

EDMONTON ENERGY AND TECHNOLOGY PARK

AREA STRUCTURE PLAN AMENDMENT

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For: The City of Edmonton

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Appendices:

- A: Approved ASP Land Use and Population Statistics and Table 2 Proposed ASP Land Use and Population Statistics**
- B: Amendment to the Edmonton Energy and Technology Park ASP - Text Amendments**
- C: Amendment to the Edmonton Energy and Technology Park ASP - Figures**
- D: Edmonton Energy and Technology Park Area Structure Plan - Proposed Amendment - Marked Text March 2, 2017**

Attachments:

Edmonton Energy and Technology Park Arterial Road Network Analysis (ISL Engineering and Land Services, December 2015)

Edmonton Energy and a revised Technology Park Traffic Impact Assessment (ISL Engineering and Land Services, August 2016).

Phase II Ecological Network Report Edmonton Energy and Technology Park Draft Report (Parts A and B, Spencer Environmental, October 2014 and December 2014).

1.0 Plan Amendment Application

1.1 Introduction

The application proposes to amend the Edmonton Energy and Technology Park Area Structure Plan ASP (EETP ASP) by :

- Realigning the Arterial Roadway Network;
- Realigning the land use precincts to coincide with the revised Arterial Roadway Network;
- Realigning the infrastructure and servicing concepts for water, stormwater, and wastewater servicing to coincide with the revised Arterial Roadway Network
- Updating existing utilities mapping, including adding in the recent EPCOR/Altalink Heartland transmission line that runs through the EETP
- Merging the existing Manufacturing and Logistics Land Use Precincts to create a new Medium Industrial Land Use Precinct;
- Updating all relevant policies and figures;
- Adding in a new Figure 15 Collector Road Concept;
- Revising the Land Use and employment population statistics; and
- General housekeeping (updating text to reflect updated plans, policies, studies, new documents, clerical errors etc.)

The EETP is located in northeast Edmonton. The majority of land in the ASP area is held privately by individual owners and to a lesser extent, corporations. The EETP is bounded to the west, north and east by Sturgeon County. It is bounded by the Anthony Henday and the Transportation Utility Corridor (TUC) to the south; Manning Drive and the City limits to the southeast; Highway 37 and the City limits to the north; and the boundary of the Canadian Forces Base Edmonton to the west.

1.2 Background

The EETP ASP Bylaw 15093 has been subject to the following adoption/amendments:

1. Bylaw 15093: Approved June 9, 2010 (To adopt the Horsehills Energy and Technology Park Area Structure Plan)
2. Bylaw 15642: Approved May 2, 2011 (To rename the ASP to Edmonton Energy and Technology Park ASP, identify a park site in the park area, delineate the City's Legal Entitlement to Municipal Reserve in Section 7.7 and update the Land Use Statistics Table)
3. Bylaw 16175: Approved January 23, 2013 (To amend the Edmonton Energy and Technology Park Area Structure Plan to amend the boundaries of the Plan and to incorporate administrative amendments that were approved as a part of Bylaw 16169 to rezone the subject lands)
4. Bylaw 16767: Approved September 23, 2014 (To allow for the development of a wider range of industrial production facilities in the Edmonton Energy and Technology Park ASP and to update contextual information.)

The EETP ASP contains approximately 5,218 hectares (12,894 acres) of mostly greenfield land. The City's vision is to transform this area into a world-class eco-industrial park and as proposed includes precincts for petrochemical, medium industrial, and research and development (R&D) sectors. The ASP provides a vision to blend and balance economic, environmental, and social interests, together with efficient uses of land and resources to create a world-class eco-industrial region.

2.0 Planning Analysis

2.1 Capital Region Land Use Plan

The Capital Region Growth Plan: *Growing Forward* aims to:

- Provide an integrated and strategic approach to planning for future growth in the Capital Region;
- Identify the overall development patterns and key future infrastructure investments that would best complement existing infrastructure, services and land uses in the Capital Region, and which would also maximize benefits to the Capital Region; and,
- Co-ordinate decisions in the Capital Region to sustain economic growth and ensure strong communities and a healthy environment.

The Capital Region Plan identifies the EETP ASP within Priority Growth Area "F". The Capital Region Growth Plan policies as they relate to economic development:

- concentrate new growth within the Priority Growth Areas;
- ensure an adequate supply of land is available for future development of the Region's industries; and
- support further diversification of the Regional economy. The proposed amendment aims to uphold the Plan's principles and policies, specifically, "*Support Regional Economic Development*" principle by ensuring a supply of industrial and commercial land opportunity for development.

The 2010 Capital Region Growth Plan is soon to be replaced by the 2016 Growth Plan *The Edmonton Metropolitan Region Growth Plan: Re-imagine. Plan. Build.* The 2016 Plan was approved by the CRB on October 16, 2016 and is currently awaiting approval by Cabinet. The 2016 Growth Plan identifies the EETP as a "major employment area."

2.2 The City of Edmonton's Strategic Plans "*The Way We Grow*" and "*The Way Ahead*"

The Municipal Development Plan: "*The Way We Grow*" identifies the EETP Industrial area as "Industrial/Business". "*The Way We Grow*" objectives focus on:

- increasing employment opportunities and municipal revenues through attraction, growth and development of industrial business targeting value-added goods and services and research and technology rich industry;

- identifying opportunities and facilitating redevelopment and intensification to higher value industrial, commercial and institutional uses in established industrial areas; and
- supporting best management practices and principles of Edmonton's Stormwater Quality Control Strategy.

The City of Edmonton's "*The Way Ahead*" is a comprehensive plan which establishes six 10-year strategic goals to achieve the City's vision for Edmonton in 2040, to direct long-term planning for the City of Edmonton and to help establish priorities and make informed decisions for the future, aiming to:

- Diversify Edmonton's Economy;
- Ensure Edmonton's Financial Sustainability;
- Improve Edmonton's Livability; and
- Preserve and Sustain Edmonton's Environment.

The EETP ASP presents a significant opportunity to incorporate policies in order to meet the goals and objectives of *The Way Ahead* and *The Way We Grow* for regional economic diversification, with an emphasis on value-added industrial processing and manufacturing, utilizing eco-industrial principles, with the long term goal of environmental and economic sustainability.

2.3 The City of Edmonton's Industrial Investment Action Plan

The City of Edmonton's *Industrial Investment Action Plan*, approved by Executive Committee on June 21, 2016 is a collection of nine actions that the City is advancing to facilitate, attract and retain businesses in Edmonton's industrial neighbourhoods to support the non-residential tax base. The nine actions were drafted based in part on a comprehensive assessment of Edmonton's industrial land inventory. This was completed resulting in an evaluation of Edmonton's current market conditions and trends, target sectors, market readiness and competitiveness.

One of those nine actions, Action 7, is to increase the investment readiness of EETP. The investment readiness is measured on three performance criteria: land absorption (zoned, subdivided and developed), development investments, and industrial taxes. As part of the implementation plan for the *Industrial Investment Action Plan*, five key deliverables have been established to meet Action 7, help increase the investment readiness of the EETP. The proposed Amendment to the EETP ASP, along with the custom zoning Amendment, are in response to two of the key deliverables, as noted under 3.0 Planning Rationale.

This proposed amendment conforms to the Capital Region Land Use Plan, the Strategic Plans- "*The Way We Grow*" and "*The Way Ahead*", and the "*Edmonton Industrial Investment Action Plan*" in particular, ensuring financial sustainability by designating industrial land and designing functional infrastructure systems to enhance industrial and commercial investment.

3.0 Planning Rationale

The “*Edmonton Industrial Investment Action Plan*” guides and forms the rationale of this proposed amendment. Five key deliverables have been established to help increase investment readiness to achieve Action #7, two of which are being addressed as part of this amendment:

1. Amend the EETP ASP to implement efficient infrastructure solutions and accommodate land use planning principles including the revision of the arterial road network and a targeted approach to edge development; and
2. Amend the EETP ASP to implement simplified development-friendly land use zoning for the EETM (Manufacturing) and the EETL (Logistics) Zones.

The arterial road network has been revised in response to the first key deliverable. The second key deliverable resulted in the proposed amendment merging of the Manufacturing and Logistics precincts into a single EETIM Medium Industrial Precinct along with a new EETIM Medium Industrial Zone to implement the new Precinct.

3.1 Arterial Roadway Realignment

In keeping with the “Action #7” as identified in the Action Plan, the amendment proposes to revise the existing proposed arterial road system, as it contained in the the EETP ASP.

The existing approved EETP ASP Arterial Roadway Network alignment is curvilinear, thereby creating fragmentation of lands and lands which would be difficult to develop. The proposed amendment will re-align the arterial road network alongside a grid that mostly follows section boundaries and existing road rights-of ways. This will improve land configuration by lessening severance of existing parcels, lessen land requirements, and move people and goods efficiently.

In December 2015, ISL Engineering and Land completed the *Edmonton Energy and Technology Park Arterial Roadway Network Analysis* in which the development of a revised arterial roadway network was based on an analysis of potential alternatives which were analyzed against a set of criteria that reflected the important key issues in the plan. The final analysis presented three alternative roadway networks, in which Option 1 was chosen as the most efficient and provided the basis in both the revised *Technology Park Traffic Impact Assessment* (ISL Engineering and Land, August 2016) and proposed amendment.

The final arterial roadway alignment proposed in the ASP Amendment has been modified from the ISL Option 1, as the connection from 227 Avenue within EETP to the Highway 28A system interchange was not supported by Alberta Transportation, and has been removed.

As the revised arterial road network will result in a more regular grid, there will be overall less linear length of arterial roadways required as a result. Therefore, the Arterial Road Assessments, to which each developer is required to contribute based on the area of assessable developable land, are expected to be lower based on the revised road network. The existing Arterial Road Assessment Bylaw for the existing EETP ASP arterial road network will be required to be replaced at the time that the ASP Amendment is heard before Council, in

accordance with City Policy C507. The increased use of existing road right-of-ways in the revised road network will also result in a smaller requirement for land compensation, an additional amount payable to landowners where land is required from to develop new road right-of-ways.

3.2 Realignment of Land Use Precincts

The land use precincts have been adjusted, so that the new boundaries coincide with the proposed Arterial Roadway network realignment, as well as proposed road right-of-way estimates provided by Alberta Transportation for future interchanges at Manning Drive/Highway 15 and Highway 28A, Highway 37 and Highway 28A, and the proposed crossing of to 211 Avenue NW to Meridian Street with Manning Drive/Highway 15, in accordance with the *Alberta Transportation Freeway Concept Plan Highway 15 & 28A within the City of Edmonton*” R-1198, (January 2016).

3.3 Proposed Medium Industrial Land Use Precinct

The EETP ASP currently identifies four distinct land use precincts; Petrochemical Cluster, Manufacturing, Logistics, and Research & Development. The amendment proposes to merge the Manufacturing and Logistics precincts into a single Medium Industrial precinct which will also allow for the development of smaller commercial nodes that will provide services for the employees and businesses located within the plan area.

Bylaw 16942, approved on October 20, 2014 resulted in a greater number of uses to be located in both the Manufacturing and Logistics precincts, through amendments to the EETM Manufacturing and EETL Logistics zones that implement the precincts. It also increased the number of permitted, as opposed to discretionary, uses, including General Industrial Use, which includes a variety of traditional manufacturing and processing uses. Through the Bylaw 16942 Amendment, the distinctive qualities that made each precinct unique were diminished. By amalgamating the Logistics and Manufacturing precincts, along with the zones, it allows for increased flexibility of development, enabling a wider range of uses within a larger geographic area. This will help increase investment readiness as developers will be able to market their lands with greater ease as only one set of regulations will apply.

The new Precinct will be implemented through the development regulations that are currently contained within the existing EETM Manufacturing Zone, thereby standardising the development regulations. These changes are reflected in a separate zoning bylaw amendment.

The new Medium Industrial Precinct will develop in a manner typical of traditional industrial land uses known to the development industry. Furthermore, the Precinct will incorporate Eco-industrial principles, fostering the elements of environment, social and economic sustainability.

The proposed Precinct is located along the periphery of the EETP ASP, in the same general area that the current the new precinct will not fundamentally change the initial intent of the approved ASP.

3.4 Proposed Service Commercial Nodes

The Action Plan identified a need to “Increase Investment Readiness of Edmonton Energy and Technology Park”. The proposed Medium Industrial Precinct proposes to allow for the development of commercial nodes, recognising that some commercial uses will be required to provide services to both the employees and businesses located within the EETP.

The service commercial nodes will be limited to be no greater than 2 hectares in size and their location/access will also be restricted to ensure traffic flow on arterial roads and ensure that the EETP does not become a ‘destination’ commercial area. Larger scale commercial business opportunities are located south of Manning Drive within the Horse Hill Area Structure Plan.

Including commercial uses within the EETIM Medium Industrial Zone removes the requirement to have either a custom commercial zoning for the EETP, or a Direct Control District. This should help increase market readiness by removing the requirement of developers to rezone to a separate commercial or Direct Control District. This also avoids the issue of “split-zoning” a large parcel that would otherwise require subdivision to meet the commercial zone maximum site area requirements.

Furthermore, the addition of the commercial nodes and the principles that allows for their creation ensures that industrial uses are permitted within the Medium Industrial zone and that commercial uses are permitted within the commercial nodes. This helps ensure that location appropriate applications are processed in a timely manner.

3.5 Infrastructure and Servicing

The infrastructure and servicing concepts for the EETP have been adjusted to reflect the changes in the arterial road network. This includes re-aligning proposed water servicing, stormwater servicing, and wastewater servicing to more closely match the revised arterial road network.

Alternative concepts for stormwater management are currently being explored and are expected to be reflected in future amendments to the EETP ASP. Alternative stormwater strategies are needed in part due to restrictions for stormwater management due to the existence of the CFB Edmonton Garrison Heliport Zoning Regulations, restricting the type, location, and size of conventional stormwater management ponds throughout the majority of the EETP plan area.

3.6 Park Identification

Park locations have been re-allocated based in part on the revised arterial road network (Figure 14 Parks and Open Space - see Appendix C of the ASP Application). The main change is that

the central, district level park has been reduced in size, from 88 ha as shown in the existing ASP (the existing statistics are in error - they show 217 ha, but this is 217 acres, the same as 88 ha) to 45.6 ha.

This district park will still provide a configuration that is suitable for programming (e.g. playing fields) to serve the EETP and surrounding neighbourhoods. Given that there is no residential component to the ASP, there is no anticipation of municipal reserve dedication required for new schools. The local park shown at the confluence of Horsehills Creek and the ravine south of the district park stays the same size (19 ha). The triangular park located at 195 Avenue and the CN Rail line is slightly smaller than the existing ASP concept, at 3.66 ha, due to changes in the arterial road network. There are new proposed parks as well shown in the northeast, reflective of rezoning to parcels on either side of the ravine that runs along the north side of the rural subdivision next to 33 Street NE to AP "Public Parks". Other parks shown as "Potential Parks" in Figure 14 are within general locations that are shown in the current Area Structure Plan, located near the various ravines and natural areas in the plan area, and each is assumed to be approximately 4 ha in size, except for the one in the southwest portion of the plan area, assumed to be approximately 8 ha in size, based on a concept plan completed in support of an approved subdivision.

The total of all parks areas anticipated to be taken as land amounts to some 104 ha, or 2.3% of the gross plan area. Current priorities for park areas within industrial parks are lower than residential areas, and areas such as the river valleys, therefore this assumption is deemed reasonable. The majority (7.7%) is assumed to be taken as cash-in-lieu. However, it is unlikely that all lands will be subject to subdivision, and it is assumed that larger industrial operations will not subdivide existing parcels in a number of cases. The total amount anticipated for future parks is assumed to be substantially less than forecast in the existing ASP, which total 241 ha (however, this number is higher than intended, due to the error in the calculation of the central park area mentioned above).

It should be noted that the *Urban Parks Management Plan* (UPMP, 2006) will be replaced Breathe: Edmonton's Green Network Strategy sometime in 2018 and specific policies related to parks in industrial areas are subject to change.

4.0 Technical Studies

4.1 Transportation Assessments

There are two documents submitted in support of the revised arterial road network. These two studies supplement the original traffic impact assessments that supported the initial EETP Area Structure Plan, and relate to the proposed arterial road network discussed in 3.1.

- *Edmonton Energy and Technology Park Arterial Road Network Analysis* (ISL Engineering and Land Services, December 2015)
- *Edmonton Energy and a revised Technology Park Traffic Impact Assessment* (ISL Engineering and Land Services, August 2016).

4.2 Phase II Ecological Network Reports

The following document is submitted in support of the Area Structure Plan Amendment:

- *Phase II Ecological Network Report Edmonton Energy and Technology Park Draft Report* (Parts A and B, Spencer Environmental, October 2014 and December 2014).

A *Phase II Ecological Network Report Edmonton Energy and Technology Park Draft Report* (Part A) by Spencer Environmental was submitted in May 2014 in support of amendments that rezoned a number of central parcels within the Petrochemical Cluster Precinct to EETC Petrochemical Cluster Zone (Bylaw 16942, October 20, 2014). Part A included a preliminary desktop assessment and provided a recommended ecological network for the entire EETP Chemical Precinct.

This *Phase II Ecological Network Report* was updated (as Part B) subsequent Bylaw 16942, in December 2014. Part B included ecological network reporting for specific EETP Area Structure plan sub-areas (neighbourhoods) that are associated with the central Petrochemical Precinct. This includes additional examination of five sub-areas of the Petrochemical Precinct, along with small portions of several other sub-areas. Part B includes the original Petrochemical Precinct area which at the time was approximately 1,730 ha (, plus a 500 m buffer). The total area reviewed includes a majority of the ITP plan area.

The natural areas mapping information has been updated in part as a result of the Part B submission, along with updated aerial photography reviewed by the City of Edmonton's Biodiversity section. As more detailed information is now available for Part B, it is also included in support of the Area Structure Plan Amendment.

5.0 Public Participation and Stakeholder Consultation

Public Involvement (Policy C513) outlines the strategic approach to be used in all City hosted public involvement processes. The City believes that a key element of representative democracy is that people have a right to be involved in decisions that affect them.

Administration consulted key stakeholders on the proposed ASP and zoning amendments with held meetings with adjacent municipalities (Sturgeon County, Strathcona County and Fort Saskatchewan), CFB Edmonton, Alberta's Industrial Heartland Association, landowners, developers, and external agencies, including Alberta Transportation. Administration has also worked closely with internal stakeholders in preparing this amendment. This includes City Planning (Planning Coordination, Parks and Biodiversity, Drainage Planning and Engineering, Transportation Planning and Engineering) and City Operations (Transit Planning).

Administration held a public open house on November 9, 2016 at the Horse Hill School from 6:30pm to 8:30pm. Prior to the event, notifications were mailed to landowners within and adjacent to the plan area. The event was also advertised on the City's website and social media platforms, as well as on three portable road signs throughout the plan area. E-mail notifications were provided to adjacent municipalities, organizations, developers, and realtors with an interest in the plan area. At the meeting itself, a brief presentation and information package was provided to attendees explaining the proposed changes to the arterial road network and zoning amendments. Over 120 individuals were present and the reaction to both changes was overwhelmingly positive. Following the event, the presentation and information package was made available on the City's website.

6.0 Land Use Statistics Changes

The land use statistics have been updated based on the following changes to the EETP ASP:

- The revised arterial road network that changed precinct boundaries
- Greater estimates for area required for stormwater management, 8.7% of the total gross developable area as opposed to 4.7% in the existing ASP, in order to allow for a variety of stormwater management strategies in response to restrictions such as the CFB Heliport Approach and Bird Hazard zone restrictions
- Greater estimates for Provincial Highway improvements, based on information provided by Alberta Transportation on estimated right-of-way requirements for the future Manning Drive/Highway 28A and Highway 37/Highway 28A System interchanges and the Meridian Drive/Manning Drive service interchange. This has resulted in a large reduction in the Research and Development Precinct (from a net developable area of 439 ha to 315 ha)
- Greater deductions for natural areas, based on the most recent data available. The existing ASP assumed a 2% deduction from the gross developable area for natural areas, whereas the proposed amendment uses 5.7%, based on available data. However, it is acknowledged that not all identified natural areas will ultimately be protected and are subject to detailed analyses on rezoning, subdivision and development applications.
- Reduced total areas expected for future parks, reduced from 231 ha to 104 ha, based on assumptions that a large portion of the plan area may not be subject to subdivision, even on development (e.g. for the larger industrial operations), as well as an error in the original park statistics calculations.

Key Changes: Edmonton Energy and Technology Park - Existing ASP and Proposed ASP						
Precinct	Net Developable		% Change	Employees		% Change
	Current	Proposed		Current²	Proposed	
Medium Industrial	1,633 ¹	1,591	-2.6%	34,293	33,420	-2.5%
Petrochemical	1,268	1,134	-10.6%	8,876	7,937	-10.6%
Research and Development	439	315	-28.2%	39,949	28,693	-28.2%
Totals	3,340	3,041	-9%	83,118	70,050	-15.7%

Notes:

1. Medium Industrial net developable area in current plan is the combined areas of the areas shown as “Net Area” for the Logistics and Manufacturing precincts, as shown in the Land Use and Population Statistics in the consolidated Area Structure Plan document.
2. Data from existing ASP uses the “Net Area” for each precinct as shown in the Land Use and Population Statistics in the consolidated Area Structure Plan document multiplies by the employees/ha assumptions. This varies from the “Total Area” amounts shown in the total employees calculation in the original ASP, and therefore there are slight differences in the current total employees projections.