determined at this time.

#### 5.2 Internal Vehicular Circulation & Access

Access to the subject site will be obtained through the introduction of a new east-west collector road which intersects 84<sup>th</sup> Street SE approximately 455 metres north of the existing TWP Road 240 (50<sup>th</sup> Avenue SE). Midway through the lands along this new east-west road, a cul du sac is proposed to extend south with a temporary access easement extending south to connect to the existing TWP Road 240 (50<sup>th</sup> Avenue SE). The emergency access easement will be built to a Municipal gravel standard and gated at both ends. It is intended to remain in use as an emergency access until such time as the east-west collector street (Frontier Road SE) is extended to the east. The intention of the proposed road network is to provide greater distance between the CN Rail line, which is located just south of TWP Road 240, and the intersection to allow the opportunity to implement roadway improvements without affecting the CN Rail line. The internal east-west road linking 84<sup>th</sup> Street SE to Range Rd. 285 (Garden Road) may provide the primary east-west connection instead of TWP Road 240 (50<sup>th</sup> Avenue SE).

Peigan Trail is designated as an expressway which precludes the ability for access from abutting properties. Therefore, no direct connection between the site and the future Peigan Trail has been protected. The site has been designed to efficiently accommodate industrial traffic including large tractor-trailer vehicles. The internal roadway system will be dedicated as a public roadway with the appropriate right-of-way and will be designed in accordance with the Municipal District of Rocky View Servicing Standards for Subdivision and Road Construction.

Policy 5.2.1 The temporary emergency access situated within a public access easement from the internal road network to TWP Road 240 (50<sup>th</sup> Avenue SE) as illustrated in Figure 5 shall remain until the east-west road connection is linked with Range Rd 285 (Garden Road) to the satisfaction of the Municipal District of Rocky View, at which time the public access easement shall be discharged.

All driveway approaches will be the responsibility of each individual purchaser of the lots and will be deferred to the development permit stage.

**Policy 5.2.2** All driveway approaches shall be deferred to the Development Permit stage.

#### 5.3 Traffic Impact Assessment

The Shepard Plan describes four major traffic-generating areas where a Traffic Impact Assessment is required prior to development occurring. The subject site is located in Area 1 – north of Highway 560 (Glenmore Trail).

A traffic impact assessment was prepared in support of the proposed Frontier Industrial Park. The main objectives of this transportation assessment, as outlined by the Municipal District of Rocky View, are to evaluate impacts of vehicular traffic generated by the proposed development on the adjacent roadway system at the opening day (2009) horizon and to recommend appropriate improvements to roadways in the vicinity of the proposed development to mitigate any unacceptable impacts.

It is estimated that the proposed development will generate in the order of 505 vehicles per hour (vph) in the AM peak hour, 515 vph in the PM peak hour and 4,175 vehicles per day.

A review of existing conditions along 84 Street SE in the immediate vicinity of the development was completed. The analysis indicates that there are currently some delays at the 84<sup>th</sup> Street SE / TWP

Road 240 (50<sup>th</sup> Avenue SE) intersection as a result of high traffic volumes on 84<sup>th</sup> Street SE which is a two-lane roadway. Overall, the critical turning movements to/from TWP Road 240 are quite low. The CN Rail line is located just south of Twp Road 240 which potentially precludes the opportunity to implement intersection improvement at 84<sup>th</sup> Street SE / TWP Road 240. The proposed plan creates a new roadway through the site which connects to 84<sup>th</sup> Street SE approximately 455 m north of TWP Road 240. The location of this new intersection allows the opportunity to implement roadway improvements without affecting the CN Rail line. Analysis of the 2009 (opening day) post-development conditions indicates that a traffic signal is required at the new intersection of the site access with 84<sup>th</sup> Street SE, in conjunction with the widening of 84<sup>th</sup> Street SE to accommodate a dedicated southbound left turn lane and a northbound right turn lane. In addition, the site access at 84<sup>th</sup> Street SE requires separate left and right turn lanes to be built.

Township Road 240 has been identified as forming part of the Municipality's Long Range Transportation Network. The Municipality has the goal of widening the right-of-way for this category of road to 30 metres and may require road dedication of 5m at the time of subdivision of land located along Regional Transportation roads.

A copy of the traffic impact assessment has been submitted to the Municipal District of Rocky View under separate cover.

- **Policy 5.3.1** Access to the Conceptual Scheme area shall be as conceptually illustrated in Figure 5.
- **Policy 5.3.2** A 10.06 m wide road dedication shall be provided for the widening of 84 Street SE as shown on Figure 5.
- **Policy 5.3.3** The Municipality will review the need for dedication of a 5m road right-of-way along the entire southern boundary of the subject lands at the subdivision stage.
- **Policy 5.3.4** The Municipality may require an updated Traffic Impact Assessment at the subdivision stage.
- Policy 5.3.5 Detailed traffic infrastructure requirements and improvements will be determined at the subdivision stage by the Municipality based on the data contained in the Traffic Impact Assessment (TIA) and the recommendations of the transportation consultant who authored the TIA.

#### 6.0 SERVICING SCENARIO

This Conceptual Scheme proposes a subdivision design and development concept based on limited servicing and maintains that further servicing, as a result of off-site improvements, should be addressed on an individual development permit basis.

**Policy 6.0.1:** A deferred servicing agreement shall be registered against each individual title created outlining the owner's requirements for future service extensions to the satisfaction of the Municipal District of Rocky View.

#### 6.1 Storm Water Management

A Storm Water Management Plan (SWMP) for the proposed Frontier Park has been submitted to the Municipal District of Rocky View under separate cover. The purpose of this report is to show how storm water runoff from the proposed development will be managed through the use of on-site storm water storage and a storm water detention pond.

The storm water management study for Frontier Park by Westhoff Engineering Resources, Inc., recognizes that the ultimate regional solution is the conveyance of surface water runoff to the Western Headworks Canal and/or the Shepard Slough Complex. In the long term the proposed storm water management for Frontier Park integrates Best Management Practices and incorporates wetlands that exist on the east boundary of the site. All runoff resulting from a 1:100 year event is handled within the development, i.e., no spill to downstream system.

The SWMP describes how all runoff (including runoff generated by the 100 year return period event) must be contained on-site given there are no regional drainage facilities in the area. The report also describes how runoff will spill into the off-site roadside ditches and channels beyond the 100 year return period event. Each of the proposed industrial lots will require a self-contained on-site retention pond in order to control storm water, pond size will be based on both 1:100 year return period and continuous modelling, the releases from which will be controlled such that the entire drainage system will make the post-development conditions "simulate" pre-development conditions.

The existing wetland complex at the east side of the development area will be enhanced to handle most of the runoff generated from the site and includes a storm water pond that will also provide the water requirements for fire suppression (see Enhanced Wetland Concept in **Figure 6**). A linear wetland system integrating the existing roadside ditch along Twp. Rd. 240 (50<sup>th</sup> Avenue SE) is proposed as an integral linear linkage to the enhanced wetland in the southeast corner of the Conceptual Scheme plan area and spill route further east.

Runoff from adjacent lands to the north is managed by a perimeter ditch/berm that will allow for continuity of overland drainage to the downstream conveyance system. It is noted that the latter is actually the roadside ditch along Twp. Rd. 240 (50<sup>th</sup> Avenue SE), past the east boundary of Frontier Park.

The internal drainage system comprises roadside ditches and swales between the individual lots and placed at property lines. All ditches and swales will be sized and designed to adequately convey the peak runoff and runoff volumes to the storm water wetland that will be located in the proposed Public Utility Lot (PUL). These swales will be within drainage easements that will require registration by caveat on title.

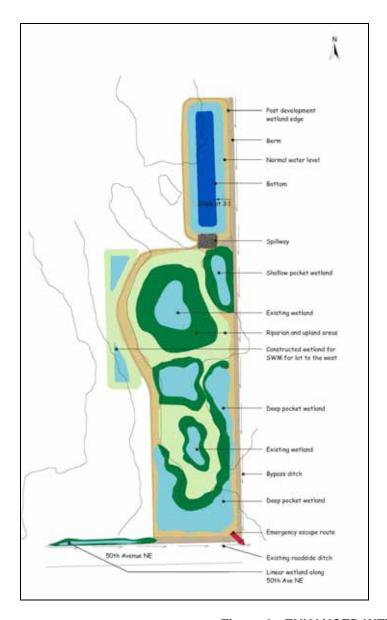


Figure 6 - ENHANCED WETLAND CONCEPT

Storm water runoff from the access roads will be controlled through a detention pond.

To ensure the SWMP is fully implemented through all stages of development, the Developer (Remington Development Corporation) has undertaken to engage the same stormwater consultant for all aspects of the projects. This includes the design and construction supervision of the on-site stormwater storage facilities on each of the lots at the Development Permit stage.

- **Policy 6.1.1:** The storm water management system shall incorporate, where feasible and practical, Best Management Practices as outlined in the Alberta Environment Guidelines for Storm Water Management for the Province of Alberta.
- **Policy 6.1.2:** The storm water management system within the Plan area shall be in general accordance with the Conceptual Scheme SWMP prepared by Westhoff Engineering

Resources Inc.

- **Policy 6.1.3:** The Municipality shall require a detailed Stormwater Management Plan at the subdivision stage.
- **Policy 6.1.4:** The final configuration of the stormwater infrastructure including the Public Utility Lot (PUL), as well as the overland drainage easements, locations and widths shall be determined at the subdivision and development permit stage based on the recommendations of the SWMP and the Stormwater Engineer who authored the SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.5:** To ensure the intent of the submitted SWMP, the design and construction supervision of the on-site stormwater storage facilities on each of the lots shall be undertaken at the Development Permit stage by Westhoff Engineering Resources, Inc. or as directed by Remington Development Corporation, all to the satisfaction of the MD.
- **Policy 6.1.6:** The detailed SWMP shall show the design, function and operation of overland drainage system components, the enhanced wetland, the activation of the emergency spillway and will stipulate minimum elevations for first opening to buildings to mitigate potential damage due to flooding to the satisfaction of the Municipality.
- **Policy 6.1.7:** The Municipality recognizes that the required on-site facilities shall be altered upon completion of a regional Stormwater Master Drainage Plan, future agreements with Alberta Environment and the Western Irrigation District. Therefore, at the subdivision or development permit stage, the on-site stormwater storage requirements shall be altered, if necessary, subject to the submission of an updated SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.8:** A lot owners association shall be incorporated to manage and maintain the stormwater management infrastructure, which includes the Public Utility Lot, the fire suppression pond and the conveyance system in accordance with the SWMP and the requirements of the Municipality and Alberta Environment.
- **Policy 6.1.9:** The ditches along TWP Rd 240 (50<sup>th</sup> Avenue SE) may be used for conveyance as part of the detailed SWMP to the satisfaction of the MD.
- **Policy 6.1.10:** An access agreement in the name of the Municipal District of Rocky View shall be registered on the title of each lot for the purposes of remedying any breach by the lot owner of any non-compliance in the construction, operation or maintenance of the lot owners' storm pond.

#### 6.2 Sanitary Sewer

Sanitary sewage will be contained and transported off-site for disposal.

**Policy 6.2.1:** Sanitary sewage shall be contained in pump out tanks and transported off-site for disposal.

#### 6.3 Water Supply

Water will either be trucked into the plan area and stored in cisterns or obtained from individual wells

on-site. Data obtained from a number of wells in the area indicates that there is sufficient water available on-site to service the needs of a variety of industrial users.

**Policy 6.3.1:** In accordance with the Provincial Water Act, lot owners shall obtain a License to Divert Water from Alberta Environment prior to extracting water for commercial purposes should water be obtained from individual wells on-site.

#### 6.4 Shallow Utilities

Electrical, telephone and natural gas utilities will be extended into the plan area. Electrical and telephone servicing will be provided via overhead joint utility poles. The alignments of the utilities are illustrated on Figure 7.

**Policy 6.4.1:** Electrical, telephone and natural gas utilities shall be provided within the plan to all lots at the sole expense of the Developer and to the satisfaction of the utility providers and the Municipality.

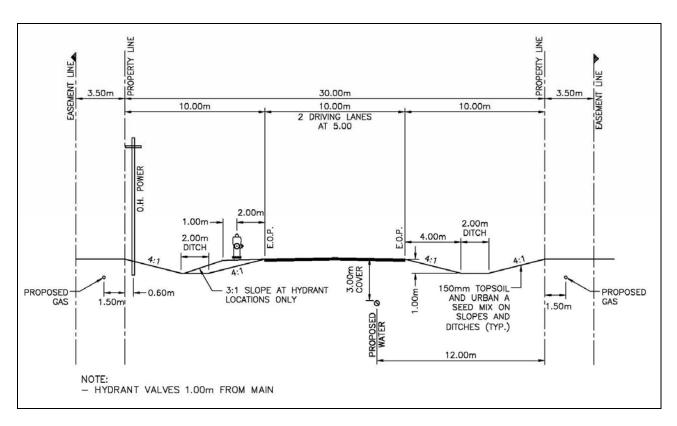


Figure 7 - TYPICAL ROAD SECTION

#### 6.5 Site Grading

Proposed road grades and drainage courses will take into consideration the existing topography to minimize grading requirements over the plan area. Upon approval of the Conceptual Scheme, the Owner is intending to rough grade the roadways and stormwater drainage facilities. Final stripping and grading of roadways, stormwater easements, PULs and common stormwater facilities will occur at the subdivision stage. Onsite grading within the lots will be completed by the lot purchasers at the time of Development Permit approval for the lot.

- **Policy 6.5.1:** Prior to stripping and grading of the site including roads, lots and stormwater facilities, a grading plan and an erosion and sediment control (ESC) report and plan shall be submitted to the satisfaction of the MD.
- **Policy 6.5.2:** Site grading is to take into consideration existing topography to minimize grading requirements over the plan area.
- **Policy 6.5.3:** The Municipal District of Rocky View may issue a Stripping and Grading Permit provided among other things the following conditions have been met:
  - (a) A Preliminary Grading Plan depicting road and swale grades including the Public Utility Lot area, a Stormwater Management Plan, Erosion and Sediment Control Plan, and Construction Management Plan are approved by the Municipal District of Rocky View and Alberta Environment.
  - (b) No topsoil shall be removed from the plan area without prior approval by the Municipal District of Rocky View.

#### 7.0 PROTECTIVE SERVICES

Police services will be provided by the Royal Canadian Mounted Police and the Municipal District of Rocky View Special Constables. The plan area will be serviced by 911 Emergency Service with an emergency locator system set up for each individual lot. Fire protection will be provided by the Municipal District of Rocky View.

The storm retention pond will be used to store sufficient water on-site to sustain fire flows. A pump station, located in close proximity to the storm pond, will force water westward across the plan area through a pressurized water distribution system. Access to water will be via one of the fire hydrants located in the subdivision. Water mains and hydrants will be located within the road right-of-way in the alignments illustrated on Figure 7.

- **Policy 7.0.1:** All parcels within the plan area shall have water for fire suppression available at the lot line. Water is to be supplied to the fire suppression system from a storm retention pond. The pumping station shall be accessible by an all weather road. Fire hydrants shall also be installed as a condition of subdivision approval to the satisfaction of the Municipal District of Rocky View.
- **Policy 7.0.2:** Should a regional water system be constructed, capable of servicing the Conceptual Scheme area, the fire protection system shall be connected to it in order to provide full fire protection.
- **Policy 7.0.3:** An Emergency Response Plan shall be submitted by the Developer to the satisfaction of the Municipal District of Rocky View at subdivision stage.

#### 8.0 PHASING

The Frontier Park Phase I development will include  $\pm$  160 acres (64.8 hectares) of land that will be subdivided into one public utility lot and 12 to 16 industrial lots all of which are proposed to be developed as a single phase. In addition, as the  $\frac{1}{4}$  section to the east is owned by the same developer, the intention is to also construct the east west road through the east  $\frac{1}{4}$  section and link with Range Rd. 285 (Garden Rd.) during this single phase.

**Policy 8.0.1:** The proposed Frontier Park will be developed as a single phase.

**Policy 8.0.2:** Multiple phasing may be permitted without amendment to this Conceptual Scheme provided adequate servicing, infrastructure and storm water management is available. If multiple phasing occurs all offsite and onsite improvements required for full build out may be required at the first phase.

# 9.0 PUBLIC CONSULTATION

A public Open House was held at the Prince of Peace Village on April 24, 2007. No members of the public attended the meeting.

#### 10.0 PLAN IMPLEMENTATION

This Conceptual Scheme puts forward policies and objectives for the development of a dynamic and functional Industrial centre on lands legally described as a portion of the SW¼ of Section 6-24-28 W4M. Frontier Park will provide a high quality development that is consistent with the Shepard ASP, and meets the existing and future needs of the local community and regional industrial market.

Redesignation and subdivision of the Conceptual Scheme plan area shall be guided by the policies and objectives herein, and implemented through conditions of redesignation and subdivision approval by the Municipal District of Rocky View.

**Policy 10.0.1:** Redesignation, subdivision and development of lands within the Conceptual Scheme Planning Area shall be guided by the policies contained herein and implemented through the Land Use Bylaw, conditions of Subdivision Approval and the conditions of the Development Permit in consultation with the City of Calgary as required by the Shepard ASP.

#### 10.1 Low Impact Development

Low Impact Development (LID) has the goal of replicating the pre-development hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic site design. Within Frontier Park, LID initiatives could be implemented within the individual lots and/or along the public roadways. Potential LID initiatives within the individual lots could consist of the implementation of green roof systems, rainwater harvesting from roof areas, or the consumptive re-use of stormwater for irrigation purposes, washwater or process water. One benefit of this approach is that it reduces the land requirements for evaporation of excess runoff. In addition, it may reduce the potable water demand. If runoff from the individual lots is conveyed off-site through the implementation of a regional stormwater system, these LID initiatives would still serve to reduce the volume of water and contaminant loadings into the regional system or into the proposed wetland that will be built as part of the local stormwater management system.

Other initiatives that lessen the impact of development that are being proposed for the Frontier Park Conceptual Scheme are listed below and discussed in greater detail elsewhere in the text.

- The creation of a wetland to treat stormwater. Traditionally most developments have created a wet pond to deal with contaminants and stormwater discharge rates. A wetland provides these benefits but also provides wildlife habitat.
- Consistent with Municipal policy the Developer will require the Lot Owners to use water saving devices and low flow plumbing fixtures. This will be implemented through the Developer's Building and Development Standards.
- Adoption of a night friendly lighting policy through the Developers Building and Development Standards.
- A Crime Prevention Through Design (CPTED) strategy as part of the subdivision design.

**Policy 10.1.1:** The Developer will promote Low Impact Development techniques to the purchasers of individual lots through discussion regarding the options for stormwater design and the use of the Developers Building and Development Standards.

#### 10.2 Construction Management Plan

The Shepard ASP requires all applications of redesignation. Subdivision and/or development for business uses within the context of a Conceptual Scheme include a Construction Management Plan that includes Best Management Practices for storm water management throughout construction.

**Policy 10.2.1:** A Construction Management Plan and Erosion/Sedimentation Control Plan shall be provided by the developer, prior to issuance of a Stripping and Grading Permit and as part of the Subdivision approval, to the satisfaction of the Municipal District of Rocky View and Alberta Environment.

#### 10.3 Performance Standards

The performance standards described below are intended to provide benchmarks for the management of potential nuisances that may result from industrial development within the plan area. The Municipal District of Rocky View will ensure that future subdivision and development applications within the plan area meet or exceed the performance standards determined by this Conceptual Scheme.

#### 10.3.1 Weed Control Management Plan

The intention of the Weed Management Plan is to prevent the spread of noxious and restricted weeds pre-development, post-development and throughout all phases of site construction. Prior to the adoption of the Conceptual Scheme a Weed Management Plan is to be submitted to the Municipality for approval.

- **Policy 10.3.1** A Weed Management Plan shall be prepared by the Owner as a condition of subdivision, all to the satisfaction of the Municipality.
- **Policy 10.3.2** The Weed Management Plan shall be implemented at the subdivision stage and will become the responsibility of the Lot Owners Association after registration of the subdivision, all to the satisfaction of the Municipality.

#### 10.3.2 Air Contaminants

No use or operation on the site shall cause or create air contaminants, visible emissions or particulate emissions beyond the site that produces them. Airborne particulate matter originating from storage areas, yards or roads shall be suppressed at all times either by landscaping, paving or other means considered appropriate by the Municipal District of Rocky View as defined in a development permit and in accordance with Alberta Environment guidelines.

#### 10.3.3 Odorous Matter

No use or operation on the site shall cause or create the emission of odorous matter or vapour beyond the building or site that contains the use or operation in accordance with Alberta Environment guidelines.

#### 10.3.4 Toxic Matter

No use or operation on the site shall cause or create the emission of toxic matter beyond the building

that contains it. The handling, storage, clean-up, and disposal of any toxic or hazardous materials or waste shall be in accordance with Alberta Environment guidelines, as well as the Chemical Management Plan and/or Emergency Management and Response Plan required by the Municipal District of Rocky View Land Use Bylaw.

#### 10.3.5 Garbage Storage

All garbage and waste material accumulated on the site shall be stored in weatherproof and animal-proof containers and kept either within buildings or at the rear or side of buildings. All containers shall be screened from view by all adjacent properties and public thoroughfares. Mechanical waste compactors are encouraged.

#### 10.3.6 Fire and Explosion Hazards

Any use or operation which stores, manufactures or utilizes materials or products which may be hazardous due to their corrosive, poisonous, flammable, reactive or explosive nature shall comply with provincial fire codes and the requirements of the Municipal District of Rocky View in accordance with the Emergency Management and Response Plan required by the Municipal District of Rocky View Land Use Bylaw. Fire protection measures, such as fire hydrants, shall also be provided to the satisfaction of the Rocky View Fire Chief and included in a development permit application.

**Policy 10.3.3:** In accordance with the guidelines established in the Conceptual Scheme, performance standards shall be implemented through the Subdivision Application and Development Permit process and through the Developers Building and Development Standards.

#### 10.4 Development Guidelines

The Development Guidelines described below are intended to provide procedures for the development of uses within the plan area. The Municipal District of Rocky View will ensure that future developments meet or exceed the development guidelines established by this Conceptual Scheme.

#### 10.4.1 Access, Parking and Loading

Entrances shall be designed to accommodate the turning movement of tractor-trailers and shall be positioned to allow for safe and adequate site distances. Parking and loading facilities shall be in accordance with the applicable requirements of the Municipal District of Rocky View Land Use Bylaw. Loading and vehicle servicing areas shall be integrated into the site and building architecture, and provided at the rear or side of buildings. Parking areas for employees and visitors shall be provided for in clearly defined areas.

#### 10.4.2 Signage

A Signage Plan shall be submitted to the Municipal District of Rocky View with a development permit application in accordance with the Land Use Bylaw. Temporary signage is prohibited with the exception of temporary signs required during development or building construction.

#### 10.4.3 Lighting

The MD of Rocky View supports a night friendly lighting policy. All outdoor lighting shall be located,

oriented and shielded to prevent light from being directed at adjoining properties, skyward, interfering with the use and enjoyment of neighbouring lands or disrupting the effectiveness of any traffic control devices. Similarly, all uses shall demonstrate adequate lighting that meets the provisions of an approved Crime Prevention Through Environmental Design (CPTED) strategy submitted as part of a development permit application.

#### 10.4.4 Outside Storage

Outside storage including the storage of trucks, trailers and other large vehicles may be permitted adjacent to the rear or side of a building provided these storage areas are not located within a required rear or side yard setback. Storage areas shall be screened from any abutting residential land uses with a six-foot high wood or steel fence.

#### 10.4.5 Outside Display Areas

Outside display areas shall be permitted provided they are not located within a required front, rear or side yard setbacks and are limited to merchandise related to industrial uses on-site.

#### 10.4.6 Fencing

On-site fencing shall only be permitted when it is being used to screen outside storage areas, garbage enclosures or pieces of equipment for security purposes. There will also likely be security fencing around each parcel to identify property lines.

#### 10.4.7 Landscaping

A Landscaping Plan for the Conceptual Scheme area shall be provided as a condition of subdivision. Individual lot landscape plans shall be submitted at development permit stage. Landscape plans will identify the location and extent of landscaped areas, the plant material proposed, and the methods of irrigation and maintenance of landscaped areas. A Landscaping Plan should also consider the following:

- A minimum of 10 percent of the site area shall be landscaped as required by the General Business District (B-2)
- Tree species and other foliage shall be appropriate for dry prairie conditions with the exception
  of natural wetland areas. Natural prairie grass landscaping is preferred over high water
  consumptive non-native grass species. Where non-native grasses are used, low water species
  shall be required. All plant species shall conform to the standards of the Canadian Nursery
  Trades Association for nursery stock.
- Existing soft landscaping retained on-site may be considered in fulfillment of the total landscaping required.

Any areas subject to excavation, stripping or grading during the construction phases of development that are not identified as a landscaped area on the Landscaping Plan shall be seeded with native prairie grasses.

**Policy 10.4.1** As a condition of subdivision, a landscaping plan shall be prepared to the satisfaction of the Municipality. This plan must illustrate the treatment along all entranceways, common landscaped areas and lands adjacent to the wetland (PUL). It must also provide the overall thematic guidelines for landscaping that will be required at the Development Permit stage.

#### 10.4.8 Crime Prevention Through Environmental Design (CPTED)

CPTED principals shall be considered as part of a Subdivision Plan and should address the following: awareness of the environment, visibility of others, and community context and finding help. The Subdivision Plan should anticipate problematic places and situations where offences may occur within the plan area and establish guidelines designed to evaluate and mitigate the potential for crime.

**Policy 10.4.2:** In accordance with the guidelines established in the Conceptual Scheme, development guidelines shall be implemented through the Subdivision Application and Development Permit process and through the Developers Building and Development Standards.

#### 11.0 PLAN SUMMARY

THE CONCEPTUAL SCHEME COMPLIES WITH THE INTENT AND POLICIES OF THE MUNICIPAL DISTRICT OF ROCKY VIEW MUNICIPAL DEVELOPMENT PLAN, THE MUNICIPAL DISTRICT OF ROCKY VIEW/CITY OF CALGARY INTERMUNICIPAL DEVELOPMENT PLAN AND THE SHEPARD PLAN, FITS WITHIN AN OVERALL CONTEXT AND DOES NOT UNDULY COMPROMISE THE DEVELOPMENT OF ADJACENT LANDS.

The following is a summary of policies that are contained in Frontier Industrial Park Phase I Conceptual Scheme:

- **Policy 1.1.1:** Policies contained within the Frontier Industrial Park Phase I Conceptual Scheme shall apply to all lands within the Conceptual Scheme plan.
- **Policy 3.8.1:** Based on the Phase I and Phase II Environmental Site Assessments no evidence of soil or groundwater contamination has been found and no further assessment of the subject site is required.
- **Policy 3.8.2:** Based on a search of the Alberta Energy and Utilities Board records, there are no petroleum wells, pipelines, and facilities on or within 100 metres of the subject land. Therefore no further assessment of the subject site is required beyond the normal circulation requirements of the subdivision application.
- **Policy 3.10.1:** Should any historical resources be encountered during construction, Alberta Tourism, Parks, Recreation and Culture are to be contacted immediately.
- **Policy 4.1.1** Subdivision and development of Frontier Park may occur out of the phasing sequence as shown in the Shepard Plan.
- Policy 4.3.1: Land uses within the Conceptual Scheme area shall conform to the approved Land Use District contained within the Municipal District of Rocky View Land Use Bylaw C-4841-97 and with the Business Area Land Use Policies contained in Part B Section 5 of the Shepard Plan.
- **Policy 4.4.1** The subdivision of the Plan area shall proceed in general accordance with the parcel configuration and road alignments illustrated in Figure 5 and the minimum requirements of the Municipal District of Rocky View Land Use Bylaw.
- **Policy 4.5.1:** Municipal Reserves for the Conceptual Scheme area will be provided as cash in lieu of Reserves in accordance with the provisions of the Municipal Government Act.
- **Policy 4.5.2:** A potential future regional pathway shall be accommodated in one of two locations in the Conceptual Scheme (as described below) that will ultimately provide a connection to the regional pathway that parallels the Western Irrigation District canal.
  - 1. The 3.0m regional path right-of-way shall be accommodated along the north part of the CN Rail R.O.W.; or
  - 2. The pathway shall be accommodated in a 3m easement within the 6m setback along the north side of the proposed east/west internal road connecting 84<sup>th</sup> Street SE to Range Rd. 285 (Garden Road), and within a 3m easement within the

- 6m setback along the east side of 84<sup>th</sup> Street SE, connecting the pathway to the anticipated future pathway from the City of Calgary along 50<sup>th</sup> Avenue SE.
- **Policy 4.5.3:** A Lot Owners Association shall be incorporated to manage and maintain the pathway system in accordance with the requirements of the MD of Rocky View.
- Policy 5.2.1 The temporary emergency access situated within a public access easement from the internal road network to TWP Road 240 (50<sup>th</sup> Avenue SE) as illustrated in Figure 5 shall remain until the east-west road connection is linked with Range Rd 285 (Garden Road) to the satisfaction of the Municipal District of Rocky View, at which time the public access easement shall be discharged.
- **Policy 5.2.2** All driveway approaches shall be deferred to the Development Permit stage.
- **Policy 5.3.1** Access to the Conceptual Scheme area shall be as conceptually illustrated in Figure 5.
- **Policy 5.3.2** A 10.06 m wide road dedication shall be provided for the widening of 84 Street SE as shown on Figure 5.
- **Policy 5.3.3** The Municipality will review the need for dedication of a 5m road right-of-way along the entire southern boundary of the subject lands at the subdivision stage.
- **Policy 5.3.4** The Municipality may require an updated Traffic Impact Assessment at the subdivision stage.
- Policy 5.3.5 Detailed traffic infrastructure requirements and improvements will be determined at the subdivision stage by the Municipality based on the data contained in the Traffic Impact Assessment (TIA) and the recommendations of the transportation consultant who authored the TIA.
- **Policy 6.0.1:** A deferred servicing agreement shall be registered against each individual title created outlining the owner's requirements for future service extensions to the satisfaction of the Municipal District of Rocky View.
- **Policy 6.1.1:** The storm water management system shall incorporate, where feasible and practical, Best Management Practices as outlined in the Alberta Environment Guidelines for Storm Water Management for the Province of Alberta.
- **Policy 6.1.2:** The storm water management system within the Plan area shall be in general accordance with the Conceptual Scheme SWMP prepared by Westhoff Engineering Resources Inc.
- **Policy 6.1.3:** The Municipality shall require a detailed Stormwater Management Plan at the subdivision stage.
- **Policy 6.1.4**: The final configuration of the stormwater infrastructure including the Public Utility Lot (PUL), as well as the overland drainage easements, locations and widths shall be determined at the subdivision and development permit stage based on the recommendations of the SWMP and the Stormwater Engineer who authored the SWMP, and to the satisfaction of the Municipality.
- Policy 6.1.5: To ensure the intent of the submitted SWMP, the design and construction supervision

- of the on-site stormwater storage facilities on each of the lots shall be undertaken at the Development Permit stage by Westhoff Engineering Resources, Inc. or as directed by Remington Development Corporation, all to the satisfaction of the MD.
- **Policy 6.1.6:** The detailed SWMP shall show the design, function and operation of overland drainage system components, the enhanced wetland, the activation of the emergency spillway and will stipulate minimum elevations for first opening to buildings to mitigate potential damage due to flooding to the satisfaction of the Municipality.
- **Policy 6.1.7:** The Municipality recognizes that the required on-site facilities shall be altered upon completion of a regional Stormwater Master Drainage Plan, future agreements with Alberta Environment and the Western Irrigation District. Therefore, at the subdivision or development permit stage, the on-site stormwater storage requirements shall be altered, if necessary, subject to the submission of an updated SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.8:** A lot owners association shall be incorporated to manage and maintain the stormwater management infrastructure, which includes, the Public Utility Lot, the fire suppression pond and the conveyance system in accordance with the SWMP and the requirements of the Municipality and Alberta Environment.
- **Policy 6.1.9:** The ditches along TWP Rd 240 (50<sup>th</sup> Avenue SE) may be used for conveyance as part of the detailed SWMP to the satisfaction of the MD.
- **Policy 6.1.10:** An access agreement in the name of the Municipal District of Rocky View shall be registered on the title of each lot for the purposes of remedying any breach by the lot owner of any non-compliance in the construction, operation or maintenance of the lot owners' storm pond.
- **Policy 6.2.1:** Sanitary sewage shall be contained in pump out tanks and transported off-site for disposal.
- **Policy 6.3.1:** In accordance with the Provincial Water Act, lot owners shall obtain a License to Divert Water from Alberta Environment prior to extracting water for commercial purposes should water be obtained from individual wells on-site.
- **Policy 6.4.1:** Electrical, telephone and natural gas utilities shall be provided within the plan to all lots at the sole expense of the Developer and to the satisfaction of the utility providers and the Municipality.
- **Policy 6.5.1:** Prior to stripping and grading of the site including roads, lots and stormwater facilities, a grading plan and an erosion and sediment control (ESC) report and plan shall be submitted to the satisfaction of the MD.
- **Policy 6.5.2:** Site grading is to take into consideration existing topography to minimize grading requirements over the plan area.
- **Policy 6.5.3:** The Municipal District of Rocky View may issue a Stripping and Grading Permit provided among other things the following conditions have been met:
  - (c) A Preliminary Grading Plan depicting road and swale grades including the Public Utility Lot area, a Stormwater Management Plan, Erosion and Sediment Control Plan, and Construction Management Plan are approved by the Municipal District of Rocky View and Alberta Environment.

- (d) No topsoil shall be removed from the plan area without prior approval by the Municipal District of Rocky View.
- **Policy 7.0.1:** All parcels within the plan area shall have water for fire suppression available at the lot line. Water is to be supplied to the fire suppression system from a storm retention pond. The pumping station shall be accessible by an all weather road. Fire hydrants shall also be installed as a condition of subdivision approval to the satisfaction of the Municipal District of Rocky View.
- **Policy 7.0.2:** Should a regional water system be constructed, capable of servicing the Conceptual Scheme area, the fire protection system shall be connected to it in order to provide full fire protection.
- **Policy 7.0.3:** An Emergency Response Plan shall be submitted by the Developer to the satisfaction of the Municipal District of Rocky View at subdivision stage.
- **Policy 8.0.1:** The proposed Frontier Park will be developed as a single phase.
- **Policy 8.0.2:** Multiple phasing may be permitted without amendment to this Conceptual Scheme provided adequate servicing, infrastructure and storm water management is available. If multiple phasing occurs all offsite and onsite improvements required for full build out may be required at the first phase.
- Policy 10.0.1: Redesignation, subdivision and development of lands within the Conceptual Scheme Planning Area shall be guided by the policies contained herein and implemented through the Land Use Bylaw, conditions of Subdivision Approval and the conditions of the Development Permit in consultation with the City of Calgary as required by the Shepard ASP.
- **Policy 10.1.1:** The Developer will promote Low Impact Development techniques to the purchasers of individual lots through discussion regarding the options for stormwater design and the use of the Developers Building and Development Standards.
- **Policy 10.2.1:** A Construction Management Plan and Erosion/Sedimentation Control Plan shall be provided by the developer, prior to issuance of a Stripping and Grading Permit and as part of the Subdivision approval, to the satisfaction of the Municipal District of Rocky View and Alberta Environment.
- **Policy 10.3.1** A Weed Management Plan shall be prepared by the Owner as a condition of subdivision, all to the satisfaction of the Municipality.
- **Policy 10.3.2** The Weed Management Plan shall be implemented at the subdivision stage and will become the responsibility of the Lot Owners Association after registration of the subdivision, all to the satisfaction of the Municipality.
- **Policy 10.3.3:** In accordance with the guidelines established in the Conceptual Scheme, performance standards shall be implemented through the Subdivision Application and Development Permit process and through the Developers Building and Development Standards.
- **Policy 10.4.1:** As a condition of subdivision, a landscaping plan shall be prepared to the satisfaction of the Municipality. This plan must illustrate the treatment along all entranceways, common landscaped areas and lands adjacent to the wetland (PUL). It must also

provide the overall thematic guidelines for landscaping that will be required at the Development Permit stage.

**Policy 10.4.2:** In accordance with the guidelines established in the Conceptual Scheme, development guidelines shall be implemented through the Subdivision Application and Development Permit process and through the Developers Building and Development Standards.