Disclaimer
The attached Report has been prepared by Select Engineering Consultants Ltd. on behalf of the Client in accordance with the agreement between Select Engineering Consultants Ltd. and Client for the services described in the Report (the “Agreement”), and is subject to the budgetary, time and other constraints and limitations set forth in the Agreement.

The information and data contained in the Report, including without limitation the results of any inspections, sampling, testing and analyses and any conclusions or recommendations of Select Engineering Consultants Ltd. (the “Information”), represent Select Engineering Consultants Ltd.’s professional judgment in light of the knowledge and information available to it at the time of preparation of the Report. Select Engineering Consultants Ltd. has not updated the Report since the date that the Report was prepared. Further, Select Engineering Consultants Ltd. has relied upon the accuracy of the information provided to Select Engineering Consultants Ltd. by Client in order to prepare the Report and Select Engineering Consultants Ltd. has not independently verified the accuracy of such information, nor was it required to do so. Thus, Select Engineering Consultants Ltd. shall not be responsible for any events or circumstances that may have occurred since the date on which the Report was prepared which may affect the information contained therein, or for any inaccuracies contained in information that was provided to Select Engineering Consultants Ltd. by Client.

Select Engineering Consultants Ltd. makes no guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof and Select Engineering Consultants Ltd. shall not, by the act of preparing or issuing the Report and the Information, be deemed to have represented that the Report or the Information is accurate, exhaustive, complete or applicable to any specific use.

Except as required by law, the Report and the Information are to be treated as confidential and, unless otherwise agreed to by Select Engineering Consultants Ltd. and Client, may be used and relied upon only by Client and its officers and employees, subject to the foregoing limitations. Select Engineering Consultants Ltd. accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information unless those parties, prior to using or relying on the Report or the Information, have obtained the express written consent of Select Engineering Consultants Ltd. and Client to use and rely on the Report and the Information, and signed an Authorized User Agreement in a form provided or agreed to by Select Engineering Consultants Ltd.

This Disclaimer is attached to and forms part of the Report.

© 2017 SELECT ENGINEERING CONSULTANTS LIMITED. ALL RIGHTS RESERVED

THIS DOCUMENT IS PROTECTED BY COPYRIGHT LAW AND MAY NOT BE REPRODUCED IN ANY MANNER, OR FOR ANY PURPOSE, EXCEPT BY WRITTEN PERMISSION OF SELECT ENGINEERING CONSULTANTS LIMITED.
# Table of Contents

1.0 Introduction ................................................................................................................................................. 1

1.1 Purpose ......................................................................................................................................................... 1

1.2 Background ................................................................................................................................................... 1

1.3 Location ........................................................................................................................................................ 1

1.4 Land Ownership .......................................................................................................................................... 3

1.5 Statutory compliance ................................................................................................................................. 3

1.5.1 Capital Region Board .......................................................................................................................... 3

1.5.2 Municipal Government Act ................................................................................................................ 3

1.5.3 Municipal Development Plan ............................................................................................................. 5

1.5.4 The North of Lakeland Drive Area Concept Plan ............................................................................... 9

1.5.5 Land Use Bylaw ..................................................................................................................................... 9

1.6 Emerald Hills Centre Sustainability Summary and Development Concept ............................................. 9

2.0 Existing Conditions ....................................................................................................................................... 10

2.1 Existing Conditions ..................................................................................................................................... 10

2.2 Surrounding Land Use ................................................................................................................................. 10

3.0 Public Participation .................................................................................................................................... 12

4.0 Development Concept ................................................................................................................................. 13

4.1 Development Objectives ............................................................................................................................ 13

4.2 The Development Concept ......................................................................................................................... 14

4.3 Urban Village .............................................................................................................................................. 14

4.3.1 Urban Village Residential .................................................................................................................. 16

4.3.2 Urban Village Mixed Use - Commercial/Residential ..................................................................... 17

4.4 Highway Commercial Land Use ............................................................................................................... 17

4.5 Service Commercial Land Use .................................................................................................................. 17

4.6 Medium Density Residential Land Use .................................................................................................... 18

4.7 Low Density Residential Land Use ........................................................................................................... 18

4.8 Parks and Open Space ................................................................................................................................. 19

4.9 Trail System ................................................................................................................................................ 20

4.10 Transportation ........................................................................................................................................... 22

5.0 Major Utility Services and Staging ................................................................................................................. 25

5.1 Sanitary Servicing ....................................................................................................................................... 25

5.2 Water ............................................................................................................................................................ 25

5.3 Stormwater Management ............................................................................................................................ 25

5.4 Other Services ............................................................................................................................................. 25

5.5 Staging ........................................................................................................................................................ 25

6.0 Summary ....................................................................................................................................................... 29
List of Appendices

Appendix A: Land Use Statistics ......................................................................................................................... 30
Appendix B: Student Generation Statistics ............................................................................................................. 33

List of Figures

Figure 1: Plan Location ................................................................................................................................................ 2
Figure 2: Land Ownership ............................................................................................................................................. 4
Figure 3: Existing Site Features .................................................................................................................................. 11
Figure 4: Land Use Concept .......................................................................................................................................... 15
Figure 5: Open Space and Linkage .............................................................................................................................. 21
Figure 6: Transportation ................................................................................................................................................ 24
Figure 7: Sanitary Servicing ....................................................................................................................................... 26
Figure 8: Water Servicing ............................................................................................................................................. 27
Figure 9: Storm Servicing ........................................................................................................................................... 28
1.0 Introduction

1.1 Purpose

The purpose of the Emerald Hills Area Structure Plan (ASP) is to provide a framework for the proposed use of land, sequence of development, density of population and the general location of major transportation routes and public utilities for the area. The ASP has been prepared in conformity with Section 633 of the Municipal Government Act and the Strathcona County Municipal Development Plan.

1.2 Background


This document consolidates these previous documents and designates a Service Commercial land use within the Plan area.

A 2016 amendment eliminated the business employment land use and replaced it with a new medium density residential land use category.

1.3 Location

The Emerald Hills ASP area is located within the north central portion of the Urban Service Area of Sherwood Park (Figure 1). Emerald Hills is defined on the north by Highway 16, the Yellowhead Highway, on the south by the future Amberley Way and existing Aspen Trail, on the east by Clover Bar Road and on the west by Sherwood Drive.

Much of the area has been registered and constructed. The ASP area comprises the following legally defined land areas:

- Several registered parcels under a variety of public and private ownership; and
- A small portion of the NW and SW quarter sections of Section 11, Township 53, Range 23, W4M lying east of Sherwood Drive.

The ASP area comprises approximately 122.82 ha (303.48 ac) of land. Much of the Plan area is developed out.
1.4 Land Ownership

The remaining unregistered land within the ASP area is all owned under corporate entities. (See Figure 2)

Four pipeline easements are registered against the land, as follows:

- The ATCO Gas and Pipelines utility right-of-way, 1290RS running at a right angle across the extreme northwest corner of NW 11;
- The ATCO Gas and Pipelines utility right-of-way, 5752NY extending north/south through the ASP area immediately east of and parallel to the quarter section line in NE 11 and accommodating a high pressure gas line; and
- The Strathcona County utility right-of-way 812 0631 running east/west through the NW and NE quarter sections, accommodating a trunk sewer line.

1.5 Statutory compliance

1.5.1 Capital Region Board

The Province of Alberta’s Growing Forward: The Capital Region Growth Plan, in Appendix B the Capital Region Land Use Plan, provides a framework for guiding regional growth based on the principles of protecting environmental resources, minimizing the regional footprint, strengthening communities, increasing transportation choice, ensuring efficient services; and supporting regional economic development. In October 2009 the Capital Region Growth Plan: Addendum (CRGPA) provided additional land use direction through supplementary regulation and the mapping of Priority Growth Areas (PGA) establishing density targets aimed at minimizing the Region’s development footprint.

Emerald Hills ASP is located within Priority Growth Area B, a designated location for residential growth, that has a density target of 30-45+ dwelling units per net residential hectare (upnrha).

1.5.2 Municipal Government Act

This ASP has been prepared within the statutory context of Part 17 of the Municipal Government Act (S.A 1994, M-26-1), Section 633(2)(a). The MGA provides that an Area Structure Plan must describe:

- The sequence of development proposed for an area;
- The land uses proposed for the area, either generally or with respect to specific parts of the area;
- The density of population proposed for the area, either generally or with respect to specific parts of the area; and
- The general location of major transportation routes and public utilities.
1.5.3 Municipal Development Plan

The Emerald Hills ASP area is designated under several categories within the Strathcona County Municipal Development Plan (MDP),

- Commercial Highway 16 Policy Area;
- Commercial Service Policy Area;
- Urban Village;
- Medium Density Residential Policy Area; and
- Low Density Residential Policy Area.

1.5.3.1 Commercial Highway 16 Policy Area

Relevant to the Commercial Highway 16 designation:

Ensure highway commercial developments are situated in a location which ensures safe access and egress from adjacent roadways without disrupting their transportation function by locating:

- In areas with good visibility and accessibility; and
- In accordance with Strathcona County and Alberta Infrastructure and Transportation regulations, policies and requirements for highway roadside development.

Promote safe and efficient transportation corridors in the development of highway commercial uses.

Ensure highway commercial developments are compatible with adjacent land uses.

Enforce urban design guidelines and landscaping standards along highways that serve to enhance the visual form and character of development, as well as promote the economic assets of these corridors.

1.5.3.2 Commercial Service Policy Area

Relevant to the commercial service designation:

Ensure new service commercial developments are located:

- In planned business parks or centers with good visibility and accessibility.

Encourage a high standard of architectural appearance and landscaping standards;

Require storage facilities to be located within enclosed buildings, in service commercial developments; and

Encourage service commercial sites which allow for business support and service uses.
1.5.3.3 Urban Village

Relevant to the Urban Village designation:

Promote the development of urban villages to support accessibility to meet every day needs and to create vibrant and attractive, multi-functional community focal points;

Encourage pedestrian-oriented commercial activity within and adjacent to urban villages;

Encourage street level retail with residential developments above, in order to increase the number of people on the streets and enhance the vitality and security of an area;

Ensure integration of access points, parking and design between adjacent commercial and residential developments; and

Promote urban villages as mixed use developments which provide individuals a place to live, work and play and as:

- A location for festivals and events;
- A location for a variety of residential and commercial developments that will attract people to the site throughout the day as well as in the evenings; and
- A preferred location for specialty retail, cultural establishments and civic centers.

1.5.3.4 Low Density Residential Policy Area

Relevant to low density residential designation:

Collaborate with the development industry and community organizations to facilitate the development of both accessible rental and ownership housing, to allow for the transition from rental tenants through the continuum of housing forms;

Encourage a mixture of housing types within all residential neighbourhoods to accommodate a broad range of housing needs, incomes and lifestyles;

Ensure the density of any residential development is directly related to the following:

- The carrying capacity of the lands proposed for development having regard for site conditions, environmental considerations and impacts, and other factors that may be considered in the design of the proposal;
- The suitability and availability of municipal services and infrastructure necessary to support the proposal; and
- The compatibility of the proposed density with that of the surrounding area and the character of the community.

Review residential development standards to ensure that access to affordable public amenities, community services and housing are encouraged at the initial planning and design stage of the development;

Ensure there is an adequate amount of housing and services offered for extended and specialized care;
Support the use of alternative building methods in order to encourage the development of more sustainable housing;

Require new residential development to provide and pay for infrastructure and servicing improvements, as well as the extension of services to facilitate the development;

Maintain a reciprocal setback distance as defined in the Heavy Industrial Transition Overlay (IH-O) in the Land Use Bylaw between future residential uses north of Baseline Road and existing heavy industries which have, or could have, a significant detrimental effect on the safety, use, amenity, or enjoyment of adjacent or nearby sites due to appearance, noise, odour, emission of contaminants, fire or explosive hazards;

Evaluate and promote innovative residential housing concepts that result in high quality and higher density residential developments as a means of reducing the rate of agricultural land consumption due to growth. This will aid in encouraging social, environmental and economic sustainability; and

Collaborate with development/building industries and community organizations to facilitate the development of more sustainable housing criteria such as:

- Sites which include considering elements such as alternate transportation options, reduced site disturbance and heat island effects;
- Increased water efficiency through such elements as eco-scaping, innovative wastewater technologies and water use reduction;
- Reduced energy use and the positive benefits on the atmosphere through the use of renewable energy and green power;
- Introducing materials and resources used to build homes that are recycled, thereby reducing construction waste; and
- Improving indoor air quality through the use of low emitting.

1.5.3.5 Medium Density Residential Policy Area

Relevant to the medium density residential designation:

- Ensure developments are at a size and scale appropriate for the neighbourhood
- Ensure planned dwelling groups, strata or condominium developments and medium density housing projects:
  - Utilize sustainable development principles (See Chapter 4 – Sustainability and Growth Management), in the overall design of the project and incorporate amenity areas;
  - Provide pedestrian, cycling and vehicle circulation connections to adjacent residential areas;
  - Include a variety of housing types to meet a range of life cycle, lifestyle, social needs and income levels;
  - Provide transitioning elements into the overall design in order to ensure sensitive integration with surrounding urban development;
  - Incorporate community facilities into the design that may be utilized on a joint-use basis with the adjacent community or neighbourhood; and
Incorporate urban design elements such as plazas, focal points and usable open spaces into the design that re-enforce continuity with the surrounding neighbourhood and foster a sense of community by providing opportunities for citizens to interact.

- Encourage new, large, multi-lot developments to have an open and accessible neighbourhood form, that emphasizes the integration of new housing with the broader community; and
- Encourage a balanced distribution of multi-family, higher density residential developments along transit routes, arterial and major collector roadways, or adjacent to major services and amenities, such as schools and recreation facilities in order to encourage the development of more complete and diverse neighbourhoods.

1.5.3.6 Institutional

Relevant to institutional designation:

Encourage the development of institutional facilities that are cost and energy efficient from a lifecycle costing perspective; that utilize regenerative energy heating and cooling sources which are alternatives to fossil fuels; and are designed to meet green building design standards such as LEED (Leadership in Energy and Environmental Design), wherever possible;

Encourage the expansion of a range of community support services, in an effective and efficient manner through alliances with private, non-government and public sectors. Advocate the provision of services with voluntary organizations;

Pursue opportunities for the shared (joint) use of sites and/or multiple use facilities, such as fire, emergency services, health care, police, schools, recreational facilities, and libraries;

Coordinate efforts to establish joint use fields and community facilities in the development of new urban neighbourhoods as well as the redevelopment of existing urban neighbourhoods; and

Prepare development criteria for public institutional facilities. Development criteria must consider the following:

- Ensure the scale and design of institutional developments are sensitive to adjacent land uses;
- Ensure sites are suitable with respect to the scale and nature of the institutional use and are in an accessible location;
- Locate institutional developments so as to buffer residential land uses from commercial land uses, industrial land uses, highways or arterial roadways;
- Traffic related impacts on residential areas, such as the filtering of vehicular traffic through residential areas, should be minimized through appropriate design.
1.5.3.7 Health Care

Strathcona County will:

Consider the following guidelines with respect to the development of future health care related facilities:

- Locate in close proximity to transit services;
- Compatible in scale and form relative to adjacent residential land uses;
- Locate close to commercial facilities; and
- Locate close to passive and active open space.

Continue to encourage more health care specialists to locate in Strathcona County.

1.5.4 The North of Lakeland Drive Area Concept Plan

The North of Lakeland Drive Concept Plan (NLDACP) was approved on July 2, 2003. The NLDACP provides a comprehensive policy framework and context for a larger area of developing lands in the north Sherwood Park area. The NLDACP is intended to guide more detailed planning and engineering studies to be completed by area land developers. The NLDACP provides an interim level of planning review between the broad policies of the Municipal Development Plan and the details of the Area Structure Plan. The Emerald Hills Area Structure Plan conforms to the intent of the NLDACP.

1.5.5 Land Use Bylaw

The ASP area must conform to the Strathcona County Land Use Bylaw. Direct Control zoning has been approved for the highway commercial, service commercial and medium density residential areas in the north plan area.

1.6 Emerald Hills Centre Sustainability Summary and Development Concept

DC69 (Bylaw 38-2008) and DC72 (Bylaw 35-2009 stated that upon subdivision within these districts a “Development Concept Plan” will be required. As a result the Emerald Hills Centre Sustainability Summary and Development Concept Plan has evolved to include modules within the highway commercial, service commercial and medium density residential land uses of the Emerald Hills Area Structure Plan as they have developed. The Emerald Hills Centre Sustainability Summary and Development Concept Plan is approved by Strathcona County Council.

The Emerald Hills Centre Sustainability Summary and Development Concept Plan was prepared to ensure that consistency and compatibility was maintained in the development area. The document includes sections on Access and Transportation, Urban Design, Landscape Design and Sustainability Principles.
2.0 Existing Conditions

2.1 Existing Conditions

The Emerald Hills ASP plan area is well suited for urban development in terms of soils, slopes and overall drainage conditions. The soils are clay loam soils formed on glacial till deposits. Soils of similar composition are common within parts of the urban service area of Sherwood Park and present few constraints to development. Much of the plan area is developed.

Generally the land slopes to the north, northwest and northeast and the topography is undulating to (Figure 3). The highest land is in the southeast corner of the ASP area, where the elevation exceeds 691 m. The northwest quarter of the ASP area is below the 684 m contour, and the lowest point in the extreme northwest corner is 676 m. The northeast corner has a low point of 677 m. This represents total relief from southeast to northwest of about 15m (49 feet).

The lower lands in the northwestern and northeastern portions of the plan area are the logical location for stormwater management facility requirements.

Only the pothole in NE 11 was identified and evaluated in the report entitled “Ecological Assessment of the Remaining Habitat Patches in the Undeveloped Lands Within the Urban Service Area of Sherwood Park North f Baseline Road” prepared for Stantec Consulting for Strathcona County in April 2000. The purpose of the report was to determine the condition and suitability for integration of natural areas into the urban fabric of the neighbourhood.

According to the report, the marsh in NE 11 is characterized as follow:

"Permanent wetland with vegetation zones developing characteristic of a freshwater marsh, little connectivity, no rare plants observed, plant and animal diversity moderate, no recreational use, not sustainable due to its seasonality and lack of connectivity." (Stanley Consulting Group, 2000, Table 3, p.3.4).

In addition, the pothole has not been claimed as a watercourse under Section 3 of the Public Lands Act. Hence, it will not be integrated into the neighbourhood, nor will the other small treed areas.

2.2 Surrounding Land Use

The existing Lakeland Village Mobile Home Park and Jubilee Landing manufactured home park is located immediately to the east of Emerald Hills in the northwest quarter of Section 12. The industrializing area of Yellowhead Industrial Park is located across the Yellowhead Highway to the north of Emerald Hills. A North of Yellowhead Area Concept Plan is approved north of Highway 16. Lands to the west across Sherwood Drive are included in the Yellowhead East Sherwood Business Park. Lands to the south within Section 11 are the subject of the Aspen Hills ASP that has been prepared and approved concurrently with the Emerald Hills ASP. Portions of these lands are undergoing urban development.
3.0 Public Participation

The public participation process, which accompanied plan preparation, involved dialogue with adjacent residents and other stakeholders at three public open house/meeting sessions.

The initial public session, held on February 20, 2002 in Festival Place, was undertaken before any concept for the Emerald Hills or Aspen Trails ASPs had been prepared. The initial meeting was hosted by Strathcona County. The North of Lakeland Drive Area Concept Plan, Aspen Trails and Emerald Hills were all introduced at that meeting. Genstar Development Company followed the Strathcona County presentation with a brief presentation on the planning process and the numerous factors to be considered in planning a new neighbourhood. Key messages which were expressed at that session by the public were (1) respect for existing residential development forms, (2) provision of adequate park space and linkages, and (3) minimization of traffic impacts on adjacent neighbourhoods.

The second public open house was held on April 4, 2002 in Festival Place. Genstar/UMA hosted the second meeting. Intonation presented included the challenges of addressing topographic constraints and opportunities, transportation options, a preliminary concept plan for both Emerald Hills and Aspen Trails ASP and the rationale for the open space concept. A number of specific issues related to permanent land uses were also identified.

Following the second open house, the draft document was prepared and reviewed by Strathcona County Administration before being fully circulated.

Throughout the process, meetings were held with County administrative staff and the consultant for the North of Lakeland Drive Area Concept Plan to review progress and resolve issues. Appropriate revisions were incorporated into the Plan and the Emerald Hills ASP was resubmitted to Strathcona County in July 2003.

A third public meeting was held on October 2, 2003. The public who attended the meeting were generally satisfied with the proposed plan and excited with the concept of the Urban Village area. Most were pleased with the possibility of a long-term care facility and senior’s apartment. Overall, the attendees found the information presented at the meeting useful and the location convenient.

A Public Engagement Plan (PEP) was approved by Strathcona County in December of 2015 in support of an amendment to the Emerald Hills ASP to remove “business employment land use” and add in its place “medium density residential land use”.
4.0 Development Concept

4.1 Development Objectives

The exceptional range and quality of development within the Emerald Hills Area Structure Plan area meets or exceeds Strathcona County Municipal Development Plan policies. Emerald Hills contains state of the art institutional uses in the form of the Strathcona Community Hospital and the Archbishop Jordan Catholic High School. The design of the mixed use Urban Village and Emerald Hills Centre respond to current Strathcona County sustainability and urban design initiatives. Emerald Hills Centre is a landmark shopping development that has raised the community business profile in Sherwood Park and Strathcona County. Emerald Hills Centre’s contemporary urban village architecture and landscape theming includes pedestrian friendly walkways complete with a variety of interesting focal points, public art, and landscape features.

Specific objectives of the ASP are:

- To provide a range and variety of housing opportunities to meet current and future market conditions in conjunction with the adjacent Aspen Trails neighbourhood;
- Provide affordable housing to all market segments from first time home buyers to empty nesters;
- To provide internal open space spaces and linkages, with opportunity for external linkages to the community open space and trail system;
- To support pedestrian circulation by providing safe, attractive and convenient pedestrian routes throughout the Plan area and within development parcels, giving consideration to appropriate traffic calming measures;
- To provide a safe and convenient circulation system that directs traffic to future Clover Bar Road, Sherwood Drive and Lakeland Drive;
- To provide a regional recreation site for active playing fields large enough to accommodate neighbourhood and district activities;
- To create an opportunity for stormwater management facilities that meet the needs of the ASP and also provide an attractive entry feature at the southeast corner at Sherwood Drive and the northeast corner at Highway 16;
- To provide for a range of business employment, service commercial and highway commercial opportunities which are compatible with residential development;
- To create a safe and attractive interface between residential and employment areas;
- To provide economical servicing which responds to existing site conditions; and
- To provide a suitable site and location for a range of higher density intergenerational housing forms and associated commercial needs.
4.2 The Development Concept

The Emerald Hills Area Structure Plan includes a variety of land uses. There are six distinct major spatial modules or components that are defined by Emerald Drive and the open space corridor created by the north/south gas line (Figure 4). Each of the modules has a distinct land use. Emerald Drive and the open space corridor serve both to define these development modules and to provide an interface between them.

The six modules are identified below.

- The Emerald Hills Urban Village area, west of Clover Bar Road, is approximately 20 ha (50 ac);
- Low density residential is identified in the southeast central quadrant of the ASP area;
- Highway commercial extends along the majority of the south frontage of Highway 16 to a depth of about 300 m (985 ft);
- Service commercial uses are proposed within the area bounded by Emerald Drive, Sherwood Drive, Amberley Way and Ebony Drive, and a medium density residential land use component is concentrated along Amberley Way and Ebony Drive;
- An institutional site west of Clover Bar Road; and
- A 15 ha regional recreation park area is located in the south central area.

Stormwater management facilities are located in the low areas at the west end of the highway commercial corridor and at the east end north of the Urban Village area. These stormwater facilities provide “Gateways” to Sherwood Park. Additional stormwater management is designated through the west central low area and separates the highway commercial, service commercial and medium density residential areas from the regional recreation area. Smaller neighbourhood parks are provided as part the Urban Village area and part of the low density residential areas.

4.3 Urban Village

An Urban Village is designated in the northeast portion of Emerald Hills Neighbourhood, west of Clover Bar Road. The Urban Village will create a mixed use community with an internal focus and clearly defined boundaries. The Urban Village will be an inter-generational village, providing housing and lifestyle opportunities for a range of age groups from young families to the elderly. The Urban Village will provide a continuum of care facilities, providing older people with options of aging in place, active adult housing, assisted living and long-term care. It will address housing and lifestyle needs of the post war “boomer” generation as it advances in years, while still providing for young families and singles in a complementary setting. It will allow Strathcona County to respond to evolving needs in their community.

The Urban Village will display a more compact urban form with higher densities than those of surrounding neighbourhoods. The North of Lakeland Drive Area Concept Plan allows for an overall average density of 50 units/ net ha. In general, the southern portion of the Urban Village will be of lower density, with density and building mass increasing to the north. Appropriate and compatible transitions to the surrounding land uses will be incorporated.
Transitions between massing and built form of adjacent housing will be carefully managed through the planning and design process.

An internal central municipal reserve corridor will run the length of the Urban Village, providing a north-south landscaped greenway for pedestrian movement in a safe and attractive setting. This corridor will create a functional and visual unity within the Urban Village and provide a pedestrian corridor for residents of all the communities to access the commercial area and medical uses in the north. The absence of cross-streets and the provision of an internal walkway system will create a walkable, pedestrian-oriented environment. Access and egress to the Urban Village will be from the perimeter roadways. Internal cross-streets will be minimized or avoided.

The clustering and density of population should be sufficient to sustain viable transit service to provide links with other community activity areas within Sherwood Park and region. While access will be provided to transit routes along Clover Bar Road, direct access to transit within the Urban Village is encouraged.

4.3.1 Urban Village Residential

All of the medium and higher density residential forms in Emerald Hills are located in the Urban Village. As stated earlier, the Urban Village will have a more compact residential form with higher densities. The generational diversity of the Urban Village will be evident in the clustering of a variety of housing types ranging from semi-detached through townhousing, stacked townhousing, apartments, and care facilities. These diverse housing forms will generally conform with existing Strathcona County Land Use districts but DC districts may be required to achieve unique combinations of housing. Densities will average approximately 50 units/ net ha within the entire urban village area. Based on allowable units per hectare per category the Concept Plan proposes approximately 1,092 units in the Urban Village.

4.3.1.1 Urban Village - Medium Density Residential

Two sites are designated for medium density housing. Medium density residential is defined as row housing and may take the form of semi-detached row housing, fourplex or other attached housing forms on sites with a range of density up to 37 units per hectare (15.0 upac). The medium density residential sites will address multi-generational market segments, from young families through to active adults. Medium density could include units for singles, families or active adults, and may be either rented or owned condominium units. These will be developed under Strathcona County Land Use Bylaw designations approved at the time of subdivision. Direct Control Zoning may be utilized to facilitate innovative site designs.

4.3.1.2 Urban Village - High Density Residential

The Urban Village Land Use Concept has five sites designated for apartment use. This will provide for apartment type housing, up to 16m (four stories) in height with densities up to 75 units per net hectare (30.35 upac). The most northwesterly apartment site will be developed in conjunction with a long-term care facility and so will require a DC Land Use designation to appropriately address the complementary senior apartment interlace. Densities must average 50 units/ net ha within the entire urban village.
A second apartment site is designated south of the long-term care site and will provide housing for active adults. A third apartment will be developed in the northeasterly Urban Village in conjunction with mixed use areas. Approximately 50% of the mixed use area is designated for residential apartment development (2.35 ha/5.81 ac). The remaining two sites are located west of Clover Bar Road. These sites will provide opportunities for a range of age groups initially but will be designed for conversion to accommodate a senior population as demographics warrant.

4.3.2 Urban Village Mixed Use - Commercial/Residential

Approximately 50% of the mixed use area is intended for commercial and service development (2.35 ha/5.81 ac). The Urban Village commercial will include a variety of personal service and retail facilities to serve its own residents. These will include food retailing, wellness facilities, personal and business services such as pharmacies, beauticians, travel agencies, financial services, and complementary uses. These retail, commercial and personal services will be clustered at the northeast corner of the Village. Residences may be developed above these services.

4.4 Highway Commercial Land Use

An extensive highway commercial land use corridor is designated along the south frontage of Highway 16 and the east frontage of Sherwood Drive up to the future Amberley Way collector. Emerald Drive’s alignment is strongly influenced by the trunk sewer line alignment, which generally defines the southern limit. Access to the highway commercial corridor will be from Emerald Drive to the south. Emerald Drive joins Clover Bar Road on the east and Sherwood Drive on the west at locations that have been determined in consultation with Alberta Transportation and Strathcona County.

The types of uses envisioned in the corridor include typical sales and services to the travelling public, vehicle-oriented sales and service as well as large format retail.

The highway commercial corridor is an average of 300 m (985 feet) deep. It could be subdivided for a single tier of lots or for two or three tiers of lots with a front or rear service road. The details of subdivision and local road format will be oriented to the needs of potential users and will be determined at the time of subdivision.

4.5 Service Commercial Land Use

A6.90 ha / 17.0 ac service commercial site is designated for the majority of the area bounded by Emerald Drive, Sherwood Drive, Ebony Drive and Amberley Way. This area provides for a mix of lower intensity business and service commercial uses compatible with and complementary to Emerald Hills Centre (uses including – but not limited to - business support services, eating establishments, banks, professional offices, retail services, and personal care services are examples). Permitted uses will be defined through the zoning for the area.
Development within the service commercial area will be oriented toward the arterial and collector roadways with parking fields internalized where feasible. The Emerald Hills Sustainability Summary provides direction for urban design, landscape design, provision of a pedestrian circulation system, and how sustainability measures should be addressed to ensure a high standard of development for this site, consistent with development elsewhere in the Emerald Hills neighbourhood. Amberley Way, a major collector road, provides a transition from this site to residential uses to the south and rear yard fences provide visual screening and privacy.

4.6 Medium Density Residential Land Use

Emerald Hills also provides opportunity outside of the Urban Village for medium density residential uses by way of a 3.35 ha / 8.28 ac site in the southwest plan area. Higher density residential in this location is adjacent to the service commercial lands and so it provides a partial transition between these commercial uses and the low density residential uses located south of Amberley Way. A transition between the higher density residential and the lower density residential to the south is provided by Amberley Way itself and parcels backing onto this roadway also have rear yard fences offering visual screening.

The medium density residential area is intended for townhouses, apartments, congregate housing and seniors citizen housing or a combination thereof. Development shall not exceed a height of six storeys in this area. This variety of housing types can provide a full range of unit sizes and tenure options that will accommodate a variety of groups, affordability, and lifestyles. The area would have a blended maximum density of 150 units per hectare. This land use area is within the Emerald Hills Sustainability Summary and Development Concept Plan that provides direction for urban design, landscape design, provision of a pedestrian circulation system, and addressing sustainability measures.

4.7 Low Density Residential Land Use

Emerald Hills will provide a wide range of housing choices for residents of Strathcona County. In addition to the multiple options available in the Urban Village, complimentary low density residential is identified west of the Urban Village.

The low density residential area is defined by collector roads on the north and south, by the north/ south open space corridor to be created on the alignment of the ATCO pipeline on the west and by the Urban Village on the east. This residential module will have a distinctive theme, identity and character that will enhance and complement the Urban Village and Aspen Trails. Architectural guidelines will be established and implemented by the developer.

The low density residential designation includes both single detached and semi-detached development and will be developed at an overall maximum density of 21.5 units per hectare (8.70 upac). Ten percent of the low density residential component will have rear access through lanes. Lanes are used to facilitate rear yard access, decrease on-street parking and to limit direct driveway access to roadways for narrower width lots. Lanes may also be used regardless of lot size to limit access to higher traffic flow collector roads.
Unique and cost effective servicing provisions and modified road cross-sections may be required to facilitate innovative development. Any variations to Strathcona County standards would require approval from appropriate agencies and departments. All residential areas outside the Urban Village will be designated for low density residential.

The low density residential component of the ASP area will accommodate about 262 dwelling units, with a population potential of approximately 629 persons under the assumptions presented in Appendix 1.

Low density residential land will be developed according to the requirements of the residential land use districts of the Strathcona County Land Use Bylaw. Changing buyer profiles and consumer demographics will require the developer to supply the market with housing forms which are both affordable and innovative. Direct Control (DC) districts may be utilized to facilitate innovative designs.

4.8 Parks and Open Space

The parks and open space system will support a variety of passive and active recreational activities (Figure 5). The system also provides the setting for recreational circulation within the ASP area with links to Aspen Trails to the south and to the regional trails system.

There are five major components of the parks and open space system:

- One neighbourhood park, 0.84 ha (2.06 ac) in size, located within the low density residential module at the interface between low density and Urban Village residential development;
- A 15.0 ha (37.06 ac) regional recreation park is centrally located west of the residential module and adjacent to Emerald Drive;
- An extensive stormwater management system, comprising three distinct parcels;
- An open space corridor bisecting the ASP area and formed by the ATCO gas pipeline adjacent to the community park; and
- A 1.92 ha (4.74 ac) passive park linking the Urban Village to areas beyond.

The neighbourhood park will serve the low density residential module with a variety of active and passive play spaces. However, it is too small to accommodate extensive playing fields.

The regional recreation park, on the other hand, is designated specifically for active play areas. It is located adjacent to Emerald Drive to accommodate the traffic generation from league and tournament play without penetrating into the heart of residential areas.

Stormwater management facilities will be required in the low areas of the northwest and northeast corners of the ASP areas. The storm pond has an area of approximately 5.16 ha (12.75 ac) and provides an opportunity for an attractive and impressive landscape feature at a main entry not only to Sherwood Park’s urban area but also to the commercial areas flanking each side of the pond. The northeast storm pond is approximately 1.21 ha in size and also serves both a technical and “gateway” functions. Storm ponds may vary somewhat in size and shape when detailed engineering is complete.
The more central storm pond has an area of 5.23 ha (12.92 ac). It will provide an amenity for the adjacent medium density residential and complement the regional recreational area.

The three stormwater management facilities collectively occupy a substantial amount of land, contributing 11.60 ha (28.65 ac) of open space to the ASP area. This comprises about 10.0% of the gross developable area. A portion of the stormwater area, beyond what is required for Emerald Hills, has been incorporated to address shortfalls in Clover Bar Ranch storage. The actual area will be defined through detailed engineering design and cost sharing issues will be addressed.

The open space corridor formed by the gas pipeline and adjacent municipal reserve space will provide a link between the community park and Aspen Trails neighbourhood to the south.

The 10% municipal reserve requirement for Emerald Hills is 11.66 ha (28.81 ac) based on a gross developable area of 116.57 ha. The actual proposed municipal reserve is 17.76 ha, which is 15.2% of the gross developable area. Municipal reserve deferred from Aspen Trails to the south and other areas in Sherwood Park has provided the overdedication required for the 15.0 ha community park area (See Appendix 1).

When the stormwater management facilities are combined with the municipal reserve dedication, the total open space in Emerald Hills is 29.36 ha (72.53 ac), which is approximately 25.2% of the gross developable area.

The ASP area will maintain a spacious appearance due to the combination of the open space elements and the overdedication of municipal reserve deferred to Emerald Hills.

Aspen Trails and Emerald Hills will ultimately dedicate 10% land for municipal reserve dedication. Potential municipal reserve that may be designated in the stormwater management facilities will be included in the overall municipal reserve. As detailed stormwater management designs are completed, minor adjustments may be required to the form and shape of the parks adjacent to the stormwater facilities to incorporate credits for municipal reserve.

4.9 Trail System

The hierarchical trail system envisioned for the plan area will include the following elements:

- A major on sidewalk pedestrian system along the major collector roadway;
- A major pedestrian system as a central spine adjacent to the gas pipeline right-of-way; and

A minor pedestrian system comprising the following elements:

- Trails linking the stormwater management facilities to municipal reserve areas and connecting them to the trail along the major collector roadway system;
- Additional linkages through the neighbourhood to be facilitated by a combination of on-roadway sidewalks, public utility lots, municipal reserve and open spaces;
- Connections from the collector system to the Heritage Walkway/ TransCanada trail system on Clover Bar Road and future Lakeland Drive; and
- Pedestrian links through the Urban Village.
The varied combination of rights-of-way, on-sidewalk collector system, defined walkways and undefined walkways will provide opportunities for interesting and diverse recreation experiences within the Emerald Hills neighbourhood. Modified road cross-sections may be utilized to enhance the walkway system. Safety issues will be addressed during the detailed design.

All trails will be developed in accordance with Strathcona County standards. Greater detail will be determined at the time of subdivision.

### 4.10 Transportation

The transportation system for the ASP area will be composed of Emerald Drive (a central east-west major collector road), Amberley Way (a collector along the south boundary), minor collector roads and a series of local roads (Figure 6). The ASP area is served on the perimeter by one arterial roadway access point from Clover Bar Road and one arterial access from Sherwood Drive. No access will be allowed from Highway 16. Emerald Drive provides numerous points of access to land uses on either side. In addition, access points from Amberley Way serving the residential module, medium density residential and recreation area is provided.

The highway commercial, institutional, regional recreation area, low density residential and “Urban Village” all have convenient access to Emerald Drive. Emerald Drive joins Clover Bar Road on the east and Sherwood Drive on the west at locations determined in consultation with Alberta Transportation. Emerald Drive is located south of the future Sherwood Drive/Yellowhead Highway interchange at a distance that meets transportation access management standards. The details of subdivision and local road format will be oriented to the needs of potential users and will be determined at the time of subdivision. Cross access agreements will be established to facilitate access between these uses at the subdivision stage.

The south boundary of Emerald Hills is defined by a major collector roadway, Amberley Way, which separates it from the Aspen Trails Neighbourhood. Although this roadway is included in the Aspen Trails Neighbourhood, it provides access to the highway commercial medium density residential, regional recreation area, low density residential and “Urban Village”, within Emerald Hills. The ASP’s major east-west roadways are intended to disperse traffic between the primarily residential areas and the other land uses.

Access to the highway commercial land use will be from Emerald Drive. The form of this access will be determined by potential users. It could take the form of front or rear service road and could be in single or multiple tiers. Due to its prominent location as an entry to Sherwood Park care and attention must be given to respect its “gateway” status. No highway commercial access from Highway 16 will be allowed.

Two north-south collectors are designated: Ebony Drive, east of the medium density residential area adjacent to the SWMF; and Eton Boulevard, west of the Urban Village. These roadways provide links to the Aspen Trails Neighbourhood to the south as well as north-south mobility within the Emerald Hills Neighbourhood.
The collectors will define a route for transit service so that most residences will be within 400 metres of transit. Attention will be given to pedestrian crossings to ensure pedestrian safety and convenience.

Residential access within the Emerald Hills ASP area will be developed in an appropriate format as cross-sections are addressed in the Transportation Impact Assessment (TIA). Ten percent of the residential access will be by lanes. Residential lots may also flank or back onto the two major collector roads. Traffic calming measures and front drive access will also be addressed in the TIA.

Boulevard and/or median landscape treatment at the main neighbourhood entry point will create and reinforce a sense of entry into a distinct, identifiable neighbourhood.

Provisions for noise attenuation along the west side of Clover Bar Road as required by Strathcona County standards will be addressed at the subdivision stage. Noise attenuation measures would be anticipated along the west boundary of Sherwood Drive.

The future requirements for widening of Yellowhead Highway and the required highway, interchanges at Sherwood Drive and Clover Bar Road has been identified and excluded from the gross developable area.
5.0 Major Utility Services and Staging

5.1 Sanitary Servicing

The ASP site generally drains from the south to the northwest. The existing Northeast Sanitary Trunk Sewer is located on the east Clover Bar Road allowance and north boundary of the ASP area (Figure 7). The Central Sanitary Trunk is located on the west boundary of the ASP area. It is proposed that the gravity sanitary sewer from the Northeast Sanitary Trunk Sewer and Central Sanitary Trunk will service the ASP area.

5.2 Water

The water supply for the ASP site is provided from 600 mm water mains extended up to Emerald Hills at Clover Bar Road and Sherwood Drive. A water network analysis was undertaken and addressed in the Design Brief.

5.3 Stormwater Management

Storm drainage in the area is basically northwesterly with a small area to the northeast, both ultimately reaching the North Saskatchewan River. Storm flows are directed to three stormwater management facilities to control the discharge to the existing drainage courses to a level agreed to in the Stormwater Management Plan. Cost sharing related to on-site stormwater storage from Clover Bar Ranch has been determined in consultation with the County.

Control and storage of runoff waters is provided in the facilities to meet Alberta Environment and Strathcona County standards required for their design and operation. Further information on the system operations was provided in the Design Brief. Stormwater drainage patterns are shown schematically on Figure 9.

5.4 Other Services

Other essential services, such as natural gas, electrical power, telephone and cable TV, are available for extension into the future developments as may be required.

5.5 Staging

Development would proceed westerly from Clover Bar Road and easterly from Sherwood Drive. Individual stages will be of a size that meets market conditions.
6.0 Summary

This Emerald Hills Area Structure Plan defines the major land use, transportation and servicing systems for a new area.

The ASP has been designed to accommodate changing market conditions, and community preferences for the new millennium. The neighbourhood will be developed to provide a variety of single and multiple family housing opportunities responsive to Sherwood Park’s changing community needs now and in the future.

The ASP designates five major types of development areas:

- An Urban Village area in the southeast;
- Highway commercial along the south frontage of Highway 16,
- A service commercial / medium density residential module in the southwest;
- A regional recreation area in the southwest central area; and
- Low density residential in the southeast central area.

The parks and open space system will be composed of a large, centrally located regional recreation park, a smaller neighbourhood park, three stormwater management facilities, a central park link through the Urban Village and on sidewalk walkway links. The trail system will have external links to the Heritage Trail and TransCanada Trail. Overall, open space is 25% of the gross developable area and will create an overall spacious character to the neighbourhood.

Access to the ASP area is from Clover Bar Road on the east and Sherwood Drive on the west. As well, access is provided from the Amberley Way to the south, which is the northern limit of Aspen Trails. The internal transportation system will be composed of a combination of major and minor collector roadways, local roadways and lanes.

The planning process included an extensive public participation process that included two initial public open houses/meeting sessions, as well as newspaper advisements and mailouts.
APPENDIX A
Land Use Statistics
## Land Uses

<table>
<thead>
<tr>
<th>Land Uses</th>
<th>Ha</th>
<th>%</th>
<th>Units</th>
<th>%</th>
<th>Pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GROSS AREA</strong></td>
<td>122.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway 16</td>
<td>5.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clover Bar Road</td>
<td>0.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atco Gas Line</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Village PUL</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GROSS DEVELOPABLE AREA</strong></td>
<td>115.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Reserve *</td>
<td>18.04</td>
<td>15.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWMF</td>
<td>12.74</td>
<td>11.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circulation (10% GDA)</td>
<td>11.60</td>
<td>10.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>42.38</td>
<td>36.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-Residential Land Use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Employment</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway Commercial</td>
<td>24.16</td>
<td>20.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Commercial</td>
<td>6.90</td>
<td>6.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>8.09</td>
<td>7.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>39.15</td>
<td>33.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mixed Use Urban Village</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium/High Density/Institutional/Commercial (I)</td>
<td>1.49</td>
<td>1.3%</td>
<td>(32)</td>
<td>7.4%</td>
<td>(160)</td>
</tr>
<tr>
<td>Medium/High Density/Commercial (VI)</td>
<td>2.13</td>
<td>1.8%</td>
<td>256</td>
<td>10.5%</td>
<td>454</td>
</tr>
<tr>
<td>Medium/High Density/ Commercial (VII)</td>
<td>4.69</td>
<td>4.0%</td>
<td>94</td>
<td>3.9%</td>
<td>166</td>
</tr>
<tr>
<td><strong>Subtotal- Mixed Use Urban Village</strong></td>
<td>8.31</td>
<td>7.1%</td>
<td>530</td>
<td>21.7</td>
<td>1,043</td>
</tr>
<tr>
<td><strong>Residential Urban Village</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium Density (V)</td>
<td>2.61</td>
<td>2.3%</td>
<td>128</td>
<td>5.3%</td>
<td>227</td>
</tr>
<tr>
<td>Low/ Medium Density (IV)</td>
<td>1.79</td>
<td>1.5%</td>
<td>208</td>
<td>8.5%</td>
<td>369</td>
</tr>
<tr>
<td>Medium/ High Density (II)</td>
<td>1.66</td>
<td>1.4%</td>
<td>325</td>
<td>13.4%</td>
<td>579</td>
</tr>
<tr>
<td>Medium/ High Density (III)</td>
<td>2.10</td>
<td>1.8%</td>
<td>431</td>
<td>17.7%</td>
<td>766</td>
</tr>
<tr>
<td><strong>Subtotal- Residential Urban Village</strong></td>
<td>8.16</td>
<td>7.0%</td>
<td>1,092</td>
<td>44.8</td>
<td>1,941</td>
</tr>
<tr>
<td><strong>Urban Village Subtotal</strong></td>
<td>16.47</td>
<td>14.2%</td>
<td>1,622</td>
<td>66.5</td>
<td>2,984</td>
</tr>
<tr>
<td><strong>Non-Urban Village Residential</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Density</td>
<td>14.57</td>
<td>12.6%</td>
<td>313</td>
<td>12.9%</td>
<td>629</td>
</tr>
<tr>
<td>Medium Density Residential</td>
<td>3.35</td>
<td>2.9%</td>
<td>502</td>
<td>20.6%</td>
<td>893</td>
</tr>
<tr>
<td><strong>Residential Subtotal</strong></td>
<td>17.92</td>
<td>15.5%</td>
<td>815</td>
<td>33.5%</td>
<td>1,821</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>115.93</td>
<td>100.0%</td>
<td>2,436</td>
<td>100.0%</td>
<td>4,506</td>
</tr>
</tbody>
</table>
Population generation is based on the North of Lakeland Drive Area Concept Plan

- Medium/High Density/Institutional/Commercial (I) based on 100 upha (40.5 upac)  
  + Persons per unit = 1.78
- Medium/High Density/Commercial (VI) based on 120 upha (48.5 upac)  
  + Persons per unit = 1.78
- Medium/High Density/ Commercial (VII) based on 20 upha (8.1 upac)  
  + Persons per unit = 1.78
- Medium Density (V) based on 45 upha (18.2 upac)  
  + Persons per unit = 1.78
- Low/ Medium Density (IV) based on 116 upha (46.9 upac)  
  + Persons per unit = 1.78
- Medium/ High Density (II) based on 196 upha (79.3 upac)  
  + Persons per unit = 1.78
- Medium/ High Density (III) based on 205 upha (82.9 upac)  
  + Persons per unit = 1.78
- Low Density residential based on 21.5 upha (8.70 upac).  
  + Persons per unit = 2.40
- Medium Density residential based on 150 upha (63 upac).  
  + Persons per unit = 1.87

<table>
<thead>
<tr>
<th>*Overall Municipal Reserve Dedication</th>
<th>MR Dedication</th>
<th>GDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDA in Section 11 (Aspen Trails &amp; Emerald Hills)</td>
<td>22.37 ha</td>
<td>223.74 ha</td>
</tr>
<tr>
<td>GDA previously dedicated and subtracted from Section 11 (Lot A Plan 5883KS and NW ¼ Section 2-53-23-W4M)</td>
<td>20.41 ha</td>
<td></td>
</tr>
<tr>
<td>Adjusted MR dedication in Section 11</td>
<td>20.33 ha</td>
<td>203.33</td>
</tr>
<tr>
<td>Deferred Reserve Caveat (DRC) From Clarkdale Meadows</td>
<td>2.14 ha</td>
<td></td>
</tr>
<tr>
<td>Lakeland Ridge MR Overdedication</td>
<td>0.20 ha</td>
<td></td>
</tr>
<tr>
<td>Total MR Dedication in Section 11 Plus DRC</td>
<td>22.27 ha</td>
<td></td>
</tr>
<tr>
<td>MR Dedication in Aspen Trails</td>
<td>4.98 ha</td>
<td></td>
</tr>
<tr>
<td>MR Dedication in Emerald Hills</td>
<td>18.04 ha</td>
<td></td>
</tr>
<tr>
<td>Additional 3% for Higher Density Required*</td>
<td>0.75 ha</td>
<td></td>
</tr>
<tr>
<td><strong>Overall Aspen Trails / Emerald Hills Dedication</strong></td>
<td><strong>22.27 ha</strong></td>
<td><strong>10.0%</strong></td>
</tr>
</tbody>
</table>

*0.75 ha is not included in the 10% Municipal Reserve dedication of 22.27 ha because it was an additional MR requirement to facilitate a higher density in the Urban Village Centre.
APPENDIX B
Student Generation Statistics
<table>
<thead>
<tr>
<th>Dwelling Units</th>
<th>Elementary</th>
<th>Junior High</th>
<th>Senior High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Students</td>
<td>687</td>
<td>290</td>
<td>338</td>
<td>1,315</td>
</tr>
<tr>
<td>Separate Students</td>
<td>196</td>
<td>104</td>
<td>48</td>
<td>348</td>
</tr>
<tr>
<td><strong>Total Students</strong></td>
<td><strong>883</strong></td>
<td><strong>394</strong></td>
<td><strong>386</strong></td>
<td><strong>1,663</strong></td>
</tr>
</tbody>
</table>

* Based on factors from Strathcona County, July 2003.

<table>
<thead>
<tr>
<th></th>
<th>Public:</th>
<th>Separate:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>0.2640 per unit</td>
<td>0.0753 per unit</td>
</tr>
<tr>
<td>Junior High</td>
<td>0.1116 per unit</td>
<td>0.0400 per unit</td>
</tr>
<tr>
<td>Senior High</td>
<td>0.1298 per unit</td>
<td>0.0185 per unit</td>
</tr>
</tbody>
</table>