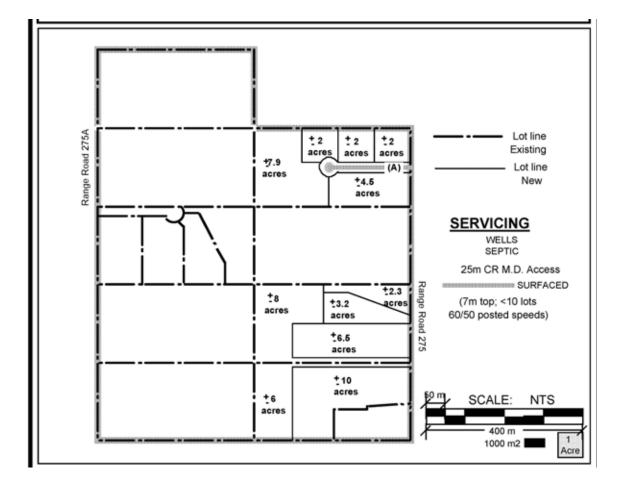


NORTHGLEN ESTATES CONCEPTUAL SCHEME



Bylaw C-5139-99, Adopted December 14, 1999

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44 Department of Planning and Development

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44

BYLAW C-5139-99

A Bylaw of the Municipal District of Rocky View No. 44 to adopt the attached Schedule "A", the "Conceptual Scheme", pursuant to Divisions 7 and 12 of Part 17 of the Municipal Government Act.

WHEREAS the Council of the Municipal District of Rocky View No. 44 wishes to adopt the Conceptual Scheme affecting the lands herein described as:

SE ¼ 31-23-27-W4M, and S ½ of LSD 10, NE ¼ 31-23-27-W4M

and

- WHEREAS a notice was published on **November 30, 1999** and **December 7, 1999** in the Rocky View Five Village Weekly, a newspaper circulating in the Municipal District of Rocky View No. 44 advising of the Public Hearing for **December 14, 1999**; and
- WHEREAS Council held a Public Hearing and have given consideration to the representations made to it in accordance with Section 692 of the Municipal Government Amendment Act, being Chapter 24 of the Revised Statutes of Alberta 1995, and all amendments thereto.

NOW THEREFORE the Council enacts the following:

1. That the Conceptual Scheme be adopted to provide a framework for subsequent subdivision and development in the:

SE ¼ 31-23-27-W4M and S ½ of LSD 10, NE ¼ 31-23-27-W4M

and is attached hereto as Schedule "A".

2. That this Bylaw shall come into effect upon third and final reading hereof.

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on November 23, 1999, on a motion by Councillor Schule.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on December 14, 1999, on a motion by Councillor Kent.

Third and final reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on December 14, 1999, on a motion by Councillor Stinson.

REEVE OR DEPUTY REEVE

MUNICIPAL SECRETARY

NORTHGLEN ESTATES CONCEPTUAL SCHEME

OFFICE CONSOLIDATION September 2009

Note: This office consolidation includes the following amending Bylaw:

Amendment	Description	Approval Date
Bylaw C 6815-2009	Section 2.1 delete and replace text Section 2.2 delete text Section 3.1 revise table Section 3.2 revise text Phase 3 policy 3.2.3 revise text and map Section 4.5 delete text	September 8, 2009

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1.0 INTRODUCTION

1.1 Background

On September 29, 1998, the Council of the M.D. of Rocky View approved a motion requesting the applicants to prepare a Concept Plan for the SE 1/4 of Section 31-23-27-W4M and the S 1/2 of LSD 10 in the NE 1/4 of Section 31-23-27-W4M.

1.2 Purpose

The purpose of the Concept Plan is as follows:

- to coordinate the transition of predominantly agricultural land uses to residential;
- to evaluate the capacity of the lands to sustain higher residential densities on rural servicing;
- to forecast additional traffic requirements;
- to anticipate the design of new developments, and to coordinate phasing of foreseeable subdivisions with the local community.

This entailed an evaluation of water capacity, soil permeability and suitability for septic tanks and tile fields. And it required the identification of an internal road network to service newly created lots.

Residents have all confirmed the need to maintain their ability to subdivide. All have confirmed their intention to remain on the land as they sell off parts of their parcels. And all envision in this Concept Plan a regulatory framework which will prove flexible in its application and consistent in its ability to preserve the amenities of an existing rural lifestyle.

Finally, landowners have been grouped into three Joint Planning Cells to coordinate the subdivision of their parcels, share in the cost of planning and servicing, and provide a realistic sequence in phasing their subdivision.

1.3 Context

Urban expansion from Calgary is creating a demand for country residential acreages which is being filled where the agricultural value of surrounding lands has fallen below subsistence levels. The farm income from the subject lands is negligible. Agricultural uses of the parcels by existing landowners have slowly deteriorated from supplemental incomes to hobby farming. Gardens and hay are grown, horses are kept and livestock is still raised, yet the real value of these lands now lies in their subdivided potential for residential purposes.

A strong and increasing demand for acreages, due in part to the rapid growth of the City of Calgary, has increased the demand for redesignation and subdivision of lands within the vicinity of the Concept Plan Area. As demand for country residential living continues to grow, the Municipality must continue to effectively manage the location and form of residential development.

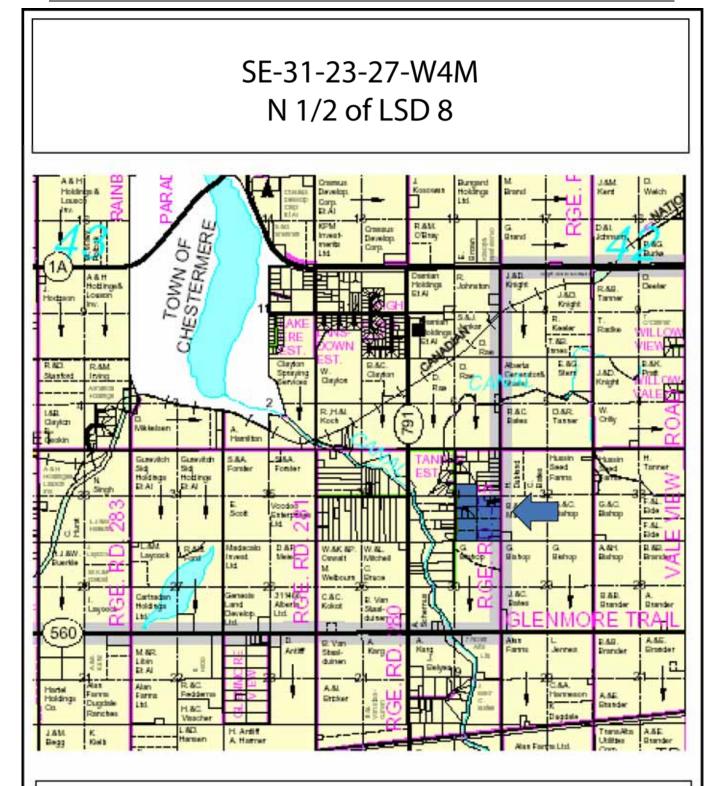
The goals of the Municipal Development Plan (MDP) of the M.D. of Rocky View encourage developments that are complementary to the rural character of the Municipality, which contribute to an orderly settlement pattern, are compatible with the natural environment, and accommodate a range of lifestyle opportunities for Municipal residents.

1.4 Plan Area

The Plan Area is comprised of 180 acres of land, which lies north of Glenmore Trail between Range Roads 275 to the East and 275A to the West.

The area is generally flat and slightly higher than adjacent lands. There is little tree cover and the area has been farmed in the past. Each parcel has direct access to either Range Road 275 or 275A with the exception of properties currently accessed through Laganis Road, an internal cul-de-sac.

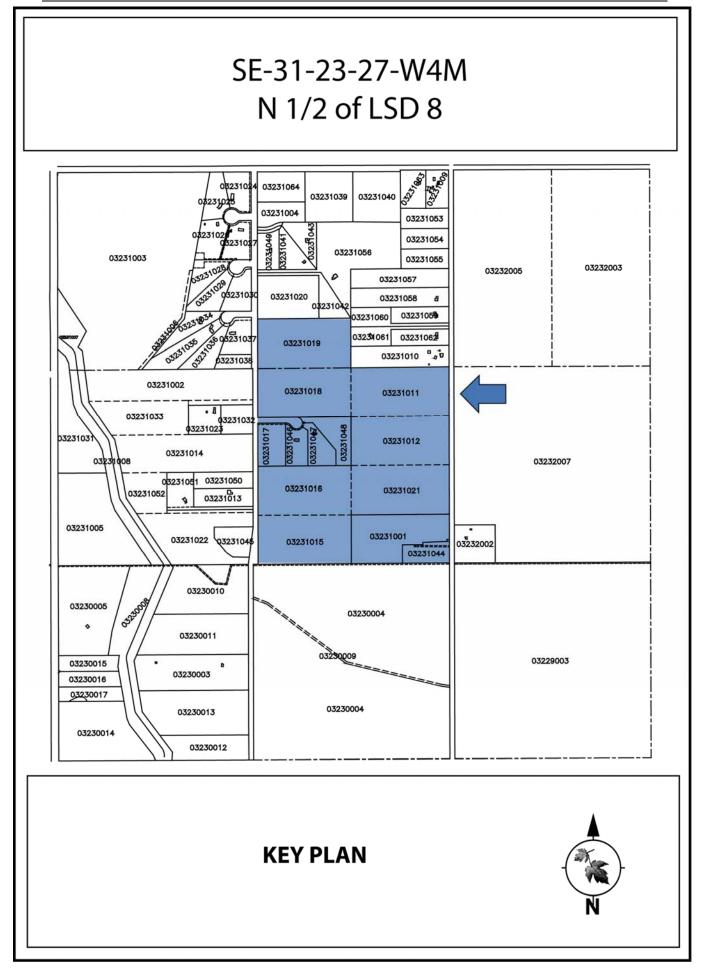
There are currently thirteen separately titled lots. Seven lots are 20 acres in size, one of which has been redesignated to residential, the remaining six parcels still designated agricultural. Four lots are 4-acre residential acreages accessed by way of an internal cul-de-sac, being the only internal access - all other lots in the Concept Plan area having direct access off Range Roads 275 or 275A. Two lots designated residential were created from a pre-existing 20-acre parcel subdivided for a 4-acre separation with a 16-acre remainder lot.



LOCATION PLAN



3



2.0 PUBLIC PARTICIPATION

This Concept Plan was prepared in consultation with all landowners in the Concept Plan Area - first with a questionnaire, then with public meetings - in order to create a balance between developing at higher residential densities and maintaining the benefits of a lifestyle in the countryside.

2.1 Questionnaire

In order to identify general principles of development for the quarter section, a questionnaire was prepared to ask each landowner and resident in the quarter section their requirements for servicing, land use and development. The questionnaire was delivered to each property owner in person so that other questions could be addressed while their responses to the questionnaire were recorded.

The public participation has laid out three fundamental guiding principles for development. These principles are used as the objectives of this Concept Plan, and can be stated as follows.

Plan Objectives:

- 1. maintain a density mix between larger parcels (4 acres and above) and smaller parcels (2 acres and above) higher densities fronting through roads, Range Road 275 and 275A.
- 2. rural character of the Concept Plan Area tighter clusters of building and landscaping at the edge of large open space in the center of the Concept Plan Area.

2.2 Planning Cells

Because the Concept Plan is made up of thirteen existing properties whose landowners have different intentions for the development of their parcels, it became important to coordinate these developments jointly over time. And because one 20-acre parcel has already been subdivided into four 4-acre acreage lots, contiguity between all parcels has been broken. As a result, the Concept Plan Area was further divided into smaller Planning Cells. Each Cell is made up of a group of adjacent parcels whose landowners are in a position to make coordinated decisions for subdivision.

The Planning Cells Map (p.8) identifies three Planning Cells, where property owners can identify potential problems and solutions with respect to subdivision design, access, internal road networks, municipal reserve and other servicing issues. Without the benefit of joint planning, each landowner may seek to maximize individual lot yields, which could result in higher densities and would quickly lead to a freeze of subdivision on other neighbouring land.

The Planning Cells do not include the 4-acre parcels on Laganis Bay already subdivided and accessed through an existing internal cul-de-sac. The owners of these lands do not intend to further subdivide, yet will maintain their involvement in the process through a Community Association.

The internal road network does not create through traffic, so its development involves properties adjacent North to South; and the existing subdivision alongside Laganis Road effectively separates the remaining 20-acre parcels. Coordinated development is necessary in the long term to plan open spaces East to West through larger residential parcels toward the centre of the plan Area while the internal road network, which is developed North to South in the short term, will accommodate smaller parcels at the edges.

The combination of lower densities and open spaces in the center of the Plan Area with higher densities and smaller landscaped parcels along side the Range Roads will contribute to a better overall development. It will be easier to phase and coordinate, and investments will be concentrated on a smaller land area, while landowners preserve the original feel and lifestyle of the area by creating larger subdivided parcels. Landowners will jointly and actively coordinate subdivision of their parcels with adjacent neighbors, in addition to the usual referral process.

Planning Cell 1 is adjacent to Planning Cell 2 to the East and North. Planning Cell 2 is expected to plan subdivisions in the longer term, while subdivision of the northern part of Planning Cell 1 will first create a short segment to access four to six lots in the short term, then further extend the cul-de-sac to the South in the medium term to further service six to eight lots. Subdivision between both Planning Cells will be articulated on the Demko property - for internal cul-de-sac development in Planning Cell 1 and for the creation of larger inside lots in Planning Cell 2. The existing Laganis Road cul-de-sac would be extended by 200 meters to the North in Planning Cell 2 to access an additional eight to ten lots.

Planning Cell 1 is adjacent to Planning Cell 3 to the East and South. Initial access will be created as panhandles from Range Road 275 and then as a cul-de-sac as part of development and subdivision in Planning Cell 1 to create six to eight lots on the two southern parcels. Access in Planning Cell 3 will mirror on the western parcels access network on the east for the creation of six to ten lots

Policies:

- 2.2.1 Subdivision in the Concept Plan Area will be coordinated with three separate Planning Cells.
- 2.2.2 Planning Cell 1 will group the lands presently owned by Demko, Sweet, Spate, Schrauwen and Dubray.
- 2.2.3 Planning Cell 2 will group the lands presently owned by Stobbe and Primrose.
- 2.2.4 Planning Cell 3 will group the lands presently owned by Armstrong and Winter.
- 2.2.5 Landowners in Planning Cell 2 will evaluate the impact of higher densities and network development in Planning Cell 1, and coordinate subdivision with a northward extension of the Laganis Road.

The proponents of the Concept Plan have already met with the landowners in Planning Cell 1 to discuss land use strategies and to design the subdivision and development of their respective parcels. They identified issues with respect to parcel sizes, access, easements, supply of water and septic disposal. The result of these discussions forms the basis of the Tentative Subdivision Plan for Cell 1 as shown on Tentative Plan Map.

Landowners in Cell 2 and 3 have not met to discuss specific subdivision design, however, they have participated in general meetings where all landowners have been present.

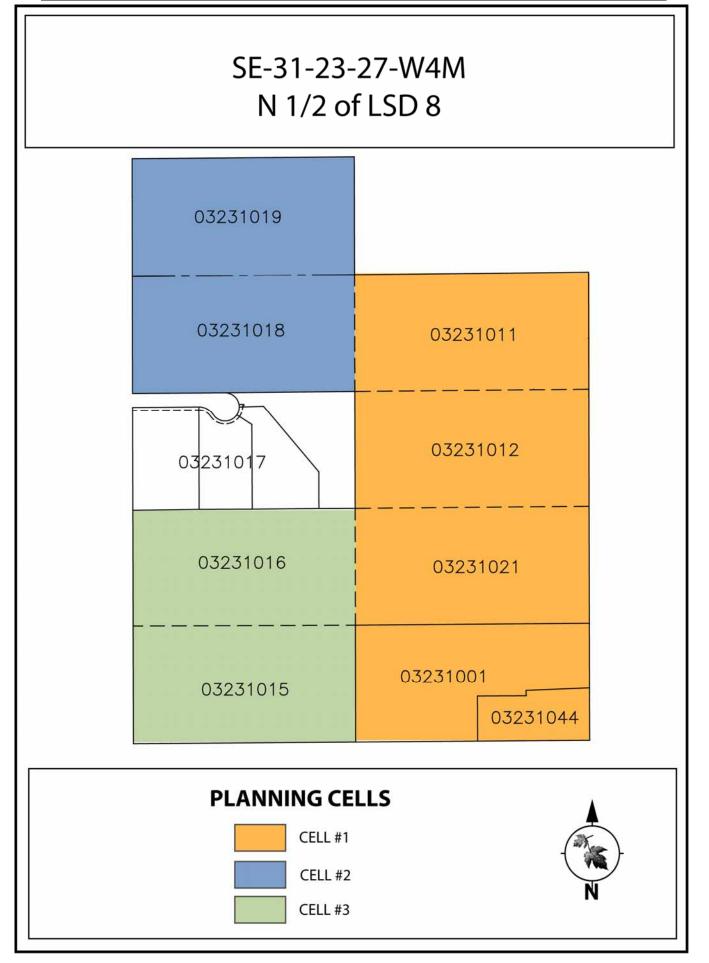
2.3 Public Meetings

Public meetings were held by the proponents of the Concept Plan on September 14, September 21 and October 13, 1999. The September 21 meeting grouped all landowners in the Concept Plan area, and a Community Association was formed to be formally registered with MD of Rockyview. The September 14 and October 13 meeting grouped landowners in Planning Cell #1, so they could review the policies of the proposed Concept Plan, and prepare a comprehensive outline plan for their Cell that addressed the creation of new lots, an internal road network and servicing.

Policies

2.3.1 It is encouraged that a Community Association be put in place to:

- 1. plan for future developments;
- 2. inform land owners;
- 3. maintain a data base of land owners, well data, percolation tests;
- 4. Propose joint cost recovery for all testing, servicing and development;
- 5. Serve as a management and administrative unit for all community based systems, and to review and comment on subdivision applications within the quarter section;
- 6. Collect membership as necessary.



3.0 LAND USE

3.1 Parcel Density

The objective of this Plan is to use a density mix between larger parcels and smaller parcels that will maintain an overall density similar to that of a 4-acre subdivision. A total of fifty lots on 180 acres of land will result in an average parcel size of 3.6 acres. The land use statistics are outlined in the following tables.

0					
LAND USE	#of parcels	Acres	Ha	%	
R2	7	58.75	23.78	32.63	
АН	6	120	48.56	66.67	
Roads		1.25	0.5	0.007	
TOTAL	13	180	72.84	100	

Existing Land Use Statistics

The creation of new parcels will be pre-determined by the provisions of the Land Use map. Areas designated R1 - 2-acre parcel minimum have their frontage on Range Roads 275 and 275A as well as the internal network to be created. The new parcels created in the R1 areas will be smaller lots between 2 to 4 acres in size. There would be a maximum possible total of thirty five such lots at full development of the Concept Plan area.

Land Use Statistics at Full Development

LAND USE	CELL 1	CELL 2	CELL 3	Total
Roads	3.7 acres	2.5 acres	2.5 acres	8.7 acres
R1 lots	19	9	9	37 lots
R2 lots	5	4	4	13 lots
Total lots	24	13	13	50 lots

Parcels created in the R2 - 4-acre parcel minimum will be accessed through the internal road network. They will be larger in size between 4 and 8 acres, and will connect to the cul-de-sac with either panhandle access or direct frontage. There would be a maximum of fifteen such lots at full subdivision.

The network development required to service the newly created lots would total 800 to 1200 meters of a 25-meter right-of-way at Country Residential standards with a 7 meter road top, made up of 4 separate segments each terminated as a cul-de-sac.

3.2 Phasing

All land owners within the concept plan area want to maintain the ability to subdivide their respective land. Most land owners, however, do not intend to develop in the immediate future. Therefore, the Concept Plan identifies three phases of development: immediate term, short term and long term. Recognizing the fact that there is a limit to the amount of subdivision within quarter section and the cost of servicing can be very expensive, landowners need to develop jointly. Applications for redesignation or subdivision must be coordinated with adjacent property owners within a Joint Planning Cell as outlined on the map entitled Planning Cells. This will result in the identification of servicing needs, land use compatibility, lot layout and internal subdivision roads and mutual access for landowners within the respective Planning Cells.

Phasing is predicated on timing, sequencing and financing. Timing simply means the intention of landowners to subdivide. Sequencing references the distribution of rural-sized residential parcels - from 2 to 10 acres - around existing developments. Financing addresses the ability of landowners to match the costs of development with lot releases.

As such there are three phases of development:

Phase 1 - Timing, sequencing and financing are based on an early release of lots in Cell #1, with the minimum network development which will allow a maximum lot yield for an effective return in anticipation of further subdivisions. This phase will create between seven to ten additional new lots in Planning Cell #1 - most lots to measure over 4 acres, some at 2 acres - and one segment of about 80 meters of paved roads in accordance with approved Municipal Standards to service a maximum of five lots.

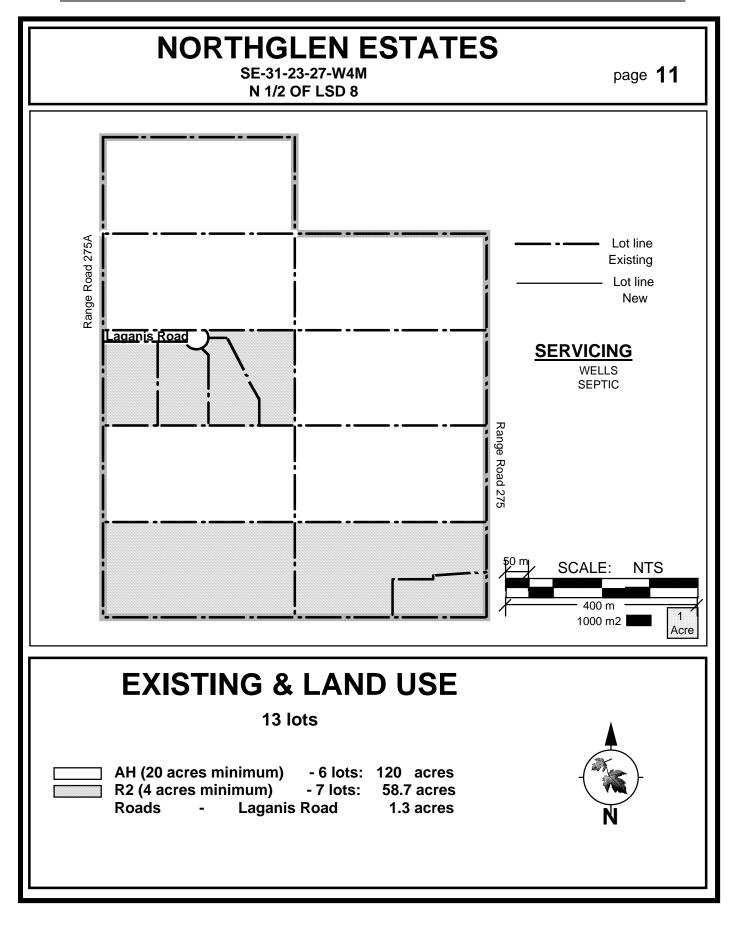
Phase 2 - Developments are completed in Cell #1 with a balance of twelve to fifteen final high density lots - most between 2 and 4 acres in size - created to facilitate the completion and paving of the internal road network in Cell#1. Interior lots have been kept at a larger size and still connect to internal cul-de-sac's via panhandles. Portions of the initial panhandles have been converted to road right-of-ways for a total of two segments - one paved 600 meters which services between twelve and fifteen lots and the other 80 meters unpaved which services between five and eight lots. Meanwhile, road design and subdivisions will have been initiated in Cells #2 and #3.

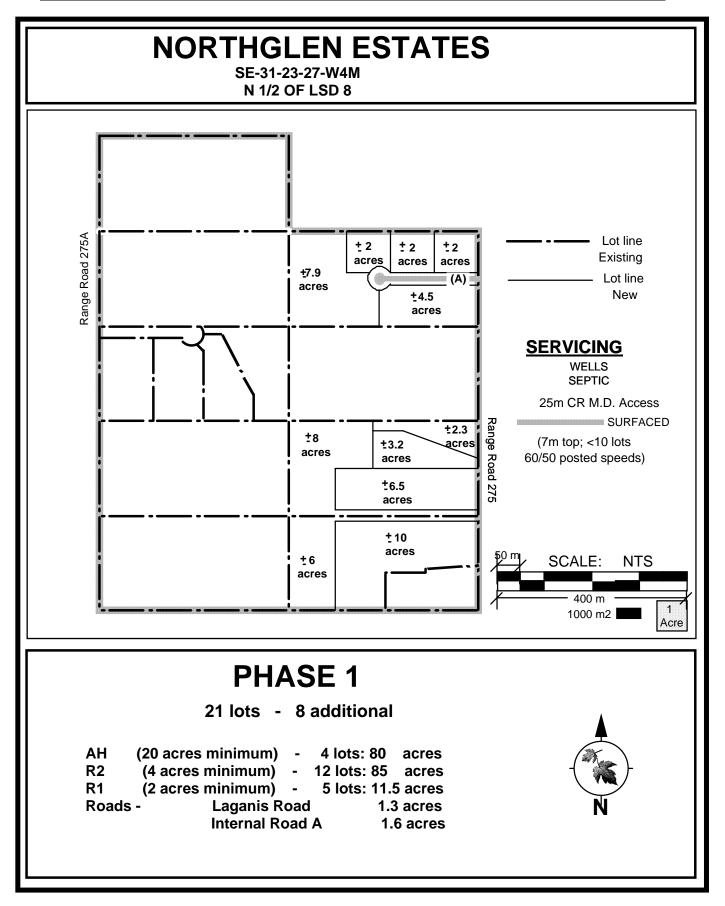
Phase 3 - The overall scope of subdivision has reached close to fifty lots. Four Cul-de-sacs segments between 200 and 600 meters each have been developed to service between eight and fifteen lots each, and access off both Range Road 275 and 275A have been maintained between two and six points each. All 50+ landowners from the original 13 who formed the Community Association are now assessing the necessity of through-traffic by way of connecting the two southern road segments from Range Road 275 to 275A, and the validity of increasing total allowable densities.

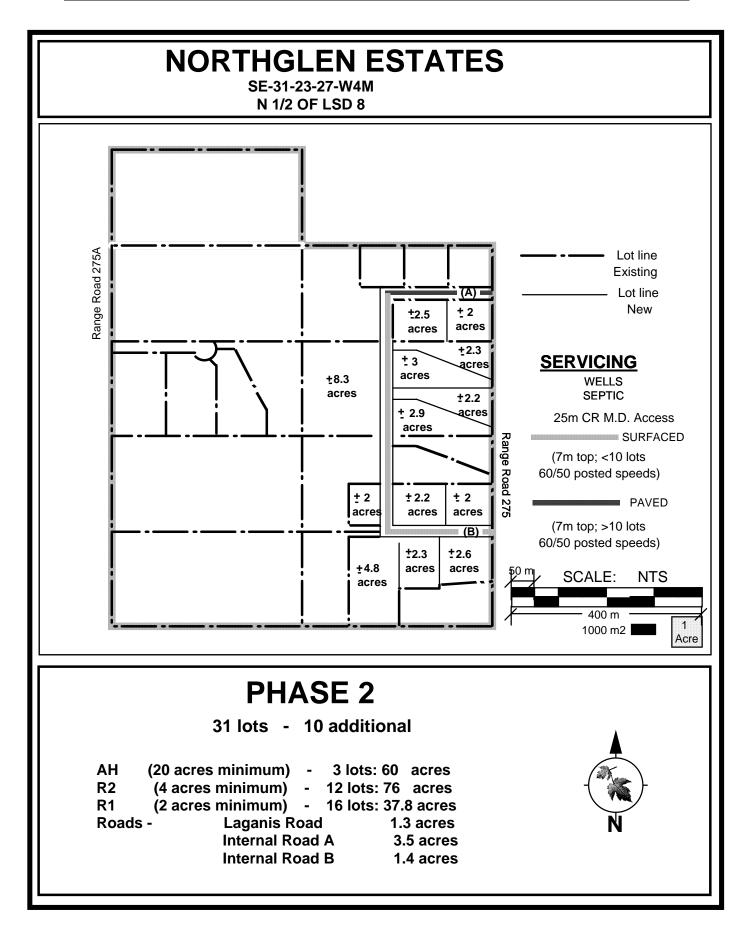
Policies

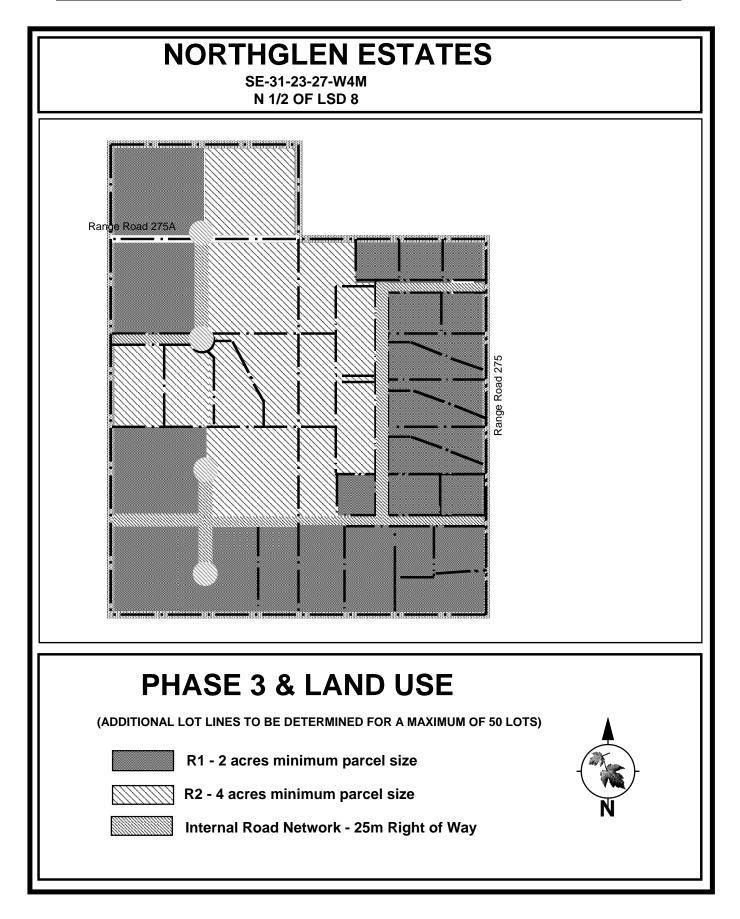
- 3.2.1 Adjacent land owners will be encouraged to submit plans of subdivision jointly well in advance of subdivision to coordinate private groundwater supply systems, private and public road networks and integrated land use plans.
- 3.2.2 Condominium plans:
 - (1) are not a preferred method of registration; and
 - (2) are acceptable provided they are submitted as part of a Planning Cell and demonstrate that they provide a feasible alternative to fee simple subdivision.

- 3.2.3 Increased density is allowed, to a minimum parcel size of 2 acres, provided higher density lots are located on the edge of the Plan Area adjacent to either Range Road 275 or 275 A.
- 3.2.4 A mix of parcel sizes within a variety of land districts, including Agricultural Holding, Residential One, Residential Two or Residential Three, is allowed and subdivision proposals within Joint Planning Areas shall be designed in accordance with the following:
 - (1) clusters of development interspersed by larger tracts of land to create better views, sense of space, and more efficient servicing;
 - (2) identify building sites to promote more compact built forms;
 - (3) plan tighter landscaping, better views and wind screens, to promote a sense of identity, community, a sense of place and security;
 - (4) minimize the number of roads and connection corridors required.









4.0 SERVICING

4.1 Water

Each parcel in the Plan Area is serviced by at least one well. A groundwater evaluation report was prepared in support of the proposed redesignation of the N 1/2 of LSD 1. The report states that the well has a pump capacity of 5.25 igpm and, according to the consulting engineer, is capable of providing sufficient water for up to 31 lots.

It is proposed that each new lot will be serviced by an individual well.

Policies:

- 4.1.1 All newly created lots within the Plan Area should be serviced by an individual well;
- 4.1.2 Communal wells may be investigated where they prove feasible;
- 4.1.3 New applications for subdivision within the Plan Area shall be accompanied by preliminary groundwater evaluation based on existing groundwater data within the vicinity of the subject lands. The groundwater evaluation shall be prepared by a consultant with expertise in groundwater analysis;
- 4.1.4 A well shall be drilled on each new lot that is created as the result of an application for subdivision, and each new well shall be tested in accordance with Alberta Environment guidelines. If the results of the testing do not fall within these guidelines, the subdivision shall not be endorsed or registered.

4.2 Sanitary Sewer

The quarter section is a rural community serviced with wells, septic systems and is accessed by Range Road. Capacity is available to develop the quarter section at higher densities. There are 11 existing wells over the quarter section, and one or more septic tanks per parcel.

In support of an application for redesignation on the N 1/2 of LSD 1, a report on percolation testing was provided and was found to be in accordance with Alberta Environment guidelines. According to the report, it was determined that site soils have a moderate percolation rate and that they comply with the Alberta Environment Guidelines for the installation of normal subsurface sewage disposal fields. Assuming these conditions prevail throughout the Plan Area it is proposed that each lot will be serviced with on-site septic tank and field system.

Policies:

4.2.1 Percolation and near-surface water table testing shall be required as a condition of subdivision approval for each new lot created in the Plan Area. In the event that the results of testing do not fall within the guidelines of Alberta Environment, the subdivision shall not be endorsed or registered.

4.3 Storm Water

The lands within the Plan Area are generally flat and are on slightly higher ground than other lands in the surrounding areas. There does not appear to be any flooding issues as reported by the landowners during the questionnaire process.

Policies

- 4.3.1 A comprehensive stormwater management plan for the entire Plan Area may be required as a condition of approval for initial subdivision applications, in accordance with the following policies:
 - (1) A stormwater management plan may be required as a condition of subdivision approval to identify natural drainage flows, locations of stormwater retention ponds, drainage easements and treatment of stormwater if necessary;
 - (2) Post-development volumes of stormwater shall be designed such that it does not exceed pre-development flows.
 - (3) Natural drainage courses shall not be altered.

4.4 Reserves

Pursuant to the Municipal Government Act, Council as Subdivision Approving Authority has the opportunity to acquire up to 10% of the gross area of the subject lands as Municipal or School Reserve or require the payment of cash-in-lieu of the land that would have been dedicated as Reserve.

Since the maximum size of potential parent parcels for any future subdivision applications within the Plan Area is 20 acres, the utility of a municipal reserve parcel consisting of 2 acres is questionable. Consequently, cash-in-lieu payments should be taken on an individual subdivision application basis to satisfy the Municipality's reserve requirements.

At the time of subdivision, however, the dedication of municipal reserve may be considered if a plan for these reserves is in place which has been prepared within their Planning Cell and reviewed by the Community Association. If lands are so reserved, they should create linear linkages to serve the needs of the whole community and they should have public access.

Policies

- 4.4.1 At the time of subdivision, landowners may be required to provide 10% of the gross areas of the subject lands as Municipal Reserve, subject to the following conditions:
 - (1) in accordance with a plan of reserves where a plan of reserve has been prepared which identifies the location of the lands and the purpose for dedication;
 - (2) where a plan of reserve has not been prepared, or where lands dedicated as part of a plan of reserve do not total 10%, reserves or the balance, as the case may be, will be provided as cash-in-lieu;
 - (3) dedication for Municipal Reserves will not be required where such dedications have already been provided from prior subdivisions of the same lands.

4.5 Transportation and Access

Regional Traffic

Range Road 275 to the East connects (connects what) to Glenmore Trail and then onto Calgary. Range Road 275A to the West is not a through road to Glenmore Trail. It is possible through the process of subdivision to create through traffic between Range Roads 275 and 275A.

Existing traffic

It is anticipated that there will be a 15% increase in usage of Range Roads 275 and 275A, well within existing Range Road capacity. Furthermore, additional traffic will be channelled through fewer entrance points onto Range Road 275, and, at Phase 2, an internal road network is introduced which brings through traffic to the additional lots further away from Glenmore Trail towards the North end of the site. It is the objective of the Plan to minimize direct access on to the Range Roads. In fact, at full build-out, Joint Planning Cell#1 reduces total access by one access point for a total of 46.

4.5.1 Proposed Internal Road Network Policies

The proposed road network reflects the joint participation of all landowners. The proposed internal road network has been designed with the following objectives:

- 4.5.1.1 Internal subdivision roads should not inhibit future subdivision;
- 4.5.1.2 All lands shall eventually receive primary access onto internal subdivision roads;

With additional lots being phased through the quarter section, access will first be channelled towards an internal system of paved cul-de-sac's.. The internal road network can be extended later by connecting the cul-de-sac to create crescent roads. Interior lots will access the cul-de-sac through 40 foot (12.5 metre) -meter wide panhandle where they are adjacent to another panhandle, or 25 meters where they are not.

4.5.2 Transportation Policies

- 4.5.2.1 Access to Range Roads 275 and 275A for new parcels within the Plan Area shall be limited to internal subdivision roads such as cul-de-sacs or crescents.
- 4.5.2.2 All internal subdivision roads and approaches shall be constructed and paved to Municipal Standards.

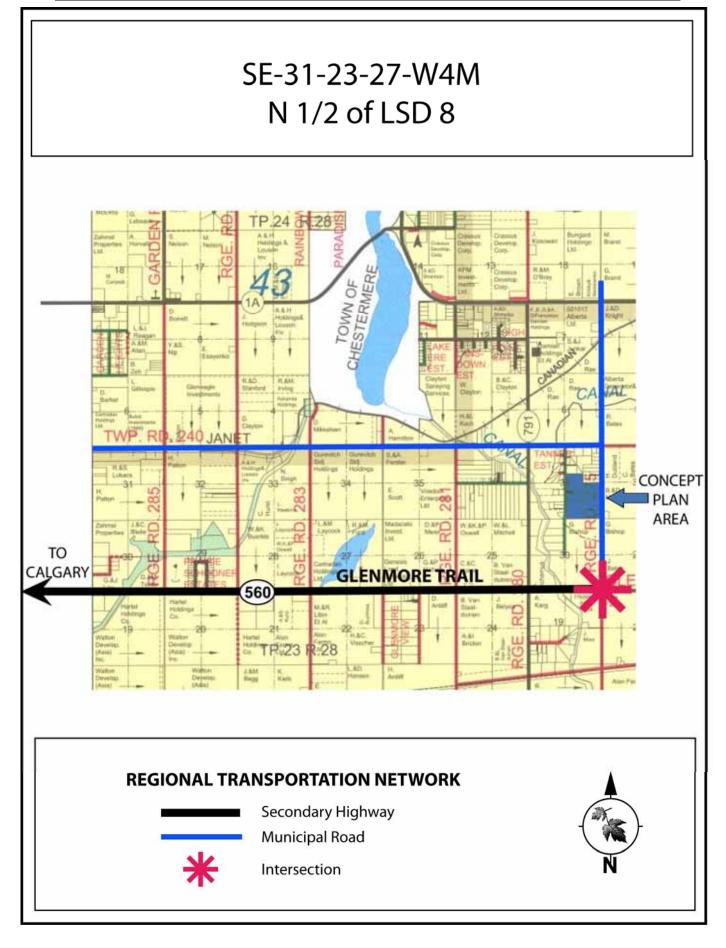
4.5.3 Long-term Through Road Policy

- 4.5.3.1 An internal road network with through-traffic remains a possibility for the future, and would be consistent with the MD of Rocky View policy on road linkages. Range Road 275A is not a through road to Glenmore Trail. The access to Glenmore is made through Range Road 275. However, through traffic from 275A to 275 was not desired by residents within the plan area.
- 4.5.3.2 A through-road linking Range Road 275A with Range Road 275 shall be encouraged in accordance with the long-term through traffic network delineated on the Phase 3 and Land Use map that forms part of this Concept Plan.

4.5.4 Panhandle Access Policies

Panhandle subdivision design may be appropriate in accordance with the following policies:

- (1) a panhandle lot shall be phased to connect to an internal road network;
- (2) the panhandle width shall be 12.5 meters in width ;
- (3) where the panhandle is adjacent to another panhandle, the combined widths of both panhandles shall be 25 meters.



5.0 TRAFFIC STUDY

5.1 **Population Dynamics**

Calgary and the MD of Rocky view have experienced substantial population growth over the 90Õs. Along with the demand for housing, there has been an increase in traffic and network usage. In 1999 Calgary has grown to 832,000. This is a 2.84% increase from the previous year. From 1991 to 1996 the MD of RockyView has grown by 4.22% annually from 18,939 to 23,326.

	1991	1996
TOTAL MD	18,939	23,326
	TOWN OF AIRDRIE	15,946
	TOWN OF COCHRANE	7,424
	TOWN OF CHESTERMERE	1,911
	VILLAGE OF IRRICANA	823
	VILLAGE OF BEISEKER	708
		+ 4.22% per annum

Population Statistics

The Concept Plan area is well located in relation to the Calgary area. It is within half-an-hour drive to the downtown. Glenmore Trail is directly south of the quarter section through Range Road 275 and provides convenient and rapid access to all parts of Calgary through Barlow Trail and Deerfoot Trail. For the location alone, the area is well suited for the development of residential acreages, since it is within easy commuting distance of Calgary, and there have been ongoing subdivisions in the area around the Concept Plan. Nonetheless, the portion of Glenmore Trail which connects to Range Road 275 is still relatively little travelled.

5.2 Existing Access

Existing access to the site is from Range Roads 275 and 275A. Range Road 275A does not connect though to Glenmore Trail. Glenmore Trail is accessed through Range Road 275. Range Road 275 services 5 lots in the Concept Plan area through 5 separate private access points. Range Road 275A services 8 lots through 4 separate private access points and 1 public cul-de-sac which services 4 individual lots.

PHASE	TOTAL	ADDITIONAL RANGE RO NUMBER OF LOTS ACCESS P	
	USAGE		
Existing	130	13	5
Phase 1	210	8	8
Phase 2	310	10	3
Phase 3 (Tentative)	500	24	3

Estimated Access Statistics

5.3 Standards

10 vehicle trips/day/lot will be used as the standard to estimate impact of development onto the road network. That is to say that each lot - existing or proposed - is expected to generate a daily average of 10 trips. With an average of 2 vehicles per lot, this is the equivalent to 1 morning and 1 evening trip, twice daily for 1 vehicle, twice daily for the other vehicle, for a total of 4 trips. The remaining 6 trips correspond to an additional 1.5 return trip per vehicle per day. This may seem higher than conventional usage in the Concept Plan Area. Local residents do not have services and amenities close-by which would cause more frequent uses of their vehicles for short distances. They will generally either commute daily, or operate out of their homes, thus reducing the likelihood of short and frequent trips. Nonetheless, for estimation purposes, 10 vehicle trips per lot per day is conservative.

Range Roads 275 and 275A are built to Country Residential Standards and classified as local roads designed to service up to 1000 vehicle trips per day at maximum speeds of 60 km/h. Range Road 275 is not a paved road.

5.4 Estimated Increase in Network Usage

The increase in use of the network is estimated from estimating the number of additional lots to be developed at each phase of development. There are 13 lots existing. These are expected to generate 130 vehicle trips/day. 90 trips are generated from parcels fronting onto Range Road 275A, and a large number of these trips will then continue onto Range Road 275 to access Glenmore Trail to the south. This Concept Plan does not prepare for through traffic or for an extension of Range Road 275A to connect to Glenmore Trail. These would relieve the impact of development onto Range Road 275A. Yet, the local residents preferred phasing options that connected cul-de-sac through crescents as opposed to through traffic.

PHASE	Α	В	PAVING	
Phase 0				
Phase 1	5			
Phase 2	14	8	A, 275	
Phase 3				

Number of Lots Served By an Internal Road System

Internal Road A is developed on the Demko property, and extended onto the Sweet property.

Internal Road B is developed on the Spate/Schrauwen property line.

From the provisions of Planning Cell #1, it is possible to estimate the impact of development onto the existing network. Planning Cell #1 will generate 310 vehicle trips per day at Phase 2, with a gradual increase from 210 at Phase 1. Phase 2 is the total build-out for Planning Cell #1. A tentative road network is also proposed as Phase 3 for Plans of Development #2 and #3, based on policies and guidelines for development of the quarter section which favour crescents to through traffic, and based on the provisions of Planning Cell #1. A total impact of 500 vehicle trips per day could be expected if the whole quarter section were to subdivide accordingly. These figures are well within design capacity of Range Roads 275 and 275A. Paving of Range Road 275 could be considered between Phases 2 and 3.

The additional traffic created by Planning Cell #1 is channelled through progressively fewer access points onto Range Road 275. A cul-de-sac is developed onto the Demko subdivision at Phase 1. This cul-de-sac is the first component of internal road network (A). It services 5 lots, and keeps the total number of access points onto Range Road 275 at 8 while 8 new lots are being developed.

4 more lots will ultimately be created with the development of internal road network (B) and the extension of internal road (A) at Phases 2 and 3. These will actually reduce total access onto Range Road 275 to 3 access points. These internal roads channel traffic through fewer access points. With fewer access points through traffic is less disrupted. There are less stops and fewer roadside improvements. This amply makes-up for the added network use. At full-build out, Internal Road (A) will service a total of 12 lots and paving of internal Road A should be considered along with paving of Range Road 275 between Phases 2 and 3. Internal Road (B) will service 8 lots.

Appendices

Public Participation Questionnaire

(Under Separate Cover) Groundwater Supply Evaluation Report Percolation Testing and Near Surface Ground Water Determination

QUESTIONNAIRE

This questionnaire was conducted with residents and landowners in the concept plan area. A total of 11 people were interview by person. The data below reflects the questions that were asked and the results. The results may not add up to 100% because not all questions were answered therefore the remaining percentage of the 100% had no input.

OPTIONS AND STANDARDS FOR SERVICING

Sewer Treatment Alternatives

Are you planning an upgrade to your existing septic system
 Do you want to remain on a septic system

Yes	10%	No	90%	
Yes	90%	No		

Water Supply and Distribution Systems

- 3) How would you rate the performance of your well
- 4) How many more lots could your well service

5) Would you consider joining a piped community water distribution system

Stormwater Management

6) Have you experienced poor drainage on your parcel

- 7) What are the worst times of the year for drainage
- 8) What were the worst years for poor drainage
- 9) How much of your parcel floods regularly

Options for Road Standards

10) Do you currently experience traffic problems on Range Roads 275 and 275A

11) Where do you experience traffic problems

12) Would you consider dedicating land on your parcel for an internal road network to facilitate potential future subdivisions

Fair – Good 36% Excellent 45% <5 10%</td> 5-10 - 10-20 10% >20 18% Yes 10% No 82%

Inadequate -- Poor --

Yes 10%	No 82%		
Winter –	Spring 73%		
Summer –	Fall –		
Spring 10%	N/A 73%		
<5% 73%	5%-25% -		
25%-50% -	>50% -		

Ŷ	es –	N	ĪΟ	90	%	

275A 10%	
Yes 45%	No 36%

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Dedications			
27) What type of dedication would you be	prepared to consider	bylaw	riction 18% convenants –
		the second s	purchase –
28) Would consider dedicating some of you access	ur lands for internal	Yes 36%	No 28%
29) Would you consider dedicating some o provide a green open space	f your lands to	Yes 18%	No 55%
30) Would you consider dedicating some y a buffer between residential and agricultura	-	Yes 18%	No 55%
OPTIONS FO	R DEVELOPN	MENT	
Lot Layout			
31) Do you want to retain access onto Ran 275A	ge Roads 275 and	Yes 83%	No -
32) Would consider access from a cul de sa	ac	Yes 45%	No
33) Would you consider access from an internal road network		Yes 45%	No 10%
Public vs Private Systems of			
Development			
34) Would you consider developing your p adjacent owners in the quarter section	parcel jointly with	Yes 55%	No 27%
35) Would you prefer to submit	plan of subdivision v joint plan of propose bare land strata 18%	d future devel	- 1
36) For community services such as rely on exisiting mu		nicipal services 55%	
road maintenance, would you prefer to	privately contract for these services		
37) Would you consider the added expenses of a private development of the quater section similar to "condo fees		Yes	No 73%
38) If the whole quater sections cannot be density, would you consider joint private d parcel	developed to full	Yes 45%	No 18%
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LAND USE POLICIES

Existing Uses and Designation

13) Over the quarter section, residential uses are slowly and steadily replacing traditional agricultural activities14) The increase in residential uses around the quarter section limits agricultural activities in the quarter section15) Agricultural Uses on your parcel

Redesignation and Strategies for the Transition

16) A useful minimum parcel size for the quarter section is

17) I would like to maintain the ability to subdivide

18) I will subdivide soon

19) Agricultural activities and a rural lifestyle are still a component of residential uses in the quarter section

Density Increase and its impacts

20) Earge parcels of land and smaller lot developments can exist side by side

21) Numberr of lot my well is good enough to service

22) More lots in the quarter section will increase

23) What is the maximum number of lots you would share a private driveway with

Managing Interface between AH and R1

24) Traditional small scale Agricultural activities still exist in the plan area

25) Joint uses of adjacent lands are conceivable in this section to establish smaller and more intensive agricultural activities such as fish farms, horticulture, equestrian services along with an increase in residential uses and densities

26) Agricultural uses and residential uses need to be seperated by buffer areas

Agree 100% Disagree -

Agree 64% Disagree 28%

Hay 82% Livestock 36% Garden 82% Grazing 36%

2 acres 10%	4 acres 73%
>4acres -	
Yes 64%	No 18%
Yes 10%	No 45%
Agree 100%	Disagree-

Agree 82% Disagree10%

<5 10%	5-10 -
10-20 10%	>20 18%
Traffic 64%	Sewer 45%
Drainage 36	% Water 36%
<5 36%	5-10 18%
10-20	>20 -

	_	فيتحوي ويرافع والمتحد والمتحد والمتحد المتحد والمتحد
Agree	91%	Disagree-

Agree 64% Disagree10%

Agree 18% Disagree 55%

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Buffer Areas

39) Do you see a need for buffer areas over t		
40) Do you believe buffer areas are needed		
between	residential and residential –	
	private and public systems of development -	

Network Options

I	· · · · · · · · · · · · · · · · · · ·
41) Would you prefer	panhandle lots 27% cul-de-sac 27%
42) Would you prefer	municipal road 10% private roads 45%
43) Do you favour	drive-through 275 to 275A –
-	loops 275 to 275 10%
	275A to 275A 10%

Drainage and Topography

44) Identify on the attached map areas of poor drainage

