LETHBRIDGE COUNTY







INDUSTRIAL-COMMERCIAL LAND USE STRATEGY 2016

October 2016

Approved by Resolution of Council

Prepared for Lethbridge County by



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LETHBRIDGE COUNTY INDUSTRIAL-COMMERCIAL LAND USE STRATEGY

EXECUTIVE SUMMARY

The following is an overview and summary of some of the main study findings and highlighted strategies identified in the report, provided for convenience and a quick synopsis. For a more comprehensive and complete understanding of the present Lethbridge County land use conditions and the suggested industrial-commercial growth strategies, it is recommended the report be read and reviewed in its entirety.



- The main purpose of the strategy is to identify and protect suitable land areas within the municipality that may appropriately be planned to accommodate industrial or commercial development, without unduly affecting other existing uses or conflict with other County policies or goals.
- The primary vision is to create a planning policy framework that will properly plan for and guide the
 growth of business development in Lethbridge County to help support the creation of a stable, healthy
 local economy, based on the principles of sustainable, managed growth.
- In reviewing economic conditions, it appears the County has slightly lost some ground on the average portion of assessment contributed to non-residential assessment over the past 15 years.
- In comparing Lethbridge County's provincial equalized assessment compares to other southern
 Alberta rural municipalities, many have a larger non-residential assessment than Lethbridge County.
 The County has a higher non-residential assessment than the closer rural municipalities of the County
 of Newell, MD of Taber and MD of Willow Creek, most of these have a much higher linear property
 assessment, along with a higher value for machinery and equipment.
- Lethbridge County does not experience the benefits of having a large 'linear property' or 'machinery
 and equipment' component to its equalized property assessment base, which helps many other rural
 municipalities off-set for having a lower non-residential assessment component.
- Between 2000 and 2012, Lethbridge County issued 1,779 development permits, of which 217 were for industrial and/or commercial uses. On average, this represents approximately 12.2 percent of the total permits issued each year.
- The majority of existing industrial-commercial activity is concentrated in the southern portion of the County and has primarily established along main transportation corridors (both highways and rail lines), in close proximity to the urban centres, and in or in close proximity to the established and designated industrial parks.

- The amount of light-industrial/commercial type land use (e.g. shop buildings, trade contractors, equipment service and sales) has traditionally been somewhat higher than industrial processing/manufacturing uses and this trend will likely continue into the foreseeable future.
- On average, 16.6 industrial/commercial development permits were approved and issued each year during the 2000 and 2013.study period. This is somewhat consistent from a past review of permits from 1996 2002.
- Based on the analysis it appears the average use occupies 4.5 acres but the range varies widely, with half being 3.0 acres or less. Applying the range of sizes to the 17 permits and averaging the total yields is a simplistic approach, however, using this method the County may expect 50 60 acres of land consumption, on average, for industrial and commercial uses per year.
- The 50 60 acres figure comprises both isolated uses and the uses that established in the designated industrial parks. Thus, in examining the data and separating the percentages of isolated development (57%) and designated/grouped development (43%), it appears that 25 30 acres may be anticipated per year within designated industrial business park areas based on previous data trends.
- Slightly more land than what is typically developed in a year should be available to prospective business interests, as it takes time to plan for, obtain necessary approvals, subdivide and service land and it cannot be brought to market in a short time frame. A two - three year land acreage inventory may be considered reasonable.
- As part of the strategy the County should try to ensure there is continually available an overall
 minimum of 75 80 acres of readily accessible land amongst the various business parks to
 accommodate development.
- The long-term planning for available land should consider a strategy of situating it in a number of locations rather than one location only, to assist with market choices and locational factors.
- The areas identified for future industrial-commercial growth as types of grouped or clustered land use developments consist of primarily expansions to existing industrial business parks, along with some new areas which are in close proximity to the existing parks (refer to section 5.6).
- As the County does not have its own water treatment facility, the growth of industrial or commercial
 land use is somewhat dependent on the County obtaining and delivering water, entering into
 agreements for treatment of the County's water (under its own license), or planning for uses which
 require limited water supply. It is recognized that overall, any growth area(s) identified will require a
 water delivery strategy or will be restricted to accommodating low volume water users only.
- To take advantage of existing developments and the high interest in the Highway 3 Lethbridge-Coaldale Corridor and Broxburn area, planning for additional industrial-commercial lands must be undertaken as the Highway 3 Corridor should be a 'priority' growth area for Lethbridge County.
- Due to the high interest in the Highway 3 Lethbridge-Coaldale Corridor and Broxburn area, the County, as part of the land use strategy, may want to ensure there is continually readily available 20 - 25 acres of land in this one particular location.
- Wilson Siding and Highway 4 Corridor should be considered as a "priority" growth area due to the
 area transportation networks, including highway and rail-line, and growing interest in the area with
 existing and expanding businesses. In particular, access to the rail transportation network and the
 possibility of spur-trackage is a significant benefit.

- The growth areas identified should not be converted to other incompatible land uses, such as grouped country residential, and an attempt should be made to keep them as unfragmented as possible.
- Where development of new industrial land appears stagnant by the private sector, Council may
 consider playing a strategic and active role either as a land developer through strategic land
 acquisition, or engaging in preplanning process (e.g. undertaking Area Structure Plans), active land
 development, or development partnerships and land sales, to help ensure that suitable land is readily
 available.
- If the County consults with land owners and ascertains there is little to no interest in development of new industrial land, Council should then seriously review and decide if it is feasible to purchase land and/or develop its own business park. Expansion at the airport is one area to focus on, as the County owns the land.
- As the Town of Coalhurst Council has expressed interest in working with the County in developing a joint regional business park, County Council should pursue that opportunity and begin discussions on how that process may evolve, and obtain an understanding and agreement on how it may develop and operate (i.e. servicing, taxes, etc.).
- The County should actively approach and engage those private landowners whose land is identified as a preferred growth area, to gauge interest in developing the land, selling the land, or ascertain long-term interest in using the land., and assist with the process as much as it can.
- In the future, areas which may benefit from or be recipients of water or sanitary sewer service should be protected and identified for industrial-commercial land use and even reserved for those types of businesses that require larger volumes of water for processing.
- It is recognized that none of the potential growth areas identified have had any professional plans (e.g. area structure plans) prepared for them to facilitate subdivision or higher density industrialcommercial development in the foreseeable future.
- Prior to land development occurring, additional planning exercises will need to be done for the
 undeveloped lands identified as growth areas. This would include the preparation and adoption of
 area structure plans, which typically will include servicing information, engineering evaluation on
 soils, storm water management engineering, and a transportation access management strategy.
 Additionally, the provision of adequate water services will need to be considered in the overall
 planning.
- This report has identified over 3,100 acres of preferred growth land areas for industrial-commercial lands. If approximately 30 acres a year on average of industrial-commercial land was developed in business parks, the growth areas identified should provide for a 100 to 120 year land supply.
- To obtain a complete understanding and review of the main growth areas identified, please refer to Part 5 of this report, and in particular section 5.6, 'Growth and Expansion Areas'.
- To review the complete "Key Principles and Recommendations" of this report, please refer, Part 6, 'Strategy and Recommendations'.

LETHBRIDGE COUNTY INDUSTRIAL-COMMERCIAL LAND USE STRATEGY

PART ONE | Overview

1.0 Introduction

This *Industrial-Commercial Land Use Strategy* report is to identify issues and opportunities for the development of industrial-commercial lands in Lethbridge County and present solutions or strategies that will help provide for those economic opportunities while respecting the principles of managed growth.

1.1 Background

Over the last decade the County has experienced increased interest and pressure to accommodate non-agricultural (i.e. industrial and commercial) land use activities on parcels of land within the municipality, particularly in proximity to transportation (highway and rail) corridors and urban areas. There has also been an expansion in the local economy relating to the agricultural/food/chemical processing industries and source-point manufacturing/processing with larger and multi-national businesses, such as Monsanto, Dupont Pioneer, etc. New technologies in the alternative energy (such as biofuels, waste to energy) sectors have also created interest in the establishment of these industries within the municipality. With Lethbridge County being situated in the heart of the irrigation zone of southern Alberta, this presents both opportunities and challenges on parcels of land.

In addition to these external economic forces, Lethbridge County also has an interest and desire to expand its non-agricultural tax base. An objective in the current MDP is to "support commercial and industrial development that will diversify employment opportunities within the County. Further intentions are to provide a positive environment for development, encourage development in suitable locations and mitigate potentially negative impacts to local residents and the environment." The MDP also states that the "County shall direct the location of industrial development towards established industrial parks provided that adequate infrastructure servicing is available."

An issue for the County is the ability or constraints present in providing adequate potable water and sewage treatment for higher intensity types of developments. The County has recognized that although industrial and commercial growth for the municipality is desirable, it wants to proceed in consideration of good land use planning practices and principles of managed growth.

1.2 Purpose and Intent

The purpose of the strategy report is to identify a long term vision and policy framework for Lethbridge County, to provide new opportunities for the diversification of the industrial – commercial sector in the County. The intent of the strategy is to guide future planning decisions and policy development related to business development and the creation of a stable, healthy local economy. Ultimately, a main purpose of the strategy is to identify and protect suitable land areas within the municipality that may appropriately be planned to accommodate industrial or commercial development, without unduly affecting other existing uses or conflict with other County policies or goals.

The identified strategies are meant to assist the County in making decisions on land use and guide non-residential type development to appropriate and desirable areas based on rationale planning policies and Lethbridge County strategic growth objectives.

Terms of Reference were created to guide the development of the report and strategy framework.

1.3 Report Context

The compilation of the *Industrial-Commercial Land Use Strategy* study has been based on a thorough review of the existing and past Municipal Development Plans (MDP), Land Use Bylaws (LUB), Area Structure Plans (ASP), land use studies, strategic plans, the County's Sustainable Community Resource plan, and previous General Municipal Plans (GMP). It also involved reviewing transportation studies, economic studies and reports, Stats Canada data, industrial/commercial land use siting planning standards, and historic documents. It has been prepared in consideration of the Municipal Government Act (MGA), the Alberta Land Stewardship Act (ALSA) and involved communication and input from municipal administration, government agencies (e.g. Alberta Transportation) and some County industry players. The South Saskatchewan Regional Plan (SSRP) also requires a municipal council to consider the Strategic Plan and Implementation Plan in the SSRP when carrying out any function in respect of council's powers, duties and responsibilities. Thus, the SSRP has been carefully considered as part of the overall growth strategy.

As a main goal of the strategy is to identify and map suitable land use locations/nodes to accommodate future industrial and commercial development within Lethbridge County, it is recognized that servicing constraints may ultimately direct where and what types of industries may establish.

1.4 Strategy Plan Vision

The primary vision of the strategy report is to create a planning policy framework that will properly plan for and guide the growth of business development in Lethbridge County to help support the creation of a stable, healthy local economy, based on the principles of sustainable, managed growth.

1.5 Strategy Plan Goals

1. To recognize and promote the importance of industry (business sector) to Lethbridge County.

- 2. To recognize that Lethbridge County as a rural municipality, has the right to non-agricultural and non-residential land use development, and may create policy to support such uses.
- 3. To provide a framework which will facilitate a viable and feasible business sector in the County by addressing land use and locational opportunities and constraints.
- 4. To promote well planned, managed growth when supporting and encouraging the establishment of industrial business parks or centres.
- 5. To promote a strategy and framework for Lethbridge County to provide additional opportunities for industrial-commercial land use development and attract new business ventures to the County.
- 6. To encourage and enable local employment opportunities by expanding and diversifying the local economy and allowing new businesses to establish and succeed.
- 7. To provide flexible and realistic policy framework to enable a successful implementation of the planning strategies.
- 8. To support the planning for industrial-commercial land use with consideration for the planning principles of nodal or clustered type development, mixed land use, and sustainable planning practices.
- 9. To provide for a range of industrial-commercial land use options based on selected land use siting criteria, industry needs, servicing availability, and locational factors.
- 10. To allow additional opportunities to assist with diversifying the County's tax base and enabling a stronger, healthier local economy.
- 11. To recognize the importance of protecting good agricultural land while also allowing opportunities to enhance, expand, and diversify the agriculture industry itself.
- 12. To promote and enable value added agricultural processing to expand and establish within a rural area by creating additional opportunities for businesses and plants to set-up operations within the County closer to the material source.
- 13. To provide businesses and developers with tangible options, realistic land possibilities, and clear policy directions when looking to locate or expand a business in the County.
- 14. To review County plans, policies, and regulations to provide for the recommendations of this report to be implemented.
- 15. To undertake the planning strategies in a manner that considers and protects the Provincial Highway Network as a safe and efficient transportation corridor.

PART TWO | Economic Analysis

2.0 Economic Review

Alberta's economy has consistently been the fastest growing and most stable in the country over the last decade. As a result, it has been experiencing significant population growth and economic expansion. In 2013, Alberta grew by more than 100,000 new residents and by 2024 it is expected that Alberta's population will reach five million. Consequently, Lethbridge County has also experienced growth and development, albeit at a slower and more stable rate. By the end of the year for 2014 and into the beginning of 2015, there is more uncertainty and volatility in the energy sector than usual, and it is affecting the economic outlook for Alberta.

A Provincial Economic Forecast by TD Economics (January 26, 2015) stated that economic activity in Alberta is projected to grind to a virtual standstill in 2015 due to depressed oil prices.¹ The report also projects that real GDP growth in Alberta will inch forward by only 0.5 percent in 2015 before increasing to 1.8 percent in 2016. This is an obvious slow down from 2014, as Alberta led the country in 2014 with estimated GDP growth of 3.8 percent. By comparison, TD Economics expected Canadian economic growth to be 2.0 percent in 2015 and 2.2 percent in 2016.

Conversely, ATB Financial Economics and Research group forecast that real GDP growth for Alberta would be 2.0 percent in 2015.² They found that livestock prices continued to rise steadily in the third and fourth quarters of 2014, and therefore they were of the opinion that this would partially offset the negative shocks in the energy sector. However, the ATB report state that shipments from Alberta manufacturers have leveled off after reaching a record in June of 2014. On a positive note, ATB Financial was of the opinion that non-resource based economies were expected to further benefit from energy cost savings and an accompanying depreciation in the Canadian dollar. It also expected that solid economic growth from the U.S. should also provide a lift to these economies.

Although the entire province is somewhat impacted by the downturn in the energy sector in Alberta, Lethbridge County is fortunate in that its local economy is not heavily dependent on the oil industry directly. The local economy is more diversified and is largely more concentrated on the agriculture sector, food production, and related agri-businesses. These types of businesses may actually see some benefit from energy cost savings and a depreciation in the Canadian dollar. For these reasons, the County needs to continue to move forward in appropriately planning for economic growth. In particular, ensuring there is identified, well-planned, suitably sited commercial/industrial lands, based on the County's principles of managed growth, readily available to potential businesses.

The following section and economic analysis is for the purpose of determining the current context of where Lethbridge County is at and to identify general trends, and is not in itself a detailed or complete indicator of overall economic growth and health of the municipality.

¹ Provincial Economic Forecast Update, January 26, 2015, TD Economics

² Economic Outlook for 2015 Prepared by ATB Financial, Economics and Research, January 5, 2015

2.1 Population

The population in the County has steadily and slowly increased over a 30-year period up until 2006, but in the 2011 census levelled off slightly as shown in Table 1. It is noted that there were some statistical errors observed in much of Statistics Canada 2011 census data, and the 2011 population may not be entirely accurate. Population projections as prepared by the ORRSC (based on Statistics Canada 2011 census data) indicate that over the next 20-year period, the County's population should grow to 11,000 to potentiality just over 13,000 residents (Diagram 1).

TABLE 1
Lethbridge County Population 1981 to 2011

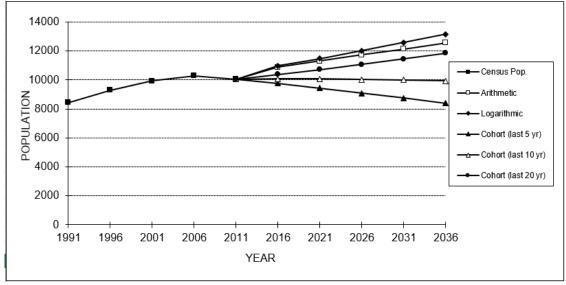
Year	Population	5-Year Rate of Change (%)	Average Change Per Annum (%)
1981	8,213	-11.13	-2.23
1986	8,266	0.65	0.13
1991	8,442	2.13	0.43
1996	9,290	10.05	2.01
2001	9,930	7.3	1.46
2006	10,302	3.75	0.75
2011	10,061	-0.02	-0.005

Population growth itself is not as an important economic health or growth indicator for the County such as it is for urban municipalities. Industry may establish in a rural municipality due to locational factors, source or proximity to resources, transportation linkages, etc., and people employed in these industries may reside in the rural municipality but they also often reside in neighbouring urban centres and commute for employment purposes.

DIAGRAM 1

Lethbridge County Population Projections to 2036

Year	Census Pop.	Arithmetic	Logarithmic	Cohort (last 5 yr)	Cohort (last 10 yr)	Cohort (last 20 yr)
1991	8442					
1996	9290					
2001	9930					
2006	10302					
2011	10061	10061	10061	10061	10061	10061
2016		10880	10980	9782	10091	10399
2021		11305	11490	9449	10074	10725
2026		11730	12024	9095	10038	11074
2031		12155	12583	8754	10006	11465
2036		12580	13167	8408	9950	11863



(Prepared by ORRSC based on 2011 Statistics Canada 2011 Census data)

2.2 Labour Force

Labour force statistics indicate the changing nature of Lethbridge County and employment as it relates to economic activity. For example, in 1996, 46.3 percent of the labour force was engaged in agriculture. The 2001 census indicated that number fell to 37.7 percent, while in 2011 the percentage fell even further to just under 28 percent.

Tables 2 and 3 indicate the sectors of the economy and the employment in each.

A review of the labour force by industry division illustrates that the overall percentage of labour engaged in agriculture was down nearly 10 percent of the total of all industries combined from 2001, a 24 percent decrease over the 10-year review period. Increases in labour force activity were in the fields of construction (up 34 percent from 2001), business and community services (a 27 percent increase from 2001), and public administration, which nearly doubled from 2001. Both manufacturing and the transportation and utility division remained somewhat level over the 10-year period and did not experience growth as far as overall labour force activity.

TABLE 2
Lethbridge County Labour Force Activity Statistics

Labour Force by Activity	2001	2011
In the labour force, both sexes	5,140	4,945
Not in the labour force, both sexes	1,725	1,720
Total population 15 and over	6,865	4,785
Employed, both sexes	5,010	4,785
Unemployed, both sexes	130	155

TABLE 3

Lethbridge County Labour Force By Industry Division 2001 and 2011

Labour Force by Industry Division	2001	% of total	2011	% of total
Agriculture	1,935	37.72%	1,370	27.96%
Mining, quarrying, oil & gas	45	0.88%	75	1.53%
Manufacturing	380	7.41%	340	6.94%
Construction	335	6.53%	450	9.18%
Transportation, warehousing & Utilities	265	5.17%	210	4.29%
Retail and Wholesale	625	12.18%	485	9.90%
Finance & Insurance	135	2.63%	115	2.35%
Business, professional, technical, educational, & Community Services	1,325	25.83%	1,690	34.49%
Public Administration	75	1.46%	165	3.35%
Total All Industries	5,130	100.00%	4900	100.00%

Source: Statistics Canada 2001 and 2011 Census (numbers may not add up due to rounding)

2.3 Assessment Base

In Alberta, equalized assessment is the means of comparing property wealth in a uniform manner for all municipalities. Alberta uses an ad valorem assessment and tax system where property taxes are based on wealth and wealth is measured by the value of property expressed as an assessment.

The Annual Equalized Assessment Report prepared by Alberta Municipal Affairs breaks property down into six major categories:

- residential
- farmland,
- non-residential (which includes the commercial and industrial),

- linear,
- railway, and
- machinery and equipment.

As noted, commercial and industrial uses are classified as non-residential property assessment as defined in section 297(4)(b) of the Municipal Government Act as:

"linear property, components of manufacturing or processing facilities that are used for the cogeneration of power or other property on which industry, commerce or another use takes place or is permitted to take place under a land use bylaw passed by a council, but does not include farm land or land that is used or intended to be used for permanent living accommodations."

Table 4 illustrates the breakdown of equalized property assessment for Lethbridge County between 2005 and 2014 (for the official provincial reporting year as prepared the previous fall). During this period, non-residential assessment has remained fairly constant at 20.7 percent of the total assessment levied each year. In reviewing a similar previous analysis that was done for a period between 1998 and 2002, the non-residential assessment had increased during that five year timeframe and represented approximately 23 percent of the total. Thus, it appears the County has slightly lost some ground on the average portion of assessment contributed to non-residential assessment over the past 15 year study period. Overall, the average portion of non-residential assessment has remained fairly constant over the last ten-years. It may be concluded however, that little significant industrial or commercial development has occurred during this period relative to overall development that has occurred, as growth in the non-residential sector appears to have occurred proportionally to other categories of assessment.

TABLE 4
Lethbridge County Equalized Assessment 2005 to 2009 (report years)

Type of Assessment	2005	2006	2007	2008	2009
Residential	324,204,985	360,322,070	421,755,804	463,367,804	624,659,349
Farmland	154,455,810	155,812,290	155,907,260	156,165,090	156,231,420
Non-residential	182,216,534	192,505,737	221,185,544	243,108,830	291,957,181
Linear	130,418,780	142,938,160	161,018,320	192,466,410	208,886,040
Machinery & Equipment	84,221,100	88,794,590	98,222,430	112,428,390	137,372,200
Railway	3,554,270	3,568,870	3,652,110	3,782,530	5,091,910
TOTAL	879,071,479	943,959,717	1,061,741,468	1,171,319,054	1,424,198,100

Lethbridge County Equalized Assessment 2010 to 2014 (report years)

Type of Assessment	2010	2011	2012	2013	2014
Residential	745,470,434	767,688,679	814,568,561	832,178,759	873,122,024
Farmland	156,160,480	156,283,960	156,188,850	156,215,290	156,314,990
Non-residential	326,160,812	353,365,894	357,090,367	346,965173	358,363,026
Linear	218,400,180	205,428,560	198,216,880	200,135,270	201,980,040
Machinery & Equipment	142,930,430	138,675,490	134,387,200	138,202,610	136,934,120
Railway	9,732,850	5,224,880	4,858,640	5,092,240	5,699,570
TOTAL	1,598,855,186	1,626,667,463	1,665,310,498	1,678,789,342	1,732,413,770

Table 5 illustrates how Lethbridge County's provincial equalized assessment compares to other various rural municipalities in Alberta for 2014. More populated rural areas, and those in close proximity to larger urban centres and major transportation routes, such as Red Deer County and Rocky View County, obviously have a much higher non-residential component to their equalized property assessment. Cypress County and Wheatland County also have a larger non-residential assessment than Lethbridge County, as they both likely benefit from being in proximity to major urban cities and have the Trans-Canada Highway traverse through their boundaries.

TABLE 5

Provincial 2014 Equalized Assessment – Rural Municipal Comparison

Municipality	Residential	Farmland	Non-residential	NR Linear Property	NR Railway	Machinery & Equipment	Grand Total
Cypress Co.	981,019,182	153,617,213	507,968,580	2,603,554,400	23,733,610	886,212,890	5,156,105,892
Newell Co.	700,377,767	132,032,300	347,267,902	2,399,490,240	23,671,680	621,047,900	4,226,707,569
Red Deer Co.	3,103,080,638	164,360,040	1,215,050,650	1,044,450,160	5,698,950	359,914,290	5,892,554,728
Rocky View Co.	10,977,903,901	153,271,170	1,771,196,426	1,057,843,210	10,892,770	480,440,000	14,451,547,477
Taber, MD	492,997,014	170,725,700	175,603,701	901,203,250	5,189,690	343,056,230	2,088,775,585
Wheatland Co.	938,666,818	200,400,850	492,152,887	1,715,553,530	13,716,000	811,382,710	4,171,872,795
Willow Cr. MD	519,398,355	142,010,173	45,272,060	611,539,810	1,934,770	83,117,640	1,403,272,808
Lethbridge Co.	873,122,024	156,314,990	358,363,026	201,980,040	5,699,570	136,934,120	1,732,413,770

The comparison table illustrates that Lethbridge County does have a higher non-residential assessment than the closer rural municipalities of the County of Newell, MD of Taber and MD of Willow Creek. However, it is of interest to note that all three of these have a much higher linear property assessment, and with the exception of the MD of Willow Creek, a higher value for machinery and equipment also.

2.4 Economic Summary

The previously presented population and economic data is provided to identify overall trends and to gauge how activity and the local economy has changed over the defined study analysis period. This brief review of the economy of the County indicates a diversification of the rural area, however, non-residential growth has not significantly increased its share in the overall growth of the County. Agriculture is still the main economic driver of the County, however, agricultural operations can be seen to be getting larger in scales (i.e. less persons employed directly on farms, but farm sizes and operations are increasing in scope, value and in land holdings). To support the fact that agriculture is the main economic engine, an economic impact study prepared for the County in 2014 found that Lethbridge County is the only County in Alberta that generates over \$1 billion in gross farm receipts.³ The report estimated that the County made a contribution of \$1.1 billion to the economy for an impact of \$415 million on Gross Domestic Product.

Over the last decade, industry sectors such as construction, agri-business, retail, service and professional service have experienced increases in activity. Increases in these sectors may, in part, be due to:

- economic health of the urban areas in the County,
- locational factors,
- slow and stable economy and labour market in southern Alberta,
- · spin-off activity from agriculture, and
- the diversification and establishment of new industries/processes, especially those in relation to agriculture and agricultural bi-products.

Likely these trends will continue and council should consider providing sufficient and suitable areas for supporting the diversity of uses.

The economic overview also highlights the fact the Lethbridge County does not experience the benefits of having a large 'linear property' or 'machinery and equipment' component to its equalized property assessment base, which helps many other rural municipalities off-set for having a lower non-residential assessment component. Planning for and pursuing a strategy of growth in the non-residential sector will help provide the County a more balanced, healthier tax base.

In the past, the County has not pursued a coordinated industrial/commercial promotions program. Previous development had occurred even without any specific promotions information. County Council has made a strategic decision to change that and desires to focus more on economic development, which has resulted in the County hiring its own Economic Development Officer on staff. Inquiries regarding possible business and enterprise locations can now be managed by the Economic Development Officer on an individual basis. This study will help form the basis of helping to promote, support, recruit, and steer businesses to appropriate areas, by identifying land areas that should be suitably developed for this purpose.

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³ Economic Impact Study by Markus Weber & Michael Krokosh, Serecon Services Inc.

PART THREE | Legislative Review

3.0 Historical Background

Policy directions and decisions pertaining to the development of industrial and commercial land use have occurred over time and using different legislative parameters. The province had established a system of land use planning that depended on various levels of legislative planning documents adopted by bylaw, legislated up until 1995 through the provincial Planning Act, and after that the Municipal Government Act. Since the mid-1970s, the primary change in direction of provincial legislation has been the continued transfer of decision authority from the regional or provincial bodies to the local level.

Another significant change that affected industrial and commercial land use policies related to municipal finances in the 1990s. Major changes and reductions in the provincial funding of municipalities resulted in both urban and rural municipalities having to rely heavily on their own resources to fund the various services provided and property taxes had to support more of the expenditure. It is understandable that industrial and commercial land development is sought after by municipalities because the tax rate applied is higher, resulting in both urban and rural municipalities competing for industrial and commercial tax revenue.

3.1 Provincial Government Rural Industrial Policy Prior to 1995

In January 1981, the Alberta Planning Board and the Minister of Municipal Affairs issued a rural industrial land use policy. The report entitled, "Rural Industrial Land Use; Some Policy Guidelines for the 1980s" outlined what the Provincial Government at the time viewed as suitable criteria for the establishment of industrial development in rural municipalities. In summary, the policy generally suggested:

- · rural areas are to take advantage of industrial development,
- industry should be grouped into industrial parks,
- industrial land should be generally unserviced by the rurals,
- rural-oriented and land-extensive industries should be accommodated, and
- development should locate close to established transportation routes.

The effect of this policy was to allow and encourage large lot, unserviced agricultural industry into the rural areas and suggest that all other industries would go into urban areas. This was supported in the Regional Plan up to 1995 and in Lethbridge County bylaws until 1998.

3.2 Regional Plan Rural Industrial Policy

The Oldman River Region: Regional Plan, adopted in 1985, and the 1974 Preliminary Regional Plan broadly outlined regional goals and objectives specifically tailored to the needs of the southwest region of the province. The policies contained in the Plan acted as a framework to help guide the physical development of a region. It was the general recommendations from these Regional Plan documents which directed rural and commercial development from before 1985 up to 1995.

The Regional Plan had specific objectives and policies intended to manage rural industrial and commercial development within the region. Prior to the mid-1980s, there was little pressure or demand for industrial or commercial development outside the urban areas of the region. At the time of plan adoption in 1985, consideration to future management strategies were beginning to warrant more attention as the demand for such development was increasing.

Policies that likely had an effect on industrial development in rural municipalities were the policies that outlined criteria for decisions on rural industrial uses. Various criteria outlined what classes of industrial uses may be approved in rural areas which included:

- agriculture-related industries which support agriculture directly in rural areas;
- non-labour intensive industries which required relatively large areas of land, but require minimal on-site improvements, services, and public amenities;
- natural resource extractive uses such as gravel pits which are governed by the location of a natural resource; and
- hazardous, offensive, or noxious industries which cannot co-exist compatibly with other uses in an urban environment.

In the mid-1990s the provincial government undertook major restructuring which included rescinding the Planning Act and planning matters were incorporated into Part 17 of the Municipal Government Act in 1995. The main outcome of these changes was to empower the local municipalities with the authority to wholly decide upon most subdivision and development matters. As a result, industrial and commercial development occurring since 1995 has been guided and directed by individual municipalities and their vision of rural development, or has occurred on a complete ad-hoc basis.

3.3 Municipal Plans

A first General Municipal Plan (GMP) for Lethbridge County was adopted in 1985 and contained policies that reflect provincial policy and were intended to recognize the service center function of urban areas in the County. The plan also promoted clustered rather than strip development, hamlet industrial areas, and locations other than the urban fringe area.

For the most part, these policies appeared to be unsuccessful and in 2000, the County's new Municipal Development Plan (MDP) changed policy to reflect the existing situation. The major changes included:

- broadening the definition of suitable commercial and industrial uses to include most categories including those that would have, in the past, been directed to urban areas;
- suggesting that lands with rail and highway access be promoted for industrial use;
- identifying the portion of Highway 3 between Lethbridge and Coaldale as an area that could accommodate a wide variety of non-residential uses.

These type of policies were further reinforced in the updated 2010 MDP which also stated the following:

- to support commercial and industrial development that will diversify employment opportunities within the County;
- to provide a positive environment for development, encourage development in suitable locations and mitigate potentially negative impacts to local residents and the environment;
- and that County Council shall support the development of private enterprises within the County.

3.4 Land Use Bylaws

Up until 2001, the County's Land Use Bylaw only generally allowed three opportunities for industrial uses:

- areas could be designated 'rural grouped industrial' for clustered (i.e. grouped) development;
- under the agricultural district, an isolated industrial use may be allowed as a discretionary use; and.
- a 'hamlet industrial district' allowed for higher-density industrial development in hamlets.

Amendments were made to the 2001 Land Use Bylaw to provide for a wider variety of industrial and commercial uses and this was further expanded in the most recent 2013 bylaw adopted. Land Use Bylaw No. 1404 includes five land use districts to accommodate various business-industrial type uses and also contains two commercial land use districts.

3.5 Other Municipal Plans

Lethbridge County has a number of other approved municipal documents and plans that reaffirm the goals and objectives of supporting and fostering non-residential development in the County, including the following:

- Over the last number of years County Councils' *Strategic Planning* documents have outlined the need, desire and direction to actively work towards properly planning for and encouraging economic growth.
- The 2009 Integrated Community Sustainability Plan for the County stated that economic sustainability is a crucial pillar to all elements of sustainability. The plan indicates that the County views sustainable economic development as a balance between agricultural, industrial and commercial sectors.
- In 2010 the County also partnered with the Town of Coaldale and created an *Integrated Development Strategy* for the Highway 3 corridor to provide a high-level framework to help guide regional economic opportunities for this area, while also properly managing water and drainage issues. This document focuses on recognizing Broxburn Business Park as an industrial-business centre (i.e. industry-commercial business node) for the area while planning within the context of the future Canamex freeway and service interchange that will be constructed in proximity.

Overall, the most recent planning and municipal documents, including the 2010 updated Municipal Development Plan, approved by Council reflect a desire by the County to expand, properly plan for, and enable wider participation/opportunities in commercial and industrial land use development within the municipality.

3.6 South Saskatchewan Regional Plan

The South Saskatchewan Regional Plan (SSRP) came into effect September 1, 2014. The SSRP uses a cumulative effects management approach to set policy direction for municipalities to achieve environmental, economic and social outcomes within the South Saskatchewan Region until 2024. The SSRP requires a municipal council to consider the Strategic Plan and Implementation Plan in the SSRP when carrying out any function in respect of council's powers, duties and responsibilities. Some of the applicable strategies identified in the SSRP that have been considered in this study (as summarized), include that municipalities:

- 1.1 Maintain an agricultural land base by reducing the conversion and fragmentation of agricultural land;
- 1. 2 Support a diverse and innovative irrigated agricultural and agri-food sector;
- 1.3 Assist the agricultural and agri-food industry to maximize opportunities for value-added agricultural products;
- 5.1 Consider the efficient use of land principles which include, increasing the proportion of new development that takes place within already developed or disturbed lands through infill, redevelopment, shared use; and plan, design and locate new development in a manner that best utilizes existing infrastructure and minimizes the need for new or expanded infrastructure;
- 8.21 Direct non-agricultural development to areas that will not constrain agricultural activities or to areas of lower quality agricultural lands.

Overall, the strategy of the SSRP that emphasizes land-use decisions are to promote the efficient use of land has been carefully respected as part of the overall growth strategy identified in the report.

PART FOUR | Existing Land Use Analysis

4.0 Review

This analysis is to identify and evaluate the various types of development, specific locational characteristics, and site requirements of existing industrial and commercial developments. By creating a profile of industrial and commercial development, including generating a set of criteria associated with industrial and commercial development, this can be used to help develop a land use strategy to assist in the management and direction of future industrial and commercial expansion to the most appropriate areas of the County.

4.1 Uses Being Reviewed

As this report is to guide the County's municipal land use decision-making process, it will therefore only focus on the industrial and commercial uses that Lethbridge County has decision-making authority over. Both federal and provincial levels of government make decisions on other uses such as:

- the oil and gas industry,
- telecommunication towers and systems,
- railway-lines,
- wind energy systems connecting into the electrical transmission grid,
- any Crown controlled use, (i.e. timber harvesting, gravel pits).

The report also recognizes that in the rural agricultural community there is an informal system of uses that support the agricultural land base and activities, but do not have formal development permits for industrial, commercial or home occupation use. A number of factors which reflect development within these sectors have been examined in order to illustrate the development of industrial and/or commercial activity within the County. Uses in this study have been attempted to be identified through the development permit and subdivision files. It is likely other uses may exist in various areas, as the field work sampled identified areas of the County rather than an intensive land use study. It is recognized that some uses also often cannot be seen from the road unless some signage exists. Thus, some gaps in data may occur.

Both industrial and commercial uses are generally dealt-with and analyzed in a related manner as the impacts, such as traffic, noise, aesthetics, etc. are similar for those types of uses.

4.2 Regional Location

Lethbridge County is located in the heart of southern Alberta approximately 80 km (50 miles) from the border with the United States. Occupying 2338.84 km² (903.1 sq. miles), the municipality is comprised of diverse landforms, soil types, and land uses. Approximately 10,061 people reside within Lethbridge County and many are not only employed within the rural municipality, but also in the six urban municipalities found within the County's boundaries as well as seven unincorporated urban hamlets.

Excellent provincial highways serve Lethbridge County, and the CANAMEX Corridor, one of the first north-south trade routes designated as a High Priority Corridor under the National Highways Systems Designation Act, includes portions of Highways 3 and 4 and represents a major link between the United States and Canada. As well, Highway 3 is a major east-west traffic route linking the region with the west coast and eastern centres through Medicine Hat where it joins the TransCanada Highway.

Canadian Pacific Railway (CPR) provides active rail service both to and through the region. The main east-west line is located through the southern portion of the County, often in close alignment to Highway 3. As well, rail trackage is available in all four directions so freight can be shipped easily to different markets. A large modern marshalling yard facility, operating at or near capacity in 2015 according to the CPR, is located in the County and is situated a ¼-mile north-west of the Town of Coalhurst adjacent to Highway 3.

4.3 Study Area

For the purpose of analysis, the detailed non-residential development activity data within the entire County was collected and examined starting in the year 2000 up to the end of 2013. Data was also reviewed from other previous planning studies, dating from 1986 to 1995, which was the time period representing approximately nine years prior to 1995 when rural industrial and commercial policy was provincially directed. Also, a review of data from 1995 to 2000, when the elected officials of Lethbridge County had a greater influence on land use policy and development, was also undertaken.

A primary goal of the analysis was to identify existing patterns of development with regards to the frequency, density and location of industrial and commercial activity, and therefore a review of the following 2000-2013 data was conducted:

- subdivision application approvals which created industrial and commercial lots,
- development permit data pertaining to home occupations approved, and
- development permit approvals for industrial and commercial developments.

The other more specific objectives of the general analysis are:

- to identify the average number of non-residential permits approved on an annual basis;
- to recognize and map trends in location and density in order to build a logical profile of rural industrial and commercial development;
- to identify the average subdivision parcel sizes applied for by developers;
- to use the profile to identify key areas experiencing development pressure;
- to appropriately site and plan for industrial and commercial development within the County in consideration of the areas where businesses most desire to locate, and where the land type and location aligns with broader County policy environments (i.e. Strategic Plan, Municipal Development Plan).

4.4 Subdivision Activity

Subdivision records from the Oldman River Regional Services Commission illustrate that during the study period (2000-2013) Lethbridge County received 501 applications for subdivision from which approximately 49 applications were to create industrial or commercial lots. On average, approximately 4 new applications were submitted per year and just over 8 new lots created. Of the 810 total new lots created by subdivision for all uses during that period, 110 lots or 13.5 percent were approved for commercial or industrial purposes (see Table 4). This percentage is an increase from the past, as a previous study analysis indicated that during the 1980s and 1990s, approximately 7.5 percent of the total subdivision lots created were for purpose of industrial or commercial uses. During this most recent study period, the majority of lots were created for industrial use (103 of the 110 total). The largest number of multi-lot or grouped industrial subdivisions were approved in the period between 2005 and 2009 (39 lots created alone in 2006) which then declined after the economic downturn that occurred globally after 2008.

TABLE 4
Lethbridge County Subdivision Activity 2000 to 2013

	Total No. of	Total No. of Commercial Industrial Applications	No. of Lots Approved By Land Use Type		Total Lots Created
YEAR	Applications (all types)		Commercial	Industrial	Commercial & Industrial
2000	31	1	0	1	1
2001	37	2	0	2	2
2002	30	4	1	3	4
2003	20	0	0	0	0
2004	30	2	0	2	2
2005	35	5	2	11	13
2006	50	9	2	39	41
2007	57	4	0	8	8
2008	43	3	0	9	9
2009	38	1	0	14	14
2010	51	6	2	4	6
2011	32	1	0	1	1
2012	42	7	0	11	11
2013	36	4	0	7	7
TOTAL	501	49	7	103	110*

^{*}Note: Some applications and lots were applied for but were not approved or were approved but not registered.

The review of subdivision files also indicates the applied-for size of a lot or lots to be subdivided from a parcel of land. The average size commercial lot created was 5.2 acres, while the average industrial lot was 4.6 acres in size. Table 5 reveals that just over 47 percent of the lots created for both commercial and industrial use during the study period were between 1.0 and 2.9 acres in size. Overall, 55 percent of the lots were less than 3.0 acres in size and nearly 72 percent of the total lots were less than 5.0 acres in size.

TABLE 5
Lethbridge County Parcel Sizes Approved 2000 to 2013

Parcel Size	Percentage of Total	Combined Percentages	
Less than 1 acre	8.18		
1.0 to 2.9 acres	47.27	55 72	
3.0 to 4.9 acres	16.36	,,2	
5.0 to 9.9 acres	16.36		
10.0 to 14.9 acres	6.36		
15.0 to 19.9 acres	0.91		
20.0 to 49.9 acres	4.55		
50 acres or more	0.0		
TOTAL	100.00		

Maps 1 to 8 were created from the subdivision records to illustrate the locations at which non-residential subdivisions have been approved. For purpose of analysis, the map is at a scale where an entire quarter-section is highlighted if a subdivision application or multiple applications have been approved at any location within the quarter-section. The pattern is somewhat scattered, however the following trends are recognized:

- Most of the subdivisions have been occurring in the southern portion of the County (described as southerly of Highway 519, and primarily south of the Oldman River).
- Subdivision has occurred largely in proximity to the main transportation corridors and also in proximity to urban centres.
- Activity can also be identified at a higher degree between Lethbridge and Coaldale along the Highway 3 corridor, and along Highway 4 towards the southern boundary of the County.
- Similarly, subdivision in quarter-sections that have involved four or more subdivisions have primarily occurred in existing designated grouped industrial park areas and adjacent to the provincial highways.

4.5 Development Permit Applications

Over time, the development permits approved represent a diverse number of uses and the density of uses has also increased as both the County and the urban municipalities in the area have grown and prospered. This would indicate that Lethbridge County appears to be in transition from its traditional role as an agricultural-based municipality to a more diversified, perhaps semi-urban type municipality. Table 6 depicts the number of permits issued since the year 2000 and indicates this increase in diversity.

Between 2000 and 2012, the Lethbridge County Development Department issued 1,779 development permits, of which 217 were for industrial and/or commercial uses. On average, this represents approximately 12.2 percent of the total permits issued each year. Home Occupations were also analyzed and included in the study (158 permits issued), but it is recognized that this category of land use includes a wide diversity of businesses, some may be for a home office or hair studio, while others are more intense such as welding shops, cabinet making business, automotive repair, etc. It is important to take note of these smaller scale home based developments, as some are in the business 'incubate' stage and may eventually grow and expand into industrial parks in the County. On average, 16.6 industrial/commercial development permits were approved and issued each year during the study period. This is somewhat consistent from a past review of permits from 1996 – 2002.

Maps 9-16 were created to illustrate the locations at which permits have been applied for and approvals given. As the information on the permits sometimes does not indicate what portion of the quarter-section is being utilized for proposed development, the map depicts the entire quarter-section as developed. As well, more than one development permit may be issued within the quarter-section if several parcels are to be developed. Similar to subdivision, the pattern again is scattered with more development permits approved in the southern portion of the County. The locational mapping analysis indicates the following trends regarding commercial/industrial developments:

- Commercial and industrial uses are more concentrated along major provincial highways and less so along minor provincial highways.
- Home occupations are scattered throughout the municipality but are more likely to be located in the southern portion of the County (i.e. south of Highway 519, south side of Oldman River).
- Industrial uses are more concentrated in industrial cluster areas or designated parks and in proximity to urban centres.
- Commercial and industrial permit approvals decline in numbers as the distance from the City of Lethbridge increases.
- In the 2000-2013 study period, there were 39 commercial and industrial permits approved within 1 kilometre of the City of Lethbridge boundary. (Reviewing the permits by category, 6 were for Home Occupations, 13 were for commercial uses, and 20 were for industrial uses. It is noted that that 18 of the 39 permits issued were located on Airport lands, 2 were in Duncan Industrial park, and 8 were along 43 Street (County Foods and Fairview area) which explains the city proximity.)

Map 4 illustrates the locations, by quarter section, where commercial or industrial development has been approved. It must be noted that although the entire quarter is highlighted, the commercial or industry use located there may not utilize the entire area. As well, in some cases due to subdivision, more than one use may be located within the quarter. Therefore, Map 4 represents only a general pattern of non-agricultural activity that does not distinguish the density of development.

TABLE 6

Development Permit Approvals 2000 – 2012 (13 year study period)

Year	Total Development Permits Approved	Total Business Type Permits (all category types)	Industrial / Commercial* Permits Issued	Home Occupation Permits Issued
2000	159	21	10	11
2001	152	36	20	16
2002	120	30	14	16
2003	126	22	14	8
2004	124	30	12	18
2005	146	27	20	7
2006	154	44	28	16
2007	171	33	18	15
2008	128	26	12	14
2009	142	31	20	11
2010	111	26	18	8
2011	131	17	9	8
2012	115	32	22	10
TOTAL	1,779	375	217	158

Source: ORRSC Analysis of Lethbridge County Development Records 2015

4.6 Land Use Conclusions

Four historical and existing broad land use category types relating to approvals of commercial or industrial activity can be identified from the examination of subdivision and development data. These include:

- isolated industrial and commercial uses,
- home occupations,
- hamlet activity, and
- grouped industrial/commercial areas, including airport industry.

By examining past subdivision activity and the issuance of development permits in relation to the location of industrial and commercial development within Lethbridge County, the following general observations can be made:

• The majority of existing industrial and commercial activity is concentrated in the southern portion of the County.

^{*} Excludes permits issued for non-business uses (e.g. compressor sites) and livestock operations

- Industrial and commercial uses have primarily established along main transportation corridors (both highways and rail lines) that allows for visibility and frontage, as well as availability of pavement and ease of access to trucking routes.
- Industrial and commercial activity adjacent to or in close proximity to the urban centres is of significance, and it is likely that location to market and a source for labour pool may play a role.
- A large portion of industrial activity is situated in or in close proximity to the established and designated industrial parks. Proximity to existing industry may also highlight the importance of linkages to associated industries.
- Other than agricultural related developments, non-residential development in the northern portion of the County is limited and the majority of existing development is concentrated along the rail lines and highways.

It is noted that the siting and locational pattern created by the indicators of industrial and commercial development can only imply activity because:

- The act of subdividing land in itself does not guarantee development activity. For example, a large grouped industrial subdivision may be approved but it often takes time to fully engineer, service and market the land, or the lots can sit vacant waiting for a lot purchaser to build on.
- The issuance of a development permit does not guarantee the construction of a proposed project. Over time (and still a current reality), there has been no comprehensive method of tracking if a business or industry is active or not once the development permit has been issued.

As previously mentioned, other industrial type activities may occur within the County, such as resource based activities, but these often do not require a municipal development permit or are regulated by other levels of government.

4.7 Existing Land Use Overview

4.7.1 Isolated Industrial and Commercial Development

This type of development is the hardest to examine because more detailed permit information has only been kept over the last decade or so (note: this category does not include home occupations). Overall, it is not precisely known exactly what activity is occurring in what location and how intensely. Prior to Land Use Bylaw No. 1404 (October 2013), these types of uses were primarily located in the 'Rural Agriculture' land use district and they did not require a rezoning to a separate commercial/industrial zoning. In some situations, the land was redesignated from rural agriculture to rural grouped industrial to facilitate certain types of industry to develop as permitted or discretionary uses, typically in respect of potential impacts to neighbours.

Land Use Bylaw No. 1404 would now require most uses to rezone to one of the appropriate commercial/industrial land use districts. Older developments may have also established prior to municipal permitting requirements or were in operation before better records were kept. These uses are both large and small, and some of the larger uses are agricultural produce processors or handlers that often locate on main transportation routes, either highway or railway or both. Often these uses locate on properties owned by the operator who started the operation.

Isolated uses comprise approximately over half (57 percent) of all industrial and commercial development within Lethbridge County. These uses occur in a scattered pattern throughout the County possibly due to either the access to transportation, closeness to markets or previous ownership of the land on which the industry or commercial business has developed.

4.7.2 Home Occupations

The Land Use Bylaw allows for issuance of permits for home occupations which are intended to allow a person to have a small-scale enterprise in the house. In the past, only one other person could be employed in the business and there couldn't be a change in appearance in the dwelling. These controls are more important in the hamlets, while in the rural area the definition between home occupation and an industrial or commercial use is less clear. For example, small trucking operations have been approved as home occupations or industrial uses. Land Use Bylaw No. 1404 was expanded to allow for a wider scope of businesses to operate as home occupations, while also allowing a small number of staff to be employed on site.

It is important to take note of these smaller-scale home based developments, as some are in the business 'incubate' stage and may grow and expand into industrial parks in the County. As Lethbridge County does not require business licenses, there is no up-to-date tracking system that allows the County to determine which uses are still operated and where. From reviewing the home occupation permits issued in the 2000-2013 study period, it is evident that although these developments are scattered throughout the County, the majority are approved on lands situated in the southern portion.

4.7.3 Hamlet Industrial/Commercial Activity

Within the boundaries of Lethbridge County, eight incorporated communities have been designated as hamlets: Chin, Fairview, Kipp, Monarch, Diamond City, Iron Springs, Turin, and Shaughnessy shown in Figures 7 through 14. These urban settlements within the County provide both services and amenities, and a variety of housing options to County residents.

As outlined in section 59 of the Municipal Government Act, an unincorporated community may be designated as a hamlet if the community:

- consists of five or more buildings used as dwellings on parcels smaller than 1859 m²,
- has a generally accepted boundary and name, and
- contains parcels of land that are used for non-residential purposes.

Only seven of the eight designated hamlets meet the above criteria of the MGA, as Kipp does not have the required number of dwellings. The province is no longer permitting municipalities to apply for provincially recognized hamlet status for new unincorporated communities. These rural urban areas are largely residential in nature and approvals of industrial uses have, in the past, met with some opposition and complaints from residents.

Hamlet of Chin Area – located in the NE¼ 25-9-19-W4, adjacent to the Municipal District of Taber.

The hamlet lies just north of Highway 3 and the CPR line and occupies approximately 18.97 acres. Chin presently has no commercial or industrial development and no land designated as hamlet commercial or hamlet industrial. There are few vacant lots present and the majority of the lots have been developed for residential purposes. However, directly south of the hamlet, approximately 140.18 acres has been zoned for rural general industrial development and McCain's Foods operates a large processing plant at that location.

Hamlet of Fairview – located in the NW¼ 34-8-21-W4, adjacent to the eastern boundary of the City of Lethbridge.

The hamlet lies at the junction of Highways 4 (43 St.) and 512 and occupies approximately 37.19 acres. Due to the close proximity of the hamlet to Lethbridge, Fairview has one of the largest commercial and industrial development areas within its boundaries of all of the hamlets. Approximately 5.43 acres are designated as hamlet industrial while much of the commercial development is zoned direct control (2.13 acres). The largest parcel of land, consisting of 4.92 acres is the former site of Hepp Autowreckers. With environmental reclamation work, this site could be repurposed for development provided the hamlet's current infrastructure handling/capacity problems were resolved. Overall, land use survey fieldwork revealed that there are few vacant lots present and the majority of the lots have been developed for residential purposes. Lethbridge County owns both residential and public/recreational land within Fairview.

Hamlet of Kipp – located in the SW¼ 29-9-22-W4, between Highway 3 and the CPR line.

The hamlet occupies approximately 2.47 acres and all of the land within the hamlet boundaries is designated as direct control. Although Kipp does not meet the formal criteria for hamlet under the Municipal Government Act, it is still a historically designated hamlet with a name and a boundary defined in the Lethbridge County Land Use Bylaw. A land use survey revealed two residences present and no

industrial or commercial development has occurred. All land within the hamlet boundary is privately held or owned by the province (i.e. Alberta Transportation).

Hamlet of Monarch – located in the SW¼ 7-10-23-W4, adjacent to Highway 3A.

The hamlet occupies approximately 92.66 acres of land. Approximately 2.12 acres is designated as hamlet commercial and no land is zoned hamlet industrial. The only main designated commercial development site within Monarch is the former hotel site. In the mid-2000s, the hamlet obtained a municipal waste water lagoon system and treated water is available from a water line from Lethbridge. Again, the majority of the lots within the hamlet have been developed for residential purposes and there are only a few undeveloped parcels located throughout the community. The relocation of Highway 3 south of the hamlet may have had a negative impact on the commercial and industrial appeal of Monarch. Currently, Lethbridge County owns lots zoned for residential development as well as public and recreational land.

Hamlet of Diamond City – located in the SW¼ 6-10-21-W4, adjacent to Highway 25.

The hamlet occupies approximately 125.89 acres with approximately 0.26 acres of land designated as hamlet commercial and no land is zoned hamlet industrial. A land use survey for the hamlet revealed that the majority of the lots have been developed for residential purposes and vacant parcels are located adjacent to the highway. Over the last decade, the hamlet has benefited from the installation of a treated water line and sewage treatment system although there is presently no additional capacity without an expansion occurring. Lethbridge County owns both residential and public land within Diamond City.

Hamlet of Iron Springs – located in the NW¼ 20-11-20-W4 and NE¼ 21-11-20-W4, adjacent to Highway 25.

The hamlet occupies 41.30 acres and approximately 1.63 acres of land is designated as hamlet commercial and 7.8 acres is designated hamlet industrial. A land use review and survey for the hamlet reveals that there is no active commercial development but some industrial activity related to agriculture located on the former CPR right-of-way. Again, the majority of the lots within the hamlet have been developed for residential purposes and undeveloped parcels were located in the eastern portion of the community. In the early 2000s, the hamlet benefited from the installation of a treated water line, which supplies the domestic water for the hamlet. Lethbridge County owns lots zoned for commercial and residential development as well as public and recreational land. The County's 2012 purchase of former railway land from the CPR may be further developed for industrial land use.

Hamlet of Turin – located in the SE¼ 4-12-19-W4 and SW¼ 3-12-19-W4, adjacent to Highway 25.

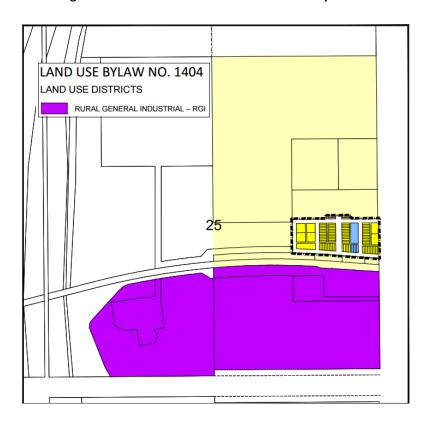
The hamlet occupies an area of approximately 63.67 acres. Approximately 0.32 acres of land is designated as hamlet commercial and 4.64 acres of land is zoned industrial along the former rail right-of-way. A land use survey for the hamlet reveals here is one active commercial development and some minor industrial activity related to agriculture. Similar to other hamlets, the majority of the lots within the hamlet have been developed for residential purposes and undeveloped parcels were located in the eastern portion of the community. Such as Iron Springs, the hamlet has also benefited from the installation of a treated water line, and a municipal waste water lagoon system was installed in 2011. Lethbridge County owns lots zoned for commercial and residential development as well as public and recreational land within Iron Springs.

Hamlet of Shaughnessy – located in the W½ 30-10-21-W4 and portion of NE¾ 25-10-22-W4, adjacent to Highway 25.

The hamlet occupies approximately 76.78 acres of land. Shaughnessy contains the largest amount of hamlet commercial zoning at approximately 6.69 acres and an additional small 0.42 acres of land is zoned hamlet industrial. Again, the majority of the lots within the hamlet have been developed for residential purposes, but parcels located adjacent to Highway 25 form a corridor of non-residential development. The hamlet receives potable water through a regional water line and sewage is handled by a municipal waste water lagoon system. The County owns lots zoned for both commercial purposes and residential development as well as public and recreational land.

HAMLET MAPS

Figure 1: Hamlet of Chin Area from Land Use Bylaw



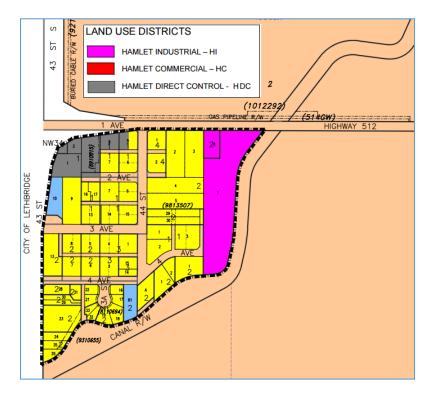
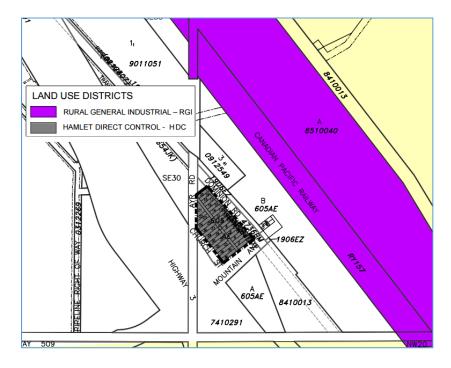


Figure 2: Hamlet of Fairview from Land Use Bylaw





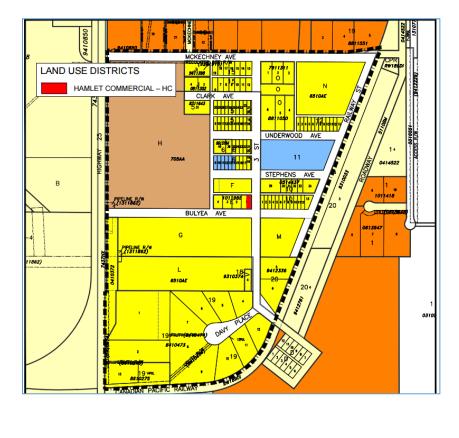
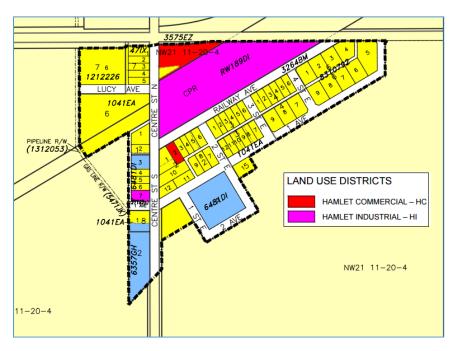


Figure 4: Hamlet of Diamond City from Land Use Bylaw





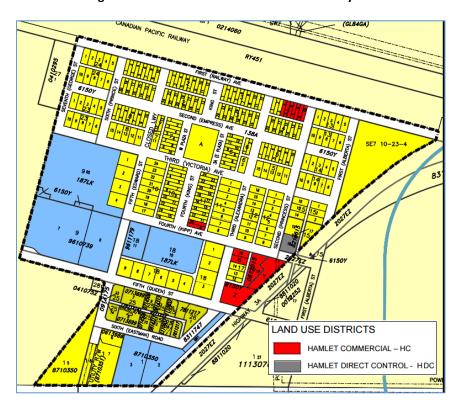
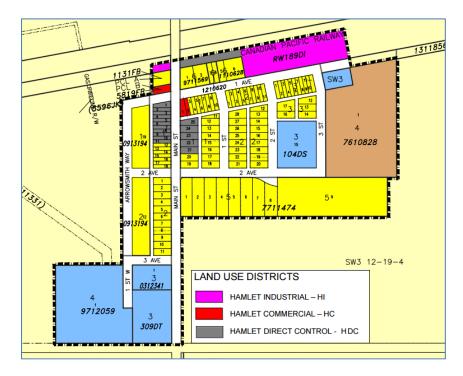


Figure 6: Hamlet of Monarch from Land Use Bylaw





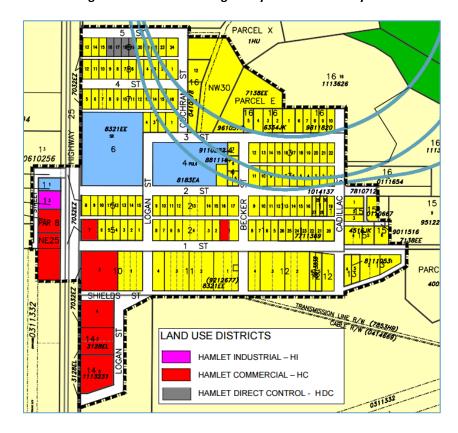


Figure 8: Hamlet of Shaughnessy from Land Use Bylaw

TABLE 7
Hamlet - Designated Commercial/Industrial Land Use 2015

Hamlet	Industrial land Existing Acres	Commercial land Existing Acres	Vacant Industrial Acres	Vacant Commercial Acres
Chin	0.0	0.0	0.0	0.0
Fairview	5.43	0.0*	3.5	0.0
Кірр	0.0	0.0	0.0	0.0
Monarch	0.0	2.12	0.0	0.0
Diamond City	0.0	0.26	0.0	0.0
Shaughnessy	0.42	6.69	0.0	1.83
Iron Springs	7.8	1.63	7.0	0.39
Turin	4.64	0.32	4.64	0.0
TOTAL	18.29	11.02	15.14	2.22

Source: ORRSC Land Use Analysis 2015

^{*} Fairview has land designated as Direct Control (2.13 acres) which contains commercial type developments.

4.7.4 Grouped Industrial/Commercial Areas

For the purpose of this study, grouped industrial or commercial areas have been defined as those areas where development has been approved, by either zoning, subdivision or both, into clustered industrial business park type developments. Within Lethbridge County, seven such formal and established sites exist which include:

- Stewart Siding Industrial Park
- RAVE Industrial Park
- Broxburn Business Park and Corridor Area
- Kipp Marshalling Yard Area
- Duncan Airport Industrial Park
- Airport Lands Lethbridge Regional Airport
- 508 Agri-Business Park (Wilson Siding)

Stewart Siding

Stewart Siding is located east and south of the City of Lethbridge limits on Highway 4 and was originally surveyed in 1911. In 1978, County Council decided to formally allow light industrial development to occur and consequently, an area structure plan was prepared and adopted in 1981. Stewart Siding became the first rural area within the County to be comprehensively planned and developed as an industrial park. Stewart Siding's potential as a light industrial area and its subsequent rezoning from rural agriculture to light industrial use in 1978 was based on a number of site characteristics:

- the area is well-defined and self-contained due to severe physical barriers (e.g. roads, highway, irrigation canal, railway);
- there is good access from a provincial highway;
- the area has a high water table and poor drainage and is not suitable for other non-agricultural development although this may appear problematic, it enabled higher value use to the land allowing for improvements to occur;
- land ownership pattern was fragmented.

Stewart Siding is approximately 200 acres in size and the area, most of which forms part of the plan registered in 1911, was originally divided into 5-acre parcels. Further subdivision of the area occurred in 1980, 1982, 1986, 1990 and most recently in 2010. An additional 31.26 acres of undeveloped land was zoned and added to Stewart Siding in 2013, increasing it in size from the previous 169 acres. Currently, there are approximately 60 lots within the area structure plan boundary, 27 more than were depicted in the original 1981 plan.

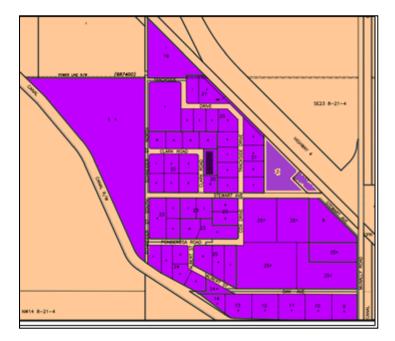


Figure 9: Stewart Siding

RAVE Industrial Park

The RAVE Industrial Park is located on approximately 60.0 acres of land adjacent to the east side of 43rd Street North, between 5th and 9th Avenues (NW 3-9-21-W4). Ideally located with excellent access via Highway 3 and 43rd Street, the property was zoned industrial by Lethbridge County in 1968, primarily for light industry. An area structure plan was prepared for the area in 1982 and subdivisions occurred in 1987, 1988 and 1993. A 10-acre serviced area immediately north of RAVE was designated to Direct Control for parking lot use in 2013, and a public utility lot was constructed to help manage surface drainage in the area.

The existing developments in RAVE are serviced with water and sanitary sewer by the City of Lethbridge through an agreement with the County. The City of Lethbridge recently has indicated that there is no present additional city capacity to service this area. Issues with the proper control of surface drainage run-off have also been a problem in the past. Currently, the RAVE subdivision is primarily fully developed with 15 lots of various sizes with development taking place on the majority of lots. There is little internal room for in-fill development unless some existing uses or buildings were to be redeveloped or removed.



Figure 10: Rave Industrial Park

Broxburn Business Park and Corridor Area

The Broxburn Business Park is located in the NE½ 1-9-21-W4, adjacent to east-bound lanes of Highway 3 between Lethbridge and Coaldale. The area was originally approximately 122 acres in size and was first rezoned to grouped rural industrial in the 1970s with no serious attempts to develop the area until the early 2000s. The property became known as the McKay Brothers Industrial Area, who subdivided approximately 15 acres for a church development and prepared an area structure plan to guide future development on the remainder. This land development later changed ownership once again and later took-on the Broxburn Business Park name in which it is now known by. The average lots range in size from 1.3 acres to 10 acres and the highway frontage lots will see the highest traffic counts in Southern Alberta. Although there are currently eight lots sitting vacant, the majority of lots have been sold and likely will be built upon in the short-term. Some larger lots (e.g. 4 - 10 acres) may potentially be resubdivided, but overall, Broxburn Business Park has very limited further development capacity.



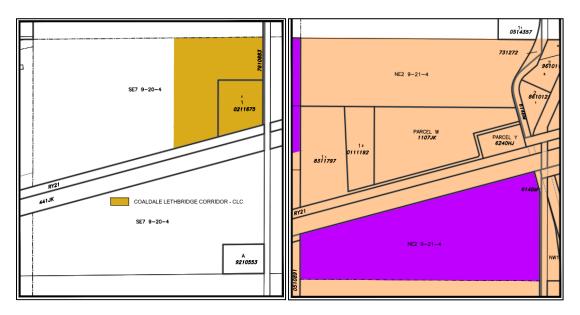
Figure 11: Broxburn Business Park Area

Highway 3 Lethbridge-Coaldale Corridor

In proximity to the Broxburn Business Park are some other parcels of land that have begun to develop unofficially as part of the Highway 3 corridor commercial-industrial area. East of Broxburn, on the north side of Highway 3 is approximately 20-acres of land designated as Coaldale-Lethbridge-Corridor, primary as highway commercial type use (Andres Trailer Sales). Almost half-mile west of Broxburn on the same side of the highway is approximately 69-acres of land designated as Rural General Industrial, used entirely at this time by Pioneer Seeds. Further development is likely to occur in these areas if further planning is undertaken. Applicable to this area is the *Integrated Development Strategy* report which recognized the potential of the Highway 3 corridor to be developed to support economic development for the region, albeit in a clustered, orderly and managed fashion.

Figure 12: Andres Trailers/Frache Subdivision

Pioneer Seeds



Kipp Marshalling Yards

The Kipp Marshalling Yards consist of 90 acres of land located adjacent to the Hamlet of Kipp and Highway 3. The yards are managed by Canadian Pacific Railway (CPR) as their southern Alberta operations hub. The lands are primarily used for the transportation operations of the CPR itself and have been operating at capacity (2013-2014). Although the CPR lands themselves may not be presently utilized by other private business, there may be future opportunity for compatible land uses on lands in the vicinity.

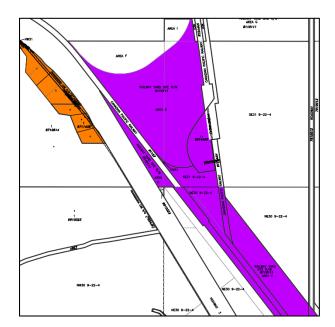


Figure 13: Kipp Marshalling Yard

Duncan Airport Industrial Park

The Duncan Airport Industrial Park is located adjacent to the Lethbridge County Airport along the east side of Highway 5. This area consists of approximately 95-acres of unserviced industrial lots. The grouped industrial development evolved from an original proposal to subdivide a 7.4-acre parcel from an 80-acre parcel for a hay compaction plant. In 1978, further subdivision occurred and the property (approximately 75-acres) was rezoned from rural agriculture to rural grouped industrial as required by the County Bylaw at the time. The lots are mainly 4.0-acres in size, and most are developed but may have some undeveloped portions of the lot used for storage. Some private land owners own 2 or 3 adjacent titles. In 2011 expansion started to occur into the north 80-acre title, as 23.10 acres was designated to RGI. This area may be suitable for growth subject to additional long-term planning and design work being undertaken.

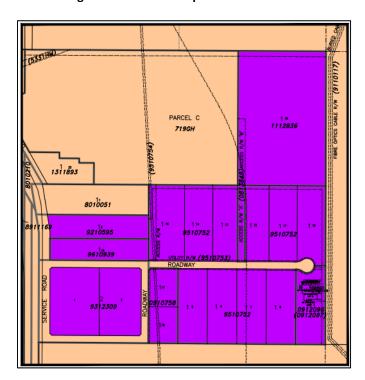


Figure 14: Duncan Airport Industrial Park

Lethbridge Airport

The Lethbridge Airport is located approximately 5 km south of the City of Lethbridge adjacent to Highway 5 (south of Mayor Magrath Drive in the city). This 37 acres of industrial airport land originally established in 1939, and currently plays host to a number of different businesses and organizations. Existing commercial development is concentrated to the northeast of Runway 12-30 and is a cluster of both aviation related and non-aviation related development.

The Lethbridge County Airport Master Plan 2010, prepared in 2000, plots a development course to maintain the role and enhance the viability of the airport. The initiatives proposed by the plan are based on the following three key strategies:

- continued diversification of the airport revenue base,
- · enhancing air services to and from Lethbridge,
- maintaining the community role of the airport.

The Lethbridge Airport currently has a well-organized land use system and Figure 15 shows the currently layout of the airport's commercial development area and identifies the location of the approximately 22 businesses currently on the site. In order to continue developing an efficient and logical development scheme, the following key principles from the Master Plan 2010 will aid long-term land use planning:

- Maintain Safe and Secure Airport Operations
- Preserve Non-Aeronautical Revenues
- Provide an Expanded Land Base for Commercial Uses
- Provide for Incremental Land Development

Figure 15 illustrates the proposed development areas and provides an outline for future development options. Additional land areas to the north of Kenyon and Stubb Ross Industrial Parks and to the south of the main runway have been identified as expansion areas. Approximately 129.9 acres is available at the airport as outlined din the Master Plan 2010.



Figure 15: Lethbridge County Airport - Proposed Expansion Options

Source: The Lethbridge County Airport Master Plan 2010, 2000

508 Agri-Business Park (Wilson Siding)

The 508 Agri-Business Park is the newest industrial park area in the County and is located in the Wilson Siding Area south of the City of Lethbridge on Highway 4. There have been some grain handling facilities adjacent to the CPR tracks for decades, and in 2008 some preliminary subdivision to allow for some other business uses occurred. In 2015, an area structure plan was prepared and adopted and over 96-acres of land was designated to Rural General Industrial use for the 508 Agri-Business Park. This industrial park is still in the development stages as subdivision has not formally occurred (other than two pre-existing titles adjacent to the rail-line which comprise 40.71 acres). Once subdivided, approximately 25 new lots will be available at full build-out to be developed with the owners utilizing a communal sewage treatment system. Due to Highway 4 and 508 and future transportation access issues that need to be addressed, approximately 55 of the 96 acres may be developed in an initial first phase. Once longer term planning and transportation strategies have been formalized, there is the potential for expansion to the north of this in the future.



Figure 16: 508 Agri-Business Park

4.7.5 Other Cluster/ Grouped Industrial Areas

SW & NW 27-7-20-W4 - Viterra Terminal/Transmark (unofficial, non-designed park)

Southeast of Lethbridge situated adjacent to Highways 4 and 845 and the CPR line are lands being used for some industrial use. In 2014 Viterra purchased the former Lethbridge Inland Terminal Ltd. grain handling facility which is situated on 200 acres of land adjacent to Highway 845. To the northeast, and parallel to the rail-line, a 65-acre parcel is owned by Transmark Ltd. which is presently designated as RGI. Transmark have 20-spur tracks and can accommodate a full unit train off the mainline along with storage

capacity for up to 600 rail cars. This is an area of interest for further expansion of this type of commodity handling/industrial land use activity; however, due to the scale and potential transportation and stormwater impacts for the area, an area structure plan would be required before growth can occur. A small, currently undeveloped, 2.5 acre parcel north of Transmark is designated as Rural Commercial.

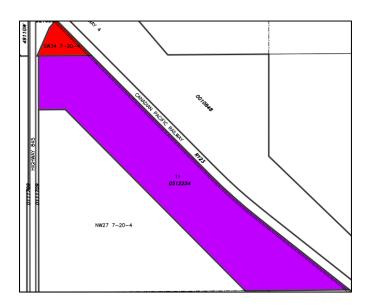


Figure 17: Viterra Terminal/Transmark

Intermunicipal Development Plan (IDP) Areas

The County has also identified new commercial/industrial areas in accordance with some Intermunicipal Development Plan agreements with neighboring urban municipalities, including Nobleford, Coalhurst and Picture Butte. These areas are largely undeveloped at this time and remain in agricultural use, with some additional planning and servicing work required prior to industrial conversion. These would be considered longer-term development and growth areas. These areas will be further discussed in the Land Use Strategy section of this report.

Summary

As a snapshot in the present time (spring 2015) it is estimated that there is approximately 220.50 acres of designated vacant land currently available within the seven designated grouped/clustered business parks zoned to accommodate industrial use. Some of the vacant lands are presently raw parcels with no roads or servicing, and although they are considered for industrial-commercial use, they would require additional planning processes to occur, including subdivision and in some cases an Area Structure Plan update. It is noted that 508 Agri-Business Park may initially only develop 55 acres, so the actual total available in the foreseeable future may be closer to 167-acres.

Table 8 illustrates a summary of existing land use and land availability.

TABLE 8
Grouped/Clustered/Designated Industrial Land Use 2015

Industrial / Business Park	Total Area Zoned for Industrial / Commercial (acres)	Existing Area Occupied (acres)	Existing Vacant Developable Land (acres)*
Stewart Siding	200.26 acres	136.15 acres	64.11 acres
RAVE	60.00 acres	60.0 acres	0.00 acres
Broxburn Business Park	95.00 acres	74.57 acres	20.43 acres**
Kipp Marshalling yards	90.00 acres	90.00 acres	0.00 acres
Duncan Airport Industrial Park	100.00 acres	79.74 acres	20.26 acres
Airport Commercial lands	37.00 acres	30.00 acres	7.00 acres***
508 Agri-business Park	137.70 acres	29.00 acres	108.70 acres
TOTAL	719.96	499.46	220.50

Source: ORRSC Land Use Analysis 2015

^{*} Vacant developable land refers to both vacant and unplanned internal unsubdivided raw land that could be developed if accordingly planned

^{**} Some of the parcels have approved development permits but construction has not commenced, so vacant land availability in reality is likely much lower

^{***} Airport Master Plan outlines an additional 129.9 acres that could be developed, but it is presently raw undeveloped land

PART FIVE | Land Use Strategy

5.0 Introduction

The previous sections of this report contained an overview and analysis of past and present economic and land use conditions pertaining to industrial/commercial land use development in Lethbridge County. That data forms the basis of guiding and planning for future land use to support economic growth in the County. The County desires to attract good, sustainable industry that will be a "net positive" for the municipality, that overall, the business will bring in more tax revenue than it will cost to provide services.

This section is to address the main purpose of the report which is to identify and protect suitable land areas within the municipality that may appropriately be planned to accommodate industrial or commercial development, without negatively affecting other existing uses or conflict with other County policies or goals.

5.1 Identification of Economic and Land Use Trends

A previous land use survey of business operators in Lethbridge County in 2003 revealed that the most important reasons the majority of respondents indicated they located where they have were that:

- they owned the land and had access to their market,
- they believed there were no limitations at their current location, and
- Southern Alberta was the market for their products or services.
- Most important to their operation were good road access and water.

These factors would likely be still relevant today along with the servicing and availability of land, and land price considerations. To move forward in the planning for future land use in the municipality, the strategy should not only consider the local conditions which are fairly well known, but also recognize some broader, contemporary economic and land use concepts and trends.

5.1.1 Broad Industrial and Economic Processes

There has been a considerable change to urban industrial development during the twentieth century which scholars have attributed to three different processes: de-industrialization (traditional industries declining in the face of international competition), decentralisation (the movement of manufacturing industries to better locations outside of urban core areas), and decongestion (decentralisation of manufacturing to suburban locations)⁴. These process have resulted in significant amounts of industry relocating from inner city locations to outer locations with better access to highways.

It is obvious that good location is strongly desired for businesses and supports industrial development. However, what constitutes a 'good' location differs by industry and business, but proximity to highways

⁴ Daniel J Graham, Identifying urbanization and localisation externalities in manufacturing and service industries, Imperial College London – Centre for Transport Studies. 2007.

is of growing importance. Major industries increasingly do not want to be located in inner urban areas, due to potential land use conflicts and congestion, and instead prefer close proximity to highways.

Many industrial businesses also desire larger parcels of land in order to accommodate their horizontal-design buildings along with sufficient space for other uses such as parking, loading and storage. Additionally, businesses will characteristically acquire more land than they initially require in order to accommodate potential future expansion of business. Businesses typically want the opportunity to expand their facility at their existing site rather than experiencing the disruption associated with relocating to another site. Some industrial uses have significant negative impacts (such as noise, vibration, smell, traffic, etc.) which can be offensive to surrounding land uses, especially residential.

Transportation access and infrastructure improvements are major drivers of industrial development. Development is very site specific, and what may be possible in one location may not be possible in another. As land prices increase, some industrial users that can relocate to other lower cost jurisdictions will do so, while other industrial users that are local serving will need to remain in the region. Availability of servicing, as required by the type of business or use, will also factor into locational decision making.

Other general industrial land use concepts that the County should consider and may influence or be beneficial for industrial businesses to locate on a larger parcel of rural land, include:

- Logistics Intermodal Transportation Facilities/ Logistics Centres
- Industrial intensification
- Industrial symbiosis / localization
- Clustered/ Nodal Development
- Growth in Alternative Energy Sources
- Eco-Industrial Parks

Intermodal Transportation Facilities / Logistics Centres are where intermodal shipping containers are off-loaded or on-loaded from trains to semi-trucks for distribution. Intermodal distribution (logistics) centres are large facilities that combine intermodal railway terminals with nearby warehouse distribution and freight facilities. Both the transfer and storage operations are combined on one site and these facilities also require easy access to major highways. These inland "terminals" can be large scale, typically a minimum of 200-300 acres in size (often over 500 acres), contain massive warehouses and often represent a collaboration between the shipping companies, rail companies, development companies and various levels government. These complexes are designed to handle goods brought by rail from coastal ports and then transfer them by truck to on-site warehouses for storage and are then eventually transported to distant retail outlets, distribution centres and manufacturing plants.

Industrial intensification optimizes land potential by allowing industrial sites to achieve higher density forms of development, and by facilitating new growth through the re-development of existing underutilized sites. The benefits of industrial land intensification are to reduce the pressure to convert agricultural and rural lands to industrial uses by using lands and resources more efficiently, reducing impact on the environment, accommodating an increase in economic and employment activity on a limited land base, using transportation infrastructure more efficiently, and generally extending the lifespan of available industrial lands.

Industrial symbiosis / localization refers to industrial interaction or sharing of by-products between industries, depending upon what type of industries are developed in the area. Symbiosis may occur for example, when an industry produces waste by-products (i.e. heat, toxic chemicals) that are useful to other industries located in proximity. Instead of these industries functioning separately, these industries can create an association that is mutually beneficial to one another and function in a format similar to natural biological processes. In order for industrial symbiosis to work properly there must be a grouping or cluster of industries in relatively close geographical proximity to one another, with commonality between certain uses in their inputs and outputs, and an intricate, connected infrastructure network between the uses (i.e. pipes between facilities). Using agricultural processing waste or bi-mass processes to generate geothermal heating is a simple example.

Localization refers to many business in the same industry locating close to each other, as geographical proximity increases the ease of communication facilitating 'technological spillovers' and innovation between firms within the same industry, and often results in greater efficiency through increasing return of scale in intermediate inputs for a product at lower costs.⁵ The introduction of related services in industrial areas also often makes them more attractive to larger employers.

Clustered/ Nodal Development refers to a planning and development land use approach that encourages using land resources and services more efficiently (i.e. compact building forms, infill development etc.) and concentrates uses in close proximity, typically adjacent to major transportation corridors or nodes (intersections), appropriately planned to preserve adjacent agricultural land or greenspace. Site specific, buildings are also in close proximity together on a portion of the site, often sharing common yard space, to allow the remaining land to be used for recreation, open space, agriculture or preservation of historically or environmentally sensitive lands.

Growth in Alternative Energy Sources, which refers to renewable or sustainable energy that is generally derived from natural sources (for example, the earth, sun, wind, water), are ideal to be located in rural municipalities and are compatible with agricultural land use. For example, wind turbine farms utilize a small foot print on the land and the structures can still be grazed or farmed around. Large solar panel farms also often require a large land base and do not want to be located in high density urban settings. Where traditional services (i.e. electricity, gas heat) are deficient, alternative energy sources may be developed or used as a by-product of large-scale alternative energy facilities. The growth in other alternative energy industries, such as bio-mass or bio-fuel production, also benefit from being close to a raw crop or nutrient source/stock which is provided by agricultural producers.

Eco-Industrial Parks refer to a business or industrial park that is designed to help achieve sustainable development, with the intention of increasing economic gains and improving environmental quality. It typically attempts to integrate a variety of preservation and renewable energy technologies throughout the park. This may be desirable in a rural setting, as a well-designed eco-park can assist with storm water management for an area by introducing a more natural wetland system, and can utilize different servicing tools where providing traditional services may be challenging, such as sanitary sewage treatment. For example, an eco-park may be designed to employ an alternative wastewater system that will utilize wetlands. Some parks have been designed to use a "Small Bore Sanitary Sewer System (SBS)" in which a clarifier tank is located on each lot which provides primary treatment of sewage. SBS also uses high

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⁵ Daniel J Graham, Identifying urbanization and localisation externalities in manufacturing and service industries, Imperial College London – Centre for Transport Studies. 2007.

density polyethylene pipes, which is a trenchless technology that minimizes construction surface disturbance. The use of "grey" water may also be encouraged, where non-potable water can be used. Typically the buildings in the park have double plumbing to carry both potable and non-potable water, such as is done in the Broxburn Business Park in Lethbridge County. Grey water may also come from wastes created by industrial processes or from an on-site local wastewater treatment plant.

5.1.2 Local Economic Factors

The agricultural services industry is a major contributor to the Lethbridge County and regional economy. It is obvious there is a strong correlation between the profitability of primary agriculture in the County and the high number of businesses that service it. Over time, the acreage of specialty crops processed in Lethbridge County has been increasing due to their high value, improved plant breeding, machine development, processing and marketing options, low grain prices, and restrictive quotas for grain delivery. The achievement of better crop yields and a wider variety of crop production has also lead to the substantial growth of seed and forage industry within the County. It is apparent that much of the present innovation that is occurring in the local economy is associated to the number of companies that focus on research and development to enhance the growth cycle and fortitude of the seeds and inputs associated with crop production. The "bio-industrial" sector is establishing an interest in the Lethbridge area which is not surprising, given that it can benefit from synergies with local producers, educational institutions, and the research centre.

Additionally, there are many other businesses and opportunities for growth and investment outside of the primary agricultural industry. This includes the growth of industries related to transportation, warehousing, construction, manufacturing and food processing. There are also numerous local trucking and shipping firms offering local, provincial, national and international freight services.

The Canadian Pacific Railway (CPR) company has also recently indicated that it envisions there to be long-term local growth in the transportation of rail freight. However, the CPR itself is not contemplating developing any major intermodal transportation facilities in the Lethbridge area and will likely locally focus on increasing its share of bulk shipping (grains, potash etc.). Canadian Pacific, however does recognize there may be potential opportunities for additional spur lines that would serve local industries or the setting up of a smaller-scale transloading facility. A benefit to Lethbridge County regarding this, is the fact that the main marshalling yards for the region are located at Kipp, and logistics or transloading centres, even smaller-scale, do benefit from synergies of being located near highways and in proximity to other related uses.

It is recognized that agri-business is an important industrial sector for Lethbridge County and is both closely associated to and is a complimentary industry to agriculture. This is an ideal and logical industry sector to establish and expand in a rural municipality, as the industry is processing products or by-products close to the supply source. Examples such as cheese processing (Agropur), potato processing (McCain's), etc., are prime examples of agri-businesses operating in the County. A prime factor in locating these industries, in addition to proximity to source/supply and major transportation networks, is access to a municipal water source that can provide the volume of water needed for processing. Depending on the processing business, access to a suitable sewage treatment system may also be important. It is noted in the 'Growth Strategy' section in this report, that agribusiness industry is not specifically singled-out, but is included in the general description category of "industrial" land use.

5.2 Classification of Industry Land Use Types

The previous land analysis identified various types of industrial and commercial developments that have been occurring in the County, and include the following six general categories:

- 1. Isolated Agriculture Related Industry
- 2. Resource Extraction or Point Source Industry
- 3. Home Occupations
- 4. Hamlet Industrial or Commercial
- 5. Isolated Industrial or Rural Commercial
- 6. Clustered or Grouped Industrial or Commercial

5.2.1 Isolated Agriculture Related Industry

These types of uses are listed as discretionary land uses within the Rural Agriculture land use district of the Land Use Bylaw, and may occur without the need to redesignate the parcel. Typically, these include uses associated with agricultural activity, such as seed processing facilities, garden markets, feed mills, etc., and they may establish anywhere in the County. Some more intense uses are required to redesignate to an appropriate industrial land use district. These are important secondary industries to agriculture, and should be permitted to continue on a site specific basis.

5.2.2 Resource Extraction or Point Source Industry

Resource extraction uses are difficult to predict where or what frequency they may occur, as they are very specific to the site of a desirable resource (e.g. gravel source) and are very dependent on market conditions for the resource. Thus, they are often dealt with in a reactionary basis by a municipality, with regard given to land use impacts, such as environmental considerations, impacts to neighboring uses, etc. Some uses, such as oil and gas activity, are also under the jurisdiction of the provincial government to regulate. Thus, theses uses will continue to operate throughout all areas of Lethbridge County, and the latest Land Use Bylaw (Bylaw No. 1404) was updated to better manage, where possible at the local government level, many of these types of uses.

5.2.3 Home Occupations

Home Occupations are found to be located all over the County, but the majority are located in the southern portion. This category of land use includes a wide diversity of businesses, such as a home office, while others are more intense such as welding shops, automotive/machinery repair, etc. Many are related to servicing the agricultural producers in an area. Between the years 2000 and 2012, 158 development permits were issued for home occupations (12.2 per year average), comprising 8.8% of the total of all permits issued. Land Use Bylaw No. 1404 was updated to better manage these uses and the bylaw now includes a third type, which allows up to five employees on site, along with limited storage and business vehicles. This is important as many of these smaller scale home based developments are in the business 'incubate' stage and may eventually grow and expand into industrial parks in the County. These types of uses should continue to be allowed wherever deemed appropriate, with the County reviewing and monitoring their success or constraints over time, wherever possible. At some point in future time, some uses that have grown or need to expand should be encouraged to relocate to established industrial areas.

5.2.4 Hamlet Industrial or Commercial

As noted, the majority of hamlets are largely residential in nature and approvals of industrial uses have, in the past, met with some opposition and complaints from residents. Based on historical trends, it is foreseen that except for perhaps a couple of hamlets that may experience interest in additional industrial/commercial development, such as on lands adjacent to highways, the majority will experience slower growth and cater to a more local service area, either to the urban residents or agricultural producers in the general area. Most future new growth will likely occur adjacent to areas or parcels already designated for such uses. Any industrial uses approved within a designated hamlet should be compatible with existing development.

To expand the hamlet industrial/commercial land base, additional studies on expansions to hamlet infrastructure services and capacities may also likely need to occur. Thus, except for some general areas described, the majority of potential hamlet industrial/commercial land use considerations should be addressed in subsequent hamlet growth studies, as previously identified by Lethbridge County as a future planning exercise.

This study and land use emphasis is to primarily highlight the following two land uses as the main focus of Lethbridge County's strategy.

5.2.5 Isolated Industrial or Rural Commercial

These types of land uses may be found in all areas of the municipality. They are often very site specific, depending on the use or needs of the business. Examples are McCain Foods located adjacent to the Hamlet of Chin or Monsanto's facility on the north side of Highway 3 on the Lethbridge County-Coaldale highway corridor. Often siting criteria is based on proximity to suppliers/producers, proximity to major transportation corridors, availability of required size of raw-land parcel, availability of servicing for the need, and price of the land. Rural commercial uses are typically very dependent on being adjacent to a highway, have good access available to the highway, high traffic volumes present, and the availability of water. These are more difficult to preplan locations for, as often the business is very specific in their needs, and it is very dependent on the developer's ability to negotiate the purchase of the land.

Some areas may be predetermined as being acceptable, such as near major intersections of transportation corridors; however, others will need to be reviewed on a site specific basis and on the merits of the proposal. Lethbridge County should continue to allow for these opportunities, but the management of such may primarily need to be accomplished through the application of general land use and siting criteria to guide decision makers as well as prospective developers in locating suitable sites. General land use and siting criteria for isolated commercial and industrial uses that may be considered are outlined in the next section.

Alternative energy developments, such as wind or solar farms, may also be categorized as isolated industrial developments. These are very dependent on the availability of large parcels of unfragmented land, proximity to transmission lines, capacity in the system, and little conflict with other land uses, including irrigation systems.

5.2.6 Clustered or Grouped Industrial or Commercial

The primary focus of this study and accompanying strategy is to identify and appropriately plan for well managed industrial and commercial uses, as located in clustered or grouped business parks. As identified, seven such formal and established sites presently exist within Lethbridge County. The strategy will attempt to focus business and industrial/commercial growth to strategic locations based on clustered/nodal development concepts, sensitivity and integration with the agricultural landscape, and adjacent land uses. Industrial localization and intensification optimizes the industrial land potential by enabling more efficient servicing, takes advantage of existing infrastructure that may be present, uses land more efficiently, allows sites to achieve higher density forms, may facilitate new growth through the re-development of existing underutilized sites, and helps preserve agricultural land in other areas of the municipality.

5.3 Defining Land Use Criteria

A main purpose of the strategy is to identify and protect suitable land areas within the municipality that may appropriately be planned to accommodate industrial or commercial development growth, without impacting other existing uses or conflict with other County policies or goals. There will always be a certain level of potential conflict between industrial land uses and other uses, such as residential and sometimes agricultural; however, appropriate siting, design and spatial separation can help to mitigate many of these conflicts to a manageable degree. Identification of suitable lands to accommodate industrial/commercial growth is based on the following principles and criteria:

5.3.1 Isolated Industrial and Commercial Uses

Defined/located according to the following criteria:

- Strategic location of highway business based on proximity to highways, especially intersections and interchanges
- Direct to cut-off or poor quality agricultural lands wherever feasible
- The proposal compatibility with existing development and the land
- Higher quality agricultural lands should only be considered if they are parcels adjacent to major transportation corridors
- Availability of existing infrastructure/services
- Ability to obtain/install infrastructure/services
- Future considerations for the land and lands adjacent to them
- The potential to mitigate any negative impacts of the development

Additionally, for **commercial** uses the following should also be considered:

- Location should be based on service centre role, service being provided to the general public
- Parcels with visibility and frontage along highway a priority
- Ease of access to paved roads
- Recreational uses may be considered suitable commercial uses

5.3.2 Regional or Clustered Industrial and Commercial Uses (Business Parks)

Defined/located according to the following criteria:

- Existing policy areas
 - As identified in the Municipal Development Plan (MDP) and Intermunicipal Development Plans (IDPs)
 - Existing and designated industrial parks in accordance with the Land Use Bylaw (infill or expansion)
- Identification or expansion of lands based on principles of clustered/nodal development

- Market demand/ developer preference, as aligned with County policy directives and planning policies
- Possibility of access or proximity to rail
- Availability of existing infrastructure/services
- Ability to obtain/install infrastructure/services
- The potential to mitigate any negative impacts of the development at the location
- Future considerations for adjacent land uses
- Availability of suitable land (e.g. not susceptible to flooding, environmentally sensitive land, etc.)
- Land use does not conflict with other land uses or other County policies
- Close proximity or connection to the provincial highway network
- Connection to or ease of access to the local road network

In identifying and siting business park locations it is recognized that highway locations offer the following advantages:

- Transport savings speed of transport brings economies in transport costs and saves time
- Visibility allows prominent sites with exposure
- Semi-truck circulation highways can readily accommodate the traffic of heavy trucks
- Traffic safety less congestion with the public and other general vehicle traffic than within a higher density urban setting

Overall, as part of the strategy, identifying a number of industrial sites in a variety of locations instead of one large concentrated area is advantageous to:

- Provide a choice of business environments
- Avoid large concentrations of industrial traffic in one location
- Provide a variety of locations with different transport orientations, and some with rail access and some without
- Help limit potential off-site impacts by reducing the scale or concentration of development in one area
- Reduce transportation distances or costs for some businesses that need to be in a certain area or in proximity to a specific supply or market
- Enable more competitive land sales and market conditions
- Take advantage of symbiosis that may exist by associating with existing industrial users

5.4 Business Park and Layout Design

The establishment or expansion of industrial business parks or centres should be planned for and consider a wide variety of uses, but there are some basic trends or best practices/factors that should be considered. Many planning studies have indicated that warehousing and distribution activities rather than production facilities are easier to plan for and often are the dominant use in industrial parks. These activities do not

typically generate nuisances (noise, odour and smoke), usually require less servicing such as water, and they are usually dependent on good access and ability to accommodate large truck traffic.

Commercial businesses may be located within industrial parks and provide a number of beneficial services, but are much more dependent on water and sewer services. Depending on the size and location of the park, hotels, restaurants and gas stations may be suitably located and planned in conjunction with industrial land use if they can be adequately serviced. Typically, these types of commercial uses are located at the entrance to the parks and adjacent to major transportation corridors.

The planning process for industrial areas should be ongoing and reviewed regularly. Improvements in transportation, shifts in tenant mix, technological advancements in providing services, technological changes in processing or communication, and other economic factors may modify the range of uses, the layout, the structures and the function of the area. Also, special consideration is needed for promoting industrial growth adjacent to rail lines and in proximity to highway and municipal road crossings due to safety and traffic issues. Often, rail crossing protection infrastructure will need to be installed, which is typically done at the developer's expense.

5.4.1 Design Considerations

The establishment of new industrial business parks or the expansion of existing ones should be based on a cost effective and suitable design, in conjunction with servicing considerations. The industrial site should be effectively laid out for efficient road network considerations and the accommodation of storm water management. In designing and/or approving plans for the expansion or establishment of industrial parks, the following criteria should be considered at a minimum:

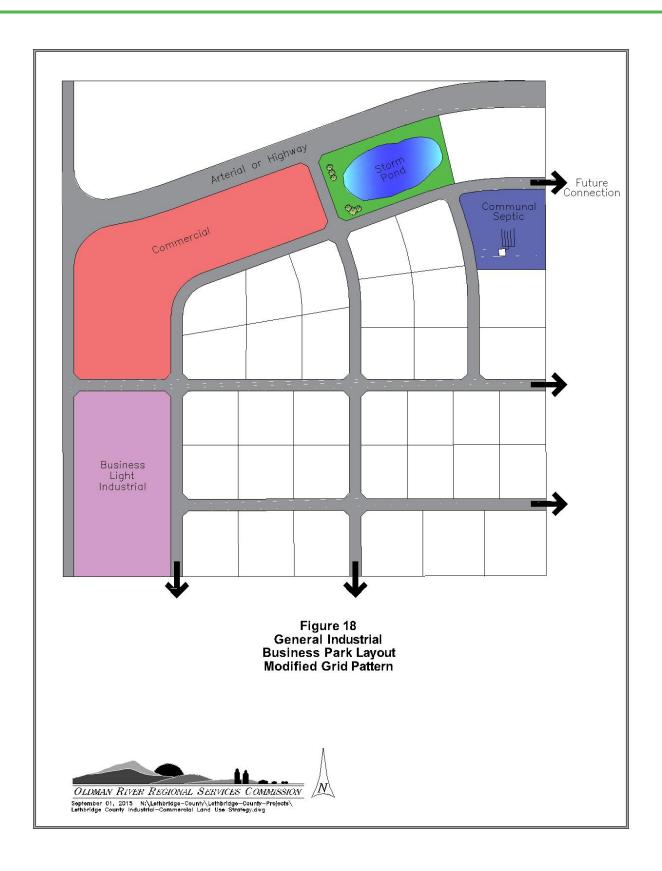
- A gridiron or modified-grid system layout is preferred, as planning and industrial land use studies
 indicate layouts which create a road network with square and rectangular parcels are best suited
 for industrial development and for warehouse use in particular (See figure 18).
- Lot depth is more important than lot width and a 200 foot depth is often not deep enough for yards that must accommodate semi-truck traffic. Thus, industrial parks should ideally be designed so parcels can have 300 to 400 feet minimum depth. Minimum site dimensions should be 200 feet of width and 300 feet of depth, and a minimum 500 feet of depth should be considered for parcels backing onto a highway.
- Designing square and rectangular parcels or 'blocks' no less than 12 20 acres in size offers flexibility, as one business may require a large site, but these blocks can also be further subdivided to accommodate small area users (e.g. 1 2 acres), if properly designed at the start.
- Property frontages should be landscaped, two-thirds of the area is a common standard, and storage in the rear only, parking and loading space should not permitted in the front yard. Parking should be limited to customers in the front yard and employee or main equipment inventory in the rear.
- Arterial or main business park roads should be designed at a minimum 30 m width, with a wider carriage way, instead of the traditional 20 m.
- There should be no dead-end roadways or small cul-de-sacs in the subdivisions. For growth areas, future access and connectivity to adjacent lands that may also be developed must be considered.

- A Floor Area Ratio (FAR) of 0.50 is encouraged (i.e. this relates to site coverage), as this assures sufficient space for parking, loading, and unloading facilities without using public streets, and encourages the reservation of additional land for future facility expansion.
- Mixed-use (both vertical and horizontal) should be encouraged office space above buildings, multi-use or lease bays, condominium plans.
- If commercial sites are included, they should ideally be placed at the entrance of the subdivision or business park.
- Best environmental practices should be incorporated wherever feasible, such as designing wetlands as part of the storm water management system, reusing water where possible, incorporating recreational opportunities in green space or buffer areas.
- The layout and design of the business park should be based on best siting and engineering practices and consideration of the topography of the land, with storm water management containment systems sited in the logical catchment area and be designed to accommodate expansion if required.
- Area structure plans should be designed to allow for logical phasing of subdivision or development.

Highway Issues – For proposals in proximity to highways, Alberta Transportation will need to be consulted and the department's requirements taken into consideration as it is the approval authority relating to access on the highway and manages control over how development and traffic may impact the integrity of the highway system. Alberta Transportation's mandate, under the Highways Development and Protection Act, is to facilitate a practical network of safe transportation routes in the province. Access management strategies will need to be considered as part of the additional planning and design of business parks. ASPs within referral distances that require circulation to Alberta Transportation should be considered for Ministerial approval prior to redesignation.

With respect to safety, the number and the physical design of access points onto primary highways are major concerns. These factors are considered by Alberta Transportation when subdivision and development occur within 300 m (1,000 feet) of a highway. Roadside permit approvals are also required from the department for any development within the right-of-way or within 300 metres beyond the limit of the highway or within 800 metres from the centre point of the intersection of the highway and another highway. In order to satisfy the department's goal of supplying safe transportation, Alberta Transportation will consider minimizing the number of access points onto the highway by closing existing intersections of municipal roads onto the highway as it determines necessary.

Rail-line Considerations – Developments desiring rural service for spur-trackage must conform to the requirements of the CPR. Thus, close contact with rail company officials is desirable throughout any process of planning for access to trackage. Consideration of setbacks and potential impacts of industry adjacent to the safe operation of the rail line should also be taken into consideration. The County's land use bylaw contains setback standards based on the *Guidelines for the Federation of Canadian Municipalities for Development Adjacent to CPR Lands*.



5.4.2 Servicing Considerations

The availability of servicing, or the potential to feasibly service, are important considerations in the planning for efficient industrial-commercial growth areas. Thus, a strategy that involves expanding existing business park areas or clustering development in specific areas offers a number of advantages including at the very least, the ability to take advantage of existing infrastructure or expand existing systems rather than develop all new. This enables efficiencies and economies of scale with less roads and pipe, less infrastructure to maintain and manage, etc. The installation of services for a business park should be completed up-front before individual lots are sold, and is typically provided at the expense of the developer and constructed to municipal standards.

Sewage Treatment

Without a municipal piping and treatment sewage facility, there are a number of viable options available for industry and the County to consider. On-site individual septic treatment systems may be used for isolated industries or low volume waste/effluent producers with a 2.0-acre minimum lot size. To potentially reduce the lot size, other technologically advanced septic systems which have been proven to be more efficient may be considered such as the "FAST system" (Fixed Activated Sludge Treatment) process to treat and denitrify wastewater, or a "Small Bore Sanitary Sewer System (SBS)" in which a clarifier tank is located on each lot.

For grouped industrial/ business parks, it may be more ideal for the County to encourage communal/municipal treatment systems which may be implemented in a variety of forms (e.g. leach field, mound system, lagoons, aerobic digesters, etc.) with the County ultimately taking control of the infrastructure. Also, a business eco-park plan may be designed to employ an alternative wastewater system that will utilize wetlands as part of the process. Depending on the industry, some businesses may also capture and reuse some processing water as part of their internal system which reduces the ultimate volume of waste water produced which leaves the plant.

Water

Water is needed to service industrial-commercial developments, but the amount will vary to different degrees of need and volume. Some businesses are very low volume users and only require it for a staff /coffee room and washroom facilities for employees, while others require larger volumes for processing or manufacturing. As the County does not have its own water treatment facility, the growth of industrial or commercial land use is somewhat dependent on the County obtaining and delivering water, entering into agreements for treatment of the County's water (under its own license), or planning for uses which require limited water supply. There may also be opportunity for considering raw water delivery through agreements with the irrigation districts. This may be utilized in business parks in conjunction with dual piping systems required for buildings, or eventual package water treatment plants being constructed.

In 2013, the County commissioned MPE Engineering to undertake a study to examine various constraints, methods and costs associated with the delivery and treatment of water for developments in the County. That MPE report and its findings should be evaluated and considered in moving forward with developing a growth strategy. It is recognized that overall, any growth area(s) identified will require a water delivery strategy or will be restricted to accommodating low volume water users only.

Fire Protection

A method of providing fire protection will need to be considered in the design of business parks. Historically, this has been provided in the form of a dugout or fire pond for the subdivision. Often in

County rural subdivisions, a dry hydrant has been required to be installed in the pond. Access to water and availability on a year-round basis is required for adequate fire protection. Some businesses install sprinkler systems in buildings as part of their safety system but such infrastructure does not help with fires external to the building or property. Often, a fire pond properly engineered and designed in combination with the storm water management (pond) system is effective for serving this purpose. Thus, the provision of water needs to be addressed in conjunction with the fire suppression needs of an isolated industrial/commercial development or the overall design of a new or expanding business park.

Land use siting practices should also be implemented for the proper siting and separation of more volatile or hazardous industries (e.g. processing chemicals, fertilizers, fuels), from other types of land uses.

Storm Water Management

The management of storm water drainage must be addressed as part of the planning process. Engineered storm water management plans will be required at the area structure plan stage, or in some cases, subdivision or development stages for isolated developments. Traditionally, it has been the developer who has been responsible for providing the engineers report and obtaining any Alberta Environment approvals. In some cases, the overall strategy will need to align with larger County storm water management initiatives, such as the Malloy Drainage Basin Master Plan. The County should encourage, wherever practicable, combining storm management ponds with fire supply methods. Additionally, encouraging low impact design principles, such as developing more natural wetland systems, should also be considered if feasible.

5.5 Land Use Assumptions and Projections

5.5.1 Land Demand

Forecasting land demand is a difficult exercise for rural municipalities and may be somewhat limited in value because of:

- inaccuracy of calculations,
- the large amount of land available gives considerable flexibility,
- · fluctuating economic conditions,
- lands usually not serviced can usually be brought on stream relatively quickly.

Cities often forecast general industrial development growth based on a ratio of square feet of industrial floor space per capita. In many Western Canadian municipalities, this ratio appears to be between 95 - 110 square feet, while smaller population centres have an industrial floor space of 80 - 90 square feet per capita respectively. Making such forecasts on this method is difficult for a rural municipality, as industry activity is not directly related to local population. Also, basing it on previous annual average growth rates for general industrial development based on square feet of industrial building space is difficult for the County since it has not been recorded or tracked in the past.

Big-box commercial development typically requires large vacant tracts of relatively inexpensive, serviced land that is located along major transportation arteries and is easily accessible from major highways. Thus, some areas of the County would be suitable strictly on parcel size, price and possible location. However, it is unlikely significant commercial development would occur outside of the urban boundaries,

especially the City, due to lower population densities, distance to market clientele, and the lack of availability of adequate services.

Overall, the anticipated amount of retail/service commercial development that can be expected in the County is low based on past trends and servicing constraints. Water and sewer servicing to surrounding City of Lethbridge municipalities (i.e. Coaldale, Lethbridge County, Coalhurst, etc.) is also provided and controlled by the city through various agreements.

The amount of light-industrial/commercial type land use (e.g. shop buildings, trade contractors, equipment service and sales) has traditionally been somewhat higher than industrial processing/manufacturing uses. This trend will likely continue into the foreseeable future. The agribusiness and bio-industrial sectors continue to grow and are compatible rural industrial land uses. Parcels or areas located within 10 km of the city appear to be most desirable based on past trends and data analysis.

5.5.2 Land Projections

The preparation of land use projections and forecasting likely industrial-commercial land demand for Lethbridge County is based on the analysis of past data and some assumptions about the future.

- In order to give some impression of likely land consumption, it may be assumed that 17 development permits per year on average may be approved. This represents the average number of industrial-commercial permits approved yearly between 2000 and 2013. Based on the data analysis it appears the average use occupies 4.5 acres but the range varies widely, with half being 3.0 acres or less. Applying the range of sizes to the 17 permits and averaging the total yields is a simplistic approach, however, using this method the County may expect 50.0 60.0 acres of land consumption, on average, for industrial and commercial uses per year.
- The 50 60 acres figure comprises both isolated uses and the uses that established in the
 designated industrial parks. Thus, in examining the data and separating the percentages of
 isolated development (57%) and designated/grouped development (43%), it appears that 25 30
 acres may be anticipated per year within designated industrial business park areas based on
 previous data trends.
- Planning for available land should consider situating it in a number of locations rather than one
 location only, to assist with market choices and locational factors. Thus, slightly more land than
 what actually may be developed on a yearly basis needs to be considered overall as part of the
 planning and economic strategy.
- In the future, a higher percentage of industrial-commercial land will likely be in designated business parks and the percentage of isolated uses should decrease somewhat. This is due to changes made in the land use bylaw and redesignation requirements, and the County actively promoting and encouraging development in the various business parks.
- Due to the high interest in the Highway 3 Lethbridge-Coaldale Corridor and Broxburn area, the County, as part of the land use strategy, may want to ensure there is continually readily available 20 25 acres of land in this one particular location.
- Slightly more land than what is typically developed in a year should be available to prospective business interests, as it takes time to plan for, obtain necessary approvals, subdivide and service

land and it cannot be brought to market in a short time frame. A two - three year land acreage inventory may be considered reasonable.

As part of the strategy the County should try to ensure there is continually available an overall minimum of 70 - 80 acres of readily accessible land amongst the various business parks to accommodate development. This estimated amount of land should only be used as a target amount and with closer monitoring over time, better estimates can be made in the future.

5.6 Growth and Expansion Areas

5.6.1 Agricultural Land Considerations

From the provincial South Saskatchewan Regional Plan land use strategies through to the local Land Use Bylaw and Municipal Development Plan, protection of agricultural land is a priority. Agriculture, although it has a changing role, is still the major use and economic driver of the County. It still needs to be considered as a primary use and in all decisions must be protected as best possible from other uses that may conflict or unnecessarily remove land from production. Although most of the soils within the growth areas are considered fertile, the majority of the entire undeveloped area, if properly managed, represents good quality productive agricultural land. The Irrigation Districts (LNID and SMRID) administer irrigation in much of the areas encompassed by the growth strategy and many parcels have irrigation or water rights.

The bylaws allow industrial and commercial uses on better-quality land if deemed appropriate, however, a balance is required and may be difficult to achieve. An industrial/commercial policy should take into account land quality and wherever possible to direct uses to poorer-quality lands. However, a goal of the strategy is that by encouraging and clustering development to specific areas, and in particular by promoting the expansion of non-agricultural development in existing industrial areas, agricultural land in other areas of the County will be preserved from being removed from production and being converted to other uses. Both infill and expansion wherever feasible and logical, should be a high priority.

5.6.2 Overview – Primary Growth Areas

It is noted that as part of the growth strategy, access to or the availability of water is not the highest locational factor consideration due to present conditions within Lethbridge County. Treated water is currently limited to specific areas or existing developments, and the County is somewhat dependent on existing agreements with urban neighbors as the County has no treatment facility of its own. So overall, any growth area(s) identified, will require a water delivery strategy or will be restricted to accommodating low volume water users only. Sewage is not as major of constraint, as treatment can be handled through various means as identified earlier in this report, including on-site individual treatment systems for low volume producers, lagoon systems, package sewage treatment plants, or communal systems.

As in the past, it is suggested that in the future industrial and commercial uses will locate in:

- hamlet areas, as appropriately planned for;
- airport surplus lands;
- isolated uses located in the general rural areas, as deemed suitable; and

designated grouped or clustered industrial/commercial areas, both existing and new.

It is anticipated that in moving forward, the majority of industrial-commercial uses will be located in designated business parks. The primary focus of the land use strategy will be to appropriately plan for and manage industrial/commercial growth in designed and designated grouped or clustered areas.

5.6.3 Areas Identified in IDPs

The County has or is in the process of developing Intermunicipal Development Plans with all if its urban neighbors. In some of the completed plans, areas have been identified in the agreements where the County may grow and develop land for non-agricultural purposes. It is of importance to note that although these areas have been identified, little additional planning, engineering or subdivision work has occurred in these areas to make them turn-key ready for business.

Nobleford West Area

The 2012 Intermunicipal Development Plan between the County and the Village of Nobleford identified an area west of the village that could be planned and utilized for industrial-commercial development. The area is bordered on the west by Highway 23, on the south by Highway 519, on the east by the CPR and the village. This area is highly visible, has good access to major transportation routes (both highway and rail) and nearby access to municipal services such as water and sanitary sewer that may be extended from the village in the future (if agreed to and available). There are presently three commercial/agri-business operations located within this area. Both municipalities agreed that the acceptable types of uses for the corridor are highway commercial type businesses and/or business/light industrial uses. Approximately 140-acres of undeveloped could be planned for additional non-agricultural land use development, with potential future growth lands also available to the north. In accordance with the IDP, an Area Structure Plan (ASP) would be needed to be prepared and an addendum Traffic Impact Assessment that should include approval of the Minister of Transportation as well as the County prior to the redesignation of any parcel of land. Moreover, and in general, ASPs within referral distances that require circulation to Alberta Transportation should be considered for Ministerial approval prior to redesignation.

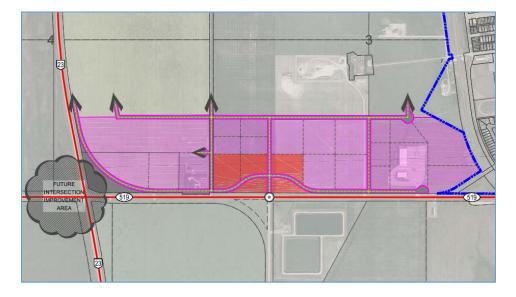


Figure 19

Coalhurst North-Kipp Road Area and Highway 25 Area

The 2014 Intermunicipal Development Plan between the County and the Town of Coalhurst identified areas around Coalhurst that could be planned for County industrial-commercial uses. Primarily, the IDP identified the western portion, north of the town and adjacent to the CPR rail-line, as the focus for industrial type uses. The west portion of this area is identified as suitable for industrial type land uses, as there are a number of such uses already established in the area. It has convenient access to major transportation routes (both highway, local pavement and rail) and the area south of the Kipp Road is in proximity to municipal services such as water and sanitary sewer that may have the potential to be extended in the future when feasible (if agreed to and available). The town has expressed an interest in collaborating with Lethbridge County and developing a joint regional business park. Approximately 190 acres of land may be developed for non-agricultural land use in this area.

As well, approximately 60 – 70 acres of land adjacent to the Kipp Road and Highway 25 intersection is identified for potential commercial/light industrial use (see Diagram 1 and Figure 20). The types of uses deemed appropriate will be dependent on servicing capabilities/constraints. It should be noted that the development of this cluster would be based on a more detailed land use concept that would require the development of a paralleling or internal service road off Highway 25 from the Kipp Road. Similarly to the Nobleford IDP area situation, any future large scale or multi-lot development in the Coalhurst area is subject to future planning and engineering work as undertaken in the preparation of an ASP, as the land is presently undeveloped and primarily used for agriculture.

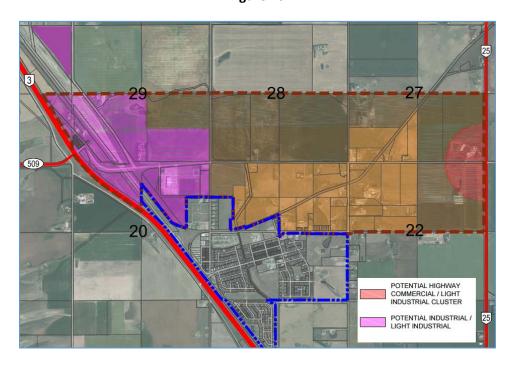


Figure 20

Picture Butte East Area

The County and Town of Picture Butte started the discussions to prepare an IDP in 2014 but that process has not been completed at the time of this report. As part of those discussions Lethbridge County has expressed a desire to make an agreement or collaborate with the town on enabling the County to develop some land on the east side of Picture Butte, in proximity to Highway 519, for industrial-commercial use. In 2012, the County helped contribute towards capital improvements made to Factory Dive South with the understanding they may also benefit from some development in the area. How much land, the exact location and area, along with potential servicing options or agreements, and if there is any interest in establishing a collaborative joint business park, will need to be discussed and negotiated with the Town of Picture Butte through the IDP process.

Potential Growth Area

Figure 21

5.6.4 CANAMEX Interchanges

Highway 843 (43 Street North)

- Highway Commercial Cluster (see diagram 2)

As part of the long-term growth strategy, the area around or in proximity to the future CANAMEX service interchange northeast of the City of Lethbridge, north-end of 43 Street (Highway 843), may be considered for a future commercial (highway commercial) land use cluster. The planning for such is subject to discussions with City of Lethbridge which have been taking place in the form of updating the IDP between the two municipalities. The City has also expressed some interest in development in this area. The issues of servicing, connectivity between uses and municipal jurisdictions, long-term planning, the detailed design plans and the time-frame of the provincial government in constructing the CANAMEX will need to be addressed. As a result, the questions of how much land, exactly where, and how the land may be developed are long-term planning considerations. In the interim, this interchange area should be reserved for future commercial type use and protected from significant fragmentation or incompatible land uses being allowed.

Highway 25 Interchange

- Highway Commercial Cluster (see diagram 3)

Similar to the previous identified area, the land around or in proximity to the future CANAMEX service interchange north of the City of Lethbridge on Highway 25 may also be considered for a future commercial (highway commercial) land use cluster. Correspondingly, the issues of being dependent on the provincial government to complete the detailed design plans and determining the time frame to actually construct the CANAMEX will factor into planning for and allowing land use in proximity. How much land, exactly where, and how the land may be serviced and developed are long-term planning considerations. It is anticipated that due to locational factors, this would likely be a smaller area and take longer to develop than the 43 Street (Highway 843) area. However once again, in the interim this interchange area should be reserved and considered for future highway commercial type land uses as being considered the most desirable land uses.

5.6.5 Grouped/Clustered Industrial-Commercial Areas

The areas identified for future industrial-commercial growth as types of grouped or clustered land use developments consist of primarily expansions to existing industrial business parks, along with some new areas which are in close proximity to the existing parks. As part of the land use and growth strategy, the diagrams depict and refer to three categories of growth lands: 'Priority – Initial', 'Successive – Secondary', and 'Prospective – Future'. The rationale for this three-tier approach is to identify the most logical areas that may be suitable for accommodating initial industrial-commercial development growth in the near future, and to protect long-term growth lands in the immediate vicinity in respect of the clustering/expansion land use planning concepts. Generally, the three-tier categories radiate out from the existing "core" built-up area. The 'Priority – Initial' areas are lands that are adjacent to existing designated industrial lands and may potentially connect to the existing road network and other infrastructure. They logically should be the first or primary areas to be developed. The 'Prospective – Future' growth areas are in consideration of very long-term growth in the County, and should remain as agricultural lands until such time they may be needed. These long-term areas identified should not be converted to other incompatible land uses, such as grouped country residential, and an attempt should be made to keep them as unfragmented as possible.

It is important to note, that although the growth strategy identifies the three-tier categories for growth lands, they do not necessarily have to be strictly developed in this manner and the reference is to act more as a plausible guide. As the County moves forward in the process and consults with land owners and developers, land categorized as 'Successive – Secondary' or 'Prospective – Future' may actually be developed earlier (or even before Priority – Initial' lands), as some land owners may choose not to be involved in the land development process, or servicing issues/opportunities may evolve that may make one area more advantageous to develop over another. Thus, a practice of exercising flexibility with respect to a managed growth approach should be employed when possible.

RAVE Industrial Park - NW 3-9-21-W4 and SW 10-9-21-W4 (see diagram 4)

The RAVE Industrial Park is fully developed and any growth would logically occur to the north, on the east side of 43 Street. This is an ideal area to expand (into SW 10-9-21-W4) as the existing park is serviced with water and sanitary sewer by the City of Lethbridge through an agreement with the County. This area has

been identified by the County to the City of Lethbridge as a desired County growth area during the IDP update discussions. However, no agreement has yet been reached and the city has indicated that there is no present additional city capacity to service this area. If these matters can be resolved, an initial 39.15 acres (Successive - Secondary) immediately north could developed, and an additional 40.91 acres (Prospective – Future) in the long-term. The feasible growth of this area is quite contingent on discussions and agreements with the city. An area structure plan, with servicing, drainage and a transportation/access strategy being addressed, would need to be prepared.

Duncan Airport Industrial Park – SW 10-8-21-W4, E½ 9-8-21-W4 and NW 10-8-21-W4 (see diagrams 5 &6)

The Duncan Airport Industrial Park (east side of Highway 5) is approximately 80% developed out. Some business or land owners are only utilizing a portion of their lot, and some own the adjacent one or two titles, which may accommodate future expansion plans. There may be some infill development potential if some of the large lots were resubdivided, and presently there is approximately 23 acres of undeveloped land that could be made available for development, if the landowners are willing to sell.

This area has been identified by the County to the City of Lethbridge as a desired County growth area during the IDP update discussions. An initial 73.1 acres (Priority - Initial) immediately north could developed, and 77.81 acres (Successive - Secondary) across from the airport adjacent to Highway 5 with some potential for Highway Commercial use. A long-term area to protect for future growth (Prospective – Future) contains approximately 107 acres. This industrial area is unserviced, and if water services in particular cannot be provided, this area will likely experience slower growth and would cater to less intense, storage type uses. To expand Duncan Industrial Park, an area structure plan, with servicing, drainage and a transportation/access strategy being addressed, would need to be prepared.

Lethbridge Airport Infill and Expansion

(see diagram 7)

The Lethbridge Airport (adjacent to Highway 5) is owned and operated by Lethbridge County and contains commercial lands for lease which assist in raising revenue to support the airport operations. The County has over the years been discussing the possibility of obtaining servicing from the City of Lethbridge to the airport. The City has indicated this area is very difficult to logistically and feasibly service, and to date, there has been no agreements or long-term infrastructure planning made to extend services to the airport area. The expansion of commercial-industrial lands available for development has been identified as a goal in the airport master plan. Close to 130 acres of land would be available at the airport. This is a positive development situation for the County, as Lethbridge County owns the airport lands and could act as the developer in actively bringing more land on-stream. Obtaining a secure water delivery system is the main issue to be addressed, as sewage treatment could potentially be managed through a communal type on-site system, as there is a sufficient land area to accommodate this.

Stewart Siding - Section 23-8-21-W4

(see diagram 8)

Stewart Siding (east and south of the City of Lethbridge on Highway 4) is approximately 68% developed. This area has been identified by the County to the City of Lethbridge as a desired County growth area during the IDP update discussions. In addition to the 32.85 acres of potential infill and 31.26 acres (SW

23-8-21-W4) already designated as RGI and as illustrated on Diagram 8 as "Priority – Initial", another 39.27 acres has been identified for future expansion into the NW 23-8-21-W4 (Successive - Secondary). To the west of this is 54.88 acres of land which fronts onto the County road allowance on the boundary with the City of Lethbridge, identified as a "Prospective – Future" growth area. After this, Stewart Siding would effectively be developed out, as no additional adjacent land is available for expansion due to many physical constraints including the SMRID canal, CPR rail-line, Highway 4, location of City of Lethbridge municipal boundary, and acreage development to the south.

This industrial area is unserviced and it has also experienced some public perception issues in the past with a number of unsightly premises. This business park is in good location, but would benefit from applying and enforcing development standards in the future. Also, if secure water servicing cannot be provided, this area will likely continue to cater to less intense, shop building and storage type uses. To expand Stewart Siding, an updated area structure plan with servicing, drainage and an internal road network/access strategy being addressed, would need to be prepared.

Broxburn Area – Highway 3 Coaldale Corridor

(see diagrams 9 - 10)

Broxburn Business Park and Corridor Area

The Broxburn Business Park (NE% 1-9-21-W4), adjacent to east-bound lanes of Highway 3 between Lethbridge and Coaldale, has experienced both good interest and growth. Approximately 90% of the lots have been sold and close to 80% have either been developed or are planning to do so in the near future. At the time of this report, 20.43 acres of land is currently vacant, but many of those parcels have development/building plans being formalized for them.

In proximity to the Broxburn Business Park, other parcels of land have begun to develop unofficially as part of the Highway 3 corridor commercial-industrial area. To take advantage of existing developments and the high interest in this area, planning for additional industrial-commercial lands must be undertaken as the Highway 3 Corridor should be a 'priority' growth area for Lethbridge County. This area has been identified by the County to the City of Lethbridge as a desired County growth area during the IDP update discussions. Also, the *Integrated Development Strategy* report recognized the Highway 3 corridor to be developed to support economic development for the region. This is a logical area to encourage growth for industrial-commercial development due to many factors: existing area transportation networks, intersection improvements being installed at Highway 3 & Broxburn Road, future CANAMEX and interchange plans, number of fragmented parcels, proximity to two urban centres, and opportunities for enhancement of servicing, storm water management, and the symbiosis of industry.

The strategy (see diagram 9) identifies 155.58 acres to the immediate south and east of Broxburn Business Park as 'Priority – Initial' growth lands, 68.08 acres as 'Successive – Secondary', and 249.74 acres as 'Prospective – Future'. Generally, the three-tier categories radiate out from the existing "core" built-up area. The 'Priority – Initial' areas are lands that are adjacent to existing designated industrial lands and may potentially connect to the existing road network and other infrastructure. The growth lands identified should not be converted to other incompatible land uses and an attempt should be made to keep them as unfragmented as possible for future planning. As stated previously, that although the growth strategy identifies the three-tier categories for growth lands, they do not necessarily have to be strictly developed in this manner. Some land owners may not want to participate or be included in the process. (It must also be noted that the total acreage identified is a raw land number and the actual

acreage that may be available for development would be smaller, as some land may have development constraints and between 20 -30% may be utilized for roads, utility right-of-ways, and other infrastructure, such as storm water management systems and fire ponds.) The *Integrated Development Strategy* identified approximately 150 acres of land adjacent to the proposed CANAMEX as a future storm water management area.

To the east and north east of the future CANAMEX and Highway 3 interchange, lands have been identified for future commercial or light industrial type use. The actual area available may likely not be determined until the detailed design plans for the CANAMEX have been finalized. However, on the north side of Highway 3 approximately 20 acres of the 51.86 acres identified has already started to be developed. There is also 78.97 acres located immediately south of Broxburn Business Park identified as a potential "Prospective – Future" growth area. This land would have to be carefully planned, likely with more business light industrial and commercial type use, as there is a grouped country residential subdivision located to the immediate west.

Highway 3 Corridor – Sunny Side Road to Broxburn (see diagram 10)

There exists a number of parcels parallel to the highway that are fragmented and/or contain existing industrial or agri-business uses. Most of these areas have either been discussed with the City of Lethbridge as part of the IDP discussions, or have been referenced in the *Integrated Development Strategy*. Part of the strategy is to further plan and allow development and infill on these parcels. Existing businesses, such as Marshall Auto Wreckers and Pioneer Seeds, may not further develop their excess undeveloped land areas, or may use them for their own future business expansion. Due to existing land utilization by businesses, the overall land acreage may not be as large as depicted in the diagrams and table. However, there is 83.77 acres of raw land identified as a 'Priority – Initial' growth area immediately to the west of Broxburn Business Park and south of Highway 3, which would be an ideal extension of the core Broxburn development area. Across the highway to the north, on the west side of Sunny Side Road, is 20.20 acres that has started to be developed for light industrial agri-business use.

It is recognized that none of the potential growth areas identified have had any professional plans (e.g. area structure plans) prepared for them to facilitate subdivision or higher density industrial-commercial development in the foreseeable future. Additionally, the provision of adequate water services will need to be considered in the overall planning. To expand the Broxburn and Highway 3 Coaldale Corridor area, a number of area structure plans, with servicing, drainage and a connected transportation/access strategy being addressed, would need to be prepared.

Wilson Siding and Highway 4 Corridor (see diagrams 11 - 14)

This should be considered as a "priority" growth area for Lethbridge County to encourage industrial-commercial development due to the area transportation networks, including highway and rail-line, and growing interest in the area with existing and expanding businesses. In particular, access to the rail transportation network and the possibility of spur-trackage is a significant benefit, with room to expand and grow.

508 Agri-Business Park (Wilson Siding) – Section 5-8-20-W4 (see diagram 11)

The Wilson Siding Area (west of Highway 4) at Highway 508 has approximately 30 acres of land presently used adjacent to the rail-line for existing businesses. The new 508 Agri-Business Park contains over 115 acres of land with an approved area structure plan but no land developed. Initially only 55 acres may be developed in a first phase, primary due to future transportation and intersection issues that will need to be addressed with Highways 4 and 508 if the industrial park was fully developed. The strategy identifies the initial 55.00 acres as a 'Priority – Initial' growth area, and 60.14 acres as 'Successive – Secondary'. The 508 Agri-Business Park Area Structure Plan outlined that water would be both raw irrigation and cistern delivered, and sewage treatment will be a communal mound system. There is also 90.83 acres of land identified to the immediate north, which may be planned for and developed in the future ('Prospective-Future") in conjunction with the 508 Agri-Business Park. These land areas should be reserved for industrial-commercial use pending consideration for the long-term transportation management strategy that will be implemented for the Highway 4 and Highway 508 area. This is an area that will require particular consultation and discussion with Alberta Transportation.

Highway 845 - Viterra Terminal/Transmark SW & NW 27-7-20-W4 (see diagram 12)

Situated adjacent to Highways 4 and 845 and the CPR rail-line are over 343 acres of land that could be more formally developed for some industrial use. The Viterra grain terminals are situated on 216 acres of land adjacent to Highway 845 but are only utilizing 10 acres for their own operations. To the northeast, Transmark Ltd. owns a 65 acre parcel presently designated as RGI. Transmark has plans to expand from their current 20-spur tracks (with storage capacity for up to 600 rail cars.) This is an ideal area to expand and properly plan for additional rail car storage, assembly yards, or even some type of inter-modal facility. The strategy identifies 139.17 acres of land as a potential 'Priority – Initial' growth area and 77.44 acres as a 'Successive – Secondary', using the existing Viterra terminal spur-line as the dividing boundary. Additionally, 126.42 acres in the SE 27-7-20-W4 is identified as long-term 'Prospective – Future' growth lands.

Diagrams 13 and 14 illustrate some lands in the Wilson Siding area, section 33-7-20-W4 (NW and SE 33-7-20-W4) and a portion in NE 32-7-20-W4 comprising approximately 219.72 acres, as long-term 'Prospective – Future' growth lands. These lands themselves would likely be a low priority area, other than perhaps some land parallel to the rail-line. However, the important aspect of identify this is that they may be considered as part of a larger planning exercise. These lands may provide a possible access and service road solution to the issues affecting the 508-Business Park and Highway 508, and future restrictions to Highway 4 and the future development of the CANAMEX (see diagram 14).

Other than the 508 Agri-Business Park area, all other identified growth areas would require an area structure plan to be prepared, with servicing, drainage and a transportation/access strategy being addressed. In this Wilson Siding/Highway 4 area, consultation with Alberta Transportation is of pertinent importance.

Kipp - Coalhurst Area

(see diagram 15)

Additional opportunities are situated in the Highway 3, Kipp and Coalhurst area in proximity to the CPR Marshalling Yards. Earlier, 189.88 acres was identified immediately north of the Town of Coalhurst, along the Kipp Road, as outlined in the IDP with Coalhurst. This is recommended as a 'Priority – Initial' growth

area, as the Town of Coalhurst has agreed to this concept, and the town has expressed some interest in collaborating with the County in facilitating its development. An additional, 262.71 acres is identified as potential 'Successive – Secondary' and 240.11 acres as 'Prospective – Future' growth areas, located primarily north of the existing marshalling yards. These areas are realistically long-term, however, they should be reserved for industrial growth due to their location as they are ideal to either expand the marshalling yards if ever needed, or they may accommodate inter-modal rail facilities that may benefit from the proximity to both the railway and highway. The future CANAMEX will have a system interchange at Highway 3 which will be in close proximity to the growth lands.

Chin - Highway 3 Area - SE 25-9-19-W4

(see diagram 16)

This is a small area in proximity to the Hamlet of Chin that is worth noting due to locational factors. This land is part of the McCain holdings, just north of Highway 3 and the CPR rail-line. The area consists of 26.18 acres and is identified as a 'Prospective – Future' growth area. If McCain's deems this to be surplus land to their business operations and is partial to selling it, this site is a suitable size to accommodate a business, especially an agri-business, which may desire good highway access. It is noted that the parcel across the municipal road allowance to the east is in the MD of Taber and contains a bio-mass processing facility. Such or similar uses would also be considered a compatible land use on the Lethbridge County side.

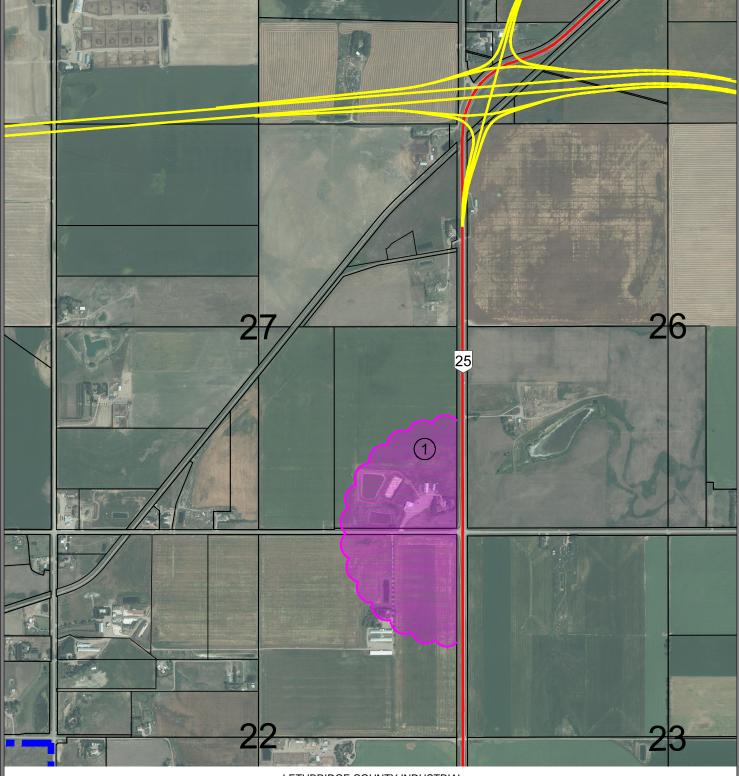
TABLE 9

Growth Areas – Potential Land Available for Industrial-Commercial Land Use

Industrial / Business Park Growth Area	Priority – Initial (acres)	Successive – Secondary (acres)	Prospective – Future (acres)
IDP & Other Special Areas			
Nobleford West	40.00	100.00	
Coalhurst – Kipp North	189.88	262.71	240.11
- Kipp - Highway 25 Commercial	70.00		
Picture Butte IDP	unknown	unknown	unknown
CANAMEX – Highway 25	unknown	unknown	unknown
CANAMEX – 43 Street N	unknown	unknown	unknown
Chin – Highway 3			26.18
Sub-Total	299.88	362.71	266.29
Grouped / Clustered Areas			
RAVE		39.15	40.91
Duncan Airport Industrial Park	73.93	77.81	107.01
Stewart Siding	31.26	39.27	54.88
Airport Commercial lands	37.04	80.90	
Broxburn - CANAMEX Corridor	155.58	68.08	328.71
- East of interchange	51.86	28.76	
Highway 3 Lethbridge – Coaldale Corridor	103.97	19.95	81.08
508 Agri-Business Park	55.00	60.14	90.83
Transmark/Viterra - Highways 4 & 845	139.17	77.44	126.42
Wilson Siding – Highway 4			264.81
Sub-Total	647.81	491.50	1,094.65
TOTAL	947.69	854.21	1,360.94

Source: ORRSC Land Use Analysis 2015

- If approximately 30 acres per year of industrial-commercial land was developed in business parks, the growth areas identified should provide for a 100 to 120 year land supply.
- If approximately 20 acres per year of industrial-commercial land was developed in business parks, the growth areas identified should provide for over 150 to 170 year land supply.



LETHBRIDGE COUNTY INDUSTRIAL COMMERCIAL LAND USE STRATEGY
GROWTH AREAS - DIAGRAM 1

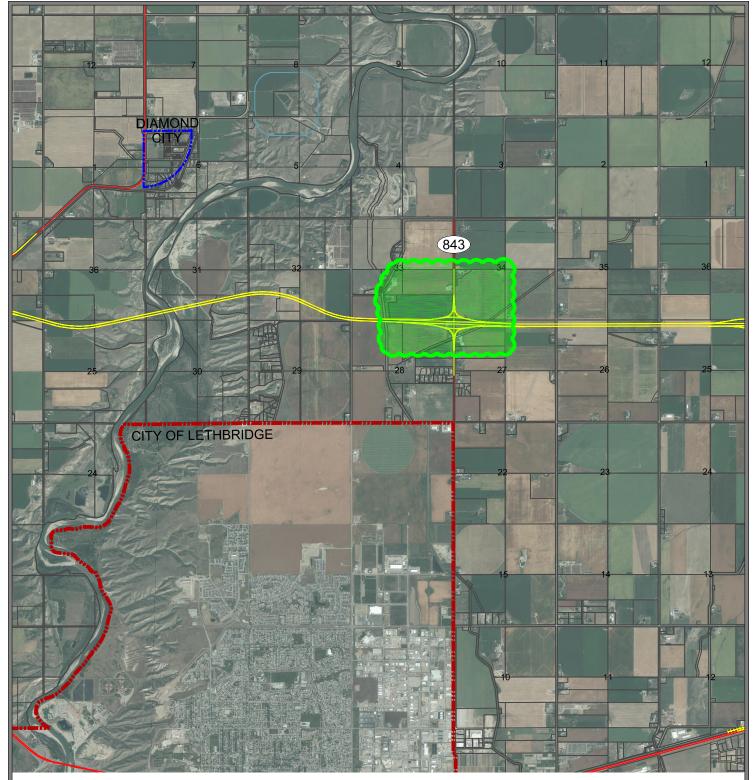
HIGHWAY 25 & KIPP ROAD

GROWTH AREA BOUNDARY

① P

PRIORITY - INITIAL
NE22-9-22 W4M & SE27-9-22 W4M
BUSINESS LIGHT INDUSTRIAL OR COMMERCIAL



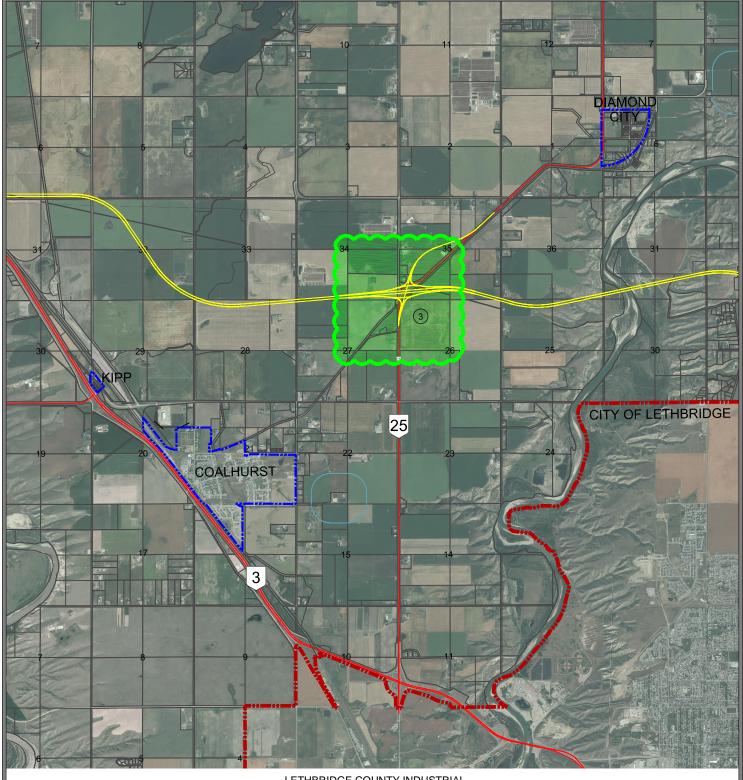


GROWTH AREAS - DIAGRAM 2

CANAMEX & HIGHWAY 25 INTERCHANGE AREA

PROSPECTIVE FUTURE
HIGHWAY COMMERCIAL CLUSTER
SECTIONS 27, 28, 33 & 34 TWP 9 RGE 21 W4M





GROWTH AREAS - DIAGRAM 3

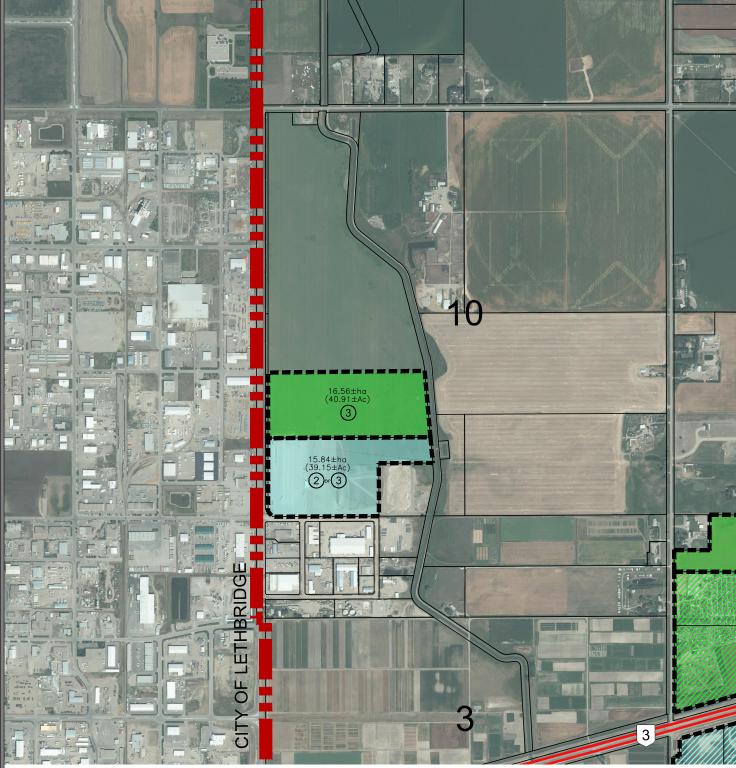
CANAMEX & HIGHWAY 25 INTERCHANGE AREA

GROWTH AREA BOUNDARY

PROSPECTIVE FUTURE HIGHWAY COMMERCIAL CLUSTER

3 SECTIONS 26, 27, 34 & 35 TWP 9 RGE 22 W4M





LETHBRIDGE COUNTY INDUSTRIAL - COMMERCIAL LAND USE STRATEGY **GROWTH AREAS - DIAGRAM 4**

RAVE INDUSTRIAL AREA

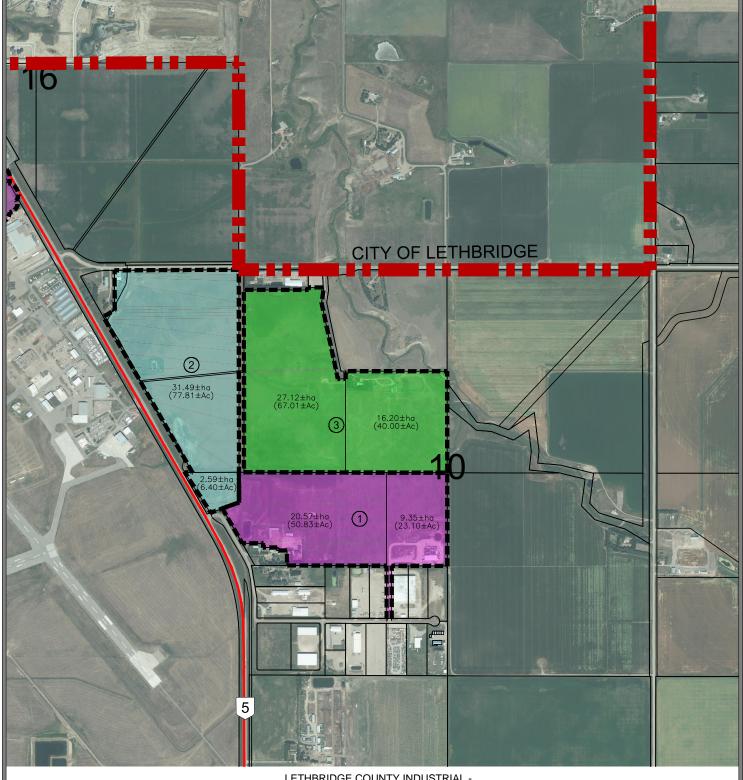
GROWTH AREA BOUNDARY

2 SUCCESSIVE - SECONDARY LOT 4, BLOCK 1, PLAN 1113171 Or WITHIN SW10 9-21-W4M 3 15.84±ha(39.15±Ac)

PROSPECTIVE - FUTURE

3 LOT 5, BLOCK 1, PLAN 1113171 WITHIN SW10 9-21-W4M 16.56±ha(40.91±Ac)





DUNCAN AIRPORT INDUSTRIAL AREA GROWTH AREAS - DIAGRAM 5

GROWTH AREA BOUNDARY
PRIORITY - INITIAL

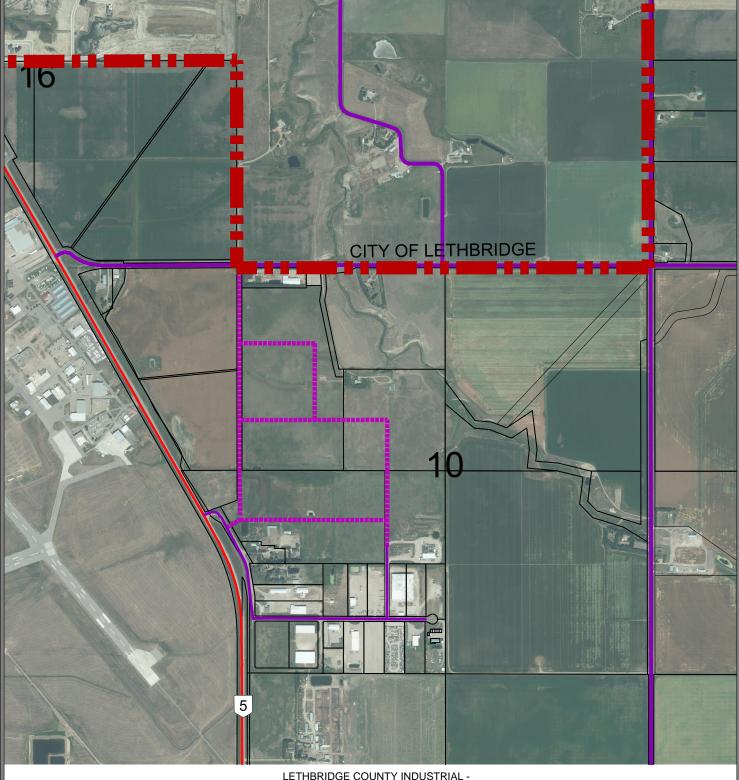
SW10-8-21 W4M 29.92±ha(73.93±Ac)

SUCCESSIVE - SECONDARY

E9-8-21 W4M 34.08±ha(84.21±Ac)

PROSPECTIVE - FUTURE
NW10-8-21 W4M
43.32±ha(107.01±Ac)





DUNCAN AIRPORT INDUSTRIAL AREA

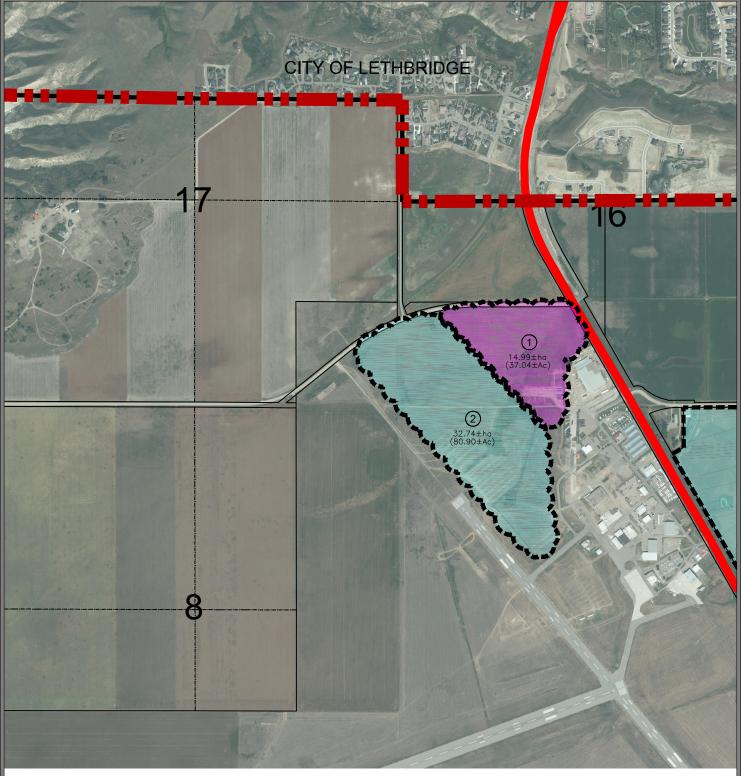
EXISTING HIGHWAYS

EXISTING COLLECTORS

CONCEPTUAL ROAD NETWORK

CONCEPTUAL ROAD NETWORK DIAGRAM 6





LETHBRIDGE COUNTY INDUSTRIAL COMMERCIAL LAND USE STRATEGY
GROWTH AREAS - DIAGRAM 7

LETHBRIDGE AIRPORT & HIGHWAY 5

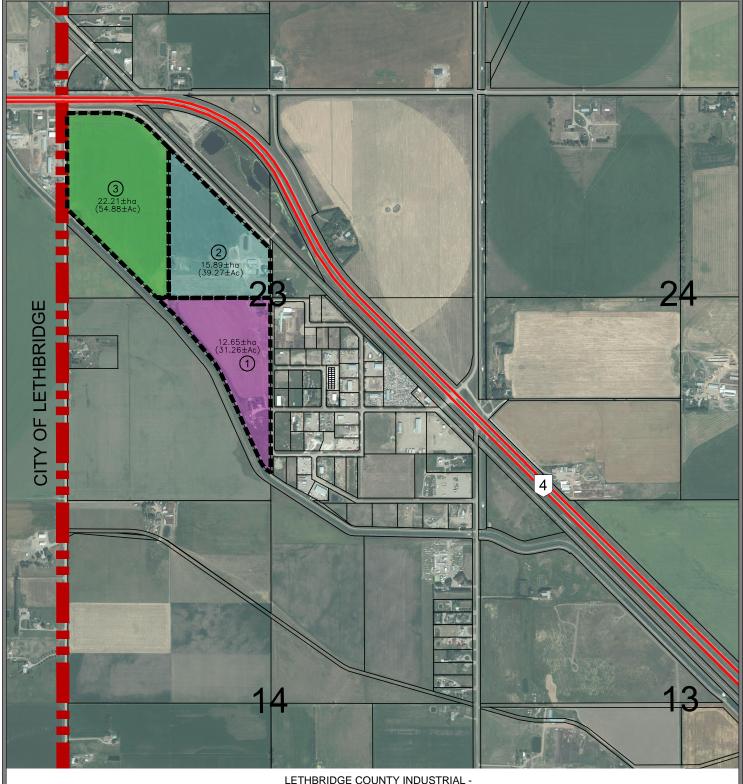
GROWTH AREA BOUNDARY

PRIORITY - INITIAL 14.99±ha(37.04±Ac)

> SUCCESSIVE - SECONDARY 32.74±ha(80.90±Ac)

> > Note: Areas are approximate Source: Airport Master Plan 2010





GROWTH AREAS - DIAGRAM 8

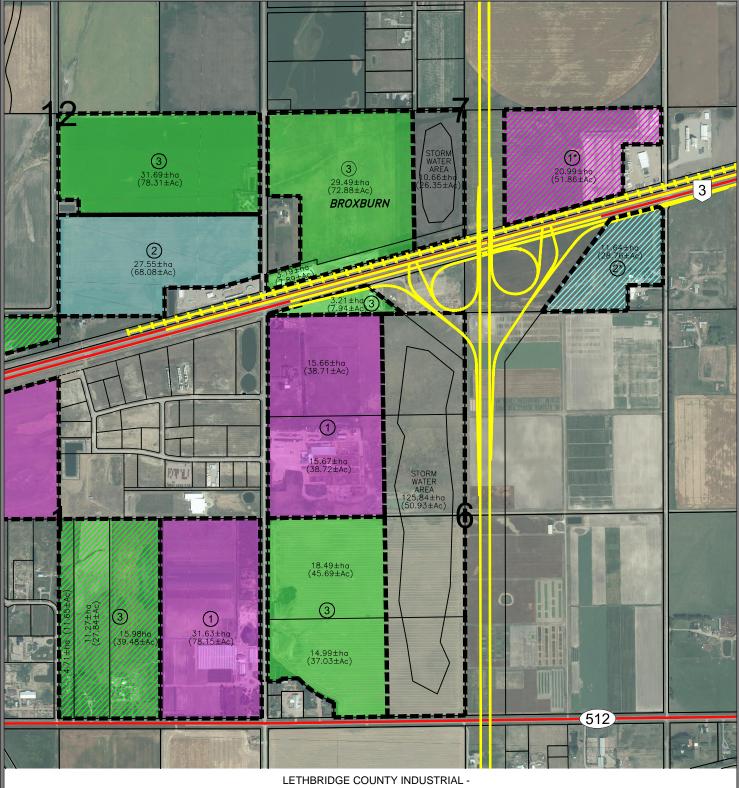
GROWTH AREA BOUNDARY PRIORITY - INITIAL SW23-8-21 W4M 12.65±ha(31.26±Ac)

STEWART SIDING AREA

SUCCESSIVE - SECONDARY
NW23-8-21 W4M
15.89±ha(39.27±Ac)

PROSPECTIVE FUTURE
NW23-8-21 W4M
22.21±ha(54.88±Ac)





BROXBURN & CANAMEX INTERCHANGE AREA HIGHWAY 3 CORRIDOR

GROWTH AREA BOUNDARY

PRIORITY - INITIAL 62.96±ha(155.58±Ac)

SUCCESSIVE - SECONDARY 27.55±ha(68.08±Ac)

PROSPECTIVE - FUTURE 101.07±ha(249.74±Ac)

COMMERCIAL LAND USE STRATEGY

GROWTH AREAS - DIAGRAM 9

PROPOSED CANAMEX HIGHWAY PRIORITY - INITIAL

LIGHT INDUSTRIAL OR COMMERCIAL 20.99±ha(51.86±Ac)

SUCCESSIVE - SECONDARY LIGHT INDUSTRIAL OR COMMERCIAL 2*\LIGHT INDCC..... 11.64±ha(28.76±Ac)

PROSPECTIVE - FUTURE LIGHT INDUSTRIAL OR COMMERCIAL 31.96±ha(78.97±Ac)



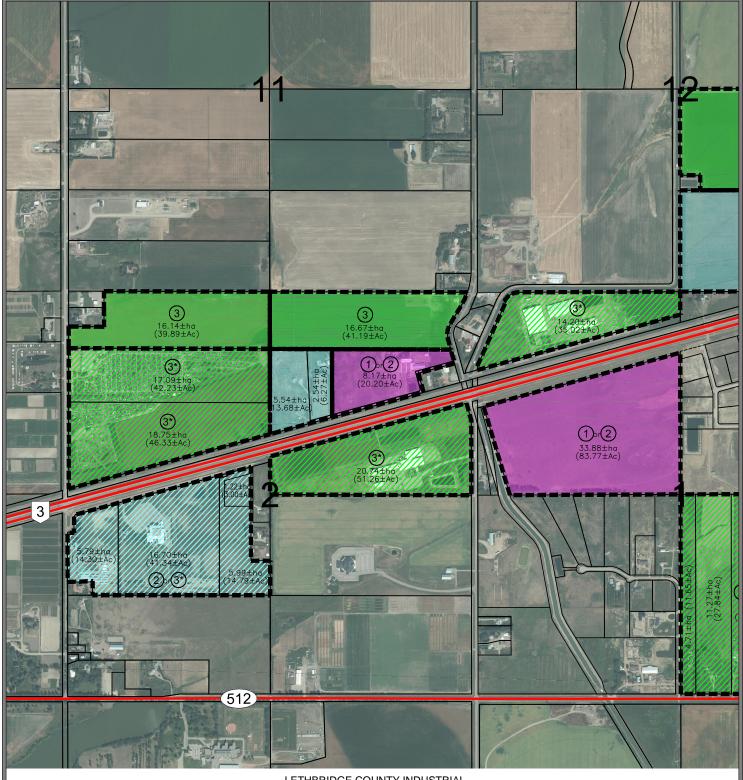


DIAGRAM 10

HIGHWAY 3 LETHBRIDGE - COALDALE CORRIDOR

GROWTH AREA BOUNDARY

PRIORITY - INITIAL or 42.05±ha(103.97±Ac)

EXISTING DEVELOPMENT -70.76±ha(174.84±Ac)

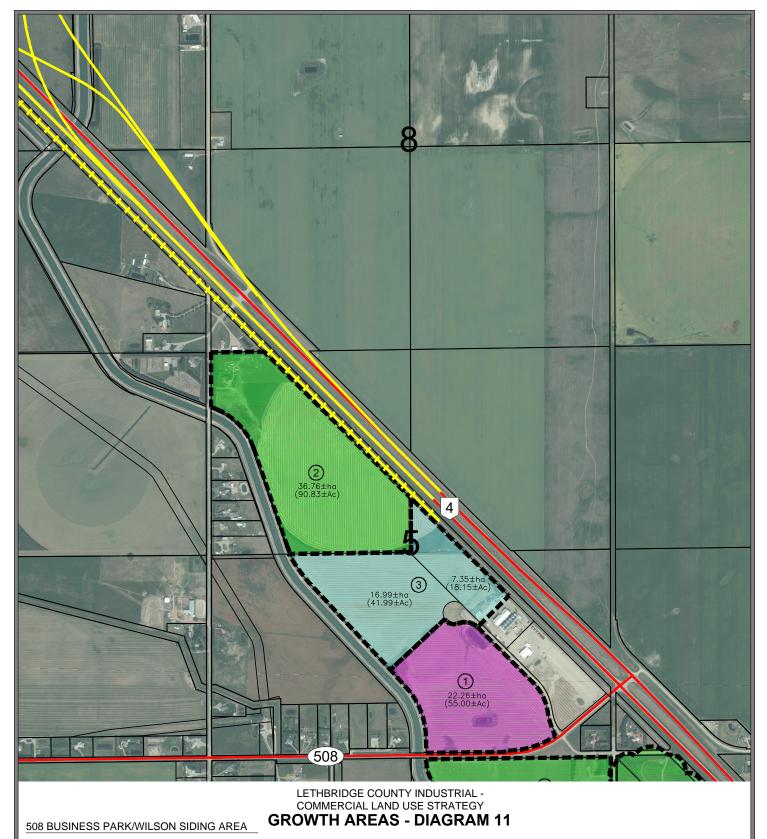
SUCCESSIVE - SECONDARY 8.08±ha(19.95±Ac)

2 EXISTING MIXED USE -

or INFILL FOR COMMERCIAL/INSTITUTIONAL (3°) 29.72±ha(73.43±Ac)







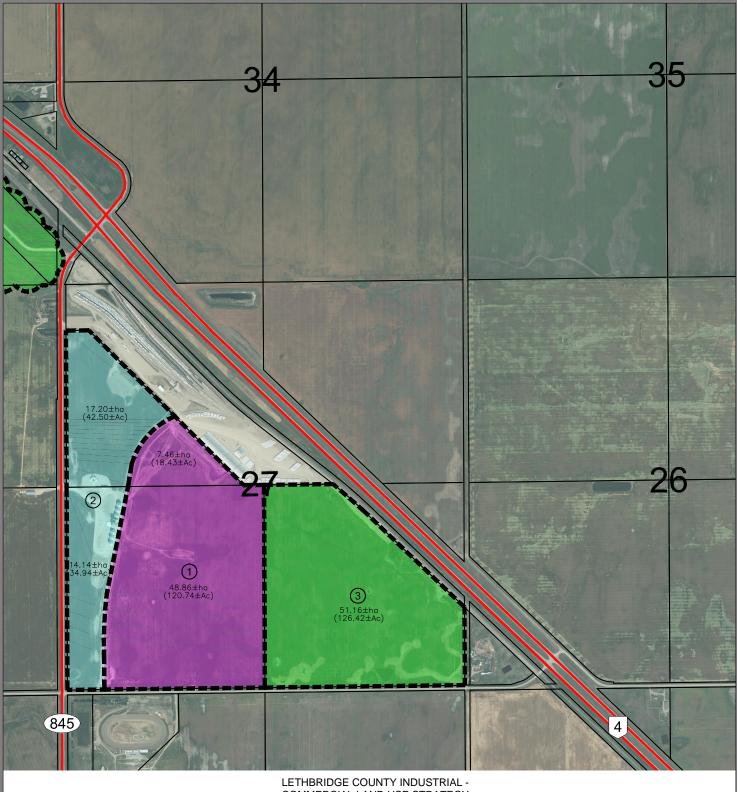
GROWTH AREA BOUNDARY PRIORITY - INITIAL

SE5-8-20 W4M 22.26±ha(55.00±Ac)

SUCCESSIVE - SECONDARY SW, SE & NE5-8-20 W4M 24.34±ha(60.14±Ac)

PROSPECTIVE - FUTURE NW5-8-20 W4M 36.76±ha(90.83±Ac)





TRANSMARK/VITERRA AREA **HIGHWAY 4 & 845**

LETHBRIDGE COUNTY INDUSTRIAL - COMMERCIAL LAND USE STRATEGY

GROWTH AREAS - DIAGRAM 12

GROWTH AREA BOUNDARY PRIORITY - INITIAL

W27-7-20 W4M 56.32±ha(139.17±Ac)

SUCCESSIVE - SECONDARY

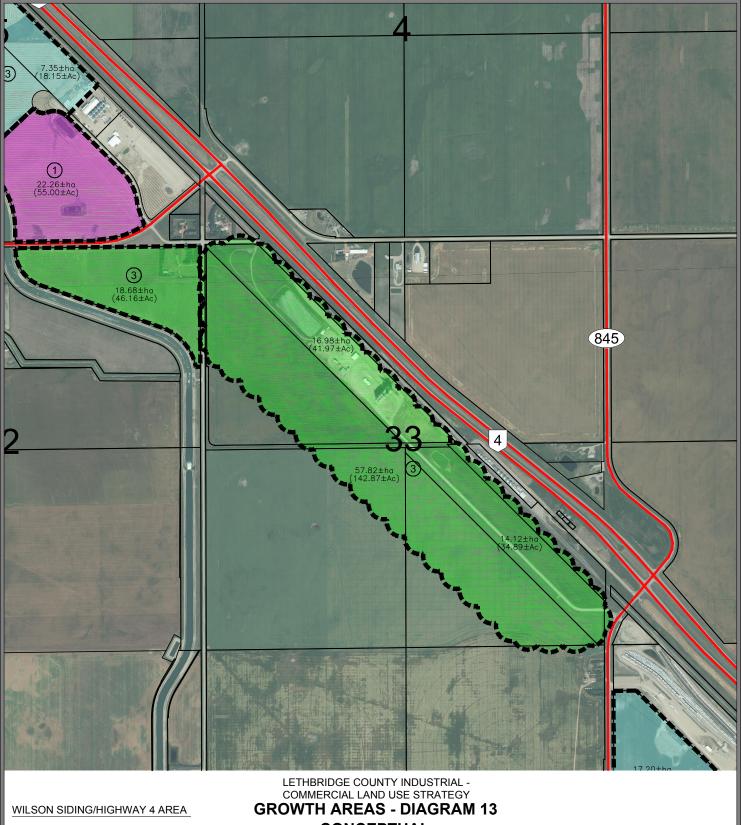
W27-7-20 W4M

31.34±ha(77.44±Ac)

PROSPECTIVE - FUTURE

3 SE27-7-20 W4M 51.16±ha(126.42±Ac)





CONCEPTUAL

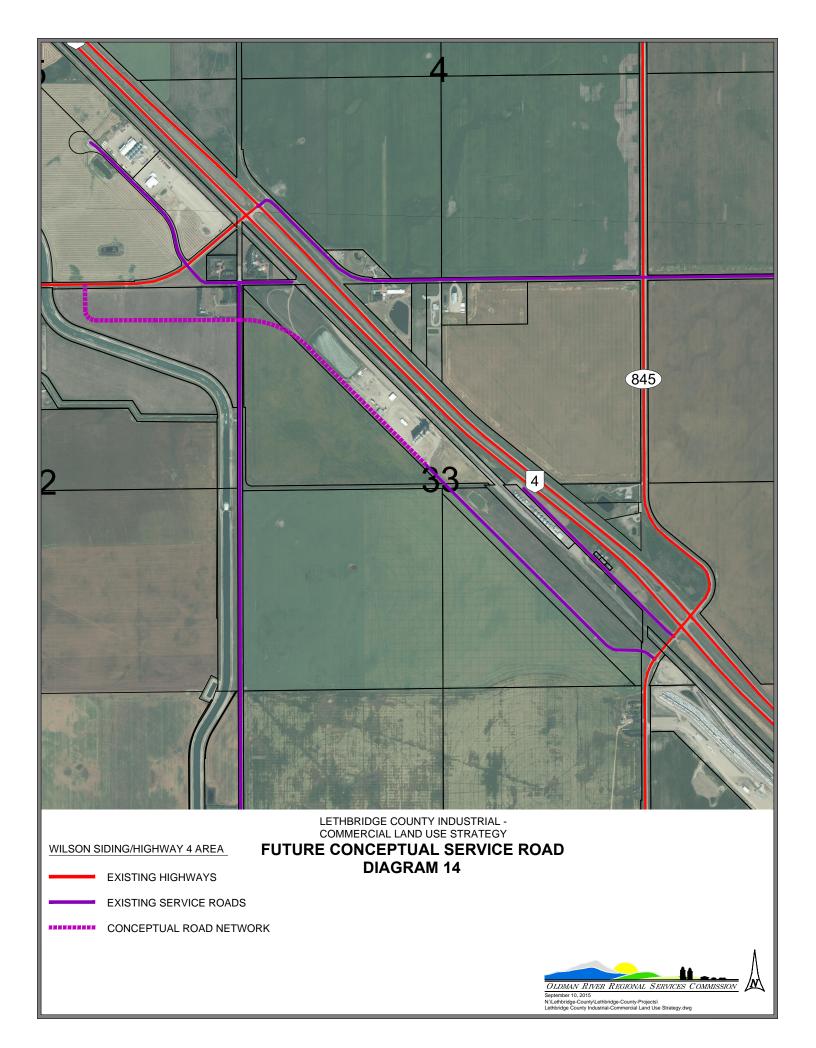
GROWTH AREA BOUNDARY PROSPECTIVE - FUTURE

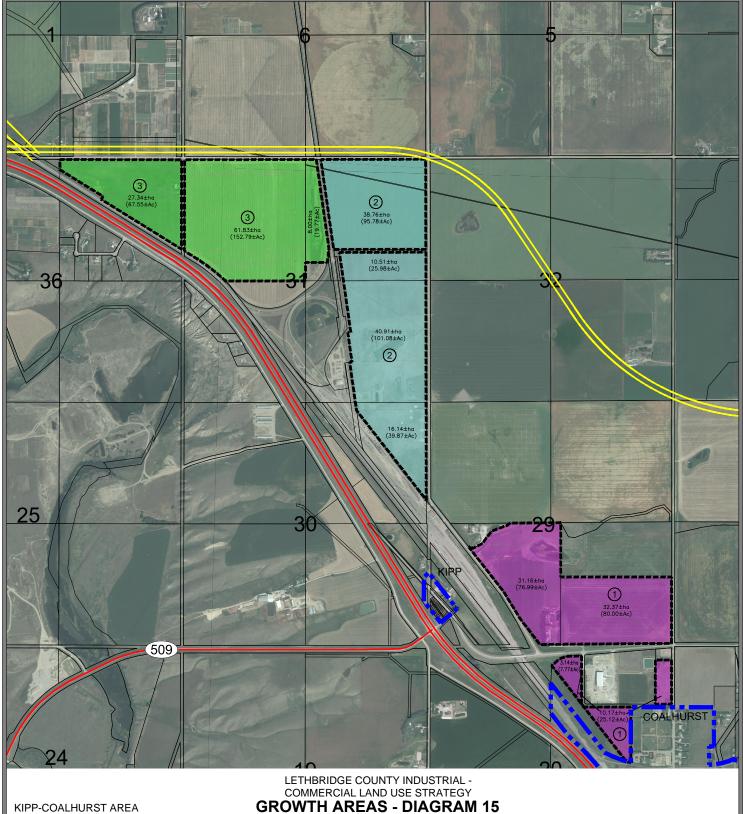
3 SEC 33-7-20 W4M & NE32-7-20 W4M 107.17±ha(264.81±Ac) *

PRIORITY - INITIAL
REFER TO GROWTH DIAGRAM 11

SUCCESSIVE - SECONDARY REFER TO GROWTH DIAGRAM 12







GROWTH AREAS - DIAGRAM 15

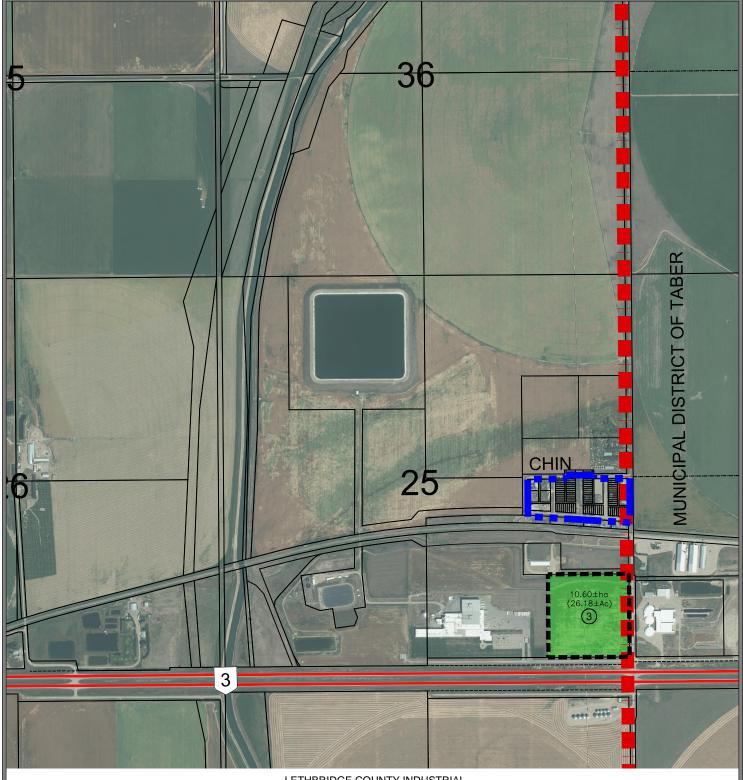
GROWTH AREA BOUNDARY

PRIORITY - INITIAL \$29 9-22 W4M & NE20 9-22 W4M 76.84±ha(189.88±Ac)

SUCCESSIVE - SECONDARY NE30 & E31-9-22 W4M 106.32±ha(262.71±Ac)

PROSPECTIVE - FUTURE NE36-9-23 W4M & N31-9-22 W4M 97.17±ha(240.11±Ac)





CHIN - HIGHWAY 3 AREA

GROWTH AREA BOUNDARY

PROSPECTIVE - FUTURE 3 SE25-9-19 W4M 10.60±ha(26.18±Ac)

GROWTH AREAS - DIAGRAM 16



PART SIX | Strategy and Recommendations

6.1 Primary Strategy

In moving forward with preparing a land use strategy for Lethbridge County, the question is how may the County attempt to meet the goals of this report, and in particular, assist in the diversification of the local economy? The County's Industrial-Commercial Land Use Strategy is a framework for guiding actions and considering policies that may need to be adopted to implement the goals and strategies of the plan. Over time, these also may eventually need to be updated to respond to changing requirements and market conditions. The primary elements of the general strategy, which are associated with the goals of this report, are listed below.

- The growth plan is to provide a framework which will facilitate the development of a viable and feasible business sector in the County by addressing land use and locational opportunities and constraints, by effectively planning for a suitable and ready available land supply at realistic marketing and consumption rates.
- 2. To plan for effective, managed growth when supporting and encouraging the establishment and expansion of industrial business parks or centres, and provide some locational certainty to businesses looking to locate within the municipality.
- 3. To identify and outline the required land use planning activities to facilitate the development and redevelopment of industrial areas in an orderly, cost-effective way, and ensure land development opportunities are continually available.
- 4. To reserve and protect those areas within the municipality identified as the logical and suitable areas to be utilized for future growth and expansion of industrial/commercial activities, so that they may appropriately be planned to accommodate industrial or commercial development.
- To use the recommended planning framework to guide and plan for the building of transportation, drainage and other infrastructure in industrial areas at the rate required to meet demand for industrial/commercial land and to enable the services to be efficiently provided that support business activity.
- 6. To assist in diversifying the local economy and allow new businesses to establish, by providing developers tangible options and ensuring land is available for development possibilities.
- 7. To have a clear land use plan that can be used to form and participate in strategic partnerships and programs to create or capitalize on economic development opportunities that are associated with industrial/commercial land development

6.2 Key Principles and Recommendations

In addition to the previously identified general strategy objectives, a number of key principles and recommendations are suggested for Council's consideration, in order to successfully implement the overall strategy and help plan for land use decisions regarding industrial/commercial land development.

This report makes a number of recommendations based on the investigation that occurred as interpreted by the authors and as discussed with County administrative staff. It is important that Council continue the process beyond this point and this section provides suggestions on how to proceed after the report is accepted for information.

6.2.1 Economic

- 1. The County should maintain an up-to-date and reliable information database on vacant industrial land, land absorption rates and market trends.
- 2. The planning and development department should regularly consult and share with the County's economic development officer land rezoning and permit information for commercial/industrial uses so the economic development office has the most up-to-date data. This would be helpful for promoting and guiding new businesses to areas where land is available for development, and the amount of acreage and parcel sizes are known.
- 3. Wherever possible, attempts should be made to streamline and assist business and development processes through detailed land and servicing information, and enhanced communication to facilitate the development of industrial land and buildings with potential developers.
- 4. The economic development office for the County should have access to a digital data base that contains legal descriptions, parcel sizes, servicing information, and land owner or developer contact information on vacant parcels available, which would greatly assist in steering businesses to available parcels that may be suitable for their business operations.
- 5. The County should ensure it is using enhanced active marketing programs and using advanced information technologies to make marketing and real estate information readily available to prospective users of industrial property.
- 6. The County should actively approach and engage those private landowners whose land is identified as a preferred growth area, to gauge interest in developing the land, selling the land, or ascertain long-term interest in using the land.
- 7. If a secured water supply is secured for a specific business park or area, the County should strive to reserve those areas for industries that require water for processing or manufacturing, and appropriately direct potential business to those areas, and direct non-water users to other areas that may be suitable.

6.2.2 Land Use and Planning

- 1. It should be ensured that major industrial areas have a minimum <u>two-three year</u> supply of ready or serviced industrial land, based on current trends and local absorption rates (for the most recent five-year period), and through public and private sector land and infrastructure development activities.
- 2. It is recommended that slightly more land than what is typically developed in a year should be available to prospective business interests, as it takes time to plan for, obtain necessary approvals, subdivide and service land and it cannot be brought to market in a relative short time frame.

- 3. As part of the strategy the County should try to ensure there is continually available a minimum of 70 80 acres of readily accessible land amongst the various business parks to accommodate development. Additionally, due to the high interest in the Highway 3 Lethbridge-Coaldale Corridor and Broxburn area, the County may want to ensure there is continually and readily available 20 -25 acres of land in this one particular location.
- 4. Home occupations should continue to be allowed wherever deemed appropriate, with the County reviewing and monitoring their success or constraints over time. At some point in future time, those home occupations that have successfully grown or desire to expand should be encouraged to relocate to established industrial areas.
- 5. To better manage and track both isolated industrial-commercial developments and home occupations, particularly to help the County determine which uses are still being operated and where, the County should consider requiring business licenses, even if it is for a nominal fee or at a fee to cover administrative costs.
- 6. Except for some general areas described, the majority of potential hamlet growth industrial/commercial land use considerations should be addressed in subsequent hamlet growth studies, as previously identified by Lethbridge County as a future planning exercise. The existing municipal servicing infrastructure and capacities, as well as potential for expansion to those systems, should be considered as part of that planning exercise.
- 7. The Highway 3 corridor (Lethbridge to Coaldale) and in particular, the Broxburn development node area, should be the prime focus of industrial-commercial development for Lethbridge County, and it appears to be where the most land interest is by businesses wanting to locate in the County. Engaging in discussions with area land owners and preparing plans to bring additional land on-stream for development should be a fairly high priority in the next year.
- 8. The Wilson Siding and Highway 4 Corridor area should also be considered as a "high priority" growth area to encourage industrial-commercial development due to the area transportation networks, including highway and rail-line, and growing interest in the area. In particular, access to the rail transportation network and the possibility of spur-trackage is a significant benefit.
- 9. The County should attempt to enhance as much as possible the state of Stewart Siding and make it more attractive for new business investment, by actively working with property owners to bring their properties into compliance with County standards and when required, enforce unsightly premises bylaws this action should be a concentrated focus, while being fairly and uniformly applied.
- 10. The long-term planning for available land should consider a strategy of situating it in a number of locations rather than one location only, to assist with market choices and locational factors. Thus, slightly more land than what actually may be developed on a yearly basis needs to be considered overall as part of the planning and economic strategy.
- 11. All industrial land uses which are considered by the approving authority to be detrimental to public health, safety, and welfare, or those uses which, because of their toxic gases, noxious smells, noise, odour, dust or smoke emissions are incompatible with other developments, should be located on lands specifically established for such uses through the land use designation of the land use bylaw (e.g. zoned 'Rural Heavy Industrial' or 'Direct Control').

- 12. For applications pertaining to isolated industrial uses, the County should request as complete of information as possible on the proposal in order to better track, manage and even direct uses to appropriate locations. Redesignation or development application information should include:
 - data on the use such as number of employees, area required, buildings and signs, traffic impact;
 - site plan which is accurate and shows existing structures, proposed structures, proposed storage area;
 - structure elevations;
 - proposed storage and screening;
 - source of water supply and firefighting supply;
 - drainage plan prepared by an engineer;
 - a statement explaining why the location is requested and why the use should be allowed outside a hamlet or designated clustered/grouped industrial area.
- 13. Where or when development of new industrial land appears stagnant by the private sector, Council may consider playing a strategic and active role either as a land developer through strategic land acquisition, or engaging in preplanning process (e.g. undertaking Area Structure Plans), active land development, or development partnerships and land sales, to help ensure that suitable land is readily available for industrial/commercial development.
- 14. If the County consults with land owners and ascertains there is little to no interest in development of new industrial land, Council should then seriously review and decide if it is feasible to purchase land and develop its own business park. (Note: Even if land is redesignated to an industrial land use district, and the land has an Area Structure Plan adopted for it, a landowner cannot be forced to participate in the land development process).
- 15. The County has or is in the process of developing Intermunicipal Development Plans (IDPs) with all if its urban neighbors. In some of the completed plans, areas have been identified in the agreements where the County may grow and develop land for non-agricultural purposes. It is of importance to note that although these areas have been identified, little additional planning, engineering or subdivision work has occurred in these areas to make them turn-key ready for business. Additional consultation and planning work needs to be completed for these areas, and the most likely areas to be developed should be pursued first.
- 16. As the Town of Coalhurst Council has actively expressed interest in working with Lethbridge County in developing a joint regional business park, County Council should pursue that opportunity and begin discussions on how that process may evolve, and obtain an understanding and agreement on how it may develop and operate (i.e. servicing, taxes, etc.). The lands identified for industrial or commercial growth in the IDP are privately held, so involvement with the local landowners needs to be discussed and a plan put into place to guide the process.
- 17. The expansion of Lethbridge Airport commercial-industrial lands should be pursued by Lethbridge County as it owns the airport lands. The County may consider acting as the developer/manager in bringing more undeveloped land on-stream, however, development of the areas south of the existing runways will likely take a considerable investment. Enhancing the Airport Master Plan and preparing detailed phased development and growth plans, which address water delivery and method of sewage

- treatment (a communal system may be considered), should be considered a priority item. Since all the airport land is owned by the County, the quality of development should reflect the standard expected from others.
- 18. The County needs to develop a long-term and stable strategy regarding the provision of water for industry, which is outside the scope of this report. Treated water is presently limited to existing County developments. The County has no treatment facility itself, and the municipality is somewhat dependent on existing agreements with urban neighbors. So overall, in any area to develop or expand to accommodate industrial or commercial land use, it will be dependent on either the County obtaining water, developing its own treatment plants, making and entering into agreements with urban neighbors for treatment of the County's water (under its own license), or planning for uses which require limited water supply.
- 19. In the future, areas which may benefit from or be recipients of water or sanitary sewer service should be protected and identified for industrial-commercial land use and even reserved for those types of businesses that require larger volumes of water for processing.
- 20. The County should be proactive and wherever possible seek new funding methods or sources, and consider new technology for developing major infrastructure required to service industrial/commercial development.
- 21. The design of business parks needs to allow for phasing of subdivision or development in a logical and feasible fashion, so too much land is not removed from agricultural production and is sitting vacant for long periods of time.
- 22. The lands identified as industrial-commercial growth areas should be reserved for those uses and they should not be used for grouped county residential use or other incompatible land uses.
- 23. County Council may consider predesignating in the land use bylaw some priority growth area lands to industrial in order to prevent other unwanted land uses from establishing on the identified lands, and to help streamline the development process for land developers.
- 24. The Municipal Development Plan Bylaw No. 1331, being a higher level statutory plan, should subsequently be updated and amended to align with this report once it is approved. The purpose would be to implement land use policy to more comprehensively guide and apply to the development of industrial-commercial lands, and to protect and enable the development of the lands identified as industrial-commercial growth areas.
- 25. It is recognized that nearly all of the future growth lands identified are presently in an undeveloped raw land state, primarily being utilized for agricultural purposes by private land owners. Therefore, additional consultation, planning and development steps must be undertaken prior to any of these area being brought on-line for development purposes and these processes will take significant time. In respect of this, the County should timely and actively consult land owners, especially in the 'priority" areas about the development possibilities, and assist with the process as much as it can.
- 26. Prior to land development occurring, additional planning exercises will need to be done for the undeveloped lands identified as growth areas. This would include the preparation and adoption of area structure plans, which typically will include servicing information, engineering evaluation on soils, storm water management engineering, and a transportation access management strategy.

- 27. The County may consider preparing some higher level concept design schemes in specific areas, that illustrate desired design elements and a transportation road network that aligns with adjacent land parcels and both the local municipal and provincial road networks in the vicinity. Any area structure plans subsequently prepared would then be required to "align" with the overall higher concept plan for the larger area. This will help guide planning and ensure cohesiveness between planning areas that will likely be developed over time or in phases. (Note: this is considered to be especially important in the Broxburn Highway 3 corridor area.)
- 28. The County needs to actively engage and consult with Alberta Transportation as it is the approval authority relating to access on the highway and manages control over how development and traffic may impact the integrity of the highway system, as the majority of identified industrial business parks are adjacent to the provincial highway network.
- 29. The County needs to be in close contact with CPR rail company officials throughout any process of planning adjacent to rail-lines or where access to trackage is desired, especially at the Area Structure Plan stages. All rural service and spur-trackage must conform to the requirements of the CPR and the County adheres to the setback guidelines as prepared and agreed to by the Federation of Canadian Municipalities and the CPR.
- 30. To this point, the public has not been involved in the preparation of the report. Council should consider having some type of public information sessions, at some future time, that would present the recommendations of the report.
- 31. Through past public processes, Council should be aware of at least two areas where industrial and commercial uses have caused local concern. Residents have expressed opposition in the Wilson area and along Highway 3 around Broxburn and the Coaldale corridor. Council may consider undertaking a public engagement or information process in these specific areas to better explain County initiatives.
- 32. This report may be viewed as the first step in the preparation of a comprehensive policy framework for the promotion and development of an enhanced industrial and commercial sector in Lethbridge County. An overall framework should include policy or strategies related to:
 - protection of the majority of County agricultural lands by strategically developing in accordance with the strategy,
 - providing logical and suitable land areas for future business development,
 - reserving and protecting identified future development areas for industrial-commercial uses,
 - managing or guiding future planning processes, such as area structure plan preparation, to be prepared in accordance with this report,
 - applying development standards as provided for in the Land Use Bylaw to application approvals,
 - ensuring an enhanced record-keeping system of permits, land and operating businesses is maintained, and
 - undertaking the active promotion of Lethbridge County as a choice location for industrialcommercial uses.
- 33. The data in this report is based on a snapshot in time and requires a review after the strategies or policy directives have been implemented over an extended period, to help better gauge active land development that is occurring. For example, the projection of land consumption is based on limited past and variable data; after a period of time (e.g. 3 5 years) the estimate may be revised.

REFERENCES

Agarwal, A. and Strachan, P. "Is Industrial Symbiosis only a Concept for Developed Countries?" *The Journal for Waste & Resource Management Professionals*, 2008.

American Planning Association, *Planning and Urban Design Standards, American Planning Association*, John Wiley & Sons Inc. 2006.

Daniel J Graham, *Identifying urbanization and localisation externalities in manufacturing and service industries*, Imperial College London – Centre for Transport Studies. 2007.

Urban Land Institute, *Business Park and Industrial Development Handbook*, Washington D.C., ULI – Urban Land Institute, 2001.

Urban Land Institute, *Industrial Development Handbook*, ULI - Urban Land Institute, Washington, D.C., Lochnueller, Muncy, Thorne, Viets, 1975.

Plans and Reports

Lethbridge County and Town of Coaldale, *Integrated Development Strategy*, prepared by consulting group consortium with principles Alvin Reinhold Fritz Architect, David Amos & Associates et al, April 2010.

Lethbridge County: Integrated Community Sustainability Plan, prepared by Oldman River Regional Services Commission, October 2009.

Lethbridge County: Land Use Bylaw No. 1404, October 2013, prepared by Oldman River Regional Services Commission.

Lethbridge County: Municipal Development Plan Bylaw No. 1331, January 2010, Lethbridge County.

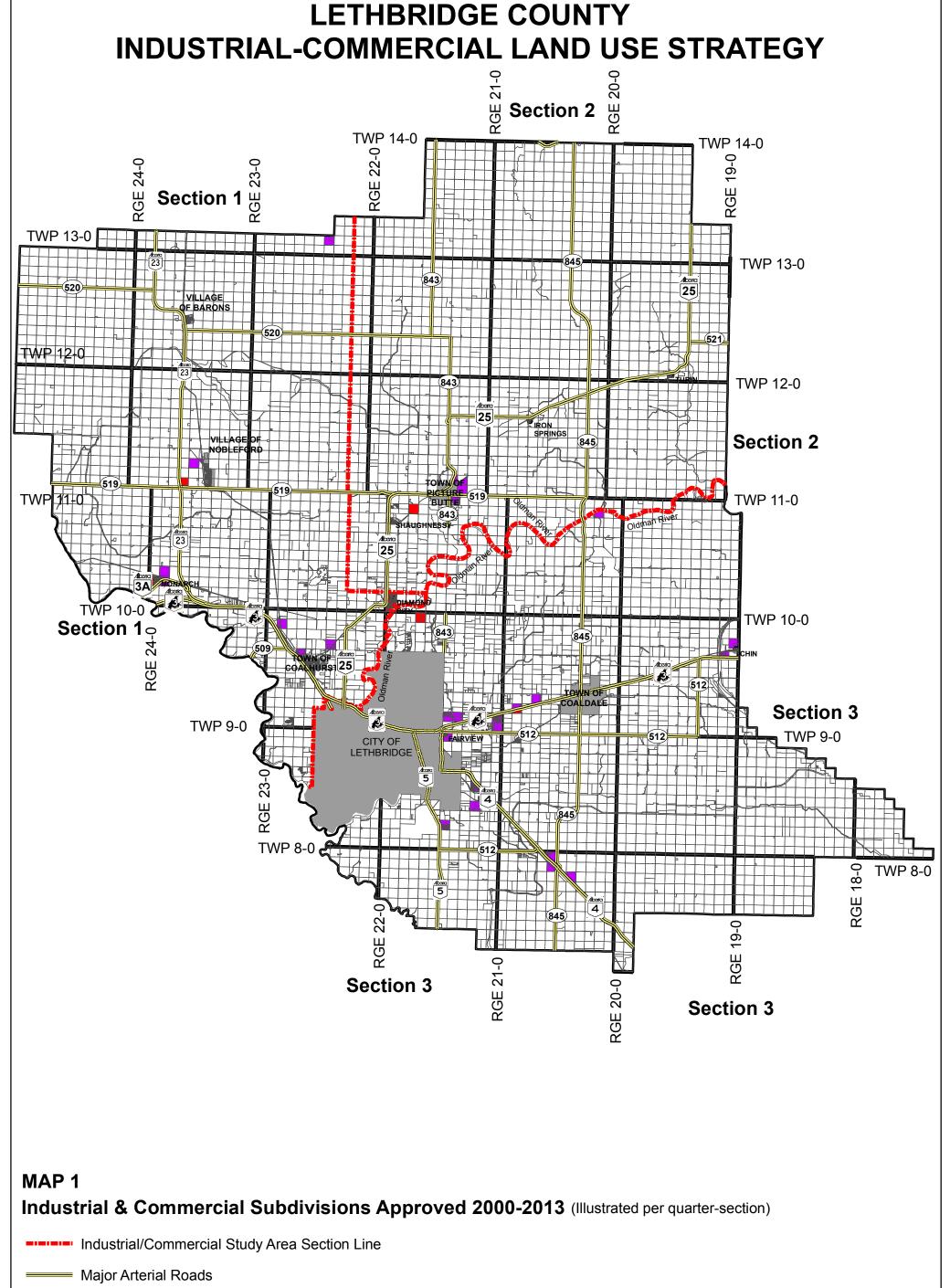
Lethbridge County & City of Lethbridge: Intermunicipal Development Plan, prepared by Oldman River Regional Services Commission, August 2004 (rescinded October 2016); and, new Lethbridge County & City of Lethbridge: Intermunicipal Development Plan, collaboratively prepared by both municipalities, October 2016.

Lethbridge County & Town of Coalhurst: Intermunicipal Development Plan, prepared by Oldman River Regional Services Commission, October 2014.

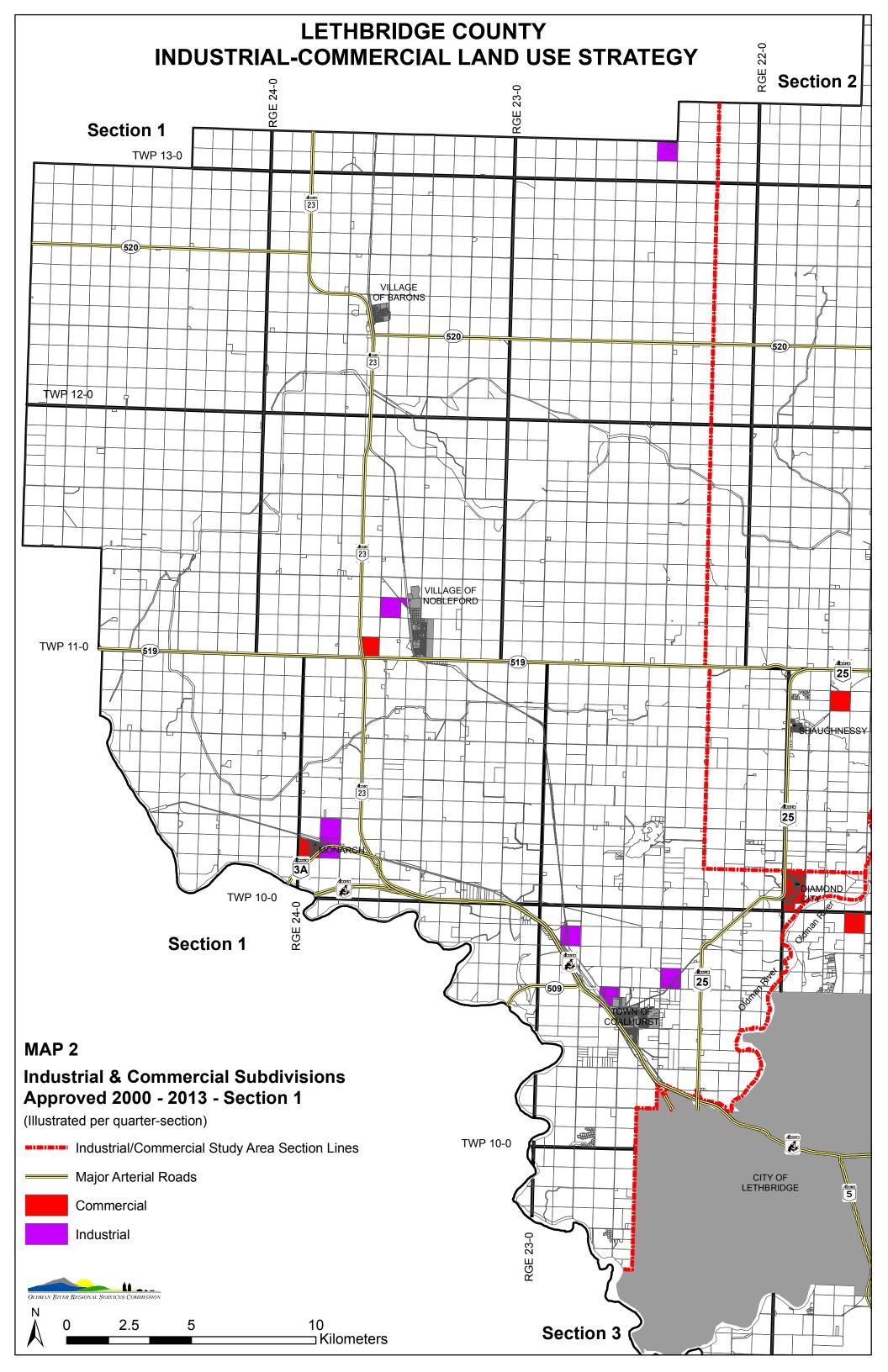
Lethbridge County & Village of Nobleford: Intermunicipal Development Plan, prepared by Oldman River Regional Services Commission, August 2012.

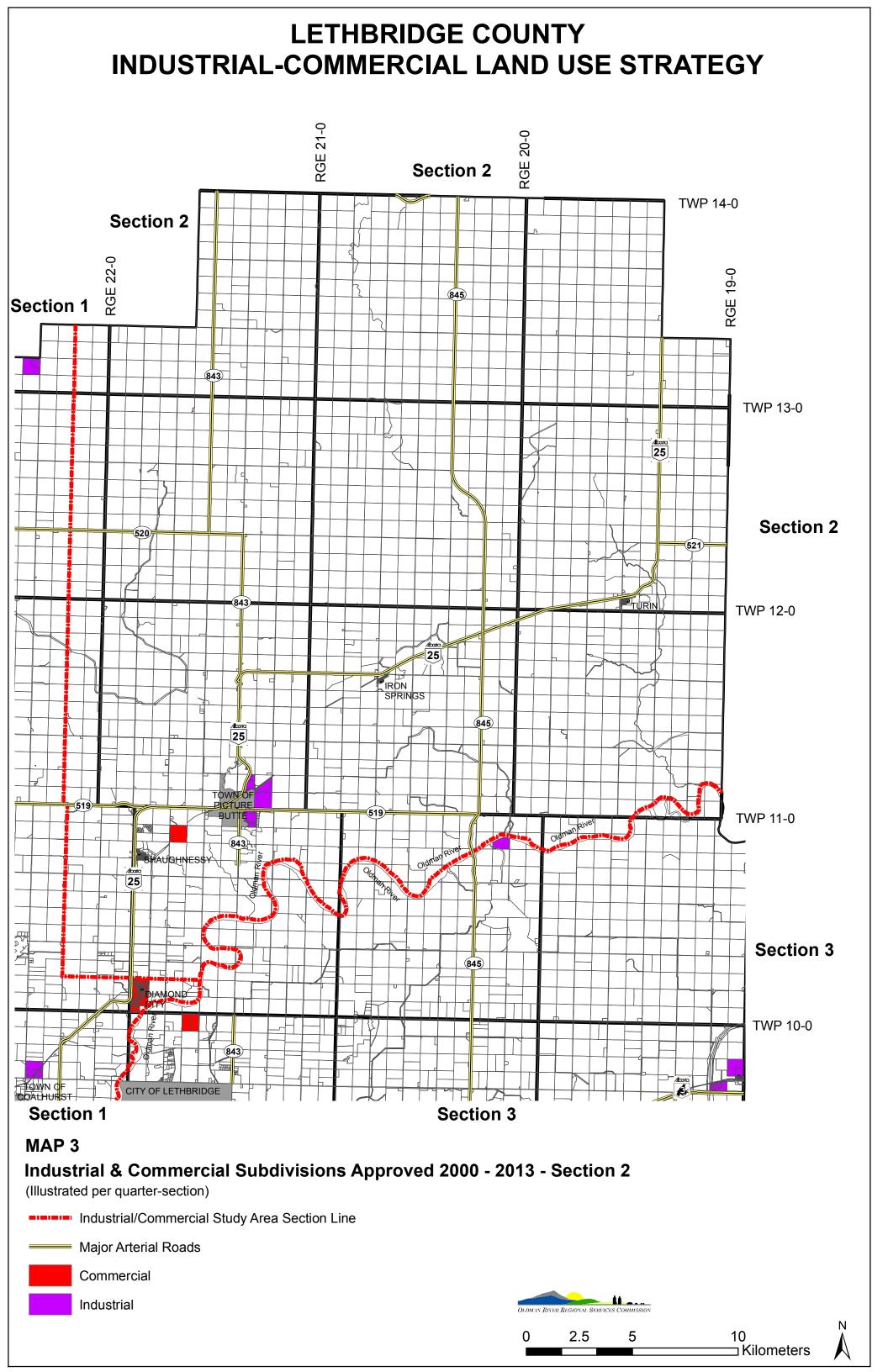
APPENDIX A

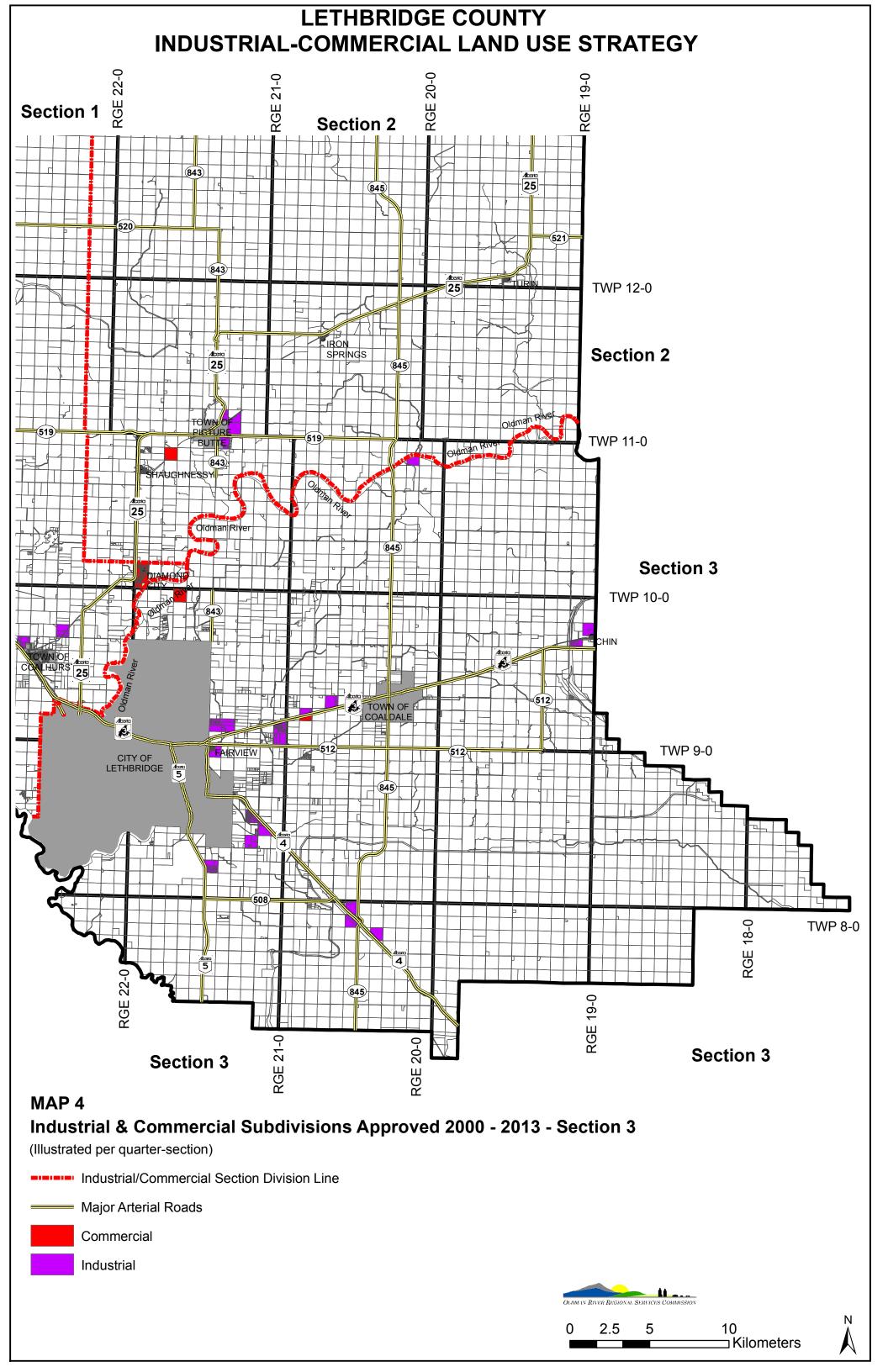
BACKGROUND ANALYSIS MAPS

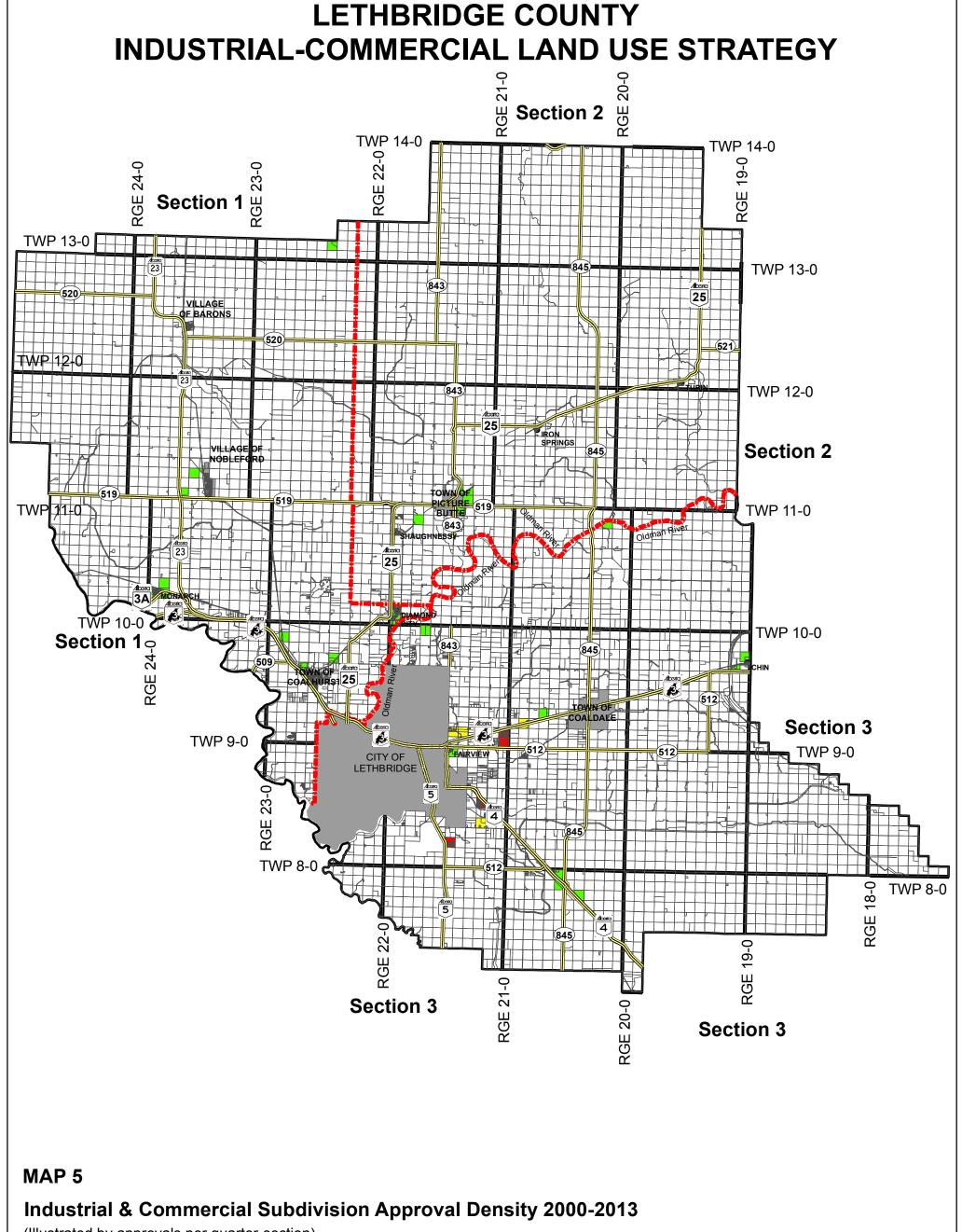


Commercial; Commericial Industrial 20 ⊐ Kilometers 10









(Illustrated by approvals per quarter-section)

Industrial/Commercial Study Area Section Line

Major Arterial Roads

Quarter Sections with 1 Subdivision Application Approval

Quarter Sections with 2 Subdivision Application Approvals

Quarter Sections with 4 Subdivision Applicationa Approvals





