

Sandstone Springs Development Corp.

SANDSTONE SPRINGS AREA STRUCTURE PLAN



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1.0 INTRODUCTION

Sandstone Springs has been designed to be fully integrated into the unique natural features that exist on the property. The centre piece of the project will be an enhanced wetland that is both protected and integrated into the residential community. The wetland is, and will continue to be, the home of countless bird and plant species.



The slopes dropping down to the wetland from the plateau above consist of sandstone ridges that form a natural edge within the project. Natural springs flow out of the sandstone ridges providing a constant source of fresh water to the wetlands below.

The proposal is to create a residential community that will consist of approximately 230 residential lots, along with 70 patio homes. The residential parcels, consisting of lots between 0.8 acres and 1.99 acres, are located on the plateau above the wetland and sandstone ridges, and offer spectacular views of the surrounding area.

The patio homes, to be located on 5,000 to 7,000 square foot bareland condominium lots, are located at the north end of the wetland at the entrance to Sandstone Springs. This community within a community will benefit from its proximity to the lifestyle centre (which is to include activity rooms, fitness centre, and swimming pool), extensive interpretive trail system, and the natural wetland.

This portion of Sandstone Springs is geared to providing affordable housing for 55 plus year old residents. It has been designed as an integrated community that will benefit from its proximity to the project's natural and man-made features. The patio homes will be approximately 1,000 square feet with an internal, paved trail system linking it to the overall system that runs throughout Sandstone Springs.



Under the bareland condominium, each home will have its own yard where the owners can enjoy their own private, outdoor space. There will also be common space (e.g. trails, open green space) that the residents will be able to access, but will be owned and maintained by the condominium association.



SANDSTONE SPRINGS AREA STRUCTURE PLAN

Sandstone Springs will appeal to individuals who are interested in living in a setting where the natural landscape has been carefully blended into a well planned, integrated community.

1.1 Purpose of the Plan

The Sandstone Springs Area Structure Plan (SSASP) has been prepared in accordance with the Municipal District of Foothills Municipal Development Plan and Land Use Bylaw, and complies with the Municipal Guideline for the Preparation of Area Structure Plans. Further, the SSASP contains provisions that are consistent with Part 17 of the Municipal Government Act which prescribes the elements that must be contained in an Area Structure Plan including:

- the sequence of development proposed;
- the land uses proposed for the area either generally or with respect to specific parts of the area;
- the density of population proposed for the area either generally or with respect to specific parts of the area;
- the general location of major transportation routes and public utilities; and
- any other matter that Council considers necessary.

The SSASP provides clear direction on how the area will be developed in an orderly fashion based on sound planning principles. It will establish the framework

for the further subdivision and development of the land.

Recognizing the need for the SSASP to satisfy the Municipal District's guidelines and the provisions of the Municipal Government Act, the Plan has been organized in the following fashion:

- a) proposed land use
- b) sequence of development
- c) location of existing and proposed roads
- d) location of reserves
- e) water supply and sewerage disposal
- f) developability of the land
- g) method of stormwater management

1.2 The Approval Process

The preparation of the Area Structure Plan is an iterative process whereby the landowner, Municipal District staff and adjacent landowners all have input into the contents and policies contained within the Plan. It is intended to identify the general form and character of the development within the Plan Area and to set the stage for redesignation, subdivision and development.

Prior to submission of the SSASP to the Municipal District, invitations were sent to adjacent residents and a public notice was



placed in the Western Wheel advising of an Open House held on April 27, 2006. There were 25 attendees who signed in at the open house.

1.3 Plan Implementation, Review and Amendment

The SSASP, adopted by bylaw in accordance with Part 17 of the Municipal Government Act, is a statutory plan of the Municipal District of Foothills No. 31. The SSASP does not supersede, repeal, replace, or regulate, or otherwise diminish any other statutory plans in effect in the Plan Area.

The SSASP is intended to provide key stakeholders, adjacent landowners, those who will ultimately live in Sandstone Springs, Municipal District staff, and Council with clear direction on how the Plan Area will be developed. It establishes policies that will guide future development and provide a vision for the development.

Because the SSASP establishes a long term vision today, it must also be recognized that due to changing considerations such as environmental, social or economic factors, the SSASP may require periodic reviews and occasional amendments. Council, through monitoring of redesignation, subdivision and development approvals, may initiate amendments to the SSASP in accordance with Part 17 of the Municipal Government Act. Similarly, the landowner may request an amendment to the SSASP by making application in accordance with the requirements and procedures of the Municipal District.

Policy 1.3.1: Periodic review and amendment of the SSASP may be required in accordance with the Municipal Government Act.

1.4 Interpretation

In this Plan:

- a) "SSASP" or "Plan" means the Sandstone Springs Area Structure Plan.
- b) "Council" means the Council of the Municipal District of Foothills No. 31.
- c) "Developer" means Sandstone Springs Development Corp.
- d) "Plan Area" means all lands within the defined boundaries of the Sandstone Springs Area Structure Plan.
- e) "Subdivision Approving Authority" means the Council of the Municipal District of Foothills No. 31.



2.0 THE PLAN AREA

2.1 Regional/Municipal Context

Sandstone Springs is approximately 162 hectares (420 acres) in size and is located on the south and east side of Big Rock Trail immediately southwest of the Town of Okotoks. Highway 7 forms the Plan Area's southern boundary with existing acreage development taking place on the other side of the highway.

Figure 1 illustrates the regional context of the Plan Area.

2.2 Definition of the Plan Area

As illustrated on Figure 2, the Plan Area consists of:

- NE¼ Section 24, Twp. 20, Rge. 1, W5M consisting of 136.7 acres
- SE½ Section 24, Twp. 20, Rge. 1, W5M consisting of 160 acres
- Fractional Section 19, Twp. 20, Rge. 29, W5M consisting of 95.26 acres
- Block 1, Plan 9012350 consisting of 19.97 acres
- An undeveloped road allowance consisting of 7.98 acres

2.3 General Physical Description and Area Land Uses

The defining feature of the Plan Area is the large wetland located in the central

and southeast portion of the site. Sloped terrains surround the wetland to the east and west giving it a well defined elongated shape. East and northeast facing slopes contain natural springs that feed water into the wetland. These slopes also include small patches of Aspen. The west and southwest facing slopes support dry grasslands.



A biophysical analysis of the wetland (included in Appendix A) was conducted in late 2005 and early 2006. This analysis divided the wetland into two sections: the north and south sections. The north section is characterized by open water where sparse bulrush plants are embedded in the shallow waters around the edge of this section of the wetland. The southern section consists largely of grasses and sedges with there being no significant amounts of standing water evident at the time of the analysis.

Above the wetland and the slopes, some of which contain exposed sandstone ridges, is a flat to gently undulating upland plain. The majority of this portion of the site has been cultivated and grazed and contains little natural vegetation. Figure 3 provides an aerial view of the site.



Sandstone Springs Area Structure Plan

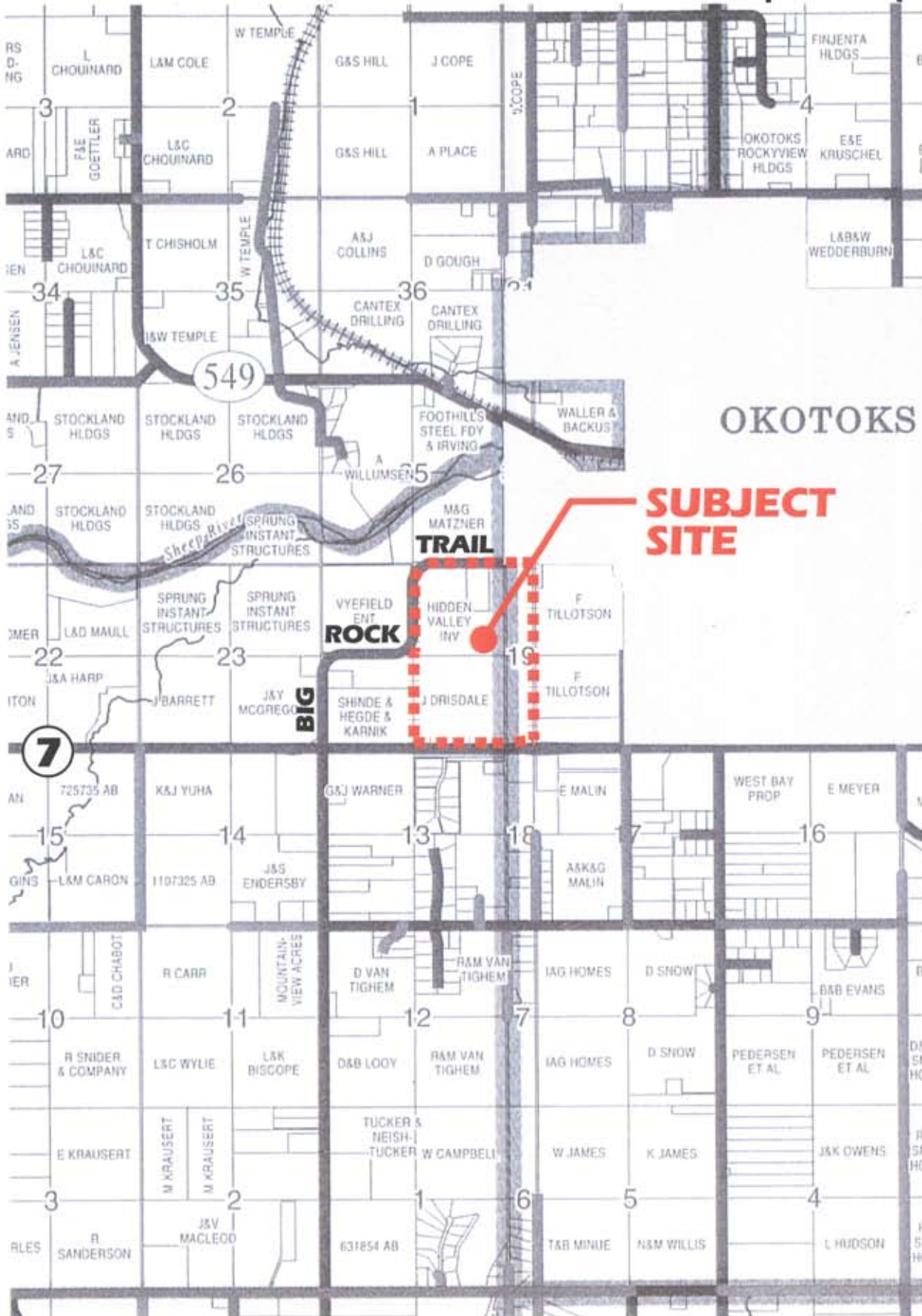
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N.E. & S.E. 1/4 Sec. 24-20-1-5

north



Sandstone Springs Development Corp.

not to scale



regional context

FIGURE 1

Sandstone Springs Area Structure Plan

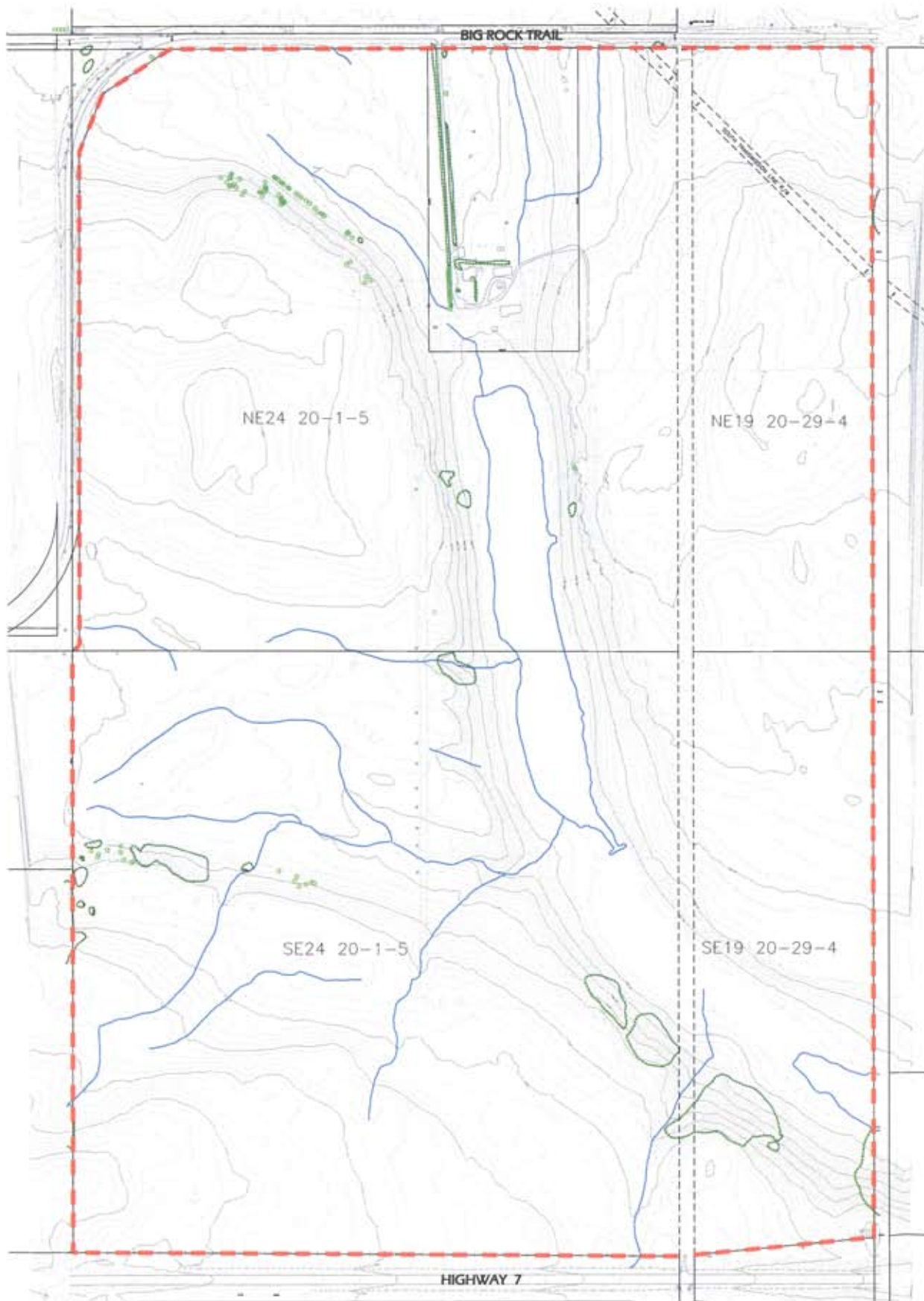
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N.E. & S.E. 1/4 Sec. 24-20-1-5

north



**Sandstone Springs
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not to scale



plan area

FIGURE

2

Sandstone Springs Area Structure Plan

N.E. & S.E. 1/4 Sec. 19-20-29-4

N.E. & S.E. 1/4 Sec. 24-20-1-5

north



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not to scale



plan area aerial

FIGURE

3

**SANDSTONE SPRINGS
AREA STRUCTURE PLAN**

Figure 4 illustrates the varied terrain on site ranging from a high point of 1137 m at the southwest corner of the site to a low point of 1083 m at the wetland.

The existing farm house and corresponding out-buildings are located at the north end of the wetland with driveway access off Big Rock Trail. The farm house is orientated to the south to capture dramatic views of the wetland down the valley between the sandstone ridges. More than 300 cattle currently graze the subject lands.



Sandstone Springs Area Structure Plan

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N.E. & S.E. 1/4 Sec. 24-20-1-5

north



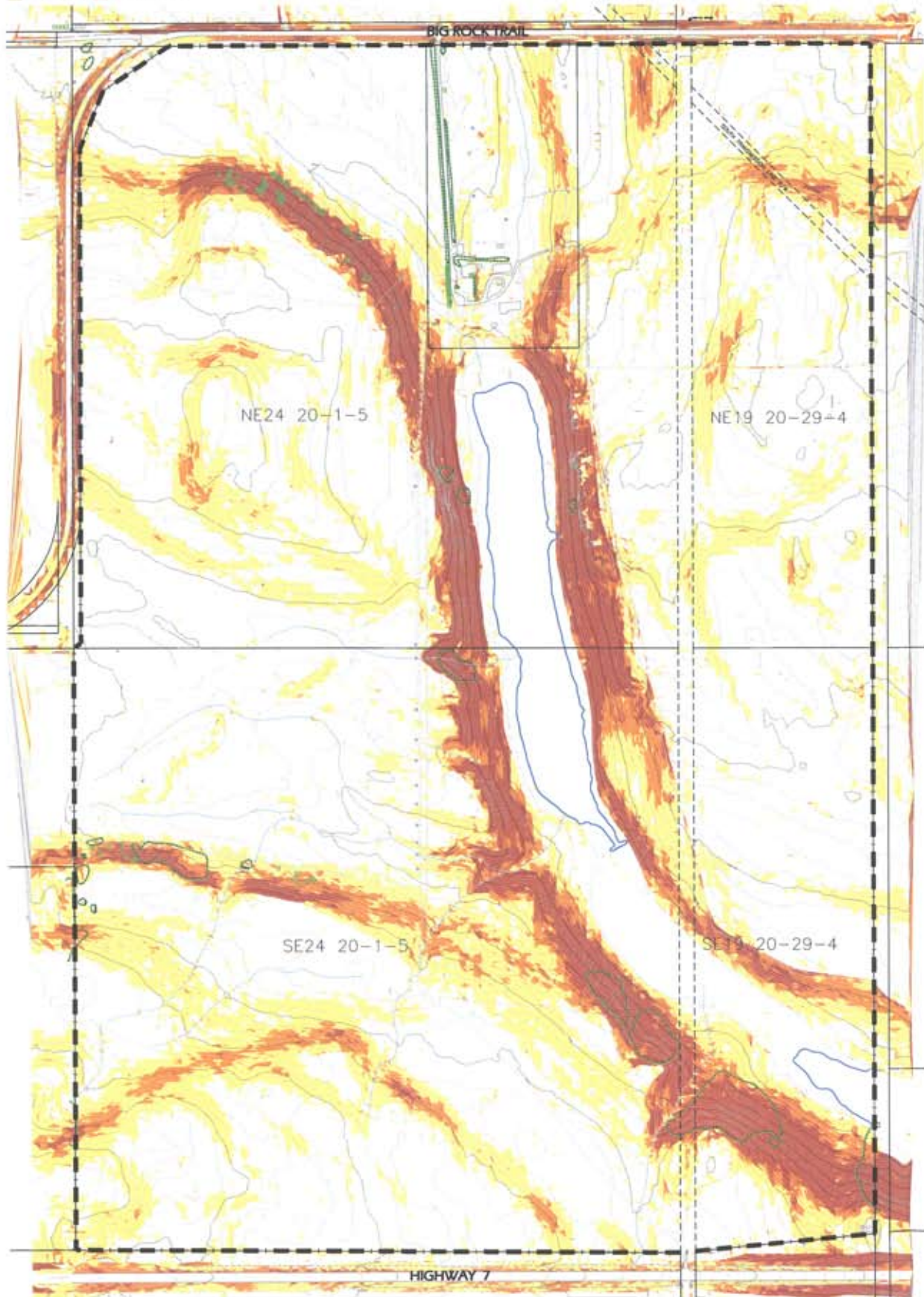
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LEGEND

Slope Range:

- 0 - 7% Slope
- 7 - 15% Slope
- 15 - 22% Slope
- 22 - 100% Slope
- Plan Boundary

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slope analysis

FIGURE

4

3.0 PLAN OBJECTIVES

The objective of the Sandstone Springs Area Structure Plan is to provide the policy and design framework to facilitate the development of a unique residential community that caters to the diverse needs and lifestyle choices of its future inhabitants while remaining sensitive to the inherent natural qualities of the site.

In support of this objective, the plan identifies a number of guiding principles and design objectives that have been used to guide the conceptual development of Sandstone Springs. These principles and design objectives were derived from a solid understanding of the natural qualities and characteristics of the land itself. Once established, they were used as “touch stones” that were revisited throughout the design process to ensure the end concept was consistent with the key elements that make the site unique.

3.1 Guiding Principles

- To maintain and enhance the existing wetlands and integrate them into the design concept so that they form an integral part of the development.
- To respect the natural land form by integrating the development into the existing landscape.
- To create a residential community that incorporates a variety of residential parcel sizes that will cater to individuals at different stages of life with diverse lifestyle objectives and income levels.

- To create a residential community that includes amenities that will meet the recreational needs of future residents.
- To tie the scope of the development to the sustainable domestic water supply.



3.2 Design Objectives

The design objectives are a further refinement of the guiding principles and serve as the basis for the evolution of the concept plan.

3.2.1 Patterns of Development

- To ensure the concept for Sandstone Springs is consistent with existing municipal and provincial policies and standards.
- To sensitively integrate the concept into the natural land form, utilizing those portions of the site best suited to accommodate development and protecting those areas that are environmentally significant or contain development constraints.



- To create natural breaks in the development in order to facilitate pedestrian access, and to retain and reinforce dramatic views into the valley.
- To reinforce the rural character of the area by preserving large contiguous areas of open space visible from Big Rock Trail and Highway 7.
- To concentrate development on the plateaus away from the sensitive wetland areas.
- To provide a range of parcel sizes that will result in a diverse residential community catering to different life stages, income levels and lifestyles.
- To provide residential design standards that strive to establish a strong identity for the community.

3.2.2 Environmental Preservation

- To protect and, where appropriate, enhance the natural wetland. To design and construct pathways, open spaces and other recreational amenities that respect the important habitat function of the wetland.
- To protect and enhance the natural springs and other significant drainage courses that flow into the wetlands.
- To ensure the long term sustainability of the wetland, natural springs and groundwater resources.
- To utilize the natural resources in such a way that residents and the public are able to view, understand, appreciate, and respect the unique natural features within the Plan Area.



3.2.3 Residential Development

- To provide a variety of lot sizes to meet the diverse needs of future residents.
- To provide smaller-scale housing forms within close proximity to area amenities that cater to those wishing to live in a rural environment, but may not wish to maintain a large yard.

3.2.4 Recreation

- To encourage recreational amenities that are compatible with and complementary to the surrounding area.
- To provide amenities that meet the recreational needs of residents and the public.
- To provide a comprehensive community pathway system that allows pedestrians to enjoy the site's natural amenities.
- To provide areas for both active and passive recreation through the development of communal facilities



and the provision of municipal and environmental reserves.

3.2.5 Infrastructure

- To provide the infrastructure necessary to efficiently service the land uses within the Plan Area.
- To ensure the infrastructure provided will accommodate the long term needs of the community in a sustainable manner.
- To provide road and pathway systems that ensure the safe, efficient and logical movement of vehicles and pedestrians.



3.2.6 Logical Growth

- To establish a phasing program that follows a logical progression and encourages the efficient extension of on-site services and recreational amenities.



4.0 PLAN POLICIES

The following policies establish the framework that will guide the future development of Sandstone Springs. Policy areas have been established that address all key aspects of the project. The policies are intended to provide the developer and the Municipal District of Foothills No. 31 with clear statements that will serve to provide certainty on how the Plan Area will be developed in the future.

4.1 The Plan Concept

Sandstone Springs will be a comprehensively planned, integrated, environmentally sensitive residential community. It will contain up to 300 residential lots to be subdivided and developed in accordance with the provisions of the Municipal Development Plan, Land Use Bylaw and this Area Structure Plan.

Residential lots, ranging in size from 0.8 acres to 1.99 acres, will be developed on the plateau lands adjacent to the ridge above the wetland. The ridge above the wetland and the wetland itself will be protected while allowing the integration of these areas into the overall concept. Recreational amenities, including pathways, viewing areas, and the community recreation facility, will be located within close proximity to the wetland thereby reinforcing the importance of the wetland as the focal point within the community.

Maintenance of the amenities and natural area will be done by a homeowners association that will be established by the developer.

Policy 4.1.1: Subdivision shall generally be in accordance with Figure 5; however, there may be variations in the number of lots and lot configurations.

4.2 Land Use Components

Sandstone Springs will be a residential community that offers both bareland condominium and fee simple tenure options.

The residential area adjacent to and at the north end of the wetland, consisting of approximately 70 units, will be developed as a bareland condominium. Each residential unit will be located on 5,000 to 7,000 square foot lots.



A community social and recreation facility is centrally located within this area to facilitate easy pedestrian access. The community social and recreation facility will provide meeting rooms, a library, exercise room, and swimming pool.



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Acreage residential units, ranging in size from 0.8 acres to 1.99 acres, will be located on the east and west slopes of the Plan Area in such a way so as to maximize views of the wetland and surrounding natural landscape. As noted earlier, these parcels will be developed on a fee simple basis.

The entire community is linked by an extensive pathway system. The pathways will be of a firm surface to facilitate greater accessibility to this area and will link the residents on the plateau to the wetland thereby fostering a sense of community by providing interpretive and educational opportunities.

Figure 5 illustrates the concept plan and Figure 6 demonstrates how Sandstone Springs is designed to optimize the site topography while being sensitive to the natural features. It is an integrated recreational and residential community that is comprehensive in its scope. Policies pertaining to residential development within the subject lands are described below.



4.2.1 Residential Policies

1. The residential development shall conform to Section 14 of the Foothills Land Use Bylaw including the general and specific setback requirements from highways, property lines and internal roads.
2. Where the Foothills Land Use Bylaw does not contain acceptable provisions to adequately accommodate the residential development, a new direct control bylaw may be prepared to ensure the provisions of this Plan are addressed.
3. The residential development shall contain up to three hundred (300) residential units. Should additional units be proposed, an amendment to this Plan shall be required.
4. Residential development in Cell A, as illustrated on Figure 7, will consist of up to 70 lots with a minimum lot area of 5,000 square feet and a maximum lot area of 7,000 square feet.
5. Residential development in Cell B, consisting of up to 230 lots, as illustrated on Figure 7, may occur on lots with a minimum area of 0.8 acres and a maximum parcel area of 1.99 acres.
6. Residential development should be integrated into the natural landscape so as to minimize any impact on the natural landscape and to enhance the visual quality of the community.



Sandstone Springs Area Structure Plan

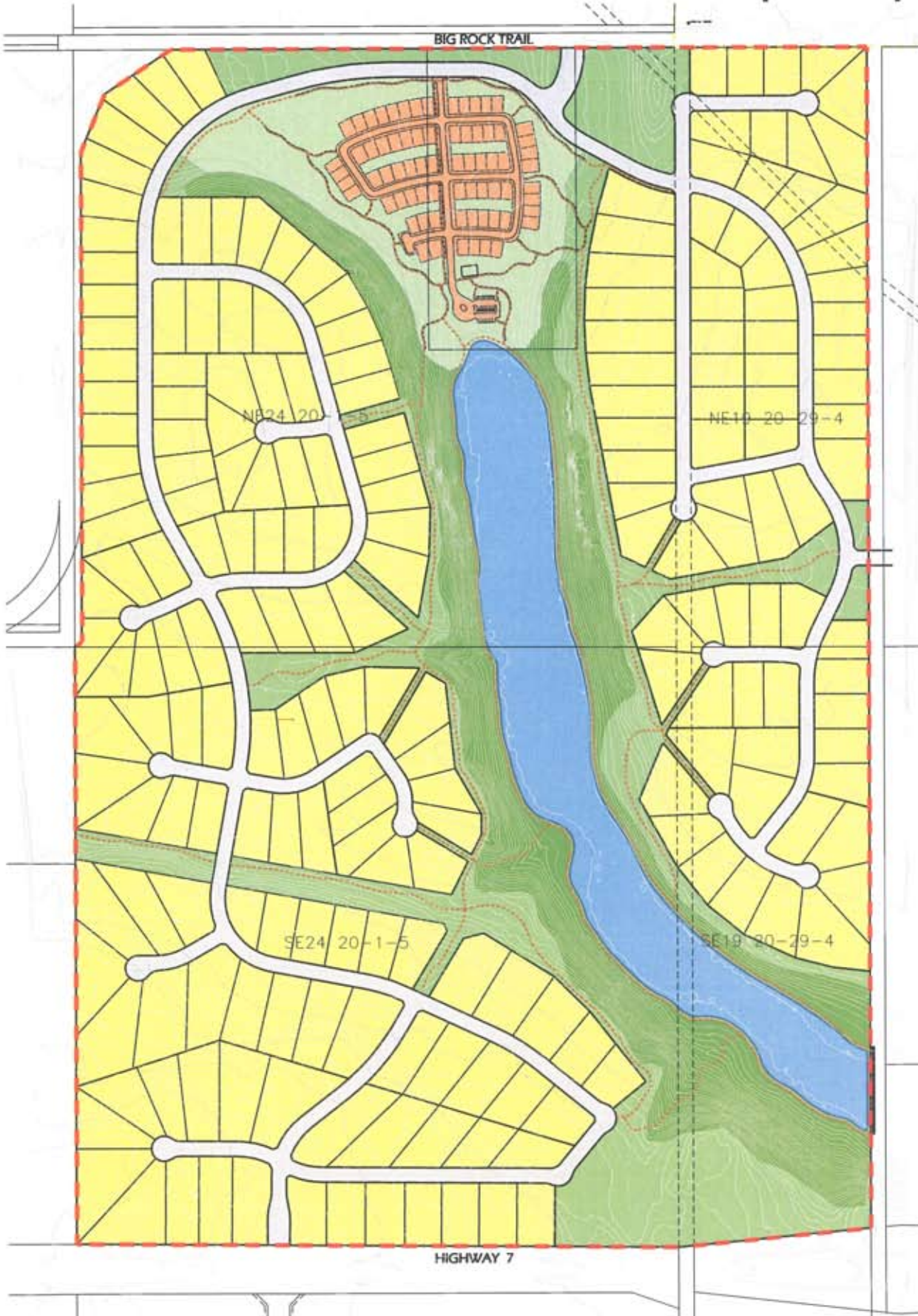
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north



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not to scale



concept plan

FIGURE

5

Sandstone Springs Area Structure Plan

N.E. & S.E. 1/4 Sec. 19-20-29-4
N.E. & S.E. 1/4 Sec. 24-20-1-5

north



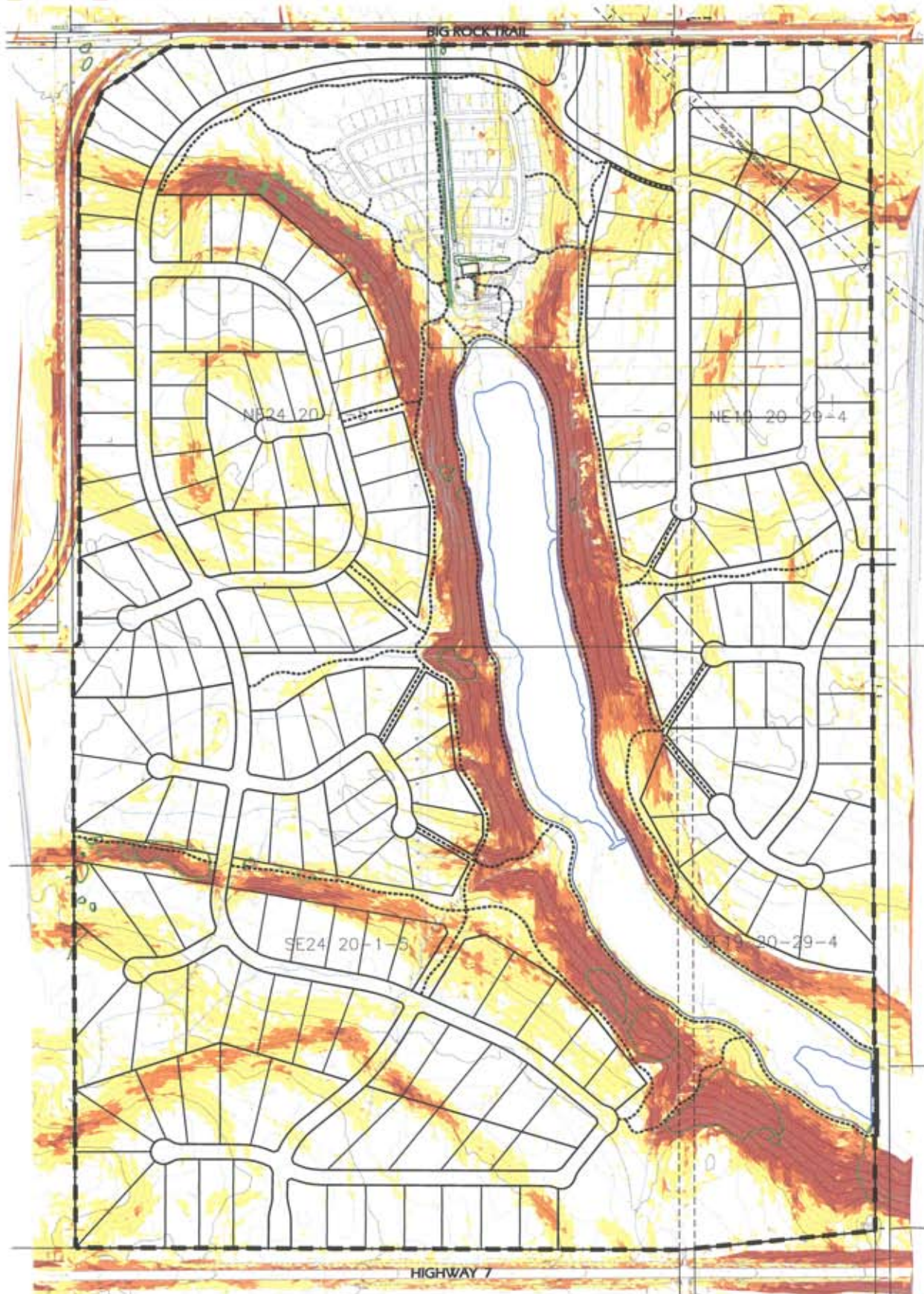
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LEGEND

Slope Range:

- 0 - 7% Slope
- 7 - 15% Slope
- 15 - 22% Slope
- 22 - 100% Slope
- Plan Boundary
- Pathway

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slope analysis with concept

FIGURE

6

Sandstone Springs Area Structure Plan

N.E. & S.E. 1/4 Sec. 19-20-29-4
N.E. & S.E. 1/4 Sec. 24-20-1-5

north

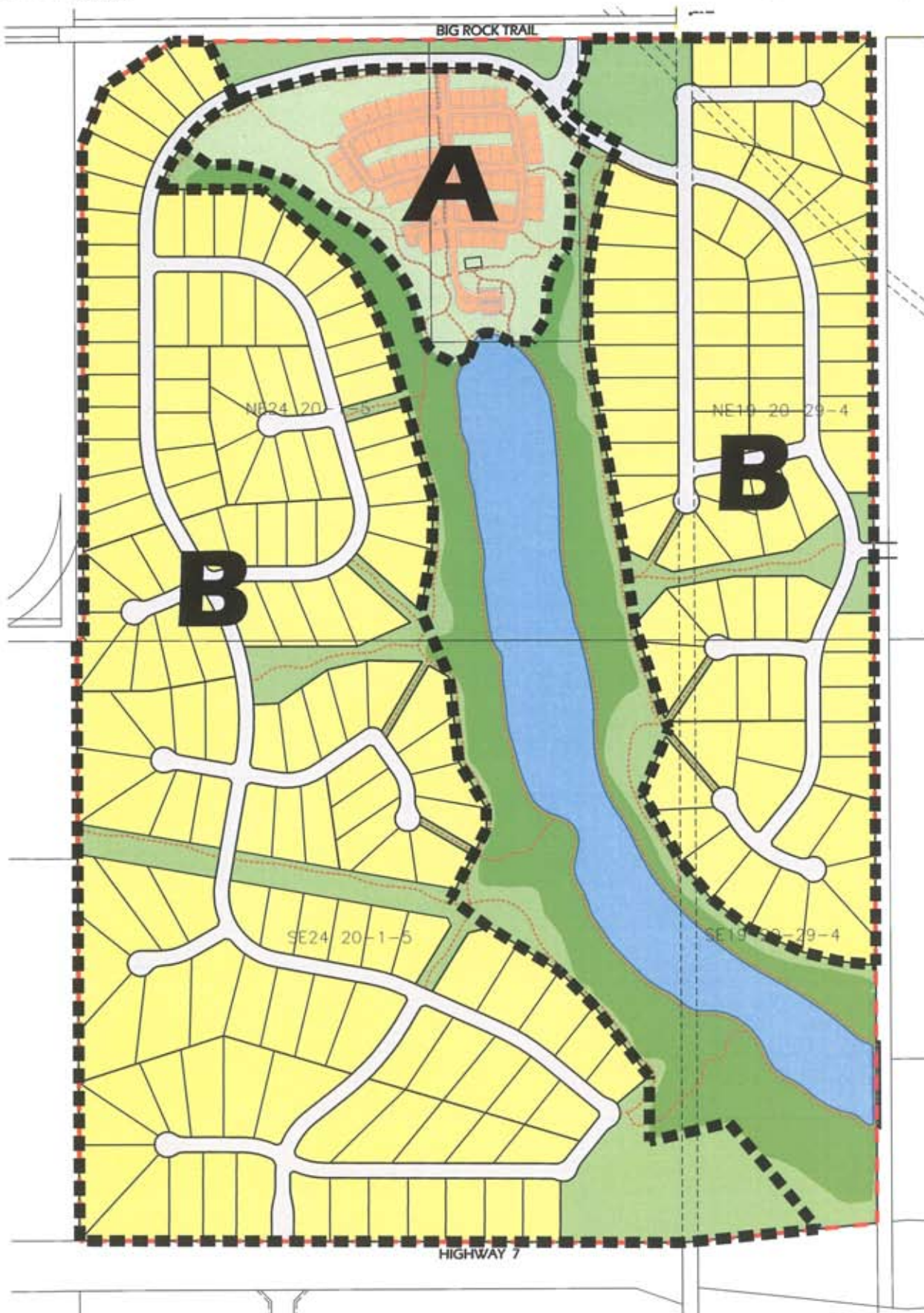


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LEGEND

- PLAN BOUNDARY
- DEVELOPMENT CELL BOUNDARY

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development cells

FIGURE

7

4.3 Open Space

The Sandstone Springs Area Structure Plan establishes a number of open space areas that are distributed throughout the community. The open spaces will provide residents with both active and passive recreational opportunities. In addition, the



open space network will serve to protect environmentally sensitive areas. The open spaces provided within the community include the following.

4.3.1 Municipal Reserve

The Municipal Government Act stipulates that up to 10% of the developable area may be dedicated as Municipal Reserve. Figure 8 illustrates the location and extent of the Municipal Reserve that is being provided.

Land will be dedicated at the entrance to Sandstone Springs in order to locate entrance features and to create a green space between Big Rock Trail and the central portion of the community.

A 10 acre park, located in the southeast corner of the community, will also be dedicated as Municipal Reserve. It is adjacent to the ridge that overlooks the southern portion of the wetland and is linked via the trail network to the balance of the Municipal Reserve and the wetland below. This 10 acre park would be suitable for a school site should it be deemed necessary. In the interim, the park could be used for active and passive recreation. An off-street parking area would also be constructed to allow the public access to the Municipal Reserve and pathway system.



Policy 4.3.1.1: Figure 8 illustrates the area that shall be dedicated as Municipal reserve.

Policy 4.3.1.2: A homeowners association shall be established by the developer to manage and maintain all lands dedicated as Municipal Reserve.

Sandstone Springs Area Structure Plan

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N.E. & S.E. 1/4 Sec. 24-20-1-5

north

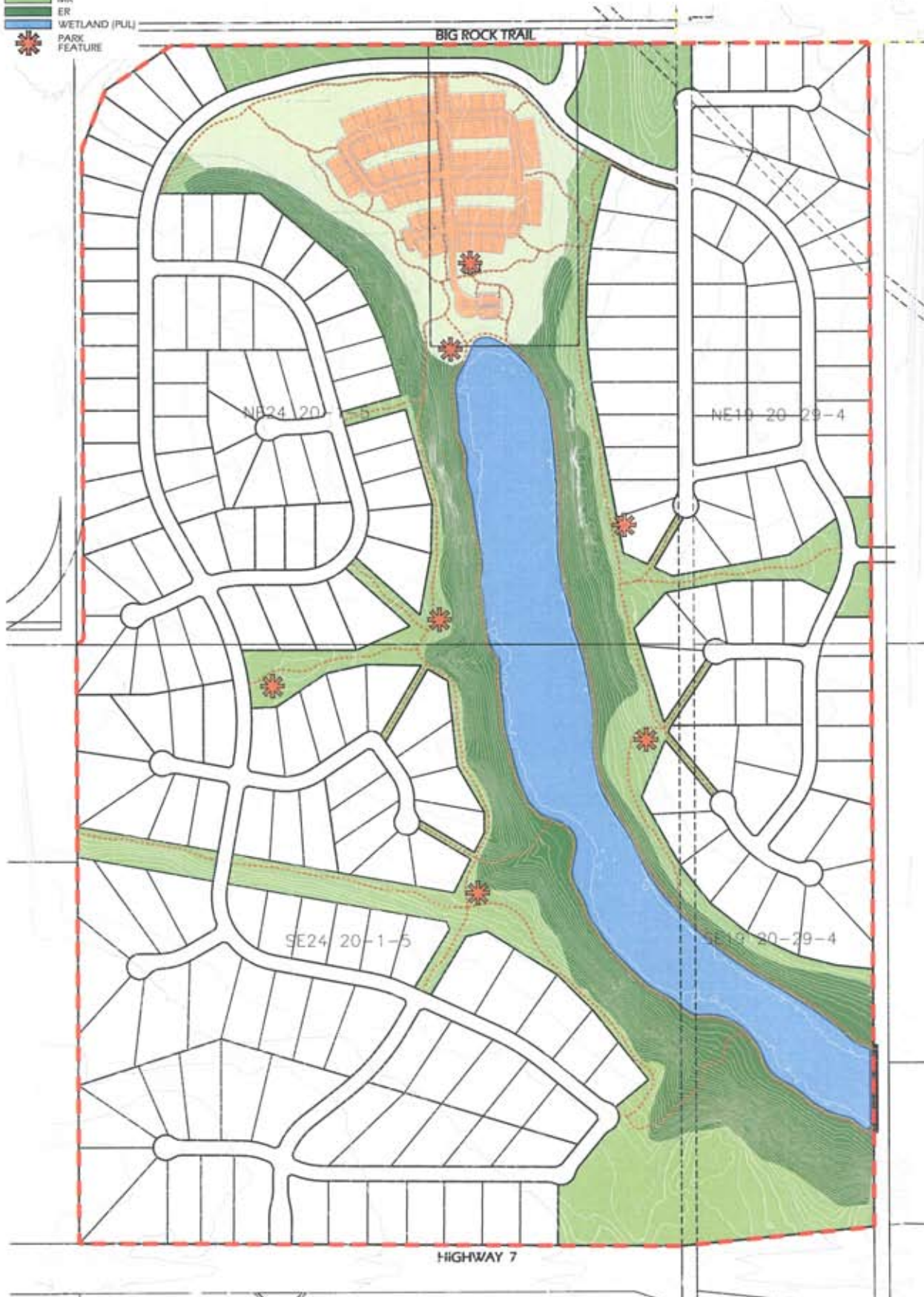


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LEGEND

- PLAN BOUNDARY
- PATHWAY
- PATIO HOMES OPEN SPACE
- MR
- ER
- WETLAND (PUL)
- PARK FEATURE



open space and pathway network

FIGURE

8

4.3.2 Patio Home Open Space

Within the area that is to accommodate the patio homes, there will be an open space system geared to providing residents with recreational opportunities. The open space in this area will be part of the condominium association that will be created for this area. Included will be an internal trail system linking to the overall network, a recreation building catering to the residents of the patio homes, and natural spaces that surround this development cell.

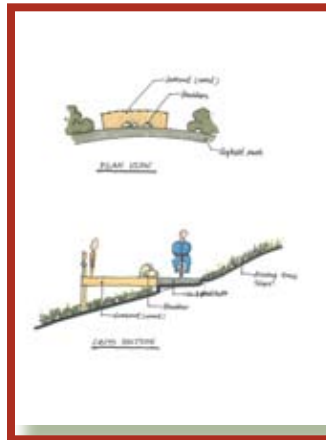
In addition, a small parking lot will be constructed to allow all residents of Sandstone Springs to access the wetlands and the overall community trail system.

Policy 4.3.2.1: Figure 8 illustrates the area that is to remain as patio homes open space.

Policy 4.3.2.2: A condominium association shall be incorporated by the developer to manage and maintain all lands and facilities shown as patio home open space.

Policy 4.3.2.3: The parking lot illustrated on Figure 8 and contained within the patio homes open space will be maintained through an agreement, established by the developer, between the condominium association and the homeowners association.

4.3.3 Pathways



A series of trails will be created that will provide pedestrian linkages throughout the community. The lower trail system will run along the wetland and will interpret information on the creation, value and nature of the wetland.

Another trail system will be created along the ridge that overlooks the wetland. These two trail systems will be linked providing a network that is over 8 kilometres in length. The overall network will be hard surfaced to provide all residents with easy access to the entire trail system.

Policy 4.3.3.1: A pathway system, as illustrated on Figure 8, shall be constructed at the developer's expense.

Policy 4.3.3.2: The pathway system shall be hard surfaced and constructed to a standard acceptable to the Municipal District of Foothills.

Policy 4.3.3.3: A homeowners association shall be established by the developer to manage and maintain



the pathway system outside the patio home open space.

Policy 4.3.3.4: Within the patio home open space, the pathways shall be managed and maintained by the condominium association.

4.3.4 Environmental Reserve

The intent of the Environmental Reserve is to protect lands that are environmentally sensitive from any potential negative impacts associated with incompatible land uses and to preserve the natural integrity of unique land forms within the Plan Area. The steep slopes enclosing the wetland, the sandstone outcropping and two historical sites have been designated as Environmental Reserve.

Policy 4.3.4.1: Figure 8 illustrates the land within the Plan Area that shall be dedicated as Environmental Reserve.

Policy 4.3.4.2: Land dedicated as Environmental Reserve shall remain in its natural state.

4.3.5 Wetland

The wetland occupies the central portion of the Plan Area. It has been the subject of a biophysical analysis that examined its natural features, its biological make-up and the potential to sensitively utilize the area to manage stormwater runoff. It was concluded that the existing wetland

cannot only be maintained, but enhanced by carrying out improvements as described below. In carrying out the improvements, the natural qualities of the wetland can be improved and it can also serve to manage stormwater and act as a reservoir for irrigation water.

Presently, the wetland has two distinct parts: the northern portion and southern portion. The northern portion is the deeper of the two and tends to retain water on a more permanent basis. As such, this part of the wetland supports diverse wetland plant species within the shallow water around its outer edge.

The southern portion of the wetland does not contain standing water and, as such, it does not currently support typical wetland plant species.

It is proposed to enhance the wetland so that the southern portion is capable of accommodating the same range of wetland plant species as currently occurs in the northern portion. This would be done by deepening the central portions of the northern and southern parts of the wetland to the same depth. In addition, plant species would be introduced to the southern portion and the existing plants that occupy the outer edge of the northern wetland would be maintained.

In order to carry out the enhancements, additional water will need to be retained. This will be done by constructing a small berm along the southern edge of the wetland. Included within the berm will be a control structure that will permit the outflow of post-development flows.



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An application has been made to Alberta Environment that details the proposed wetland enhancement.

Policy 4.3.5.1: Any modification to the existing wetland shall be subject to the approval of Alberta Environment and the Municipal District of Foothills.

Policy 4.3.5.2: The wetland, as illustrated on Figure 8, shall be dedicated to the Municipal District of Foothills as a Public Utility Lot.

Policy 4.3.5.3: A homeowners association shall be established by the developer to manage and maintain the wetland as a Public Utility Lot.

The open space provided within Sandstone Springs is summarized below.

Type of Open Space	Area (Acres)
Municipal Reserve (including pathways)	49.27 acres
Patio Home Open Space	17.54 acres
Environmental Reserve	42.42 acres
Wetland	29.42 acres
Total	138.65 acres

This accounts for 33% of the total Plan Area with the Municipal Reserve dedication accounting for 12% of the developable area.



4.4 Servicing

4.4.1 Sanitary Sewer Service

Sanitary sewer service will be provided through advanced on-site sewage treatment (such as Advantex) and ground disposal. Within Cell A, a collection system will be installed and conveyed to a centrally located treatment and disposal system. For development within Cell B, either a collection system with appropriately located disposal sites, or individual systems located on each parcel will provide a high level of treatment and disposal.

A shallow subsurface analysis was conducted in February 2006, the results of which are included in Appendix B.

Once installed, the systems will be monitored and maintained by a utility company established for the prime purpose of operating the sanitary sewer facilities and the domestic water supply as described in Section 4.4.2. This utility company will be responsible for ensuring that the sanitary sewer services are adequately maintained and operate within parameters established by Alberta Environment.

The following policies shall apply to the installation and operation of the sanitary sewer system.

Policy 4.4.1.1: Prior to any subdivision approval, the developer shall establish a utility company that will be responsible for the installation, monitoring and maintenance of the sanitary sewer collection treatment and disposal systems. In establishing the utility system, the developer shall identify the means whereby charges will be applied to each parcel to ensure the utility has sufficient funds to install, monitor and maintain the sanitary sewer systems on an ongoing basis.

Policy 4.4.1.2: Prior to any subdivision approval, the developer shall provide to the Municipal District of Foothills, confirmation of the type of advanced on-site treatment system to be used, and whether a collective system will be installed in Cell B.

Policy 4.4.1.3: Installation of the sanitary sewer systems shall be the responsibility of the developer. The location of the collection (where applicable) treatment and disposal systems shall be identified prior to the issuance of a building permit.

Policy 4.4.1.4: The design and operational parameters of each sanitary sewerage system shall be consistent with those established by Alberta Environment and the Municipal District of Foothills.

4.4.2 Water Supply

Domestic water will be provided by a series of groundwater wells. An analysis of the groundwater supply was conducted by Groundwater Exploration and Research in November 2006. This analysis examined the supply and identified the groundwater reserve and prescribed a sustainable yield. A copy of the groundwater analysis is included as Appendix C.

The domestic water system consists of a series of groundwater wells, treatment facility and distribution mains. Each parcel will be supplied with domestic water from this system. Figure 9 outlines the proposed water system.

Water required for irrigation will be collected and distributed using a separate water system. This water will not require the same level of treatment as domestic water thus reducing water treatment and maintenance costs. The irrigation system will be supplied from the rainfall runoff which is directed to the wetland on the site. Separate irrigation supply lines that run parallel to the domestic lines will be provided to each lot, thus reducing the demand on the domestic water system.



Sandstone Springs Area Structure Plan

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N.E. & S.E. 1/4 Sec. 24-20-1-5

north

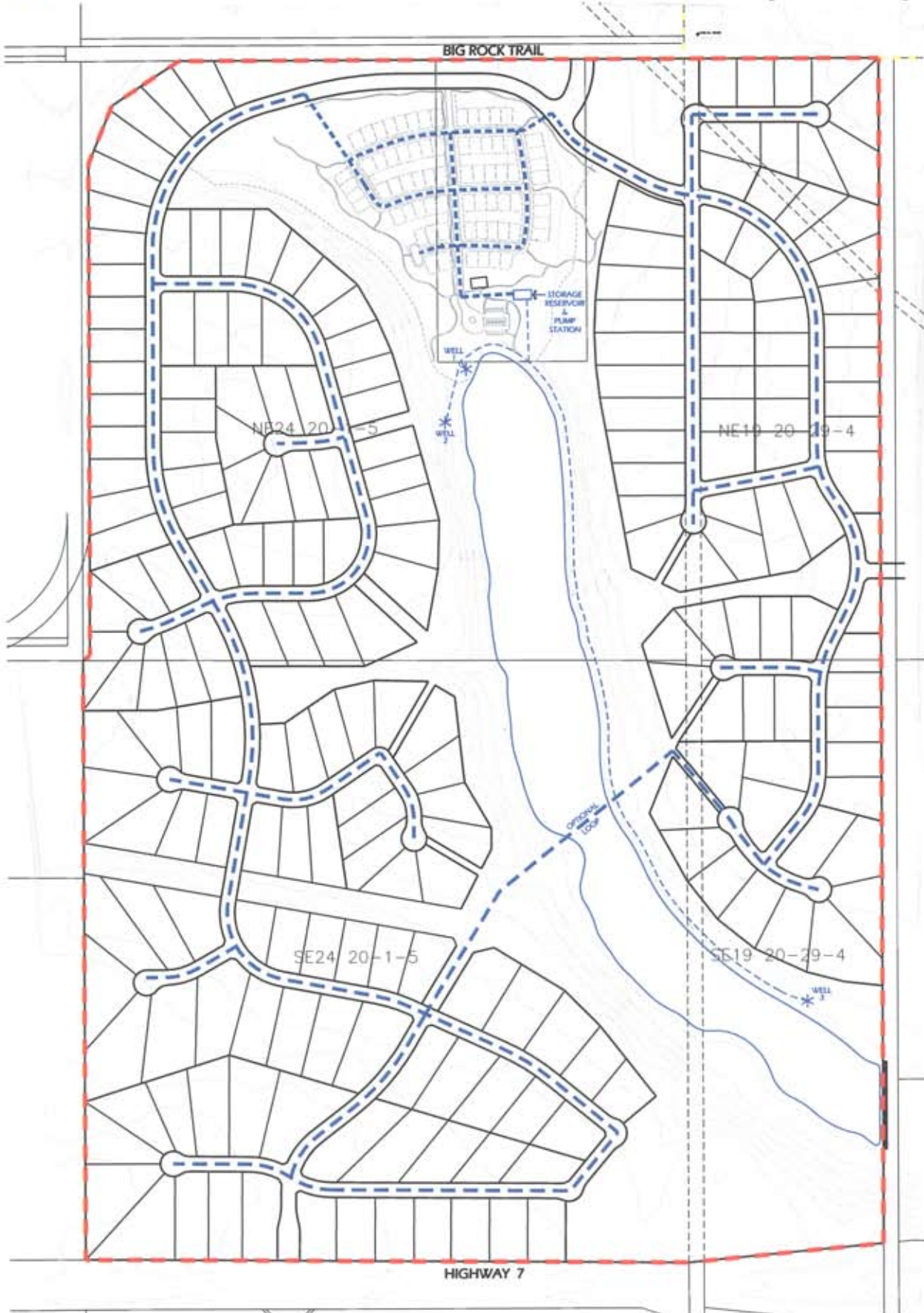


not to scale

LEGEND

- PLAN BOUNDARY
- WATER MAIN

Sandstone Springs Development Corp.



water servicing system

FIGURE

9

The water systems will be installed, operated and maintained by a utility company established by the developer prior to subdivision approval. Both the domestic and irrigation systems will include water meters at each unit.

The following policies shall apply to the water supply:

Policy 4.4.2.1: The utility company established by the developer will be responsible for the installation, operation and maintenance of the water system.

Policy 4.4.2.2: The developer shall register the necessary easements and rights-of-way for the water system at the subdivision stage. If Council requires, access to the facilities and related infrastructure, easements, and rights-of-way will be granted for emergency purposes.

Policy 4.4.2.3: The necessary water evaluation reports will be completed and submitted to the Municipal District of Foothills No. 31 and the proper licensing and approvals obtained from Alberta Environment.

Policy 4.4.2.4: The proper licensing for groundwater will be obtained to the satisfaction of the Municipal District of Foothills No. 31 and Alberta Environment prior to installation.

4.4.3 Stormwater Management

A stormwater management plan that addresses the stormwater solutions for the Plan Areas is included as Appendix D. It notes the

stormwater runoff within the Plan Area currently flows toward the wetland located in the central portion of the site. These pre-development flows are accom-



modated through natural depressions and overland channels that exist throughout the Plan Area. The design of Sandstone Springs utilizes these natural drainage channels to convey stormwater runoff toward the wetland. Figure 10 illustrates the catchment areas and drainage channels for Sandstone Springs.

The stormwater management for the Plan Area will maintain the wetland and its current function as a stormwater retention pond. In order to ensure stormwater quantity is maintained to a high quality, natural treatment facilities will be included in the overall stormwater management. Best Management Practices will be implemented to ensure the quantity and quality of stormwater flow entering the wetland will be at pre-development levels.



Sandstone Springs Area Structure Plan

N.E. & S.E. 1/4 Sec. 19-20-29-4
N.E. & S.E. 1/4 Sec. 24-20-1-5

north

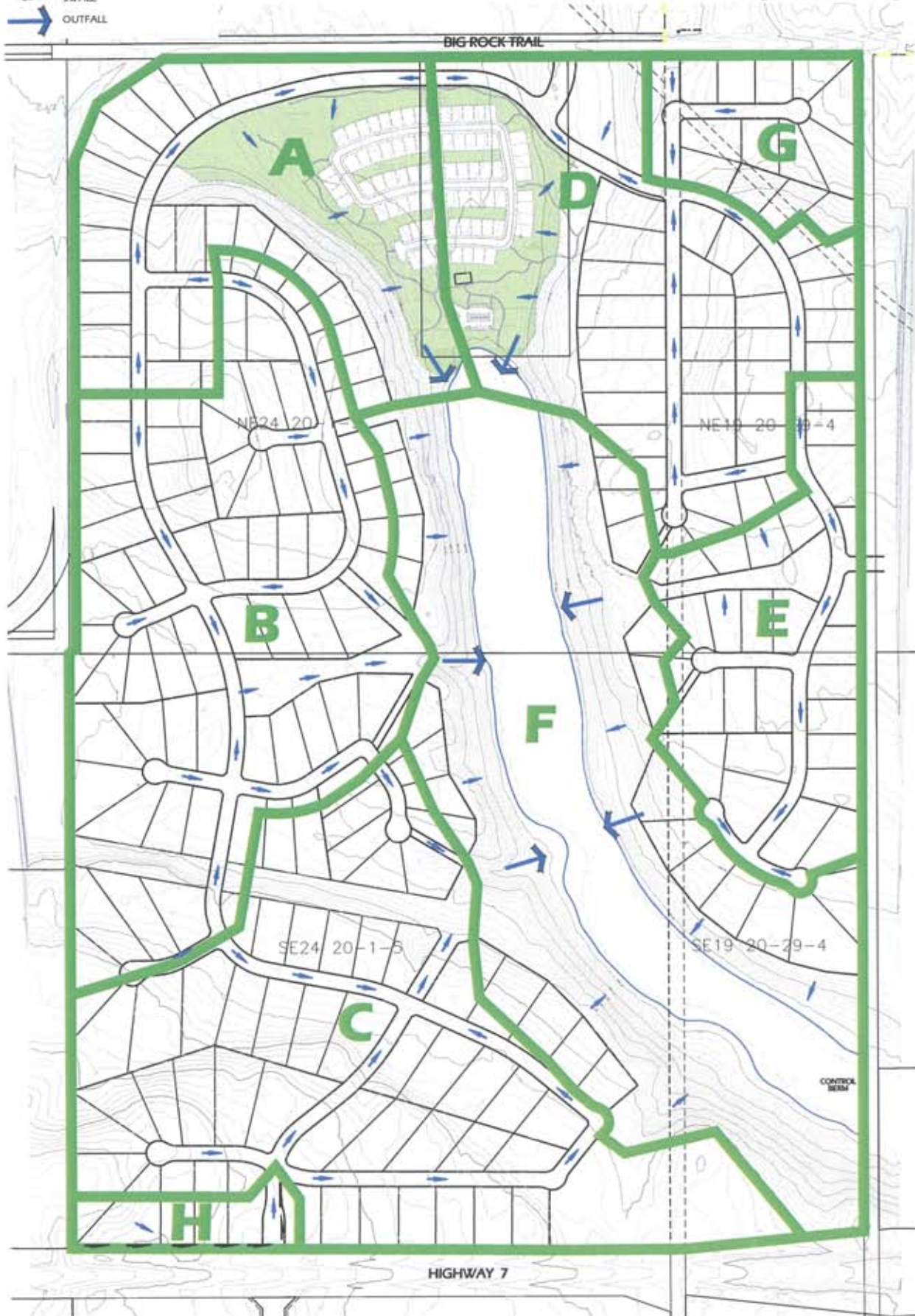


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LEGEND

- CATCHMENT AREA BOUNDARY
- DIRECTIONAL FLOW
- SWALE
- OUTFALL

Sandstone Springs Development Corp.



stormwater system

FIGURE

10

SANDSTONE SPRINGS AREA STRUCTURE PLAN

The policies associated with stormwater management are as follows:

Policy 4.4.3.1: The quality and quantity of stormwater runoff within the Plan Area will be maintained at pre-development levels.

Policy 4.4.3.2: Stormwater runoff from roads, driveways and roofs shall be conveyed using natural drainage channels and roadside ditches.

Policy 4.4.3.3: Best Management Practices shall be implemented throughout Sandstone Springs. These may include grassed roadside ditches and swales which can minimize erosion and remove sediment, end treatment measures, and minimal lot grading to reduce runoff volume from developed parcels.

Policy 4.4.3.4: The developer shall obtain all licenses required by Alberta Environment to divert surface runoff and to utilize the wetland as a stormwater retention facility.

4.5 Transportation

An internal road system has been designed to provide efficient access and circulation throughout Sandstone Springs. These new access points in existing roadways

are proposed including one off of Big Rock Trail and one off of Highway 7.

A transportation impact study, provided under separate cover, was completed in order to quantify the traffic generated by Sandstone Springs and to examine the effect of any new traffic on adjacent roadways and new intersections. The major components of the road network in the vicinity of Sandstone Springs are described below and illustrated on Figure 11.



Southridge Drive / Highway 2A is a divided 4-lane road that is part of the provincial highway system and is classified as a major arterial within the Town of Okotoks. The highway serves as the major north-south route through the centre of Okotoks providing access for residents of the Town and the Municipal District to the City of Calgary. Highway 2A is the only crossing of the Sheep River serving both local and non-local travel within the town.

The intersection with Big Rock Trail includes exclusive left turn lanes and channelized right turns on all approaches. The intersection is signalized with pedestrian crossings on all approaches.



Sandstone Springs Area Structure Plan

N.E. & S.E. 1/4 Sec. 19-20-29-4
N.E. & S.E. 1/4 Sec. 24-20-1-5



Sandstone Springs Development Corp.

not to scale



regional road network

FIGURE

11

SANDSTONE SPRINGS AREA STRUCTURE PLAN

Southridge Drive carries nearly 20,000 vehicles per day.

Highway 7 is an undivided 2-lane road that is also part of the provincial highway system and is classified as a major arterial. Highway 7 is a major east-west highway traversing the southern edge of the Town and providing access to the Turner Valley and Black Diamond communities to the west. It also provides a link to Southridge Drive to the east.

The T-intersection with Sundance Trail, located opposite to the site, provides a right turn deceleration and acceleration lane for traffic turning to and from Sundance Trail.

Highway 7 carries nearly 3,000 vehicles per day.

Big Rock Trail is a 2-lane divided collector road for several hundred metres. Further to the west the roadway narrows to a 2 lane undivided cross-section. Approximately 2 kilometres west of Southridge Drive, Big Rock Trail completes the first of three 90 degree turns spaced approximately 800 metres apart before intersecting Highway 7. It carries between 2,000 and 5,000 vehicles per day and provides access to the residential districts of Hunter's Gate and Sheep River Ridge, southwest of the Sheep River. It also serves as an alternative route connecting to Highway 7.

Sundance Trail is a 2-lane local road that accesses Highway 7 and provides entry into a 30 single family unit development south of the subject site. The T-intersection

with Highway 7 is stop controlled with 5.0 metre lane widths. Daily traffic volumes do not exceed 1,000 vehicles per day.



Pacer Park is a 7.0 metre wide gravel residential access for a farm home along Big Rock Trail. Daily traffic volumes are negligible.

Figure 11 outlines the regional road network. Based on the findings of the traffic impact study, no improvements are required to Big Rock Trail. The intersection of Highway 7 and the southern access point will require a minor upgrade to permit left hand turning movements in and out of Sandstone Springs, and acceleration and deceleration lanes for right hand movements.

The policies associated with transportation include:

- Policy 4.5.1:** Vehicular access to the Plan Area shall be from internal roads.
- Policy 4.5.2:** Internal access and roadways required to service the development area shall be designed in



accordance with municipal standards, but may be modified in consultation with the Municipal District of Foothills No. 31.

Policy 4.5.3: All internal roadways shall be constructed at the developer's expense.

Policy 4.5.4: Roadways within Cell A, as outlined on Figure 7, shall be developed as part of a bareland condominium. As such, the developer shall be responsible for the construction of the internal road system, and the liability and maintenance will be the responsibility of the condominium association.

Policy 4.5.5: At his sole expense, the developer shall upgrade the Highway 7/southern access intersection to the satisfaction of Alberta Transportation and Infrastructure and the Municipal District of Foothills No. 31.

Policy 4.5.6: The Highway 7/south access intersection shall be upgraded in conjunction with the initial development of the Plan Area. As per a road use agreement executed between the developer and the Municipal District of Foothills No. 31, construction traffic shall use the Highway 7/south access intersection to access the Plan Area. Construction traffic shall not use the Big Rock Trail/north access intersection.

Policy 4.5.7: The developer shall be responsible to construct or make contributions toward road improvement fees for external roads that are required to accommodate traffic associated with Sandstone Springs.

Policy 4.5.8: The design and improvements of all external roads shall meet all requirements and conditions set forth by Alberta Infrastructure and Transportation, and the Municipal District of Foothills No. 44.

Policy 4.5.9: As this sole expense, the developer shall upgrade Big Rock Trail where it intersects with the proposed access into Sandstone Springs. The design of the intersection shall be to the satisfaction of the Municipal District of Foothills No. 31.

Policy 4.5.10: Prior to subdivision approval, the developer and the Municipal District of Foothills No. 31 shall enter into an agreement that specifies the amount and timing of the contribution to be applied to off-site road improvements.



4.6 Historical Resources Assessment

An Historical Resources Assessment was completed for the Plan Area. Two sites of potential significance were identified. One is located on the western side of the wetland in the central portion of the Plan Area. The second site is located on the eastern side of the wetland. Both have been included in the Environmental Reserve as per the recommendations of the Historical Resources Assessment. The Historical Resources Assessment is provided in Appendix E.

4.7 Concept Plan Statistical Summary

The following provides a breakdown of the statistics associated with the concept plan:

	Hectares	Acres
Residential	93.82	231.83
Patio Homes	11.61	28.69
Roads	15.17	37.49
Municipal Reserve*	19.94	49.27
Environmental Reserve	17.17	42.42
Wetland (PUL)	11.91	29.42
Total Plan Area **	169.62	419.12

* includes 0.6 hectares (1.48 acres) of road allowance

** includes 3.23 hectares (7.98 acres) of road allowance

4.8 Phasing

Sandstone Springs has been designed as an integrated, comprehensively planned residential community. As such, a single application for land use redesignation for

the entire site will be made. However, the subdivision of the site will occur in phases that allow for the logical extension of services, roadways and pathways.

Policy 4.8.1: A single redesignation application shall be made that addresses the future land use and development of the entire site.

Policy 4.8.2: A subdivision of the site may be done in phases in conjunction with the extension of services and the construction of the internal road and pathway systems and as generally illustrated on Figure 12.

Policy 4.8.3: The phasing plan as illustrated on Figure 12 is intended to provide a general indication on how Sandstone Springs will develop over time. Phasing of development may proceed differently than illustrated on Figure 12 without an amendment to this Plan.

Policy 4.8.4: Further to Policies 4.5.5 and 4.5.6, the Highway 7 and Big Rock Trail intersections shall be upgraded as part of Phase 1. Further a "haul" road from Highway 7 shall be constructed as part of Phase 1 to accommodate all construction related traffic.



Sandstone Springs Area Structure Plan

N.E. & S.E. 1/4 Sec. 19-20-29-4
N.E. & S.E. 1/4 Sec. 24-20-1-5

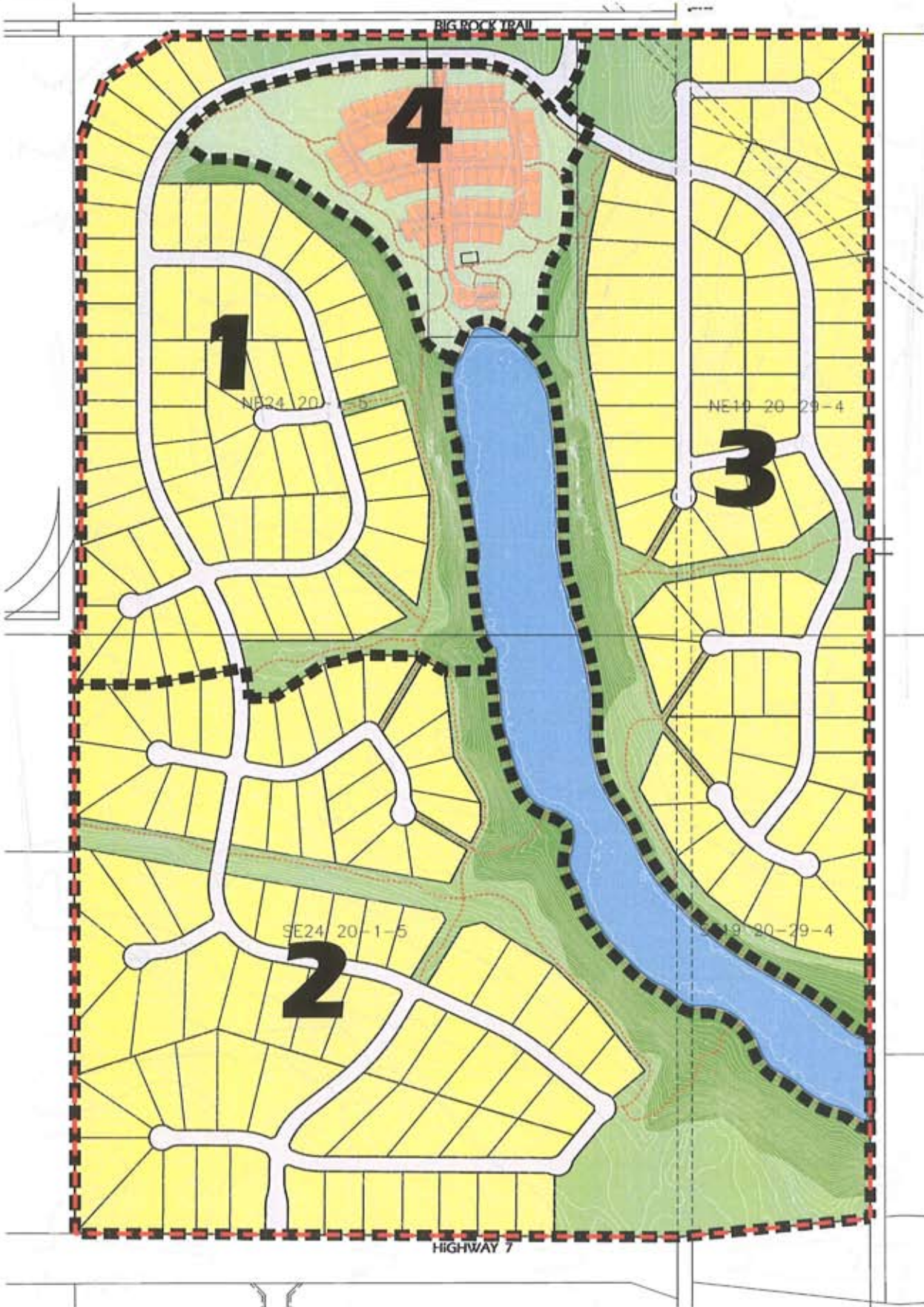


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LEGEND

- PLAN BOUNDARY
- PHASE BOUNDARY

Sandstone Springs
Development Corp.



Phasing Plan

FIGURE

12

5.0 IMPLEMENTATION

The provisions of this Area Structure Plan will be implemented through the redesignation and subdivision of the site. In addition, provisions will be put in place that ensure the future development of the site is consistent with Municipal District of Foothills No. 31 standards.

The following sets out implementation policies relative to Sandstone Springs:

Policy 5.0.1: All development shall conform to the provisions of the Municipal District of Foothills No. 31 Land Use Bylaw.

Policy 5.0.2: All subdivision and development shall be in conformity with the standards established by the Municipal District of Foothills No. 31.

Policy 5.0.3: Development approval shall be conditional upon a signed Development Agreement between the developer and the Municipal District of Foothills No. 31.

Policy 5.0.4: Internal roadways within Cell B, as outlined on Figure 7, shall be constructed to municipal standards at the sole expense of the developer. Upon issuance of a Final Acceptance Certificate, the maintenance of the internal roads shall be the responsibility of the Municipal District of Foothills No. 31.

Policy 5.0.5: Maintenance and any liability associated with all internal roadways and amenities within Cell A, as outlined on Figure 7, shall be the responsibility of the bareland condominium association.

Policy 5.0.6: The developer shall be responsible for establishment of a Homeowners Association who will be responsible for operation, maintenance and any liability associated with the Municipal Reserve, pathways, any Environmental Reserve, and any public utility lots.



APPENDIX A
(Submitted under separate cover)



APPENDIX B
(Submitted under separate cover)



APPENDIX C
(Submitted under separate cover)



APPENDIX D
(Submitted under separate cover)



APPENDIX E
(Submitted under separate cover)





URBAN SYSTEMS.