
Conceptual Scheme

SW 31 & NW 30-51-22-W4

November 2007



Conceptual Scheme

SW 31 & NW 30-51-22-W4

1 INTRODUCTION

- 1.1 The purpose of a Conceptual Scheme (CS) is as follows:
- a) To provide a framework for the subsequent subdivision and/or development of land within the Country Residential Policy Area and the Agriculture Small Holdings Policy Area of the Municipal Development Plan;
 - b) To establish a potential plan of future subdivision or development that applies to a specific parcel of land; and
 - c) To ensure that the subdivision under review does not prohibit the ability of remnant parcels, or adjacent parcels, to be further subdivided in the future. This can be achieved through improved subdivision design and the protection of land for future road dedication to provide access to remnant lands owned by the applicant or adjoining lands.
- 1.2 As per Strathcona County Council Policy statement SER-008-019, the proposed Conceptual Scheme is necessary in this case as:
- a) The proposed subdivision would result in more than two parcels on the quarter section; and
 - b) There is a need to coordinate development planning or servicing of adjoining lands.
- 1.3 The subject Conceptual Scheme (CS) has been prepared by Strathcona County Planning and Development Services on behalf of Ken Horne, Blair & Susan Mossing, and Rod & Barb Ceretzke, landowners within the SW 31 & NW 30-51-22-W4.

2 OVERVIEW

- 2.1 Location: The lands are located southeast of the intersection of Highway 14 and Highway 21 (Figure 1). There is also a service road that spans the west boundary and south boundary of the north quarter section (SW 31) which provides access to the two existing parcels. The southern parcel (NW 30) has access directly from Highway 21. The quarter sections are bounded by agricultural parcels to the east, south and north. There are large rural residential parcels to the northeast and west of the parcel (across the highways).
- 2.2 Legal Description: SW 31 & NW 30-51-22-W4 (See Figure 1 for location)
- 2.3 Existing Land Uses: Three parcels, all districted AG Agriculture: General District
- a) 24.33 ha (60.11 ac) parcel - SW 31-51-22-W4
 - b) 24.3 ha (60.05 ac) parcel - SW 31-51-22-W4; Lot 1, Plan 912 0777
 - c) 63.03 ha (155.87 ac) parcel - NW 30-51-22-W4

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- 2.4 Existing Development:
- a) All of the existing parcels within the plan area are occupied by a single dwelling and ancillary buildings. Development on the SW 31-51-22-W4 is located in the north centre of the parcel and has access from the service road along Highway 14. Development on Plan 912 0777, Lot 1 is located on the western edge of the parcel very near where there is access from the service road along Highway 21. Development on the NW 30-51-22-W4 is located entirely in the northwest corner of the parcel, along Highway 21.
- 2.5 Canada Land Inventory Rating: Class 3 - 4 soils
- 2.6 Adjacent Land Uses:
- a) The lands are located southeast of the intersection of Highway 14 and Highway 21 (Figure 1). There is also a service road that spans the west boundary and south boundary of the north quarter section (SW 31) which provides access to the two existing parcels. The southern parcel (NW 30) has access directly from Highway 21. The quarter sections are bounded by agricultural parcels to the east, south and north. There are large rural residential parcels to the northeast and west of the parcel (across the highways).
- 2.7 Municipal Development Plan: Agriculture Small Holdings Policy Area
- 2.8 Land Use Bylaw:
- a) The subject land is currently districted as AG Agricultural District. Pursuant to the Land Use Bylaw 8-2001, the lands must be redistricted to DC Direct Control District and AD Agriculture: Future Development District prior to subdivision approval. The purpose of the DC District is to provide a mechanism to create districts with land use regulations for a specific site when the control by other districts would be inappropriate or inadequate. In this case, the proposed parcels fall between the RA Rural Residential/Agriculture District and the RC Country Residential District sizes.

3 CONCEPTUAL SCHEME (DESIGN CONCEPT)

- 3.1 The proposed Conceptual Scheme encompasses the entire SW 31 & NW 30-51-22-W4 quarter sections (Figure 2) and has been prepared in consultation with the affected and adjacent landowners of the quarter sections and Alberta Infrastructure and Transportation. The objective of the Conceptual Scheme is to illustrate the potential developable area, potential lot yield, potential access locations and potential reserve land (Environmental Reserve, Municipal Reserve and Conservation Lots).

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- 3.2 The Conceptual Scheme lays out the development of the land in three phases (see Figure 2). Phase I includes all the land within the remnant of the SW 31-51-22-W4, which contains 24.33 ha (60.11 ac). Phase II is located south of the remnant of SW 31-51-22-W4, legally described as Plan 912 0777, Lot 1 and contains 24.30 ha (60.05 ac). Phase III would continue southward into the NW 30-51-22-W4, which contains 63.03 ha (155.74 ac).
- 3.3 The Conceptual Scheme illustrates the proposed land use bylaw amendment application and future proposed subdivision. Based on the developable and undevelopable areas illustrated in Figure 2, 16 lots are proposed for the plan area. The areas required for future highway widening have been identified on the plan. Those dwellings within the highway widening area are considered temporary until the Province acquires the lands for future highway development.
- 3.4 Please note that the development concept shown on Figure 2 is conceptual and may change at the time of future subdivision if further investigation of the quarter section identifies additional constraints to development. Final lot sizes and dimensions will be determined at the time of subdivision.
- 3.5 The design concept incorporates conservation design principles. Those lands having significant environmental value have been identified for environmental reserve or conservation purposes with adjacent lands identified as municipal reserve to act as a buffer. The remaining lands have been identified for development.
- 3.6 Proposed Phasing:

Phase I - SW 31-51-22-W4

Gross Area:	24.33 ha	(60.11 ac)
Highway widening:	10.04 ha	(24.80 ac)
Environmental Reserve (ER):	1.91 ha	(4.70 ac)
Gross Developable Area:	12.38 ha	(30.59 ac)
Municipal Reserve:	0.04 ha	(0.1 ac)
Net Developable Area:	12.34 ha	(30.49 ac)

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Phase II - Plan 912 0777, Lot 1, SW 31-51-22-W4

Gross Area:	24.30 ha	(60.05 ac)
Highway widening:	3.30 ha	(8.15 ac)
Environmental Reserve (ER):	2.33 ha	(5.76 ac)
Gross Developable Area:	18.67 ha	(46.13 ac)
Municipal Reserve:	0.84 ha	(2.10 ac)
Net Developable Area:	17.83 ha	(44.06 ac)

Phase III - NW 30-51-22-W4

Gross Area:	63.03 ha	(155.74 ac)
Highway widening:	14.42 ha	(35.63 ac)
Environmental Reserve (ER):	3.05 ha	(7.54 ac)
Gross Developable Area:	45.56 ha	(112.57 ac)
Municipal Reserve:	2.76 ha	(6.80 ac)
Net Developable Area:	42.80 ha	(105.76 ac)

**Areas are estimates only; Final measurements to be confirmed at time of subdivision

4 ENVIRONMENTAL CONSIDERATIONS

- 4.1 Strathcona County's environmental management objectives are to minimize the impact of human activity and development on the natural environment; sustain and where necessary, improve upon the quality of water, land, air and natural resources within the County; increase community awareness regarding the impact of activity on the natural environment; promote environmentally friendly programs such as recycling and composting; and encourage the use of conservation easements and other tools to protect the environment. To assist in meeting the environmental objectives Priority Environment Management Areas (PEMA) were identified within the County. These areas were ranked as high, medium or low priority depending on the environmental sensitivity of the landscape.
- 4.2 The lands with the plan area contain high and medium PEMA. Where lands contain high PEMA, a biophysical assessment, geotechnical assessment and/or environmental impact assessment is required prior to subdivision or development.
- 4.3 Prioritized Landscape Ecology Assessment (PLEA)
- a) In addition to the PEMA ranking in the Municipal Development Plan, 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

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lands that may require further consideration through on-site assessments and analysis. The PLEA identifies the following priority habitat features in the SW 31 & NW 30-51-22-W4M:

- Ub: Upland Mixedwood
- Uc: Upland forest with small wetlands
- Wa: Wetland Marsh
- Wb: Wetland Bog
- Wc: Wetland Slough
- Wd: Wetland Complex Without Open Water
- Wff: Wetland Restoration Drainage Course
- Wg: Wetland Swamp

4.4 Biophysical Assessment

- a) A biophysical assessment of the lands was carried out in accordance with the Municipal Development Plan and 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.

4.5 Site Conditions

- a) Approximately 90 % of the subject land has been subjected to tree clearing for agricultural purposes. The parcels are predominantly in Canada Land Inventory soil class 3 with a small portion being class 4. The haying and pasturing areas on the subject property have been cleared. Ephemeral, intermittent drainage swales and several wet areas are apparent on the subject property in areas where clearing has occurred. Larger more permanent wetlands are apparent in the northwest and northeast corners of the subject property. The majority of remaining upland forest is located within the northwest and southernmost portion of the subject property.
- b) The lands ranked as high PEMA are generally located in the areas of future highway widening. Mitigation of the these lands will be the responsibility of the Province at the time improvements to the highway are undertaken.

4.6 Reserve Recommendations

- a) Based on the biophysical assessment, 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:
 - i. Environmental Reserves (ER): Dedicate wetland areas 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.

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- ii. Municipal Reserves (MR): Proposed to be under-dedicated, based on a minimum of 10% of the land area less that area owing as ER. The remaining MR that is owing would be paid cash-in-lieu.
- b) Based on the findings of the biophysical approx. 7.29 ha (18 ac) has identified as Environmental Reserve as defined with the Act. The Conceptual Scheme proposes to dedicate approx. 3.64 ha (8.99 ac) of Municipal Reserve.

4.7 Conservation

- a) In addition to the Environmental Reserve and Municipal Reserve dedications, the Conceptual Scheme proposes to protect an additional 3.50 ha (8.65 ac) of sensitive areas through the use of Drainage Easements.
- b) In total, approx. 14.43 ha (35.66 ac) of sensitive environmental lands or 16% of the developable area will be protected through the use of ER, MR and Drainage Easements.

5 TRANSPORTATION

5.1 General

- a) The lands are located southeast of the intersection of Highway 14 and Highway 21 (Figure 1). Access to the SW 31 is provided via a service road that spans the west and north boundaries of the quarter section adjacent to Highway 14 and Highway 21. The southern parcel (NW 30) has access directly from Highway 21. Due to the proximity of the land to Highway 14 and Highway 21 the subject lands fall within jurisdiction Alberta Transportation. Therefore, approval from Alberta Transportation will be required prior to subdivision approval.

5.2 Internal Road

- a) The biophysical revealed that the lands most suitable for development are located on the central part of the quarter sections. Therefore, an internal access road, constructed to County standards, will be constructed through the middle of the quarter sections to serve any future subdivision. All lots will have internal access from this road as per Municipal Development Plan policy. At the end of the proposed internal road, there will be an undeveloped road allowance dedicated to allow access to the possibility of future subdivision on SW 30-51-22-W4.

5.3 Transportation Impact Assessment

- a) Due to the proximity of the land to Highway 14 and Highway 21, and the need to restrict access to the Highway 21/service road intersection, and the need to assess the intersection of Highway 14/Range Road 225; a Traffic Impact Study is required, Alberta Transportation. The recommendations outlined in the study will need to be implemented to the satisfaction of Alberta Transportation and Strathcona County in advance of subdivision registration.

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- 5.4 Highway Widening Area for Freeway Conversion/Interim Access
- a) Alberta Transportation has identified lands within the plan area that will be required for future upgrades and widening of Highway 21 and Highway 14 and are labeled as such on Figure 2. The subdivision is located at the crossroads of two Freeways (Highway 21 and Highway 14). In this regard Alberta Infrastructure and Transportation has indicated that the removal of the intersection of Range Road 225 with Highway 14 and the Intersection of Township Road 514 with Highway 21 will be required in the future. In view of this removal, a future traffic circulation network has been developed. This future traffic circulation network is shown on the attached Figure 5. The future removal of these two intersections (i.e. Highway 21/TR514 and Highway 14/Range Road 225 intersections) may be initiated by Alberta Infrastructure and Transportation as a result of the Highway upgrading or by Strathcona County as a result of further subdivision and/or development in the area that effects the operation of these intersections.
 - b) Since there are existing dwellings and accesses within the highway widening area, interim access and/or relocation of accesses will be required until the areas are acquired by the Province. The remnant following the subdivision of the SW 31-51-22-W4 will continue to have access to the existing service road until such time as the land is acquired by the Province. Since the residence within Plan 912 0777 Lot 1 (See Figure 1) will be absorbed into the new subdivision (See Figure 3), the access be relocated from the highway service road to the internal access road. The access to the remnant of the NW 30-51-22-W4 will be relocated to the existing service road until such time as the land is acquired by the Province. No direct access to the highway will be permitted.
 - c) No further development will be allowed on the remnant lands/highway widening area following subdivision of each of the existing parcels.
- 5.5 Collector/Arterial road network
- a) Alberta Transportation requested that the County address the effect that the future subdivision will have on the neighbouring lands and how access to the plan area will be gained through neighbouring properties in the future as further development and subdivision occurs, or as Highway 21 and 14 develop into full freeways in the long term.
 - b) Figures 3 - 5 depict the overall road network strategy for the current, short and long terms. The development would continue to use the existing road network and highway access points that are provided by the service road in the immediate future. Once access is taken away from highway 16 via the service road and Twp Rd 514, traffic would be rerouted through the County road network to Twp Rd 512. Again for access to Highway 14, traffic would be routed through the County road network to Range Road 223.
 - c) Given the planning policies currently in place respecting future development and ultimate density in the region, the County's Transportation Branch has no concerns with the existing township and range road network meeting the service needs of the area.

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5.6 Noise attenuation

- a) Alberta Infrastructure and Transportation requires that noise attenuation be designed to be fully contained outside the highway right-of-way. Lands adjacent to highways require that a noise attenuation study be undertaken pursuant to the Strathcona County Rural Engineering Servicing Standards.

6 SERVICING

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

7 PUBLIC INPUT

- 7.1 In accordance with Conceptual Scheme policy, meetings were held with all the landowners within the plan area on November 9, 2006, and with adjacent landowners on April 17, 2007 and August 27, 2007 to gather input. No concerns regarding the proposed Conceptual Scheme were identified at either of the public information meetings.

8 SUBDIVISION AND DEVELOPMENT CRITERIA

- 8.1 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 SW 31 & NW 30-51-22-W4 and the surrounding area. Additional criteria may be identified at the more detailed subdivision stage:
 - a) Subdivision and Development within the SW 31 & NW 30-51-22-W4 shall be consistent with the Development Concept shown in Figure 2.
 - b) 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.
 - c) 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.
 - d) Future development shall only be allowed based on the provision of internal road access to individual parcels, constructed to County Standards. A potential location for internal road access is shown on Figure 2.
 - e) The minimum parcel size shall be 2.0 ha (5 ac).
 - f) The maximum number of residential parcels shall not exceed 16 within the plan area.

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- g) Development adjacent to slopes, wetlands and water courses shall conform with environmental setbacks contained within the Land Use Bylaw 8-2001.
- h) The subdivision and development shall be designed in a such a way as to minimize the amount of tree removal and site grading.

8.2 Note that the Development Concept shown on Figure 2 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

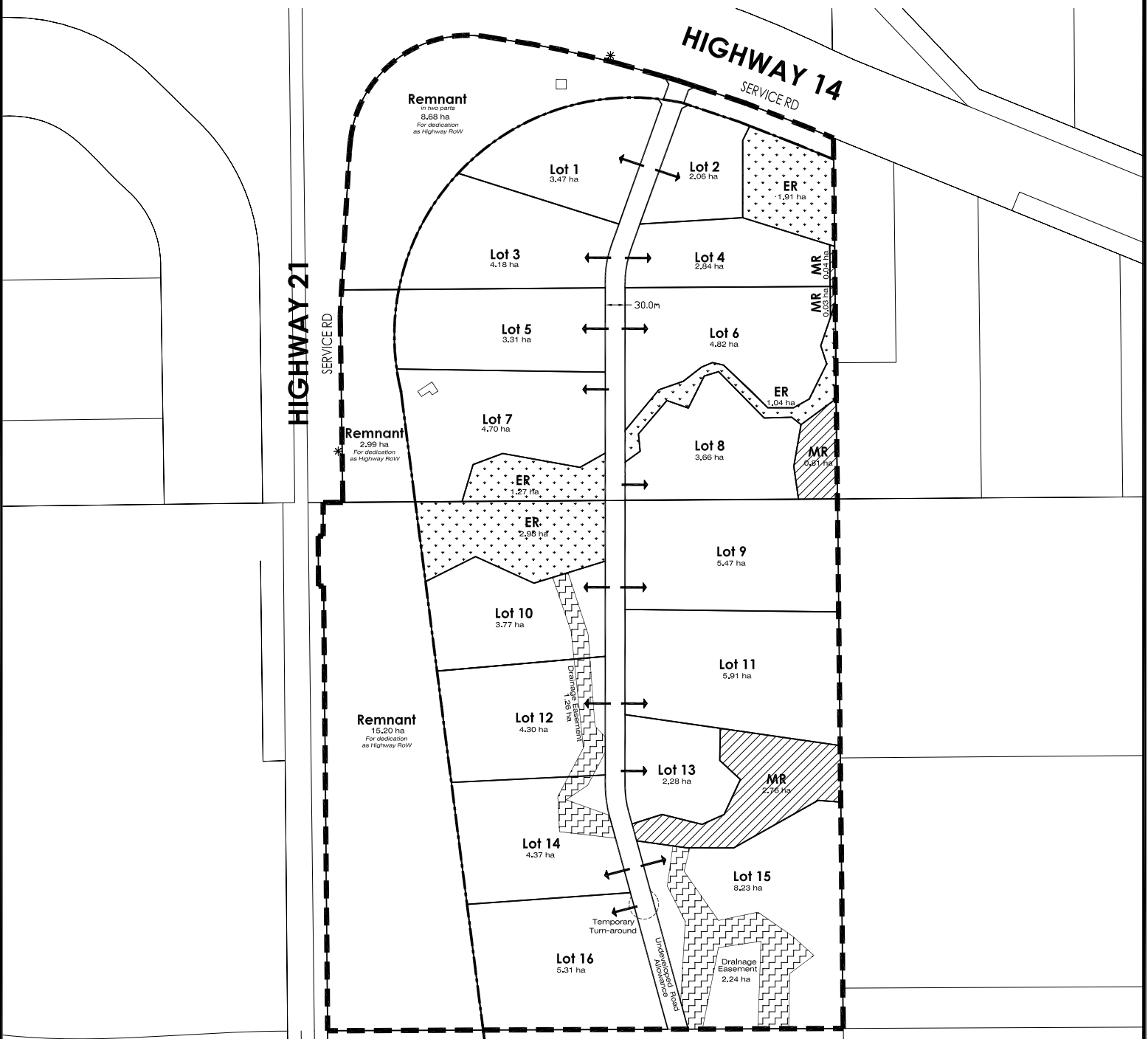
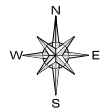
9.1 Notwithstanding any other issues that may arise through the subdivision review process, the following will be addressed as conditions of subdivision:

- a) 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.
- b) A development agreement will be required to address the construction of an internal roadway and any offsite improvements required.
- c) Any other conditions which may be applicable.

10 COMPLIANCE WITH OTHER LEGISLATION

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

CONCEPTUAL SCHEME SW 31 & NW 30-51-22-W4



Legend

- Conceptual Scheme Boundary
- Potential Access Location
- Existing ACCESS
- Proposed Future Highway Right-of-Way
- Existing Dwellings

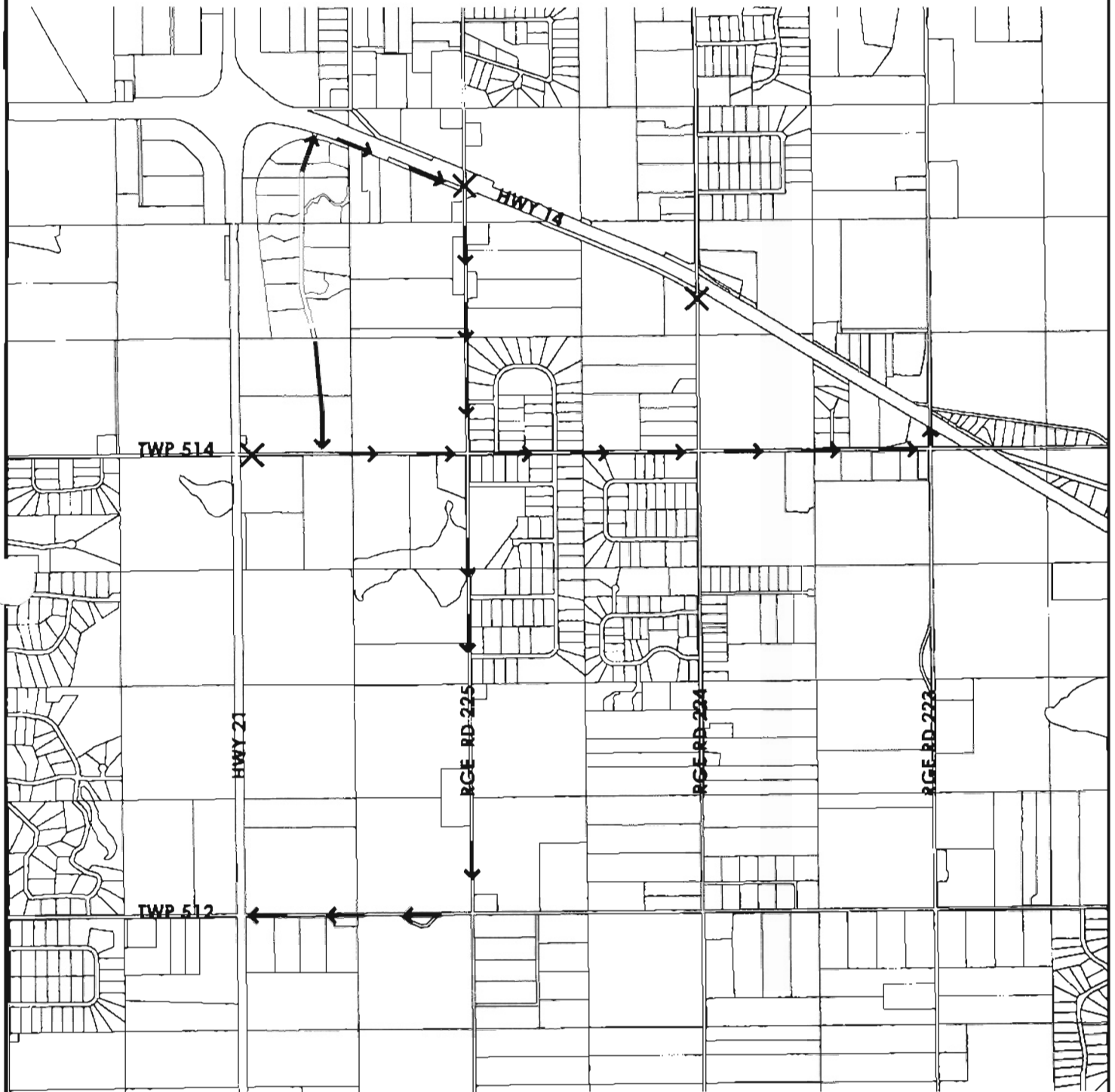
- Gross Developable Area
77.30 ha (191.00 ac) ±
- Municipal Reserve
3.57 ha (8.82 ac) ±
- Environmental Reserve
7.20 ha (17.79 ac) ±
- Drainage Easement
3.50 ha (8.65 ac) ±

**FIGURE 2
CONCEPTUAL SCHEME SW 31 & NW 30-51-22-W4**

PLANNING & DEVELOPMENT SERVICES

Drawn by: G. Davis	Dwg No.: P12M0007
Date Drawn: 06/14/2007	Adopted: Scale: NOT TO SCALE

CONCEPTUAL SCHEME SW 31 & NW 30-51-22-W4



Legend

- Future Highway Access Route
- Future Highway Access Closure

FIGURE 5
Highway Access/Internal Road Network - Long Term

Drawn by: C. Moriarty	Dwg No.: P12M0013
Date Drawn: 10/19/2007	Adopted: _____
	Scale: NOT TO SCALE

PLANNING & DEVELOPMENT SERVICES

