

# **East Springbank Area Structure Plan**

## **Appendix 5**

### **East Springbank III Community Plan**

**Note:** This office consolidation includes the following amending Bylaws:

<b>Date</b>	<b>Amendment</b>	<b>Bylaw</b>	<b>Description</b>
1999 July 20	5	12P99	a. Incorporate East Springbank III Community Plan as Appendix 5 to East Springbank Area Structure Plan
2005 June 13	23	6P2005	a. Delete & replace Map 1. b. Delete & replace Map 2. c. Section 1.0 under subsection 1.1 entitled "The Planning Area (Map1) delete & replace text. d. Section 1.5 under subheading "Required Uses, Features and Actions, delete subsection 6. e. Section 1.7 under subheading "Intent" delete fourth paragraph. f. Section 1.7 under subheading "Required Uses, Features and Actions, delete subsection 2.a and renumber subsection 2.b to 2.a. g. Section 1.8 under subheading "Required Uses, Features and Actions, delete subsection 4 and renumber remaining.

Amended portions of the text are printed in italics and the specified amending bylaw is noted.

Persons making use of this consolidation are reminded that it has no legislative sanction, and that amendments have been embodied for ease of reference only. The official Bylaw and all amendments thereto are available from the City Clerk and should be consulted when interpreting and applying this Bylaw.

## **PUBLISHING INFORMATION**

**TITLE:** **EAST SPRINGBANK AREA STRUCTURE PLAN  
APPENDIX 5: EAST SPRINGBANK III COMMUNITY PLAN**

**AUTHOR:** PLANNING & BUILDING DEPARTMENT  
CITY, COMMUNITY & DOWNTOWN PLANNING DIVISION

**STATUS:** APPROVED 1999 JULY 20, BYLAW 12P99

**PRINTING DATE:** 2005 JUNE

**ADDITIONAL COPIES:** THE CITY OF CALGARY #8115  
RECORDS & INFORMATION MANAGEMENT (RIM)  
DEVELOPMENT & BUSINESS APPROVALS  
P.O. BOX 2100, STN "M", #8115  
CALGARY, AB T2P 2M5

**PHONE:** 311 OR OUTSIDE OF CALGARY 403-268-2489

**FAX:** 403-268-4615

## TABLE OF CONTENTS

	PAGE
<b>PREFACE.....</b>	<b>v</b>
What is a Community Plan? .....	v
The Planning Process.....	v
Organization of the East Springbank III Community Plan.....	vi
The East Springbank Area Structure Plan.....	vi
<b>PART I: THE EAST SPRINGBANK III COMMUNITY PLAN.....</b>	<b>1</b>
<b>VISION.....</b>	<b>3</b>
<b>1.0 THE PLAN .....</b>	<b>4</b>
1.1 The Planning Area .....	4
1.2 Goals and Objectives .....	4
1.3 Design Concept (Map 2) .....	6
1.4 Residential .....	10
1.5 Commercial .....	14
1.6 Open Space and the Joint Use Site .....	16
1.7 Transportation .....	17
1.8 Servicing .....	20
1.9 Environmental Issues.....	21
<b>2.0 IMPLEMENTING THE PLAN.....</b>	<b>23</b>
2.1 Phasing of Development .....	23
2.2 Comprehensive Planning .....	23
2.3 Applying the Density and Housing Mix Requirements .....	24
2.4 Information Requirements of Applicants .....	24
2.5 Special Land Use Regulations .....	26
2.6 Making Decisions on Planning Applications.....	27
2.7 The Timing of Public Improvements .....	27
2.8 Streetscape Improvements .....	28
<b>3.0 MONITORING THE NEW COMMUNITY .....</b>	<b>29</b>

## TABLE OF CONTENTS Continued...

	<b>PAGE</b>
<b>PART II: SUPPORTING INFORMATION .....</b>	<b>31</b>
<b>4.0 PLANNING AREA .....</b>	<b>32</b>
4.1 Location and Size.....	32
4.2 Land Ownership .....	32
4.3 Population Projections.....	32
<b>5.0 PLANNING APPROACH .....</b>	<b>34</b>
<b>6.0 NATURAL FEATURES .....</b>	<b>35</b>
6.1 Topography and Drainage .....	35
6.2 Soils and Geology .....	35
6.3 Biophysical Assessment of the Paskapoo Slopes.....	36
6.4 Environmentally Significant Areas.....	44
6.5 Archeological Resources .....	49
6.6 Geotechnical Terrain Analysis .....	49
<b>7.0 POLICIES AND STUDIES AFFECTING THE PLAN.....</b>	<b>54</b>
7.1 Provincial Land Use Policies .....	54
7.2 Calgary Municipal Development Plan .....	54
7.3 The East Springbank Area Structure Plan .....	54
7.4 The City of Calgary/MD of Rocky View Intermunicipal Development Plan.....	55
7.5 Calgary Transportation Plan.....	55
7.6 Sustainable Suburbs Study .....	56
7.7 Transit Friendly Design Guide .....	56
7.8 The City of Calgary Environmental Policy, Principles and Goals	56
7.9 Calgary Urban Park Master Plan .....	56
7.10 Natural Area Management Plan.....	56
7.11 Improving Calgary's Entranceways .....	57
7.12 Calgary Restricted Development Area and Transportation/Utility Corridor.....	57
7.13 Planning for Adjacent Areas.....	57
7.14 East Springbank III Commercial Demand Study.....	57
<b>8.0 TRANSPORTATION .....</b>	<b>58</b>
8.1 Road Network .....	58



**TABLE OF CONTENTS Continued...**

	<b>PAGE</b>
<b>9.0    SERVICING AND UTILITIES.....</b>	<b>60</b>
9.1    Engineering Studies for East Springbank .....	60
9.2    Water Supply.....	60
9.3    Sanitary Sewage .....	60
9.4    Stormwater Management.....	60
9.5    Electrical Service .....	62
9.6    Natural Gas .....	62
9.7    Telephone and Cable .....	62
<b>10.0    COMMUNITY SERVICES.....</b>	<b>64</b>
10.1    Police Service .....	64
10.2    Fire Protection.....	64
10.3    Emergency Medical Services.....	64
10.4    Library Service .....	64
10.5    Social Services .....	64
10.6    Public Health Services .....	64
<b>GLOSSARY.....</b>	<b>65</b>
 <b>MAPS</b>	
Map 1    Community Location.....	5
Map 2    Land Use Concept.....	7
Map 3    Land Ownership .....	33
Map 4    Environmentally Significant Areas .....	45
Map 5    Habitat Types .....	47
Map 6    Geotechnical Slope Classification .....	51
Map 7    Transportation Network .....	59
Map 8    Water Supply, Sanitary Sewer and Storm Sewer Servicing ....	61
Map 9    Shallow Utilities .....	63



# East Springbank Area Structure Plan

## Appendix 5: East Springbank III Community Plan

### PREFACE

#### What is a Community Plan?

A community plan is a planning document that establishes a framework for the development of new suburban residential communities. The framework is in the form of a set of plan objectives, a design concept and a comprehensive package of required and desired uses, features and actions intended to ensure that the plan is achieved.

A community plan must achieve two things. It must be in keeping with The City's strategic planning objectives by promoting the design of communities that are more fiscally, socially and environmentally sustainable in the long term (see also, Section 1.2 Goals and Objectives). At the same time, it must be flexible so that developers can respond to prevailing market conditions and exercise creativity and innovation in design details.

East Springbank is presently subject to the East Springbank ASP, and the East Springbank III Community Plan shall be an amendment adopted by bylaw and forming an appendix to that ASP. The white pages of the East Springbank III Community Plan shall form the bylawed portion of the plan. The purpose of the **Vision** statement and **Intent** clauses is to assist applicants, decision makers and others in understanding what the whole plan, or components of it, are intended to achieve. The blue pages of the East Springbank III Community Plan are Supporting Information only and are not bylawed.

#### The Planning Process

Community plans are developed through a consultative process involving landowners and their consultants, key City departments, school boards and others that will be directly affected by the plan. The planning group, or Technical Team, works on the plan at a series of meetings until it is completed, with public input occurring at key stages.

The East Springbank III Community Plan process was carried out concurrently with the adjoining Aspen Village ASP process.

## Organization of the East Springbank III Community Plan

This document is in two parts. Part I is **The Plan** itself and Part II is **Supporting Information** that is useful in understanding the plan. Part I starts with a **Vision** of life in East Springbank III when fully built-out and functioning. Next, it sets out key public interest **Goals and Objectives** for the plan that are in keeping with that **Vision**. Then, with text and maps, it explains the **Design Concept** and the **Organizing Principles** for spatially arranging the major elements. Subsequent sections describe the **Required and Desirable Uses, Features and Actions** necessary to meet the **Intent** of each element. **Implementing the Plan** describes information to be provided by developers submitting planning applications and how the various planning criteria should be used in making decisions on the plan. Finally, **Monitoring the New Community** describes how The City intends to provide feedback to all parties on how well the plan is achieving the public interest goals and objectives set for it.

## The East Springbank Area Structure Plan

The **East Springbank Area Structure Plan** (ASP) was adopted by City Council in June 1997 and replaced the East Springbank Joint General Municipal Plan that served as the joint plan for the area, with the M.D. of Rocky View, since May 1994. The ASP is a statutory plan that covers approximately 10 square miles (2,700 hectares) of land and includes the East Springbank III planning area. As such, the ASP sets out land use policy areas including residential densities, a transportation network and servicing. The **East Springbank III Community Plan** applies the ASP to one community within East Springbank while utilizing as many of the **Sustainable Suburbs Study** criteria as appropriate to this area.

Both the **East Springbank ASP** and the **East Springbank III Community Plan** should be used concurrently as policy for the area.

# Part I

## East Springbank III Community Plan



## PART I : THE EAST SPRINGBANK III COMMUNITY PLAN

### VISION

*East Springbank III is a unique, vibrant community of 8,000 residents on the edge of Paskapoo Slopes, a prominent natural feature that serves as the entranceway to west Calgary. It shares its vision with that of Discovery Ridge: a community developed in true harmony with its natural setting. Where development occurs on the edge of the slopes, it is designed to ensure the dominant natural landform remains the view from other areas of Calgary to the north. The area's beauty and environmental quality is an asset.*

*The design and layout of the community encourages residents to adopt more sustainable lifestyles. Some local shopping and services are met within the community. Larger, less frequent shopping needs are met in close proximity to the community. The transit route is designed to encourage use with direct, easy walking distances to the bus. A school site, parks and pathways are provided in the community to cater to a range of passive and active recreational needs. A range of dwelling types have developed in East Springbank III helping to provide for a wide spectrum of lifestyle choices and housing needs over the lifetimes of its residents.*

*Residents of the community prize the adjacent Paskapoo Slopes. This natural amenity serves as a sanctuary from urban life, where the archeological history of the area is preserved along with a diversity of natural habitat.*

*By providing a wide range of housing choice, good access to transit, and local services within, and adjacent to a natural setting, East Springbank III is a highly desirable community in which to live.*

## 1.0 THE PLAN

### 1.1 The Planning Area (Map 1)

The East Springbank III planning area is located within East Springbank in west Calgary (Map 1). The area comprises 150 hectares (370 acres) of land bounded on the north by Canada Olympic Park and adjacent lands, on the east by the Paskapoo Slopes, on the south by Old Banff Coach Road and on the west by the Transportation and Utility Corridor (TUC) (future Stoney Trail).

For more details about the planning area, see Part II: Supporting Information.

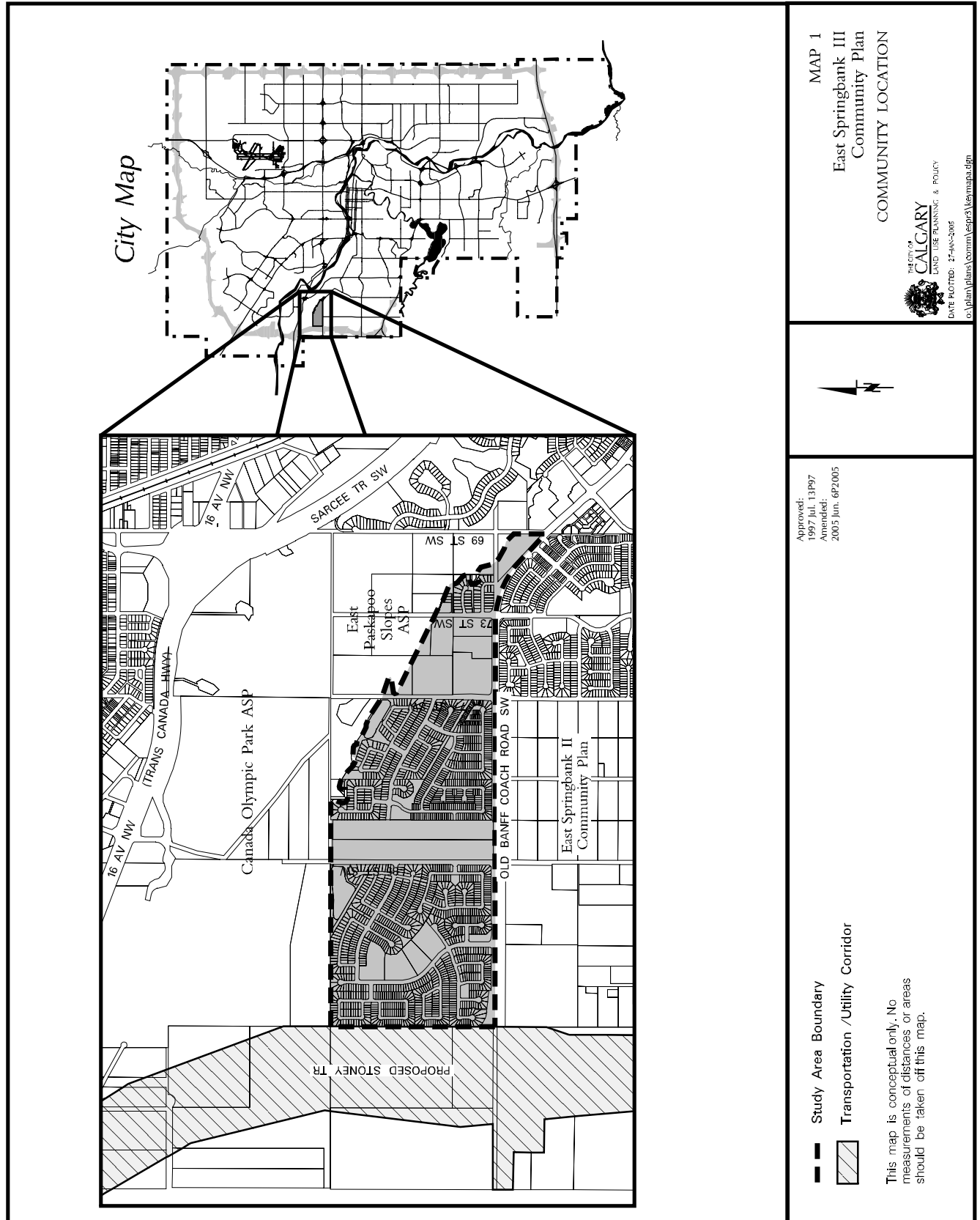
### 1.2 Goals and Objectives

In planning East Springbank III, The City of Calgary and developers have several common goals. Both want roads, services and facilities to be safe and efficient, both want to keep costs down, and both want the community to be a desirable place to live and be a successful project for the developer. In addition, the plan must meet a number of public interest goals, which benefit not only community residents, but also indirectly, the public at large. These goals are discussed in a number of policy documents approved by Calgary City Council including the **Calgary Transportation Plan**, the **Sustainable Suburbs Study**, **The City of Calgary Environmental Policy**, the **Natural Area Management Plan**, the **Calgary Urban Park Master Plan**, the **Calgary River Valleys Plan**, **Improving Calgary's Entrancesways**, and the **Transit Friendly Design Guide** (for more details, see Supporting Information). They translate into the following public interest goals (in bold) and objectives for East Springbank III.

#### **Increased Environmental Protection**

- To protect environmentally significant areas through municipal reserves, conservation easements, and other means approved by City Council.
- To ensure development is sensitive to the natural setting.
- To ensure development in sloped areas is slope-adaptive.
- To ensure to visual impacts of development on sloped areas and ridge lines is minimized.
- To reduce solid waste, water and energy consumption.
- To ensure servicing and transportation infrastructure alignments are chosen which protects the natural integrity of this area.





**Improved Community Life**

- To provide a school, local retail and commercial services, and recreational opportunities within the community to meet people's daily needs and offer some local employment opportunities.
- To give the location and quality of public areas and facilities high priority to encourage safe community activities and give people civic pride and a sense of place.
- To encourage social diversity by providing a wide choice of housing to accommodate different households types.

**Reduced Car Dependency**

- To reduce the need for vehicle trips and encourage people to make more of their journeys by walking and cycling.
- To encourage greater use of transit.

**Reduced Infrastructure Costs**

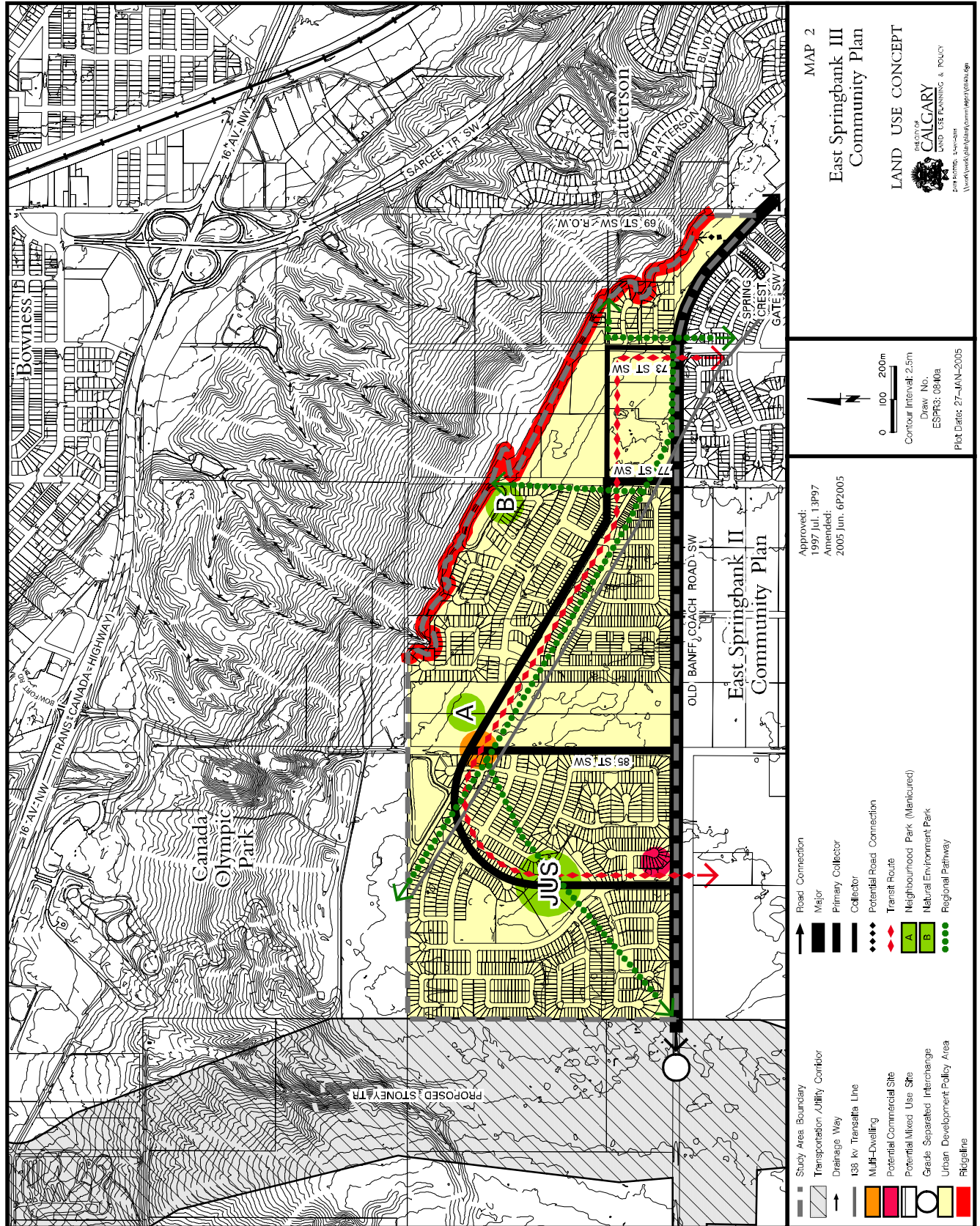
- To design the community with an aim to reducing the costs for services and for the construction and maintenance of infrastructure.

**Increased Protection of Public Health and Property**

- To protect public health by preventing, reducing or remediating soil, water and air pollution.

**1.3 Design Concept (Map 2)**

The design concept for East Springbank III addresses two different physical landscapes on which development may occur. First, most of the plan area reflects the "uplands" immediately north of Old Banff Coach Road, and is characterized by a generally flat landscape. With the exception of some tree stands and native fescue grasslands in the north-central area, the majority of the uplands are not environmentally significant. It is in this area that more of a sustainable community design is envisioned, including a direct road network connecting key amenities, an efficient and direct transit routing, a centrally located school, a regional pathway system connecting community facilities, a wider choice of housing in key areas, and the provision for local retail services for the residents of the community. Second, the northern areas of the plan represent the ridgeline or interface with the Paskapoo Slopes, a steeply sloping, naturally vegetated, and visually prominent area of high environmental and ecological significance. It is in this area of the plan that the design concept is to ensure development in this ridge line and sloped area is sensitive to the natural setting, slope-adaptive and visually unobtrusive.





## Organizing Principles

The major elements of the Design Concept and their spatial organization, are as follows:

- **The Urban Development Policy Area** provides various residential densities, opportunities and requirements with the most highly visible and sloping lands requiring the most sensitive development. This policy area provides for a wide spectrum of urban land uses and densities including multi-family development and possibly local retail uses; the ridge line and sloped areas provide for sensitive low density slope-adaptive, visually unobtrusive development, and clustered development that helps protect environmentally significant areas.
- A **network of interconnecting pedestrian-friendly streets** is provided linking residents with community amenities and facilities such as the school, parks and other open spaces, and any local retail services in a way that makes walking and cycling a pleasant alternative to the car for many local journeys.
- **Direct transit routing** and **accessible bus stops** are provided for efficient transit service and to make transit a pleasant viable alternative to the car for many journeys within and outside the community.
- A **variety of open spaces including a school site** are provided to help fulfil the recreational needs of the community. Regional pathways help to achieve an integrated pathway system within the community, while providing important links to the open space system of adjacent communities.

## Understanding the Planning Criteria

Development proposals will be evaluated in accordance with the planning criteria outlined in Sections 1.4 to 1.9. The criteria are described under headings that have the following meanings:

### Intent

The intended role and function of a land use area or planning element within the plan.

### Required Uses, Features and Actions

Uses, features and actions that are essential to achieving the Intent.



### **Desirable Uses, Features and Actions.**

Uses, features and actions that are desirable, but not essential, to achieving the **Intent**. A selection of them or others providing an equivalent public benefit are recommended to meet the **Intent**.

(See Section 2.6 - Making Decisions on Planning Applications)

## **1.4 Residential**

### **Intent**

As described in the Design Concept, East Springbank III reflects two physical landscapes: the main area of the plan reflects relatively flat developable lands, and does include an area of environmentally significant native fescue grasslands and tree stands (see Maps 4 and 5). This area falls under the Urban Development policy area of the East Springbank ASP, and as such, provides for a wide range of residential densities and forms of development in comprehensively designed neighbourhoods; the northern areas of the plan reflects the interface with, or ridge line of the Paskapoo Slopes, an environmentally significant and highly visible area of sloping lands.

The intent of the residential policies is to distinguish the sloped ridgeline area from the flatter uplands areas to the south. A more sustainable community design is envisioned for the general uplands areas, while the ridgeline areas will reflect a lower density transition, and will develop with a sensitive slope-adaptive and visually unobtrusive design.

### **Required Uses, Features and Actions**

#### **1. The Urban Development Policy Area**

- i. A residential density of between 9.9 and 17.3 units per gross developable hectare (4.0 to 7.0 units per gross developable acre);
- ii. A mix of dwelling units including single-detached, semi-detached and multi-dwelling. This dwelling unit mix requirement is intended to apply to the Urban Development Policy Area overall, not necessarily to each ownership area given the fragmentation of the plan area into smaller parcels.

(Refer to the Land Use Concept (Map 2) for the conceptual locations of multi-dwelling development, and Section 2.3);

- iii. Development on the northern edge of this policy area (ridge line development) to reflect the lower end of the density range, and these areas without open space dedication between the ridge line and residential development to be designated Direct Control

in order to address the development and design requirements described under the General Policies for Residential Development (see 1.4.3);

- iv. Opportunities to utilize Municipal Reserves to be explored as a way to help protect environmentally significant areas and areas along the ridge line; and
  - v. Within environmentally significant areas of this policy area, opportunities to cluster development to be explored as a way to help create areas of contiguous protected open spaces.
2. All Outline Plan/Land Use Amendment applications for **multi-dwelling** sites to address the following development components (see also Section 2.4):
- the principles of slope-adaptivity to be met in the site design and building details, if applicable;
  - site design and building details, including massing, height, orientation, coverage, and the quality of the development to reflect and be compatible with the surrounding low density residential areas, with special attention given to the visual impact of the development on areas beyond the plan (if applicable);
  - site design to incorporate open spaces within the development; and
  - environmentally significant areas to be considered in the design of the site.

3. General Policies for Residential Development

The following policies, development and design criteria apply generally throughout the plan area, where spatially applicable:

- a. All development proposals within the Direct Control areas of the plan to submit a **visual impact analysis** of the development including built-form, road alignments and all landform grading from a minimum of three perspectives, in 3 dimensions. The intent of this requirement is to ensure the development is as visually unobtrusive as possible. For the purposes of this plan, visually unobtrusive development is defined as development that is in harmony with its natural setting through the implementation of design techniques (e.g., height, colours, materials, roof pitch, setbacks, building orientation, varying grades); and/or is hidden or less visibly seen through the retention (retention is preferred over new plantings) and/or planting of native vegetation; and/or development that is clustered, either in a single-detached or multi-dwelling format, that

ensures the dominant visual effect remains the natural vegetated slope when viewed from areas beyond the plan to the north. (This requirement to be implemented in concert with slope-adaptive development requirements where applicable, and architectural principles).

- b. **Slope-adaptive development** is development that respects the natural landform as much as possible, addresses public safety by ensuring changes in soil erosion and natural drainage are minimized, is aesthetically compatible with its natural setting by minimizing negative visual impacts, and generally protects the environment within which it develops. All development within the Direct Control areas of the plan to be **slope-adaptive**, where applicable, and the following requirements to be demonstrated in a Concept Plan submitted as part of the Land Use Amendment and/or Outline Plan:
- It is recognized that some grading is required for development to occur, however, the natural landform to be retained as much as possible; mass-grading to create level lots is to be minimized for natural sloped areas;
  - Roadways in sloped areas to minimize cut and fill, to be of a sensitive design along contours, and which blends with the surrounding topography; cross-contour vertical roadway segments to be minimized (see also Section 1.7 Transportation policies);
  - Development along the ridgeline (see Map 2) to be designed and spatially arranged so as to prevent the appearance of a wall of development as seen from areas beyond the plan;
  - The built-form to step down the slope; utilize natural grade variations through multi-level housing design;
  - The site slope to be absorbed into the building massing, with exposed retaining walls having a maximum height of 1.2 metres (4.0 feet);
  - Development proposals to ensure that changes to the natural drainage pattern, groundwater levels, landform stability and erosion potential is minimized;
  - Development proposals to ensure the maximum amount of natural vegetation is retained on-site, with the built-form sensitively integrated into the natural terrain. Clustering the development helps protect contiguous environmentally significant areas; and



- Building design, materials and retaining walls to blend with the natural setting. Variations in setbacks, building heights, orientation and grade levels are required to help mitigate the visual impact of a “wall” or “string” of development along and against the slope. The predominant roof pitch is to follow the natural slope.
- c. Wherever development is proposed in areas of high **environmental significance**, the Land Use Amendment and/or Outline Plan submission to demonstrate how the following design guidelines have been considered:
- Targeting these areas for lower density cells on large lots, and a minimal road network, with contiguous portions of adjoining rear yards helping to protect a larger natural area;
  - Clustering development in these areas to minimize the need to clear as many trees for development, and generally to help protect contiguous environmentally significant areas;
  - Preserving natural areas between development wherever possible;
  - Utilizing conservation easements and/or restrictive covenants on title to protect yards that are contiguous to an open space system;
  - Where appropriate, the retention, storage and transplanting of vegetation to other areas to be protected;
  - Street and utility alignments that are sensitive to environmentally significant areas; and
  - Except where prevented by topography or other requirements of this plan, the orientation of buildings and the planting of trees to enhance sunlight (to reduce energy costs).
- d. Notwithstanding additional specific slope-adaptive requirements as described under b) above, all development proposed within the Direct Control areas, to be guided by the following **Architectural Principles**:
- Developments to utilize natural materials such as wood, natural stone, brick, and stucco in quiet, subdued colours and in tones which blend with the natural setting. Roof materials to be of cedar shakes and shingles, slate or tile in subdued colours and tones. Pressure treated wood foundations are discouraged;

- Retaining walls to be of uniform design and construction to ensure consistency of appearance within a subdivision, and be finished with natural stones or materials which blend with the natural setting. Pressure treated wood materials are discouraged;
- On sloping sites, side garages are encouraged which results in less site disturbance. Avoid straight ramp driveways against contours. Driveways to be constructed of exposed aggregate, unit pavers, stamped concrete or a combination of these materials;
- Extensive natural vegetation retention and tree planting is required to help mitigate the visual impact of development. Native plants to remain the predominant species in this area; and
- Fences along ridgelines and hillcrests to be avoided. All fencing in highly visible locations to be transparent, e.g., chainlink, low ornamental iron, post and cable and rail fences. Opaque fencing is inappropriate on slopes. Any fencing adjacent to ER areas to be low profile and consist of natural materials.

## 1.5 Commercial

### Intent

The intent of the commercial policies is to ensure that if commercial land uses are proposed for locations in East Springbank III, that the development is strategically located to serve the residents of the community, is served by transit, is designed to be complementary to and integrated with the residential community, and has numerous pedestrian-friendly linkages that converge on the site. In conjunction with adjacent uses, the site provides a focus for community residents. To give the commercial site a distinct character and sense of place, the buildings are pedestrian-scaled, and the site designed to achieve many of the features of providing a destination as illustrated under the Design Guidelines for Policy C.4 in the **Sustainable Suburbs Study**.

### Required Uses, Features and Actions

With the exception of lands referred to in policy 6 below, if commercial/retail land uses are proposed for East Springbank III, the following requirements shall apply:

1. The site to be located as conceptually shown on Map 2, Land Use Concept, to maximize access for community residents, e.g., located on the “drive home” side of the road.
2. The site to be served by the local transit route with bus zones adjacent to the site.
3. The primary focus of the commercial/retail site is to provide local services to community residents.
4. Direct vehicle and pedestrian and/or pathway connections that converge on the site.
5. For any proposed commercial site, a **Concept Plan** to accompany the Land Use Amendment and Outline Plan addressing the design guidelines as described under Policy C.4 of the **Sustainable Suburbs Study**. The site design is to be complementary to and integrated with the adjacent residential community.
6. *Deleted* **Bylaw 6P2005**

### Desirable Uses, Features and Actions

The following are not mandatory, but they meet the **Intent** and should be considered:

1. A site(s) for local commercial and retail uses to accommodate a range of approximately 2,137 - 2,787 sq. metres (23,000 - 30,000 sq. feet) of space.
2. A mix of dwelling units including multi-dwelling housing of higher densities in close proximity to the commercial site.
3. Second storey residential, commercial or institutional uses above retail.
4. Attractive pedestrian-scale lighting, signage and other street furniture.

## 1.6 Open Space and the Joint Use Site

### Intent

It is intended that there be a variety of multi-functional open spaces that are located, sized and configured to help meet future passive and active recreational needs. These parks will form a network which will include the school site, neighbourhood and sub-neighbourhood parks, natural environment parks as well as linear parks. This network will facilitate the regional pathway, linking the open space network with linear natural areas. Some of these parks may also provide interpretive value to the community with the inclusion of archeological resources and/or information on natural history within the park systems.

The integration of Aspen Woodlands and native grasslands into the urban form helps protect these natural features while providing uninterrupted regional pathway connections.

The type and size of school is in balance with anticipated local needs. For optimum access and service catchment, it is located at the centre of the largest and highest density neighbourhood.

### Required Uses, Features and Actions

1. A Public Elementary School Joint Use Site, 4.1 hectares (10.0 acres) in size, as conceptually shown on the Land Use Concept (Map 2). The exact size and location of the Joint Use Site will be determined at the Outline Plan stage.
2. Neighbourhood Parks (natural environment and manicured), each approximately 0.8 hectares (2.0 acres) in size, as conceptually shown on the Land Use Concept (Map 2), to ensure a diversity of passive and active recreational opportunities. The park conceptually located in close proximity to 85 Street SW on Map 2, may also contain a community

facility. In that event, the size of the site may need to be larger, and will be determined at the Outline Plan stage.

3. Sub-neighbourhood parks (“tot-lots”), each a minimum of 0.2 hectares (0.5 acres), optimally distributed throughout the community so as to maximize the service catchment area.
4. Environmentally Significant Areas to be evaluated for protection by the use of MR at the Outline Plan and Land Use Amendment stage.
5. Protection of any portion of environmentally significant and/or sloping lands can be provided through voluntary preservation, purchase or other methods approved by Calgary City Council.
6. A regional pathway system, as conceptually shown on the Land Use Concept (Map 2), that provides public access to community amenities and facilities such as the school, parks and natural areas. It connects to the regional pathway system of adjacent communities. Wherever possible, the regional pathway is to be located within a linear open space system. Where this is not possible, the pathway will be located within the road right-of-way. Pathways shall only cross major roads at intersections. Any pathway crossing of the TUC will require Ministerial Consent from Alberta Environmental Protection.
7. All existing rights-of-way not needed for roadways, to be retained by The City and kept as open space.

### **Desirable Uses, Features and Actions**

The following are not mandatory, but they meet the **Intent** and should be considered.

1. The design of neighbourhood and sub-neighbourhood parks to satisfy both the active and passive recreational needs of the community. These parks may include the following elements: play equipment, informal sports fields, landscaping, natural areas, and space to accommodate neighbourhood events.
2. Where required, a regional pathway located within a road right-of-way, in the form of a separate off-street pathway.

## **1.7 Transportation**

### **Intent**

The primary intent of the transportation network is to provide residents with access to, from and within the community as effectively and safely as possible. The system is planned and designed to accommodate all modes of travel, including walking, cycling, public transit and private vehicles.

Many measures are taken to encourage transit. The street design is pedestrian-friendly; bus stops are built as pleasant, comfortable places to wait for a bus; and transit service is accessible, quick and efficient. Walking and cycling as a means of travel, not just for recreation, are encouraged by a pathway system that links homes with community facilities in a safe and direct manner. Reduced vehicle trips are possible because those facilities used on a daily basis, such as the school and shops are centrally and/or strategically located within the community.

Road access into the community is provided at several locations. Multiple access points help to limit the traffic volume on any one road and therefore reduce the need for major standard roads into and within the community. Multiple routes also provide more options for emergency services, improve public transit routing, and help to reduce travel time and distance. In planning the collector road system, a key factor is to reduce the impacts on environmentally significant areas.

*Deleted*

**Bylaw 6P2005**

### **Required Uses, Features and Actions**

1. An internal road network of collector and local roads comprised of:
  - a. *Deleted* **Bylaw 6P2005**
  - a. Roads designed to City-approved road standards at the time of development.
  - b. Align and design roads to minimize impacts on environmentally significant areas.
  - c. Final roadway and regional pathway alignments to be determined in association with Outline Plan approvals for the area.
2. Road access for developments in specific portions of the plan area as follows:
  - a. The small parcel of land in the extreme northern area of the plan adjacent to Canada Olympic Park, to access via 16 Avenue NW.
  - b. For the development cell in the extreme southeast area of the plan, consideration may be given to an access directly from Old Banff Coach Road SW, as conceptually shown on Map 7.
3. Upon urban development for adjacent areas, the 69 Street SW connection to Old Banff Coach Road SW to be closed, allowing emergency access and egress only.

4. 85 Street SW presently functions as a secondary road entrance from the south to Canada Olympic Park (COP). Over time, it is expected that 85 Street SW will be increasingly used by visitors to COP from both outside the immediate area as well as by new residents of the East Springbank III community. Any Outline Plan/Land Use Amendment application for lands adjacent to, or along 85 Street SW in the community to take into account the potential for increased COP traffic. A traffic study is required evaluating the impacts of the proposed development on the planned road standard, and to involve all affected landowners and interests.
5. A direct internal pedestrian/cyclist network comprised of multiple sidewalk and pathway connections to key destinations within the community, such as bus stops, the joint use site, parks and any commercial services.
6. Of the pedestrian/cyclist connections (referred to in 5 above), those connections which, in the opinion of The City are essential to afford residents year-round access to bus stops and other key destinations, to be paved, lit, plowed and maintained as necessary to ensure safe and pleasant use, comparable to a street sidewalk. The mechanism to achieve this will be subject to further study and negotiation between the Urban Development Institute and The City.
7. Bus stops provided at key community facilities such as any commercial site, the joint use site, and in close proximity to multi-dwelling sites to ensure that residents have easy access to transit in accordance with the **Transit Friendly Design Guide**.
8. Noise attenuation to be provided for development along the interface with the future Stoney Trail and along Old Banff Coach Road SW under the provisions of the Council approved Surface Transportation Noise Policy.

### **Desirable Uses, Features and Actions**

The following are not mandatory, but they meet the **Intent** and should be considered.

1. Street trees and sidewalks on both sides of collector streets where these roadways provide connections to major community facilities (e.g., the joint uses site, any commercial site).
2. Traffic calming measures incorporated into the road design where such features are demonstrated to effectively slow traffic, do not detract from the aesthetic appearance of the roadway, can be removed or modified should operational problems arise, and are safe.
3. Calgary Transit to identify areas within the community where transit shelters, designed to encourage transit use, with heating and lighting and related amenities such as route maps, bicycle storage facilities and passenger drop-off areas, are most appropriate.



## 1.8 Servicing (Maps 8 and 9)

### Intent

The intent of municipal and shallow utilities is to ensure that water, sanitary sewer, storm sewer, stormwater management facilities, telephone, electrical, natural gas and cable utilities are provided in a safe, logical and efficient manner while minimizing the impact on environmentally significant areas and features.

### Required Uses, Features and Actions

1. All servicing to be in accordance with the East Springbank Engineering Studies, and any amendments approved by the Engineering & Environmental Services Department (see also Section 9.1).
2. Development to be serviced through the extension of a water feedermain along Old Banff Coach Road SW west from 69 Street SW, and by distribution mains along the internal collector road network, as conceptually shown on Map 8.
3. Development in eastern areas (see Map 8) to be serviced through the extension of the existing water and sewer mains in Patterson Boulevard SW.
4. *Deleted* **Bylaw 6P2005**
4. Most of the plan area is within the Patterson Heights Catchment Area for sanitary and storm sewer servicing. The eastern area of the plan (see Map 8) can be serviced to the existing trunk in Patterson Heights. All other areas in this catchment service to the north, to existing and future trunks located in the vicinity of 16 Avenue NW/Sarcee Trail. The final servicing solutions and alignments are to be determined in association with Outline Plan approvals for the East Springbank III Community Plan area.
5. Development within the Bowness Catchment Area will require a connection to the existing sanitary trunk in 16 Avenue NW; storm sewer servicing will require a connection to the future storm trunk as described under policy (5) above. (See also policy (4) above for a discussion of water servicing options).
6. Stormwater management facilities for water quality are required in the catchment area in order to meet new provincial water quality requirements. Planning may be required for this area to determine the size and location of these future facilities.
7. Calgary Parks & Recreation to be involved in all discussions concerning servicing alignments that affect any environmentally significant area. Disturbances to environmentally significant areas as a result of the placement of piped systems are to be minimized, and the areas restored to their natural state to the satisfaction of the Director of Calgary Parks & Recreation.



8. Telephone, electrical, natural gas and cable provided for all development in the planning area, to the satisfaction of the utility companies.

## 1.9 Environmental Issues

### Intent

Protecting the environment by reducing the impact of urban development is the primary goal of the plan. Policies requiring sensitive slope-adaptive development and a community design that encourages transit, walking and cycling as viable alternatives to private vehicle use, further this goal.

There are also other ways that communities can be planned and built to help protect the environment. The **Sustainable Suburbs Study** contains a number of policies aimed at reducing waste and pollution and encouraging recycling. Several of these policies are set out below. Although most of the following policies are not mandatory, developers and builders are encouraged to pursue them.

### Required Uses, Features and Actions

1. A Potential Site Contamination Acknowledgement and Disclosure Statement to be provided as part of the Outline Plan/Land Use Amendment application. An Environmental Site Assessment report(s) may be required, as determined from a review of the Acknowledgement and Disclosure Statement and civic databases (See Section 2.4 - Soil, Groundwater and Vegetation Assessments).
2. If required as a result of Policy (1) above, remediation or risk management to be carried out to the satisfaction of Alberta Environmental Protection and Calgary Regional Health Authority, during the Outline Plan/Land Use Amendment application stage.
3. An Historical Resources Inventory and Assessment for Paskapoo Slopes (Permit 98-038) has been completed for the area on behalf of The City of Calgary and submitted to the Province of Alberta. When development is proposed, the developer to complete any further work required as a result of the assessment, to the satisfaction of Alberta Community Development.
4. Pursuant to Section 33(2) of the Historical Resources Act, the developer will conduct an Historical Resources Impact Assessment prior to any development. Any work required as a result of the assessment will be to the satisfaction of Alberta Community Development.

### Desirable Uses, Features and Actions

The following are not mandatory, but they meet the **Intent** and should be considered.

1. Builders to audit all new buildings for construction waste.
2. Builders to use and/or promote recycled materials in the construction of new buildings when supplies are available, existing standards allow and the cost of materials is reasonable.
3. Builders to equip all buildings with bins for sorting recyclable dry waste (paper, plastic, metal and glass) and to locate permanent composters on lots.
4. Include water metres and manufactured water-saving fixtures in all buildings.
5. Builders to use their show homes as a venue for displaying the benefits of energy and water-saving devices.
6. A site for a City operated recycling depot in a convenient location e.g., any commercial site, community centre.

## 2.0 IMPLEMENTING THE PLAN

### 2.1 Phasing of Development

1. Subject to 2.1.2, the phasing of subdivision and development within the community, through the Outline Plan/Land Use Amendment approval process, should occur in a contiguous and logical manner, given servicing and landownership constraints.
2. Where, due to landownership patterns or other factors, the phasing of subdivision and development will result in isolated or discontinuous phases, these phases will be allowed where:
  - a. Roadways and utilities can be extended to the area (with the cost of the extension borne by the developer, subject to standard City cost recovery procedures);
  - b. Transit service and other essential public services can be delivered to the area;
  - c. On-site parks to serve the immediate resident population are provided; and
  - d. Access to schools and recreational and community facilities is provided.

*NOTE: Where non-contiguous small ownership parcels are proposed for development, these conditions may not apply.*

3. The developer will demonstrate the phasing of transportation access and improvements to the planning area, and the dwelling unit threshold levels that will trigger additional transportation improvements.

### 2.2 Comprehensive Planning

1. An Outline Plan/Land Use Amendment should, for larger parcels, comprise an entire neighbourhood, and generally as large an area as possible or practical. For smaller land holdings, the application should comprise the entire parcel.
2. Given the extensive fragmentation of the plan area into small ownership parcels, the developer will be required to demonstrate through the conceptual design of adjacent lands, that those lands can be developed in a logical and comprehensive manner.

## 2.3 Applying the Density and Housing Mix Requirements

The density and housing mix requirements are intended to apply to:

- a. **Each ownership area** (See Section 1.4.1); and
- b. **Each Outline Plan/Land Use Amendment area** within an ownership area unless a developer submits supporting plans and information demonstrating that non-compliance with the requirements can be met through future Outline Plan/Land Use Amendment submissions within their lands, with all such agreements, plans and information to the satisfaction of the Approving Authority.

## 2.4 Information Requirements of Applicants

The checklist and other information required of applicants and referred to in Section 2.6 of this plan must be provided at the time of Outline Plan/Land Use Amendment submission and may be circulated with these applications.

In accordance with standard City procedures, as part of an Outline Plan/Land Use Amendment submission, an applicant will be required to submit any or all of the following, to the satisfaction of the Approving Authority:

### **Context Plan**

A plan for lands outside of the Outline Plan/Land Use Amendment area which demonstrates the relationship of the site with the joint use site, regional pathways, collector roads or other relevant components of the community plan, as appropriate (See also Section 2.2.2).

### **Special Land Use Area Concept Plan**

A special concept plan for any commercial site showing compliance with the requirements of Section 1.5.

### **Density Phasing Plan**

A plan showing:

- a. The intended phasing of subdivision within the Outline Plan/Land Use Amendment area;
- b. The proposed number and type of dwelling units with each phase; and
- c. Compliance with Section 2.3 relating to residential density.

## Open Space Plans

When submitting outline plans, developers to demonstrate how they propose to achieve the integrated system of open spaces and pathways referred to in Section 1.6. This will include negotiations with The City to determine how best to utilize some municipal reserves to protect high quality environmentally significant lands.

When a change to the location or size of the joint use site is proposed, the developer to submit an **Open Space Allocation Plan** showing, among other matters, a reserve analysis on an ownership basis for the community.

Where an Outline Plan/Land Use Amendment submission includes the joint use site, a **Site Layout Plan** for the site is required. Where the site is located affecting two or more landowners, the developer to demonstrate how the features of the site (building envelope, facilities and playfields) will be accommodated, including proposed grading changes.

## Transit Service Statement

A **Transit Routing Plan**, prepared in accordance with the Transit Friendly Design Guide, and containing, among other matters:

- a. Bus stop locations;
- b. Transit route;
- c. Transit catchment areas; and
- d. Residential unit distribution in relation to walking distances to bus stops.

## Roadway and Pathway Network Plan

As part of an Outline Plan/Land Use Amendment submission, a **Roadway and Pathway Network Plan** to be prepared describing, among other matters, the proposed roadway phasing, road and pathway types and special features of the internal road and pathway network including how the road network on sloping and highly visible lands sensitively integrates into the natural features.

Pathways used to directly connect residents to transit stops and other community facilities are to be identified in the **Roadway and Pathway Network Plan**.

## **Stormwater Management Plan**

As part of an Outline Plan/Land Use Amendment submission, a **Stormwater Management Plan** to be submitted by the developer to determine the need, location and capacity of any required stormwater management facilities, including addressing Provincial requirements concerning stormwater quality.

## **Visual Impact Analysis**

For all Direct Control lands, photo simulations, drawings, elevations and other materials including proposed landform grading for built-form and roadways in 3-dimensions to be submitted by the developer as part of the Outline Plan/Land Use Amendment application. The analysis to include what measures are proposed to achieve the slope-adaptive requirements of this plan as well as how any negative visual impacts of the development are minimized (See Section 1.4. 3 a), b) and d).

## **Soil, Groundwater and Vegetation Assessments**

When submitting Outline Plan/Land Use Amendment applications, developers to demonstrate that the site is suitable for the intended use. This may require environmental site assessments, slope stability/geo-technical analysis, a hydrological impact study and a Biophysical Impact Assessment of the impacts of the proposed development on the natural habitat.

The applicant to submit a Potential Site Contamination Acknowledgement and Disclosure Statement identifying any soil or groundwater contamination concerns. A Phase I Environmental Site Assessment (E.S.A.) may be required as determined from a review of the Acknowledgement and Disclosure Statement and civic databases, to identify actual or potential soil and groundwater contamination. Further environmental reports may be required based on the findings of the Phase I E.S.A., including a Phase 2 E.S.A. (soil/ groundwater sampling and analysis) and possibly a Phase 3 E.S.A. (Remediation/Risk Management Plan). Phase 2 and Phase 3 E.S.A. reports are reviewed by Alberta Environmental Protection and the Calgary Regional Health Authority.

## **2.5 Special Land Use Regulations**

- a. Subject to future amendments to the Land Use Bylaw that will have the same effect, areas will be designated Direct Control (DC) in order that land use and design requirements can be customized to ensure specific policies of this community plan are achieved.

- b. All requirements, as applicable in Direct Control areas under Section 1.4, to be to the satisfaction of the Approving Authority prior to any development permits being approved. Furthermore, all Direct Control areas under Section 1.4 to specify residential as a discretionary use.
- c. Development permits will be issued for development on a single parcel, block by block basis, or development cell basis as circumstances warrant, within the Direct Control areas. Prior to the issuance of a development permit, the applicant will be required to provide an affidavit from the developer's design consultants, or architect, certifying that the requirements of this plan have been complied with.

## 2.6 Making Decisions on Planning Applications

1. An applicant submitting an Outline Plan/Land Use Amendment or development permit application, to demonstrate to the satisfaction of the Approving Authority that the application:
  - a. Complies with the plan **Goals and Objectives**, the **Design Concept** and **Organizing Principles** and the **Intent** of all applicable plan components;
  - b. Provides the **Required Uses, Features and Actions**; and
  - c. Provides a number of **Desirable Uses, Features and Actions** or other features that are of an equivalent benefit to the public.

A **Checklist** showing compliance with the community plan to accompany the application to the Approving Authority.
2. In making a recommendation or decision on an application, some flexibility in interpreting the plan will be needed and some trade-offs may have to be made.
3. Any change to the location, key elements or other aspects of the plan that would, in the opinion of The City, significantly change the **Design Concept**, will require a formal amendment to this plan from Calgary City Council following a statutory public hearing.

## 2.7 The Timing of Public Improvements

Although it is intended that the publicly funded improvements and services necessary to implement the East Springbank III Community Plan will be provided, no commitment is made as to timing because that is subject to the annual capital budget process.

## 2.8 Streetscape Improvements

East Springbank III is characterized by fragmented ownership. In order to retain the unique character of the area, improve the quality of the public environment, and help ensure a visually compatible and unified streetscape, specific design elements and approaches are encouraged in the development process. These include:

- Pedestrian-scale, decorative street lighting that meet street lighting safety requirements;
- Boulevard treatments including planting and irrigation along collector and entrance streets;
- Entrance features; and
- Innovative street design standards.

Homeowner's Association(s) are encouraged in order to implement and maintain these features. The installation, maintenance, and/or removal of any non-standard or innovative features would be the responsibility of the Developer or Homeowner's Association.



### 3.0 MONITORING THE NEW COMMUNITY

This plan is intended to bring about certain fiscal, social and environmental benefits, not just to the residents of the community, but to the citizens of Calgary and region generally. As a result, it is critical that the planning area be monitored by The City of Calgary as it develops, in order that future development plans may benefit from this analysis. Both the **Calgary Transportation Plan** and the **Sustainable Suburbs Study** call for the development of a set of indicators for monitoring community plans.

The two key pieces of information that will be needed are: were the planning criteria met in the implementation of the plan and, if they were, did they achieve the hoped for results? For example, the plan contains provisions aimed at reducing the use of private vehicles. It is important to know if they were implemented and, if they were, do residents use their vehicles less than in comparable communities where these provisions did not apply. It would also be useful to know specifically which of these provisions was most effective, which could be improved, and which seem to have little effect and might be discarded if they serve no other purpose. The Sustainability Indicators Study does recognize that, in the above example, there are many factors external to the plan (such as the price of gasoline or the availability of parking) that might influence the use of cars by community residents. Accordingly, the study recommends using both quantitative data and resident surveys in making evaluations.

The present intention is to start to monitor the **Goals and Objectives** of the plan as soon as a sufficient number of houses have been built. In order to be cost-effective and to avoid duplication, the monitoring program will be coordinated with routine data collection by a number of City Departments and with other monitoring programs. Such programs are being developed in connection with the **Calgary Transportation Plan**, the **State of the Environment** (Office for the Environment), the **Natural Area Management Plan** and the **Corporate Performance Measures** initiative.

Part of the East Springbank III Community Plan is contained within the boundaries of the M.D. of Rocky View / City of Calgary Intermunicipal Development Plan, which will be subject to periodic review by both municipalities. Such intermunicipal review may take into consideration any monitoring The City may undertake with respect to the East Springbank III Community Plan (e.g., the need for connections to regional open space systems, or mitigation of impacts from potentially incompatible uses.



# Part II

## East Springbank III Community Plan

## **PART II: SUPPORTING INFORMATION**

### **4.0 PLANNING AREA**

#### **4.1 Location and Size**

The planning area is bounded to the south by Old Banff Coach Road SW, to the west by the T.U.C. (Transportation/Utility Corridor) and future Stoney Trail and to the east and north by the Aspen Village planning area, and present Canada Olympic Park facilities.

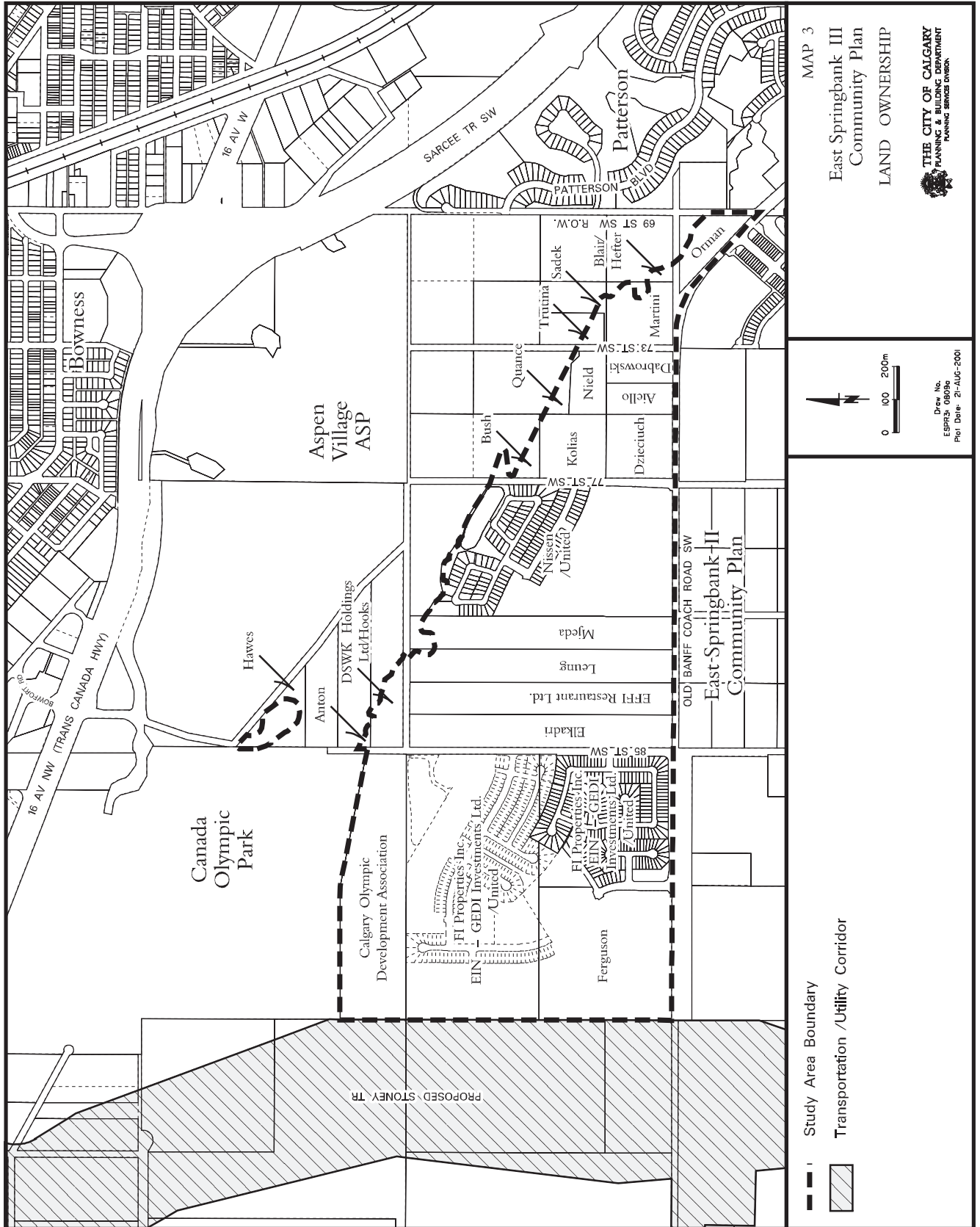
The planning area contains approximately 166 hectares (410 acres) of land.

#### **4.2 Land Ownership**

As detailed in Map 3, land ownership in East Springbank III is generally fragmented, particularly towards the eastern portion of the planning area. United Management Inc. is the largest landowner in the study area.

#### **4.3 Population Projections**

Based on the preliminary estimates of developable acreage and the density requirements in the planning area, projected population figures for East Springbank III are in the range of 7,000 to 7,500.



## 5.0 PLANNING APPROACH

### Background Studies

The East Springbank III Community Plan and policies were formulated following a series of detailed planning studies. In the early stages of the planning process, a biophysical assessment of the planning area was undertaken, and environmentally significant areas were identified (See Sections 6.3- 6.4). Recommendations include preservation of a contiguous open space system generally along the top of the slopes as well as the need to preserve a diversity of habitat types.

Given the physical complexity of the sloped area, a geotechnical terrain analysis was completed for both the East Springbank III and Aspen Village planning areas, and lands are classified in accordance with potential slope stability concerns. (See Section 6.6).

Lastly, a comprehensive archeological study was undertaken for both planning areas, which identified a number of sites, ranging from local to regional significance. (See Section 6.5).

### The Ridge (Horizon) Line - (See Map 2)

This proposed line delineates “uplands” areas from sloped areas. As such, it separates the Urban Development policy area from Special Development areas (as described in the East Springbank ASP). Downslope (north) of this line, is the Aspen Village ASP lands and are determined to be part of the Paskapoo Slopes, generally reflecting a natural slope of greater than 15% and visually prominent to areas beyond the plan.

### The Urban Development Policy Area

The planning area is located on the upland plateau (between Old Banff Coach Road and the Paskapoo Slopes), where few development constraints exist. No significant geotechnical concerns are present in this area. Attention is required, however, for lands adjacent to the ridge or horizon line, to ensure that development along the ridge line is visually unobtrusive and provides for an appropriate interface with the slopes to the north.

The overall **Planning Approach** is to consider collectively the Background Studies and the ridge (horizon) line, to spatially determine where and how development will occur. Each development application will be reviewed in light of this information resulting in a determination of where best to utilize municipal reserve to protect high quality lands; and ways to ensure slope-adaptive and otherwise clustered development is achieved with minimal visual impact.

## 6.0 NATURAL FEATURES

### 6.1 Topography and Drainage<sup>1</sup>

The planning area is located in the Broadcast Hill district, and consists of an upland plateau, bordered to the north by the Bow River valley slopes. The Broadcast Hill upland is an erosional remnant of flat-lying beds of the Porcupine Hills Formation. The Bow River escarpment at this location is 80 to 100 m in height. Relief and topography conditions are variable, with elevations ranging from 1,240 to 1,270 m a.s.l. at the crest to about 1,160 m a.s.l. along the slope toe.

Local groundwater recharge occurs in topographic high areas (upper slopes). Discharge occurs to the northeast in terrain depressions (i.e. drainageways/ravines). Springs have been noted near the upper portions of the ravines. These springs are found where the erosion associated with the ravines have cut into the bedrock. In these deep ravines, the water table is within the bedrock and close to the surface. Where the surface intersects fractured bedrock (chiefly sandstone), water springs occur. The source of recharge likely includes much of Broadcast Hill to the south and, as a result, some of the springs are perennial. Surface drainage conditions over most of the escarpment slopes are fair to good; however, locally, organic in-filled terrain depressions have poor drainage.

### 6.2 Soils and Geology<sup>2</sup>

The surficial geology in the general area is relatively complex, and deposits of preglacial, glacial and post-glacial origin are present. Within the upland area, the main deposits include the upper unit of the Spy Hill Drift (predominantly glacial till) on top of the Tertiary gravel<sup>4</sup>, which in turn rests on the bedrock of the Porcupine Hills Formation.<sup>5</sup>

---

1 East Springbank III/Patterson Woods Community Plan, Report on Geotechnical Terrain Analysis, Geo-engineering Ltd., July 1998, pp. 2-8.

2 East Springbank III/Patterson Woods Community Plan, Report on Geotechnical Terrain Analysis, Geo-engineering Ltd., July 1998, pp. 2-8.

3 The Spy Hill Formation is the oldest stratigraphic unit of the Quarternary age in the Calgary area. Its upper unit consists of till, which is generally very stiff to hard, dark grey and contains abundant stones. The matrix is a mixture of silt and clay with some sand.

4 Tertiary gravel consists of well rounded pebbles and cobbles or quartzite, dark grey limestone and minor amounts of local sedimentary rock.

5 The Porcupine Hills Formation consists of a non-marine sequence of thick bedded cherty sandstones and calcareous mudstones (Green, 1972).

The upper segments of the escarpment is covered with colluvium<sup>6</sup> underlain by bedrock strata of the Porcupine Hills Formation. The lower unit of the Spy Hill Drift blankets the middle and lower segments of the escarpment and was encountered only in two northmost portions of the study area. The lower unit of the Spy Hill Drift is similar in appearance to the upper one but is somewhat sandier and does not contain granitic stones.

### 6.3 Biophysical Assessment of the Paskapoo Slopes

The importance of the Paskapoo Slopes has been examined from a biophysical perspective with particular emphasis on vegetation community viability and ecological association. Wildlife movement, aesthetic considerations and uniqueness are also discussed below.

Maps 4 and 5 provide detail of the vegetation communities and are the approximate **Habitat** areas of Paskapoo Slopes (East of Canada Olympic Park) and the **Environmentally Significant Areas**. These maps are intended to provide an overview of the location and importance of current natural environments. The information was compiled from Calgary Parks & Recreation ESA Inventory, site visits and various consultants reports. The information includes areas covered by East Springbank III and Aspen Village and makes reference to associated systems outside the area.

As a whole, the diversity of habitats found on Paskapoo Slopes, their large size and the importance as a wildlife habitat and movement corridor between the Elbow River and Edworthy Park are all notable. This area is as significant as any major Natural Environment Park in Calgary (e.g., Bowmont, Nose Hill, Edworthy Park).

---

6 Colluvium includes a wide range of materials from silt and clay particles to boulders; composition of this material is related to the material covering the upland hillside segment.



The following **Habitat** types have been found on the East Paskapoo Slopes and have been divided into associated vegetation communities. The diversities of vegetation communities indicate the importance of the area from a biological perspective. When variation of this sort is found in an area, high use by a number of wildlife species can be expected and assumed. Not only is there a diversity of habitats in a small area, the diversity of vegetation in communities is extensive as well.

### MAP 5

Habitat Type	Associated Vegetation Community	
1. Aspen Forest	Aspen/rose/buckbrush	*
	Aspen balsam poplar/dogwood	*
	Aspen/saskatoon/rose	*
	Aspen/willow	*
	Aspen/white spruce	*
2. Balsam Poplar	Balsam P./water birch/dogwood	*
	Balsam P./dogwood	*
	Balsam P./silverberry	*
	Balsam P./brome (thistle)	*
3. Upland Tall Shrub	Saskatoon/chokecherry	*
	Willow	*
	Silverberry	*
4. Riverine Tall Shrub	Willow	*
	Saskatoon	*
	Water birch	*
	Dogwood	*
5. Upland Low Shrub	Buckbrush/Rose	*
	Shrubby Cinquefoil	*
6. Native Grassland	Rough Fescue	*
	Needle Grass (dominant)	*
	Mixed Native Grass (others)	*
7. Non-native Grassland	Brome-Thistle	*
	Other	*
8. Disturbed	Balsam P./manicured grass	*
	Manicured grass	*
	Anthroprogenic	*
9. Wetland	Non-native	

## **Descriptions**

### **Aspen Forest**

Trembling aspen (often referred to as quaking aspen) is the most widely distributed tree in North America. Its success can be attributed to its ability to establish in a range of site conditions, and prolific reproduction through asexual suckering. While abundant, aspens have a relatively short lifespan; in Calgary the average clone (dome shaped forest) endurance may be 65-80 years. On poor quality sites this existence may be reduced to 40 years or less. In Calgary, large aspen forests are most common on marginal sites where the trees have a relatively fast turnover rate. Trees tend to reach maturity at a relatively young age, occasionally as young as thirty years in exposed, windy sites. Aspen forests can tolerate a certain amount of edge encroachment by development but internal fragmentation should be avoided.

In the east Paskapoo Slopes area, aspen is found commonly in association with other tree species in mixed stands. Mixed deciduous forests of aspen and balsam poplar are found in moist depressions, or ravines. On the most moist, north-facing escarpment, aspen is interspersed with white spruce. Typically in this area, aspen has an understorey (associated shrub and ground cover) which may be composed of saskatoon, rose, chokecherry, red osier dogwood, willow, buckbrush, and Canada buffaloberry.

In the Calgary area, aspen poplar may be found in both isolated stands or clones or as a component of mixed woods. Aspen copses tend to form in well-drained areas on open plains, and on the moist northern exposures of small hills and ravines. In a grassland setting, aspen stands form small “islands” of woodland, providing additional diversity in the prairies and foothills. Several species of birds and mammals feed in the open grassland, but require the hiding and thermal cover afforded by small tree stands. Many of these species cross Sarcee Trail to Edworthy Park for winter thermal cover. Paskapoo Slopes is dominated by a consistent expanse of aspen. The high quality and variety of ages of aspen are important factors on the slopes.

### **Balsam Poplar**

The balsam poplar forest is a predominant habitat type in most natural areas along the river edge within Calgary. Riverine forest, in the Calgary context, offers vegetation that is not found in the grassland and aspen woodlands, and are among the most important habitats for wildlife, especially for migratory bird usage in North America. Riparian or riverine woodlands in Calgary typically exist on prominent point bars of the Bow and Elbow rivers. Mature balsam poplar (*Populus balsamifera*) is the dominant tree species in the riverine forest, establishing on gravelly river floodplain and terraces in moderately well-drained areas. This particular tree requires moist ground with cycles of moisture and drying in order to survive, and may suffer

accordingly if water table regimes are altered. Balsam poplar stands may be also found in upland areas, but are usually near a source of water - for example a seep, spring, or drainage course as is found throughout Paskapoo Slopes. The ravine systems on Paskapoo Slopes are inhabited extensively with Balsam Poplar and are rare in the Calgary area. Of concern should be the altered environmental conditions caused by changed hydrology expected in denser development.

Under ideal conditions, balsam poplar may be accompanied by an understorey of red-osier dogwood, willow, water birch, Saskatoon, silverberry, or Canada buffaloberry. Occasionally, white spruce may establish in shady, moist areas but normally do not mature. Mature riparian (associated with water) forests that have been disturbed - through grazing, gravel extraction, or other natural and human processes - often have a rudimentary smooth brome - thistle understorey. There is extensive disturbance in the NW corner of the newly acquired Canada Olympic Park property. For this reason significance has been lessened in this area.

## **Shrubs**

Shrub habitats in Calgary's natural areas have been separated into Riverine Tall Shrub, Upland Tall Shrub, and Low Shrub. The location of shrubs is determined strongly by slope and aspect, as well as by soil moisture, texture, and drainage. In open upland areas, shrubs will be confined generally to areas of high moisture - such as depressions, shallow ravines, or west, east or north-facing slopes. South facing slopes are usually too exposed and dry to support shrubs; in these areas grasses have a competitive advantage. Places where moisture collects on south facing slopes, however, may permit the development of low shrub stands composed of buckbrush, silverberry, or rose.

## **Riverine Tall Shrubs**

Riverine shrubs are found along the floodplain and lower slopes of the major river valleys in Calgary. These shrubs, which commonly include red-osier dogwood, water birch, and a variety of willows, can withstand periodic flooding and are adapted to grow in coarse, unstable soil. In general, riverine shrubland accompanies balsam poplar riverine woodlands, and marks the transition from grassland or wetland into floodplain forest. It is generally assumed that a source of water lies close to the surface in order to maintain such moisture-loving trees. This habitat is rare in large pure units and its highest concentration in the City is at the Weaslehead and the Patterson Woods area and smaller units on Canada Olympic Park land. This area is particularly important to wildlife and is very sensitive to disturbance and fragmentation.

## **Upland Tall Shrubs**

Saskatoon and chokecherry, and sometimes willow can interact to form upland tall shrub communities. In some cases, low shrub species may comprise a secondary layer as well. Saskatoon, chokecherry, and willow usually grow on the lower, more moist portions of a slope, or in protected ravines. Once again, the distribution of these shrubs is largely dictated by moisture availability on Paskapoo Slopes.

## **Low Shrubs**

Low shrub communities may consist of buckbrush, shrubby cinquefoil, rose spp., or silverberry. Canada buffaloberry and gooseberry may be present, although they form a minor component of these shrub habitat types. Low shrub communities may be found along the dry, upper portions of a slope or in well-drained, open floodplain areas. On Paskapoo Slopes, these areas are often found in edge conditions and in openings in the forest canopy. This habitat type is too closely associated with others to be identified clearly on the map.

## **Native Grasslands**

Most grasses grow in exposed areas where wind and sun prevail; more so than other vegetation species can usually tolerate. Moisture tends to be limiting, especially in steeper hillside situations. In the Paskapoo Slopes area, grasslands are commonly found on south or southwest-facing slopes of ravines and escarpments.

On Paskapoo Slopes, June grass, wheat grasses, and needle grasses grow in mixed communities on the drier hill slope habitats. Large patches of fescue grasslands, while rare in Calgary, still exist on Nose Hill and Paskapoo Slopes and a few other locations. Rough fescue grass communities are often tall and tussocky (hill like) and tend to be found on rough terrain that was unsuitable for the plough. The exception to this rule exists on the plateau above and south of the escarpment. The tufted thick base protects the grass from fire and winter grazing. The composition of these grassland communities is largely dictated by moisture availability. Certain species require a relatively moist, moderate slope, while other grasses may tolerate steep, dry escarpments. Native grasslands also support an abundance of wildflowers. Prairie crocus is a common spring flower, while golden bean, hedsyrum, lupine, geranium, fleabane, bedstraw, sage, goldenrod, and aster will follow into fall. The diversity and abundance of available food for animal species are high. Grasslands can vary in condition and diversity based on past and present grazing practices and the availability of a weed source. The abundance of this habitat type can be hidden by grazing practices. On sites that have experienced high grazing and have recovered over the last year or so (in Aspen Village), fescue prairie is apparent.

### **Disturbed and Non-Native Grasslands**

Disturbance, simply refers to areas where the majority of native species have been removed leaving either bare ground or introduced grass. There is little natural growth. Non-native grassland refers to introduced grasses or weeds that have been left to grow naturally. These areas are often assumed to be native grasslands by the untrained eye. The more disturbed a site is the less structure biologically the area usually has and therefore the less likely it is to be utilized heavily by wildlife. In other words, when diversity is low and food sources are poor. One of the most common non-native grassland that is highly invasive and difficult to control is Smooth Brome/Thistle.

### **Summary of Paskapoo Slopes Habitats**

Most of the sloping lands that make up Paskapoo Slopes are Aspen Woodland habitat type. This includes the area known as the escarpment. This area of aspen is significant due to the large size and the continuous nature.

The ravines in Calgary West, the TUC and the area known as Aspen Village and above are in very good condition and play a significant role in habitat diversity. They are made up of Balsam Poplar (one of the few upland sites in Calgary), shrubs and grasslands. The diversity of habitats is one reason for the high wildlife use in the area. Split Bison bones have been found in the running streams as well. Rare species of plants should be expected here due to the unusual conditions.

Paskapoo Slopes is one of the few places in Calgary where intact fescue prairie exists with the rare and threatened Baird's Sparrow having been observed but likely does not provide nesting habitat. Native grasslands are very important to most forest areas as they often play a critical role as food source for most of the inhabitants that nest or migrate through the woodlands. The close associations, and boundaries are all important reasons for the identification of the area as Environmentally Significant. The lower flat land and the upper bench south of (behind) Canada Olympic Park are disturbed grassland and do not play a significant role in food supply for wildlife.

The Riverine Tall Shrub community in and south of Canada Olympic Park/ Aspen Village are very significant and are rare in the city. This is the only place where upland sites of these kind are found in abundance. These areas are important nesting and cover sites for resident animals including birds, and play a significant role as part of a habitat and wildlife movement corridor. This area is susceptible to the impacts of fragmentation.

The landscape features that provide the conditions for the above vegetation groups include glacial/ fluvial terraces, ravines and other fluvial erosion

features. The north facing slopes extend beyond Canada Olympic Park through Calgary West and Artist View just outside the City limits. It is this cool and moisture retaining hillside aspect that encourages treed vegetation. These slopes then become west facing until they reach the Elbow River Valley. The slopes are equivalent in elevation to Nose Hill and the Edgemont Escarpments. South of Paskapoo Slopes in East Springbank also contain patches of native grasslands and clones of Aspen.

### **Habitat Connectivity & Wildlife Movement**

From an ownership perspective the slopes are divided into separate units or sections. Land can normally be planned within these boundaries as separate entities but from an ecological perspective planning must take into account a number of complicated layers and are rarely so confined. These issues include the ecological associations between different vegetation communities, where they are located in relation to one another, the variety of age patterns in the vegetation community and the amount of use by wildlife for both long term and temporary movements. Wildlife in this context is not defined as just deer and other large mammals, but is broader in scale ranging from birds to plants. Connectivity is an important part of maintaining species viability as reproduction, seasonal and daily migration and even food supply relies on maintaining attached links. Where these areas are pinched off, fragmented or removed entirely, many of our urban wildlife problems begin. These include large animal/car collisions, undesirable species in built communities, and other issues such as loss of ecological diversity. With increased disturbance long term operational costs also increase. One of the key factors for the protection of the quality of this area and its inhabitants is the maintenance of the large structure of habitats with as little fragmentation and pinch outs as possible.

Wildlife movement is often concentrated by availability of superior or seasonal habitat. The presence of dense conifer wood along the Douglas fir trail provides excellent wintering areas for many species, most of which move from the Paskapoo Slopes area on a regular basis. Species that have been observed include mule deer, white-tailed deer, moose, Canada lynx, cougar, black bear, red fox, coyote, American badger and porcupine indicating contact with the Elbow River. Many species of birds are also likely to use the movement corridor. When the integrity of the corridor is maintained few wildlife conflicts occur. In other words the larger the contact between major habitat types the more likely the movement will be safely accommodated. As these areas are pinched in (e.g., through development) options for wildlife to escape or move by choice are narrowed and increased chances of fatal conflict rise. Currently, the lower speed and wide corridor prevents many car impacts. History has shown that removal of the corridor altogether produces very negative effects by introducing increased severe conflict through forcing species into unnatural situations.



In summary, in order to ensure the viability of the various habitats, vegetation communities and the associated wildlife use in the East Paskapoo Slopes, the following are encouraged:

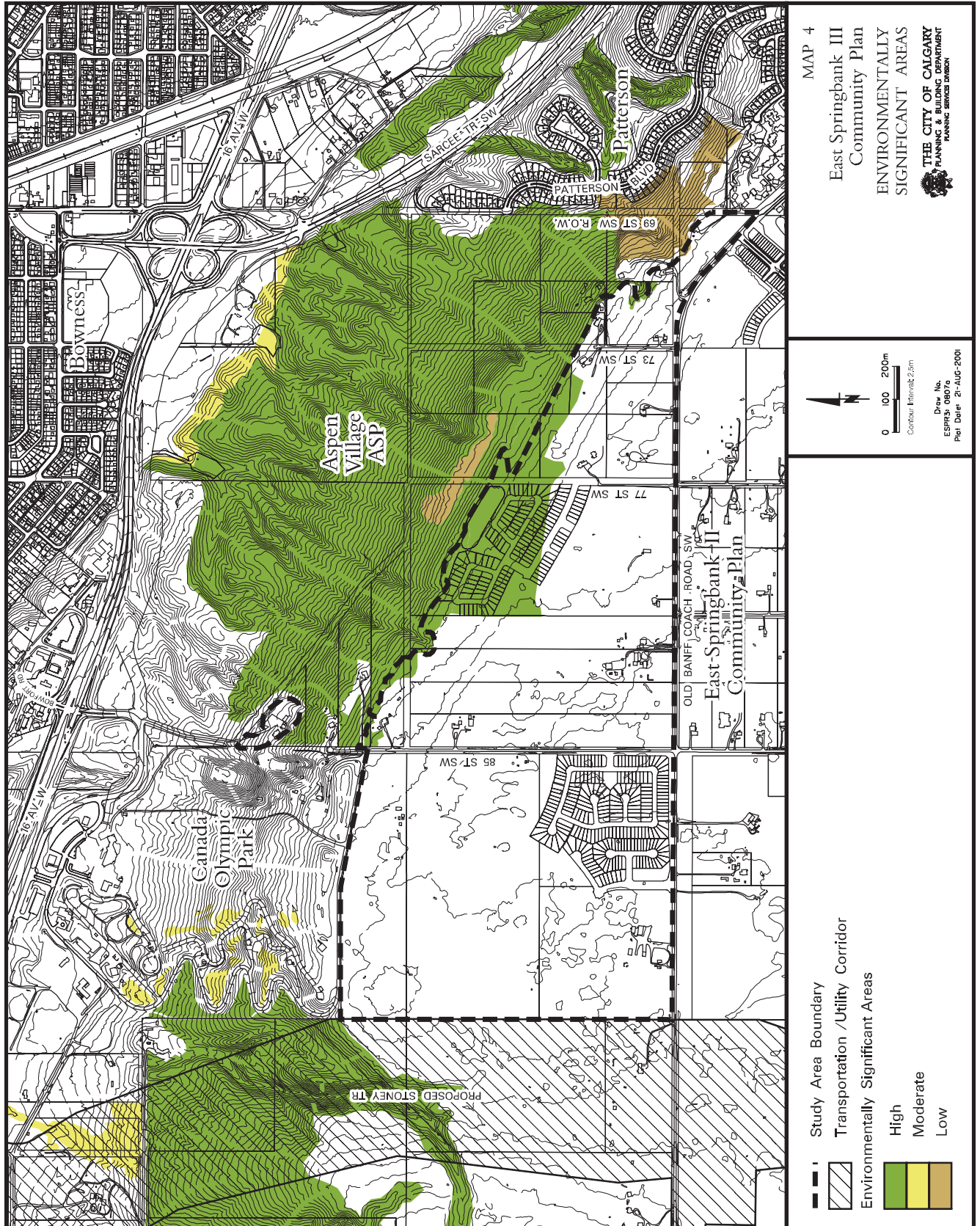
1. The maintenance of the large block-like (un-fragmented) combination of habitat types that extend throughout the East Paskapoo Slopes.
2. The protection of the ravines including the large size of aspen woodland and balsam poplar association, including the grasslands normally on east facing slopes.
3. The availability and close proximity of diverse vegetation communities such as native grasslands, shrubs and trees.
4. The recognition of the slopes importance as a whole for wildlife movement corridor (not just deer) between the Elbow River and Edworthy Park, the Douglas Fir Trail and Lawrey Gardens. Connection by one or two ravines is insufficient.
5. The protection of the rare Riverine Tall Shrub community.
6. The avoidance of increased fragmentation in significant habitats.

The importance of this site reflects not only in the completeness and condition of the area biologically, but the importance in connection with Edworthy Park, its major land form dominance, the entranceway to the city, and the high level of development surrounding the area.

## 6.4 Environmentally Significant Areas

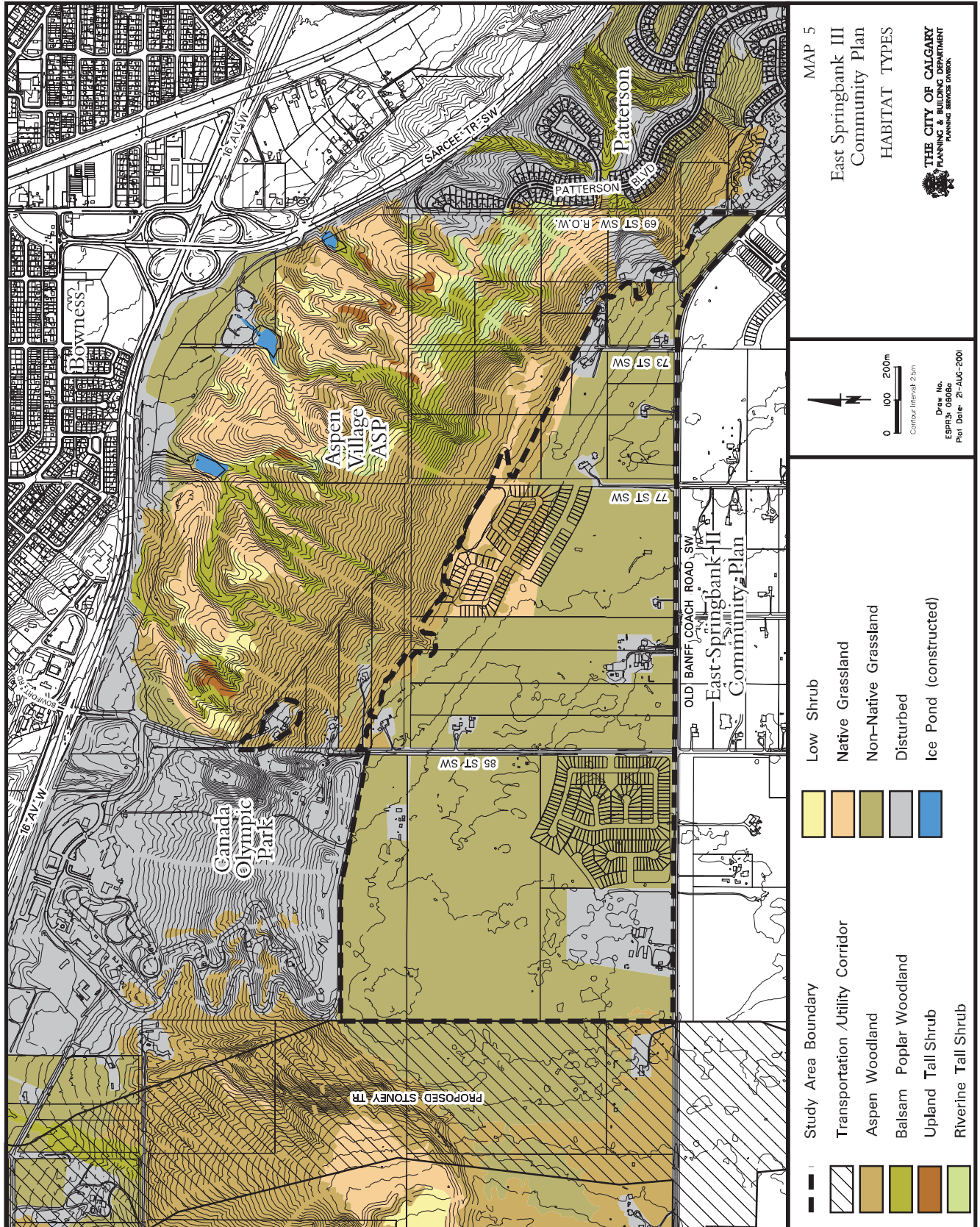
Much of the planning area and Aspen Village ASP lands are considered to be environmentally significant by virtue of the topography and type of habitat found in the area. For an inventory and description of existing natural features, refer to Maps 4 and 5 and Section 6.3.













## 6.5 Archeological Resources<sup>7</sup>

In 1998, the City of Calgary commissioned an Historical Resources Inventory and Assessment of both the East Springbank III and Aspen Village planning areas. The study revealed a significant number of archeological sites which are considered to be the northern extension of the Porcupine Hills/Oldman River basin pattern of bison driving, trapping and processing. The pattern, dating back over the past five thousand years or more, is characterized by the use of escarpments, slopes, benches and ravines for trapping and processing bison. The bison were gathered from the grazing lands in the uplands to the south and west and moved by a system of drive lanes to preferred killing and processing locales along Paskapoo Slopes.

The Paskapoo Slopes pattern can collectively be considered to be of Provincial Significance. Individual sites range from local to high regional significance. Paskapoo Slopes is an integral component of our Native Archeological Heritage. The Study recommends conservation of those regionally significant components through site avoidance where feasible, and mitigative archeological field and interpretive excavations where avoidance is not feasible.

The Historical Resources Inventory and Assessment, Paskapoo Slopes (Permit 98-038) is currently on file with Alberta Community Development.

## 6.6 Geotechnical Terrain Analysis<sup>8</sup> (Map 6)

The East Springbank/Aspen Village Patterson Woods Plans Report on Geotechnical Terrain Analysis, completed in 1998 November, provides an overview of the geological and drainage conditions within the planning area. Lands within the East Springbank III and Aspen Village planning areas were assessed in terms of their development potential from a geotechnical standpoint, based upon the following categories:

**Zone A -No significant geotechnical concerns.**

- All slopes within this category are flatter than 15 percent (8.5 degrees), and a stability assessment is not required.

**Zone B -Potential stability concerns.**

- Slope gradients are in the 15 to 33 percent range.
- Possible adverse impact due to cuts and embankments.
- Site specific investigation and stability evaluation of proposed final terrain configuration is required.

---

<sup>7</sup> Historical Resources Inventory and Assessment, Paskapoo Slopes (Permit 98-038), Lifeways of Canada, Limited, July, 1998.

<sup>8</sup> East Springbank/Aspen Village Patterson Woods Plans, Report on Geotechnical Terrain Analysis, Geo-Engineering (M.S.T.) Ltd., November, 1998.

**Zone C -Significant stability concerns.**

- Slopes are steeper than 33 percent (18 degrees).
- Development not recommended without site specific project evaluation and, if necessary, implementation of adequate mitigation measures.

As illustrated on Map 6, most of the land within the planning area is located in **Zone A**, where ground conditions are considered to be good and further geotechnical work is not required. Within **Zone B**, the range of slopes are between 15 and 33 percent. It is recommended that grading of sloping ground be carefully evaluated in consideration of the following aspects:

- i. final terrain configuration with respect to drainageways and steep slope segments;
- ii. erosion potential; and
- iii. increase of groundwater levels because of modified evapo-transportation regime.

Additional details regarding Zone B are contained within the report.

The report indicates that development in **Zone C** (drainage ways/ravines and steep escarpment lands) would likely require significant terrain grading, placement of engineered fill, and installation of drains.

The report also recommends consideration of the following principles of erosion and sediment control:

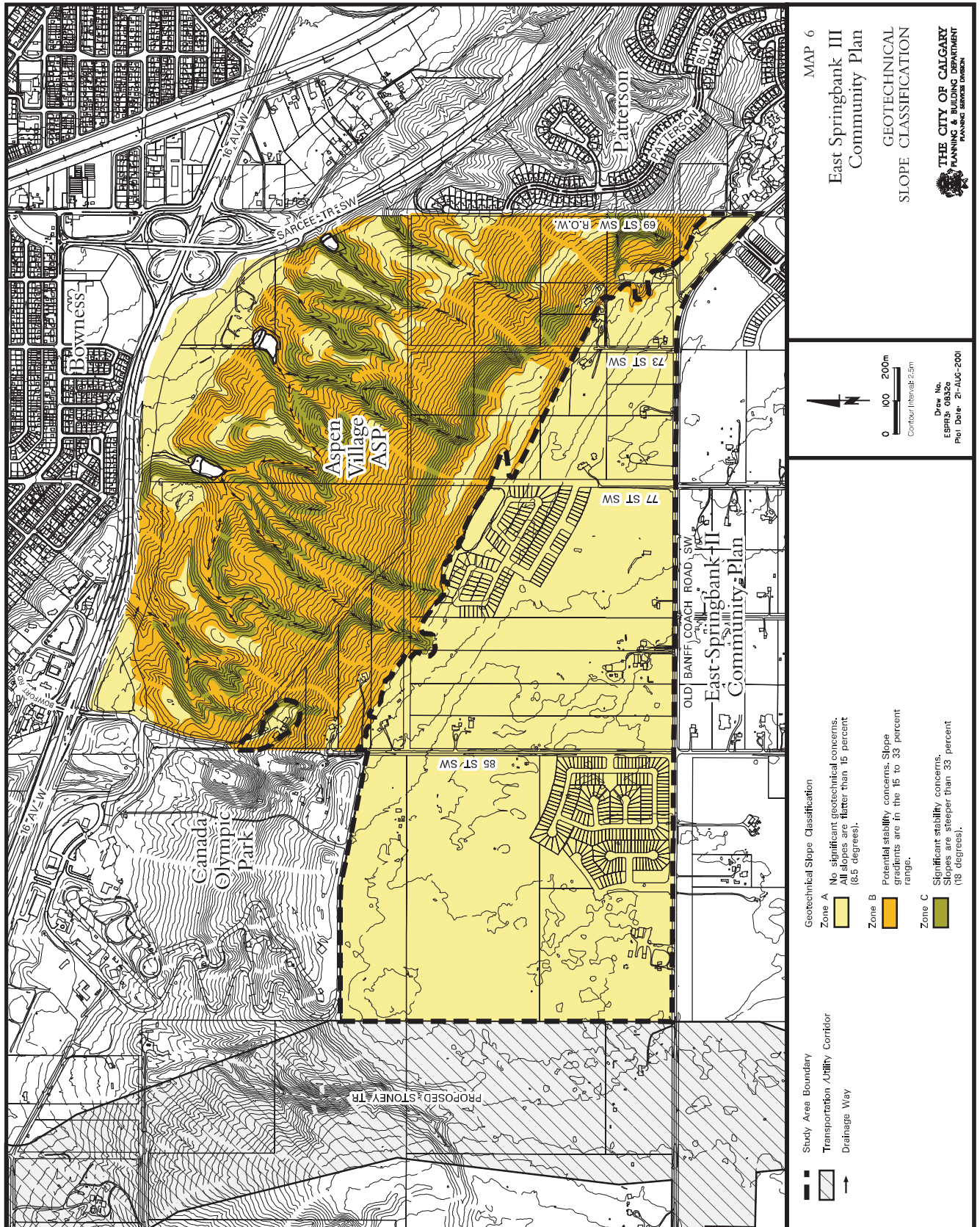
**Plan the development to the existing terrain and site conditions.**

- Design and plan the development of roads, utilities and building sites with as little soil excavation and disturbance as possible.
- Design and plan development for the particular soil conditions and topography of the site.
- Confine construction to least critical areas.

**Schedule development to minimize risk of potential erosion.**

- Where possible, plan construction activities during dry months of the year to avoid potential rain events and delays.
- Stage development to allow “green-up” or re-establishment of vegetation and minimize erosive areas.
- Halt construction during periods of heavy precipitation and runoff to minimize soil disturbance.
- Restrict vehicular and equipment access or provide working surfaces/pads.









**Retain existing vegetation where possible.**

- Minimize clearing rights-of-way and stripping of building sites.
- Avoid clearing and grubbing areas with sensitive soils.
- Consider aesthetics and retention of vegetation, including undergrowth.
- Physically mark clearing boundaries on the construction site.

**Re-vegetate/protect denuded areas and bare soils.**

- Seed or re-vegetate cut and fill slopes, and disturbed natural slopes.
- Cover temporary fills or stockpiles with polyethylene sheeting or tarps.
- Use mulches and other organic stabilizers to minimize erosion until vegetation is established on sensitive soils.
- Plan seeding and planting to allow establishment before end of growing season.

**Divert runoff away from denuded areas.**

- Minimize flow over bare areas by diverting overland flows away from development areas.
- Isolate cleared areas and building sites with swales to re-direct runoff.
- Avoid steep slopes below rills and gullies.
- Retain natural drainage patterns wherever possible.

**Minimize length and steepness of slopes where possible.**

- Erosion and soil loss is greater the longer and steeper the slope. Minimize both length and steepness of all slopes at engineering/planning stage.

**Minimize runoff velocities and erosive energy.**

- Maximize the length and flow paths for precipitation runoff to minimize energy of flow.
- Construct interceptor ditches and channels with low gradients to minimize secondary erosion and transport.
- Line unavoidable steep interceptor or conveyance ditches.

**Retain eroded sediments onsite with erosion and sediment control structures.**

- Utilize sediment traps and silt fences.
- Provide bed load clean-outs at culverts and ditches.
- Construct and operate sediment control ponds.

**Plan, inspect and maintain erosion and sediment control structures.**

- Develop and follow a maintenance and inspection schedule as part of the development plan.

## 7.0 POLICIES AND STUDIES AFFECTING THE PLAN

### 7.1 Provincial Land Use Policies

Pursuant to Section 622 of the Municipal Government Act, The Province of Alberta has established *Land Use Policies* (Order in Council 522/96), November 6, 1996). These policies require that Municipal and Provincial planning efforts be consistent and that a high level of cooperation and coordination is fostered with respect to the areas of mutual concern. All Municipal statutory plans must be consistent with the *Land Use Policies*. Key mutual policy areas that the East Springbank III Community Plan encourages are: land use patterns that foster sustainable development; provision for a variety of residential opportunities and densities; protection of the natural environment and minimizing the loss of valued habitat; and ensuring negative impacts to water quality, hydrology and soil erosion are minimized.

### 7.2 Calgary Municipal Development Plan

The **Calgary Plan** was adopted by City Council in 1998 July. The document is the municipal development plan for the City of Calgary, as required by the Municipal Government Act, 1995, and as such, replaces the General Municipal Plan. The Plan addresses future land use, development and transportation, relationships with municipal neighbours, provision of municipal services and facilities, and the type and location of land uses adjacent to sour gas facilities. It includes policies regarding the dedication of reserve land and provides the basis for actions and decisions regarding the environmental, social and economic health of the city.

The **Calgary Plan** provides the strategic, city-wide framework for more detailed plans and policies.

### 7.3 The East Springbank Area Structure Plan

The **East Springbank Area Structure Plan** (ASP) was adopted by City Council in 1997 June. The Plan replaced the East Springbank Joint General Municipal Plan that served as the joint plan for the area with the M.D. of Rocky View since 1994 May. The ASP is a statutory plan that covers approximately 10 square miles (2,700 hectares) of land and includes the East Springbank III lands. It defers detailed planning to this Community Plan, but does identify a broad framework for the area, including conceptual road and pathway alignments and housing density policies north of Old Banff Coach Road SW. The Plan identified the slope lands in Aspen Village as a Special Development Area, with the following provisions:

#### *Section 2.5.4. Paskapoo Slopes Special Development Area*

- a) Canada Olympic Park should continue to accommodate public recreational activities and uses that are supportive and related to the primary recreational use. Evidence of slope stability to the satisfaction of the Approval Authority should be required for all new development;*
- b) Lands within the Paskapoo Slopes Special Development Area may accommodate residential and related land uses in accordance with a future Area Structure Plan or an amendment to this Area Structure Plan. Development in this area must:*
  - iv) provide evidence of slope stability to the satisfaction of the Approval Authority;*
  - v) show how the proposed development would be integrated with planned adjacent uses and the roadway system, including any proposed building setbacks from the top of the escarpment;*
  - vi) demonstrate how natural features can be maintained or integrated with the proposed development.*

## **7.4 The City of Calgary/M.D. of Rocky View Intermunicipal Development Plan**

This Intermunicipal Development Plan was approved by the Councils of the M.D. of Rocky View and the City of Calgary in 1998 October. The purpose of the Plan is to identify an area of mutual intermunicipal interest and establish policy direction and processes to address intermunicipal issues that may arise within the area. Lands within the planning area that fall within the Intermunicipal Development Plan Boundaries are located west of 85 Street S.W.

## **7.5 Calgary Transportation Plan**

In 1995 May, the **Calgary Transportation Plan** was adopted by City Council. The plan portrays a vision of Calgary in the year 2024 when the city's population is expected to reach 1.25 million. It sets out a strategy for avoiding expensive and contentious river crossings and road improvements, and problems of air pollution, downstream traffic impacts and loss of natural areas experienced by other cities undergoing substantial growth. It emphasizes the link between transportation and land use planning, and establishes policies to be used in the planning of new residential communities to reduce the need for vehicle trips and encourage transit and other modes of transportation.

## 7.6 Sustainable Suburbs Study

In 1995 July, City Council adopted the **Sustainable Suburbs Study: Creating More Fiscally, Socially and Environmentally Sustainable Communities**. The study is aimed not only at implementing the objectives of the Calgary Transportation Plan as they relate to the development of new communities, but seeks to encourage developers, City departments and others to find new ways of designing more sustainable communities. It describes many long-term fiscal, social and environmental concerns, and sets out a comprehensive package of planning policies, requirements and guidelines that respond to these issues. The East Springbank III Community Plan utilizes appropriate recommendations of this study.

## 7.7 Transit Friendly Design Guide

The **Transit friendly Design Guide** was approved by City Council in 1995 December, and describes techniques for improving integration of transit into residential and non-residential areas to achieve the vision described in the Calgary Transportation Plan. It explains and gives examples of physical requirements necessary to encourage transit use.

## 7.8 The City of Calgary Environmental Policy, Principles and Goals

The **Environmental Policy, Principles and Goals** was approved by City Council in 1994, and acts as a guide for City of Calgary employees to ensure that the environmental stewardship and performance adopted by The City of Calgary is implemented and maintained by staff.

## 7.9 Calgary Urban Park Master Plan

The **Calgary Urban Park Master Plan** (UPMP), approved by City Council in 1994 March reflects the public's vision for river corridors within the Calgary. The Urban Park Master Plan is to be considered during amendment or creation of City planning documents in consultation with affected communities and landowners. Policies and proposed improvements for the East Springbank III/Aspen Village ASP lands are found in UPMP Planning Unit 17 (Paskapoo Slopes).

## 7.10 Natural Area Management Plan

The **Natural Area Management Plan** was approved by City Council in 1994. Its primary role is to ensure the long-term viability of Calgary's natural environment and to support its appropriate use by the public. The Plan highlights the need for continuous public input, education and interpretation of ecological data and expert management of natural areas.

### **7.11 Improving Calgary's Entranceways**

In 1994, City Council approved the study **Improving Calgary's Entranceways** which sets out varying design themes, improvements to public lands and guidelines for private development, to help articulate the arrival experience, ecological and cultural context for all of Calgary's various entranceways. For the Trans Canada Highway west, a "City by the Rockies" theme helps celebrate Calgary's proximity to the mountains and natural areas, as well as the legacy of the mining and timber industries along with transportation links through the Rockies.

### **7.12 Calgary Restricted Development Area and Transportation/Utility Corridor**

A Restricted Development Area (RDA) around the City of Calgary was established in 1976. Land within the RDA was designated for Transportation/Utility Corridor (TUC) use in order to provide for long-term alignments for future ring roads and major linear utilities needed to serve the expanding urban area.

The TUC provides components, which are specific areas dedicated to designated primary uses. Primary uses are the linear transportation and utility facilities including ring roads, petroleum pipelines, powerlines and municipal services. Other uses permitted within the TUC are secondary or interim and include a variety of agricultural, commercial, recreational and storage activities.

### **7.13 Planning for Adjacent Areas**

The Patterson Heights community lies immediately east of the planning area, and was planned in accordance with the Strathcona Design Brief, approved by City Council in 1976, with subsequent amendments in 1978, 1981 and 1982.

The East Springbank II Community Plan was approved in 1998 October as an appendix to the East Springbank Area Structure Plan. This Plan provides the conceptual planning framework for the area immediately south of Old Banff Coach Road SW in East Springbank.

The Aspen Village planning process is underway for the lands north of the East Springbank III area.

### **7.14 East Springbank III Commercial Demand Study**

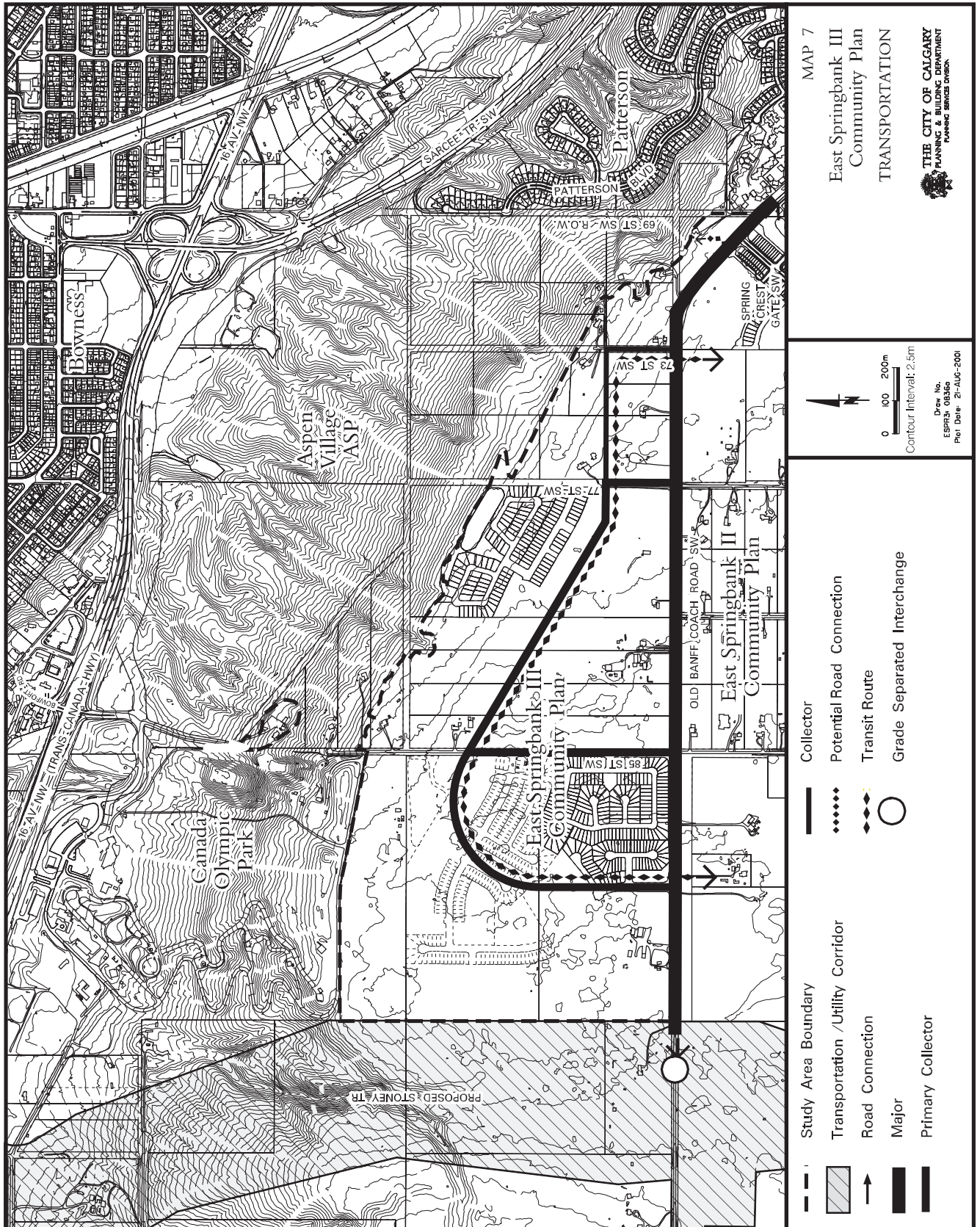
The City of Calgary commissioned a study in 1998 January to explore potential commercial/ retail demand for both the East Springbank II and III Plan areas. This study was further refined in response to the approval of the East Springbank II Community Plan, and updated population estimates for the East Springbank III area. The Study is used as input to the general location and size of commercial uses within the planning area.

## **8.0 TRANSPORTATION (MAP 7)**

### **8.1 Road Network**

External road access to East Springbank III is provided from Old Banff Coach Rd. SW., which is identified as a Major Standard road. The conceptual internal road system consists of a collector loop system, with access/egress points to Old Banff Coach Road at 89 Street SW, 85 Street SW, 77 Street SW and 73 Street SW. The road network takes advantage of the existing rural grid roads and rights-of-way for future road alignments, where possible, with the alignment of the final road network and intersection locations to be determined at the Outline Plan approval stage.





## **9.0      SERVICING AND UTILITIES (MAPS 8 AND 9)**

### **9.1      Engineering Studies for East Springbank**

The East Springbank Engineering Studies (ESES) were completed in June of 1998 and serve as the guiding documents for the transportation and utilities network in the East Springbank area. The ESES delineates the conceptual transportation, water and sewer servicing networks. It includes information such as water pressure zones, storm and sanitary sewer catchment areas, storm flow rates, road alignments and standards. Further detailed engineering study(s) by the Developer are required at the time of development of lands within the Community Plan area as determined by the City Engineer, with the final transportation and servicing alignments to be determined at the Outline Plan approval stage.

### **9.2      Water Supply (Map 8)**

The planning area is within the Broadcast Hill Pressure Zone. A feedermain extension along Old Banff Coach Road SW east from 69 Street SW, and extending west to 89 Street SW will ultimately be required to service this area. Future distribution mains are to be within the internal road system.

A small area located at the north end of the planning area may be serviced by extending existing mains southward from Bowfort Rd SW (requiring pumping). Alternatively these lands may be serviced via distribution main extensions (including pressure reducing valves) from 85 Street SW.

### **9.3      Sanitary Sewage (Map 8)**

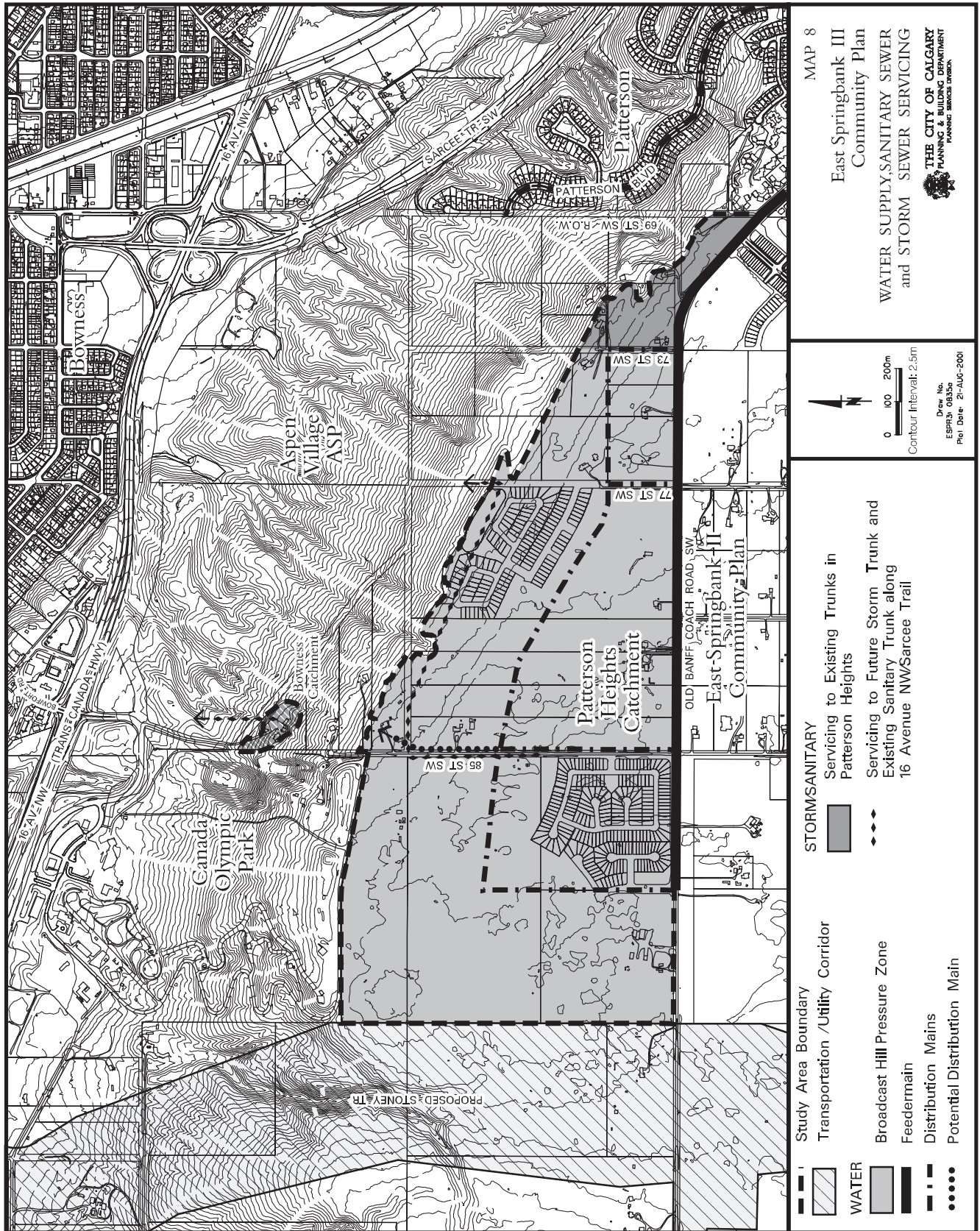
For the majority of the planning area, sanitary sewer trunks are to be extended from Old Banff Coach Road SW to the northeast, to tie into the existing main within 16 Avenue NW, as generally shown on Map 8.

A small portion of land located at the eastern end of the planning area will be serviced via extensions to an existing main in Patterson Boulevard SW.

### **9.4      Stormwater Management (Map 8)**

The majority of the planning area lies within the Patterson Heights Catchment Area, and will be serviced via trunk extensions to a new storm trunk along 16 Avenue NW/Sarcee Trail. At the north end of the planning area, a small area falls within the Bowness Catchment Area, and will also be serviced to the new storm trunk. The extreme eastern area of the plan (see Map 8) can be serviced to existing facilities in Patterson Heights.





Stormwater management facilities for water quality are required in the catchment area in order to meet new Provincial water quality requirements. New planning may be required for this area to determine the size and location of these future facilities.

Stormwater management studies are to determine how the drainage of the Transportation/Utility Corridor (TUC) will be accommodated, including the drainage requirements for all future interchanges in this area.

## **9.5 Electrical Service (Map 9)**

Electrical service will be provided by 25 kv distribution lines as shown conceptually on Map 9. Substation locations and feeder routes (alignments) are subject to change based on actual development patterns.

## **9.6 Natural Gas (Map 9 )**

Natural gas service will be provided through an intermediate pressure distribution line along Old Banff Coach Road SW, with local gas main extensions into the planning area. The intermediate pressure distribution line will be developed to the west from existing facilities at approximately 69 Street SW. A transmission branch line is proposed along the future Stoney Trail, in the Transportation/Utility Corridor. Any significant concentration of development in the planning area could require upgrading or replacement of the existing system.

## **9.7 Telephone and Cable (Map 9)**

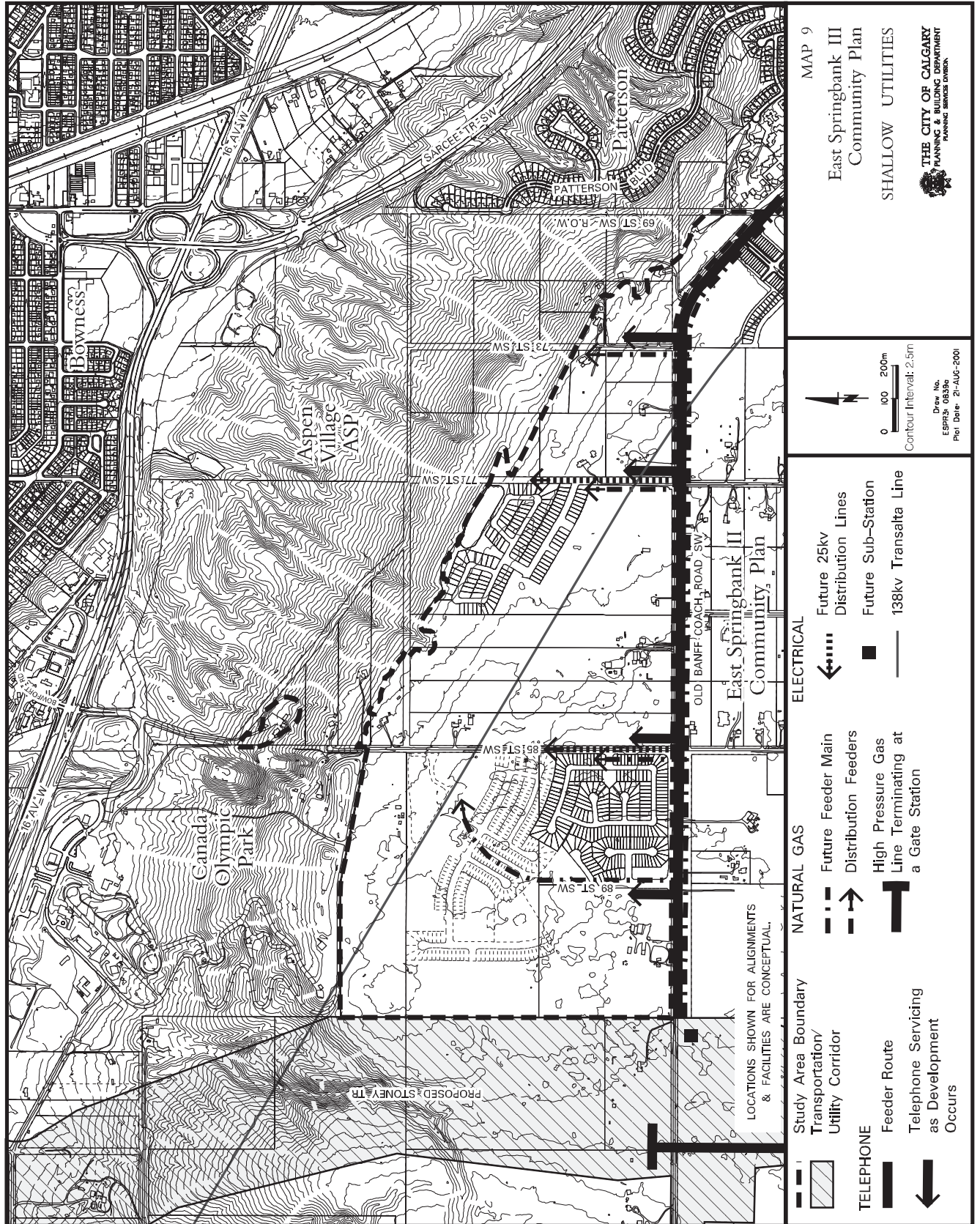
1. Telephone service will be provided by extending the existing feeder route from the Prominence Point Switching Station, westward along Old Banff Coach Road SW. The western part of this route will require the use of Carrier Cabinets (typically a Carrier Cabinet will service approximately 400-450 homes).

Distribution cables will likely be jointly placed with the Calgary Electric System cables.

To reach the various phases of development, permanent extensions must be placed. If the development cannot be reached via a permanent structure, temporary facilities will be placed. The cost of temporary facilities will be at the developer's expense (including the future transfer to permanent facilities). Any required relocation of existing (rural) facilities will be charged.

2. Cable TV lines will be placed along the same routes as for telephone service.





## **10.0 COMMUNITY SERVICES**

### **10.1 Police Service**

The planning area is serviced from Police District Office #2, located at 4506 - 17 Avenue SW.

### **10.2 Fire Protection**

The planning area is serviced by Fire Station #29 at 7027 Coach Hill Road SW.

### **10.3 Emergency Medical Services**

The closest EMS to the planning area is at the #8 Fire Station, located at 1720 - 45 Street SW. *Note: This is a Geopost location which means there is an ambulance located there at all times.*

### **10.4 Library Service**

The closest library to the planning area is the new Signal Hill Branch in the Signal Hill Regional Shopping Centre (5994 Signal Hill Centre SW).

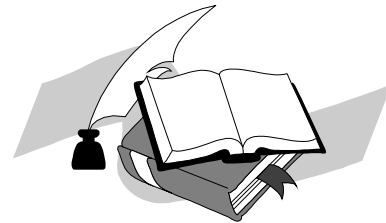
### **10.5 Social Services**

Municipal social services are provided from the Shaganappi Area Office at 3415 - 8 Avenue SW. Provincial social services and child protection service are provided through their main number at 270-5335. Alberta Family and Social Services located at 1240 Kensington Road NW will provide adult financial assistance services.

### **10.6 Public Health Services**

The Shaganappi District Office, located at 3415 - 8 Avenue SW will provide public health services.

# Glossary



## GLOSSARY

**Approving Authority** means the Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the case may be.

**Calgary Planning Commission** means the Calgary Municipal Planning Commission constituted pursuant to the Municipal Planning Commission Bylaw.

**Community** means, when referring to land, a logical physical and social planning area which is predominantly residential in character, defined by significant natural or man-made features.

**Community Boundary** means the boundary of a community as defined in a community plan, and is to be distinguished from a community name boundary which may be different and is based on the Community and Street Name Guidelines.

**Community Centre Site** means a site, comprised of reserve land, which is owned by The City but used and developed by a community association under the terms of a license of occupation, and accommodates a community centre building and related recreational facilities and amenities.

**Community Commercial Use** means a small to moderate scale retail or personal service use which serves the community and may include a medical clinic, a personal service business, a retail store, an office, an entertainment establishment, a recycling depot, a financial institution, a food store, a private club, an automotive service, a restaurant and an outdoor café.

**Council** means the City Council of The City of Calgary.

**Duplex** means a single building containing two dwelling units, one above the other, each having a separate entrance.

**Environmentally Significant Area** means a natural area which, because of its features or characteristics, is significant from an environmental perspective to Calgary, and has the potential to remain viable within an urban environment. A site is listed as an Environmentally Significant Area on the basis of meeting one or all of the following criteria:

1. **Quality of Biotic Community:** Biotic communities of high quality (minimal disturbance) and/or diversity for a specific habitat type.
2. **Ecological Function - Human:** area makes a significant, if not unique, contribution to the community. This includes aesthetical considerations, potential for passive recreation space, diversity of urban form, hazard considerations and pollution mitigation (noise, air, visual, water soil, etc.).
3. **Ecological Function - Natural:** area is important to the healthy maintenance of a natural system beyond its boundaries.
4. **Distinctive and/or Unusual Land Form:** presence of distinctive and/or unique land form (geologic or geographic).
5. **Uniqueness:** The habitat or ecosystem component has limited representation within the municipality; and/or the area is representative habitat for wildlife of recognized importance.



**Gross Area** means the total area of land contained within the property lines of a site.

**Gross Developable Area** means the gross area of a site, excluding environmental reserve, expressways, freeways and interchange lands, commercial sites greater than 2.4 hectares, private lakes and lands purchased with reserve funds.

**Institutional Use** means a public, quasi-public or private use that serves the educational, social, cultural or religious needs of the residents in a community and may include a church, a post office or postal kiosk, a library, a public or private school, a child-care facility and a private club.

**Joint Use Site** means a site comprised of reserve land which is jointly owned by The City of Calgary and a school board for the purpose of accommodating a school, sports fields and related recreational uses.

**Linear Park** means a park, comprised of reserve land, that accommodates the regional or local pathway and passive and active recreational activities and creates continuity for the open space system. A linear park may also include private land that accommodates local pathway connections.

**Multi-dwelling Residential Use** means a residential building containing two or more dwelling units and includes a semi-detached dwelling, a duplex, a townhouse and an apartment.

**Natural Area** means an undisturbed, or relatively undisturbed, area of land or water, or both, which has existing characteristics of a natural/native plant or animal community and/or portions of a natural ecological and/or geographic system.

**Natural Environment Park** means a park as defined, described and managed within and under Calgary Parks & Recreation Natural Area Management Plan.

**Neighbourhood** means a portion of a community and is generally defined by a 400-metre radius or five minute walk from a central bus stop.

**Neighbourhood Park** means a park, comprised of about 0.8 ha of reserve land located in an area located relatively distant from a joint use site, which is designed to accommodate a mix of recreational activities, including informal sports, passive recreation and neighbourhood events, and may contain creative play equipment and decorative elements.

**Pedestrian-oriented** means an area that is planned and designed to cater to the needs of pedestrians who are travelling to, from and within the area. Characteristics of a pedestrian-oriented setting may include, but are not limited to:

- a) a variety of land uses and activities located closely to one another;
- b) sidewalk and/or pathway connections from surrounding neighbourhoods to the area;
- c) streetscapes and other public spaces that are designed to make walking both easy and enjoyable, and encourage social interaction;
- d) building design and massing, and signage that relate to a human scale and contribute to a comfortable walking environment;

- e) orientation and integration of building facades with a public sidewalk or pedestrian way, permitting direct pedestrian access to building entrances; and
- f) parking and vehicular circulation areas designed to minimize conflicts between pedestrians and vehicles.

**Private Park** means a park owned and maintained by a residents' association.

**Recreational Use** means a public or private athletic or recreational facility or amenity, a joint use site or a park or playground which serves the surrounding neighbourhood or community.

**Restored** means the efforts to restore a disturbed site to near its natural and native condition.

**Secondary Residential Use** means a small-scale detached residential unit developed on the same lot as a single detached dwelling, and may include a studio suite.

**Semi-detached** means a single building designed and built to contain two side-by-side dwelling units, separated from each other by a party-wall extending from foundation to roof.

**Single-Detached Residential Use** means a single residential building containing one dwelling unit only, but does not include a mobile home.

**Streetscape** means all the elements that make-up the physical environment of a street and define its character including the road, boulevard, sidewalk, building setback, height and style. It also includes pavement treatment, trees, lighting, pedestrian amenities and street furniture.

**Sub-Neighbourhood Park** means a small-scale park, comprised of a minimum of 0.2 ha reserve land with about a 500 m walking distance service area, which is designed to accommodate neighbourhood socialization and passive recreation.

**Transit-oriented Transit-friendly** means the elements of urban form and design that make transit more accessible and efficient. These range from land use elements (e.g., locating higher density housing and commercial uses along transit routes) to design (e.g., provision of direct routes to transit facilities). It also encompasses pedestrian-friendly features as most transit riders begin and end their rides as pedestrians.