

## **Major Roadway Planning Adjacent to the SE Quadrant of Big Lake**

### **1.0 Introduction**

The Big Lake Environment Support Society (BLESS) is the environmental steward of the Big Lake natural area and the Lois Hole Centennial Provincial Park (LHCPP). As such, it is BLESS's responsibility to monitor activities that are occurring in the vicinity of LHCPP that may be prejudicial to the environment. The following is an outline of the history, and the current state, of planning for urban growth and the roadway system adjacent to the southeast quadrant of the Lake.

The urban growth in this area is occurring in both major cities – Edmonton and St Albert. It should be noted from the outset that BLESS is not opposed to this growth, or the construction of transportation infrastructure that is needed to facilitate this growth. BLESS does, however, want to ensure that the negative impacts of this growth on the Big Lake environment are minimized. The Province of Alberta also has significant plans for development of park facilities, including trails and an Environmental Learning Centre, in this sector of LHCPP. It is important that these features are coordinated with the roadways proposed to be built in the adjacent neighbourhoods.

The boundary between the two municipalities runs along the alignment of 137 Avenue, which is currently the only access from the east into Edmonton's Big Lake communities, including Trumpeter, Starling, and Hawks Ridge. Development in those neighbourhoods is governed by the Big Lake Area Structure Plan (ASP), which was originally formulated in the 1990's and has subsequently been modified on several occasions.

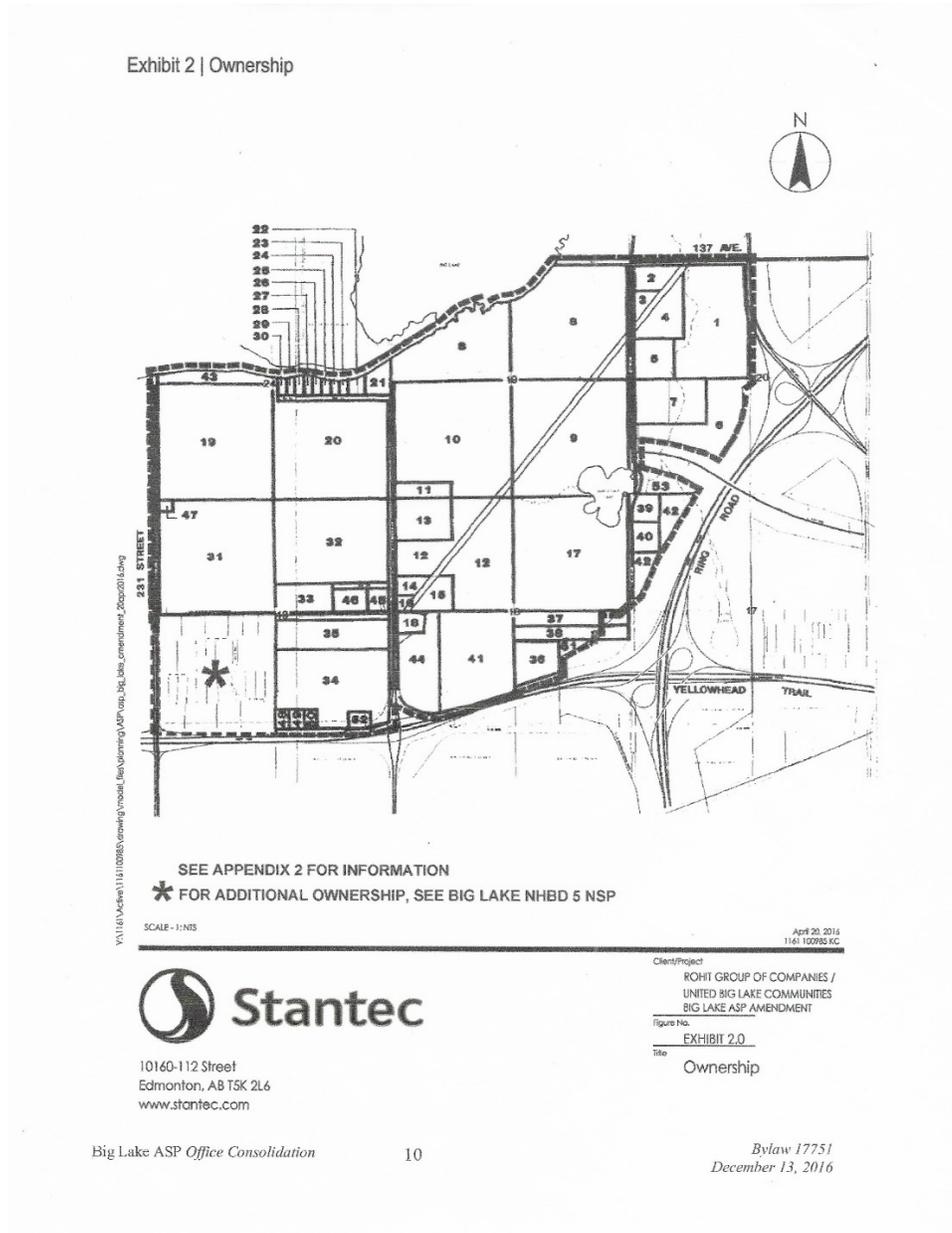
An important infrastructure development in this sector of St Albert over the last few years has been the construction by the City of the Ray Gibbon Drive (RGD). The first two lanes of that road were built starting in 2004. Widening of RGD to be a 4-lane expressway was commenced in 2020, and will continue throughout the 2020's. In 2020 RGD has been widened to be 4-lanes to a point 500 metres north of LeClair Way.

The current intersection of 137 Avenue and RGD has become a pivotal location for residents of both municipalities. As a 2-lane roadway RGD has become seriously congested, particularly during the morning and afternoon peak commuter periods. Similarly, as the only access in and out of the Big Lake communities, 137 Ave is also becoming congested during the morning and afternoon peaks. As a result, the elected officials and the transportation planners in both cities are looking for ways to ease the congestion. Both municipalities need to work jointly to come up with an appropriate transportation plan. Given that RGD is intended to be a viable component of the regional transportation system, the provincial government is also involved in these discussions.

### **2.0 Background and History – Original Planning Concepts**

#### **City of Edmonton – 127 Avenue Road Access into the East Side of the Big Lake Communities**

The Area Structure Plan (ASP) for the Big Lake Communities in the City of Edmonton was originally formulated and initially approved in 1991. Since that time, it has been revised on several occasions as the various stages of development have progressed. The latest version of the ASP still includes “Exhibit 2.0”, which is the original Ownership Plan and outlines the situation at the start of the development. A scan of that plan is provided below.

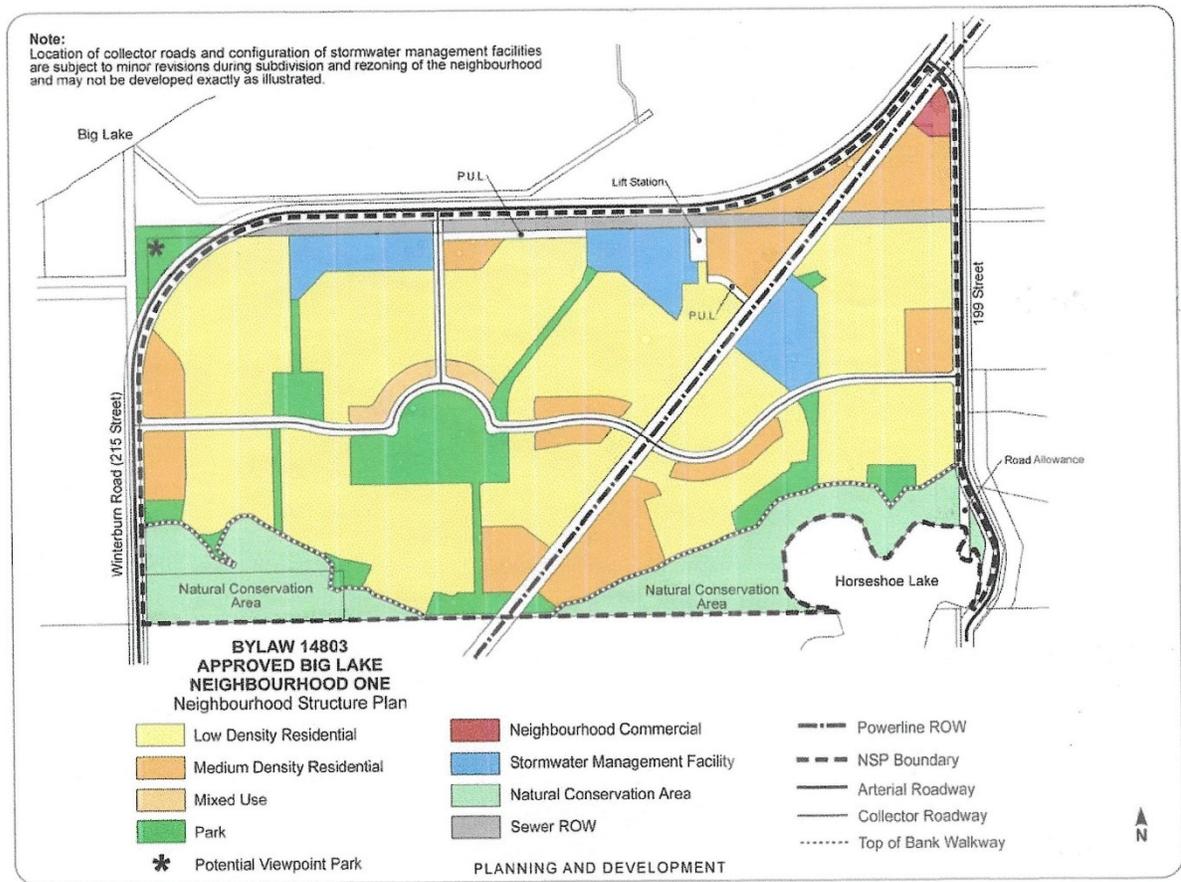


The boundary of the area covered by the original ASP does not include adjacent land that had previously been acquired by the Province for the Transportation and Utility Corridor (TUC) which encircled the City of Edmonton. The Ownership Plan does, however, show the major roads that were intended at that time to be built within the TUC, including the Anthony Henday

Ring Road. It also shows that at that time it was planned there would be an overpass crossing the Ring Road at approximately 127 Avenue. That overpass would have been the main access into the Big Lake communities from the east.

City of Edmonton – Proposed Arterial Road on the North Boundary of the Trumpeter Nd.

When the original Big Lake ASP was prepared in 1991 137 Avenue was a minor road allowance that terminated at the east side of Big Lake. Traffic heading west along 137 Avenue would travel south down the 184 Street or 199 Street gravel roads to connect with the east-west corridors of 118 Avenue and Hwy 16. The original Big Lake NSP proposed a new arterial road connecting the west end of 137 Avenue to the intersection of Winterburn Road and 118 Avenue. The 2008 Neighbourhood One NSP shows the alignment of that proposed arterial running east-west along the north boundary of the neighbourhood.



Big Lake NSP Office Consolidation June 2008

Bylaw 14803  
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### St Albert – West Ring Road (Ray Gibbon Drive)

An important environmental document governing the transportation systems in the SW quadrant of St Albert is the 2003 Environmental Impact Assessment (EIA) for the City's West Ring Road. That document was a key factor when the decision was made to proceed with construction of what is now known as Ray Gibbon Drive (RGD). It is still used as the environmental document governing the current widening of RGD to be a 4-lane roadway.

In addition to specifying environmental criteria for the construction, the 2003 EIA also included a significant analysis and projections of the likely traffic demands for the road. It made specific recommendations regarding what class and size of road might be needed in the ultimate situation. It stated that the ultimate designation would likely be a four-lane expressway. It specifically states that:

- *A six-lane roadway is not under design.*
- *A six-lane expressway is not foreseen as being required unless unprecedented growth occurs.*
- *DFO has not identified a six-lane roadway as part of the project.*

The EIA also specifies:

*In November 2002 DFO was provided with a preliminary project description for the entire roadway (137 Avenue to Villeneuve Drive) to ultimate design (four-lane expressway)*

and

*The WRR would have a posted speed of 70 kph and, ultimately, at-grade, signalized, intersections at the following locations:*

- *137 Avenue*
- *A new, as yet unnamed road north of 137 Avenue*
- *Levasseur Road*
- *Meadowview Drive, and*
- *Sangudo Subdivision rail crossing*

### **3.0 Subsequent Construction and Planning Revisions**

#### Access from the East into the Big Lake Communities

Construction of the northwest segments of the Anthony Henday Ring Road occurred in the first few years of the 21<sup>st</sup> century. In addition to this major roadwork in the City of Edmonton, the

first two lanes of Ray Gibbon Drive were constructed in St Albert. That new roadway then provided a direct connection from 137 Avenue on the north boundary of the Starling neighbourhood to the Anthony Henday Ring Road.

Consequently, the proposed 127 Avenue overpass connecting the Big Lake neighbourhoods to the NW quadrant Edmonton was deemed to be unnecessary. The 127 Avenue access into the neighbourhoods was deleted from the ASP in 2007, and 137 Avenue was established as the only access into the neighbourhoods from the east.

#### Proposed Arterial Road on the North Boundary of Trumpeter

The construction of Anthony Henday Drive and Ray Gibbon alleviated the need for there to be a new arterial road connection between St Albert and the Winterburn area of Edmonton. However, the Big Lake ASP has continued to show this proposed arterial road, and all planning for this area has been based on this possibility. The Province's 2009 Park Management Plan showed a "Proposed 137 Ave. Realignment" running diagonally across the parcel of land north of the Trumpeter neighbourhood and also specified the future "Park Boundary" to match the alignment of this possible future roadway.

The construction of Anthony Henday Drive also necessitated a major realignment of 137 Avenue east of RGD. A completely new alignment was built west of 170 Street jogging the road to the north to an alignment 1 km into St Albert. The realigned roadway in St Albert has been renamed LeClair Way.

The combination of these revisions has created the possibility that the future arterial road will extend along the entire boundary of LHCPP from 1 km into St Albert to the north end of Winterburn Road (251 Street). This arterial road would be a possible shortcutting route between St Albert and the Winterburn area of west Edmonton.

#### Ray Gibbon Drive – 2008 Functional Planning Study (FPS)

The Introduction to this report that was issued in early 2009 states:

*Construction of the first 2 lanes in both Stages 1 and 2 ..... commenced in 2004 and was completed in 2007. During this time, the Province and the City began to look at the possibility of converting the arterial roadway to an ultimate 8-lane freeway. As an outcome of a meeting between Premier Ed Stelmach and the current mayor at the time, Mayor Paul Chalifoux on September 11, 2007, Alberta Transportation (AT) and the City of St Albert (the City) completed an overall functional study (Ray Gibbon Drive Functional Planning Study, September 2008) that identifies the modifications required to convert the existing Ray Gibbon Drive from a two-lane arterial roadway to a freeway complete with interchanges at 137 Avenue, McKenney, Giroux, and Villeneuve Roads. This freeway, which the Alberta Transportation would assume responsibility of, would extend north beyond St Albert and eventually connect with Highway 2.*

The Functional Planning Study outlines the changes to the design that would be required if the ultimate designation for the road were to be changed from the 4-lane expressway that was specified in the EIA, to an 8-lane freeway. However, the Planning Study does not provide any technical rationale why this significant change might be needed. It recommends that a new EIA should be completed “*within the next year*”. To date no new EIA has been carried out.

However, subsequent planning documents that have been based on this proposed revision to the ultimate classification for Ray Gibbon Drive, include the following:

2011 Capital Region Board – Regional Transportation Plan

2015 City of St Albert – Transportation Master Plan

2017 Edmonton Metropolitan Regional Growth Plan

#### **4.0 Current Planning**

Changing of the ultimate classification of Ray Gibbon Drive to a freeway, as outlined in the 2009 FPS, is now having both long term and short-term implications. In the long term, a freeway designation would have to meet the following criteria:

- A speed limit of 90 – 110 kph
- Grade separated interchanges - including closure or replacement of all at-grade signalized intersections.
- Increased minimum distances between intersections.

Specific long-term design changes needed to meet these criteria for the southern portions of Ray Gibbon Drive include the following:

- Increasing the speed limit from 70 kph to at least 90 kph
- Closure of the current intersection at 137 Avenue
- Converting the at-grade intersections at LeClair Way and McKinney Avenue to be grade separated intersections.
- Creating a new arterial road running along the eastern edge of LHCPP from LeClair Way to the NW corner of the Starling neighbourhood in Edmonton.
- Diverting all traffic entering or leaving the east side of the Big Lake neighbourhoods in Edmonton to travel an additional 3 kms into and then out of St Albert.

- Significantly increasing the amount of traffic entering and leaving St Albert and using the LeClair Way intersection.
- Creating a major grade separated interchange adjacent to the main entrance into LHCPP.
- Severely prejudicing the possible development of an environmentally sensitive development on the parcel of land north of 137 Avenue and west of Ray Gibbon Drive.
- Compounding the negative impacts for the environment on either side of the Ray Gibbon Drive right-of-way.

Increasing the speed limit from the current 70 kph has very severe implications for both large and small wildlife that frequently move across the land occupied by this roadway. In similar situations in the Banff and Jasper National Parks the federal government has implemented significantly lower speed limits and spent millions of dollars on fencing and wildlife overpasses, underpasses and other wildlife movement routes. Similar measures would need to be implemented along Ray Gibbon Drive, particularly on either side of the Sturgeon River, which is a major wildlife corridor.

While it is recognized that the ultimate freeway designation may never be needed or constructed, specifying that option as a possibility is having significant negative impacts on the current planning for land development, park development, and transportation infrastructure in this sector of both cities. The planning and transportation administrations in both St Albert and Edmonton are now working on the assumption that the implications listed above are all eventually going to happen and therefore must be used as the basis for all aspects of current design. This is significantly prejudicing development of environmentally sensitive facilities and trails in the LHCPP, and on adjacent lands in both Edmonton and St Albert.

It is also limiting possible interim measures to alleviate the congestion currently being experienced along 137 Avenue. If the ultimate designation for RGD is now taken to be an expressway, as noted in the 2003 EIA, rather than the freeway noted in the FPS, several options will become available. The 137 Ave intersection would remain open in the ultimate situation. Development of the parcel north of 137 Ave and west of RGD would be more likely to happen in the foreseeable future. That, in turn, would precipitate the possibility of two accesses to the west from RGD, rather than just the one connection at LeClair Way, 1 km into St Albert.

### **5.0 BLESS Observations and Suggestions**

The environmental provisions of the 2003 EIA are being followed for the current widening of Ray Gibbon Drive, and therefore those items do not currently need to be revisited.

The ultimate classification and design of RGD should be the minimum necessary for it to be a functioning component of the provincial road network and to accommodate predicted peak traffic volumes.

Questions that need to be addressed prior to making, or adopting, further changes to the transportation systems in this sector of both cities are as follows:

- Is RGD needed to ultimately be a freeway for it to meet predicted local and provincial traffic demands?
- Is this the best long term solution for the citizens of both municipalities, **and the environment**?
- Will a freeway designation attract more traffic into, and through, St Albert?
- Does the 137 Ave intersection have to be closed?
- Is the arterial road along the north boundary of Trumpeter needed?
- Will this arterial road attract short cutting traffic towards 137 Ave and into St Albert?
- What is the preferred land use for the parcel north of 137 Ave and west of RGD?