

## **BY-LAW NUMBER 2008/50**

BY-LAW NO. 2008/50 is a by-law of the County of Wetaskiwin No. 10 in the Province of Alberta, to authorize the adoption of an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of the area known as Hiland Spruce Estates (SE 15-46-6-W5M) in accordance with Section 633 of the Municipal Government Act, Chapter M-26.1, Revised Statutes of Alberta 2000, and amendments thereto.

WHEREAS: at the requirements of County Council, as per Policy 6606, an Area Structure Plan has been prepared for SE 15-46-6-W5M.

AND WHEREAS: the proposed Area Structure Plan has been widely circulated and discussed within the County pursuant to Section 230, 606(1), and 633(1) of the Municipal Government Act, 2000, Chapter M-26.1, and amendments thereto.

NOW THEREFORE: the County of Wetaskiwin No. 10, duly assembled, hereby enacts as follows:

- (a) The document attached to this By-law as "Appendix A", together with accompanying maps, is hereby adopted as "*Hiland Spruce Estates in (SE 15-46-6-W5M)*" with the following amendments:
  - (i) Under the Municipal and Environments Reserves Section on Page 10, a statement is to be added as follows: "The applicant is to indicate the amount of all remaining Municipal Reserve owed, indicate that this reserve will be dedicated as land and show on a schedule where this Municipal Reserve will be dedicated to the County's satisfaction.
  - (ii) Under the second paragraph of the Sewage Treatment section on Page 7, the first sentence needs to be amended to read "for all lots requiring sewage treatment off-site at a Provincially and Municipally approved sewage treatment facility and a caveat will be placed on the title of the titles of the lots regarding sewage treatment."
  - (iii) That a sentence be added to the last paragraph under the Section Adjacent Land Use (starting Page 6) stating that: "This access shall also be dedicated at a 20 metre width for future access considerations to the quarter section west of this Plan area."
  - (iv) That a sentence be added to the third paragraph under the Traffic and Roads Section stating: "That the future extension to Township Road 462A be dedicated at this time and shall be constructed in the next phase."

2. This by-law comes into effect on the date of third reading.

READ: A First time this 10<sup>th</sup> day of July, A.D., 2008.

READ: A Second time this 10<sup>th</sup> day of July, A.D., 2008.

READ: A Third time and finally passed this 10<sup>th</sup> day of July, A.D., 2008.

Note

Need the updated  
ASP.

REEVE

SECRETARY-TREASURER

COUNTY OF WETASKIWIN

BYLAW NO. \_\_\_\_\_

HILAND SPRUCE ESTATES AREA STRUCTURE PLAN

S.E.1/4 Sec. 15, TWP 46, RGE 6, W5M

BUCK LAKE, ALBERTA

LAND OWNER: HARLU HOLDINGS LTD

PREPARED BY: LUP CONSULTANTS – LAND USE PLANNING  
(W.T. CANDLER, m.c.i.p. ACP)

Date of Preparation JANUARY 2007

Date of Revision MAY 2008

Date of Bylaw Approval 1<sup>st</sup> Reading

2<sup>nd</sup> Reading

3<sup>rd</sup> and Final Reading

## CONTENTS

## PAGE

• INTRODUCTION	4
• PURPOSE	
• THE SITE	
• NATURAL AREAS	5
• SURFACE DRAINAGE	
• GROUNDWATER/GEOTECHNICAL	
• NEAR SURFACE WATERTABLE	6
• EXISTING AND SURROUNDING LAND USE	
• ADJACENT LAND USE	
• LAND USE BACKGROUND	7
• SEWAGE TREATMENT	
• STORMWATER MANAGEMENT & DRAINAGE PLAN	8
• TRAFFIC AND ROADS	9
• ZONING	
• MUNICIPAL AND ENVIRONMENTAL RESERVES	10
• TENTATIVE PLAN OF SUBDIVISION	
• ENVIRONMENTAL ASSESSMENT	
• PUBLIC INPUT	
• FURTHER STUDIES	12

ILLUSTRATIONS:

1. MAP 1 – Vicinity Map
2. MAP 2 – Air photo showing proposed subdivision
3. MAP 3 – Development Concept Plan
4. MAP 4 – Zoning Plan
5. MAP 5 – Possible Future Sewer Service Plan
6. MAP 6 – Topographic and Drainage Plan

ENCLOSURE(S):

- A. Title Search
- B. Tentative Sub-division Plan

ADDENDUM(S):

1. Groundwater Availability Report (Hydrogeological Consultants Ltd.)
2. Drainage letter report (Altime Engineering)

## **INTRODUCTION**

This Area Structure Plan document has been prepared for and on behalf of Harlu Holdings Ltd., registered owner of the undeveloped portions of the lakeshore community of HiLand Spruce Estates situated on the west Shore of Buck Lake in the County of Wetaskiwin, Province of Alberta. The intent of Harlu Holdings Ltd., is to provide for the expansion of the existing subdivision and to include a concept plan for the balance of the parcel for future phased residential development.

## **PURPOSE**

The purpose of this Area Structure Plan document is to establish a clear and comprehensive planning framework for the expansion and development of the land legally described as the SE ¼-Sec 15-TWP46-RGE6-W5M. MAP 1(Vicinity Map) shows the location of the land relative to Buck Lake and the surrounding area.

## **THE SITE**

HiLand Spruce Estates is an attractive, well-planned lakeshore community of some 120 acres of land having broad frontage onto the west shoreline of Buck Lake. Approximately half of the Harlu Holdings original parcel has been subdivided and is now under separate and individual title. No Area Structure Plan covering the existing subdivision currently exists nor, was one required, for early phases of development. This document seeks to provide an orderly, planned structure for the balance of the quarter section. It is notable that many of the original lots created are now fully developed with substantial residential homes and seasonal cottages. All of the previously subdivided lands are now under separate title and ownership.

With respect to the total plan area, the subdivided and developed portion of the site is well treed with mature spruce and large calliper poplar and aspen. The subdivision has a parkland appearance with well-separated residences and a strong sense of community. The back lands, which are the focus of this document, are less treed and have been used for agricultural and pasture purposes. Harlu Holdings has created strategic tree cover by planting of shelterbelts and buffers between future development phases, which enhance these areas for residential use. The back lands are higher in elevation, well drained and have an imposing view over the lake and the Eastern skyline.

There are no wetlands, valleys or creeks on the property. The existing estate dwelling is 1950's to 1960's vintage and there are several outbuildings and a large dugout on the estate parcel that will remain intact as part of the Harlu estates. The dugout will serve as a fire pond for the community and will be accessible by easement, or, the provision of a dry hydrant connected to the fire pond.

## **NATURAL AREAS**

There is one natural treed area that exists outside of the subdivided area. This natural treed area will remain intact as part of the Harlu estate parcel and will be unaffected by future expansions of the HiLand Spruce Subdivision.

The expansion area is generally high in elevation relative to the surface water of Buck Lake and is well drained by the natural contours of the land. It is generally free of tree cover except for strategically planted shelterbelts of spruce and willow which provide buffering and separation for future lot development. There are no distinctive features of the land such as steep slopes, ravines, watercourses or wetlands that would constitute a constraint to development for residential use.

## **SURFACE DRAINAGE**

The contours of the land are illustrated on MAP 6 (Topographic Plan). There is an overall gentle slope of approximately 1.5% toward the South and East corner of the expansion area where there exists a large dugout excavation intended for domestic use as well as a proposed fire protection storage pond. Surface drainage is pooled at the lowest elevation within the expansion area and the containment of the pond will be sized as required to meet or exceed the standards outlined in NFPA 1142 (Water Supplies for Suburban and Rural Fire Fighting) guidelines. County fire authorities have been consulted and are in agreement subject to the details of maintaining accessibility in a satisfactory manner.

## **GROUNDWATER/GEOTECHNICAL**

In December 2006, a comprehensive review and evaluation of groundwater availability was commissioned. The firm of Hydrogeological Consultants Ltd (HCL) was engaged to conduct the review. A copy of HCL's report is appended to form part of this Area Structure Plan document.

The conclusion of the HCL review and evaluation is summarized as follows:

The bedrock aquifer below HiLand Spruce is capable of supporting all proposed and future new water wells (Page 6). The report further indicates (Page 5), that there are no adverse effects on existing groundwater users, the aquifer in which the water wells are completed or, the resource itself.

There should be no concern therefore, with respect to groundwater availability or impact.

## **NEAR SURFACE WATERTABLE**

There are no discernable indications that any such conditions exist nor, has there been any near surface water table conditions within the existing developed portion of the HiLand Spruce subdivision. The higher and better-drained back lands are even less likely to have near-surface water table conditions. The excavation involved in creating the dugout and proposed fire pond showed no groundwater seepage and the depth excavated was ten to fifteen meters below surface. Initial charging of the excavation was achieved with first snowmelt 2007 and levels were sustained during summer months.

## **EXISTING AND SURROUNDING LAND USE**

The surrounding area is primarily rural in character with the exception of lake related residential development. The Hamlet of Buck Lake is some 2.5km to the south via TWP Road 462 and RR 63.

There are no intensive livestock operations within the 2km setback guidelines under the Food and Rural Development Guidelines – Minimum Distance Separation Formula, nor is there an airfield (noise), a sour gas facility, or a former landfill operation in close proximity to the HiLand Spruce community. The closest oil well is located approximately in the middle of the NW-10-46-6-5 and is separated from the proposed expansion area by pasture lands and residential development within the Avalon Wynd subdivision and the already developed portion of HiLand Spruce Estates.

There are no known or potential sources of pollution or contamination either on or adjacent to the plan area and there are no encroachments on the land by pipelines or transmission lines of any type except for the provision of domestic services, i.e. power, cable, natural gas etc required to service the existing subdivision and the owner's estate parcel.

In summary, there are no constraints to development of the plan area as proposed, save County Council's favourable consideration and approval.

## **ADJACENT LAND USE**

To the South of HiLand Spruce Estates are two subdivisions, one that has been in existence for numerous decades and, the more recent cottage subdivision known as Avalon Wynd. All three subdivisions have primary access from TWP Road 462, which also serves to provide public lake access and small watercraft launching or winter ice access.

To the East of HiLand Spruce are the shoreline of Buck Lake and, the southern tip of the West Point Beach cottage subdivision. Separating West Point and HiLand Spruce is an undeveloped, heavily treed road allowance that provides pathway access to the lakeshore.

To the North of the proposed future development areas are pasturelands, cultivated fields and scattered bush lands separated by TWP Road 462A. This public road also provides primary access to the West Point Beach subdivision, the Segal subdivision and to the eastern portion of the HiLand Spruce subdivision. The owner's estate parcel also relies on TWP Road 462A for primary access. Future development of the expansion lands will tie HiLand Spruce to TWP Road 462A via a proposed future internal subdivision road that is deliberately made circuitous to discourage thru traffic and to respond to concerns expressed about short cutting, potential speeding and dust. This future road will not be developed until the future development lands are subdivided and there is the presence of residents to provide supervision for that area.

Finally, to the West of HiLand Spruce Estates are cultivated agricultural lands, which are delineated by a natural treed windbreak and buffer of aspen, poplar and willow. Emergency vehicle access for grass or bush fire and/or police vehicles has been provided at the request of the County.

#### **LAND USE BACKGROUND**

The HiLand Spruce lands have a history of agriculture. There is no indication of any other activity, exploration, drilling, resource extraction, landfill or habitation of any kind that would distract from development for lakeshore residential use. There is no evidence of domestic waste or any other disposable debris from either the existing or previous owners.

Further, the site is clear of any known historical occupation or evidence of any historical structure or archaeological findings. Contact has been made with Alberta Historical Resources and notice of this Area Structure Plan document will be provided for their review and comment through the circulation process.

#### **SEWAGE TREATMENT**

All proposed and future lakeshore residential sites will be in excess of one acre in area and will therefore qualify for septic tank and field systems. The intent is that these lots will be serviced for sewage treatment in the same fashion as existing lots in HiLand Spruce Estates i.e. septic tile field and/or pump out holding tank. If at some future date the County makes available a feasible piped sewage catchments and treatment system, a possible sewer alignment concept is illustrated on MAP 4 (Possible Future Sewer Service Plan). All private installations are required to comply with statutory County standards.

It is recognized that the County has an off-site levy in place of \$2,034 (two thousand and thirty four) dollars per lot for all lots requiring sewage treatment. It is understood that this off-site levy is to be applied at the Development or Building permit stage. Caveats on title will be required at subdivision approval to ensure awareness of this levy.



## **STORMWATER MANAGEMENT AND DRAINAGE PLAN**

The SE ¼-15-46-6-W5M is notably well drained. The land is high in elevation relative to the drainage basin of Buck Lake and there is an established system of shallow grassed swales that effectively drain the entire quarter section. There are no depressions, low areas or wetlands on the property except for a substantial dugout that is intended to provide for farm use and to serve as a sustainable fire pond for the entire HiLand Spruce subdivision.

Currently, both the proposed eleven lot subdivision and the "future" development back lands drain over land to the existing subdivision road and ditch system to merge with the County ditch and culvert crossing of TWP Rd. 462.

The Stormwater management and drainage plan is to direct run off waters from the proposed and "future" development lands away from the internal road and ditch system and to channel these water flows to the excavated dugout fire pond. The contours of the land are conveniently conducive to that design solution.

A shallow grassed swale along the north boundary of the proposed eleven lot subdivision and/or minor re-grading of an existing road drainage ditch will reverse flow away from the existing internal subdivision road and ditch to provide sustainable water supply for the excavated dugout and fire pond. This will result in less water run off to TWP Rd. 462 than currently exists since both the proposed subdivision and the "future" area for subdivision will be diverted to the dugout and fire pond. Further, the dugout and fire pond will serve to provide a sediment settling function for snowmelt and rainfall emanating from the back lands area. The existing system of grassed swales through the developed portion of the subdivision will serve to handle any unlikely overflow conditions.

It is notable that the SE ¼ of section 15 is a self-contained drainage parcel. No other lands drain into the quarter section and no drainage from the quarter section impacts other lands.

Significant benefits result from the proposed storm water management and drainage plan, including;

- Creation of a sustainable fire pond to serve the area with a dependable water supply
- Substantial reduction of the catchment area feeding the existing internal road and ditch system with corresponding reduction to drainage flow of TWP Rd. 462
- Environmental benefit in the provision of a sediment settling function by diversion of overland drainage to the dugout / fire pond.

The drainage plan concept is illustrated on Map 6, which has been verified feasible in concept by Altime Engineering Ltd (Addendum II) dated May 2008.

## **TRAFFIC AND ROADS**

The proposed extension of the HiLand Spruce subdivision by eleven new sites will not impact the existing road system or lot owners in any significant manner. The roadways that will serve eight out of the eleven proposed new lots are already constructed and are in use by owners who currently have frontage onto one side of this existing constructed roadway. Extension of the existing road is to service only three of the proposed new lots.

Future development of the backhands will expand circulation and access to the area. A future phase of development will produce a second primary entrance into HiLand Spruce Estates that will provide convenient access for new residents while discouraging shortcutting thru the existing subdivision. A second entrance, connected to the existing interior road will provide emergency vehicle and service vehicle access thru the connected road system.

The expanded road system maintains the current road width (20m) and profile of the existing subdivided area. It is to be gravelled to County standards and policies respecting surface finish.

Of note is a remnant portion of registered but undeveloped County road allowance that is of no current or future use to the County. The Development Concept Plan (MAP 3) proposes closure of that remnant road allowance for consolidation with the future phase of subdivision.

The County's policy is to assess a levy of \$2,000 (two thousand) dollars per subdivision lot as a road contribution. The owner / developer is aware of this policy and acknowledges the requirement.

## **ZONING**

The subdivided and developed portion of HiLand Spruce is appropriately zoned LR-Lakeshore Residential under Land Use Bylaw No. 95/54, the balance of the quarter section is AG-Agricultural including the owner's estate parcel. The proposed expansion of the existing subdivision will require re-zoning to LR Lakeshore Residential. That re-zoning is the subject of a separate application. The balance of the quarter section, including the estate parcel, will remain under the AG District Zone until further development lands is proposed.

## **MUNICIPAL AND ENVIRONMENTAL RESERVES**

The area of land currently proposed for development is 4.736ha (11.702 acres). Municipal Reserve Dedication in the amount of 0.47ha (1.17 acres) is required pursuant to the Municipal Government Act for Alberta. The County can either defer reserves (to the future subdivision area), take land for public use upon subdivision or, take cash in lieu. Having regard to the circumstances of the land and the configuration of the lot layout and road system, the owner would prefer to defer Municipal Reserve to the future development lands or, to provide cash in lieu of dedication. Either would be acceptable.

With respect to Environmental Reserve, there are no lands within the undeveloped portions of the quarter section that could be classified or designated as Environmental Reserve lands. Environmental Reserve is therefore not a consideration of this planning document.

## **TENTATIVE PLAN OF SUBDIVISION**

MAP 3 (Development Concept Plan) shows in detail a proposed subdivision containing eleven new development sites in context with existing development and possible future development. Application to create eleven new development sites has been submitted concurrently with this Area Structure Plan document.

## **ENVIRONMENTAL ASSESSMENT**

This document describes in detail the features of the plan area and the framework for future development. There are no known environmental issues, conditions or impacts that require further study or comment. The back lands of the plan area are well suited for the intended use and the development concept integrates well with the existing and developed subdivision of HiLand Spruce Estates.

## **PUBLIC INPUT**

On October 27, 2007 an open house information meeting was held at the Buck Lake Community Centre. The purpose of the meeting was to present the concepts for development as contained in the proposed HiLand Spruce Estates Area Structure Plan and to obtain input from the area residents. Notice of the meeting was well advertised in the Pipestone Flyer and the Buck Lake Hardware News Bulletin in two issues prior to the open house meeting. Posters were placed on local bulletin boards and phone calls were made between residents of HiLand Spruce sub division as reminders. Large-scale plans illustrating the proposed ASP were displayed and discussed one on one with all who attended.

The meeting was attended by approximately twenty interested people. Only fourteen chose to register their names. An additional three persons registered their comments by telephone. All were encouraged to submit their comments and concerns directly to the County offices and several did so. The letters submitted must speak for themselves but there were really only three key issues or concerns expressed. They include;

- a concern about speeding traffic
- concern about dust and noise generated by speeding traffic and
- a strong opposition to the proposed sub division road being extended to TWP Rd. 462A

The public meeting produced no substantive concern about either the proposed sub division or the possible future development of the back lands. The concerns expressed had to do with speed of traffic and the resulting noise and dust conditions, which are normally experienced with gravelled roads. There is an obvious desire by a few to push for some form of ongoing dust abatement solution. There is also a desire by a few residents outside of the HiLand Spruce Community, to impose broader hard surfacing or dust attenuation requirements, all at the expense of the developer, of course. Clearly their desire is to include much more hard surfacing than the minor extension of road required to service only three new building sites. That suggestion is not equitable, not feasible, reasonable or acceptable. If the lot owners in the area, both within HiLand Spruce and those that would benefit by an upgraded TWP Rd 462 were to petition the County for local improvement funding, that would be equitable. All residents, including the developer would benefit equally. That is precisely what the local improvement funding process is intended to address.

The County's policies respecting road surfacing is summarized to the effect that internal road surfaces must reflect the road surface that exists on the road from which access is gained. In this instance, both TWP Rd. 462 and the access road into HiLand Spruce Estates are gravelled.

The solution to dust and noise concerns is to apply and enforce strict speed limits and to not extend the internal roadway to connect with TWP Rd. 462A. With regard to any concerns about dust during construction of the extension road, water sprinkling will occur as required to minimize any unlikely impact. The area of the intersection with TWP Rd. 462 could benefit by intermittent spraying by the County, to alleviate dust caused by vehicles turning into HiLand Spruce and/or accessing the boat launch.

## **FURTHER STUDIES**

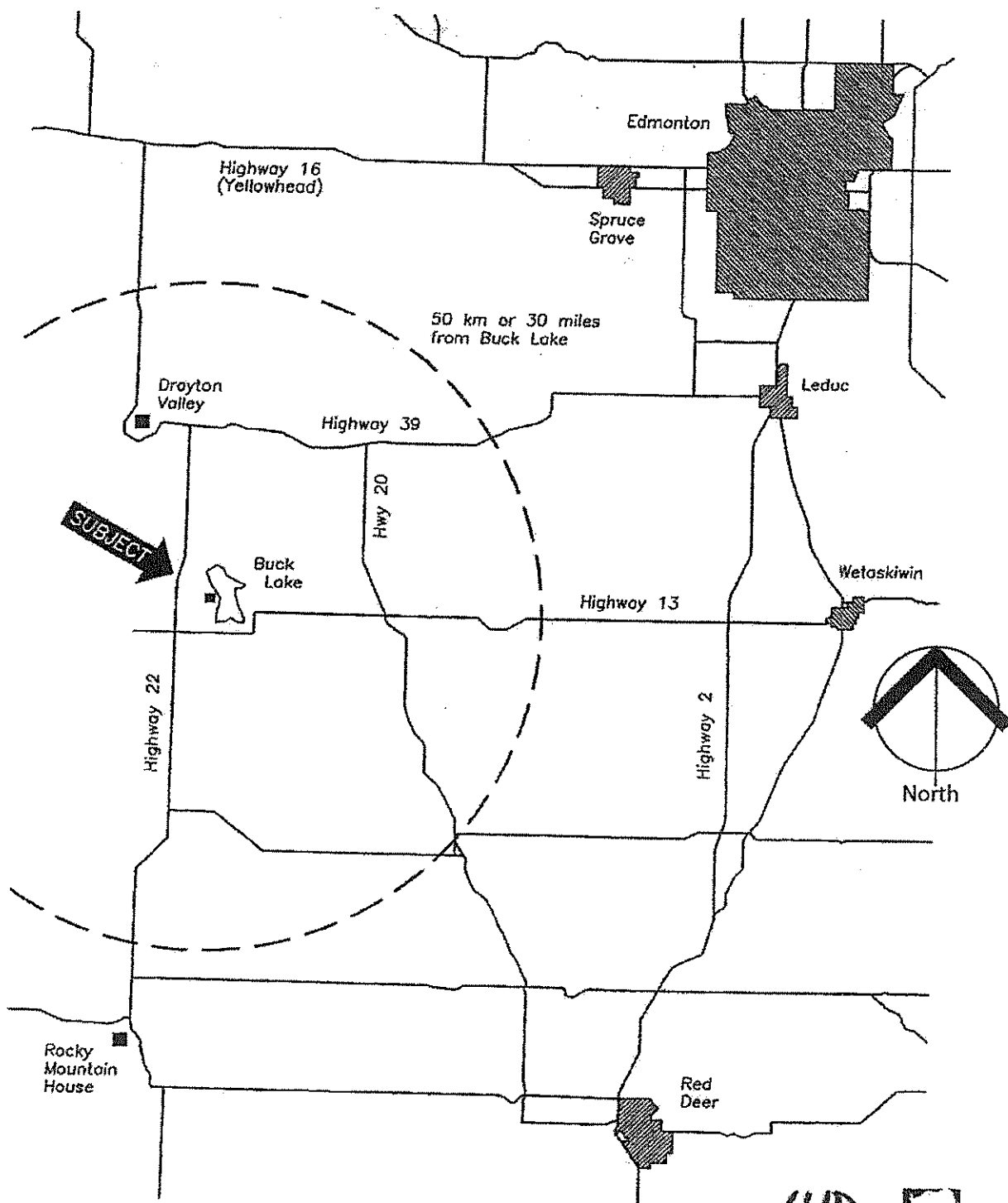
For the purpose of Area Structure Plan bylaw consideration, this document is considered to be complete and adequate for that purpose.

Respectfully prepared and submitted by:



W.T. Candler, m.c.i.p., ACP  
Land Use Planner

NOTE: The preceding information is believed to be accurate, complete and adequate for planning purposes at the Area Structure Plan bylaw level. For further clarification contact the writer at (780) 435-3537 or by email at [wcandler@telus.net](mailto:wcandler@telus.net)



## **HI LAND SPRUCE ESTATES**

Showing :  
Proposed Development within the  
S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
**County of Wetaskiwin No.10**

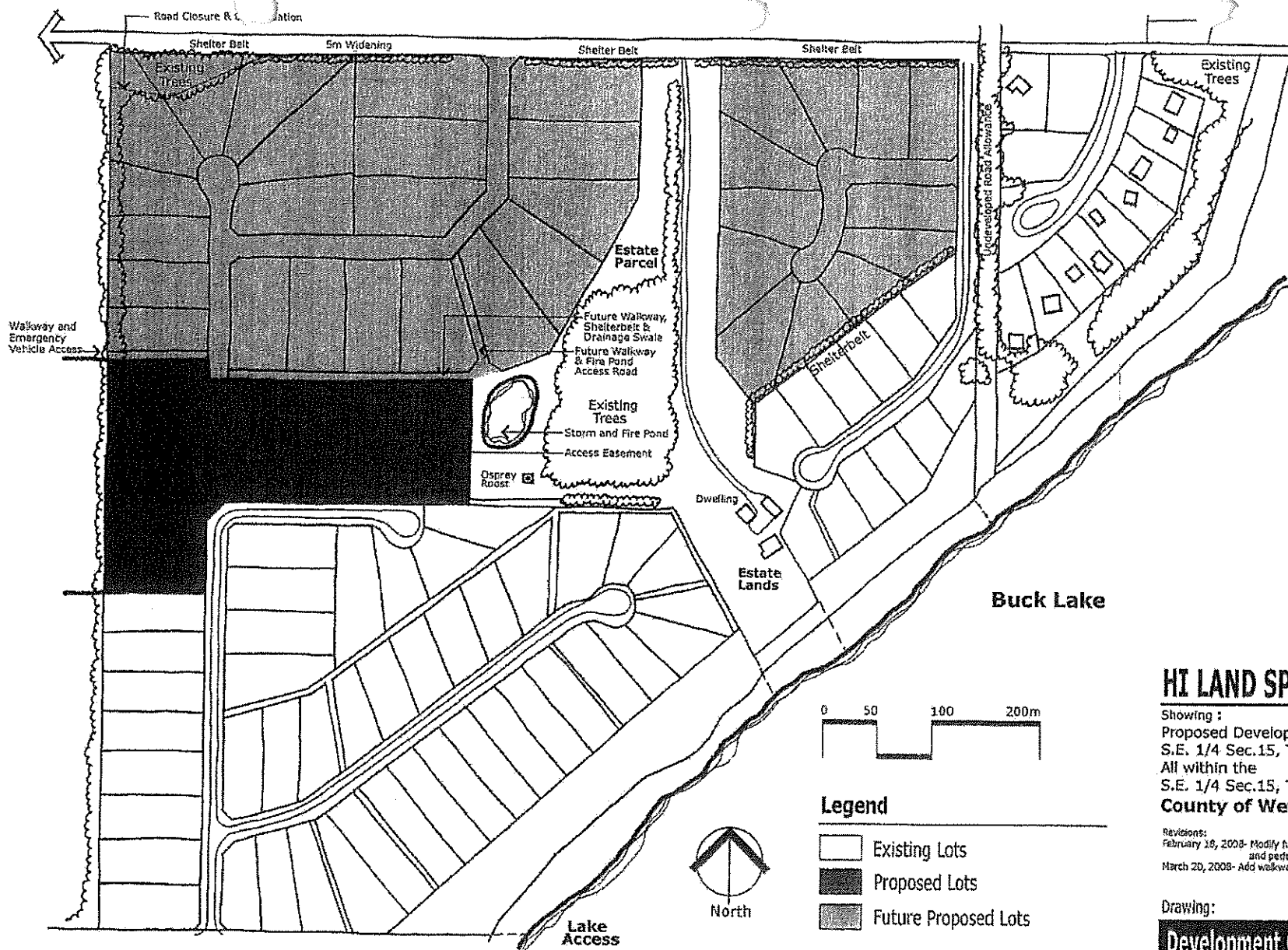
Drawing:

**Vicinity Map 1**

**LUP**  
Consulting  
Land Use Planning

**RHINO**  
DESIGNS

Prepared by: LUP Consulting  
Drawn by: Rhino Designs



Prepared by:

**LUP**  
Consulting  
Land Use Planning



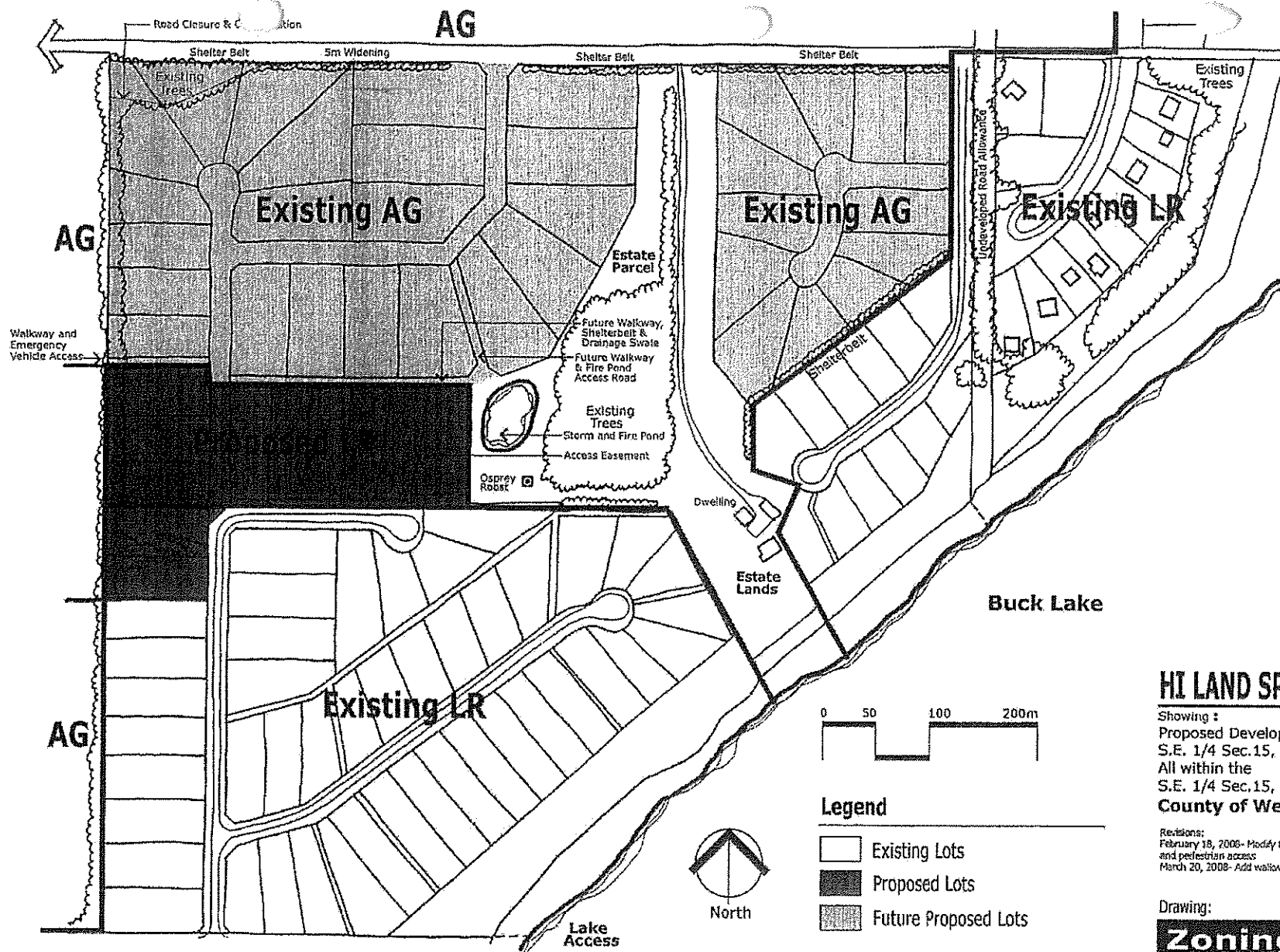
## HI LAND SPRUCE ESTATES

Showing :  
Proposed Development within the  
S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
All within the  
S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
County of Wetaskiwin No.10

Revisions:  
February 18, 2008- Modify future proposed lots, add emergency  
and pedestrian access  
March 20, 2008- Add walkway and swale

Drawing:

**Development Concept Plan 3**



Prepared by:  
**LUP**  
 Consulting  
 Land Use Planning



## HI LAND SPRUCE ESTATES

Showing:  
 Proposed Development within the  
 S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
 All within the  
 S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
 County of Wetaskiwin No.10

Revisions:  
 February 18, 2006 - Modify future proposed lots, add emergency  
 and pedestrian access  
 March 20, 2008 - Add walkway and swale

Drawing:

**Zoning Plan 4**

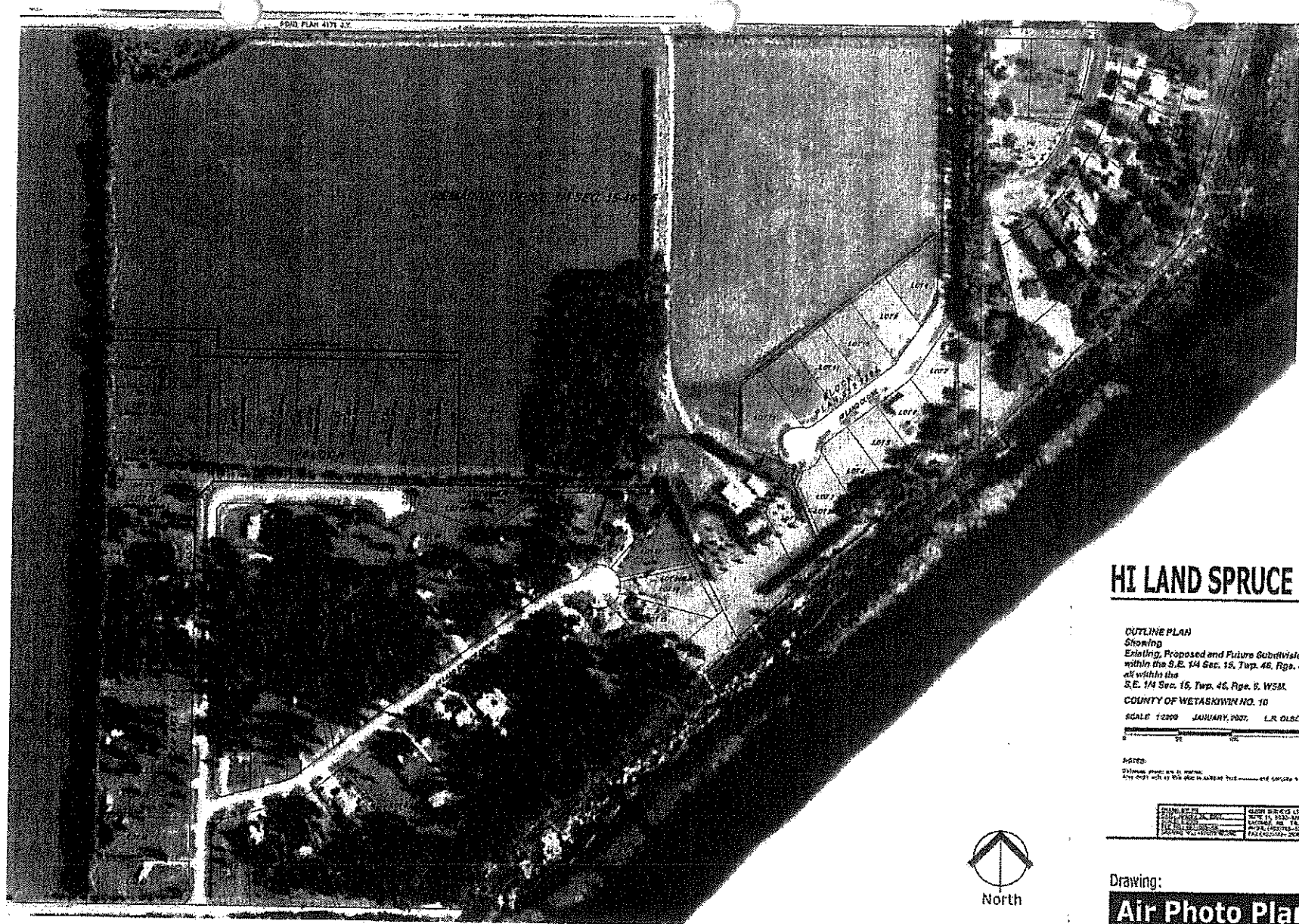


### Legend

- Existing Lots
- Proposed Lots
- Future Proposed Lots







Prepared by:  
**LUP**  
 Consulting  
 Land Use Planning

## HI LAND SPRUCE ESTATES

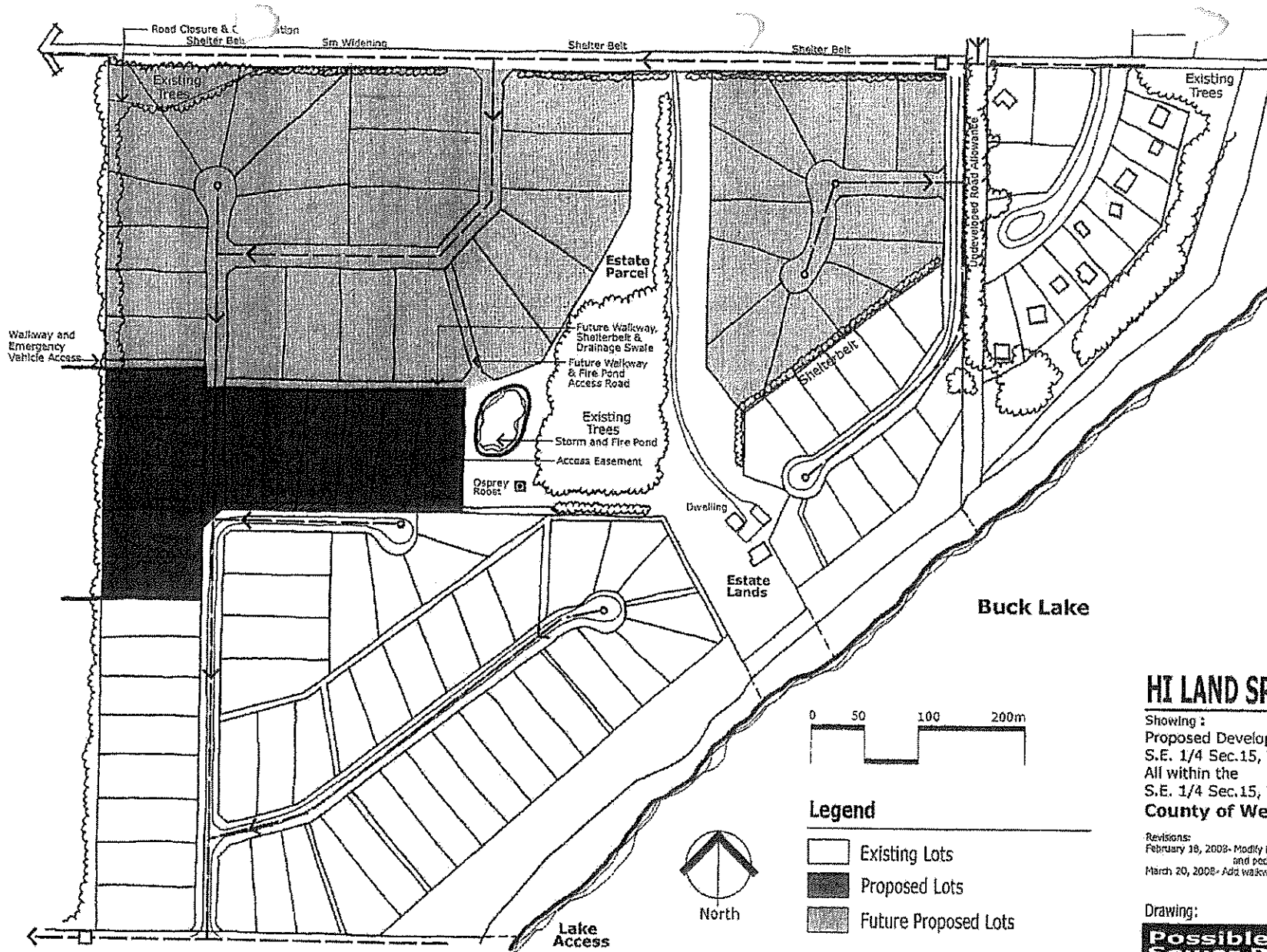
**OUTLINE PLAN**  
 Showing  
 Existing, Proposed and Future Subdivision Design  
 within the S.E. 1/4 Sec. 15, Twp. 46, Rge. 6, W5M.  
 all within the  
 S.E. 1/4 Sec. 15, Twp. 46, Rge. 6, W5M.  
 COUNTY OF WETASKIWIN NO. 10  
 SCALE 1:2000 JANUARY, 2007, L.R. OLSON A.L.R.

NOTES:  
 1. All dimensions are in metres.  
 2. Any part not to scale will be as shown on the ground.

OWNER: L.R. OLSON	DATE: 15 JAN 2007
PROJECT: HI LAND SPRUCE ESTATES	SCALE: AS SHOWN
DATE: 15 JAN 2007	PROJECT: HI LAND SPRUCE ESTATES
SCALE: 1:2000	PROJECT: HI LAND SPRUCE ESTATES



Drawing:  
**Air Photo Plan 2**



Prepared by:

**LUP**  
Consulting  
Land Use Planning



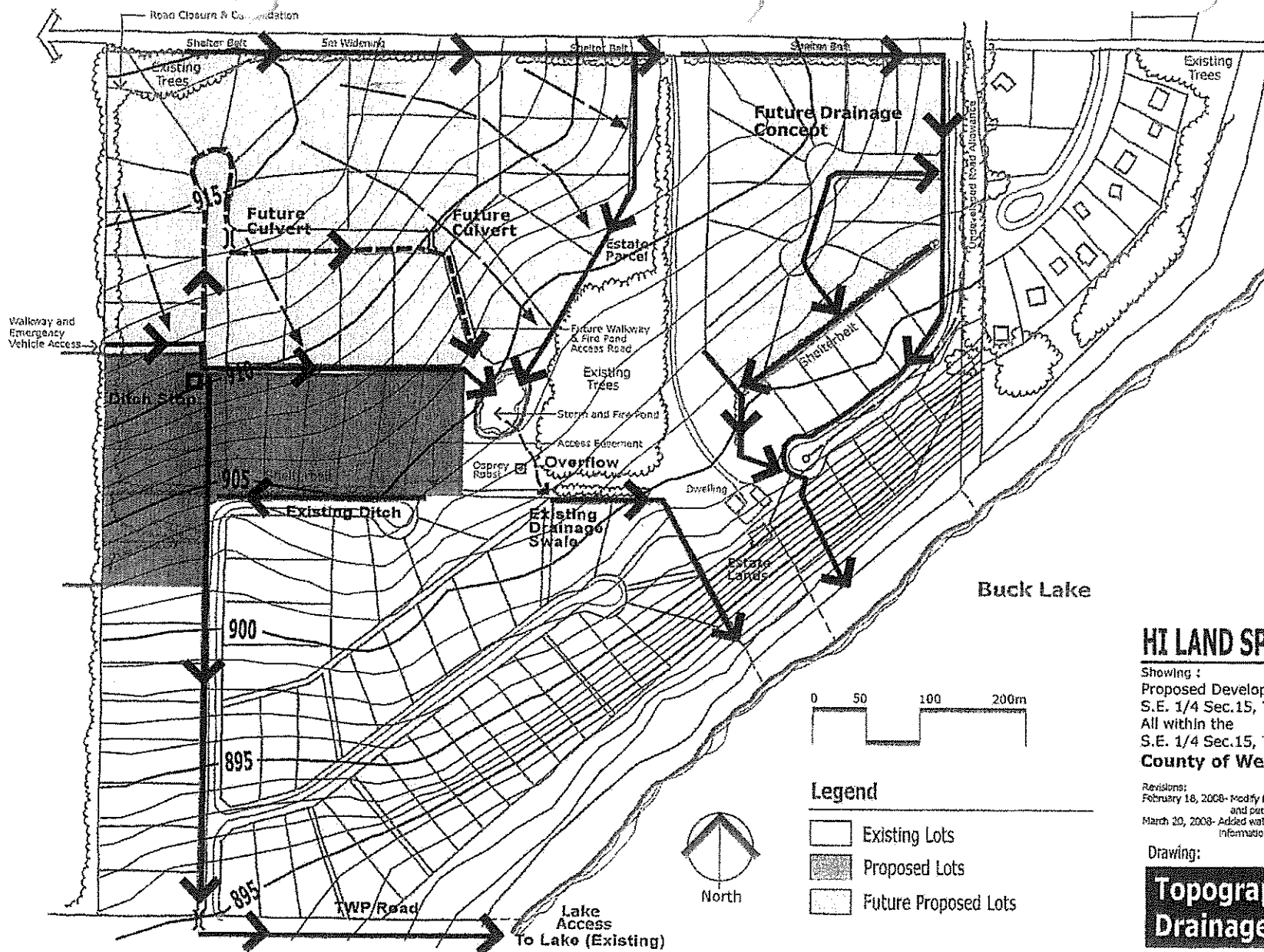
## HI LAND SPRUCE ESTATES

Showing:  
Proposed Development within the  
S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
All within the  
S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
County of Wetaskiwin No.10

Revisions:  
February 18, 2008- Modify future proposed lots, add emergency  
and pedestrian access  
March 20, 2008- Add walkway and drainage swale

Drawing:

**Possible Future Sewer Plan 5**



Prepared by:  
**LUP**  
 Consulting  
 Land Use Planning



## HI LAND SPRUCE ESTATES

Showing :  
 Proposed Development within the  
 S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
 All within the  
 S.E. 1/4 Sec.15, Twp. 46, Rge. 6, W5M  
**County of Wetaskiwin No.10**

Revisions:  
 February 18, 2008- Modify future proposed lots, add emergency  
 and pedestrian access  
 March 20, 2008- Added walkway and swale, included drainage  
 information

Drawing:

**Topographic and  
 Drainage Plan**

**6**