SAUNDERS LAKE AREA STRUCTURE PLAN

Adopted August 23, 2005

(Consolidation with Amendments up to and Including Bylaw 13-11)
BY-LAW NO. 15-04

LEDUC COUNTY

A BY-LAW OF LEDUC COUNTY, IN THE PROVINCE OF ALBERTA, TO ADOPT THE SAUNDERS LAKE AREA STRUCTURE PLAN.

WHEREAS the Council of Leduc County deems it to be in the public interest to adopt the Saunders Lake Area Structure Plan;

NOW THEREFORE, be it resolved that the Council of Leduc County, duly assembled, hereby enacts that the Saunders Lake Area Structure Plan, being Schedule “A” attached to and forming part of this By-Law, be adopted.

This By-Law shall take effect on the date of the third reading.

Read a first time this 6th day of July, 2004.

[Signatures]

REEVE

COUNTY MANAGER

Read a second time this 23rd day of August, 2005.
Read a third time and finally passed this 23rd day of August, 2005.

[Signatures]

REEVE

COUNTY MANAGER
Bylaw 15-04, as amended, was adopted by Council in August 2005. In May 2011, this document was consolidated by the incorporation of the following bylaws:

- Bylaw 11-06  Approved May 23, 2006
- Bylaw 13-07  Approved April 10, 2007
- Bylaw 16-07  Approved April 24, 2007
- Bylaw 21-07  Approved June 5, 2007
- Bylaw 35-07  Approved August 28, 2007
- Bylaw 13-11  Approved March 24, 2011

NOTE: Anyone using this consolidation is advised that the amendments have been included for convenience only and that the original Saunders Lake Area Structure Plan and the original amending Bylaws should be consulted for all purposes of interpreting and applying the Bylaws.
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1 INTRODUCTION

Saunders Lake extends through the Blackmud Creek Valley from Airport Road south to Highway 623. The principal value of the lake is as an aesthetic amenity, suitable for passive recreation, with limited value for commercial or recreational fishing, or for intensive boating.

Leduc County recognises the value of Saunders Lake as a community asset. In response to inquiries regarding potential development in the area, the County identified the need to both guide future development and protect the natural amenity offered by the lake. In March 2003, Leduc County retained Scheffer Andrew Ltd. to prepare an area structure plan for the land surrounding Saunders Lake.

Figure 1 shows the plan area in its regional context. It lies just east of the City of Leduc and 9.6 km south of the City of Edmonton.

2 BACKGROUND

2.1 Purpose of Plan

The County recognizes that Saunders Lake and the land adjacent thereto are a significant asset to the municipality. The purpose of this area structure plan is to provide more specific direction regarding future development in the area than that provided in the County's Municipal Development Plan.

The Leduc and District Regional Waste Management Facility is a significant feature in the southwest portion of the plan area. Alberta government regulations require a substantial separation between waste management operations and certain types of development, including residential development. This area structure plan must recognize the existence of this feature and its implications for future development in the area.

The area between Saunders Lake and the City of Leduc is of interest to both municipalities. The area structure plan is intended to clarify a shared concept of what constitutes appropriate development of this area in the future.

2.2 Vision

The County has prepared this area structure plan as a means of clarifying, communicating, and protecting its vision of future development of the land surrounding Saunders Lake, and lying between the lake and the County's shared boundary with the City of Leduc.
Leduc County’s vision for the long term future development of the area around Saunders Lake combines municipally serviced estate residential development with significant areas of public open space around the lakeshore for low intensity recreation and environmental protection.

The following points provide more detail:

- In order to make the best possible use of the amenity offered by the lake, development is to consist of predominantly residential land use. On the other hand, the County does not wish to simply replicate typical suburban residential development such as that provided by the City of Leduc. Instead, the County sees the area around Saunders Lake providing an alternative to both these types of development in the form of serviced residential lots, a minimum of 0.2 ha (0.5 acre) in area. This type of development is referred to in this plan as "Estate Residential".

- The County's vision of future development around Saunders Lake acknowledges the current and future availability of regional and municipal utility services extending from the City of Edmonton/City of Leduc development corridor. To help minimize the impact of development on Saunders Lake, the County envisions all development in the vicinity ultimately being connected to municipal utility services.

- In order to ensure the protection of the lake as a community amenity, the County wishes to provide a substantial area of open space around the lake to protect steep slopes, preserve vegetation, provide public access, and to generally preserve the aesthetic qualities that make the lake a valuable asset.

- The County's vision of development west of the lake, near the City of Leduc, emphasizes complementary and transitional uses between the largely residential development anticipated near the lake and the various land uses proposed by the City near its eastern boundary. The County wishes to use this area structure plan to build on the current City of Leduc/Leduc County Intermunicipal Development Plan, by addressing future land use and coordinated infrastructure development.

3 DESCRIPTION OF PLAN AREA

3.1 Plan Boundary
The plan area encompasses approximately 2,720 ha, of which approximately 240 ha are occupied by Saunders Lake itself. The boundary of the plan area follows Airport Road
(10 Avenue) on the north, and extends one half mile south of Highway 623. The western boundary of the plan area corresponds with the municipal boundary of the City of Leduc. The eastern boundary is roughly defined as Range Road 244 north of Township Road 500 and one half mile east of Range Road 243 south of Township Road 500.

Figure 1 identifies the plan boundary used in the Saunders Lake Area Structure Plan.

3.2 Existing Plans

3.2.1 Leduc County Municipal Development Plan

The current Leduc County Municipal Development Plan was adopted in 1999 as By-law 35-99. It designates the plan area as Agricultural Area A, except for the portion south of Highway 623, which is designated Agricultural Area B. The purpose of the Agricultural Areas is “to conserve and protect extensive areas of land for agricultural uses; to encourage and accommodate a broad range of agricultural-related pursuits; and to retain and enhance the County’s agricultural community”.

The Municipal Development Plan Policy 3.3.25 recognises the potential for new lakeshore residential development when adequate study has been undertaken to ensure land use conflicts and adverse impact on the natural lake environment will not occur.

Policy 3.3.7 provides that non-agricultural land uses in subdivisions may occur on high capability agricultural land if the County is convinced that the benefits of such development to the County and the general public warrant the removal of high capability agricultural lands from production and if the area removed is the minimum required to accommodate the proposed non-agricultural use.

3.2.2 Leduc County Land Use Bylaw

Two land use districts currently apply to the plan area:

Agriculture

The Agriculture District allows a range of agricultural uses and a single family residence with the possibility of some public institutional, recreation, resource extraction, and commercial uses where permitted by the Development Authority.

Recreation / Open Space

Similar to the Agriculture District, the Recreation / Open Space District allows a range of agricultural uses (including extensive livestock) and a single family residence. It also provides for public and private recreational uses.

The general land use designations described in this plan are different from Land Use Bylaw districts. This plan provides guidance regarding the types of Land Use Bylaw
districts that are appropriate within the plan area. However, amendments to the Land Use Bylaw require an approval process that is separate from the adoption of this plan.

3.2.3 City of Leduc Municipal Development Plan

As illustrated in Figure 2, the City of Leduc Municipal Development Plan identifies future land uses for the City lands adjacent the plan boundary. These future uses have been taken into account in the development of the land use concept for this plan.

3.2.4 Leduc Intermunicipal Development Plan

The County adopted the Leduc Intermunicipal Development Plan in 1998 as Bylaw 43-98. It sets out principles, objectives, land use policies, and intermunicipal referral requirements for an area generally extending one half mile on either side of the municipal boundary. Within its boundaries, and to some extent outside the Intermunicipal Development Plan boundaries, the Intermunicipal Development Plan requires that plans such as this plan, and development applications made under this plan, be subject to intermunicipal review and comment.

3.2.5 City of Leduc, North Leduc Industrial ASP

In May 2001, the City of Leduc approved this area structure plan identifying an area of approximately 720 ha for future commercial and a range of industrial uses. The plan is bounded by Highway 2 on the west, Airport Road to the north, the municipal boundary (Range Road 250) on the east, and 65 Avenue (Township Road 500) to the south.

The future uses identified in this plan have been taken into consideration in the development of the Saunders Lake ASP.

3.3 Ownership

The majority of the plan area is in private ownership. Fragmentation of land does not appear to be a problem, with the majority of the existing lots being 40 acres or larger. According to the County's current ownership map, only two owners control more than half a section of land. Both these owners are on the east side of the lake, one south of Township Road 500, and one to the north. Public land ownership is limited to a small (under 1 ha) lakeshore parcel in the NW 32-49-24-4; the Leduc and District Regional Waste Management Facility site in Section 29; the bed and shore of the Clearwater Creek in the NE 8-50-24-4; and the bed and shore of Saunders Lake, which belong to the Province of Alberta.

3.4 Existing Land Use

The majority of the plan area is presently in agricultural production with associated farmsteads dispersed throughout. A variety of cereal and forage crops are presently
farmed and there are some extensive livestock operations within the plan boundary. Southwest of Saunders Lake, north of Highway 623, the *Leduc and District Regional Waste Management Authority* is carrying out landfill activities in the NW 29-50-24-4. This facility was originally licensed in 1978 and presently has sufficient storage capacity to remain active until 2020.

The Waskahegan Trail Association maintains a hiking path along the eastern shore of Saunders Lake. The organisation does not own the lands over which the trail runs, but has permission from the numerous participating landowners to use the land.

There are numerous pipeline and power rights-of-way in the plan area that may constrain future development in their vicinity. Development setbacks are usually the edge of the right-of-way for pipelines, and can vary from power rights-of-way depending on the type of structures. The Alberta Energy and Utilities Board has not identified any sour gas wells within or immediately adjacent the plan boundary.

Figure 3 Air Photo illustrates the predominately agricultural land use in the plan area.

### 3.5 Adjacent Land Use

Figure 2 identifies existing/proposed land uses for adjacent areas.

There are three existing country residential subdivisions, two to the east (Sunnyville and Valley View) and one to the north (Mini Vista), adjacent the plan area. These country residential acreages are individually serviced, except that Mini Vista has municipal water service extended south from the "Vistas" residential development to the north.

The Nisku industrial area is located to the north/northwest of the plan area. This is a fully serviced industrial area, with a variety of industrial and business occupants.

The remainder of the adjacent County land is in agricultural production and designated as Agricultural in the Municipal Development Plan.

The lands to the west of the plan area fall within the jurisdiction of the City of Leduc. Presently these lands are generally in agricultural use with the exception of a current industrial development directly south of Airport Road. The City of Leduc Municipal Development Plan designates the land on the south side of Airport Road as Commercial and Industrial. The land south to Township Road 500 is designated Industrial Reserve. South of Township Road 500 to Telford Creek is Agricultural Residential Reserve land. A small area of Major Public and Private Open Space is identified along Telford Creek.
The remainder of the adjacent City land south of Telford Creek remains designated as Agricultural.

At the time this plan was developed, there were no confined feedlot operations identified, by either the County or the Province, within the plan boundary.

### 3.6 Airport Vicinity Protection Area

The 30 NEF contour as proposed in the DRAFT AVPA Regulation, within which residential development should be restricted, only affects the plan area in the NE 19, part of the NW 20, and a small area in the SW 6. However, it does have an impact on future development in the east portion of the City of Leduc. Recent changes in the definition of the 30 NEF contour must be considered by the City of Leduc with the possibility that future land uses proposed adjacent to the municipal boundary may change.

The proposed revised 30 NEF contour is show in Figure 7 Development Concept.

### 3.7 Special Study Area

At the time of consideration of this ASP for adoption, the proposed AVPA Regulation had not been adopted. Thus, Figure 7 Development Concept includes a “Special Study Area” that includes the area that had been proposed for “Estate Residential” development in previous Drafts of this ASP. This area is designated as AM – Airport Industrial District under the existing AVPA Regulation (AR63-81) and does not permit residential development. The proposed Development Concept consistent with the proposed AVPA Regulation is contained within Appendix 1. This Area Structure Plan will require an amendment in order to place this concept into the Plan once an amended or new AVPA Regulation is adopted by Municipal Affairs.

### 3.8 Natural Features

#### 3.8.1 Topography

There is a substantial amount of relief (approximately 50m) within the plan area. Saunders Lake is the low area of the plan (at approximately 690m) with the lands around it rising quite quickly to a maximum elevation of approximately 740m in the southern plan area east and west of the lake.

With the exception of a small area at the intersection of Range Road 250 and Township Road 500, the entire plan area slopes towards Saunders Lake. Above the steep banks leading to the lake, the land is generally gently rolling.

#### 3.8.2 Surface Water
There are two main tributaries into Saunders Lake: Blackmud Creek enters from the south and Telford Creek enters from the west. Clearwater Creek enters the plan area from the northeast, but connects to Blackmud Creek just north of the lake.

The outflow from Saunders Lake is at the north end of the lake into the Blackmud Creek diversion channel, which ultimately feeds into the North Saskatchewan River. The outflow location has a control structure to help maintain the lake level of Saunders Lake.

3.8.3 Vegetation
The majority of the lands above the lakeside slopes have been or are in agricultural production. However, much of the slope leading to the lake is covered by deciduous forest. The dominant tree type is trembling aspen on the upper slopes and well-drained sites, and balsam poplar on lower slopes and poorly drained sites. These treed areas are outlined in Figure 4.

3.9 Environmentally Sensitive/Significant Areas
Spencer Environmental Management Services Ltd. prepared an environmental assessment for the lands within the plan boundary. This report identified environmental constraints and opportunities and provided recommendations for protective measures that have been incorporated into the Saunders Lake Area Structure Plan.

3.10 History/Archaeology
Although Alberta Community Development has not identified any existing sites of historical significance, they have identified this area as having a high potential for artefacts and noted that further detailed study to their satisfaction should be conducted prior to development.

3.11 Agricultural Land Capability
Generally, the County’s farmland assessment gives the majority of the land in the plan area a high capability rating for Agriculture. However, land near the lake itself is not rated as highly, and some substantial areas in the southwest portion of the plan area north of Highway 623 receive a lower rating.

The County’s farmland assessment rating for land within the plan area is illustrated in Figure 5.

3.12 Groundwater Availability
A general assessment of groundwater availability and quality was undertaken by Hydrogeological Consultants Ltd. in support of this plan.
This assessment found that groundwater supplies within one quarter to one half mile of the lake north of Township Road 500 are generally adequate in terms of yield, total dissolved solids, fluoride, and risk of groundwater contamination to support some residential development. This area extends west along Airport Road to the City boundary.

A second area where groundwater supplies are deemed adequate to support some residential development exists on either side of Highway 623 in the central portion of Sections 20 and 29.

These areas are illustrated in Figure 6.
Area Structure Plan
Saunders Lake
Figure 6
Ground Water Potential
February 23, 2005
5680100/8-0.pdf
3.13 Access

The plan area has excellent access west to the City of Leduc and Highway 2, and east to Highway 814 via Airport Road and Highway 623. Township Road 500 (65 Avenue within the City of Leduc) also provides access west into the City of Leduc and onto Highway 2.

The existing road network in the plan area is illustrated in Figure 2 and includes:

- Airport Road - 2 lane paved highway
- Highway 623 - 2 lane paved highway
- Range Road 245 & 250/9th Street - 2 lane local gravel
- Highway 814 - 2 lane paved arterial
- Township Road 500/65 Avenue - 2 lane local gravel
- Range Road 244 – 2 lane paved local
- Range Road 243 and Township Road 500 - 2 lane local gravel

Currently all major roadways carry less than 10,000 ADT. The numbers were taken from 2002 Alberta Transportation traffic count data, as well as from the *Nisku Traffic Analysis and Functional Planning Study*, Reid Crowther, 1997, scaled up to 2002 by using a growth factor of 3% per annum, similar to the Reid Crowther Study, and consistent with experience elsewhere in the Province.

3.14 Water and Sewer

Currently there are no municipal sanitary or water mains within the plan boundary. The closest connection to the SERTS (South Edmonton Regional Trunk Sewer) line is located at the northwest plan boundary at the intersection of Airport Road and Range Road 250/9th Street. Municipal water connection to County lines is available to the west of 7th Street/Airport Road, to the east at 10th Street/Airport Road, and to the north between Section 18 and 19-50-24-4.

The City of Leduc North Leduc Industrial Area Structure Plan, which affects an area south of Airport Road and west of Range Road 250/9th Street, indicates that there may be potential for intermunicipal servicing arrangements.

4 PUBLIC INPUT

4.1 Ongoing Public Involvement

At the commencement of this project the County and the consultants recognized the importance of public involvement in the preparation of the Saunders Lake Area Structure Plan.
From the time of the first advertisement (March 2003) notifying the public that development of an Area Structure Plan was underway, the public has been involved (formally and informally) in the planning process. In addition to three public meetings, numerous phone calls, emails, and faxes have been received, reviewed, and considered over the course of plan development.

Updates on the development of the plan have been posted on both the County and the Scheffer Andrew Ltd. websites and notices have been published in the Leduc Representative.

A series of public meetings were held over the plan development period to receive information from the public, inform them of plan progress, and to solicit comments and suggestions.

4.2 First Public Meeting
An issue identification meeting was held April 16, 2003 at the Nisku Recreation Centre. The goals of this meeting were as follows:

- Inform the public about what an area structure plan is, and how it relates to other planning documents;
- Explain the process that would be followed in the development of the Saunders Lake Area Structure Plan; and
- To listen to concerns and ideas from the public relating to future development within the plan area.

Approximately 70 people (58 signed the sign-in registry) attended.

The questions and concerns raised during this meeting were primarily focused on the lake and shoreline. Potential recreational use of the lake and shoreline was a heavily discussed issue. Concerns about vandalism, littering, noise pollution, proper access, and policing of public areas and the type of opportunities for recreational activities were voiced and discussed.

In addition to the recreational aspect of the lake, there was considerable concern about the integrity of the natural environment. Ideas about a natural buffer or non-development area surrounding the lake were offered, as were concerns about property rights and public versus private lands.

The existing and future use of the regional waste management facility was also identified as a major concern. The offsite impact of this facility on local roads (speed and dust problems) was also identified.
4.3 Second Public Meeting

A second public meeting was held June 24, 2003 at the Nisku Inn. This meeting was attended by approximately 40 people (35 recorded their attendance on the sign-up sheets). The meeting began with a brief review of the goals of establishing an area structure plan, and a review of the input received since the first public meeting in April. The review was followed by a presentation of three draft land use concept maps and an explanation of the rationale behind each.

Following the formal presentation, the attendees were divided into smaller groups to discuss the three alternatives and provide feedback regarding what they liked/disliked about each concept. After approximately 45 minutes the groups were asked to present their comments on the three concepts.

Opinions were somewhat polarized, with approximately half the people favouring the concept with the least development and half favouring the concept with extensive future development. However, many saw the three options presented not as alternatives, but as a representation of naturally expanding development over time, and did not offer strong objections to the general future land uses proposed.

4.4 Third Public Meeting

A complete draft plan was available to the public in November 2003, on both the Scheffer Andrew Ltd. and Leduc County websites, and hard copies were available from the Leduc County Office. The third public meeting was held on December 8, 2003 at the Nisku Recreation Centre to present this draft plan to the public. Approximately seventy people attended this meeting.

A summary of the proposed plan and details regarding future land uses were presented to the public. Following this formal presentation of the plan, the consultants answered questions and received comments / concerns regarding the plan.

Comments and suggestions received at the meeting and in the following weeks were reviewed and taken into consideration during preparation of the final draft.

5 LAND USE

5.1 Interpretation

The boundaries of the land use designations shown in Figure 7 are conceptual and subject to refinement at the outline plan stage.
5.1.1 Where the boundary does not follow a property line or where there is uncertainty regarding the location of a boundary, the specific boundary location maybe determined at the time of subdivision or development, or at the time of consideration of local outline plans, through legal survey and/or supporting studies. The final boundaries will then be determined on consideration of such surveys, plans or supporting studies only by:

- Council;
- or the Chief Administrative Officer by resolution of Council, or
- an assignee of the Chief Administrative Officer, such person or persons to be by resolution of Council.

The use designations themselves are general indications of future development types. They do not correspond directly to the land use districts set out in the County’s Land Use Bylaw. It is possible that, at the outline plan stage, other more specific land uses that are generally consistent with the designations identified in this plan may be approved. Similarly, Land Use Bylaw districts that are generally consistent with the land use designations shown in this plan may be approved. For example, in an area designated for Estate Residential in this plan, an outline plan or redistricting application might create a convenience commercial site to serve the general residential development. The introduction of such a complementary use would not require an amendment to this area structure plan.

Leduc County recognizes that it will take several years for the Saunders Lake area to fully develop as described in this plan. Development within the plan area is dependent on several important variables, such as the availability of municipal services, the extension of transportation infrastructure, development sequencing, and market demands. This plan recognizes that in the interim, land uses that:

- are compatible with existing and/or anticipated neighbouring developments;
- do not negatively impact the implementation of the development concept; and
- are subject to time limitations (with or without extensions)

may be considered for development in the Saunders Lake area. Sites within the plan area that are developed for interim land uses may require environmental remediation prior to redevelopment consistent with the development concept. Bylaw No. 13-11

As development proceeds within the plan area, requirements for schools, parks, emergency service facilities, or other municipal use may be identified at the outline plan stage. This plan assumes that as development proceeds, the responsible agencies will
acquire land by purchase or through the dedication of municipal reserve to accommodate these uses.

5.2 Natural Area/Open Space
The Saunders Lake Environmental Assessment Report, prepared by Spencer Environmental Management Services Ltd., reviews the existing environmental features and condition of the Saunders Lake corridor and makes recommendations regarding the preservation and management of this resource. The report offers recommendations regarding three main issues: erosion control, retention of natural areas, and recreational opportunities. These recommendations were taken into consideration in the development of this area structure plan.

Figure 7 designates a substantial area of land surrounding the lake as Natural Area/Open Space. This area consists of the bed and shore of Saunders Lake, steep slopes adjacent the lake, and watercourses draining into the lake. This designation is intended to protect the lakeshore, control development in the flood plain, allow for appropriate public access to the lake, allow the development of lake related recreational facilities, and conserve wildlife habitat and movement corridors.

A second significant designation of land as Natural Area/Open Space connects west from Saunders Lake to the City of Leduc and ultimately to Telford Lake within the City. The City's Municipal Development Plan already provides for the continuity of this connection within the City boundary.

Within the Natural Area/Open Space designation, four generalized points of public access to the lake are identified by arrows in Figure 7. In addition, two general locations for the potential development of recreational facilities have been identified. Other appropriate locations may be identified at the outline plan stage.

The following policies apply within the Natural Area/Open Space designation:

The configuration of the Natural Area/Open Space designated in this plan is conceptual. It is intended to be refined at the outline plan stage, to the satisfaction of the County, on the basis of detailed environmental, topographic, geotechnical, and other analyses considered relevant by the County and prepared at the developer’s expense by qualified professionals.

5.2.1 The area is to remain generally in its natural state with exceptions only for development related to or supporting recreation (e.g. trails, access for boating, nature interpretation sites, picnic sites, campgrounds) or extensive agriculture (such as the cultivation of forage or cereal crops, or cattle grazing).
5.2.2 Access to lake will be limited to a small number of points, generally indicated by arrows in Figure 7, to minimize the impact on the lake and lakeside residential development. Individual boat launching facilities are not to be permitted.

5.2.3 Proponents of recreational facilities (including the County or other public agencies) shall be required to provide the County, at the proponent’s expense, an assessment, consistent with criteria established by the County, of the environmental impact of the proposed development. The County will take the assessment into account in making its decision regarding approval of the development.

5.2.4 In accordance with the provisions of the Municipal Government Act, upon subdivision the County will require the dedication of environmental reserve within the Natural Area/Open Space area. In cases where the dedication of environmental reserve is not appropriate, the County may also require the dedication of municipal reserve to ensure that the intent behind the Natural Area/Open Space designation is fulfilled.

5.2.5 The County will consider the use of environmental reserve easements, as provided for in the Municipal Government Act, where appropriate.

5.2.6 As development occurs, the County will support the formalization of appropriate rights-of-way to accommodate the Waskahegan Trail. Care should be taken to protect the aesthetic and environmental values associated with the trail.

5.2.7 All residential developments adjacent to the Natural Area/Open Space shall provide a 6.0 metre walkway (minimum) on the upslope limit of the Natural Area/Open Space encircling the lake. This land will be developed, at the developer’s expense, with a multiuse trail providing passive recreation opportunities to future residents and the general public. This formal walkway will help protect the environmental feature by defining the boundary between public and private land.

5.2.8 All residential developments adjacent to the Natural Area/Open Space shall provide pedestrian access to the Natural Area/Open Space at intervals not greater than 400m.

5.2.9 Attempts should be made to connect the trail system and natural area with trails being developed in the City of Leduc, particularly the Telford Lake/Creek corridor.

5.2.10 Storm water run-off from future development shall be managed in a manner that will minimize sedimentation of Saunders Lake and prevent detrimental impacts on the lakeshore slopes and tributaries.

5.3 Commercial

Land has been designated Commercial to accommodate a broad range of general commercial uses along the south side of Airport Road, east of the municipal boundary. This designation is a logical extension of the City of Leduc’s commercial area identified in both their Municipal Development Plan and the North Leduc Industrial ASP. This location takes advantage of the visibility and access available from Airport Road.

The following policy applies within the Commercial designation:
5.3.1 Development within the Commercial area must provide for adequate buffering from adjacent residential development. The configuration of the required buffer will be determined by the County at the outline plan stage and may include construction of a landscaped berm.

5.4 Business Industrial and Light Industrial

The City of Leduc’s North Leduc Industrial Area Structure Plan designates the majority of the area west of Range Road 250/9th Street for “Light Industrial” development. However, it also acknowledges the possibility that portions of the area may be districted “M-2 General Industrial” under the City’s land use bylaw, which would allow a much broader range of industrial development. It is possible that uses having potential negative impacts extending east of Range Road 250/9th Street could be approved by the City of Leduc. Planning immediately east of Range Road 250/9th Street must take this possibility into account.

The Business Industrial designation is intended to provide a transitional use between the City of Leduc’s industrial area to the west and future estate residential development nearer the lake. It will be supported by the access and exposure available from Range Road 250/9th Street.

The type of development proposed is a combination of light industrial and business developments having a minimum potential for offsite impact such as noise, dust, vibration, light pollution, and odour. This designation also offers opportunities for warehouse commercial and service commercial uses.

The following policies apply within the Business Industrial designation:

5.4.1 Development within the Business Industrial area must provide for adequate buffering from the residential development proposed to the east. The configuration of the required buffer will be determined by the County at the outline plan stage and may include construction of a landscaped berm.

5.4.2 No development shall be approved that would produce airborne contaminants, dust, vibration, light and noise emissions, likely to have a detrimental impact on existing or planned residential areas.

5.4.3 Development applications for individual sites shall be reviewed with consideration of the potential visual impact on residential development to the east. Conditions regarding landscaping and/or special architectural requirements shall be imposed to ensure that each development is aesthetically pleasing when viewed from the (future) residential development to the east.

5.4.4 The uses and regulations for the small Light Industrial area located at the intersection of 65th Avenue/Township Road 500 and Range Road 250/9th Street shall be subject to joint planning between Leduc County and the City of Leduc in conjunction with agreements for the construction of the road alignment east of this area shown conceptually in Figure 7 (see 6.1.6 and 9.5) and in light of the
proposed uses within the North Leduc Industrial Area Structure Plan east of the existing Range Road 250 right-of-way.

5.5 Estate Residential

The Estate Residential designation in this plan gives expression to the County's desire to take full advantage of the amenity offered by Saunders Lake itself and the adjacent slopes. It represents a balance between large lot country residential development, such as is available in other parts of the County, and small lot suburban residential development as is offered by the City of Leduc.

While it is possible that this type of residential development may ultimately be economically viable along the south half of the lake, the most immediate opportunity for development of this type is the area just west of the lake and north of Township Road 500. The majority of this area slopes toward the lake, offering the potential for views of the lake. A majority of this area is affected by the current AVPA Regulation (see 3.7) and as an interim measure is classified in Figure 7 as “Special Study Area.” Once the proposed AVPA Regulation is adopted by the Province, an amendment will be required to include Residential Estate use throughout the Special Study Area, as shown in the Proposed Figure 7 (Appendix 1).

The following policies apply within the Estate Residential designation:

5.5.1 The minimum lot area shall be 0.2 ha (0.5 acre). While it is recognized that any area structure plan has a degree of inherent flexibility, this minimum lot area shall not be relaxed or varied (except on a lot specific basis) without consultation with the City of Leduc. Any proposed general reduction in the minimum lot area will require an amendment to this plan.

5.5.2 Re-subdivision of residential lots under 0.4 ha (1.0 acre) will not be permitted.

5.5.3 All residential lots are to be serviced with municipal sanitary and water.

5.5.4 No new residential development shall be permitted within the 30 NEF contour.

5.6 Communally Serviced Residential

The Communally Serviced Residential land use designation has been applied to an area on the east side of the lake, north of Township Road 500.

Because of the intervening Blackmud Creek valley, the extension of municipal water and sewer services to this area may be impractical until such time as additional regional services are extended east of Blackmud Creek. However, Hydrogeological Consultants Ltd. has identified this area as having a greater potential potable water supply than most of the remainder of the plan area. An opportunity therefore exists to allow residential development prior to the extension of regional and municipal services to the area. It must be noted, however, that, based on the report by Hydrogeological Consultants Ltd.,
the extent of Communally Serviced Residential development possible in the area is likely limited by the quantity and quality of potable groundwater available.

Communally Serviced Residential is proposed as a long-term interim use designation with the expectation that development within the area will be required to connect to municipal services when such services become available.

The following policies apply within the Communally Serviced Residential designation:

5.6.1 Development will take the same form as in the Estate Residential area with a minimum lot area of 0.2 ha.

5.6.2 The unit density of Communally Serviced Residential lots shall not exceed 0.78 lots per developable hectare (prorated such that the total residential lots will not exceed 50 lots per quarter section), until such time as municipal sewer and water services are available.

5.6.3 Remnant developable lands will remain as agricultural with no further residential subdivision permitted until municipal sewer and water services are available.

5.6.4 All residential lots shall be served by a communal sanitary sewer system and a communal water supply. It is assumed that the sewer system would drain to a common holding/pump out tank. Other technologies, however, may be considered.

5.6.5 The communal systems shall be operated and maintained by a home owners’ association or condominium corporation until permanent connections to municipal services are made, at which time the County will take responsibility for the infrastructure.

5.6.6 Communal water and sewer systems shall be designed such that they can be practically integrated into future municipal systems when services are extended to this area.

5.6.7 All subdivisions will be required to connect to such municipal systems when they become available, and this requirement shall be noted through caveats registered against the titles of all new residential lots.

5.6.8 The import of trucked water for communal distribution will not be permitted. On site groundwater or a connection to municipal water must be used as the source for the communal water system.

5.6.9 The availability of an adequate groundwater supply must be assessed in detail at the outline plan stage. This assessment must take into account the cumulative effects on groundwater supplies of other existing or approved development in the area. Limitations on the supply of potable water may reduce the amount of residential development that can be approved.

5.6.10 No residential development shall be permitted within the 30 NEF contour.

5.7 Country Residential

A small 80 ha area of land in the southeast plan area has been identified as Country Residential. This area has been identified as Country Residential due to the combination
of a FAR of less than 41% (Figure 5) and the potential for a potable groundwater supply (Figure 6).

Country Residential subdivisions would be considered in this area subject to the following policies:

5.7.1 The availability of an adequate groundwater supply must be assessed in detail at the outline plan stage. This assessment must take into account the cumulative effects on groundwater supplies of other existing or approved development in the area. Limitations on the supply of potable water may reduce the amount of residential development that can be approved.

5.7.2 Direct access from residential lots onto Highway 623 will not be permitted.

5.8 Agricultural Residential Reserve

The Agricultural Residential Reserve designation has been applied in areas where some form of residential development will be appropriate in the future when adequate municipal services are practically available. These areas generally do not have good supplies of groundwater to support communal water systems. However, by virtue of their proximity to the lake and/or future residential development within the City of Leduc, they have long-term potential for some form of residential development. Given the time that will elapse before development occurs, the County acknowledges that decisions regarding the specific form of residential development to be provided in these areas are premature.

The following policies apply within the Agricultural Residential Reserve designation:

5.8.1 Land within the plan area designated Agricultural Residential Reserve will remain subject to the Agriculture A designation and other relevant policies of the Leduc County Municipal Development Plan as amended, except that the following uses identified in Policy 3.2.1 of the Municipal Development Plan are excluded: intensive animal; rural industrial and commercial; and country residential.

5.8.2 An amendment to the Saunders Lake Area Structure Plan is required in order for multi-lot residential, intensive animal, rural industrial, or commercial uses to be accommodated within the area currently identified as Agricultural/Residential Reserve.

5.8.3 Any amendment to allow multi-lot residential development shall be consistent with policy 5.5.1 with respect to minimum lot area.

5.9 Waste Management Facility

This designation has been applied to land currently licensed for landfill operations. This facility is operated by the Leduc and District Regional Waste Management Authority.

The Subdivision and Development Regulations under the Municipal Government Act provide for a development setback area of 450 metres from a landfill operation for a
range of land uses including residential development. For convenience, Figure 7 shows the 450 metre buffer measured from the parcel property lines where the landfill is located.

The Leduc and District Regional Waste Management Authority currently has sufficient lands under license to meet projected landfill needs until 2020. The land currently owned by the Authority is greater than that presently under license. Prior to expansion of the landfill, the Authority must meet several Provincial regulations and receive a license granted by the Province. If the Province grants a license for an expansion of the facility, the 450 metre setback will automatically be expanded regardless of the detail within this Area Structure Plan. An amendment reflecting the expanded landfill facility and buffer would not be required as the Provincial Regulations restricting subdivision within the 450 metre buffer take precedence over this plan.

The Authority plans to retain, in its natural state, the treed watercourse and ravine that passes east/west through the identified site. This will allow the creation of a continuous open space connection between Saunders Lake and Telford Lake in the City of Leduc.

The following policies apply within the Waste Management Facility designation:

5.9.1 The County will, through its development permitting powers under the Municipal Government Act, confirm the Authority’s intention to allow the watercourse, its side slopes, and associated vegetation to remain generally in their natural state.

5.9.2 If expansion of the licensed operational area of the landfill is approved by the Province, an amendment to this plan reflecting the new boundary and expanded buffer area will not be required.

5.10 Agriculture

Figure 7 shows where areas to which the Agriculture designation has been applied.

South of the waste management facility, the land that is not within the landfill buffer is a mixture of higher and lower capability agricultural land. The City’s Municipal Development Plan does not identify a future urban land use for the part of the City immediately west of the municipal boundary. Instead, it designates the area within the City as “Agriculture”. The means by which these areas southwest/southeast of the landfill site will be provided with municipal services in the distant future is uncertain at this time. This area is therefore proposed to remain designated Agriculture until such time as the two municipalities undertake a joint planning exercise to determine how development should proceed in this area.

The situation south of Highway 623 is similar. The land is a mixture of high and low agricultural capabilities and its designation for a particular urban or semi-urban use is premature at this time.
The following policies apply within the Agriculture designation:

5.10.1 *Land within the plan area designated Agriculture will remain subject to the Agriculture A and B designations and other relevant policies of the Leduc County Municipal Development Plan as amended.*

5.10.2 *In addition to Municipal Development Plan policy 2.2.1(c), potential rural industrial and commercial uses shall be compatible with future land uses as designated in this plan.*

5.10.3 *Municipal services (water, sanitary sewer) shall not be provided in the agricultural area.*

5.11 Land Use Distribution

The plan area is divided into several different land uses, including four residential uses. Agricultural is the most extensive use (566 ha) with the combined residential uses within the plan representing 40% of the developable lands (796.9 ha).

Land use and population statistics based on ultimate development are provided in Table 1 on the following page. It is assumed that the Agricultural Residential Reserve
Table 1 Land Use Statistics

<table>
<thead>
<tr>
<th>Description</th>
<th>Gross Plan Area</th>
<th>Developable Area</th>
<th>Net Developable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Plan Area</td>
<td>2,718.0</td>
<td>1,985.3</td>
<td>1,419.3</td>
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<tr>
<td>Open Space / Natural Area</td>
<td>493.4</td>
<td></td>
<td>324.0</td>
</tr>
<tr>
<td>Lake</td>
<td>239.3</td>
<td></td>
<td>131.1</td>
</tr>
<tr>
<td>Developable Area</td>
<td>1,985.3</td>
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<td>566.0</td>
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<tr>
<td>Agricultural Area</td>
<td>239.3</td>
<td></td>
<td>239.3</td>
</tr>
<tr>
<td>Net Developable</td>
<td>1,419.3</td>
<td></td>
<td>1,398.6</td>
</tr>
</tbody>
</table>

1 Municipal Reserve (10% Developable Lands)
2 Estate Residential
3 Communal Residential
4 Country Residential
5 Agricultural Residential Reserve
6 Business/Light Industrial
7 Commercial
8 Waste Management Authority
9 Transportation / PUL

Please note that developable areas for the residential, business, and commercial uses have accommodated reductions for MR (10%) and Transportation/PUL (25%)

The majority of the Estate Residential Area will be required to be amended into the Development Concept (Figure 7) once the proposed (as of the date of this Draft) Airport Vicinity Area (AVPA) Regulation is adopted or the existing one is amended. Please see Proposed Figure 7, Appendix 1, for the proposed full Estate Residential area.

Projected Population

<table>
<thead>
<tr>
<th>Description</th>
<th>Area (ha)</th>
<th>Dwellings Per Dwellings</th>
<th>Number of People / Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ha</td>
<td>acre</td>
</tr>
<tr>
<td>2 Estate Residential</td>
<td>251</td>
<td>4.00</td>
<td>1.60</td>
</tr>
<tr>
<td>Communal Residential (pre municipal servicing)</td>
<td>112</td>
<td>0.78</td>
<td>0.31</td>
</tr>
<tr>
<td>3 Communal Residential (additional density following municipal servicing)</td>
<td>112</td>
<td>3.22</td>
<td>1.29</td>
</tr>
<tr>
<td>Country Residential</td>
<td>55</td>
<td>0.50</td>
<td>0.20</td>
</tr>
<tr>
<td>Agricultural Residential Reserve</td>
<td>380</td>
<td>4.00</td>
<td>1.60</td>
</tr>
<tr>
<td>Total</td>
<td>798</td>
<td>4.00</td>
<td>1.60</td>
</tr>
</tbody>
</table>

3 although the minimum residential lot size is 0.2 ha, the statistics assume that the average residential lot size will be 0.25 ha.
areas will ultimately be developed for estate residential use. Future municipal reserve contributions and estimated land requirements for circulation have been calculated out of the non-agricultural uses.

When all identified residential lands are fully developed, it is estimated that there will be 2,998 residential dwellings with a population of approximately 8,700. Until municipal services are extended along the east side of the lake, however, the Communally Serviced Residential and Agricultural Residential Reserve areas cannot be developed to their full potential. Until services are extended, the interim residential development capacity in the plan area will be approximately 1,119 dwellings.

6 TRANSPORTATION NETWORK

The schematic roadway network is shown on Figure 7.

The northern east/west highway, Airport Road, is presently a four lane roadway from Highway 2 east to Range Road 250/9th Street and continues eastward to Highway 814 as a 2 lane highway. Based on projected population and traffic figures, this road (with upgrades to key intersections) will adequately accommodate development proposed by this plan.

The southern east/west highway, Highway 623, should function adequately with the current two lane paved standard, except for the section west of Range Road 245, which will require upgrading to a 4 lane divided standard. The intersection with Range Road 245 will require upgrading to provide proper channelization.

Township Road 500/65th Avenue traffic to/from the City of Leduc will increase by a projected 4900 vehicles per day due to development in the plan area. This is not expected to have a significant impact on upgrading requirements within the City of Leduc.

Township Road 500 east to Highway 814 should be developed to a two lane paved standard.

It is anticipated that Range Road 250/9th Street and Range Road 245 will be made continuous along the west boundary of plan area, as contemplated in the City of Leduc Municipal Development Plan. The County has requested that this road be built as a four lane arterial between Airport Road and Township Road 500 as it will be handling a large amount of industrial traffic from future development in both the County and the City. South of Township Road 500 to Highway 623, this road can be constructed to a two lane arterial standard. Channelization will be required at the intersections with Airport Road and with Highway 623.
Highway 814 should function adequately as a two lane paved highway east of the plan area. However, north of Airport Road the projected traffic volumes indicate that the highway will have to be twinned in the future.

Two collector road systems to serve the internal workings of the future development area, one on each side of the lake, have been identified schematically. The specific alignment of these collector roads will be established at the Outline Plan stage. They will convey local residential traffic to the surrounding arterial roads/highways.

The locations of these collectors in the northwest plan area have been aligned in consideration of future roadways in adjacent plans. The connections onto Range Road 250/9th Street have been located such that they can form four-way intersections with future connections identified in the North Leduc Industrial ASP. Access onto Range Road 250/9th Street is to have a minimum spacing of 800m or such greater or lesser intervals as determined by the two municipalities, taking into account the Transportation Association of Canada guidelines.

The collector serving development on the east side of the lake will connect to Airport Road via Range Road 244 to the north. Due to topographic constraints, a collector connection south to Highway 623 or east to Highway 814 from the southeast plan area is likely not feasible. The collector access/egress to the southeast plan area will be from Township Road 500 and south on Range Road 243.

The following policies apply to roadway development in the plan area:

6.1.1 The County will establish a cost sharing mechanism such that all developable lands will contribute to the ultimate transportation network for the plan area.

6.1.2 As residential and business industrial subdivision occurs, local roads (and collectors as required) shall be developed to a two lane paved standard. These roads are to be constructed, to the satisfaction of the County, at the cost of the developer.

6.1.3 All lands will contribute proportionately to the cost of required arterial road upgrades. Actual construction shall be conducted with the development that triggers such upgrades, with recoveries from other benefiting developers.

6.1.4 The County may establish and charge development levies for roadways installed and/or upgraded by developers and/or the County.

6.1.5 Improvements to Range Road 250/9th Street and Range Road 245 will be cost-shared between the County and the City as per the Annexation Agreement. The re-alignment of these roads to make them continuous will require new cost sharing agreements between the County and the City. These should be based on detailed long range transportation planning undertaken with the cooperation of the two municipalities.

6.1.6 Development within the plan area may have an impact on 65 Avenue within the City. As development occurs, a joint traffic impact study will be required to
assess these potential impacts and determine the need, if any, for intermunicipal agreements regarding joint responsibilities for the cost of upgrades and/or maintenance of 65 Avenue.

6.1.7 Direct access to new residential lots shall be to local roads only.

7 MUNICIPAL WATER AND SANITARY

Figure 8 shows a conceptual servicing scheme for the plan area.

In the long term, both the east and west sides of the lake will be serviced with municipal water and sanitary services. To ensure that this is possible, the design and construction of these systems (particularly the first stages) must be properly oversized to accommodate lands to be serviced in the future.

7.1.1 Prior to any development, detailed engineering reports must be prepared by the proponent and accepted by the County.

7.1.2 Services shall be constructed with appropriate oversizing to accommodate future development within the plan area.

7.1.3 The County shall prepare a mechanism by which a developer front-ending the cost of over sizing services will be reimbursed by future developers as they utilise the services.

7.1.4 The County may establish and charge development levies for utility and/or stormwater facilities installed by developers and/or the County.

Due to the physical separation created by the lake, the east and west sides of the plan area must be serviced by separate systems.

7.2 West of Saunders Lake

The northwest area of the plan is most readily serviceable with water and sanitary connections available within 0.8 km. Sanitary servicing will be by gravity to a lift station on Airport Road. From this lift station, a connection will be made to the SERTS line. Municipal water servicing can connect to existing mains to the west on Airport Road or north to the distribution line between Section 18 and 19-50-24-4. It is anticipated that as subdivision and development occur, both the sanitary and water lines will be extended through the area within the local or collector road rights-of-way.

A sanitary lift station will be required to service development south of Township Road 500. County lands, and potentially some land within the City’s boundary, will be able to drain by gravity north to the proposed lift station and then into the gravity system north of Township Road 500.
An opportunity for intermunicipal servicing exists in the west area of the plan. West of Range Road 250/9th Street, the Leduc North ASP identifies storm and water connections east to County lands. Future connections of collector roads, sanitary drainage, and stormwater drainage must be addressed in detail at the outline plan and subdivision stages.

7.3 East of Saunders Lake

Servicing on the east side of the lake will start at the north and expand southward as development progresses.

Sanitary services will be extended east across the Blackmud Creek. If this expansion follows development on the west side of the lake, the sanitary tie-in location would be the lift station identified on Airport Road, but if the east side is first to connect to the SERTS line the connection point would be as previously described. A lift station is required on Airport Road to connect with the infrastructure on the west side of the creek. The developable areas north of Township Road 500, and approximately ¼ mile south of Township Road 500 will drain by gravity to the lift station in Airport Road. The Agricultural Residential Reserve lands further than ¼ mile south of Township Road 500 will drain by gravity into a lift station that will then tie into the gravity system north of Township Road 500. It is anticipated that as subdivision and development occur, both the sanitary and water lines will be extended through the area within the local or collector road rights-of-way.

To ensure proper flows and pressure, it is projected that the water system on the east side of the lake will have to be supplemented by a booster station and a reservoir. These facilities are to be constructed as required.

The two existing country residential developments just outside the east boundary of the plan area (Valley View and Sunnyville) may connect, at owners’ expense, to municipal water and sanitary services as they become available to their area.

8 STORM WATER MANAGEMENT

The ultimate receiving body for stormwater from the plan area is Saunders Lake. The majority of the plan area naturally drains toward the lake. Stormwater runoff must be properly managed to ensure that the water entering the natural water body is of a high quality with a low level of suspended solids.

The plan area has been divided into 12 drainage basins shown conceptually in Figure 9. Within each basin, stormwater management facilities will drain via roadside ditches,
linkages between stormwater management facilities, and other surface channels to outfalls into Saunders Lake. As acknowledged in the City of Leduc’s Leduc North ASP, detailed plans for storm water drainage in the area west of Range Road 250/9th Street must account for future development in the Saunders Lake plan area.

Stormwater management shall be provided in accordance with the following policies:

8.1.1 The County will not allow stormwater management facilities as part of every development. Larger “communal” facilities shall be created to efficiently manage the quantity and quality of stormwater discharged into Saunders Lake. To ensure an efficient stormwater management system, owners will have to coordinate development at the outline plan stage to ensure proper usage and location of stormwater management facilities.

8.1.2 Permanent stormwater management facilities shall be a minimum of 2.0 ha in size.

9 IMPLEMENTATION STRATEGY

9.1 Implications for Other Municipal Plans and Bylaws

The implementation of this plan may require amendments to the Land Use Bylaw to create land use districts compatible with this plan.

The County is presently updating its Land Use Bylaw. Appropriate districts may be included in this revised bylaw. In some cases, implementation of this plan may require the use of a direct control district.

9.2 Outline Plan

This plan addresses future development around Saunders Lake in general terms. Prior to re-districting and subdivision, it will be necessary for the County to approve detailed outline plans to ensure that individual developments are properly planned.

9.2.1 Prior to the approval of districting or subdivision that would allow development to proceed, detailed outline plans shall be prepared by the applicant and accepted by the County.

9.2.2 Each outline plan shall, to the satisfaction of the County, include a practical planning area based on natural and/or servicing boundaries and extending, if necessary, beyond the proponent’s land ownership.

9.2.3 This outline plan shall show how the proposed development will relate to its neighbours in terms of sound/visual/dust impacts, access requirements, traffic impacts, provision and extent of municipal and environmental reserve, environmental, historical, palaeontological and archaeological considerations, identification of landscaping and buffering requirements/standards, storm water drainage and natural drainage courses, the provision of municipal utility and community services, the anticipated sequence of development, and other
considerations deemed relevant by the County, all to the satisfaction of the County.

9.2.4 Outline plans shall be subject to public review and comment prior to their consideration for approval.

9.3 Development Financing

Within this plan area, it is the County's policy to require development proponents to take full financial responsibility for the extension of any and all municipal utility services required to support the development. This includes the initial capital, or "front end", cost. In accordance with the provisions of the Municipal Government Act, the County will endeavour to ensure that the development proponent receives appropriate compensation from future benefiting developments as they occur.

9.4 Residential Growth

Residential growth within the plan area is difficult to predict since the Estate Residential form is relatively new to the County. However, it is possible to provide an indication of the likely timing of residential growth in the plan area by extrapolating recent growth trends in the County and in the Edmonton region, while making reasonable assumptions regarding the impact of changes in the types of housing available and the distribution of future growth within County.

According to Alberta Municipal Affairs statistics, the County's recent growth rate, expressed in terms of dwelling units, has been about 1% per year. This is about 50 units per year currently. The City of Leduc’s municipal development plan projects future growth at a low rate of 1% per year, a medium rate of 2% per year, and a high growth rate of 3% per year. The City of Edmonton projects that the Edmonton Census Metropolitan area will grow at a rate of approximately 1.5% to 2009.

Based on expectations of a buoyant economy in general and additional growth resulting from the broader range of housing opportunities in the County, it is possible to assume an annual increase in residential units of 2% per year. To provide a better indication of potential growth, a low rate of 1.0%, a medium rate of 2%, and a high rate of 3.0% have been calculated.

Not all the County's growth will occur in the Saunders Lake area. For present purposes, it is assumed that approximately 20% of the growth will occur within the plan area, and that approximately 16% of the County's annual residential growth will be located in the Saunders Lake Estate Residential area (subject to an amendment to the existing AVPA Regulation, or adoption of the AVPA Regulation proposed at the time of consideration of
this ASP for adoption, see proposed Figure 7, Appendix 1). The remainder is expected to be absorbed by the Communally Serviced area east of the lake. It is further assumed that development in the Saunders Lake area will begin to occur no earlier than 2006 because of the time required to obtain development approvals and to extend municipal services to the area.

The Saunders Lake plan projects approximately 1000 estate residential dwelling units in the northwest Estate Residential area in proposed Figure 7, Appendix 1. Based on the assumptions described above, the total numbers of units absorbed in the Estate Residential area will be as shown in the following table. The population figures are calculated by multiplying the number of dwelling units by an assumed 2.9 persons per unit (2001 federal census).

### Table 2 Dwelling Unit/Population Growth for Northwest Estate Residential Area

<table>
<thead>
<tr>
<th>Growth Rate</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
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</thead>
<tbody>
<tr>
<td>1.0% Units</td>
<td>41</td>
<td>85</td>
<td>131</td>
<td>179</td>
<td>230</td>
</tr>
<tr>
<td>Population</td>
<td>120</td>
<td>247</td>
<td>379</td>
<td>519</td>
<td>666</td>
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<tr>
<td>2.0% Units</td>
<td>85</td>
<td>178</td>
<td>281</td>
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<td>521</td>
</tr>
<tr>
<td>Population</td>
<td>245</td>
<td>516</td>
<td>815</td>
<td>1145</td>
<td>1510</td>
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<tr>
<td>3.0% Units</td>
<td>129</td>
<td>280</td>
<td>453</td>
<td>655</td>
<td>889</td>
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<tr>
<td>Population</td>
<td>375</td>
<td>811</td>
<td>1315</td>
<td>1900</td>
<td>2578</td>
</tr>
</tbody>
</table>

This suggests that at a growth rate of 3.0%, half of the dwelling units in the area designated for Estate Residential development would be absorbed by 2022. At a growth rate of 1.0%, only about 23% of the units would have been absorbed by 2030.

These calculations are not intended as a projection of growth, but as an indication that the land use designations imposed by this plan address ultimate development rather than short to medium term growth.

### 9.5 Development Sequence

The County intends that development will proceed on the basis of the availability of adequate road access and, where applicable, the availability of municipal water and sewer. This reflects the County’s policy requiring development proponents to take full financial responsibility for the extension all municipal utility services required to support the development (Section 9.3).
It is intended that development will commence in the northwest portion of the plan area and proceed southward as shown in Figure 10, pending an amendment to the existing AVPA Regulation, or adoption of the AVPA Regulation proposed at the time of consideration of this ASP for adoption (see proposed Figure 7, Appendix 1). More detailed staging within local areas will be required as part of the outline plans described in Section 9.2 of this plan.

While the sequence of Business Industrial development is expected to be in a north to south direction as adequate road access is available and water and sewer services are extended from Airport Road, this sequence may be varied depending on the final sequence of development of lands within the North Leduc Industrial Area Structure Plan immediately to the west (i.e. access roads to Range Road 250/9th Street, service extensions to areas in close proximity to the Saunders Lake plan area).

The development of the triangular area designated light industrial in the southwest corner of Stage 6 will depend on the sequencing of development in the adjacent City of Leduc and the finalization of the new alignment of Range Road 250/9th Street/Range Road 245.

As development in the northwest is being completed, a second development area is expected to commence in the northeast and progress to the southeast. However, it should be noted that the area designated as Communally Serviced Residential may be partially developed prior to the introduction of municipal servicing and therefore could be developed concurrently with the northwest area.

Recreational and other non-residential developments will be developed as dictated by demand for such uses.

9.5.1 The County may amend this plan to apply an Estate Residential designation to an area currently designated as Communally Serviced Residential or Agricultural Residential Reserve only if:
   a) the lands in any adjacent Estate Residential area or Communally Serviced Area are two thirds built out; and
   b) municipal water and sewer services have been extended to the boundary, or are in very near proximity to the land being considered for redesignation to Estate Residential.

9.5.2 In the case of consideration of an Estate Residential area proposed next to an existing Communally Serviced Residential area, municipal water and sewer services must be made available to the existing Communally Serviced Residential Area, along with a strategy for conversion of the Communally Serviced Residential Area to a Residential Estate area.
The requirements regarding the preparation of local outline plans prior to re-districting and subdivision approvals (Section 9.2) and, in the case of Communally Serviced Residential, for connection to municipal services when available (Section 5.6.7) will continue to apply.
9.6 Intermunicipal Coordination

The Leduc Intermunicipal Development Plan contains specific policies regarding the referral of proposed plans, re-districtings, subdivisions, etc. to the City of Leduc for comment. It also encourages cooperation and coordination between the two municipalities with respect to the provision of major utilities and drainage.

9.6.1 The County will refer development applications within the plan area to the City of Leduc in accordance with the provisions of the Leduc Intermunicipal Development Plan.
APPENDIX

1. Proposed Figure 7

Development Concept Upon AVPA Regulation Change
By-Law No. 15-04 was adopted August 23, 2005 to enact the Saunders Lake ASP

Bylaw Amendments to 15-04 are as follows

<table>
<thead>
<tr>
<th>BYLAW NO.</th>
<th>DATE</th>
<th>LEGAL</th>
<th>AMENDMENT/ZONING DISTRICT TO-FROM</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-06</td>
<td>May 23, 2006</td>
<td>(S ½) SW 28-49-24-4</td>
<td>From Agricultural (AG) to Country Residential (CR)</td>
</tr>
<tr>
<td>13-07</td>
<td>April 10, 2007</td>
<td>NW 7-50-24-4</td>
<td>Special Study Area removed and replaced by Business Industrial and Buffer designations</td>
</tr>
<tr>
<td>16-07</td>
<td>April 24, 2007</td>
<td>NW 7-50-24-4</td>
<td>Special Study Area is removed</td>
</tr>
<tr>
<td>21-07</td>
<td>June 5, 2007</td>
<td>NW 22-49-24-4</td>
<td>Land redistricted from Recreation/Open Space to Agricultural/Country Residential</td>
</tr>
<tr>
<td>35-07</td>
<td>August 28, 2007</td>
<td>NW 22-49-24-4</td>
<td>Bylaw 21-07 is repealed. Land be redesignated from Agricultural to Country Residential</td>
</tr>
<tr>
<td>13-11</td>
<td>March 24, 2011</td>
<td>N/A</td>
<td>Text Amendment to Section 5.1</td>
</tr>
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</table>
BY-LAW NO. 11-06
LEDUC COUNTY

A BY-LAW OF LEDUC COUNTY, IN THE PROVINCE OF ALBERTA, TO AMEND THE LEDUC COUNTY SAUNDERS LAKE AREA STRUCTURE PLAN BY-LAW NO. 15-04.

WHEREAS the Council of Leduc County deems it to be in the public interest to amend the Leduc County Saunders Lake Area Structure Plan Bylaw No. 15-04;

NOW THEREFORE, be it resolved that the Council of Leduc County, duly assembled, hereby enacts that Bylaw No. 15-04 be amended as follows:

1) That those lands described as Pt. S1/2 S.W. 28-49-24-W4th (+32.4 ha), be amended from Agricultural (AG) to Country Residential (CR).

This By-law shall take effect on the date of the third reading.

Read a first time this 23rd day of May, A.D., 2006.

Read a second time this 23rd day of May, A.D., 2006.

Read a third time with the unanimous consent of Council Members present and finally passed this 23rd day of May, A.D., 2006.

__________________________
REEVE

Seal

__________________________
DEPUTY COUNTY MANAGER
BY-LAW NO. 13-07
OF LEDUC COUNTY
IN THE PROVINCE OF ALBERTA

THIS BYLAW AUTHORIZES THE COUNCIL OF LEDUC COUNTY TO AMEND BYLAW NO. 15-04.

WHEREAS
The Council of Leduc County deems it to be in the public interest to amend the Leduc County Saunders Lake Area Structure Plan Bylaw No. 15-04;

NOW THEREFORE, THE COUNCIL OF LEDUC COUNTY, DULY ASSEMBLED, ENACTS AS FOLLOWS:

That Bylaw No. 15-04 be amended as follows:
The Special Study Area, Commercial and Business Industrial land use designations in the West Half of the N.W. 7-50-24-W4th, as shown on Figure 7 of the Saunders Lake Area Structure Plan, are removed and replaced by the Business Industrial and Buffer designations shown in Schedule “A” attached.

DONE AND PASSED in open Council assembled at Nisku, in the Province of Alberta, this 10th day of April, A.D. 2007.

Read a first time this 10th day of April, A.D., 2007.

Read a second time this 10th day of April, A.D., 2007.

Read a third time with the unanimous support of the Council Members present this 10th day of April, A.D., 2007.

John Wesley
REEVE

S E A L

COUNTY MANAGER
BY-LAW NO. 16-07
OF LEDUC COUNTY
IN THE PROVINCE OF ALBERTA

THIS BYLAW AUTHORIZES THE COUNCIL OF LEDUC COUNTY TO AMEND BYLAW NO. 15-04.

WHEREAS
The Council of Leduc County deems it to be in the public interest to amend the Leduc County Saunders Lake Area Structure Plan Bylaw No. 15-04;

NOW THEREFORE, THE COUNCIL OF LEDUC COUNTY, DULY ASSEMBLED, ENACTS AS FOLLOWS:

That Bylaw No. 15-04 be amended as follows:

Substitution of Figure 7 Development Concept, as shown in the Appendix to the Area Structure Plan, for Figure 7 Development Concept with Special Study Area. Section 3.7 Special Study Area, as contained in the Area Structure Plan is hereby removed.

DONE AND PASSED in open Council assembled at Nisku, in the Province of Alberta, this 24th day of April, A.D. 2007.

Read a first time this 24th day of April, A.D., 2007.

Read a second time this 24th day of April, A.D., 2007.

Read a third time with the unanimous support of the Council Members present this 24th day of April, A.D., 2007.

John Whaley
REEVE

S E A L

COUNTY MANAGER
BY-LAW NO. 21-07
OF LEDUC COUNTY
IN THE PROVINCE OF ALBERTA

THIS BYLAW AUTHORIZES THE COUNCIL OF LEDUC COUNTY TO AMEND BYLAW NO. 15-04.

WHEREAS
The Council of Leduc County deems it to be in the public interest to amend the Leduc County Saunders Lake Area Structure Plan Bylaw No. 15-04;

NOW THEREFORE, THE COUNCIL OF LEDUC COUNTY, DULY ASSEMBLED, ENACTS AS FOLLOWS:

That Bylaw No. 15-04 be amended as follows:

That those lands described as Lot B, Plan 882 0934, Pt. N.W. 22-49-24-W4th containing +32.53 ha (+80.38 acres) be redistricted from Recreation/Open Space (ROS) to Agricultural/Country Residential (AG/CR) District, attached as Schedule “A” which forms part of this Bylaw.

This Bylaw shall take effect on the date of the third reading.

Read a first time this 22nd day of May, A.D., 2007.

Read a second time this 22nd day of May, A.D., 2007.

Read a third time this 5th day of June, A.D., 2007.
Schedule "A"

Bylaw 21-07

[Map with highways and streets labeled: Hwy 623, Rd 243, Hwy 814, Saunderson Lake, Old Lake. A shaded area indicates the subject property.]
BY-LAW NO. 35-07
OF LEDUC COUNTY
IN THE PROVINCE OF ALBERTA

A BYLAW OF LEDUC COUNTY TO AMEND THE LEDUC COUNTY SAUNDERS LAKE AREA STRUCTURE PLAN BYLAW NO. 15-04.

WHEREAS

The Council of Leduc County deems it to be in the public interest to:
1) Repeal Bylaw No. 21-07; and
2) Amend the Leduc County Saunders Lake Area Structure Plan Bylaw No. 15-04;

NOW THEREFORE, THE COUNCIL OF LEDUC COUNTY, DULY ASSEMBLED, ENACTS AS FOLLOWS:

1) That Bylaw No. 21-07 be repealed; and
2) That Bylaw No. 15-04 be amended as follows:

That those lands described as Lot B, Plan 882 0934, Pt. N.E. 22-49-24-W4th containing 32.53 ha (80.38 acres) be redesignated from Agricultural to Country Residential, attached as Schedule “A” which forms part of this Bylaw.

DONE AND PASSED in open Council assembled at Nisku, in the Province of Alberta, this 28th day of August, A.D., 2007.

Read a first time this 28th day of August, A.D., 2007.

Read a second time this 28th day of August, A.D., 2007.

Read a third time with the unanimous support of the Council Members present this 28th day of August, A.D., 2007.

[Signatures]

REEVE

COUNTY MANAGER

* (December 10, 2007)

Please Note: authorization for correction of typographical error will be submitted to Council for approval.
WHEREAS
The Council of Leduc County deems it to be in the public interest to amend the Saunders Lake Area Structure Plan Bylaw No. 15-04;

NOW THEREFORE,
be it resolved that the Council of Leduc County, duly assembled, hereby enacts that Bylaw No. 15-04 be amended as follows:

1. The following be inserted before the last paragraph of Section 5.1:
   Section 5.1:
   Leduc County recognizes that it will take several years for the Saunders Lake area to fully develop as described in this plan. Development within the plan area is dependent on several important variables, such as the availability of municipal services, the extension of transportation infrastructure, development sequencing, and market demands. This plan recognizes that in the interim, land uses that:
   • are compatible with existing and/or anticipated neighbouring developments;
   • do not negatively impact the implementation of the development concept; and
   • are subject to time limitations (with or without extensions)
   may be considered for development in the Saunders Lake area. Sites within the plan area that are developed for interim land uses may require environmental remediation prior to redevelopment consistent with the development concept.

This Bylaw shall take effect on the date of the third reading

Read a first time this 24th day of March, A.D., 2011.

Read a second time this 24th day of March, A.D., 2011.

Read a third time with the unanimous consent of Council Members present and finally passed this 24th day of March, A.D., 2011.

[Signature] MAYOR