

Section 11-53-26-W4M

Adopted by Parkland County Council: DATE Resolution No. XX

Acheson Zone 2



ACKNOWLEDGEMENT PAGE

PREPARED ON BEHALF OF:

Parkland Estates Development Corp.

D&F Blounas Holdings Ltd.

Brenmar Holdings Ltd.

CONSULTING TEAM:















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1. INTRODUCTION

1.1 Purpose

This Conceptual Scheme (CS) provides a comprehensive planning framework to guide development of a total area of 215.50 ha (532.50 ac) of land consistent with Parkland County's strategic objective of accommodating larger format business development opportunities within the Acheson Industrial Area Structure Plan (ASP) Major Employment Area. The demand for additional serviced commercial/industrial land development within the area is expected to continue.

1.2 Background

This Conceptual Scheme was developed in response to the desire of three (3) of the landowners within the CS area to commence land development opportunities. The CS application is accompanied by a separate Area Structure Plan amendment and Land Use Bylaw redistricting application. The CS application was found to be in compliance with the Edmonton Metropolitan Region Growth Plan (EMRGP) and the County's Municipal Development Plan (MDP). The proposed amendments to the Acheson Industrial Area Structure Plan will be referred to the Edmonton Metropolitan Regional Board for approval. Final approval of the CS application and Land Use Bylaw redistricting application will follow approval of the proposed ASP amendments.

This Conceptual Scheme is supported by the following technical reports and studies under separate cover:

- Oil & Gas Technical Report's (Kriedo);
- Environmental Report (Spencer Environmental Management Ltd.);
- Environmental Report (Solstice Canada Corp.);
- Preliminary Geotechnical Investigation (Shelby Engineering);
- Preliminary Geotechnical Investigation (J.R. Paine & Associates Ltd.)
- Acheson Zone 2 Traffic Impact Assessment (Bunt & Associates)
- Acheson Industrial ASP Traffic Impact Assessment (Bunt & Associates)
- Infrastructure Services Report (Prism Engineering Inc.)
- Stormwater Management Report (Northwest Hydraulics Consultants)

1.3 Location and Plan Boundaries

As shown in Figure 1 – Location and Context Map, this Conceptual Scheme encompasses all land within Section 11-53-26-W4M and a small portion of the $N\frac{1}{2}$ of Section 2-53-26-W4M that lies north of the CN Railway, and is bound on its four sides by:

- 231st Street to the east, which is the boundary of Parkland County and the City of Edmonton;
- Highway 16 (Yellowhead Highway) to the north, under jurisdiction of Alberta Transportation;
- CN Rail right-of-way and tracks to the south, which is an active main line running east/west; and
- Bevington Road to the west, under jurisdiction of Parkland County.

Policy 1.3.1	Policies contained within the Section 11-53-26-W4M Conceptual Scheme shall apply to all lands within the Conceptual Scheme area.
Policy 1.3.2	This Conceptual Scheme shall not amend any currently districted and developed land within NW 11-53-26-W4M north of 114 th Avenue.

1.4 Vision

To develop sustainable and attractive Business Industrial and Medium Industrial lots in a range of sizes to respond to the market demands and to stimulate economic development within the Acheson Industrial Area Structure Plan Major Employment Area.

1.5 Conceptual Scheme Objectives

The Section 11-53-26-W4M Conceptual Scheme:

- Describes the summary findings of a comprehensive baseline review of current conditions within the CS area to identify any significant development constraints which require appropriate mitigation strategies in support of future development;
- b) Describes a development rationale to support implementation of a comprehensive land use, subdivision, and development framework within the CS area that conforms with the Acheson Industrial ASP;
- c) Determines appropriate transportation and utility service infrastructure improvements required to facilitate development within the CS area, evaluated within the context of infrastructure capacities and/or requirements for the entire Acheson Industrial ASP area as set out in the County's Master Servicing Studies:
- d) Establishes expectations for the delivery of community support infrastructure including emergency services and solid waste management within the CS area;
- e) Establishes a logical development phasing strategy to facilitate the orderly progression of development throughout the CS area, over time;
- f) Allows the market to provide business commercial and industrial lots in a range of sizes as demanded by the market;
- g) Summarizes the conclusions of a community consultation program to inform and educate affected stakeholders and to ensure the Conceptual Scheme's development framework responds to identified concerns; and
- h) Rationalizes the proposed development in accordance with the County's adopted statutory and non-statutory policy framework.

1.6 Public Engagement

Public Engagement for this Conceptual Scheme was conducted in accordance with Parkland County Council Policy C-AD51 and adheres to Section 33(c) of the *Freedom of Information and Protection of Privacy Act*. Personal information of respondents has not been published within this public document.

Engagement Plan

A formal engagement plan was submitted by EDS Group and was approved by Parkland County on October 11, 2017.

Identified Stakeholders

The following parties were identified as key stakeholders in the development of this Conceptual Scheme:

- Parkland County;
- City of Edmonton;
- nearby residents of Parkland County and the City of Edmonton;
- nearby businesses of Parkland County and the City of Edmonton;
- Alberta Transportation;
- Alberta Energy Regulator;
- Alberta Environment; and
- CN Rail.

These key stakeholders, amongst other groups identified by Parkland County, were provided individual invitations to the open house events and made aware of the Conceptual Scheme process. Treeter Enterprises Ltd. was made fully aware of the Conceptual Scheme process however did not participate in the conception of technical reports or the final document. A representative from Treeter Enterprises Ltd. attended the open house and is aware of the proposed development of this Conceptual Scheme.

Open House Sessions

Two open house sessions were held on Monday, December 11, 2017 at the Acheson Fire Hall in Zone 1. Both sessions contained the same information. The sessions were advertised in the Spruce Grove Examiner and Stony Plan Reporter prior to the events. Invitations were provided by postal mail to all nearby landowners, Acheson Business Association and key stakeholders.

Results of Open House Sessions

Nine individuals attended the two open house sessions, at which exit surveys were made available. Three of these surveys were returned, none of which identified concerns with the proposed development or the information presented.

2. POLICY FRAMEWORK

2.1 Edmonton Metropolitan Region Growth Plan

The Edmonton Metropolitan Region Growth Plan: Re-Imagine. Plan. Build. (Effective October 26, 2017) contains an integrated policy framework to plan for and manage all of the multifaceted components through a holistic approach to planning. It encourages collaboration and coordination between municipalities as the Edmonton Metropolitan Region is planned and developed.

Examples of elements from the Growth Plan's guiding principles that apply to this Conceptual Scheme include:

- Collaboration the Area Structure Plan amendments identified in this plan will be referred to the Edmonton Metropolitan Region Board by Parkland County for approval, and during the conception of technical elements of the plan (such as transportation networks) there has been collaboration with the City of Edmonton and Alberta Transportation;
- Building on Existing Infrastructure the proposed development is within a current ASP and land area that has been identified for this type of development;
- Effective Regional Mobility this plan addresses efficient transportation connections to surrounding highway infrastructure; and
- Protecting Natural Heritage Systems working with Alberta Environment and Parks, this plan seeks to retain some of the existing natural areas as dictated by Provincial legislation and the regulatory process.

There are no apparent conflicts between the proposed Conceptual Scheme and the principles of the Edmonton Metropolitan Region Growth Plan as required by the MGA.

Policy 2.1.1	This Conceptual Scheme and the land development it generates shall conform to both the Edmonton Metropolitan Region Growth Plan and the Municipal Government Act.
Policy 2.1.2	Prior to adoption of this Conceptual Scheme by Parkland County, the related amendments to the Acheson Industrial Area Structure Plan Bylaw 2014-29 shall be referred to the Edmonton Metropolitan Region Board for approval.

2.2 Municipal Development Plan

Municipal Development Plan Bylaw 2017-14 guides development within Parkland County for approximately the next 30 years (2017-2047). Figure 7 of the MDP identifies the Acheson Industrial Area Structure plan as a Major Employment Area, therefore the proposed development is in compliance with the MDP. Section 5 of the MDP addresses industrial development, and outlines how business and industrial development will proceed in the County. This Conceptual Scheme complies with the following MDP policies:

POLICY #	POLICY STATEMENT	DEMONSTRATED CONFORMANCE WITH POLICY
5.0.1(a)	The County encourages economic and employment diversification throughout the County where businesses will be support by adequate infrastructure and transportation networks.	The CS proposes full municipal water and wastewater be installed and is located near a number of Provincial highways and CN Railways providing options for access.
5.0.1(c)	The County will encourage a range of commercial and industrial lot sizes and servicing standards to be located where appropriate in the County.	The CS is designed to allow for flexibility of lot sizing to respond to market demands. Access to municipal servicing provides opportunity for smaller industrial lots.

5.0.1(g)	Employment and business development should locate in areas where the off-site impacts of the business on surrounding land uses can be mitigated to the satisfaction of the County.	The CS area is located within an existing industrial area. Lands south of Highway 16 are surrounded on all sides by industrial uses. Highway 16 acts as a buffer for the country residential estate development located to the north.
5.0.2(b)	Major Employment Areas will support a range of intensive land uses including commercial, industrial and institutional uses that require full municipal servicing.	The CS is in compliance with the Acheson Industrial ASP by proposing municipal water and wastewater servicing be installed.
5.0.2(c)	Major Employment Areas must be planned and coordinated through an Area Structure Plan or other statutory plan.	The CS is in compliance with the Acheson Industrial ASP.
5.0.2(d)	The County will encourage the extension of municipal services to the Acheson Business Park and Fifth Meridian Business Park.	The CS proposes full municipal water and wastewater be installed.
5.0.6(b)	Development that is highly visible from a major transportation corridor should enhance visual attractiveness through design features, such as landscaping, fencing, buffering and other design features, the satisfaction of the County as regulated in the Land Use Bylaw.	The CS identifies the need for additional design elements for parcels located along major transportation corridors. Landscaping plans will be submitted at the development permit stage in accordance with the Land Use Bylaw.
9.4.1(a)	The County will collaborate with CN Railway and Transport Canada to maximize rail access to the Acheson Industrial Area, Entwistle and other future developments that may require rail access where it provides benefit to the County.	The CS area is bound by the CN Railway and is in proximity to the Intermodal Yard in nearby west Edmonton. This increases opportunities for rail access and stimulates rail reliant businesses to locate here.
9.6.2(a)	Development within the Acheson Business Industrial Park and Fifth Meridian Business Park shall be serviced by piped municipal water and wastewater servicing in accordance with the EMRGP and applicable Area Structure Plans.	The CS proposes full municipal water and wastewater be installed which will be in accordance with the EMRB and Acheson Industrial ASP requirements.
12.0.6(b)	The County will share information with residents and stakeholders on major planning and development initiatives and decision and will be transparent in communication opportunities for feedback.	Public Engagement was carried out by the consulting team in accordance with Parkland County Council Policy C-AD51. Further, the CS will require approval through Council Resolution and the associated Land Use Bylaw and Area Structure Plan Amendments will be heard in a Public Hearing held by Council.

2.3 Area Structure Plan

The general intent of this Conceptual Scheme is in conformance with the Acheson Industrial ASP by proposing Business Industrial and Medium Industrial land uses within the CS area. The Acheson Industrial ASP currently identifies a portion of the lands (East Half of the Section) in the CS area as outside of development timelines, however the ASP does allow for development that is out of step with the identified phasing plan should the policies identified within Section 7.1.2.6 be met:

- a) The developer has provided full municipal servicing on their site
- b) The developer has retained all Alberta Transportation approvals, and complies with applicable Alberta Transportation plans;
- c) All Alberta Energy Regulator (AER) setback requirements and applicable Federal and Provincial health and safety regulations for development near oil infrastructure have been met;

- d) All on-site decommissioning or land reclamation required on a particular site has been completed, and copies of reclamation certificates can be provided to Parkland County;
- e) The developer has complied with the policies in the Area Structure Plan and with other applicable municipal, Provincial, and Federal policies, standards, legislation and agreements; and
- f) Development is adjacent to a parcel, or portion of a parcel which has existing municipal servicing.

Subsequent to this policy, in order to advance the development of the Conceptual Scheme, Section 7.1.2.9 of the Acheson Industrial ASP states that, "any amendments to Figure 15 - Development Staging will require an amendment to the Acheson Industrial ASP, and may require an amendment to the County's Municipal Development Plan, and the Land Use Bylaw." Given the acceleration of proposed land development in the eastern half of the CS area by the landowners, an amendment to the Acheson Industrial ASP as well as the Land Use Bylaw is required prior to subdivision.

Policy 2.3.1 Concurrent to completing this Conceptual Scheme, the ownership group shall complete an amendment to the Acheson Industrial Area Structure Plan in order to recognize new proposed timelines of development for the eastern half of the Conceptual Scheme area.

Policy 2.3.2 As part of the subdivision approval process the developer must provide documentation to the County, where applicable, which confirms:

- a) The developer has retained all Alberta Transportation approvals and roadside development permits, and complies with applicable Alberta Transportation plans;
- b) All Alberta Energy Regulator setback requirements and applicable federal and Provincial health and safety regulations for development near oil infrastructure have been met:
- c) All Alberta Energy Regulator setback requirements and applicable federal and provincial health and safety regulations for development near oil infrastructure have been met:
- d) All on-site decommissioning or land reclamation required for non-operational infrastructure on a particular site has been completed and certificates of reclamation issued by Alberta Environment and Parks has been provided to Parkland County; and
- *e)* The developer has complied with the policies in the Acheson Industrial Area Structure Plan and with other applicable Municipal, Provincial, and Federal policies, standards, legislation and agreements.

2.4 Land Use Bylaw

The Land Use Bylaw (LUB) designates the undeveloped lands within the CS area as IRD - Industrial Reserve District. The intended districting for the entirety of the undeveloped lands within the CS area is MI - Medium Industrial, with BI - Business Industrial north of 114th Avenue and fronting onto Highway 16 (refer to Figure 5 – General Land Use Concept). The proposed districting is in conformance with the intent of the Acheson Industrial ASP. Lands under the ownership of Treeter and Tidewater Midstream are not part of the current redistricting application; redistricting of these lands shall occur at a later date and upon completion of required supporting technical studies.

Policy 2.4.1 Prior to any land development activities occurring on the Treeter or Tidewater Midstream lands, amendments to the Land Use Bylaw and Conceptual Scheme shall be completed. These amendments shall be supported by technical studies to the satisfaction of the County.

3. SITE CONTEXT

3.1 Legal Description and Ownership

As shown in Figure 2 – Land Ownership Map, the Conceptual Scheme area includes approximately 218 ha (532 ac) of undeveloped land and 11.6 ac of previously developed land. Current ownership, legal descriptions and areas of these lands are as follows:

LEGAL DESCRIPTION	OWNER	AREA (HECTARES)	AREA (ACRES)
NW 11-53-26-W4M	Parkland Estates Development Corp.	28.18	69.64
SW 11-53-26-W4M	Parkland Estates Development Corp.	64.6	159.63
N½ NE 11-53-26-W4M	D&F Blounas Holdings Ltd.	22.07	54.54
S½ NE 11-53-26-W4M	Treeter Enterprises Ltd.	30.82	76.16
SE 11-53-26-W4M	Brenmar Holdings Ltd.	64.0	158.15
NW 2-53-26-W4M (north of rail line)	Tidewater Midstream & Infrastructure Ltd.	5.06	12.50
NE 2-53-26-W4M (north of rail line)	Tidewater Midstream & Infrastructure Ltd.	0.76	1.88
TOTAL		215.49	532.50

3.2 Adjacent Land Uses

The lands to the west of the CS area (Section 10-53-26-W4M) were developed prior to this CS being established. These parcels are currently districted under the BI - Business Industrial or MI – Medium Industrial land use districts with established business and general industrial development respectively, municipal servicing and stormwater management facilities.

To the east is partially developed industrial land within the City of Edmonton, under the jurisdiction of the Winterburn Industrial ASP. To the south is undeveloped agricultural land and Tidewater Midstream's Acheson Gas Plant that is within the Acheson Industrial ASP (Zone 4) boundaries. To the north across Highway 16 is municipally serviced country residential estate development under the jurisdiction of Parkland County's Big Lake Area Structure Plan (Figure 1 – Location & Context Map).

The Big Lake Environmentally Significant Area (as identified in Parkland County's Environmental Conservation Master Plan) and Lois Hole Centennial Provincial Park are located approximately 1.7 km to the northwest. The Wagner Natural Area, also a Parkland County Environmentally Significant Area, is located approximately 4 km west of the CS area. No Environmentally Significant Areas (ESAs) are located within the CS area.

3.3 Site Conditions

The undeveloped lands within the CS area are primarily being used for extensive agricultural activities with a number of operating and suspended oil and gas wells, facilities, pipelines and related infrastructure. The majority of the undeveloped land in the west half of the Section (Parkland Estates) is cultivated land, actively farmed with grain crops. The southeast quarter (Brenmar) has a mix of grain farming activities and areas of active grading (development permit approved), with some stockpiling and excavation areas with little to no vegetation. Two depressional areas with standing water exist in this southeast quarter, which will both be incorporated into the overall stormwater management network.

The northeast quarter of the Section (Blounas/Treeter) has a mix of cultivated land, native forested areas, and depressional areas with standing water. The proposed development will remove most of the existing trees, retaining some buffers around any natural areas. A residence is located within the NE quarter, along with numerous small accessory buildings adjacent to 231st Street.

The constraints of the undeveloped land as it relates to the proposed development within the CS area include:

- Existing oil and gas leases, including well sites, facilities, pipelines and other infrastructure. Some of this infrastructure will remain active in future years while other infrastructure could be reclaimed. Development must ensure access is accommodated to these leases at all times.
- Natural areas including streams, forested areas, and wetlands, some of which will be retained as Crown
 claimed wetlands which will be engineered to work with the overall stormwater management plan.
- 114th Avenue is an established, partially paved municipal roadway that cuts through the northern half of the Section that provides an essential east/west traffic flow through the CS area to adjoining lands.
- The CS area is bordered to the east by the City of Edmonton's 231st Street; this road shall be upgraded
 in the future under a joint-use agreement between Parkland County and the City of Edmonton. Any access
 onto 231st Street must be approved by the City of Edmonton.
- **Policy 3.3.1** Access to oil lease sites shall be maintained at all time during construction and development.

3.4 Historical Uses of the Site

In preparation of the proposed development, Historical Resource Impact Assessments (HRIAs) were completed and the following Statements of Justification were submitted to Alberta Historic Resources, who issued clearance for the subject parcel relative to the Historic Resources Act:

APPROVAL	APPROVAL NO.	ISSUE DATE	LANDS COVERED	APPROVAL HOLDER
Historical Resources Act	4835-17-0036-001	May 05, 2017	E ½ 11-053-26-W4	Brenmar Holdings Ltd./D&F Blounas Holdings Ltd.
Historical Resources Act	4835-15-0068-001	May 12, 2015	NW 11-053-26-W4	Trans America Group*
Historical Resources Act	4835-15-0085-001	June 17, 2015	SW 11-053-26-W4	Trans America Group*
	* Approvals in the na	me of Trans America Parkland Estates De	a Group are currently being evelopment Corp.	changed to

Policy 3.4.1	Landowners who have not yet acquired clearance for land development under the Historical Resources Act (HRIAs) shall do so before submission of future Planning applications.
Policy 3.4.2	Should any historical resources be encountered during construction, Alberta Environment and Parks shall be contacted immediately.

4. PHYSICAL SITE FEATURES

4.1 Topography

The majority of the lands within the CS area have been cleared for agricultural use as well as for oil and gas extraction activities. The lands are undulating in the northern area adjacent to Highway 16, as they move to the south they become flatter. The overall drainage patterns are south to north with overland drainage into Big Lake north of Highway 16. The central area of the Section is significantly encumbered with oil and gas infrastructure. A small undisturbed gully/natural depression is located in NW 11-53-26-W4M south of 114th Avenue (Parkland Estates) and will be incorporated into a train of stormwater management facilities. The Blounas lands in NE 11-53-26-W4M adjacent to Highway 16 are not currently being cultivated and contain the most significant wetland within the CS area with an intact tree-stand. There is an existing single family dwelling on this parcel and grading has commenced by the landowner (without approval to date).

4.2 Hydrology and Geotechnical

East Half of Section 11-53-26-W4M

Geotechnical studies for the eastern half of the CS area, with the exception of the Treeter lands, were conducted by Shelby Engineering in September and October of 2016. Each ownership group commissioned their own studies. The subject lands consist of a "highly variable native glaciolacustrine deposit comprised of silt, clay and/or sand was encountered beneath the surficial fill and organic soils". Based on knowledge of the region this deposit is anticipated to be approximately 25 meters to 30 meters below grade and will be underlain by thin discontinuous clay till and/or bedrock. Eighteen (18) boreholes were drilled to a depth of 8.85 meters, all but two (2) of these holes were dry after 14 to 21 days.

Preliminary investigations determined that cast-in-place concrete friction piles and driven steel piles would be the most appropriate foundations for these soils. It is noted that further geotechnical investigations should be undertaken prior to construction and installation of infrastructure and roads and at the development permit stage for individual building lots. The subject soils are able to support the proposed industrial/commercial development.

West Half of Section 11-53-26-W4M

Geotechnical studies for the western half of the CS area were originally conducted in September and October of 2006. This report was reviewed by J.R. Paine and Associates in October of 2017 confirming its validity. Generally the soils encountered in the test holes around this site consisted of surficial topsoil, underlain by a lacustrine clay or clayey silt, overlying silty sand. Forty-four (44) boreholes were drilled, the water table was encountered for the majority of the boreholes deeper than 7.2 meters below the surface.

The soil conditions encountered were identified as generally fair for the construction of underground and surface utilities. Preliminary investigations identify cast-in-place piles (low load capacity), driven piles of pre-cast concrete, steel H or pipe piles and Franki piles (Pressure Injected Footings) are all considered suitable for these soils. Slab-on-grade would be acceptable on non-organic soils. It is noted that further geotechnical investigations should be undertaken prior to construction and installation of infrastructure and roads and at the development permit stage for individual building lots.

Policy 4.2.1

Prior to development, site-specific geotechnical analysis shall be prepared by end users to confirm subsurface conditions.

4.3 Vegetation

The eastern portion of Parkland County, including the CS area, is located within the Central Parkland natural subregion of Alberta, a region historically characterized by a mosaic of aspen forests and fescue grasslands. Most of the Central Parkland subregion has been intensively cultivated and developed with relatively few areas retaining native vegetation. Wetlands cover approximately 10% of the Central Parkland subregion, and lakes and small water bodies cover another 2%.

4.4 Environmental Considerations

Each ownership group, with the exception of the Tidewater Midstream and Treater lands conducted Biophysical and Environmental studies independently of each other. The collective environmental features are shown in Figure 3 – Environmental Features Map.

E ½ of Section 11-53-26-W4M

A Biophysical Assessment was undertaken by Spencer Environmental Management Services Ltd. For the E ½ of Section 11-53-26-W4M. Field work was commissioned by each individual ownership group and began in 2014, with the final vegetation surveys concluding in January of 2017.

Wetlands

A total of 20 wetlands of varying size and classes were identified. All wetlands were generally small, ranging in size from one to two hectares or less in size. The total combined area of the wetlands was 4.46 ha (11.02 ac). Two (2) wetlands were classified as shallow open water wetland, two (2) were classified as swamps, and the remaining 16 were classified as graminoid marshes.

Upland Plant Communities

- Blounas lands: Three (3) distinct plant communities were identified on the Blounas lands: deciduous forest; shelterbelt communities and unmanicured grassland.
- Treeter lands: Two (2) upland plant communities were identified within the Treeter lands: small areas of upland deciduous forest and shelterbelt communities along the east, south and west boundaries
- Brenmar lands: A single patch of deciduous forest is located in the northwest corner of the lands and shelterbelt communities located along the north and west property boundaries.

Wildlife

Thirty-one (31) wildlife species, including twenty-five (25) bird species, two (2) amphibian species, and four (4) mammal species were identified within the Brenmar and Blounas lands.

Recommended Mitigation

Spencer Environmental Management Services Ltd. identified the following mitigation strategies for the eastern half of the CS area:

- Consider retention/integration of the Crown claimed wetland located within the Blounas lands and the surrounding deciduous forest. That wetland remains largely surrounded by mature deciduous forest and, as a result, this wetland-upland complex is the most valuable natural feature within the CS area. It supports the greatest diversity of natural habitat and, considering the surrounding land uses, remains relatively healthy. If the wetland and surrounding deciduous forest were to be retained in their current form, assuming some provision of surface water flow to the wetland to mimic predevelopment wetland hydrology, it is expected that the complex would remain sustainable and provide local biodiversity value and other ecological functions over the long term. The wetland and an appropriate wetland buffer would likely meet the criteria for designation as Environmental Reserve (ER). The remainder of the deciduous forest could possibly be designated as Municipal Reserve (MR).
- Consider integration of additional patches of natural habitat. Small habitat patches (e.g. deciduous forest patch in the northwest corner of Brenmar lands; deciduous forest and marsh in the southeast corner of the Treeter land) could continue to provide some limited ecological function and local habitat value for a small suite of species.

W ½ of Section 11-53-26-W4M

A Biophysical Assessment and Impact Report was undertaken by Solstice Canada Corp. in September 2017 for the western half of Section 11-53-26-W4M. Field work was commissioned by Parkland Estates Development Corp. including a wildlife habitat assessment conducted in 2015 and Wetlands surveyed in May 2017. Note, a vegetation field study was not conducted as the subject lands are primarily cultivated field.

Wetlands

Eleven (11) wetlands were identified on the western portion of the Section, the majority of which were identified as seasonal or temporary graminoid marshes. All of these wetlands were assessed at a value of "D" by Alberta Environment and Parks. Due to the pre-existing disturbance, distribution, and size of wetlands, planning for avoidance and retention was considered difficult. Wetland compensation has been determined at a 1:1 ratio for approximately 1.67 ha (4.13 ac) of land.

Vegetation

A desktop review identified that the wooded ravine in the northeast corner of the subject land contained two (2) marsh wetlands and an upland vegetation community supporting aspen and balsam poplar. Other plant species included cultivated sedges, blue joint, duck weed, common horsetail and rush.

Wildlife

A total of 233 wildlife species could potentially be present at the property, using the area as breeding winter, year-round, or migratory habitat. The majority of these species are birds.

Recommended Mitigation

 The role of storing stormwater and controlling flood water will be immediately replaced by the planned stormwater management facilities (SWMFs) on the lands.

- SWMFs shall be designed and constructed in accordance with Parkland County Engineering Design Standards;
- Conservation of an additional 5 to 10 m vegetated buffer with a planning mechanism suitable to both the developer and Parkland County (e.g., Municipal Reserve, conservation easement) is recommended to provide water quality protection for the stormwater management facilities.
- Retention of hedgerow vegetation and landscaping plans that will encourage restoration of forested habitat within the ravine would help replace lost upland habitat and provide amenity value.

Summary

With the exception of the Blounas lands, the majority of the CS area has been cleared for either cultivation, oil and gas exploration, or infrastructure. These lands were previously disturbed from their natural state and is therefore considered as low quality within the regional setting. The Development Concept set out in this Conceptual Scheme does not propose the retention of any wetland areas in their natural state based on the existing topography, previously disturbed lands and the engineering requirements for a gravity fed drainage system. These areas are best treated as naturalized stormwater management facilities which, over time, will provide habitats for flora and fauna.

The Crown has claimed 3 wetland areas on the eastern half of the section under the *Public Lands Act* as shown in Figure 3 – Environmental Features. It has been determined that the retention of the 2 Crown claimed wetlands on the Brenmar lands is not feasible. Further work will need to be conducted into the retention of the Crown claimed wetland located on the Blounas lands; this most northern wetland is the most undisturbed wetland area on the Section and is connected to an existing tree stand. Wetland compensation for the eastern half of the Section will need further review at the time of subdivision.

None of the wetlands identified on the western half of the Section are proposed to be retained. Wetland compensation has been identified at an area of 1.67 ha (4.13 ac) of land at a 1:1 ratio. The wetland compensation will be reviewed at the time of subdivision.

Policy 4.4.1	Further study and review of wetland areas shall be conducted prior to subdivision application to the satisfaction of Alberta Environment and Parks and the County.
Policy 4.4.2	Wetland compensation plans shall be developed where required by the developers and submitted to the County and Alberta Environment and Parks for approval prior to subdivision endorsement.

4.5 Existing Transportation and Utility Considerations

The CS area is accessible by roadway on three of four sides, with the southern property boundary potentially accessible to existing rail subject to provisions of Canadian National Railway.

231st Street (City of Edmonton)

231st Street right-of-way lies wholly within the City of Edmonton Boundary, as such all accesses and approaches must be approved by the City of Edmonton. As of the date of this Conceptual Scheme there is one residential access to the Blounas lands and one field approach to the Brenmar lands. There is an existing right-in-right-out intersection at Highway 16 which is under review by Alberta Transportation regarding timing of future closure.

114th Avenue

114th Avenue is a constructed collector road running east/west through the north half of the CS area; it is paved to the center of the Section. There are some individual approaches along this roadway. It is anticipated that the current alignment of 114th Avenue will remain in its current location. Additional accesses onto the roadway shall be considered with care to protect the roadway's function.

Bevington Road

Bevington Road is a major collector road south of 114th Avenue and a minor collector road north of 114th Avenue. The direct access from Bevington Road to Highway 16 has been permanently closed, relying on access to the west from Highway 60 and east to 231st Street. There are three (3) existing approaches to the CS area on the east side of the roadway that are primarily used to access the existing oil lease sites.

Water and Wastewater Servicing

The developed lands in the northwest quarter are currently serviced with piped municipal water and wastewater which is located within the road right-of-way of Bevington Road and 114th Avenue. The existing servicing terminates along 114th Avenue at the quarter line between the NW and NE quarters. Upgrades to the existing systems will be required to service the undeveloped lands as discussed in detail below.

4.6 Existing Oil and Gas Infrastructure

There is a significant network of oil and gas infrastructure within the CS area primarily located near the central portion of the Section as shown in Figure 4 – Oil & Gas Infrastructure. Most notably a sour gas line runs north/south through the western half of the CS area, a development setback is required in compliance with the Alberta Energy Regulator (AER). Reclamation of this oil and gas infrastructure must be completed prior to subdivision application and approved by Alberta Environment and Parks with reclamation certificates in place prior to endorsement; unless AER setbacks can be met.

5. DEVELOPMENT CONCEPT

5.1 Land Use Concept

In accordance with the provisions of the Acheson Industrial Area Structure Plan, the location of anticipated land use within the CS area is illustrated by Figure 5 – General Land Use Concept. The site is conceptually divided into two (2) policy areas generally described as follows:

- Policy Area 'A' Highway 16 Business Industrial Area will accommodate business uses that are compatible with estate country residential developments on the north side of Highway 16. Implementation of development with enhanced architectural design will establish and maintain an attractive and cohesive built form within this area. Detailed architectural controls will ensure all developments within this area consider design elements such as building heights & massing, façade treatments, landscaping, lighting, signage and placement of parking, loading, and outside storage areas. Business uses that create potential for limited off-site intrusions (such as noise and visual impacts) may be permitted in Policy Area 'A'; however mitigation measures must be implemented to address these potential impacts.
- Policy Area 'B' Medium Industrial Area will accommodate a wide range of general industrial developments. The types of uses anticipated in this area may include industrial developments with extensive outdoor storage needs, which require a variety of lot sizes and parcel configurations. Additionally, Policy Area 'B' will accommodate a range of medium industrial processing activities with potential for impacts to adjacent parcels through considerations such as visual and noise obtrusions and particle emissions. Any such development will be required to appropriately mitigate off-site impacts in accordance with all municipal, Provincial, and/or Federal regulation governing the same. Business types which can be benefitted by access to rail may be accommodated through a new spur from the existing rail line situated along the southern boundary of the CS area subject to the provisions of CN Railways.
- Policy 5.1.1 Land uses within the Conceptual Scheme area shall include a full range of business uses involving commercial and industrial developments which are consistent with the policies of the Acheson Industrial Area Structure Plan.
- Policy 5.1.2 Land uses within Policy Area 'A' shall include business developments with an enhanced visual aesthetic and a variety of lots sizes and parcel configurations. Development standards and architectural guidelines shall be implemented within Policy Area 'A' to ensure the Highway 16 business frontages present an attractive visual interface in accordance with the policies of the Acheson Industrial Area Structure Plan.
- Policy 5.1.3 Land uses within Policy Area 'B' will include general and medium industrial developments with a variety of lot sizes and parcel configurations. Businesses are expected to include large format operations with extensive outside storage requirements. Uses may also include a combination of regional commercial, office, and medium industrial developments, comprehensively planned in a campus-style setting. Heavier industrial processing activities may create potential for impacts to adjacent properties which will be required to be

	successfully mitigated and minimized in accordance with relevant municipal, Provincial, and Federal regulation.
Policy 5.1.4	Prior to development on the Treeter and Tidewater Midstream lands this Conceptual Scheme shall be amended. The amendment application shall be supported by technical studies as required by the County.
Policy 5.1.5	Any development requiring direct rail access or rail spur construction shall work with CN Rail and the County to negotiate access prior to development.

5.2 Subdivision & Development Concept Design

The anticipated subdivision configuration will implement the general land uses shown in Figure 5 – General Land Use Concept with business industrial development in the north portion of the CS area and a transition to more general and medium industrial development south of 114th Avenue (anticipated to include a wide range of parcel sizes and configurations).

The configuration of subdivision anticipated is generally illustrated by Figure 6 – Development Concept. Given the relatively large area included within the Conceptual Scheme boundary, the specific illustration of anticipated lot layouts has not been defined at this scale. Instead the detailed parcel configurations will be established through subsequent phasing of development through subdivision applications.

The orientation of development with the CS area will be determined, in large part, by the alignment of roadways and the placement of stormwater management facilities. The Development Concept illustrates a series of Cells which will be divided into smaller parcels tailored to suit specific business development users (as dictated by the County's approval of individual land use and subdivision applications).

Land development will likely begin on the outer west and east sides of the CS area moving inwards towards the central area of the Section, as much of the central area is encumbered by existing oil and gas lease sites and will not be developed until lease sites are abandoned and reclaimed. Individual landowners may exercise the option to provide compensation to lease holders to prematurely decommission oil and gas infrastructure, and reclaim land to be in a development-ready state. Reclamation would be completed prior to the time of subdivision, with reclamation certificates provided to Parkland County prior to endorsement. Development will continue around oil and gas infrastructure in compliance with the required Alberta Energy Regulator setbacks, should infrastructure remain in place.

Policy 5.2.1	Future lot sizes and configurations shall be determined at the time of subdivision and may include a mix of small, medium, and large sized lots for industrial development based on market demands at the time of development.
Policy 5.2.2	Proposed parcels shall include Medium Industrial and Business Industrial development that will be in accordance with the policies of the Acheson Industrial Area Structure Plan and minimum requirements of the applicable District as outlined in the Parkland County Land Use Bylaw.
Policy 5.2.3	Individual landowners may negotiate to buy-out existing oil and gas leases to allow for development to proceed at a faster pace.

5.3 Development Statistics

The following table includes the land use statistics for the proposed Development Concept in Figure 5 – General Land Use Concept. The total area of 215.50 ha (532.51 ac) represents all of the undeveloped land as well as the eastern half of 114th Avenue that passes through NE 11-53-26-W4M.

LAND USE STATISTICS	AREA (HA)	% of GA	% of GDA
GROSS AREA (HA) – Undeveloped Lands	215.50	100.0%	
Existing Road (114 Avenue.)	3.0	1.4%	
Undevelopable Pipeline ROW	1.4	0.6%	
GROSS DEVELOPABLE AREA	212.2	98.0%	
Road Widening	1.7	0.8%	0.8%
Industrial Lands			
Cell A1	29.8	13.8%	14.0%
Cell B1	48.1	22%	22.7%
Cell B2	56.7	26.2%	26.7%
Cell B3	33.5	15.5%	15.8%
PUL/SWMF	23.9	11.4%	11.3%
Public Roads	18.5	8.8%	9.0%

5.4 Municipal Reserve and Open Spaces

In accordance with Parkland County Policy C-PD15, 10% Municipal Reserves will be provided as Money-in-Place by the participating developers in accordance with County Policy and the *Municipal Government Act*. MR will be assessed and negotiated at the time of subdivision.

Policy 5.4.1	In accordance with Parkland County Policy C-PD15, all participating landowners included in the Conceptual Scheme Area may exercise the option of paying Money-in-Place of Municipal Reserve dedication in lieu of land dedication pursuant to the provisions of the Municipal Government Act.
Policy 5.4.2	At each phase of development, payments of Money-in-Place of Municipal Reserves shall be determined prior to conditional subdivision approval and shall be payable to the County prior to subdivision endorsement.

5.5 Environmental Reserves and Wetland Compensation

Wetland areas will be lost as a result of the proposed development throughout the CS area. Due to the existing agricultural use, combined with the Development Concept, none of these lands are proposed to be retained, and will require compensation under the Provincial Wetland Policy. Compensation will be reviewed for each application at the time of subdivision. Few other impacts to biophysical resources were identified in these assessments. Any clearing that might affect these lands should occur outside the breeding period for this species (March – April) to comply with management recommendations issued by Alberta Environment and Parks. Similarly, clearing of vegetation during development should avoid the spring breeding period of migratory birds, to comply with the *Migratory Birds Convention Act*.

Any wetland subject to claim by the Crown under the *Public Lands Act* and/or qualifies for dedication as Environmental Reserve under the *Municipal Government Act* shall be determined as part of the subdivision application process.

APPROVAL	APPROVAL NO.	ISSUE DATE	LANDS COVERED	APPROVAL HOLDER
Water Act	00372668-00-00	December 3, 2015	SE 11-053-26-W4	Brenmar Holdings Ltd.
Historical Resources Act	4835-17-0036- 001	May 05, 2017	E ½ 11-053-26-W4	Brenmar Holdings Ltd./D&F Blounas Holdings Ltd.

Historical Resources Act	4835-15-0068- 001	May 12, 2015	NW 11-053-26-W4	Trans America Group*
Historical Resources Act	4835-15-0085- 001	June 17, 2015	SW 11-053-26-W4	Trans America Group*

Wetland Compensation

To understand potential Crown claims of wetland features and to determine any compensation for wetland loss, applications to the Province of Alberta as well as Parkland County were processed prior to completing this Conceptual Scheme. The following table provides a snapshot of the applications made and their status at the time of the Conceptual Scheme application.

Policy 5.5.1	Landowners shall acquire necessary Water Act approvals prior to construction and/or development permit.
Policy 5.5.2	Lost wetland areas shall be compensated in accordance with Provincial wetland policies and regulations.
Policy 5.5.3	Further study and review of the Crown claimed wetland area located at NE-11-53-26-W4M shall be required to determine if it is to be retained in a natural state in accordance with Alberta Environment and Parks requirements.
Policy 5.5.4	Further study and review of the wetland areas at SE-11-53-26-W4M shall be required to determine wetland compensation in accordance with Alberta Environment and Parks requirements.
Policy 5.5.5	Wetland compensation arrangements with the Province shall be established prior to subdivision application.
Policy 5.5.6	Applications to Public Lands to finalize the identification of Crown claimed bodies of water shall be required prior to subdivision, and certificates from the Province of Alberta of any land transfer shall be in place prior to subdivision endorsement.
Policy 5.5.7	Tree clearing shall be prohibited during nesting periods as defined by Provincial and Federal regulations.

6. TRANSPORTATION

6.1 Transportation Concept

The anticipated roadway system for the CS area is illustrated in Figure 7 – Transportation Network. The CS area will be accessed by the surrounding Acheson Regional Transportation System including Highway 16, Highway 16A, Highway 60, Bevington Road, 114th Avenue and 231St Street (City of Edmonton). Regional traffic will be conveyed to and from the CS area from various strategic access points from these surrounding roadways.

114th Avenue will provide the primary east/west connection in support of development within the CS area. In accordance with the expectations of the Acheson Industrial ASP, additional traffic lanes will be added to Highway 16 by Alberta Transportation along the north boundary of the CS area within the existing highway right-of-way in the future. Appropriate treatments will be established at the Highway 60 and 114th Avenue intersection as required by the timing of development within the CS area and adjacent lands. Similarly, 114th Avenue will be extended through the CS area to complete a continuous roadway connection from Highway 60 the 231st Street and eventually through to 215th Street within the City of Edmonton.

Surface upgrades and additional road right-of-way will be required to both Bevington Road and 231st Street to provide the primary north/south road connections for the CS area. Widening and surface upgrades of these roadways will be completed by the developers within the CS area or adjacent lands as phasing of development within the CS area warrants.

A variety of internal collector roads and internal streets will be established to convey local traffic from the CS area onto the adjacent collector roads. Direct access from individual parcels within the CS area onto the surrounding roadways will be carefully controlled to ensure appropriate access management considerations are respected.

6.2 Transportation Impact Assessment (TIA)

In 2017, a Traffic Impact Assessment (TIA) was prepared by Bunt & Associates Engineering in support of this Conceptual Scheme (under separate cover). The TIA investigated three (3) development horizons; near-term (2027), long-term (2037) and ultimate buildout (2047). Further, Parkland County also retained Bunt & Associates to complete a TIA respective to the entire Acheson Industrial Area Structure Plan (under separate cover).

The TIAs assessed the future transportation network, the cumulative impacts on the road network, and any possible mitigation measures associated with the expected traffic generated by the proposed development within the CS area (as well as other ambient background traffic growth).

To accommodate the anticipated traffic generation, a staged program of supporting roadway improvements will be required to upgrade existing and construct new regional transportation infrastructure summarized as follows:

- Highway 16 will require widening to six (6) lanes;
- 231st Street which runs north/south along the east boundary of the CS area shall be upgraded to an
 arterial road with rural ditching on the west side and an urban cross-section on the east side (City of
 Edmonton);
- Bevington Road which runs along the west boundary of the CS area and south to Highway 16A will require
 upgrading to a two-lane industrial collector south of the current upgraded limits. Improvements at the atgrade railway crossing will also be required;
- 114th Avenue which runs east/west through the north portion of the CS area should be upgraded to three (3) lane undivided roadway with a centre two-way left turn lane. The portion of 114th Avenue that runs south of the developed lots within NW 11-53-26-W4M has been previously upgraded to three (3) lanes. The remaining section of 114th Avenue to 231st Street will be upgraded as development progresses. These recommended classifications satisfy both the short term (2022) and long-term (2037) needs of the development;
- The intersection of 231st Street and Highway 16A south of the CS area has been reconfigured to a right-in/right-out/left-in intersection. The construction of an interchange is assumed to be outside the study horizons;
- The 114th Avenue extension east through the Winterburn Industrial area to 215th Street in the City of Edmonton is assumed to not be available in the short term (2022) or long-term (2037) horizons;
- 112th Avenue through the Winterburn Industrial area in the City of Edmonton will no longer connect to 215th Street due to grade separation of the 215th Street CN Railway crossing. An alternate connection to 215th Street will be available via 220th Street to 114th Avenue, timing of this construction is unknown at this time;
- The interior roads within the CS area, with the exception of 114th Avenue, are to be constructed as industrial minor collector or local industrial roadways; and
- All dead-end roads, whether temporary or permanent will include a cul-de-sac turnaround, with a minimum radius as required under Parkland County's Engineering Design Standards.

The TIA assumptions note that traffic conditions identified for the long-term scenario are not due solely to the proposed Section 11-53-26-W4M development. Rather the future traffic forecast volumes include a combination of both background traffic and site-generated volumes. The absence of regional connections will impact traffic routing through the area, and as such, ongoing development within the CS area and the balance of the Acheson Industrial ASP will require coordination by the County, local developers and multiple levels of municipal and provincial jurisdictions.

Policy 6.2.1

The future roadway network and key intersections in the Conceptual Scheme area shall be designed and constructed to accommodate all roadway users at a safe and satisfactory level of transportation service.

6.3 Vehicular Access to the Conceptual Scheme Area

The CS area is accessible from three (3) sides, Bevington Road, 114th Avenue and 231st Street. The Development Concept included in this Conceptual Scheme identifies generally accepted access/intersection points into the CS area (see Figure 7 – Transportation Network). These points have been established based on preliminary discussions with the City of Edmonton, Parkland County as well as Treeter Enterprises Ltd. Should the location of these access points change significantly, amendments to this Conceptual Scheme will be required. No direct vehicle access will be permitted from Highway 16, vehicles from Highway 16 will be directed to Highway 60 or 231st Street.

Policy 6.3.1	Additional and/or significant changes to the location of intersections identified in Figure 7 -
	Transportation Network shall require amendments to this Conceptual Scheme.

Policy 6.3.2 Parkland County's Off-Site Transportation Levy shall be calculated and applied at the time of subdivision and/or development permit.

Intermunicipal Road Access - 231st Street

A Memorandum of Understanding (MOU) between the City of Edmonton and Parkland County was signed on September 14, 2018. This MOU is not legally binding, however it outlines the design and cost-sharing arrangement for future upgrades to 231st Street. This MOU is the pre-cursor to an agreement, and will allow subdivisions and/or development within Parkland County requiring access to 231st Street to proceed subject to approval by the City of Edmonton. Access points onto 231st Street were designed in coordination between the County and the City and will be reviewed as a part of the 231st Street concept plan update.

Policy 6.3.3	Subdivision applications requiring direct access onto 231st Street shall include written confirmation from the City of Edmonton supporting the access and the related subdivision proposal.
Policy 6.3.4	Parkland County shall continue negotiations in good faith regarding upgrades to 231st Street with the City of Edmonton in accordance with the Memorandum of Understanding dated September 14, 2018.
Policy 6.3.5	Landowners adjacent to 231st Street within the Conceptual Scheme Area shall dedicate, where required, additional road widening to accommodate the planned upgrades. The width of dedication shall be determined at the subdivision stage as part of the subdivision application referral process to the City of Edmonton.
Policy 6.3.6	Parkland County in co-ordination with the City of Edmonton may establish an Intermunicipal Off-Site Transportation Levy to assist with recovery of the proposed upgrades to 231st Street to support development of the Conceptual Scheme area and other areas. The Levy would be calculated and applied at the time of subdivision and/or development permit approval.

6.4 Internal Vehicular Circulation and Access

The Development Concept considers possible road alignments for internal circulation. These alignments are conceptual and are subject to change based on the market demands and parcel sizes. Changes to the proposed internal road layout shall not require an amendment to this Conceptual Scheme.

Local Industrial Roadways

Roadways to provide access to the internal lots of the development will be determined at the time of detailed subdivision design.

Policy 6.4.1	Internal road alignments shall be determined and finalized at the time of subdivision. Changes to the internal road layout identified in Figure 7 – Transportation Network shall not require amendments to the Conceptual Scheme.
Policy 6.4.2	All internal roadways shall meet the specifications determined in Parkland County's Engineering Design Standards.
Policy 6.4.3	All dead-end roads, whether temporary or permanent will include a cul-de-sac turnaround, with a minimum radius as required under Parkland County's Engineering Design Standards.

114th Avenue: Three-Lane Industrial Collector

114th Avenue has been improved fully to a Three-Lane Industrial Collector with an Asphalt Concrete Overlay surface for the west half of the Section, while the eastern half has only been improved with a granular surface. This road right-of-way currently exists and will remain in its current configuration with paving of the east portion to occur with the servicing and development stages. Access from 114th Avenue to the eastern portion of the CS area will need to be negotiated and secured by impacted developers from the Treeter lands prior to subdivision application.

Policy 6.4.4	The alignment of 114th Avenue shall remain in its current location.		

Policy 6.4.5 Impacted landowners in the east half of section 11-53-26-W4M shall negotiate access and utility servicing across the Treeter lands prior to subdivision application.

6.5 Rail Servicing (Canadian National Railway)

Canadian National Railway (CN) operates a main line heading west out of the City of Edmonton and through the Acheson Industrial area. Spur lines are located on the south side of the main line west of the CS area. Given the anticipated allocation of medium and business industrial land uses within the southern portion of the CS area, implementation of rail-serviced industrial development may be accommodated within the southern portion of the CS area. As part of the subdivision process affecting lands within the south portion of the CS area, the developers shall consult with Canadian National Railway (CN) to determine specific requirements for potential rail access.

Policy 6.5.1All new development within proximity of the railway shall comply with current Federation of Canadian Municipalities and the Railway Association of Canada Guidelines for New Development in Proximity to Railway Operations.

SERVICING SCENARIO

This Conceptual Scheme is supported by an Infrastructure Services Design Brief completed by Prism Engineering (under separate cover) and includes three (3) design scenarios based on the potential lot design of the CS area. Generally, the conceptual design for water and wastewater servicing will be provided for within the proposed road right-of-ways. In order to ensure flexibility to meet market demands, the servicing design presented in this plan is conceptual, changes to this potential layout will not require amendments to this Conceptual Scheme. It is however assumed that the connection points to lands adjoining the CS area identified in Figure 9 - Water Network and Figure 10 - Sanitary Sewer Network will be maintained.

Policy 7.1.1 The developer prior to subdivision endorsement shall be required to enter into a Development Agreement with the County regarding all off-site infrastructure and construction.

7.1 Potable Water Supply

In alignment with the Acheson and Big Lake Area Water Servicing Study (AECOM, 2015), a 350mm diameter watermain will continue east along 114th Avenue from the central portion of the Section. This 350mm diameter watermain will be diverted south through the Treeter and Brenmar lands. During the ultimate development stage, the 350mm watermain will be stubbed near the CN rail tracks to provide future connection (by others) from the south of the railway tracks. This connection will be the location for a proposed 350mm pressure reducing valve (PRV) 16.

A 300mm watermain will ultimately be utilized to loop the 350mm watermain within SE-11-53-26-W4M and the proposed 300mm watermain extension south along Bevington Road. As a near future condition a 300mm pressure reducing valve PRV15 will be constructed along the south extension of the 300mm Bevington Road watermain. The Bevington Road watermain will extend to the southern limit of the CS area for eventual looping south of the railway (by others).

Policy 7.1.1 The Conceptual Scheme area shall be serviced with potable water by the Parkland County Acheson and Big Lake Area System.

Policy 7.1.2	All potable water infrastructure within the Conceptual Scheme area shall be constructed by the developer to the satisfaction of Alberta Environment and Parks and Parkland County in accordance with the Acheson and Big Lake Area Water Servicing Study (2015).
Policy 7.1.3	The potable water distribution system shall accommodate minimum design requirements necessary to provide appropriate fire suppression within the Conceptual Scheme area.
Policy 7.1.4	Parkland County's Off-Site Water Levy shall be calculated and applied at the time of subdivision and/or development permit.
Policy 7.1.5	The servicing for this development shall accommodate looping of watermains, once full build-out is achieved, including the 300mm connection along Bevington Road and the 350mm watermain connection within SE 11-53-26-W4M.

7.2 Waste Water Management

The Acheson and Big Lake Area Sanitary Sewer Servicing Study (2016) indicates the southern half of Sec.11-53-26-W4 will flow from east to west and connect to the existing 600mm Bevington Sanitary Sewer Trunk Main east of Bevington Road. The northern half of Sec.11-53-26-W4 will also flow east to west connecting to the existing 375mm sanitary main within 114th Avenue near the centre of the Section. To achieve proper capacity, the northern half will need to have a new sanitary main constructed south of 114th Avenue. This main will connect to the east at SSMH02-096 and west with a new manhole connection along the Bevington Sanitary Sewer Trunk.

A sanitary lift station for the eastern half of the Section will be required; this lift station will need to be constructed near the existing 375mm sanitary stub on 114th Avenue. Lift stations are not anticipated for the western half of the Section.

Policy 7.2.1	The Conceptual Scheme area shall be serviced by the County's Acheson East Sanitary Sewer Trunk Main. The general configuration of the waste water infrastructure system required to service the Conceptual Scheme area is illustrated in Figure 10 – Sanitary Sewer Network.
Policy 7.2.2	All wastewater infrastructure within the Conceptual Scheme area shall be constructed by the developer to the satisfaction of Alberta Environment and Parks and Parkland County in accordance with the Acheson and Big Lake Area Sanitary Sewer Servicing Study (2016).
Policy 7.2.3	Parkland County's Off-Site Sanitary Sewer Levy shall be calculated and applied at the time of subdivision and/or development permit.

7.3 Stormwater Management

Figure 8 – Stormwater Management Plan generally illustrates the configuration of proposed stormwater management facilities and drainage patterns for the CS area. As shown in Figure 4.2 of the AECOM Acheson/Big Lake Area Master Drainage Plan (2011), the existing drainage of Sec.11-53-26-W4 is separated into two main drainage basins:

- the west half of Section 11-53-26-W4M drainage is directed south to north and controlled by the existing dry pond north of 114th Avenue. The controlled flow is released via ditch and an 800mm diameter culvert across Highway 16 and north towards Big Lake; and
- the east half of Section 11-53-26-W4 drainage is directed south to north via ditch/culvert to a series of three existing inline culverts near the northeast corner of the development which directs the drainage north across Highway 16. The flows crossing the three culverts at Highway 16 have a limiting capacity of 640 l/s due to the 600mm diameter size of furthest downstream culvert.

The proposed stormwater management plan will direct and manage flows and release rates per the Acheson/Big Lake Area Master Drainage Plan (2011). Any post-development flows from the development that uses culverts and ditches along 231st Street will be controlled stormwater. Refer to the NHC Stormwater Management Concept (separate cover) for further details.

Stormwater for the CS area will be conveyed via roadside ditches for the rural municipal cross section. Storm piping is required between some ponds and mostly outlet to the roadside ditches. Stormwater management facilities have been designed by observing the existing flow directions of the subject terrain, and also taking into

consideration land ownership and pipeline crossings.

Policy 7.3.1	The proposed stormwater management system within the Conceptual Scheme area is generally illustrated in Figure 8- Stormwater Management Plan.
Policy 7.3.2	Each stormwater management facility shall be constructed within a Public Utility Lot (PUL) to be dedicated to the County at the subdivision stage.
Policy 7.3.3	Stormwater management facilities completed within the Conceptual Scheme area shall be designed and constructed in accordance with Alberta Environment and Parks and Parkland County standards.
Policy 7.3.4	The stormwater management system shall be designed and constructed to meet or exceed Parkland County Engineering Design Standards as well as Alberta Environment and Parks stormwater management and stormwater quality requirements for the Acheson Big Lake Storm Basin.
Policy 7.3.5	Release rates for the proposed stormwater network shall conform to the rates per the Acheson/Big Lake Area Master Drainage Plan (2011).
Policy 7.3.6	Parkland County's Off-Site Stormwater Management Levy shall be calculated and applied at the time of subdivision and/or development permit.

7.4 Community Support Infrastructure

Fire Response

Fire protection will be provided from the existing Acheson Fire Station located in Zone 1 of the Acheson Industrial Park. Secondary response will be provided from the other Fire Halls in the County and from the City of Edmonton and/or City of Spruce Grove subject to the provisions of a Mutual Aid Agreement. Fire suppression will be provided by the municipal potable water supply system with appropriate design that considers hydrant spacing.

Police Response:

Police service within the CS area will be provided by the Royal Canadian Mounted Police detachment situated in the Town of Stony Plain (moving to City of Spruce Grove) and will be supported by service provided by Parkland County Community Peace Officers.

Emergency Service Response:

The Acheson Industrial Park and CS area will be serviced by 911 Emergency Services with an emergency locater system (civic address) set up for each individual property and structure. EMS facilities are situated in the Town of Stony Plan and City of Edmonton.

Solid Waste Management:

Solid Waste Management will be the responsibility of each property owner.

7.5 Shallow Utilities

Shallow utility services including electrical power, natural gas, telephone, cable and high speed internet services will be provided by local utility companies. Utilities within the Acheson Industrial Area shall be installed underground wherever possible and be located within the road rights-of-way and private easements as required to serve all new industrial lots. In order to accommodate anticipated development within the CS area, existing franchised utility infrastructure surrounding the area may require staged upgrading matched to the anticipated phasing of development.

Policy 7.5.1	Shallow utilities shall be provided within the Conceptual Scheme area at the sole expense
	of the developer within appropriate road rights-of-way and within easements on private
	property established at the detailed subdivision design stage to the satisfaction of the utility
	providers and Parkland County.

7.6 Site Grading

Proposed road grades and drainage courses will take into consideration the existing topography to minimize grading requirements over the CS area. Upon approval of the Conceptual Scheme, landowners may make application to commence rough grading of the lands. Final stripping and grading of roadways, stormwater management easements, PULs and common stormwater facilities will occur at the subdivision stage. Onsite grading within the lots will completed at the time the development permit approval for the lot.

Policy 7.6.1	Prior to stripping and grading of the site, a grading plan and an erosion & sediment control report shall be submitted to the satisfaction of Parkland County. This plan shall depict road and swale grades and include public utility lot areas, stormwater management plans and an erosion and sediment control plan and shall be approved by Parkland County.
Policy 7.6.2	Site grading is to take into consideration existing topography to minimize grading requirements over the Conceptual Scheme area.
Policy 7.6.3	
	A striping and grading permit issued by Parkland County shall be in place prior to any soils being removed from the Conceptual Scheme Area.

8. IMPLEMENTATION

8.1 Development Phasing

As is generally illustrated by Figure 6 – Development Concept, development phasing within the CS area will begin on the most westerly and easterly edges of the CS area working towards the central portion of the Section. The initial phases of development may include Cells A1, B1, and B2. Phasing of these cells can be completed independently of each other, on the timelines of each individual landowner. It is generally anticipated that development of Cells A1, B1, and B2 will occur within 10 years and will follow a logical servicing and transportation design. Development within Cell B3, which is highly encumbered with oil and gas infrastructure, is estimated to take place beyond a ten-year horizon. The sections below identify common constraints for each of the Development Cells as well as constraints specific to each Development Cell and methods of mitigation as they progress towards development.

Considerations to Apply to All Development Cells:

CONSTRAINT	ISSUE	MITIGATION STRATEGY
Alberta Transportation (Variance/Waiver)	All lands within the CS area are located within 1.6 km of a Provincial highway.	The County completed a TIA in 2018 for the Acheson Industrial ASP. Waivers from Alberta Transportation required as part of subdivision process. Roadside Development Permits required prior to construction. Updates to TIAs may be required in the future.
Crown Claimed Wetland Areas & Wetland Compensation	The majority of wetlands are not to be retained and are eligible for compensation or are to be converted into engineered SWMFs.	Further study and discussion with County and AEP will be required. Wetland compensation plan to be established. Compensation to be provided to appropriate agency. Detailed engineering design to be approved and reviewed by the County and AEP prior to subdivision application.
Grading, Vegetation Clearing and Migratory Birds	Municipal, Provincial, and Federal regulations.	Commitments from land owners to follow municipal, Provincial, and Federal regulations through the execution of Development Agreements.

Pipeline Crossing Agreements	Roads and utilities will be required to cross existing oil and gas rights-of-way where reclamation not completed first.	The landowners shall negotiate crossing agreements with the relevant lease-holders prior to subdivision endorsement. These agreements are to be provided to the County with the endorsement package.
Oil & Gas Pipelines (Operating)	Roads and utilities will be required to cross existing oil and gas rights-of-way where reclamation not completed first.	Adhere to the requirements and guidelines of the AER, including the minimum setback requirements for operating pipelines. Ensure flow lines to well sites are maintained through joint plans between the developer and operator.
Oil & Gas Pipelines (Discontinued)	To be reclaimed by lease holder or landowner.	Provide reclamation certificates to the County as part of subdivision process.
Oil & Gas Wells (Operating)	Land development proposed adjacent to operating wells.	Adhere to the requirements and guidelines of the AER, including the minimum setback requirements from operating wells. Access to well sites and supporting infrastructure required.
Oil & Gas Wells (Discontinued)	To be reclaimed by lease holder or landowner.	Provide reclamation or discontinuation certificates to the County as part of endorsement process.
Oil & Gas Wells (Rec Exempt)	No action required.	Restrictive Covenant to be put in place through the subdivision process to protect requirements and guidelines of the AER.
Limited Direct Access to 231 st Street (City of Edmonton)	231st Street will be a 3-lane modified arterial roadway. Development Cells A1 and B1 propose direct access onto roadway. 231st Street requires upgrading.	Memorandum of Understanding in place, County and City working towards a use and funding agreement for upgrades to 231st Street. Subdivision applications to be referred to City of Edmonton for review. Developer to dedicate necessary road widening through the subdivision process to support upgrades. Developer to pay for upgrades through the execution of Development Agreements.
Limited Direct Access to 114 th Avenue. (Parkland County)	Need to establish internal road network through the Treeter lands to access/service adjoining lands.	Road and utility rights-of-way to be negotiated and secured by the developer from owners of S ½ of NE 11-53-26-4. Consent to Register a Plan for required road right-of-way by owners of S ½ of NE 11-53-26-4.

8.2 Development Cell A1

N ½ of NE 11-53-26-4 – D&F Blounas Holdings Ltd., and Treeter Enterprises Ltd.

The north eastern portion of the CS area lies on the south side of the Highway 16 corridor. In order for this Development Cell to be in alignment with the Acheson Industrial ASP, Cell A1 has been proposed as Business Industrial for future land uses and will require additional architectural design work and landscaping requirements as it fronts onto the Provincial highway. Cell A1 also boarders onto 231st Street, and the City of Edmonton boundary and therefore will be subject to consideration from the City of Edmonton prior to subdivision.

Access

Access to Cell A1 can be achieved from either 114th Avenue or 231st Street. In order to obtain access to the Blounas lands from 114th Avenue, right-of-way access for roads and servicing must be secured through the Treeter lands. In order for access to be obtained from 231st Street, access approval must be obtained from the City of Edmonton. Additional right-of-way dedications may be required from the Blounas and Treeter lands to support 231st Street upgrades through the subdivision process.

Oil and Gas

An Oil and Gas Gap Analysis was completed for the Blounas lands by Kriedo (under separate cover). This report considered only the Blounas lands, no study was conducted on the Treeter lands. Of the active wells, three are in operation and two have been suspended. There are two wells on the site that have been abandoned and are considered Reclamation Exempt. There is one facility (Gas Single Well Battery) located on the property. There are nine licensed pipeline segments on the site for a total of approximately 2.58 km of pipeline.

INFRASTRUCTURE	BLOUNAS LANDS	TREETER LANDS
Operating Oil and Gas Wells	3	Detailed Review Not Completed
Suspended Oil and Gas Wells	2	Detailed Review Not Completed
Rec Exempt Oil and Gas Wells	2	Detailed Review Not Completed
Facilities (Battery, etc.)	1	Detailed Review Not Completed
Operating Pipelines	6	Detailed Review Not Completed
Discontinued or Abandoned Pipelines	3	Detailed Review Not Completed

Other Constraints

The Blounas lands house a Crown claimed wetland with the largest intact tree stand within the CS area. The developer will need to work with the province to determine the status of this and other wetlands on the parcel. At the subdivision stage, the dedication of Environmental Reserve or other conservation tool acceptable to the developer and the County may be required to protect the wetland should it be claimed. The Biophysical Report completed by Spencer Environmental Management Ltd. (under separate cover) discusses possible wetland dedication amounts which will be reviewed and finalized at the time of subdivision.

Because the landowners of generally the south half of NE 11-53-26-W4M are non-participants in the technical studies in support of this Conceptual Scheme, constraints have not been identified for that land parcel.

8.3 Development Cell B1

SE-11-53-26-W4M Brenmar Holdings Ltd., and Treeter Enterprises Ltd.

Cell B1 is proposed for Medium Industrial development. This Cell is adjacent to 231st Street and the CN rail line, development may benefit from its close proximity subject to the provisions of CN Railway. This southeast quarter would lend itself to a variety of parcel configurations and sizes to respond to the market demands. A small sliver of land located within NE-2-53-26-W4M lies north of the railway and has been included in the Cell B1; as the owner of this parcel Tidewater Midstream has identified that it is prepared to sell the land in order for it to be developed along with adjoining lands to the north. As supporting studies regarding the Treeter lands have not been completed to date, the technical reports shall be completed and this Conceptual Scheme reviewed and amended as required prior to redistricting of the Treeter lands.

Access

Access to Cell B1 can be achieved from either 114th Avenue or 231st Street. In order to obtain access to the Brenmar lands from 114th Avenue right-of-way access for roads and servicing must be secured through the Treeter lands. In order for access to be obtained from 231st Street, approval must be obtained from the City of Edmonton through the subdivision application process. Additional right-of-way dedications may be required from the Brenmar and Treeter lands to support 231st Street upgrades through the subdivision process.

Oil and Gas

An Oil and Gas Gap Analysis was completed for the Brenmar lands by Kriedo (under separate cover). This report considered only the Brenmar lands, no study was conducted on the Treeter lands or Tidewater Midstream Lands. The Development Cell has been designed to exclude the majority of the oil and gas constraints, therefore the Brenmar lands located within Cell B1 have no oil and gas encumbrances. All the oil and gas infrastructure on the Brenmar lands is included within Cell B3.

INFRASTRUCTURE	BRENMAR LANDS	TREETER LANDS	TIDEWATER MIDSTREAM LANDS
Operating Oil and Gas Wells	0	Detailed Review Not Completed	Detailed Review Not Completed
Suspended Oil and Gas Wells	0	Detailed Review Not Completed	Detailed Review Not Completed
Rec Exempt Oil and Gas Wells	0	Detailed Review Not Completed	Detailed Review Not Completed
Operating Pipelines	0	Detailed Review Not Completed	Detailed Review Not Completed
Discontinued or Abandoned Pipelines	0	Detailed Review Not Completed	Detailed Review Not Completed

Other Constraints

The Development Concept does not propose to retain any wetland areas within Cell B1, notwithstanding that two of the wetlands have been claimed by the Crown. All wetlands are proposed to be redeveloped as constructed stormwater management facilities. The landowner and their environmental consultant have commenced discussion with AEP regarding these matters. As such, wetland compensation will be required for these lands to be determined by further study and review prior to submission of subdivision applications. The Biophysical Report completed by Spencer Environmental Management Ltd. (under separate cover), discusses possible wetland dedication amounts which will be reviewed and finalized at the time of subdivision.

Because the landowners of the south half of NE 11-53-26-W4M are non-participants in the technical studies in support of this CS, constraints have not been identified for that land parcel.

8.4 Development Cell B2

NW 11-53-26-4 (south of 114th Ave) & SW 11-53-26-4 – Parkland Estates Development Corp.

The western half of the Section is owned by a single landowner. The eastern portion of the two quarter sections are heavily encumbered by oil and gas infrastructure and have been separated into two Development Cells for that purpose. A small sliver of land located within NW-2-53-26-W4M lies north of the railway and has been included in the development cell. A sour gas line running north/south through the half Section has been identified and shall be protected by development setbacks in accordance with AER regulations until it is decommissioned.

Access

Access to Cell B2 can be obtained from either 114th Avenue or from Bevington Road, both of which are County roads. As access is limited along these roadways, consideration of intersections and approach spacing will be required. Approaches to individual parcels shall be limited to local roadways wherever feasible.

Oil and Gas

An Oil and Gas Data Gap Analysis was completed for the Parkland Estates lands by Kriedo (under separate cover). This report considered only the Parkland Estates lands, no study was conducted on the Tidewater Midstream Lands. The lands identified within Cell B2 have been identified as being less encumbered by oil and gas infrastructure than Cell B3. Development of select areas of Cell B2 will be able to proceed in the short-term on the less encumbered areas of the Cell. As the Kriedo report did not break down the infrastructure on the Parkland Estates lands beyond the property boundary, all infrastructure has been reported as being within Cell B3 below.

Of significance is the sour gas pipeline setback, as illustrated in Figure 4 - Oil & Gas Infrastructure, which must be observed until the pipeline can be decommissioned and reclaimed.

INFRASTRUCTURE	PARKLAND ESTATES LANDS	TIDEWATER MIDSTREAM LANDS
Operating Oil and Gas Wells	Refer to Cell B3	Detailed Review Not Completed
Suspended Oil and Gas Wells	Refer to Cell B3	Detailed Review Not Completed
Rec Exempt Oil and Gas Wells	Refer to Cell B3	Detailed Review Not Completed
Operating Pipelines	Refer to Cell B3	Detailed Review Not Completed
Discontinued or Abandoned Pipelines	Refer to Cell B3	Detailed Review Not Completed

Other Constraints

A small area located south of 114th Avenue has been identified as an area that may qualify as Environmental Reserve. Further review of these lands will be required at the time of subdivision. No other wetlands are proposed to be preserved and wetland compensation will be required for all other lands within the western half of the Section. The Biophysical Report completed by Solstice Canada Corp. discusses possible wetland dedication amounts which will be reviewed and finalized at the time of subdivision.

8.5 Development Cell B3

SE & SW 11-53-26-4 – Parkland Estates and Brenmar Holding Ltd.

Cell B3 has been defined based on the extensive amount of existing oil and gas infrastructure that must be reclaimed before the Development Concept for these lands can be implemented. As such development of these lands are anticipated beyond 10 years. The anticipated life span of the infrastructure in this Cell could be as long as 50 years. The ownership groups may exercise the right to buy-out the remaining oil and gas leases prematurely in order to proceed with development.

Access

It is noted that the Development Concept and Servicing Scenario requires east/west road and infrastructure connections respectively through Cells B1, B2 and B3 connecting Bevington Road and 231st Street. This connection may be required prior to development of Cell B3 to provide secondary means of access to development in adjoining Cell B1 and B2.

Oil and Gas

The following provides a breakdown of the extensive infrastructure within Development Cell B3:

- Regarding the Brenmar lands, there are a total of four active wells, three are in operation and one has been suspended. There are no facilities located on the property. There are six licensed pipeline segments on the site for a total of approximately 2.80 km of pipeline.
- Regarding the Parkland Estates lands, there are a total of twelve active wells, seven are in operation and
 five have been suspended or partially suspended. There are five wells on the site that have been
 abandoned and are considered Reclamation Exempt. There are three facilities, one active acid gas
 injection facility and two oil satellites located on the property. There are forty-one licensed pipeline
 segments on the site for a total of approximately 20.52 km of pipeline.

INFRASTRUCTURE	BRENMAR LANDS	PARKLAND ESTATES LANDS ¹	TIDEWATER MIDSTREAM LANDS
Operating Oil and Gas Wells	3	7	Detailed Review Not Completed
Suspended Oil and Gas Wells	1	5	Detailed Review Not Completed
Rec Exempt Oil and Gas Wells	0	5	Detailed Review Not Completed
Facilities (Battery, etc.)	0	3	Detailed Review Not Completed

Operating Pipelines	4	32	Detailed Review Not Completed
Discontinued or Abandoned Pipelines	2	9	Detailed Review Not Completed

Note ¹: This includes existing infrastructure in both Development Cell B2 and B3

Other Constraints

The grading and/or installation of municipal services within this Development Cell will be limited given the extensive amount of existing oil and gas infrastructure. A detailed plan between the developers and the oil and gas operators will be required to ensure that access to well sites and supporting infrastructure (flow lines, etc.) can be maintained during the various phases of development.

9. OIL AND GAS RECLAMATION PLAN

Three of the five landowners within the CS area (Parkland Estates, Blounas & Brenmar) have explored the financial and logistical implications of removing existing oil and gas infrastructure that is on their property to allow development to proceed, despite some of this infrastructure still providing a viable source of oil and gas. Given that landowners may negotiate options to decommission existing infrastructure, life spans are not pertinent to the development phasing. The landowners may exercise options to relocate, decommission or buy-out oil and gas infrastructure that currently inhibits development. All of the land is therefore developable within 20 years, and not constrained under the scenario of existing oil and gas infrastructure staying in place.

The technical reports provided by Kriedo summarizes current conditions of this infrastructure and the related costs of abandoning this infrastructure.

Policy 9.1.1	Reclamation of oil and gas infrastructure shall be completed prior to the time of subdivision application, with Alberta Environment and Parks reclamation certificates provided to Parkland County prior to subdivision endorsement. Development will continue around oil and gas infrastructure applying the setbacks as required by the Alberta Energy Regulator, should infrastructure remain in place.
Policy 9.1.2	Developers and the oil and gas facility operators shall work together to ensure a plan is in place to accommodate the flow lines to the operating oil and gas wells for as long as they remain in the area and prior to any directly impacted subdivision being approved.
Policy 9.1.3	Subdivisions adjacent to an operating or suspended oil and gas well shall accommodate suitable access to the well site from a municipal roadway for operation and maintenance of the well site, such that there is minimal impact on adjacent businesses. Secondary access to the satisfaction of the County and oil and gas operator may be required for subdivision located adjacent to oil and gas wells. Such arrangements may be temporary until such time as the wellhead has been abandoned or reclaimed.
Policy 9.1.4	At a minimum, the existing oil and gas facilities shall be separated from development by the required Alberta Energy Regulator setbacks. In each case, no subdivision to create public facilities within the Conceptual Scheme area shall be allowed within 100 metres of any wellhead. At such time that the wells are no longer required, the well will be capped, any required environmental restoration will be undertaken in accordance with Alberta Environment and Parks and Alberta Energy Regulator, and the reclaimed site will be utilized for development in accordance with the Development Concept.
Policy 9.1.5	Future development surrounding abandoned well sites shall adhere to the policies and requirements established by the Alberta Energy Regulator. For an abandoned well site, a Phase II Environmental Site Assessment, proof of abandonment, provision for access, and demonstration of how the abandoned well site can be accommodated within a subdivision plan must be provided prior to approval to adhere to the policies and requirements by the Alberta Energy Regulator.
Policy 9.1.6	Development setbacks as required by the Alberta Energy Regulator from the sour gas line

in place from Alberta Environment and Parks.

located in the eastern half of the section shall be observed until reclamation certificates are

10. SUMMARY OF POLICY STATEMENTS

Policy 1.3.1	Policies contained within the Section 11-53-26-W4M Conceptual Scheme shall apply to all lands within the Conceptual Scheme area.
Policy 1.3.2	This Conceptual Scheme shall not amend any currently districted and developed land within NW 11-53-26-W4M north of 114 th Avenue.
Policy 1.3.1	Policies contained within the Section 11-53-26-W4M Conceptual Scheme shall apply to all lands within the Conceptual Scheme area.
Policy 1.3.2	This Conceptual Scheme shall not amend any currently districted and developed land within NW 11-53-26-W4M north of 114 th Avenue.
Policy 2.3.1	Concurrent to completing this Conceptual Scheme, the ownership group shall complete an amendment to the Acheson Industrial Area Structure Plan in order to recognize new proposed timelines of development for the eastern half of the Conceptual Scheme area.
Policy 2.3.2	As part of the subdivision approval process the developer must provide documentation to the County, where applicable, which confirms:
	a) The developer has retained all Alberta Transportation approvals and roadside development permits, and complies with applicable Alberta Transportation plans;
	 All Alberta Energy Regulator setback requirements and applicable federal and Provincial health and safety regulations for development near oil infrastructure have been met;
	c) All Alberta Energy Regulator setback requirements and applicable federal and provincial health and safety regulations for development near oil infrastructure have been met;
	d) All on-site decommissioning or land reclamation required for non-operational infrastructure on a particular site has been completed and certificates of reclamation issued by Alberta Environment and Parks has been provided to Parkland County; and
	e) The developer has complied with the policies in the Acheson Industrial Area Structure Plan and with other applicable Municipal, Provincial, and Federal policies, standards, legislation and agreements.
Policy 2.4.1	Prior to any land development activities occurring on the Treeter or Tidewater Midstream lands amendments to the Land Use Bylaw and Conceptual Scheme shall be completed. These amendments shall be supported by technical studies to the satisfaction of the County.
Policy 3.3.1	Access to oil lease sites shall be maintained at all time during construction and development.
Policy 3.4.1	Landowners who have not yet acquired clearance for land development under the Historical Resources Act (HRIAs) shall do so before submission of future Planning applications.
Policy 3.4.2	Should any historical resources be encountered during construction, Alberta Environment and Parks shall be contacted immediately.
Policy 4.2.1	Prior to development, site-specific geotechnical analysis shall be prepared by end users to confirm subsurface conditions.
Policy 4.4.1	Further study and review of wetland areas shall be conducted prior to subdivision application.
Policy 4.4.2	Wetland compensation plans shall be developed where required by the developers and submitted to the County and Alberta Environment and Parks for approval prior to subdivision endorsement.
Policy 5.1.1	Land uses within the Conceptual Scheme area shall include a full range of business uses involving commercial and industrial developments which are consistent with the policies of the Achesor Industrial Area Structure Plan.
Policy 5.1.2	Land uses within Policy Area 'A' shall include business developments with an enhanced visual aesthetic and a variety of lots sizes and parcel configurations. Development standards and architectural guidelines shall be implemented within Policy Area 'A' to ensure the Highway 16

	business frontages present an attractive visual interface in accordance with the policies of the Acheson Industrial Area Structure Plan.
Policy 5.1.3	Land uses within Policy Area 'B' will include general' and medium industrial developments with a variety of lot sizes and parcel configurations. Businesses are expected to include large format operations with extensive outside storage requirements. Uses may also include a combination of regional commercial, office, and medium industrial developments, comprehensively planned in a campus-style setting. Heavier industrial processing activities may create potential for impacts to adjacent properties which will be required to be successfully mitigated and minimized in accordance with relevant municipal, Provincial, and Federal regulation.
Policy 5.1.4	Prior to development on the Treater and Tidewater Midstream lands this Conceptual Scheme shall be amended. The amendment application shall be supported by technical studies as required by the County
Policy 5.1.5	Any development requiring direct rail access or rail spur construction shall work with CN Rail and the County to negotiate access prior to development.
Policy 5.2.1	Future lot sizes and configurations shall be determined at the time of subdivision and may include a mix of small, medium, and large sized lots for industrial development based on market demands at the time of development.
Policy 5.2.2	Proposed parcels shall include Medium Industrial and Business Industrial development that will be in accordance with the policies of the Acheson Industrial Area Structure Plan and minimum requirements of the applicable District as outlined in the Parkland County Land Use Bylaw.
Policy 5.2.3	Individual landowners may negotiate to buy-out existing oil and gas leases to allow for development to proceed at a faster pace.
Policy 5.4.1	In accordance with Parkland County Policy C-PD15, all participating landowners included in the Conceptual Scheme Area may exercise the option of paying Money-in-Place of Municipal Reserve dedication in lieu of land dedication pursuant to the provisions of the Municipal Government Act.
Policy 5.4.2	At each phase of development, payments of Money-in-Place of Municipal Reserves shall be determined prior to conditional subdivision approval and shall be payable to the County prior to subdivision endorsement.
Policy 5.5.1	Landowners shall acquire necessary Water Act approvals prior to construction and/or development permit.
Policy 5.5.2	Lost wetland areas shall be compensated in accordance with Provincial wetland policies and regulations.
Policy 5.5.3	Further study and review of the Crown claimed wetland area located at NE-11-53-26-W4M shall be required to determine if it is to be retained in a natural state in accordance with Alberta Environment and Parks requirements.
Policy 5.5.4	Further study and review of the wetland areas at SE-11-53-26-W4M shall be required to determine wetland compensation in accordance with Alberta Environment and Parks requirements.
Policy 5.5.5	Wetland compensation arrangements with the Province shall be established prior to subdivision application.
Policy 5.5.6	Applications to Public Lands to finalize the identification of Crown claimed bodies of water shall be required prior to subdivision, and certificates from the Province of Alberta of any land transfer shall be in place prior to subdivision endorsement.
Policy 5.5.7	Tree clearing shall be prohibited during nesting periods as defined by Provincial and Federal regulations.
Policy 6.2.1	The future roadway network and key intersections in the Conceptual Scheme area shall be designed and constructed to accommodate all roadway users at a safe and satisfactory level of

	transportation service.
Policy 6.3.1	Additional and/or significant changes to the location of intersections identified in Figure 7 – Transportation Network shall require amendments to this Conceptual Scheme.
Policy 6.3.2	Parkland County's Off-Site Transportation Levy shall be calculated and applied at the time of subdivision and/or development permit.
Policy 6.3.3	Subdivision applications requiring direct access onto 231st Street shall include written confirmation from the City of Edmonton supporting the access and the related subdivision proposal.
Policy 6.3.4	Parkland County shall continue negotiations in good faith regarding upgrades to 231st Street with the City of Edmonton in accordance with the Memorandum of Understanding dated September 14, 2018.
Policy 6.3.5	Landowners adjacent to 231 st Street within the Conceptual Scheme Area shall dedicate, where required, additional road widening to accommodate the planned upgrades. The width of dedication shall be determined at the subdivision stage as part of the subdivision application referral process to the City of Edmonton.
Policy 6.3.6	Parkland County in coordination with the City of Edmonton may establish an Intermunicipal Off- Site Transportation Levy to assist with recovery of the proposed upgrades to 231st Street to support development of the Conceptual Scheme area and other areas. The Levy would be calculated and applied at the time of subdivision and/or development permit approval.
Policy 6.4.1	Internal road alignments shall be determined and finalized at the time of subdivision. Changes to the local road layout identified in Figure 7 – Transportation Network shall not require amendments to the Conceptual Scheme.
Policy 6.4.2	All internal roadways shall meet the specifications determined in Parkland County's Engineering Design Standards.
Policy 6.4.3	All dead-end roads, whether temporary or permanent will include a cul-de-sac turnaround, with a minimum radius as required under Parkland County's Engineering Design Standards.
Policy 6.4.4	The alignment of 114 th Avenue shall remain in its current location.
Policy 6.4.5	Impacted landowners in the east half of section 11-53-26-W4M shall negotiate access and utility servicing across the Treeter lands prior to subdivision application.
Policy 6.5.1	All new development within proximity of the railway shall comply with current Federation of Canadian Municipalities and the Railway Association of Canada Guidelines for New Development in Proximity to Railway Operations.
Policy 7.1.1	The developer prior to subdivision endorsement shall be required to enter into a Development Agreement with the County regarding all off-site infrastructure and construction.
Policy 7.1.1	The Conceptual Scheme area shall be serviced with potable water by the Parkland County Acheson and Big Lake Area System.
Policy 7.1.2	All potable water infrastructure within the Conceptual Scheme area shall be constructed by the developer to the satisfaction of Alberta Environment and Parks and Parkland County in accordance with the Acheson and Big Lake Area Water Servicing Study (2015).
Policy 7.1.3	The potable water distribution system shall accommodate minimum design requirements necessary to provide appropriate fire suppression within the Conceptual Scheme area.
Policy 7.1.4	Parkland County's Off-Site Water Levy shall be calculated and applied at the time of subdivision and/or development permit.
Policy 7.1.5	The servicing for this development shall accommodate looping of watermains, once full build-

	out is achieved, including the 300mm connection along Bevington Road and the 350mm watermain connection within SE 11-53-26-W4M.
Policy 7.2.1	The Conceptual Scheme area shall be serviced will be serviced by the County's Acheson East Sanitary Sewer Trunk Main. The general configuration of the waste water infrastructure system required to service the Conceptual Scheme area is illustrated in Figure 10 – Sanitary Sewer Network.
Policy 7.2.2	All wastewater infrastructure within the Conceptual Scheme area shall be constructed by the developer to the satisfaction of Alberta Environment and Parks and Parkland County in accordance with the Acheson and Big Lake Area Sanitary Sewer Servicing Study (2016).
Policy 7.2.3	Parkland County's Off-Site Sanitary Sewer Levy shall be calculated and applied at the time of subdivision and/or development permit.
Policy 7.3.1	The proposed stormwater management system within the Conceptual Scheme area is generally illustrated in Figure 8- Stormwater Management Plan.
Policy 7.3.2	Each stormwater management facility shall be constructed within a Public Utility Lot (PUL) to be dedicated to the County at the subdivision stage.
Policy 7.3.3	Stormwater management facilities completed within the Conceptual Scheme area shall be designed and constructed in accordance with Alberta Environment and Parks and Parkland County standards.
Policy 7.3.4	The stormwater management system shall be designed and constructed to meet or exceed Parkland County Engineering Design Standards as well as Alberta Environment and Parks stormwater management and stormwater quality requirements for the Acheson Big Lake Storm Basin.
Policy 7.3.5	Release rates for the proposed stormwater network shall conform to the rates per the Acheson/Big Lake Area Master Drainage Plan (2011).
Policy 7.3.6	Parkland County's Off-Site Stormwater Management Levy shall be calculated and applied at the time of subdivision and/or development permit.
Policy 7.5.1	Shallow utilities shall be provided within the Conceptual Scheme area at the sole expense of the developer within appropriate road rights-of-way and within easements on private property established at the detailed subdivision design stage to the satisfaction of the utility providers and Parkland County.
Policy 7.6.1	Prior to stripping and grading of the site, a grading plan and an erosion & sediment control report shall be submitted to the satisfaction of Parkland County. This plan shall depict road and swale grades and include public utility lot areas, stormwater management plans and an erosion and sediment control plan and shall be approved by Parkland County.
Policy 7.6.2	Site grading is to take into consideration existing topography to minimize grading requirements over the Conceptual Scheme area.
Policy 7.6.3	A striping and grading permit issued by Parkland County shall be in place prior to any soils being removed from the Conceptual Scheme Area.
Policy 9.1.1	Reclamation of oil and gas infrastructure shall be completed prior to the time of subdivision application, with Alberta Environment and Parks reclamation certificates provided to Parkland County prior to subdivision endorsement. Development will continue around oil and gas infrastructure applying the setbacks as required by the Alberta Energy Regulator, should infrastructure remain in place.
Policy 9.1.2	Developers and the oil and gas facility operators shall work together to ensure a plan is in place to accommodate the flow lines to the operating oil and gas wells for as long as they remain in the area and prior to any directly impacted subdivision being approved.

Policy 9.1.3	Subdivisions adjacent to an operating or suspended oil and gas well shall accommodate suitable access to the well site from a municipal roadway for operation and maintenance of the well site, such that there is minimal impact on adjacent businesses. Secondary access to the satisfaction of the County and oil and gas operator may be required for subdivision located adjacent to oil and gas wells. Such arrangements may be temporary until such time as the wellhead has been abandoned or reclaimed.
Policy 9.1.4	At a minimum, the existing oil and gas facilities shall be separated from development by the required Alberta Energy Regulator setbacks. In each case, no subdivision to create public facilities within the Conceptual Scheme area shall be allowed within 100 meters of any wellhead. At such time that the wells are no longer required, the well will be capped, any required environmental restoration will be undertaken in accordance with Alberta Environment and Parks and Alberta Energy Regulator, and the reclaimed site will be utilized for development in accordance with the Development Concept.
Policy 9.1.5	Future development surrounding abandoned well sites shall adhere to the policies and requirements established by the Alberta Energy Regulator. For an abandoned well site, a Phase II Environmental Site Assessment, proof of abandonment, provision for access, and demonstration of how the abandoned well site can be accommodated within a subdivision plan must be provided prior to approval to adhere to the policies and requirements by the Alberta Energy Regulator.
Policy 9.1.6	Development setbacks as required by the Alberta Energy Regulator from the sour gas line located in the eastern half of the section shall be observed until reclamation certificates are in place from Alberta Environment and Parks.

11. LIST OF FIGURES

- 1) Location and Context Map
- 2) Land Ownership Map
- 3) Environmental Features Map
- 4) Oil & Gas Infrastructure Map
- 5) General Land Use Concept
- 6) Development Concept Map (includes Development Cells)
- 7) Transportation Network
- 8) Stormwater Management Plan
- 9) Water Network
- 10) Sanitary Network

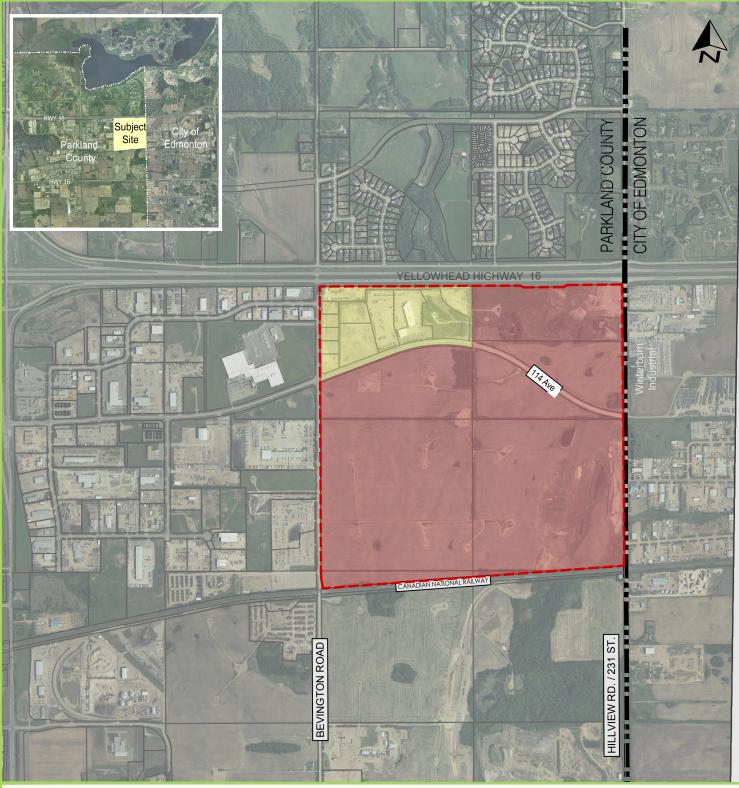


FIGURE 1: LOCATION & CONTEXT MAP

300 200 100 0 500 m

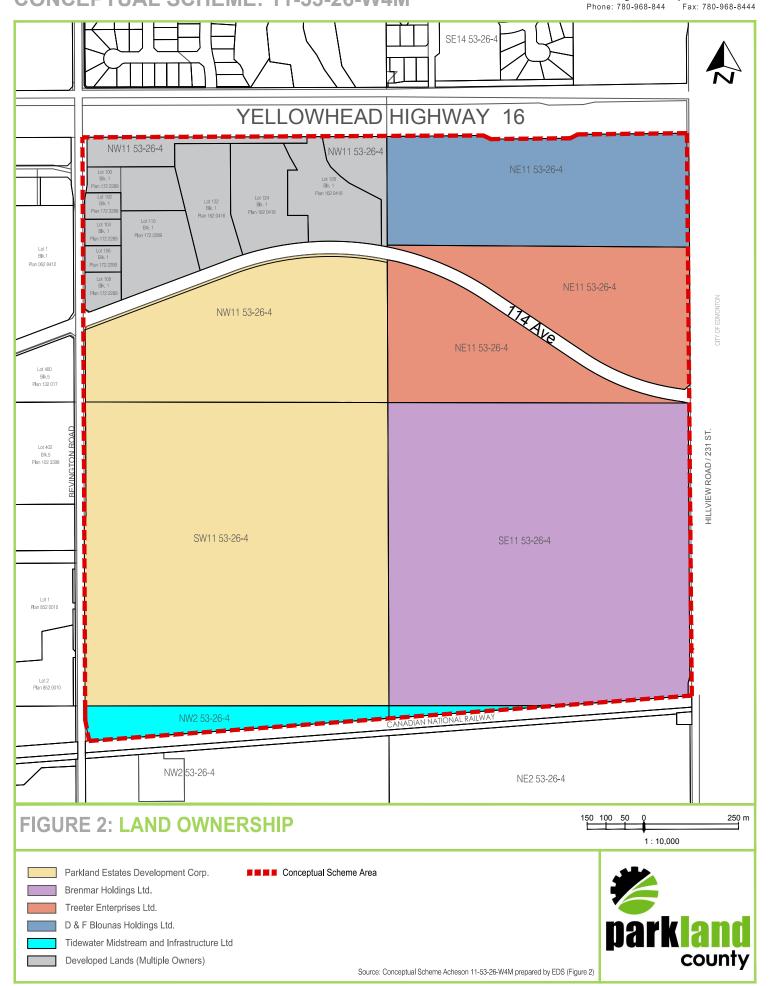
Conceptual Scheme Area

Municipal Boundary

Developed Lands

Undeveloped Lands





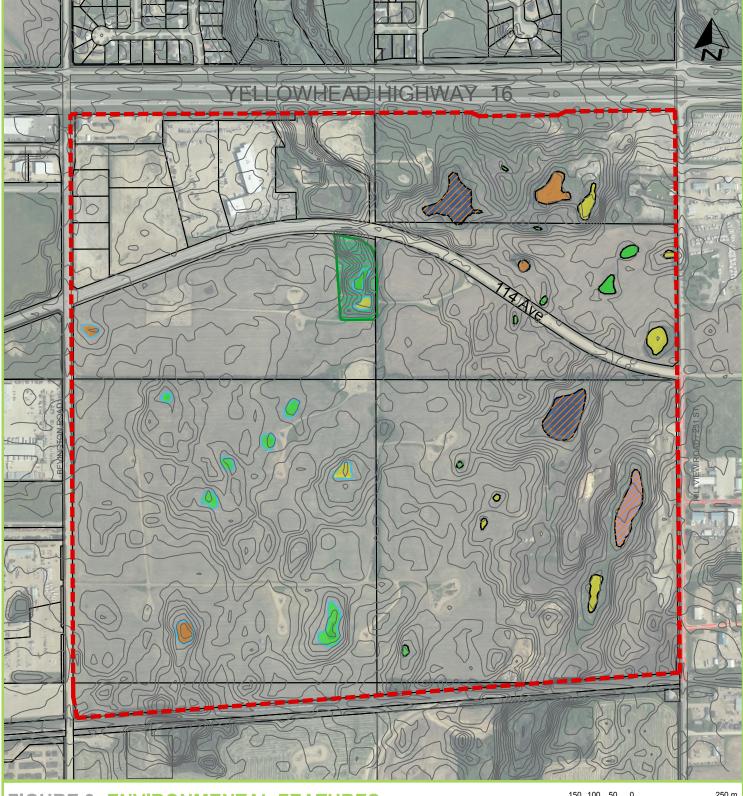


FIGURE 3: ENVIRONMENTAL FEATURES

150 100 50 0 250 m 1:10,000

Wetland Extent

Wetland Class

MG-II Temporary Graminoid Marsh

MG-III Seasonal Graminoid Marsh

SS-III Seasonal Shrubby Swamp

MG-IV Semi-permanent Marsh

WA-IV Semi-permanent Open Water

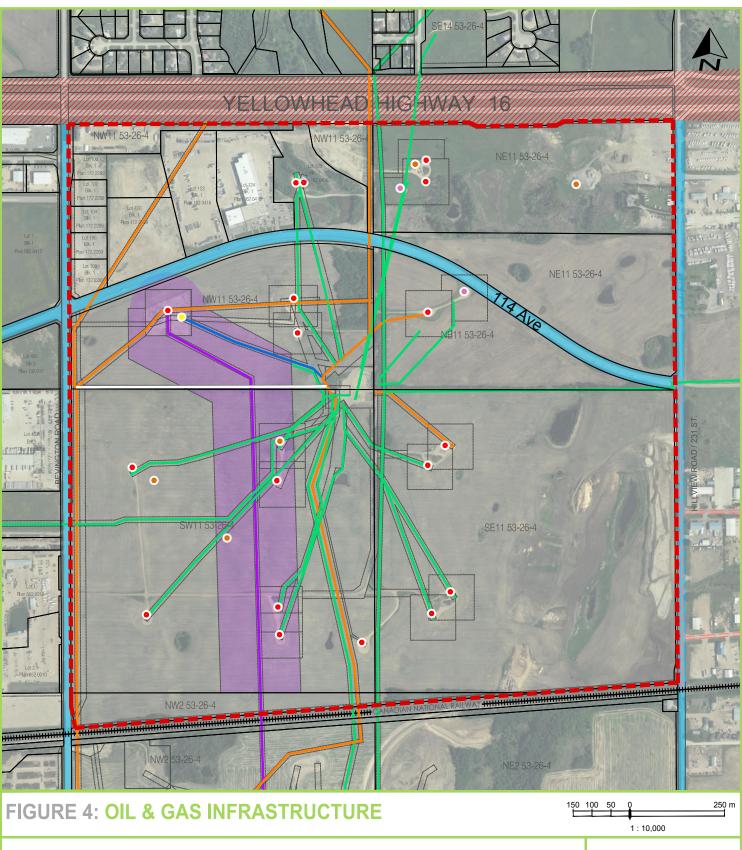
Potential Environmental Reserve

Crown Claimed Wetland

1m Contours

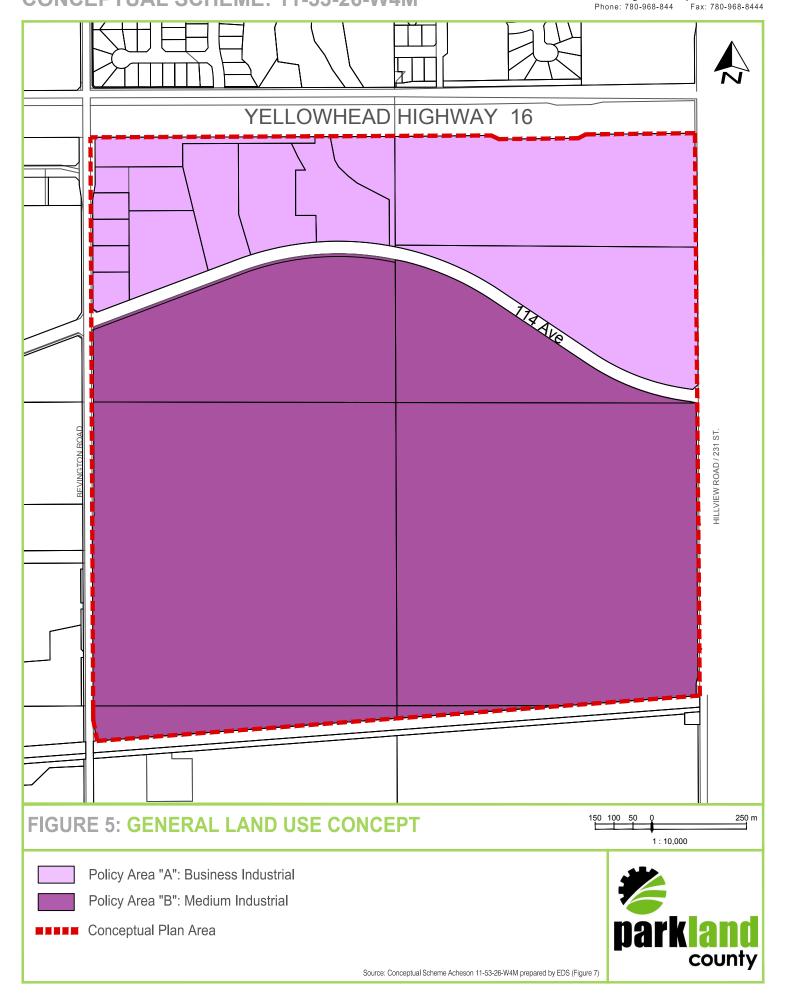
■■■ Conceptual Scheme Area

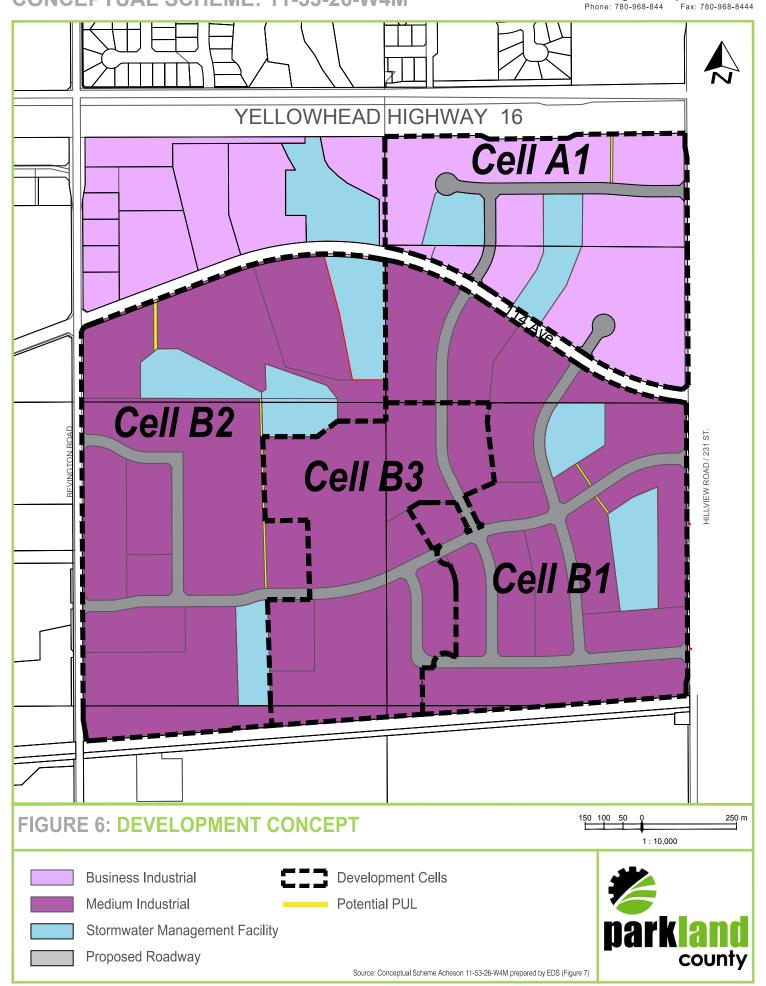


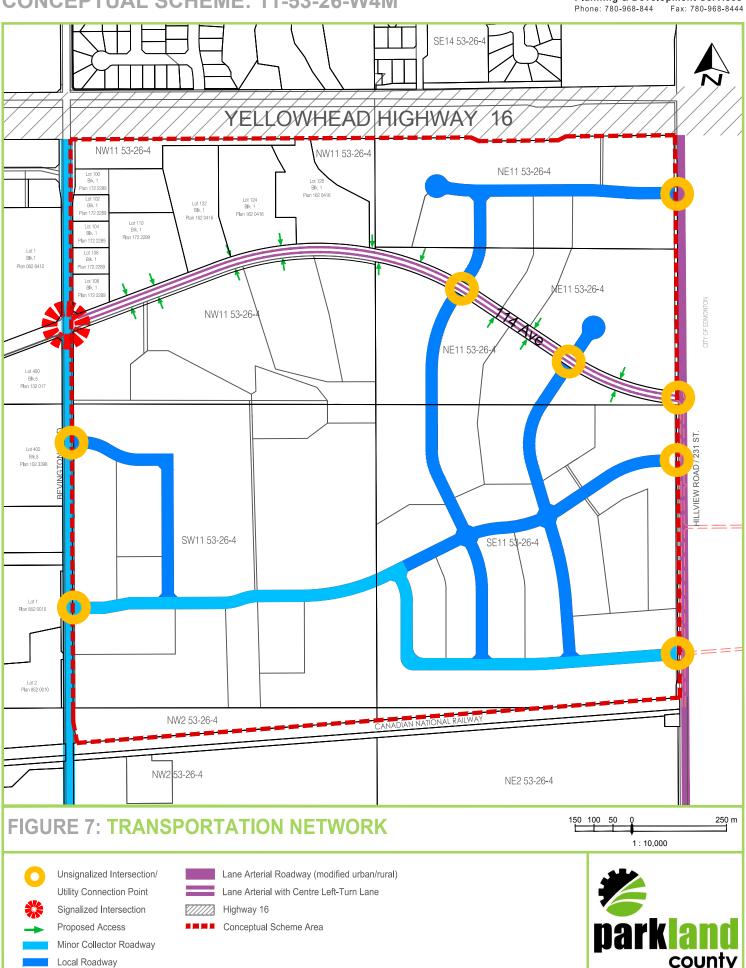




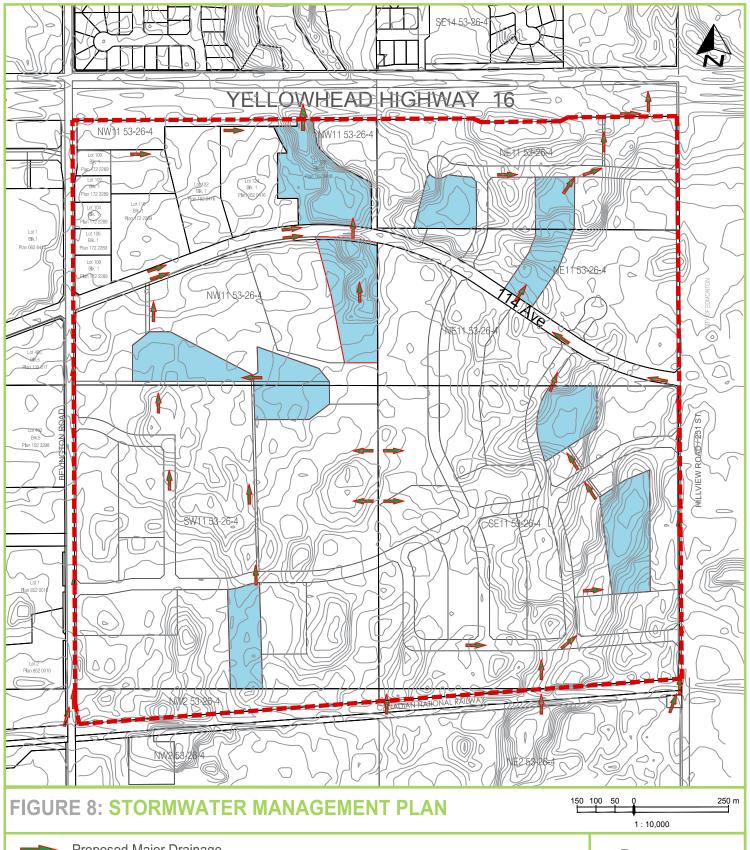








Source: Conceptual Scheme Acheson 11-53-26-W4M prepared by EDS (Figure 8)





Proposed Major Drainage



Stormwater Management Facility



1m Contour



Conceptual Scheme Area



Source: Conceptual Scheme Acheson 11-53-26-W4M prepared by EDS (Figure 10)

