Bylaw No. 868-2014

A BYLAW OF THE CITY OF LEDUC IN THE PROVINCE OF ALBERTA, TO ADOPT THE AREA STRUCTURE PLAN FOR THE: NORTH WEST QUARTER OF 22-49-25-W4M

The *Municipal Government Act,* R.S.A. 2000, Chapter M-26, as amended (the "Act") grants a municipality the authority to adopt by Bylaw an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land in a municipality;

AND: the NW ¼ Section 22, Township 49, Range 25, West of the 4th Meridian Area Structure Plan addresses the requirements of an Area Structure Plan as outlined in the Act;

AND: notice of intention to pass this bylaw has been given and a public hearing has been held in accordance with the Act;

THEREFORE: the Council of the City of Leduc in the Province of Alberta duly assembled hereby enacts as follows:

PART I: BYLAW TITLE

1. **THAT:** this Bylaw is to be cited as the Blackstone Area Structure Plan Bylaw.

PART II: APPLICATION

2. **THAT:** the Blackstone Area Structure Plan, attached hereto as Schedule "A", is hereby adopted.

PART III: ENACTMENT

This Bylaw shall come into force and effect when it receives Third Reading and is duly signed.

READ A FIRST TIME IN COUNCIL THIS 25TH DAY OF AUGUST, 2014.

READ A SECOND TIME IN COUNCIL THIS 14TH DAY OF OCTOBER, 2014.

READ A THIRD TIME IN COUNCIL AND FINALLY PASSED THIS 12TH DAY OF JANUARY, 2015.

Robert Young
DEPUTY MAYOR

Sandra Davis
CITY CLERK

Jan 12/15
Date Signed

BYLAW 868-2014
SCHEDULE "A"

Blackstone
Area Structure Plan

1161 102315

Prepared for:
Maclab Enterprises
Cameron Communities

Prepared by:
Stantec Consulting Ltd.

July 31, 2014

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1. Introduction

1.1 Purpose

An Area Structure Plan (ASP) in the City of Leduc is a statutory bylaw which establishes a framework for the future subdivision development of the lands within a designated plan area and implements the policies of the Municipal Development Plan and other applicable statutory plans. The City of Leduc's Area Structure Plan & Outline Plan Guidelines specifies that an ASP in the City of Leduc address the following:

- The location, configuration, and area of land uses including residential, commercial, parks and open spaces, and public utility land uses;
- The transportation network for the plan area;
- A conceptual servicing scheme showing utility services and infrastructure; and,
- The implementation and phasing of development.

The Blackstone ASP has been prepared to maximize the benefits of the new local and regional planning requirements by providing land uses that will support the concentrated growth as proposed in the City of Leduc Municipal Development Plan and the Capital Region Growth Plan. The Blackstone ASP meets the required policies and is in accordance with Section 633 of the Municipal Government Act and the Capital Region Growth Plan.

The Blackstone ASP will contribute to the residential and commercial land supply in Leduc to ensure a combination of single family, multifamily, and commercial development potential is available within the City of Leduc. An appropriate supply of residential and commercial lands promotes sustainable development within Leduc and supports housing affordability for Leduc residents.

1.2 Location

The Blackstone ASP is comprised of two separately titled parcels and encompasses approximately 64.8 hectares (160 acres) of land. It is located immediately south of the Windrose neighbourhood in the southwest portion of the City of Leduc (**Figure 1 - Location**).

The ASP area is defined by the following boundaries:

- North – Township Road 494 (38 Avenue)
- East – Agricultural Land (SW ¼ 22-49-25-W4)
- South – Leduc County boundary
- West – Range Road 253 (Grant MacEwan Boulevard)

The current use of the ASP lands and the lands to the south, west, and east is agricultural. There is also an existing farm site located on the quarter section immediately east of the plan area. The lands to the

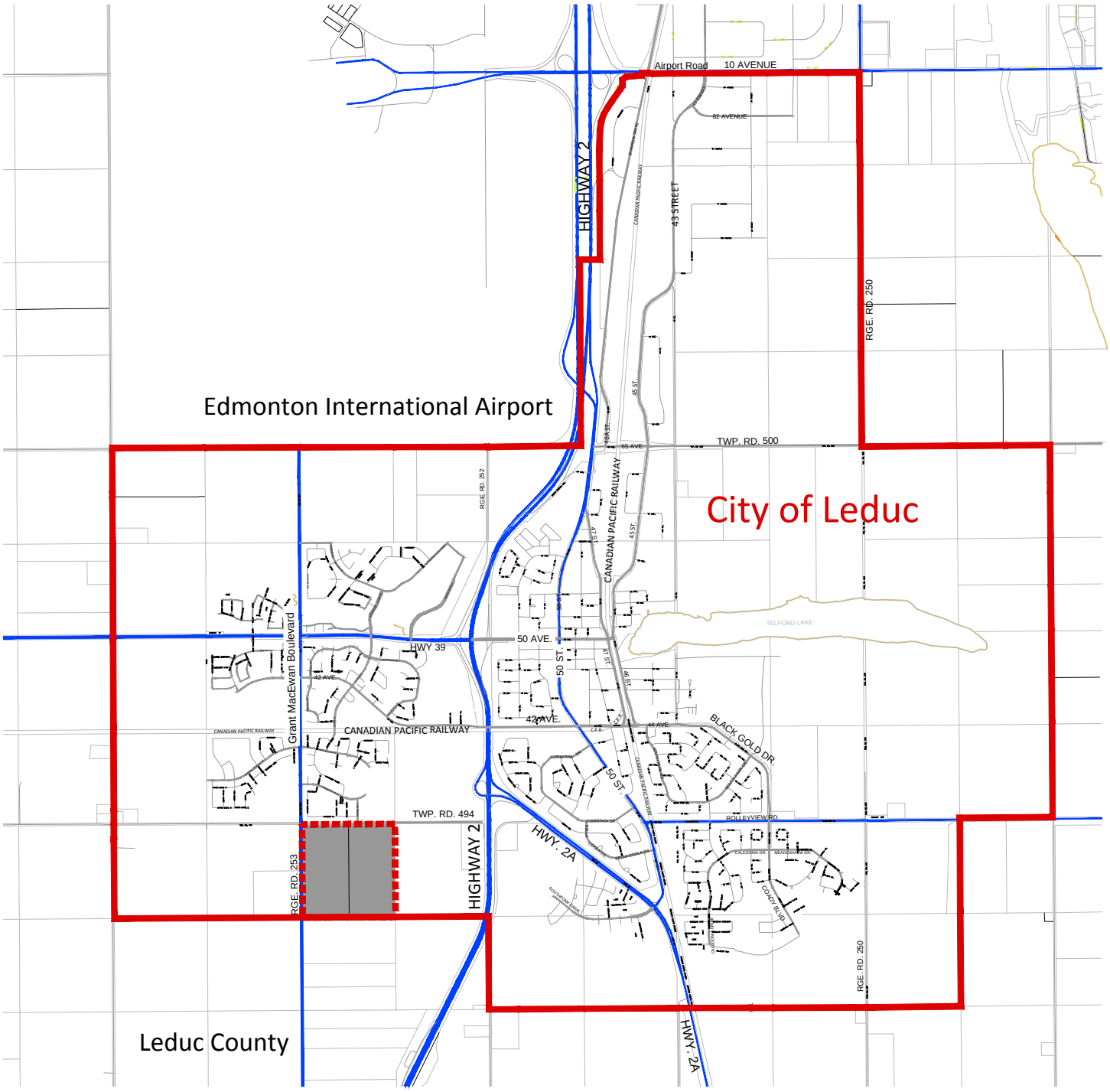
north of the ASP area are existing residential (Windrose Neighbourhood). The Blackstone ASP has been prepared in response to the current and anticipated market demands in the City of Leduc and the Capital Region, as well as the aspirations of the landowner.

1.3 Background & Context

In 2012, the City of Leduc announced its proposal to annex approximately 526 ha of land abutting its west and southwest boundary. In September 2013, the Province of Alberta approved the City of Leduc's proposed annexation plans, which became effective January 1, 2014. The Blackstone ASP lies within the approved annexation area.

The Blackstone ASP is well positioned to take advantage of the growing demand for single family, medium density, larger estate lots, and commercial uses located within proximity to the future Highway 2A realignment, existing schools, and employment nodes in the region. Development of lands within the plan area is expected to commence immediately following approval of the ASP and is expected to be fully built-out within ten years.

Location Figure 1



Legend

Plan Area

2. Development Area

2.1 Legal Description and Ownership

The Blackstone ASP consists of two separately titled parcels of land totalling approximately 64.8 ha, which are controlled by one landowner. A utility easement registered to AltaGas Utilities Ltd. runs in an east-west direction along the north portion of the site. Current land ownership is summarized in **Table 1 – Land Ownership**.

Table 1 - Land Ownership

#	Legal Description	Owner	Certificate of Title	Area (ha)
1	**W ½ NW ¼ 22-49-25-4**	**Blackmud Enterprises Ltd.**	**142 073 918**	**32.4**
2	**E ½ NW ¼ 22-49-25-4**	**Blackmud Enterprises Ltd.**	**142 073 918 +1**	**32.4**
			Total Area (ha)	**64.8**

2.2 Pipelines and Wellheads

One pipeline is located within the plan area (**Figure 3 - Site Features**) south of Township Road 494 (38 Avenue). This pipeline contains natural gas and is licensed to AltaGas Utilities Inc. (**Table 2 - Pipelines within the Blackstone ASP**). Pipelines containing natural gas, oil and similar products are regulated by the Alberta Energy Regulator (AER). These regulations include minimum setback distances from high pressure pipelines. It is intended that with development of the area this pipeline will be relocated to the area adjacent to Township Road 494 (38 Avenue) and accommodate a multiway within the corridor.

Table 2 - Pipelines within the Blackstone ASP

Licence/Line#	Company	Substance	Status	Max. Pressure	H2S
1055-17	ATCO GAS AND PIPELINES LTD.	Natural Gas	Operating	6140 kPa	0

There are two abandoned well sites situated within the plan area. No active oil or gas wells were identified in the plan area **(Table 3 - Wellheads within the Blackstone ASP).**

Table 3 - Wellheads within the Blackstone ASP

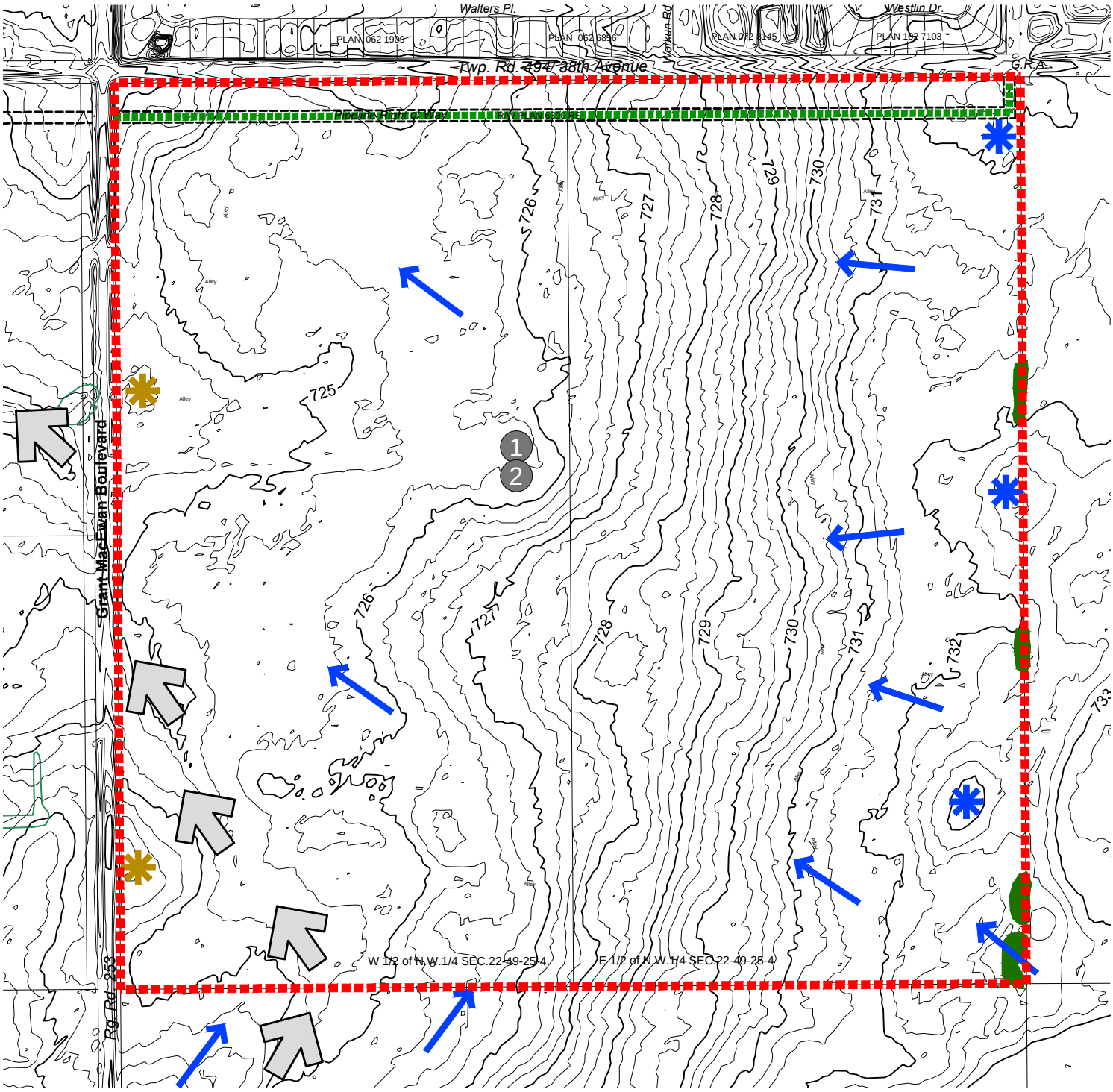
Ref #	**Licence #**	**Company**	**Well Name**	**Status**
1	**0227792**	Quattro Exploration and Production Ltd.	ACL Leduc – Woodbend 11-22-49-25	Abd.
2	**0217308**	Quattro Exploration and Production Ltd.	CGRU Leduc – WB 13-22-49-25	Abd.

Aerial Photo Figure 2

Legend

ASP Boundary

Site Features Figure 3



Legend

- ASP Boundary
- 0.25 m Contour Interval
- High Point
- Low Point
- Pipeline Right of Way
- Abandoned Wells
- Treed Area
- Existing Major Drainage
- Existing Drainage Course

Stantec

Blackstone ASP

July 2014
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2.3 Landscape, Vegetation and Wildlife

A Biophysical Assessment was prepared in August 2013 to determine the ecological value of the natural areas located within the plan area. The assessment consisted of a desktop review of relevant literature and information databases, including a historical aerial photograph review, pre-mapping of all natural features, and a field program to assess natural features within the plan area.

The topography of the ASP lands is generally flat, with broadly rolling features that gently slope from the southeast to the northwest. The Blackstone 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 broad-leaved forest and mixed-wood forest. The Central Parkland Region typically consists of groves of broad leaves intermixed with grasslands dominated by rough fescue. There are three separate tree stands with in the plan area along the east boundary. These tree stands will not be retained with development in the area.

Natural features such as a Class I wetland and drainage channel were found within the plan area. Impacts are considered permanent impacts, however, given the non-native, heavily impacted, ruderal nature of the majority of the vegetation within the plan area, these impacts are considered insignificant.

2.4 Geology, Soils and Groundwater

A Geotechnical Report was prepared by Hoggan Engineering & Testing (1980) Ltd. in March 2011 to determine if the ASP lands are suitable for urban development. The report consists of an evaluation of geological, soil, and water table characteristics. The report speaks generally to the ASP lands, with specific data provided for test-hole drilling. Further geotechnical investigation will be required at the time of redistricting and/or subdivision. This report has been submitted under separate cover.

The surficial geology found in the region of the Blackstone ASP is glacial draped moraine, which consists of till of uneven thickness with minor amounts of water sorted material and local bedrock exposure. According to the Geological Map of Alberta, the general bedrock geology in the region is identified as the Horseshoe Canyon Formation of the late Cretaceous age. The Horseshoe Canyon Formation is generally comprised of grey feldspathis, clayey sandstone, bentonitic mudstone and carbonaceous shale, with scattered coal and bentonite beds of various thicknesses.

The soil and groundwater conditions in the testholes are considered suitable for residential development. Most of the soils encountered were clay soils that were not overly wet and present no major issues for subdivision design and construction.

2.5 Environmental Assessment

A Phase I Environmental Site Assessment (ESA) was undertaken by Hoggan Engineering & Testing (1980) Ltd. in March 2011 for the lands located in the ASP. The purpose for undertaking the Phase I ESA was to assess if there was evidence of potential or actual environmental contamination as a result of current or past activities on the site or surrounding properties. This report has been submitted under separate cover.

The Phase I ESA consisted of a records review process and a site visit. The results of the Phase I ESA did not reveal any undue constraints to future development.

2.6 Historical Resources

A Statement of Justification (SoJ) for Historical Resources Act was prepared in January 2014 and submitted to Alberta Culture for review. Alberta Culture granted clearance for the parcel. Subject to Section 31 of the Resources Act, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the minister of the discovery". The chance discovery of historical resources is to be reported to Alberta Culture.

3. Policy Context

3.1 General

The Blackstone ASP has been prepared taking into consideration applicable legislation and has achieved consistency with the regulations outlined in sections 3.2, 3.3, and 3.4 of this plan. An ASP must be consistent with all higher-order plans, including the Municipal Government Act, the Provincial Land Use Policies, the Capital Region Growth Plan, and all City of Leduc Statutory Plans.

3.2 Municipal Government Act (MGA)

The Blackstone ASP has been prepared in accordance with the provisions of the Municipal Government Act (Revised Statutes of Alberta, 2000, Chapter M26). Section 633(1), Part 17, of the MGA provides for a municipality to adopt an ASP as a statutory planning document for the purpose of providing a framework for future land use, subdivision, and development within the Plan area. Regarding the preparation of an ASP, the MGA states the following:

Area Structure Plan

633 (1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may by bylaw adopt an area structure plan.

(2) An area structure plan

a) must describe:

i. the sequence of development proposed for the area;

ii. the land uses proposed for the area, either generally or with respect to specific parts of the area;

iii. the density of population proposed for the area either generally or with respect to specific parts of the area; and

iv. the general location of major transportation routes and public utilities; and

b) may contain any other matters the council considers necessary.

Statutory Plan Preparation

636 (1) While preparing a statutory plan a municipality must:

a) provide a means for any person who may be affected by it to make suggestions and representations;

b) notify the public of the plan preparation process and of the means to make suggestions and representations referred to in clause (a);

c) notify the school boards with jurisdiction in the area to which the plan preparation applies and provide opportunities to those authorities to make suggestions and representations; and

d) in the case of an area structure plan, where the land that is the subject of the plan is adjacent to another municipality, notify that municipality of the plan preparation and provide opportunities to that municipality to make suggestions and representations.

(2) Subsection (1) does not apply to amendments to statutory plans

Plans Consistency

638 All statutory plans adopted by a municipality must be consistent with each other.

3.3 Provincial Land Use Policies & Alberta Land Stewardship Act

Section 622(3), Part 17 of the MGA stipulates that every statutory plan must be consistent with the Land Use Policies. There are eight sections contained within the Provincial Land Use Policies addressing plan implementation, general planning approaches, municipal interaction and specific planning issues. The Blackstone ASP meets the goals set out in the Land Use Policies.

It should be noted that Section 622 (4), Part 17 of the MGA, indicates that the Land Use Policies will not apply to the Blackstone ASP once the North Saskatchewan Regional Plan is developed and enacted in accordance with the Alberta Land Stewardship Act (ALSA). ALSA is the enabling legislation that supports the Land Use Framework (LUF). Pursuant to 638(1), Part 17, of the MGA, all statutory plans must be in compliance with ALSA; regional plans enacted under ALSA will prevail over any statutory plan to the extent of any conflict or inconsistency.

The purpose of the LUF is to manage growth and sustain Alberta's economy, while providing a balance with the social and environmental goals of Albertans. Essentially, the framework provides a blueprint for land-use management and decision-making that will address the needs of Alberta. While the North Saskatchewan Regional Plan has yet to be developed and enacted, the Blackstone ASP has taken into account the desired outcomes of the LUF, which include:

1. A healthy economy supported by our land and natural resources;
2. Healthy eco-systems; and
3. People friendly communities with ample recreational and cultural opportunities.

3.4 Capital Region Board Regulation: Capital Region Growth Plan

The Municipal Government Act, Capital Region Board Regulation (Alberta Regulation 17/2010, MGA) is the enabling legislation that establishes the Capital Region Board (CRB) and the Capital Region Growth Plan (CRGP).

Pursuant to Section 11 of the Capital Region Board Regulation, the objectives of the CRGP are:

a) to promote an integrated and strategic approach to planning for future growth in the Capital Region;

b) to identify the overall development pattern and key future infrastructure investments that would;

   i. best complement existing infrastructure, services and land uses in the Capital Region;

   ii. maximize the benefits to the Capital Region; and

c) to co-ordinate decisions in the Capital Region to sustain economic growth and ensure strong communities and a healthy environment.

According to Sections 17(1) and 18 of the Capital Region Board Regulation, all statutory plans must meet the requirements of CRGP. In the event of a conflict, the CRGP will prevail. This ASP has been developed to comply with the CRGP.

3.5 City of Leduc Municipal Development Plan

The City of Leduc's Municipal Development Plan (MDP), approved in April 2012, sets out the guidelines for orderly growth and development until 2035. The MDP provides a comprehensive long term land use policy framework within which present and projected growth and development may take place. The MDP determines where growth is most feasible based on such factors as infrastructure, sustainable growth principles, and economic development opportunities, and addresses such factors as the environment, the economy and tourism, social wellness and safety, recreation and culture, governance, and the administration, monitoring, and implementation of the MDP policies.

3.6 City of Leduc – Leduc County Intermunicipal Development Plan

The City of Leduc – Leduc County Intermunicipal Development Plan (IDP) was approved in 2011 to address the two municipalities' mutual issues, interests, and concerns as they relate to physical, social, and economic development in the IDP area. The plan is based upon five pillars of sustainability, which include:

1. Smart Growth
2. Creating Vibrant Communities
3. Environmental Stewardship
4. Economic Development
5. Responsible Governance

The IDP also includes procedures for the implementation of the IDP policies, dispute resolution, and amending the IDP.

4. Development Concept

The Blackstone ASP development concept (**Figure 4 - Land Use Concept**) has been designed in accordance with City of Leduc statutory plans and policies and servicing standards, the Capital Region Growth Plan, as well as all relevant Provincial and Federal statutes and regulations. Development staging and extension of infrastructure will be facilitated in a logical, efficient, and economical manner while having regard for potential environmental and ecological impacts.

4.1 Land Use Distribution

The development concept for the Blackstone ASP has been designed to support a mix of low and medium density residential and commercial uses (**Table 4 - Land Use Statistics**). The area is intended to capitalize on its location adjacent to several approved and developing residential neighbourhoods in the City of Leduc as well as the future Highway 2A bypass.

Table 4 - Land Use Statistics

LEDUC SOUTH WEST AREA STRUCTURE PLAN
LAND USE & POPULATION STATISTICS

	Area (ha)	% of GA
Gross Area	**64.80**	**100%**
Environmental Reserve	0.00	
		% of GDA
Gross Developable Area	**64.80**	**100%**
Required Municipal Reserve Dedication	**6.48**	**10.0%**
Arterial Road Right-of-Way	2.20	3.4%
Urban Services	0.82	1.3%
Circulation	12.96	20.0%
Municipal Reserve Dedication	6.48	10.0%
School with Public Park	*4.30*	*6.6%*
Park	*2.18*	*3.4%*
Storm Water Management	4.11	6.3%
General Commercial	4.08	6.3%
Total Non-Residential Area	**30.65**	**46.3%**
Net Residential Area (NRA)	**34.15**	**52.7%**

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	% of NRA	People/Unit	Population
Low Density Residential	32.17		854	82.7%		2,390
Single Detached & Duplex	*29.70*	*25*	*743*	*72.0%*	*2.80*	*2,079*
Townhouse	*2.47*	*45*	*111*	*10.8%*	*2.80*	*311*
Medium Density Residential	1.98	90	178	17.3%	1.80	321
Total	**34.15**		**1,032**	**100%**		**2,711**

STUDENT GENERATION STATISTICS

Level	Public	Separate	Total
Grade K-9	319	172	**491**
Grades 10-12	90	48	**138**
Total	**409**	**220**	**629**

NEIGHBOURHOOD DENSITY

Population Per Net Residential Hectare (p/nha)	79
Dwelling Units Per Net Residential Hectare (du/net ha)	30.2

5. Objectives and Policies

5.1 Land Uses

5.1.1 Residential

The Blackstone Area Structure Plan provides a variety of residential opportunities for neighbourhood residents. Proving a variety housing sizes and types supports the development of a balanced neighbourhood which can accommodate a range of family types, sizes, and income groups throughout their life cycle. The land use concept anticipates a planned overall density of approximately 29.9 units per net residential hectare (du/net ha).

The plan provides for the following residential designations:

Low Density Residential supports the development of single detached and duplex housing at a density of approximately 25 du/net ha, and townhouses at an approximate density of 45 du/net ha. Single Detached and Duplex land uses allow the opportunity to provide various forms of low density housing within the neighbourhood with and without rear lanes. Townhouses allow for the development of townhouse units primarily along collector roadways. Sites developed as townhouses will have vehicular access at the rear of the property via laneways, adding to the safety and visual appeal of the streetscape.

Medium Density Residential supports the development of stacked townhouses and low rise apartments (2 ½ storeys to 4 storeys) at a density of approximately 90 du/net ha. Medium Density Residential presents opportunities for stacked townhouses and low-rise apartments. The type of housing pursued will depend on market demands.

Objectives:

- To provide a variety of housing types that serve a range of age groups, income levels and needs.
- To establish increased residential density within the plan area that meets the density target set out by the Capital Region Growth Plan.
- To promote higher-density residential development along major transportation corridors to provide efficient and convenient access.

Policies:

5.1.1.1 A variety of housing types shall be provided, including single detached, duplex, townhouses, and low rise apartments.

5.1.1.2 Opportunities for large lot residential development in the northeast portion of the plan area may be considered.

5.1.1.3 Residential areas shall be developed in a manner compatible in scale and density to adjacent residential developments.

5.1.1.4 Townhouses and medium density residential development shall be located adjacent to the collector roadway.

5.1.1.5 Residential density shall be in accordance with the Capital Region Growth Plan.

5.1.2 Commercial

A portion of the plan area has been designated for commercial land uses. These lands are located on the highly visible and accessible corner of Range Road 253 / Grant MacEwan Blvd and the planned future arterial roadway to the south. All-directional access to the commercial area is expected to be provided off the collector roadway to the north of the site. If possible, a right-in-right-out access from Grant MacEwan Boulevard will be provided.

The intent of the commercial area is to provide for a wide range of goods and services to support the commercial needs of future residents in the plan area, adjacent residential developments, and the travelling public in general. This development is envisioned to include uses such as commercial and convenience retail, food and entertainment establishments, medical clinics, financial services, and other related uses. The commercial area will be comprehensively planned with pedestrian-friendly access and connections to adjacent lands. By planning an area for commercial development, the Blackstone ASP is providing an important service node to meet the future needs of surrounding land uses and the travelling public.

Objectives:

- To support the development of commercial land uses which serve the commercial needs for residents in the plan area and surrounding communities.
- To locate commercial land uses such that they are highly visible and accessible.
- To integrate the commercial land uses with surrounding residential uses.

Policies:

5.1.2.1 The commercial site shall be located at the corner of Grant MacEwan Blvd and the Future Highway 2A bypass to ensure high visibility and accessibility.

5.1.2.2 The commercial site should be accessible by multiple modes of transport i.e. car, transit, and walking.

5.1.2.3 Commercial developments should be encouraged to have higher architectural standards and landscaping requirements.

5.1.2.4 The land use concept shall provide connections between commercial and residential land uses.

5.1.2.5 There shall be no outdoor storage permitted in the commercial area.

5.1.3 Parks, Multiways, and Open Space

The ASP has been designed to provide connectivity to parks and trails internally and to adjacent communities (**Figure - 4 Land Use Concept)**.

A school/park site is located at the east boundary of the plan area and a central park site is located in the centre of the plan area. The school/park site is intended to extend into the quarter section to the east to accommodate the development of a public elementary school and a separate elementary school. The central park site is intended to be the recreational focal point for the community and a social gathering place for neighbourhood residents. Both park sites are located along the collector roadway network to provide appropriate access to the sites.

In addition to the two main park sites, there are smaller pocket parks and a stormwater management facility. The smaller park sites are intended to provide passive recreational space within close walking distance to neighbourhood residents. The lands that surround the stormwater management facility provide a natural location for passive recreational opportunities (however, these lands will not included in Municipal Reserve dedication calculations). Multiways between these focal points improve overall walkability and promote active transportation and healthy lifestyles for neighbourhood residents.

The Municipal Government Act Section 666 requires the dedication of 10% of the gross developable area, cash in lieu, or a combination of the two for Municipal Reserve. The gross developable area for the Blackstone ASP is approximately 64.8 ha which would require approximately 6.48 ha for Municipal Reserve dedication. The land use concept identifies approximately 6.48 ha (or approximately 10% of the gross developable area) of land for Municipal Reserve dedication within the plan area.

Objectives:

- To support the development of a connected open space network.
- To provide adequate access and appropriate open space amenity to meet the needs of the plan area.
- To provide pedestrian-friendly connectivity within the plan area and into adjacent communities.
- To accommodate low impact and naturalized stormwater drainage through the plan area to the Stormwater Management Facility.

Policies:

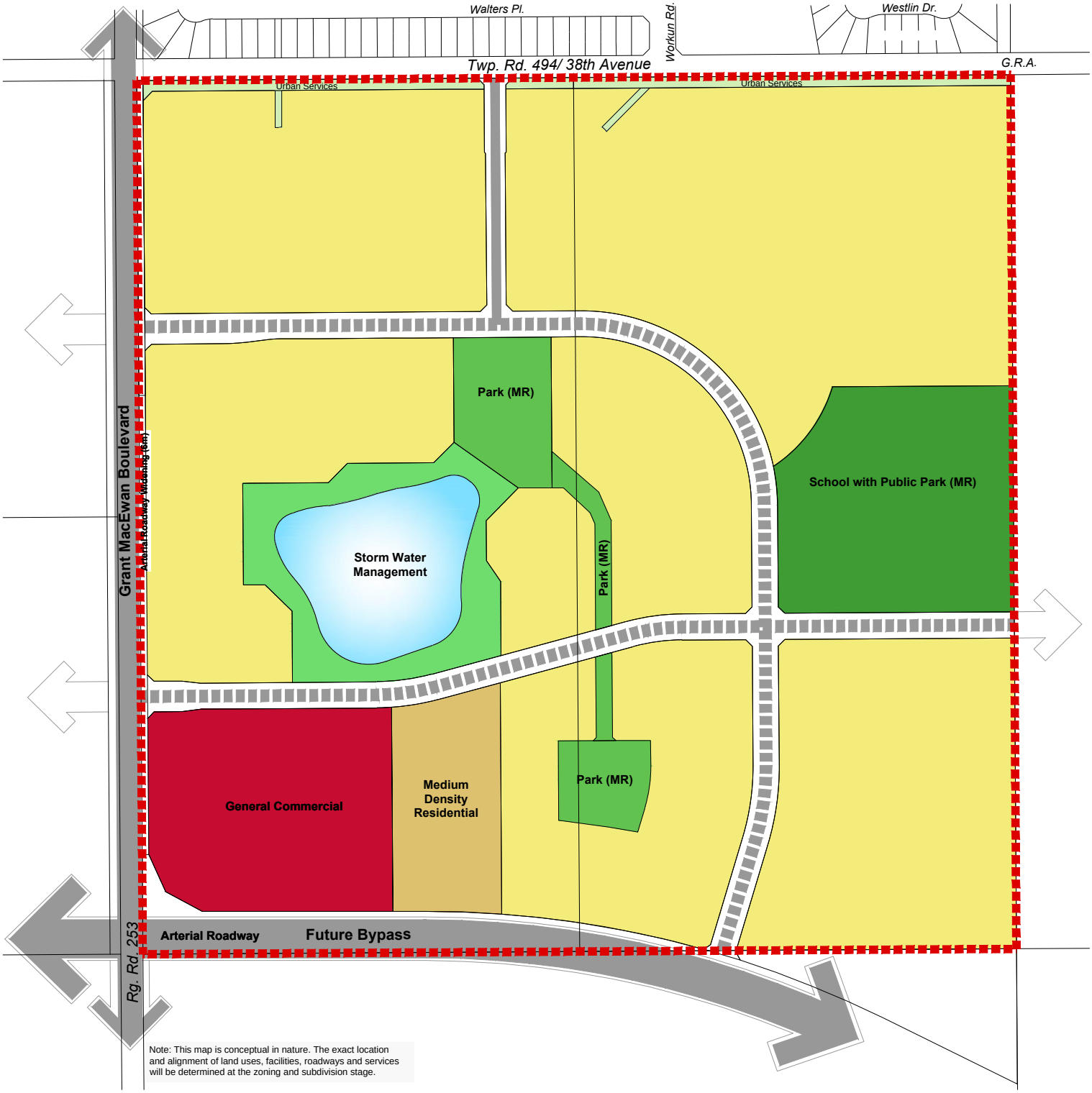
5.1.3.1 Municipal Reserves shall be utilized to provide connective trails and park space.

5.1.3.2 Where possible, trails and park space should be located to provide logical connectivity between adjacent developments, thereby maximizing park size and trail length.

5.1.3.3 The stormwater management facility should be included as part of the park and/or multiway network.

5.1.3.4 Proponents shall work with the City of Leduc and the pipeline right-of-way owner to determine the location and construction standards for a connective trail through and along the public utility lot.

5.1.3.5 Bioswales should be incorporated into the overall stormwater management network for the plan area.



Legend

- ASP Boundary
- Low Density Residential
- Medium Density Residential
- General Commercial
- Storm Water Management
- Park (MR)
- School with Public Park (MR)
- Urban Services
- Local Roadway Connection
- Collector Roadway
- Arterial Roadway

5.2 Transportation

The Blackstone ASP maintains sufficient access to existing and planned arterial roadways. Grant MacEwan Boulevard is the primary access to the neighbourhood. Additional neighbourhood access is provided to Township Road 494 (38 Avenue) and the potential future Highway 2A bypass. With the development of the neighbourhood, Township Road 494 (38 Avenue) will need to be reconstructed to the intersection of Workun Road to a minor collector status. No sidewalks or fire hydrants will be required on Township Road 494 (38 Avenue)

Access to the future Highway 2A bypass is conceptually illustrated in the figures. The proposed transportation network is subject to change pending approval of the Highway 2A bypass road and interchange by Alberta Transportation. At such time, an amendment to the Blackstone ASP may be required to ensure the land use concept aligns with the approved concept plan for the bypass.

The land use concept provides a 6.0 m area along the entire length of Grant MacEwan Boulevard. It is intended that this area will accommodate future road widening as well as noise attenuation measures. A noise attenuation study is required to ensure noise levels within Blackstone are below the City of Leduc's 55 dB limit. If required, a noise attenuation fence will be constructed within the 6.0 m area along Grant MacEwan Boulevard.

Collector roadways for the ASP have been designed to provide for efficient access for personal vehicles and active modes of transportation (**Figure 6 - Transportation**). In addition to the roadway infrastructure, the neighbourhood proposes a comprehensive multiway system that will improve pedestrian and bicycle access within the neighbourhood and into adjacent neighbourhoods. Multiways will be incorporated into the pedestrian network along the collector network and between neighbourhood focal points (**Figure 5 - Open Space and Connectivity**).

5.2.1 Circulation

Collector Roads

Collector roadways, which provide internal/external accesses, are spaced at appropriate intervals to facilitate traffic progression and to ensure that sufficient distance is available to allow for right and left turn-bay development. The collector roadway network provides efficient and convenient access to residential areas, provides a distinctive entryway into the neighbourhood, and establishes a pedestrian-oriented streetscape through provision of separate sidewalks and multiways. Local public transportation will be provided on the collector roadways in the future.

Local Roads

Local roadways will provide direct access to lots within the plan area. The locations of these roads are flexible, and will be determined by how the land is subdivided and the nature of the individual site.

Local roadways will be constructed to an urban standard with a curb and gutter along with a sidewalk. The sidewalk should be considered part of the pedestrian network and provide connections to the multiway system.

Objectives:

- To provide efficient and convenient access to the plan area and logical connectivity within it.
- To provide connections to the local and regional transportation network.
- To accommodate the development of a safe and efficient roadway system for multiple modes of transportation, including automobiles, cyclists, and pedestrians.

Policies:

5.2.1.1 The local road network shall incorporate a network of streets that provide a high degree of connectivity and access to lots.

5.2.1.2 Front drive access for residential units along collector roadways should be minimized.

5.2.1.3 A City of Leduc approved Transportation Impact Assessment (TIA) shall determine roadway hierarchy and signalization.

5.2.1.4 The design of collector roadways shall accommodate multiple modes of transportation, including automobiles, cyclists, and pedestrians.

5.2.2 Active Transportation

The plan area and surrounding lands are located in Priority Growth Area 'E', as identified in the Capital Region Growth Plan. Lands in this area will be developed with an overall net residential density of between 25 and 30 du/net ha. In recognizing this, connective multiways have been incorporated into the land use concept to allow for local residents to walk and cycle within the plan area and into existing and future communities (**Figure 5 - Open Space and Connectivity**). These multiways will also provide connections between neighbourhood focal points.

Objective:

- To promote efficient and accessible pedestrian and cycling circulation options in the plan area.
- To implement Low Impact Development principles into the transportation concept.

Policies:

5.2.2.1 The transportation concept shall include a system of multiways to facilitate active transportation across the plan area.

5.2.2.2 The design of collector roadways shall accommodate pedestrians and cyclists within a multiway.

5.2.2.3 All multiways shall connect to the main pedestrian circulation network (**Figure 5 - Open Space and Connectivity**).

5.2.2.4 The design of pedestrian connections between neighbourhood focal points should consider Low Impact Development strategies.

5.2.3 Transportation Impact Assessment

A Transportation Impact Assessment (TIA) was prepared by Bunt Engineering Ltd. in support of this ASP, and has been submitted under separate cover. The primary scope of this assessment was to:

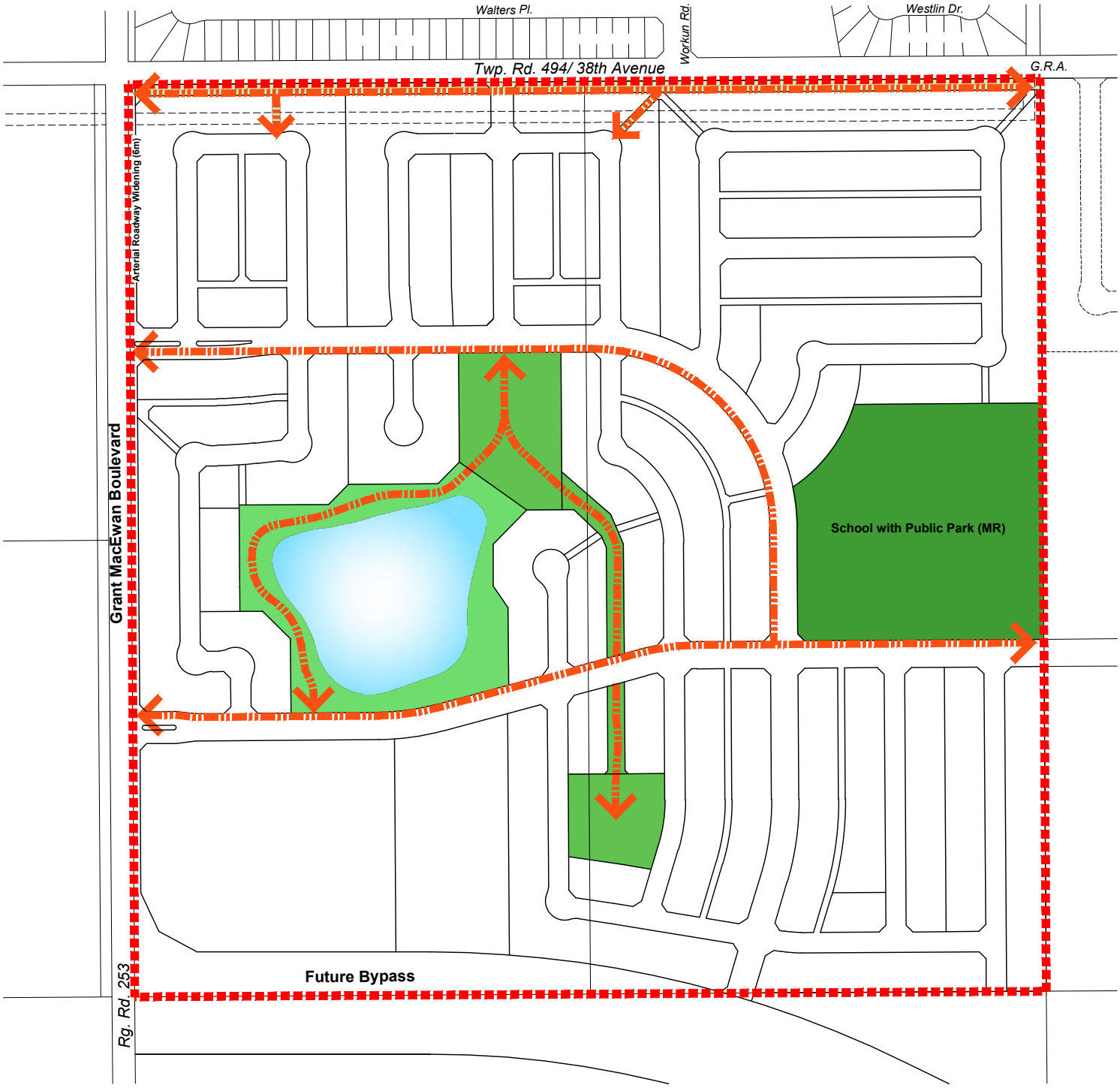
- Examine the proposed development area, including land uses, roadways, traffic conditions and traffic operations;
- Identify the proposed future roadway network adjacent to the plan area including access locations;
- Estimate forecasted background traffic conditions;
- Estimate future vehicular trip patterns generated to and from the plan area;
- Distribute and assign the projected vehicular demands on adjacent corridors based on the proposed roadway network; and,
- Conduct intersection capacity analysis to identify intersection and roadway improvement measures.

With proposed improvements, capacity analyses revealed that all study intersections will operate with an acceptable level of service at 'D' or better at the long-term planning horizon (beyond 2032). Notwithstanding the traffic control and lane requirements identified in the TIA report, requirements for gradual improvements should be confirmed through the completion of traffic counts and delay studies. As well, the actual improvement requirements should be confirmed upon build out of the Blackstone ASP so that the intersections can continue to operate effectively once the traffic patterns have been firmly established.

The TIA proposes lane configuration and storage lengths on major intersections. This information may be used for initial planning and will require further verification with an actual implementation plan during the design stage.

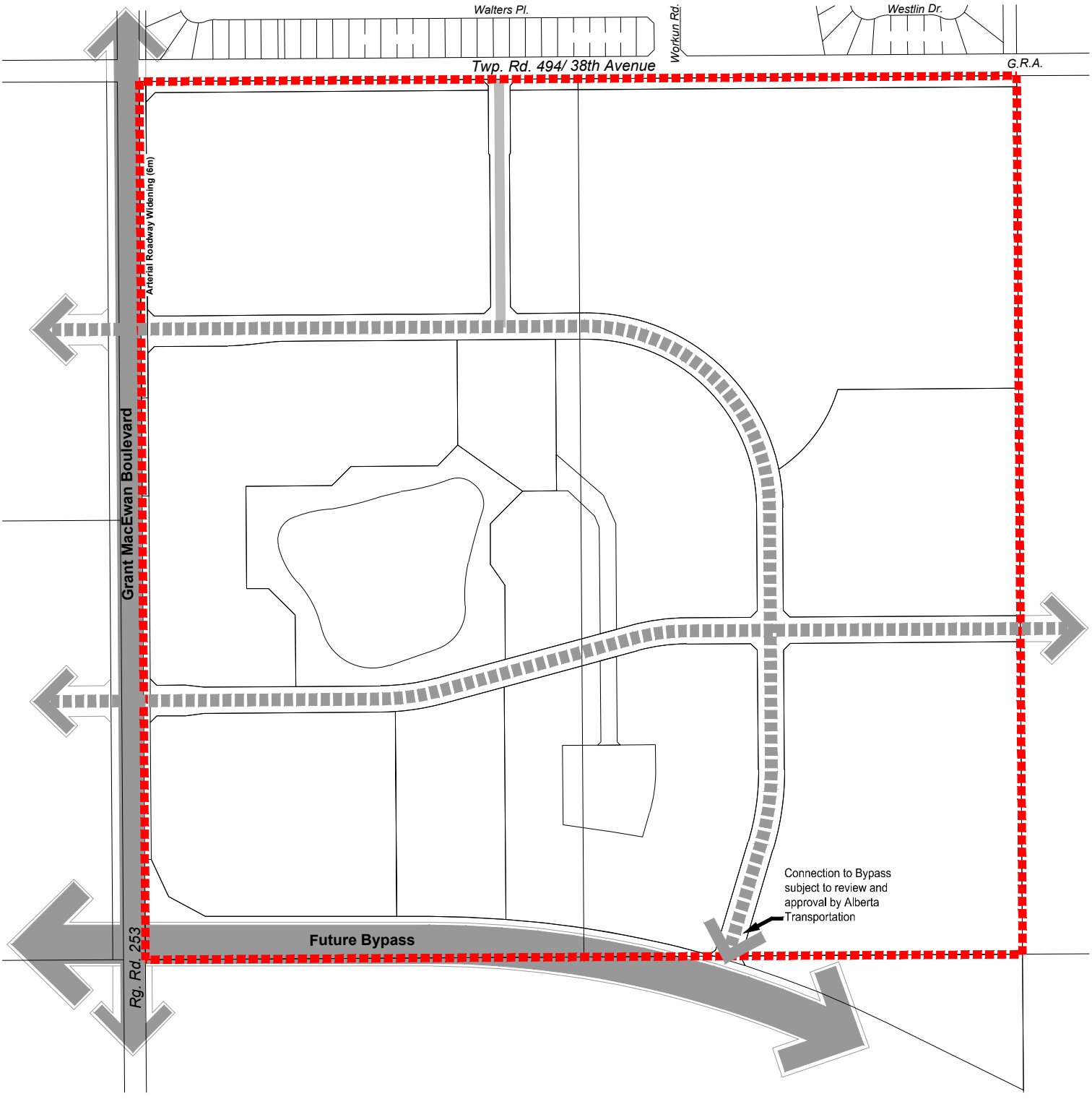
Open Space and Connectivity

Figure 5



Legend

- ASP Boundary
- School with Public Park (MR)
- Park (MR)
- Urban Services
- Storm Water Management
- Multiway



Legend

- ASP Boundary
- Collector Roadway
- Arterial Roadway
- Local Road Connector

5.3 Servicing

The Blackstone ASP will be fully serviced with water, sanitary sewer, and stormwater management, along with utilities that include power, natural gas, phone, and cable. Extensions to municipal water and wastewater servicing are proposed below. The details of the proposed servicing schemes will be further defined through subsequent reports and detailed engineering design.

5.3.1 Stormwater Management

The natural drainage for the Blackstone ASP lands flows principally from the south east to the north west, and then westerly approximately 500 m to a tributary of the Whitemud Creek. The natural drainage course will be redirected and picked up in the stormwater in the southwest portion of the plan area (**Figure 7 - Stormwater Servicing**).

Minor storms in the plan area will drain into the stormwater management facility. The stormwater management facility will be a fully landscaped feature for the purposes of providing stormwater rentention and primary treatment. Discharge from the pond will be limited to a pre-development 1:5 year rate of runoff, with storage being provided for the most critical storm event.

A stormwater management study will be undertaken prior to submission of the first plan of the subdivision. The approximate area of the stormwater management facility (**Figure 7 - Stormwater Servicing**) will be adjusted after the stormwater management study is accepted by the City of Leduc and Alberta Environmental Protection.

Objectives:

- To provide a storm water management system that safeguards storm water runoff quality and quantity from exceeding predevelopment standards and flows

Policies:

5.3.1.1 Prior to finalizing the stormwater management concept, an optimum stormwater strategy shall be determined with effort to minimize site grading.

5.3.1.2 Landscaping of parks, open spaces, and stormwater management facilities shall incorporate native and naturalized plant species to minimize landscape irrigation.

5.3.1.3 Bioswales should be incorporated into the overall stormwater management network to convey overland drainage in appropriate areas and promote natural infiltration.

5.3.2 Water Servicing

Water service for the plan area will be provided through the extension of the existing water main within the Windrose neighbourhood north of the plan area. An additional water connection will be provided to the Blackstone along Grant MacEwan Blvd.

Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for the various forms of development. Water looping will be provided in accordance to City of Leduc requirements, and are detailed in the Hydraulic Network Analysis submitted under separate cover. **Figure 8 - Water Servicing** illustrates the layout of the proposed water mains.

Objective:

- To provide full services to meet the needs of the Blackstone ASP, while also considering the needs of future adjacent developments.

Policies:

5.3.2.1 Water system infrastructure will be provided in accordance with the approved Hydraulic Network Analysis to the satisfaction of the City of Leduc.

5.3.3 Sanitary Sewer Servicing

The sanitary sewer network for the Blackstone ASP will be a gravity system that is sized to accommodate the future development of the ¼ section to the east. Until such time that the Sanitary Trunk from the Blackstone development can be extended to the West, an oversized storage pipe with a temporary lift station discharging at a maximum of 22 l/s to the extension of the gravity stub located in the Windrose Neighbourhood will be utilized. Once the ultimate sanitary trunk system is extended to the west, only a small portion of the development will continue to drain by gravity through the Windrose neighbourhood. Figure 9 - Sanitary Servicing illustrates the direction of flow for the sanitary servicing and delineates the portion of the development that will permanently flow north through Windrose

Objectives:

- To provide full services to meet the needs of the Blackstone ASP, while also considering the needs of future adjacent developments.
- To provide a temporary servicing concept that will utilize a maximum discharge of 22 l/s into the Windrose Subdivision until such time that the ultimate system can be extended west.

Policies:

5.3.3.1 Sanitary system infrastructure will be provided in accordance with the approved Sanitary Servicing Plan to the satisfaction of the City of Leduc.

5.3.4 Shallow Utilities

Shallow utilities including electricity, gas, telephone, and cable are all available for extension into the plan area. These utilities will be provided within the road right-of-way and through easements on private lands.

Electricity

Electric power is supplied in the area by Fortis Alberta. According to the utility, adequate service is available in the area to supply the proposed ASP area.

Gas

AltaGas Ltd. is the local gas utility. According to the utility, adequate service is available in the area to supply the proposed ASP.

Telephone and Cable

Telephone and cable can be provided to all lots in the area via extension of services from adjacent lands. These services are proposed to be installed as shallow buried utilities along the shoulder or in easement along roadways in the service area.

Objectives:

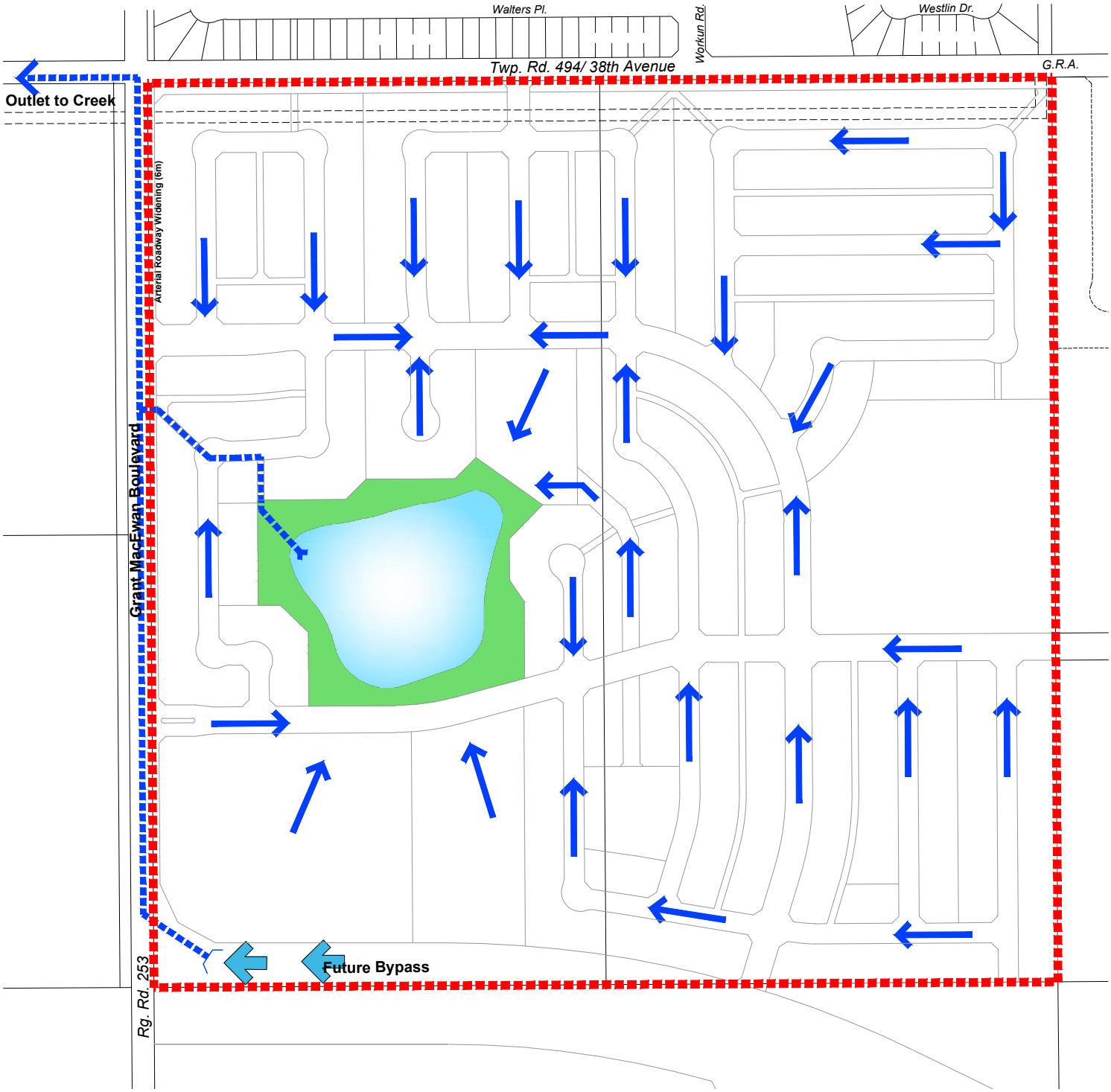
- To provide reliable municipal shallow utilities servicing to all users within the plan area.
- To provide opportunities for alternative energy options within the plan area.

Policies:

5.3.4.1 All shallow utility infrastructure required to provide service to development shall be located underground.

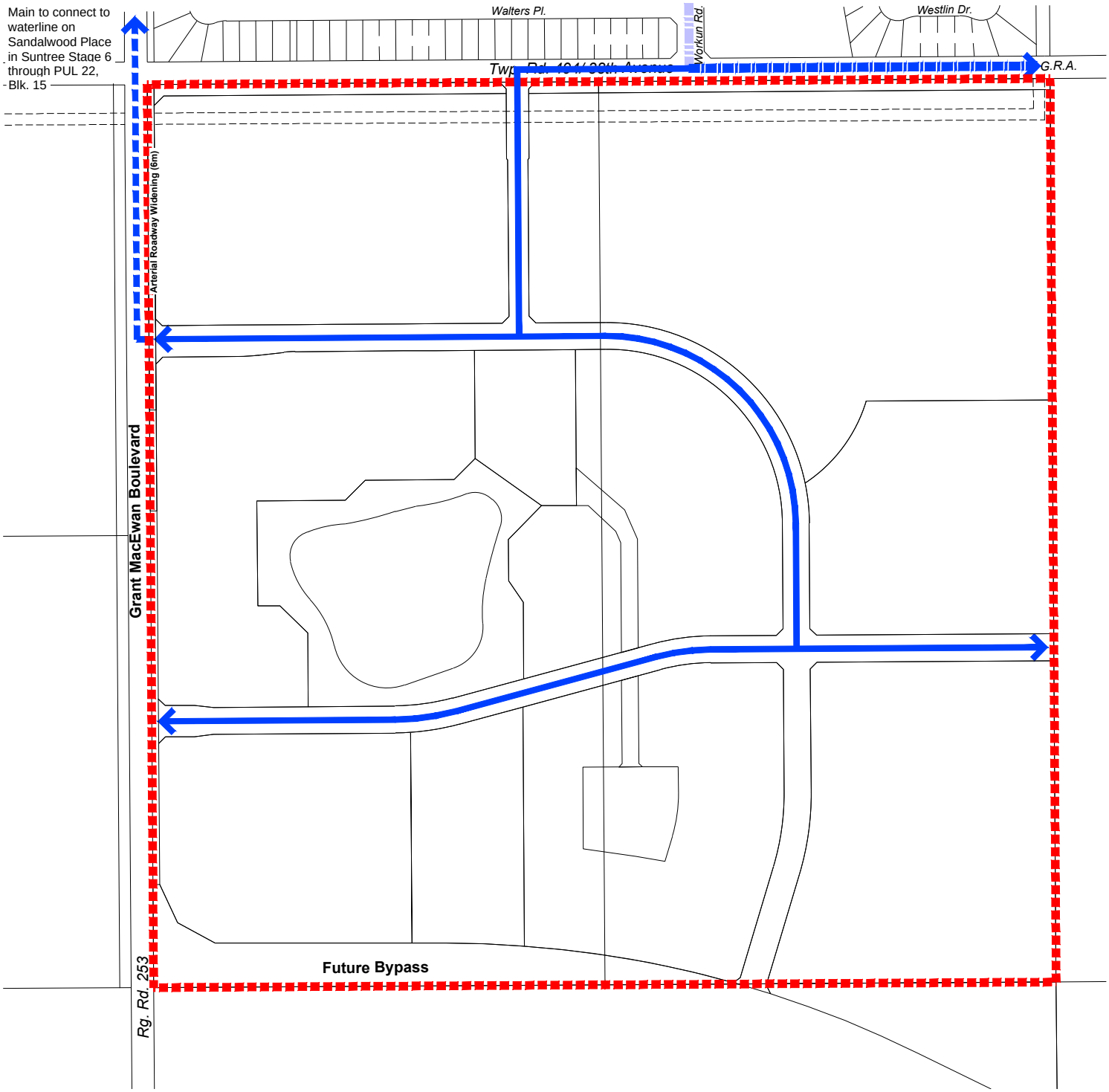
5.3.5 Emergency Response Services

Local emergency services will be available to all future developments located in ASP lands. Ambulance services are supplied by Alberta Health Services, with the closest hospitals located in the City of Leduc. Police Services in the City of Leduc are provided by the Royal Canadian Mounted Police (RCMP), with a detachment located in the City. Fire protective services have a fire hall located in the City of Leduc.



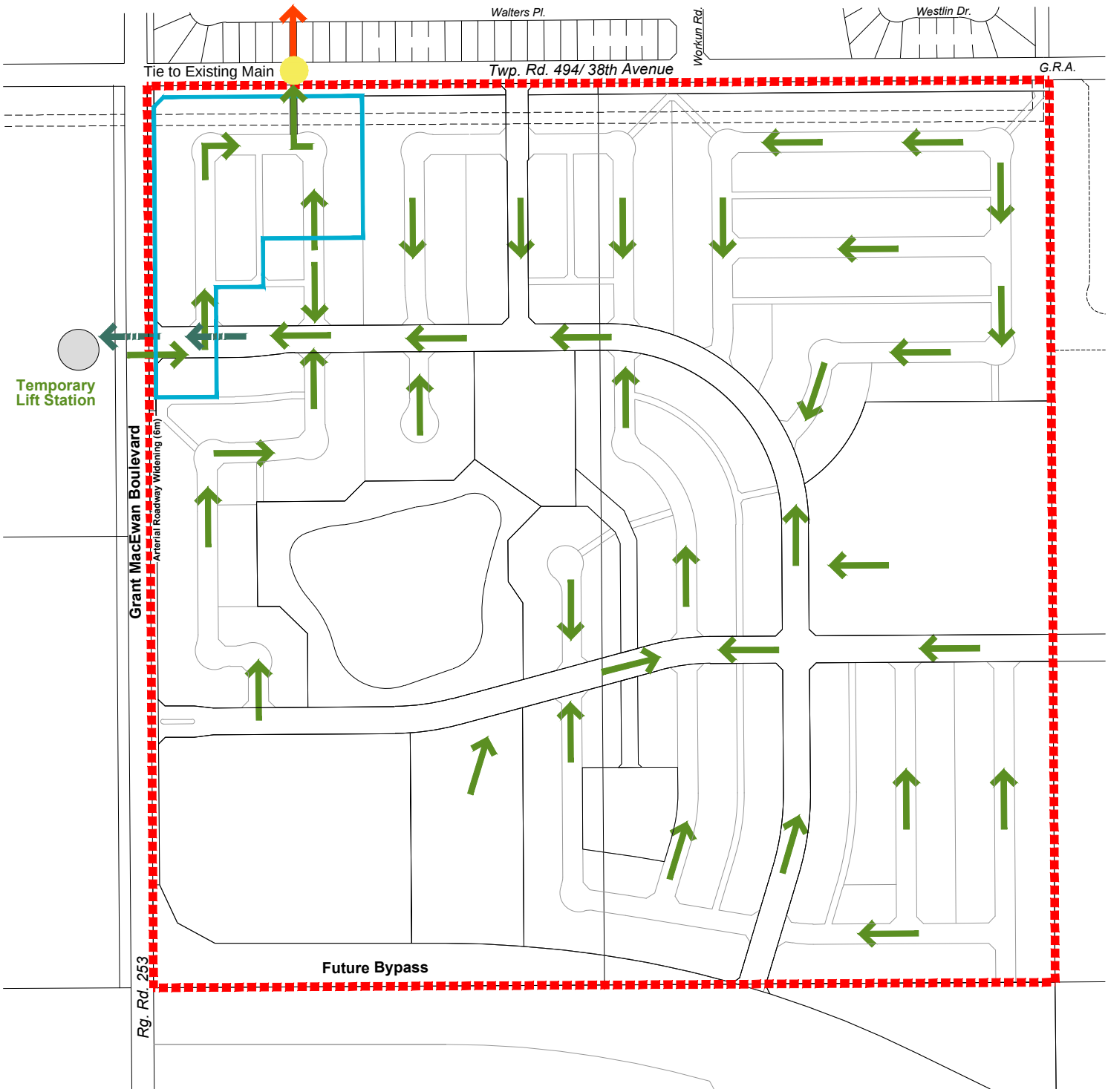
Legend

- ASP Boundary
- Storm Water Management
- General Direction of Flow
- Storm Water Outlet
- Proposed Realignment of Existing Drainage Course



Legend

- ASP Boundary
- Existing 400mm Water Main
- Future 400mm Water Main
- Proposed 350mm Water Main
- Proposed Offsite 200mm Water Main (Looping)



Legend

- ASP Boundary
- Existing 600mm Sanitary Main
- Proposed 2100mm Superpipe
- Proposed Sanitary Main Flow
- Tie to Existing Main
- Ultimate Flow Through Windrose

5.4 Implementation

The plan has been prepared with the recognition that there is a need to provide flexibility to ensure development corresponds to changing market demands and demographics.

The Blackstone ASP provides a policy framework guiding future subdivisions and development. The staging of development will progress in a logical and cost effective manner, initiating in the northwest area and following the collector road through the plan area (**Figure 10 - Development Staging)**. The staging provided in the ASP is conceptual and may change depending on future development demand.

With each stage of development, an amendment to the land use bylaw will be submitted. These amendments will involve redistricting the current Agricultural District to the applicable land use districts.

Objectives:

- To develop land in accordance with the City of Leduc policy framework.
- To develop the ASP lands in a logical and cost effective manner.

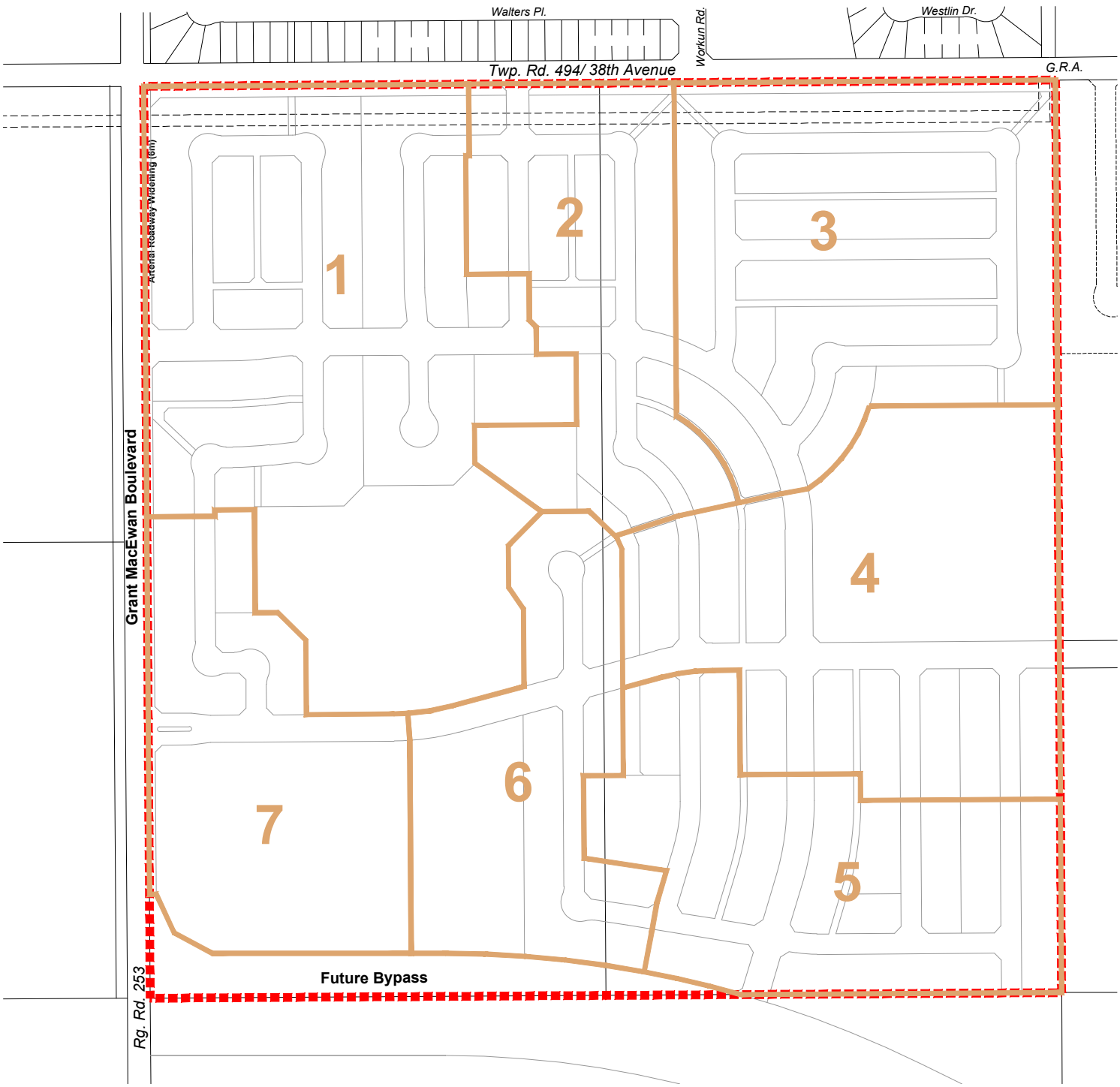
Policies:

5.4.1.1 Land shall be developed with consideration given to adjacent statutory and non-statutory plans, located in the City of Leduc.

5.4.1.2 Order of development shall occur as outlined in **Figure 10 - Development Staging**.

5.4.1.3 Development shall generally be in accordance with the land use concept in **Figure 4 - Land Use Concept**.

5.4.1.4 The interim use for all lands located in the Blackstone ASP shall remain as agricultural.



Legend

- ASP Boundary
- 1-7 General Staging Sequence
- Staging Boundary

Appendix A – Policy Compliance

Capital Region Growth Plan

Update all policy compliance statements in the second column.

Capital Region Land Use Plan	Blackstone ASP
I. Protect the Environment and Resources	
A. Preserve and Protect the Environment	
Policy (i) – Any development which may cause detrimental effects such as erosion or pollution to lakes, rivers, water bodies and shorelines shall be prohibited unless appropriate mitigation measures are implemented.	Policies in the Area Structure Plan ensure stormwater will be clean and free of pollutants.
Policy (v) – Support innovative design, construction and operational technologies and strategies which reduce emissions.	The Area Structure Plan provides opportunities for the application of low impact development strategies.
Policy (vi) – Manage land use distribution patterns to reduce reliance on automobiles.	The Area Structure Plan promotes a complete and walkable community by supporting a multiway network through the community and locating higher density residential uses in proximity to future transit uses.
II. Minimize Regional Footprint	
A. Identify, Protect and Prioritize Lands for Regional Infrastructure	
Policy (i) – Ensure that lands identified for regional infrastructure such as energy transmission, highways, municipal infrastructure, transit and related facilities are protected from incompatible development.	The Area Structure Plan requires compatible development in the vicinity of major transportation corridors, or an appropriate buffer area between incompatible uses.
Policy (v) – Encourage and support sustainable development within the region.	The Area Structure Plan promotes sustainable and compact development.
B. Concentrate New Growth Within Priority Growth Areas	
Policy (i) – Most new growth shall occur within priority growth areas.	The Blackstone ASP is in Priority Growth Area *E*. This Area requires a minimum net residential density target of 25-30 units per net residential hectare. The Area Structure Plan meets this density target.
Policy (v) – Priority growth areas shall incorporate intensive forms of development that significantly exceed existing development patterns.	The Area Structure Plan promotes the development of a variety of higher density residential forms that meet the Capital Region Board's target density for the area.
Policy (ix) – Development on or near municipal boundaries shall be compatible and consistent with the policies of the Plan and shall not impede the sustainable delivery of infrastructure.	The Area Structure Plan provides appropriate transitions to adjacent municipalities' land uses.

Capital Region Land Use Plan	Blackstone ASP
D. Support Expansion of Medium and Higher Density Residential Housing Forms	
Policy (i) – New residential development shall provide a greater proportion of higher density residential units.	The Area Structure Plan supports the development of new and alternative residential forms and promotes the integration of higher-density residential development.
Policy (ii) – Support innovative housing designs and / or built forms within new and existing residential neighbourhoods.	
Policy (iii) – Greenfield developments shall make provision for a mixture of uses including a diversity of housing forms, community services, local retail and employment opportunities.	The Area Structure Plan supports the development of pedestrian-friendly neighbourhoods with a variety of essential services.
Policy (iv) – Transit accessibility must be included in the design of all new developments.	The land use concept is equipped to accommodate future transit service on collector roadways.
III. Strengthen Communities	
A. Create Inclusive Communities	
Policy (i) – Encourage and support the establishment of social infrastructure throughout the region.	The Area Structure Plan promotes the development of recreational and public service facilities within the area.
Policy (ii) – Support initiatives to improve the livability of communities.	The Area Structure Plan proposes key recreational features in the plan area and promotes the integration of these features within the neighbourhood fabric.
Policy (iii) – Integrate uses with adjacent developments to improve connectivity and accessibility to local parks, open space, commercial, and community services.	The multiway trail system provides connectivity between uses, including local parks, open space, residential, and commercial.
Policy (iv) – Encourage co-location and/or shared use of compatible public service infrastructure, such as education facilities, parks and civic uses.	The Area Structure Plan supports the development of education facilities, local employment, and residential land uses.
B. Support Healthy Communities	
Policy (i) - Support the implementation of present and future initiatives to create and enhance parks, trails and natural areas for public use.	The Area Structure Plan supports the development of a hierarchy of parks, open spaces, and natural areas across the plan area.
Policy (ii) – Improve accessibility to community services by providing sidewalks and bicycle trails to encourage walking and cycling and locate these services within proximity to transit, where possible.	The multiway network will connect focal point with residential areas across the plan area and into adjacent communities.
Policy (iv) - Encourage and support innovative and green design solutions for neighbourhoods and buildings.	The Area Structure Plan promotes low impact development practices and green

Capital Region Land Use Plan	Blackstone ASP
	development principles.
C. Support Public Transit	
Policy (i) – Provide a mix of higher intensity land uses along transit corridors, at nodes, and employment centres.	The Area Structure Plan encourages medium density residential development in proximity of commercial and open spaces.
Policy (iii) – New developments shall be designed for connectivity and accessibility to transit facilities.	
D. Support Innovative and Affordable Housing Options	
Policy (i) - Municipalities shall provide for a diversity of housing needs for the entire population of the region.	The Area Structure Plan promotes the development of a variety of housing types and sizes, including single- and semi-detached, street oriented row housing, and low-rise medium density housing.
Policy (ii) – All residential developments shall provide a greater variety of housing types.	
IV. Increase Transportation Choice	
A. Integrate Transportation Systems with Land Use	
Policy (ii) – Ensure the integration of public transportation infrastructure and land use development	The Area Structure Plan provides policies for the provision of future transit service.
Policy (iii) – Design transportation infrastructure to support multiple modes of transport.	The Area Structure Plan promotes the development of a multiway network to support opportunities for active transportation across the plan area.
Policy (iv) – Support development of inclusive communities to reduce the need for travel.	The land use concept identifies a commercial node and supports pedestrian connections to this area.
B. Support the Expansion of Transit Service in Various Forms	
Policy (i) – Expand and extend the level, quality and range of public transportation options available to serve the Region.	The Area Structure Plan encourages multiple modes of transportation. The multi-use trail provides connectivity between open spaces and residential uses. The neighbourhood is equipped to accommodate the integration of public transit when available.
Policy (iv) – Support multi-modal transportation options by providing multi-use streets sufficient to accommodate bicyclists, motorists and pedestrians.	
Capital Region Growth Plan Addendum	Blackstone ASP
II. Land Use	
2.3 Land Use Policies Density Targets – Priority Growth Area "E": 25 – 30 dwelling units per net residential hectare.	The Area Structure Plan proposes a residential density that meets the minimum growth target mandated by the Capital Region Board.

City of Leduc Municipal Development Plan

City of Leduc Municipal Development Plan	Blackstone ASP
2B Clean Air and Greenhouse Gas Emmissions	
2. Encouraging the use of alternatives to motorized transport in collaboration with the school boards and other community partners, including active modes of travel such as walking and cycling, through integrated planning and the promotion of compact urban form and mixed land use.	The Blackstone ASP includes higher density residential forms connected by a network of multiways across the plan area and between neighbouring communities.
3. Providing realistic alternatives to single occupant automobile use.	
2D Water Resources	
The City shall protect water resources and manage municipal water supplies by:	
4.Preserving natural streams and constructed drainage systems in developed urban areas.	Where appropriate, natural drainage corridors will be maintained until such time that they can be incorporated into the stormwater facility.
8.Controlling water pollution through the implementation of dependable, cost-effective, and environmentally responsible best practices such as low impact development.	Minor storms will drain into the stormwater management facility. The facility will provide retention and primary treatment.
2F Natural Areas and Urban Forests	
The City shall conserve and protect natural areas for the purposes of protecting wildlife habitat and corridors, supporting natural systems, and providing recreational opportunities by:	
4. Providing buffer areas around sensitive natural areas in order to minimize the impacts of development on natural features.	Where appropriate, natural features will be maintained by providing adequate buffers and setbacks.
5. Providing low impact public access to natural areas that can sustain human uses with minimal impacts to the overall health of ecosystems.	To accommodate low impact and naturalized stormwater drainage through the plan area to the Stormwater Management Facility.
6. Developing public open spaces with environmentally sensitive best practices such as bio-swales, which will enhance and integrate natural systems.	Bioswales should be incorporated into the overall stormwater management network for the plan area. Landscaping of parks, open spaces, and stormwater management

	facilities may incorporate native and naturalized plant species to minimize landscape irrigation.
2G City Beautification	
The City shall enhance the beautification of Leduc by:	
1. Maintaining minimum design standards for parks and open spaces that reflect the community's vision for landscaping on public lands.	Architectural controls shall be considered for all residential and commercial development with the Blackstone ASP lands.
5. Supporting enhanced way finding and community identity through the development of attractive entrance features and public signs at the entrances to Leduc and throughout the community.	Signage and entrance features shall be outlined at time of subdivision and detailed design.
4A Growth Management	
The City shall manage growth by:	
1. Promoting compact urban form through sensitive redevelopment of existing developed areas and efficient development of undeveloped areas.	The Blackstone ASP lands propose a density of approximately 30 dwelling units per net residential hectare, which will result in a more compact urban form.
7. Ensuring that new development will be approved adjacent to existing developed areas, so that public services and infrastructure will be extended logically and efficiently to create contiguous development.	Blackstone ASP capitalizes on the logical extension of municipal infrastructure. The water service for the plan area will be provided through the extension of the existing watermain within the Windrose neighbourhood, north of the Plan Area. The sanitary sewer network for the Blackstone ASP lands will tie into an existing main on 38th Avenue, near Grant MacEwan Boulevard.
8. Meeting transportation demand through provision of choice among mobility options including non-vehicular travel, the private automobile, and public transit.	The Blackstone ASP provides options for alternative modes of travel; the multiway system provides connectivity throughout the

	ASP, and to the greater community.
9. Achieving residential densities in conformance with the density targets of the Capital Region Board.	The Blackstone ASP proposes densities that meet the requirements mandated by the Capital Region Board.
10. Approving new subdivisions only where a full range of municipal infrastructure (sewer, water, and roads) can be provided in an environmentally sound, economical, and timely manner.	The Blackstone ASP lands will be serviced to full urban standards. Extending sewer, water, and roads in this area are the logical extension of infrastructure.

4B General Land Use Planning	
The City shall achieve the orderly, economical and beneficial development and use of land by:	
4. Prohibiting the premature subdivision and development of land prior to the availability of municipal infrastructure (sewer, water, and roads).	The Blackstone ASP lands will be serviced to a full urban standard. Extending sewer, water, and roads in this area are the logical extension of infrastructure for the area.
6. Planning for land uses at safe distances from development constraints such as landfills, major rail and road rights-of-way, oil and gas facilities, and noise sources.	Setbacks from arterial roadways, and oil and gas facilities will be maintained to ensure compatibility.
7. Prohibiting land uses and developments that may create negative impacts on safe airport operations.	The Blackstone ASP lands are outside of the Edmonton International Airport NEF-25 boundary.
12. Providing for new residential neighbourhoods with a variety of housing types, which have full access to a complete range of municipal infrastructure, community services, retail establishments, commercial developments, open space, recreational facilities, and educational institutions.	The Blackstone ASP lands will be designed to be a complete community. Full urban services, as well as parks, mulitways, and a commercial node will be available within the neighbourhood. Connections to the greater community ensure access to City-based amenities.
13. Facilitating the development and redevelopment of local and regional commercial and retail areas that will serve all of the consumer needs of the region.	To locate commercial land uses such that they are highly visible and accessible. To integrate the commercial land uses with surrounding residential uses.
16. Dedicating local and regional parks and natural open space areas with generous access to trails, pathways, and the Multiway system.	The Blackstone ASP proposes a robust open space and multiway network throughout the neighbourhood.
17. Promoting innovative planning and development concepts and methods such as low impact development, environmental design, green building techniques, innovative servicing technologies, and recycled construction materials.	Low impact design feature will be utilized in the design of stormwater management facilities, and open spaces where feasible. These features will be detailed at time of subdivision.

20. Requiring that all Area Structure Plan, Area Redevelopment Plan, land use re-designation, subdivision, and development approvals generally conform to the land uses designated in Figure 4 — Municipal Development Plan Policy Areas, while allowing for minor adjustments to the boundaries of those Policy Areas without an MDP amendment if such adjustments are supported by detailed planning studies.	The Blackstone ASP is intended conform to the requirements of the Municipal Development Plan, as the land uses proposed support the concentrated growth.
4E New Residential Development	
The City shall provide for new residential neighbourhoods by:	
1.Requiring that all new residential Area Structure Plans achieve the target densities mandated by the Capital Region Board.	The Blackstone ASP achieves a density of 29.9 units per net residential hectare (du/ net ha).
3. Measuring net residential density in new residential Area Structure Plans in order to maintain consistency with the density measures used by the Capital Region Board.	
4. Acknowledging new trends in household formation (e.g., smaller households) in the design of new residential neighbourhoods and the provision of a variety of housing types.	The Blackstone ASP provides a variety housing sizes and types supports the development of a balanced neighbourhood which can accommodate a range of family types, sizes, and income groups throughout their life stages.

5. Requiring that all new residential Area Structure Plans provide a variety of housing types including, where appropriate, types such as single-detached, semi-detached, duplex, triplex, fourplex, townhouse, or apartment dwellings, with no more than 50% of the total number of dwelling units in any residential Area Structure Plan to be designated within the same residential land use district of the Land Use Bylaw.	The Blackstone ASP provides a variety housing sizes and types supports the development of a balanced neighbourhood which can accommodate a range of family types, sizes, and income groups throughout their life cycle.
7. Supporting the provision of affordable market and financially supported housing in all new neighbourhoods	The Blackstone ASP proposes a mix of housing types and sizes.
8. Balancing higher residential densities with the provision of open space.	A mix of residential densities will be provided within the Blackstone ASP lands.
9. Ensuring that all new residential neighbourhoods have full access to a complete range of municipal infrastructure (sewer, water, and roads), community services, retail establishments, commercial developments, open space, recreational facilities, and educational institutions.	The Blackstone ASP concept proposes retail establishments and commercial development, active and passive recreational open spaces. There is access to other recreational facilities and educational institutions within the City of Leduc and Leduc County.
10. Providing for neighbourhood commercial (office, personal service business, and retail) development at key locations within new residential Area Structure Plans, which will complement and integrate with the surrounding residential neighbourhoods through mitigation of traffic and parking impacts, appropriate site planning and architecture, landscaping, and pedestrian connections.	A proposed commercial node has been provided for in a centralized location within the Blackstone ASP lands. The node lies at the intersection of Grant MacEwan Boulevard and a future bypass.
11. Protecting and creating access to adjacent neighbourhoods, natural amenities, open space, and the Multiway system.	In addition to the two main park sites, there is a smaller pocket parks and a stormwater management facility. The smaller park sites are intended to provide passive recreational space within close walking distance to neighbourhood residents.
12. Protecting and creating views to natural amenities.	Stormwater management facilities will be a fully landscaped feature and integrated within the proposed open space.

13. Incorporating public transit into new neighbourhoods.	The ASP policies support the future provisions of local transit service.
14. Protecting rights-of-way for future public transit service.	
17. Requiring that all residential developers be responsible for on-site and appropriate off-site costs of municipal infrastructure (sewer, water, and roads) and community services, through mechanisms such as off-site levies, bylaws, and development agreements.	A servicing agreement will be finalized prior to development.
18. Requiring that all new residential Area Structure Plans are supported by comprehensive engineering, servicing, environmental, geotechnical, and transportation studies approved by the City.	At time of subdivision, detailed engineering design will be provided.
19. Prohibiting new residential development on undeveloped lands where the noise contours established by the Airport Vicinity Protection Area (AVPA) Regulation exceed NEF 30, except where special area exemption designations have been granted under the AVPA Regulation.	The lands within the Blackstone ASP are outside the NEF 25 Overlay Boundary.
20. Directing new residential development away from significant noise generators such as Edmonton International Airport, the Canadian Pacific Railway, and the QE II Highway.	The lands within the Blackstone ASP are outside the NEF 25 Overlay Boundary. The lands are not adjacent to Canadian Pacific Railway lines or the QEII Highway.
24. Requiring that any new residential development that may be affected by significant noise generators incorporate noise mitigation measures such as berms, sound attenuation walls, site planning, building orientation, landscaping, or building construction techniques.	Noise attenuation measure may be included along Grant MacEwan Boulevard.
25. Requiring that all new residential subdivision and site plans include landscaping and open space plans that take into account, integrate, and where appropriate, protect existing natural vegetation, topography, wildlife, soils, water bodies, drainage courses, and climatic conditions.	A stormwater management facility will accommodate on-site stormwater drainage.
26. Ensuring that all new residential subdivision and site plans conform to the City of Leduc Neighbourhood Design Guidelines.	Development on the Blackstone ASP lands will conform to the City of Leduc's Neighbourhood Design Guidelines.
27. Encouraging city beautification, public art, and	Appropriate roadway widths, park locations,

high quality urban design in new residential neighbourhoods that will exceed the minimum requirements of the Neighbourhood Design Guidelines.	mix of housing products, and location of commercial development has been considered for the site design of the Blackstone ASP lands. Details will be provided at the engineering design stage, at time of subdivision.
4F Commercial Development	
The City shall promote local and regional commercial and retail areas that will serve all of the consumer needs of the entire community by:	
2. Providing for commercial and retail areas that support and have access to nearby residential neighbourhoods.	A residential node is proposed for the Blackstone ASP lands. The node is connected via multiway and road networks.
3. Requiring that commercial and retail development and redevelopment that is visible from the QE II Highway, public open spaces, and residential neighbourhoods shall meet the highest design standards.	The commercial node will be designed to ensure compatibility with adjacent land uses.
10. Requiring that all commercial and retail development and redevelopment provide adequate pedestrian connections on site and to the City's trail, pathway, and Multiway systems.	Pedestrian connections are provided to the commercial and retail development within the ASP area via the road network and the multiway system.
11. Requiring that commercial development incorporate pedestrian-oriented frontages.	The commercial area will be comprehensively planned with pedestrian-friendly access and connections to adjacent lands.
12. Requiring that parking areas for commercial development provide for pedestrian circulation, landscaping, and architectural elements to enhance the safety and comfort of pedestrians.	Commercial parking areas should consider pedestrian circulation, landscaping, and architectural elements to enhance the comfort and safety of pedestrians. These features shall be outlined at time of subdivision.
13. Requiring that commercial and retail development and redevelopment provide adequate access for persons of all ages and abilities in accordance with the principles of universal access.	Universal access and design features will be outlined at time of subdivision at the detailed design stage.
14. Integrating public transit with commercial development.	The commercial node is adjacent to two

15. Protecting rights-of-way for future public transit service.	arterial roadways, situated in a central location. The placement allows easy access when transit is available.
16. Encouraging the use of low impact development, environmental design, green building techniques, and recycled construction materials in commercial development.	Low impact design development will be utilized where appropriate. Open spaces and naturalized stormwater management facilities will be provided within the Blackstone ASP lands.
17. Requiring that new residential Area Structure Plans provide for adequate local commercial and retail development that will serve the needs of residential neighbourhoods.	Residential dwellings within the Blackstone ASP lands will permit home occupations that will not create adverse impacts for adjacent residents.

4H Transportation and Utility Servicing Infrastructure	
The City shall integrate land use planning and development with infrastructure investments based upon regional, city-wide, and sectoral priorities by:	
8. Providing a balanced transportation system that offers choice among mobility options including non-vehicular travel, the private automobile, and public transit.	Connectivity to the greater community will be provided via multiways and the arterial roadway network.
9. Planning for public transit routes and stops where transit service can most efficiently be provided to major concentrations of employment, residential population, and community services, including schools.	Community design and densities proposed are supportive of future public transit routes.
15. Integrating pedestrian infrastructure such as sidewalks, trails, pathways, and the Multiway system into the overall transportation network.	Integrated multiways and trails are proposed for the area. Connections to the greater transportation network will allow ubiquitous travel throughout the Blackstone ASP lands and greater community.
17. Requiring developers: a. to conduct engineering, servicing, environmental, geotechnical, and transportation studies for approval by the City, b. to identify significant development constraints and mitigate any impacts that such constraints may have on proposed development, c. to pay for the costs of providing adequate water and sewage services, stormwater m anagement facilities, roadways, curbs and sidewalks, and franchise utilities (e.g. gas, power, cable, telephone) to new developments, d. to pay for appropriate off-site costs of municipal infrastructure (sewer, water, and roads) and community services, through mechanisms such as off-site levies, bylaws, and development agreements, and	Preliminary geotechnical and environmental reports were conducted for the Blackstone ASP lands. Further geotechnical is required prior to subdivision detailing site specific conditions for development.

e. To provide irrevocable security to ensure that road and infrastructure construction meets City standards.	
5C Healthy, Inclusive, and Safe Communities	
The City shall promote social well-being and will help individuals, couples, and families to develop and maintain healthy lifestyles by:	
15. Ensuring that growth and development support the positive social atmosphere of Leduc and its reputation as a community that provides a safe and pleasant environment for raising families.	CEPTED principles have been utilized to design the community to ensure safety of citizens.
16. Adhering to urban design principles that address universal access, lighting, clear sightlines, building security, site planning, landscaping, and parking facilities in order to enhance safety, crime prevention, walkability, diversity, and sense of place.	Universal access design, site planning, lighting, building security, landscaping, and parking design will utilize CEPTED principles, which will be outlined at time of detailed design.
6A Active and Healthy Communities	
The City shall promote the creation of an active and healthy community that reflects the needs of residents by:	
1. Creating a range of park spaces with a variety of site amenities to meet the diverse needs of City residents.	Active and passive recreational opportunities are proposed for the Blackstone ASP lands. These will be in the form of open spaces connected via the multiway system.
2. Developing outdoor public spaces for year round use, with appropriate plantings and park design.	Design of outdoor spaces will be finalized at time of subdivision and detailed engineering design stages.
3. Developing the Multiway system as a complete network that promotes walkability and links residential subdivisions, recreation and cultural destinations, hubs of commerce, and high activity areas.	The proposed multiway system is a complete network and will be integrated within the larger extent of the community.
5. Working with developers to have parks and the Multiway established in the early stages of development to ensure residents in new areas have access to outdoor recreational spaces.	The multiway path system has been integrated at the preliminary design stages of the Blackstone ASP lands.

6C High Quality, Safe, and Accessible Public Open Spaces	
The City shall create high quality public open spaces that are accessible, safe, and responsive to the needs of residents by:	
1. Developing efficient and sustainable public open spaces that incorporate natural systems where appropriate.	Public open spaces may incorporate naturalized landscaping where appropriate.
2. Locating parks, playgrounds, public open space, and Multiway trail heads so they are highly visible as well as easily and safely accessible for pedestrians and cyclists.	Proposed multiways and public spaces are sited in accordance to CEPTED principles. They will be located along collectors and local road systems.
3. Promoting safety in parks and the Multiway system with accessible design, snow clearing and ice control, street lighting, and pedestrian-oriented design.	Orientation and layout of multiways will be finalized at time of subdivision and detailed engineering design of the lands within the Blackstone ASP.
4. Establishing locations for parks, open space, and school sites, in consultation with the school boards, through Area Structure Plans.	From discussion with City Administration, parks, open spaces, and school sites within the Blackstone ASP have been revised to accommodate the needs of the school boards operating within the City of Leduc.

5. Working with the school boards to provide for parks, open space, and school sites that will be large enough to accommodate future joint use and adaptation of community facilities and schools.	A school/park site is located at the east boundary of the plan area and two smaller park sites connected by a multiway are located in the centre of the plan area. The school/park site is intended to extend into the quarter section to the east to accommodate the development of a public elementary school and a separate elementary school. The central parks site is intended to be the recreational focal point for the community and a social gathering place for neighbourhood residents. Both park sites are located along the collector roadway network to provide appropriate access to the sites.
7. Balancing the development of large automobile-oriented parks and recreation facilities with small pedestrian-oriented local parks and recreation facilities.	The Blackstone ASP Concept provides a mix of open space types and sizes. In addition to the main school/park site, there are smaller parks and a stormwater management facility. The smaller park sites are intended to provide passive recreational space within close walking distance to neighbourhood residents. The lands that surround the storm water management facility provide a natural location for passive recreational opportunities. Multiways between these focal points improve overall walkability and promote active transportation and healthy lifestyles for neighbourhood residents.
8. Obtaining lands for parks, open space, and school sites, in consultation with the school boards, through dedication at the time of subdivision approval of municipal reserve, municipal and school reserve, and school reserve, as defined in the Municipal Government Act.	The Blackstone ASP identifies lands as MR and school sites within the boundaries. Land use statistics can be found in Table 4, in Section 4.1.
10. Developing stormwater management facilities, where appropriate, as attractive and usable park areas with public access.	The proposed stormwater management facility is landscaped, and utilized as a park space, and integrated into the overall park network.
11. Locating residential dwellings within walking distance of open space.	All residential units within the Blackstone ASP lands are within 400 m

	walking distance of open space.

City of Leduc / Leduc County Intermunicipal Development Plan

City of Leduc Municipal Development Plan	Blackstone ASP
Residential	
4.2.2.1 Residential development in the IDP area should generally conform to the areas identified for residential or mixed-use development as shown on Figure 11 – Intermunicipal Development Plan Policy Areas and as addressed in the policies for Areas A, B, C, and D in Section 5.0 of the Leduc City and County's IDP.	The proposed Blackstone ASP lands are identified as area "A" on Figure 11, within the City of Leduc/Leduc County's Intermuncipal Development Plan.
4.2.2.3 All residential development and subdivision within new Area Structure Plans in the IDP area shall achieve a target density of 25 - 30 units per net residential hectare.	The Blackstone ASP complies with the target densities outlined in the Intermunicipal Development Plan.
4.2.2.5. The minimum residential densities required in this IDP should be achieved through a variety of housing types including single-detached, semi-detached, townhouse, and apartment dwellings.	The residential densities required in the IDP are proposed to be achieved through a combination of medium density, townhouses, and low density residential units.
4.2.2.6. New residential communities/neighbourhoods within the IDP area should incorporate design that: • reduces vehicle dependency • includes a variety of housing choices • exceeds minimum residential densities • comprises mixed uses and activities in neighborhood nodes • supports pedestrian and public transit connections and • provides access to open space and recreational areas and facilities. Through the ASP and subdivision processes, both municipalities will ensure residential neighbourhoods and communities are designed and developed in a manner to	Safe and attractive communities will be achieved by utilizing CEPTED principles, and incorporating a high standard of landscaping in the entry, parks, and open spaces. Adequate parks and open spaces The multiway system provides options for residents to utilize active transportation modes. Densities achieved are in adherence to the Capital Region Board requirements Communities are designed to be complete communities; the Blackstone ASP lands are designed to include lands for schools, parks, trails, and commercial uses. Housing will not be fronting on to Grant MacEwan Boulevard or the future bypass along

make them safe, attractive and well serviced through the following design principles: • The design of the neighbourhood or community wherever possible should maintain and protect stands of trees, watercourses, wetlands, ravines and other natural features. In the more rural areas, a conservation (cluster) subdivision design form should be encouraged. • Provide a wide range of housing forms and tenure. • Try to exceed minimum residential densities specified in the IDP. • The design of the neighbourhoods and communities should avoid dwellings fronting onto highways or arterial roadways. • The design needs to provide for adequate parks and open space to serve the neighbourhood and community, preferably in the form of a large centralized or linear park area which is more usable and easier to maintain. • Wherever possible, provisions need to be made in the design of the neighbourhood and community to encourage alternative sustainable transportation such as walking, cycling and public transit to reduce vehicle dependence.	the southern boundary of the quarter section. There are adequate parks and open spaces within the Blackstone ASP boundaries. A centralized landscaped SWMF has been provided, which will also serve as an amenity feature for the community. The multiway system in allows ubiquitous travel throughout the Plan Area. This amenity will allow residents opportunity for active transportation modes.
Commercial	
4.4.2.12 New commercial development and subdivision within the IDP area should incorporate design that: • Reduces the dependence of customers, employees, tourists, and area residents on the private automobile for access to and from the commercial area • Includes a variety of building types • Exceeds minimum standards for site planning, landscaping, and building materials • Comprises, where appropriate, a mix of commercial and residential uses in accessible activity nodes • Supports pedestrian and public transit connections • Provides access to open space and recreational areas and facilities.	The commercial lands within the Blackstone ASP will be accessible via multiple modes of transportation. The multiway network within the Plan Area provides connections from existing and proposed residential to the commercial node. The commercial lands are encouraged to have higher architectural standards and landscaping requirements.

4.4.2.15 Municipal infrastructure and services shall be provided to all commercial development within new Area Structure Plans in the IDP area.	Full urban services will be provided for the lands within the Blackstone ASP.
Environmental	
4.6.2.2 All proponents of development proposals adjacent to significant natural features, such as the major creeks within the IDP area and Saunders Lake, shall be responsible at the subdivision stage for delineating the top-of- bank, based upon the approval of a qualified engineer, to the satisfaction of the relevant municipal approving authority.	The Blackstone ASP lands are not adjacent to any natural features, such as the major creeks within the IDP area or Saunders Lake.
4.6.2.5 Subject to joint intermunicipal planning, the conceptual networks, locations, and alignments of trails within the IDP area shall be included in future Area Structure Plans, and will be determined in more detail at the land use re-designation and subdivision stages of development.	The trail network outlined in the Blackstone ASP lands will be detailed during the engineering design, at time of subdivision.
4.6.2.7 The development of trails, parks, and school sites shall be coordinated among the municipalities, the appropriate school boards, and any residents' associations.	The locations of trails, parks, and school sites have been determined through discussions with the school boards, City administration.
4.6.2.8 For all residential or commercial subdivisions, a minimum of 10% of the gross developable area of land to be subdivided shall be dedicated for the purposes of providing Municipal Reserve, School Reserve, or Municipal and School Reserve.	The 10% municipal reserve is outlined within the Blackstone ASP, and shall be provided at time of subdivision.
4.6.2.9 Landscaped elements of parks and open space systems may include buffers, berms, tree planting, or boulevards along major roadways.	The landscaped elements of the parks and open spaces within the Blackstone ASP will be detailed at time of subdivision, included in the detailed design stage.
4.6.2.10 At the Area Structure Plan, land use re-designation, or subdivision stage, Environmental Impact Assessments addressing natural areas on site or Environmental Site Assessments addressing contamination on site, shall be prepared by qualified environmental consultants, to the satisfaction of the relevant municipal approving authority.	An environmental assessment has been conducted for the Blackstone ASP lands by Hoggan Engineering and Testing (1980) Ltd. The results of the Phase 1 ESA did not reveal any undue constraints to future development.

4.6.2.11 Lands identified as sensitive natural areas may be designated as Environmental Reserve at the subdivision stage in accordance with the Municipal Government Act. Such areas may also be identified at the Area Structure Plan stage. In the case of identification at the Area Structure Plan stage, sensitive natural areas would require the appropriate land use designation before subdivision could proceed. If at the subdivision stage private ownership of environmentally sensitive lands is deemed more appropriate by the relevant municipal approving authority, then environmental reserve easements may be registered to protect the sensitive lands.	There are no lands identified as sensitive natural areas within the Blackstone ASP lands.
4.6.2.12 Owners of lands with existing tree stands will be encouraged to retain them to the extent possible at the time of development.	There are two existing tree stands within the Blackstone ASP. These stands will not be retained with development.
4.6.2.16 When considering Area Structure Plan, land use redesignation, subdivision, and development proposals within the IDP area, the City of Leduc and Leduc County shall apply ERCB setback regulations and guidelines respecting oil and gas facilities	Setback requirements have been adhered to for all development within the Blackstone ASP lands.
Transportation	
4.7.2.10 At the Area Structure Plan stage, the City and County shall require the identification of pedestrian and bicycle trail networks in the IDP area.	Figure 8, shows connections to open spaces within the Blackstone ASP lands as well as lands outside of the ASP Boundary.
4.7.2.14 The City and County shall require that development and subdivision along major roadways within the IDP area: • obtain approvals, as required, from Alberta Transportation • coordinate the number of entry and exit points to major roadways • provide sufficiently wide rights-of-way or setbacks to accommodate berms, landscaping, trees, dividers, or similar noise attenuation and aesthetic features • be suitably set back in order not to interfere with the	Primary access to the Blackstone ASP lands is from Grant MacEwan Boulevard. The transportation routes of the ASP lands have been coordinate to provide adequate access and egress. The land use concept provides a 6.0 m area along the entire length of Grant MacEwan Boulevard. It is intended that this area will accommodate future road widening as well as noise attenuation measures.

improvement or widening of roadways	
Municipal Services	
4.8.2.2 The provision of municipal services into new development areas shall be based upon logical extensions of existing infrastructure and upon the cost implications of such extensions.	The extension of services within the ASP lands is the logical extension of municipal infrastructure. The services will be further refined at time of subdivision and detailed engineering design stage.
4.8.2.4 Area Structure Plans shall include detailed servicing concept studies for the provision of water, sanitary sewer, stormwater management, and franchise utilities.	The Blackstone Area Structure Plan outlines water, sanitary sewer, and stormwater management in Figures 7, 8, and 9.
4.8.2.5 All new multi-lot development within the IDP area shall be provided with full municipal services, including piped water, piped sewage, stormwater management, natural gas, and franchise utilities (electric power, cable, and telephone).	Full urban municipal services have been proposed for the Blackstone ASP lands. Water, sanitary sewer, and stormwater management facilities are outlined in Figures 7, 8, and 9.
4.8.2.6 All landowners, developers, or development proponents shall be responsible for the costs of providing adequate water and sewage services, stormwater management facilities, roadways, curbs and sidewalks, and franchise utilities (e.g. gas, power, cable, telephone) to a new development area or site.	The proponent of the Blackstone ASP development will enter into a servicing agreement with the County of Leduc.
4.8.2.12 The relevant municipal approving authority shall require, as a condition of subdivision approval, the preparation and submission of stormwater management plans prepared by a qualified professional engineer registered in the province of Alberta, which shall demonstrate how the use of stormwater best management practices will reduce post-development run-off rates to pre-development levels.	Stormwater management facilities have been outlined in Figure 7.
4.8.2.14 All required stormwater management plans shall include, at a minimum: • topography of the development lands and surrounding area • watershed affected by the development	Detailed stormwater management plans will be outlined at time of subdivision, included in the engineering design stage.

• proposed major drainage systems (including the direction of surface drainage) proposed minor drainage systems (including ditches, pipes, and catch basin locations) • proposed on-site detention and retention facilities (including locations and sizes) • locations of outlow or outfall structures • any related modeling or calculation information.	
AIRPORT VICINITY PROTECTION AREA	
4.9.2.1 When making decisions on Area Structure Plans, Area Redevelopment Plans, land use redesignations, subdivisions, and development permits, the relevant municipal approving authorities shall comply with the requirements of the Edmonton International Airport Vicinity Protection Area Regulation and the Edmonton International Airport Zoning Regulations.	The Blackstone lands are outside of the NES 25 overlay under the Edmonton International Airport Vicinity Protection Overlay Regulation.

City of Leduc Neighbourhood Design Guidelines

City of Leduc Neighbourhood Design Guidelines	Blackstone ASP
Neighbourhood Structure	
2.1.1 Defined edge: residential neighbourhoods should have well-defined edges that are obvious to area residents. Common neighbourhood edges are urban infrastructure (i.e: arterials roads or rail lines) and natural areas (i.e: ravines or major tree stands).	The Blackstone ASP boundary is defined by transportation corridors on three sides. The active transportation corridor to the north, Grant MacEwan Drive to the west, and the future Highway 2A bypass to the south.
2.1.2 Walkable: neighbourhoods should be compact and typically have a radius of 400 metres, which represents a reasonable walking distance from the centre of the neighbourhood to services and amenities.	All residents are located within a short walking distance of neighbourhood focal points. These areas are connected by a network of multiways.
2.1.3 Complete neighbourhoods: residential neighbourhoods should include (1) housing; (2) places for gathering, playing and enjoying nature; and (3) daily goods and services that are within easy walking distance of residences	The Blackstone ASP provides a diversity of housing types, parks and open spaces, and commercial services within walking distance of neighbourhood residents.

2.1.4 Housing options: residential neighbourhoods should provide (1) a range of housing types and sizes (ie: single-detached, multi-plexes, townhomes and apartments); (2) a variety in housing styles and architecture; (3) the full spectrum of housing affordability, from affordable entry-level to executive housing; and (4) both homeownership and rental opportunities.	The Blackstone ASP supports the development of a variety of housing sizes, types, and styles to accommodate a range of family sizes and incomes.
2.1.5 Neighbourhood themes: creation of a consistent neighbourhood character or theme is encouraged. For example, similar landscape material, public art, decorative signage and/or street lighting, and other streetscape elements may be used.	The Blackstone ASP recognizes the City of Leduc's strong relationship with the oil and agriculture industries. A street decoration and street naming scheme has been developed around this theme.
2.1.6 Entrance features: decorative entrance features should be located at main neighbourhood access points, which are typically located at major collector and arterial street intersections. Small scale entrance features are encouraged at secondary neighbourhood access points, which are typically located along major roadways.	Entryways into Blackstone will include architectural features to provide a feeling of arrival, sense of place, and coherent theme to the community with the thoughtful application of enhanced landscaping and architectural details.
2.1.7 Focal points: neighbourhood focal points are encouraged, such as park spaces, urban plazas, mixed-use developments, multiway access features or decorative islands.	Focal points are located in the central portion of plan area. These include parks connected by a multiway network.
2.1.8 Energy-efficient design: street orientation in relation to the sun, the strategic placement of buildings, incorporation of energy efficient technology—such as LED lighting, and lighting (street lights and private signage) designed to reduce light pollution—and the strategic use of landscaping material should be implemented to contribute to the energy efficiency of the community.	Details of energy efficient lighting will be outlined in detailed design provided with the first stage of subdivision.
Natural Features and Environmental Sensitive Design	
2.2.1 Natural areas & wildlife corridors: natural areas, such as ravines and tree stands, and known wildlife corridors shall be protected using appropriate municipal reserve and environmental reserve allocations.	No significant natural area are within the Blackstone ASP.

2.2.2 Protect natural features: a buffer area is encouraged around existing natural features, such as tree stands or ravines, to minimize the impacts of development and to help conserve the feature. Provide public access where appropriate.	No significant natural area are within the Blackstone ASP.
2.2.3 Reduce water dependence: efficient use of water through the use of natural drainage, use of permeable surfaces and drought tolerant landscaping, where appropriate, is encouraged.	The Blackstone ASP supports the implementation of Low Impact Development principles to accommodate on-site stormwater drainage and replicate natural processes.
Land Use Distribution	
2.3.1 Compact building form: increased land efficiency and a reduced urban footprint are encouraged. Housing diversity (multifamily, 2-stories, bungalows, etc) and a range of housing types (ie: entry-level, move-up and executive housing) must be provided within each neighbourhood.	The Blackstone ASP supports the development of a range of housing types and sizes to use the land efficients.
2.3.2 Mixed-use: mixed-use buildings, blocks and/or village centres are encouraged in appropriate locations in all residential neighbourhoods. Consideration should be given to providing good vehicle, pedestrian and future public transit access, high quality urban design features, and appropriate parking in such areas.	The Blackstone ASP supports the development of a variety of residential and commercial uses across the plan area.
2.3.3 Density: higher-density developments should be located in close proximity to future transit routes, neighbourhood entranceways, major roadways, planned commercial and mixed-use areas, and park space.	Higher density residential land uses are located along the collector network to provide appropriate access to future transit service.
2.3.4 Walkability: housing should be located within 400 meters or a reasonable walking distance of daily goods and services, such as parks, convenience stores, schools and identified future transit stops. Consideration should be given to providing direct pedestrian routes to destination points. Secure bike parking and storage space should be provided at all retail and service locations.	All residential in Blackstone will be within a 400m walking distance of focal points, commercial services, or transit services.
2.3.5 Noise mitigation: noise mitigation measures, such as berms and noise attenuation fences, are to be implemented when locating residential land uses near major sources of noise. The type and style of such noise mitigation measures chosen should fit with and	The Blackstone ASP accommodate future widening and noise attenuation requirements along Grant MacEwan Boulevard.

enhance the neighbourhood theme.	
Street Network	
2.4.1 Connectivity: the residential street pattern should promote pedestrian and vehicle connectivity, allow for long-term flexibility in land use, and aim to reduce road infrastructure. Consideration should be given to traditional, modified or fused grid street designs. Cul-de-sacs and dead-end streets must provide for and enhance pedestrian connectivity throughout the neighbourhood and access to services. Smaller block faces are encouraged, as they allow for better continuity for both pedestrians and vehicles, break up on-street parking, and provide for an interesting streetscape.	The design of the local road network supports the development of a modified grid street network with shorter block faces. The development of Cul-de-Sacs have been minimized
2.4.2 Public transit: potential transit routes and key transit stops must be considered in all neighbourhood plans. Most households should have a potential transit stop located within 400 meters. Consider locating appropriate and supportive land uses along potential transit routes, such as mixed-use and higher density developments. To minimize the impact on residents, potential bus stops should be located adjacent to parks, open spaces or commercial sites. If necessary, potential bus stops may be located along the flanking side of a corner lot.	The Blackstone ASP supports the future development of transit services along the collector roadway network.
2.4.3 Design focused: street alignments should reinforce focal points and distinctive neighbourhood features. Decorative islands can be both a neighbourhood focal point, as well as provide for the efficient and safe movement of traffic.	The design of the collector roadway network provides vistas of the stormwater management facility and park spaces, and includes decorative islands at neighbourhood entryways.
2.4.4 Integrated: road infrastructure should be integrated with the multiway to create a fully-connected transportation system that allows for diversity in transportation options and provides interesting and multiple routes options for pedestrians and cyclists. Consider dedicated bicycle lanes along primary collector roads.	The collector roadway network in Blackstone will be integrated with the multiway network through the neighbourhood.
2.4.5 Traffic control: consideration must be given to the safe integration of pedestrians, cyclists and vehicles in the design of a residential street network. Consider the appropriate location of crosswalks, four-way stops and other traffic control mechanisms.	Appropriate crossing features will be incorporate into the detailed design of the neighbourhood with the first stage of subdivision.

2.4.6 Safety: traffic calming should be provided at major pedestrian intersections and crossings. Consider curb extensions, decorative islands or special pavement treatments. Traffic-calming technique should be consistent through the neighbourhood to promote driver familiarity.	Appropriate traffic calming features will be incorporate into the detailed design of the neighbourhood with the first stage of subdivision.
Streetscape	
2.5.1 Attractive streets: create an attractive streetscape through urban design. Consider landscaped boulevards and decorative fencing. Enhanced landscape boulevard treatments and the use of hardy, large canopy trees are encouraged along primary collector roads.	Streetscapes and architectural detailing of neighbourhood street will be determined .
2.5.2 On-street parking: the appearance of on-street parking should be addressed. Consider integrating parking spaces in landscaped cul-de-sac islands, using landscaped curb extensions and/or shorter blocks to break up on-street parking. Snow storage must be considered in any streetscape design.	On-street parking will be accommodated within the neighbourhood.
2.5.3 Walkability: sidewalks should be provided along all street frontages and be free of obstructions such as light standards, fire hydrants and trees.	Sidewalks will be provided along all neighbourhood streets.
2.5.4 Pedestrian-friendly streets: create pedestrian-friendly streets through attractive building façades, interesting and varied landscaping, appealing human-scale architecture, and interesting streetscape elements.	Neighbourhood streets will be designed to accommodate safe pedestrian movement through the neighbourhood and between neighbourhood focal point.
2.5.5 Residential streetscapes: reinforce residential streetscapes by locating buildings close to the street, particularly at main neighbourhood entrances. Comprehensively planned townhouse developments should include front-facing units along the public street and institutional and commercial uses should be located close to the street, with parking provided in the rear.	Architectural detailing of all residential units will be determined with further market research.
Parks, Public Spaces, & Multiways	
2.6.1 Integrated: an interconnected open-space system should be implemented, which integrates the multiway, parks and natural areas within neighbourhoods and adjacent to neighbourhoods.	The Blackstone ASP provides a variety of open spaces across the plan area that are connected by a network of multiways.

2.6.2 Year-round use: design main pedestrian routes for year-round use. Consider appropriate plantings and pathway locations that provide windbreaks and allow for winter sun exposure.	The design of multiways will be outlined at time of subdivision, included in the engineering design stage.
2.6.3 Native and/or low maintenance plantings: the use of native and/or low maintenance vegetation, and landscape design is encouraged. Consider clustering plantings or placing plantings in beds to allow for the efficient maintenance of vegetation and the surrounding grassed areas.	The Blackstone ASP supports the use of native and naturalized plant species in the landscaping of parks and open spaces.
2.6.4 Public art: the incorporation of public art in parks and public spaces is encouraged.	Neighbourhood entryways will accommodate architectural features to create a sense of place and arrive to the neighbourhood.
2.6.5 Timely development: multiway and parks are to be installed early in the development process and alongside residential development to ensure residents of a developing neighbourhood have access to park space and the multiway.	One of the park spaces is proposed to be included in the first stage of subdivision.
2.6.6 Accessible parks: parks and other public places are to be highly visible and easily and safely accessible by pedestrians and cyclists. Vehicle access and parking should be considered for community parks and larger neighbourhood parks and public areas. Most homes should be located within 400 meters of a park or open space.	All residents in Blackstone will be within a 400 m walking distance of parks and open spaces.
2.6.7 Accessible multiway: multiway access points are to be highly visible and easily and safely accessible by pedestrians and cyclists. Consideration should be given to increased pathway widths, higher quality landscape features, and/or decorative paving patterns at trail heads and access points.	The design of multiways will be outlined at time of subdivision, included in the engineering design stage.
2.6.8 Diversity: a diversity of public places is encouraged in each neighbourhood, which may include squares, plazas, multiway, passive parks, active parks and natural areas.	The Blackstone ASP provides a diversity of parks and open spaces across the plan area connected by a network of multiways.
2.6.9 Gathering places: main gathering spaces should be specifically designed and provided in each neighbourhood. Such areas should be highly visibility, provide good accessibility, be aesthetically pleasing and be the main focal points of the neighbourhood. Consideration should be given to seating, shade,	Parks and open spaces in the Blackstone ASP are intended to be focal points and neighbourhood gathering places for neighbourhood residents.

windbreaks and play structures. School sites are encouraged to be the main gathering places of neighbourhoods and be integrated with other public spaces, such as parks, to increase their size and prominence.	
2.6.10 SWMF: Storm Water Management Facilities (SWMF) should be designed as usable, attractive and prominent public spaces within neighbourhoods. It is encouraged that such places be integrated with parks to increase their size and functionality. Consideration should be given to creating the SWMF as a neighbourhood focal point, providing appropriate park infrastructure, integrating with the multiway system and providing opportunities for parking.	The stormwater management facility will be designed to accommodate passive recreational activities by accommodating the development of a multiway network around a portion of the facility.
2.6.11 Public access: public access to open space features of a neighbourhood—such as natural areas, parks and SWMFs—must be provided. When homes back onto such areas, consider providing multiway or clearly designated public park space around the feature. Such public accesses must be clearly indicated on all marketing material for the subdivision to ensure lot purchasers are aware of public accessible areas.	Public access to the parks and stormwater management facility will be provided.
2.6.12 Playgrounds: to increase visibility, accessibility and safety, playground structures are to be located with clear visibility to public streets.	The design of the park sites will locate the playgrounds in highly visible locations.
2.6.13 Plazas and squares: plazas or squares are encouraged adjacent to or within neighbourhood mixed use centres and higher density developments. Consideration should be given to including decorative street furniture, a combination of interesting landscaping features, signage and decorative lighting.	Neighbourhood gathering spaces will be provided in the parks area.
Siting, Sizing, and Building Design	
2.7.1 Lot diversity: a mixture of different lot sizes and dimensions that will accommodate a variety of dwelling types is encouraged. Continuous rows of small frontage lots are strongly discouraged.	The Blackstone ASP supports the development of a variety of housing types, sizes, and styles.
2.7.2 Housing Style: a variety in housing style and design is encouraged. Consider providing a variation in rooflines, window placement, materials, colour and porches. Significant and abrupt changes in building	The Blackstone ASP supports the development of a variety of housing types, sizes, and styles.

height are, however, discouraged. Repetition of a similar housing designed is also discouraged. A minimum of three dwellings between the same housing style is suggested.	
2.7.3 Transitioning: appropriate transitioning between high, medium and low density housing is required to provide for a logical neighbourhood form and structure.	Appropriate transitioning between land uses will be considered with each stage of subdivision.
2.7.4 Multifamily individuality: emphasizing individual units of townhouses and multi-plex buildings in a way that contributes to the overall character of the neighbourhood is encouraged. Consider off-setting alternating units, using varying exterior fixtures or defining different roof forms.	Architectural detailing of all residential units will be determined with further market research.
2.7.5 Views and vistas: views and vistas from private dwellings to prominent site features—such as natural areas, parks or focal points—are encouraged.	The multiway network along the collector roadway provides vistas of the parks and stormwater management facility.
2.7.6 Porches: front porches, low-profile courtyards (patios) and verandas are encouraged.	Architectural detailing of all residential units will be determined with further market research.
2.7.7 Garages: front-attached garages should not dominate the front façade of dwellings. Consider off-setting individual doors on homes with double or triple car garages or aligning or recessing the garage with the front façade of the home.	Architectural detailing of all residential units will be determined with further market research.
2.7.8 Energy efficiencies: incorporation of energy-efficient technologies and building design is encouraged. Consider high-efficiency building materials (insulation and windows) and appliances, as well as positioning the building and using appropriate landscaping to take advantage of passive solar opportunities. Technologies that are visible and may impact the buildings appearance, such as solar panels, must be appropriately incorporated into the overall house design.	Energy efficient strategies will be determined through consultation with the buildings in each stage of subdivision.
2.7.9 Integrating non-residential uses: the façade of non-residential and mixed-use buildings should be designed to blend with the surrounding residential neighbourhood. Consider the building architecture, colour, materials and landscaping. Building signage should be compatible with the surrounding	Architectural detailing of all residential units will be determined with further market research.

neighbourhood and respect the building form and architectural features. Down-casted lighting is encouraged to limit potential impacts to surrounding properties.	