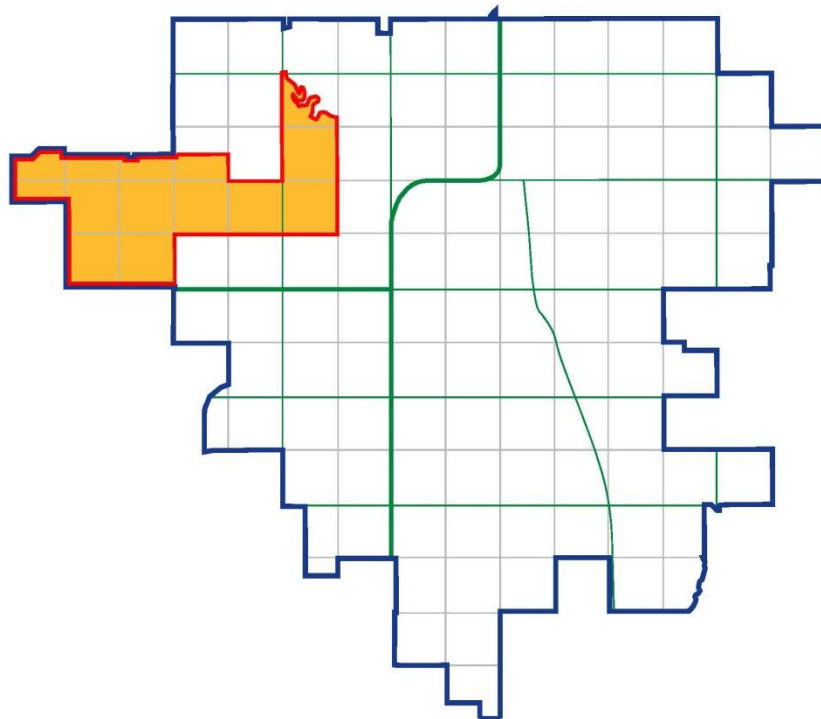


NORTHWEST AREA STRUCTURE PLAN

Bylaw C-1106
Adopted August 11, 2003



CITY OF GRANDE PRAIRIE

OFFICE CONSOLIDATION

BYLAW C-1106

A Bylaw to Adopt the Northwest Area Structure Plan

**(As amended by Bylaw C-1106-01, C-1106-02, C-1106-03,
C-1106-04, C-1106-06, C-1106-07 and C-1106-08)**

**THE MUNICIPAL COUNCIL OF THE CITY OF GRANDE PRAIRIE, IN THE
PROVINCE OF ALBERTA, DULY ASSEMBLED, ENACTS AS FOLLOWS:**

1. This Bylaw shall be cited as the “Northwest Area Structure Plan” bylaw.
2. The Northwest Area Structure Plan attached as “Appendix B” is hereby adopted pursuant to Section 633 of the Municipal Government Act, RSA 2000, Chapter M-26.
3. This Bylaw shall take effect on the date it is passed.

READ a first time this 14th day of July, 2003.

“W. Ayling” (signed)
MAYOR

“J. Ferguson” (signed)
CITY CLERK

READ a second time this 11th day of August, 2003.

READ a third time and finally passed this 11th day of August, 2003.

“W. Ayling” (signed)
MAYOR

“J. Ferguson” (signed)
CITY CLERK

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1.0 INTRODUCTION

1.1 Purpose of Plan

The Northwest Area Structure Plan (ASP) has been prepared to provide a framework for future development of the northwest section of the City of Grande Prairie. The City initiated the preparation of this Plan as a means of providing a proactive and coordinated approach to the planning of this area that is beginning to experience development pressure. There is also a need to address the long term planning needs of the Grande Prairie Airport. This Plan contains a general land use concept that is integrated with overall servicing concepts, and serves as a guideline for subsequent Outline Plan preparation by individual landowners at the quarter section level. The primary intent of this Plan, in addition to illustrating development concepts that are consistent with other statutory plans, is to demonstrate how new development will tie-in to the City's established urban fabric.

The Northwest ASP has been prepared in accordance with Section 633 of the Municipal Government Act and Policy 7.2.2 of the City of Grande Prairie Municipal Development Plan.

1.2 Plan Area Location

As indicated in Map 1, this ASP applies to approximately 11 quarter sections of land in the northwest quadrant of the City. The Plan area is composed of two distinct sub-areas:

- 1 quarter section located west of 116th Street and north of 108th Avenue, and the Grande Prairie Airport, hereafter referred to as "Area 1"; and
- 2.5 quarter sections located east of 116th Street and north of 108th Avenue, hereafter referred to as "Area 2".

All of the lands contained within the Plan area were annexed into the City in 2001.

The Plan area totals approximately 707 hectares (1,747 acres) as outlined in Table 1.

TABLE 1 - PLAN AREA COMPOSITION

Legal Description	Owner	Land Use	Area (ha)
Pt. NW 34-71-6-6	private	Agriculture	28.73
Pt. SW 34-71-6-6	private	Residential	3.23
SW 34-71-6-6	private	Agriculture	61.97
NW 21-71-6-6	private	Agriculture	59.94
Pt. NW 27-71-6-6	private	Industrial/Commercial	1.21
Pt. NW 27-71-6-6	private	Residential	4.05
NE 28-71-6-6	private	Agriculture	65.2
Plan 6172 NY	City of Grande Prairie	Airport	482.6
Road Plans			0.27
Total			707.2

(Bylaw C-1106-06 - May 30, 2016)

1.3 Policy Context

There are numerous City plans and policy documents currently in force that provide a broader policy context for ASP preparation. These plans, both statutory and non-statutory, are outlined below.

1.3.1 City of Grande Prairie Municipal Development Plan

The Municipal Development Plan (MDP) was adopted in 1996 and is the City's primary land use policy document. The Municipal Government Act requires that all statutory plans be consistent with one another. As all the lands in the Plan area were recently annexed into the City, they are not addressed in the current MDP. Upon adoption of this ASP, the MDP will be amended concurrently to reflect the land use concept contained in this Plan.

1.3.2 Existing Area Structure Plans

Several approved Area Structure Plans abut the Plan area as illustrated in Map 2.

The Plan area is bounded to the east by the Hidden Valley ASP, which provides for future residential development, as well as the development of a future satellite campus for Grande Prairie Regional College. The Gateway and West Highway 43 ASPs, located to the south and southeast, provide for residential, commercial and general industrial development for those areas abutting the Northwest ASP.

These plans provide future land use and servicing patterns for neighbouring lands that the Northwest ASP, upon completion, will be consistent with to ensure a smooth transition between areas.

In addition, the Grande Prairie Airport has prepared a non-statutory Concept Plan to address future development at the airport. The proposed land use concept contained in the Northwest ASP generally reflects this concept plan with regard to future development on airport land and future expansion of the facility.

1.3.3 City of Grande Prairie Land Use Bylaw

The majority of land in the Plan area outside the airport is zoned as “Urban Reserve (UR)” under the City’s Land Use Bylaw as illustrated in Map 3. The airport itself is zoned as “Airport District (AP)”. One site, where an existing trucking operation is located, is zoned as “General Industrial (IG)”.

In addition, a majority of the Plan area is affected by the Land Use Bylaw’s Airport Vicinity Overlay (AVO), which is based on the 1984 Grande Prairie Airport Vicinity Protection Area Regulation. All of the land within the AVO outside the airport is also the subject of zoning caveats, requiring development approvals from Transport Canada.

As indicated in Map 3, the central portion of the Plan area is also contained in the 25 and 30 NEF (Noise Exposure Forecast) contours of the airport. This requires that any residential and institutional development be conditionally approved subject to acoustic insulation being provided. In addition, a portion of the Plan area is contained within the Transitional and Non-Precision Approach Surfaces of the airport resulting in potential restrictions on building height.

1.3.4 Non-Statutory Plans

The City has Master Plans in place for all major forms of infrastructure including transportation, sanitary sewer, storm drainage, water distribution and parks¹. All ASPs and subsequent Outline Plans are required to conform to these documents. More detailed discussion relative to the Master Plans is provided in Section 5 of this Plan.

In addition, the Bear Creek Corridor has been the subject of the North Bear Creek Park Development Plan, a special planning study conducted by the City of Grande Prairie. This study defines the boundaries of the Bear Creek Corridor and sets out the City's policies with respect to future trail development within it.

¹ An update to the Stormwater Drainage Master Plan is currently underway. Updates to the Water and Sanitary Sewer Master Plans are scheduled to commence in 2003.

2.0 PLAN OBJECTIVES

The Northwest ASP is intended to achieve the following objectives:

1. To provide an overall framework for the future development of the Northwest plan area.
2. To integrate future development with the existing urban fabric and approved plans for adjacent lands.
3. To develop residential neighbourhoods that will provide for a variety of housing opportunities.
4. To create a community environment that promotes a high quality of life.
5. To provide for the future development of airport lands and the integration of municipal infrastructure with the airport.
6. To provide for the development of future industrial and commercial uses in the Plan area at appropriate locations.
7. To identify locations for community service facilities such as schools and major parks.
8. To identify an arterial and major collector road system for general access and public transit.
9. To provide a servicing system based on the economical and efficient extension of municipal infrastructure and utilities.
10. To utilize stormwater management facilities, whenever possible, as amenity features.
11. To integrate natural features into future urban development.

3.0 PLAN AREA

3.1 Topography and Natural Features

The Plan area is essentially flat. As illustrated in Map 4, much of Area 1 including the NE 28 and the built-up portion of the airport drains to the southeast. Other portions of the airport lands drain to the northwest and southwest. There is no significant vegetation in Area 1.

The topographic variation of Area 2 is roughly 4 m over a distance of almost 1.4 km (0.3%) for its southern two thirds. This portion drains to the south and east, while the north portion of Area 2 drains toward Bear Creek.

For the most part the Bear Creek ravine is well defined, with an approximate depth of 6 m east of the Plan area. However, along the north boundary of Area 2, the corridor is much less incised and widens into a substantial area of flood-prone marsh and oxbows adjacent to 116th Street. The only significant vegetation in Area 2 is the willows and other low bushes that are associated with the Bear Creek Corridor.

3.2 Existing Land Use

Outside of the airport lands, the Plan area is in agricultural use. Two residences are located on long-established subdivided parcels in Area 2. A vacant industrial building occupies a small parcel in the southwest corner of Area 2.

(Bylaw C-1106-06 May 30, 2016)

The Plan area is surrounded on all sides by agricultural lands, with the exception of the commercial development in the Gateway Power Centre to the southeast of Area 2, and the Brochu Industrial Park to the south of Area 1. All lands adjacent to the Plan area within the City have approved area structure plans in place that propose future residential development to the north and east, and a combination of industrial, commercial and residential development to the south (Westgate). In addition, the Grande Prairie Regional College owns a quarter section to the east of the Plan area that is intended for future expansion of its facilities.

4.0 PROPOSED DEVELOPMENT CONCEPT

4.1 Introduction

The proposed land use concept for the Northwest area is illustrated in Map 5. The intent of this plan is to provide a generalized land use plan that will be subject to further refinement through Outline Plan preparation and rezoning in advance of subdivision.

Area 1 is characterized by future industrial and commercial development, as well as expanded airport services on the airport lands. Industrial development is also proposed for the balance of Area 1 lands, linking this area to future industrial development in Westgate to the south.

Residential development is proposed for the north and east portions of Area 2, providing a logical extension of similar development proposed in the Hidden Valley area located on adjacent lands to the east. Pockets of multiple family development is also proposed in proximity to future school sites, and to serve as transitional uses adjacent to commercial uses. Overall densities are to be consistent with City averages as outlined in the Appendix. Commercial development is proposed for the southwesterly portion of Area 2, and provides for a continuation of similar development contained in the Westgate area. Neighbourhood development is also supported by school sites and other open space, including trail corridors and connections to the Muskoseepi Park system. A detailed summary of major land uses and potential populations and student generation is provided in the Appendix.

(Bylaw C-1106-06 - May 30, 2016)

4.2 Residential Development

- 4.2.1 It is the intent of this area structure plan to promote the development of a diversity of housing types and lot sizes. Although single family residential development will be the predominant use in Area 2, townhouse and apartment development is also encouraged. According to the calculations in the Appendix, a total population of approximately 3,800 people can be accommodated in the Plan area.

(Bylaw C-1106-06 - May 30, 2016)

- 4.2.2 It is proposed that medium density residential development, consisting of rowhousing and low-rise apartment complexes, be integrated into Plan area neighbourhoods at appropriate locations. Such sites should be located in proximity to school sites and neighbourhood parks, have access to collector roads, and serve as buffers between low density residential areas and potentially incompatible uses. Residential densities in areas identified as Medium Density Residential in Map 5 should average approximately 40 units per net hectare for townhouses and 74 units per net hectare for apartment development.

(Bylaw C-1106-06 - May 30, 2016)

4.2.3 Public uses such as churches and community halls that are compatible with residential development may be incorporated into neighbourhoods in the Plan area without an amendment to this Plan. If such facilities are to develop, it is preferred that they be located along collector roadways.

4.2.4 In areas where residential development is located adjacent to commercial or light industrial sites, suitable landscaped buffers and/or screening shall be provided.

4.3 Commercial Development

4.3.1 Arterial commercial development is proposed adjacent to the 116th Street corridor, providing a logical extension of similar development proposed in Westgate to the south. It is intended that these uses extend north to 110th/109th Avenue in Area 1 and 116th Avenue in Area 2, thus utilizing arterial roads as boundaries for development.

4.3.1a General commercial development, consisting primarily of retail and office uses, is proposed on the southerly portion of Area 2 adjacent to major collector roads.

(Bylaw C-1106-06 - May 30, 2016)

4.3.2 One neighbourhood commercial site is proposed in Area 2 at the intersection of 116th Street and 124th Avenue.

4.4 Industrial Development

4.4.1 As noted in Table 1 in the Appendix, approximately 8% of the Plan area is to be developed for industrial purposes. A mixture of light and general industrial development is proposed, the location of which is intended to optimize opportunities for transition between uses and minimize the potential for detrimental impacts on non-industrial properties.

(Bylaw C-1106-06 - May 30, 2016)

4.4.2 A combination of light and general industrial development is proposed for that portion of Area 1 located east of the airport. This provides an extension of similar development proposed in Westgate, but is also appropriate at this location due to its location under the airport's east-west flight path. Given this proximity to the runway and flight path, height restrictions will be imposed on development in the northerly portion of this area. Light industrial development is proposed along the north side of the future collector road into to the airport.

4.4.3 **Deleted by Bylaw C-1106-06 - May 30, 2016.**

4.5 Airport Lands

The Grande Prairie Airport is the dominant use in the Plan area, occupying 60 percent of its land area. A Concept Plan for the airport was prepared for the Grande Prairie Airport Commission in 2001 to outline the future development of airport lands. The land use concept in that Plan has been used as a basis for the development policies contained in this ASP.

- 4.5.1 The majority of airport land is designated as an “Aviation Reserve” area, which includes the runways and other facilities critical to airport operations. No additional development outside of airport facility expansion and improvements or unobtrusive extensive agricultural operations, are intended to occur in this area.
- 4.5.2 Lands identified as “Aviation Services” are proposed to be located immediately adjacent to the Aviation Reserve areas. Future development in these areas would include commercial and light industrial uses that serve the aviation industry and require runway access.
- 4.5.3 A commercial node is proposed to be located immediately north and east of the airport terminal area. Uses intended for this area are intended to complement airport operations, but need not be related to aviation.
- 4.5.4 General industrial park development is proposed for the westerly portion of the airport lands. The type of uses intended in this area is anticipated to be similar in nature to conventional industrial park development elsewhere in the City, provided such uses do not interfere with airport operations.

4.6 Parks and Open Space

- 4.6.1 At the time of subdivision, ten percent (10%) of the developable land shall be dedicated as Municipal Reserve (MR) in accordance with the Municipal Government Act. All MR shall be taken as land unless it can be proven that the acceptance of cash in lieu or the deferment of reserve will not hinder the provision of long term community recreation needs.

(Bylaw C-1106-01 - July 16, 2007)

- 4.6.2 At the time of subdivision, any land deemed to be unsuitable for development shall be dedicated as environmental reserve (ER). In the Plan area, those lands on the north boundary of Area 2 that are adjacent to Bear Creek and are known to be flood-prone are to be dedicated as ER as a condition of subdivision approval. The specific extent of ER dedication at this location will be determined by more detailed evaluation at the time of Outline Plan preparation.

- 4.6.3 As there are no neighbourhood parks or school sites proposed in Area 1 or the southwest portion of Area 2 of this plan, the land dedicated as MR shall be considered for use as a future community facility site. In addition, as subdivision is not intended for the Aviation Reserve and Aviation Services areas at the airport, MR will not be applied to these lands.

(Bylaw C-1106-01 - July 16, 2007)

- 4.6.4 The Plan area is to be served by two community park sites as illustrated on Map 5 as follows:

- (a) a joint elementary-junior high (K-9) site of approximately 9 ha on the east boundary of Area 2. Approximately 70% of the municipal/school reserve required for this site is to be dedicated from lands in Area 2, with the balance coming from the Hidden Valley neighbourhood to the east; and
- (b) a community park/recreation site of approximately 3.9 ha located in the centre of Area 2 adjacent to the future 116th Avenue under the airport flight path, and in proximity to multi-family development sites.

(Bylaw C-1106-06 - May 30, 2016)

It should be noted that the amount of land required for that portion of the joint school site identified in (a) exceeds the amount of MR that is potentially available from this quarter. Therefore, it will be necessary to apply cash-in-lieu from adjacent lands within the Plan area in order to assemble the required lands.

- 4.6.5 Neighbourhood parks will be distributed at strategic locations in the residential portion of Area 2. The specific number and location will be further defined at the time of Outline Plan preparation in accordance with City standards, will be consistent with the Parks Master Plan, and will be coordinated with school site development where warranted. In addition, where possible, MR dedication in the northerly portion of Area 2 should be allocated in a manner that allows for integration into the Muskoseepi Park system.

5.0 PROPOSED ENGINEERING CONCEPT

5.1 Transportation Network

5.1.1. Deleted by Bylaw C-1106-07 - March 6, 2017

5.1.2 The Transportation Master Plan designates 116th Street as a restricted access truck route and dangerous goods route. Outside of those locations noted in 5.1.1, no direct accesses to this roadway will be permitted. Where residential development abuts this roadway, appropriate noise attenuation measures such as berming, fencing and landscaping shall be provided in accordance with City standards.

5.1.3 Major collector road access is to be provided to the Plan area as follows:

- (a) The future industrial area on the west side of the airport will be served by the future 132nd Street, which is currently a graveled County road²;
- (b) The future 109th Avenue west of 116th Street, which is required to provide access to the Grande Prairie Airport.

(Bylaw C-1106-02 - November 5, 2007)

- (c) Access to Area 2 is to be provided from 116th Street at 110th Avenue, 116th Avenue and 124th Avenue, which also provide connections to the Hidden Valley and College lands to the east. Collector road access is also provided from the south through Westgate via 114th Street and 115th Street;

(Bylaw C-1106-06 - May 30, 2016)

- (c.1) Collector road access is provided to Area 1 from the south through Westgate West at 118th Street and 120th Street.

(Bylaw C-1106-07 - March 6, 2017)

- (d) **Deleted by Bylaw C-1106-06 - May 30, 2016.**

5.1.4 Specific collector road alignments are to generally follow the alignments contained in this Plan. The specific location of collectors and internal roads is the responsibility of the individual developer through the preparation of Outline Plans and Design Reports.

5.1.5 The public transit system will be extended into the Plan area as population growth and development activity warrants. Future transit routes and transit stops are to be identified in Outline Plans.

² Future development at this location will be the subject of a Traffic Impact Assessment meeting the requirements of Alberta Transportation to determine if any upgrades to the intersection of Highway 43 (100th Avenue) at 132nd Street are required.

5.1.6 In order to facilitate the movement of pedestrian and bicycle traffic within and between neighbourhoods, a number of trails are to be provided in Area 2. Although the specific alignment of trails will be determined through Outline Plan preparation, the following general locations are proposed:

- (a) adjacent to proposed collector roads, linking school sites, and neighbourhood parks; and
- (b) linkages to the proposed North Bear Creek trail system located at the north end of Area 2, providing access to the Muskoseepi Park corridor.

In addition, internal trail connections may be provided through neighbourhoods utilizing public utility lots. The general alignments are illustrated in Map 6.

5.2 Water Distribution

At present there is no municipal water service in the Plan area. The airport is currently served by a water system consisting of a well that feeds two reservoirs located on the airport property. Existing developments in Area 2 are served by private wells.

The proposed water supply and distribution network for the Plan area is illustrated in Map 7. According to the 1995 Water Distribution System Master Plan³, future development in the west end of the City is dependent on the construction of a new reservoir and pump station. More recent studies have indicated that this requirement may be accommodated through an upgrade and connection to the airport water system.

It is also intended that the area be linked to the water systems that are proposed for Hidden Valley to the east, Westgate to the south, and/or to the south to Centre West through the Brochu Industrial Park.

Internal looping will be accomplished through the installation of an internal network, the specific alignment of which will be identified through Design Reports. Specific pipe sizes are subject to confirmation through detailed engineering design.

5.3 Sanitary Sewer

All existing development in the Plan area is serviced by on-site sewage disposal systems. The airport is currently served by a system consisting of a gravity sewer system and forcemain that feeds a lagoon located along the south boundary of the airport property.

The servicing of the Plan area was not contemplated in the 1995 Sanitary Sewer Collection System Master Plan. As a result, the provision of sanitary sewer servicing of the Plan area will

³ An update to the Water Distribution System Master Plan is currently underway. The ultimate water servicing strategy for the Plan area will be dependent on the findings of this review.

be dependent on connections to neighbouring developing lands⁴. A potential sanitary network is illustrated conceptually in Map 8.

It is proposed that the Airport lands ultimately be tied into the City's sanitary system. Subject to further study, this may be achieved via a connection through the Brochu Industrial Park to a future lift station located in the Centre West Business Park south of 100th Avenue. Development on the airport lands may also be dependent on the installation of a lift station at the southwest corner of the airport property.

With respect to Area 2, there may be an opportunity for connect through Gateway and/or the College lands to the West Trunk located along the Highway 43 Bypass, subject to available capacity in this line. The northerly portion of Area 2 would likely connect to the system proposed for Hidden Valley.

Detailed engineering design will determine the degree to which oversizing of the downstream sanitary sewer systems may be required.

5.4 Stormwater Management

In accordance with the draft Stormwater Management System Master Plan, all surface run-off in the Plan area will be stored in approved storm pond facilities with discharge to the City's storm sewer system being restricted to pre-development flows. As indicated in the draft Master Plan, the number of proposed storm ponds has been minimized through the use of shared facilities outside the Plan area. The proposed storm water management system is illustrated in Map 9.

Drainage for the westerly portion of Area 1 is to be accommodated by a future storm pond proposed for the southwest corner of the airport lands. As no development is proposed for the northwest portion of the airport lands, no containment facilities are contemplated. The east half of the airport lands are proposed to drain into a storm line that drains into a proposed dry pond located at the southeast corner of Area 1. This pond will discharge in turn to a storm line that feeds a future wet pond located on the College lands.

As indicated previously, the northerly portion of Area 2 flows towards the Bear Creek corridor, while the balance of the land slopes gradually to the south. Surface run-off in the north portion of this area is to be directed toward the flood-prone lands adjacent to Bear Creek, which may be used as a natural storm detention facility subject to approval being obtained from Alberta Environment.

⁴ An update to the Sanitary Sewer Collection System Master Plan is currently underway. In addition, a sanitary and storm sub-basin study is currently being prepared for the west end of the City. The ultimate sanitary servicing strategy for the Plan area will be dependent on the findings of these reviews.

The balance of Area 2 is to be served by two (2) dry ponds on the south boundary of the Plan area, which in turn will be connected to existing wet ponds located on the lands to the east and subsequently discharged into Bear Creek.

(Bylaw C-1106-06 - May 30, 2016)

5.5 Shallow Utilities

All shallow utilities (natural gas, power, cable, telephone) are to be extended into the Plan area by the individual franchise holders as required to service new developments. Any rights-of-way that may be required to accommodate utilities are to be secured at the time of subdivision.

All overhead lines that are located in those parts of the Plan area designated for residential or related uses as well as those located in arterial commercial areas are to be installed underground at the time of development.

6.0 IMPLEMENTATION

6.1 Subdivision and Development

- 6.1.1 In compliance with City policy, Outline Plans and detailed Design Reports will be prepared by individual landowners in advance of subdivision approval. Potential Outline Plan areas are identified in Map 10. In the process of Outline Plan preparation, developers shall be required to provide for linkages to adjacent lands and transition between land uses to the satisfaction of the City.
- 6.1.2 Detailed engineering design reports for transportation, water, sanitary sewer, storm drainage and parks shall be prepared by the developer and approved by the City prior to Outline Plan approval, rezoning or subdivision proceeding on the subject lands.
- 6.1.3 The phasing of future development in the Plan area is to be determined by market conditions, and the willingness of individual landowners to proceed.

6.2 Plan Amendments

- 6.2.1 An amendment to this ASP shall be required if, in the opinion of the Approving Authority, a proposed Outline Plan results in one or more of the following changes to the Plan:
- a change in the general land use pattern of an area or site except as provided in this Plan;
 - a change in size or location of a school site or major park;
 - the elimination, reclassification, or significant realignment of proposed arterial roads, or the relocation of intersections with major collector roads; and
 - significant changes to the location of major utility networks or storm water management.
- 6.2.2 In order to ensure consistency between this ASP and the Municipal Development Plan (MDP), an amendment to the MDP incorporating the Plan area into the MDP's Future Land Use Map will be required.

It is proposed that this amendment be made concurrently with adoption of this ASP.

APPENDIX

STATISTICAL SUMMARIES

TABLE 1	LAND USE SUMMARY
TABLE 2	LAND USE SUMMARY BY SUB-AREA
TABLE 3	POPULATION AND STUDENT GENERATION ESTIMATES

TABLE 1 - OVERALL LAND USE SUMMARY

Land Use	Area (ha)⁵	Percent
Gross Developable Area	707.2	
Less Environmental Reserve ⁶	11.2	
Net Developable Area	696.0	100.0
Residential	64.0	9.3
Low Density	45.7	6.6
Low-Medium Density Multi-family	7.4	1.1
Medium Density Multi-family	10.9	1.6
Commercial	43.8	6.3
Neighbourhood Commercial	1.5	0.2
Arterial Commercial	24.1	3.5
General Commercial	18.2	2.6
Airport	476.3	68.4
Aviation Reserve	337.7	48.5
Aviation Services	80.1	11.5
Airport Commercial	10.8	1.6
Airport Industrial	47.7	6.9
Industrial	57.4	8.2
General Industrial	46.2	6.6
Industrial Business	11.2	1.6
Roadways	21.8	3.1
Arterials ⁷	5.6	0.8
Collectors	16.2	2.3
Storm Ponds	15.7	2.3
Municipal Reserve	17.0⁹	2.4
School Sites	5.0	0.7
Neighbourhood Parks/Other ⁸	12.0	1.7

(Bylaw C-1106-06 - May 30, 2016)

⁵ Areas are approximate only and are subject to confirmation at time of Outline Plan preparation.

⁶ Includes marsh area at north end of Area 2 adjacent to the Bear Creek corridor.

⁷ Includes new roadways and land required for 116th Street widening. Does not include existing road allowances.

⁸ Municipal reserve for non-residential development to be dedicated as cash-in-lieu, and/or for use as buffers.

⁹ Aviation Reserve, Aviation Services and Airport Commercial areas exempt from municipal reserve requirements.

TABLE 2 - LAND USE SUMMARY BY SUB-AREA

Land Use	Area 1	Area 2	Total (ha)
Gross Developable Area	547.8	159.4	707.2
Less Environmental Reserve ¹⁰	0.0	11.2	11.2
Net Developable Area	547.8	148.2	696.0
Residential	0.0	64.0	64.0
Low Density	0.0	45.7	45.7
Low-Medium Density Multi-family	0.0	7.4	7.4
Medium Density Multi-family	0.0	10.9	10.9
Commercial	1.6	42.2	43.8
Neighbourhood Commercial	0.0	1.5	1.5
Arterial Commercial	1.6	22.5	24.1
Airport Commercial	0.0	18.2	18.2
Airport	476.3	0.0	476.3
Aviation Reserve	337.7	0.0	337.7
Aviation Services	80.1	0.0	80.1
Airport Commercial	10.8	0.0	10.8
Airport Industrial	47.7	0.0	47.7
Industrial	57.4	0.0	57.4
General Industrial	46.2	0.0	46.2
Industrial Business	11.2	0.0	11.2
Roadways¹¹	4.0	17.8	21.8
Arterials (Widening)	0.0	5.6	5.6
Collectors	4.0	12.2	16.2
Storm Ponds	7.5	8.2	15.7
Municipal Reserve	1.0¹³	16.0	17.0
School Sites	0.0	5.0	5.0
Neighbourhood Parks/Other ¹²	1.0	11.0	12.0

(Bylaw C-1106-06 - May 30, 2016)

¹⁰ Includes marsh area at north end of Area 2 adjacent to the Bear Creek corridor.

¹¹ Includes new roadways and land required for 116th Street widening. Does not include existing road allowances.

¹² Municipal reserve for non-residential development to be dedicated as cash-in-lieu, and/or for use as buffers.

¹³ Aviation Reserve, Aviation Services and Airport Commercial areas exempt from municipal reserve requirements.

TABLE 3 - POPULATION AND STUDENT GENERATION

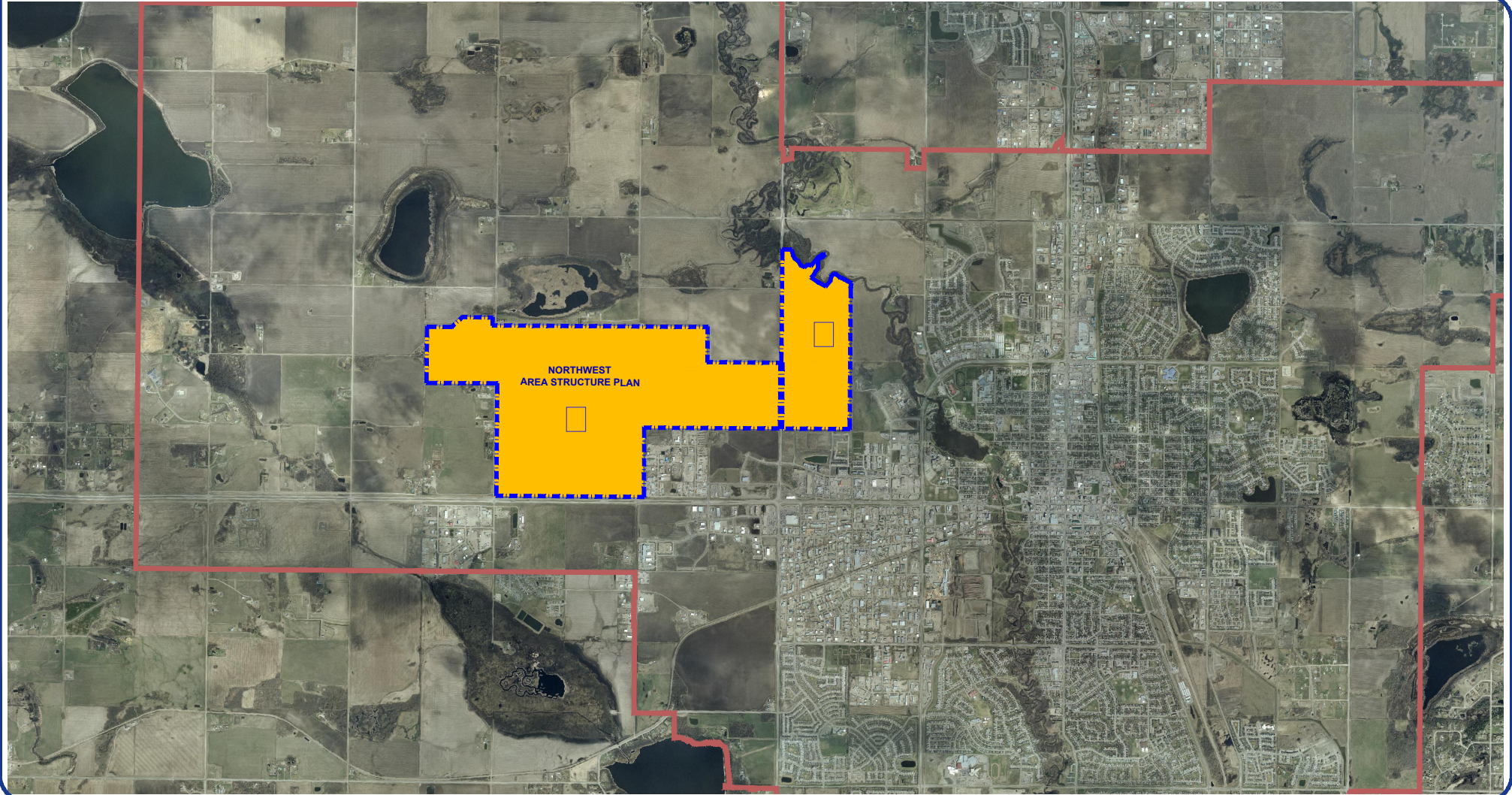
	Total
Developable Residential Area	64.0 ha
Low Density	45.7 ha
Low-Medium Density	7.4 ha
Medium Density	10.9 ha
Total Residential Units	1,302
Low Density (45.7 ha @ 11 du/gross ha)	503
Low-Medium Density Multi-family (7.4 ha @ 40 du/net ha)	296
Medium Density Multi-family (10.9 ha @ 74 du/net ha)	807
Total Population	3,811
Low Density Single Family (503 units @ 3.2 ppu)	1,610
Low-Medium Density Multi-family (296 units @ 2.8 ppu)	829
Medium Density Multi-family (807 units @ 1.7 ppu)	1,372
Total Students*	663
Public School Students	651
Grades K-8	447
Grades 9-12	186
Catholic School Students	212
Grades K-8	311
Grades 9-12	127
Francophone School Students	13
Grades K-8	11
Grades 9-12	2

* Student Generation is based on the following:

Total Students	17.4% of Total Population
Total K-8 Students	72 % of Total Students
Total 9-12 Student	28 % of Total Students
Public School Students	66 % of Total Students
Catholic School Students	32 % of Total Students
Francophone Students	2 % of Total Students
Public K-8 Students	71 % of Total Public Students
Catholic K-8 Students	75 % of Total Catholic Students
Francophone K-8	87 % of Total Francophone Students

Total school enrollment of 11,949 as of September 30, 2015 and City population of 68,556 (2015 municipal census).

(Bylaw C-1106-06 - May 30, 2016)



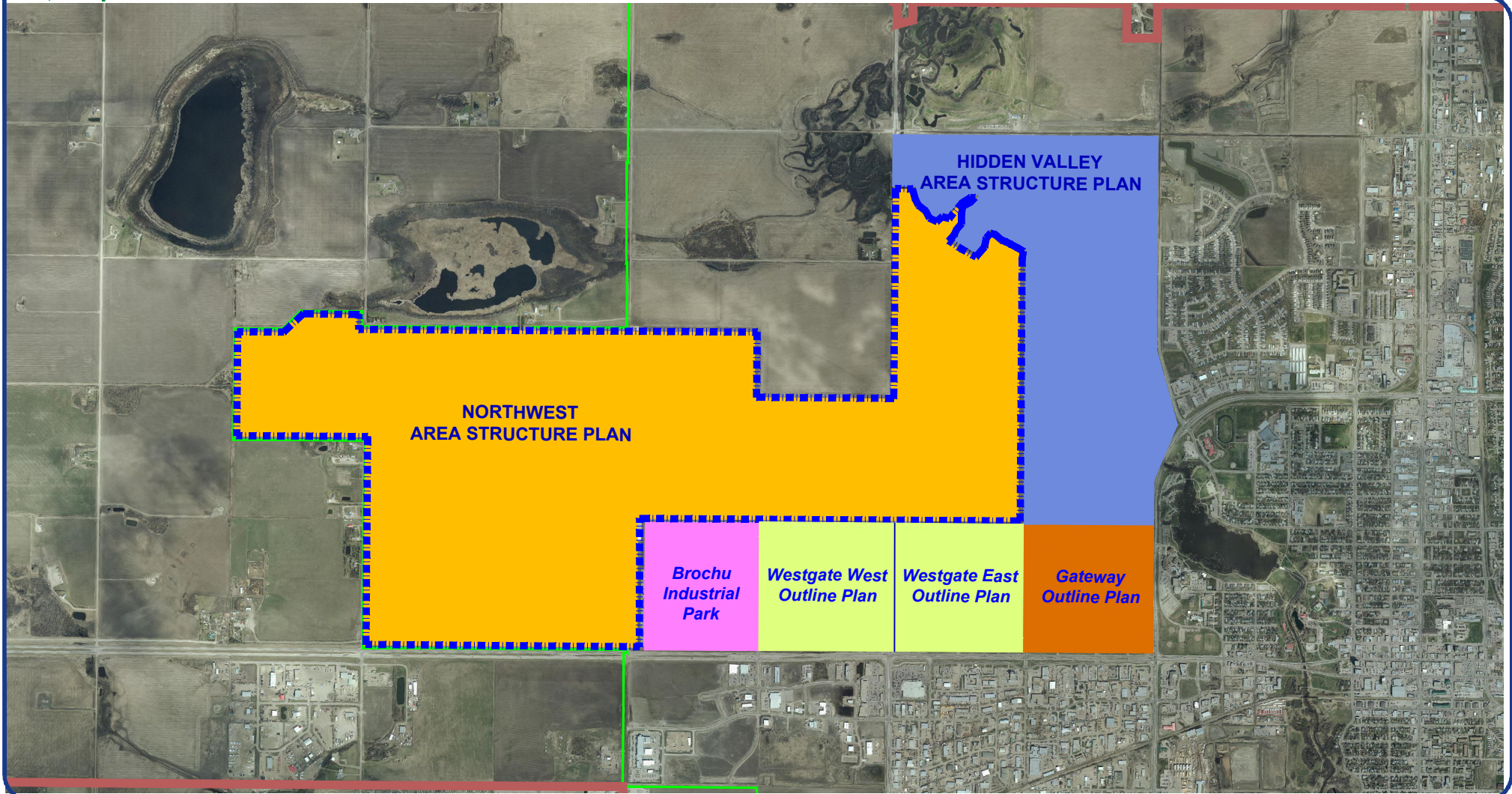
Legend

- City Boundary
- Plan Area



Location

Bylaw C-1106-06 : May 30, 2016



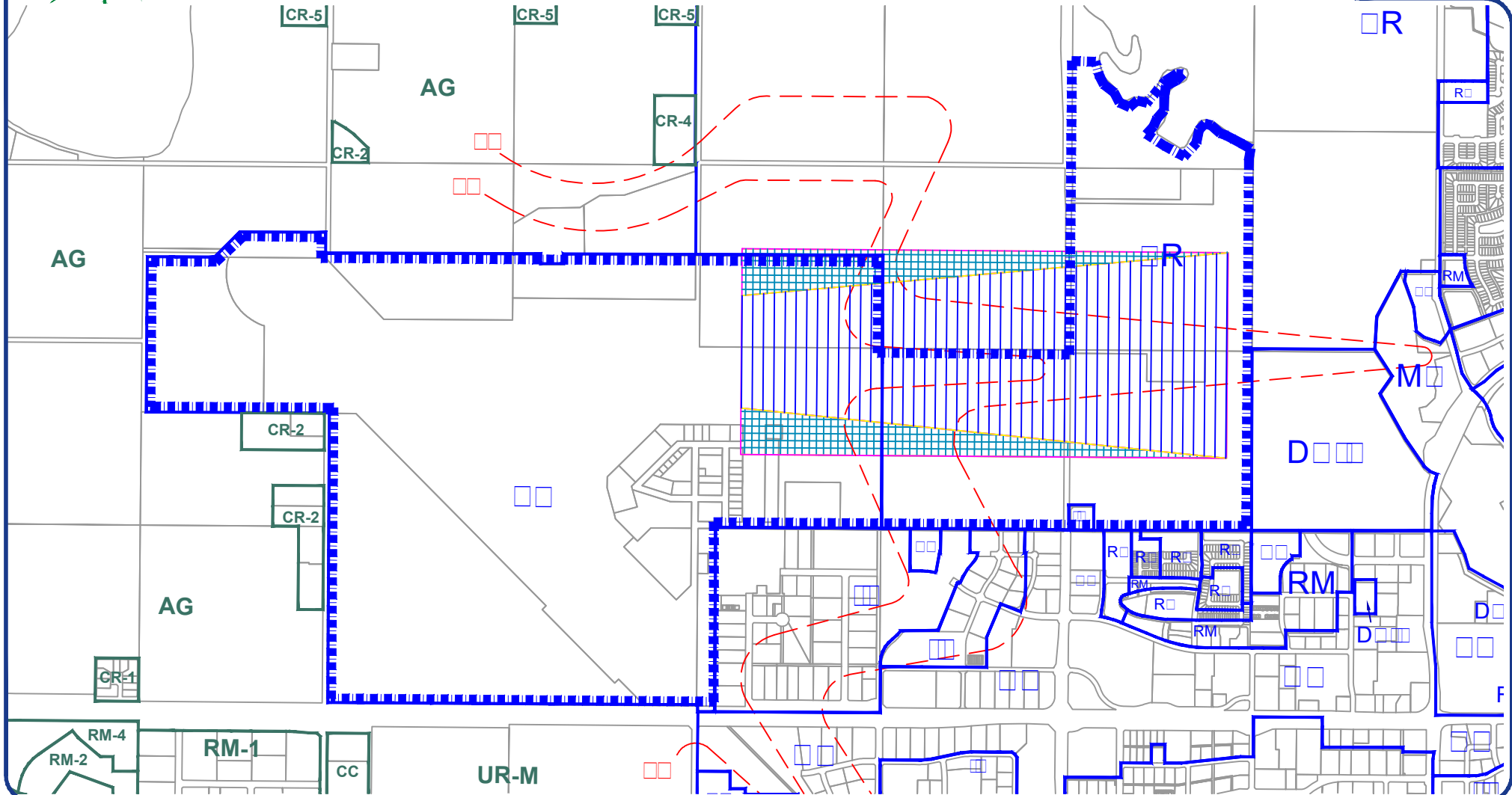
Legend

- City Boundary
- Rural Service Area Boundary
- Plan Area



Context

Bylaw C-1106-06 : May 30, 2016



Legend

AG		RM-1	
CC		RM-2	
CR-2		RM-4	
CR-4		UR-M	
CR-5		UR-R	

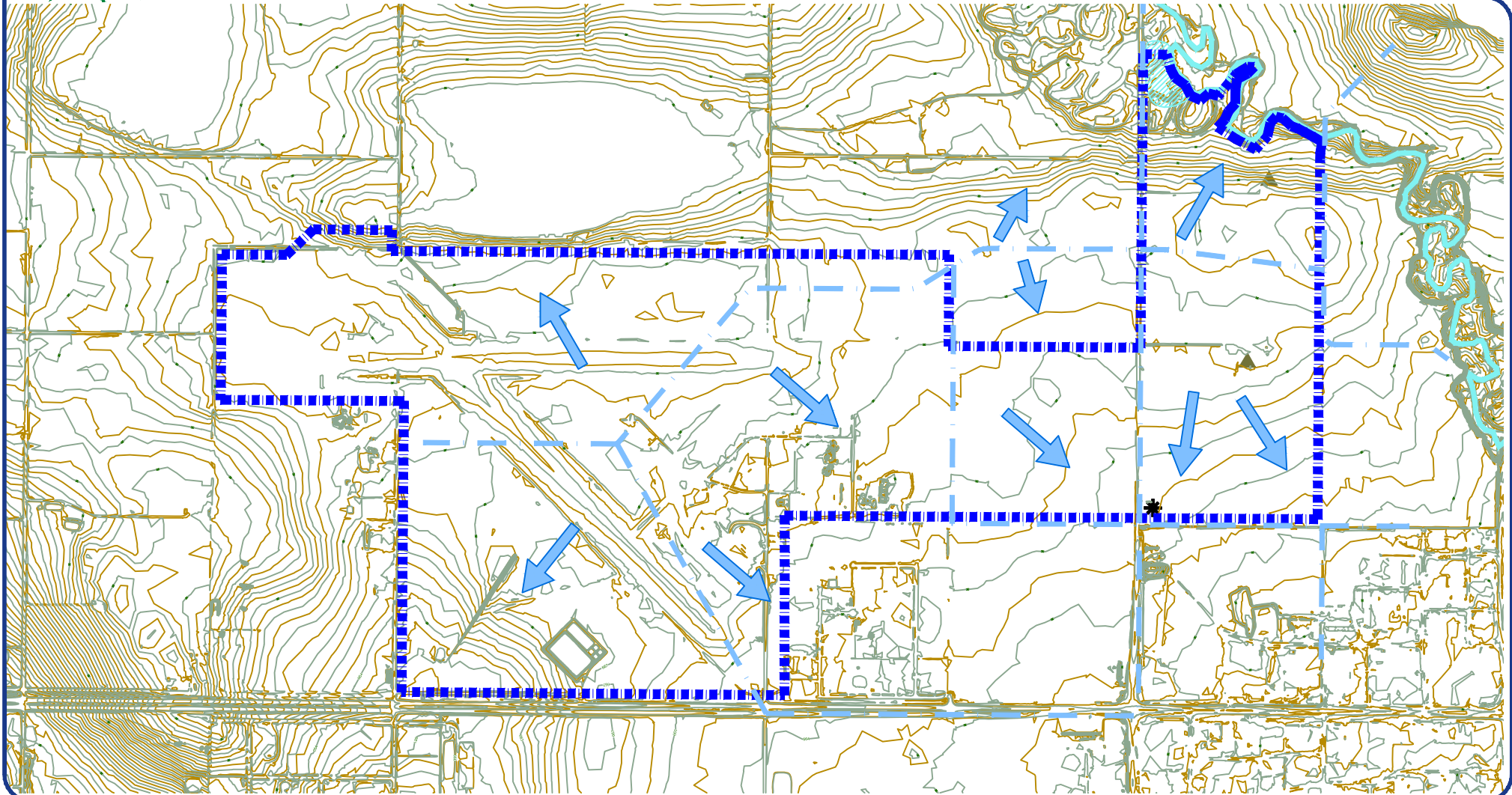
	Plan Area
	Airport Approach - Transitional Surface (1:7)
	Airport Approach - Precision Surface (1:50)
	Noise Exposure Forecast Contour

AP		PS	
CA		RC	
DC		RH	
IB		RM	
IG		RS	
MP		UR	



**Land Use
Regulations**

Bylaw C-1106-06 : May 30, 2016



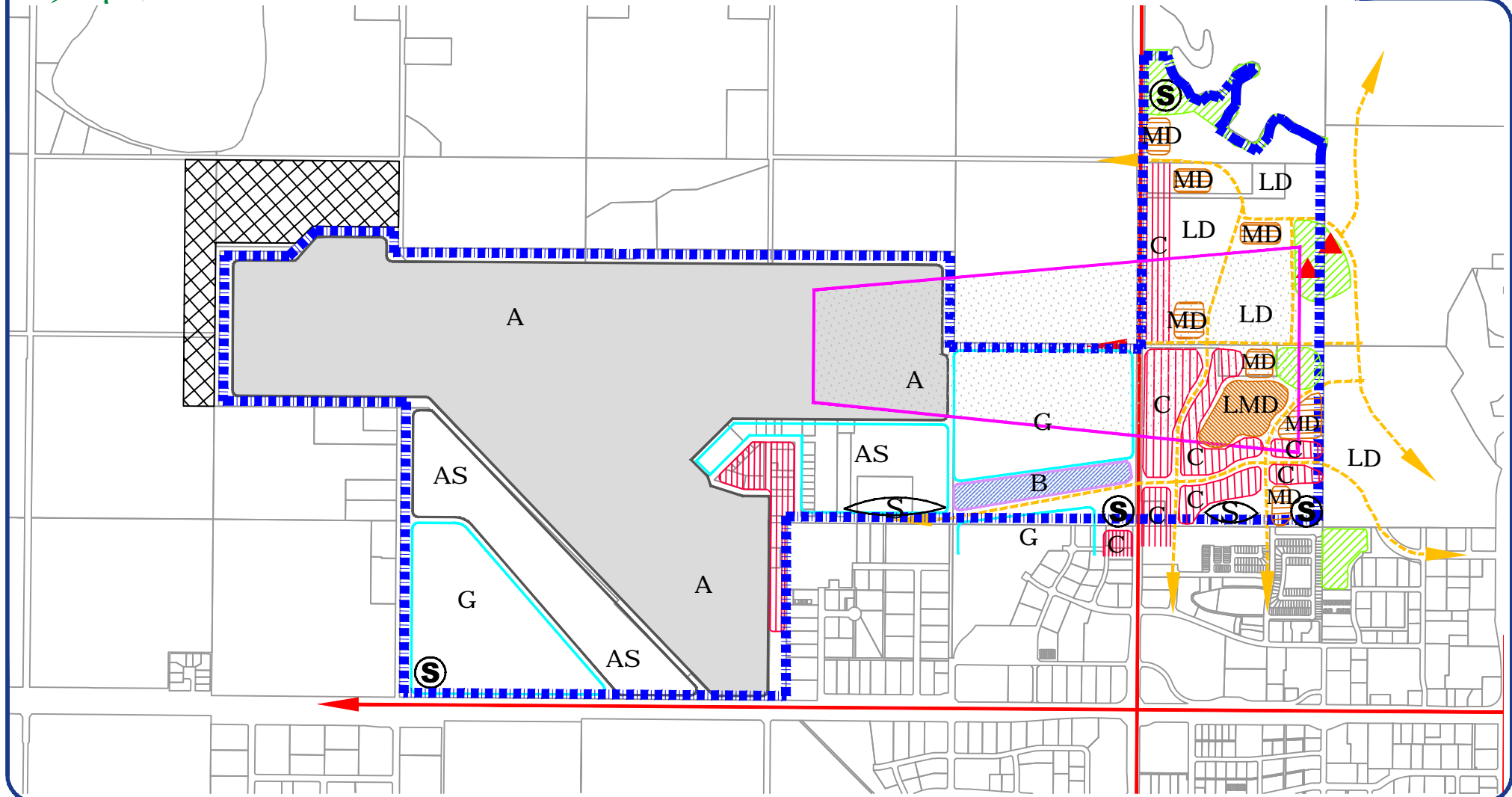
Legend

- | | | | |
|--|-------------------------|--|----------------|
| | Plan Area | | Residence |
| | 1m Contour | | Industrial Use |
| | Direction of Flow | | Creek |
| | Drainage Basin Boundary | | Marsh Area |



Existing Conditions

Bylaw C-1106-06 : May 30, 2016

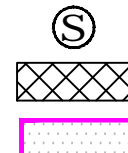


Plan Area

- LD Low Density Residential
- LMD Low / Medium Density Residential
- MD Medium Density Residential
- C Commercial
- Parks & Open Space

Legend

- A Airport (Aviation Reserve)
- B Industrial Business
- G General Industrial
- AS Aviation Services
- School



Storm Pond

Airport Runway Expansion Areas

Runway Approach (Height Restrictions)

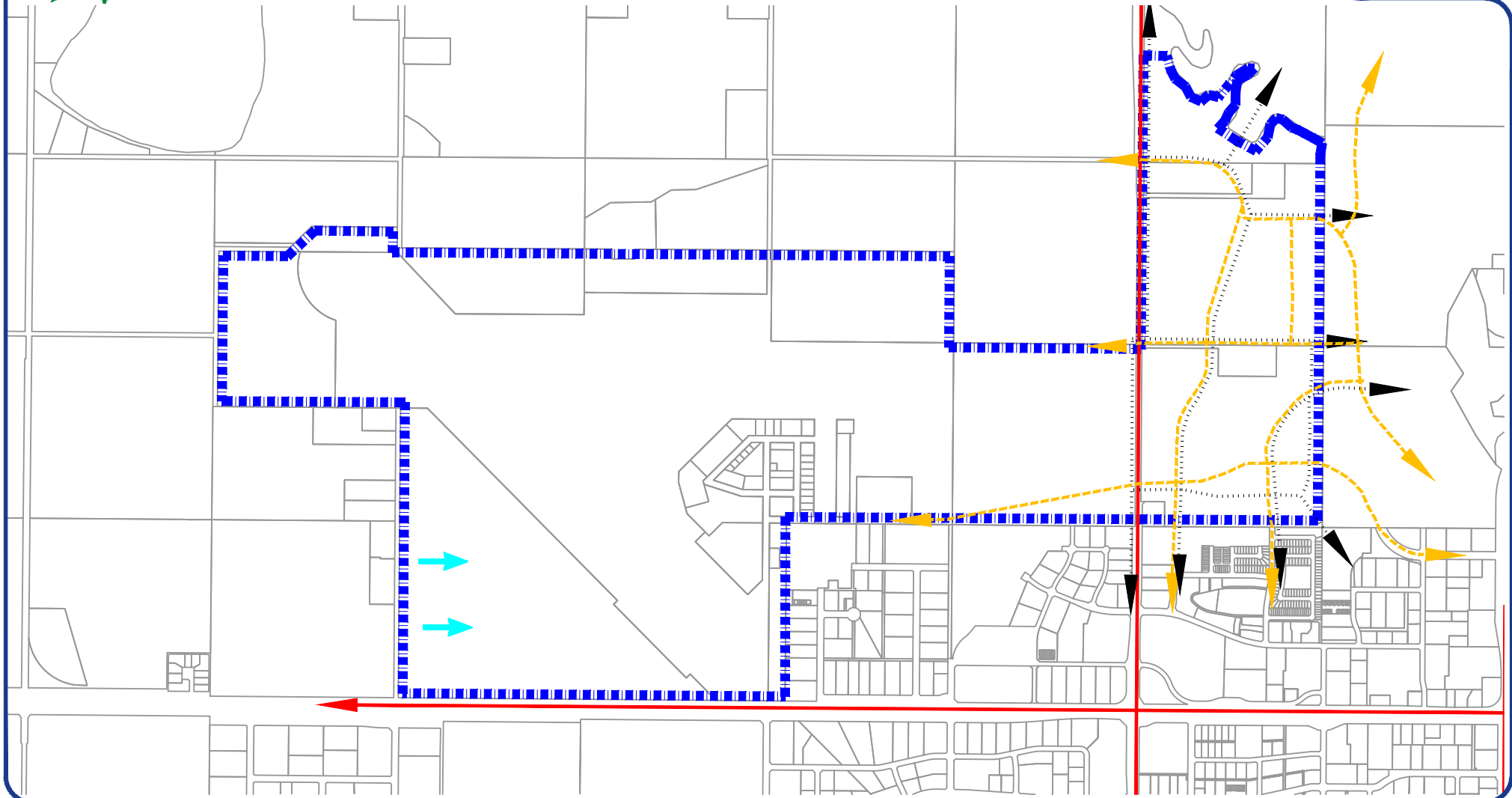
Arterial Road

Collector Road








Development Concept

Bylaw C-1106-06 : May 30, 2016



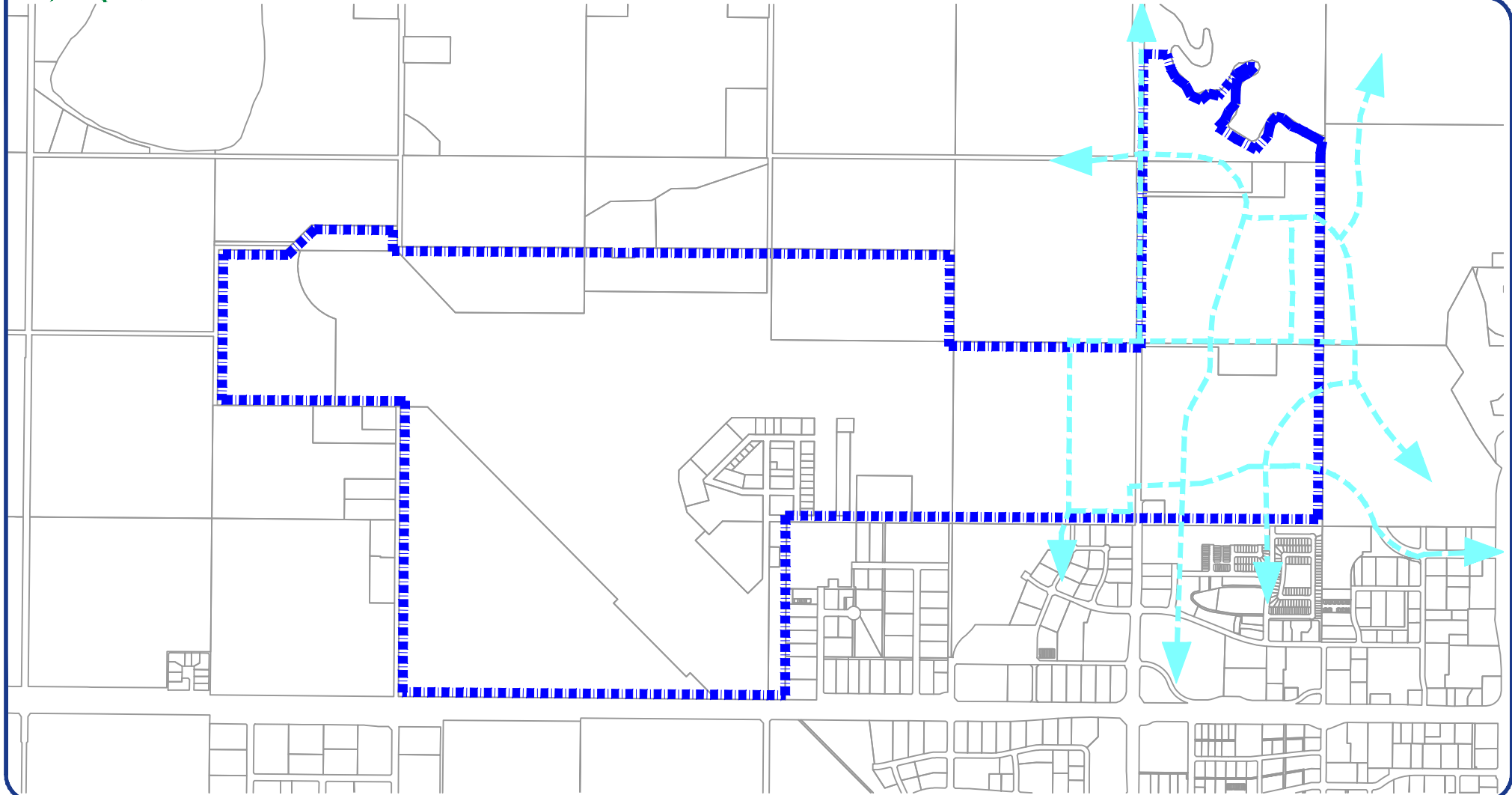
Legend

- | | | | |
|---|----------------|---|----------------------|
|  | Plan Area |  | Potential Trail Link |
|  | Arterial Road |  | Local Access |
|  | Collector Road | | |



Transportation

Bylaw C-1106-08
July 16, 2018



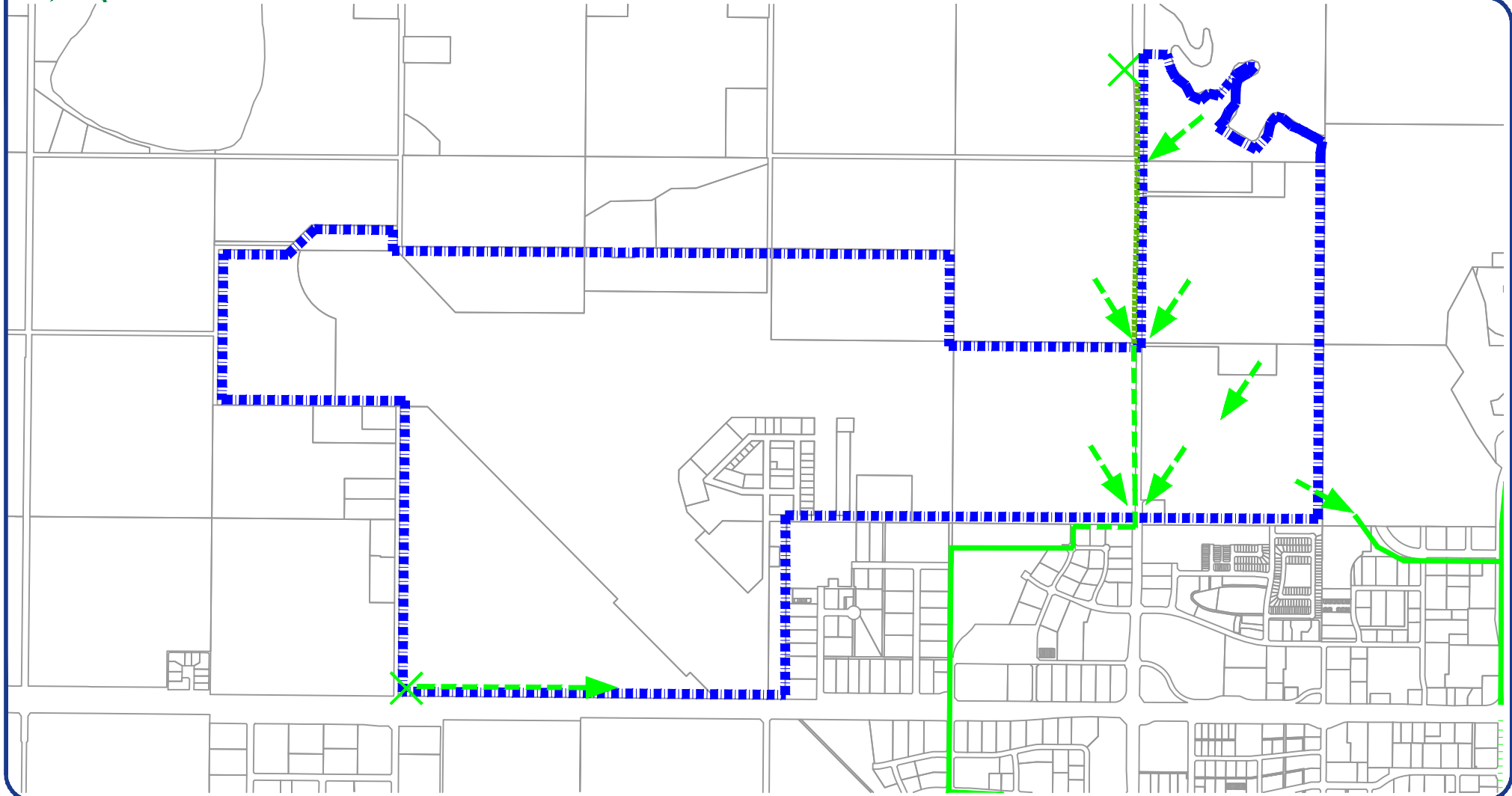
Legend

- ■ ■ ■ Plan Area
- - - - Water Line



Water Concept

Bylaw C-1106-06 : May 30, 2016



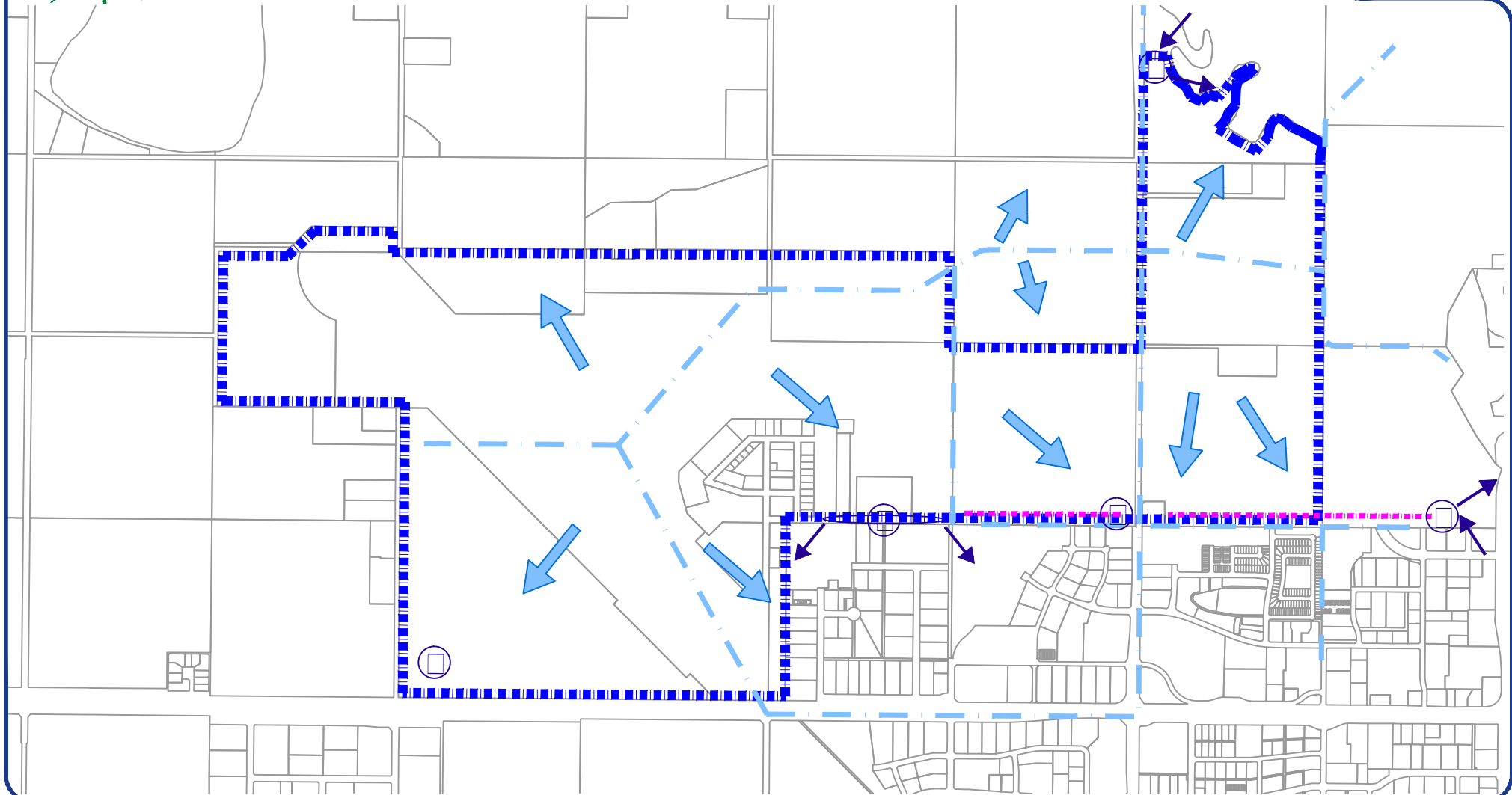
Legend

- | | | | |
|-------|------------------------------|-------|---------------------|
| ■■■■■ | Plan Area | | Future Force Main |
| → | Proposed Sanitary Connection | X | Future Lift Station |
| --- | Future Sanitary Trunk | | |
| — | Existing Sanitary Main | | |



Sanitary Network

Bylaw C-1106-06 : May 30, 2016



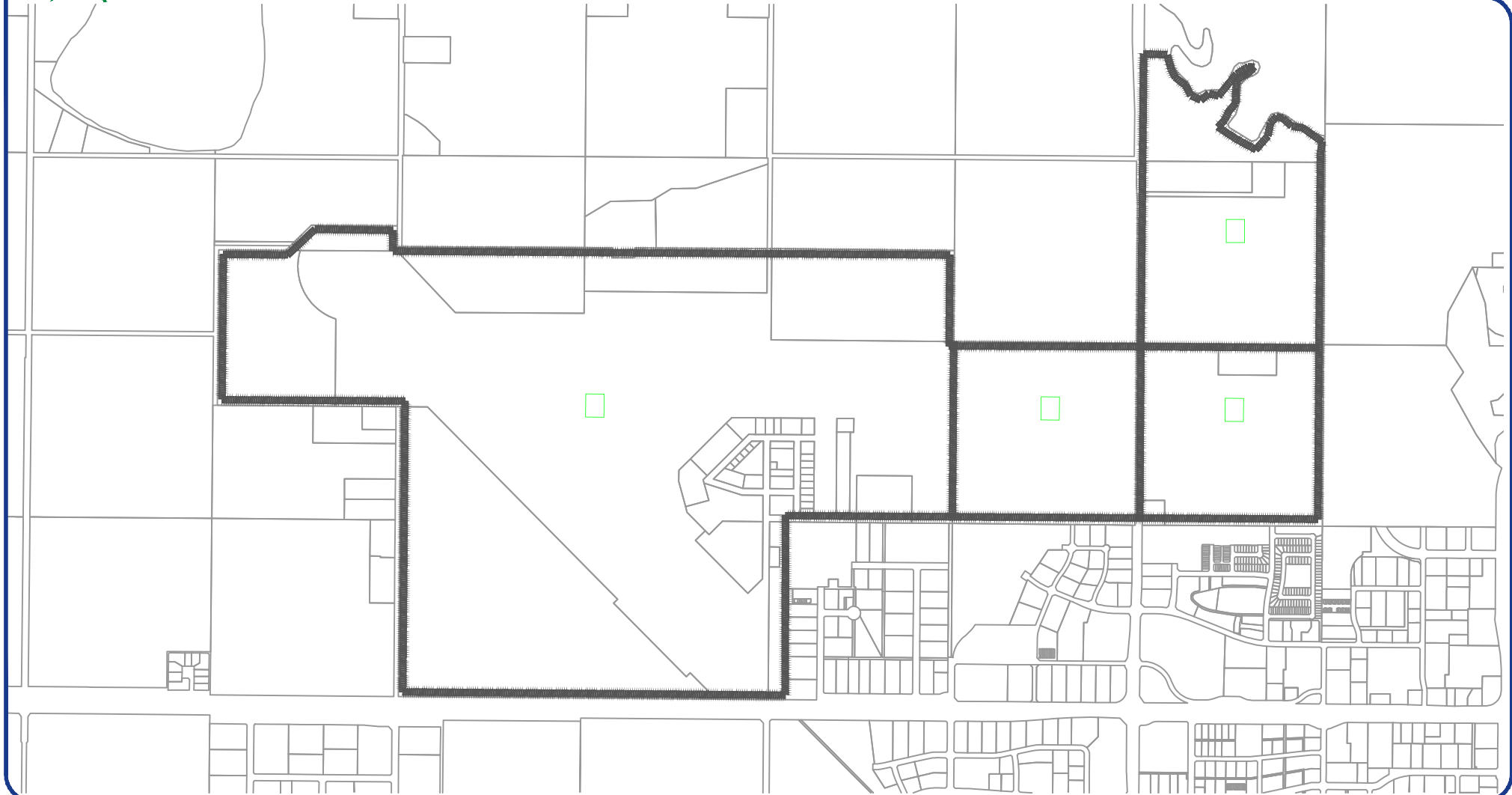
Legend

- ■ ■ ■ Plan Area
- ➡ Direction of Flow
- ➡ Discharge Point
- - - Drainage Basin Boundary
- - - - - Storm Line
- Storm Pond (specific size and location to be determined during detailed engineering design)



Storm Concept

Bylaw C-1106-06 : May 30, 2016



Legend

 Outline Plan Area



Proposed Outline Plans
Bylaw C-1106-06 : May 30, 2016