

THE CITY OF SPRUCE GROVE

BYLAW C-1066-19

East Pioneer Area Structure Plan Amendment

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality may adopt and amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to amend Bylaw C-843-13, the East Pioneer Area Structure Plan Bylaw;

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

1. Bylaw C-843-13, the East Pioneer Area Structure Plan, be amended as outlined in Schedule 1 which is attached to and forms part of this Bylaw.

This bylaw shall come into force and effect when it receives third reading and is duly signed.

First Reading Carried

March 25, 2019

Public Hearing

November 12, 2019

Second Reading Carried

Third Reading Carried

Date Signed

Mayor

City Clerk

EAST PIONEER

AREA STRUCTURE PLAN AMENDMENT



Prepared for: Qualico Developments Ltd.
Presented by: Select Engineering Consultants Ltd.
Date: October 30, 2019
RPT-1-36-15039-8.5-EastPioneerASP-191018.docx

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1.0 Introduction

1.1 Background

The East Pioneer ASP amendment has been prepared on behalf of Qualico Developments West Ltd. The following amendments to the plan have been previously approved:

Bylaw C-950-16 Approved April 11, 2016 (to re-designate a 1.58 ha site from Low to Medium Density Residential to Medium to High Density Residential to accommodate a senior's housing site with approximately 135 units in the northwest plan area).

Bylaw C-952-16 Approved May 9, 2016 (to reconfigure the central Stormwater Management Facility, re-align the collector road, add a linear park space along the north side of the ER drainage channel and add a small park site within the Fenwyck neighbourhood).

Bylaw C-1008-17 Approved September 11, 2017 (to re-designate a 1.0 ha site from Medium to High Density Residential to Commercial within the northwest corner of the Fenwyck neighbourhood).

1.2 Location and Context

This ASP area includes four neighbourhood areas including Tonewood (N.E. ¼ Section 2-53-27-W4), Fenwyck (N.W. ¼ Section 1-53-27-W4), while S.W. ¼ Section 2-53-27-W4 and S.E. ¼ Section 2-53-27-W4 are unnamed. This amendment proposes to name the neighbourhood in S.E. ¼ Section 2-53-27-W4 "Easton" as approved by the City of Spruce Grove.

This proposed amendment only affects the Easton neighbourhood. The neighbourhood area is located:

- South of Tonewood Neighbourhood,
- West of Pioneer Road,
- East of the existing Lakewood neighbourhood and
- North of Highway 16A.

1.3 Your Bright Future: Municipal Development Plan 2010 - 2020

This proposed amendment continues to achieve the overall objectives of the Municipal Development Plan (MDP). An amendment to the MDP is proposed to remove any reference to an urban village within the East Pioneer Lands ASP and to add the proposed commercial area. The MDP amendment has been submitted under a separate cover and was generally accepted by the City.

2.0 Proposed Amendment

This amendment to the East Pioneer Area Structure Plan (ASP) includes an update to the land use concept and land use statistics to reflect the following proposed changes to the plan within the Easton neighbourhood.

- Add Easton Natural Area site west of Pioneer Road,
- Remove Section 4.4.8 Urban Village and all other references to an “urban village” land use from the ASP,
- Add residential, commercial and municipal reserve park spaces to the Easton Neighbourhood,
- Remove the Urban Village Land Use and the Urban Village Influence from Figure 5, and replace with defined locations for residential, commercial and park/open space land uses,
- Relocate the stormwater management facility (SWMF) to the south, adjacent to the future extension of McLeod Avenue,
- Remove a portion of the north/south collector road and replace with a linear park,
- Remove a 2.0 ha Urban Village Park from the land use statistics and add park spaces to the land use concept,
- Add potential commercial access locations from Highway 16A to Figure 7,
- Update Table 2 - Proposed Land Use Statistics,
- Change the name of the neighbourhood in the S.E 1/4 Section 2-53-27-W4 to Easton neighbourhood for future reference in this amendment,
- Remove the symbol for Transit Centre from Figure 7 and
- Add a reference table and graphic that summarizes the findings of each study required to support development within the ASP, including the fen and peat lands as Appendix A.

2.1 Land Use

2.1.1 Urban Village

The Urban Village land use measuring 26.6 ha has been removed from the East Pioneer ASP. All references to the Urban Village, including but not limited to Section 4.4.8, are deleted and the Urban Village Centre Mixed Use and Urban Village Influence land use designations are removed from the Land Use Concept in Figure 5 and the Land Uses Statistics in Table 2.

The deleted Urban Village / Mixed Use area has been replaced with a combination of residential and commercial uses as outlined in Sections 2.1.2 and 2.1.3.

2.1.2 Residential

Residential land uses are conceptualized to replace a portion of the former Mixed Use (Urban Village) area and adjust the residential use types in other amendment areas within the Easton neighbourhood. Overall, the amendment adds 9.69 ha of Medium to High Density Residential to the ASP area, all within the Easton neighbourhood, and causes a slight 0.16 ha reduction to the Low to Medium Density Residential use.

As shown in the proposed Land Use Concept (Figure 5), a 3.34 ha Medium to High Density Residential land use is added to the northeast corner of Easton adjacent to Pioneer Road with access from the collector road to the north. An additional 5.52 ha Medium to High Density Residential area is added south of McLeod Avenue adjacent to the commercial sites. 0.83 ha of Medium to High Density Residential has also been added along the north/south collector road. Street-oriented row housing can be developed under either the R1 or R2 district.

In consideration of both the increase to Medium to High Density Residential and the elimination of the residential component in the former Mixed Use area, this amendment causes a slight reduction to the overall residential density from 34 dwelling units per net residential hectare (du/nrha) to 33 du/nrha. The revised Land Use Concept complies with the MDP policy requiring a minimum of 30% Level 2 housing (medium to high density) with 36% of the projected ASP units identified as Level 2 residential.

2.1.3 Commercial

An 11.37 ha commercial area is located immediately north of Highway 16A, replacing the Mixed Use Commercial/Employment component that was planned within the Urban Village.

It is anticipated that the commercial area will be districted C2 - Vehicle Oriented Commercial or an appropriate commercial district, depending on final site design and uses, which will be confirmed at the time of subdivision. The proposed commercial area will add to the retail and services offered to the residents of East Pioneer, the City of Spruce Grove, and visitors traveling on Highway 16A. In addition to this land use change, potential access locations into the commercial site have been identified on Figure 7 Transportation Network.

The area commercial uses will adhere to development regulations contained in the Land Use Bylaw for commercial uses adjacent to Highway 16A, which includes the following regulations:

- Additional landscaping requirements,
- Minimum façade height and width and
- Architectural features, such as, multiple colours, complementary finishes and textures, articulating walls, canopies, and varying roof lines.

The commercial development within Easton will adhere to the Objectives and associated Policy listed in Section 4.4.7 of the East Pioneer ASP. This amendment adds Policy 'c' to Objective 17 plus a new Objective '17A'. Proposed updates are noted in red font.

Objective (17) Minimize the impact of commercial development on adjacent land uses**Policy****Implementation**

(a) Activity areas (e.g. primary entrances) associated with commercial uses should be oriented towards arterial or collector roadways, away from residential uses.

Where possible, place medium density residential uses near commercial uses, and have regard for building placement and activity areas for commercial development under the applicable zone.

(b) Low density residential lots adjacent to commercial uses shall either back onto or flank commercial uses.

The application of appropriate setbacks, landscaping, buffering and design elements available under the Land Use Bylaw at the Development Permit stage.

(c) Where commercial development shares a roadway that also serves residential development, the transition area shall be developed in a mutually beneficial and integrated manner.

Use landscaping, fencing, screening, and architectural treatments to achieve a beneficial land use transition, to the satisfaction of the City.

Policy Rationale: Impacts associated with commercial development should be minimized and carefully integrated with surrounding residential development through attention to site design (building placement, access locations), pedestrian connectivity, and appropriate transitioning.

Objective 17A: Promote safe and convenient access between residential and commercial uses.**Policy****Implementation**

a) Priority pedestrian crossing areas shall use an enhanced crossing feature, which may include, but is not limited to, curb extensions, raised crosswalks, coloured and textured pavement, signals, etc., to increase safety and visibility of pedestrians accessing the commercial area.

An appropriate crossing feature that achieves this policy is to be determined at time of subdivision design in accordance with the engineering standards or an innovative solution accepted by the City.

Policy Rationale: Traffic Calming measures and pedestrian crossing aides will help reduce traffic speeds and prioritize pedestrian activity in the area. Encouraging use of nearby commercial by Easton residents will help to ensure the viability of the commercial uses and increases activity in the commercial area as a place to shop, work and socialize.

2.1.4 Parks and Open Space

A comprehensive change to the provision of open space is defined within the Easton neighbourhood. The previously identified 2.0 ha Urban Village Park/Open Space has been removed, and parks/open spaces have been reconfigured. Municipal reserve dedication in

Easton is proposed to increase to 4.33 ha. These changes, and the removal of the symbols for potential park/open space locations from the amendment area, are illustrated on Figures 5 and 6. In addition to the new parks, the Active Network & Open Space Plan (Figure 6) has been updated to identify Pedestrian Walkway locations required for connectivity and to optimize use and awareness of the off-street trail network.

Four new parks/open space locations are identified:

- A 2.81 ha 'Type C' central park space provides opportunities for both linear connections and programmable space. The park will include frontage and visibility from both the central collector and local roads, and will be developed with an off-street pedestrian / bicycle trail connection through to the proposed Easton Natural Area to the east.
- A 0.96 ha 'Type E' linear park space is defined immediately east of the 'Type C' park. This park will be developed as a linear park with frontage along both the central collector and local roads, providing for the continuation of the off-street pedestrian / bicycle trail connection through to the proposed Easton Natural Area.
- A 0.42 ha 'Type E' linear park will provide a direct pedestrian / bicycle connection for neighbourhood residents to the Easton commercial site.
- A walkway connection and extension of the natural area on the fringe of a ravine is provided as a 0.14 ha Type 'A' park by municipal reserves in the northwest corner of Easton. This park will preserve the southern fringe of an existing natural area tree stand and provide a pedestrian connection to the Lakewood residential area and access to the creek natural area identified as Area 'H' in the ASP.

The exact configuration of these parks, road frontage requirements, and access from the local road network will be determined at the time of subdivision. Any surplus municipal reserve from the residential portion of the Easton area may be deferred to property under the same ownership within the ASP area or collected as cash-in-lieu, at the discretion of the City in the endeavor of retaining the identified natural area east of Pioneer Road.

Municipal reserve owing for the proposed commercial area will be provided as cash-in-lieu or as a DRC on titles at the time of subdivision.

2.1.5 Natural Area

A 2.43 ha area is identified as the Easton Natural Area in place of previously approved Low to Medium Density Residential and Stormwater Management Facility land uses.

A portion of the forested area within the Easton Neighbourhood west of Pioneer Road was previously cleared for development in accordance with the approved ASP, but construction activities uncovered soils with high levels of peat that are challenging and uneconomical for development. As a result, an area measuring 2.11 ha is identified for retention and restoration as part of the Easton Natural Area in this proposed amendment.

A Natural Area Restoration and Management Plan (NARMP) is required as part of any redistricting application for the identified Natural Area or bordering residential lands. The NARMP will define the conditions for re-naturalization of the lands, identify responsibilities, and provide recommendations for integration with the urban environment. A draft Terms of Reference created by Stantec in 2018 has been submitted by the applicant under separate cover. The following items shall be defined within the NARMP:

- Responsibilities and timelines with respect to restoration and management goals and objectives,
- Methods of weed monitoring, control, and maintenance,
- Landscaping requirements including tree types and reforestation locations for tree planting,
- If required, buffer space shall be identified and included within the natural area to maintain access and protection between the re-established tree stand and private property and
- Any maintenance or development on the natural area site will follow protocol as established in the NARMP.

The following items shall be considered for the servicing agreement associated with the Easton Natural Area at time of subdivision:

- Lands dedicated as part of the Easton Natural Area will be exempt from offsite development levies, municipal reserve contribution, and other development contributions,
- Developer will be responsible for protecting the integrity of the natural area during all subdivision related construction activities within or adjacent to the natural area during development of the Easton neighbourhood,
- The City will undertake responsibility for public awareness efforts and any interpretive signage within the natural area,
- Any trail construction and or lighting requirements within the identified natural area will be the responsibility of the City and
- Any additional responsibilities of the developer and the municipality as negotiated at the time of subdivision.

The north portion of the Easton Natural Area, located within Lot 1, Block 1, Plan 182 2695, includes an area of undisturbed trees. This 0.32 ha area was reported to have peat depths greater than 40 cm (see Section 3.6 for additional information) and is identified as part of the Easton Natural Area on Figure 5. This area could be integrated with the reforestation area to the immediate south. Prior to development occurring on the subject parcel, additional studies may be required to determine which areas may be deemed undevelopable and if any areas may qualify for Environmental Reserve.

The exact area and configuration of the Easton Natural Area may be refined at the time of subdivision. Specific lot designations within the Easton Natural Area will be determined in accordance with the Municipal Government Act at the time of subdivision. Land that is identified as undevelopable or qualifies as environmental reserve will not be considered for credited municipal reserve dedication.

2.2 Transportation and Infrastructure

2.2.1 Roadway Network

The ASP reconfiguration continues to propose a range of transportation facilities in order to meet the needs of the neighbourhood. These facilities will accommodate vehicles, future public transit, and active modes of transportation.

The collector roadways in the southern central area of the Easton neighbourhood have been adjusted, as illustrated in Figure 7, due to the removal of the Urban Village. The major changes include:

- The removal of a portion of the north/south collector road that connected Highway 16A to the future extension of McLeod Avenue.
- A collector loop south of future McLeod Avenue (with two connecting intersections with future McLeod Avenue) will provide access to both the Medium to High Density Residential areas and the north side of the commercial area. This road provides a key transition between the Easton commercial uses and residential uses. Alternative road cross-sections designed to specifically assist in this transition, and maintain functionality for user groups and the various modes of transportation may be considered at the time of subdivision. The right angle turns shown in this loop offer excellent intersection locations for potential access into the commercial area and have been identified as such on Figure 7.
- A short north/south collector is identified (within the commercial area) that connects Highway 16A to the collector loop that provides access into the commercial area from both Highway 16A and the residential areas to the north. Estimated daily traffic volumes show this roadway is required to accommodate collector traffic flows that include neighbourhood traffic. However, this collector connection is primarily for access into the commercial area. On-street parking is not anticipated to be required on both sides of the roadway, therefore opportunities may exist to develop an alternative cross-section to more effectively manage the pedestrian and vehicular users of the area. This road may be considered as a private collector with a non-standard cross-section as an entrance feature into and through the commercial area. If this portion of the collector network is developed as a private roadway, as supported by a Traffic Impact Assessment (TIA), an access agreement or easement must be registered in favour of the City to ensure this connection is preserved. Any proposed non-standard cross-section roadways (public or private) may be considered and is subject to the approval of City Engineering.
- A private collector road is proposed as an eastward extension of the existing private collector road in Century Crossing. This private collector road shall satisfactorily tie into the existing connection at the western property line and transition into a public roadway at the identified intersection (Figure 7). This private collector may be developed with alternative non-standard cross sections designed specifically for the projected traffic, vehicle/pedestrian requirements, and anticipated parking standards, subject to the approval of City Engineering, as supported by a TIA. Delineation between the private and public collector roads may be accommodated through curb extensions or a change in pavement structure.

A TIA completed by Bunt Engineering in 2019 was submitted under separate cover and includes potential alternative road cross-sections that may be considered at the subdivision stage. The cross-sections reflect alternative road rights-of-way that consider the specific users

for the area based on commercial types, traffic projections, and potential parking restrictions. Vehicle access locations from Highway 16A into the commercial area are identified and are shown on Figure 7.

The location of key pedestrian walkways has been updated for the Easton neighbourhood and is illustrated on Figure 7. A circular symbol indicating a “key pedestrian crossing (focal point)”, at the intersection of McLeod Avenue and the proposed linear park, has been replaced by a star to indicate an important intersection for active travelers accessing the park and the linear walkway that leads to the commercial area. Although it was never defined, as such, within the ASP text, the circle symbol may have set an expectation for a roundabout at this location. A roundabout remains an option, but the specific traffic control at this location shall be determined at time of subdivision. An additional priority pedestrian crossing has been added on the south end of the linear park.

The road network in the remainder of the ASP is not significantly altered.

2.2.2 Public Transit

Transit service can be accommodated along Easton’s collector roadways and can be provided within 400m of all residents. Specific details of transit service requirements will be determined through discussions with the City at time of subdivision.

A transit node was originally contemplated within the Urban Village to service the future mixed-use destination. With the removal of the Urban Village, and revised City transit planning, this transit node is no longer required. The location of the potential transit node has been removed from Figure 7.

2.2.3 Servicing and Infrastructure

In general, the servicing for the lands within the ASP remains consistent with the approved ASP.

At the request of the City, the Storm Servicing Concept for the ASP has been updated to include flow from approximately 136 ha of predevelopment area. These lands are outside the ASP (to the south) and are currently flowing north through a culvert beneath Highway 16A and are, on the interim, flowing into the Lakewood stormwater system. The City has requested that this flow be accommodated within the Easton neighbourhood. This stormwater is to be transmitted to the Pioneer Road minor system; retention is not required nor provided. This change has been identified on Figure 8.

The Easton SWMF has been relocated to the south to avoid areas with a high water table and excessive peat conditions, as identified in the hydrogeological assessment prepared by Stantec in 2017. In addition to the SWMF relocation, more detailed engineering calculations have determined that the Easton SWMF was oversized. The size of the Easton SWMF has been decrease by 0.15 ha, bringing the total area for SWMF within the ASP to 14.26 ha as shown in Table 2.

Figures 8, 9, and 10 have been updated to illustrate the servicing concept with the revised transportation network and the proposed location of the Easton stormwater management facility.

2.2.4 Development Staging

There are seven stages in Tonewood and Fenwyck that are currently registered and being developed. With the recent construction of the regional sanitary line and Pioneer Road, development into the Easton neighbourhood may commence in the south and expand in a northward direction.

2.3 Land Use Statistics

The Approved Land Use Statistics are included as Table 1 and updates to these statistics that reflect the changes described in the revised Concept are presented in Table 2 Proposed Land Use Statistics.

The updated statistics include the removal of the term Mixed Use from both residential and commercial statistics, the deletion of the Urban Village Park/Open Space use, and the addition of the Easton Natural Area.

The addition of 4.33 ha for Parks and Open Space and 2.43 ha for the Easton Natural Area, together with the elimination of the Mixed Use residential area have resulted in a 3.78 ha reduction in the overall residential area. This reduction in residential area has resulted in a 249 residential unit reduction and a reduction of 1 unit per net residential hectare for the entire ASP area.

Table 1: Existing Land Use Statistics

Land Use	Hectares	%
Gross Area	277.44	
Drainage Channel (Environmental Reserve)	7.78	
Natural Area (Environmental Reserve)*	17.56	
Gross Developable Area	252.10	100.0%
Commercial	7.33	2.9%
Mixed Use (50% Commercial / Employment)	13.31	5.3%
Parkland, Recreation, School, Natural Area (Municipal Reserve)*		
Parks and Open Space	33.88	13.4%
Urban Village Park/ Open Space	2.00	0.8%
Transportation		
Highway 16 and CNR	19.14	7.6%
Arterial Roadways	10.17	4.0%
Collector Road	10.48	4.2%
Local Circulation	37.89	15.0%
Infrastructure & Servicing		
Stormwater Management	14.41	5.7%
Institutional / Other		
Special Study Area (north)	15.10	6.0%
Special Study Area (south)	3.66	1.5%
Institutional (Existing Cemetery)	3.28	1.3%
Total Non-Residential Area	170.65	67.7%
Net Residential Area (NRA)	81.45	32.3%

Residential Land Use, Dwelling Unit Count and Population

Land Use	Area (ha)	Units/ ha	Units	% of NRA	People/ Unit	Population
Estate Residential	9.64	2.0	19	11.8%	3.0	57
Mixed Low to Medium Density Residential	54.37	30.0	1,631	66.8%	2.8	4,566
Mixed Use (50% Residential)	13.31	67.5	898	16.3%	2.2	1,975
Mixed Medium to High Density Residential	4.13	67.5	278	5.1%	2.2	611
Total Residential	81.45		2,826	100.0%		7,209

Gross Population Density 28.6 persons per gross developable hectare

Net Population Density 88.5 person per net residential hectare

Net Unit Density 34.7 units per net residential hectare

Student Generation

Elementary 758

Junior High 379

Senior High 379

Total Student Population 1,516

* Environmental Reserve to be determined at the time of subdivision. Further study may be required to delineate the area dedicated as ER.

Table 2: Proposed Land Use Statistics

Land Use	Hectares	%
Gross Area	277.44	
Drainage Channel (Environmental Reserve)	7.78	
Natural Area (Environmental Reserve)*	17.56	
Easton Natural Area **	2.43	
Gross Developable Area	249.67	100.0%
Commercial	18.70	7.5%
Parkland, Recreation, School, Natural Area (Municipal Reserve)		
Parks and Open Space	38.21	15.3%
Transportation		
Highway 16 and CNR	19.14	7.7%
Arterial Roadways	10.17	4.1%
Collector Road	11.59	4.6%
Local Circulation	37.89	15.2%
Infrastructure & Servicing		
Stormwater Management	14.26	5.7%
Institutional / Other		
Special Study Area (north)	15.10	6.0%
Special Study Area (south)	3.66	1.5%
Institutional (Existing Cemetery)	3.28	1.3%
Total Non-Residential Area	172.00	68.9%
Net Residential Area (NRA)	77.67	31.1%

Residential Land Use, Dwelling Unit Count and Population

Land Use	Area (ha)	Units/ ha	Units	% of NRA	People/ Unit	Population
Estate Residential	9.64	2.0	19	12.4%	3.0	57
Mixed Low to Medium Density Residential	54.21	30.0	1,626	69.8%	2.8	4,552
Mixed Medium to High Density Residential	13.82	67.5	932	17.8%	2.2	2,050
Total Residential	77.67		2,577	100.0%		6,659

Gross Population Density 26 persons per gross developable hectare

Net Population Density 86 persons per net residential hectare

Net Unit Density 33 units per net residential hectare

Student Generation

Elementary 691

Junior High 345

Senior High 345

Total Student Population 1,381

* Environmental Reserve to be determined at the time of subdivision. Further study may be required to delineate the area dedicated as ER.

** Lands dedicated as part of the Easton Natural Area, will be exempt from offsite development levies, municipal reserve contribution, and other development contributions.

3.0 Amendment Rationale

The following sections provide supporting rationale to the proposed changes described in Section 2.

3.1 Removal of Urban Village

Since the approval of the East Pioneer ASP in 2013, market conditions and City plans have evolved, making an Urban Village in the eastern suburban area of Spruce Grove an uneconomical and unmarketable endeavor. In a supporting memorandum, prepared by Key Planning Strategies (submitted under separate cover), several reasons for removing the Urban Village are outlined. These include:

- Retail Market Demand in Spruce Grove
 - + Anticipates additional 750,000 to 1,000,000 sf of new retail space required over the next decade.
 - + This additional space would predominately be occupied by branded retail, seeking larger spaces in locations with high visibility and vehicular access.
- Draft City Centre Area Redevelopment Plan (ARP)
 - + City has renewed focus on the redevelopment of the downtown area.
 - + The draft City Centre ARP identifies that a substantial area of redevelopment will be focused on vertically mixed use buildings.
- Retail Mix & Location
 - + With an anticipated demand for larger retail space with high visibility, the lands adjacent to Highway 16A are ideal to address that need.
- Cultural Investment
 - + The City Centre ARP will direct significant capital to redevelop the area, such that it may become a focal point for cultural activities and community events. Such a cultural node and associated activities are essential for the prosperity of a mixed use area.
 - + Establishment of a second mixed use / Urban Village area in east Spruce Grove would potentially compete and dilute the cultural activities, making both areas less viable.
- Competition for limited market
 - + A mixed use Urban Village development would pose a threat to the City Centre's revitalization, competing to attract similar clientele.

The points above identify reasons why the Urban Village concept has not been successfully implemented and is no longer viable in this location. They also support a change to vehicle-oriented retail and services proposed adjacent to the Highway 16A.

3.2 Residential

Medium to high density residential land uses are generally located along collector roadways providing convenient access to transit routes and arterial roadways. Much of the higher density residential is located near the proposed commercial uses to the south. This provides future residents of Easton convenient access to retail, employment and services, and creates opportunities to work, shop, and socialize within the neighbourhood.

An average residential density of 30 du/nrha for Low to Medium Density Residential, represents a mix of low density housing forms ranging from single family to semi-detached and street-oriented row housing. Mixed Medium to High Density Residential is assigned an average density of 67.5 du/nrha, which represents a range of building forms including, street-oriented row housing, row housing, stacked row housing and apartments. Innovative housing forms could also be considered through discussion with City Administration and an amendment to the Land Use Bylaw, which would provide a range of affordability and improve housing efficiencies.

The proposed plan provides a more detailed land use concept than the broad brush used at the time of the original ASP and reflects the findings of several technical studies and the anticipated demand for housing and commercial uses.

The overall residential density in the approved ASP was over-estimated due to an error in the land use statistics. The approved development concept showed potential locations for park spaces within the Urban Village, however, the 2.0 ha park space was incorrectly allocated to the Low to Medium Density Residential in the land use statistics. This resulted in a decrease of the Low to Medium Density area and an overestimation of 2.0 ha of Urban Village use in the statistics falsely indicating a higher overall residential density.

Table 3 illustrates how the adjustment to the statistics accurately includes this park within the Urban Village area and corrects the overall residential density in the approved ASP from 34.7 du/nrha to 34.2 du/nrha.

Table 3: Summary Comparison of Overall ASP Land Use Statistics

		Area (ha)	%GDA	Units	%	
GDA		252.10	100.00%			
Approved ASP Bylaw C-1008-17	Estates Residential	9.64	3.82%	19	0.68%	
	Low to Medium Residential	54.37	21.57%	1631	57.69%	
	Mixed Use Residential	13.31	5.28%	898	31.77%	
	Medium to High Density Residential	4.13	1.64%	279	9.86%	
	Total	81.45	32.31%	2828	100.00%	EMRB: 35du/nrha
Approved ASP Corrected with 2.0 ha Park Included in the Urban Village	Estates Residential	9.64	3.82%	19	0.68%	
	Low to Medium Residential	56.37	22.36%	1691	59.97%	
	Mixed Use Residential	12.31	4.88%	831	29.46%	
	Medium to High Density Residential	4.13	1.64%	279	9.89%	
	Total	82.45	32.71%	2820	100.00%	EMRB: 34du/nrha

	Area (ha)	%GDA	Units	%	
Proposed ASP	Estates Residential	9.64	3.82%	19	0.74%
	Low to Medium Residential	54.21	21.50%	1626	63.09%
	Medium to High Density Residential	13.82	5.48%	932	36.18%
	Total	77.67	30.81%	2577	100.00% EMRB: 33du/nrha

3.3 Changes to Residential Density

The Edmonton Metropolitan Region Growth Plan was approved on October 26, 2017 and replaces the Capital Region Growth Plan. Under the new EMRB Growth Plan, the City of Spruce Grove has a new target density of 35 du/nrha for new ASPs, which has increased from a minimum range of 25-30 du/nrha at the time of approval of this ASP.

In the Growth Plan, *Policy 5.1.1 – Existing Area Structure Plans* states that “existing area structure plans that were adopted in accordance with the MGA prior to the date this Plan comes into force” (October 2017) “will remain in effect and will be grandfathered. Substantive amendments to these approved plans will be subject to the Regional Evaluation Framework (REF) evaluation, as established through the REF submission criteria”. Grandfathering plans helps to protect against changes in policy and regulations that could hinder decisions that were made under a different set of circumstances.

The approved East Pioneer ASP has an overall density of 34 du/nrha and includes a mixed use urban village area within the southwest plan area immediately north of Highway 16A. Within the approved ASP, the Easton Neighbourhood has a density of 43.3 du/nrha and accounts for 47% of the dwelling units and 64% of commercial land for the whole ASP. As a result, the other three ¼ sections of land within the ASP have much lower average residential densities.

When the ASP was originally approved, Easton Neighbourhood committed to a higher residential density than the other ¼ sections based on the notion of a mixed use urban village. Now that circumstances for the plan have changed, the lower residential densities in the other ¼ sections are approved and can't be increased without an amendment and the land owner's consent.

The proposed amendment maintains Easton's proportion at 45% of the residential units and 62% of the commercial lands in the ASP. The points below provide reasons for the slight reduction of 249 units and 1 du/nrha in the residential density for East Pioneer ASP:

- Challenging soil conditions with deep peat creates a costly and difficult situation for land development within a portion of Easton. 2.4 ha of land is proposed as natural area where the peat lands are the deepest. This resulted in a shift of the approved storm pond to the south displacing low density residential land use.
- The mixed use urban village used a generalized estimate of 50% medium to high density residential and 50% non-residential for statistical assumptions. At the time of ASP approval there was no policy restriction on reducing residential densities, therefore a generalized estimate was acceptable for high level planning. It was understood by the developer that the final mix of commercial and residential would be determined based on market demand and include a variety of building forms ranging from ground-oriented dwellings to apartments, as well as, standalone commercial, institutional or mixed use buildings.

- There was an error in the approved land use statistics that allocated 2.0 ha of Urban Village Park within the low density residential instead of displacing the urban village land use. Adjusting the Urban Village Park in the approved statistics to an assumed displacement of 1.0 ha on the Mixed Use Commercial and 1.0 ha on the Mixed Use Residential reduces the approved density to 34.2 ha. This shall be reflected as the actual approved ASP density for comparison in this amendment.
- There are 9.6ha of estate residential land use approved east of Pioneer Road in SW ¼ 1-53-27-W4M, at only 2.0 du/nrha. This lower density was intentionally used to avoid disturbance to a potential groundwater recharge area for the fen located to the north. This area significantly reduces the average residential density in the ASP statistics. If this 9.6ha of estate residential area were excluded from the ASP land use statistics, the overall approved ASP density would increase to 37.3 du/nrha, exceeding even the new EMRB target of 35 du/nrha. Further environmental study of the lands east of Pioneer Road may allow for an increase in the density of the estate residential, through future amendment to the ASP.
- The City is preparing their downtown Area Redevelopment Plan, which focuses on redevelopment of existing land and buildings and encourages more mixed use development in the heart of the City. As identified in the market assessment prepared by Key Planning Strategies, this shift in focus contributes to making an urban village on the edge of the City next to the Highway unfeasible.

In summary, this proposed amendment exceeds the former Capital Region Board density requirements of 25-30 du/nrha that was in effect at time of approval by achieving an overall density of 33 du/nrha. The reduction in residential density as a result of this amendment is very minor changing from 34 du/nrha to 33 du/nrha. The reduction of 249 residential units in this ASP amendment is due to several contributing factors including:

- The addition of the 2.4 ha Easton natural area,
- An additional 2.33 ha of Municipal Reserve, and
- The change from Urban Village land use, which used a broad assumption for land use mix with 50/50 split of residential and commercial.

The proposed plan provides a more detailed land use concept than the broad brush used at the time of the original ASP and reflects the findings of several technical studies and the anticipated demand for housing and commercial uses.

3.4 Commercial

The proposed commercial site is well-suited for vehicle-oriented commercial uses due to its location next to Highway 16A offering excellent visibility and access from the high traffic roadway. The commercial uses will also provide retail services and employment opportunities for nearby residents.

The site will have several vehicle accesses from Highway 16A in accordance with the TIA. Additional vehicular and pedestrian access will be provided from the adjacent collector roadway within the Easton neighbourhood. The majority of adjacent residential area is designated medium to high density and will accommodate a compatible mix of residential housing to support a variety of retail and services. A proposed linear park will provide an active transportation link from residential uses to the north.

The proposed commercial area is expected to create a modest increase to overall employment within the plan area. In their supporting memorandum, Key Planning Strategies theorizes that the anticipated mix of commercial, retail, and office uses for the Urban Village area would generate approximately 530 jobs, while a strictly commercial area could generate 600 jobs.

3.5 Parks and Open Space

As a whole, the ASP provides 15.2% of developable land as Municipal Reserve. Within Easton, this amendment proposes to increase the credited MR from 2.0 ha in the approved ASP to 4.33 ha of MR plus an additional 2.4 ha of natural area as passive open space. This combined open space accounts for 11.0% of the area within the Easton neighbourhood.

Cash-in-lieu shall be paid on municipal reserve owing on the area of commercial land in Easton. Any remaining MR dedication may be deferred to another privately owned property within the ASP area or pay cash-in-lieu to offset City land purchases required to obtain identified natural areas in other parts of the ASP.

The proposed parks within Easton will provide everyday opportunities for formal and informal recreation, and combined with neighbourhood sidewalks, will provide multiple walking routes throughout the neighbourhood and connections to adjacent communities. The Type 'C' park is not proposed as a school site.

A Type 'A' municipal reserve with walkway connection is added to provide access into the ravine area located northwest of the neighbourhood.

A proposed Type 'E' linear park provides opportunity for passive recreation to residents of the adjacent medium to high density residential lands and is an important active multi-modal linkage and gateway connecting the commercial and residential uses.

3.6 Natural Area

To support this ASP amendment, an addendum to the biophysical study and a hydrogeological study were prepared by Stantec in 2017 and submitted under separate cover. The reports delineate the peat area within Easton and summarize site-specific information related to the current state of the site.

The Easton Natural Area is proposed adjacent to Pioneer Road, measuring approximately 2.4 ha. This area was previously stripped of trees and shall be left to grow and naturalize over time. The biophysical study provides recommended mitigation measures to allow the former forest area to regenerate and regrow to its former state and to integrate with the remaining forest stand to the north within the context of urban development. The City hired a consultant to review the biophysical assessment and generally agreed with the findings that the forested area is in a period of regrowth.

A hydrogeological assessment was completed to evaluate the hydrogeological and hydrological conditions in the Easton neighbourhood and to determine which areas are developable and which may present potential challenges. Shallow and deep groundwater levels were monitored between April 2015 and May 2017. The report identifies areas with a high groundwater table and provides engineering recommendations for the neighbourhood

design and construction. The report also delineates the peat lands with a depth of 0.40 m or deeper as per the definition of a peatland under Alberta Wetland Classification System.

The hydrogeological study supports the proposed land use plan, which minimizes development on an area with high levels of peat and with shallow groundwater to maintain some of the natural hydrological patterns. The report indicates that the soil conditions are uneconomical for development and therefore the ASP amendment proposes the site as an area to renaturalize. The study indicates that avoiding residential development on the proposed Easton natural area should have a beneficial effect on the health of the area that extends across Pioneer Road into Fenwyck neighbourhood and the unnamed ¼ section to the east. Groundwater mitigation measures, such as sump pumps and linear drains, can be used for specific building types based on observations at time of construction.

3.7 Roadways

The amendment removes the direct road link from McLeod Avenue to Highway 16A. A potential private road accessing from Highway 16A connects to an east/west collector road connecting to McLeod Avenue in two places. Although the loop road was not shown in the approved ASP, it was contemplated as a potential private roadway in the original TIA.

The linear park will encourage access to the commercial area through active modes of travel. The removal of the straight collector road linkage will also reduce shortcutting traffic to and from the highway between the commercial sites and will encourage vehicular access to the residential portion of the neighbourhood from Pioneer Road.

Roadways have been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood and are supported by a Traffic Impact Assessment prepared by Bunt Engineering and submitted under separate cover with this amendment. A hierarchy of collector and local roadways is intended to facilitate the efficient movement of vehicular traffic.

In general, roadways will be designed to meet City of Spruce Grove engineering design standards. The City of Spruce Grove's current design standards for major and minor collector roadways were reviewed by Bunt & Associates Engineering Ltd. as part of the Easton amendment Traffic Impact Assessment prepared in 2019. As part of this review, opportunities are identified to develop some collector roadways with a modified cross-section using a Complete Streets philosophy. Complete Streets were developed to provide a shift from a rigid design standard to a flexible approach that acknowledges the design of individual streets based on the type of users for which the street is intended.

As per the TIA, the Complete Streets design standards for major and minor collector roadways can be utilized to develop alternative cross-sections for collector roads near commercial uses within Easton and the private road connection from Century Crossing and Highway 16A. This approach would allow for alternate cross-section widths based on the anticipated needs, such as, reduced parking lanes and walkways at specific locations along each collector roadway. Modified cross-sections would be reviewed and approved to the satisfaction of City Administration at time of subdivision.

A priority pedestrian crossing is proposed at the north end of the linear park and is depicted by a star symbol on Figure 6. This intersection was designated as a "key pedestrian crossing" (focal point) in the original ASP due to the crossing of two major collector roadways at the entrance to the Urban Village concept contemplated at the time. Although this intersection

becomes a 'T' in the proposed concept, it provides a key gateway and linkage for active users between commercial and residential uses.

3.8 Transit Centre

No need for a transit centre has been identified in the Easton Neighbourhood. Specific transit facilities shall be explored with the City at time of subdivision.

3.9 Storm Water Management Facility

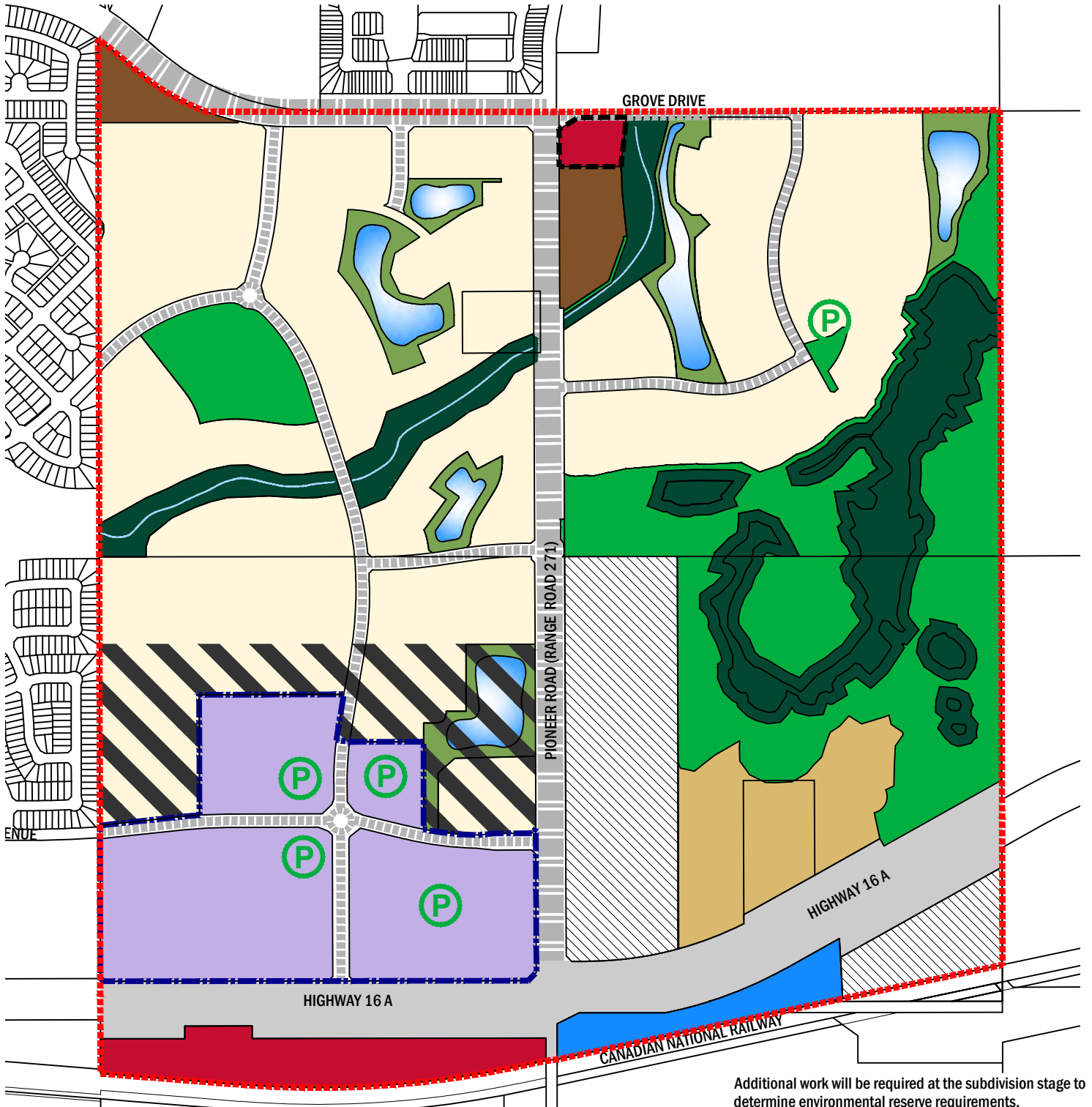
As per the findings of the hydrogeological review, the Stormwater Management Facility (SWMF) in the Easton neighbourhood has been relocated and reconfigured to avoid areas of extremely high groundwater and to minimize disturbance to the identified peat lands. Even with the relocation to a more suitable location, specific design details for the SWMF have been identified within the Hydrogeological Review and these recommendations will be considered in the design of the Easton SWMF.

Locating the SWMF adjacent to the Easton natural area provides complementary open space that could be integrated into future public use of that land.

Figure 5A - Approved Land Use Concept

East Pioneer Area Structure Plan

Schedule 1 Bylaw C-1066-19

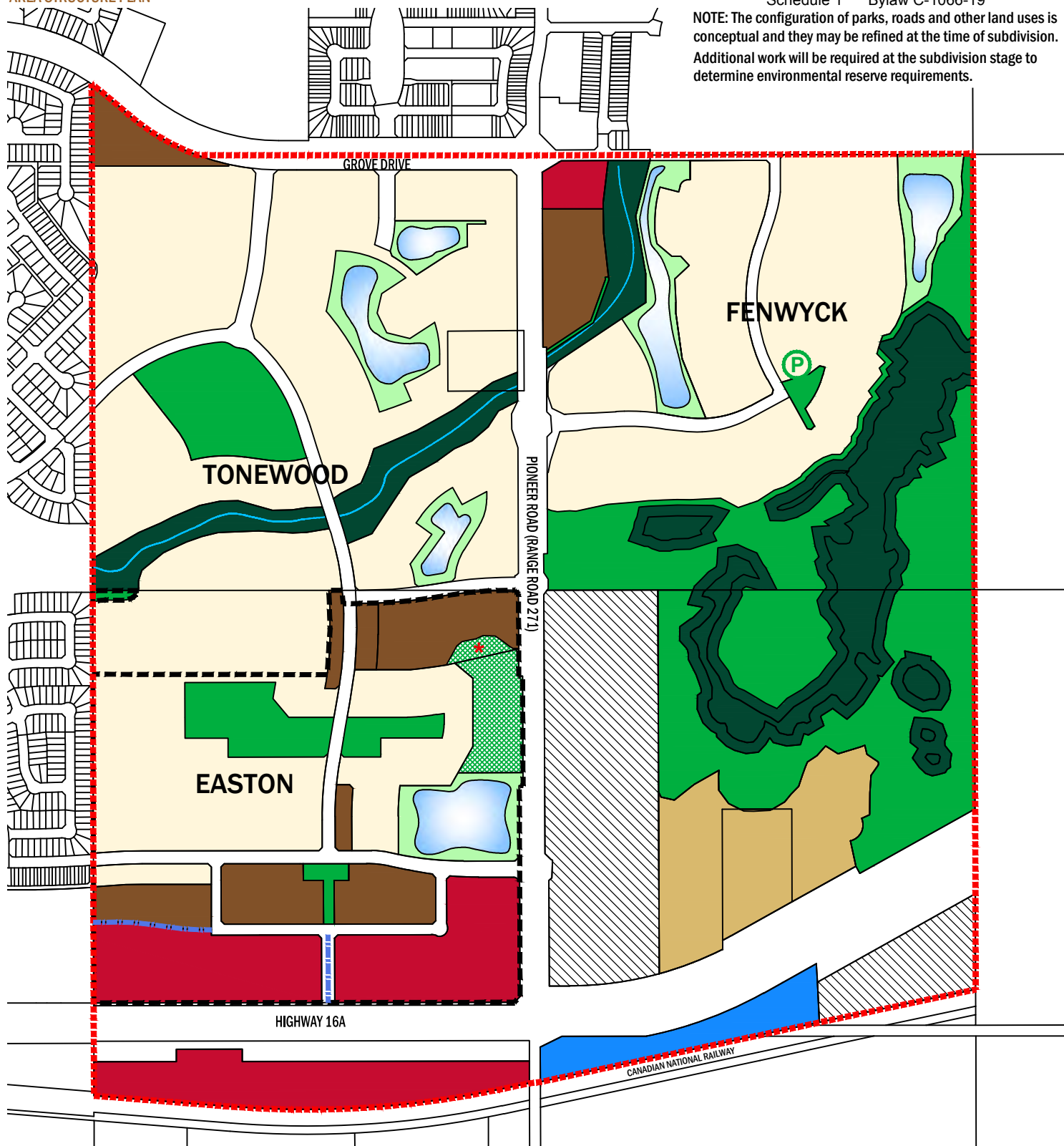


Additional work will be required at the subdivision stage to determine environmental reserve requirements.

Legend

- | | | |
|--|--------------------------------------|-------------------------|
| Estate Residential | Stormwater Management Facility | Collector Roadway |
| Low to Medium Density Residential (Level 1) | Environmental Reserve | Arterial Roadway |
| Medium to High Density Residential (Level 2) | Special Study Area | Highway Right-of-Way |
| Mixed Use | Public Utility Lot | Urban Village Influence |
| Commercial | Potential Park / Open Space Location | ASP Boundary |
| Institutional | Urban Village Centre | Amendment Boundary |
| Park / Open Space | | |

NOTE: The configuration of parks, roads and other land uses is conceptual and they may be refined at the time of subdivision. Additional work will be required at the subdivision stage to determine environmental reserve requirements.



* Easton Natural Area configuration may be further refined at the subdivision stage, and further study may be required to delineate any areas to be dedicated as ER, MR, Non-Credit MR or Conservation Reserve.

LEGEND

- Estate Residential
- Low to Medium Density Residential
- Medium to High Density Residential
- Commercial
- Institutional
- Park / Open Space

- Easton Natural Area
- Stormwater Management Facility
- Environmental Reserve
- Special Study Area
- P Potential Park
- Potential Private Collector
- ASP Boundary
- Amendment Boundary

EAST PIONEER
SPRUCE GROVE



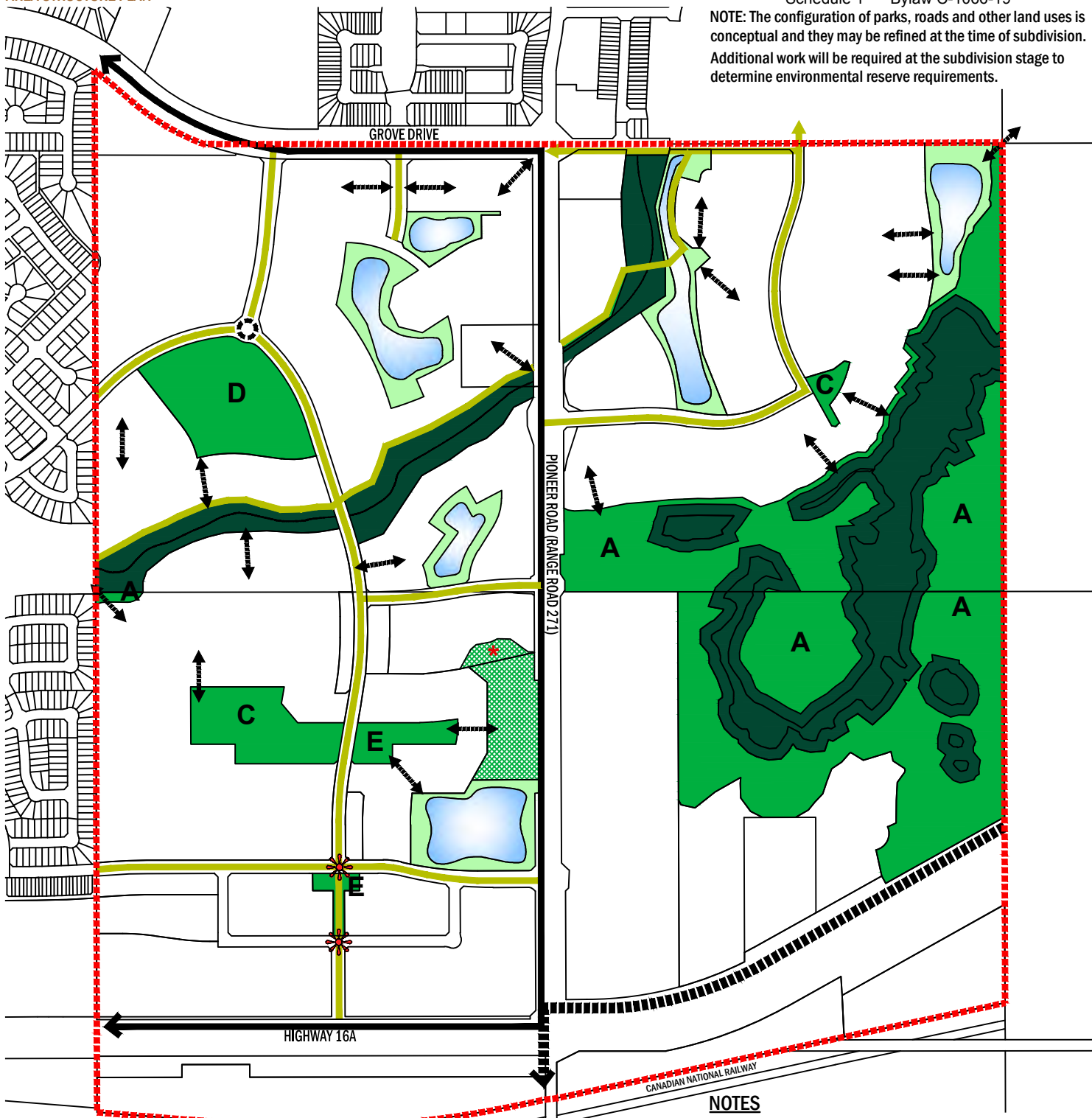
LAND USE CONCEPT

0 100 200 m scale 1:10,000

36-15039_01_PR005.DWG
Jcalder October 18, 2019

FIGURE 5

NOTE: The configuration of parks, roads and other land uses is conceptual and they may be refined at the time of subdivision. Additional work will be required at the subdivision stage to determine environmental reserve requirements.



* Easton Natural Area configuration may be further refined at the subdivision stage, and further study may be required to delineate any areas to be dedicated as ER, MR, Non-Credit MR or Conservation Reserve.

LEGEND

- Park / Open Space
- Easton Natural Area
- Stormwater Management Facility
- Environmental Reserve
- Key Pedestrian Crossing



Priority Pedestrian Crossing



Pedestrian Walkway (Approx.)



Minor / Shale Trail



Major Paved Trail



Major Paved Trail (Potential)



ASP Boundary

NOTES

- Type 'A' Natural & Semi-Natural, Green Space or Watercourses
- Type 'C' Parks, Gardens & Civic Spaces
- Type 'D' Outdoor Sport & Recreations Facilities
- Type 'E' Linear systems, Green Corridors, Paths, and Streets



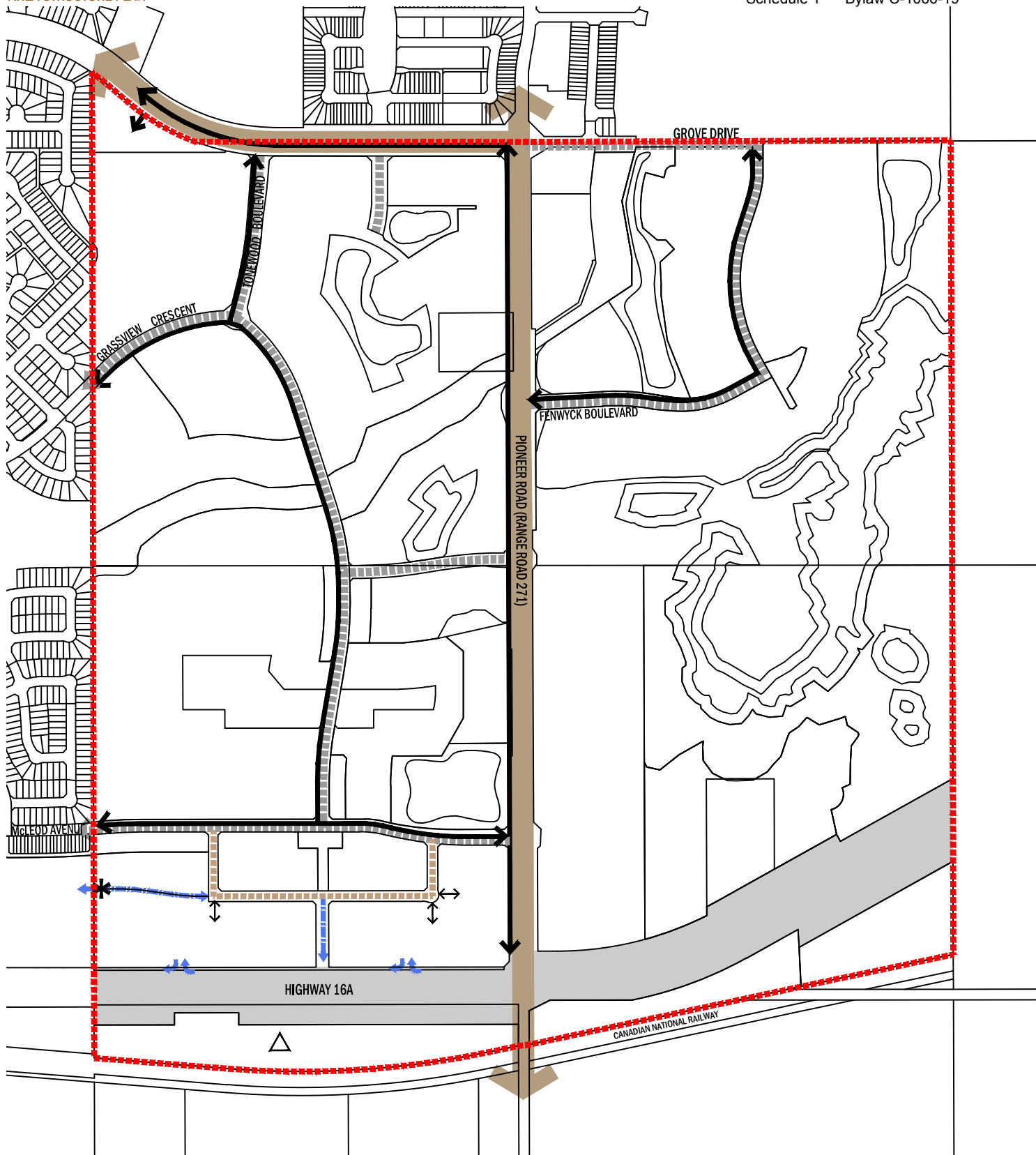
ACTIVE NETWORK & OPEN SPACE PLAN

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EAST PIONEER
SPRUCE GROVE

36-15039_01_PR006.DWG
Jcalder October 30, 2019

FIGURE 6



LEGEND

- | | | | |
|--|--------------------------------------|--|----------------------------------|
| | Collector Roadway | | Potential Private Roadway |
| | Potential Modified Collector Roadway | | Right-In/ Right-Out |
| | Arterial Roadway | | Potential Transit Corridor |
| | Highway Right-of-Way | | Potential Commercial Access |
| | Connection to Existing Roadway | | Park & Ride (Potential Location) |
| | ASP Boundary | | |



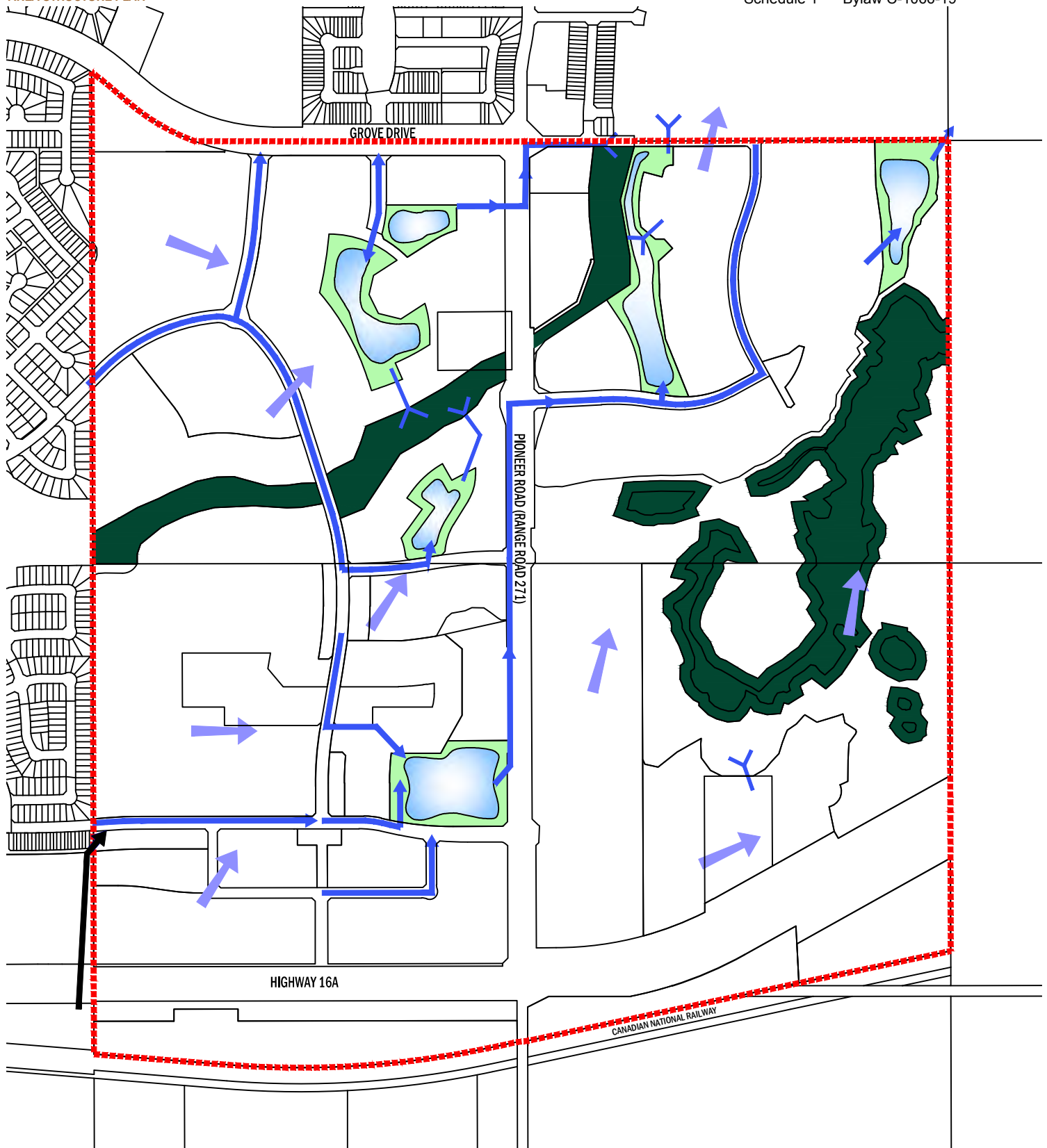
TRANSPORTATION NETWORK

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0 100 200 m

EAST PIONEER
SPRUCE GROVE

36-15039_01_PR007.DWG
Jcalder October 18, 2019

FIGURE 7



LEGEND



Stormwater Management Facility

Environmental Reserve



Storm Sewer



Outfall



Direction of Existing Ground Flow

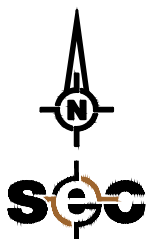


136 ha Predevelopment Flow



ASP Boundary

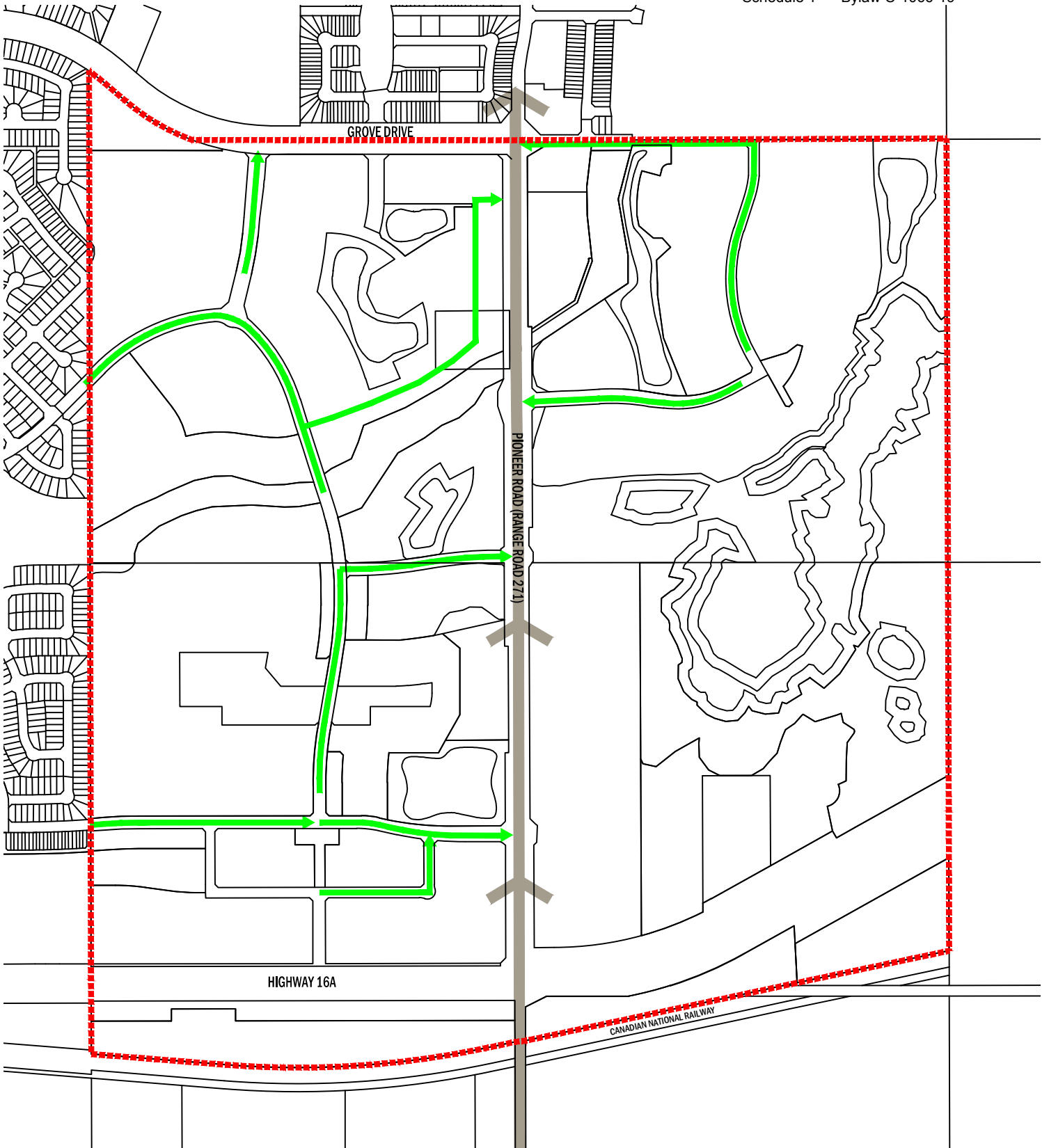
EAST PIONEER
SPRUCE GROVE



**STORM
SERVICING CONCEPT**

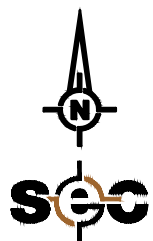


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LEGEND

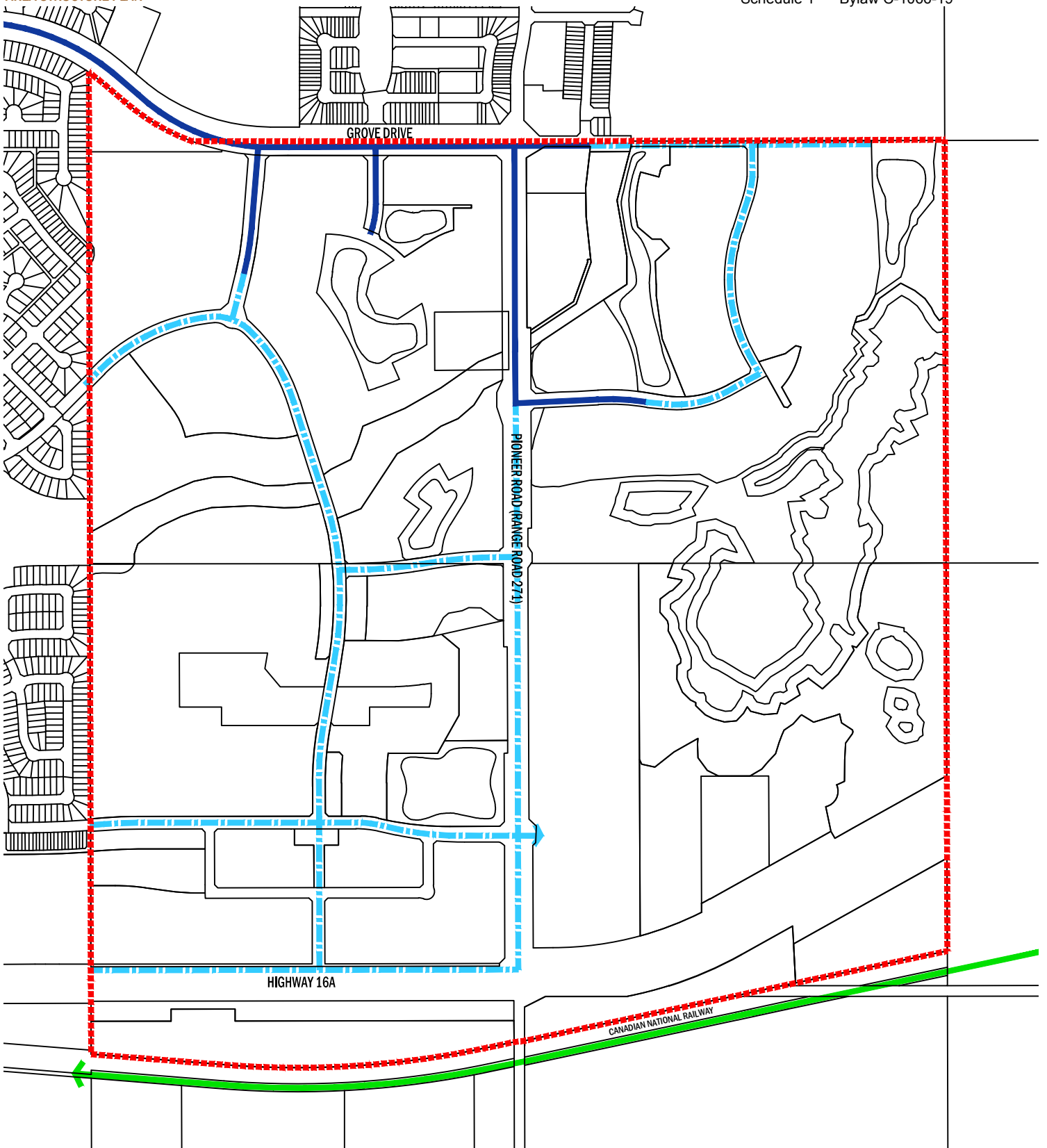
- Sanitary Sewer
- Sanitary Sewer Trunk
- - - - - ASP Boundary



**SANITARY
SERVICING CONCEPT**

0 100 200 m scale 1:10,000

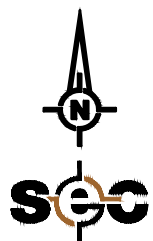
EAST PIONEER
SPRUCE GROVE



LEGEND

- Proposed Watermains
- Existing Watermains

- Regional Water Line
- ASP Boundary



**WATER
SERVICING CONCEPT**

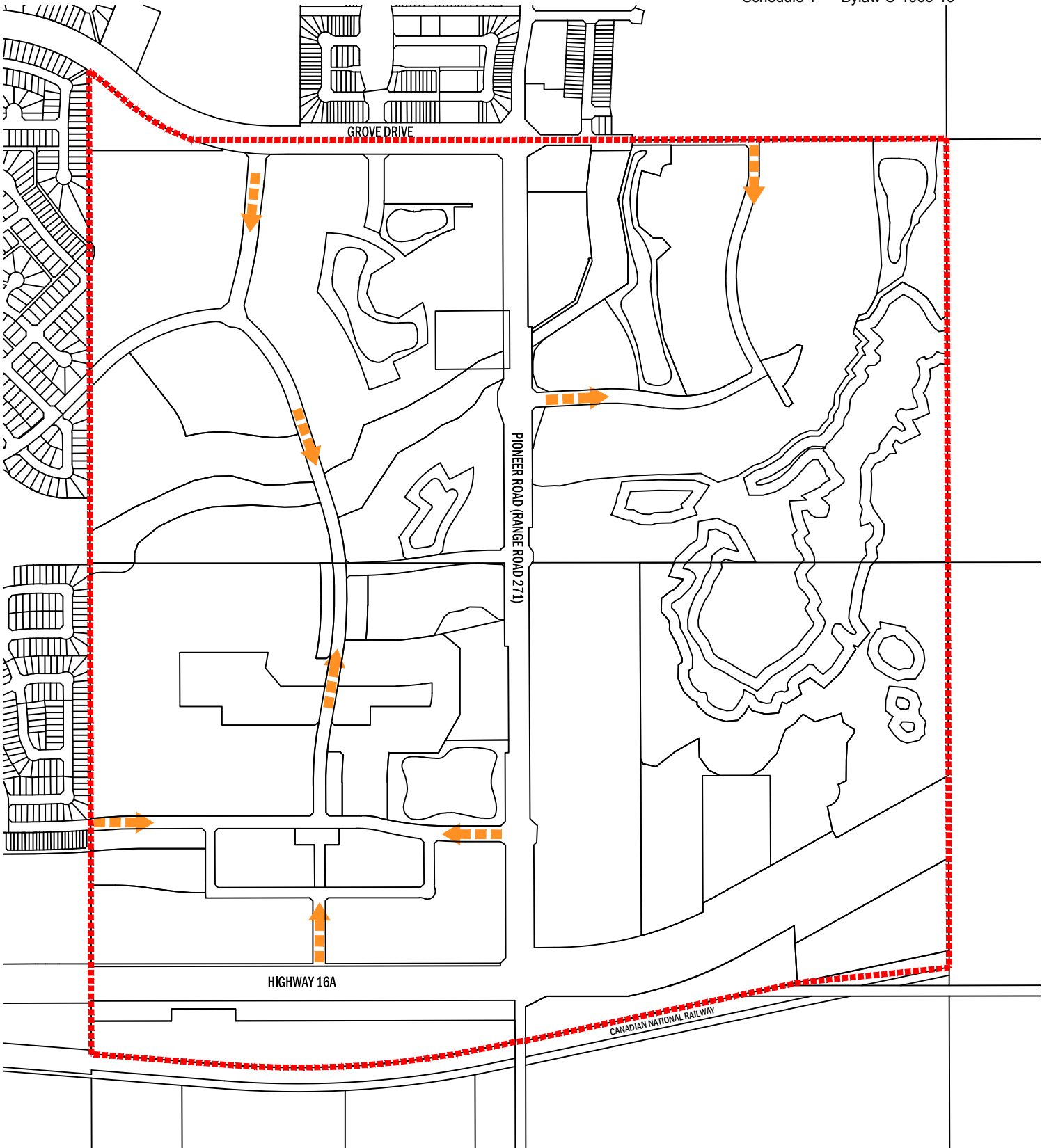


scale 1:10,000

**EAST PIONEER
SPRUCE GROVE**

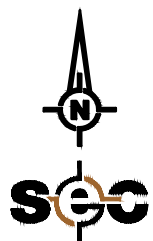
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Jcalder October 18, 2019

FIGURE 10

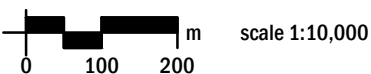


LEGEND

-  Staging Direction
-  ASP Boundary



STAGING CONCEPT



EAST PIONEER
SPRUCE GROVE

APPENDIX A

Technical Report Summary



Report	Prepared by	Date	Developer
1 Spruce Grove Biophysical at Hwy 16A & Pioneer Road	Stantec	Nov 2010	Qualico
2 Desktop Hydrogeological Review	Stantec	Feb 2011	Qualico
3 Delineation of a Fen	Stantec	Jun 2012	Qualico
4 Spruce Grove East Hydraulic Network Analysis	Stantec	Mar 2013	Qualico
5 Wetland Drainage/Water Act Application	Stantec	Jul 2013	Qualico
6 East Pioneer Environmental Assessment (Tonewood)	Enviromak	Mar 2014	Melcor
7 Phase I ESA	Thurber	Dec 2016	Avillia
8 Fenwyck Hydrogeological Assessment	Stantec	Jun 2016	Avillia
9 Easton Subdivision Hydrogeological Assessment	Stantec	Oct 2017	Qualico
10 Spruce Grove Biophysical; Addendum for Easton	Stantec	Nov 2017	Qualico
11 Fenwyck Phase II ESA	Ecoventure	Dec 2017	Avillia
12 Fenwyck Biophysical; Letter	Stantec	Jan 2018	Avillia



	REPORT NAME	DATE OF REPORT	COMPLETED BY	COMPLETED FOR	STUDY AREA	SUMMARY	
1	Spruce Grove Biophysical at Hwy 16A & Pioneer Road	Nov-10	Stantec	Qualico	SE2-53-27-W4M, W1-53-27-W4M	Identifies natural features of significance by evaluating their conservation value and potential incorporation into the development. Stantec recommends a mix of commercial and differing densities of residential development. Stantec also expressed that the fen complex including ravines and forested areas are designated as a high priority natural area that is an extremely important habitat and major component of the local and regional hydrology.	
2	City of Spruce Grove Desktop Hydrogeological Review	Feb-11	Stantec	Qualico	SE2-53-27-W4M, W1-53-27-W4M	A Desktop review identifying the potential impacts of the proposed development on groundwater resources within the area. Stantec has concluded that reduced infiltration caused by the development is not likely to have significant impacts on the groundwater flow to Wagner Natural Area however, other potential risks include artificial drainage, artificial infiltration, dewatering and risk of groundwater contamination reaching the Wagner Natural Area and Beverly Valley Aquifer through runoff, leaks and spills. Developing mitigation strategies prior to development is recommended	
3	Delineation of a Fen located within SE2-53-27-W4M, W1-53-27-W4M, Plan 752 0163, Lot C and Plan 932 0693, Spruce Grove, Alberta	Jun-12	Stantec	Qualico	SE2-53-27-W4M, W1-53-27-W4M (Portions), Lot C, Plan 7520163 and Plan 932 0693	Purpose of the report is to identify and map vegetation and wetland communities to provide recommendations to promote the sustainable retention of the fen complex in light of future residential development. Stantec recommends a buffer be maintained around the wetland complex to help reduce direct physical impacts to the vegetation and to capture stormwater within the proposed development and released and redirected into the wetland complex at pre-disturbance levels.	
4	Spruce Grove East Hydraulic Network Analysis	Mar-13	Stantec	Qualico	NW1-53-27-W4M, SE2-53-27-W4M, SW1-53-27-W4M, Lot 3,Blk 1,Plan 022 129,	Provides a water network analysis to determine peak hour demand pressures and maximum day demand fire flow and pressure levels for Spruce Grove East	
5	Wetland/Drainage Water Act Application for Wet Features Located within SE2-53-27-W4M and W1-53-27-W4M, Spruce grove Alberta	Jul-13	Stantec	Qualico	SE2-53-27-W4M and W1-53-27-W4M	This letter is intended to provide information on the wet features located within the Subject Property and is intended to seek regulatory approval under <i>Water Act</i> for the removal of said wet features.	
6	Environmental Assessment for the Proposed Land Development Plan, East Pioneer Area, East of Spruce grove (NE2-53-27-W4M)	Mar-14	Enviromak	Melcor (Tonewood)	NE2-53-27-W4M	This environmental assessment for the Tonewood neighbourhood provides a description of the biophysical parameters associated with the proposed residential development in addition to possible environmental protection opportunities to consider at the time of development. EnviroMak concluded that the Tonewood neighbourhood is designed in a manner that does not result in a negative net effect on the wtlands and unnamed watercourse in the south plan area. An application for wetland alteration and compensation is not required due to the only wetland that has been or will be altered has been previously distrurbed.	
7	Phase I ESA	Jun-16	Thurber	Avillia	NW1-53-27-W4M	This Phase 1 ESA did not encounter any historical evidence of contamination however, potential environmental concern was indicated for the fill material in the vicinity of a former slough, two wells within Pioneer Road and ASTs associated with the farmstead. It was recommended that further sampling and testing within these areas is completed.	
8	Fenwyck Subdivision Hydrogeological Assessment	Dec-16	Stantec	Avillia	NW1-53-27-W4M	Stantec completed a hydrogeological study that included both desktop and field characterization to synthesize data to describe the geological and hydrogeological framework of the site prior to development. It was critical to incorporate the natural hydrology and hydrogeology into the overall neighbourhood design. the field characterization program was completed to determine the hydrostratigraphic framework and how the groundwater levels are likey to react over time. The site was monitored in 2015 and 2016 and concluded that groundwater conditions in the proposed SWMF means careful consideration of the drainage grade and depth is required to optimize retention time and volume while minimizing groundwater interfereance and that the development may require additional fill in areas to establish adequate depth to groundwater to facilitate development with foundations and utility trenches.	
9	Easton Subdivision Hydrogeological Assessment	Oct-17	Stantec	Qualico	SE2-53-27-W4M	A desktop review and a two year field characterization was completed to evaluate the hydrogeological and hydrological regime of the site to determine what areas are developable and what areas may present negative potential interactions such as compromising the health and function of the Peatland Area. Stantec recommends continuing data monitoring to determine seasonal variation which includes field visits for manual measurements, review subsurface drainage designs to compare operational costs and efficiency and evaluation of the storm ponds and neighbourhood grading plans.	
10	Spruce Grove Biophysical at Hwy 16A & Pioneer Road; Addendum for revisions to the Easton Development	Nov-17	Stantec	Qualico	SE2-53-27-W4M	An addendum to the November 2010 biophysical report to support the ASP amendment and provide supplemental information to the City of Spruce Grove which includes: ER being incorporated into the land use concept, the MR and SWMF locations which provide a larger habitat patch and ER buffer. Potential effects include disturbance on vegetation and wildlife habitat through development however, it is expected that the ER area will recover naturally. Greater risk to the sustainability of the ER is anticipated to come from potential interactions with groundwater related to the development and utility installation of Pioneer Road. Regional groundwater management is recommended to quantify the potential effects and develop mitigation strategies.	
11	2017 Phase II Environmental Site Assessment Fenwyck Spruce Grove Multi-site within NW1-53-27-W4M	Dec-17	Ecoventure	Avillia	NW1-53-27-W4M	A Phase II Environmental Site Assessment (ESA) was completed for the Fenwyck neighbourhood which included the investigation of the petroleum wells and a farm yard within the northwest multi-site. This Phase II ESA builds upon the previous Phase I ESA's that were completed for the area. All applicable soil remediation guidelines have been met and no further investigation or remediation is recomended.	
12	Fenwyck Subdivision Biophysical update Letter for Stage 3 buffers.	Jan-18	Stantec	Avillia	NW1-53-27-W4M	This letter is intended to provide further information in regards to the buffer area between the natural areas and Stage 3 of Fenwyck at the request of the City of Spruce Grove. The overall MR/ER buffer surrounding the natural area is an average of 37.5 metres wide which is a large buffer to assist in water quality treatment and wildlife habitat for the natural area. Stantec concluded that although the buffer south of Stage 3 is smaller than the average it will still support the key objective of providing water quality treatment. Multiple mitigation measures were listed for consideration during construction to help protect the native vegetation.	