
Conceptual Scheme

SE 9-52-22-W4

June 2006



Conceptual Scheme

SE 9-52-22-W4

1 INTRODUCTION

1.1 Purpose

The proposed Conceptual Scheme (CS) has been prepared by Strathcona County Planning and Development Services on behalf of Richard Kulhawe and Ken Greenwood, landowners within the SE 9-52-22-W4. The purpose of this CS is to provide supporting rationale for the future redistricting and subdivision of the land to accommodate rural residential development and to coordinate development planning of adjoining lands.

1.2 Location

The lands are located approx. 1 km south of Township Road 522 on the west side of Range Road 223 (Figure 1). The quarter section is bounded by the country residential subdivision known as Jidaro Valley to the west, numerous rural residential/agricultural parcels to the north and east, and an agricultural parcel to the south.

1.3 Planning Policy Context

Strathcona County's Municipal Development Plan Bylaw 38-98, places the lands within the Agricultural/Large Rural Residential Policy Area. Pursuant to the Agricultural/Large Rural Residential Policy Area, Council may establish a policy in the Council Policy Handbook outlining the circumstances, under which a Conceptual Scheme is required, as well as the purpose, general content and procedures required for the preparation and adoption of a Conceptual Scheme. Council Policy SER-008-019 – Conceptual Schemes requires that a Conceptual Scheme be prepared where the land being proposed for redistricting or subdivision is within the Agricultural Large Rural Residential Policy Area of the MDP and is 16 hectares (40 acres) or more in size. The subject lands proposed for redistricting and subdivision are approximately 56.67 hectares (140.0 acres).

Further, the Agricultural/Large Rural Residential Policy Area limits the number of parcels on a quarter section to a maximum of 8. However, there is policy that supports up to an additional 2 parcels, to a maximum of 10 on a quarter section, where the land includes priority habitat that is of significant ecological value to the community and one of three mechanisms, in addition to Environmental Reserve and Municipal Reserve, is used to conserve that habitat. The subject lands contain significant priority habitat and this Conceptual Scheme will employ one of the methods identified within the Municipal Development Plan to conserve the habitat and support the proposal for 10 parcels on the quarter section.

The County's Land Use Bylaw 8-2001 currently zones the lands as AG Agriculture: General District. The minimum parcel size within the AG District is 32 ha (80 ac). In order to accommodate the conservation of significant amounts of habitat and

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environmental features, the remaining developable area requires that the lands be redistricted to a land use district that supports parcels less than 32 ha (80 ac). Further, where there is protection of environmentally sensitive lands the parcel sizes within the Agricultural/Large Rural Residential Policy Area may be a minimum of 2 ha (5 ac). Land Use Bylaw 8-2001 does not have a standard district that permits minimum parcels of 2 ha (5 ac). Therefore, this Conceptual Scheme supports the adoption of a site specific special purpose DC Direct Control District where standard land use districting will not apply.

2 EXISTING CONDITIONS

2.1 Legal Plan

The quarter section currently contains 4 parcels. The following table summarizes the existing parcels:

Legal Description	Area Ha	Area Ac
Plan 458 RS, Lot 4	16.20	40.01
Plan 852 2234 Block 1 Lot 2A	1.42	3.50
Plan 892 0395 Block 1 Lot 5	39.10	96.52
Plan 892 0395 Block 1 Lot 6	8.10	20.00
Total	64.82	160.03

2.2 Existing Development

All 4 of the existing parcels on the quarter section are occupied by a single dwelling and ancillary buildings. All development is on the east side of the quarter section within close proximity of Range Road 223. Each of the parcels has its own access to Range Road 223.

2.3 Land Form

The quarter section is approximately 80% tree covered with the remaining lands being wetlands and a pasture area in the Southwest corner of the lands. The subject lands are severely limited in agricultural sustainability.

The general topographic relief of the quarter section is characterized as rolling with scattered shallow depressions supporting isolated ephemeral wetlands. One large significant wetland is located in the south central portion of the quarter section. No permanent creeks were observed on the site; however, there is one drainage channel from the southwest corner to the South central wetland.

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3 ENVIRONMENT

3.1 General

The SE 9-52-22-W4 is a relatively intact island of mature forest and wetlands in a landscape of disconnected residential and agricultural land uses. Through provincial legislation and municipal policy, a priority has been placed on protection of these sites to encourage a balance of conservation and development. The Municipal Government Act gives municipalities the authority to protect environmentally sensitive lands through the use of Environmental Reserves (ER). The County has taken this a step further and provided landowners that are proposing to subdivide with incentives to conserve additional environmental features such as upland habitat and wildlife corridors through policy in the Municipal Development Plan. A design process, known as Conservation Design, has been utilized by the County to achieve the protection of the most valuable environmental features. The process starts with the identification of environmental features rather than developable areas as has been the typical practice in the past. Through the use of tools such as the County's Prioritized Landscape Ecology Assessment and on-site biophysical assessments the most valuable environmental features can be identified and protected.

3.2 Environmental Policy

The Municipal Government Act provides for the protection of environmental features such as swamps, gullies, ravines, natural drainage course, etc. when a landowner submits an application for subdivision. Environmental Reserve may be applied to any of the lands described in the Act, without compensation, by the Subdivision Authority. Current County policy requires the dedication of Environmental Reserve when proposed subdivisions involve environmentally sensitive lands.

The Municipal Development Plan discourages further clearing or development of lands in areas where native vegetation is important for soil conservation, water resource protection or wildlife habitat. However, within the Agricultural/Large Rural Residential Policy Area, where the land includes priority upland habitat (forest and grassland) that is of significant ecological value to the community the County will support development and consider allowing the development of up to 2 additional parcels above the maximum of 8 on a quarter section, provided that the features are protected through an over dedication of municipal reserve, the use of conservation easements, and/or the dedication of a conservation lot that is owned and operated by a local homeowners association or nature conservancy group. This Conceptual Scheme proposes that large blocks of upland forest and features that do not qualify for ER be protected through the use of conservation lots.

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3.3 Prioritized Landscape Ecology Assessment (PLEA)

The Prioritized Landscape Ecology Assessment was undertaken in 1997 by the County to provide planners with a tool to identify existing priority wildlife habitats and consider their active conservation and/or restoration into the County's planning process, such that conflicts between land development and land conservation can be minimized. The PLEA is used to screen and flag lands that may require further consideration through on-site assessments and analysis.

The PLEA identifies the following priority habitat features in the SE 9-52-22-W4M:

- Ua: Upland Poplar
- Uc: Upland forest with small wetlands
- Wb: Bog
- Wg: Swamp, Wetland Wildlife Habitat

The priority habitat features are shown on the PLEA mapping in Figure 2.

3.4 Biophysical Assessment

A biophysical assessment of the lands was carried out in accordance with the Conceptual Scheme Policy. The overall objective of a biophysical assessment is to characterize the natural features on a site in order to identify and prioritize those features that should be given the highest conservation consideration. The following recommendations refer to activities that should be undertaken to facilitate development of a rural residential area in a way that incorporates, and therefore conserves, the biophysical resources.

- Retain the significant wetland features (ie. PLEA - Wg), including a minimum buffer of 7.5 m, to maintain the hydrological functions (surface water storage, water quality improvement, wildlife habitat, recreation potential, aesthetics) as ER,
- Retain large portions of the upland forest stand (ie. PLEA - Ua, Uc), to maintain the hydrological functions and provide habitat diversity and connectivity, as Municipal Reserve (MR).
- Retain large portions of the spruce bog forests (ie. PLEA - Wb), to maintain the hydrological functions and provide habitat diversity, as MR.
- Maintain a physical connection between the ER and MR lands.
- Investigate the applicability of Conservation Easements to conserve upland forest areas, specifically where white spruce islands are beginning to dominate the canopy
- Work with the existing topography to the maximum extent as a means of conserving the existing drainage features and landscape character.
- Consult with Alberta Environment and Strathcona County regarding any changes to topography which may influence drainage.

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3.5 Reserves

Based on the recommendations of the biophysical assessment, Environmental Reserves are proposed to be dedicated for wetland areas and watercourses to the full extent described under the Municipal Government Act. Further, once the ER is delineated in a subdivision plan, an additional 7.5 m buffer shall be taken for access purposes.

Municipal Reserve (MR) is proposed to be dedicated to the full extent owing for the maintenance of forested habitat (both poplar and black spruce), based on a minimum of 10% of the land area less that area owing as ER. One large habitat block in the north half of the subject property is considered to be the best use of MR. This would conserve a larger area that incorporates a variety of habitats.

The biophysical has identified approx. 6.6 ha (16.3 ac) as Environmental Reserve as defined with the Act. The Conceptual Scheme proposes the dedication of approx. 5.9 ha (14.6 ac) of Municipal Reserve. This results in a voluntary over dedication of approx. 0.86 ha (2.13 ac) of MR.

3.6 Conservation

In addition to the Environmental Reserve and Municipal Reserve dedications, the Conceptual Scheme proposes to protect an additional 12.81 ha (30.1 ac) of priority upland, as identified through the PLEA and in the biophysical assessment, through the dedication of conservation lots. Further, a conservation easement has been proposed along the rear of the lots on the west boundary of the Conceptual Scheme for a wildlife corridor.

In total, approx. 26.2 ha (64.7 ac) of sensitive environmental lands or 40% of the quarter section will be protected through the use of ER, MR, conservation lots and easements.

3.7 Additional Lots

The Municipal Development Plan, Section 10.18(1)(iii), supports one additional lot for every 4 ha (10 ac) land that is registered under a separate title for the purposes of conserving significant habitat. The Conceptual Scheme proposes to protect approx. 12.81 ha (30.1 ac) of significant habitat through the use of conservation lots, therefore, supporting an additional two lots to the maximum of ten parcels permitted on the quarter section.

4 TRANSPORTATION

The biophysical revealed that the lands most suitable for development are located on the west side of the quarter section. Therefore, an access road, constructed to County standards will be built to the rear of the quarter section. Municipal Development Plan policy

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also requires that internal road access be provided to existing and new lots. However, given the location of the developable area, the constraints on design of a future subdivision, and the location of existing dwellings, Lots 1, 2 and 3, as shown on the development concept, will be allowed to maintain their existing accesses. The existing access to Lot 4 will be relocated to the internal road. All the proposed new parcels will gain access from the internal road.

Pursuant to Strathcona County's Engineering Servicing Standards a 5 metre road widening will be required adjacent to Range Road 223 and any additional right-of-way to accommodate for the required deceleration and acceleration lanes will be dedicated at the time of future subdivision.

5 SERVICING

The appropriate private on-site servicing for water and sewer will be determined at the time of subdivision to the satisfaction of Strathcona County.

6 PUBLIC INPUT

In accordance with Conceptual Scheme policy, meetings were held with all the landowners within the plan area on March 14, 2006, and with adjacent landowners on May 4, 2006 to gather input.

7 DEVELOPMENT CONCEPT

The Development Concept as illustrated in Figure 3, is a balance of conservation and rural residential use.

8 SUBDIVISION AND DEVELOPMENT CRITERIA

To assist in the preparation of future redistricting and subdivision applications the following list of Development Criteria have been developed for reference. The criteria was developed from policies, standards and regulations within the various applicable bylaws and statutory plans and from information gathered at meetings with landowners within the SE 9-52-22-W4 and the surrounding area. Additional criteria may be identified at the more detailed subdivision stage.

- 8.1 Subdivision and Development within the SE 9-52-22-W4 shall be consistent with the Development Concept shown in Figure 3.
- 8.2 The developer (applicants) will, through the subdivision application process be required to provide information for water and sewer servicing, access locations, internal road layout, municipal reserve, environmental reserve, and potential conservation easements/lots, geo-technical considerations/ constraints, approval fees, rural road levies and any other requirements deemed appropriate, to the satisfaction of Strathcona County.

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- 8.3 Technical considerations including a biophysical assessment or stormwater management report and any other studies deemed appropriate by Strathcona County to be provided, if required, to the satisfaction of Strathcona County at the time of subdivision. At all times County standards shall be maintained.
- 8.4 Future development shall only be allowed based on the provision of internal road access to individual parcels, constructed to County Standards, with the exception of proposed lots 1, 2, and 3. A potential location for internal road access is shown on Figure 3.
- 8.5 At the time of subdivision a 5 metre road widening and any additional right-of-way to accommodate for the required deceleration and acceleration lanes will be required adjacent to Range Road 223.
- 8.6 The minimum parcel size shall be 2.0 ha (5 ac).
- 8.7 The maximum number of residential parcels shall not exceed 10 on the quarter section.
- 8.8 Conservation lots and easements shall be dedicated/provided in a manner that is consistent with the Development Concept shown on Figure 3. A conservation easement shall be registered on the conservation lots to the satisfaction of the County at the time of subdivision.
- 8.9 Development adjacent to slopes, wetlands and water courses shall conform with environmental setbacks contained within the Land Use Bylaw 8-2001.
- 8.10 The subdivision and development shall be designed in a such a way as to minimize the amount of tree removal and site grading.

Note that the Development Concept shown on Figure 3 is conceptual and may change at the time of future subdivision upon further investigation of the quarter section and the preparation of detailed plans.

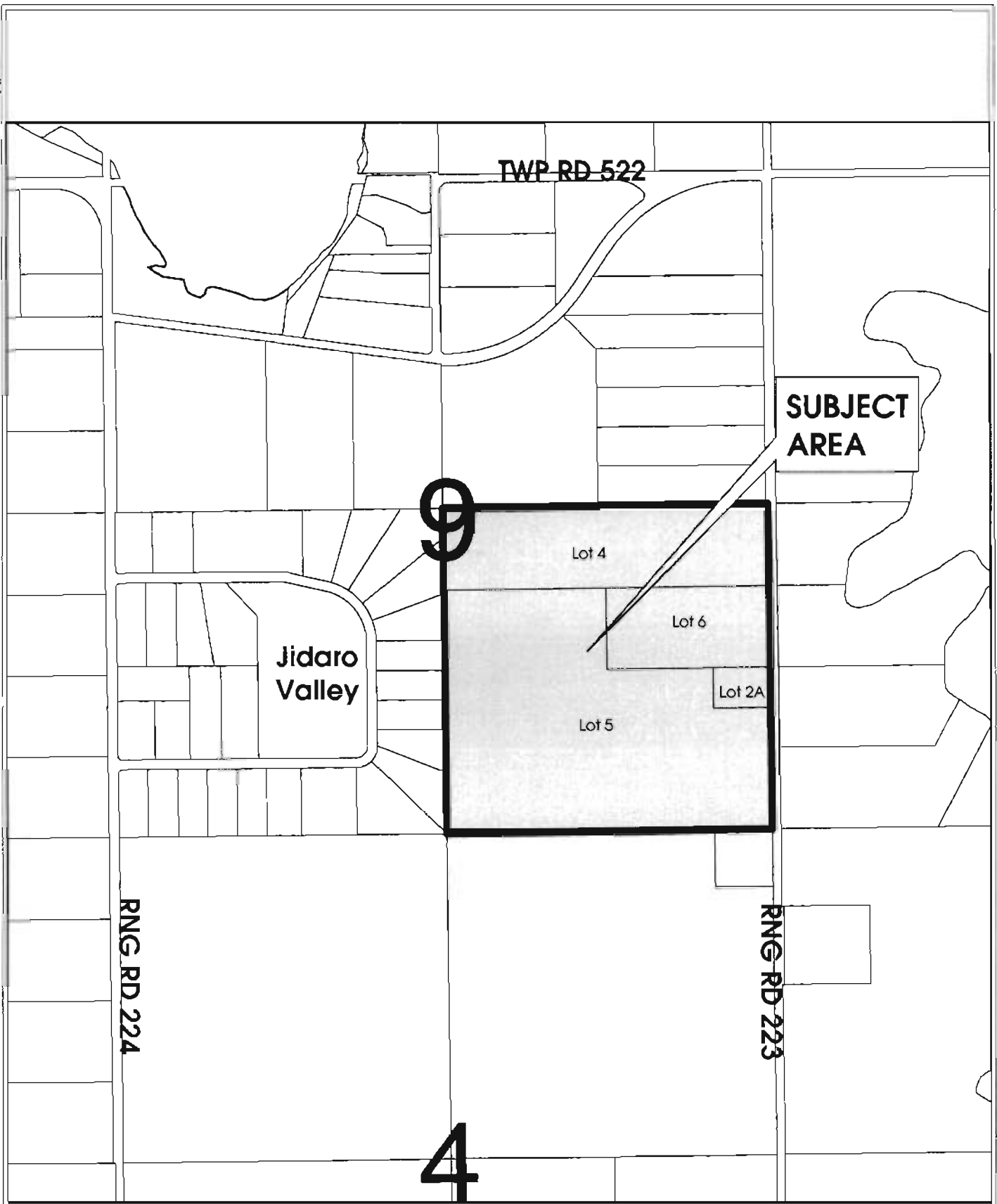
9 SUBDIVISION APPROVAL

Notwithstanding any other issues that may arise through the subdivision review process, the following will be addressed as conditions of subdivision:

- 9.1 Final location of property lines and parcel areas may be adjusted at the time of subdivision, however, shall comply with the maximum density and minimum lot areas of the Land Use Bylaw District for the lands.
- 9.2 A development agreement will be required to address the construction of an internal roadway and any offsite improvements required.
- 9.3 Any other conditions which may be applicable.

10 COMPLIANCE WITH OTHER LEGISLATION

Nothing in this Conceptual Scheme shall be interpreted as relieving a person from complying with Federal, Provincial or Municipal statutes or bylaws. In the event of a conflict between any of the provisions of this Conceptual Scheme and the provisions of any statute or bylaw, the provisions of the statute or bylaw shall prevail.



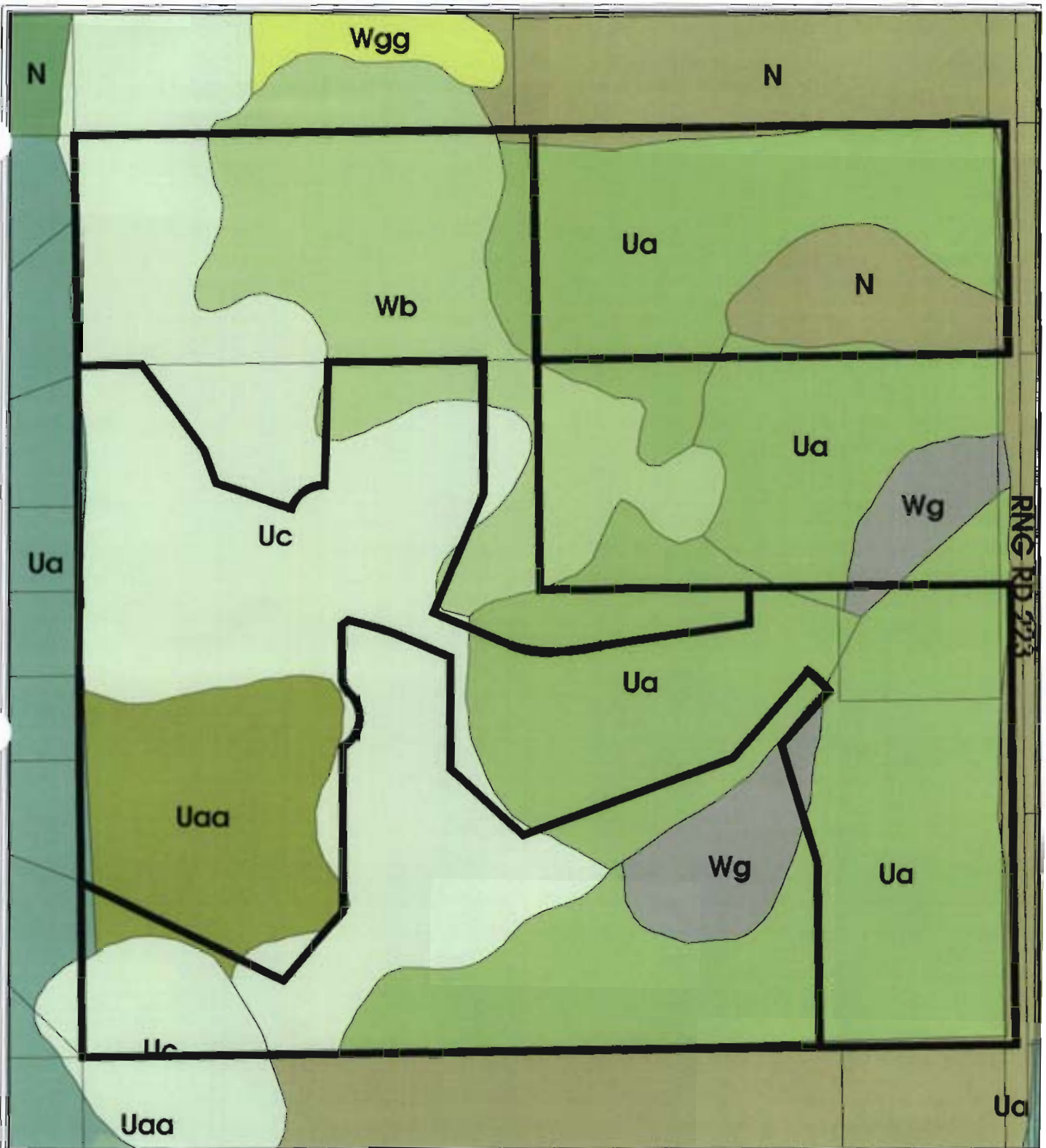
**FIGURE 1 KEY PLAN
CONCEPTUAL SCHEME SE 9-52-22-W4**

PLANNING & DEVELOPMENT SERVICES

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P22M0003 - Key Plan.mxd

Strathcona
County



Habitat Priority Areas

- Ua: Upland Poplar
- Uc: Upland forest with small wellands
- Wb: Bog
- Wg: Swamp, Wetland Wildlife Habitat

FIGURE 2 Prioritized Landscape Ecology Assessment (PLEA) CONCEPTUAL SCHEME SE 9-52-22-W4

PLANNING & DEVELOPMENT SERVICES

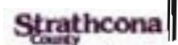
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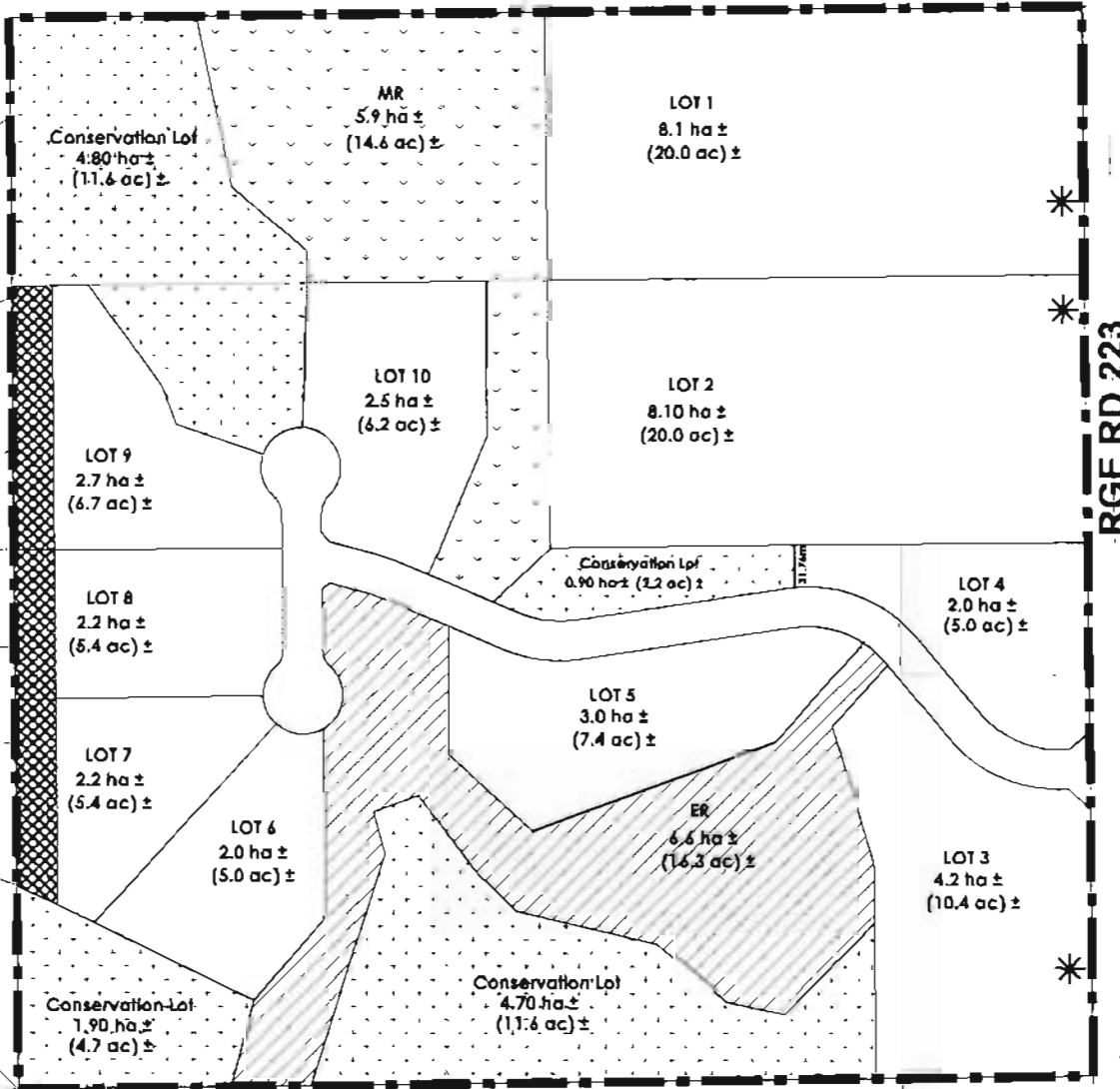
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CONCEPTUAL SCHEME

SE 9-52-22-W4



Legend

- — — —** SE 9-52-22-W4 =
Approx. 64.7ha (160ac) ±
GDA = Approx. 58.1ha (144ac) ±
- Developable Area =
Approx. 40.0ha (99.0ac) +/-
- Environmental Reserve =
Approx. 6.6ha (16.3ac) ±

- Municipal Reserve =
Approx. 5.90ha (14.6ac) +/-
- Conservation Lots =
Approx. 12.3ha (30.0ac) +/-
- Conservation Easement =
Approx. 1.4ha (3.5ac) +/-
- Existing Accesses to Remain

FIGURE 3 DEVELOPMENT CONCEPT
CONCEPTUAL SCHEME - SE 9-52-22-W4

PLANNING & DEVELOPMENT SERVICES

Drawn by: R. Ferrar	Dwg No.: P22M0003
Date Drawn: 25/07/2006 Adopted:	Scale: NOT TO SCALE

