

1.0 Policy

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Table of Contents

1.0 Policy

List of Figures

	Executive Summary.....	1
1.1	Methodology	4
	1.1.1 Vision	
	1.1.2 Goals	
1.2	Policy Instruments.....	7
1.3	Site Analysis.....	9
	1.3.1 Location	
	1.3.2 Topography	
	1.3.3 Environmental and Natural Considerations	
	1.3.4 Land Ownership	
	1.3.5 Land Uses	
	1.3.6 Transportation	
	1.3.7 Municipal Servicing	
1.4	Environment.....	13
	1.4.1 Context	
	1.4.2 Existing Policy	
	1.4.3 Best Practices	
	1.4.4 Environmental Policy Goal	
	1.4.5 Objectives & Policies	
1.5	Transportation.....	29
	1.5.1 Context	
	1.5.2 Existing Policy	
	1.5.3 Best Practices	
	1.5.4 Transportation Policy Goal	
	1.5.5 Objectives & Policies	
1.6	Municipal Service Infrastructure.....	39
	1.6.1 Background	
	1.6.2 Existing Policy	
	1.6.3 Best Practices	
	1.6.4 Municipal Service Infrastructure Policy Goal	
	1.6.5 Objectives & Policies	

1.7	Affordable Housing.....	43
1.7.1	Context	
1.7.2	Existing Policy	
1.7.3	Best Practices	
1.7.4	Affordable Housing Policy Goal	
1.7.5	Objectives & Policies	
1.8	Employment Centre Strategies.....	54
1.8.1	Context	
1.8.2	Existing Policy	
1.8.3	Best Practices	
1.8.4	Employment Centre Policy Goal	
1.8.5	Objectives & Policies	
1.9	References.....	65

List of Figures

Figure 1.1: Policy Development Framework

Figure 1.2: Policy Implementation Ladder

Figure 1.3: from SW Community ASP

Figure 1.4: showing wildlife corridors from OSP

Figure 1.5 Air photo of site; note the abundance of smaller wetlands.

Figure 1.6: Proposed Road Alignment Map (City of Calgary, 2004)

Figure 1.7: Modified Grid Street Pattern

Executive Summary

The policy framework for the community of Pine Creek Villages has been developed for five key areas:

- The Environment
- Transportation
- Municipal Services Infrastructure
- Affordable Housing
- Employment Centre Strategies

The following goals and objectives were inspired by the vision for Pine Creek Villages and framed the resulting policies.

1. To preserve and protect both the character and function of the natural environment with pro-active, educational based approaches which are integrated into the framework of Pine Creek Villages.
 - *Water Quality* - Preserve, protect and improve water quality and natural hydrological features of the area, specifically the streams and wetlands
 - *Land Stewardship* - To recognize, value and protect the unique landscape of the area, including the undulating topography and pockets of natural vegetation of trees and grasslands
 - *Air Quality* - To preserve and enhance air quality by encouraging the community to engage in sustainable practices
 - *Energy and Waste Reduction* - To reduce and limit energy consumption and solid waste by providing an infrastructure for sustainable practices
2. To create a physical transportation network that provides direct, continuous and convenient routes for all modes of transportation within a hierarchy of regional and local road systems that allows for integration with the existing transportation networks in the City of Calgary.

- To encourage the development of an effective transit infrastructure for the community, with full integration with the existing transit network.
 - To encourage street design that allows for a positive pedestrian experience.
 - To design adequate and efficient parking for all uses that minimizes the impact on the visual continuity of the streetscape.
3. To design and establish safe, efficient and consistent service infrastructure as required by urban development.
 - To match development phasing with the future phasing of utility lines and the new Pine Creek Sewage Treatment Plant.
 - To encourage compact neighbourhood design standards to increase the efficiency of services.
 - To reduce the environmental impact of new development, by utilising and encouraging natural drainage systems, while creating opportunities for amenity
 4. To provide a mix of attractive, sustainable and energy efficient housing that will be affordable to households in all income ranges.
 - *Affordable Housing Concentration* - To accommodate a diversity of lifestyle choices by creating affordable housing near neighbourhood nodes which offer a range of higher density housing forms
 - *Employment Centre Housing* - To promote development of housing within the Employment Centre area that is accessible to all income levels
 - *Rental Housing* - To ensure there is provision of affordable rental housing throughout the community that addresses the needs of lower income groups
 - *Community Amenities* - To provide a variety of public and private amenities that support the diverse nature of residents contained within the community
 5. To ensure the provision of adequate and appropriate employment throughout the community that will encourage people to work and reside within Pine Creek Village.
 - *Employment Centre* - To create a vibrant mixed-use core area that will function as a focal point for the new community

- *Local Retail* - To ensure that there are clusters of retail development located at strategic points within the neighbourhoods to reduce automobile dependence and promote walkable, pedestrian friendly commercial uses
- *Municipal Services & Amenities* - To ensure that municipal infrastructure and civic amenities are efficient and maintain the vitality of the employment centre and community
- *Phasing* - To encourage the construction of significant employment-generating uses within the community during the initial stages of development

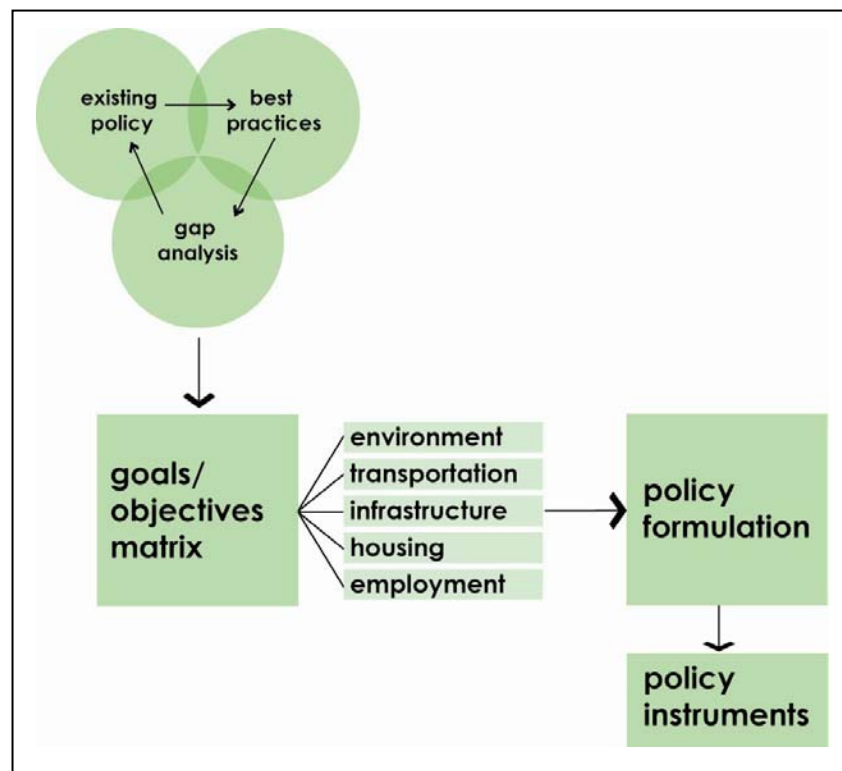
1.1 Methodology

The policy framework for the community of Pine Creek Villages is the result of both a visioning process and an extensive review of existing policies, as well as an analysis of best practices. The policy framework has been divided into the following sectoral issues:

- The Environment
- Transportation
- Municipal Services Infrastructure
- Affordable Housing
- Employment Centre Strategies

Policy development was coordinated to ensure that sectoral policies were complimentary. The following flow chart outlines the policy development process that guided the formation of the policy framework.

Figure 1.1: Policy Development Framework



After a collective brainstorming and visioning session to determine the guiding principles for the development of Pine Creek Villages, goals and objectives were formulated for the specific policy topics based on the vision and analysis of existing policy and best practices. A gap analysis was done based on these analyses to determine weaknesses in the existing policy, and with this information policy was developed for each of the policy topics. Background research and site-specific information was incorporated into the policy formulation, and the goals and objectives of each of the policy topics were integrated when appropriate.

1.1.1 Vision

Pine Creek Villages is a community that is attractive, diverse, balanced, sustainable, and liveable. It will accommodate the full range of urban land uses that allow for the development of a vibrant community.

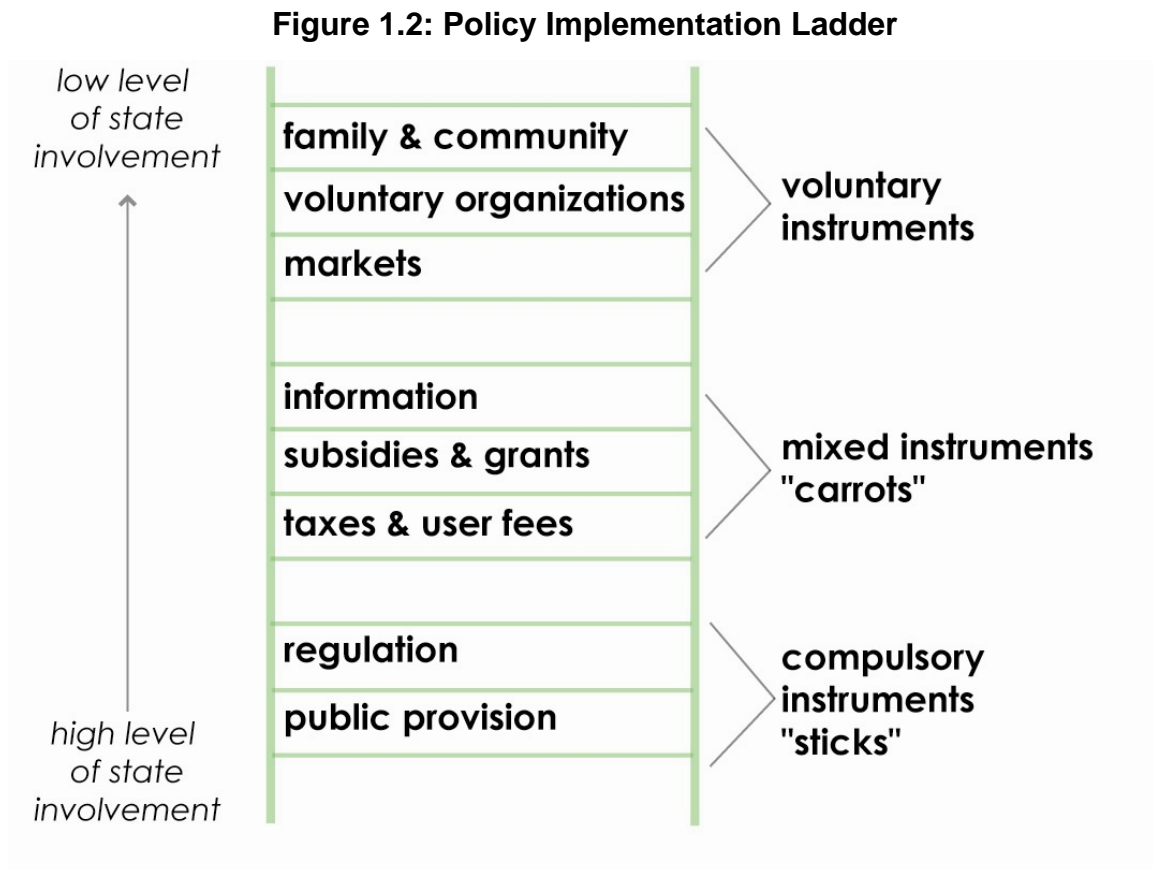
It is a city on the edge. It is located at the edge of the foothills and the unique natural landscapes of the area help define Pine Creek Village. Water features surround the community with wetlands on both the east and west edges and pine creek at the south. The rolling topography filled with pockets of aspen stands and spruce trees contribute to the distinctive character of the area. The goal in developing this new community is to create a cohesive independent community, but one that also works with and compliments the greater City of Calgary area. Physically, Pine Creek Villages will be a dense and efficient community, using principles of sustainability, with access and links to the greater City and the surrounding environment. Socially, Pine Creek Villages will be a place both to live and work; with a vibrant mix of housing and employment opportunities. As the foundation of the community--economic vibrancy, environmental character, housing diversity, innovative municipal services, infrastructure and open space—will form the basis for the unique development of Pine Creek Villages.

1.1.2 Goals

6. To preserve and protect both the character and function of the natural environment with pro-active, educational based approaches which are integrated into the framework of Pine Creek Villages.
7. To create an efficient transportation infrastructure that supports community and regional connectivity, and that supports various modes of transportation
8. To provide service infrastructure in an efficient, consistent and sustainable manner as required by urban development
9. To provide a mix of attractive, sustainable and energy efficient housing that will be affordable to households in all income ranges.
10. To ensure the provision of adequate and appropriate employment throughout the community that will encourage people to work and reside within Pine Creek Village.

1.2 Policy Instruments

Policy goals and objectives are only as effective as the policy instruments available to ensure implementation. Policy instruments represent a broad spectrum of government involvement from no involvement (voluntary instruments) to a high level of involvement (compulsory instruments), as outlined in Figure 1.2.



Compulsory instruments, also called regulatory instruments, compel or regulate actions with little or no discretion in determining alternatives (Howlett and Ramesh, pg 87). Traditional compulsory instruments for municipal development policy include Land Use Bylaws, Municipal Development Plans, and other existing legislation.

At the other end of the ladder are market driven and voluntary instruments. The key characteristic of voluntary instruments is that they require little or no involvement by the

government and the desired result is instead preformed on a voluntary basis (Howlett and Ramesh, pg 83). These voluntary actions are usually representative of desired goals, but carry little impetus for implementation. It is therefore important to include mixed policy instruments that provide some type of incentive for desired development practices.

Mixed instrument combine the features of both voluntary and compulsory instruments that permits varying levels of government involvement in shaping development decisions (Howlett and Ramesh, pg 91). Mixed instruments can act to reward a desired activity, thereby affecting the costs and benefits of various alternatives. In a market driven society, the likelihood of the desired choice being made is enhanced due to the incentive provided. Mixed instruments can include fiscal incentives and subsidies such as bonus trading, density trading, and property tax rebates.

The policy framework for Pine Creek Villages attempts to include a balance of policy instruments with an emphasis on mixed instruments, in the hope of achieving the vision, goals and objectives that have been determined for the community.

1.3 Site Analysis

1.3.1 Location

The Pine Creek Villages Study Area is the southwestern most boundary of the City of Calgary. The Study Area lies south of Highway 22X and west of Macleod Trail South. The boundary on the west is 14 Street SW. The south boundary is the Pine Creek. The Study Area encompasses approximately 3,600 acres (1,450 hectares).

1.3.2 Topography

The study area has a varied topography of rolling plain, prominent hills and a significant creek valley. A major topographical feature is the hill along the western boundary of the Study Area.

The remainder of the study area is rolling plains with defined drainage basins. These plains are considered to be developable though retention of the local drainage patterns should be considered.

1.3.3 Environmental and Natural Considerations

Priddis Slough is concentrated in the northern portion of the study area immediately south of Highway 22X. It is approximately 30 acres in size. A drainage channel flows southward from the wetland draining toward Pine Creek. This entire wetland complex in the north is considered a significant natural area and should be preserved (Price Waterhouse Coopers, 2002).

Radio Tower Creek wetland lies immediately east of 14 Street and south of Highway 22X and drains southwards towards Pine Creek. Although not as significant as Priddis Slough, the Radio Tower Creek wetland and drainage way should be retained and possibly incorporated into detailed storm water management and open space design in this area.

1.3.4 Land Ownership

A review of the Municipal District of Foothills cadastral map and City Land ownership list indicates that lands within the study area are owned by a combination of farming operations and development interests. There appears to be no large assembly of any sizable holdings by a residential development company (Price Waterhouse Coopers, 2002). There are a few country residential developments within the study area, but they should not be a limiting factor in the future development of the Pine Creek Villages area.

1.3.5 Land Uses

To the north of the Pine Creek Villages Study Area and Highway 22X is the Somerset community that contains primarily lower density residential. The Shawnessy Towne Centre lies east of the CPR line adjacent to the Somerset community. It primarily includes “big box” retail and entertainment uses as well as the new South Fish Creek Recreation Centre and two high schools.

The Chaparral community lies east of Macleod Trail and has been built as far south as approximately 186 Avenue. It is predominantly a low density, single-family community.

Country residential acreages lie to the west of the study area and are very low density. Spruce Meadows equestrian facility lies immediately west of 14 Street and south of Highway 22X. Development of the Pine Creek Villages Study Area should take Spruce Meadows and its uses into consideration prior to development.

1.3.6 Transportation

Highway 22X and Highway 2 (Macleod Trail) are identified as expressways by the City of Calgary. A full directional interchange is proposed on Macleod Trail at 194 Avenue, which will permit access to the study area from the north and south on Macleod Trail and from the local communities to the east. Two interchanges are the only access points into Pine Creek Villages from 22X. A full direction interchange is proposed at 14 Street SW will permit access from the east and west on Highway 22X, and from the Somerset community to the north. A second half interchange on Highway 22X is proposed at 4

Street SW that will also be used to access the Shawnessy area north of Highway 22X (Price Waterhouse Coopers, 2002). The major north-south road within the Pine Creek Villages Study Area is 4 Street SW and figures to be a major transportation corridor within the study area when development is undertaken.

A CPR rail line runs in a north-south direction through the study area west of Macleod Trail. The tracks dissect the study area but should not be considered a large obstacle to development and could possibly be utilized as future LRT paths.

Light Rail Transit (LRT) service is proposed to service the Study Area with an extension of the current line south from the future Shawnessy Station (164 Avenue). The line will be extended within the western portion of the existing CPR right-of-way. A station site has been identified in the GRAMP approximately one half mile south of Spruce Meadows Drive (Price Waterhouse Coopers, 2002).

1.3.7 Municipal Servicing

Water

The study area lies within the Glenmore and Lower Sarcee pressure zones. The existing water services located immediately north of the Marquis of Lorne Trail can be extended south, and the services located in Somerset can be extended across Spruce Meadows Trail to provide water service to the area, as well as the existing water feeder mains near 14 Street SW and Macleod Trail. A Lower Sarcee feeder main extension along Spruce Meadows Way and 194 Avenue SW will be required to reinforce water service to the western portion of the study area. (ASP, 60)

Sanitary Sewer

The site for the Pine Creek Sewage Treatment Plant is to the south east of the study area, and construction will be completed in the fall of 2006. This location has been identified as the wastewater treatment plant for the Pine Creek drainage basin. Sewer trunk lines will cross Macleod Trail near the southern boundary of the site to service the study area.

Storm Water Drainage

The local Priddis wetland could be used for this purpose and a second wetland may need to be constructed or enhanced in the southern part of the trough, to treat flows from the south-central portion of the study area. The smaller wetland and drainage channel along 14 Street can be used to treat drainage from the western portions of the study area, as well as those uses west of 14 Street.

1.4 Environment

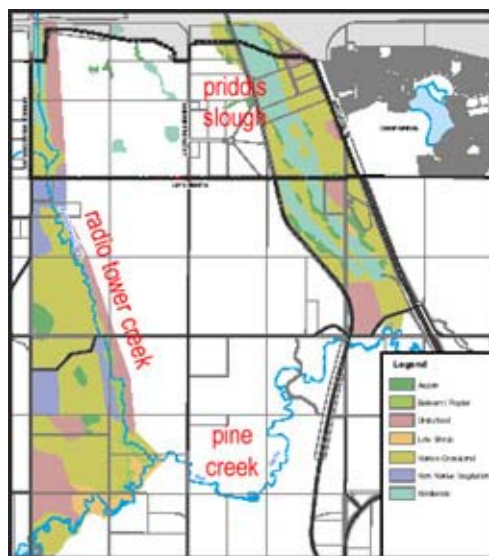
1.4.1 Context

As discussed in the Site Analysis section, the natural landscape of Pine Creek Villages is varied and complex. Habitat communities include open water, emergent marsh, meadowlands, grasslands, native shrubs, and indigenous trees stands. The development of environmental policies that identify and protect these areas are key to their lasting health, as is the ability to integrate them into the urban fabric and foster a sense of community ownership.

Hydrological Features

One of the most important features of the site is the abundance of wetlands and other hydrological features. Water features form three of the four edges of the site: Priddis Slough wetland on the east edge, Radio Tower Wetland/Creek to the west, and Pine Creek on the southern edge.

Figure 1.3: from SW Community ASP



- **The Priddis Slough** lies in a shallow valley and is surrounded by native vegetation and is one of the largest wetlands in Calgary. It is supplied by surface

runoff and ground water. The wetland varies from 100 metres to 300 metres in width, is about 1,700 metres long, and is approximately 45 hectares in size. The entire wetland is about 3 kilometres long, and is approximately 70 hectares in size (SW ASP).

- **The Radio Tower Wetland** is part of Radio Tower Creek that flows out of the Bridlewood Wetland and south to Pine Creek. It lies in a shallow valley and is also surrounded by native vegetation. This wetland varies from 120 metres to 300 metres in width, is about 1,600 metres long, and is about 24 hectares in size (SW ASP). Radio Tower Creek Wetland is also important from a cultural perspective as this feature provides a natural buffer between Pine Creek Villages and neighbouring Spruce Meadows.
- **Pine Creek** is classified as an intermittent stream, which means there is not always a supply of running water within the banks of the stream. That being said, Pine Creek is still considered a riparian area and comprises approximately 40 hectares of lands within the site. There are also numerous smaller wetlands strewn over the site. The combined wetlands and associated uplands are approximately 135 hectares in size.

Figure 1.4: showing wildlife corridors from OSP

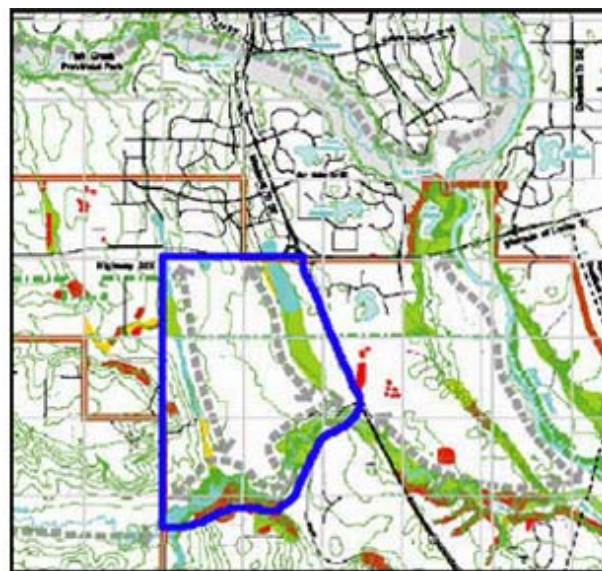


Figure 1.5 Air photo of site; note the abundance of smaller wetlands.



According to Calgary's Open Space Plan, the larger watercourses are important wildlife corridors that link with both Fish Creek and the Bow River. Each contains an important range of habitat and *structural diversity*, including breeding and stopover habitat for birds, mammals and reptiles - more specifically waterfowl, songbirds, and mammals such as deer, coyote, badgers and small reptiles such as salamanders.

Landscape Features

- **Topography:** In addition to the hydrological features of the landscape are the topography and vegetation. Pine Creek Villages' general topography is highest at the NW corner and lowest at the western edge of Pine Creek, thus the general drainage pattern is from the NW to the SE. That acknowledged, the landscape is described as "rolling hills" with undulating topography. One of the major topographical features on the site is the hill along the western boundary, adjacent to Radio Tower Creek. This hill provides spectacular views west toward the Rocky Mountains.

- **Vegetation** on the site includes a large portion of native grasslands that are associated with the two main wetlands. Native prairie grasslands are becoming increasingly rare in Calgary and attempts are currently being made to utilize native species in reseeded and rehabilitation projects, as a result these large grasslands are considered significant. In addition to the grasslands there are two other areas with significant vegetation patterns. At the confluence of Radio Tower Creek and Pine Creek the riparian zones expand and there is a concentration of vegetation that includes native spruce stands, aspen and poplar stands, and willow and birch trees with an understorey including a variety of native shrubs (Quinn). The other significant area is a stand of aspen and balsam poplar trees (with surrounding native grassland). This area is located adjacent to the CPR tracks and is part of the Priddis Slough in terms of its function (SW ASP). Other isolated tree stands and pockets of vegetation are scattered throughout the site. These areas provide habitat and natural refuges for larger mammals and nesting birds.

Air Quality

The only air quality problems presently in the area are associated with Spruce Meadows. According to the South West Community Area Structure Plan noise and odour pollutions from Spruce Meadows are within the existing standards and guidelines for the area. That acknowledged Spruce Meadows does have some concerns with regards to being a good neighbour. Their fear is that both the smell from the livestock and noise from the tournaments will become a nuisance for immediately adjacent landowners and as a result they propose either adjacent compatible land use (they do not consider residential compatible) or an increased setback.

Once the intensive development of Pine Creek Villages begins air quality issues may arise due to automobile use and attempts to reduce and control air quality should be incorporated with compact land use improved public transit (CP).

Community Involvement

Equally important when discussing environmental policy is the importance of community involvement and ownership. Increasingly both the City of Calgary and its citizens are becoming aware of the fact that personal decisions do directly impact the environment. Often the city can facilitate individual's actions - as an example the City provides recycling depots, which allow the citizens to actively recycle waste material. Associated with this, is the idea of community ownership. As discussed previously Pine Creek Villages does have a variety of complex natural systems that function as habitat. Monitoring of these resources is critical in understanding human impact (WCP) and encouraging community ownership, by including the community in the process of monitoring and the development of management plans, increases their understanding of the resource and their desire to protect it.

1.4.2 Existing Policy

Examination of existing City of Calgary policy documents related to the development of Pine Creek Villages environmental policy was undertaken and the following documents were identified as relevant.

Calgary Open Space Plan (OSP)

The Calgary Open Space Plan was completed in 2002 and Section C focuses on *Environmental Open Space*. It is in this section where it is explained that Environmental Reserve is essentially “undevelopable land and is not based on the quality of the natural areas”. It further states that “the city has few legislative options for protecting natural features on developable lands” and that “important Environmentally Significant Areas are being destroyed, while less significant ones are preserved” (pg 43). As a result this document includes policies that encourage the identification and acquisition of *Environmentally Significant Areas* (ESA). An ESA is defined in the document as a natural area that, due to its features or characteristics, is significant from an environmental perspective and has *the potential to remain viable* within an urban environment.

The significance of a natural area is determined by a combination of the following:

- quality of biotic habitat;
- level of importance to the healthy maintenance of the human system;
- level of importance to the healthy maintenance of the natural system;
- presence of distinctive and/or unusual landform; and
- limited representation within the area or city.

These ideas of identification are primary themes in the environmental policy of Pine Creek Villages.

The Calgary Plan (CP)

The Calgary Plan was completed in 1998 and the first chapter of Part 2 focuses on *Healthy Environments*. The policies were divided into six categories and included the following:

- Air Quality
- Water Quality
- Land Stewardship and Protection
- Natural Areas
- River and Creek Valleys
- Natural Resource Extraction

One of the most important general policies related to the approach taken in the Pine Creek Villages environmental policy was 2-1E, *Assist the community in improving environmental quality*, which recognizes the importance of community ownership.

Sustainable Suburbs Study (SSS)

The Sustainable Suburbs Study was completed in 1995 with the purpose of creating new communities that address fiscal, social and environmental issues. The main environmental goal was to design communities that “minimize air, water, and soil pollution, reduce resource consumption and waste, and protect the natural systems that support life.” One key contribution of the document was the inclusion of Design Guidelines, which will be developed as part of the Pine Creek Villages environmental policy.

Natural Areas Management Plan (NAMP)

The Natural Areas Management Plan was completed in 1994 with the primary goal of ensuring the long-term viability and supporting appropriate public use of Calgary's natural environments. The use of buffers and community participation is continually discussed in the document and helped to form Pine Creek Villages environmental policy.

Calgary River Valley's Plan (RVP)

The River Valley's Plan was completed in 1984 and places an importance on a Biological Impact Assessment (BIA) for any development that might impact natural watercourses. The River Valley's Plan was included specifically due to the fact that both Pine Creek and Radio Tower Creek flow through Pine Creek Villages.

Wetland Conservation Plan - Draft (WCP)

The draft of the Wetland Conservation Plan was finished in 2004. The plan recognizes the complex nature of wetlands and attempts to develop practices that preserve wetlands. The prominence of wetlands on the site and the fact that section 2.6 focuses entirely on public education are two reasons this draft plan was included in the development of the Pine Creek Villages environmental policy.

1.4.3 Best Practices

Due to the abundance of wetlands within Pine Creek Villages examination of best practices focused on wetland stewardship and the role wetlands can play in communities. Integration into stormwater management, increasing amenity value, and integration into existing education sites were all researched. However most organizations encouraged strict protection and integration into existing parks, environmental, or open space systems. This research was conducted through the World Wide Web and started with www.wetlands.org.

The most interesting cases occurred in Virginia and Maryland. Both states have encouraged wetlands to be incorporated into school sites to increase public understanding of wetlands, to increase public ownership of the wetlands, to regularly monitor wetlands,

and to ultimately protect the wetlands. These states illustrated the way incentives and voluntary actions could be developed into policy implementation.

Another valuable resource was Arlene Kwasniak's Alberta Wetlands: A Legal and Policy Guide. While outlining best practices was not included in the document, a summary of existing legislation that protected wetlands was very beneficial and helped with an increased understanding of some of the regulatory/compulsory instruments available.

Federal Legislation

- **Fisheries Act, 1985:** Section 35(1) of the *Fisheries Act* "prohibits the harmful alteration, disruption or destruction of fish habitat without authorization from the federal Minister of Fisheries and Oceans" (Kwasniak, pg 148). Habitat includes spawning grounds and nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life process (Kwasniak, pg 149).
- **Migratory Bird Convention Act, 1994:** The *Migratory Bird Sanctuary Regulations* can protect areas that represent habitat of migratory birds. This is to protect the birds from hunting and all other disturbances while they are in breeding and other staging areas. The Regulations ban all activities that are harmful to migratory birds, their eggs or their nests. (www.cws-scf.ec.gc.ca/enforce/law)
- **Species at Risk Act, 2002:** The purpose of the *Species at Risk Act* is to protect Canada's species at risk and their habitats. The Act is viewed as a tool for the conservation of Canada's biological diversity (Environment Canada, pg 1). By June 2004 "prohibitions against the destruction of critical habitat will come into effect" (Environment Canada, pg 17) and it will be an offence to "damage or destroy the residence of one or more individuals of a listed endangered or threatened species, or a listed extirpated species" (Environment Canada, pg 16).

Provincial Legislation

- **Water Act, 1999:** According to the *Water Act* the province owns all the water within its borders and has the right to divert the water. In regards to wetland protection, the Act offers Aquatic Habitat Conservation or Enhancement Licenses for the "management of fish or wildlife, to enhance habitat, for recreation, or for water management" (Kwasniak, pg 76).
- **Public Lands Act, 1980:** The *Public Lands Act* does make it an offence to "cause, permit, or suffer the disturbance of any public land in any manner that results or, in the opinion of the minister, is likely to result in injury to the bed or shore of any river, stream, watercourse, or lake" (Kwasniak, pg 123).
- **Wildlife Act, 1984:** The main purpose of the *Wildlife Act* is to regulate hunting activities, but section 38 of the Act does specifically focus on habitat protection. The section states, "that without authorization, a person shall not wilfully molest, disturb or destroy a house, nest or den of prescribed wildlife or a beaver dam in prescribed areas or at prescribed times" (Kwasniak, pg 92).

1.4.4 Environmental Policy Goal

To preserve and protect both the character and function of the natural environment with pro-active, educational based approaches which are integrated into the framework of Pine Creek Village.

1.4.5 Objectives & Policies

EV 1.0 Water Quality

Objective: *To preserve, protect and improve water quality and natural hydrological features of the area, specifically the streams and wetlands.*

Policies

EV1.1 Prior to development, the City will identify hydrological features with regard to environmental significance and wildlife habitat through a biological impact assessment (BIA)(adapted from OSP).The BIA will: Identify any polluted hydrological features and ensure mitigation is undertaken where and when required.

EV1.2 Directly protect hydrological features (this should include all water bodies) by acquiring them as Environmental Reserve (ER) as outlined in the Municipal Government Act (OSP).

EV1.3 Directly protect fish and wildlife habitat by recognizing and enforcing federal and provincial legislation, including but not limited to the following:

- Federal: Fisheries Act, 1985, Migratory Bird Convention Act, 1994, Species at Risk Act, 2002
- Provincial: Water Act, 1999, Wildlife Act, 1984, Public Lands Act, 1980

EV1.4 Recognize the opportunity for a Regional Park to provide protection to Radio Tower Creek Wetland, and provide a buffer for Spruce Meadows.

- In the development of the Regional Park, collaboration will be encouraged between The Government of Alberta, the Municipal District of Foothills, Calgary Parks & Recreation, and Spruce Meadows.

EV1.5 Require the use of setbacks and buffers around hydrological features to ensure protection of the resource. Dimensions of the setbacks and buffers are not fixed for the area, but will be established on a case-by-case basis in recognition of their unique nature, via the BIA. Regional paths and linear parks, both part of Calgary's opens space plan, can be used as buffers and should be routed along the edges of the natural resource (adapted from the RVP).

- EV1.6** Integrate naturally occurring hydrological features into the Calgary's parks network as part of *Natural Environment Parks*. Manage these areas according to the natural areas management plan with priority given to habitat protection over recreational use (adapted from NAMP).
- EV1.7** Integrate larger wetlands systems (Priddis Slough and Radio Tower Creek Wetland) and natural drainage patterns of the area into the stormwater management plan to ensure sustainability of the resource (adapted from WCP).
- EV1.8** Recognize the value of natural watercourses and encourage development that respects the resource and realizes the potential amenity value.
- EV1.9** Where permitted through a BIA, encourage school sites and community centres to locate adjacent to wetland systems to support community ownership of the resource.
- EV1.10** Recognize the complex nature of wetlands and provide incentives that encourage the community to rigorously monitor the health of key wetland systems within the area Use the information from the BIA as a benchmark for pre-development levels (adapted from WCP).
- EV1.11** Encourage public participation in the development and updating of best management practices for the operations, maintenance, lifecycle and programming of wetlands.
- EV1.12** Provide incentives that encourage the community to develop education and interpretation programs for residents with regards to water conservation and habitat protection.

EV1.13 Encourage the development and use of Design Guidelines that enhance water quality, protect hydrological habitat, and conserves water. Examples include the following:

- Use of permeable surfaces (e.g. unit pavers) to allow more water to percolate back into the ground water
- Use of rain barrels to collect and use rain water
- Use of shared driveways to reduce the amount of paved surfaces
- Use of xeriscaping to reduce amount of water required for gardens and yards
- Use of water meters to ensure community is aware of amount of water used
- Use of low flow toilets and water-saving fixtures to reduce the amount of water used

EV2.0 Land Stewardship

Objective: *To recognize, value and protect the unique landscape of the area, including the undulating topography, pockets of natural vegetation (trees, shrubs, grasslands) and their roles as habitat for wildlife.*

Policies

EV2.1 Prior to development the City will identify landscape features with regard to environmental significance and wildlife habitat through a biological impact assessment (BIA) and classify them as high, medium or low Environmentally Significant Areas (ESAs) (adapted from OSP).

EV2.2 Directly protect Environmentally Significant Areas that are classified as Environmental Reserve (this includes undevelopable slopes) as outlined in the Municipal Government Act (OSP).

EV2.3 Directly protect wildlife habitat by recognizing and enforcing federal and provincial legislation; including but not limited to the following:

- Federal: Migratory Bird Convention Act, 1994, Species at Risk Act, 2002
- Provincial: Wildlife Act, 1984, Public Lands Act, 1980

EV2.4 Integrate ESAs into the Calgary's parks network as part of Natural Environment Parks. Manage these areas according to the natural areas management plan with priority given to habitat protection over recreational use (adapted from OSP).

EV2.5 Recognize the regional nature of large mammal wildlife corridors and work with adjacent municipalities to protect and preserve those corridors.

EV2.6 Require the use of setbacks and buffers around ESAs to ensure protection of the resource. Dimensions of the setbacks and buffers are not fixed for the area, but will be established on a case-by-case basis, though the BIA, in recognition of their unique nature. Regional paths and linear parks, both part of Calgary's open space plan, can be used as buffers and should be routed along the edges of the natural resource.

EV2.7 Recognize the importance of wildlife habitat and provide incentives that encourage the community to rigorously monitor the health of key habitat systems within the area. Use the information from the BIA as a benchmark for pre-development levels.

EV2.8 Encourage public participation in the development and updating of the natural area management plan for Pine Creek Villages.

EV2.9 Provide incentives that encourage the community to develop education and interpretation programs for residents with regard to habitat protection and enhancement.

EV2.10 Encourage the development and use of Design Guidelines that protect and enhance wildlife habitat. Examples include the following:

- Use of natural vegetation when landscaping to provide *microhabitat* for wildlife
- Linear parks should reinforce wildlife corridors and add to environmental buffers
- Allow major topographical features and natural areas of vegetation to be primary determinants of design (SSS)

EV3.0 Air Quality

Objective: *To preserve and enhance air quality by encouraging the community to engage in sustainable practices.*

Policies

EV3.1 Identify any pollutants (including particulates, odours, or noise) and ensure land use is compatible with minimum requirements for development.

EV3.2 Encourage the use of increased buffers for areas adjacent to Spruce Meadows in recognition of their concerns regarding odours and noise.

EV3.3 Improve atmospheric air quality by encouraging transit use (refer to transportation policies) and discouraging automobile use by developing design guidelines that:

- Make the public transit system an important determinant of design, utilizing the 400m-access rule
- Ensure there is a transit connection between the neighbourhood/community level, the community/region and the region/downtown level (adapted from SSS)

EV3.4 Improve atmospheric air quality by encouraging walking and biking and discouraging automobile use by developing design guidelines that:

- Ensure the regional path system is integrated with commercial/retail areas to encourage bicycle use and walking (SSS)

- Use enhanced sidewalk design, including use of street trees to enhance the pedestrian experience

EV3.5 Encourage a wide range of employment located within the community in order to reduce the emissions created from work - home commute (refer to employment policies).

EV3.6 Prior to the arrival of the LRT, provide incentives that encourage the community to establish a carpooling organization within the community.

EV3.7 Provide incentives that encourage the community to monitor air quality, transit use, and car-pooling within their community.

EV3.8 Provide incentives that encourage the community to develop education and interpretation programs for residents that increase public awareness of individual choices that can improve air quality, e.g. carpooling, alternative modes of transport, etc.

EV4.0 Energy and Waste Reduction

Objective: *To reduce and limit energy consumption and solid waste by providing an infrastructure for sustainable practices.*

Policies

EV4.1 Encourage, by example, the use of wind generated power, and ensure that 25% of all City owned buildings within Pine Creek Villages are designated as *powered by wind*.

EV4.2 Encourage the development and use of Design Guidelines that reduce the amount of energy consumption. Examples include the following:

- Use of energy efficient appliances
- Building placement sensitive to aspect (south vs. north facing windows, etc.)

EV4.5 Encourage the development and use of Design Guidelines that reduces the amount of solid waste in city landfills. Examples include the following:

- Ensure all buildings are equipped with an area for recycling bins (SSS)
- Ensure that all communities have a recycling depot at their community centre

EV4.6 Provide incentives that encourage community associations to pick up recyclables at the homes of people who cannot travel to the recycling depots (SSS).

EV4.7 Provide incentives that encourage the community association to monitor the recycling program within their community, set recycling goals for the community, and to regularly inform the community of the estimated totals and goals of recycled materials.

EV4.8 Recognize the complex and labour intensive nature of composting and provide incentives that encourage community associations to start and operate large scale composting systems at a community level.

EV4.9 Provide incentives that encourage the community to develop education and interpretation programs for residents that increase public awareness of individual choices that reduce both energy consumption and solid waste (e.g. photo voltaic cells, composting, etc.)

1.5 Transportation

1.5.1 Context

Urban transportation systems lay the foundation for urban growth, and an integrated and efficient transportation infrastructure is an important element in the development of urban growth. The Sustainable Suburbs study indicates that transportation provisions represent “the single most expensive element in developing new communities [and] are expected to represent 60 percent of the costs of growth over the next ten years” (City of Calgary, 1995a, 11). Accordingly, the expense of new transportation infrastructure is expected to make mobility options for new suburban developments quite challenging (City of Calgary, 1995b).

This challenge is in large part due to the continued dominance of the private automobile as the main mode of transportation for Calgarians. This modal choice is expected to remain the “sustained dominant form of transportation for citizens” (City of Calgary, 1995b, 2-7). Therefore, the Calgary Transportation Plan identifies that in order to accommodate population growth and the development of new communities, there will need to be a reduction in the number of vehicle trips.

In the development of a transportation plan, it is important to understand the connections between transportation and land use, and especially the relationship between low-density land use and inefficient transportation. This implicit connection requires coordination between transportation and land use policies to ensure an effective and appropriate transportation plan.

The development of Transit-Oriented-Design (TOD) has been identified as desirable in Pine Creek Villages. TOD offers a unique opportunity for development to be simultaneously locally and regionally oriented and connected. TOD developments centre around transit infrastructure and focus on the density of the built form, the diversity of uses, and the design of the pedestrian and built environment. Some of the key principles include: increased mobility choices (walking and bicycling as well as transit), increased

transit ridership, good transit connections to the rest of the city and region, reduced auto use and reduced auto ownership, sufficient retail development (quantity, quality, and diversity) to satisfy the basic daily needs of residents and employees working in the area, and the ability to live, work, and shop within the same neighbourhood.

The purpose of these policies is to provide for a regional road network that is functional, safe and efficient, and that provides a number of mobility choices. The transportation system for Pine Creek Villages will provide multiple routes through the community and connections between the neighbourhood nodes, community facilities and the proposed employment centre. The road network for the area has been defined through a comprehensive transportation planning undertaken for the area (City of Calgary, 2004), and the resulting general location of the regional road network is outlined in Figure 1.6.

1.5.2 Existing Policy

Existing transportation policy for the City of Calgary includes the Calgary Transportation Plan (City of Calgary, 1995b), Sustainable Suburbs Study (City of Calgary, 1995a), Transit Friendly Design Guide (Calgary Transit, 1995), and Traffic Calming Policy (Urban Systems, 2003). The Inter-Municipal Development Plan (City of Calgary & Municipal District of Foothills, 1998) and The Proposed Southwest Community 'A' and Employment Centre Area Structure Plan (City of Calgary, 2004) also provide site-specific transportation infrastructure information for the area of Pine Creek Villages. These policies seek to create a modern and efficient transportation system for the City of Calgary.

- The Calgary Transportation Plan ('GoPlan', 1995a) seeks to balance three competing forces: community and environmental quality, mobility and costs and affordability. The main goals of the plan are to encourage a transportation network that supports safety, choice, accessibility, goods movement, and land use links – and that is effective, affordable, efficient, user-pay, and respects the environment.

- The relationship between land use and transportation is emphasised in Calgary Transit's Transit Friendly Design Guide (1995), which encourages that communities be developed using transit-friendly principles to ensure transportation and transit efficiency.
- The Sustainable Suburbs Study also provided transportation policies for suburban development, with a focus in encouraging walking, cycling and transit. The study proposes a street design that provides transportation infrastructure and accessibility for all modes of transportation. The Study also emphasises the importance of creating successful linkages between community nodes, community facilities, retail and residential land uses.
- The Inter-municipal Development Plan between the City of Calgary and the Municipal District of Foothills outlines the major transportation and infrastructure issues, as well as the inter-municipal co-ordination of planning in the inter-municipal plan area.
- The Proposed Southwest Community 'A' and Employment Centre Area Structure Plan details the road alignment and site-specific considerations for regional and local road networks, pedestrian and bicycle circulation and transit service.

1.5.3 Best Practices

VIP (Voluntary Incentive Program) for Transit

The Green Pass Program established by the Toronto Transit Commission (TTC Ridership Growth Strategy, 2003) provides discounted Metropasses to employers based on the purchase of a minimum monthly volume. The program targets employees who regularly use transit to travel back and forth to work and who would benefit from a less expensive pass, and by providing the opportunity to purchase a discounted pass, it may be possible to influence travel habits and patterns and "attract" riders on a longer-term basis. This strategy has also been established by the Ottawa-Carlton Regional Transit Commission through the Ecopass, which is a payroll-deduction program that saves riders as much as

15 percent of the regular pass price.

Mobility Friendly Design

The Wilmington Area Planning Council (Delaware) has developed Mobility Friendly Design Standards (WILMACO, 1997). The standards have been developed to create design standards for mobility-friendly communities that can be incorporated into land use planning to ensure that alternative transportation modes are considered in the development of the built environment.

1.5.4 Transportation Policy Goal

To create an efficient transportation infrastructure that supports community and regional connectivity, and that supports various modes of transportation.

1.5.5 Objectives & Policies

T1.0 Physical Road Network

Objective: *To create a physical transportation network that provides direct, continuous and convenient routes for all modes of transportation within a hierarchy of regional and local road systems that allows for integration with the existing transportation networks in the City of Calgary.*

Policies

Regional Road Network

T1.1 Highway interchange access will be developed to support employment centre and local development, as outlined on the City of Calgary's Proposed Road Alignment map (Figure 1.6).

- It has been identified that an employment centre will be developed in the east portion of Pine Creek Villages. Therefore, the movement of people to and from the employment centre will require the construction of new interchanges on MacLeod Trail.
- Interchange Access on Highway 22X will support development in the northwest portion of Pine Creek Villages, and will allow access from the west,

as well as provide access for the Spruce Meadows facilities.

- Other proposed interchanges and the future development of Sarcee Trail will provide connections to adjacent communities and the greater region.

T1.2 Coordination with provincial government for improvements and interchanges for Highway 22X will be required.

- Due to provincial jurisdiction, any improvements or modifications to highway 22X alignment or interchanges will require cooperation of the provincial government. It is important to include the Provincial government in any regional transportation planning initiatives that cross jurisdictional boundaries.

Major Roads

T1.3 A major road network will be designed to provide access to the various planned communities and to enhance local, community and regional connectivity, as outlined on the City of Calgary's Proposed Road Alignment map (Figure 1.6).

- Major road alignments for the area have already been proposed by the City of Calgary (City of Calgary, 2004). The following have been identified as the major corridors for the area: Spruce Meadows Way (14 Street SW) Sheriff King Street (4 Street SW), 194 Avenue SW, and 210 Avenue SW.

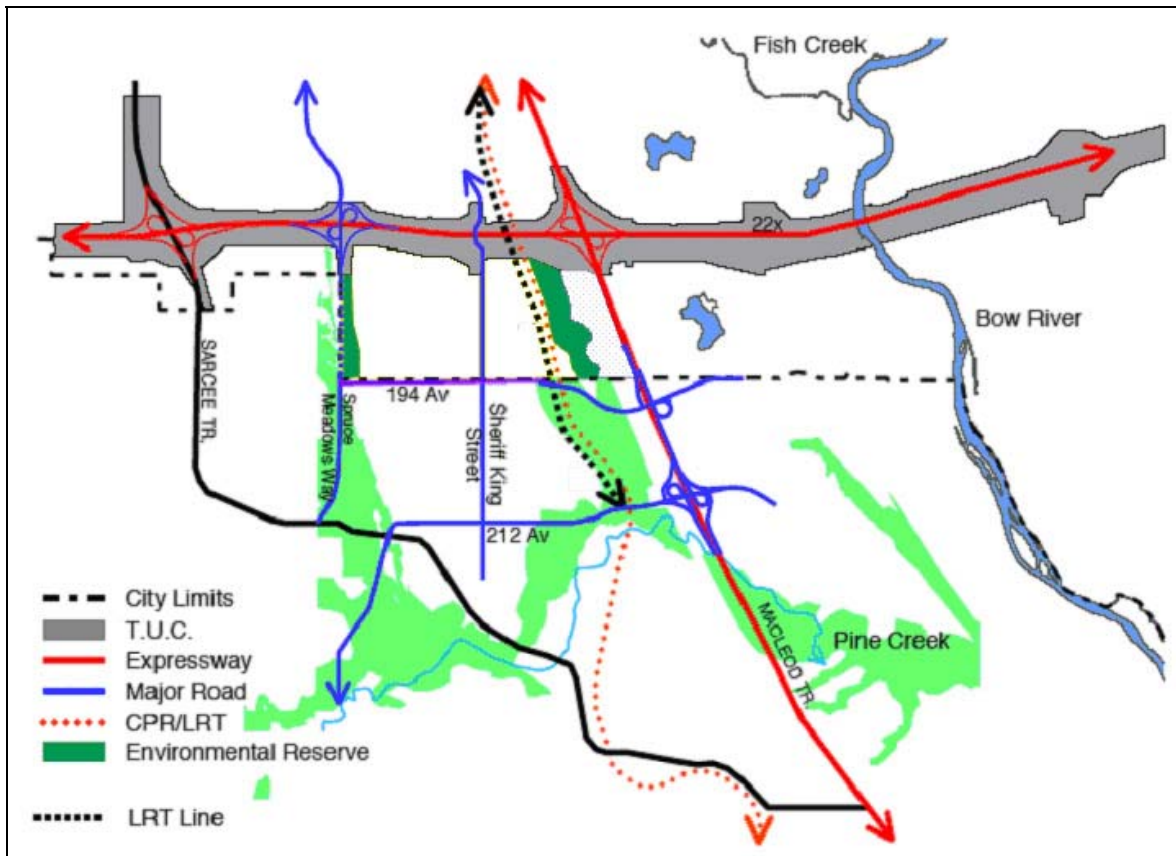
T1.4 Sheriff King Street and 194 Avenue shall designed for community integration across the different areas of the community, with sidewalks, treed boulevards and landscaping elements.

T1.5 Spruce Meadows Way shall be designed as an undivided major road, with access for the community and to Spruce Meadows.

T1.6 It is strongly encouraged that the transportation network be designed with sensitivity to the defining topographical and natural features of the area.

T1.7 Prior to finalized road alignments, a BIA will be conducted to assess special topographical and natural features of the site.

Figure 1.6: Proposed Road Alignment Map (City of Calgary, 2004)



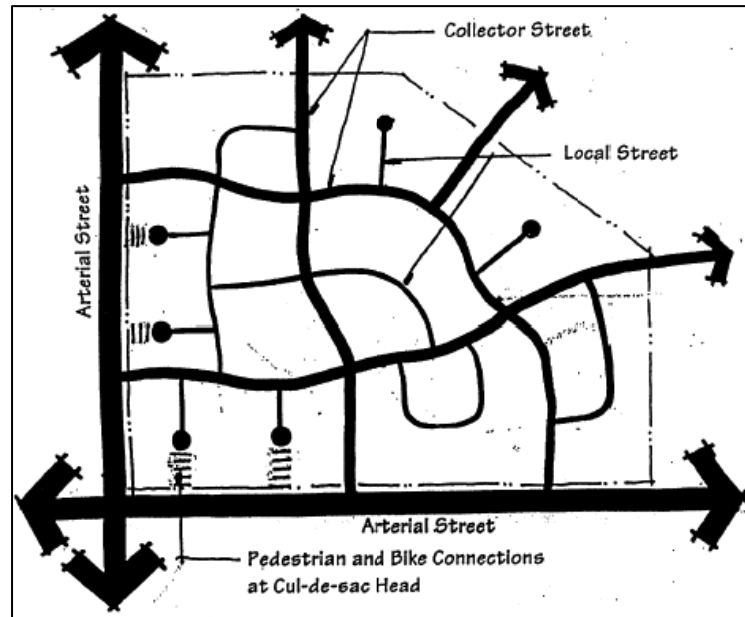
Internal Roads

T1.8 An internal road network comprised of interconnected streets will be created, with multiple routing options for pedestrians, cyclists and motorists.

T1.9 A modified grid pattern will be encouraged to provide numerous connections within and around the Neighbourhood Nodes, the Core Commercial Centre and the LRT/Transit Station. Figure 1.7 outlines an example of a modified grid pattern.

T1.10 Wherever possible, roads bordering the pathway corridors and major parks shall be designed to facilitate visual and physical access into open space areas.

Figure 1.7: Modified Grid Street Pattern



T2.0 Transit Network

Objective: To encourage the development of an effective transit infrastructure for the community, with full integration with the existing transit network.

Policies

T2.1 Calgary's LRT system will ultimately service the new community with two stations.

- Calgary's South LRT line will be extended along the current C.P.R. right-of-way that is located near the western boundary of Pine Creek Villages. The location of the employment centre should correspond with an LRT station.

T2.2 To encourage the development of the employment centre, the LRT should be extended before the City's population and/or employment thresholds (25 000 population, 10 000 jobs) are met.

- T2.3** The principles of Transit-Oriented-Design (TOD) should be employed in the development of Pine Creek Villages.
- T2.4** It is strongly encouraged that each major road be used for public transit so that all residents of the community shall be within a 5 to 10 minute walk to transit service.
- T2.5** Transit stops shall be identifies at the Outline Plan stage and meet current City standards for transit service accessibility. Catchment areas of 400 metres for access to bus stops and 600 metres for access to LRT stations shall be encouraged as a design guideline. This requirement will ensure a level of transit service that is accessible, convenient and efficient.
- T2.6** The Transit-Oriented-Design will provide continuous linkages for pedestrian and cycle access between and within communities.
- T2.7** Development concentrations shall be required around transportation nodes and will be determined at the Outline Plan stage.
- T2.8** The system of local roads shall be designed to facilitate transit use by providing direct walking routes to major roads and transit stops.
- T2.9** Major roads will be designed to allow for transit amenities such as bus bays, shelters, benches and landing pads to broaden the appeal of public transit more and to improve safety for transit users and motorists.
- T2.10** An incentive program should be established for transit passes for employers and employees in the employment centre. If a certain volume is purchased, transit passes will be available at a reduced-rate to encourage transit ridership by those commuting to the employment centre.

T3.0 Walkability

Objective: *To encourage street design that allows for a positive pedestrian experience.*

Policies

- T3.1** All internal community and neighbourhood streets should be designed with walkability as a goal.
- T3.2** An on-street sidewalk system shall be designed to provide pedestrian access to retail, recreational and community services and facilities.
- T3.3** A network of off-road pedestrian and cycle paths should be provided throughout the community linking all amenities within the new community.
- T3.4** Traffic calming measures will be encouraged to ensure the safe, efficient and convenient movement of people and goods within the community. Such design elements include, but are not limited to landscaped centre boulevards, roundabouts, reduced rights of way, and on-street parking.

T4.0 Parking

Objective: *To design adequate and efficient parking for all uses that minimizes the impact on the visual continuity of the streetscape.*

Policies

- T4.1** Parking will be designed to minimise the visual impact on the streetscape and to allow for pedestrian connectivity. To create a more pedestrian friendly environment, and to reduce the impact of parking lots on the streetscape, all parking spaces for non-residential uses, and where underground parking is not a viable option, shall be located to the rear and sides of buildings.
- T4.2** On-site circulation systems should be provided to minimize the conflict between pedestrians and traffic at all points of access to on-site parking and building

entrances. Pedestrian walkways should also connect building entrances with the street and pedestrian stops, with attention to the design and landscaping of the pedestrian/vehicle interface.

- T4.3** Permanent loading, service and parking areas shall be located so as not to significantly interrupt the pedestrian circulation or traffic flow on the street.
- T4.4** Where possible, developments will be encouraged to create shared access points for multiple buildings to reduce the number of laneways off the street.
- T4.5** On-street parking will be encouraged on major streets, with some limitations during rush hour, as determined by transportation planners.
- T4.6** Property tax reductions shall be provided for owners who have constructed adequate and appropriate underground parking. This incentive should cover a portion of the cost differential of building underground parking compared to the cost of constructing the required amount of at-grade parking.

1.6 *Municipal Service Infrastructure*

1.6.1 Background

Before the development of the community can occur, proper infrastructure servicing needs to be carefully considered. The success and viability of a community is dependent on infrastructure and servicing in place to support development. These services include: water, sewage treatment, stormwater facilities, gas, electric and telecommunications.

The new Pine Creek Sewage Treatment Plant will play an important role in the phasing of the development of Pine Creek Villages. This facility, located to the southeast of the community, will service Pine Creek Villages and other communities in Southern Calgary. It is scheduled for completion in the fall of 2006.

The purpose of the following policies is to ensure adequate municipal service infrastructure to serve the future needs of the Employment Centre and the residential communities of Pine Creek Villages.

1.6.2 Existing Policy

The City of Calgary is directly responsible for providing safe water, stormwater treatment and waste and liquid disposal, and the Calgary Municipal Development Plan (City of Calgary, 1998) indicates that Calgarians will be provided with “urban services essential for the health, safety and convenience of its citizens and for the preservation of the environment” (p.90). The MDP also outlines some of the issues concerning the capacity to adequately provide service infrastructure, including provincial regulations, the impact of rapid urban growth on servicing provision, environmental impact, and the increasing cost of maintaining and upgrading aging infrastructure.

- The Calgary Municipal Development Plan promotes the implementation of safe, efficient and economical municipal services and infrastructure utilities to directly support the business and residential health of the community. The City regulates the proper implementation and function of utilities and service infrastructure,

especially regarding issues of water quality, waste disposal and stormwater management.

- The Inter-municipal Development Plan provides policy for future development of utilities and servicing in the area, and plans for the extension of major storm and sanitary sewer trunks. The importance of preserving natural features and mitigating the impact of municipal services on the environment is also outlined.
- The Proposed Southwest Community ‘A’ and Employment Centre Area Structure Plan outlines more site-specific policies regarding the direct provision of waterworks, sanitary sewer and stormwater infrastructure.

1.6.3 Best Practices

Alternative Development Standards “Making Choices” (Province of Ontario, 1995) outlines the role of development standards in municipal development, and the possibilities for alternatives to the traditional standards for more compact and sustainable infrastructure development.

1.6.4 Municipal Service Infrastructure Policy Goal

To provide service infrastructure in an efficient, consistent and sustainable manner and to encourage innovative servicing design and delivery.

1.6.5 Objectives & Policies

MS1.0 Infrastructure Servicing

Objective: *Design and establish safe, efficient and consistent service infrastructure as required by urban development.*

Policies:

MS1.1 Develop urban infrastructure services to ensure a successful employment centre and residential community development.

MS1.2 Urban development shall be serviced with municipal water, sanitary sewer and stormwater utilities; as well as shallow utilities, including gas, electric and telecommunications utilities according to city standards.

MS1.3 Utility rights-of-way and easements will be provided in order to accommodate municipal utilities as needed, and shall be implemented at the Outline Plan stage.

MS1.4 Utility setbacks and easements shall be planned to mitigate the negative impacts of servicing infrastructure on neighbouring residential areas as required.

MS1.5 The final number and location of stormwater management facilities will be determined at the outline plan stage. These facilities must be consistent with the catchment areas, trunks and location of proposed storm outfalls identified in the Calgary Growth Area Management Plan (City of Calgary, 2000).

MS1.6 Shallow services are typically ratepayer utilities such as gas, electricity, telecommunications, and cable television. The location of shallow utilities and the related line assignments, easements and rights-of-way will be determined to the satisfaction of the City and the utility companies.

MS2.0 Phasing

Objective: *To match development phasing with the future phasing of utility lines and the new Pine Creek Sewage Treatment Plant.*

Policies

MS2.1 Prior to construction of the Pine Creek Sewage treatment plant, development will only be considered directly to the east of Spruce Meadows. Developers will be required to build sufficient trunk extensions to existing sewers in the north as well as extensions to the Pine Creek Sewage Treatment Plant when development from the south meets this area.

MS2.2 Development subsequent to the completion of the Pine Creek Sewage Treatment Plant will be phased from the southeast area of Pine Creek Villages to support the Employment Centre.

MS3.0 Compact Development

Objective: *To encourage compact neighbourhood design standards to increase the efficiency of services.*

Policies

MS3.1 Compact design principles will be used to increase the efficiency and sustainability of the service infrastructure and service delivery to reduce the infrastructure load of the community.

MS3.2 Where possible, shallow infrastructure can be located under sidewalks, encased in concrete-encased duct banks, to create more compact street design, instead of as an exclusive portion of the right-of-way.

MS4.0 Environmental Impact

Objective: *To reduce the environmental impact of new development, by utilising and encouraging natural drainage systems, while creating opportunities for amenity.*

Policies

MS4.1 It is encouraged that Stormwater management facilities be integrated with existing wetlands and parks. The design of stormwater management features in parks will be subject to the approval of the City.

MS4.2 Stormwater detention and retention ponds shall be multi-purpose and function as part of the green infrastructure. They shall be located adjacent to parkland wherever feasible, and be designed to provide community amenities and functioning wildlife habitat.

1.7 Affordable Housing

1.7.1 Context

Suburban development has been the dominant form of residential development in North America since the Second World War. With most suburbs being catered toward households with medium to high-income levels, incorporation of housing choices for moderate to low-income levels has been almost completely ignored. Pine Creek Villages Study Area is a location in the south eastern-most part of Calgary that has been identified as a prime location for the development of a viable community. Through a thorough examination of existing conditions, policies, market trends and projections, a more holistic understanding of the area and the potential for the integration of affordable housing into this suburban community can be realized. With better understanding of the context that the Pine Creek Villages Study Area is situated within, goals, objectives and policies may be more adequately formulated in order to create a favourable atmosphere for the future development of a community that would contain a mix of housing types designed for all income levels.

What is Affordability?

Prior to delving into the study of the Pine Creek Villages, some basic definitions regarding what affordable housing means would be appropriate to articulate. Housing affordability is typically only one of three aspects that determine what is termed “core housing need”. Core housing need refers to households, which are unable to afford shelter that meets adequacy, suitability and affordability norms. Affordability is commonly determined by stating that the cost of adequate shelter should not exceed 30% of household income. Housing which costs less than this is considered affordable (Canada Mortgage and Housing Corporation, 2004). For the purposes of this study, this definition of housing affordability will be applied.

Income and Household Price Trends - Calgary

Over the past couple of decades, there has been a growing increase in average income levels in Calgary. During this same time period, the cost of households has been

increasing more rapidly than income in relative terms. In 2000, Census Canada reported that the median family income for all census families was \$65,488 while the median household income for all households was \$58,861; both of which were substantially higher than the \$52,605 and \$45,777 respective median incomes in 1996. Meanwhile, in 2000, the average value of owner-occupied dwellings was \$201,651, which is substantially higher than the 1995 value of \$154,203. With this type of growth in the cost of housing coupled with the relatively low increase in income levels, affordability issues have remained prevalent the Calgary housing market.

Income and Household Price Trends - South Sector

The South Sector in the City of Calgary has continued to become more affluent over the past decade with average household incomes in 2001 rising to between \$60,000 and \$100,000 per year. As a result of higher incomes, households in the South Sector are able to devote more of their annual income to housing needs. Values of housing within the South Sector are slightly higher than the rest of the city. As with household income, the fringe of the city reflects higher household values than the inner city and older suburbs do. The minimum average dwelling is approximately \$44,000 higher (\$137,285 versus \$93,003) than the city, indicating that low-income households are not as prevalent in the South. Overall, these dwelling value averages demonstrate that the South is a predominately middle class sector, with household dwelling values appropriate for most middle-income earners.

Based on these trends, the relative absence of housing in the South Sector geared toward lower income groups, displays that there would most likely be continued development of housing targeted at middle to higher income levels. There is a growing need for intervention in the suburban housing market in the City of Calgary to allow for the development of affordable housing and a mixing of socio-economic groups across the city.

Housing Categories

- **Market Housing:** Average and median household incomes in Calgary can afford a medium to high market housing. These types of homes are prevalent in the new communities in the south of Calgary. Calgary and South Sector trends signify that the medium to high market housing category is the highest demand in new developments throughout the city.
- **Affordable Housing:** New communities, specifically the South Sector are not as good at providing affordable housing options. In the new suburbs of Calgary, households with incomes below \$40,000 would have trouble finding affordable housing. This imbalance of housing options within the suburban areas of Calgary is at odds with the City's desire to provide viable housing options for all income levels across the city.
- **Assisted Housing:** Assisted housing generally refers to senior assisted living, in this context it will refer to housing subsidies and grants, social housing, and housing services for the elderly and disabled. It recommends that services and programs be implemented to provide housing for those whose needs are not met within the market housing supply.

Affordable Housing in a Suburban Market

For the purposes of this report, much of the focus will be on the provision of affordable housing, as the market driven residential development will be adequately provided for through market forces.

An analysis by the housing group as part of this report provided two scenarios that could be examined in order to adequately supply the Pine Creek Villages Study Area with residential development. Due to market forces and feasibility, Scenario II was chosen. The affordable housing for the Pine Creek Villages Study Area would be contained within a 10% multi-family and 90% single-detached split that were used by the second

scenario. Based on this type of split, it could be inferred that much of the affordable housing would be located within the single-detached housing and only a small percentage within the multi-family housing. Nonetheless, one of the objectives of the Pine Creek Villages Study is the provision of affordable housing using higher densities located in and around the neighbourhood nodes to promote more accessibility and walkability for the residents. The higher density housing options would be ideally take the form of rental units, rather than single-detached homes, although both types are desirable. Also, types of affordable housing such as social housing should also be explored in an attempt to holistically integrate all people from all income levels into the Pine Creek Villages community. Use of the goal, objectives and policies contained within this report will help to guide and develop the Pine Creek Villages Study Area toward the ultimate vision at the beginning of this report.

1.7.2 Existing Policy

Calgary Municipal Development Plan

Access to affordable housing choices has been a growing concern for the City of Calgary. Contained within the Calgary Plan is a section dedicated specifically to access of housing. The vision for the future of the City of Calgary states, “A range of housing options exists for all ages, income groups and family types and lifestyles”. Section 2-3.2.2 contains most of the policies directly associated with the issue of affordable housing. Although vague in its application to the Pine Creek Villages Study Area, the Calgary Plan recognizes a need for targeting more affordable housing solutions, more dispersion of socio-economic groups throughout the city through social housing projects, as well as for the need to increase the supply of rental housing throughout the city for all income levels (City of Calgary, 1998).

Calgary Affordable Housing Strategy

Over the past couple of years, the City of Calgary has been focusing more intensely on the growing issue surrounding housing issues. Recognizing that they and senior levels of government are large stakeholders in the affordable housing market, the City of Calgary has developed the Affordable Housing Strategy as a guiding document that will help to

improve the state of housing in Calgary. The City has developed eight housing roles that they feel are most important and has formulated the following principles in order to prioritise future housing needs in Calgary:

- The City's *core business and first priority is to build/operate non-market housing.*
- City financial resources should *leverage other resources* through public/private/non-profit partnerships & joint ventures for City and community initiated projects.
- The City will *administer financial assistance for capital projects, preferably in the form of land*, the value of which is charged against Program 489, the Capital Housing Reserve. The value of the land will be determined at the discretion of the Affordable Housing Team as per the Terms of Reference of the Corporate Housing Capital Reserve (FB99-62 and its amendment).
- *Council's Affordable Housing Team will establish priorities* for the use of City financial and staff resources, including a decision about the ratio of funds to be used for City core business projects in relation to funds allocated through a community process (e.g., The Calgary Homeless Foundation Funders' Table), *based upon the results of a biennial housing needs assessment* undertaken by the City in consultation with other affordable housing stakeholders.
- Although The City will cultivate partnerships with all relevant stakeholders, it *will assign staff or request aldermanic involvement in other organizations' Boards only when* The City has contributed significant resources to the organization, when frequent liaison is important for accomplishing The City's identified housing priority area, or when requested by another level of government.
- Council of The City of Calgary will be requested to *reduce / waive / relax development fees and standards*, subject to Affordable Housing Team recommendation, where it clearly enhances the viability and affordability of the project.
- Wherever possible *affordable housing shall be provided on a "mixed income" basis* where some residents receive a rental subsidy while the remainder pay a "low end" of market rent. This kind of affordable housing creates healthy communities, reduces the concentration of low-income households and contributes to affordable housing opportunities for both non-market and market renters.
- The City of Calgary will *support the increase of expertise within communities* to develop and implement local solution to local housing issues (City of Calgary, 2002).

Use of this kind of strategy could ensure that any development of affordable housing is not overlooked in the future. By taking initiative, the City has conceded that there are growing issues surrounding housing across the entire city.

Sustainable Suburbs Study

Developed in 1994, this study was designed in order to change the manner that suburban growth was occurring in Calgary. Concerned with the long-term sustainability of a sprawling city, the City initiated this study in order to create options for the development of more sustainable communities in suburban locations. Following are a list of the issues that the City identified as detrimental for the development of affordable housing in new suburbs:

- Exclusive estate areas separate housing types based on economic class;
- Separation of uses make access to facilities difficult without a vehicle;
- Lack of affordable housing is a problem in Calgary;
- Little choice in housing is also a problem;
- Minimum house size prevent low cost housing;
- There is a reluctance to build multifamily housing by developers;
- Even when land is set aside for MF, local residents petition building;
- Segregation results in socially unhealthy communities;
- Calgary's suburbs are suited only to a particular group, income, and household structure;
- Lack of choices, mobility options and employment is a problem (City of Calgary, 1994).

Using the Study to address these issues and recommending alternate design techniques for new suburban communities allows for the possibility of integrating more affordable housing into communities throughout Calgary.

1.7.3 Best Practices

Case Study: Community Housing Land Trust Foundation, Vancouver, BC

The Community Housing Land Trust Foundation (CHLTF) was created in 1993 by the Co-operative Housing Federation of B.C. to preserve the stock of affordable housing in B.C. and to acquire land on which new affordable housing could be developed. Since its formation, CHLTF has explored a number of ways to use the community land trust model to secure affordable housing.

Each experience of forming a land trust and bringing land into trust is unique, depending on government policies and regulations, financing opportunities, social and neighborhood characteristics and the specific individuals involved. As the land trust concept spreads and as CHLTF's specific project experience grows, experience gained from one project can be applied to the next to improve the outcome and reduce transaction costs and time.

Case Study: Oregon Affordable Housing Tax Credit, Oregon, United States

Through the use of state tax credits, lending institutions are able to lower the costs of financing by as much as four percent for housing developments serving low-income households. The saving generated by the reduced interest rate must be passed directly through to the tenant in the form of reduced rent.

A reservation will be given to projects with an acceptable application that have obtained a “Firm Commitment of Financing.” A Certification is good for the length of the loan or up to a maximum of 20 years, whichever comes first.

Entities considered “qualified borrowers” or “sponsors” are for-profit and not-for-profit corporations, state or local entities (including but not limited to housing authorities) or a controlling general partner in a limited partnership that enters into restrictive covenants regarding the rents on a property and eligibility of occupants.

Applications are taken twice a year as part of the department’s Consolidated Funding Cycle. A \$100 non-refundable fee is due with the application. Successful applicants

must apply for a loan and receive financing within timelines established at the time of reservation.

One hundred percent of the savings from the reduced loan must be directly passed through to low-income tenants/end users in the form of lower rents. Low-income households are those having less than 80 percent of the area median income as defined by the U.S. Department of Housing and Urban Development (HUD). The sponsor must show an intent to use the tax credit project for a long term affordable housing use. Restrictive covenants will be required to guarantee long term affordability.

The financial institution holding the OAHTC loan is annually required to submit loan status reports along with a five percent fee of the tax credits used. This fee is passed on to the sponsor.

1.7.4 Affordable Housing Policy Goal

To provide a mix of attractive, sustainable and energy efficient housing that will be affordable to households in all income ranges.

1.7.5 Objectives & Policies

H1.0 Concentrations of Affordable Housing

Objective: *To accommodate a diversity of lifestyle choices by creating affordable housing near neighbourhood nodes that offer a range of higher density housing forms.*

Policies

H1.1 The City shall set minimum density requirements for neighbourhoods in accordance with levels outlined in the subsequent Housing Study conducted as part of this project.

H1.2 Designation of land for multi-family residential units within or in proximity to neighbourhood commercial nodes shall be encouraged.

- H1.3** Initiation of a citywide or community housing levy by the City to fund construction of and ensure community based support for affordable housing.
- H1.4** Implement the use of inclusionary zoning either through mandatory government regulation or incentives to the private development industry to integrate affordable housing into the community.
- H1.5** The City of Calgary shall streamline approval processes for the Pine Creek Village community in order to provide a desirable atmosphere for development of affordable housing that will in turn secure needed residents within the area.
- H1.6** Lobbying of higher levels of government to encourage investment in grant & loan programs for affordable housing such as rent supplement.
- H1.7** Partnerships between the public/private sectors shall be strongly encouraged to offset upfront financing costs and risks associated with affordable housing development in order to facilitate the inclusion of affordable housing in the community.
- H1.8** The City shall encourage the formation of a land trust that will be the responsibility of a local community-based not-for-profit affordable housing organization that will protect the public interest in affordable housing within Pine Creek Village (See Case Study: Vancouver, British Columbia).

H2.0 Employment Centre Housing

Objective: *To promote limited development of housing within the Employment Centre area that is accessible to all income levels.*

Policies

H2.1 Affordable housing shall be encouraged and permitted for housing above office and retail uses in the neighbourhood commercial nodes and core employment centre.

H2.2 Implementation of density bonusing that will allow for the provision of affordable housing in the core area shall be strongly encouraged.

T3.0 Rental Housing

Objective: *To ensure there is provision of affordable rental housing throughout the community that addresses the needs of lower income groups.*

Policies

H3.1 The City shall consider the exemption of certain development fees to attract development of affordable rental housing to Pine Creek Village.

H3.2 Second suites shall be permitted and encouraged in single-detached housing through direct control zoning to create an alternative form of affordable housing within the community.

H3.3 Use of tax credits to lower financing rates and promote lower-rent housing shall be encouraged through lobbying senior levels of government for legislative changes. The savings from reduced interest rates must be passed directly to tenants in the form of reduced rents (See Case Study: Oregon, United States).

H4.0 Community Amenities

Objective: *To provide a variety of public and private amenities that support the diverse nature of residents contained within the community.*

Policies

- H4.1** Strategic location of services within the community, more specifically the neighbourhood nodes, shall be undertaken in order to serve the majority of residents efficiently.

- H4.2** Location of transit stops shall be directed toward concentrations of residents in an attempt to accommodate all residents of the community.

1.8 Employment Centre Strategies

1.8.1 Context

Pine Creek Villages Study Area is a location in the southeastern-most part of Calgary that has been identified as a prime location for the development of a viable community supported by a large employment centre. Through a thorough examination of existing conditions, policies, market trends and projections, a more holistic understanding of the area and its potential for development as an employment centre can be realized. With better understanding of the context that the Pine Creek Villages Study Area is situated within, goals, objectives and policies may be more adequately formulated in order to create a favourable atmosphere for the future development of an employment centre.

Economic and Demographic Context

Calgary's economy has long been driven by the oil and gas industry and is currently a leading city for growth in Alberta and Canada. Calgary's economy has continued to diversify and is currently 0.75 out of 1.00 on the Conference Board of Canada's scale of economic diversification, which represents a diversified city. The city is expected to see continuing strong growth in the business services, manufacturing, transportation and warehousing, as well as in high tech and communications sectors (Price Waterhouse Cooper, 2002).

Currently, there is next to no one living in the proposed Pine Creek Villages area. However, the City projects that it will reach a population of almost 10,500 by 2020, and over 37,000 by 2030. The City is also projecting that the population of the area in the vicinity of and including the Pine Creek Villages Study Area will increase from almost 48,000 in 2000 to over 108,000 by 2020, and almost 158,000 by 2030 (Price Waterhouse Cooper, 2002).

Employment centre demand is affiliated with the need for additional office space as the workforce in Calgary continues to grow. Forecasts by the Conference Board of Canada indicate that over the next 5 years, Calgary will experience one of the lowest

unemployment rates that Canada has seen in the last 25 years (Price Waterhouse Cooper, 2002).

The South and Southeast Sectors of Calgary have above average levels of single-detached dwellings and of owner-occupied dwellings. They contain 15% of the employee's place of work, though nearly 27% of the employed population resides in these sectors. By comparison, the Central Sector contains nearly 49% of Calgary employees place of work, but only 22% of the employed population place of residence (Price Waterhouse Cooper, 2002). Based on the imbalance of residents to jobs in the South Sector, the proposed Pine Creek Villages Study Area is a prime location for growth in employment opportunities for the entire South Sector and will attempt to help alleviate growing transportation pressures being experienced in the City.

Market for Office Space: Trends and Projections – Calgary

The City of Calgary has various areas that account for the different shares of the supply and demand for office space. The South Macleod Trail Employment Centre Study by Price Waterhouse Coopers has identified and grouped these areas into relevant sectors. For the purpose of this study, the supply and demand of office space and its implications toward the market in the Pine Creek Villages Study Area will be examined.

Downtown Calgary is the dominant office submarket in Calgary. Supply totalled 32.7 million square feet (sf) in 2000, and increase of 1.2 million sf since 1996. Demand totalled 30.3 million sf in 2000, and increase of 1.6 million sf since 1996. The city should experience a significant increase in the demand for office space by 2020. It is estimated that the forecast demand in 2020 would total 54.9-60.4 million sf, an increase of 13.3-18.8 million sf (32-45%) since 2000 (Price Waterhouse Cooper, 2002).

Market for Office Space: Trends and Projections – Suburban Market

They account for a moderate amount of space in the City. Supply totalled 8.2 million sf in 2000, an increase of 1.3 million since 1996. Demand totalled 7.5 million sf in 2000, an increase of 1.4 million since 1996. These markets should experience a substantial

increase in relative terms. It is estimated that the demand in 2020 would total 10.2-14.1 million sf, and increase of 2.8-6.5 million sf (34-86%) since 2000. Its share of the City's demand for office space should increase from 18% in 2000 up to 24% in 2020 (Price Waterhouse Cooper, 2002).

Market for Office Space: Trends and Projections – South Sector

The South Sector is the second largest suburban submarket. Supply totalled 3.6 million sf in 2000, an increase of 0.6 million sf since 1996. Demand totalled 3.3 million sf in 2000, an increase of 0.7 million sf since 1996. It is estimated that the forecast demand in 2020 should total 4.4-6.1 million sf, and increase of 1.0-2.7 million sf (29-79%) since 2000. The warranted supply of office space should total 4.7 million sf to 6.5 million sf, with the population approach forecasting 5.5 million sf. This submarket should require an additional 1.1 million sf to 2.9 million sf of office space, with the population approach forecasting an additional 1.8 million sf. This submarket should require the development of an additional 84 acres to 222 acres of land for office space, with the population approach forecasting an additional 141 acres (Price Waterhouse Cooper, 2002).

Based on the growing population, demand for office space in the suburban and south sectors of the City of Calgary, development of an employment centre in the Pine Creek Villages Study Area of comparable size to the proposed Southeast Employment Centre – 500,000 sf – would not be unreasonable to assume (Price Waterhouse Cooper, 2002). Based on research completed by the employment centre group as part of this extensive study of the area, it is suggested that 40 acres and 80 acres is needed in order to develop employment uses in The Pine Creek Villages Study Area. The development would serve the entire 3,600-acre Pine Creek Villages Study Area, as well as the employment centre. The timing of development would have to occur in accordance with residential development in the Pine Creek Villages Study Area to make the development feasible, as there would have to be a population to facilitate the need for employment.

Market for Retail Space: Trends and Projections

Growth in the residential sector does not mean that there will be a significant increase in demand for retail within the Pine Creek Villages Study Area. The major retail node located in Shawnessy Centre is adequate to serve the entire South Sector for many years. After examination of the Pine Creek Villages Study Area and the surrounding market it was determined that some neighbourhood-oriented commercial development would be appropriate when the local population reaches approximately 7,000-10,000 (Price Waterhouse Cooper, 2002). The neighbourhood-oriented commercial would be encouraged near central, strategic nodes to promote a more compact, pedestrian-oriented community. It is not expected that a major concentration of commercial development would be needed in the Pine Creek Villages Study Area in the foreseeable future due to the existing concentration of commercial development that is nearby and well positioned in the Shawnessy Centre.

1.8.2 Existing Policy

Extensive examination of existing policy relevant to the Pine Creek Villages Study Area was undertaken with the intention that possible areas of intervention and policy formulation for an employment centre would be identified. Following the analysis of existing policy, the following documents and their contents were identified as relevant to the formulation of policy for an employment centre within the Pine Creek Villages Study Area.

M.D. of Foothills/City of Calgary Inter-municipal Development Plan

This document is the over-riding statutory policy between the City of Calgary and the Municipal District of Foothills. It provides direction for future land use and development with regard to both municipalities. The Pine Creek Villages Study Area forms part of the primary growth corridor identified in the plan. Developments must be controlled to limit fragmentation on land located in the fringe of these two abutting municipalities. It is also recognized within the document that it is important to create employment opportunities in the south of Calgary in order to relieve growing transportation issues and problems (City of Calgary & M.D. of Foothills, 1998).

Calgary Municipal Development Plan

Contained within the vision of the Calgary plan is the idea that the City is attempting to move toward communities where people live close to their places of work and use transit on a regular and consistent basis. This is one of the main principles for the Pine Creek Villages Study Area, which is consistent with the City's vision. The Calgary Plan specifically designates the Pine Creek Villages Study Area as a long-term employment centre use (City of Calgary, 1998).

Calgary Growth Area Management Plan (GRAMP)

The Calgary Growth Area Management Plan recommends a regional land use development pattern for the south growth corridor, which integrates the visions expressed in the Sustainable Suburbs Study, Calgary Plan, Calgary Transportation Plan, and Urban Parks Master Plan. The Growth Area Management Plan points out that the inequity of jobs for the people in the south is at a crucial point, and there is need to identify land in the south for a major employment centre. While acknowledging and realizing that the Southeast Centre is already in the stages of development, the Pine Creek Villages Study Area is also identified as a possible location for a regional employment centre (City of Calgary, 1999).

Employment Centre Strategy

The purpose of the Employment Centre strategy is to assist in directing suburban job growth to growth corridors that contain concentrations of jobs and change commuting patterns to places of work in order to help alleviate growing transportation pressures being experienced throughout the City.

The Strategy defines Employment Centres as:

- a concentration of non-retail businesses or facilities in a suburban location;
- a high level of access and public amenity;
- compatible with adjacent uses, while attempting to accommodate as high an ultimate level of non-retail employment as is reasonable for the site context;

- pedestrian-friendly and transit-oriented; and
- having interim and long-term uses that attract desired employment and related uses over time (City of Calgary, 1999).

The Strategy proposes Pine Creek Villages as a “Major Suburban Centre” with a “significant concentration of activity and a focal point of office development, medium density residential and community facilities” (City of Calgary, 1999).

Characteristics of these Employment Centres include:

- becoming a central focal point for future residential growth corridors;
- providing a broad range of public and community facilities, such as large regional recreation centers, schools, health centers, etc.;
- enhancing the job to population balance;
- high level of LRT or bus service;
- accessible to pedestrians, transit riders, and vehicular traffic; and,
- having ample land available for non-retail employment uses over time (City of Calgary, 1999).

The City of Calgary has recently been working on a new policy that will replace the Employment Centre Strategy, entitled the Jobs/Housing Strategy. Still in draft form, the new policy will seek to improve the job balance across the city, which is a main focus of the Calgary Plan. Attempting to balance the east-west distribution of jobs and locate new employment in clusters or corridors, the strategy will focus on key factors that will stimulate demand for office space in the suburbs. With the adoption of the new Jobs/Housing Strategy, the desire and need to attract more employment to suburban locations will be strengthened and reinforced.

1.8.3 Best Practices

Case Study: Commercial Industrial Tax Incentive Policy, City of Melville, SK

In Order to attract new business and industry to the City's commercial and industrial areas, and to encourage existing established business and industry to expand their

operation, the Council of the City of Melville *in cooperation with the Melville School Boards* hereby offers an attractive commercial/industrial tax incentive program.

City Council gives its commitment to grant a three (3) year tax exemption of 75% of the new constructed building assessment of the property taxes (taxes on land are payable) for the owners of new businesses or industries that establish in the City. A further incentive of up to 25% is available, when "local contractors" and/or "locally purchased materials" are used, based on the percentage of "local content" of the total construction cost. The burden of proof falls upon the property owner. "Local" means, the business where the services and/or materials have been purchased from must pay property taxes in Melville either directly or through rent. Applications for incentives must be made within three (3) months of taking out the building permit. Council may offer additional tax incentives to businesses on the basis of employment.

A two (2) year tax exemption of 50% of the municipal portion of property taxes applies to the following owners of existing and new businesses.

- for the owners of existing businesses who expand their premises through construction. The incentive will only apply to the newly constructed portion.
- for the owners of existing businesses who renovate their premises, but do not expand, the incentive will only apply to the increase in assessment.
- for the owners of existing businesses who rent and now purchase a building and move the business into this building
- for new businesses who purchase an existing business and continue to operate the business and/or purchase an existing vacant building and operate a business from it.
- Where a business enterprise is located in rented premises, only the owner of the building may make application for the incentives provided for in Section 1 (a) to (b). The owner of the building must provide verification that the benefits of the incentives are being passed on to the renter.
- Tax incentives will terminate effective on the date that a business ceases operation, whether in privately owned premises or rented premises, with 100% of the Municipal share of property taxes becoming payable, pro-rated from the date of cessation of business to the end of the then current calendar year.
- Tax incentives will be terminated where property taxes are in an unpaid position.
- The tax incentives are not transferable or assignable.
- When City owned land is purchased for the location of a new business, the provisions of the City's Offer to Purchase form will apply.
- All required Development Permits, Building Permits approved by the City's Building Inspector must be obtained from the City.

1.8.4 Employment Centre Policy Goal

To ensure the provision of adequate and appropriate employment throughout the community that will encourage people to work and reside within Pine Creek Villages.

1.8.5 Objectives & Policies

EM1.0 Employment Centre

Objective: *To create a vibrant mixed-use core area that will function as a focal point for the new community.*

Policies

EM1.1 The implementation of flexible zoning practices that will allow for alternate interim uses for undeveloped land within the core employment centre. More flexible zoning will allow the owners of land to use vacant or undeveloped property as a desirable interim use (e.g. parkland) that will be an amenity for the surrounding area in accordance with the proper planning tools.

EM1.2 Public/private partnerships should be explored by the city in order to foster development in the core area and secure significant employment opportunities for the residents of Pine Creek Villages. Subsequent to studies conducted in the area, a catalyst similar to the proposed hospital in a neighbouring community is needed to attract and stimulate growth and development of employment opportunities.

EM1.3 The creation of a business vitalization fund shall be encouraged at the initial stage of development in order to maintain the area and jointly promote the commercial areas. It is a similar concept to “revitalization” zones with a proactive approach that would apply to both employment center and neighbourhood commercial. The idea is similar to the development fees charged in McKenzie Towne to provide alternative design and lifestyle features to the residents and maintain a distinct character.

EM1.4 In accordance with Section 1-3 of Calgary’s Municipal Development Plan, the city shall seek partnerships and/or funding from other levels of government in order to subsidize costs in development and create a more attractive marketplace for developers.

EM1.5 Provision of land for important cultural, recreational, community and institutional facilities along with the accommodation of a mix of comparatively intense retail, personal service, office and residential uses that will provide opportunities for residents to both live and work within the community shall be incorporated into the planning of Pine Creek Villages. Restrictive zoning and/or land banking by the City can be used to accomplish these types of uses, acknowledging that there may be discretion used in order to attract and establish desired uses.

EM2.0 Local Retail

Objective: *To ensure that there are clusters of commercial development located at strategic points within the neighborhoods to reduce automobile dependence and promote walkable, pedestrian friendly commercial uses.*

Policies

EM2.1 Land shall be designated in order to locate neighbourhood commercial nodes at desired positions throughout community in order to support local commercial needs and provide a focal point for each identified neighbourhood.

EM2.2 Apartments shall be permitted above ground floor retail in the neighbourhood commercial nodes in order to promote walkable communities.

EM2.3 Restriction of lot sizes shall be incorporated into the planning of the community to restrict unwanted “big box” commercial uses and to create a more compact design in the local commercial nodes and the core employment centre.

EM3.0 Municipal Services & Amenities

Objective: *To ensure that municipal infrastructure and civic amenities are efficient and maintain the vitality of the employment center and community.*

Policies

EM3.1 The City of Calgary shall streamline approval processes for the Pine Creek Villages community in order to provide a desirable atmosphere for development to occur that will in turn secure needed employment within the area.

EM3.2 Location of transit stops at strategic points throughout community will be encouraged and provide access to all commercial and residential areas within the community that will support alternate options to automotive travel. The major light-rail transit station must be located within the core employment centre to allow maximum access to the rest of the city by non-auto oriented travel methods.

EM3.3 The City shall require the provision of adequate designated and designed open space in commercial areas that will accommodate and compliment the community.

EM4.0 Phasing

Objective: *To encourage the construction of significant employment generating uses within the community during the initial stages of development.*

Policies

EM4.1 The phasing of development shall occur in geographic and chronological sequence of development that shall be established in a master-servicing plan.

EM4.2 The City shall be encouraged to purchase and hold undeveloped land within commercial areas in accordance with a phasing plan for development that shall allow for the creation of desirable interim uses (e.g. parks, parking lots, temporary uses) prior to the appropriate scheduled development of permanent uses. Further,

the City should be proactive and relocate some offices to the area in order to foster and attract development early in the development process.

EM4.3 The City shall consider provision of tax incentives and subsidies to attract desirable commercial early in the process of developing Pine Creek Villages. Direct provision of tax incentives and subsidies would partially offset initial risks involved from the development industry and encourage developers to support the vision of Pine Creek Villages (see Case Study: City of Melville, Saskatchewan).

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