



**A BYLAW OF THE CITY OF FORT SASKATCHEWAN, IN THE PROVINCE OF ALBERTA,
TO AMEND THE JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN,
BYLAW C9-15**

BYLAW NO. C27-21

WHEREAS the *Municipal Government Act*, R.S.A., 2000, c.M-26 as amended or repealed and replaced from time to time, provides that a municipality may adopt an Area Structure Plan;

NOW THEREFORE, the Council of the City of Fort Saskatchewan in the Province of Alberta, duly assembled, hereby enacts:

1. That "Josephburg Road North Industrial Area Structure Plan", attached as Schedule "A-1", and forming part of Bylaw C27-21, is hereby adopted.
2. This Bylaw is cited as the "Amending the Josephburg Road North Industrial Area Structure Plan Bylaw C9-15".
3. That Schedule "A" of Bylaw C9-15 is replaced with Schedule "A-1" attached hereto, with amendments to the following sections:

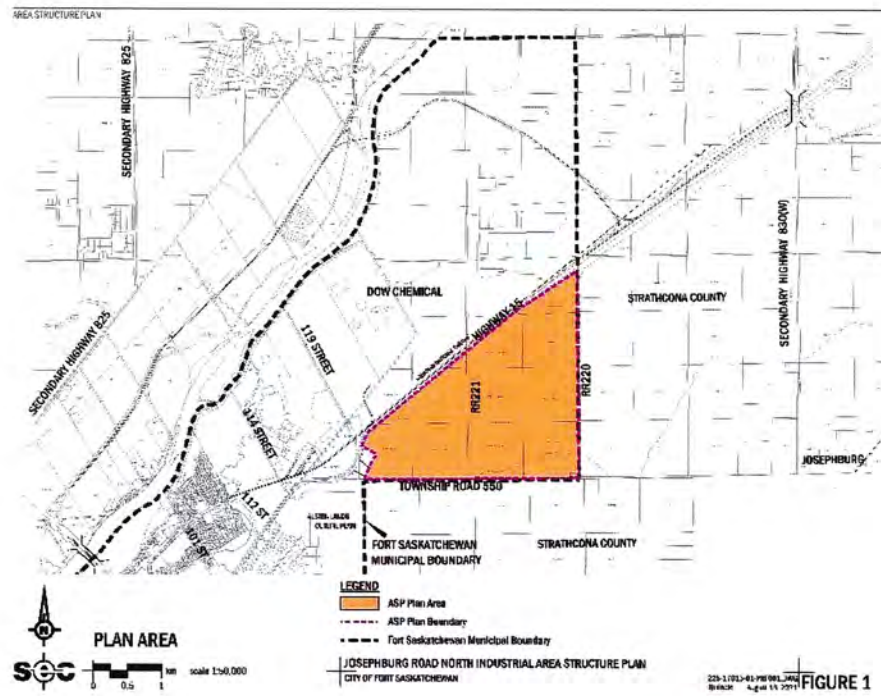
a. Add to Section 4.5 - Environmental Management:

4.5.5 Site Specific Municipal Reserve Dedication	4.5.5 Two municipal reserve parcels, approximately 2.95 ha in total size, are located in the southwest Plan area, north of Secondary Road 550 and southwest of 90 Avenue.	4.5.5 Extra topsoil from the surrounding development will be placed within these MR parcels. The site will accommodate tree plantings that will serve as a tree stand and carbon sink. The site is not intended for public recreational use.
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b. Add to Section 4.5 - Environmental Management:

Two Municipal Reserve parcels are located in the southwest Plan area which will provide a carbon sink and future tree stand which is not intended for public recreational activities. The site will accommodate a stockpile from surrounding development and tree plantings so that little to no maintenance is required by the City. Native tree species will be provided throughout this MR parcel which will densify the area throughout the years.

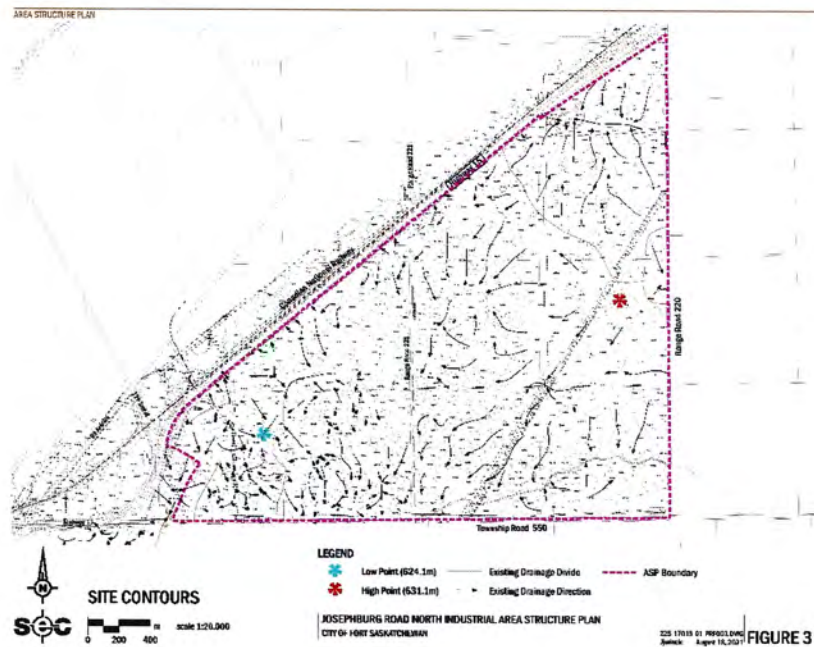
c. Amend Figure 1:



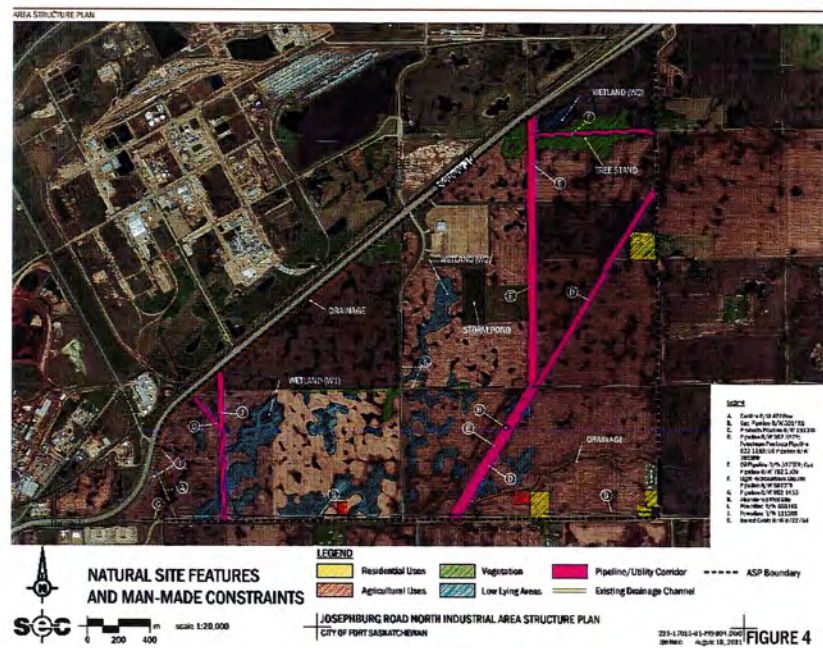
d. Amend Figure 2:



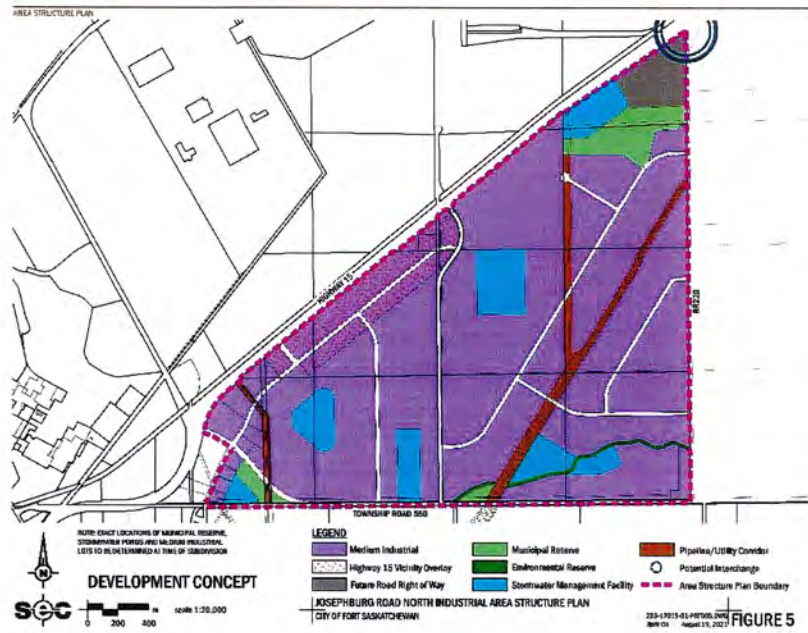
e. Amend Figure 3:



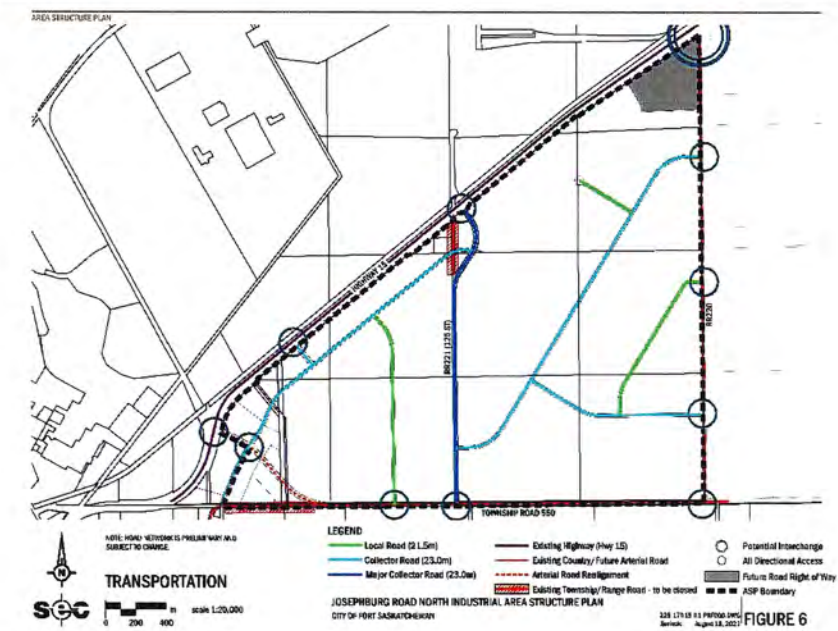
f. Amend Figure 4:



g. Amend Figure 5:



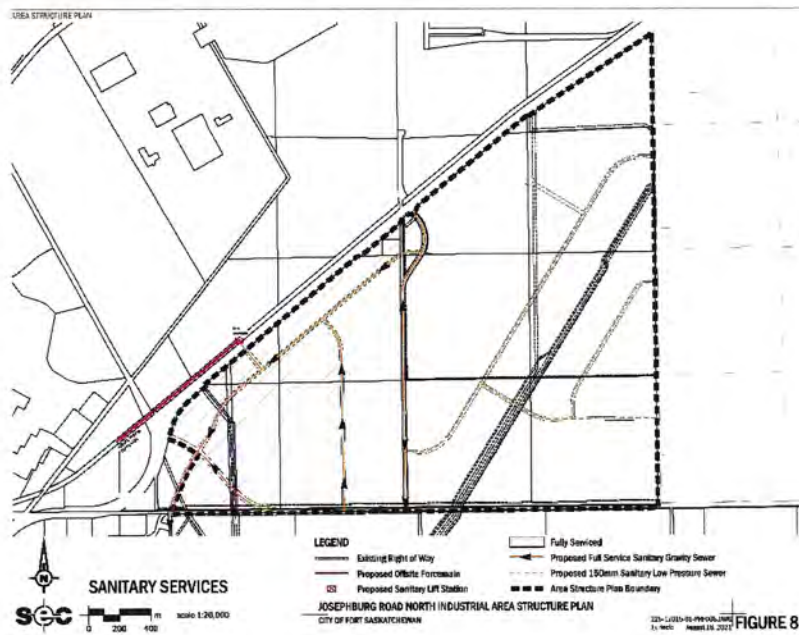
h. Amend Figure 6:



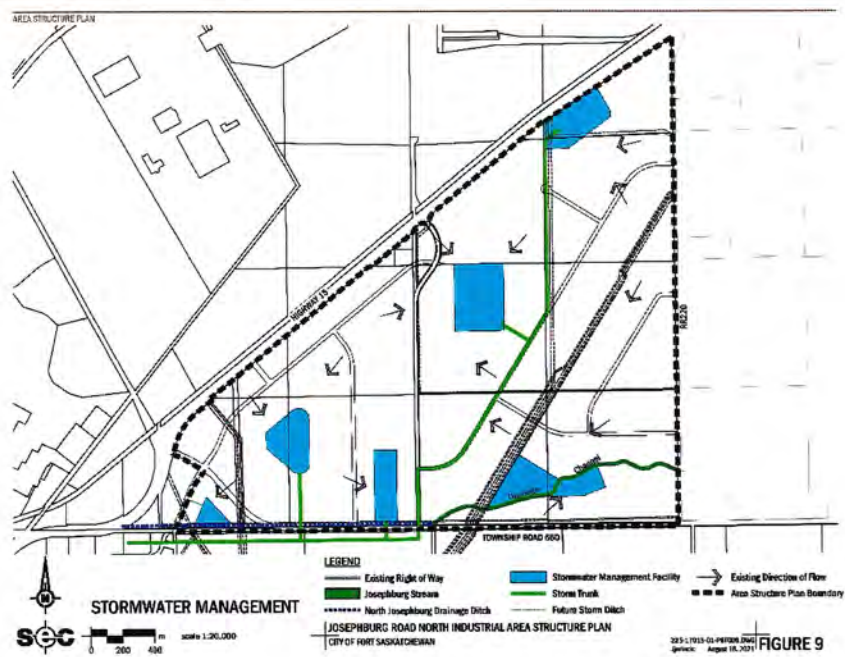
i. Amend Figure 7:



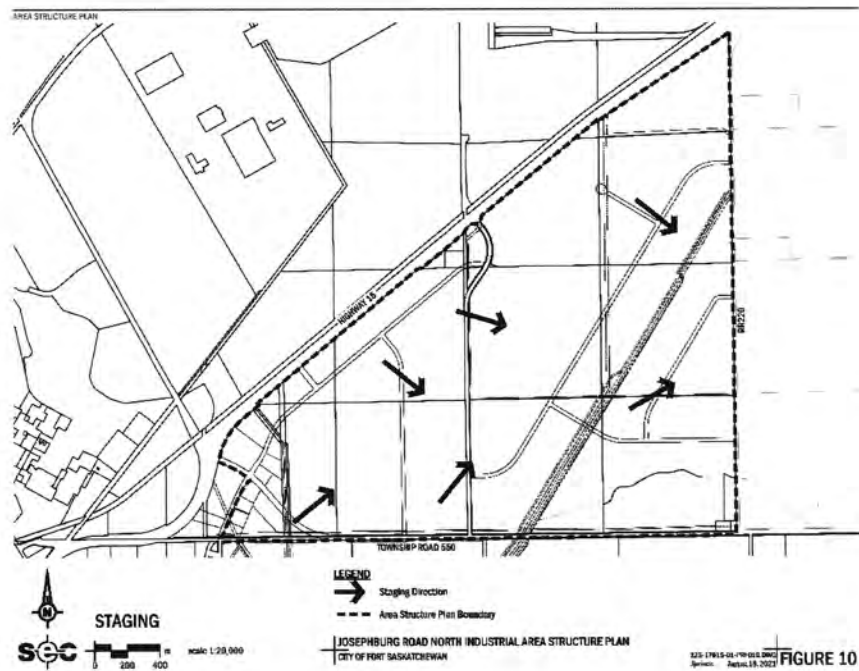
j. Amend Figure 8:



k. Amend Figure 9:



l. Amend Figure 10:



m. Amend Appendix 2 - Land Use Statistic:

**JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN LAND
USE STATISTICS**

	Area (ha)	% of GDA
GROSS AREA	596.4	
*Highway 15/Range Road 220 Interchange Right-of-Way	15.2	
Pipeline & Utility Rights-of-Way	23.0	
Environmental Reserve (Public Utility Lot/Drainage Channel)	3.8	
Sub-total	42.0	
GROSS DEVELOPABLE AREA	554.4	100.0%
Stormwater Management Facility	49.7	9.0%
Industrial Roadways	35.7	6.4%
Municipal Reserve	20.4	3.7%
Sub-total	105.8	
NET DEVELOPABLE AREA	448.6	80.9%
Medium Industrial	413.6	74.6%
Medium Industrial – Highway 15 Vicinity Overlay	35.0	6.3%
	448.6	80.9%

*Area is approximate. Exact area and extent of land required for the interchange to be determined in conjunction with Alberta Transportation, Strathcona County, and the City of Fort Saskatchewan prior to the approval of an Outline Plan for the adjacent lands.

** Exact MR area to be confirmed at time of detailed Outline Plan submission. Balance of MR owing to be provided as cash-in lieu, unless the City determines through the Outline Plan stages that smaller park areas are required.

4. If any portion of this Bylaw is declared invalid by a court of competent jurisdiction, the invalid portion must be served and the remainder of the Bylaw is deemed valid.
5. That Bylaw C27-21 becomes effective upon third and final reading.

READ a first time this 24th day of August 2021.

READ a second time this 14th day of September 2021.

READ a third time this 14th day of September 2021.



[Signature]
MAYOR

[Signature]
DIRECTOR, LEGISLATIVE SERVICES

Signed: September 14, 2021



Josephburg Road North Industrial Area Structure Plan

BYLAW C27-21 SCHEDULE A

Prepared For:
The City of Fort Saskatchewan

Prepared By:
Stantec Consulting Ltd.
File: 1161 70800

Adopted as Bylaw C13-09 January 25,
2011

Amended by:
Scheffer Andrew Ltd. in 2014
Select Engineering Consultants in 2021

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City of Fort Saskatchewan
Josephburg Road North Industrial Area Structure Plan
Bylaw Amendments

Bylaw	Date	Description
C13-09	January 25, 2011	Plan adoption
C9-15	July 14, 2015	Amended land use designations, servicing provisions, and Highway 15 vicinity overlay boundary.
C27-21	September 14, 2021	Addition of municipal reserve sites and storm water management facility.

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JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

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JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

1.0 Introduction

1.1 INTRODUCTION

The purpose of the Josephburg Road North Industrial Area Structure Plan (ASP) is to provide a policy framework for orderly planning in the area, respond to future subdivision and development proposals, and establish a preliminary servicing concept for the Josephburg Road North Industrial area. The objectives of this ASP are to:

- Prepare a policy document and a future development concept for the plan area;
- Establish the general location of land uses and transportation routes to support development within the plan area;
- Conceptually identify public utilities and storm water management facilities (SWMF) necessary to support development;
- Outline preliminary and conceptual servicing requirements for the proposed development concept;
- Determine the appropriate sequencing and phasing of development based on servicing, access and market demand; and,
- Prompt the creation of a Boundary Road Accord Agreement between the City of Fort Saskatchewan and Strathcona County for Range Road 220 when warranted.

1.2 PURPOSE

The plan area covers approximately 590 ha (1,459 ac). As shown in **Figure 1.0 - Plan Area**, the plan area is located within the municipal boundaries of the City of Fort Saskatchewan. The plan area boundaries are as follows:

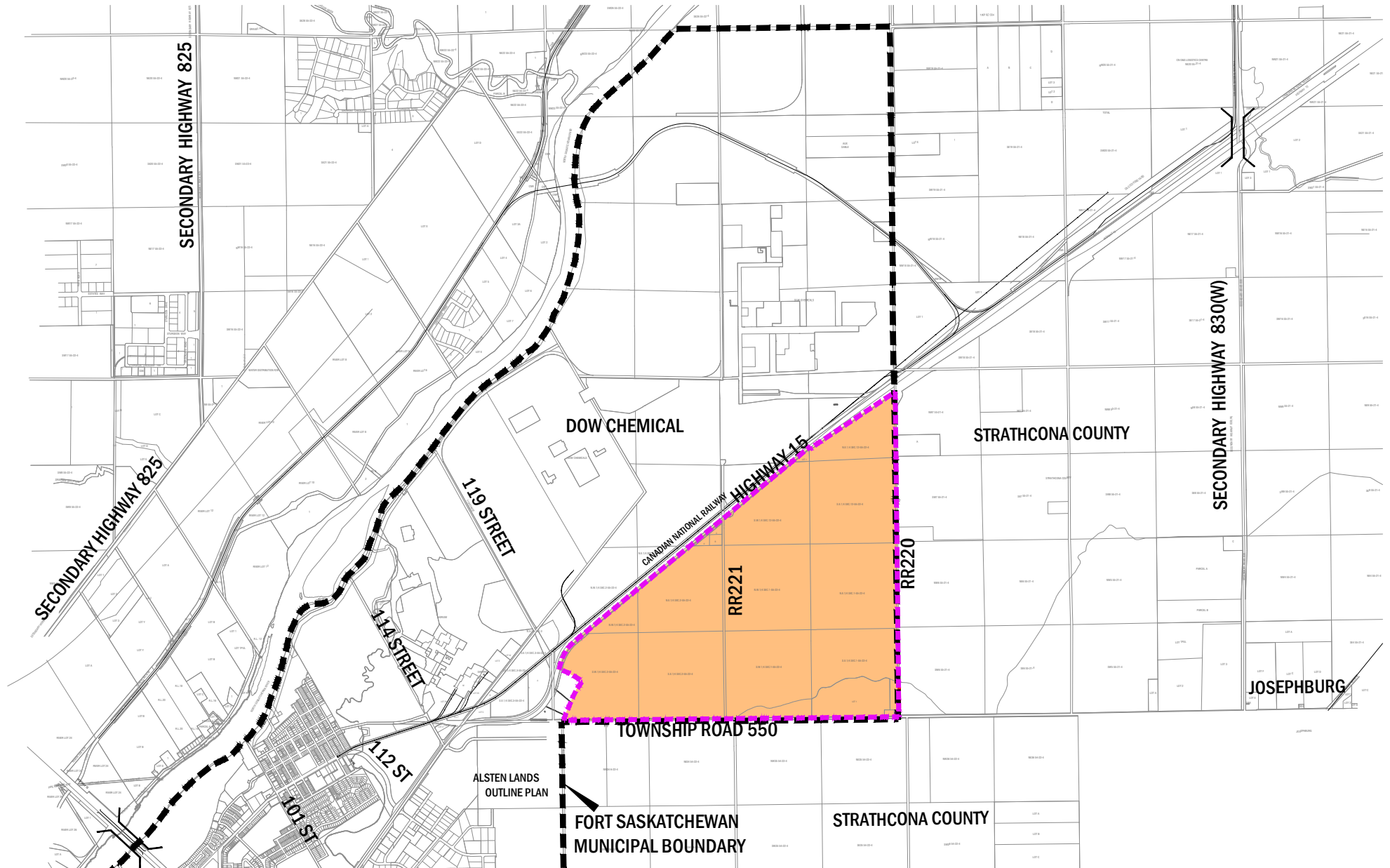
Northern Boundary:	Highway 15
Eastern Boundary:	Range Road 220 (Strathcona County)
Western Boundary:	Highway 15
Southern Boundary:	Township Road 550 (Strathcona County)

1.3 LAND OWNERSHIP

Most of the parcels within the Plan area are un-subdivided (i.e. full quarter sections) or have been severed by the Highway 15 right-of-way or the existing drainage ditch in the southeast portion of the Plan area. Three smaller parcels (ranging from 0.5 ha to 5 ha) are registered in the southeast corner of the plan area (Range Road 220), and are currently titled to private landowners. Most of the land in the plan is held by private developers, while a private landowner currently owns approximately 2½ quarter sections adjacent to Range Road 220.

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

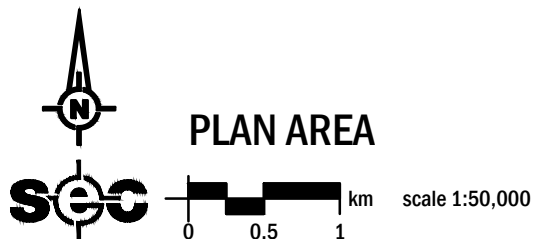
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LEGEND

- ASP Plan Area
- ASP Plan Boundary
- Fort Saskatchewan Municipal Boundary

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN
CITY OF FORT SASKATCHEWAN



JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

Figure 2.0 - Land Ownership and **Appendix 1 – Land Ownership** show the land ownership within the plan area.

1.4 REGIONAL CONTEXT

Fort Saskatchewan is centered within Alberta's Industrial Heartland Region, and is home to numerous industrial petrochemical and related industries, providing an important link to the Athabasca Oil Sands of northeastern Alberta and international markets. It is one of Canada's largest processing centres for petroleum, petrochemicals and chemicals, and employs a large, skilled workforce. The City of Fort Saskatchewan is home to 22,808 residents, and the majority of land uses include residential, light/medium/heavy industrial, commercial, business and agricultural uses. Highway 21 provides one of the main access routes to Fort Saskatchewan while Highway 15 provides a second link to the Capital Region, and access to northern and eastern Alberta.

The Alberta's Industrial Heartland region lies within portions of five municipalities: The City of Fort Saskatchewan, the City of Edmonton, the Counties of Strathcona, Sturgeon and Lamont. It is designated for long-term heavy and medium industrial growth, and is already home to over 50 world-class companies, with still more facilities proposed.

The City of Fort Saskatchewan is a member of the Capital Region Board (CRB), along with 23 other municipalities in the Capital Region. Member municipalities are subject to the Capital Region Growth Plan (CRGP), which is a regional growth management document. The City of Fort Saskatchewan, has been identified as being a priority growth area within the CRGP.

1.5 ORIENTATION

This document contains four (4) sections and 3 appendices.

- Section 1 provides the Introduction, purpose and regional context of the plan;
- Section 2 describes the Statutory and Policy Context;
- Section 3 outlines the Site Characteristics and Development Considerations;
- Section 4 Describes the Land Use Concept, Objectives and Policies;
- Appendix 1 contains background information on Land ownership;
- Appendix 2 provides the proposed Land Use Statistics;
- Appendix 3 contains a listing of technical studies used in support of the preparation of the development and servicing concepts.

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

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 Fort Industrial Estates Ltd. Ownership

 Ownership Boundary

 Area Structure Plan Boundary

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

CITY OF FORT SASKATCHEWAN

225-17015-01-PRF002.DWG
Jjurincic August 18, 2021

FIGURE 2

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

2.0 Statutory and Policy Context

The ASP has been prepared in context of its geographical location within the Edmonton Capital Region and the Heartland Industrial Area.

It has been planned having regard for the City of Fort Saskatchewan's statutory plans, policies and design principles which govern land development. These include the City of Fort Saskatchewan Municipal Development Plan (MDP), the Fort Saskatchewan Alberta's Industrial Heartland Complementary Area Structure Plan, and Land Use Bylaw C10-13. Other relevant policies and design principles are further identified and summarized in the following sub-sections as they relate to the creation of an industrial park within the plan area.

It must be noted that the ASP underwent a review and update in 2013/2014, in order to ensure alignment with the revised MDP, LUB and CRGP. This review and update involved amendments to the proposed land uses and servicing concepts within the plan area, in order to provide for greater flexibility and encourage development within the plan area.

Future applicants seeking amendments to the ASP or applying for rezoning, subdivisions or development permits are required to consult the actual documents for specific guidance on detailed requirements as they apply to particular properties.

The following documents provide important direction and a policy context for the ASP.

2.1 CITY OF FORT SASKATCHEWAN MUNICIPAL DEVELOPMENT PLAN (2010 – 2030)

The Municipal Development Plan (MDP) was adopted in September 2010 as Bylaw C16-10, and is intended to express the community's vision, goals, objectives and policies to direct its physical, social and economic development from 2010 to 2030.

Several of the policies contained within the MDP have been used in the preparation of this ASP, ensuring conformity with Council direction with respect to the development of these lands for industrial purposes. The relevant policies include:

Section 6.8 ► Industrial ► General Policies for all Industrial Areas

Section 6.8.1 Implement the Industrial Heartland Area Structure Plan (ASP) and the Josephburg Road North Industrial ASP, which set the main policy direction for the development of industrial areas.

Section 6.8.3 Encourage the utilization of eco-industrial planning principles, seeking enhanced environmental and economic performance through collaboration in managing environmental and resource issues, including energy, water and

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

materials, as outlined in the Industrial Heartland ASP and the Eco-Industrial Master Plan Strategy.

Section 6.8.4 Require, through provisions of the Land Use Bylaw and other municipal bylaws, quality development to be maintained through the application of standards for siting and design of buildings, landscaping, screening of storage and parking areas, and signage.

Section 6.8.7 Permit interim agricultural uses that will not preclude the future use of the land for industrial purposes.

Section 6.8.8 Ensure that developments mitigate visual impacts from public roads.

Section 6.8 ➔ Industrial ➔ Light and Medium Industrial

Section 6.8.15 Complete and implement the Josephburg Road North Industrial Area Structure Plan (ASP).

Section 6.8.16 Ensure compatibility between the Light and Medium industrial designation and surrounding urban development by directing only Light Industrial uses to those lands within proximity of the General Urban Area.

Section 6.8.17 Proactively work to ensure a supply of fully serviced Light and Medium Industrial lands.

Section 6.8.18 Ensure that Light and Medium Industrial uses meet current industrial Risk standards and guidelines.

Section 6.8.19 Use a risk management approach based on principles of: risk reduction at the source; risk reductions through land use controls and prescribed mitigation measures; emergency preparedness; emergency response; and, risk communication.

Section 7.2 ➔ Community Design ➔ Sustainable Design Policies

Section 7.2.3 Work with the development community to provide incentives for the development of buildings and developments that meet green building standards.

Section 8.2 ➔ Mobility ➔ Pedestrians and Cyclists

Section 8.2.2 Plan for pedestrian and cyclist facilities as part of development and redevelopment proposals, ensuring the provision of adequate walking and cycling paths and lanes, and adequate cycle facilities such as secure storage, changing rooms, and showers where appropriate/feasible.

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

Section 8.4 ➔ Mobility ➔ Roadways

- Section 8.4.1 Use the Transportation Master Plan as a reference to ensure that adequate rights-of-way are preserved and incorporated into future development areas.*
- Section 8.4.2 Limit vehicular accesses along Highway 15 and 21 to provide an expressway standard.*
- Section 8.4.3 Ensure that Transportation Impact Studies are prepared to evaluate the impacts of major development on the safe and efficient movement of pedestrians, cyclists, public transit and vehicles.*

Section 10.2 ➔ Parks and the Natural Environment ➔ Municipal, School and Environmental Reserves

- Section 10.2.3 Require that environmental reserve, municipal and school reserves be identified through the ASP and ARP processes, to the satisfaction of the Municipality.*
- Section 10.2.4 Ensure that industrial ASP and ARP processes consider preservation of land for parkland, and that municipal reserves are established for this purpose.*

Section 10.4 ➔ Parks and the Natural Environment ➔ Pathways and Trails

- Section 10.4.1 Facilitate the continued development of community and regional trail systems that provide connectivity for both leisure and commuting purposes.*

Section 11.4 ➔ Infrastructure and Resource Management ➔ Stormwater Management

- Section 11.4.2 Maximize retention of stormwater or require enhancement to natural wetlands where possible to ensure a high quality of stormwater effluent.*
- Section 11.4.3 Minimize effective impervious area for all new development to reduce development related stormwater run-off.*

Section 13.3 ➔ Responsive Local Economy ➔ Economic Diversification

- Section 13.3.1 Support economic diversification by ensuring there are sufficient commercial and industrial lands available to suit a variety of business opportunities.*

2.2 ALBERTA'S INDUSTRIAL HEARTLAND AREA STRUCTURE PLAN

The City of Fort Saskatchewan Alberta's Industrial Heartland Area Structure Plan (ASP) was approved under Bylaw C19-00 in August 2001. At the same time, the municipalities of Lamont County, Strathcona County and Sturgeon County approved similar, complimentary ASP's for

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

lands within their jurisdictions. Together, these four ASP documents refer to the area now marketed internationally as the Alberta's Industrial Heartland.

The purpose of these four ASP's is to guide future industrial development within each municipality and the region as a whole. More specifically the plans:

- Encourage more efficient use of the land resource;
- Establish complementary land use policies for industrial, transition and environmental areas in the Heartland Region;
- Reduce environmental impacts;
- Reduce land use conflicts and establish buffers and transition areas around heavy industry;
- Facilitate efficient provision and extension of transportation and utility infrastructure and joint use of these services;
- Encourage the use of eco-industrial principles, e.g. co-generation.

The land use concept for the ASP identifies the entire plan area as being within the Medium Industrial Policy Area. This policy area is intended to serve as a transition zone between heavy industrial uses and lighter/non-industrial land uses. Important guidelines outlined in this ASP, and which dictate development is as follows:

- This area will accommodate medium industrial activities that could support the activities associated with the heavy industry activities throughout the Heartland;
- Activities could include: heavy industrial and agricultural equipment sales, rentals and repairs; laboratories; temporary indoor storage; veterinary clinics or hospitals; minor eating establishments; contracting services; vehicle repair and service stations and greenhouses/nurseries;
- Access to and from Highway 15 will be centralized in one or two intersections;
- To maintain the point of entry into the Heartland Area, regulations for the development will require a high standard of site design, signage, open space, architectural control and landscaping.

2.3 CITY OF FORT SASKATCHEWAN LAND USE BYLAW

The plan area is, in large part, currently zoned as IR – Industrial Reserve, but is agricultural and presently under cultivation. The IR district is generally intended to reserve those areas of the City which are rural in character or land use but are intended for future industrial development. Approximately 47 ha (117 acres) adjacent to Highway 15 and Range Road 221 is currently zoned as IM - Medium Industrial; this district is generally intended to establish an area of industrial uses where site regulations require a high standard of site design, open space, and landscaping. This district is intended to serve as a buffer between heavier industrial and other land uses.

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

In addition to the lands zoned as IM and IR, there are approximately 23.5 ha (58 acres) of land at the intersection of Range Road 220 and Township Road 550, that are currently zoned as IL - Light Industrial. This district is intended to provide for light industrial uses that do not adversely affect adjacent land uses or cause any external, objectionable or dangerous conditions outside of any building on the light industrial site. This district is also intended to serve as a buffer between heavier industrial and other land uses.

In addition to the zoning currently in place, a portion of the plan area adjacent to Highway 15 is subject to the Highway 15 Vicinity Overlay. The purpose of the Overlay is to provide for limited highway commercial uses adjacent to Highway 15 as identified in **Figure 5.0 – Land Use Concept** of the ASP.

Lands that are adjacent to, but not within, the plan area and are within the City of Fort Saskatchewan are currently zoned as IL-Light Industrial, IM-Medium Industrial or IH-Heavy Industrial.

2.4 CITY OF FORT SASKATCHEWAN STRATEGIC PLAN

The City of Fort Saskatchewan's Strategic Plan: 2020 Vision – Clarity for the Future, identifies economic development as a significant strategic priority. Within that priority, it is the City's objective to attract medium industrial activities by providing an adequate amount of serviced and available industrial land for sale to prospective industries. The preparation of this ASP provides for the proper planning and development of the industrial area in supporting the City in achieving their strategic objective of creating a sizeable medium industrial land base.

2.5 STRATHCONA COUNTY STATUTORY PLANS

Associated statutory plans and the Land Use Bylaw within Strathcona County to the east and south of the plan area include the Municipal Development Plan Bylaw 1-2007, Strathcona County Alberta's Industrial Heartland ASP Bylaw 65-2001 and the Land Use Bylaw 8-2001.

The MDP identifies lands south and east of the plan area as being under the Agriculture Large Holdings Policy Area or the Agri-Industrial Transition Policy Area. The Strathcona County Alberta's Industrial Heartland ASP identifies the lands adjacent to Highway 15, north-east of the plan area, as being within the Strathcona Transition Policy Area.

The Land Use Bylaw has zoned these lands adjacent to the plan area as AG Agriculture: General. The plan area is also in proximity to the Josephburg Airport (within 1.5 miles). As such, the A-O Airport Vicinity Protection Overlay applies to some of these lands.

Although the airport is within Strathcona County, a portion of the eastern plan area is affected by the conical and inner-horizontal surfaces and take-off/approach surface of the runway. Therefore, it should be recognized that the airport may influence the height and type of development permitted within the plan area.

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

3.0 Site Characteristics and Development Considerations

3.1 TOPOGRAPHY AND VEGETATION

As shown in **Figure 3.0 - Site Contours**, the topography of the land within the plan area is primarily flat, with gradual sloping from east to west. The highest point is at an elevation of 631.1 m (within the eastern portion of the N.E. 1/4 SEC.1-55-22-4), while the lowest elevation is 624.1 m (within the eastern portion of the S.W. 1/4 SEC.2-55-22-4). The maximum elevation difference across the entire plan area is approximately 7.0 m.

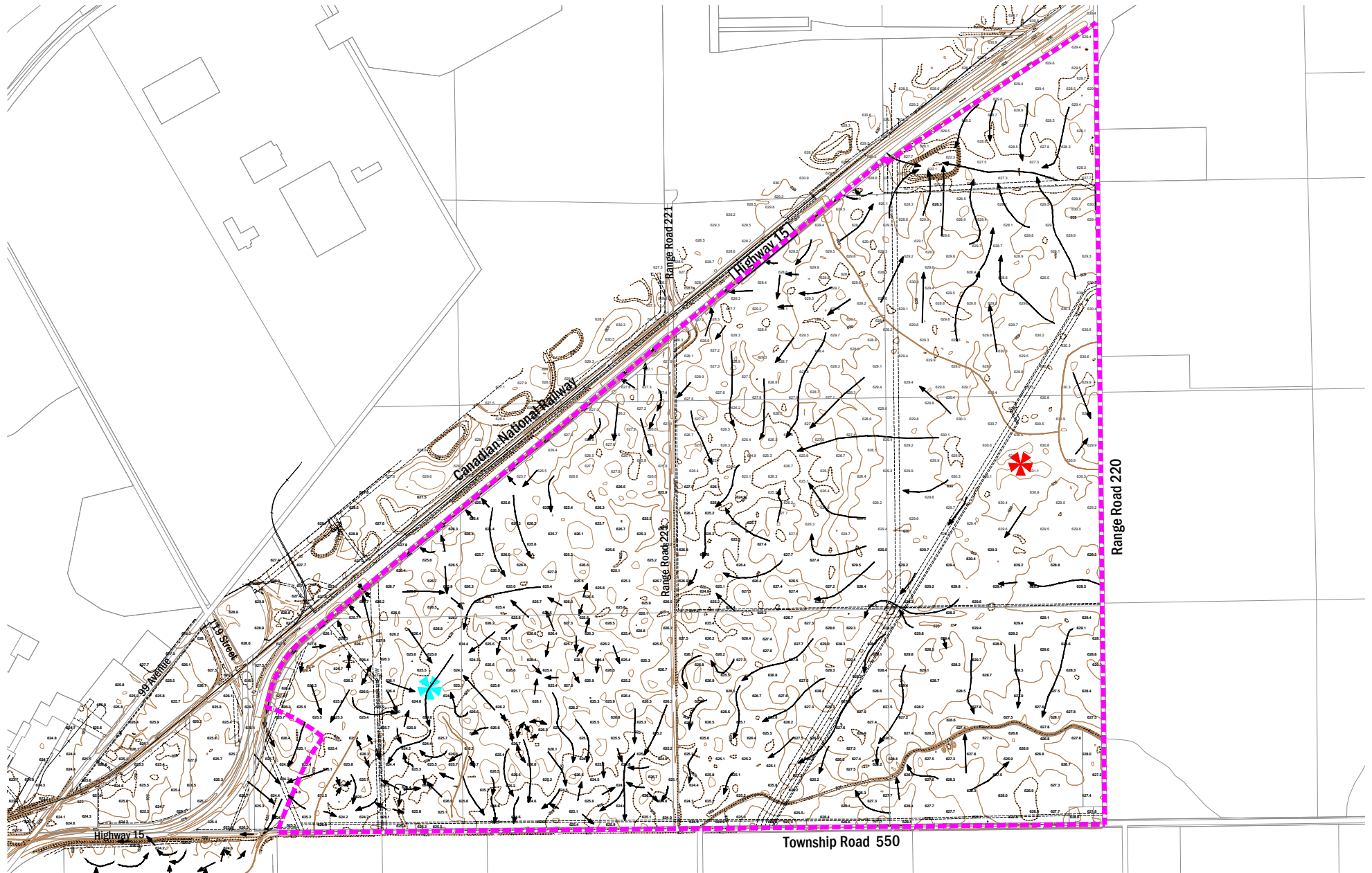
The majority of the land within the plan area has been cleared of vegetation and is under cultivation. However, there are several depressional areas loosely scattered throughout the plan area and a large tree stand in the north-east corner. Stantec Consulting Ltd. undertook a preliminary ecological assessment of these features, described in Section 3.2 below, to provide a preliminary baseline inventory of site features.

3.2 PRELIMINARY ECOLOGICAL ASSESSMENT

The ASP is located within the Parkland Natural Region and Central Parkland Subregion. The Parkland Natural Region is a transition vegetation zone, characterized by fescue grassland interspersed with pockets of aspen forest and mixed wood forest. The Central Parkland Subregion typically consists of groves of poplar intermixed with grasslands dominated by rough fescue. As part of the ecological assessment, a site reconnaissance was conducted in the summer 2008. This investigation identified a total of 3 wetlands (defined as having standing water and/or the presence of hydrophilic vegetation), a tree stand and a drainage course. Two of the wetlands, identified as Wetland (W1) and Wetland (W2) on **Figure 4.0 – Natural Site Features and Man-Made Constraints**, have been classified as intermittent bodies of water. Both wetlands are at low-lying elevations and are absent of distinct hydrophilic vegetation such as cattails, sedges, rushes and distinctive soils usually characteristic of higher order wetland systems. It is likely that these areas contain open water during portions of the wet season and would seldom hold water for prolonged periods of time. No wildlife was observed at either of these locations. Therefore, given their low-lying elevations, it is suggestive that the primary function of these wetland features would be as a surficial run-off storage feature.

The third wetland, Wetland (W3), did not appear on the landscape until after 1996 and is a large, open water feature with steep banks and no outlying fringe of vegetation, suggestive of a man-made feature. However, various waterfowl species were identified using the area.

The existing tree stand is located in a portion of the NE and SE ¼ Sec 12-55-22-W4M, and is identified as “Tree Stand”. This area has a large contiguous stand that contained healthy mature balsam poplar with a thick willow understory, a meadow-like interior consisting of reed canary



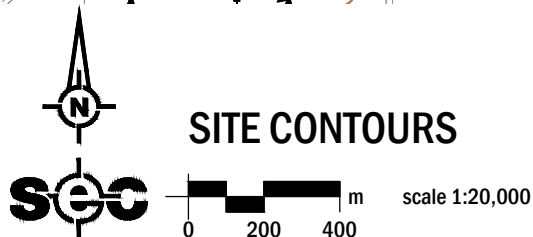
LEGEND

-  Low Point (624.1m)
-  High Point (631.1m)
-  Existing Drainage Divide
-  Existing Drainage Direction
-  ASP Boundary

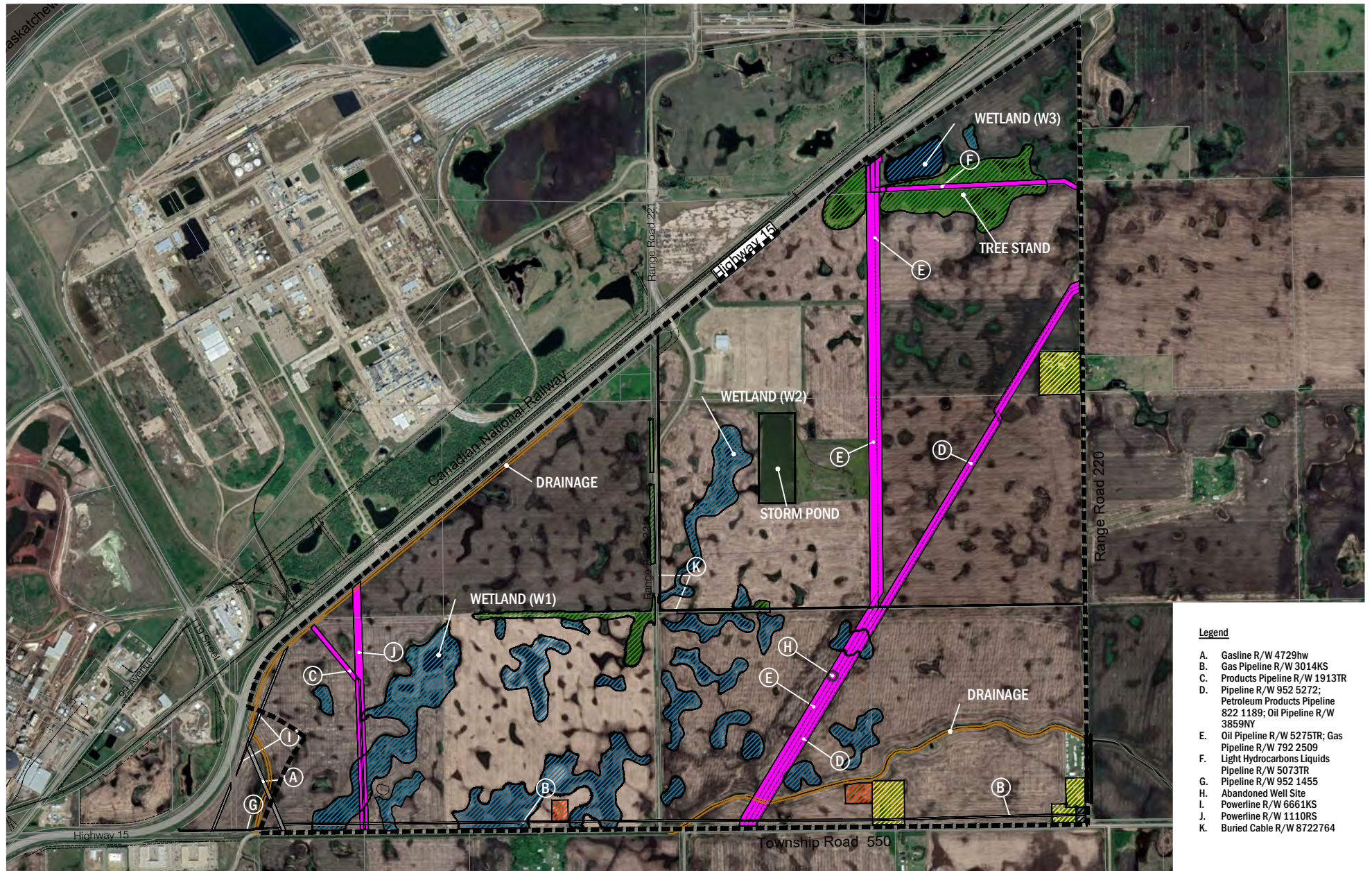
JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN
CITY OF FORT SASKATCHEWAN

225-17015-01-PRF003.DWG
Jjurinic August 18, 2021

FIGURE 3



JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN



JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN
CITY OF FORT SASKATCHEWAN

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

grass. Surrounding the stand were intermittent depressional areas that could potentially hold water for portions of the year. The preliminary site visit suggests that the stand is sustainable and a permanent feature on the landscape. A review of historical air photos revealed that the woodlot has been present on the landscape as a depressional area since 1949 and it appears vegetation has been associated with it since 1962. In addition, a variety of wildlife species were observed throughout the stand, either directly or indirectly, including migratory birds and the presence of deer were indicated.

The drainage course runs from the southwest corner of the SW ¼ 1-55-22-W4M to the east of the SE ¼ 1-55-22-W4M, and has been evident on the landscape since 1949. The channel appears to be a natural creek, which has been heavily modified over time. The historical air photo review indicates that the drainage channel likely contains water during parts of the year. Further investigation of the channel would be required prior to any development if additional modifications are proposed.

Based on the ecological assessment, Wetlands (W1) and (W2) have been heavily modified through agricultural practices over time, while Wetland (W3) appears to be a man-made feature. If (W1), (W2) or the drainage course, are to be conserved, it is recommended that a buffer be implemented around the perimeter to protect wildlife habitat and water quality within the wetland. Due to historical agricultural activities, it is also recommended that restoration activities occur within the buffer and/or riparian area to improve habitat quality. However, as Wetlands (W1) and (W2) are considered to have low ecological value, they may not require compensation under the Provincial Wetland Restoration/Compensation Guide (Alberta Environment 2007). If compensation is required it should be done in accordance with Alberta Environment policies and procedures.

3.3 EXISTING AND SURROUNDING USES

3.3.1 Existing Land Uses

The existing land uses within the plan area are identified in **Figure 4.0 – Natural Site Features and Man-Made Constraints**. The majority of the plan area is agricultural land, with few permanent structures. There are no other land uses in the plan. Specific land uses within the plan area include:

Agriculture

The majority of land in the plan area is under agricultural cultivation. There are no horticultural or intensive livestock operations within the plan area.

Residential

There are five existing dwellings within the plan area, each located on separately titled parcels. Associated with each parcel are also numerous outbuildings (i.e. grain silos, workshops, garages,

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etc.). Two of the homes have access directly to Range Road 220, while the other three access directly to Township Road 550.

3.3.2 Surrounding Land Uses

Land uses to the east and south are within the jurisdiction of Strathcona County, while land uses to the north and west are within the City of Fort Saskatchewan.

Agriculture

The predominant land use to the south and east are agricultural in nature. Directly adjacent to the plan area are five existing farmsteads accessing either Range Road 220 or Josephburg Road.

Industrial

Heavy industrial uses are located to the north and west of the plan area. These uses are petro-chemical in nature and include multi-national firms such as Dow Chemical Canada Inc, Agrium Inc and Sherritt International. These industries cover a large number of hectares and are accessed directly from Highway 15.

To the south-west of the plan area is the Alsten Lands Outline Plan area, containing a mixture of light and medium industrial lands on parcels ranging from 1.0 ha to 2.0 ha in area. Servicing of the first phase of development began in the summer of 2008, with a total plan area consisting of approximately 123 ha (304 ac).

3.3.3 Natural Constraints

There are few natural constraints to development of these lands for development purposes. The constraints as they are present today include:

Drainage Course

As detailed in Section 3.2, there is an existing drainage course which traverses from the southwest corner of the SW ¼ 1-55-22-W4M to the east of the SE ¼ 1-55-22-W4M. The channel is a tributary of Ross Creek, originating further east in Strathcona County, and has been heavily modified and re-channeled over time. The drainage course continues for approximately 1 mile into the southeastern portion of the plan area, eventually crossing to the south side of Township Road 550 (outside of the plan area) and continuing west until teeing into Ross Creek approximately 1km south of the North Saskatchewan River.

Based on the preliminary findings of the Ecological Assessment outlined in Section 3.2, further investigation will be required if modifications are proposed to the drainage course (i.e. with respect to compensation). At a minimum, appropriate setbacks to the channel should be observed based upon the minimum requirements of the Municipal Government Act and the Subdivision and Development Regulations at the time of detailed Outline Plan preparation. As required by the City,

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geotechnical investigations should be undertaken prior to subdivision to determine the suitability of the lands adjacent to the channel for more intensive industrial development.

Wetlands/Treed Area

As discussed in Section 3.2, there is an existing tree stand and three wetland areas existing in the plan area. The wetland areas have been heavily modified over time and are deemed to have low ecological value. The tree stand has been deemed to be a sustainable and permanent feature on the landscape and is recommended for retention.

3.3.4 Man-Made Constraints

The significant man-made constraints within the plan area are shown on **Figure 4.0 – Natural Site Features and Man-Made Constraints** and are detailed below:

Oil, Gas and Petro-Chemical Pipelines

There are numerous pipeline right-of-ways that pass through the plan area. In total there are seven (7) distinct pipeline corridors, containing a total of 22 separate pipelines. **Table 1 – Pipeline Information Summary** provides additional details regarding the pipelines.

The pipeline corridor identified as “A” contains three operating ATCO Gas and Pipelines Ltd natural gas pipelines, is situated within an approximately 15m right-of-way and is located in the extreme southwest corner of the plan area.

Pipeline corridor “B” contains two operating ATCO Gas and Pipelines Ltd natural gas pipelines and is located within a 6m wide right-of-way. This right-of-way is approximately 20m north of the north boundary of Josephburg Road and extends east to west for approximately 2 miles along the south portion of the plan area.

Pipeline corridor “C” contains three operating Keyera Energy Ltd high pressure pipelines within a right-of-way that varies in width from 6m to 18m. A portion of the corridor is within an existing power line right of way, and then bends to the northwest where it crosses to the north side of Highway 15.

The largest pipeline corridor (identified as “D” and “E”) originates in the south central part of the plan area and is approximately 66m in width, diverging into two separate corridors (48m in width to the north and 32m in width to the north-east). This corridor contains pipelines belonging to Nova Chemicals, BP Canada Energy Company, Alberta Ethane Development Company, Suncor, Praxair, Shell Canada and Access Pipeline. All of the pipelines contain products that are under extremely high pressures.

Pipeline corridor “F” contains two operating BP Canada Energy Company high pressure pipelines within an 18m wide right-of-way. The corridor enters the plan area from east of Range Road 220,

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crossing through the centre of the treed area, before bending sharply to the north and crossing Highway 15.

Pipeline right-of-way “G” contains one operating Praxair high pressure pipeline within a 5m wide right-of-way. The corridor enters the southwest corner of the plan area from south of Josephburg Road, heading west before crossing to the north side of Highway 15.

Air Products is currently in the application process to receive approval for the construction of two pipeline segments through the plan area, beginning at their existing facilities in the refinery row area of Strathcona County just outside Edmonton to end at the Williams Energy (Canada) Inc. facility north of the ASP. A significant portion of the right-of-way proposed is adjacent to the existing “D” and “E” pipeline corridors, along with a lateral portion adjacent to the “G” corridor. The pipelines would be to transport hydrogen gas containing no hydrogen sulphide. These alignments will be confirmed upon approval by the ERCB and will be respected within any Outline Plan or detailed subdivisions which are affected.

As the ASP is adjacent to heavy industry and contains a significant number of existing pipelines, it is important to recognize the potential for additional pipeline infrastructure within or adjacent to existing corridors within the plan area.

Historically, the City has provided policy direction regarding the joint use of utility corridors. This ASP continues to encourage the joint use of utility pipeline corridors, transmission lines, and other utility right-of-ways and structures of a compatible nature to minimize adverse visual, environmental, or safety impacts, as well as to minimize the fragmentation of properties.

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Table 1: Pipeline Information Summary

License #	Licensee	Status / Substance	Operating Pressure (kPa)	Utility Right of Way Plan	Map Reference ID
1826-59	ATCO Gas and Pipelines (South)	Abandoned/ Natural Gas	0		
4932-1	ATCO Gas and Pipelines (South)	Operating/ Natural Gas	4,450		
1826-61	ATCO Gas and Pipelines (South)	Operating/ Natural Gas	3,450	Gasline R/W 4729HW	Pipeline Corridor "A"
1826-24	ATCO Gas and Pipelines (South)	Operating/ Natural Gas	3,450		
9453-1	ATCO Gas and Pipelines (South)	Operating/ Natural Gas	3,450	Gas Pipeline R/W 3014KS	Pipeline Corridor "B"
1826-25	ATCO Gas and Pipelines (South)	Operating/ Natural Gas	3,450	Gas Pipeline R/W 3014KS	Pipeline Corridor "B"
8594-6	Keyera Energy Ltd	Operating/ High Vapour Pressure Products	4,960		
8478-6	Keyera Energy Ltd	Operating/High Vapour Pressure Products	6,230	Products Pipeline R/W 1913TR	Pipeline Corridor "C"
8588-7	Keyera Energy Ltd	Operating/High Vapour Pressure Products	4,930		
34335-1	Suncor Energy Inc	Operating/Carbon Dioxide	7,290		
27896-3	Praxair Canada Inc.	Operating/Miscellaneous Gases	6,800	Pipeline R/W 952 5272	
19780-23	Shell Canada Limited	Operating/Low Vapour Pressure Products	9,930	Petroleum Products Pipeline R/W 822 1189	Pipeline Corridor "D"
19780-4	Shell Canada Limited	Operating/Low Vapour Pressure Products	9,930	Oil Pipeline R/W 3859NY	
46674-30	Access Pipeline Inc.	To be constructed/Low Vapour Pressure Products	9,930		
43179-1	Nova Chemicals Corporation	Operating/High Vapour Pressure Products	9,930		
14763-36	Nova Chemicals Corporation	Operating/High Vapour Pressure Products	9,930		
9570-1	BP Canada Energy Company	Operating/High Vapour Pressure Products	9,930	Oil Pipeline R/W 5278TR Gas Pipeline R/W 792 2504	Pipeline Corridor "E"
13023-16	Alberta Ethane Development Company	Operating/High Vapour Pressure Products	9,930		
16967-1	Nova Chemicals Corporation	Operating/High Vapour Pressure Products	9,930		

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License #	Licensee	Status / Substance	Operating Pressure (kPa)	Utility Right of Way Plan	Map Reference ID
22037-1	BP Canada Energy Company	Operating/Low Vapour Pressure Products	9,930	Light Hydrocarbons Liquids Pipeline R/W 5053TR	Pipeline Corridor "F"
9570-11	BP Canada Energy Company	Operating/High Vapour Pressure Products	9,930		
27896-2	Praxair Canada Inc	Operating/Miscellaneous Gases	6,800	Pipeline R/W 952 1455	Pipeline Corridor "G"

Powerline / Telephone Rights-of-Way

There are two existing powerline right-of-ways within the southwestern portion of the plan area, and as described in **Table 2 – Utility Right of Way Information Summary**. Powerline right-of-way "H" is situated within a 30.5m wide corridor and contains a series of 2 parallel above ground transmission towers which originate at an existing sub-station at the northwest corner of the 114 Street / Highway 15 intersection. The transmission lines extend from the sub-station east through the Alsten Lands Outline Plan, then turn northwards, crossing Township Road 550 and entering the plan area approximately 400m east of Range Road 223 and in the approximate centre of the S.W.¼ Sec. 2-55-22-W4, where they proceed northwards and cross to the north side of Highway 15 and continue to the northeast paralleling the CN Railway mainline.

The second powerline right-of-way, identified as "I", is an underground powerline contained within a 9.2m wide corridor in the extreme southwestern corner of the plan area. The right-of-way enters the plan area from the corner of Lot 1, Block 1, Plan 0820100 and travels in a northeast direction through the S.W.¼ Sec. 2-55-22-W4, ultimately crossing Highway 15 and continuing north.

It is forecasted that there will be a major increase in the demand for electricity as industrial development continues in the Heartland area. As such, the electrical transmission system was expanded to meet this growing demand. The expansion of the transmission system involved the construction of a new high voltage transmission line connecting power generation in the Keephills / Wabamun area (west of Edmonton) to the Heartland region. The transmission line runs within the transportation utility corridor (TUC) through southeast Edmonton and along the western boundary of Strathcona County (west of Sherwood Park), the transmission line then extends north from the TUC into Sturgeon County finally terminating at the Heartland substation. The transmission system is now energized and is capable of supply electricity to development in the region.

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Right-of-way “J” is an existing buried, telephone cable within a 5m wide right-of-way. The corridor begins in the plan area at the intersection of Range Road 221 and Highway 15, traveling southward on the west side of N.W.¼ Sec. 1-55-22-W4 for approximately 1km, eventually heading east 1.6km and out of the plan area.

Table 2: Utility Right of Way Information Summary

Owner	Utility Right of Way Plan	Map Reference ID
Altalink Management Ltd	Powerline Right of Way 6661KS	Utility Corridor “H”
Altalink Management Ltd	Powerline R/W 1110RS	Utility Corridor “I”
Alberta Government Telephones	Buried Cable R/W	Utility Corridor “J”

Utility Right-of-Ways

The plan area does not contain any municipal infrastructure improvements such as sanitary, storm or water mains.

The developing Alsten Lands Outline Plan light and medium industrial park to the southwest of the plan area will eventually construct some of the infrastructure required to support servicing within the plan area. Approximately 189.44 ha of the plan area west of Range Road 221 can be fully serviced; while the remaining plan area east of Range Road 221 will have a reduced level of servicing such as a trickle feed water supply, and a low pressure sanitary sewer network.

Highways and Roadways

The plan area is bound on the north and west by Highway 15, a four lane divided urban expressway and part of the provincially designated high load corridor system. Access to Highway 15 from the plan area is currently available from three separate intersections located at Range Roads 220, 221 and Township Road 550.

The south boundary of the plan area is Township Road 550, an improved, two lane rural road under the City of Fort Saskatchewan’s municipal jurisdiction. The roadway terminates slightly west of the plan area where it intersects with Highway 15. The eastern boundary of the plan area is Range Road 220, an unimproved two lane rural roadway. The municipal boundary between the City of Fort Saskatchewan and Strathcona County is on the west side of the Range Road 220 right-of-way. All access to Range Road 220 is controlled solely by Strathcona County. The only internal roadway is Range Road 221, again an unimproved two lane rural roadway, extending north-south in the ASP.

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Josephburg Airport

A majority of the eastern and central portions of the plan area are affected by Strathcona County's Josephburg Airport Vicinity Overlay zone. This overlay zone applies restrictions to areas in proximity to the airport to buildings and structures and ensures continuing flight safety and air navigation for the airport by prohibiting uses within the zone that would cause excessive radio interference, conflict with aircraft movements, create a fire or explosives hazard, accumulate any material or waste edible by, or attractive to, birds or development that may create glare or lighting that interferes with lights necessary for aircraft landing or taking off.

3.3.5 Parks, Recreation, Open Space and Trails

There are currently no developed parks, recreation facilities or trail systems within the plan area. There is potential for extending the City's primary trail network into the plan area, as identified in the Recreation, Culture and Parks Facilities Master Plan document. Further details should be considered through development of subsequent Outline Plans.

3.4 TRANSPORTATION

The following discussion outlines the existing transportation characteristics of the plan area including highways and roadways.

3.4.1 Highway 15

Highway 15 is a four lane divided urban expressway with a concrete median separating opposing traffic for the majority of its length adjacent to the plan area. The Highway is the main transportation route into the City from the north, intersecting with Highway 21 within the City limits. At the Highway 21/Highway 15 junction, Highway 15 continues to the northeast, accommodating the major transportation into the Heartland area with a 70km/h posted speed limit. In 2005 the Average Annual Daily Traffic west of Range Road 220, as it traveled parallel to the plan area, was in excess of 9,300 vehicles. There are four existing traffic signals impacting the plan area along Highway 15 at the intersections with Township Road 550, the Dow main gate (east of 119 Street), Range Road 221, and Range Road 220.

The Strathcona Area Industrial Heartland Transportation Study Update was completed for Strathcona County by Stantec in 2007. Although the area studied was for industrial lands within the boundaries of Strathcona County, the intersection of Highway 15 and Range Road 220 is the eastern boundary of the City and the Highway is an important link into the region, and as such was impacted by this study.

The study, as it affects this ASP, was intended to develop a conceptual major internal road network for the area and establish the characteristics of the road network (major intersection configurations, right-of-ways). The issues identified in the study concluded that heavy traffic

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volumes on Highway 15 in peak hours cause significant delay at signals through Fort Saskatchewan, and that maintaining reasonable traffic flows through the City is desired.

Key findings and recommendations highlighted in the study indicated the intersection of Highway 15 with Range Road 220 was a location for potential major intersection improvements. The intersection improvements identified for the intersection of Highway 15 with Range Road 220 have since been completed. Eventually as development evolves, a grade separated interchange at the Highway 15/Range Road 220 intersection would be required to provide adequate capacity for the long-term Daily Operational and major Turnaround traffic demands.

Based on the study, it was recommended that at a minimum traffic signals through the study area as well as through the City be controlled through a centralized traffic control system. Although not a consideration of the study, a more robust approach would be the development of a free-flow by-pass route around the City.

Strathcona County has also undertaken a Functional Planning Study of the Highway 15 corridor between Range Road 220 and Highway 830 north in order to determine medium and long-term needs of the highway, inclusive of future grade-separated intersection locations and their possible footprints. This study is ongoing.

3.4.2 Fort Saskatchewan By-Pass

The Capital Region 10-Year Provincial Highways Plan, a follow up on the Capital Region Integrated Growth Management Plan Report, was released by the Alberta Government to the public in August 2008. The document outlined the province's transportation funding policy, the municipal grant programs available and the 10-Year highways plan. The plan recognized the province's priorities with respect to Capital Region highway improvements. Within and in proximity to the plan area, the plan outlined the following improvements that directly or indirectly impact the plan area:

- Intersection upgrade at the Highway 15 / Range Road 220 intersection;
- The Fort Saskatchewan by-pass highway, consisting of a new 4-lane roadway and two new interchanges; one at the south end of the City intersecting with Highway 21 and another at the intersection of the proposed by-pass with Highway 15 and Secondary Highway 830 east of the City.

The proposed Fort Saskatchewan by-pass south of the plan area presents possible opportunities to access the south part of the plan, thus creating additional prospects for end users and increasing accessibility. The by-pass alignment remains conceptual at this time; however traffic modeling undertaken by the City indicates that the bypass will be required by 2022. As development progresses eastwards in the plan area a more detailed right-of-way may be available, and therefore prior to approval of an Outline Plan(s) for the eastern portion of the plan

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area, the alignment of the by-pass should be confirmed to ensure consistency with regional transportation facilities.

It should be noted that the Capital Region Board Integrated Regional Transportation Master Plan identifies a new river crossing south of Fort Saskatchewan, connecting Highway 28 with Highway 21 and Township Road 540. This river crossing and roadway may, at some future point, constitute part of the Fort Saskatchewan by-pass. For more information see Figure 3 of the Integrated Regional Transportation Master Plan.

3.4.3 Township Road 550

Township Road 550 is currently a paved two-lane, rural cross-section roadway, forming the southerly boundary of the plan area. The roadway has been designated as an arterial roadway classification by the MDP, however at this time it operates as a rural roadway.

3.4.4 Range Road 221

Range Road 221 is an 8m wide paved rural road that is contained within the original 20m (66 ft.) government road allowance. The ASP development concept proposes to re-align the majority of Range Road 221, ultimately requiring that the majority of the right-of-way be closed and consolidated with adjacent parcels. The existing intersection locations at Highway 15 and Township Road 550 will remain, and will be upgraded as development warrants and as per future transportation assessment and analysis.

3.4.5 Range Road 220

Range Road 220 is currently an 8m wide gravel rural road that is contained within the original 20m (66 ft.) government road allowance and is operated and maintained by Strathcona County. The MDP identifies this with an arterial roadway designation, however at this time there is a minimal volume of traffic. As development progresses towards this part of the plan area, transportation analysis and consultation with Strathcona County will determine the required width of the roadway, cross section, right-of-way requirements and any access opportunities.

3.4.6 Dangerous Goods Routes

Highway 15 is the only designated dangerous goods route in proximity to the plan area.

3.5 MUNICIPAL SERVICES

The City of Fort Saskatchewan Conceptual Servicing Study, Final Report, June 2006, was prepared by Stantec Consulting Ltd. to provide a conceptual level servicing study for the Alsten Lands Outline Plan, as well as the area contained within this ASP. The conceptual study addressed water, sanitary and storm servicing issues within these areas. As part of the review and update to the ASP in 2013/2014, a review of the Servicing Study was completed, and an

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alternate servicing concept was developed by Scheffer Andrew Ltd. The revised servicing options are detailed in Section 4.8.

3.6 EMERGENCY SERVICES

3.6.1 Fire, Police, Ambulance and Disaster Services

The City of Fort Saskatchewan's Disaster Services Agency provides fire and disaster services to the plan area, while emergency medical services are provided by Alberta Health Services. The plan area is covered by the City's Fire Hall at the corner of Highway 15 and 101 Street (approximately 2 miles southwest of the plan area), where part-time fire members, under the direction of a full-time Fire Chief, respond to incidents involving the need for fire suppression, rescue, (motor vehicle collisions, low angle rope rescue), clean up of environment spills or mutual aid to surrounding communities. Two fully equipped ambulances are also located at the main fire station to provide emergency medical services to the City.

Additionally, Strathcona County's Heartland Hall (Station #4) is located approximately 2 miles north-east of the plan area along Highway 15. This station provides full-time protection for heavy industry in the area, with advanced industrial level fire and dangerous goods support.

The RCMP provides police services to the City of Fort Saskatchewan from the central station located west of Highway 15 on 99 Avenue. Additionally, Heartland Hall also serves as a satellite office for the RCMP, special constables and bylaw officers working in north Strathcona County.

The City of Fort Saskatchewan Disaster Services Agency works closely with industrial and municipal partners and all other stakeholders to prevent incidents from occurring that could negatively impact our personal safety.

3.6.2 Emergency Preparedness

The City of Fort Saskatchewan is a member of Northeast Region Community Awareness and Emergency Response (CAER), a partnership of more than 40 community-minded industries and municipalities dedicated to emergency response and education initiatives in the region.

A key initiative for the organization is the Community Notification Program. This program consists of (1) an information line residents can call to hear current information about site activities, and (2) notification system Northeast Region CAER members can use to contact residents to notify them of more serious situations in their immediate vicinity.

3.7 INDUSTRIAL RISK ASSESSMENT

The City of Fort Saskatchewan retained the services of Doug McCutcheon and Associates Consulting to undertake an Industrial Risk Assessment (IRA) for the plan area in 2009. The objective of the IRA was to identify and assess what types and levels of risk are in proximity to

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

the plan area as a result of existing and potential heavy industrial activities. The purpose of the assessment was to provide recommendations as to the type and intensity of uses that could be appropriate in the plan area. Summary and selected excerpts from this analysis are provided below.

The plan area is in proximity to, and potentially impacted by, industrial activity from several companies in the area, including Sherritt Gordon, Marsulex, Shell Canada and Dow Chemical. In addition, nearby railway and roadway infrastructure are used to transport numerous hazardous materials to and from these sites. The IRA characterizes the risk associated with these into five separate activities that could create incidents that would be typical for these industries, including (1) toxic release, (2) flammable release, (3) explosion damage, (4) pipeline incidents and (5) a boiling liquid expanding vapour explosion (BLEVE).

The analysis for risk involves the consequence of an incident and the probability of it happening. The result is calculated in terms of the potential for fatalities and then compared to an acceptable level of risk as defined through the Major Industrial Accidents Council of Canada (MIACC) criteria for risk based land use planning.

The MIACC risk acceptability criteria describes the level of risk for a member of the public who is inadvertently exposed to an industrial incident must be better than a 1×10^{-6} (1 in a million) chance of a fatality. However as one moves closer to the risk source, the level of risk increases, until it reaches the maximum allowable of 1×10^{-4} (100 in a million) chance of a fatality.

The IRA provides a breakdown of the probability that an industrial accident would occur in proximity to the plan area, and concludes that these values are within an acceptable range for light industrial and commercial zoning according to the MIACC criteria. Sound design, collection of leaks, fire protection systems, operational procedures, emergency planning and other activities will serve to effectively manage the risk to that acceptable level.

The IRA concludes that each of the five scenarios outlined above would have varying degrees of impact on the plan area, as each can create consequences that can potentially cause fatalities. In order to illustrate these, the IRA provides “risk contours” that define the risk level based on distances of 0 km, 1.5 km and 3.5 km from the property line of adjacent industry. For example a 1×10^{-4} (100 in a million) risk contour corresponds to 0 km at the property line of industry. At a distance of 1.5 km from the property line would be the 1×10^{-5} (10 in a million) risk contour. At 3.5 km from the heavy industry property line is the 1×10^{-6} (1 in a million) risk contour.

Based on the MIACC risk based land-use criteria, the IRA recommends that allowable land uses in the plan area be as follows:

- 0 km to 1.5 km (1×10^{-4} to 1×10^{-5}): light to medium industrial land uses such as manufacturing, warehousing and open space (e.g. parkland, golf courses, etc.)
- 1.5 km to 3.5 km (1×10^{-5} to 1×10^{-6}): commercial and office type uses

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Thus, in order to minimize risk, commercial and office type uses should be no closer than 1.5 km to the property line of heavy industry, and light or medium industrial uses to be primarily between 1.5 km and heavy industry.

The IRA recommends the 1.5 km and 3.5 km as appropriate separation distances for managing land uses in the plan area. However, there is an opportunity to incorporate a limited amount of highway commercial uses within the 0 km to 1.5 km risk contour provided that certain safety measures are implemented in the design, construction and operation of the buildings. For example, new development could be designed and built (e.g. structural, mechanical, HVAC, etc.) to have a calculated risk equal to or lower than the 1×10^{-5} risk criteria at the 1.5 km distance. Site/development-specific risk assessment would demonstrate to the City's satisfaction that the lesser setback is warranted by the incorporation of additional safety measures. Other safety measures may include provision of in-place sheltering, shielding, evacuation programs and ventilation shut-off systems.

As part of the Josephburg Road North Industrial Area Structure Plan review and update, the City of Fort Saskatchewan retained the services of Doug McCutcheon and Associates Consulting, to undertake a Risk Review of the proposed amendments to the plan area in 2014.

The Risk Review reiterates that medium to light industrial uses are appropriate for the plan area and the Highway 15 Vicinity Overlay. Should uses such as office buildings be incorporated into the Highway 15 Vicinity Overlay, safety measures such as; HVAC control and isolation systems using monitors to initiate shutdown, windows that cannot open, and doors capable of sealing tightly, should be incorporated into the building design in order to provide an effective means of sheltering in place should a toxic release happen.

The Risk Review identifies no concerns around acceptable levels of risk in relation to utilizing a trickle water system to service medium to light industrial uses; keeping in mind that a separate fire water system will be utilized for the areas serviced by the trickle water system.

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4.0 Land Use Concept, Objectives and Policies

4.1 DEVELOPMENT CONCEPT

A Development Concept is shown on **Figure 5.0 – Land Use Concept**, illustrating a conceptual land use and development framework for the preparation of more detailed Outline Plans and design briefs that need to be approved by the City of Fort Saskatchewan prior to consideration of detailed subdivision and zoning applications.

The Development Concept and associated goals, objectives and policies for the Josephburg Road North Industrial ASP have been determined with regards to the following:

- Policies contained within the City of Fort Saskatchewan MDP, the City of Fort Saskatchewan's Alberta's Industrial Heartland ASP and other relevant plans and studies;
- Natural and man-made constraints;
- Existing and planned improvements to the transportation network;
- Utility servicing constraints and opportunities;
- Economic and strategic development goals of the City of Fort Saskatchewan;
- Environmental considerations;
- Long range planning practices that support logical, cost-effective and beneficial development.



NOTE: EXACT LOCATIONS OF MUNICIPAL RESERVE, STORMWATER PONDS AND MEDIUM INDUSTRIAL LOTS TO BE DETERMINED AT TIME OF SUBDIVISION

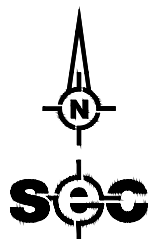
LEGEND

- Medium Industrial
- Highway 15 Vicinity Overlay
- Future Road Right of Way

- Municipal Reserve
- Environmental Reserve
- Stormwater Management Facility

- Pipeline/Utility Corridor
- Potential Interchange
- Area Structure Plan Boundary

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN
CITY OF FORT SASKATCHEWAN



DEVELOPMENT CONCEPT

0 200 400 m scale 1:20,000

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN

4.2 INDUSTRIAL DEVELOPMENT

Goal: To create a functional and sustainable industrial area in which future development is complementary to, and compatible with, the surrounding heavy industry and agricultural uses, roadway network, and important site elements.

Objective	ASP Policy	Implementation
4.2.1 To provide for medium industrial land that will be available to meet the diverse needs of prospective industries.	4.2.1(a) Lands in the ASP designated for medium industrial development will be accommodated through application of the IM-Medium Industrial District.	4.2.1(a) Figure 5.0 – Land Use Concept will guide the future application of medium industrial land uses.
	4.2.1(b) To allow flexibility in the size of parcels in order to accommodate the space requirements of respective users.	4.2.1(b) The size of the parcels required to accommodate user demands shall be pursued at the Outline Plan, rezoning and subdivision phases.
	4.2.1(c) To provide industrial and business opportunities to serve the employment needs of the Industrial Heartland, the City of Fort Saskatchewan and the Capital Region.	4.2.1(c) Uses which are permitted within the existing IM-Medium Industrial District will be applied.
4.2.2 Locate and orient industrial parcels along roadways to take advantage of the high visibility and convenient access opportunities.	4.2.2 To ensure internal roadway circulation increases visibility and provides appropriate accesses to the industrial parcels.	4.2.2 • Figure 5.0 – Land Use Concept illustrates industrial uses with access and frontage along the internal roadways. • The internal roadway circulation pattern will be refined and confirmed at the Outline Plan, rezoning and subdivision phases with regards to the development and staging pattern and logical extension of infrastructure, and may require the completion of detailed

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Objective	ASP Policy	Implementation
		Transportation Impact Assessments (TIA).
4.2.3 To apply an appropriate buffer width to protect the existing drainage course from encroaching industrial development.	4.2.3 To protect the existing drainage course through the plan area.	4.2.3 Appropriate buffers, setbacks and/or landscaping requirements will be determined at the Outline Plan, subdivision or development permit stage at the discretion of Planning & Development Services.
4.2.4 To encourage industrial land uses that support the Alberta's Industrial Heartland, are complementary and compatible with Heavy Industry and have adequate infrastructure to meet current and future industrial needs.	4.2.4 Development shall be intended primarily for uses that are complimentary to heavy industrial land uses in proximity, with secondary emphasis on limited highway commercial uses.	4.2.4 Development shall comply with the IM-Medium Industrial District of the Land Use Bylaw.

Discussion

The land use identified for the entire ASP, consisting of approximately 590 ha (1,459 ac) ha (ac) of land, is for medium industrial purposes. Medium industrial lands are situated as a buffer between the existing heavy industrial development north of Highway 15 and the agricultural lands to the south and east, which is in Strathcona County's boundaries. Note that the lands subject to the Medium Industrial - Highway 15 Vicinity Overlay may permit uses that differ from those traditionally found in medium industrial areas. The Land Use Bylaw currently specifies a minimum parcel size of 0.4 ha (0.99 ac) for medium industrial development.. Parcel sizes will be identified at the Outline Plan stage, approved through the subdivision process and confirmed at time of legal plan endorsement. The plan intends to allow landowners the flexibility to create a variety of parcel sizes, which are appropriate to the district and would facilitate the creation of economical and marketable industrial land development.

Medium industrial uses are located such that access and frontage are along the internal roadway system to increase site visibility and provide for appropriate access opportunities. Where possible direct access to either Township Road 550 or Range Road 220 may be possible, and would require consultation and/or approval with Strathcona County and the City of Fort Saskatchewan.

The existing drainage course in the south-east portion of the plan area has been heavily modified and re-channeled over many years. As it carries drainage flows from beyond the plan area (Strathcona County) to the North Saskatchewan River, it should be protected from abutting development. The plan identifies and provides policy for its protection and the application of

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appropriate buffering and setbacks, determined through the Outline Plan and subdivision application processes. A more detailed analysis may be required prior to subdivision approval.

While the focus of the plan is to facilitate primarily industrial development, a limited amount of commercial oriented land uses may be accommodated within a Medium Industrial – Highway 15 Vicinity Overlay designation. The plan illustrates conceptually the location where the Overlay may be applied in consideration of visibility and accessibility from Highway 15 and where access will not interfere with the flow of traffic intended for industrial purposes. In order to accommodate commercial oriented land uses within the Medium Industrial - Highway 15 Vicinity Overlay it may be necessary to prepare a risk assessment to support proposed commercial oriented development.

The conceptual locations for medium industrial activities are illustrated on ***Figure 5.0 – Land Use Concept***.

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4.3 MEDIUM INDUSTRIAL – HIGHWAY 15 VICINITY OVERLAY

Goal: To provide opportunities for limited commercial oriented land uses, adjacent to Highway 15, which are compatible and complementary to heavy industrial development in proximity to the plan.

Objective	ASP Policy	Implementation
4.3.1 To provide opportunities for limited commercial oriented land uses immediately adjacent to Highway 15.	4.3.1(a) • Medium Industrial will be the primary land use in this area. • A Highway 15 Vicinity Overlay, with special provisions, will allow for the development of specific commercial oriented uses on lands designated for Medium Industrial.	4.3.1(a) • Figure 5.0 – Land Use Concept will conceptually guide the future application of medium industrial uses, with provisions for limited commercial oriented land uses. • An update to the Highway 15 Vicinity Overlay in the Land Use Bylaw shall be prepared to reflect the amendments to this plan.
	4.3.1(b) Commercial oriented development will only be considered within the area identified as “Highway 15 Vicinity Overlay”, and shall not exceed ten percent (10%) of the gross developable area.	4.3.1(b) • Development shall comply with the Highway 15 Vicinity Overlay of the Land Use Bylaw. • The Highway 15 Vicinity Overlay shall be limited to 10% of the gross developable area.
4.3.2 To prohibit commercial developments which are not compatible with heavy industrial uses.	4.3.2 • Consideration of commercial oriented uses shall ensure compatibility, from a risk management perspective, with adjacent heavy industrial activities.	4.3.2 Planning & Development Services shall review all commercial oriented development against the Highway 15 Vicinity Overlay and at the Development Permit stage.
4.3.3 To implement risk management procedures to ensure that commercial oriented development does not restrict the operation or expansion of heavy industrial uses in proximity to the plan area.	4.3.3 • Appropriate safety measures may be required for new buildings in the plan area to ensure that the operation or expansion of adjacent heavy industrial uses will not be	4.3.3 The requirement for risk assessments/analysis of risk management programs/implementation of safety features shall be determined by Planning and Development

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Objective	ASP Policy	Implementation
	compromised by commercial oriented uses. • Risk Assessments may be required for any commercial oriented developments to ensure a calculated risk equal to or lower than the 1×10^{-5} risk criteria at the 1.5 km distance. • Additional safety measures may be required and could include provision of in-place sheltering, shielding, evacuation programs and ventilation shut-off systems.	Services and in consultation with Emergency Services.

Discussion

The land uses parallel and adjacent to the Highway 15 corridor are medium industrial in nature, allowing uses similar to those described in Section 4.2. However, the plan includes provisions for a limited amount of commercial oriented uses under a new Highway 15 Vicinity Overlay. The Overlay would permit a specific range of commercial type uses, at specific locations, within the medium industrial area adjacent to Highway 15. The commercial oriented uses are anticipated to include such uses as animal service facility (minor/major); business/office support services; commercial school; recreational vehicle/heavy equipment sales & rental; and professional services – office, which would require good visibility and accessibility to Highway 15. However, consideration of appropriate uses will ensure they are of the type that does not employ a significant number of people on site and are compatible with heavy industry.

The designation of the Highway 15 Vicinity Overlay within the plan area requires the implementation of a new overlay in the Land Use Bylaw to specifically address the type, intensity, location and risk analysis of compatible uses within this designation.

The areas suitable for these commercial oriented uses are illustrated paralleling Highway 15, and would be accessible only via the internal circulation network, with no direct access to Highway 15 permitted. The plan proposes approximately 63.0 ha, or approximately 11.8% of the gross developable area for potential commercial purposes. The plan area is in proximity to significant heavy industrial activity, both existing and proposed, to the north. The type and intensity of commercial uses adjacent to Highway 15 must be compatible with heavy industry and must be designed and operated to minimize the risk associated with the continued operation of these heavy industrial facilities.

Section 3.7 Industrial Risk Assessment outlines, at a minimum, the requirements for development of commercial oriented uses within the overlay. The intent is for site developments/buildings to be constructed and operated such that they provide safe and efficient evacuation of occupants and/or provide “shelter in place” protection or ventilation shut-off systems against potential risks

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associated with the heavy industry. Other regulations may be incorporated to ensure adjacent heavy industrial uses will not be compromised by the commercial oriented uses.

Site or development specific risk assessment analysis will be required for each new development within the Overlay to ensure compliance with the requirements of this section and to demonstrate to the City's satisfaction the uses proposed are compatible with heavy industry.

The conceptual location of the Highway 15 Vicinity Overlay and commercial oriented activities are illustrated on **Figure 5.0 – Land Use Concept**.

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4.4 UTILITY RIGHT OF WAYS

Goal: To ensure the integrity of existing pipeline and utility corridors by incorporating the right of ways, where feasible, into the development fabric of the plan area.

Objective	ASP Policy	Implementation
4.4.1 Protect pipeline and utility right-of-ways from encroachment by abutting uses.	4.4.1(a) Minor utility rights-of-way will be incorporated into development sites and protected by easement.	4.4.1(a) Easements to protect minor utility rights-of-way will be required as a condition of subdivision approval for the affected lands.
	4.4.1(b) Major utility rights-of-ways not already owned by the operator will be dedicated to the City as public utility lots.	4.4.1(b) Public utility lots to accommodate major utility rights-of-way will be required as a condition of subdivision approval for the affected lands.
4.4.2 To create appropriate buffers between operating pipelines and industrial uses.	4.4.2 Require minimum setbacks from industrial land uses and pipeline and utility corridors.	4.4.2 The minimum setback shall be in accordance with the guidelines of the Alberta Energy Regulators and relevant regulations specified in the Land Use Bylaw.
4.4.3 To recognize the potential for additional pipelines within or adjacent to existing corridors within the plan area.	4.4.3 At the Outline Plan stage determine the need for future pipeline infrastructure.	4.4.3 Outline Plans will be circulated to local industry to determine requirements for future pipeline infrastructure.
4.4.4 To integrate, where feasible, portions of the major utility rights-of-way and Storm Water Management Facilities as open space elements.	4.4.4 Portions of the major utility rights-of-way and the SWMF may incorporate multi-use trails and landscaping to enhance these lands as open space areas.	4.4.4 The provision of multi-use trails and associated landscaping will be reviewed at the Outline Plan stage and may be required as a condition of subdivision approval for the abutting lands.

Discussion

The plan area contains numerous pipeline and utility right-of-ways which convey high pressure flammable or volatile petrochemical products and high voltage electricity. These right-of-ways are currently legally registered in the name of the owner/operator of the respective utility and must be

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protected from encroachment by future uses. In the past, incidents have been caused by third party activities near to the pipelines, and as such these potential impacts must be taken into consideration by respecting existing right-of-ways and development setback distances.

The alignment and location of future pipelines or above ground power transmission lines is not known at this time. As there are a significant number of existing pipeline corridors currently traversing through the plan area, possible future pipelines within or adjacent to these may be considered. Through the Outline Plan and subdivision application stages adjacent industry should be notified to determine if their long range infrastructure requirements affect the land uses proposed for the area. In addition, during the development permit application stage, pipeline operators should be notified, in order to ensure that the specifically proposed development activity does not impact, nor is impacted by the pipeline operations.

Incorporating naturalized landscaping and/or multi-use trails along utility right-of-ways further encourages alternative forms of circulation by providing workers in the area opportunities to walk, cycle or roller-blade at various times during the workday. It also serves to better integrate these corridors into the plan area, while still allowing ease of access to the utility operators for maintenance purposes.

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4.5 ENVIRONMENTAL MANAGEMENT

Goal: To protect environmentally sensitive areas, where considered sustainable, and promote environmentally responsible and sustainable development practices.

Objective	ASP Policy	Implementation
4.5.1 To encourage the retention, incorporation and enhancement of sustainable wetland areas into the ASP.	4.5.1 Use wetland areas, where feasible, for stormwater management, thereby reducing infrastructure and servicing costs.	4.5.1 As Figure 5.0 – Land Use Concept conceptually illustrates the existing wetlands and drainage course may be integrated into the future stormwater management system, where feasible and environmentally sustainable, to achieve the ASP policy.
4.5.2 To provide adequate buffering between industrial land uses, the existing treed area in the north-east and drainage channel in the south-east part of the ASP.	4.5.2 Require as part of the preparation of the Outline Plan and Design Brief that buffers are integrated adjacent to industrial uses to protect and enhance existing natural features.	4.5.2 The location, width and type of buffer will be determined as part of the preparation of the detailed Outline Plan and Design Brief and to the satisfaction of Planning & Development Services.
4.5.3 To protect the existing treed area in the north-east corner of the plan area.	4.5.3 The treed area will be conserved as a natural area and passive open space.	4.5.3 The tree stand will be acquired by the City of Fort Saskatchewan through municipal reserve dedication, which will be achieved as a condition of subdivision of the affected lands.
4.5.4 Municipal Reserve Dedication	4.5.4 Take 10% of the Gross Developable Area to be subdivided in the form of municipal reserve land or cash-in lieu.	4.5.4 The amount, form (land or cash-in lieu) and location of municipal reserves will be confirmed through Outline Plan and subdivision applications.
4.5.5 Site Specific Municipal Reserve Dedication	4.5.5 Two municipal reserve parcels, approximately 2.95 ha in total size, are located in the southwest Plan area, north of Secondary Road 550 and southwest of 90 Avenue.	4.5.5 Extra topsoil from the surrounding development will be placed within these MR parcels. The site will accommodate tree plantings that will serve as a tree stand and

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Objective	ASP Policy	Implementation
		carbon sink. The site is not intended for public recreational use.

Discussion

A preliminary ecological assessment concluded the presence of three wetland areas within the plan area. Although each of these areas have been heavily modified over time, the opportunity for enhancement as storm water management facilities provides an ecologically sound and sustainable method of storm water treatment on site.

The large contiguous tree stand in the north-east corner of the plan appears to be a sustainable and a permanent feature on the landscape. A variety of wildlife species were observed throughout the stand, either directly or indirectly, including migratory birds and the presence of deer were indicated. In consideration of this, the plan designates the treed area for preservation as municipal reserve, with the exact boundary and area to be determined through the Outline Plan and subdivision process. The location of existing underground pipeline infrastructure in proximity to the treed area should be considered.

Municipal reserves will be primarily required as cash-in lieu at the time of subdivision. However, the preparation of Outline Plans may demonstrate the need for small parks in strategic locations throughout the plan to provide amenity and recreation opportunities.

Two Municipal Reserve parcels are located in the southwest Plan area which will provide a carbon sink and future tree stand which is not intended for public recreational activities. The site will accommodate a stockpile from surrounding development and tree plantings so that little to no maintenance is required by the City. Native tree species will be provided throughout this MR parcel which will densify the area throughout the years.

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4.6 TRANSPORTATION

Goal: To provide a functional and effective transportation system that supports development of industrial and limited highway commercial uses within the Plan area and to ensure that adequate land area is protected to facilitate major, future transportation improvements (i.e. Hwy 15 / Range Road 220 interchange);

Objective	ASP Policy	Implementation
4.6.1 Provide safe, effective and functional transportation linkages consistent with the City of Fort Saskatchewan's Transportation Master Plan and the Strathcona Area Industrial Heartland Transportation Study.	4.6.1(a) Transportation access and internal circulation in the plan area will be generally consistent with the network of roadways as conceptually shown on Figure 5.0 – Land Use Concept and Figure 6.0 – Transportation Network . Where warranted, and supported through the preparation of a suitable traffic study, existing road rights-of-way may be utilized as part of the future internal road network.	4.6.1(a) Roadway alignments shown on Figure 5.0 – Land Use Concept and Figure 6.0 – Transportation Network are conceptual. Ultimate alignments and cross-sections will be determined through the preparation of detailed Outline Plans and Design Briefs and to the satisfaction of Planning & Development Services, Project Management and, where warranted, Strathcona County and Alberta Transportation.
	4.6.1(b) Access to the plan area from abutting roadways will be generally as illustrated on Figure 5.0 – Land Use Concept and Figure 6.0 – Transportation Network	4.6.1(b) • Access locations to Highway 15 and Township Road 550 will be reviewed and approved at the Outline Plan and subdivision stage. • Strathcona County has jurisdiction of Range Road 220 and will review any applications to access from the plan area.
4.6.2 To protect land adjacent to the Highway 15 / Range Road 220 intersection for future right-of-way requirements long-term construction of an interchange.		
	4.6.2(a)	4.6.2(a)

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Objective	ASP Policy	Implementation
	An interchange has been identified in the Capital Region Integrated Growth Management Plan's 35-Year Plan.	The City of Fort Saskatchewan will work with Alberta Transportation and Strathcona County in determining when the interchange is required and the amount of land needed.
	4.6.2(b) Future roadway networks adjacent to the plan area, within the Industrial Heartland, will be further defined.	4.6.2(b) The Heartland Association is currently working on their Transportation Master Plan. Recommendations of this report will be taken into consideration as development progresses in the plan area.
4.6.3 Ensure noise resulting from heavy traffic and along major roadways is taken into consideration and addressed where necessary.	4.6.3 Ensure land uses backing on to Township Road 550 or Range Road 220 provide appropriate landscaping, berms or other enhancements (e.g. building treatments) to assist in noise attenuation and buffering.	4.6.3 Appropriate landscaping, berming and fencing, as required by the Land Use Bylaw, shall be provided along Township Road 550 or Range Road 220 to provide for visual and noise attenuation.
4.6.4 To recognize future pedestrian and bicycle circulation opportunities in the plan area.	4.6.4 A multi-use trail network shall be developed within the plan area utilizing portions of the major utility rights-of-way, stormwater management facilities, the roadway network and the northeast treed area.	4.6.4 The location, alignment and cross-section of a multi-use trail network will be determined through the preparation of detailed Outline Plans and Design Briefs and required as a condition of subdivision approval.
4.6.5 Ensure roadways are built to a standard acceptable to the City of Fort Saskatchewan's Engineering and Service Standards.	4.6.5 A combination of rural and urban roadway cross-sections will be provided. Within the Medium Industrial - Highway 15 Vicinity Overlay urban road cross-sections are preferred.	4.6.5 Roadway standards and subsequent rights-of-way will be determined during the preparation of the Outline Plan and Design Brief and will be dedicated through subdivision.
4.6.6	4.6.6	4.6.6

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Objective	ASP Policy	Implementation
To facilitate the installation of water and wastewater services, in a flexible manner.	Roadway cross-sections (with adjacent easement areas as necessary) are to be designed in order to accommodate the installation of any deferred infrastructure.	Roadway standards and subsequent rights-of-way will be determined during the preparation of the Outline Plan and Design Brief, and will be dedicated through subdivision.

Discussion

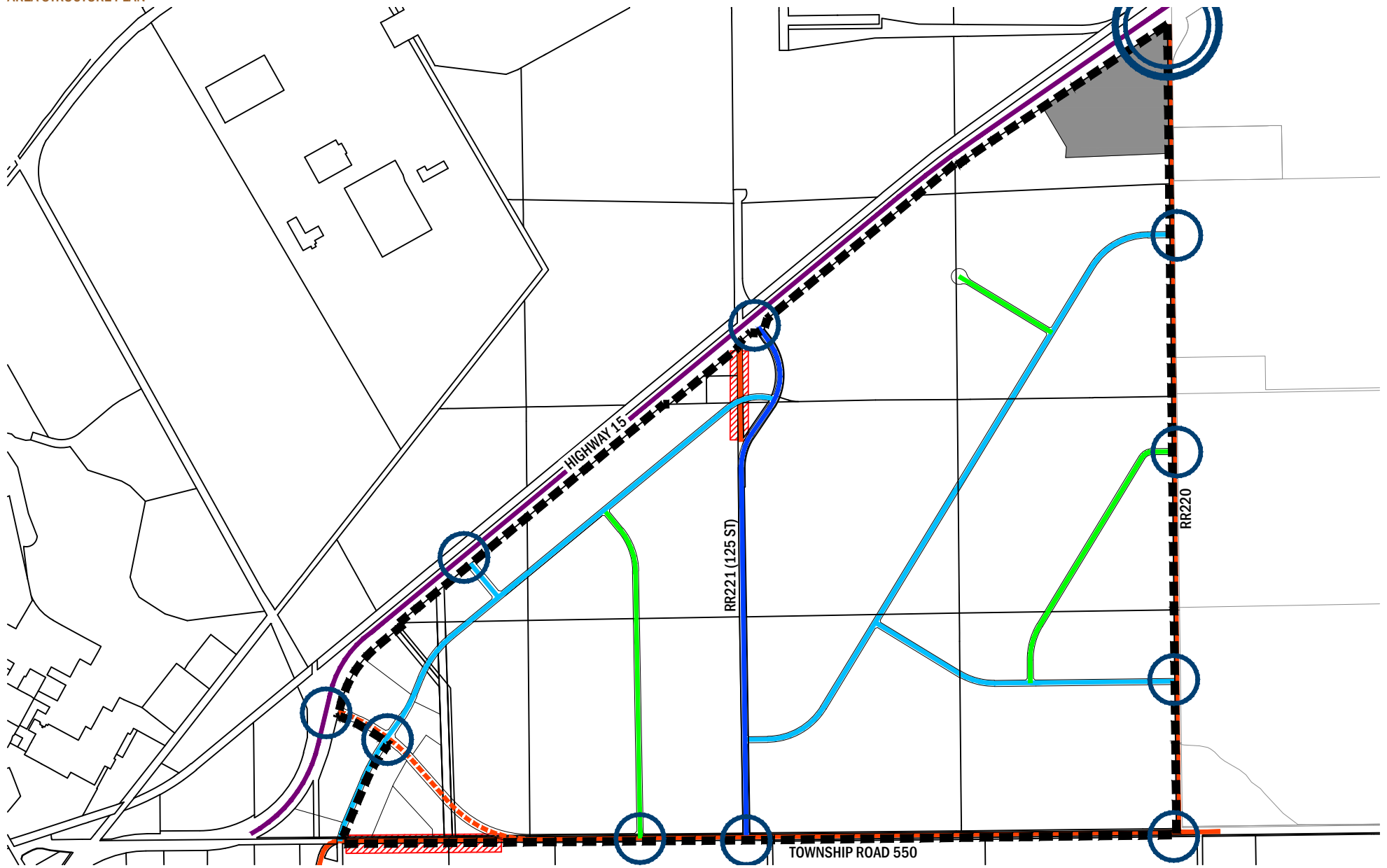
The circulation pattern within the plan area provides for the safe and efficient movement of traffic throughout the plan area and beyond. The proposed hierarchy of roadways includes collector and local industrial roadways. Construction of these roadways will be to either a rural standard (e.g. ditches) or full urban standard with curb and gutter, and will be determined at the Outline Plan and Design Brief stage, to the satisfaction of the City. The road network within the area subject to the Highway 15 overlay is intended to be urban in nature, with curb and gutter in order to reflect the more commercial nature of the area. In order to promote walkability, the provision of a 3.0m multi-use trail on at least one side of most roads in the plan area will allow pedestrians the choice to circulate throughout the plan and amenity areas (storm water facilities and open spaces) in a relatively safe and efficient manner.

The plan identifies the location of the three major all-directional access points into the plan from Highway 15. The southernmost access is proposed at the intersection of the future re-aligned Township Road 550 and 119 Street. The second access is located at the existing location across from the Dow main gate, while the third access is at the intersection of Range Road 221 (which may be realigned and improved) and the northerly access to the Dow site. Each of these all-directional access points occurs at existing intersection locations, and will provide the main access routes to the plan area.

However, detailed traffic impact assessments will be required through Outline Plans prepared for all lands in this area, which will confirm the exact access type and location, intersection requirements/improvements, traffic signalizations, internal road alignments and cross-sections, to the satisfaction of the City of Fort Saskatchewan.

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NOTE: ROAD NETWORK IS PRELIMINARY AND SUBJECT TO CHANGE.

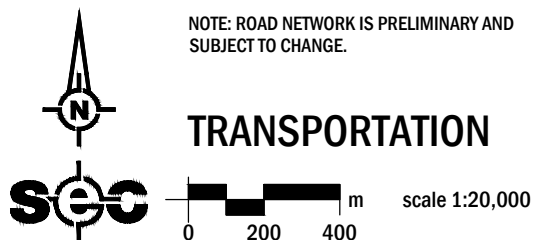
LEGEND

- Local Road (21.5m)
- Collector Road (23.0m)
- Major Collector Road (23.0m)

- Existing Highway (Hwy 15)
- Existing Country/Future Arterial Road
- Arterial Road Realignment
- ▨ Existing Township/Range Road - to be closed

- Potential Interchange
- All Directional Access
- Future Road Right of Way
- ASP Boundary

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CITY OF FORT SASKATCHEWAN



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FIGURE 6

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Vehicular access to the plan area from Township Road 550 and Range Road 220 is conceptually illustrated **Figure 5.0 – Land Use Concept** and **Figure 6.0 – Transportation Network**. The purpose is to permit all-directional access directly into the plan at regular intervals (i.e. 400 m or greater). Township Road 550 and Range Road 220 are not anticipated to carry significant traffic volumes, and consideration may be given to providing individual parcels direct access at specific locations, at the discretion of the City of Fort Saskatchewan and with regards to detailed traffic assessment analysis. As Range Road 220 is the responsibility of Strathcona County, any proposal which require access to this roadway will require their review.

The Province of Alberta has identified the intersection of Range Road 220 and Highway 15 as the location of a future interchange within the next 35 years. Within the next 10 years, this intersection has been identified for intersection improvements to maintain and improve traffic flow to the Industrial Heartland. Given the long-term horizon of the interchange, it is difficult to determine the extent of land required for a right-of-way and construction. However to protect for this possibility, the lands north of the tree stand (proposed as municipal reserve) have been acknowledged as future road right of way. The objective is to ensure sufficient land is set aside for the Outline Plan stage or the interchange is deemed a priority.

Adjacent to the plan area are lands within Strathcona County primarily used for agricultural purposes, containing few residential dwellings. However, as the plan area builds out, improvements to Township Road 550 and/or Range Road 220 will increase the level of traffic and noise impacting these areas, and industrial development may create negative visual impacts. Consideration for landscaping or noise attenuation within the plan area to mitigate this shall be considered as the lands and roadways develop.

Individuals employed in the plan area may seek opportunities for exercise and passive or active recreation before, during or after work. The inclusion of a 3.0m multi-use trail on at least one side of most roadways, the opportunity to create a separate multi-use trail system, the enhanced landscaping of storm water management facilities and the use of utility or pipeline corridors will provide the necessary means for employees to recreate throughout the day. The specific location and alignment of multi-use trails within utility or pipeline corridors, along roadways and within storm water management facilities will be determined through the Outline Plan, subdivision and development agreement stages.

It is anticipated that the plan area will be accessible via a series of collector and local industrial roadways. The collector roadway network is flexible in nature and is conceptually illustrated in **Figure 6.0 – Transportation Network**, while the local roadway network will be confirmed through the Outline Plan and subdivision processes. Deviations from the conceptual roadway network are to be supported by a suitable traffic study, prepared to the satisfaction of the City of Fort Saskatchewan. The appropriate roadway cross-sections will be confirmed through the development of individual Outline Plans, detailed transportation impact assessments and to the satisfaction of the City of Fort Saskatchewan. Urban roadway cross-sections will be the predominant requirement within the plan area subject to the Highway 15 overlay, with the remainder of the plan area anticipated to consist of rural roadway cross-sections.

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4.7 SUSTAINABLE DEVELOPMENT PRACTICES

Goal: To promote sustainable development practices within the plan area.

Objective	ASP Policy	Implementation
4.7.1 To consider alternative development standards which promote innovation and high levels of environmental and economic performance.	4.7.1 Minimize environmental impacts through the application of sustainable development practices (i.e. bio-swales as a complement to storm sewers; reduced street lighting levels to reduce energy consumption and light pollution; alternative road construction to accommodate recycled materials, grey water re-use, etc.)	4.7.1 Application of alternative development standards will be reviewed through the preparation of detailed Outline Plans and Design Briefs, and finalized through subdivision approval and associated servicing agreements.

Discussion

Sustainable development practices are intended to be used for site and facility design to take advantage of synergies between various building systems and industrial processes. For development within the plan area, sustainable development guidelines could be applied, where appropriate, at the Outline Plan, subdivision, development agreement or development permitting processes.

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4.8 MUNICIPAL SERVICING

Goal: To ensure that municipal utility services are provided in accordance with the City of Fort Saskatchewan standards and extended in a logical and coordinated manner to meet the needs of present and future growth;

Objective	ASP Policy	Implementation
4.8.1 To ensure that suitable contributions are made, be they financial or physical, to shared infrastructure within each servicing basin, so as to accommodate the ultimate servicing concepts as outlined within the ASP.	4.8.1(a) A suitable level of service for Sanitary, Storm and Water services will be finalized through subdivision approval and associated servicing agreements with regards to the ultimate servicing concepts outlined within the ASP and the Outline Plans. 4.8.1(b) Development within the plan area west of Range Road 221 shall be fully serviced; while development within the plan area east of Range Road 221 shall have a reduced level of servicing. Areas subject to a reduced level of servicing are to be served by a trickle water feed and a low pressure sanitary system. Fire protection will be provided via dry hydrants connected to suitably sized stormwater management facilities. 4.8.1(c) A combination of overland storm drainage conveyance and underground systems will be utilized.	4.8.1(a) The ultimate sanitary, storm and water infrastructure systems shall be determined through the preparation of detailed design briefs during the preparation of the Outline Plans. 4.8.1(b) Proponents of a subdivision, shall accommodate the ultimate servicing requirements by providing for suitable rights-of-way, and contributing to the overall construction of the system by either constructing municipal infrastructure, or contributing financially, through a municipal levy, for the future installation of municipal infrastructure. 4.8.1(c) Design briefs will guide the location and extent of overland conveyance, as well that of the underground system. Underground systems are to be utilized within the plan area subject to the Highway 15 Overlay; while a combination of overland conveyance and underground systems may be used for the remainder of the lands.
	4.8.1(d) Should the end user desire a level of service in conformance with the ultimate servicing concept and	4.8.1(d) Should the end user desire a level of service in conformance with the ultimate servicing plan, and

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Objective	ASP Policy	Implementation
	proposed Outline Plan, the end user shall be responsible for extending the necessary infrastructure.	proposed Outline Plan, they shall provide suitable design drawings to the City and construct the infrastructure to City standards. The end user may recover costs from other benefitting end users, when and if they tie into the infrastructure.
	4.8.1(e) All shallow utility infrastructure required to provide service to development will be located underground, unless otherwise directed by the City of Fort Saskatchewan.	4.8.1(e) Underground utility services will be required as a condition of subdivision and executed through the associated servicing agreements.
4.8.2 To require more detailed servicing information at the Outline Plan and Design Brief stages.	4.8.2 Development and servicing shall proceed in accordance with approved Outline Plans and Design Briefs prepared for the associated lands.	4.8.2 Development shall proceed having regards to the Servicing Concepts as outlined within the ASP and as per Outline Plans and Design Briefs approved for the associated lands. The costs of preparing any required reports shall be borne by the benefiting developer(s).
4.8.3 Provide for a flexible servicing and phasing scheme having regard for the economical and efficient extension of City services and utilities.	4.8.3 Development and servicing should occur sequentially, through the extension of storm, sanitary and water systems; flexibility in the sequence of development and servicing shall be accommodated where warranted by the proponent of a subdivision and where supported by the City.	4.8.3 Development shall occur when it is feasible to do so, balancing the needs of the proponent and that of the City. Development shall adhere to the servicing concepts outlined in the ASP, Outline Plans and Design Briefs.
4.8.4 To utilize natural systems to provide surface drainage and stormwater management, where possible	4.8.4 To re-create natural drainage patterns, where feasible, and utilize such patterns to provide storm	4.8.4 The precise locations, sizes, configuration and number of stormwater sites will be determined

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Objective	ASP Policy	Implementation
	drainage services within the plan area.	at the time of Outline Plan and subdivision plan.
4.8.5 Utilize stormwater management facilities to provide water for fire protection purposes.	4.8.5 Stormwater management facilities shall provide sufficient fire water to service all of the plan area which is not fully serviced as identified in Figure 7.0 – Conceptual Water Servicing .	4.8.5(a) A system of dry hydrants, connected to the stormwater management facilities, shall be defined in the Outline Plan and Design Briefs, to the satisfaction of the City. 4.8.5(b) A system of dry hydrants, connected to suitably sized stormwater management facilities, shall be required as part of any development, and shall be in accordance with the Outline Plan and Design Briefs approved by the City.
4.8.6 To encourage the joint use of utility pipeline corridors, transmission lines and other utility right-of-ways.	4.8.6 Use the pipeline / utility corridors as multiple use corridors to accommodate oil, natural gas and product pipelines, utilities such as electrical transmission lines and communications infrastructure.	4.8.6 Pipeline and utility companies shall be notified during the subdivision application and development review process.

Discussion

Servicing required for the development of the ASP lands will be paid for and constructed either by the developer, or by the City upon satisfactory collection of municipal levies. Servicing will be provided to a full urban standard with municipal water, sanitary and storm sewers for those areas subject to the Medium Industrial - Highway 15 Vicinity Overlay; with full water and sanitary servicing being provided to the remainder of the plan area west of Range Road 221.

For the remainder of the plan area east of Range Road 221, servicing shall be provided at a reduced level with a trickle water service, low pressure sanitary sewers, and a stormwater collection system consisting of underground and surface conveyance. Installation of infrastructure will be provided in accordance with approved studies (i.e. design brief) and to City of Fort Saskatchewan approved standards.

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The 2006 City of Fort Saskatchewan Conceptual Servicing Study Final Report provided a conceptual level servicing for these lands, in conjunction with the Alsten Lands Outline Plan to the south-west. In 2013/2014 the initial water, sanitary and stormwater servicing concepts for the plan area were reviewed and alternate servicing concepts, blending full and reduced servicing levels were prepared. Further, more detailed technical reports will be required through subsequent stages of development (i.e. Outline Plans, subdivision, etc.) in order to adequately address the provision of water, sanitary and stormwater services.

Water Servicing Concept

It is the City's intent through the Medium Industrial Off-Site Levy program to construct a combined 450mm and 350mm watermain to support this plan area, and meet fire flow demands in the Alsten Development. The 450mm watermain will follow a route along the north boundary of the Alsten Developments (just behind the Heartland Center) with the 350mm line to extend north and connect to the existing watermain at the intersection of 119th Street and 99th Avenue as per **Figure 7.0 – Conceptual Water Servicing**. The 2006 City of Fort Saskatchewan Conceptual Servicing Study Final Report determined that all of the Alsten Lands Outline Plan area and approximately one quarter section of land in this ASP can be serviced with the construction of the above noted 450mm water main. The October 2014 City of Fort Saskatchewan Josephburg Road North Industrial Water Modelling Study - Update Technical Memorandum identifies that the plan area west of Range Road 221 can be fully serviced. Approximately 189.44 ha within the plan area will be fully serviced with municipal water, which includes the approximately 63.0 ha Highway 15 Vicinity Overlay, as identified in **Figure 5.0 – Land Use Concept**. Capacity is limited for the development of the remaining lands; as a result, the majority of the ASP lands are to be serviced with a trickle water feed service to provide potable water only.

Figure 7.0 – Conceptual Water Servicing conceptually illustrates the possible water servicing concept for the ASP lands, based on the completion of infrastructure in the Alsten Lands Outline Plan.

Sanitary Servicing Concept

The Alberta Capital Region Wastewater Commission (ACRWC) pumping station and siphon is located over 2 km west of the plan area, along River Road and north of 104 Street. All sanitary flows in the City of Fort Saskatchewan are directed to this location.

The existing sanitary sewer system in the Eastgate Business Park is adequate to accommodate all of the light and medium industrial development within the Alsten Lands Outline Plan. These flows are directed to an existing 1200mm trunk sewer at the intersection of Highway 15 and 112 Street.

For development to commence in the Josephburg Road North Industrial ASP, it will be necessary to construct a lift station and a 450m forcemain connecting to the existing 1200mm pipe at 99 Avenue and 112 Street. The plan area will be served by a combined gravity and low pressure

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system. The gravity system will serve the area to be fully serviced with municipal water west of Range Road 221, while the low pressure system will service the remainder of the plan area east of Range Road 221.

Figure 8.0 – Conceptual Sanitary Servicing conceptually illustrates the possible sanitary sewer servicing concept for the ASP lands. All development must comply with the ACRWC principles and guidelines.

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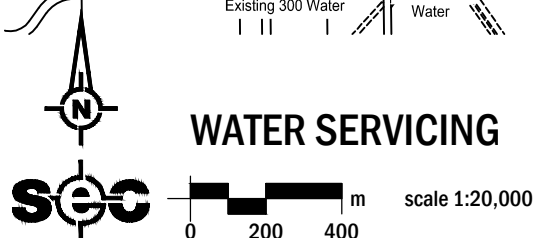
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LEGEND

- | | | | |
|-----------------------------|--------------------|--------------------|------------------------------------|
| ----- Existing Right of Way | — 300mm Water Line | — 450mm Water Line | ■ ■ ■ Area Structure Plan Boundary |
| — 150mm Water Line | — 400mm Water Line | ▨ Fully Served | |

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Storm Servicing Concept

A heavily modified, minor tributary of Ross Creek (in the south-eastern part of the plan, crossing to the south side of Township Road 550) forms the principal drainage feature through the plan area. The east side of the plan area slopes from 630m in the west to 626m near the middle. The west half is very flat with an elevation of approximately 626m. Runoff in the west flows away from the high point in all directions whereas to the north runoff collects in a depression. The runoff to the east and south is ultimately collected in a ditch that runs along the south side of Township Road 550. This ditch carries flows east to a tributary of Ross Creek. The runoff on the east half of the plan area collects in the low lying areas, however under large rainfall events, the runoff would be directed to the ditch to the south and eventually into the tributary of Ross Creek.

Three wetland areas have been identified within the plan area. Although these wetland areas have been heavily modified over time, are deemed to have low ecological value and retain water only on an intermittent basis, their incorporation into the proposed development as stormwater management facilities may be a highly desirable means with which to retain the wetlands on the landscape, given the proposed industrial development. However, development would require regulatory approvals or compensation under the Water Act, Public Lands Act and Environmental Protection Act.

The proposed development concept identifies the general location and conceptual size of seven (7) storm water management facilities (SWMF) within the plan area. These SWMF's will be sized in order to supply fire water for future development within the portion of the plan area serviced by a trickle water system and not fully serviced by municipal water services, as identified in **Figure 7.0 – Conceptual Water Servicing**. The SWMF will be outfitted with a dry hydrant system, acceptable to the City of Fort Saskatchewan. It is proposed that a piped outlet system will convey any discharges from each SWMF to Ross Creek.

The storm runoff from the developed plan area will discharge into Ross Creek through a proposed outfall near an existing storm outfall (near Highway 15 and 99 Avenue). During detailed design stage when more accurate information is available, the possibility of utilizing the existing outfall for these areas needs to be explored.

Consideration for alternative methods of overland storm water conveyance may be possible to reduce the cost of the storm sewer system by using drainage ditches and strategically placed public utility lots instead of underground infrastructure. A determination will be made upon the preparation and review of appropriate design briefs by the landowners and at the discretion of the City of Fort Saskatchewan.

Figure 9.0 – Conceptual Storm Servicing conceptually illustrates the proposed storm sewer servicing concept for the plan area.

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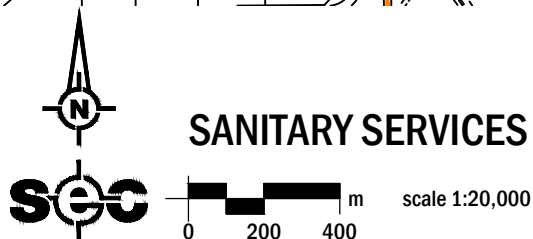


LEGEND

- Existing Right of Way
- Proposed Offsite Forcemain
- ⊠ Proposed Sanitary Lift Station

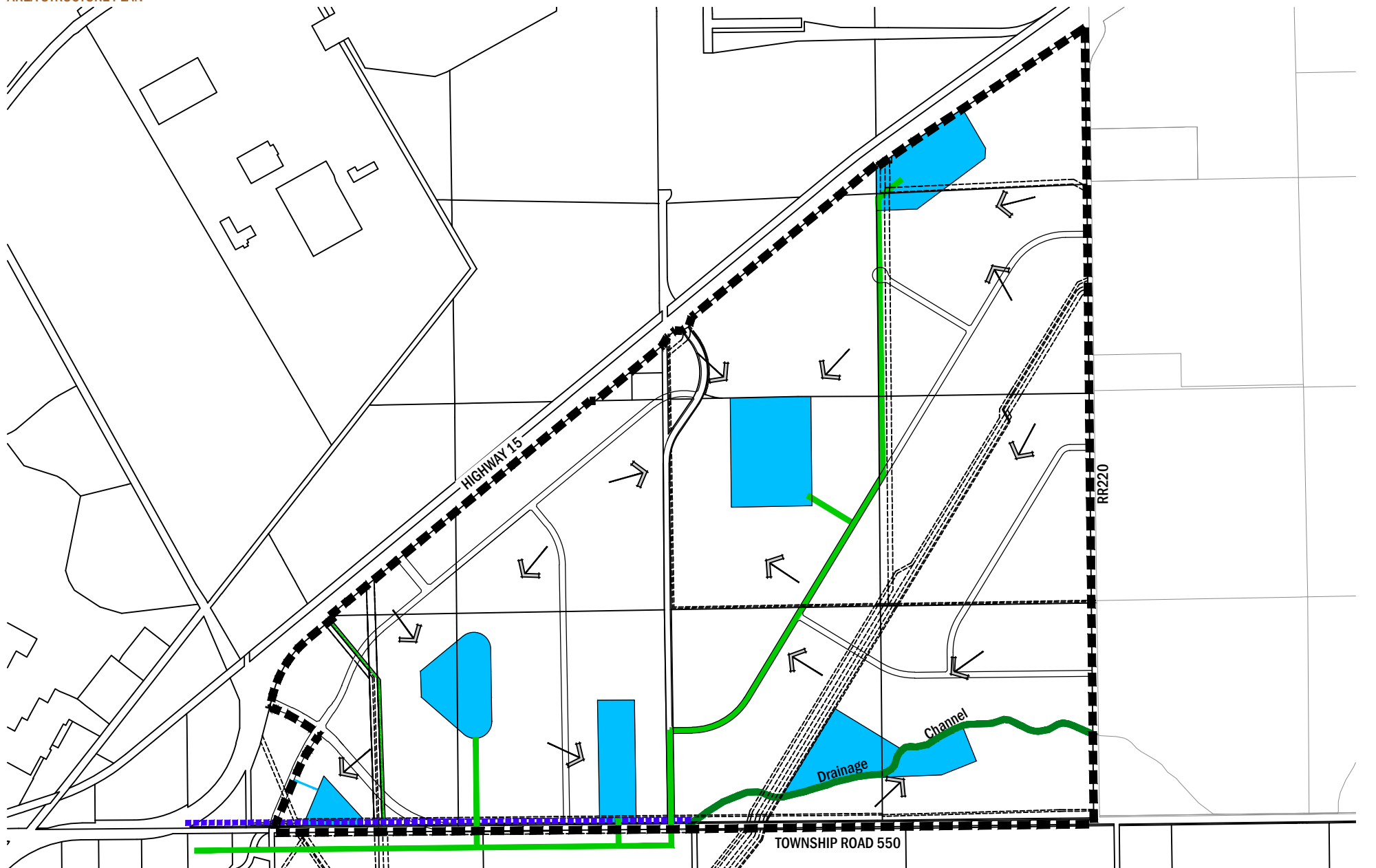
- ▨ Fully Served
- Proposed Full Service Sanitary Gravity Sewer
- - - Proposed 150mm Sanitary Low Pressure Sewer
- Area Structure Plan Boundary

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SANITARY SERVICES

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN



LEGEND

----- Existing Right of Way

■ Josephburg Stream

■■■■ North Josephburg Drainage Ditch

■ Stormwater Management Facility

— Storm Trunk

— Future Storm Ditch

→ Existing Direction of Flow

■■■■ Area Structure Plan Boundary

STORMWATER MANAGEMENT

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FIGURE 9

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Shallow Utilities (Power, Gas, Telecommunications)

Shallow utilities such as power, gas and telecommunications systems will be extended from existing locations, at the cost of the developer, and subject to approvals by the appropriate utility agencies.

Pipeline / Utility Corridors

In recognition of the proximity of the plan area to heavy industry and the existing pipeline and utility corridors within the plan area, utility companies shall be notified during the Outline Plan, subdivision application and development review process. Cooperation and communications with these companies will provide them with the ability to adequately plan their long term infrastructure and land right-of-way requirements, while integrating with the land uses proposed within the plan area.

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4.9 HIGHWAY 15 CORRIDOR DESIGN GUIDELINES

Goal: To control the appearance and quality of development along Highway 15, recognizing its importance as a gateway to the City of Fort Saskatchewan and the Alberta's Industrial Heartland.

Objective	ASP Policy	Implementation
4.9.1 Promote a high standard of design and aesthetics within the public and private lands abutting Highway 15.	4.9.1(a) The City of Fort Saskatchewan should endeavor to develop and implement a statutory plan overlay in the Land Use Bylaw, consistent with Section 6.8 - Industrial, and more specifically policy 6.8.4 of the MDP, with respect to design guidelines for industrial uses along Highway 15 to ensure a higher standard of appearance for the major gateway into Fort Saskatchewan and the Alberta's Industrial Heartland.	4.9.1(a) The statutory plan overlay design guidelines should address, but not be limited to, such considerations as building design, setbacks, location and screening of open storage areas, parking lots, landscaping, signage and lighting.
	4.9.1(b) All infrastructure required to distribute and service the development should be located underground.	4.9.1(b) Underground services will be required as a condition of subdivision and executed through associated servicing agreements.
		4.9.1(c) Roadway standards will be reviewed and included as conditions at the time of subdivision approval and executed through servicing agreements.

Discussion

Policy 6.8.4 of the Municipal Development Plan provides direction for the City to work with developers and landowners to develop and implement design guidelines regarding such items as architectural treatment of building, setbacks, landscaping, lighting, screening, storage, parking and signage for the Highway 15 corridor. This would ensure that the siting, form, and unified architectural treatment of commercial and industrial development improves the visual quality of road(s) that it fronts and considers the environment in which it is located. Special attention will be given to development along Highways 15. Wetlands, stands of trees, and other natural habitat

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should be preserved where possible. Parking and loading areas should be paved and screened, have landscaped buffers, and provided with signage where appropriate.

The use of aerial (overhead) power servicing is discouraged as it is unattractive and may pose as an impediment to end users within the plan area. Roadway cross-sections within the Highway 15 Vicinity Overlay are to be urban in nature as it coincides with the level of servicing within the Overlay area, and is more aesthetically pleasing; thereby promoting that these lands be used for their highest and best use.

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4.10 RISK MANAGEMENT

Goal: To adopt a Risk Management Framework which prohibits land uses within the plan area that might be detrimentally impacted by hazardous land uses located on lands in adjacent industrial areas.

Objective	ASP Policy	Implementation
4.10.1 To restrict industrial uses and industrial activities associated with explosive or hazardous materials within the plan area.	4.10.1 The IH Heavy Industrial district will not be applied to lands within the plan area.	4.10.1 Planning & Development Services will refuse support for applications to rezone lands within the plan area to the IH designation.
4.10.2 To implement risk management practices and procedures for limited highway commercial land uses.	4.10.2 Appropriate safety measures, such as in-place sheltering, shielding, public warning systems, evacuation programs and ventilation shut-off systems may be required for new buildings in the plan area.	4.10.2 A Risk Management Framework shall be developed at the Outline Plan and Design Brief stage by the developer/landowner, in consultation with Emergency Services and adjacent heavy industrial landowners.
4.10.3 To restrict public institution uses where people are dependent upon others for evacuation such as hospitals, schools, or senior citizen homes.	4.10.3 No public institution uses shall be approved with the ASP boundaries.	4.10.3 The Development Officer will refuse any applications for any uses that, in the opinion of the Development Officer, is deemed a public institutional use.

Discussion

The Municipal Development Plan supports the continued growth and expansion of Heavy Industrial development in Fort Saskatchewan, and promotes a risk management approach to ensure that appropriate separation distances are defined between Heavy Industrial Development and less intensive industrial development or potentially non-compatible uses. The limited highway commercial land uses will not be able to accommodate day cares, institutional uses, recreation facilities, or uses where overnight accommodation may occur.

Section 4.3 recognizes the opportunities for limited highway commercial development along Highway 15. Reducing risk has been initiated through the completion of the Industrial Risk Assessment outlined in Section 3.7, whereby 1.5 km and 3.5 km setback distance from heavy industrial to various land uses are recommended. The opportunity for a limited amount of highway commercial uses within the 1.5 km setback distance may be acceptable provided that certain safety measures are implemented in the design and operation of the buildings and that

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site/development specific risk assessments demonstrate to the City's satisfaction that this lesser setback distance is warranted.

For example, new development may require designs (e.g. structural, mechanical, HVAC, etc.) that reduce the calculated risk equal to or lower than the 1×10^{-5} risk criteria at the 1.5 km distance. The site/development-specific risk assessment could determine that although the site is at or closer than 1.5 km of industry, it actually functions as if it was located farther out because of the incorporation of additional safety measures.

Historically the City has required developers of new industrial subdivisions to provide public warning systems in accordance with City standards, and will continue to do so of future industrial subdivisions.

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4.11 IMPLEMENTATION

Goal: To adopt and use the Area Structure Plan as a policy framework for development and to assist with the preparation of more detailed Outline Plans and design briefs for City approval prior to consideration of rezoning and subdivision applications.

Objective	ASP Policy	Implementation
4.11.1 To ensure lands within the ASP boundaries are able to meet local and regional demands for industrial land.	4.11.1(a) Servicing of ASP lands shall be permitted to be flexible.	4.11.1(a) Reduced levels of service shall be permitted in the interim until such time as the owner of a parcel requires a higher level of service.
	4.11.1(b) To require more detailed servicing information at the Outline Plan and Design Brief stages.	4.11.1(b) Development and servicing shall proceed in accordance with Outline Plans and Design Briefs prepared for the associated lands.
	4.11.1(c) Provide for a flexible servicing and phasing scheme having regard for the economical and efficient extension of City services and utilities.	4.11.1(c) Development and servicing should occur sequentially, through the extension of storm, sanitary and water systems; flexibility in the sequence of development and servicing shall be accommodated where warranted by the proponent of a subdivision and supported by the City.
	4.11.1(d) Require on-site and off-site costs associated with servicing new developments with roadways, utilities and other infrastructure to be borne by the development.	4.11.1(d) Development charges and levies will be in accordance with executed servicing agreements associated with each development.
4.11.2 Undertake amendments to the Land Use Bylaw	4.11.2(a) A Land Use Bylaw amendment will recognize the addition of the Limited Highway Commercial Overlay designation within the plan area.	4.11.2(a) Administration shall draft a Limited Highway Commercial Overlay for Council consideration.

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Objective	ASP Policy	Implementation
	4.11.2(b) Individual landowners must apply for zoning prior to subdivision and/or development.	4.11.2(b) Administration will review all rezoning applications to ensure conformity with this plan.
	4.11.2(c) The City of Fort Saskatchewan, at its discretion, may pre-zone the lands within the ASP to the IM - Medium Industrial District following approval of an Outline Plan.	4.11.2(c) Administration shall investigate the need to pre-zone the lands within the plan area, and determine if it is in the best interest of the City.
4.11.3 Ensure alignment and consistency between all municipal statutory documents.	4.11.3 Amendments to The City of Fort Saskatchewan Alberta's Industrial Heartland ASP, Bylaw C19-00 will recognize amendments made to this plan.	4.11.3(a) The City shall amend Map 2 of The City of Fort Saskatchewan Alberta's Industrial Heartland ASP to reflect the Land Use Concept as found in this plan. 4.11.3(a) The City shall amend The City of Fort Saskatchewan Alberta's Industrial Heartland ASP objective and policies to reflect those found in this plan.
4.11.4 To ensure the ASP remains relevant to the planning and development issues that may change over time.	4.11.4 Planning & Development Services will monitor the effectiveness of the ASP in an ongoing manner.	4.11.4 Planning & Development Services will monitor the ASP and undertake a review, and update if necessary, at 5 year intervals.
4.11.4 Facilitate open discussion with Strathcona County regarding access points from the plan area roads onto County roads.	4.11.4 Inter-municipal cooperation	4.11.4 The City of Fort Saskatchewan will enter into agreement with Strathcona County regarding identified access points from the plan area onto Range Road 220 and TWP RD 550 within one year of adoption of this plan and any access and/or County road improvement matters identified must be resolved to the satisfaction of both parties prior

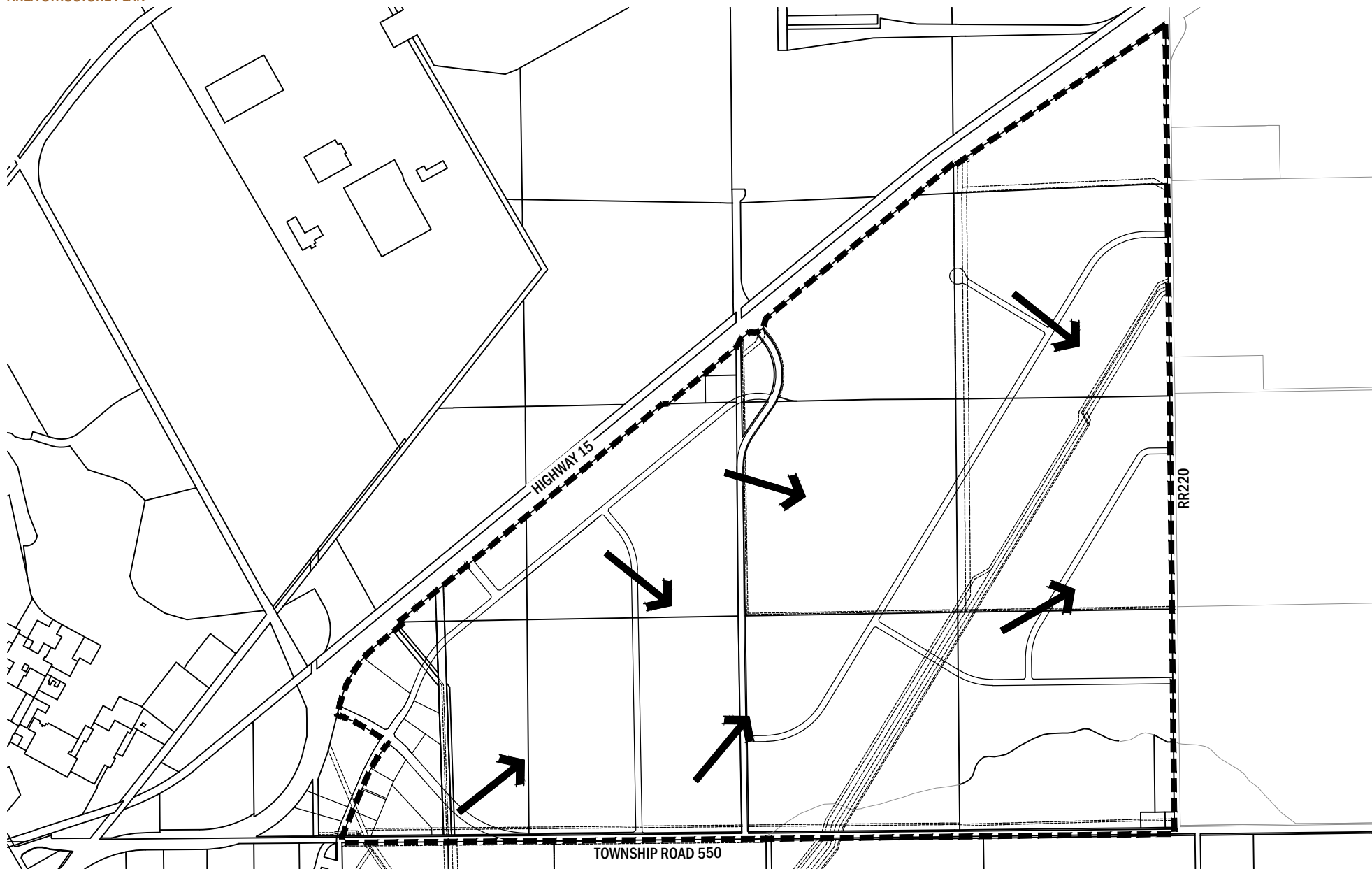
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Objective	ASP Policy	Implementation
		to any new development proposals being accepted within the plan area.

Discussion

The ASP is meant to serve as a planning framework for development within the plan area, and should be reviewed periodically, updated and amended having regard to changes in economic, social or physical (i.e. man-made) conditions that may arise. Amendments are required to the Land Use Bylaw to ensure consistency with this plan and land uses proposed. Additional technical and supporting studies will be required regarding, but not limited to, transportation and servicing, within the plan area. The phasing of development is proposed based upon the logical extension of municipal infrastructure, transportation links and economics and is conceptually illustrated on **Figure 10.0 – Conceptual Development Phasing**.

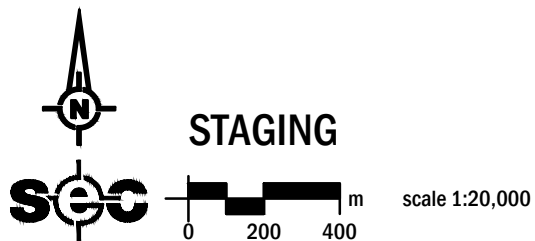
Economic conditions, market demand and the logical and cost-effective extension of roadways, municipal services and other infrastructure will determine the phasing of Outline Plans, subdivision and development. If, as a result of proposed Outline Plans, subdivision or development proposals, the need to construct services and other municipal infrastructure in advance of the logical phasing of development is proposed, review will required by the City provided the developer finances the required costs.



LEGEND

-  Staging Direction
-  Area Structure Plan Boundary

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Appendix 1 – Land Ownership

	Titled Owner	Legal Description	Area (ha)
1	Private Corporate	Lot 1, Block 1, Plan 082 0100	1.79
2	Private Corporate	SW 1/4 2-55-22-W4M	54.93
3	Private Corporate	SE 1/4 2-55-22-W4M	65.195
4	Private Corporate	SW 1/4 1-55-22-W4M	65.894
5	Private Corporate	SE 1/4 1-55-22-W4M	40.436
6	Private Corporate	Lot 1, Plan 952 2270	23.49
7	Private Non-Corporate	SE 1/4 1-55-22-W4M	2.02
8	Private Non-Corporate	SE 1/4 12-55-22-W4M	64.7
9	Private Non-Corporate	NE 1/4 12-55-22-W4M	28.48
10	Private Corporate	Pt of Lot 1, Plan 912 2507	0.82*
11	Private Corporate	SW 1/4 12-55-22-W4M	44.7*
12	Private Corporate	NW & NE 1/4 2-55-22-W4M	62.9*
13	Private Corporate	NW 1/4 1-55-22-W4M	64.7
14	Private Non-Corporate	NE 1/4 1-55-22-W4M	64.7
15	Private Corporate	Power Line ROW OT, Plan 110RS	2.48
16	Private Non-Corporate	SE 1/4 1-55-22-W4M	0.543
17	Private Non-Corporate	SE 1/4 1-55-22-W4M	0.203
18	Private Corporate	Lot A, Plan 590KS	1.005
19	Private Corporate	Lot B, Plan 590KS	1.21
20	Private Corporate	Lot C, Plan 590KS	0.924
		TOTAL	591

* Represents area within the ASP, not as indicated on the certificate of title

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Appendix 2 – Land Use Statistics

JOSEPHBURG ROAD NORTH INDUSTRIAL AREA STRUCTURE PLAN LAND USE STATISTICS

	Area (ha)	% of GDA
GROSS AREA	596.4	
*Highway 15/Range Road 220 Interchange Right-of-Way	15.2	
Pipeline & Utility Rights-of-Way	23.0	
Environmental Reserve (Public Utility Lot/Drainage Channel)	3.8	
Sub-total	42.0	
GROSS DEVELOPABLE AREA	554.4	100.0%
Stormwater Management Facility	49.7	9.0%
Industrial Roadways	35.7	6.4%
Municipal Reserve	20.4	3.7%
Sub-total	105.8	
NET DEVELOPABLE AREA	448.6	80.9%
Medium Industrial	413.6	74.6%
Medium Industrial – Highway 15 Vicinity Overlay	35.0	6.3%
	448.6	80.9%

*Area is approximate. Exact area and extent of land required for the interchange to be determined in conjunction with Alberta Transportation, Strathcona County, and the City of Fort Saskatchewan prior to the approval of an Outline Plan for the adjacent lands.

** Exact MR area to be confirmed at time of detailed Outline Plan submission. Balance of MR owing to be provided as cash-in lieu, unless the City determines through the Outline Plan stages that smaller park areas are required.

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Appendix 3 – References

The following studies were reference in support of the Josephburg Road North Industrial ASP:

- 1. City of Fort Saskatchewan Municipal Development Plan, 1999-2010, Bylaw C12-99 (Rescinded)**
- 2. City of Fort Saskatchewan Municipal Development Plan, 2010-2030, Bylaw C16-10**
- 3. City of Fort Saskatchewan Land Use Bylaw, Bylaw C6-08 (Rescinded)**
- 4. City of Fort Saskatchewan Land Use Bylaw, Bylaw C10-13**
- 5. The City of Fort Saskatchewan Alberta's Industrial Heartland ASP, Bylaw C19-00**
- 6. Strathcona Area Industrial Heartland Transportation Study Update – Final Report**
 - a. Prepared by Stantec Consulting Ltd, November 2007, for Strathcona County.
- 7. City of Fort Saskatchewan Conceptual Servicing Study Final Report**
 - a. Prepared by Stantec Consulting Ltd., October 2006
- 8. Ecological Assessment, Josephburg Road North Industrial ASP, Section 1-55-22-4 and portions of Sections 2-55-22-4 and 12-55-22-4, Fort Saskatchewan**
 - o Prepared by Stantec Consulting Ltd, August 15, 2008
- 9. Industrial Risk Assessment, Final Report**
 - o Prepared by Doug McCutcheon and Associates Consulting, March 2009
- 10. Josephburg ASP Amendment, Risk Review**
 - o Prepared by Doug McCutcheon and Associates Consulting, June 2009
- 11. Alsten Lands Outline Plan**
 - o Prepared by Durrance Projects Ltd; Trans America Group; Ecomark Ltd; Associated Engineering Ltd; & BK Hydrology Services, July 2007
- 12. City of Fort Saskatchewan Strategic Plan: 2020 Vision – Clarity for the Future**
- 13. Strathcona County Land Use Bylaw, Bylaw 8-2001**
- 14. Heartland Transmission Project;**
 - a. www.heartlandtransmissionarea.ca

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15. Capital Region Integrated Growth Management Plan – Final Report on Core Infrastructure

- o Prepared by ISL Engineering and Land Services, November 2007

16. Josephburg Road North Industrial ASP – Transportation Impact Assessment

- o Prepared by Stantec Consulting Ltd., December 2009

17. Growing Forward – The Capital Region Growth Plan

- o Capital Region Board, March 2009

18. The Capital Region Growth Plan Addendum

- o Capital Region Board, October 2009 & December 2009

19. Integrated Regional Transportation Master Plan

- o Capital Region Board, September 2011

20. Josephburg Road North Industrial Water Modelling Study - Update

- o Prepared by Associated Engineering, October 2014