PRINCE ALBERT SOUTH

HIGHWAY CORRIDOR CONCEPT PLANS AND COMMERCIAL / INDUSTRIAL FEASIBILITY STUDY

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Prince Albert District Planning Commission

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1. INTRODUCTION

1.1 BACKGROUND

In September 2005, the Prince Albert District Planning Commission solicited consultant proposals for the preparation of a plan for highway corridors leading into the City of Prince Albert, and for the conduct of a feasibility study for industrial / commercial development of the lands between the highway corridors. In December, 2005, the Project Team made up of Crosby Hanna & Associates and subconsultants (Associated Engineering (Sask.) Ltd., Ian MacPherson Management Consultant and Golder Associates) were retained to undertake the work.

The purpose of the Highway Corridor Concept Plans and Commercial / Industrial Feasibility Study is to produce a detailed redevelopment scheme for the Highway 2 entry corridor area, a general concept plan and feasibility study for the development of Highway 3 entry corridor area, and the potential industrial, commercial, institutional and mixed use available properties in the land area which lies between the two corridors. The purpose of this document is to identify the problems, opportunities, and priorities for development of each area, including proposed phasing, servicing issues and options, and policy recommendations. The objectives of the detailed development and redevelopment schemes for the Prince Albert South Highway Corridor, as stated in the project Terms of Reference, are as follows:

- To determine development potential in the area, keeping in mind land-use compatibility;
- To consider options, limitations, and unusual requirements for services;
- To create future development goals and objectives with relevant stakeholders groups;
- To provide an insight into relevant market conditions;
- To provide a clear picture of the contributions and hindrances caused by relevant development plans and zoning bylaws;
- To create adequate strategies for management of surface water in the area; and
- To propose implementation mechanisms for future development plans.

The planning process associated with the Highway Corridor Concept Plans and Commercial/Industrial Feasibility Study was to be comprehensive in nature, in that it was to consider a wide range of development issues, opportunities and constraints, with regard to servicing requirements, market conditions and environmental and heritage compatibility. The process was also required to include consultation with identified stakeholders. A Steering Committee was established to oversee the work program including the following individuals:

- John Swystun, Councillor, City of Prince Albert
- Leonard Blocka, Reeve, Rural Municipality of Prince Albert
- Tom Guidinger, Member, Prince Albert District Planning Commission
- Beatrice Regnier, Member, Prince Albert District Planning Commission
- Yves Richard, Senior Planner, City of Prince Albert
- Joan Corneil, Director of Economic Development and Planning, City of Prince Albert
- Chad Watson, Director of Planning, Prince Albert District Planning Commission

It is noted that municipal staff from the City of Prince Albert, the Prince Albert District Planning Commission, the Rural Municipality of Buckland and the Rural Municipality of Prince Albert all provided support and input to the planning process that was critical to the success of the project

1.2 STUDY AREA

The Prince Albert South study area includes two major north-south highway corridors, Highway 2 South and Highway 3, leading North into the City of Prince Albert. It also includes the land that connects these two highways. The study area perimeter is enclosed by 40th Street to the north, Highways #2 and #3 to the west and east, and Elevator Road to the south.

1.3 THE PLANNING PROCESS

The planning process followed in the preparation of the Highway Corridor Concept Plans and Commercial / Industrial Feasibility Study consisted of six distinct, but interrelated phases, each of which was comprised of a series of incremental steps. Work involved included:

- assessment of relevant background information;
- field observations;
- consultation with stakeholders and the broader community through a visioning workshop;
- critical interaction with the Client Steering Committee;
- analysis and interpretation of relevant data; and
- creative integration of the perspectives and experience brought by the individual professions represented on the consulting team.

The Phases of the work program included:

- **Phase 1: Initial Steps**, in which an initial site reconnaissance was undertaken by the consulting team and Client Steering Committee, relevant background information and resource materials were compiled, a site survey was undertaken and base mapping was prepared.
- Phase 2: Market Economic Analysis, in which relevant information on the provincial and regional economy was identified and analyses were performed on the Prince Albert population, economy, and real-estate, as well as an analysis of the existing conditions on and affecting the highway corridors and connecting area (including visual inspection of the study area, obtainment of background information and on-going discussions during interviews and a visioning workshop).
- Phase 3: Biophysical/Technical/Infrastructure Analysis, in which an environmental and heritage screening was performed to provide information on key aspects (environmental setting, identifying red flags, environmental concerns, mitigation measures) along with an infrastructure review to identify municipal servicing opportunities and constraints.
- Phase 4: Land Use / Planning Analysis, in which an extensive land use inventory was undertaken, including areas adjacent to the study area, and an analysis of the current municipal policies.
- Phase 5: Synthesis / Preliminary Recommendations and Concepts, in which a visioning workshop was held for stakeholders and the Steering Committee to receive preliminary findings and to offer opinions, ideas and concerns. Preliminary goals and objectives were drafted from the workshop and preliminary development concepts were presented to the general public at an Open House held on September 28, 2006.
- Phase 6: Final Recommendations, Concept Plans and Reporting, in which refined Redevelopment and Development Plans were prepared and submitted to the Steering Committee, followed by a presentation to the affected councils.

1.4 THIS REPORT

This Final Report provides summary background information to those opportunities and constraints identified in Phases 2, 3, 4, 5 and 6 of the process and describes the thinking that led to, and the options considered in, developing the Highway Corridor Concept Plans. The report is organized as follows:

- Section 2 contains an analysis of the market/economic conditions in and surrounding the Prince Albert area, including the real estate market.
- Section 3 contains an analysis of findings from an Environmental and Heritage Screening including identifying existing conditions as well as regulatory and permitting processes involved in developing the study area;
- Section 4 includes an infrastructure review of existing infrastructure and its capacities and anticipated remaining life and limitations.
- Section 5 contains a land use and planning analysis that considers the existing land use context in and adjacent to the study area as well as the relevant policies that affect development in the study area.
- Section 6 describes the process followed in identifying optional development scenarios through a visioning workshop and public open house in which, ideas, opinions and concerns for the Prince Albert South Highway Corridor Concept Plans were offered by relevant stakeholders and community members from the Prince Albert Area.
- Section 7 contains a synthesis of findings, in the form of statements of key opportunities for, and determinants of, potential future development for the Prince Albert South Highway Corridors.
- Section 8 contains a summary of recommendations pertaining to all aspects of the project.
- Section 9 contains a series of planning bylaw amendments related to project recommendations.
- Section 10 contains mapping prepared as part of the project including several Concept Plans that illustrate the land use and development options considered important to successful development of the study area.

2. MARKET AND ECONOMIC ANALYSIS

2.1 PROVINCIAL AND REGIONAL ECONOMY

Saskatchewan has experienced sustained, but unbalanced, economic growth during the past decade. It is very possible that conditions will continue to favour some sectors of the province's economy versus others.

Average annual economic growth for Saskatchewan has been more than two per cent. The strength of the energy sector in the next decade would certainly lead to higher rates of growth in the next ten years.

Among key factors which have shaped the growth of Saskatchewan's economy in recent years are the following:

- severe problems in the important agricultural sector, driven by weather, low commodity prices and a catastrophic suspension of beef exports;
- continued urbanization of the population of the province, reflecting in part relative opportunities in rural and urban economies;
- weaknesses in the forestry and related processing sectors, driven in part by trade disputes and weakening newsprint/paper markets;
- major expansion of the province's energy industries because of the dramatic increase in prices of uranium, oil and natural gas;
- continued growth in the province's manufacturing industries, including high-tech sectors; and
- for many small and medium-sized businesses, growth in sales driven by proximity to the booming Alberta economy;

In 2004, the mining/petroleum sector, which also includes the important potash industry, accounted for twice the level of production value as agriculture and forestry combined. This gap has most certainly increased since then.

The Saskatchewan government states that most economic forecasters expect the province to have the fourth-highest rate of economic growth in 2006. Should oil prices stay near current levels (well over \$ 60 U.S. per barrel), and should natural gas prices rise in concert with oil prices, it is probable that Saskatchewan will do even better than forecast in terms of overall growth.

Saskatchewan in general and Prince Albert, more specifically, have the potential in the next decade to benefit substantially from the following important economic trends, should they continue:

- proximity to Alberta, which enjoys one of the world's strongest and fastest-growing economies: provision of business services, a source of skilled human resources on a commuting basis, and an alternative location for business investment;
- specifically, cities such as Prince Albert have the potential to attract existing/expanding or new businesses to locate in a lower-cost environment, while still serving the booming Alberta marketplace; land prices and human resource and other production costs are confirmed to be much lower in cities such as Prince Albert than in even medium-sized Alberta cities; and
- cash-rich Alberta businesses and financial players could be major sources of capital, combined with their expertise and risk orientation, for new investments in cities such as Prince Albert and in new ventures in its surrounding region.

California's population and economic growth eventually led to a move of residents and businesses (both existing and new) to neighbouring states where production costs and labour supplies were more conducive to profitable operation. Twenty years ago, no one expected states like Nevada, Utah and Idaho to grow as quickly as they have, in part because of the exodus of California economic activity, including high-tech businesses. Saskatchewan will show the positive effect of such a transfer of economic activity in the next decade.

- The recently released economic development strategy for the Prince Albert area by Derek Murray Consulting Associates pointed out several positive indicators for the area's economy in the next years, including:
- the diversity of economic activity in the region in which this area is located: mining, forestry, agriculture and tourism;
- the growth in the population of the Prince Albert region since 1996, compared to overall population decline in the province;
- continued increases in housing prices in Prince Albert in the past two years, modified of course by the uncertain future of the city's pulp mill;
- a high level of commercial development since 2000, measured by nearly \$35 million in annual building permits;

- Prince Albert's commercial strength and growth in relation to its abnormally large (in relation to other cities of comparable population) trading area of more than 140,000 people, including large portions of northern Saskatchewan and Manitoba; and
- the city's role as the major gateway to the north of the province: tourism, transportation of raw materials, business services, and government / health / education sectors.

In summary, despite short-term uncertainty surrounding one of the area's major employers, other factors have the potential to reinvigorate the city's and area's economy in the next few years.

2.2 PRINCE ALBERT AND AREA POPULATION/MARKET ANALYSIS

The Murray report included the following population increase projections for the three municipalities in the District Planning Commission and nearby First Nations to 2011:

- City of Prince Albert: from 34,300 in 2001 to 38,100 in 2011 (an increase of 11%);
- R.M. of Prince Albert: from 3,400 to 3,600 (5.9 %);
- R.M. of Buckland: from 3,500 to 3,800 (8.6 %);
- Muskoday First Nation: from 500 to 650 (30%); and
- James Smith First Nation: from 625 to 775 (24%).

It is important to note that the fate of the pulp mill could mitigate other factors driving population growth in the Prince Albert area, including general urbanization, the continued move of aboriginal residents of central and northern Saskatchewan to the city, and new employment opportunities.

As noted in the previous section, Prince Albert serves a large trading area, given its role as a service location for central and northern Saskatchewan, and even part of northern Manitoba. A city with a population of approximately 35,000 serving a potential market of up to 150,000 customers will accordingly exhibit more retail space and hotel rooms per capita, for example, than other medium-sized cities.

Prince George, B.C. is similar to Prince Albert in terms of the regional service role which it plays. It shows similar retail / commercial / hotel characteristics in relation to its own population. It is worth noting that Prince George, in order to consolidate its role as a gateway to northern British Columbia and to attract new investment in a strong provincial economy, has opened an economic development office in Vancouver. At some time in the future, Prince Albert and area, possibly in partnership with northern groups, might consider opening an office in Edmonton.

Another important characteristic of the City's population is its relative youth, partly as a result of the presence of an important aboriginal / Métis population; in 2001, when the most recent data was available, nearly 39 % of its population was aged 24 years or younger (versus nearly 36 % for all Saskatchewan); that proportion has certainly grown since five years ago.

The Murray report noted that over the next ten years, around 8,000 residents of Prince Albert who are members of the Prince Albert Grand Council will enter the labour market.

Statistics Canada data show that Prince Albert's median income is slightly higher than that of all provincial residents (partly reflecting the problems of the rural economy in recent years).

The Murray report also placed in perspective Prince Albert's strong role as a service centre for a large region, when examining the composition of its work force:

- government administration jobs make up around 11 % of all jobs (versus less than 10 % for Regina);
- health and social service jobs make up nearly 15 % (versus less than 12 % in Regina);
- education sector jobs are nearly 8 % of all jobs (second only to Saskatoon in the province);
- retail jobs make up almost 15 % of all jobs (Regina, just above 12 %); and
- hotel and food-service jobs are nearly 10 % of the total (greater than for Regina).

In the future, it is practical to expect that:

the proportion of government administration jobs will decline somewhat in relation to the total employment base;

- the presently small manufacturing job base could grow as more Alberta-based companies might be attracted to lower-cost centres offering a skilled labour force to meet their needs; and
- even if the city's retail and hotel / food service sectors demonstrate static job levels, continued growth of business services (including those aimed at the booming Alberta and B.C. markets) will drive demand for commercial and light industrial space.

Continued population and economic growth in northern Saskatchewan (especially in resort and First Nation communities) will also help to push growth in the Prince Albert area.

2.3 PRINCE ALBERT AND AREA ECONOMIC ANALYSIS

Before discussing information on recent and projected economic conditions in Prince Albert and area, and on development strategies identified to grow the economy in future years, it is important to place other potential events in perspective:

- the imminent closure of the pulp mill, following the closure of its connected paper mill, with the associated direct loss of 700 jobs, would have at least a temporary impact on the area's economy; it is further estimated that another 400 jobs would be affected to some extent by the final closure;
- businesspeople and persons knowledgeable about the real-estate sector in Prince Albert state that the news of the plant closure in October of last year has had the effect of suspending, at least, investment decisions, and slowing or stopping the increases in real-estate prices which the city had experienced for a few years;
- generally, such a major loss of jobs in a local/area economy is felt until other business activities take the place of the lost industry; it is noted that despite the severe decline of their local auto industry (and thousands of job losses), Ontario and Michigan continue to attract high levels of new business investment, which has already served to replace some of the lost jobs;
- the potential development of a diamond mining operation within an hour's drive east of the city, which could be confirmed by final feasibility analysis within two years, would provide significant payroll and business spin-offs to the area;
- the potential development of a new ethanol plant within an hour's drive southeast of Prince Albert also has the potential to generate business activity in Prince Albert; jobs created would go well beyond direct plant employment, and more jobs could be created in transportation of raw materials, and maintenance and services;
- technological advances (such as new techniques for enzyme production used in ethanol processing), high energy prices, and government policies hold the promise to permit cost-economical production of a vital energy resource; and
- Prince Albert has the potential to develop an important role as a service centre, and eventually another location of production, for the burgeoning ethanol / biofuel sector.

Further, with the anticipated demand for thousands of new skilled employees in Alberta, especially in the oil sands industry around Fort McMurray, higher-paying jobs will be available for any Prince Albert-based employees seeking other jobs. Already, a significant proportion of construction employees on new projects are commuting to the Fort McMurray area, and are staying in work camps, because no housing exists in the community.

This trend will continue, and the major energy companies committed to large investments in the oil sands in the next ten years will recruit experienced and skilled / trainable employees in communities such as Prince Albert. There is no appreciable difference between Edmonton and Prince Albert as a commuting origin point from the point of view of logistics or economics.

It is noted that a recent study done for the Saskatoon Airport Authority estimated that 1,000 Saskatoon residents already work in Fort McMurray.

Should the Shore Gold (diamonds) and Iogen (ethanol) projects proceed within two years, their combined impacts on the area's economy would be very positive, including on its real-estate markets.

The following factors will continue to be very positive for the economy of Prince Albert and area:

- significantly lower operating costs for business in comparison to high-cost cities and regions in Alberta and British Columbia;
- despite a likely pulp mill "chill" of a temporary nature, Prince Albert's retail sector will
 continue to be a vital part of the area economy; the Murray report estimated that in 2003,
 retail sales per resident of Prince Albert were nearly \$16,000 versus less than \$10,000 for
 Regina;
- in Asia alone, an estimated sixty new nuclear reactors are under construction or on the drawing boards; demand for Saskatchewan's uranium, and projected future prices (nuclear fuel represents only a small proportion of the operating cost of a reactor) for yellowcake, will continue to underpin the economy of northern Saskatchewan, and provide a major market for Prince Albert businesses;
- despite recent chronic and temporary problems, the region's agricultural base is still a major driver of activity in Prince Albert and area; the Murray report estimated that the beef sector within two hours' drive of the city totals 400,000 head of cattle;
- the city's young population will provide a source of employees for area businesses, and for Alberta companies desperate to staff profitable projects; in both cases, a large proportion of the paycheques created will stay in the city and area;
- future industries to be located near Prince Albert will continue to adopt the prevailing trend to outsourcing services (transportation, maintenance, staff training, employee services, etc.) to other businesses; Prince Albert-based businesses will benefit considerably; and
- at some point in the near future, despite population growth and pro-development policies, Saskatoon will be in a situation where labour shortages and costs, and other cost factors

such as land prices, will make Prince Albert an attractive alternative for business location or expansion.

Two sectors of Prince Albert's economy which are already important, and which merit special attention in the next few years, are:

- the <u>trucking industry</u>, both companies based in or with terminals in the city, and companies/independent operators who drive into and through the city from three directions (north, east and south); the Prince Albert Regional Economic Development Authority estimates that at least twenty-five trucking companies are directly serving Prince Albert and its surrounding area;
- Prince Albert and area economic development and municipal agencies should think of the
 area as equivalent to a much larger city, given the relative importance of home-based and
 through-traffic trucking to the city and area; larger cities have adopted policies and
 incentives to attract and encourage truck service businesses and facilities in at least one
 area of their territories;
- resource development and new processing activities in the area and larger region, including the north, will certainly lead to sustained growth in truck traffic into and through Prince Albert;
- <u>agribusiness</u>, including primary producers, is still a major source of business for the city and its surrounding area; the REDA estimates that the region around Prince Albert contains nearly seven per cent of all farms in the province, and nearly seven per cent of all cattle/calves in Saskatchewan's beef sector;
- future ethanol and biofuel industries as well as agroforestry start in the farm field, and will entail important transportation components; truck sales and service revenues could become major growth sectors in the area economy; and
- despite a possible closure of the pulp mill, and to some extent as a result of initiatives to replace it with new industrial activities in and near the city, there will be a demand for new serviced industrial space; the City and the two Rural Municipalities which are its neighbours and partners in economic development will make important decisions as to future supply and its location.

All the above points are very relevant for the future development, and the shape it will take, on both the Highway 2 and 3 corridors, and the land which connects them south of the City's southern limits.

It is reasonable to assume that future truck service and agricultural service businesses would be located on the periphery of, or outside, the limits of the City of Prince Albert. However, such

decisions on future industrial location, and associated servicing and access needs, will require cooperation and collaboration among the three jurisdictions.

2.4 PRINCE ALBERT AND AREA REAL ESTATE MARKET ANALYSIS

2.4.1 General Trends in Real Estate Markets

Following the first round of interviews and review of available reports and studies, the consultant conducted a literature search on recent and projected trends affecting commercial and industrial real estate in North America, with a focus on trends and their associated factors relevant to the study area in and near Prince Albert.

Because of the importance of the city's retail sector, and because of the key role which retail development has played in real estate in recent years, special retail trends have been placed in a separate category from general commercial real estate trends.

The following major trends have been identified for future retail-related real estate development:

- continued popularity of discount retailers, often in large spaces, including branded outlets (such as even well-known department stores and clothing/shoe merchandisers such as Ralph Lauren) and warehouse clubs, such as Costco and Sam's Club (a Wal-Mart affiliate);
- retailers in general, and especially those catering to younger customers, will continue to demonstrate a high rate of "churn", which will be reflected in mergers, buyouts, and name changes;
- e-tailing, the use of the Internet to promote and sell products, will continue to grow; successful retailers will marry Internet-based promotions and services to their traditional retail operations, continuing the trend to "clicks and mortar" shopping and buying; retailers such as Sears now estimate that up to half of their in-store dollar sales are associated with the customer's visit to their web sites;
- while grocery retailers / supermarkets continue to expand in terms of retail space and products / services offered, they experience ever-shrinking margins, and have lost relative importance as anchor tenants in shopping centres / malls;
- at the same time, general merchandise chains such as known department stores have lost market share (in part because of the expansion of Wal-Mart, other big-box stores, and specialty chains), and are less important as anchor tenants in centres / malls;

- as a result, many cities now have as much as 80 % of their major retail space in freestanding retail complexes as opposed to traditional malls; fifteen years ago, only 45 % of these cities' space was free-standing;
- small grocery businesses have tended to close, in part because of the growth of superconvenience stores which offer longer hours and a variety of products and services, including fast food;
- many cities are seeing the growth of "small box" stores with a total footprint of 40,000 square feet, compared to their much larger competitors (up to 100,000 square feet); some of these smaller stores, trying to offer comparable varieties of products, are being located more centrally in their city markets; and
- such major operators as The Bay and Sears Canada are now owned and managed by realestate / financial specialists rather than merchandisers; as a result, marginal retail operations must be turned around quickly, or they will be closed and converted to some other activity; in some cities, department store space has already been converted to condominium/loft residential or entertainment (theme restaurants and nightclubs) uses.

The following trends have been identified for commercial real estate in general:

- one specialist estimates that at least ten per cent of all malls in North America are economically unviable; some are being converted to traditional storefront blocks, with independent access and outside parking versus enclosed circulation;
- increased land and construction costs, and shortages of trades people, have changed the "build versus buy" formula in some markets, which has the potential to make existing buildings more desirable for renovation/conversion, as opposed to building a new facility;
- more commercial developments are being configured to serve a wider variety of tenants;
 for example, first-floor space remains traditional retail, and second-floor space is added or converted for office rentals;
- even large malls and commercial complexes are looking at offering smaller individual spaces for rent, reflecting growth in small businesses versus larger office staffs, with easily and cheaply modified space areas;
- in general, demand for large office areas is in decline (in part because of government cutbacks), while rentals to small office tenants is still popular; office "malls" which offer common-area sharing are popular in some markets;
- climate permitting, open-air malls are becoming more popular, similar to the independent access space trend noted above; and

• income trust vehicles are very important in financing major commercial projects, and larger, more experienced companies are able to apply financing and marketing knowledge in more than one market.

The following relevant trends respecting <u>industrial</u> real estate were identified:

as much as ever, the quality of the transportation infrastructure associated with industrial land or building space (including road access, proximity to highways, rail access, and proximity to airport) is a key asset;

- there is relatively growing demand for smaller industrial-use space (a trend mirroring trends in retail and general commercial markets);
- in many cities, there is less demand for warehouse space, especially large-area space; the importance of "just in time" logistical systems, and supply chains linking suppliers, manufacturers and customers, has a big impact in this regard; and
- relative capital (acquisition, construction, etc.) costs can become more important than location when the cost gap is great between two cities; for example, Prince Albert's lower land and construction costs could reduce location advantages of cities such as Edmonton or Calgary.

In summary, these trends should be considered in relation to the first fact about a real-estate market: the strength of the general (national / regional) and local / area economies is the major determinant of the health of the real-estate market and its components:

- high employment and wage rates drive retail consumption;
- low interest rates provide a more favourable climate for investment decisions affecting real-estate development;
- economies which are very strong may be characterized by high construction costs and labour shortages which will distort traditional location factors;
- government and corporate downsizing, often as a result of external economic conditions, will affect demand for office space; and
- generally, when an economy is strong, smaller centres can be beneficiaries of these distortions.

2.4.2 **Specific Information on the Prince Albert Real Estate Market**

Interviews with a variety of business and property owners and with persons knowledgeable about the city's/area's real estate markets confirm that while residential demand remains fairly resilient despite the impending closure of the pulp mill, the news about the mill has definitely put commercial and industrial demand in "neutral".

Some persons feel that the effects of the mill closure will be felt for a fairly long period, especially for the city's and area's commercial market, absent some major positive announcement which would change the payroll effect should the mill close.

Some believe that the effect of the mill's closing could be surprisingly short-term, and demand for land and space could increase within several months. Should the optimists be proven right, it is apparent, based upon information obtained in the interviews, that:

- the city and area will require a new supply of serviced industrial land in short order, ideally offering good road/highway access and at least rail proximity;
- business development south of the city along the Highway 2 corridor should be accompanied by attention to the appearance of the city's major entry corridor, and upgrading of at least one service road along the highway;
- the presently moderate retail space vacancy rate, both in the downtown and highway corridor areas, could decrease within a year should interested businesses make the decision to locate or expand in the Prince Albert market; the supply of good quality space will especially be in short supply;
- confirmation of the new resource and processing developments near Prince Albert would stimulate commercial demand, and could lead to the need for significantly more industrial space in and near the city;
- the fact that municipal jurisdictions have traditionally controlled industrial land supply through their own programs and policies makes co-operation and collaboration among the three governments very important, in order to ensure that the city and area can respond quickly and effectively to future demand; and
- the economic boom in Alberta and future market conditions in Saskatoon are already moving the centre of gravity for economic development toward smaller centres such as Prince Albert; any perceived locational disadvantage which Prince Albert may have (as perceived by the outside world or Prince Albert decision makers themselves) are becoming less important in relation to the area's locational assets.

As noted in the discussion on general real-estate trends, while in the past lower quality or less viable real estate, especially existing buildings, might have been less desirable, the impact of higher construction costs and shortages of trades people could lead to a more favourable future for the renovation/conversion of more marginal properties.

For example, older commercial centres which may have suffered declining use and value in recent years may become much more desirable as part of a new development venture.

2.5 ANALYSIS OF HIGHWAY CORRIDORS AND CONNECTING AREAS

2.5.1 Comments Obtained From Interviews

For the purpose of obtaining basic information and generating discussion during interviews, the consultants carried out a comprehensive visual inspection of the study areas (the two highway corridors, and the areas along the cross streets between them). Following this visual inventory, the consultants developed detailed mapping setting out owners and uses, based upon visually obtained information and municipal data bases.

The two corridors and connecting area are characterized by mixed uses and mixed intensities of use. Many properties are vacant or underused. A growing orientation to trucking industry and agricultural service businesses is already apparent along the Highway 2 corridor especially.

It is obvious that significant room for future development, based upon non-utilization and underutilization of many properties, is available.

For the purpose of the preliminary market analysis and for developing the following key points to be used during the visioning workshop, this consultant interviewed fifteen persons who either own properties or businesses in the study area, or are very knowledgeable the area under study. Also, a fax was sent to all members of the Chamber of Commerce inviting their comments.

The consultant's final report will include more detail on findings, and more interviews will be conducted following the workshop, including with municipal officials.

The following representative comments were made during the interviews conducted:

- the service road running along Highway 2 should be upgraded;
- there has been a shift in retail activity and spending from the Highway 2 toward the Highway 3 corridor, partly as a result of the Wal-Mart and neighbouring stores in that corridor;
- a major business opportunity exists for a trucking service facility, including food service, fuel, trailer wash, driver facilities (showers, Internet, lounge, etc.), and temporary storage

and security areas; this facility could be located either north or south of the city on Highway 2; a location south of the city would be more in proximity to Highway 11 and traffic to and from Saskatoon;

- there is a need to upgrade the appearance of the entry to the city via Highway 2 from the south, including signage and better landscaping by property owners; a Bylaw in the R.M. of Prince Albert should be considered;
- future conference facilities which the city and area will require (at present, the banquet capacity at the Hauser Centre is for around 1,000 guests) could be located on either corridor, probably in conjunction with existing hotel and motel facilities;
- there was a consensus among those interviewed that the city has sufficient modern hotel and motel rooms to meet anticipated demand for several years;
- there is interest in developing an aboriginal interpretive centre, which could also provide information on northern Saskatchewan for tourists and visitors; the centre could be located next to the tourist information building at the south end of the city and the law enforcement museum;
- the City is already looking at the feasibility of adding more industrial development sites;
- significant investment funds exist in the hands of aboriginal organizations, including development corporations, to invest in real estate, existing or new, in the Prince Albert market;
- Elevator Road should be upgraded/paved to become an industrial traffic corridor between Highways 2 and 3;
- properties along Elevator Road should be allowed to rezone to commercial in order to encourage more development along this corridor;
- 44th Street from the Happy Camper on Highway 2 to the John Deere dealership on Highway 3 should also be upgraded; the City owns the land to the north, and the R.M. of Prince Albert owns the land to the south of this road; the two municipalities could work together to develop/upgrade this corridor area for light industrial and complementary commercial purposes;
- Highway 2 south of the city should be merged into Highway 11, leading to Saskatoon; most traffic is destined to Saskatoon; and
- there will be significant demand in the future to allow commercial development along Highway 11.

3. ENVIRONMENTAL AND HERITAGE SCREENING

3.1 EXECUTIVE SUMMARY

In January 2006, Golder Associates Ltd. was sub-contracted by Crosby Hanna & Associates, to conduct an Environmental and Heritage Screening for a Functional Planning Study, on behalf of the Prince Albert District Planning Commission. The purpose was to complete a preliminary screening to identify potential terrestrial, aquatic, and archaeological issues associated with the proposed Project area, and regulatory approval processes that may be involved.

The majority of the proposed Project area has been previously altered by agricultural practices, infrastructure (e.g., roads, powerlines), rural development, and residential acreages. Aspen and balsam poplar stands prevail in undisturbed areas, with short shrubs and open grassland communities scattered throughout the Project area. While there are no recent records of the presence of any federally or provincially listed plant or wildlife species, there is an historical record for one provincially listed plant species, short-stemmed thistle (Cirsium drummondii), for the Project area. There are no Saskatchewan Wildlife Federation Habitat Trust Lands, Fish and Wildlife Development Lands or lands designated under the Wildlife Habitat Protection Act located within the Project area. A Ducks Unlimited lease agreement is associated with the west half of SE 3-48-26 W2M. No International Biological Program sites, Provincial or Regional Parks, or First Nations Reserves are located within the Project area. However, there are two surface parcels located in the E½ 9-48-26 W2M are in the active selection process for Treaty Land Entitlement lands by the Peter Ballantyne Cree Nation. The status of the selection process is currently not near the transfer to Reserve status, as there are still outstanding issues that must be addressed. Until the land receives Reserve status, the Province remains the regulatory authority. There are also two lots located in the E½ of NW 3-48-26 W2M that are owned by the Pelican Lake First Nation. With regard to heritage sites, there are 38 previously recorded archaeological and historic sites on file with the Heritage Resources Branch for the Project region, but none of these sites are situated within the immediate Project area. However, as portions of the Project area occur in heritage sensitive terrain where undocumented heritage resources may be present, a Heritage Resource Impact Assessment would be required for select locations within the Project area in advance of any construction activities.

Due to the extensive modifications of the landscape, and based on the screening level review, in the absence of any field work, no known environmental or heritage issues were identified that will preclude completion of this Project. Nonetheless, more formal or detailed wildlife, vegetation, aquatic, and heritage assessments may be required by both federal and provincial agencies in advance of construction of this Project. If issues are identified during these studies, mitigation measures will likely be required.

3.2 INTRODUCTION

The City of Prince Albert is developing a plan for improving the Highway 2 and Highway 3 corridors entering the south side of the city. In conjunction with this, they are conducting a feasibility study for industrial/commercial development of the lands between these corridors. Together, these areas are referred to as the "Project area". The objective of this "desktop" screening report is to document known environmental and heritage issues, reported in existing documents, maps, and other relevant literature or databases, including topographic maps and airphotos.

This report, is a summary of the results of the screening. Section 3.3 examines the location of the Project area and the physical setting. Section 3.4 provides an overview of the methods used for the screening and data sources consulted. Section 3.5 discusses the findings of the screening, including a summary of the possible regulatory requirements and approvals process, and provides general recommendations related to additional studies and mitigation strategies. A list of acronyms is provided in Appendix I. The locations of previously recorded heritage resources in the general Project area are provided in Appendix II.

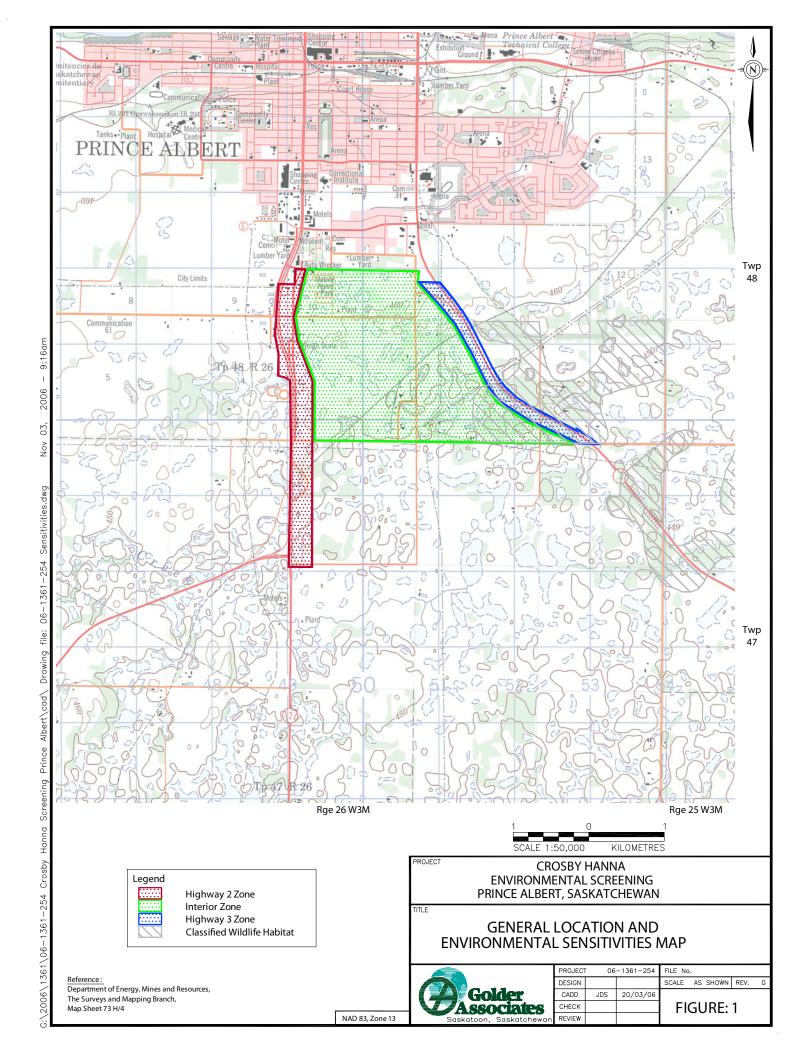
3.3 PROJECT LOCATION

3.3.1 **Project Location**

As part of its long-term urban infrastructure planning objectives, the Prince Albert District Planning Commission is developing a plan for portions of Highway 2 (from the city limits, south to the junction with Highway 11) and Highway 3 (from the city limits, south to Elevator Road, including a buffer of varying width along each highway (Figure 1). In addition, they are conducting a feasibility study for industrial/commercial development of the lands between these highway corridors, extending from the city limits, south to Elevator Road (Figure 1).

3.3.2 General Setting

The landscape of the Project area consists mainly of small, remnant patches of native parkland habitat surrounded by land altered by agricultural practices. There are also operating and/or abandoned commercial development sites. Highways 2 and 3 are important vehicle traffic routes. The area located between the two highway corridors is primarily used for annual crop production, livestock grazing, and residential acreages. The surface topography can be described as "knob and kettle" terrain with isolated wetland habitat occurring in many of the low-lying areas.



3.4 METHODS

3.4.1 Review Process and Background Research

This preliminary screening is designed to meet the following objectives:

- describe the current environmental and heritage resource setting of the Project area, based on a review of the existing information;
- identify any environmental or heritage resource "red flags" or concerns that could affect development within the Project area;
- identify key regulatory contacts, and their potential concerns, related to projects undertaken within the Project area; and
- recommend general mitigation strategies, as appropriate.

The following subsections identify the specific environmental and heritage resource components requested to be addressed in this screening, and summarize the methods used to gather and interpret information. With all disciplines, the information reviewed was augmented with professional knowledge of the Project area.

A. Terrestrial Resources

Collectively, terrestrial resources include aspects of both the physical and biological environment. The terrestrial aspects reviewed for the environmental screening include:

- land use:
- terrain and soils;
- vegetation; and
- wildlife.

i. Land Use

By reviewing relevant existing literature, reports, topographical maps, agricultural capability maps (Canada Land Inventory [CLI]), airphotos and satellite imagery, it was possible to identify and delineate the predominant land uses within the Project area. This review of land base information provided an overview of the land use within the Project area, as it relates to agricultural land (i.e., cultivated, hay), native vegetation upland areas, wetlands, transportation corridors, industrial areas, and residences and acreages.

ii. Terrain and Soils

Topgraphical maps, land system maps (Flory 1983, Tackaberry 1983), and soil maps (Saskatchewan Soil Survey 1989) were reviewed to identify sensitivities related to terrain (e.g., steep slopes) and soils (e.g., erosion prone soils, stone class). This information was used to identify lands considered to have sensitivity related to soils and terrain (i.e., steep

slopes, low agricultural rating for soils) that could affect the construction cost and/or mitigation requirements related to a given development within the Project area.

iii. Vegetation

A search of the Saskatchewan Conservation Data Centre (SCDC) database (Saskatchewan Environment [SE 2006]) and in-house files/records was completed to identify dominant vegetation communities within the Project area and to identify any records of listed plant species occurrences. From this search, the sensitive plant species and/or communities that are known to occur, or could potentially be encountered, and their preferred habitat type, were identified for the Project area. The preliminary data search also assisted in identifying the reported occurrence of noxious weeds (e.g., leafy spurge) that may be of concern in the Project area, and may require specific management strategies.

iv. Wildlife

A search of provincial databases (SE 2006), and in-house files/records was also completed to compile a list of wildlife species that may use the habitat within the Project area on a year-round or seasonal basis. Also identified were provincially or federally listed wildlife species that have been reported as occurring in the Project area or those that have historical breeding ranges that overlap with the Project area. Habitat maps (Flory 1983) for wildlife were reviewed to determine sensitive habitat (e.g., classified wildlife habitat) within the Project area.

B. Aquatic Resources

To determine the presence of any watercourses and/or waterbodies that may provide potential fish habitat in the proposed Project area, topographic maps, airphotos, government databases, fish distribution reports (SPRR 1991), and in-house data were reviewed.

C. Heritage Resources

A review of the provincial heritage resource database maintained by the Heritage Resource Branch was completed to determine the presence and nature of previously recorded heritage resources. The distribution of these heritage resources was used in conjunction with a review of existing terrain features identified on 1:50,000 National Topographic System (NTS) maps to identify locations considered to have heritage and paleontological sensitivities. Areas with heritage sensitivities typically include landforms in close proximity to permanent water sources, eskers, hummocky terrain, hill tops, and other unique topographic features.

Golder Associates Ltd. (Golder) archaeological staff used the screening criteria created and maintained by the Heritage Resources Branch at the Department of Culture Youth and Recreation (Heritage Resources Branch) to identify areas of heritage sensitivity in the Project area. The

Project area was also submitted to the Heritage Resources Branch for a formal Heritage Resource Review.

3.5 RESULTS

3.5.1 Environmental and Heritage Review

A. Land Use

The Project area is located within Prince Albert's south industrial park area and is comprised of deeded land. Land use within this area consists of annual crop and livestock production, residential acreages and industrial businesses. In addition, the Project area includes the Memorial Gardens Cemetery in SE 4-48-26 W2M, on the west side of Highway 2, and the Fairview Fairways Golf Course in SW 1-48-26 W2M, on the northeast side of Highway 3.

Industrial businesses are primarily located along 2nd Avenue West, in the W½ 3-48-26 W2M and a Saskatchewan Wheat Pool grain elevator is located in 1-3-48-26 W2M. An abandoned Canadian National Railway line passes through the Project area, in E½ 33-47-26 W2M, NW 34-47-26 W2M, NW 2-48-26 W2M, 3-48-26 W2M and SW 11-48-26 W2M. A Saskatchewan Highways and Transportation weigh scale is located along Highway 2, in NE 4-48-26 W2M.

Farmyards and residential acreages are located throughout the Project area. A mobile home park, which includes the Eastview and Driftwood Trailer Courts, is located in SW 10-48-26 W2M. It is expected that these businesses and residences are serviced with water, power and natural gas. Overhead powerlines and their associated rights-of-way (ROW) extend from a SaskPower substation located in 4-2-48-26 W2M.

Highway 2 is a paved, two-lane secondary highway that travels south of Prince Albert, to Wakaw and points south. Highway 3 is a paved, two-lane secondary highway that travels southeast of Prince Albert to Birch Hills and points southeast. There are gravelled, provincial grid roads, and vehicle access/trails (primarily related to the acreages) within the Project area.

Recreational capability for the Project area is rated as low to moderate (CLI 1976a). Recreational land use is typically limited, related to snowmobiling, hiking, and bird watching, as the majority of recreational use occurs north of Prince Albert in the forested areas.

B. Designated Areas

The Project area is located within the Rural Municipality of Prince Albert No. 461. A Ducks Unlimited lease agreement is associated with the west half of SE 3-48-26 W2M (G. Letain, Ducks Unlimited Canada, pers. comm. 2006). No International Biological Program (IBP) sites (Adam 1985), Provincial or Regional Parks, or First Nations Reserves are located within the Project area. Two surface parcels (Parcels F and H, Plan 61PA02422), both located in the E½ 9-48-26 W2M

are in the active selection process for Treaty Land Entitlement (TLE) lands by the Peter Ballantyne Cree Nation (S. Carani, First Nations and Metis Relations, pers. comm. 2006). The status of the selection process is currently not near the transfer to Reserve status, as there are still outstanding issues that must be addressed (S. Carani, First Nations and Metis Relations, pers. comm. 2006). Until the land receives Reserve status, the Province remains the regulatory authority. There are also two lots located in the E½ of NW 3-48-26 W2M that are owned by the Pelican Lake First Nation.

C. Terrain

The Project area is located on lacustrine/fluvial-lacustrine land systems. Lacustrine lands are formed by fine textured glacio-lacustrine deposits, while fluvial-lacustrine lands are similar, but are formed by glacial, sandy deposits (Tackaberry 1983). According to the Saskatchewan Soil Survey (1989), the surface topography throughout the Project area is hummocky, with moderately to strongly sloping terrain (i.e., slopes ranging from 5% to 15%).

D. Soils

The Project area is located within the Dark Gray Soil Zone of Saskatchewan and, from west to east, contains a combination of soil associations that include Blaine Lake, Hamlin-Shellbrook, Hoey, La Corne-Shellbrook and Sylvania-Nisbet (Saskatchewan Soil Survey 1989). These soil associations vary from grey (i.e., La Corne, Sylvania), to dark grey (i.e., Shellbrook, Nisbet), to black soils (i.e., Blaine Lake, Hamlin, Hoey) that are poorly drained in depressions, in most instances. These soils are non-stoney, with surface textures that are primarily loamy, with varying compositions of sands, silts and clays. Agriculturally, the soils exhibit moderate to very severe limitations for crop production, largely related to the drainage and moisture holding capacity (i.e., insufficient water holding capacity which may lead to runoff and may cause erosion), as well as unfavourable topography, and may require special conservation practices (CLI 1976b, Saskatchewan Soil Survey 1989). Susceptibility of these soils associations to wind and water erosion ranges from very low to moderate.

E. Native Vegetation

The Project area is located within the Prince Albert Plain Landscape Area of the Boreal Transition Ecoregion of the Boreal Plain Ecozone (Acton et al. 1998). According to Tackaberry (1983), the Project area supports Class 4 lands (10% to 30% of the land supports natural vegetation and/or introduced perennial forage crops). Aspen and balsam poplar stands prevail in undisturbed areas, with understory plants often consisting of snowberry, willow, and rose. Open native grassland communities are typically comprised predominately of needlegrasses, wheatgrasses, plains rough fescue and a variety of forb species.

It is estimated that 70% of the Project area still retains a natural or modified vegetative community. The remaining portion has been modified by highways, residences and commercial/industrial development.

F. Sensitive Listed Plant Species

The Project area still retains patches and tracts of native habitat. Consequently, there is the potential for rare plants to exist. A search of the SCDC database established that short-stemmed thistle (*Cirsium drummondii*), currently listed as an S3 (rare or uncommon), could occur within the Project area (SE 2006). However, records reveal that the last documented observation of this species occurred in 1937, so the likelihood that the species still exists in this area is considered to be low. No Committee on the Status of Endangered Wildlife in Canada (COSEWIC 2006) listed plant species are known to occur in the Project area, nor are the historical ranges of COSEWIC listed plant species encountered by the Project area.

G. Wildlife Habitat

Flory (1983) identifies classified wildlife habitat for white-tailed deer and sharp-tailed grouse on Sections 1 and 2 of 48-26 W2M (Figure 1). The definition for classified wildlife habitat, according to Flory (1983), are areas "that may be of seasonal or year round importance to wildlife and is essential to the maintenance of current populations". There are no Saskatchewan Wildlife Federation Habitat Trust Lands, Fish and Wildlife Development Lands or lands designated under the Wildlife Habitat Protection Act located within the Project area (SE 2006).

Portions of the Project area have been altered and/or modified for agricultural, commercial and residential land uses. These alterations/modifications to the landscape, coupled with its proximity to a large urban centre, may have decreased the value of the habitat for some wildlife species. Remaining habitat, such as the temporary or seasonal wetland basins and treed bluffs scattered throughout the Project area, still provides cover for ungulates and furbearers, as well as a mosaic of nesting structure for upland gamebirds and songbirds. As such, a variety of wildlife species may inhabit the habitat, or traverse it enroute to other suitable habitat (e.g., the North Saskatchewan River Valley), in search of shelter, forage, or breeding opportunities. Due to the amount of fragmentation and associated human disturbance, the Project area is expected to provide low to moderate potential habitat for wildlife, with differences on a site-specific basis.

H. Wildlife Species

i. Mammals

The Prince Albert 73/H map region is known to provide habitat for a variety of wildlife species. Larger mammalian species that could be found in the Project area, include white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*) and red fox (*Vulpes vulpes*), while smaller species such as porcupine (*Erethizon*

dorsatum), badger (*Taxidea taxus*), northern pocket gopher (*Thomomys talpoides*), white-tailed jackrabbit (*Lepus townsendii*), red squirrel (*Tamiasciurus hudsonicus*), and Richardson's ground squirrel (*Spermophilus richardsonii*) may also be found, depending on the habitat type.

ii. Birds

Bird species potentially found in the agricultural lands of the Project area typically include grey partridge (*Perdix perdix*), rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), black-billed magpie (*Pica pica*), and house sparrow (*Passer domesticus*).

Natural habitat along the North Saskatchewan River valley and adjacent upland areas would include a diversity of species during the breeding season, including ruffed grouse (Bonasa umbellus), alder flycatcher (Empidonax alnorum), blue jay (Cyanocitta cristata), black-capped chickadee (Parus atricapillus), Swainson's thrush (Catharus ustulatus), American robin (Turdus migratorius), red-eyed vireo (Vireo olivaceus), yellow rumped warbler (Dendroica coronata), chipping sparrow (Spizella passerina), hairy woodpecker (Picoides villosus), common flicker (Colaptes auratus), red-tailed hawk (Buteo jamaicensis), and great-horned owl (Bubo virginianus) (Smith 1996). Many of these species could be expected to be found in the Project area, during the breeding and nesting season.

Wetlands with open water could support waterbird populations such as mallard (*Anas platyrhynchos*), blue-winged teal (*Anas discors*), American coot (*Fulica americana*), and bufflehead (*Bucephala albeola*) in the spring to fall periods. The region also supports seasonal populations of migratory geese, including Canada geese (*Branta canadensis*), lesser snow geese (*Chen caerulescens caerulescens*), and greater white-fronted geese (*Anser albifrons*).

iii. Amphibians and Reptiles

The mosaic of wetlands associated with the existing, natural or modified vegetative communities in the Project area may provide habitat for a variety of amphibian and reptile species. Species that the habitat types within the Project area could support, include boreal chorus frog (*Pseudacris triseriata maculata*), wood frog (*Rana sylvatica*), Canadian toad (*Bufo hemiophrys*), northern leopard frog (Rana pipiens), tiger salamander (*Ambystoma tigrinum*), and red-sided garter snake (*Thamnophis sirtalis parietalis*).

I. Sensitive Listed Wildlife Species

The following six COSEWIC (2006) listed wildlife species have historical breeding ranges that overlap with the Project area. These listed species and their conservation status are described below:

- *Threatened* loggerhead shrike (*Lanius ludovicianus*) and Sprague's pipit (*Anthus spragueii*); and,
- **Special Concern** yellow rail (*Coturnicops noveboracensis*), short-eared owl (*Asio flammeus*), northern leopard frog and monarch butterfly (*Danaus plexippus*).

All the above listed species may potentially be found in the Project area, depending on the habitat type and time of the year. The following provides a short description of the species' habitat requirements.

Threatened

Loggerhead shrikes are often associated with open areas having shrub and hedgerow vegetation communities, which are utilized for perching and nesting habitat (Telfer 1989). Potential habitat is located throughout the Project area.

Sprague's pipits are typically found in prairie grasslands that have not been burned or cultivated (Smith 1996). While suitable habitat is limited within the Project area, no historical nesting sites are known (SE 2006).

Special Concern

Yellow rails are found in marsh environments that are dominated by sedges, true grasses and rushes, where there is little or no standing water (Smith 1996). Preferred habitats include damp fields and meadows, and in floodplains for rivers and streams. There is potential for yellow rails to be nesting in habitat associated with the wetlands, depending on seasonal water levels, in the Project area; however, no historical nesting sites have been documented (SE 2006).

Short-eared owls typically prefer open grassland and hayland areas (Godfrey 1986). Potential nesting and foraging habitat for this species may be located in the general Project area where lands are used for pasture, or along wetland fringes. No historical nesting sites are recorded for the Project area (SE 2006).

The northern leopard frog inhabits scattered, permanent, small water bodies with emergent vegetation in the spring for breeding, and moves out to the permanent wet areas adjacent to the breeding sites in summer (Wagner 1997). The majority of wetlands within the Project area are classified as temporary or seasonal wetlands, therefore is unlikely that suitable habitat is present for this species.

The monarch butterfly feeds on plants with bitter or poisonous sap; eggs are generally laid in mid to late spring on milkweed plants (Layberry 1998). Potential habitat may exist in the Project area, if milkweed plants are present.

J. Aquatic Habitat

The Project area contains numerous wetlands due to the hummocky terrain. The landscape has a closed aquatic system, such that no surface drainage exists, other than temporary rainwater/meltwater channels to low-lying areas where the wetlands prevail. The majority of wetlands in the Project area are classified as temporary or seasonal wetlands, with no connection with fish bearing waters. As such, they would not be expected to be large enough, or deep enough to support fish habitat.

K. Heritage Resources

The Project area is located within map sheet 73 H/4 (approximately 1,200 km²), and there are 38 previously recorded archaeological and historic sites on file with the Heritage Resources Branch for this map sheet (Table 3-1 and Appendix II). None of these sites are situated within the immediate Project area. However, significant sites such as human burials, which have been designated as Sites of a Special Nature (SSN), are located within the same Townships as the Project area. SSNs are provided with special protection, per Section 64 of The Heritage Property Act. As such, based on the review of the previously recorded archaeological and historic sites for the 73 H/4 mapsheet, there exists potential for significant heritage resources to be found within the Project area.

TABLE 3-1: SITE TYPES RECORDED FOR MAP SHEET 73H						
Site Type	Number of Sites					
Artifact Find	8					
Artifact Scatter	20					
Artifact / Feature Combination	2					
Site of Special Nature	7					
Unknown	1					
Total	38					

3.5.2 Regulatory Requirements

The Environmental Assessment Branch of SE-Prince Albert office (953-2322), should be consulted prior to beginning any project or development within the Project area, to determine if the project is considered a "development", as defined under the Environmental Assessment Act (Saskatchewan). SE may require the submission of a project proposal for their review to

determine if the Project meets all their regulatory requirements. As discussed further below in Section 3.5.2 (C), an HRIA would also be required in portions of the Project area.

If federal money is used to finance a portion of a project, or if federal lands are affected, or if the federal government is involved with a project, it will trigger a review under the Canadian Environmental Assessment Act (CEAA). It is anticipated that a typical project within the Project area would qualify for a "Screening Assessment" as defined by the aforementioned Act. If CEAA is triggered, additional requirements such as wetland habitat compensation may be required.

A. Terrestrial

As mentioned previously, a few sensitive listed species may be found in the Project area. Therefore, a survey for sensitive wildlife species and/or associated nesting or breeding sites may be requested by SE prior to construction. If a sensitive species is found to be nesting or breeding within the Project area, restrictions on construction activities may be imposed during the critical breeding and rearing period (e.g., mid March to end of July). Requirements will be dependant on the species, distance from the proposed project and timing of construction or related activities, and other appropriate mitigation. Contact should be made with a representative from the SE-Prince Albert office (953-2322), to determine any concerns they might have with a particular Project, and what specific wildlife surveys would be required.

Similarly, a rare plant survey may be requested for native habitat areas encountered by a given project within the Project area. In the event that a listed species is identified, SE would then be contacted to determine the appropriate mitigation required (e.g., avoidance, salvage or relocation). Contact should be made with a representative from the SE-Prince Albert office (953-2322), to determine any concerns they might have with a particular Project, and what specific plant surveys would be required.

As there is a Ducks Unlimited Project located within the Project area, contact should be made with the local Ducks Unlimited office in Melfort (752-2791) regarding any concerns they may have with a given project in the vicinity of their project lands. Consultations with Ducks Unlimited indicated that this lease agreement expires in December, 2007.

B. Aquatics

Although the Project will not be in proximity to any fish bearing watercourse or waterbody, there are several small wetlands in the proposed Project area. Murray Koob (Aquatic Technician, SE - Prince Albert, 953-2885) should be contacted to determine if an Aquatic Habitat Protection Permit will be required for a given project. Additional requirements such as wetland habitat compensation may be required, depending on whether a project is on private or Crown land. If any wetlands within the Project area are proposed to be altered (i.e., drained and/or filled-in), Saskatchewan Watershed Authority (North Battleford, 446-7450) should be consulted in regards to any permits that may be required.

Because no work below the high water mark of a fish bearing watercourse is expected to occur within the Project area, it is not likely that Fisheries and Oceans Canada (DFO) will require a review of a given project. However, this should be determined on a project by project basis.

C. Heritage

Heritage resources, as defined under *The Heritage Property Act*, include all Saskatchewan's historic and precontact archaeological sites, architecturally significant structures, and paleontological resources. As per Section 66 of *The Heritage Property Act*, all heritage resources on privately owned land and Crown Land are considered to be property of the Crown. These sites are managed by the Heritage Resources Branch at the Department of Culture, Youth and Recreation (Heritage Resources Branch) in Regina.

Cultural Resources on Federal Lands are protected under the CEAA, and to a limited degree by the *Indian Act*, and are administered by the Archaeological Services Branch at Parks Canada. Archaeological resources located on Indian Reserves, including TLE lands, are the responsibility of the owning Band Council.

Section 63 of *The Heritage Property Act* empowers the Minister to require a developer to conduct a heritage assessment for any project that has the potential to impact significant heritage resources. It is the responsibility of the developer to submit all proposed operations for regulatory review to the Heritage Resources Branch. The review will detail what assessments will be required in response to the proposed operations. Developers are obligated to commission a qualified archaeologist to conduct any required assessment or mitigative procedures.

i. Heritage Regulatory Requirements

The Heritage Resources Branch formally reviewed the Project area by completing an analysis of the 1:50,000 topographic map, satellite images, and the locations of previously recorded sites, to determine if areas of heritage sensitivity existed within the Project area. The Heritage Resources Branch determined that areas of heritage sensitivity were present and includes those locations occurring in undisturbed hummocky terrain. Archaeological investigations in similar topography have identified significant precontact sites such as stone circles and camp locations. There is a strong likelihood that sites of a similar nature exist in this area.

As such, a HRIA would be required on portions of the Project area that exhibited high heritage sensitivity (File No. 1967). The requirement for a HRIA is based on three main factors: 1) the presence of previously recorded heritage resources, 2) the potential of the terrain to contain undocumented heritage resources, and 3) the nature and scope of the proposed project.

Preconstruction HRIAs are required (File No. 1967) in uncultivated areas within:

- NW 34-47-26 W2M;
- SW 34-47-26 W2M;
- SW 1-48-26 W2M;
- NE 2-48-26 W2M; and
- SE 2-48-26 W2M.

These areas are shown on **Map 6**. Should it not be possible to complete pre-construction HRIAs on these locations due to limiting factors such as snow cover and ground frost, a qualified consulting archaeologist should be on-site during construction to carefully monitor snow and topsoil stripping in all sensitive areas (File No. 06-1967). Monitoring will provide the opportunity, that if heritage resources are uncovered during construction, they can be quickly assessed and the archaeologist can determine if follow-up investigation and/or mitigation is appropriate during snow and frost-free conditions.

3.5.3 Recommendations

As the number, location and/or scope of the potential projects to be undertaken within the Project area is unknown at this time, it is difficult to provide specific recommendations regarding any development that may occur within the Project area. Listed below are some general strategies pertaining to potential environmental concerns which may be encountered during construction and operations of projects.

This preliminary screening identified potential environmental issues (e.g., natural habitat, wetlands, classified wildlife habitat, Ducks Unlimited project) and heritage resource (e.g., lands with potential to contain heritage resources) and designated lands (e.g., Crown land, First Nations land) that may require consideration, depending on the location, type and funding of a given project. Consequently, additional environmental assessment work may be requested by regulators (e.g., federal and/or provincial) prior to any development within the Project area. Heritage assessments are required in portions of the Project area prior to development commencing (File No. 06-1967).

Depending on the location of a given development, clearing of natural habitat (e.g., trees, shrubs, grasses) may be required. Any clearing activities of natural areas should be limited to the extent practical, be restricted to a surveyed work area, and be conducted outside the sensitive nesting and rearing period of migratory bird species (e.g., mid-March to mid-July) to comply with the spirit of the Migratory Bird Convention Act.

Where earthwork is required, efforts should be employed to strip and salvage desirable growth material (e.g., topsoil and organic material). This material could then be used on reclaimed areas such as road ditches, slopes that have been cut/graded or portions of the construction areas not required for operations.

The majority of the Project area contains soil associations with loamy soil textures that are considered to have a very low to moderate susceptibility to wind and water erosion. Nonetheless, if soils are salvaged or stockpiled they should be protected and stabilized by placing them in low mounds/berms and either seeding with a cover crop or covering with fibre matting. Similarly, topsoil replaced on reclaimed areas or newly constructed areas (e.g., ditch) should also be stabilized (i.e., seeded, silt fence placement) to minimize loss or dilution by wind and water erosion.

There is the potential for listed wildlife species to be encountered in the Project area. As such, SE may require a survey for sensitive wildlife species and/or associated nest sites prior to development. If a sensitive species is found to be nesting or utilizing an area within or adjacent to the proposed Project area, restrictions on construction activities may be imposed during the critical breeding and rearing period (mid March to end of August). These restrictions will be dependant on the species, in relation to their critical breeding and rearing periods, and the recommended setback distance from the species for the type of construction activity occurring (SE 2003).

Numerous wetlands are located within the Project area, and should be avoided to extent practical. Should construction activities need to infringe upon a wetland(s), efforts should be employed to limit activities within the wetland. Mitigation measures should be implemented (i.e., silt fences) to prevent surface material disturbed during construction activities from entering the wetland(s). Where feasible (depending on the development), efforts should be made to protect and enhance wetlands that will remain intact and are adjacent to any development. Depending on the location and type of development, wetlands may be incorporated into a plan for storm water storage.

A formal Heritage Resource Review was completed for the Project area and a HRIA is required on portions of the Project that exhibit undisturbed areas of native prairie/bush in NW 34-47-26 W2M; SW 34-47-26 W2M; SW 1-48-26 W2M; NE 2-48-26 W2M; and SE 2-48-26 W2M (File No. 06-1967). Depending on the results of the HRIA, additional work, including mitigation of any significant archaeological sites may be necessary.

3.6 **SUMMARY**

Classified wildlife habitat has been identified for white-tailed deer and sharp-tailed grouse on Sections 1 and 2 of 48-26 W2M (Flory 1983). There are no Saskatchewan Wildlife Federation Habitat Trust Lands, Fish and Wildlife Development Lands or lands designated under the Wildlife Habitat Protection Act located within the Project area (SE 2006). A Ducks Unlimited Project is located in SE 3-48-26 W2M.

The historical breeding ranges of six wildlife species listed by the COSEWIC (2006) overlap with the Project area. These include loggerhead shrike, Sprague's pipit, yellow rail, short-eared owl, northern leopard frog and monarch butterfly. While suitable habitat for most of these species is located within the Project area, no historical nesting sites or documented sightings of these

species are known within the Project area (SE 2006). However, as these species may be potentially encountered in the Project area, SE may require a survey for sensitive wildlife species, and/or preferred habitat, prior to development.

A search of the SCDC database identified that short-stemmed thistle, a provincially listed plant species, could possibly occur within the Project area (SE 2006). However, records reveal the last documented observation for this species occurred in 1937. No COSEWIC listed plant species have ranges that overlap with the Project area.

An Aquatic Habitat Protection Permit may be required for a given project, due to the wetlands in the Project area. If the CEAA is triggered, additional requirements may be required, such as wetland habitat compensation.

The Project area is located within the Rural Municipality of Prince Albert No. 461. A mobile home park, which includes the Eastview and Driftwood Trailer Courts, is located in SW 10-48-26 W2M. Industrial businesses are primarily located along 2nd Avenue West, in the W½ 3-48-26 W2M and a Saskatchewan Wheat Pool grain elevator is located in 1-3-48-26 W2M. It is expected that these businesses and residences are serviced with water, power and natural gas. Overhead powerlines and their associated ROWs extend from a SaskPower substation located in 4-2-48-26 W2M. In addition, the Project area includes the Memorial Gardens Cemetery in SE 4-48-26 W2M, on the west side of Highway 2 and the Fairview Fairways Golf Course in SW 1-48-26 W2M, on the northeast side of Highway 3.

An abandoned Canadian National Railway line passes through the Project area, in E ½ 33-47-26 W2M, NW 34-47-26 W2M, NW 2-48-26 W2M, 3-48-26 W2M and SW 11-48-26 W2M. A Saskatchewan Highways and Transportation weigh scale is located along Highway 2, in NE 4-48-26 W2M.

Two lots, both located in the $E\frac{1}{2}$ 9-48-26 W2M are in the active selection process for TLE lands by the Peter Ballantyne Cree Nation. Until the land achieves reserve status, the regulatory authority remains with the province and the R.M.. There are also two lots located in the $E\frac{1}{2}$ of NW 3-48-26 W2M that are owned by the Pelican Lake First Nation.

There are no previously recorded heritage resources located within the Project area. However, portions of the Project area occur in heritage sensitive terrain where undocumented heritage resources may be present in locations that have never been assessed by a professional archaeologist. As a result, the Heritage Resources Branch requires an HRIA on select locations within the Project area in advance of any construction activities (File No. 06-1967). Should a pre-construction HRIA not be possible, due to limiting snow and ground frost, construction monitoring is required, with appropriate follow investigation/mitigation to be determined.

4. INFRASTRUCTURE REVIEW

The following infrastructure review summarizes the results of the analysis undertaken in determining the municipal servicing opportunities and constraints for the study area. The description is based on previous reports, site assessment and capacity calculations.

Based on review of the existing infrastructure and the study area conditions, conceptual servicing plans have been developed to provide roadway, water, sewer, and storm water drainage for the proposed land uses within the study area.

4.1 WATER DISTRIBUTION

To service the south corridor study area, water could be provided either through tie-ins to the City of Prince Albert's high pressure water distribution system, or through tie-ins to the low pressure Prince Albert Rural Water Supply system. Both systems are supplied by Prince Albert's Water Treatment Plant (WTP) which draws and treats raw water from intakes located in the North Saskatchewan River.

Map 1 shows the existing high and low pressure water distribution systems.

4.1.1 Existing Treatment and Storage Capacities

The existing water supply and treatment system capacities have been reviewed based on information drawn from the 2006 *Prince Albert Water System Assessment* by Associated Engineering. This assessment reports the capacities of the raw water supply and treatment systems as adequate to provide maximum day demands for the next 15 to 20 year projected population growth for the Prince Albert and surrounding areas supplied by the system.

The City stores treated water in reservoirs at River St., 2nd Avenue, and Marquis Road located at the southern edge of the City (shown on **Map 1**). Each reservoir includes a pumping station to provide flow and pressure to the City and rural systems.

The study area would be relying on flow from the Marquis Road reservoir and pumping station for its water supply. Currently the City reports no low pressure problems in the area supplied by this station.

There two commonly accepted approaches for determining adequate treated water storage for a City of Prince Albert's size, including:

- (1) total capacity = $2 \times \text{average day demand}$
- (2) total capacity = equalization + fire reserve + emergency reserve

On a city wide basis, P.A. currently meets criteria (1) but may fall short of this within the next

5 - 10 years, and will meet criteria (2) for the long term future. This will need further detailed investigation in the preliminary design stage should the area be developed.

4.1.2 Study Area Distribution

Option 1: Tie-in to High Pressure System (City)

To service the study area initially from the City's high pressure system, tie-ins could be located at the 300mm diameter pipelines near the rural water booster station located on Highway #2, and at the 300mm main on Phelps Drive near Jay's Moving & Storage Ltd. These tie-in points are shown on **Map 1**. For long term development of the entire study area, the existing 300 mm mains would likely require twinning or replacement with larger diameter mains back to the Marquis Road Reservoir and Pump Station.

Based on City of Prince Albert Hydraulic model information, pressures of approximately 365 kPa (53 psi) and 380 kPa (55 psi), are available at these two tie-in locations during current peak summer system-wide demands.

Contours provided on **Map 2** show the study area dropping off significantly south of these tie-in locations (a total of 12m elevation drop is observed from the north and south study area boundaries), therefore, adequate pressures may be achieved should the system be expanded south from these points. There is some potential for the need for pressure reduction/control, depending upon service levels.

The flow capacity of the Marquis Road reservoir pumps is limited, and requires further investigation at the preliminary design stage to determine their adequacy to meet the demands of the study area. There is a possibility that larger pumps with higher flow capacities would be required in the future.

Should this high pressure option be pursued, the proposed study area distribution piping network and demands will need to be modeled in the preliminary design stage using the City's existing WaterCad model or other similar numerical assessment model. Modeling, with source pumps included at the Marquis Road Pumping Station will clearly define the study area distribution system performance and potential pumping upgrade requirements.

Map 7 illustrates a conceptual plan for high pressure water distribution servicing for full development of the study area based on the proposed future land uses. To serve the proposed development area, 500 mm diameter mains would likely be required from the Marquis Road Pump Station traveling down each highway corridor. From these two major pipelines, 300 mm diameter mains would branch off to service industrial and commercial areas.

Watermain sizes were determined assuming velocities below 1.5 m/s during peak hour demands. Based on the 2006 City of Prince Albert WSA Report, flow demands were calculated using an

average day usage of 450 litres/capita/day and a peak hour factor of 2.7. For the commercial and industrial areas, 37 equivalent capita/hectare, and 30 equivalent capita/hectare multipliers were used respectively.

Option 2: Tie-in to Low Pressure System (Rural Water)

As illustrated on **Map 1**, there are many lots within the study area that are currently serviced by the low pressure Rural Water Supply System, with mains ranging from 38 mm to 150 mm in diameter. Based on this existing infrastructure, tie-in to the rural supply system is likely the most economical option for servicing new development within the study area. However, the overall study area distribution system capacity (volume & pressure) would be more limited, and not suitable for full development of commercial and industrial flow demands without suitable provisions to ensure flow and pressure meet demand.

If the study area were to be serviced by the low pressure system, holding tanks and pumps would likely be required at houses and businesses to provide a 150 mm air gap, consistent with current requirements for system users.

Should expansion of the rural supply system be pursued, the pumping and pipeline capacities for additional supply from the South Rural System will require detailed analysis using the existing system numerical hydraulic model, currently unavailable to the project team, or be recreated with a like tool.

Overall there do not appear to be significant constraints for water distribution to the study area, with tie-in options available through both the Rural and City systems. Use of both systems would require pressure control and, potentially, booster pumping. The merits of the three options should be investigated in preliminary design stage.

4.2 SANITARY SEWER

There appear to be two feasible options for providing sanitary sewer service to the study area. The area could be connected to the City's gravity system to carry waste to the Waste Water Treatment Plant (WWTP), or holding tanks could continue to be used with truck haul disposal at the WWTP. City of Prince Albert staff have confirmed that the capacity of the WWTP is adequate to serve a population of 50,000, which corresponds to the next 15-20 years based on projected population growth.

Tie-in to Gravity System (City)

Based on the topography of the study area, sewage pumping stations would likely be required to collect the area's flows and then pump through a force main connecting to the existing City gravity main on Phelps Drive near Jay's Moving & Storage Ltd.. Gravity flow could then carry

the waste water to the WWTP via the trunk main that follows 15th Avenue, and then north east to the plant. This trunk main increases in diameter from 250 mm at the tie-in point to 1350mm at the WWTP.

Manning's equation was used to estimate the approximate capacity of this main considering existing City flows. Pipe invert elevations received from the City of Prince Albert, pipe lengths and contributing population flows were considered at intersection points along the length of the trunk main. Flows were calculated based on the current City population, an assumed 3.5 residents per connection, and flow rates provided by the 1975 AESL *City of Prince Albert Sanitary Sewer Study*.

Based on these cursory calculations it is estimated that the trunk main has adequate capacity for existing loading and some, limited, capacity for additional loading. However, the physical limits of system expansion cannot be determined based on the scope of this review. The estimated capacity available is in the order of 40 to 50 L/s (equivalent of 400 to 500 service connections) based on the limiting capacity of the 525 mm main on 15th Avenue near its intersection with McIntosh Drive. The estimated peak sewage flow contribution from the fully developed industrial and commercial land uses within the study area is approximately 620 L/s. Based on this, capacity upgrades will be required to the City's existing trunk system in order to service the entire study area as proposed.

It is recommended that a detailed Sanitary Sewer Study be completed, similar to the 1975 Study, to estimate current loading more accurately, and assess the City's system in relation to projected future developments be undertaken.

Map 8 illustrates a conceptual sanitary sewer collection plan for the proposed land uses within the study area. This plan includes gravity mains draining to one of three future sewage pumping stations which deliver flow to the City's gravity system through force mains. This concept makes use of the City's planned SPS, located on 48th Street, with gravity piping entering this station at an invert elevation of 452.5. The estimated peak flow contribution from the study area to this station, is approximately 120 L/s.

Gravity mains were estimated based on Manning's equation with pipes sloped at a minimum of 0.25%. Force mains were sized to achieve velocities of less than 5 m/s and greater than 0.6 m/s. Based on typical design standards, sanitary loading was calculated based on commercial and industrial flow contributions of 14,000 litres/hectare/day, and 17,500 litres/hectare/day respectively, with a peak hour factor of 3.0.

Holding Tanks/ Truck Haul

As an alternative to utilizing the City's gravity system, sewage holding tanks could be provided for the houses and businesses in the area consistent with current practice in the area. Truck haul would then be required to carry waste to the WWTP.

This alternative is not as attractive in terms of convenience, although it may be realistic from a cost perspective depending on the type of development that is proposed, and capacity of the City's existing gravity trunk mains.

Overall, topography is the major constraint to servicing the area with conventional gravity sanitary sewer. Piped service is possible but existing trunk main capacity, and cost for sewage pumping, may be constraining factors. There appear to be no significant constraints to servicing the area by holding tank and truck haul.

Existing Sewage Lagoon

As shown on **Map 1** a sewage lagoon is situated in the northern portion of the study area servicing Eastview Trailer Court. The lagoon appears to be a natural slough with berms constructed in some areas, and natural boundaries enclosing the remainder of the water body. It is assumed that no liner was constructed for the lagoon, and that it does not meet Saskatchewan Environment (SE) Guidelines. Based on consultations with both SE and the Prince Albert Parkland Regional Health Authority it is undetermined as to which jurisdiction the lagoon falls under. In order to determine which jurisdiction the lagoon falls under, the volume of waste water being pumped to the lagoon must be determined. This can likely be determined by examining water records (i.e. volume of treated water being used by the Eastview Trailer Court).

While we can not confirm the construction of the lagoon or the existence of a liner, based on a 1992 geotechnical and hydrogeological investigation report by Agra Earth & Environmental, without a liner or cut-off, exfiltration from the lagoon facilities would be controlled only by the permeability of the natural sand. Flow from the lagoon could be exiting in all directions, possibly following preferred seepage paths of cleaner or coarser material zones. This would pose a ground water, and potentially surface water, down stream contamination threat.

Based on site observations of the lagoon construction, and the potential for sewage contamination of the surrounding land and groundwater, a detailed assessment of the suitability of the lagoon is recommended. Failing this the lagoon should be decommissioned as a disposal and treatment facility for the trailer court. Should it be replaced with a constructed facility meeting SE Guidelines, the required separation from residential development is 0.6 km. The current separation from the trailer court is approximately .25 km, meaning it could not be reconstructed at its current location.

Map 1 illustrates the lagoon buffer zone radius of 0.6 km, and its encroachment on existing residential areas. This facility is a constraint to residential development in the area without its elimination. The lagoon may constrain certain types of commercial and industrial development in the vicinity, including but not limited to lodging, food services and food production.

4.3 STORM SEWER

Due to the study area topography as illustrated by the contours on **Map 2**, gravity storm water drainage to the City's gravity collection system is not feasible based on the large drop in elevation from the north to the south. Significant pumping energy and force main piping would be required to facilitate ties to the greater Prince Albert system.

As indicated on **Map 2**, there are numerous sloughs throughout the central portion of the study area. These existing wetlands could be utilized effectively as part of the overall storm water management system for the area. This is, of course, offset by the loss in serviceable land.

In sizing storm water ponds, the total expected precipitation for a specific design event, typically 1:25 or more should be considered for the study area, including surrounding areas that would could potentially drain into the corridor.

Graded ditches, culverts, and drainage swales will be required to convey the run-off to the ponds. An underground gravity collection system could also be considered for this purpose, however it would be significantly more capital intensive.

Overall, topography is the significant constraint to conveying flow from the study area into the municipal gravity system or away from the site by overland flow. Storm water from rainfall and spring run-off will likely have to be handled within the study area utilizing retention ponds. This would require significant topographic survey information, storm and hydraulic modelling at the preliminary design stage.

Based on the topographic information available, **Map 9** illustrates a conceptual overland storm water management servicing plan for the anticipated land uses within the study area, making use of existing topography including low lying sloughs for storm water retention.

4.4 TRANSPORTATION

The study area perimeter is enclosed by 40th Street to the north, Highways #2 and #3 to the west and east, and Elevator Road to the south.

Major roadways within the interior of the study area include Phelps Drive running north south, and 48th Street running east west.

The construction of minor roadways is expected to be required within the study area to provide manoeuverability, and improvements may be required to allow ease of access from Highways #2 and #3. Grading and paving may be required for the existing interior roads.

There is an abandoned railway line running north east through the study area which would only represent a constraint in terms of manoeuverability inside the study area, should it be brought back into use.

Overall transportation to and within the study area is not expected to be a significantly constraining issue. Access to the site is very good considering the existing perimeter and interior roadways, thus representing more of an opportunity for development.

The overall proposed transportation network should be developed based on the land use concept plans, however, at this time there do not appear to be any significant constraints that would negate development.

Maps 7-12 each show proposed future roadways that may be required for access to the commercial and industrial land uses within the study area. These concepts, showing existing and potential roadways and ditches will provide accessible servicing routes for potable water, sanitary sewer, and storm water drainage within the study area.

4.5 ELECTRICITY, NATURAL GAS AND TELECOMMUNICATIONS

Electricity, natural gas, and telecommunication service have not been investigated in detail at this time. They are not expected to be a constraint to further development in the study area.

4.6 SOIL CONDITIONS

Based on preliminary review of aerial photos and available test hole information recorded in 1992 by Agra Earth and Environmental, the study area topography indicates glacial drift conditions consisting of sands, silts, or clays overlying glacial till clay till.

There is potential for high ground water levels in some areas based on the test holes near the existing trailer court sewage lagoon. Outside of this, soil conditions are expected to provide generally acceptable foundation conditions. The type of structure will dictate the degree of foundation or pile support required and should be considered on a case by case basis.

5. LAND USE AND PLANNING ANALYSIS

5.1 EXISTING LAND USE AND CONTEXT (Map 3)

The Study area (1,132 ha) contains land lying within both the Rural Municipality of Prince Albert No. 461 (1,063 ha) and the City of Prince Albert (69 ha). Field investigations of the Study area were conducted in January, May and June of 2006.

General land use within the Study area is presented in Table 5-1:

TABLE 5-1: LAND USE		
Land Use	Area (ha)	% of Study Area
Vacant	109.0	9.6%
Agriculture	665.0	58.7%
Country Residential	94.0	8.3%
Mobile Home Park	16.0	1.4%
Highway Commercial	110.0	9.7%
Industrial	21.0	1.9%
Community Service	40.0	3.5%
Right of Ways (roads)	77.0	6.8%
Total	1132.0	100.0%

Approximately 61 ha of the study area are actually wetlands (predominantly located in the land between the corridors). Agricultural land uses and vacant land dominate portions of the study area near the intersection of Highway #11 and Highway #2, as well as the land between the corridors. Most of the land adjacent to Highway #3 also is predominantly vacant or used for agriculture, with the exception of the Fairview Fairways (Golf Course), John Deere and McDonald Metals Ltd.. Country residential is scattered throughout the Study area, though clusters of acreages are situated to the north, east and south of the Memorial Gardens Cemetery. The Driftwood Trailer Court (85 trailers) and the Eastview Trailer Court (102 trailers) are situated east of, but separated from Highway #2, by a "strip" of Highway commercial development. The trailer courts are not easily visible from the Highway. Highway commercial and light industrial development is concentrated on the east side of Highway #2, in a 1.6 km "strip", running south from the City's southern boundary. This "strip" is accessed by the service road that runs along the east side of Highway #2. Other industrial and commercial uses are scattered in small clusters

throughout the study area. The Memorial Gardens Cemetery occupies a large parcel of land west of Highway #2, adjacent to Flaman Sales. The City of Prince Albert has been servicing and preparing four new industrial sites (within City boundaries) east of Phelps Drive. The largest of these parcels has been purchased by Broda Construction.

Obvious land use conflicts within the Study area involve the existence of residential and industrial development within relative close proximity to one another. The two trailer courts do not appear compatible with surrounding development (i.e. industrial and commercial), though it is understood that each has been in existence since the 1970's. A number of country residential sites within the study area are in close proximity to industrial development, though most of these sites are relatively large and have mature vegetation and trees to buffer adjacent development.

The private sewage lagoon that serves the Eastview Trailer Court (located in the Rural Municipality) is located approximately 250 metres east of the trailer court, within City boundaries. Current Saskatchewan Environment policies require that sewage lagoons be located at least 600 metres from concentrated residential development. Concerns were raised during interviews of the potential for the lagoon to be discharging to the north, towards developed areas of the City. Although the lagoon has existed in this location for a number of years, it likely does not meet current provincial standards and is inappropriately sited.

5.2 REGULATORY ENVIRONMENT REVIEW

Development in the study area situated in the Rural Municipality of Prince Albert is subject to the provisions of:

- The Prince Albert Planning District Development Plan; and
- The Rural Municipality of Prince Albert Zoning Bylaw.

Development in the study area that is situated in the City of Prince Albert is subject to the provisions of:

- The City of Prince Albert Development Plan; and
- The City of Prince Albert Zoning Bylaw.

Relevant provisions of each bylaw are set out below:

5.2.1 Prince Albert Planning District Development Plan Bylaw No. 1 of 1991

The Development Plan Policy Map 1, which forms part of the District Development Plan Bylaw, designates portions of the Study area for (see **Map 4**):

- Industrial Commercial;
- Industrial; and
- Agricultural Resource.

The following policies from the Prince Albert Planning District Development Plan are relevant to the Prince Albert South Highway Corridor Concept Plans and Commercial / Industrial Feasibility Study. It is noted that the Prince Albert Planning District has plans to update its Development Plan in 2007. Policies from this Bylaw that are relevant to the Study / Study area are noted below:

• Industrial and Commercial Uses in the Agricultural Resource Policy Area "4.4.8 Industrial and Commercial Uses

Industrial and commercial uses may be permitted in the Agricultural Reserve District (of the Rural Municipality of Prince Albert Zoning Bylaw) only if their function is directly related to the local agricultural economy. Such uses shall be restricted to the following:

- *i) Grain elevators*;
- *ii) Grain and seed storage, cleaning and drying;*
- iii) Fertilizer mixing and sales;
- iv) Livestock and poultry breeding services; and
- v) Abattoirs.

Approval for such industrial commercial developments may be granted only after a review of the affected Council and the Prince Albert District Planning Commission to ensure that:

- *i) Incompatibility with other land uses will be avoided;*
- *ii)* Policies for environmental control will not be jeopardized;
- iii) Significant areas of good agricultural land will not be permanently removed from production;
- iv) The design and development of the use will conform to high standards of safety, visual quality and convenience; and
- v) Water and waste disposal services will be provided to an adequate nonpolluting standard."

Implications for study area: Commercial and industrial development in parts of the study area that are designated for Agricultural Resource uses (in the Development Plan), is limited to uses that directly serve primary agricultural production.

Mobile Home Parks

"6.4 Mobile Home Parks Policies

6.4.1 Existing Mobile Home Parks

The expansion of any of the existing mobile home parks currently located with the District shall be prohibited.

6.4.2 New Mobile Home Parks

The development of new mobile home parks within the District will be permitted provided they are located within areas designated as having potential for country residential development and only if they are controlled by stringent Mobile Home Park zoning controls."

Implications for study area: This policy precludes expansion of both the Driftwood Trailer Court and the Eastview Trailer Court.

• Natural and Heritage Resources

- "8.4.3 Rare or Endangered Plants or Animals, Significant Natural Features and Cultural and Historic Sites
 - i) All those areas in the Planning District which are considered significant for rare or endangered plants or animals, natural features or cultural or historic sites shall, where possible be conserved. In keeping with the intent of the previous statement, these areas will be conserved and protected from development that would limit their future renovation or rehabilitation."

Implications for study area: No anticipated implications; significant natural and heritage resources are not believed to exist within the study area.

• Sewage Disposal

"9.3.3 Sewage Disposal

... For all residential, institutional, commercial and industrial development, a plumbing permit for the sewage disposal system to be installed must be issued by the Department of Health before a building permit will be issued."

Implications for study area: Sewage disposal systems for new development must be approved by the Regional Health Authority prior to obtaining a building permit. While not stated in the Development Plan, certain sewage disposal systems (i.e. large scale) may require approval by Saskatchewan Environment rather than the Regional Health Authority, prior to their construction.

Hazard Lands

"10.4 Hazard Lands Policies

- i) Prohibit all development involving permanent human occupancy in areas known or suspected hazardous.
- *Required the individual proposing any development in an area susceptible to:*
 - a) flooding;
 - b) slumping, sliding and erosion; or
 - c) unsuitable for development because of inherent physical or environmental characteristics to prove by means of a report prepared by a professional engineer registered in the Province of Saskatchewan.

...

- v) Subject to the provisions of The Planning and Development Act, 1983, Council may require the owner of land that is the subject of a proposed subdivision to provide part of the land that is the subject of a proposed subdivision to provide a part of that land, in any amount and in any location that the approving authority, in consultation with the Department of Environment and Public Safety and the Saskatchewan Water Corporation, considers necessary, as environmental reserve, where the land consists of:
 - a) a ravine, coulee, swamp, natural drainage course or creek bed;
 - b) land that is subject to flooding or is, in the opinion of the approving authority, unstable; or
 - c) and abutting the bed and shore of any lake, river, stream or other body of water for the purpose of the prevention of pollution, the preservation of the ban, or the protection of the land to be

subdivided against flooding. Environmental reserves shall become the property of the municipality in which the land is situated."

Implications for study area: The natural water bodies in the study area (and areas in close proximity) are not suitable for development and may be required to be dedicated as Environmental Reserve by the approving authority (Community Planning Branch of Saskatchewan Government Relations) should a subdivision application be initiated.

• Industrial and Commercial Development

The Background statement from Section 12 - Industrial and Commercial Development from the Development Plan effectively summarizes the existing situation and many of current issues that prevail upon the study area:

"12.1 Background

The industrial and commercial development in the rural municipalities is generally concentrated along the Highways adjacent to the City of Prince Albert. Many of these industrial and commercial operations are located there to take advantage of less stringent bylaws, cheaper land, lower taxes and close proximity to the urban market. The existing developments are, to a large extent, poorly planned and visually unattractive."

Additionally, the following policies under Section 12 of the development have direct relevance to the study area:

"12.4.2 Industrial Development

Industrial and Commercial uses which are oriented to both rural and urban economy will be permitted within the rural municipalities provided that:

- i) They are located in specifically zoned Industrial or Commercial Districts, and comply with applicable regulations concerning site design, buffering and servicing;
- ii) Such uses do not require more extensive services than the rural municipalities are able to provide; and
- iii) The infilling of existing industrial and commercial properties is completed prior to new development. Industries considered to have unique site requirements will only be permitted in locations where services can be economically and adequately provided and where land use conflicts are minimal. Examples of these include trucking terminals, forest related plants and other similar uses. A special Industrial District and a specific set of guidelines may be established to deal with these uses."

Implications for study area: Industrial and commercial development in the Rural Municipality generally should occur in locations that would not conflict with surrounding development and the nature of such development (i.e. type of land use / development) should not require municipal services that the Rural Municipality is not in a position to provide.

"12.4.3 Location of Industrial Development

12.4.3.1 Soil Quality

Industrial and commercial development shall, if at all possible, be located on poor agricultural land (Classes 4, 5 and 6 according to the Canada Land Inventory)."

Implications for study area: Generally speaking, industrial and commercial development should not occur on Canada Land Inventory Class 1, 2 or 3 agricultural land. Because this policy is worded so as to provide some flexibility in its application (i.e. ...if at all possible...), it should not have implications on future development in the study area.

"12.4.3.2 Heritage Sites and Open Space Areas

Industrial and commercial development shall not be located in areas of historical, archeological, ecological or recreational significance."

Implications for study area: As noted in Section 3.5.2 (C) of this report, an HRIA will be required prior to development in portions of the study area (see Map 6).

"12.4.3.3 Proximity to Residential Development

Industrial and commercial developments are highly incompatible with residential uses and will therefore be separated by appropriate buffers, including physical distance and man-made barriers. Where a residential use is specifically permitted as an accessory use to industrial or commercial operations, it shall be permitted only if is intended to accommodate the owner, caretaker or operator of a permitted use established on the site."

Implications for study area: Future residential development within the Study area is restricted to dwellings intended for owners, caretakers or operators of a permitted industrial or commercial use.

"12.4.3.4 Scattered Development

Further scattered linear highway commercial development along the highways in the District shall not be permitted. The further proliferation of service stations along the highways will not be permitted."

Implications for study area: Future development of highway commercial uses in a linear fashion along the Highways in the Study area (including service stations) is not permitted.

"12.4.4 Existing Industrial and Commercial Sites

The operators of presently existing industrial and commercial facilities will be strongly encouraged to upgrade their operations, specifically with regard to off-street parking, outdoor storage and landscaping."

Implications for study area: Existing industrial and commercial facilities are strongly encouraged to upgrade their developments in terms of off-street parking, outdoor storage and landscaping. During stakeholder consultations, only outdoor storage and landscaping were identified as significant issues. As these two issues continue to be outstanding, other approaches (i.e. stronger wording of policy, incentives, etc.) warrant consideration.

"12.4.5 Site Design

Industrial and commercial site development shall take into consideration the provision of an adequate supply of water, the disposal of sewage, surface drainage, innovative site planning and design, character and appearance of buildings and landscaping. These considerations will be intrinsic to the issuance of a Development Permit."

Implications for study area: This general policy statement ties the requirements of adequate water supply, sewage disposal, surface drainage, innovative site planning, character and appearance of buildings and landscaping to the issuance of a development permit.

- "12.4.6 Existing and Proposed Industrial and Commercial Areas in the Rural Municipality of Prince Albert.
 - i) Further industrial and commercial development in the industrial commercial complex located in the Rural Municipality of Prince Albert will be permitted only if it meets the design standards as set

out in this Plan and implementing bylaw. The said lands are located on the South East quarter-section 9 and South West quarter-section 10, in Township 48, Range 26, West of the Second Meridian. A complete redevelopment scheme should be prepared for this area to deal with surface water drainage, compatibility of uses and other factors. The said scheme should also identify site specific development guidelines.

- ii) The area to the west of that area referred to in subsection 12.4.6 i), specifically Lot 2, Block D (Plan No. 81PA23965) and Parcel 'G' (Plan No. 61PA02422) being part of the South East quartersection 9, in Township 48, Range 26, West of the Second Meridian will be considered for highway commercial development. This area is outlined on Map 1.
- iii) Infilling of the existing C.C.I.L. Industrial Park, Plan No. 72PA00482, being part of Parcel 46 of the Hudson Bay Company Reserve will be encouraged. This area is outlined on Map 1. The possibility of expanding this Industrial Park further to the south will also be considered at a future date provided that the area will be developed to the standards outlined in this Plan and implementing bylaw.
- iv) Additional industrial-commercial development may be considered within the Rural Municipality of Prince Albert at a future date depending upon demand. Further, the proposed developments would have to comply with the development standards (except sewer and water) which the City of Prince Albert is currently placing on their industrial development in the South Industrial Park."

Implications for study area: Subsection i) recognizes the need to undertake a study of this nature in a part of the District that represents a portion of this Study area (i.e. lands in Sections 9 & 10-48-26-W2M). Subsection ii) identifies Parcel D, Plan No. 81PA23965 (a country residential property owned by Fernanda and John Gruszka) and Parcel G, Plan 61PA02422 (parcel no longer exists) for future highway commercial development. Subsection iii) identifies the land represented on Plan No. 72PA00482 (John Deere Tractor, McDonald Metals) as an area for infill industrial development and potential expansion of same to the south. Subsection iv) requires that future industrial or commercial developments meet the development standards set by the City of Prince Albert in its South Industrial Park (with the exception of water and sewer).

Tax Sharing

This section identifies a significant issue / barrier (as identified during the visioning workshop and through stakeholder discussions) to development in the Study area.

"12.4.8 Tax Sharing

The main reason for municipalities encouraging industrial and commercial development is to assist in reducing the tax burden on the general tax payer. The sharing of industrial and commercial assessment would enable the rural municipalities in the District to further determine the extent to which they wanted to pursue industrial and commercial development. The rural municipalities could then determine if they wanted to attract industrial and commercial development with all its inherent problems. The implementation of a tax sharing formula between the City and the rural municipalities should therefore be discussed to deal with the problems of competition for industrial and commercial tax assessment."

Implications for study area: This policy empowers the City and the Rural Municipalities in the planning district to together develop and implement tax-sharing agreements respecting industrial and commercial areas located in both urban and rural fringe areas.

Regional Cooperation

"14.5 Review of the Existing Structure of the District Planning Commission

It is recommended that the existing structure of the District Planning Commission be revised to allow the rural area to have an active voice in formulating planning policies for the entire Planning District, including the City of Prince Albert.

It is envisaged that eventually there would be one Development Plan for the entire Planning District which would incorporate a separate set of policies for the urban and rural components of the District."

Implications for study area: It is recommended that the District Planning Commission be revised to allow the rural area to have an active voice in formulating planning policies for the City of Prince Albert as well as the Planning District.

5.2.2 Rural Municipality of Prince Albert Zoning Bylaw No. 2 of 1991

The Zoning District Maps, which form part of the Rural Municipality of Prince Albert Zoning Bylaw, zone portions of the study area (see **Map 5**):

- AR Agricultural Reserve District;
- CR3 Country Residential 3 District;
- C2 Highway Commercial District;
- M1 Light Industrial District; and
- M2 Industrial District.

The following is an analysis of the Zoning Districts and general regulations from the Rural Municipality of Prince Albert's Zoning Bylaw that are relevant to this study:

• AR - Agricultural Reserve District

The majority of the study area is appropriately zoned AR - Agricultural Reserve. This zoning district is intended to provide for agriculture and agriculture-oriented land uses. Permitted uses in the AR - Agricultural Reserve District include: public utilities, municipal buildings, agriculture, farm residences (subject to certain conditions), country residences (subject to certain conditions) and accessory uses. Uses permitted at Council's discretion include: Intensive Livestock Operations, institutional uses, recreational uses, mineral resource extraction, historical / archaeological sites, landfills, sewage lagoons, pesticide containers collection sites, telecommunication facilities, dog kennels, agriculturally related industrial and commercial uses, airstrips, accessory buildings, additional farm dwellings, home occupations and uses intended to conserve or manage water supplies, wildlife, vegetation or other natural features.

It is important to note that the Eastview Trailer Court is currently zoned AR - Agricultural Reserve. Mobile home courts are not permitted in this district, but the Eastview Trailer Court was developed prior to passing of the R.M.'s Zoning Bylaw, meaning that it is a "Non-conforming use". Non-conforming uses are subject to the provisions of Sections 113 - 118 of *The Planning and Development Act, 1983*.

• CR3 - Country Residential 3 District

A small portion of the study area, west of Highway #2 (separated from the Highway by vacant land), is zoned CR3 - Country Residential 3. This zoning district is intended to provide for both low density and medium density country residential development. Permitted uses include residential development (not including mobile homes) and other compatible uses (i.e. schools, churches, day cares, etc.).

Outside storage in the CR3 - Country Residential 3 District cannot occur in any front yard. Outside storage in any side or rear yard must by fenced or suitably screened to the satisfaction of R.M. Council.

• C2 - Highway Commercial District

Portions of the Study area adjacent to Highway #2 are zoned C2 - Highway Commercial District, including Flaman Sales, Thorpe Bros., Shell bulk fuel, an R.V. dealership, the Super 8 Motel, the Twilight Motel, Aloramyk Construction, Glenmore Grain Handling, a mini-golf course, the Floor Store, Sun Auto body, Spring and Align, several parcels used for heavy equipment and building material storage and The Driftwood Trailer Court. A small parcel of land east of Highway #3, immediately south of the City, is also zoned C2 (occupied by the A & W Restaurant). Uses permitted in the C2 - Highway Commercial District include: public utilities, automotive sales and service, restaurants, retail food outlets, confectionaries, retail stores (but not auction markets), building supply sales and construction yards. Uses permitted at Council's discretion include: hotels, motels, service stations, agricultural equipment sales and service, commercial service establishments, offices, parking lots, personal service establishments, repair shops, public and quasipublic buildings, bus terminals, agricultural supply sales, veterinary clinics, commercial recreation establishments, accessory building units, attached dwelling units (attached toa main building), auction markets (with certain conditions) and light manufacturing or processing facilities.

Outside storage in the C2 - Highway Commercial District cannot occur in any front yard (except for the display of items for sale). Outside storage in any side or rear yard must by fenced or suitably screened to the satisfaction of R.M. Council.

Mobile home courts are not permitted in this district, but the Driftwood Trailer Court was developed prior to passing of the R.M.'s Zoning Bylaw, meaning that it is a "Non-conforming use". Non-conforming uses are subject to the provisions of Sections 113 - 118 of *The Planning and Development Act, 1983*.

• M1 - Light Industrial District

Land zoned M1 - Light Industrial includes: a self-storage operation (situated south of the Eastview Trailer Court); Ray's Moving and Storage, Maxim International, Northern Dene Airways, Ruskowski Construction, P.A. Rentals / Southside Storage, McDonald Metals and Hanover Holdings (situated east of Highway #2, fronting on the Service Road); and the R.M. of Prince Albert Maintenance Depot, the Sask. Rivers School District Bus Yards and Prairie Wood Supplies (located east of Heartland Auction Sales, fronting on Phelps Drive). Uses permitted in the M1 - Light Industrial District include: public utilities, automotive sales and service (including R.V.'s and mobile homes), agricultural equipment sales, building supply sales, construction yards and landscaping establishments. Uses permitted at Council's discretion include: dry goods storage yards, commercial service establishments, repair shops, sale of agricultural supplies (including fertilizers), veterinary clinics (not with boarding of large animals), commercial recreation establishments,

auction markets (no outside storage), light manufacturing and processing, auto body and paint shops, warehousing and wholesale facilities, trucking and transfer yards, grain storage, milling, cleaning and drying facilities, dog kennels, grain elevators, autowrecking yards, sawmills, wood treatment plants, accessory uses and dwelling units (attached or detached - only for an owner or operator of a principal use).

Outside storage in the M1 - Light Industrial District cannot occur in any front yard (except for the display of items for sale). Outside storage in any side or rear yard must by fenced or suitably screened to the satisfaction of R.M. Council.

• M2 - Industrial District

An area near the City boundary, west of Highway #3, including the John Deere dealership, McDonald Metals Ltd., Jays Moving and Storage, a tire shop, and two warehouses / storage buildings are zoned M2 - Industrial. Uses permitted in the M2 - Industrial District include public utilities, automotive sales and service (including R.V.'s and mobile homes), agricultural equipment sales, building supply sales, construction yards andlandscaping establishments. Uses permitted at Council's discretion include: dry goods storage yards, commercial service establishments, repair shops, sale of agricultural supplies (including fertilizers), veterinary clinics (not with boarding of large animals), auction markets (no outside storage), manufacturing and processing, auto body and paint shops, warehousing and wholesale facilities, asphalt plants, cement plants, gravel yards, trucking and transfer yards, grain storage, milling, cleaning and drying facilities, grain elevators, auto-wrecking yards, sawmills, wood treatment plants, railway freight yards, accessory uses and dwelling units (attached or detached - only for an owner or operator of a principal use).

Outside storage in the M2 - Industrial District cannot occur in any front yard (except for the display of items for sale). Outside storage in any side or rear yard must by fenced or suitably screened to the satisfaction of R.M. Council.

• Outdoor Storage and Maintenance (Section 4.14)

Section 4.14 contains a general regulation requiring the "screening" of outdoor storage:

- "4.14 Outdoor Storage and Maintenance
 - 4.14.1 Where permitted, the outdoor storage of raw materials, finished or partially finished products, fuel, salvage material, junk or waste on a site shall be suitably screened from adjacent sites."

Implications for study area: Outside storage must be screened - it is recommended that "screened" be further articulated.

• Third Party Signs (Section 4.19.12)

Section 4.19.12 deals with third party signs:

4.19.12 Third Party Signs

Third party advertising signs are prohibited in all zones.

Implications for study area: Third party signs (e.g. billboards) are not permitted in the R.M..

5.2.3 City of Prince Albert Development Plan Bylaw No. 2 of 1987

The Future Land Use Concept Map 1a, which forms part of the City of Prince Albert Development Plan Bylaw, designates the entire portion of the Study area lying within City boundaries for "Proposed Industrial / Commercial" development (see **Map 4**):

The following policies from the City of Prince Albert Development Plan are relevant to the Prince Albert South Highway Corridor Concept Plans and Commercial / Industrial Feasibility Study. It is noted that the City of Prince Albert is currently in the process of updating its Development Plan. Policies from this Bylaw that are relevant to the study / Study area are noted below:

• Industrial Development

"3.3.2 Industrial Land Use - Expansion Areas

Policy

Future industrial development areas shall be located with respect to the cost of servicing, accessibility from main transportation routes, and the avoidance of conflicting land uses.

Discussion

Specific industrial areas will be located as follows:

a) South Industrial Area

This area will eventually be developed for light and medium industrial purposes."

Implications for study area: Land lying within City boundaries, that is part of the Study area, is identified for future light and medium industrial development.

Industrial Beautification

"3.3.3 <u>Industrial Beautification</u>

Policy

The City shall encourage the orderliness and beautification of industrial sites.

Discussion

This policy may be implemented in one or more of number of ways, as follows:

- a) The Zoning Bylaw may stipulate that a certain minimum percentage of the site area of industrial sites be landscaped.
- b) The Zoning Bylaw may stipulate that unattractive storage areas be screened by fences or hedges.
- c) The dedication of buffer areas for landscaping may be required as a condition of approval of subdivision applications.

Implications for study area: In the Zoning Bylaw, the City may require industrial sites to be landscaped and / or screened. The dedication of buffer areas for landscaping may be required as a condition of subdivision approval.

City Growth

"3.5.1 Land Assembly and Annexation

Policy

- The City will contribute to play an active role in the acquisition and development of land for any suitable development purposes and uses consistent with this Plan in order to achieve certain objectives including:
 - Facilitating orderly development;
 - Ensuring a supply of reasonably priced land;
 - Complementing the activities of the private land development sector; and
 - Encourage and facilitate re-development and revitalization initiatives

Land acquisitions and annexations are to be undertaken in a logical pattern of direction consistent with the City's ability to:

- *service these lands*,
- the need for land use control of specific areas,
- the desire to retain City-owned land within the boundaries of the City, and
- to promote continuous growth and development as outlined in this Plan.

Discussion

The management of growth is an important responsibility of the City and one of the key ways in which the future of the city is shaped. There is an emphasis on efficient and economical growth, particularly with respect to the demands new growth places on public infrastructure and capital expenditures.

While sensitive and rational intensification is advocated across the existing builtup area there is a need to manage growth not only to protect and enhance the quality of life Prince Albert citizens enjoy now, but also to ensure that the provision of infrastructure-transportation, water, sewers, parks, etc. occurs in the most cost-effective, efficient and safe manner possible.

The City at present is the major landowner in areas designated for expansion. This situation places the City in a good position to influence the direction, nature and pace of development and the land market. Ultimately land ownership is the most effective form of land use control.

The City has a strong interest in accommodating a substantial majority of growth attracted to the Prince Albert Region. Growth that is not reasonably accommodated in Prince Albert will migrate to other centres in the region. The City will therefore, support the private sector when possible in facilitating land assemblies for developments."

Implications for study area: This policy generally outlines the City's approach to annexation of new areas and land acquisition (assembly) for development.

• Future Land Use Concept

"Section 4: Future Land Use Concept

d) The South Industrial Area will become the major light and medium industrial area of the City."

Implications for study area: Land lying within City boundaries, that is part of the Study area, is identified as the major light and medium industrial for the City. Expansion of the City into this area (i.e. by annexation) is not articulated in the Development Plan.

5.2.4 City of Prince Albert Zoning Bylaw No. 1 of 1987

The Zoning District Map, which form part of the City of Prince Albert Zoning Bylaw zones the entire portion of the Study area lying withing City boundaries as M3 - Light Industrial Medium Density District (see **Map 5**):

The following is an analysis of the M3 - Light Industrial Medium Density District and general regulations from the City of Prince Albert's Zoning Bylaw that are relevant to the Study area:

• M3 - Light Industrial Medium Density District

Areas zoned M3 - Light Industrial Medium Density include: Broda Construction (currently in the latter stages of development), a wrecking yard, two residences and the sewage lagoon that serves the Eastview Trailer Court. Uses permitted in the M3 - Light Industrial Medium Density District include: accessory buildings, agricultural sales and service, ambulance services, auto body and paint shops, commercial entertainment establishments, commercial service establishments, confectionaries, construction yards, essential public services, financial institutions, food manufacturing or processing facilities, industrial service establishments, laboratories, manufacturing, assembling or packaging facilities, medical clinics, mobile home sales and service, offices related to commercial or industrial uses, parking lots and structures, personal service businesses, restaurants, retail stores, sale of building supplies, agricultural supplies, commercial or industrial supplies, or sale of any items produced in the zone, storage facilities, trucking or transfer yards, veterinary clinics (not including boarding of large animals), warehousing and wholesale facilities, minor eating and/or drinking facilities, automotive / recreational vehicle sales and service. Uses permitted at Council's discretion include: asphalt plants, clubs coal and gravel yards, correctional institutions and related facilities, day care centres, funeral homes, grain storage, milling, cleaning or drying, manufacturing or packaging of chemical products, meat processing plants, petroleum products, storage and wholesale, public and quasi-public buildings, stock yards, single detached dwellings (existing prior to the passing of the bylaw - additional limitations), major eating and / or drinking facilities and night clubs.

It is important to note that M3 - Light Industrial Medium Density is the only zoning district in the entire Zoning Bylaw that does not permit "utilities". This means that the existing sewage lagoon (assuming it was constructed prior to passing of the City's Zoning Bylaw) is a "Non-conforming use". Non-conforming uses are subject to the provisions of Sections 113 - 118 of *The Planning and Development Act, 1983*.

Outside storage in the M3 - Light Industrial Medium Density District cannot be located in the front yard, except for the display of items for sale. Outside storage in a side or rear yard must be screened by a fence at least 1.9 metres high.

Landscaping in the M3 - Light Industrial Medium Density District must be provided in the first 3 metres of the minimum required front yard abutting the street (corner sites must also provide landscaping in the first 3 metres of the side yard abutting the flanking street). A strip abutting the front of the principal building must also be landscaped to an average depth of 2 metres.

• General Landscaping Standards

Where landscaping is necessary, the City requires a landscaping plan that conforms to the following standards (from Section 21.6 of the Zoning Bylaw):

- "21.6.1.1 existing soft landscaping retained on a site may be considered in fulfilment of a portion of the total landscaping requirements;
- 21.6.1.2 except for City boulevards, trees shall be planted in the overall minimum ratio of one tree per 45 square metres of landscaped area provided;
- 21.6.1.3 the quality and extent of the landscaping established on a site shall be the minimum standard to be maintained on the site for the life of the development. Adequate means of irrigating and maintaining the landscaping shall be provided.
- 21.6.1.4 Soft Landscaping shall be provided as follows:
 - 21.6.1.4.1 all plant materials shall be of a species capable of healthy growth in Prince Albert and shall conform to the standards established by the City of Prince Albert Parks and Recreation Department;
 - 21.6.1.4.2 the mixture of tree sizes at the time of planting shall be equivalent to a minimum of 50 percent larger trees. The minimum size for smaller deciduous trees shall be 50 millimetres caliper and for larger deciduous trees, a minimum of 85 millimetres caliper;
 - 21.6.1.4.3 the minimum size for small coniferous trees shall be a height of 2 metres and for larger coniferous trees, a height of 3 metres;
 - 21.6.1.4.4 coniferous trees shall comprise a portion of all trees planted;
 - 21.6.1.4.5 wherever space permits, trees shall be planted in groups;
 - 21.6.1.4.6 shrubs shall be a minimum height or spread of 600 millimetres at the time of planting."

Consultations with City administration indicated that Prince Albert has had difficulty interpreting and enforcing its existing standards for outside screening and landscaping.

5.2.5 Saskatchewan Highways and Transportation

Saskatchewan Highways and Transportation has a number of standards and restrictions respecting development adjacent to provincial highways. A series of discussions were held with Highways and Transportation officials, yielding the following relevant information:

- No new approaches will be permitted on either Highway #2 or Highway #3.
- In July, 2006, Highways and Transportation initiated a Regional Transportation Study for the Prince Albert Region, which will include a reassessment of the intersection of Highway #11 and Highway #2.
- Highway #11 will be twinned in stages starting from Warman and working towards Prince Albert.

The restriction of new approaches to both highways in the study area ultimately will require the further development of service roads and possible upgrades to existing approaches as new development occurs. The reassessment and possible redesign of the intersection of Highway #2 and Highway #11 could have implications for the siting of future development in the area of that intersection (e.g. a truck stop). The twinning of Highway #11 from Warman to Prince Albert will have an overall positive effect on both the Study area and the Prince Albert Region as a whole.

6. VISIONING WORKSHOP & PUBLIC OPEN HOUSE

6.1 VISIONING WORKSHOP

In April 2006, 18 individuals participated in a visioning workshop relating to future development / redevelopment of the Prince Albert Highway Corridor. Participants, who included identified stakeholders, members of the Client Steering Committee, others with special interest or special understanding to share, and members of the consulting team, were divided into groups. Four interrelated topic areas were discussed: Policies and Regulation, Business and Development Opportunities, Issues and Challenges, and Cooperation. Groups were requested to communicate their ideas, opinions, and concerns about each of the three sub areas (i.e. Highway #2, Highway #3 and the land between) and the overall Study area in general.

Visioning Workshop - April 26th, 2006

Attendees:	Organization:
Earl Ermine	Sturgeon Lake First Nation
Wes Daniels	Sturgeon Lake First Nation
Jack Long	Sturgeon Lake First Nation
Chief Henry Daniels	Sturgeon Lake First Nation
Dean Bear	Muskoday First Nation
J. Glen Denham	Glen More Grain Systems
Tom Guidinger	Prince Albert District Planning Commission
Beatrice Regnier	Prince Albert District Planning Commission
Orest Romanchuk	Rural Municipality of Buckland
Joan Corneil	City of Prince Albert
Daria McDonald	City of Prince Albert
Brian Martin	P.A. Hydronic Heating Solutions
Neil Hazelwood	Rural Municipality of Prince Albert
Harvey Balicki	Balicki Auctions
David Harradence	P.A. Realty
Chad Watson	Prince Albert District Planning Commission
Ian McPherson	Management Consultant
Jim Walters	Crosby Hanna and Associates

Four topic areas were explored at the Visioning Workshop. It was understood that none of these topics can be considered mutually exclusive from one another - all of these subject areas tie into one another within the context of creating a new vision or concept plan for the study area. The four topic areas discussed were:

- 1. Policies and Regulations
- 2. Business and Development Opportunities
- 3. Issues and Challenges
- 4. Cooperation

Discussion Points:

The following points are intended to capture and bring forward the ideas and opinions expressed by the participants who attended the Visioning Workshop:

1. Policies and Regulations

- Aesthetics the need to improve the aesthetics of the area was identified. The study area includes all lands adjoining the two major south access routes into the City of Prince Albert. Policies, regulations and development standards designed to improve the visual impact of these two important gateways should be explored (e.g. permitted land uses, landscaping, screening).
- Enforcement the enforcement of policies, regulations and standards needs to be fully considered. It is critical that policies and regulations and standards are properly enforced.
- Complimentary Policies having complimentary policies, regulations and development standards between jurisdictions (i.e. Rural Municipalities, Urban Municipalities and First Nations) is essential.
- Land Use Mix- careful consideration must be given to the types of land uses envisioned for the three sub-regions of the study area (i.e. Highway #2 corridor, Highway #3 Corridor and area between the corridors). The land uses allowed in these areas should compliment each other (i.e. avoid land use conflicts) and should avoid negatively impacting the image of the study area (visual impact, especially along highway corridors).
- Flexibility policies, regulations and development standards should also be flexible enough to accommodate appropriate development opportunities that may arise in the future.
- Commercial and Industrial Land Inventories there should be enough commercial and industrial land (with an appropriate range of municipal servicing levels) available to take advantage of future development opportunities.
- Implementation Tools trees (vegetation) and buffers (separation) could be effective in creating both a positive image (i.e. improved visual impact) and in minimizing conflicts between land uses within the study area.
- Market Factors policies need to recognize that that markets will determine what happens in the future (plan needs to be able to respond to market factors and events).

2. Business and Development Opportunities

- Generally speaking, it will be important to consider a mix of development types / businesses (i.e. existing and future development) that can facilitate or take advantage of symbiotic relationships. Examples of this kind of relationship include:
 - similar clientele (e.g. convenient for customers / clients);
 - similar infrastructure / municipal servicing requirements (e.g. transportation infrastructure, water); and

- businesses that can use waste, byproducts, products and possibly services from other businesses in relative close proximity (e.g. increased "value-added" potential, locational efficiencies).
- A number of specific business operations / types of development were identified during the workshop as having a good potential to work within the study area including the following:
 - Truck stops it was noted that a "Regional Transportation Study" will be prepared for the greater Prince Albert area in 2006 identifying an "ideal" truck stop location may be difficult until any potential design changes to regional transportation networks have been examined and finalized (e.g. the treatment of the intersection of Highways #2 and Highway #11);
 - Hotels possibly in association with a truck stop;
 - Industrial office space;
 - Manufacturing (including businesses to serve Alberta markets);
 - Energy sector (growth industries including bio-fuels);
 - Diamond cutting;
 - Fish processing plant;
 - Warehousing;
 - Heavy equipment storage (secured storage);
 - Recreational Vehicle storage;
 - Recreational Vehicle Parks;
 - Tourist-oriented services this type of land use could be used as a "buffer" for industrial development; and
 - Greenhouses could take advantage of co-generation opportunities or energy sharing with other development in the study area.
- The importance of "good" signage was also noted at the workshop (i.e. nice-looking, need to ensure that people know what businesses / services are located in the area).

3. Issues and Challenges

- Service Roads and Infrastructure upgrades will be required, extent of upgrades, cost, alignment and location of services (e.g. roads, water, sewer, storm water management, utilities) needs to be determined.
- Remediation possible costs associated with potential environmental contamination on sites in the study area could be limiting.
- Drainage portions of the study area are poorly drained and located in low lying areas.
- Cost of Serviced Land the market may not want to pay a fair price for serviced industrial land in the study area.
- Traffic Safety there are unsafe traffic conditions in certain parts of the study area (e.g. intersection of Highway #2 and Highway #11).
- Mindset Problems some people have a negative outlook respecting future business / development opportunities (e.g. people in Saskatchewan feel they are in the "Shadow of Alberta").
- Taxes there is a need for a more positive environment for business.
- Coordination government, service providers and other agencies need to come together

- to improve communication and speed up turnaround times for approvals / permits.
- Regional Transportation Network a long-range transportation plan is important the Prince Albert region as a whole needs to be careful with the concept of a second bridge and a potential heavy truck bypass (truck route) as they could potentially be damaging to the City and surrounding areas (Note: these issues, and others will be examined by the "Regional Transportation Study" scheduled to commence in 2006).
- Future Growth of Prince Albert long term expansion plans for the City of Prince Albert need to be clarified (Note: the City of Prince Albert is currently in the process of revising its Development Plan).
- Airport the size limitations of the Prince Albert Airport could have a constraining impact on the scale and variety of future development in the study area.
- Outdated Plans all governments (e.g. municipal, provincial, First Nation) need to have up to date plans.
- Rail rail line access may be important for certain industrial and manufacturing land uses.

4. Cooperation

- It is and will continue to be critical for the City, RM's and First Nations to be working together on development issues / opportunities.
- It would be much more productive for the City, RM's and First Nations to cooperate and form partnerships, rather than competing for development.
- It is important that the City, RM's and First Nations continue to update their policies and priorities on an ongoing basis, reflecting changing conditions and opportunities (e.g. a mechanism to review their game plan(s) once a year).

6.2 PUBLIC OPEN HOUSE

On September 28, 2006, a public open house was held in the City of Prince Albert to present preliminary project recommendations to interested community members. Approximately 20 individuals attended the open house, including members of the steering committee and municipal councillors. Discussions those in attendance clearly indicated support for the direction of the project. Five (5) response forms were returned to the consultants, all of which indicated strong or moderate support for the recommendations and concepts. Specific written comments submitted to the consultants included:

"I like the general idea, but feel that dialogue between the parties be urged to bring to full fruition in a timely manner...and timely means completion within five years."

"Please allow non-conforming uses to continue as they are. Do not force rezoning or expropriation to take place."

7. KEY OPPORTUNITIES / CONSTRAINTS

This section represents a compilation of those factors determined, during the inventory and analysis phase of the project, to be key development opportunities and/or constraints:

7.1 ECONOMIC CONDITIONS

Opportunities

- the booming Alberta economy;
- future growth of the economy of northern Saskatchewan: uranium, hard-rock mining, services, etc.;
- potential regional developments, including diamonds and ethanol;
- a young and skilled labour supply to meet the demand of local and outside markets;
- the continuing strong role of Prince Albert as a centre of health/education and retail/service activities for a large trading area;
- future cost and labour supply issues in Saskatoon;
- the future needs of the growing trucking industry and trucking volumes passing through Prince Albert;
- services for high-value agri-business;
- future demand for more industrial land in the city and area;
- potential for partnering with educational institutions to meet demand for skilled labour;
 and
- cost and labour supply issues leading to relatively more desirable renovations/conversions versus new construction.

Constraints:

- pulp mill "chill", both economic and psychological, should the mill stay closed; the impact on the city's economy would probably be felt for at least several months;
- the perception in and outside Prince Albert that the city is not sufficiently central to attract business serving Alberta; over time, this perception will change considerably;

- the present shortage of serviced industrial land, which could become serious should demand increase again in the near future; and
- the need to devote energies and money to revitalize the city's downtown/central business district.

7.2 BIOPHYSICAL CONDITIONS

Opportunities

• No major environmental or heritage issues that could preclude development in the area are known to exist.

Constraints

- Numerous wetlands in the study area pose a constraint to development. Should construction activities infringe upon any wetland, efforts should be employed to minimize activities in the immediate area.
- Portions of the study area will require a Heritage Resource Impact Assessment prior to their development (see **Map 6**).
- Former service station sites and other sites where fuel tanks or other hazardous materials were known to exist may require a Type I or Type II environmental assessment (and possible remediation) prior to their redevelopment.

7.3 INFRASTRUCTURE / SERVICING

Opportunities

- Water for the study area could be provided by either tie-ins to the City of Prince Albert's
 high pressure water distribution system or the low pressure Prince Albert Rural Water
 Supply system.
- Prince Albert's raw water supply and treatment systems are adequate enough to provide for the next 15 to 20 year projected population growth for the City and surrounding area.
- To service the study area from the south rural water system tie-in could be located downstream of the rural water Booster Station along Highway #2 near the Super 8 Motel.
- The sanitary sewer service for the study area could be connected to either the City's

gravity system carrying waste water to the Waste Water treatment Plant (WWTP) or holding tanks could be used with disposal at the WWTP.

Constraints

- Flow capacity of Marquis Road reservoir pumping station (treated water) is limited and further investigation is needed. There is a possibility that larger diameter pumps with higher flow capacities will be needed in the future.
- Due to the study area topography, storm water drainage to the City's gravity collection system is not feasible.
- Storm water retention ponds will be required in the southern section of the study area to collect run-off from roadways and properties. Existing wetlands should be utilized where possible.
- Graded ditches, culverts, drainage swales and an underground gravity collection system will be required to manage storm water as the area is developed.

7.4 LAND USE AND SITE CONTEXT

Opportunities

- The City has prepared and serviced 4 new light industrial sites in the study area (1 already occupied) to meet demand.
- A number of complimentary highway commercial and industrial uses already exist in the study area.

Constraints

- The two trailer courts within the study area are incompatible with current and likely future industrial and commercial development.
- Low density country residential development (and farm residences) in the study area could come into conflict with future industrial and commercial development as the area fills in.
- The private sewage lagoon serving the Eastview Trailer Court is situated too close to the trailer court (according to Saskatchewan Environment Guidelines) and generally inappropriately located (within City boundaries, central location within study area).

7.5 REGULATORY / INTER-JURISDICTIONAL ENVIRONMENT

Opportunities

- The City is currently in the process of updating its Development Plan
- The Rural Municipality intends to update its Development Plan in 2007.
- The City and the Rural Municipality have a long history of cooperation in terms of land use planning (i.e. the District Planning Commission). Both municipalities are well positioned to cooperate on many levels including land use planning, tax sharing, marketing and infrastructure development.
- A number of First Nations in the Prince Albert region have expressed keen interest in cooperating with the Rural Municipality and the City in developing and planning within the study area.

Constraints

- Certain policies / regulations are inconsistent between the Rural Municipality and the City (should be streamlined).
- Competition between jurisdictions for development has proved a constraint in the past.
- Saskatchewan Highways and Transportation will not allow any new approaches to either Highway #3 or Highway #2.
- Saskatchewan Highways and Transportation may redesign the intersection of Highway #11 and Highway #2. This is only a constraint while the changes are unknown once any proposed changes are "finalized", plans for development in the study area can be adapted.

8. POLICY AND DEVELOPMENT RECOMMENDATIONS

Cooperation and coordination between the City of Prince Albert, the R.M. of Prince Albert, the R.M. of Buckland and First Nations with interests in the area is absolutely critical to the successful development of the study area. Without a coordinated effort, many of the goals and objectives for the area will not be achievable.

The following specific key development and policy recommendations relate to the study area and were formulated throughout the work program:

8.1 PHYSICAL AND ECONOMIC DEVELOPMENT

8.1.1 Objectives:

- To accommodate an appropriate range of industrial, commercial and agricultural land uses in the study area.
- To improve the visual appearance of development in the study area with particular emphasis on areas that are visible from Highway #2 and Highway #3.
- To avoid and eventually phase out conflicting land uses in the study area over time, as the area is developed.
- To establish a means by which competition for development between jurisdictions is minimized.
- To ensure that the Rural Municipality is aware of the City's future growth plans so as to avoid future conflict.

8.1.2 Recommendations:

- Concept plans are recommended for three distinct portions of the study area and form an integral part of these recommendations: the Highway #2 Corridor Concept (Map 10), the South Industrial Concept (Map 11) and the Highway #3 Corridor Concept (Map 12).
- Market research combined with consultations with local stakeholders have identified a
 number of key development opportunities for the study area that are recommended as
 potential development opportunities, including:
 - Uranium, diamonds and other hard rock mining processing and servicing facilities / businesses:
 - Services for high value agribusiness including ethanol and biofuel processing (likely services oriented to these industries);
 - Services oriented to the oil-industry in western Alberta;

- Tourist oriented services and facilities including hotels, RV parks, retail, and service stations;
- Services and complimentary land uses associated with the trucking industry including truck stops, hotels, vehicle servicing and storage and transfer stations.
- Other industries including general manufacturing, fish processing, warehousing and green houses.
- To the extent that it is possible, land uses should be encourage to group or cluster so as to take advantage of symbiotic / complementary relationships.
- Required landscape standards for both Rural Municipalities should be consistent with the landscape standards required for industrial and highway commercial development within the City of Prince Albert. Existing landscape development standards for both the City and R.M.'s have proven difficult to implement and enforce. New landscape development standards appropriate for adoption by the City and both the R.M. of Prince Albert and R.M. of Buckland are outlined in Section 9 of this report.
- The Eastview Trailer Court and the Driftwood Trailer Court will continue to be non-conforming uses (subject to Sections 113-118 of *The Planning and Development Act, 1983*). Consultations with the Community Planning Branch of Saskatchewan Government Relations indicate that sites within each of the trailer courts may be re-developed (i.e. trailers can be replaced), but the number of trailers within each trailer court may not increase. The owner of both trailer courts has indicated that he has not received complaints from trailer court residents pertaining to nearby industrial development. Specific complaints regarding the trailer courts from industrial or commercial operations within the study area were also not reported to the consulting team during the project. Alternative sites for trailer courts and other forms of high-density residential development should be identified outside of the study area to facilitate their relocation in the future. Trailer courts are a legitimate use and should have place in the Rural Municipality, separated from industrial and highway commercial development.
- The existing sewage lagoon serving the Eastview Trailer Court will continue to be a non-conforming use (subject to Sections 113-118 of *The Planning and Development Act, 1983*). It is believed that this sewage lagoon does not meet current provincial regulations and standards (i.e. it does not have a liner). Consultations with Saskatchewan Environment and the Prince Albert Parkland Health Region (PAPHR) indicate that neither regulatory agency has records pertaining to the sewage lagoon. Further research (an examination of water consumption by the Eastview Trailer Court) determined that the lagoon does fall under the jurisdiction of Saskatchewan Environment.

- Much of the existing country residential development situated in the study area is
 identified for future industrial and commercial development. Future country residential
 development in the study area should not be permitted. Rezoning of these properties (to
 accommodate industrial and commercial development) should occur when demand
 warrants.
- Existing agricultural development and farm residences will continue to be permitted in the study area. Rezoning of these properties (to accommodate industrial and commercial development) should occur when demand warrants.

8.2 INTER-MUNICIPAL / JURISDICTIONAL COOPERATION

8.2.1 Objectives:

- To establish consistent land use policies and standards between municipal and potentially First Nation jurisdictions in the study area.
- For municipal and potentially First Nation jurisdictions to cooperatively pursue economic development opportunities for the study area.
- For municipal and potentially First Nation jurisdictions to share in the benefits and share in the costs of providing incentives for attracting development to the study area.
- To ensure that land within the R.M. that is needed for future expansion of the City is not used indiscriminately or in such a manner that would either preclude or significantly increase the cost of conversion of land for future urban use.
- To ensure that land surrounding the City is not underutilized or underdeveloped due to concerns in surrounding municipalities that new development will be simply be annexed by the City once it formally proceeds.

8.2.2 Recommendations:

- Coordinated marketing, promotion and cooperative development of the study area (between municipalities) is recommended and critical to the successful redevelopment of the area.
- Development standards (Zoning Bylaws) and planning policies (Development Plans) related to the study area should be consistent insofar as it is possible.

- The City and the Rural Municipality of Prince Albert should continue to cooperatively pursue potential developers / developments for the study area (or the broader Prince Albert Region including other municipalities and First Nations) through organizations such as the Prince Albert Regional Economic Development Authority.
- The City, in cooperation with other surrounding municipalities and jurisdictions, should consider opening an economic development office in another major City in western Canada (e.g. Calgary, Edmonton), with the goal of attracting business and development to the region.
- The City, surrounding municipalities and First Nations that have a direct interest in the study area should formally come together on a regular basis (e.g. once per year) to discuss economic development and other matters of mutual interest.
- The City and the Rural Municipality of Prince Albert should explore the concept of sharing tax revenue in the study area in order to minimize competition for new developments and to facilitate cooperation and cost sharing on multiple levels (e.g. marketing, planning, servicing, road maintenance, other infrastructure development, etc.).
- The City should identify a formal future growth and annexation strategy to avoid uncertainty in the study area (and other portions of the urban-rural fringe around the City of Prince Albert) as to where and when boundary alterations may be expected to occur.

8.3 MUNICIPAL SERVICING

8.3.1 Objectives:

- To ensure that development in the study area can be suitably serviced.
- To ensure that storm water management is addressed within the study area as it is developed over time.
- To ensure that development within the Rural Municipality and the City can be suitably serviced by the respective municipality.

8.3.1 Recommendations:

• Based on site observations of the construction of the lagoon serving the Eastview Trailer Court, the potential for sewage contamination of the surrounding land and groundwater, it is recommended that the Rural Municipality of Prince Albert and the City of Prince Albert request a detailed assessment of its suitability. Failing this the lagoon should be decommissioned as a disposal and treatment facility for the trailer court. If the lagoon must be replaced with a constructed facility meeting SE guidelines, the required

separation from residential development is 0.6 km. The current separation distance from the Eastview Trailer Court is approximately .25 km, meaning it could not be reconstructed at its current location.

- Existing wetlands have been identified on each of the development concepts for potential future storm water management purposes.
- The construction of service roads will be required along the two highway corridors as development occurs.
- The City and the Rural Municipality should clarify municipal servicing policies as they relate to the study area (e.g. City water and sewer, R.M. road standards and maintenance). This combined with an understanding of the City's growth plan and growth needs, will help facilitate municipal cooperation in the study area by minimizing uncertainty and potential future conflict.
- Municipal servicing concept maps (water, wastewater and stormwater drainage) for the study area are outlined on **Maps 7 9**.

9. RECOMMENDED BYLAW AMENDMENTS

The following section suggests wording for planning bylaw amendments for both the City of Prince Albert and the R.M. of Prince Albert:

9.1 PRINCE ALBERT PLANNING DISTRICT DEVELOPMENT PLAN BYLAW 1 OF 1991

- 1. The Development Plan Policy Map 1, which forms part of the Prince Albert District Development Plan Bylaw, designates portions of the Study area for (see **Map 4**):
- Industrial Commercial;
- Industrial; and
- Agricultural Resource.

Development Plan Policy Map 1 should be amended to designate the entire study area for Industrial - Commercial, as shown on "Schedule A".

Rationale: this amendment will clearly designate the study area for future industrial and commercial development.

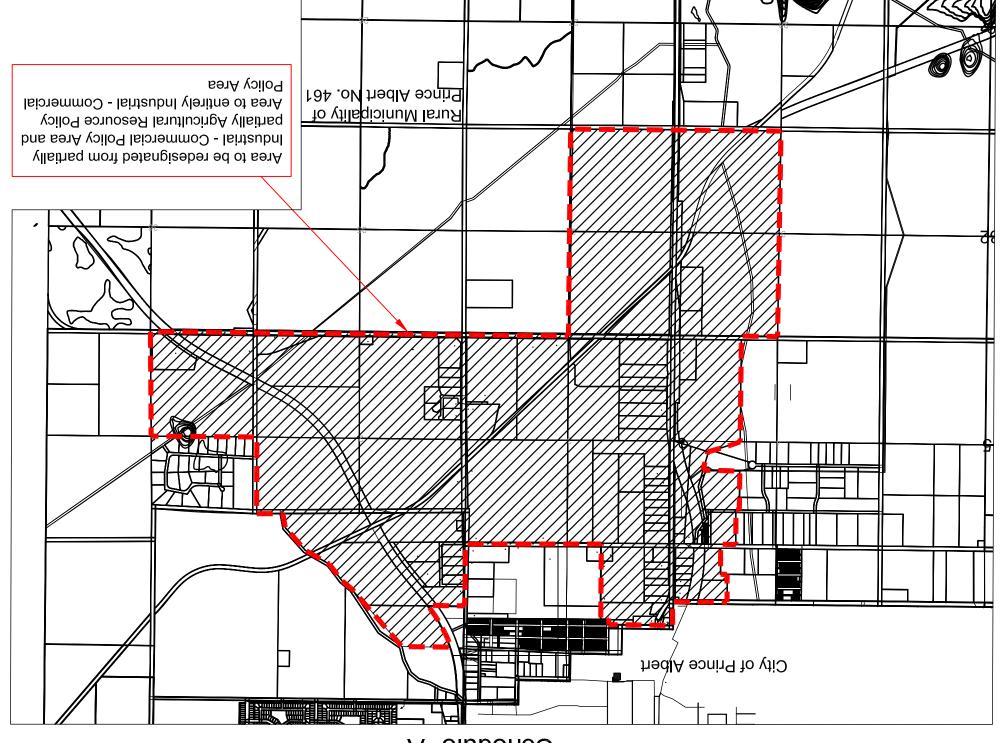
2. Section 9.3.3 - Sewage Disposal is deleted and replaced with the following new Section:

9.3.3 Water Supply and Sewage Disposal

- i) All developments shall provide for:
 - a) individual on-site water supply appropriate to the proposed use; or
 - b) water supply from a regional water distribution system; or
 - c) an independent communal water supply system approved pursuant to either *The Public Health Act, 1994* and associated regulations, as administered by the Regional Health Authority or *The Environmental Management and Protection Act, 2002* and associated regulations.
- ii) All developments shall provide for:
 - a) on-site liquid waste treatment and disposal approved pursuant to *The Public Health Act, 1994* and associated regulations, as administered by the Regional Health Authority; or
 - b) an independent communal sewage collection, treatment and disposal system approved pursuant to either *The Public Health Act, 1994* and associated regulations, as administered by the Regional Health Authority or *The Environmental Management and Protection Act, 2002* and associated regulations.

Rationale: this amendment reflects changes in legislation and jurisdiction since 1991.

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3. Section 10.4 - Hazard Land Policies is deleted and replaced with the following new Section:

10.4 Policies

- i) Development shall avoid land that is potentially hazardous due to flooding, erosion, slumping or slope instability.
- ii) Where there is subdivision of land, any areas that are determined to be hazard land will be designated as environmental reserve in accordance with *The Planning and Development Act, 1983*.
- iii) Council may refuse to authorize development of structures on hazard land or may permit development only in accordance with specified mitigation measures. The costs associated with undertaking specified mitigation measures, and with providing the required documentation related to any specified mitigation measures will be borne by the applicant/ proponent of the proposed development.

Rationale: this amendment reflects changes in legislation and jurisdiction since 1991 and requires the development applicant / proponent to pay any costs related to required mitigation measures.

4. Section 12.4.3.3 - Proximity to Residential Development is deleted and replaced with the following new Section:

12.4.3.3 Accessory Dwelling Units

Where a residential use is specifically permitted as an accessory use to industrial or commercial operations, one (1) dwelling unit shall be permitted only if is intended to accommodate the owner, caretaker or operator of a permitted use established on the site.

Rationale: this amendment is for clarity purposes.

5. Section 12.4.3.4 - Scattered Development is deleted.

Rationale: this amendment removes a section in the Development Plan that appears no longer relevant and could conceivably preclude the development of a truck stop.

6. Section 12.4.6 - Existing and Proposed Industrial and Commercial Areas in the Rural Municipality of Prince Albert is deleted and replaced with the following new Section:

12.4.6 Industrial and Commercial Areas in the Rural Municipality of Prince Albert

- i) Highway commercial uses should maintain the functional integrity of the highway, through the use of service road systems, or controlled highway access points, which are approved by the Department of Highways and Transportation.
- ii) Before considering a commercial or industrial development, subdivision or rezoning application, Council may require that the development application contain information with respect to:
 - a) the types of industry or commercial use to be contained on the site.
 - b) the size and number of parcels proposed.
 - c) the installation and construction of roads, services, and utilities.
 - d) the potential impacts on adjacent land uses, and proposed measures to mitigate any negative impacts.
 - e) the environmental suitability of the site and other potentially affected lands with particular consideration to the soils, topography, drainage and availability of services, proximity to public recreation and wildlife management areas and hazard land.
 - f) the access, egress, and the potential impacts of the proposed development on the highway system and traffic safety.
 - g) development standards or design criteria that include such aspects as parking for large trucks, landscaping, screening, storage, and signage.
 - h) any other matters that Council considers necessary.

Rationale: this amendment is for clarity purposes, deletes policy that appears no longer relevant (i.e. the issues have been addressed since 1991) and proposes a new set of general policy statements relevant to future industrial and commercial development in the study area.

9.2 RURAL MUNICIPALITY OF PRINCE ALBERT ZONING BYLAW NO. 2 OF 1991

It is recommended that the C2 - Highway Commercial District be used for future development in the study area identified for Future Commercial Development by the land use concept plans (Maps 10-12). Land identified on the concept plans for Future Industrial Development should generally be accommodated with the M1 - Light Industrial District. Heavy industrial development should be carefully considered for compatibility with surrounding land uses and servicing needs and should be accommodated using the M2 - Industrial District.

1. Section 4.14 - Outdoor Storage and Maintenance is deleted and replaced with the following new Section:

4.14 Outside Storage

Where permitted in association with any approved industrial, commercial or residential land use, outside storage is subject to the following requirements:

- i) No outside storage shall be located in the front yard, except for the display of items for sale, which shall be neatly arranged.
- ii) Outside storage in a side or rear yard shall be screened from adjacent sites by a fence of or combination of a fence and soft landscaping to a minimum height of 1.9 metres.
- iii) All waste material shall be stored within a completely enclosed building or container located on the site.

Rationale: this amendment will clarify the requirements for "screening" for outside storage.

2. Section 4.18 - Landscaped Open Space is deleted and replaced with the following new Section:

4.18 Landscaping

- 4.18.1 General Regulations for Landscaping
 - 4.18.1.1 Where this Bylaw specifies that landscaping is required, it shall be developed and maintained in accordance with the following standards and policies:

- 4.18.1.1.1 Plant materials shall be species capable of healthy growth in Prince Albert and shall conform to the current Canadian Standards for Nursery Stock of the Canadian Nursery Landscape Association.
- 4.18.1.1.2 Areas designated for planting shall be provided with an underground irrigation system, or other adequate means of irrigation commensurate with landscaping requirements, with at least one outside hose bibb for each principal building.
- 4.18.1.1.3 Landscaping required to be provided within any front or side yard shall not be used for an purpose except for signs or structures otherwise permitted or driveways leading to a parking or loading facility.
- 4.18.1.1.4 Required landscaping shall be completed in accordance with the approved landscape plan by the end of the construction season in which occupancy or partial occupancy or use of the building or site has taken place. When occupancy or partial occupancy or use of a building or site has taken place after the end of the construction season, all required and approved landscaping shall be completed by June 1st of the following year. For the purposes of this section, "construction season" means from May 1st to October 31st of the same calender year;
- 4.18.1.1.5 Required and approved landscaping shall be suitably maintained in a neat and tidy condition at all times, and plant material installed or retained shall be maintained in a healthy, vigorous condition at all times.
- 4.18.2 The Development Officer shall not approve an application for a development permit in the event that:
 - 4.18.2.1 a required landscape plan(s) has not been submitted; or

- 4.18.2.2 the required landscape plan(s) does not, in the opinion of the Development Officer, provide an adequate or suitable degree of landscaping necessary to enhance the visual amenity of the site or provide a visual screen where required by this Bylaw.
- 4.18.3 Landscaping shall be a condition of the issuance of a development permit when the existing use of a building or structure is significantly enlarged, undergoes a significant increase in capacity or is changed to a new use.
- 4.18.4 Where, in a yard in any Zone, a parking area is required to provide for more than four off street parking spaces abuts a residential use or Zone, then a continuous strip of landscaping of minimum width of four and one half metres shall be provided along the site line of said yard or site.
- 4.18.5 Where, in a yard in any Zone, a parking area which is required to provide for more than four off street parking spaces abuts a street, then a strip of landscaping shall be provided along the site line adjoining the said street, and the said landscaping shall be continuous except for aisles or driveways required for access to the parking area and shall be a minimum of three metres in width along the said site line.
- 4.18.6 Any landscaping, including planting thereon, which is required to be provided by this Bylaw shall be maintained in a healthy growing condition or shall otherwise be replaced.
- 4.18.7 Any land for landscaping shall be included in any calculation of site area, setbacks, density or yard requirements as required by this Bylaw.
- 4.18.7 Requirements for Landscape Plans
 - 4.18.4.1 When landscaping is required under this Bylaw, a landscape plan(s) shall be attached to and form part of an application for a development permit. The landscape plan(s) shall be prepared in accordance with Section 4.18.4.2 of this Bylaw.
 - 4.18.4.2 Landscape Plan Submission Requirements
 - 4.18.4.2.1 Two copies of a scaled landscape plan(s), must be submitted to the satisfaction of the Development Officer, showing all physical features, including existing and proposed grades, the size and type of existing

vegetation to be removed and retained, the size, type and location of plant material to be provided, the location of hard landscaping such as fences, retaining walls, walkways and curbs, and the details of the proposed irrigation system, including the location of any outside hose bibbs.

4.18.4.2.1 A declaration, signed by the property owner and applicant, shall be affixed to required landscape plan(s), specifically acknowledging that the landscaping specified on the plan(s) is a condition of the issuance of a development permit for the property and that such development will be complete by the date set out in the development permit.

Rationale: this amendment will clarify the requirements for landscaping, make them more enforceable and be consistent with City landscaping standards.

3. Section 13.3 - Highway Commercial District C2 Discretionary Uses is amended by adding the following new discretionary use:

13.3.19 Truck Stops.

Rationale: this amendment will provide opportunity for the development of a truck stop within the C2 District.

4. Section 13.4.10 Outside Storage is deleted and replaced with the following new section:

13.4.10 Outside Storage

Outside storage shall comply with Section 4.14 of this Bylaw.

Rationale: this amendment is for cross-reference purposes.

5. The following new section is added:

13.4.11 Landscaping

13.4.11.1 Landscaping shall be provided in the following areas and shall comply with Section 4.18 of this Bylaw:

- i) The first 3 metres of the minimum required front yard measured from the front property line.
- ii) In the case of a corner site, the side yard abutting the flanking street to a minimum perpendicular width of 3 metres.
- iii) A strip of soft landscaping abutting the front of the principal building, where loading does not occur, to an average depth of 2 metres.

Rationale: this amendment defines the landscaping requirements for development in the C2 district and is for cross-reference purposes.

6. Section 14.4.10 Outside Storage is deleted and replaced with the following new section:

14.4.10 Outside Storage

14.4.10.1 Outside storage shall comply with Section 4.14 of this Bylaw.

Rationale: this amendment is for cross-reference purposes.

7. The following new section is added:

14.4.11 Landscaping

- 14.4.11.1 Landscaping shall be provided in the following areas and shall comply with Section 4.18 of this Bylaw:
 - i) The first 3 metres of the minimum required front yard measured from the front property line.
 - ii) In the case of a corner site, the side yard abutting the flanking street to a minimum perpendicular width of 3 metres.
 - iii) A strip of soft landscaping abutting the front of the principal building, where loading does not occur, to an average depth of 2 metres.

Rationale: this amendment defines the landscaping requirements for development in the M1 district and is for cross-reference purposes.

- 8. Section 15.3 Industrial District M2 Discretionary Uses is amended by adding the following new discretionary use:
 - 15.3.19 Mineral Resource Processing.

Rationale: this amendment will provide opportunity for the development of mineral resource processing operations in the M2 District.

- 9. Section 15.4.10 Outside Storage is deleted and replaced with the following new section:
 - 15.4.10 Outside Storage
 - Outside storage shall comply with Section 4.14 of this Bylaw.

Rationale: this amendment is for cross-reference purposes.

- 7. The following new section is added:
 - 15.4.11 Landscaping
 - 15.4.11.1 Landscaping shall be provided in the following areas and shall comply with Section 4.18 of this Bylaw:
 - i) The first 3 metres of the minimum required front yard measured from the front property line.
 - ii) In the case of a corner site, the side yard abutting the flanking street to a minimum perpendicular width of 3 metres.
 - iii) A strip of soft landscaping abutting the front of the principal building, where loading does not occur, to an average depth of 2 metres.

Rationale: this amendment defines the landscaping requirements for development in the M2 district and is for cross-reference purposes.

8. The following new definitions are added:

Truck Stop "Truck Stop" means any building, premises or land in which or upon which a business, service or industry involving the maintenance, servicing, storage or repair of commercial vehicles is conducted or rendered including the dispensing of motor fuel or other petroleum products directly

into motor vehicles, the sale of accessories or equipment for trucks and similar commercial vehicles. A truck stop also may also include overnight accommodations, retail and restaurant facilities.

Mineral Resource Processing

"Mineral Resource Processing" means the blasting, crushing, washing, screening, weighing, sorting, blending or refining of mineral resources.

Rationale: these two definitions are new.

9. The following new definition replaces an existing definition:

Landscaping "Landscaping" means the modification and enhancement of a site through the use of any or all of the following elements:

- (a) "soft landscaping" consisting of vegetation such as trees, shrubs, hedges, and grass.
- (b) "hard landscaping" consisting of non-vegetative materials such as brick, stone, concrete, tile and wood, excluding monolithic concrete and asphalt.
- (c) "architectural elements" consisting of wing walls, sculpture and the like.

Rationale: this definition is being replaced for clarity purposes.

9.3 CITY OF PRINCE ALBERT DEVELOPMENT PLAN BYLAW NO. 2 OF 1987

1. It is recommended that the City of Prince Albert articulate the direction and anticipated rate of growth (i.e. by annexation) for all land uses, including industrial and commercial, in the form of a Future Growth Study or Plan. This "Plan" can be adopted as part of the City's new Development Plan. It is recommended that the Rural Municipality of Buckland, the Rural Municipality of Prince Albert and surrounding First Nations with interests in the City and in rural-urban fringe be actively consulted during the process of developing this "Plan".

Rationale: This proposed component of the City's Development Plan would be identify a formal future growth and urban annexation strategy to avoid uncertainty in the study area (and other portions of the urban-rural fringe around the City of Prince Albert) as to where and when boundary alterations may be expected to occur.

9.4 CITY OF PRINCE ALBERT ZONING BYLAW NO. 1 OF 1987

- 1. Section 21.6 Landscaping is deleted and replaced with the following new Section:
 - 21.6 Landscaping
 - 21.6.1 General Regulations for Landscaping
 - 21.6.1.1 Where this Bylaw specifies that landscaping is required, it shall be developed and maintained in accordance with the following standards and policies:
 - 21.6.1.1.1 Plant materials shall be species capable of healthy growth in Prince Albert and shall conform to the current Canadian Standards for Nursery Stock of the Canadian Nursery Landscape Association.
 - 21.6.1.1.2 Areas designated for planting shall be provided with an underground irrigation system, or other adequate means of irrigation commensurate with landscaping requirements, with at least one outside hose bibb for each principal building.
 - 21.6.1.1.2 Landscaping required to be provided within any front or side yard shall not be used for an purpose except for signs or structures otherwise permitted or driveways leading to a parking or loading facility.
 - 21.6.1.1.2 Required landscaping shall be completed in accordance with the approved landscape plan by the end of the construction season in which occupancy or partial occupancy or use of the building or site has taken place. When occupancy or partial occupancy or use of a building or site has taken place after the end of the construction season, all required and approved landscaping shall be completed by June 1st of the following year. For the purposes of this section, "construction season" means from May 1st to October 31st of the same calender year;

- 21.6.1.1.2 Required and approved landscaping shall be suitably maintained in a neat and tidy condition at all times, and plant material installed or retained shall be maintained in a healthy, vigorous condition at all times.
- 21.6.2 The Development Officer shall not approve an application for a development permit in the event that:
 - 21.6.2.1 a required landscape plan(s) has not been submitted; or
 - the required landscape plan(s) does not, in the opinion of the Development Officer, provide an adequate or suitable degree of landscaping necessary to enhance the visual amenity of the site or provide a visual screen where required by this Bylaw.
- 21.6.3 Landscaping shall be a condition of the issuance of a development permit when the existing use of a building or structure is significantly enlarged, undergoes a significant increase in capacity or is changed to a new use.
- 21.6.4 Except for City boulevards, trees shall be planted on the overall minimum ratio of one tree per 45 square metres of landscaped area provided.
- 21.6.5 Requirements for Landscape Plans
 - When landscaping is required under this Bylaw, a landscape plan(s) shall be attached to and form part of an application for a development permit. The landscape plan(s) shall be prepared in accordance with Section 4.18.4.2 of this Bylaw.
 - 21.6.5.1 Landscape Plan Submission Requirements
 - 21.6.5.1.1 Two copies of a scaled landscape plan(s), must be submitted to the satisfaction of the Development Officer, showing all physical features, including existing and proposed grades, the size and type of existing vegetation to be removed and retained, the size, type and location of plant material to be provided, the location of hard landscaping such as fences, retaining walls, walkways and curbs, and the details of the

proposed irrigation system, including the location of any outside hose bibbs.

21.6.5.1.2 A declaration, signed by the property owner and applicant, shall be affixed to required landscape plan(s), specifically acknowledging that the landscaping specified on the plan(s) is a condition of the issuance of a development permit for the property and that such development will be complete by the date set out in the development permit.

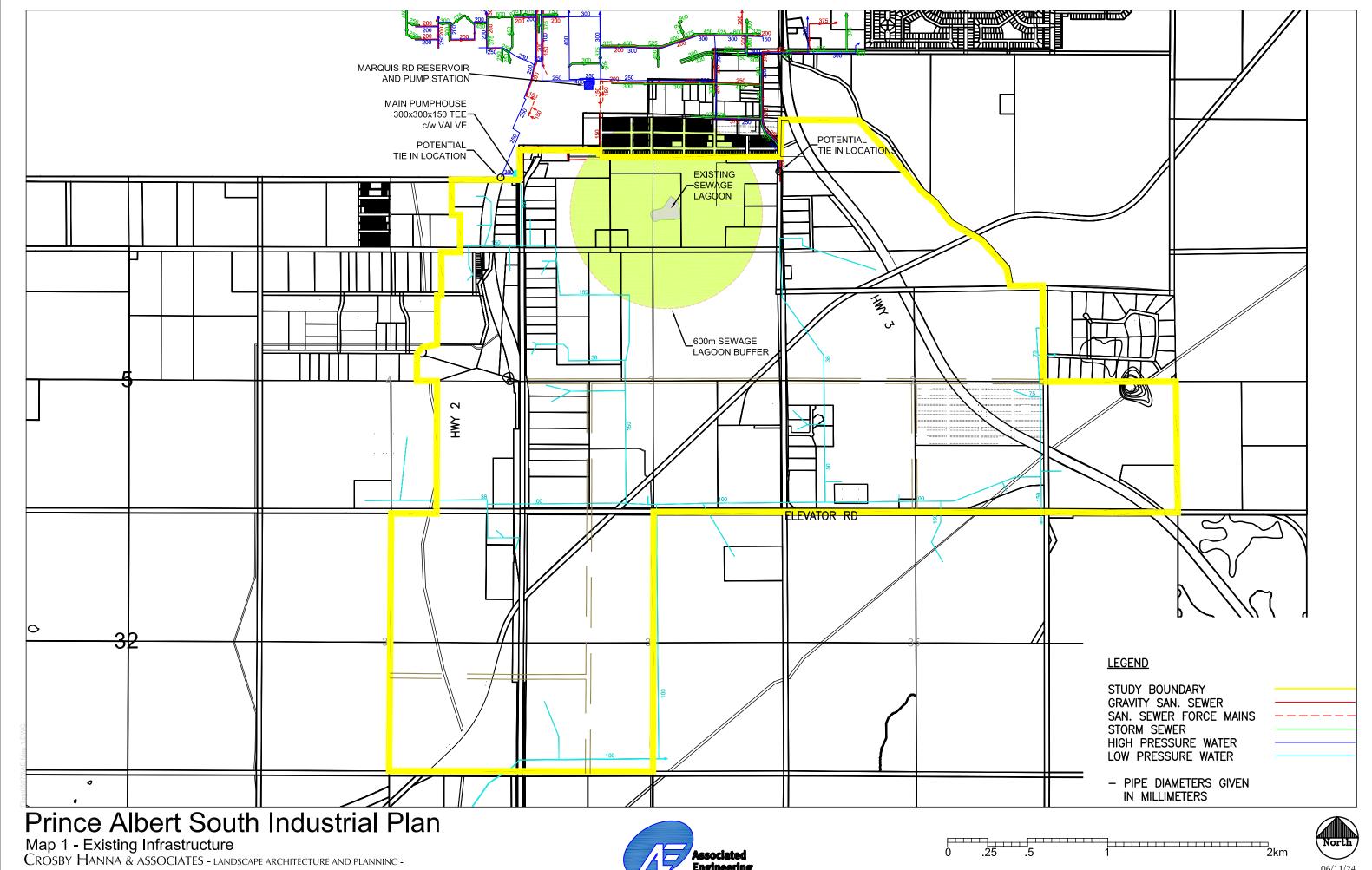
Rationale: this amendment will clarify the requirements for landscaping, make them more enforceable and be consistent with R.M. landscaping standards.

- 2. Section 24.2 M3 Light Industrial Medium Density District Permitted Uses is amended by adding the following new permitted use:
 - 24.2.31 Utilities, except facilities for the treatment of sanitary sewage.

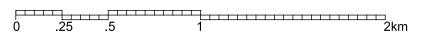
Rationale: this amendment will correct an apparent oversight in the M3 District, allowing for utilities except sewage lagoons.

10. MAPS & DEVELOPMENT CONCEPTS

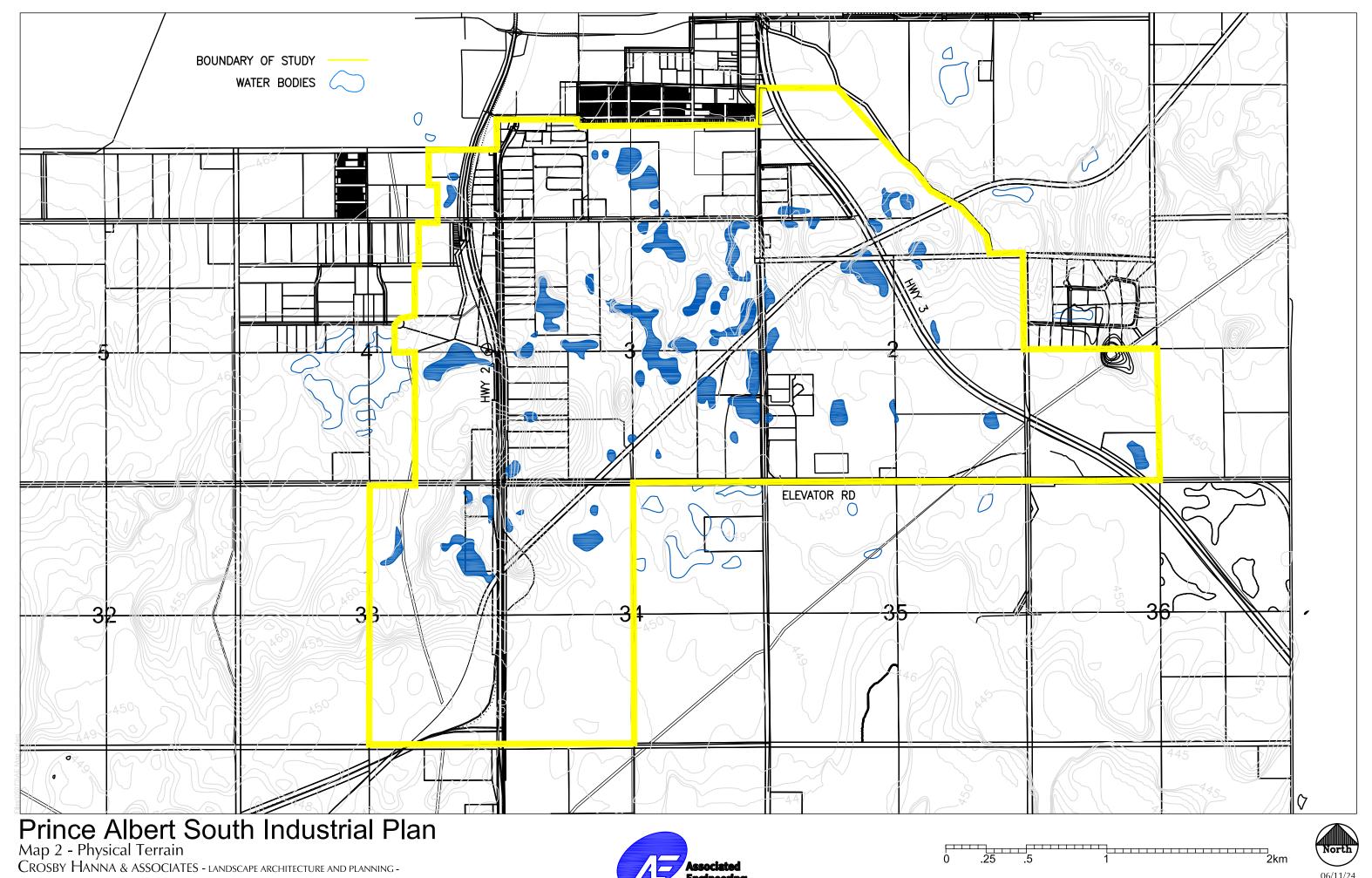
- Map 1 Existing Infrastructure
- Map 2 Physical Terrain
- Map 3 Existing Land Use
- Map 4 Existing Development Plan Policy Areas
- Map 5 Existing Zoning Designations
- Map 6 Heritage Resource Potential
- Map 7 Water Distribution System Conceptual Plan
- Map 8 Sanitary Sewer System Conceptual Plan
- Map 9 Storm Water Drainage Conceptual Plan
- Map 10 Highway #2 Corridor Concept
- Map 11 South Industrial Concept
- Map 12 Highway #3 Corridor Concept



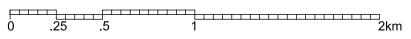




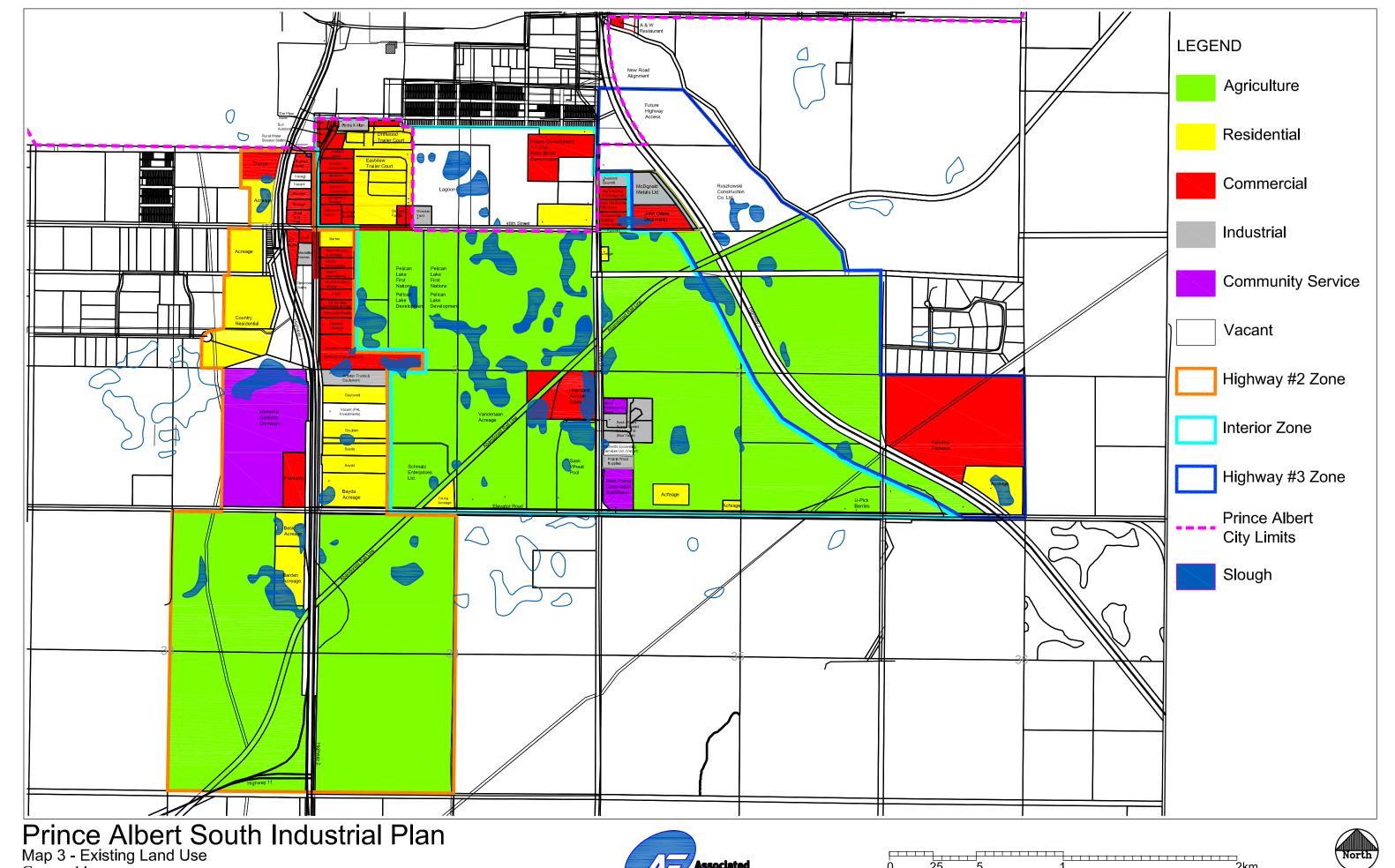






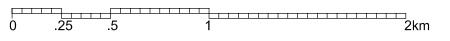




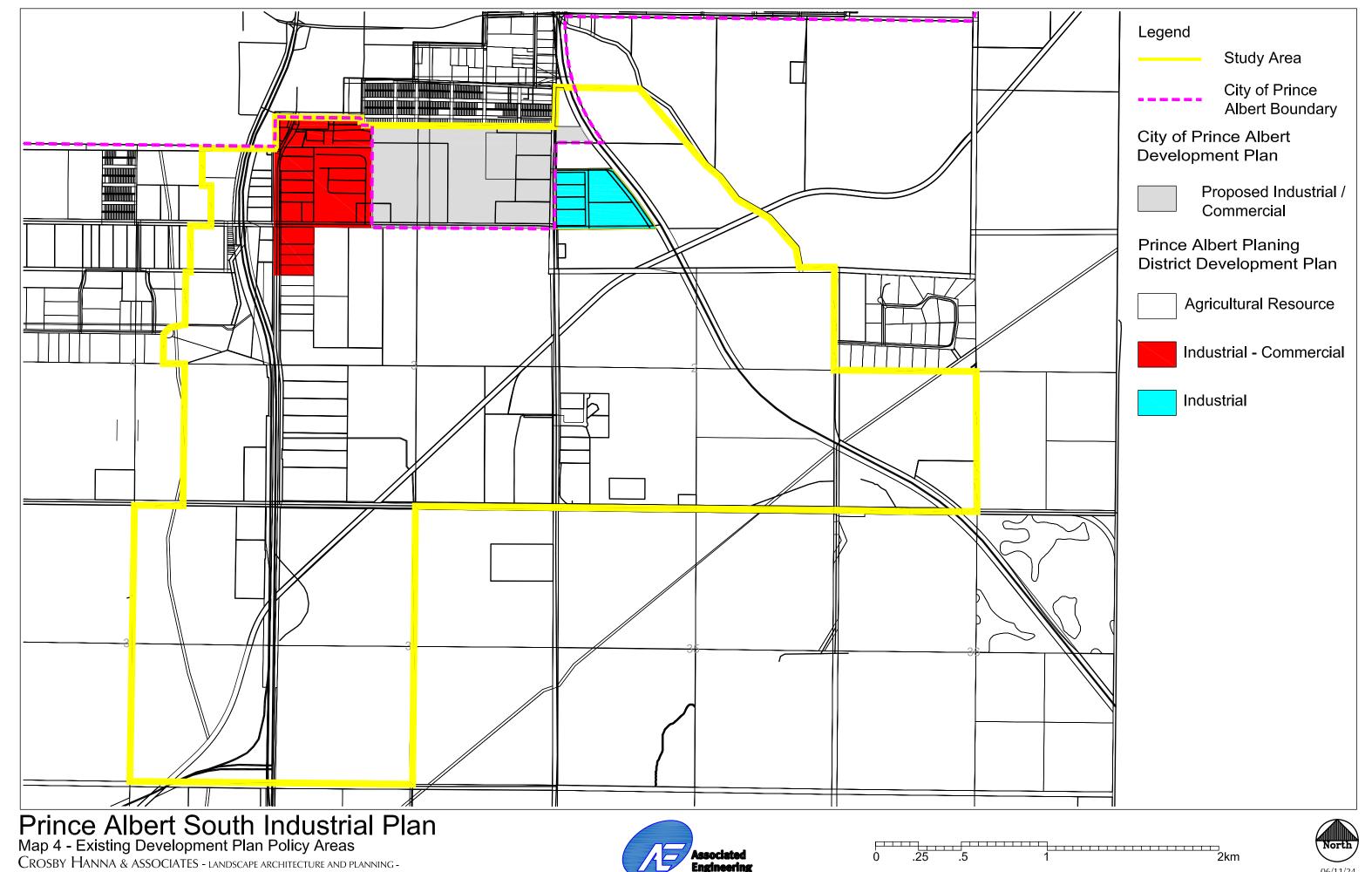


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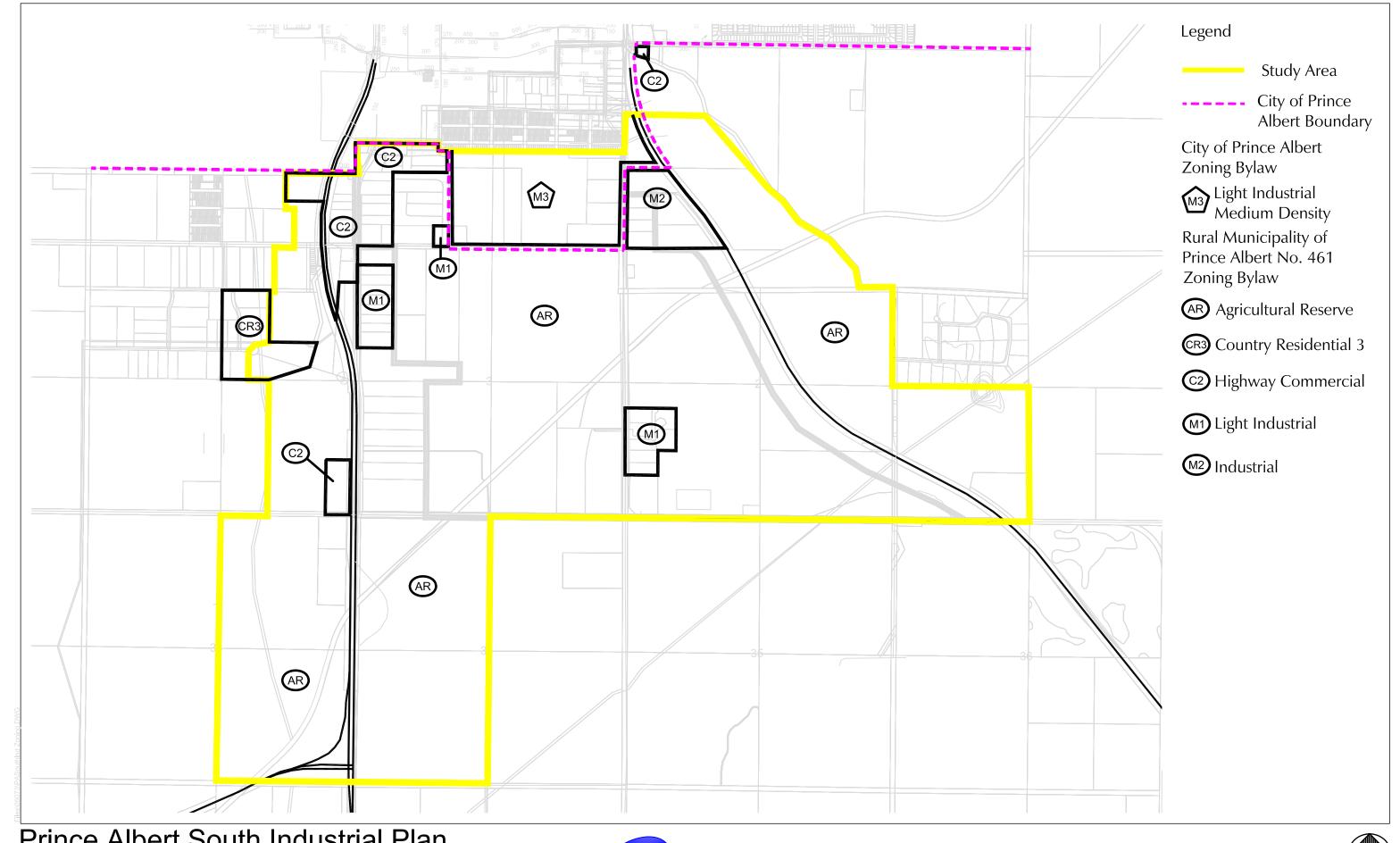








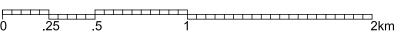




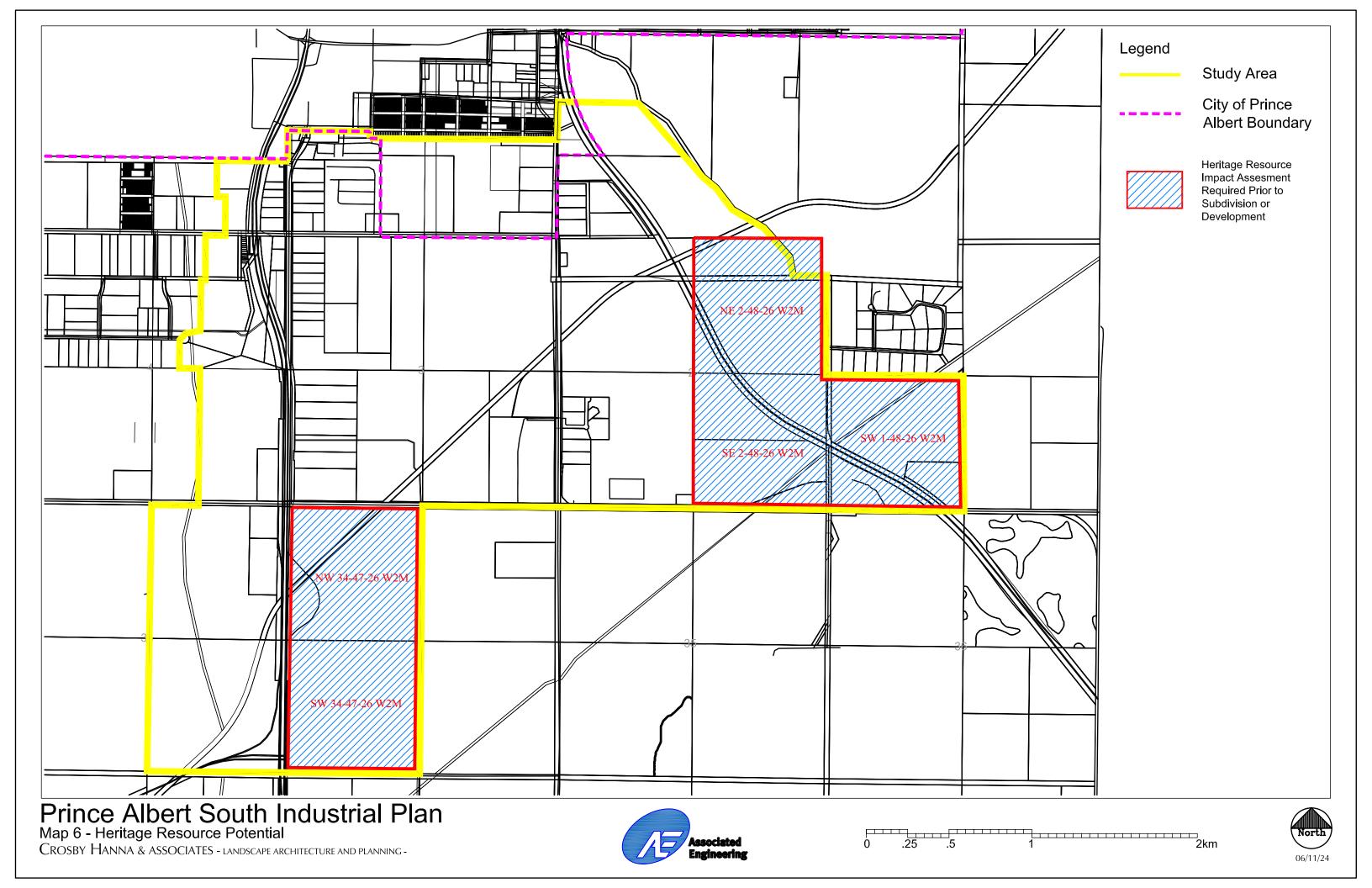
Prince Albert South Industrial Plan

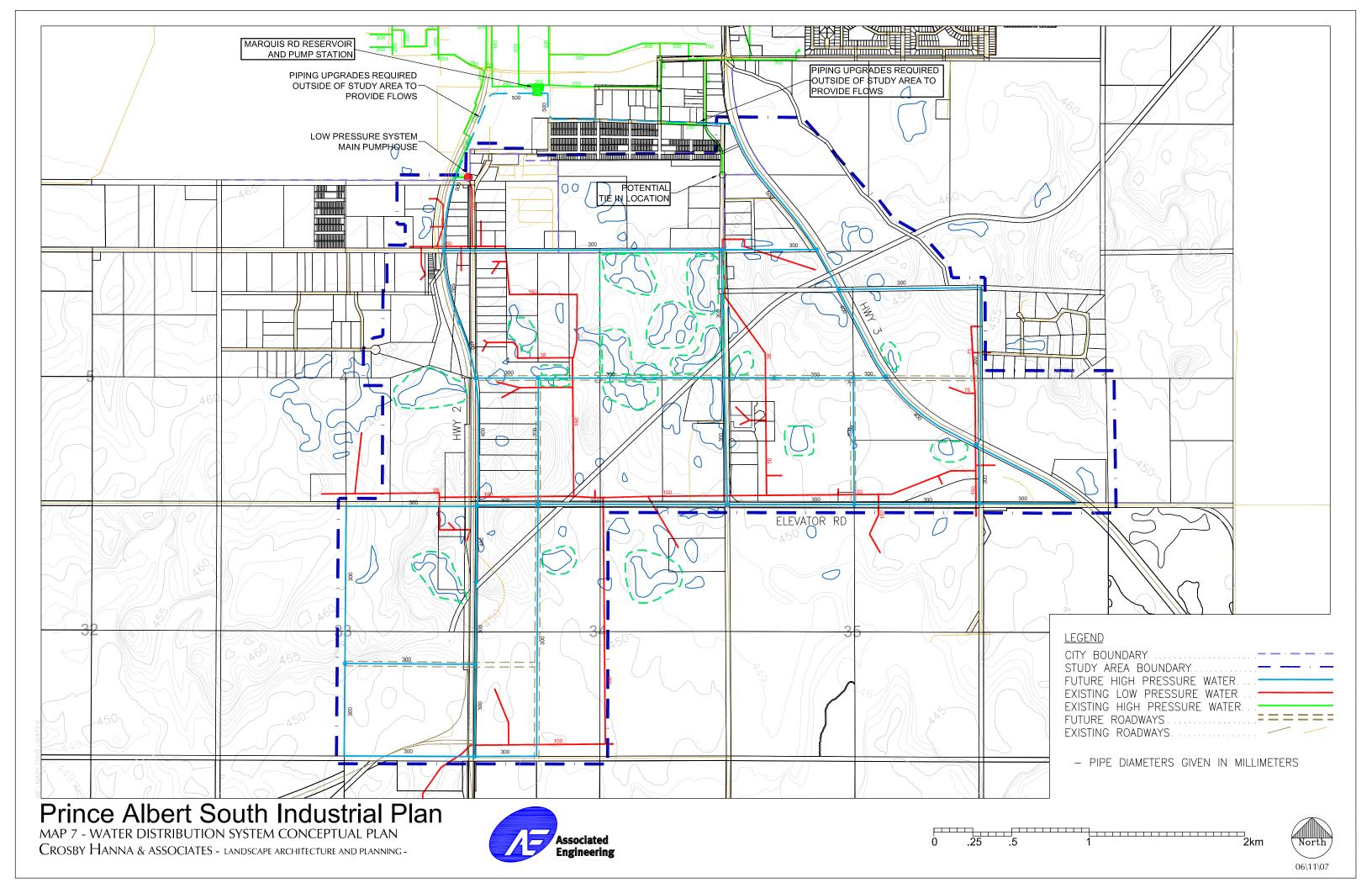
Map 5 - Existing Zoning Designations
CROSBY HANNA & ASSOCIATES - LANDSCAPE ARCHITECTURE AND PLANNING -

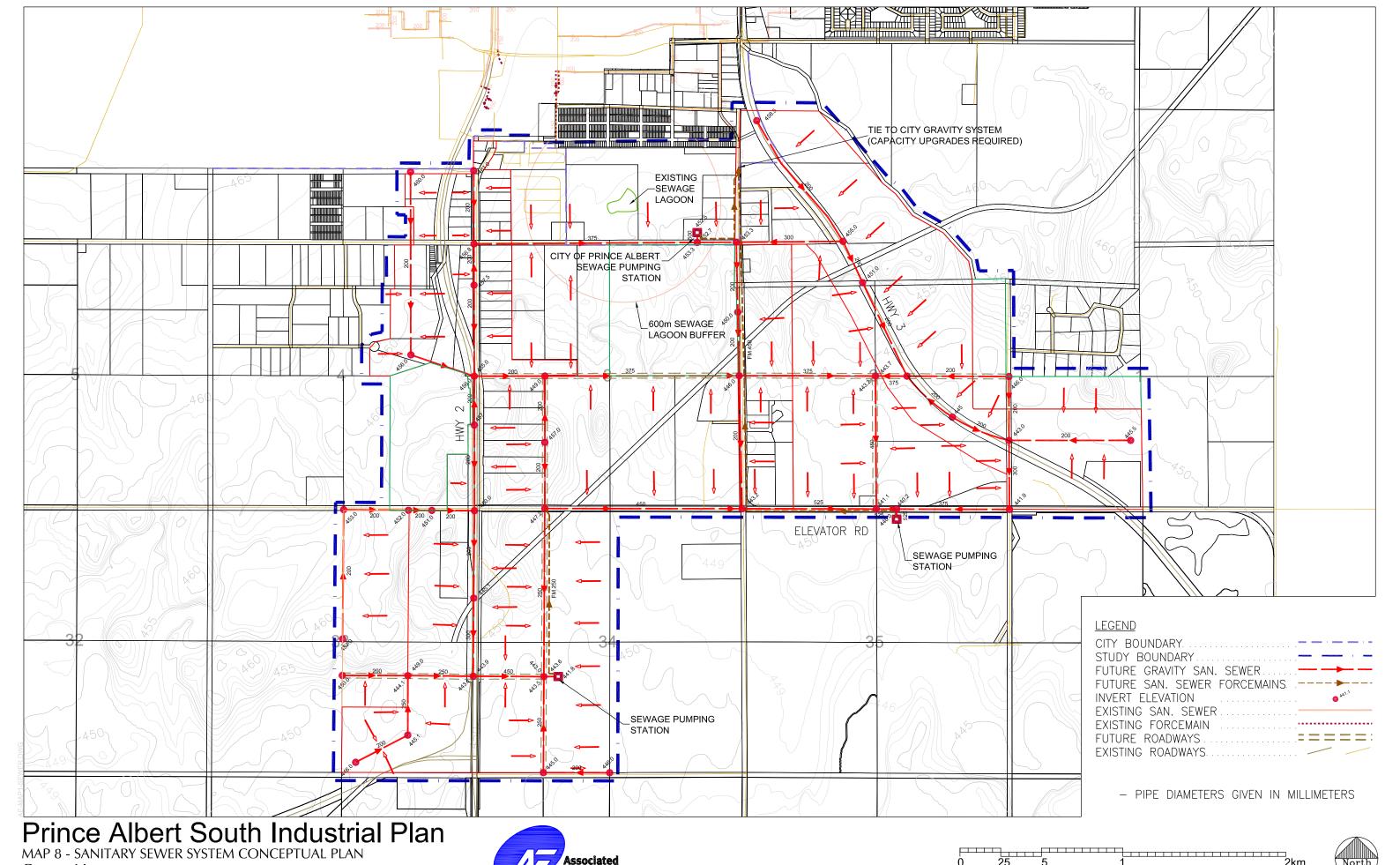






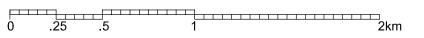




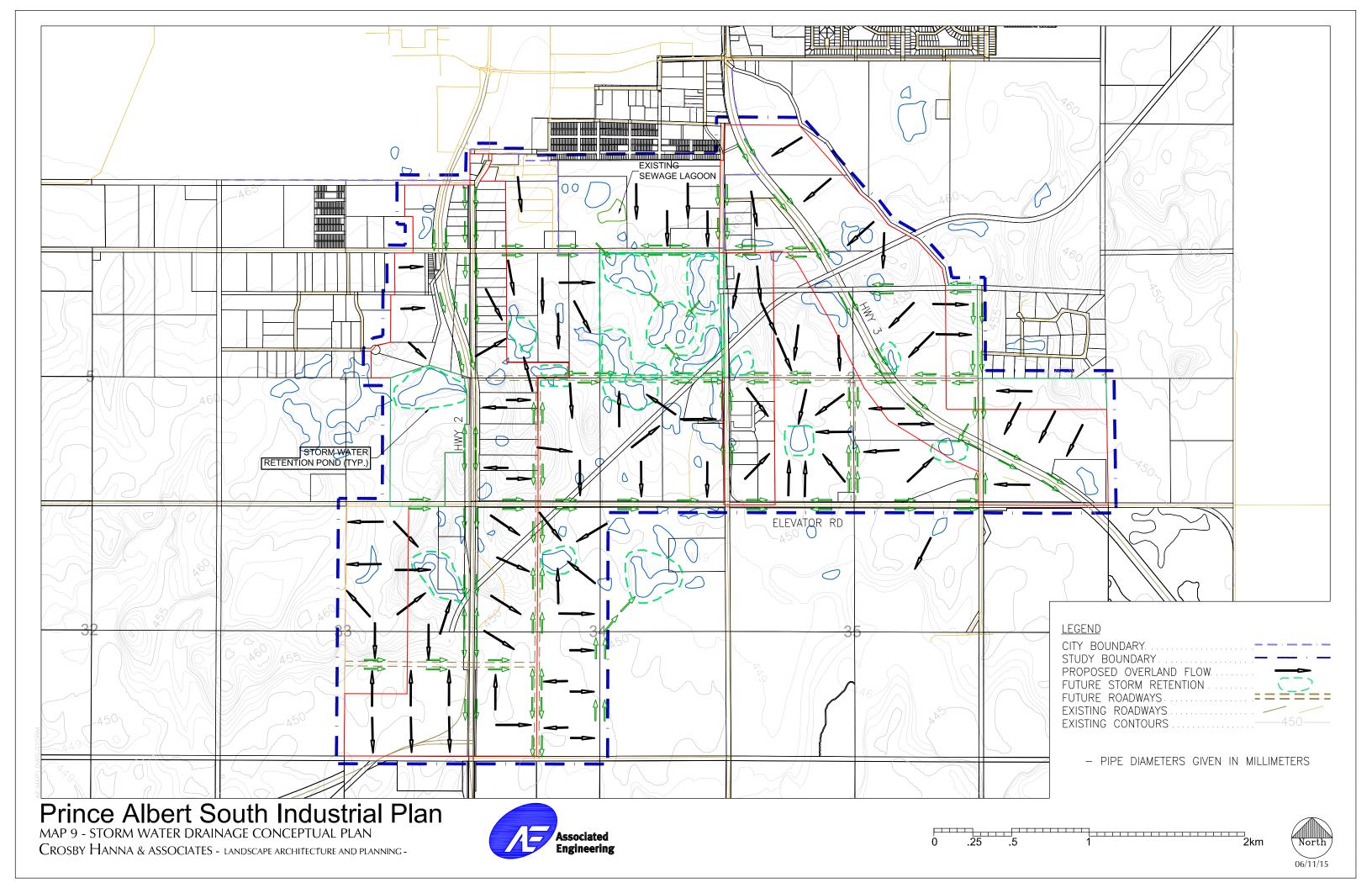


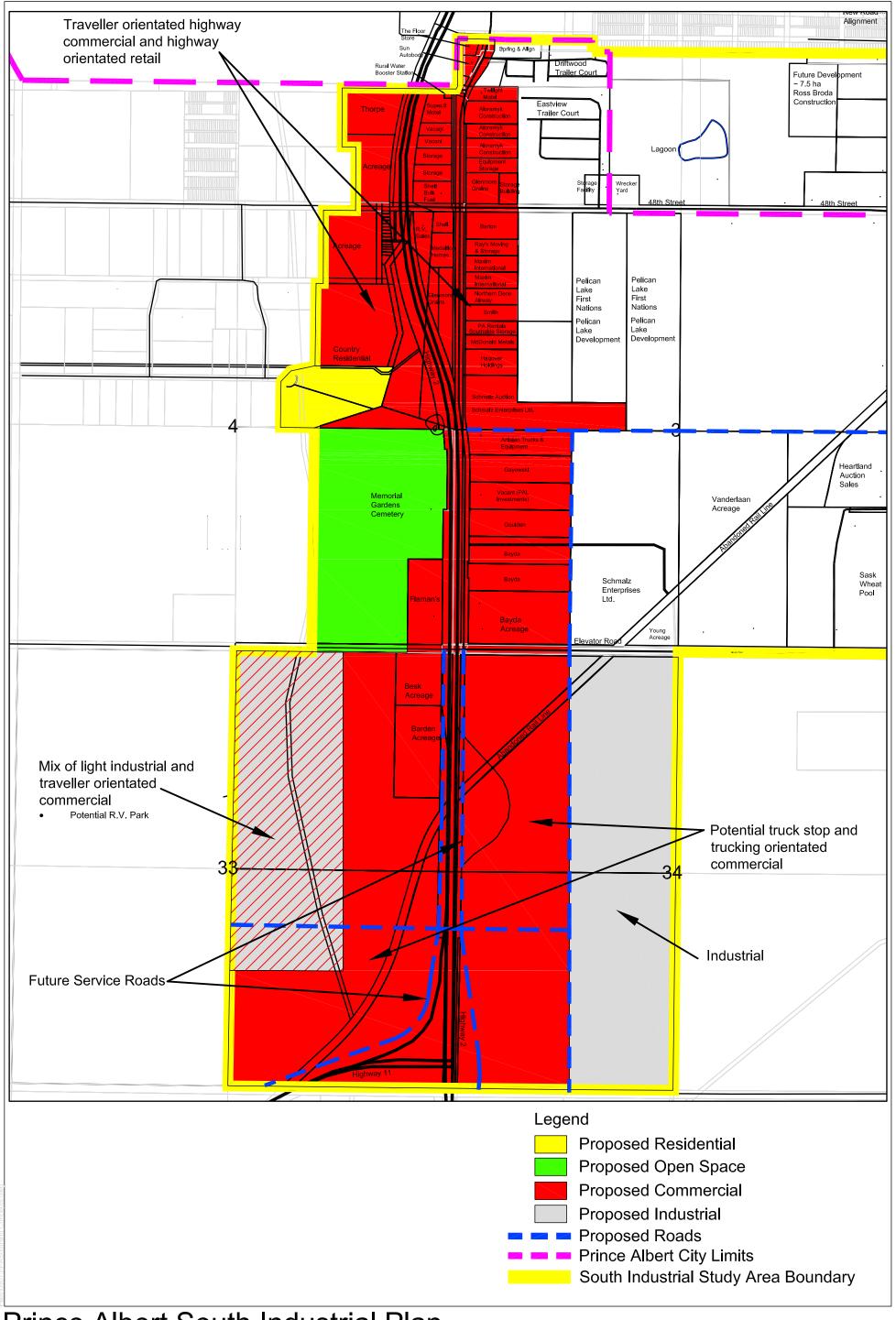
Crosby Hanna & associates - landscape architecture and planning -









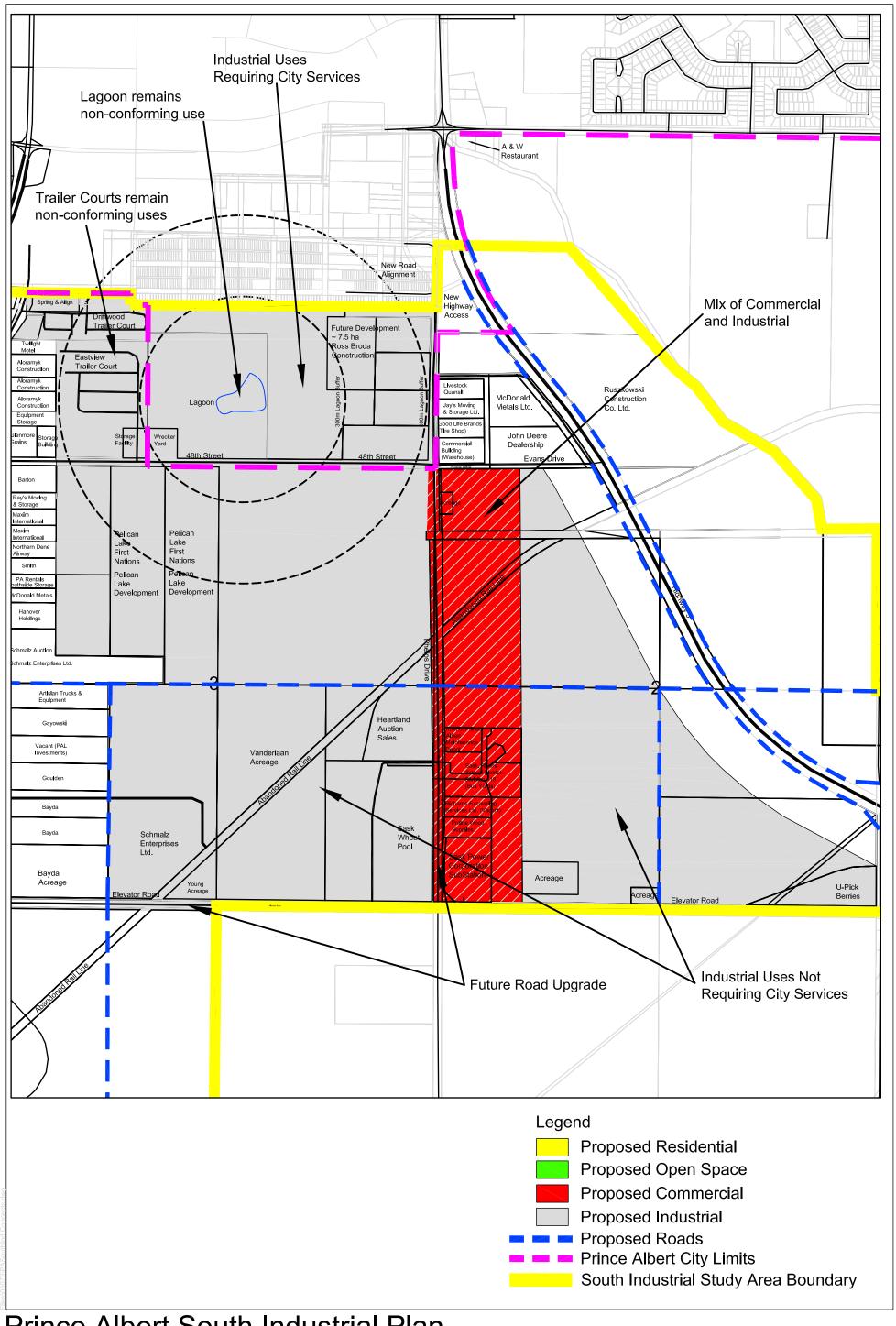


Prince Albert South Industrial Plan

Map 10 - Highway 2 Corridor Concept

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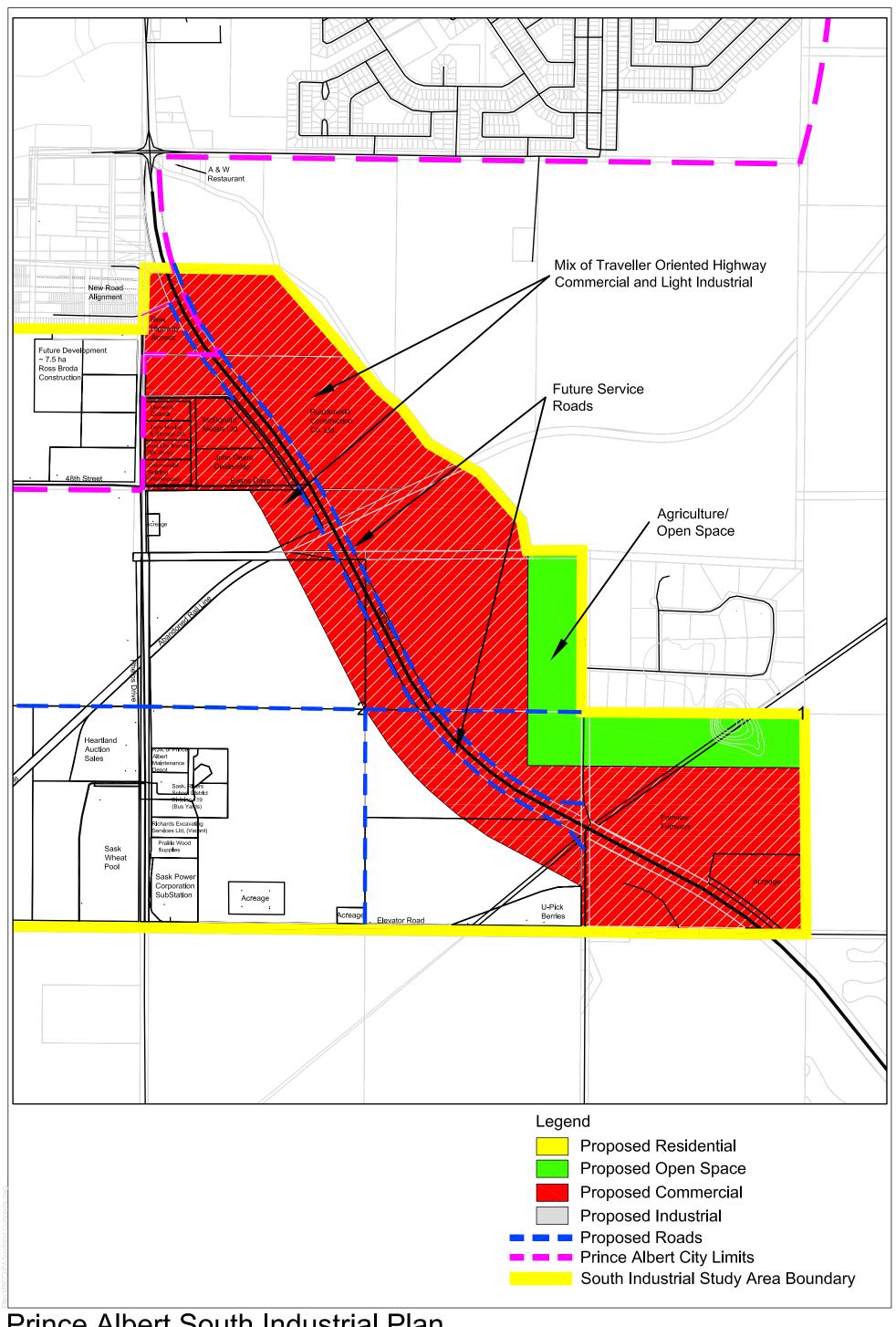


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Map 11 - South Industrial Concept

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Prince Albert South Industrial Plan Map 12 - Highway 3 Corridor Concept CROSBY HANNA & ASSOCIATES - LANDSCAPE ARCHITECTURE AND PLANNING -



APPENDIX I - Acronyms

ACRONYMS

AHPP Aquatics Habitation Protection Permit

CEAA Canadian Environmental Assessment Act

CLI Canadian Land Inventory

COS City of Saskatoon

COSEWIC Committee on the Status of Endangered Wildlife in Canada

DFO Fisheries and Oceans Canada

HADD Harmful Alteration, Disruption, or Destruction

HRIA Heritage Resources Impact Assessment

HRIM Heritage Resource Impact Mitigation

IBP International Biological Program

NTS National Topographic System

ROW Rights of Way

SARA Species at Risk Act

SCDC Saskatchewan Conservation Data Centre

SE Saskatchewan Environment

SERM Saskatchewan Environment and Resource Management

SSN Sites of Special Nature

SPRR Saskatchewan Parks and Renewable Resources

TLE Traditional Land Entitlement

W2M West of the Second Meridian

APPENDIX II - Previously Recorded Heritage Resources

Previously Recorded Heritage Resources

Borden Designation	Site Type	Location
FgNj 2	artifact scatter	19-46-25 W2M
FgNj 1	artifact scatter	20-46-25 W2M
FgNj 4	artifact find	21-46-25 W2M
FgNj 5	artifact find	35-46A-25 W2M
FgNI 1	artifact scatter	18-47-27 W2M
FhNj 10	artifact scatter	32-48-24 W2M
FhNj 11	artifact scatter	32-48-24 W2M
FhNj 12	Site of Special Nature	25-48-25 W2M
FhNj 25	artifact find	28-48-25 W2M
FhNj 20	artifact scatter	34-48-25 W2M
FhNj 14	artifact scatter	35-48-25 W2M
FhNj 1	artifact find	35-48-25 W2M
FhNj 13	artifact scatter	35-48-25 W2M
FhNk 52	Site of Special Nature	48-26 W2M
FhNk 4	Site of Special Nature	14-48-26 W2M
FhNk 6	Site of Special Nature	17-48-26 W2M
FhNk 7	Site of Special Nature	20-48-26 W2M
FhNk 11	Site of Special Nature	23-48-26 W2M
FhNk 5	Site of Special Nature	24-48-26 W2M
FgNI 2	artifact scatter	14-48-28 W2M
FhNj 17	artifact scatter	18-49-25 W2M
FhNj 28	artifact scatter	20-49-25 W2M
FhNj 19	artifact scatter	21-49-25 W2M
FhNj 18	artifact scatter	21-49-25 W2M
FhNj 16	artifact scatter	21-49-25 W2M
FhNj 38	artifact find	22-49-25 W2M
FhNj 37	artifact scatter	22-49-25 W2M
FhNj 15	artifact scatter	22-49-25 W2M
FhNj 36	artifact scatter	22-49-25 W2M
FhNj 27	artifact scatter	27-49-25 W2M
FhNj 26	artifact scatter	27-49-25 W2M
FhNk 9	artifact/feature combo	15-49-26 W2M
FhNI 1	artifact/feature combo	3-49-27 W2M
FhNI 2	artifact find	3-49-27 W2M
FhNk 3	artifact find	11-49-27 W2M
FhNI 3	artifact scatter	11-49-27 W2M
FhNk 1	Unknown	12-49-27 W2M
FhNk 2	artifact find	12-49-27 W2M

APPENDIX III - References

City of Saskatoon Community Services Department, 2000. *City of Saskatoon Landscape Development Requirements and Guidelines*. Crosby Hanna & Associates. Saskatoon, Saskatchewan.

COSEWIC. 2006. Committee on the Status of Endangered Wildlife in Canada. Species at Risk - 2006.

Flory, P.M. 1983. *Prince Albert 73-H Critical Wildlife Habitat Map*. Saskatchewan Parks and Renewable Resources, Wildlife Research Division, Terrestrial Wildlife Habitat Inventory.

Godfrey, W.E. 1986. The Birds of Canada. National Museum of Canada. 595 pp.

Layberry, R. A., P.W. Hall and J.D. Lafontaine. 1998. The Butterflies of Canada. University of Toronto.

Letain, Gerry. 2006. Ducks Unlimited Canada. Personal Communications.

North Central Transportation Planning Committee, 2003. *Transportation Plan*. North Central Transportation Planning Committee. Shellbrook, Saskatchewan.

Prince Albert and Area Regional Strategic Planning Committee, 2005. *Prince Albert and Area Regional Development Strategic Plan*. Derek Murray Consulting Associates. Winnipeg, Manitoba.

Prince Albert Planning District, 1991. *Prince Albert Planning District Development Plan Bylaw No. 1.* Prince Albert Planning District. Prince Albert, Saskatchewan.

Rural Municipality of Buckland No. 491, 2000. *Buckland Industrial Park Master Plan*. AMEC Earth & Environment Limited & UMA Engineering Limited. Saskatoon, Saskatchewan.

Rural Municipality of Prince Albert, 1991. *Rural Municipality of Prince Albert Zoning Bylaw No. 2.* Rural Municipality of Prince Albert. Prince Albert, Saskatchewan.

Saskatchewan Environment (SE). 2006. Sensitive species web site: http://gisweb1.serm.gov.sk.ca/wildlifelogin/form.asp.

Saskatchewan Environment (SE). 2003. Saskatchewan Activity Restriction Guidelines for Sensitive Species in Natural Habitats. September 2003.

Saskatchewan Parks and Renewable Resources (SPRR). 1991. Fish Species Distribution in Saskatchewan, Fisheries Branch, Saskatchewan. 102 pp.

Saskatchewan Soil Survey. 1989. Preliminary Soil Map and Report - *Rural Municipality of Prince Albert, Number 461 May 1, 1988 (Revised March 1, 1989).* Saskatchewan Soil Survey, Saskatchewan Centre For Soil Research, University of Saskatchewan.

Smith, A.R. 1996. Atlas of Saskatchewan Birds. Special Publication No. 22. Environment Canada. Nature Saskatchewan.

Tackaberry, R.E. 1983. *Prince Albert 73-H Present Land Use Map.* Saskatchewan Parks and Renewable Resources, Wildlife Research Division, Terrestrial Wildlife Habitat Inventory.

Telfer, E.S. C. Adam, K. DeSmet and R. Wershler. 1989. *Status and distribution of the Loggerhead Shrike in western Canada*. Canadian Wildlife Service. Progress notes, No. 184.

Wagner, G. 1997. *Status of the Northern Leopard Frog (Rana pipiens) in Alberta*. AEP, Wildlife Management Division, Wildlife Status Report No. 9. Edmonton, Alberta. 46 pp.