



# BEARSPAW COUNTRY RESIDENTIAL

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## CONCEPTUAL SCHEME

AS AFFECTING THE NE 03-26-03-W5M & BLOCKS 1 & 2,  
PLAN 294 LK located within the SE 10-26-03-W5M



Bylaw C-5585-2002, Adopted February 18, 2003

**MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44**  
**BYLAW C-5585-2002**

A Bylaw of the Municipal District of Rocky View No. 44 to amend Section 10.0 of Bylaw C-4129-93 (the Bearspaw Area Structure Plan) by inserting a Conceptual Scheme to provide a comprehensive policy framework intended to evaluate and guide redesignation, subdivision and development within the subject lands.

**WHEREAS** the Council deems it desirable to amend the said Bylaw, and

**WHEREAS** the Council of the Municipal District of Rocky View No. 44 has received an application to adopt a Conceptual Scheme to provide a comprehensive policy framework to guide and evaluate redesignation, subdivision and development proposals within the NE 3-26-3-W5M and Block 1 & 2, Plan 294 LK located within the SE 10-26-3-W5M, as shown on the attached Schedule 'A'; and

**WHEREAS** a notice was published on Thursday, July 04, 2002 and Thursday, July 11, 2002 in the Rocky View Times, a newspaper circulating in the Municipal District of Rocky View No. 44, advising of the Public Hearing for Tuesday, July 16, 2002; 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 Act, being Chapter 24 of the Revised Statutes of Alberta, 1995, and all amendments thereto.

**NOW THEREFORE** the Council enacts the following:

1. That Section 10.0 of Bylaw C-4129-93 (the Bearspaw Area Structure Plan) be amended by inserting a Conceptual Scheme to provide a comprehensive policy framework to evaluate and guide redesignation, subdivision and development within the NE 03-26-3-W5M and Block 1 & 2, Plan 294 LK within the SE 10-26-3-W5M.
2. The Bylaw comes into effect upon the date of its third reading.

**File: 6703011-2001170**

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on June 25, 2002, on a motion by Councillor Goode.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on February 18, 2003, on a motion by Councillor Kent.

Third reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on February 18, 2003, on a motion by Councillor Cameron.

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REEVE OR DEPUTY REEVE

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MUNICIPAL SECRETARY

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## I. INTRODUCTION

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### 1.1 BACKGROUND

The Plan Area encompasses the NE1/4-Sec3-T26-R3-W5M and a portion of the SE ¼ of Sec10, T26, R3, W5M composed of a total of 80.94 ha (200 acres). The site is located approximately 2.4 km north on Highway 766 from Highway 1A, within the Municipal District of Rocky View No.44 as shown on Figure 1. The lands are currently designated RF- Ranch and Farm District and R-2 – Residential Two District under the Land Use By-Law No. C-4841-97.

Two separate landowners within the Plan Area have collaborated to generate a comprehensive proposal for the subdivision and development of their lands. The resulting development concept places an emphasis on passive and active recreational space and facilities as the central theme of the project.

### 1.2 PLAN FORMAT

This proposal will provide Council with an analysis of all subdivision and development related issues pertaining to the site and its context within the surrounding community.

The Plan begins by identifying objectives in Section 2.0, describes the Plan Context in Section 3.0, and Section 4.0 will discuss the existing natural site features. Sections 5.0 and 6.0 present the conceptual development scheme proposal as well as existing and future servicing proposals. Section 7.0 will discuss traffic impact while the final two Sections 8&9 of this report will address Public Input and Concept Plan conformity with other relevant legislation.

Policy statements within the Plan are numbered and written in *Italics*.

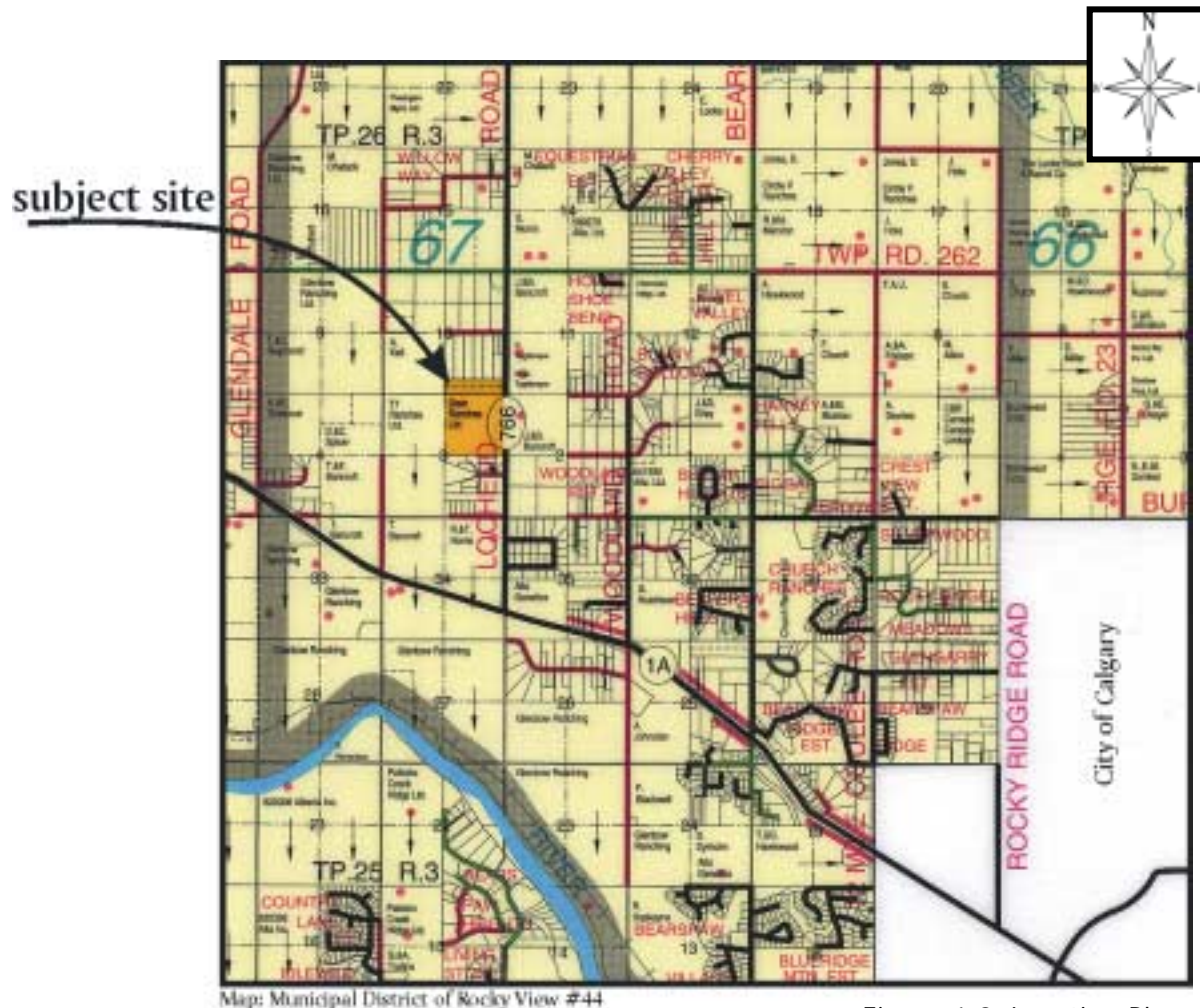


Figure 1.0 Location Plan

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## II. PLAN OBJECTIVES

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- 2.1** To establish policies to guide future subdivision and development within the Plan Area in accordance with the Bearspaw Area Structure Plan.
- 2.2** To identify development issues within the Plan Area and establish appropriate and comprehensive solutions for addressing these issues.
- 2.3** To facilitate the development of a comprehensively planned residential project that incorporates the highest design, aesthetic and environmental standards.
- 2.4** To establish a servicing scheme that is appropriate to the Development Proposal.
- 2.5** To gather input from residents and create a development which is compatible with the adjacent land uses and is an asset to the surrounding community.

### III. PLAN CONTEXT

The Subject Lands are identified in Figure 1 and are legally described as:

*The NE ¼ of Section 3, Township 26, Range 3, west of the 5<sup>th</sup> meridian composed of 160 acres*

*And a portion of the SE ¼ of Section 10, Township 26, Range 3, west of the 5<sup>th</sup> Meridian composed of 40 acres.*

#### 3.1 EXISTING AREA LAND USE

The context of the Plan Area with respect to the surrounding community is depicted in Figure 2.

The site is located within the Bearspaw Community in a portion of the MD of Rocky View where primary land uses are residential mixed with some agricultural uses.

A portion of the Subject Lands are designated RF (Ranch and Farm District under Section 47 of the Land Use Bylaw) and R-2 (Residential Two District). The lands are currently being primarily used for the boarding of horses and grazing pasture. As well, a single detached dwelling is located along the north boundary of the site.

##### 3.1.1 Adjacent Land Uses and Zoning

Within a 1-mile radius the surrounding land uses consist primarily of R-2 to the north, R-2 and R-1 to the south, a combination of RF, R-2 and R-1 to the east, west and south-east of the subject site.

##### 3.1.2 Recent Approvals in the surrounding area

The subject site is located in an area of the Bearspaw community that has seen significant growth over the past few years. Recent approvals for R-2 and R-1 uses to the southeast of the site, demonstrate a continued westward progression of Country Residential land uses.



Fig 2.0 Recent Approvals



### 3.2 BEARSPAW AREA STRUCTURE PLAN

The Bearspaw Area Structure Plan provides a Land Use strategy to guide future growth and development within the Bearspaw Community in accordance with sound Land Use Planning and Phasing principles.

#### 3.2.1. Future Land Use

As shown in figure 3.0 the subject lands are located in an area identified for future Country Residential Land Uses. Within the past few years, the Bearspaw Area has seen significant growth in the development of country residential uses, as is evidenced in Figure 2.

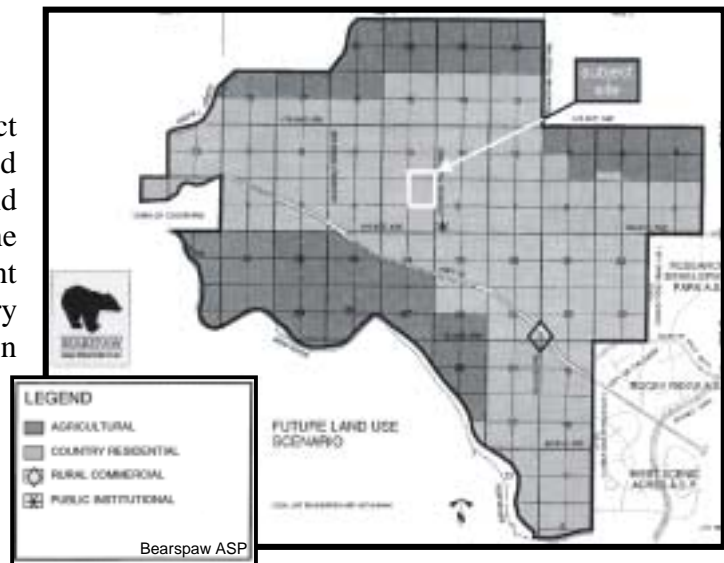


Figure 3.0 Future Land Use

#### 3.2.2. Phasing

Due to the size of the Bearspaw ASP area, guidelines for future residential development have been outlined on a development priority basis. Pursuant to figure 4.0 the subject site is located within priority area 1 and 2. Priority area 1 is recommended for concept plans, whereby concept plans are required for priority area 2.

The proposed concept incorporates a comprehensive development between two joint landowners who are presently located between Country Residential development to the north and south. Additional recent development is currently occurring to the southeast of the subject site on R-1 and R-2 land uses.

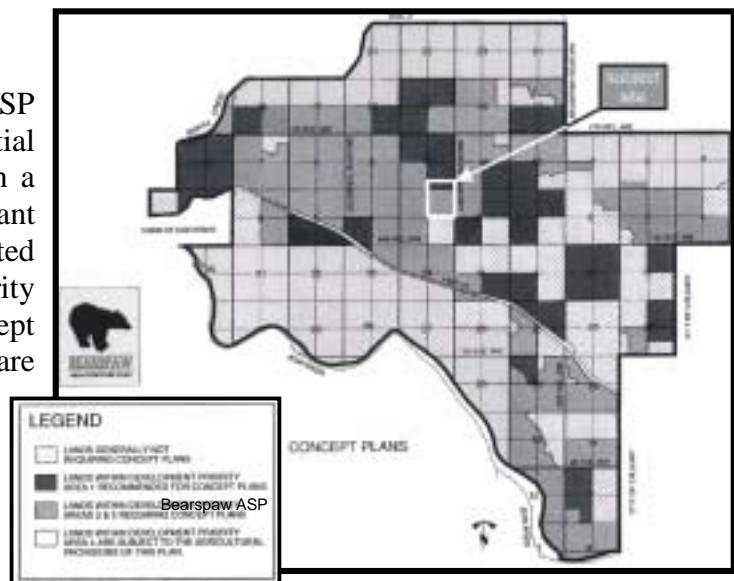


Figure: 4.0 Concept Plan Requirements

Consequently, despite the location of a portion of the plan area within priority area 2, the proposed subdivision represents a logical sequence with the phasing of country residential development within Section 7.2 and Appendix B, of the Bearspaw ASP.

### 3.2.3. Parcel Sizes

Figure 5.0 depicts the various land uses occurring within the Bearspaw ASP area, the average parcel sizes for country residential development range from a minimum 2 acres to approximately 4 acres in size. The proposed parcel sizes within the plan area comply with the Bearspaw ASP for parcel sizes from 2 acres to 4 acres in size. The proposed concept plan provides the rationale required for parcels less than 4 acres in size as required by section 8.2.21 of the Bearspaw ASP.

### 3.2.4. Concept plans

The MD of Rocky View considers the development of Concept Plans an important part of the long range planning within the municipality. This helps to ensure the appropriateness of land uses, identify development issues, facilitate the phasing of subdivision, and to promote innovative design to maximize potential yield (Sec. 8.1.8 Bearspaw ASP)

Pursuant to the Bearspaw ASP, the proposed concept plan is in compliance with the preferred land uses as well as the implementation of innovative subdivision design.

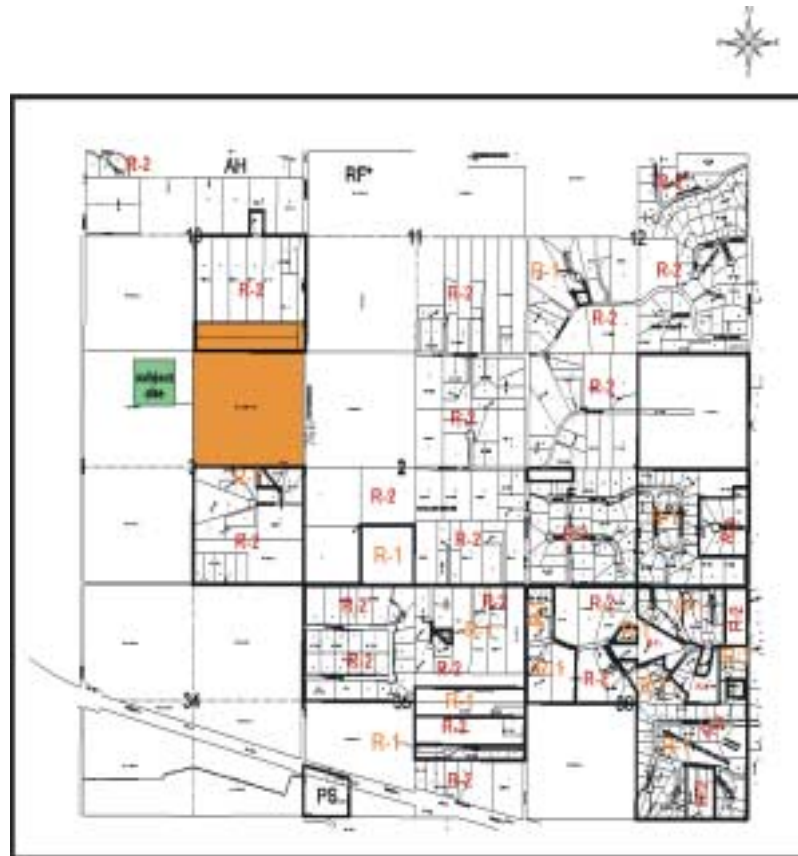


Figure 5.0: Surrounding Land Use

### 3.3 Access

Figure 6.0 provides an overview of main regional access routes to the Subject Land.

The site is accessed via a 2.4 km drive north on Highway 766 (SH 766) from Highway 1A. The proximity of Highway 1A and the superior access afforded by Highway 766 results in an efficient access scenario for the plan area. Consequently, any additional traffic generated as a result of this subdivision proposal can be easily accommodated via these two major access routes. A detailed traffic impact analysis will be discussed in section 7.

Highway 766 is considered to be a major Collector Road within the Bears paw Community, essentially dividing the Bears paw area into the east and west. Oriented in a north to south fashion, Highway 766 links commuters to Highway 1A with the preferred location of an interchange to be constructed at a future date (see figure 6.0).

The Bears paw ASP considers a major collector to function with equal importance given to site access and traffic movement. The typical volume of traffic considered to be appropriate is less than 5,000 vehicle trips per day.

According to the most recent traffic count data (1997), Highway 766 was experiencing approximately 1798 vehicle trips per day and therefore operating at approximately 35% road design capacity.

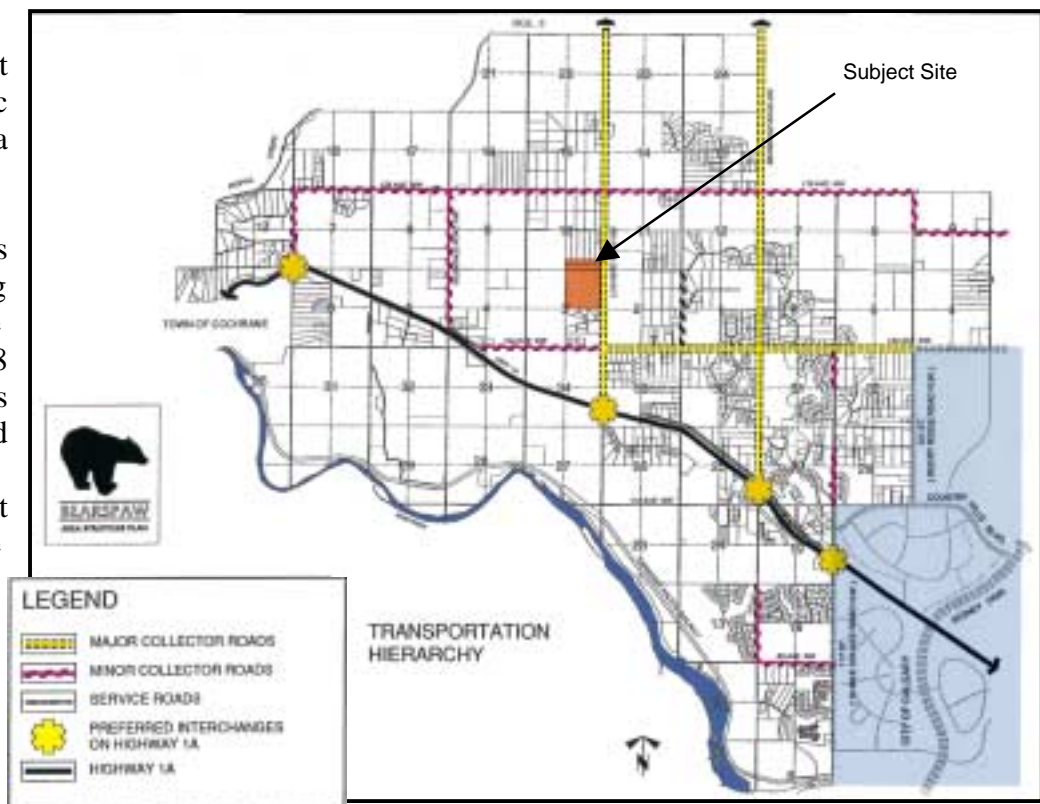


Figure 6.0 Site Access

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## IV. SITE FEATURES

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### 4.1 EXISTING LAND USE

The lands are currently being primarily used for the boarding of horses and grazing pasture. As well, a single detached dwelling is located along the north boundary of the site.



### 4.2 TOPOGRAPHY

The land generally slopes from south to the northwest portion of the site as is depicted in figure 7.0. The terrain provides an opportunity to create a terraced series of building sites along the southern half of the site. The site generally orients itself to the west, northwest and east. Given the rolling topography of the site as well as the surrounding countryside, there are superior mountain views at select locations on the site.

### 4.3 GEOTECHNICAL INVESTIGATION

Almor Testing Services Ltd, conducted a Geotechnical Investigative Study on November 15<sup>th</sup> 2000, to determine suitable percolation soil testing.

Ten test holes were dug on the Subject Lands for the purpose of conducting percolation testing and near surface water table testing to determine the suitability of the site for the installation of septic field systems. The Geotechnical investigations concluded that the area proposed for subdivision is suitable for residential development. Further testing will be undertaken on individual lots through subdivision conditions to confirm suitability on a building site- specific basis. The policies related to further testing are discussed in detail in section 6.1. The Geotechnical report is available under separate cover.

### 4.4 VEGETATION

Vegetation over the Plan Area is typical of non-native pasture. There are no tree stands anywhere on the site.

### 4.5 DRAINAGE

The Plan Area generally drains from the south to the central - northwest corner of the site where a low lying area collects intermittent drainage on a seasonal basis.



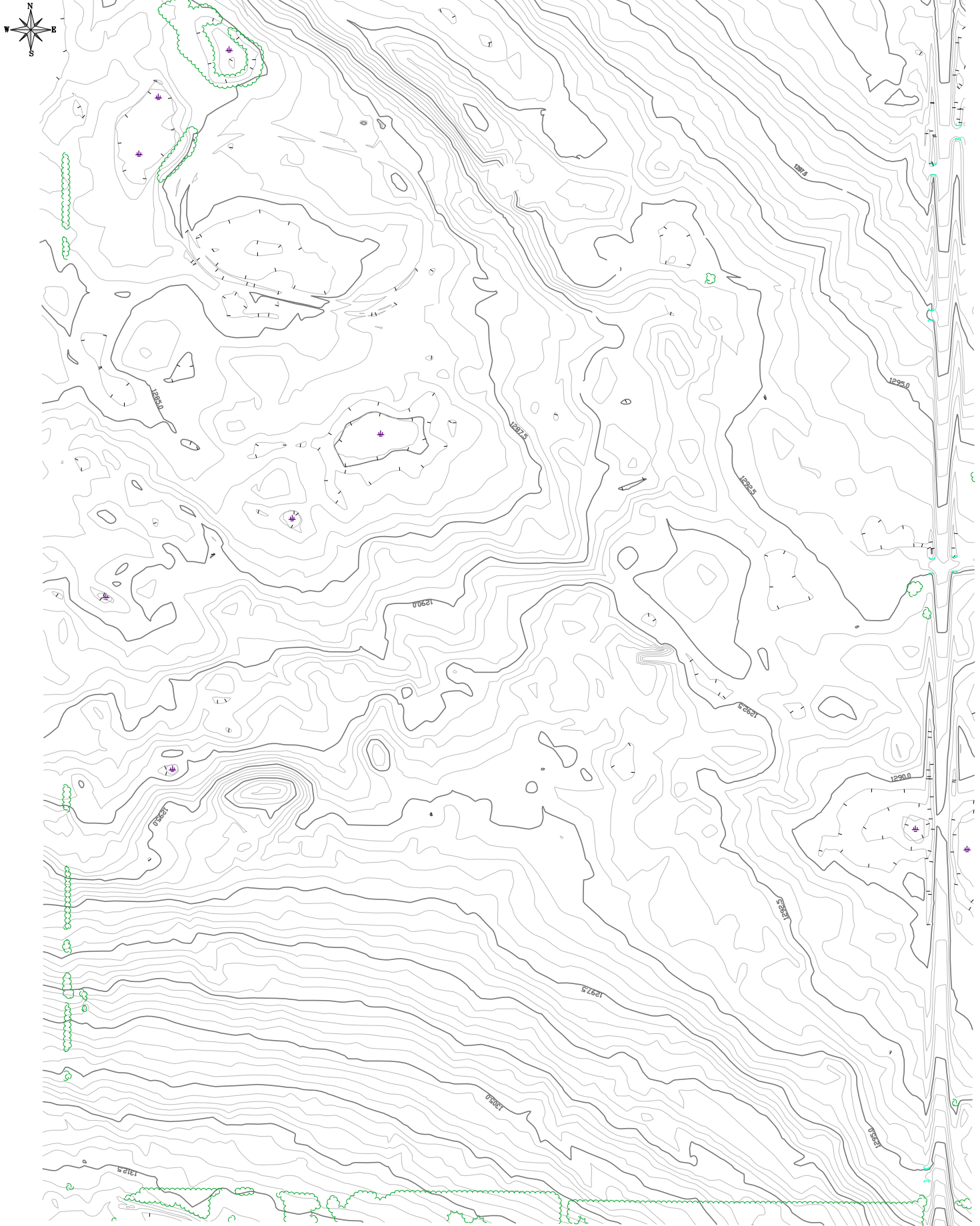




Figure 8.0



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## V. CONCEPTUAL DEVELOPMENT SCHEME

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### 5.1 PROPOSED SUBDIVISION CONCEPT

The proposed subdivision concept is a joint venture between two existing landowners. Both landowners have initiated the development of a unique country residential community highlighting active and passive recreational uses within the framework of a residential layout.

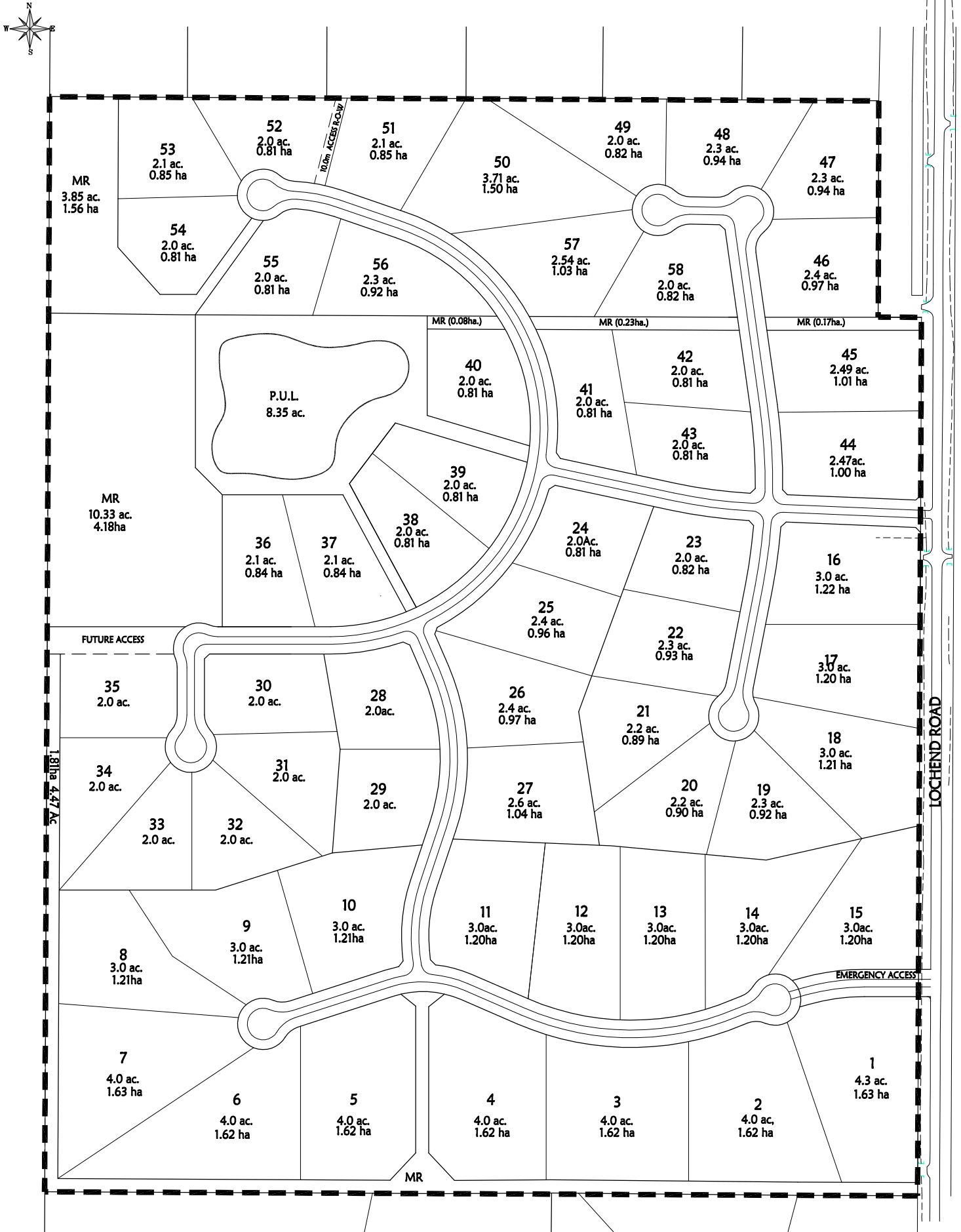
Any proposal for future subdivision of the Plan Area must take into account the existing physical attributes of the land and the existing pattern of development to create subdivision that is compatible with both. Figure 9.0 provides a concept for the future subdivision of lands within the Plan Area that accomplishes this objective.

Access into the Plan Area is via Highway 766. The access roads follow a curvilinear pattern creating unique building sites and maximizing view corridors. The primary northern entrance via Highway 766 will terminate at a t-intersection overlooking the MR parcel, which is has been designed to be the focal point of the community. Through the use of T-intersections, the traffic speed is reduced, while at the same time maintaining a visual termination feature. Additional provisions for a mail kiosk and community bulletin board at the t-intersection enhance the functionality of the meeting space encouraging interpersonal communication.

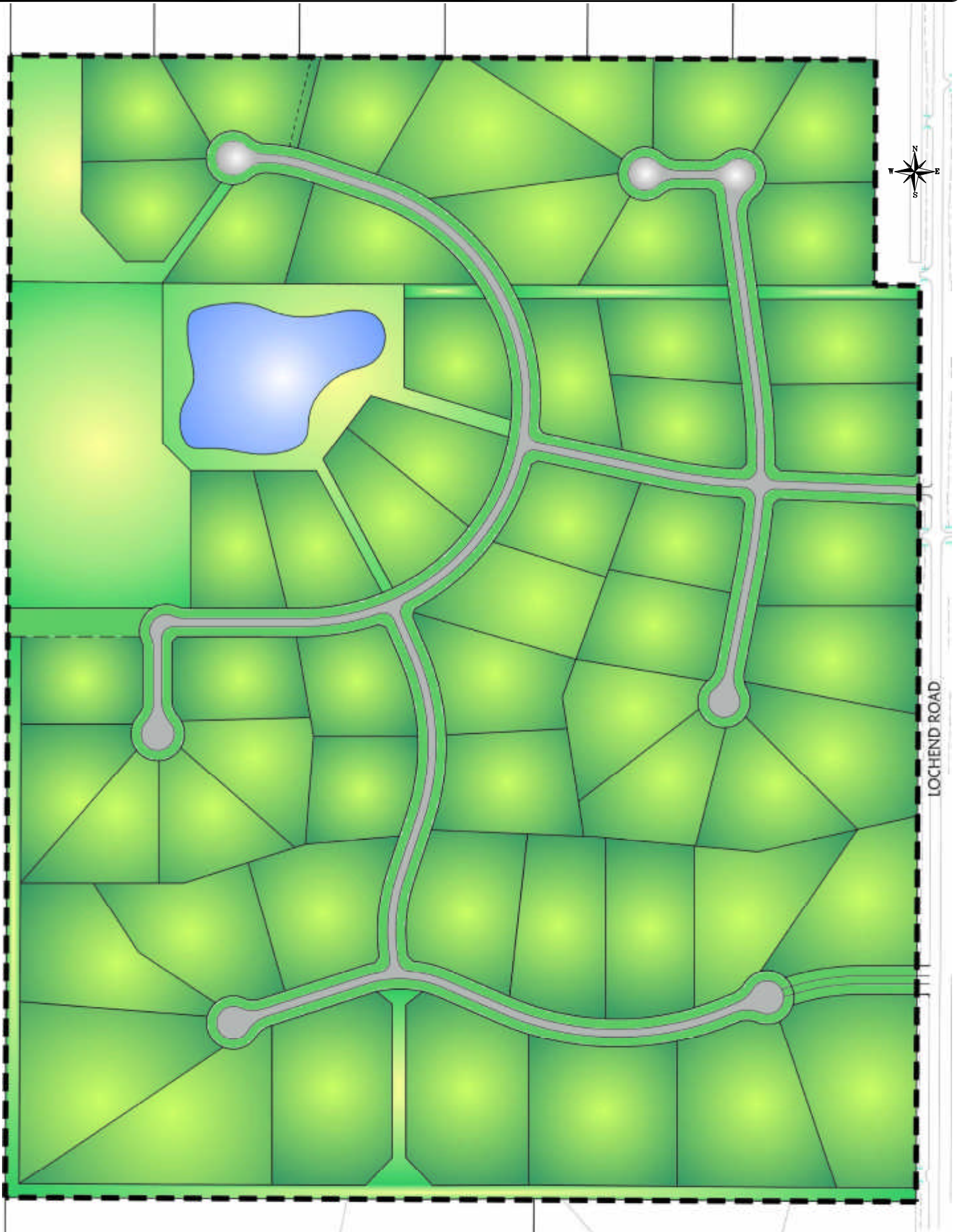
The Lot configuration maximizes view corridors, building locations, and privacy. The residential layout has been designed to reduce vehicular traffic within the community, and encourage increased pedestrian activity. This is achieved through the location of a central open space – “the focal point of the community” and several pathway connections.

The proposed subdivision design also seeks to maximize potential yield while at the same time minimizing grading of the site to reduce development costs, and preserve the integrity of the existing landscape.

One primary recreational component has been incorporated into the design of the community. The low-lying area of the site in the northwest area will be developed with a recreational lake with a beach and docks (with non motorized boats). Provision may be made to add other amenities such as tennis courts, beach volleyball and a basketball/hockey court.







LOCHEND ROAD

Given the topography of the land, the layout takes full advantage of the existing contours through the location of roads and the placing of lots. Accordingly the layout has maximized the potential for stepping of building sites, increasing view corridors and transitioning parcel sizes.

With the development of a stepped approach the transitioning of parcel sizes will maintain the view over principle. Alongside the south boundary of the site 4-acre parcels have been located to provide similar parcel sizes near the existing residents of White Tail Place to the south. Furthermore, 3 acre parcel sizes on the north side of Road “A”, act as a transition to the 2 acre parcels to the north and center of the site.

Zoning	Lot sizes	Lots	Lot Numbers
R-1	2-3 acres	51	8-58
R-2	4 acres	7	1-7

Given the parcel size transition from 4 acre to 2 acre, the proposed Land Use designation is R-1 (with 51 Lots), and R-2 (with 7 Lots).

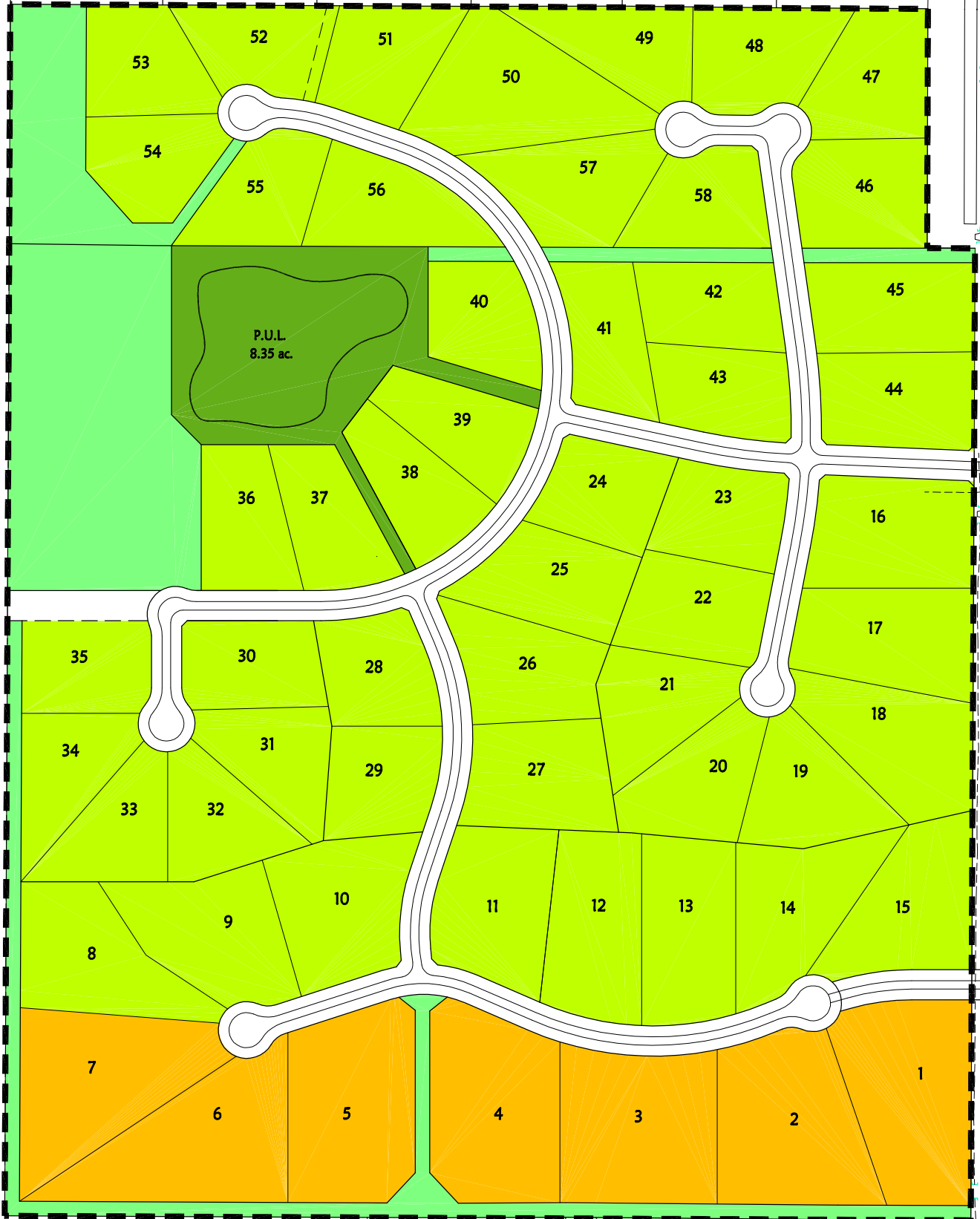
A maximum yield of 58 residential lots is expected for the entire Plan Area. This will result in an approximate population density of 214 people, based on an average of 3.7 persons per household.

Building sites on each of the future parcels will be designated in accordance with overall aesthetics and architectural design guidelines. Future subdivision of the subject lands will be determined by the provisions of this plan.

*Policy 5.1.3: Subdivision of lands within the Plan Area shall generally be in accordance with the Subdivision Concept Plan in Figure 9.0.*

*Policy 5.1.4: All parcel sizes shown within this Plan Area shall remain as shown on Figure 9.0.*

*Policy 5.1.5: Future subdivision of 4 acre-parcels within the Plan Area to increase parcel density shall not be permitted without an amendment to this Plan.*



- R-1
- R-2
- MR
- PS(PUL)-PRIVATE LAKE AND PARK

## 5.2 SUBDIVISION PHASING

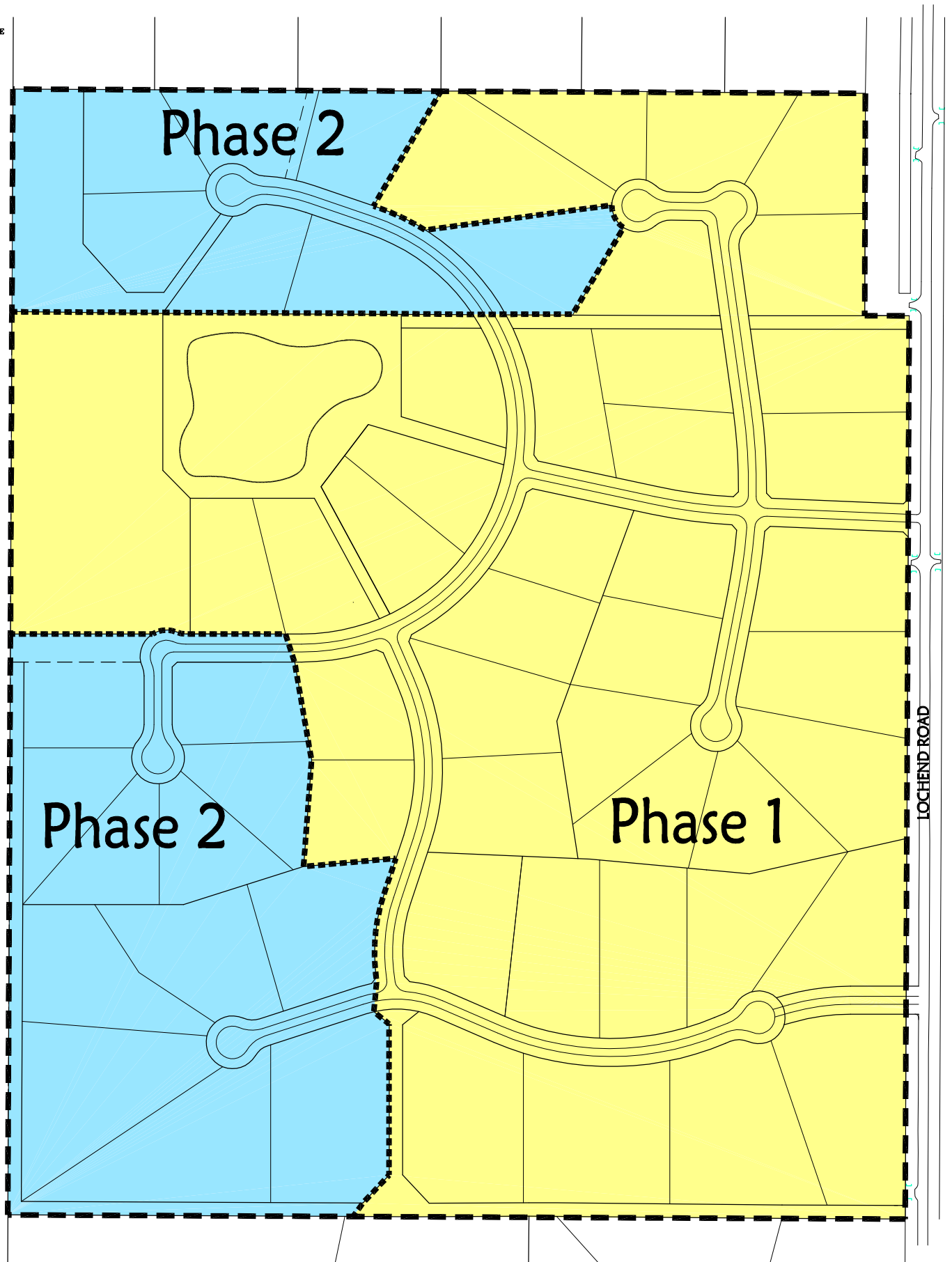
Development of the Plan Area will occur in two phases, as depicted in Figure 12.0, with the first phase of subdivision being the east half of the development next to Highway 766 including the MR areas.

*Policy 5.2.1: Phasing within the Plan Area may generally proceed in accordance with the Subdivision Phasing Plan attached to and forming part of this Plan.*

*Policy 5.2.2: While the subdivision and development of the Plan Area is intended to proceed in two phases matched to a logical progression of servicing, subdivision and development may proceed in a single phase (or multiple phases) without an amendment to this Concept Scheme, subject to the other provisions of this Plan, provided the required infrastructure to sustain the planned subdivision and development is in place and/or available at the time of the approval.*

*Policy 5.2.3: The development of Recreational Amenities within the subdivision may occur notwithstanding subdivision phasing.*

*Policy 5.2.4: The Riding Arena and related paddocks/corrals shall be removed and reclaimed as a condition of subdivision approval for lots proposed within a portion of the SE ¼ of Sec10, T26, R3, W5M. An Environmental Assessment may be required to determine the suitability of the former Riding Arena site for residential development, to the satisfaction of Alberta Environment, the Calgary Health Region and the M.D. of Rocky View.*





### 5.3 MUNICIPAL RESERVES – OPEN SPACE AND RECREATIONAL AMENITIES

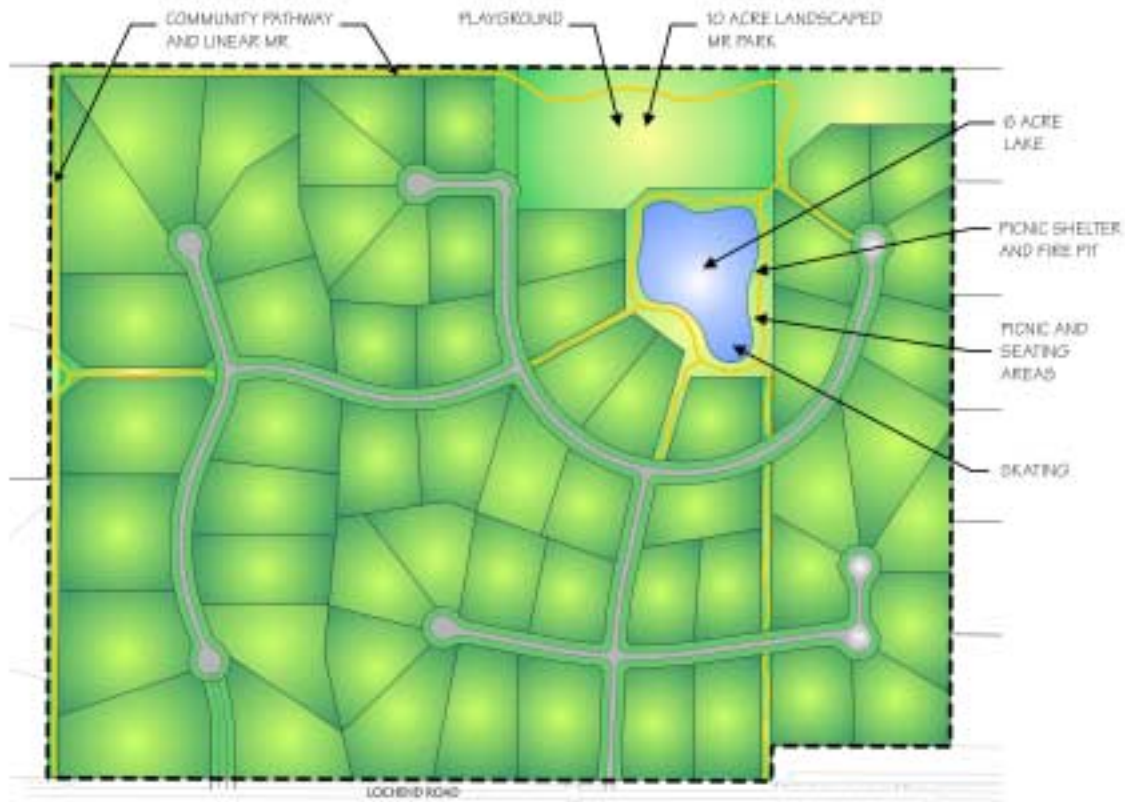


Figure 13.0 Community Design

Pursuant to the Municipal Government Act, Council as a Subdivision Approving Authority, has the opportunity to acquire up to 10% of the gross area of the subject lands as Municipal or School Reserve. Similarly, municipal reserves could be provided via payment of cash-in-lieu of land that would otherwise have been dedicated.

The proposed municipal reserve dedication scheme is shown in Figure 14.0 (Open Space Plan). A total of 20 acres of land will be dedicated as municipal reserve, which represents 10% of the gross area proposed for subdivision, as required by the Municipal Government Act.

The proposed subdivision will incorporate municipal reserve lands to create a pathway network that links the community with a centrally located Municipal Reserve parcel in the northwest portion of the site. This MR parcel will act as a focal point for the

subdivision and provide a hub for passive recreational activities. Additional amenities may be developed within the MR site including tennis courts, volleyball courts, basketball courts and a hockey rink. The development of these recreational facilities within the MR parcel will be subject to approval from the MD of Rocky View and would be constructed, operated and maintained at the sole expense of a local Homeowner's Association.

The extensive pathway network throughout the northwest MR parcel and the balance of the Plan Area will encourage pedestrian activity. This activity will be further enhanced by the location of a central Mail Kiosk at the main t-intersection located just east of the proposed lake.

The design of the proposed open space system within the Plan Area is intended to:

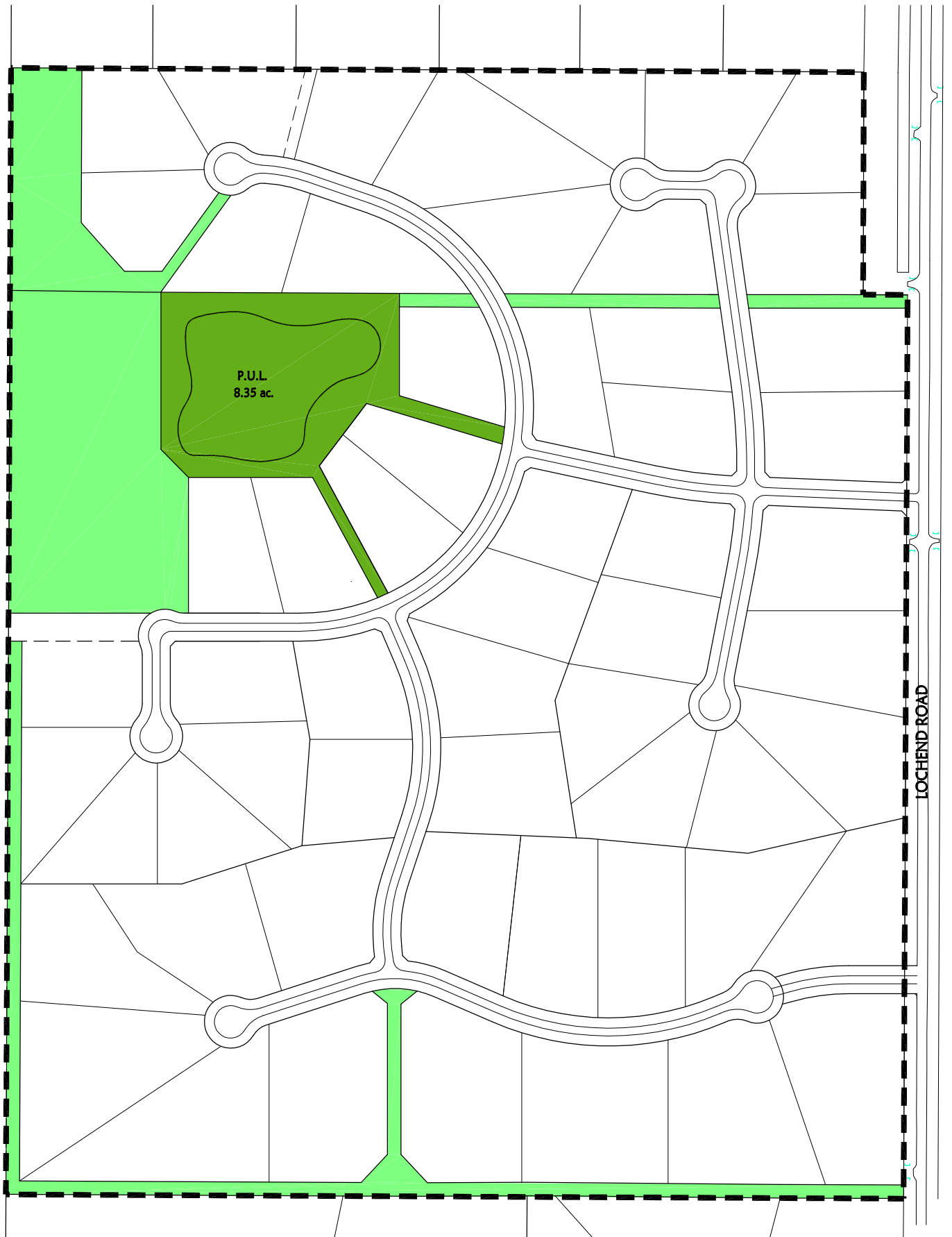
1. Promote a pedestrian-oriented country residential subdivision via dedication of municipal reserves;
2. Provide a focal point within the heart of the subdivision to provide a visual feature and a communal gathering place that encourages informal leisure activities; and
3. Link the MR parcel with the balance of the subdivision via interconnected pathways that reduce vehicular traffic within the site and function as a buffer between future and existing development to the south of the Plan Area.

*Policy 5.3.1: The lands identified in Figure 14.0 shall be dedicated as Municipal Reserve to the satisfaction of the MD of Rocky View.*

*Policy 5.3.2: The Pedestrian System shall be developed as a low-intensity grass or graveled trail as a condition of the subdivision's first phase in accordance with a Development Agreement pursuant to the Municipal Government Act.*

*Policy 5.3.3: A Homeowner's Association, established as a condition of the subdivision's first phase, shall enter into a Lease Agreement for the purpose of providing additional recreational amenities within the Municipal Reserve. The Homeowner's Association will be responsible for the operation and maintenance of any amenities located within the MR, including the pedestrian trails.*

*Policy 5.3.4: A Mail Kiosk shall be developed within the Municipal Reserve in accordance with the terms of a Lease Agreement between the MD of Rocky View and the Homeowner's Association, to the satisfaction of Canada Post.*





### 5.3.1 Recreational Lake

In order to create a country residential development with an emphasis on leisure activities, subdivision of the Plan Area will include a recreational lake. This lake will provide several functions within the subdivision.

1. It will serve as a primary recreational amenity for the residents of the Plan Area on a year-round basis and may offer:
  - a. A beach area
  - b. A dock to support non-motorized boating
  - c. Opportunities for year-round fishing
2. A visual amenity to the community;
3. A focal point for the community;
4. A gathering place for local residents; and
5. Provide for Stormwater Management within the Plan Area.

The lake will be constructed within a Public Utility Lot (Figure 9.0 - Subdivision Concept Plan). As such, the lake can address the subdivision's stormwater management requirements and could be linked into a regional stormwater system. A Homeowner's Association shall enter into a Lease Agreement to lease back the boat dock, beach area, etc.) for the benefit of local residents. Access to the lake shall be via the municipal road as shown on Figure 9.0

The overall dimensions of the lake are as follows:

- The lake will be approximately 5 acres in total surface area.
- The lake will be approximately 2.5 m in depth.
- The lake will be lined with a synthetic liner to eliminate weed growth, maintain water levels to ensure a high quality of the water.
- Lake water levels will be supplemented by water from the Rocky View Coop.
- Water quality will be maintained via mechanical aeration and evaporation.

Creation of the lake will depend upon the Developer obtaining all necessary Municipal, Provincial and Federal approvals. Construction will be the responsibility of the Developer, as a condition of subdivision, and operation and maintenance of the lake will be the sole responsibility of a Homeowner's Association.

*Policy 5.3.1.1: The recreational lake shall be developed within a Public Utility Lot (PUL) as a condition of the subdivision's first phase and will be subject to the Developer obtaining all necessary Municipal, Provincial and Federal approvals. Notwithstanding any other approval requirement, the Developer shall submit a Landscaping Plan as affecting the PUL, to the satisfaction of the MD of Rocky View.*

*Policy 5.3.1.2: A Homeowner's Association, established at the time of the subdivision's first phase, shall enter into a Lease Agreement with the Municipality and will be solely responsible for the operation and maintenance of the proposed recreational lake and any other amenities to be developed within the PUL.*

*Policy 5.3.1.3: All uses developed within the PUL shall be subject to approval from the MD of Rocky View's Development Authority.*

*Policy 5.3.1.4: The recreational lake shall provide for Stormwater Management within the Plan Area and shall be constructed in accordance with the terms of a Stormwater Management Plan approved by Alberta Environment and the MD of Rocky View. Any recreational use of the PUL shall be considered ancillary to the lake's Stormwater Management function.*

*Policy 5.3.1.5: Water to supplement stormwater levels in the lake shall be supplied from the Rocky View Water Coop. Groundwater shall not be used to supplement water levels in the lake.*

## 5.4 DEVELOPMENT CONTROLS

The Subject Lands are surrounded by primarily residential and some agricultural uses, as is evident in Figure 5.0. The subject site, is ideal for country residential development.

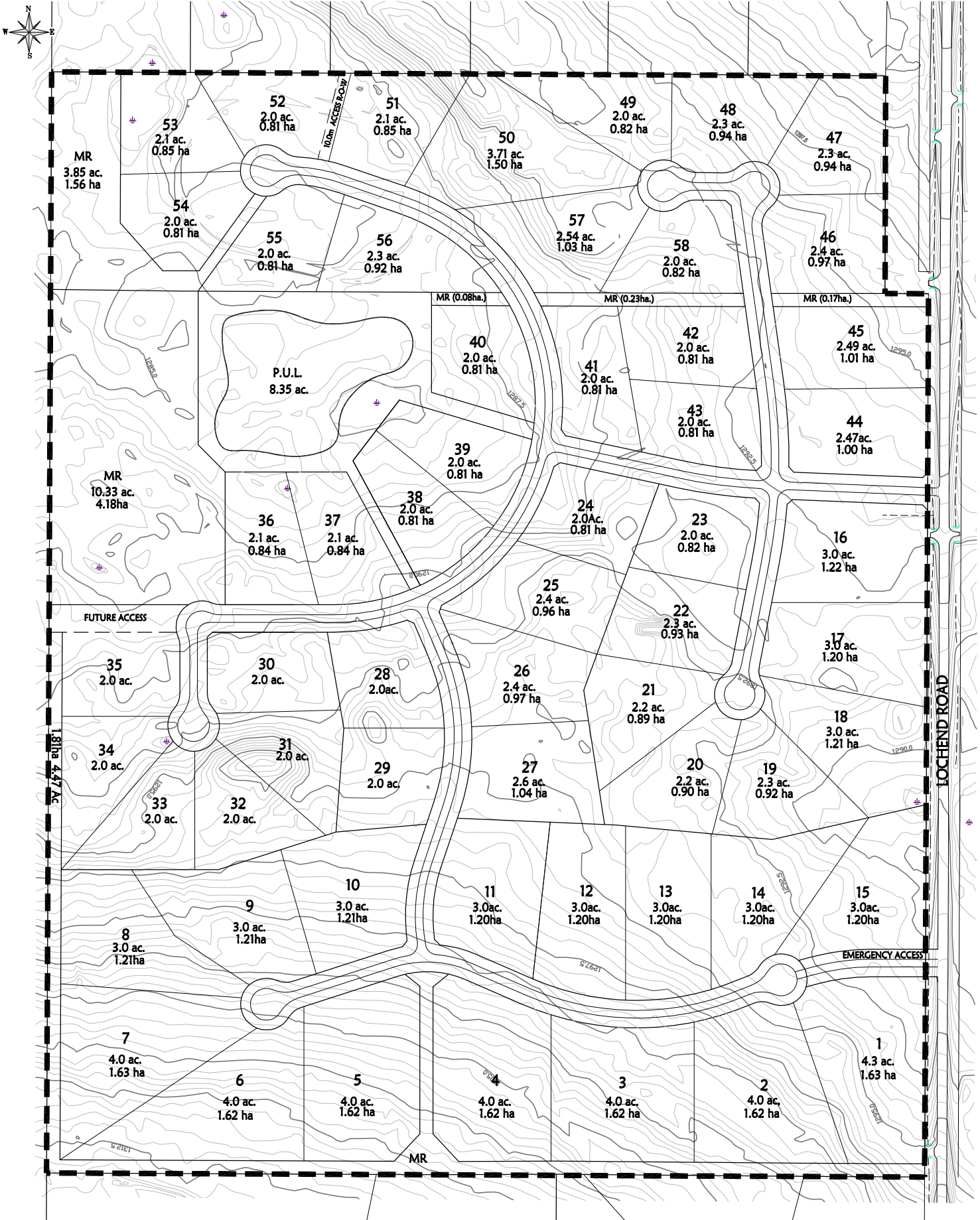
As is evident in Figure 7.0, the subject site slopes from the south and southeast to the northwest and central portion of the site. Towards the north and northeast spectacular mountain and valley views can be observed due to a slight rise in elevation.

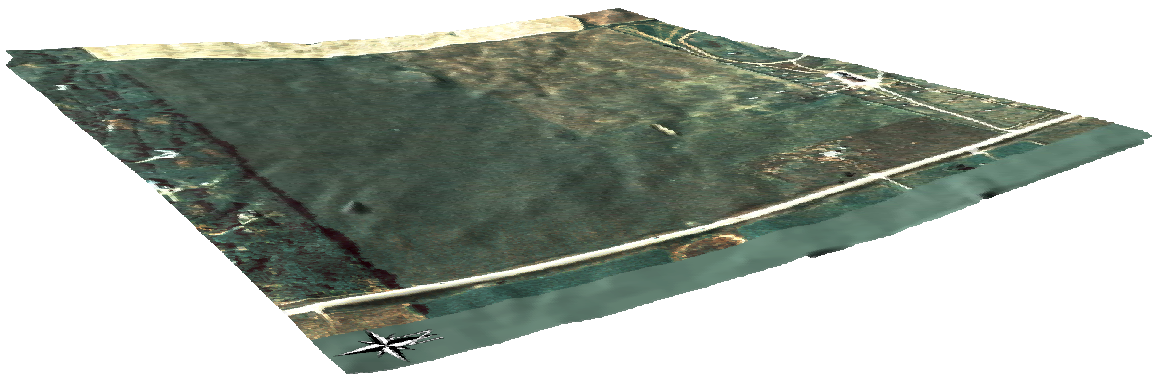
Considering the unique layout and lot configurations for the Subject Lands, the proposed housing locations create a subdivision in which building envelopes alternate between each lot, as shown on Figure 17.0. This results in a softening of the edge between the proposed development and adjacent uses due to the variation in house locations along the plan area boundaries. The requirement for variations in building site locations will be detailed in architectural controls.

### *Architectural Controls*

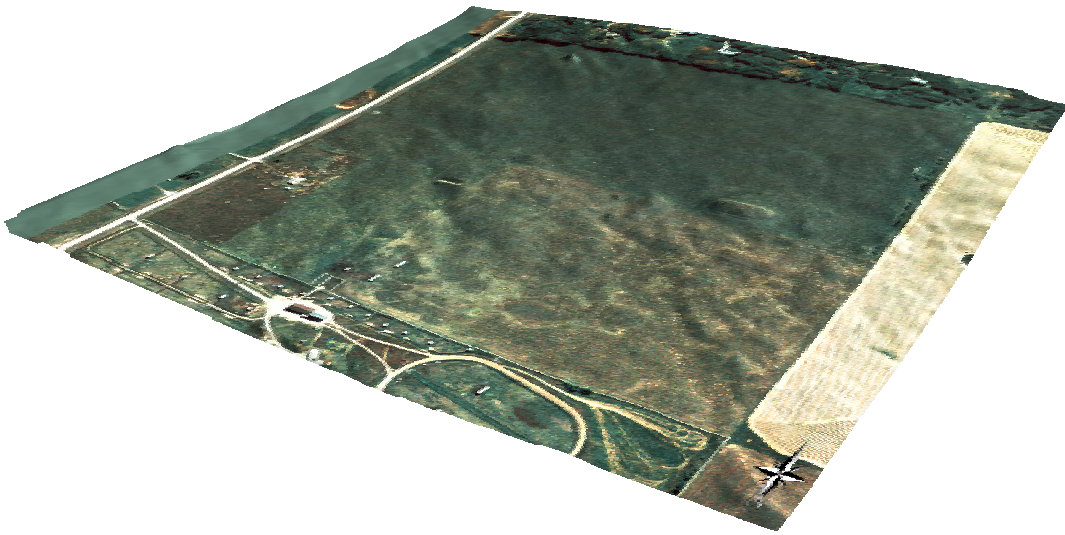
The developer of the proposed subdivision is incorporating strict architectural controls, for the purpose of creating a community sensitive to its heritage and immediate surroundings. These architectural controls will be guided by a rural ranching theme combining traditional architectural elements with natural materials. As a result of the architectural controls the proposed subdivision will be a visually pleasing transition between agricultural uses and urban uses to the west. Architectural controls and building site locations will be contained within a restrictive covenant to be registered against the title of each new lot. The developer will enforce these requirements as lots are sold through the conditions of sale.

*Policy 5.4.1: Building Site locations are to be determined prior to registration of subdivision and will be detailed in a Restrictive Covenant, to be registered against the proposed Lots through conditions of Subdivision Approval.*

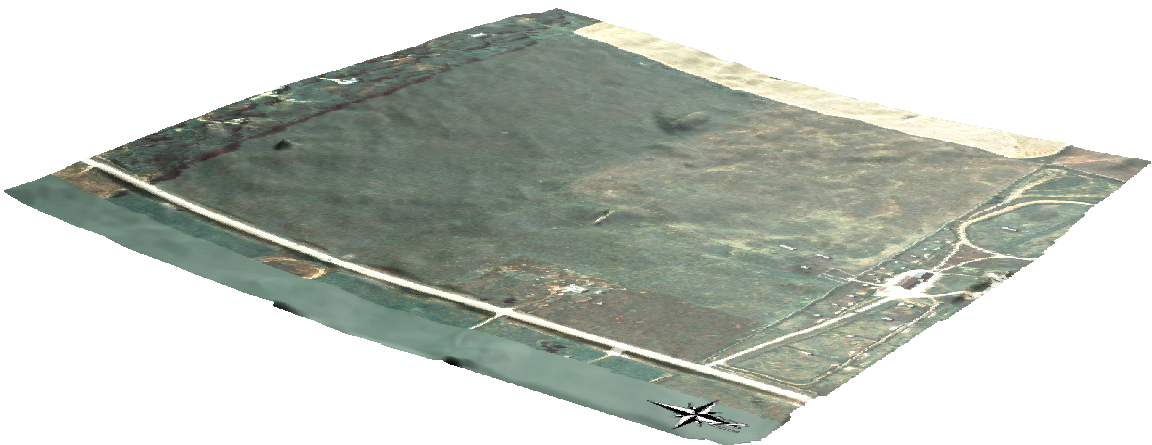




View to the North West



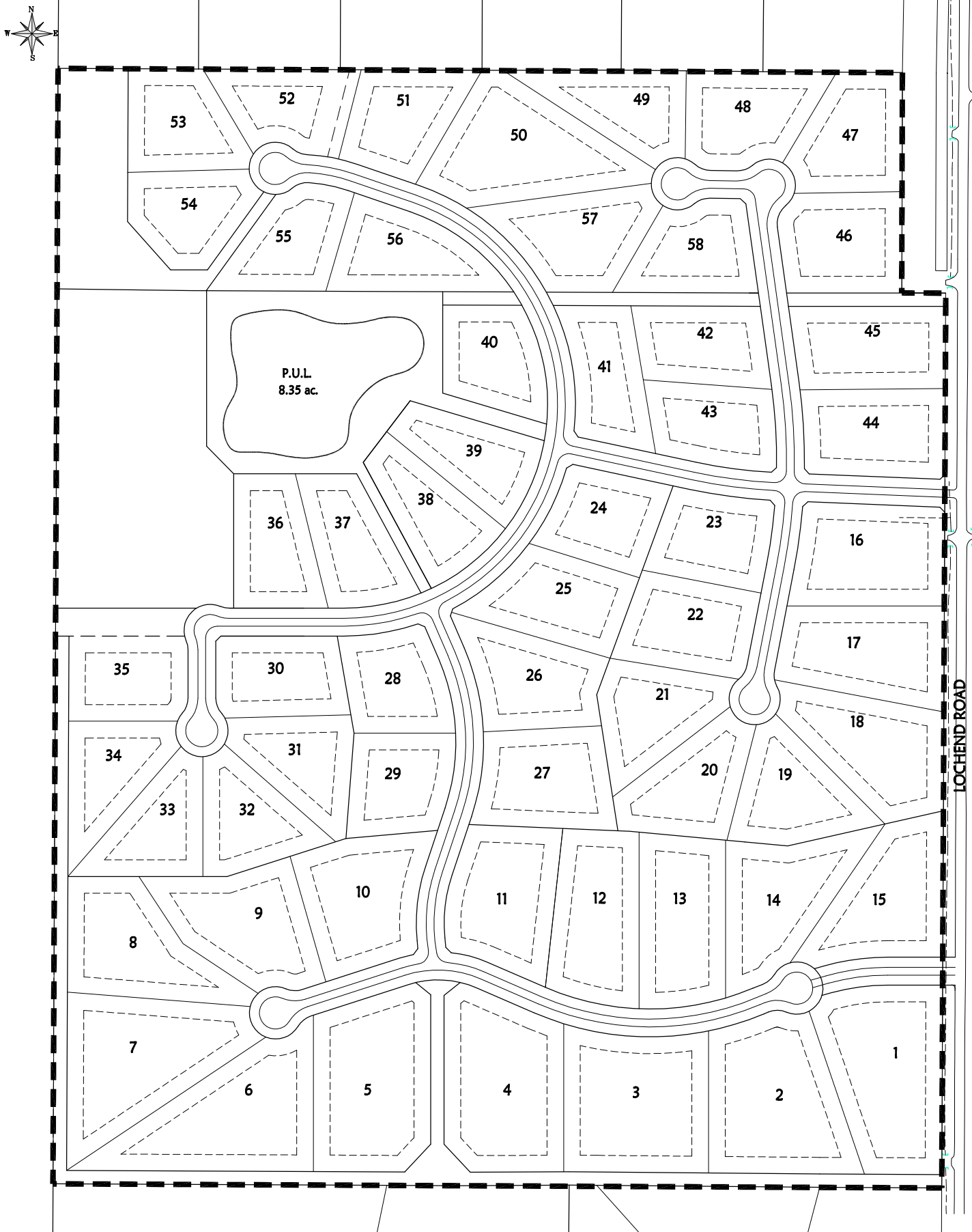
View to the South East



View to the South West

Figure 16.0 3D Views





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## VI. SERVICING PROPOSAL

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### 6.1 WASTEWATER TREATMENT

Sewage treatment and disposal will be managed on site with individual septic tank and tile field installations. Alberta Environment prefers a minimum of 1 acre (0.4 ha) of developable land on each lot proposed through subdivision to facilitate the proper siting of tile fields. The proposed conceptual subdivision scheme has been designed to accomplish this (see figure 15.0).

*Policy 6.1.1: Sewage treatment shall be by individual septic tank and tile field for each lot proposed for residential development to the satisfaction of the M.D. of Rocky View.*

*Policy 6.1.2: Additional Geotechnical Evaluations including percolation and near surface water table testing confirming suitability for on-site septic field sewage treatment systems shall be required, as a condition of subdivision approval, to the satisfaction of the M.D. of Rocky View.*

### 6.2 WATER SUPPLY AND DISTRIBUTION

The proposed development will be serviced with piped water via the Rocky View Water Co-op. The water Co-op has confirmed that it has sufficient capacity to service the project. See Figure 18.0 Proposed Servicing.

*Policy 6.2.1: Water is to be supplied via the Rocky View Water Co-op in accordance with the requirements of the M.D. of Rocky View and Alberta Environment.*

### 6.3 STORMWATER MANAGEMENT

Post-development run off will be managed through retention on both individual lots and through the use of central collection areas. The size of individual parcels is adequate to retain potential increases in stormwater run off resulting from development on the proposed lots. Additional stormwater from roadways will be managed through conveyance within roadside ditches. There will be no increase in post-development stormwater discharge off site above the pre-development conditions.

A separate Stormwater Management Report, completed by Westhoff Engineering Ltd, has been prepared.

*Policy 6.3.1: Post development stormwater discharge off-site shall equal pre development stormwater discharge rates.*

*Policy 6.3.2: Stormwater Management shall comply with a Stormwater Management Plan prepared by a qualified professional in accordance with the Servicing Standards for Residential Subdivision and Road Construction as amended to the satisfaction of the M.D. of Rocky View and Alberta Environment.*

## 6.4 UTILITY SERVICES

Utility service providers in the area have been contacted and power, phone and natural gas shallow utility services are all available in the area with sufficient capacities to service the proposed development and will be extended into the Plan Area.

*Policy 6.4.1: Shallow utilities shall be provided by the appropriate utility company providing service to the Plan Area at the sole expense of the Developer.*

## 6.5 INTERNAL SUBDIVISION ROADS

All internal subdivision roads will be constructed to municipal standards. Roads have been located to minimize the need for extensive earthworks and all finished road grades will be in accordance with municipal standards.

The internal subdivision roads access the site from Highway 766 and link together. Intersection spacing on Highway 766 conforms to the minimum 400m intersection spacing distance as required by the Bearspaw ASP. A future access right of way has been provided to the adjacent lands west of the property.

In addition, a 10m wide emergency access right of way has been provided between proposed lots 51 and 52 for future access to adjacent lands north of the Plan Area. This has been done at the request of the adjacent owner.

Highway 766 is a provincial highway under the jurisdiction of Alberta Transportation. Alberta Transportation has indicated only a single access point from the Plan Area onto Highway 766 will be permitted. An emergency access may be developed to facilitate a secondary access should the primary access become impassable.

*Policy 6.5.1: Access for the Plan Area shall be generally provided as shown on Figure 9.0.*

*Policy 6.5.2: The southerly access onto Highway 766 shall be provided as an emergency access only. The right-of-way shall be fully dedicated and constructed as a paved municipal standard road complete with construction of breakaway bollards to allow access for emergency service vehicles.*

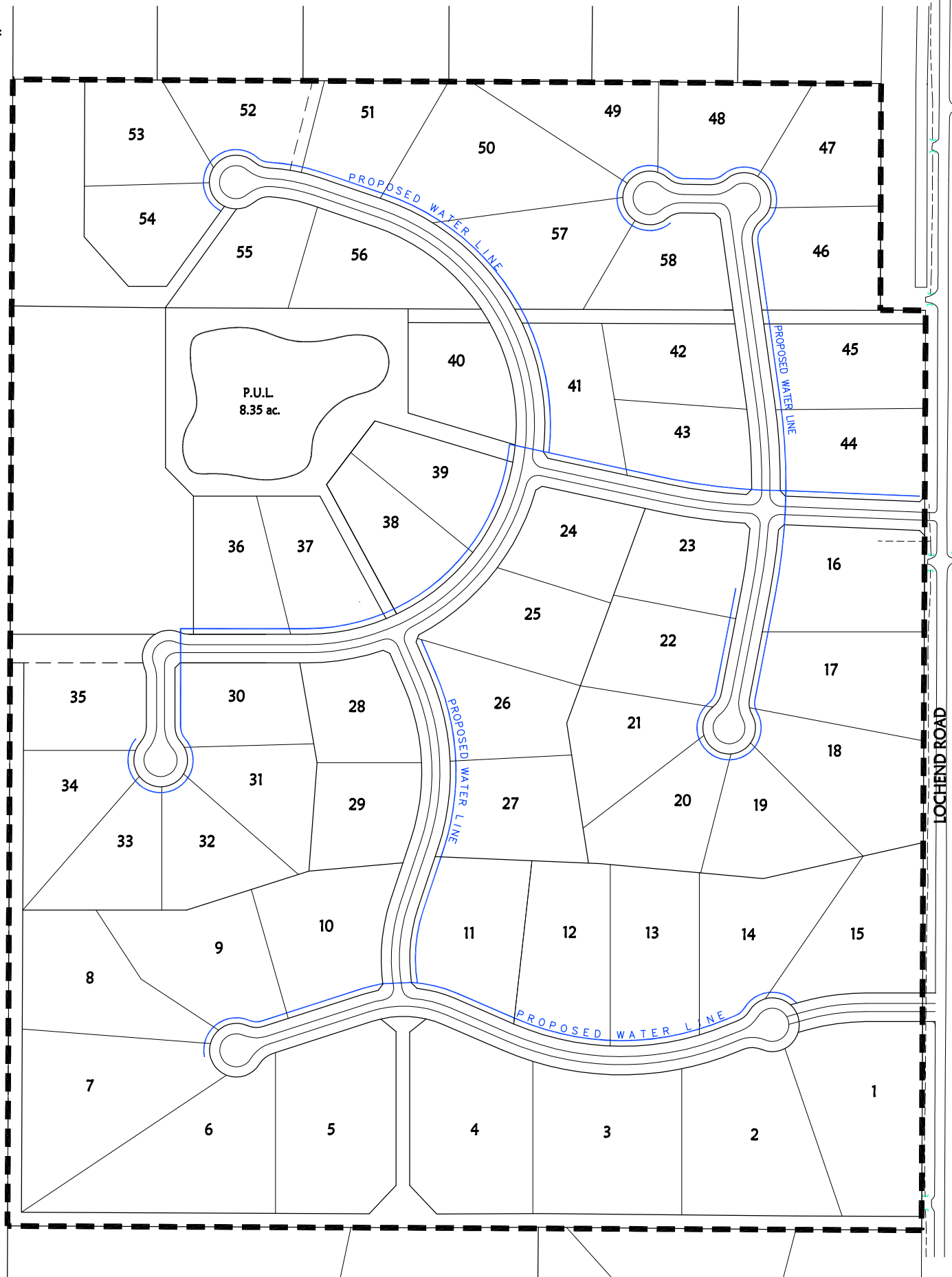


*Policy 6.5.3: A third right-of-way dedication shall be provided as a future roadway connection onto the adjacent westerly lands as shown on Figure 9.0.*

*Policy 6.5.4: Those lots adjacent to Highway 766 shall only be accessed via the proposed internal Subdivision road.*

*Policy 6.5.5: Access to Highway 766 shall only be via one intersection in accordance with the requirements of Alberta Transportation.*

*Policy 6.5.6: An access right – of – way shall be provided between proposed Lots 51 and 52 to provide the opportunity for development of a 10m wide emergency access for adjacent lands to the north.*



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## VII. TRAFFIC IMPACT ANALYSIS

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### 7.1 FUTURE TRAFFIC VOLUMES

A preliminary traffic impact study was initiated at the request of the M.D. of Rocky View and Alberta Transportation for the following purpose:

- To ensure that the study intersections and road network can safely accommodate future traffic volumes to a ten year time horizon.
- To identify what improvements may be required due to the proposed development based upon the M.D. of Rocky View's and Alberta Transportation's road and intersection design standards.

Urban Systems Ltd. traffic engineering group undertook the study in February, 2002 and began with the collection of traffic count data on both Highway 766 and Highway 1A at the Highway 766 intersection to determine potential impacts of the proposed development on both the operational safety of the intersection at Highway 1A and Highway 766. This was a preliminary traffic impact study that will be subject to an additional review at the detailed design stage of the subdivision process.

The analyses resulted in the following conclusions and recommendations:

1. The Highway 1A/Highway 766 intersection currently operates with a good level of service. After the development traffic is added and the background traffic volumes increase through to the 2012 horizon, a good overall level of service will still be provided at this two-way stop-controlled intersection. At the 2012 combined horizon, the southbound approach will operate with a Level of Service E, approaching capacity.
2. Signals are not warranted at the Highway 1A/Highway 766 intersection by the 2012 combined horizon. At this horizon signal warrant points total 62, out of the 80 required to warrant a signal.
3. The proposed 200 acre, 57 dwelling unit country residential development will not have a significant impact on the surrounding road network. The site will generate approximately 65 vehicles per hour during the afternoon peak hour, and will not significantly increase delays at the Highway 1A/SH 766 intersection.
4. The proposed country residential development will fit in well with the surrounding area development. Based on the Bearspaw Area Structure Plan, the subject lands are slated for future country residential uses.

5. The design designation of Highway 766 is currently RCU 208.8-110. The estimated existing AADT on Highway 766 is 2200 vehicles per day just north of Highway 1A. Based on Alberta Transportation's guidelines, Highway 766 should be constructed to a RCU 211.8-110 standard. This would require widening the pavement width from 8.8 m to 11.8 m, increasing the shoulder widths from 0.6 m to 2.1 m. This 3 m widening is warranted for existing conditions, and will continue to be warranted through to the 2012 combined conditions, when the estimated AADT on Highway 766 is 4500 vehicles per day. It is recommended that these improvements be implemented by Alberta Transportation over the next 10 years.
6. The design designation of Highway 1A is RAD-413-120. No improvements are recommended to Highway 1A immediately east and west of Highway 766.
7. The Highway 1A/SH 766 intersection meets sight distance requirements, and storage requirements for eastbound and westbound turns on Highway 1A. An average of 1.6 collisions per year occurred at this intersection over the past five years. It does not appear that the design of the intersection caused these collisions. No improvements are recommended to the intersection.
8. The eastbound stop-controlled sight access intersections at Highway 766 will operate with a very good level of service to the 2012 combined horizon and beyond. Sight distance and intersection spacing requirements will be met for both of the intersections. Illumination will not be required for the intersections. However, to provide for safe operation of these intersections, they should be constructed as Type IIIa intersections, as per Alberta Transportation's guidelines. Type IIIa intersections have a 3.5 m wide, 40 m long auxiliary lane with 87.5 m long tapers. The auxiliary lanes will permit northbound vehicles on SH 766 to bypass stopped vehicles waiting for a gap to turn left into the site, reducing the potential for rear-end collisions.
9. Roads internal to the development will be built to the M.D. of Rockyview's Country Residential standard, with a pavement width of 7 m in a 25 m right-of-way.

*Policy 7.1.1: A traffic impact assessment shall be prepared for the Plan Area prior to its development to determine any road improvements required as a result of the increased usage of the local roads to the satisfaction of the M.D. of Rocky View and Alberta Transportation.*

*Policy 7.1.2: Intersections of any internal subdivision road with Highway 766 shall be constructed to a standard that is in accordance with the requirements of Alberta Transportation.*

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## VIII. HISTORICAL RESOURCE IMPACT ASSESSMENT

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*Policy 8.1.1: A Historic Resource Impact Assessment shall be prepared for the Plan Area prior to its development to identify the location of historic resources and the program for the removal, avoidance and/or conservation of these resources. The assessment shall be prepared by a qualified archeologist to the satisfaction of Alberta Community Development.*

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## IX. PUBLIC INPUT

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In order to facilitate public input for the proposed development, all adjacent landowners near the Plan Area were sent an invitation to attend an open house at the developer's residence located on the site in May 2001.

From the 33 invitations sent out, approximately 30 people showed up expressing interest in the future development of the lands. Overall the response was very favourable, given the cohesive nature of the residential development being proposed. Design elements such as the pathway connections, open space features, recreational components and road and lotting were considered an important feature of the proposed subdivision.

Concerns regarding septic systems and water acquisition were expressed. As well concern was also expressed regarding potential traffic impact.

Additional concerns for remaining true to the proposed concept were also mentioned as being important.

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## X. CONCEPTUAL SCHEME CONFORMITY

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### 10.1 MUNICIPAL STATUTORY PLANS AND POLICY

In addition to the planning principles established by this Plan, implementation of the development will be guided by the planning policies adopted by the M.D. of Rocky View in its statutory Plans, and the Municipal Government Act.

*Policy 10.1.1: All subdivision and development within the Plan Area shall conform to:*

- *Bylaw C-4840-97 being the Municipal District of Rocky View No. 44 Municipal Development Plan;*
- *Bylaw C-4841-97 being the Municipal District of Rocky View No. 44 Land use Bylaw; and*
- *Bylaw C-4129-93 being the Bearspaw Area Structure Plan.*

*Policy 10.1.2: The M.D. of Rocky View shall implement the provisions of this Conceptual Scheme through the redesignation and subdivision process.*

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## XI. POLICY SUMMARY

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The following is a summary of all policy statements contained within this plan:

*Policy 5.1.3: Subdivision of lands within the Plan Area shall generally be in accordance with the Subdivision Concept Plan in Figure 9.0.*

*Policy 5.1.4: All parcel sizes shown within this Plan Area shall remain as shown on Figure 9.0.*

*Policy 5.1.5: Future subdivision of 4 acre-parcels within the Plan Area to increase parcel density shall not be permitted without an amendment to this Plan.*

*Policy 5.2.1: Phasing within the Plan Area may generally proceed in accordance with the Subdivision Phasing Plan attached to and forming part of this Plan.*

*Policy 5.2.2: While the subdivision and development of the Plan Area is intended to proceed in two phases matched to a logical progression of servicing, subdivision and development may proceed in a single phase (or multiple phases) without an amendment to this Concept Scheme, subject to the other provisions of this Plan, provided the required infrastructure to sustain the planned subdivision and development is in place and/or available at the time of the approval.*

*Policy 5.2.3: The development of Recreational Amenities within the subdivision may occur notwithstanding subdivision phasing.*

*Policy 5.2.4: The Riding Arena and related paddocks/corrals shall be removed and reclaimed as a condition of subdivision approval for lots proposed within a portion of the SE ¼ of Sec10, T26, R3, W5M. An Environmental Assessment may be required to determine the suitability of the former Riding Arena site for residential development, to the satisfaction of Alberta Environment, the Calgary Health Region and the M.D. of Rocky View.*

*Policy 5.3.1: The lands identified in Figure 14.0 shall be dedicated as Municipal Reserve to the satisfaction of the MD of Rocky View.*

*Policy 5.3.2: The Pedestrian System shall be developed as a low-intensity grass or graveled trail as a condition of the subdivision's first phase in accordance with a Development Agreement pursuant to the Municipal Government Act.*

*Policy 5.3.3: A Homeowner's Association, established as a condition of the subdivision's first phase, shall enter into a Lease Agreement for the purpose of providing additional recreational amenities within the Municipal Reserve. The Homeowner's Association will*



*be responsible for the operation and maintenance of any amenities located within the MR, including the pedestrian trails.*

*Policy 5.3.4: A Mail Kiosk shall be developed within the Municipal Reserve in accordance with the terms of a Lease Agreement between the MD of Rocky View and the Homeowner's Association, to the satisfaction of Canada Post.*

*Policy 5.3.1.1: The recreational lake shall be developed within a Public Utility Lot (PUL) as a condition of the subdivision's first phase and will be subject to the Developer obtaining all necessary Municipal, Provincial and Federal approvals. Notwithstanding any other approval requirement, the Developer shall submit a Landscaping Plan as affecting the PUL, to the satisfaction of the MD of Rocky View.*

*Policy 5.3.1.2: A Homeowner's Association, established at the time of the subdivision's first phase, shall enter into a Lease Agreement with the Municipality and will be solely responsible for the operation and maintenance of the proposed recreational lake and any other amenities to be developed within the PUL.*

*Policy 5.3.1.3: All uses developed within the PUL shall be subject to approval from the MD of Rocky View's Development Authority.*

*Policy 5.3.1.4: The recreational lake shall provide for Stormwater Management within the Plan Area and shall be constructed in accordance with the terms of a Stormwater Management Plan approved by Alberta Environment and the MD of Rocky View. Any recreational use of the PUL shall be considered ancillary to the lake's Stormwater Management function.*

*Policy 5.3.1.5: Water to supplement stormwater levels in the lake shall be supplied from the Rocky View Water Coop. Groundwater shall not be used to supplement water levels in the lake.*

*Policy 5.4.1: Building Site locations are to be determined prior to registration of subdivision and will be detailed in a Restrictive Covenant, to be registered against the proposed Lots through conditions of Subdivision Approval.*

*Policy 6.1.1: Sewage treatment shall be by individual septic tank and tile field for each lot proposed for residential development to the satisfaction of the M.D. of Rocky View.*

*Policy 6.1.2: Additional Geotechnical Evaluations including percolation and near surface water table testing confirming suitability for on-site septic field sewage treatment systems shall be required, as a condition of subdivision approval, to the satisfaction of the M.D. of Rocky View.*

*Policy 6.2.1: Water is to be supplied via the Rocky View Water Co-op in accordance with the requirements of the M.D. of Rocky View and Alberta Environment.*

*Policy 6.3.1: Post development stormwater discharge off-site shall equal pre development stormwater discharge rates.*

*Policy 6.3.2: Stormwater Management shall comply with a Stormwater Management Plan prepared by a qualified professional in accordance with the Servicing Standards for Residential Subdivision and Road Construction as amended to the satisfaction of the M.D. of Rocky View and Alberta Environment.*

*Policy 6.4.1: Shallow utilities shall be provided by the appropriate utility company providing service to the Plan Area at the sole expense of the Developer.*

*Policy 6.5.1: Access for the Plan Area shall be generally provided as shown on Figure 9.0.*

*Policy 6.5.2: The southerly access onto Highway 766 shall be provided as an emergency access only. The right-of-way shall be fully dedicated and constructed as a paved municipal standard road complete with construction of breakaway bollards to allow access for emergency service vehicles.*

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*Policy 6.5.5: Access to Highway 766 shall only be via one intersection in accordance with the requirements of Alberta Transportation.*

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*Policy 7.1.2: Intersections of any internal subdivision road with Highway 766 shall be constructed to a standard that is in accordance with the requirements of Alberta Transportation.*

*Policy 8.1.1: A Historic Resource Impact Assessment shall be prepared for the Plan Area prior to its development to identify the location of historic resources and the program for the removal, avoidance and/or conservation of these resources. The assessment shall be prepared by a qualified archeologist to the satisfaction of Alberta Community Development.*

*Policy 10.1.1: All subdivision and development within the Plan Area shall conform to:*

- *Bylaw C-4840-97 being the Municipal District of Rocky View No. 44 Municipal Development Plan;*
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- *Bylaw C-4129-93 being the Bearspaw Area Structure Plan.*

*Policy 10.1.2: The M.D. of Rocky View shall implement the provisions of this Conceptual Scheme through the redesignation and subdivision process.*