North Hill Heights Area Structure Plan



Prepared for the Town of Strathmore

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1. Introduction

1.1. Purpose

The purpose of the North Hill Heights Area Structure Plan is to provide the long range plan for the community, to work collaboratively with other agencies and organizations, to conform to Town of Strathmore bylaws and regulations and create a "roadmap" for the phased development of this community.

1.2. Goals and Objectives

The overall goal for the North Hill Heights community is to create a comprehensively planned residential enclave that will provide for a walkable, healthy and attractive area of the Town of Strathmore.

The objectives of the North Hill Heights Area Structure Plan are:

- To comply with all Town of Strathmore bylaws and regulations
- To provide a variety of housing types
- To create a unique living environment
- To create a walkable community that will provide alternatives to personal vehicle use
- To create links to other communities within the Town of Strathmore

1.3. Vision

The vision for North Hill Heights is a desirable residential community, integral to the other communities in the Town and linked by paths and walkways, incorporating local commercial/retail uses and integrating amenities in functional infrastructure.



2. Plan Area

The site of North Hill Heights was included in the lands recently annexed into the Town of Strathmore. As such the lands are currently designated Agriculture General under the Wheatland County Land Use Bylaw. This Area Structure Plan provides the direction for the redesignation and subdivision of this community under Town of Strathmore bylaws and regulations.

The study area is 142.5 acres of a quarter section of land, that is located in the northern part of the Town. Figure 1 illustrates the Site Location.

The land is currently owned by 1318325 Alberta Ltd. The legal description of the land is the SE Quarter of Section 27, Township 24, Range 25, West of the 4th Meridian, lying east of the Western Irrigation District canal right of way Plan 9411127. The parcel contains 58.88 ha (145.5 acres) excepting out:

Road Plan 2467JK 0.4 ha (1 acre)
Road Plan 1526LK 0.4 ha (1 acre)
Descriptive 0410384 1.215 ha (3 acres), all within the Town of Strathmore.

The three acre parcel of land on the southeast corner of the quarter section of land is owned by a church. They declined involvement in the preparation of this Area Structure Plan. Future access shall be obtained through the North Hill Heights multi family site via a registered joint access agreement. Conversely, if the church organization determines that housing might be a better or more economical use of the site, they could apply for an ASP amendment to be included in this document as high density residential and access through the multi family site.

The land is bounded by North Boundary Road on the south, the main Western Irrigation District Canal on the west, Wheatland Trail (Highway 817) on the east and the Town of Strathmore municipal boundary on the north. The community of Hillview is directly south of North Hill Heights (NHH) and Lakewood Meadows is southwest of NHH.











NORTH HILL HEIGHTS

SITE LOCATION

FIGURE 1



NORTH HILL HEIGHTS

ASP BOUNDARY

FIGURE 2

3. Policy Context

An Area Structure Plan must conform to all of the current policies and regulations in place, including both provincial and municipal direction. This provides a summary demonstrating how the North Hill Heights Area Structure Plan conforms to all existing policy.

3.1 Provincial Land Use Framework

The Town of Strathmore is located within the South Saskatchewan Regional Plan Area which is a planning region currently being addressed by the Province. To date, the Terms of Reference have been prepared and background work is being compiled. The Plan will ultimately provide overarching guidelines regarding development in the area while ensuring the protection and sustainability of the environment. All plans adopted by municipalities will be required to conform to this plan. While there is no adopted Plan, the North Hill Heights ASP conforms to the discussions and preliminary direction of the draft South Saskatchewan Plan.

3.2 Municipal Government Act

The Municipal Government Act outlines the tools available to local municipalities to regulate and control future development. All municipalities with a population over 3,500 must prepare and adopt a Municipal Development Plan and all municipalities must adopt a Land Use Bylaw. In addition, they may use Area Structure Plans to provide more detailed land use direction. Section 633 of the Municipal Government Act states:

633(1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may by bylaw adopt an area structure plan.

(2) An area structure plan

- (a) Must describe
 - (i) The sequence of development proposed for the area,
 - (ii) The land uses proposed in the area, either generally or with respect to specific parts of the area,
 - (iii) The density of population proposed for the area either generally or with respect to specific parts of the area, and
 - (iv) The general location of major transportation routes and public utilities, and
- (b) May contain any other matters the council considers necessary.

An Area Structure Plan requires three readings and a public hearing to be adopted. The North Hill Heights ASP will follow this process.

3.3 Calgary Metropolitan Plan

The Town of Strathmore is one of 14 member municipalities in the Calgary Regional Partnership. The purpose of the Partnership is to outline strategic direction for regional development and servicing. The Calgary Metropolitan Plan, June, 2009, outlines four main themes for sustainable regional development, which include:

- Regional Landscapes protecting elements of our natural systems.
- Regional Settlement intensifying development in existing communities and new growth in compact urban nodes.
- Regional Infrastructure aligning settlement patterns with the provisions of new infrastructure.
- Preparing a regional economic strategy for the Calgary Region.

North Hill Heights supports the goals of the Calgary Metropolitan Plan and provides for a residential community in Strathmore with local commercial uses, that provides a mixture of housing styles with excellent trail and open space opportunities, linking this community with the rest of the Town, creating walkability and reducing the dependency on personal vehicles. The overall density of the development strives to achieve the density desired in the Calgary Metropolitan Plan.

3.4 Town of Strathmore Municipal Development Plan

The Town adopted their Municipal Development Plan in August 1998. At that time, the subject land was not located within the Town boundary. However, the primary goal of the MDP is to facilitate growth, in a responsible manner. This Area Structure Plan proposes growth in a responsible, phased manner that conforms to all current policies in the Town.

3.5 Town of Strathmore Land Use Bylaw

This land was recently annexed into the Town of Stathmore and as such is still designated Agriculture General by the Wheatland County Land Use Bylaw. Prior to any subdivision or development proceeding, the lands within this Area Structure Plan will apply for redesignation to the appropriate residential and commercial land use districts under the Town of Strathmore Land Use Bylaw.

3.6 Town of Strathmore Growth Plan

The Growth Plan was completed in 2008 as part of the background work for the Annexation application. As with the Municipal Development Plan, the plan focuses on the need for long term well planned growth. The North Hill Heights ASP lands are located within the East Growth Sector of the town, considered appropriate for residential and commercial uses.

3.7 Quality of Life Master Plan

The Town of Strathmore Quality of Life Master Plan, completed in February 2010, was prepared to outline the strategies required to provide recreation and cultural facilities, trails, parks, and open spaces within the Town. North Hill Heights supports the Plan by providing pedestrial linkages to the town, walkable access to local commercial uses and parkland.

3.8 The Town of Strathmore Wetland Conservation Plan

In 2005, the Town prepared a Wetland Conservation Plan as part of the background work for the Annexation application. No wetlands have been identified on the North Hill Heights property.

3.9 Strathmore Community Sustainability Plan

The Town of Strathmore completed the Strathmore Community Sustainability Plan in April, 2010. The Plan seeks to balance social, cultural, environmental, governance, and economic aspects of the Town as it moves into the future. North Hill Heights supports the Town's vision for the future by providing:

- Natural Environment North Hill Heights provides public access to adjacent significant natural areas for passive recreational enjoyment;
- Built Environment introduction of low impact development for storm water management (incuding re-use, irrigation, low flow utilities and aeration for increased evaporation), with a variety of housing types and the integrated pathway network connecting North Hill Heights with neighbouring communities; and,
- Economic North Hill Heights contributes to the vision for the newly annexed lands by supporting the Town's sustainability goals, creates a local neighbourhood commercial and creates a tax base.

3.10 Town of Strathmore Area Structure Plan Process

Development proposals that encompass large parcels of land require the preparation and adoption of an Area Structure Plan. Such is the case with North Hill Heights. The process the Town of Strathmore follows includes:

- Pre application meeting and plan review
- Holding of an Open House (the responsibility of the developer)
- First Reading of the Bylaw by Council
- Advertisement and Public Hearing
- Second and Third Reading of the Bylaw

The Specific Requirements for an Area Structure Plan are:

- Inclusion of a clear and precise purpose
- Compliance with the MGA and any Town documents

- Planning forecasts (phasing and population)
- Concise statement of the lands relationship to adjacent lands
- Policies addressing environmental protection, wetlands, tree covers, water bodies or other environmentally sensitive areas
- Land use, population and development densities
- Transportation plans including transit, pedestrian and bicycle routes
- Utility servicing
- Proposed development phasing
- Legal composite map with ownership pattern
- Public information program
- Any additional information deemed necessary by Town Administration
- All mapping in digital format

The North Hill Heights ASP has met all of the requirements for the preparation of an Area Structure Plan in the Town of Strathmore.

4. North Hill Heights Site Analysis

Several studies and assessments were conducted to determine the suitability of the site for development. The following is a summary of each study.

4.1. Physical Site Features

A Phase 1 Environmental Site Assessment was completed by G Tech Earth Sciences Corp. in September 2011 on the SE ¼ of Section 27, Township 24, Range 25, W4M, proposed as the North Hill Heights community. The purpose of the study was to assess the presence or non-presence of contamination and potential environmental hazards, past and present. Historical photos and site reconnaissance was completed, confirming that the land is currently used for grazing cattle. No significant environmental hazards or potential threat of contamination of or to the subject property were identified in the historical documentation review or site visit.

No further environmental study for soil or groundwater quality is warranted at this time. However, due to the age of the existing structures (built prior to 1980) asbestos containing materials, PCB's or lead paint may be present. If any of these materials are present, they should be disposed of properly under the direction of qualified personnel.

In addition to the Phase 1 ESA, an Environmental Background Study was completed by Management and Solutions in Environmental Science (September 2011). This assessment determined that the subject lands are undulating and heavily disturbed (cattle were present on the site when the field work was completed). The property is primarily grazed grassland with scattered shrubby species and small patches of wooded area, primarily in close proximity to existing structures. The property is bordered on two sides by major arterial roads and EnCana has a gas facility north of the property.

While the presence of some wildlife species was detected and some habitat areas, the provincial data base¹ indicates that no records of species tracked by either data base occur on the subject lands.

The Topography of the site is illustrated on Figure 3.

4.2 Transportation and Roads

Bunt and Associates Transportation Planners and Engineers was hired to complete a Transportation Review for both the Lakewood Meadows and North Hill Heights.² This

¹ Fish and Wildlife Management Information System (FWMIS), and the Alberta Conservation Management Information System (ACIMIS)

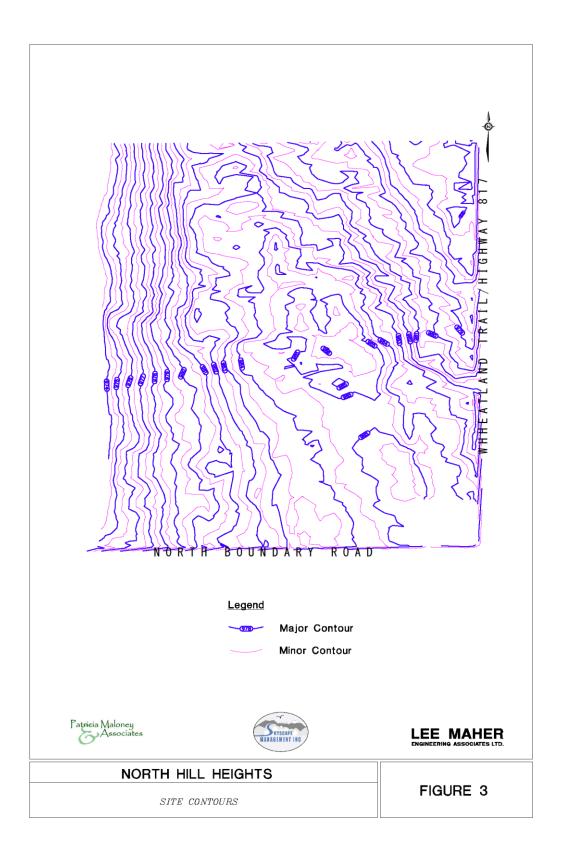
²The Area Structure Plan for both communities were being prepared by the same planning and engineering consultant team, and both communities access onto North Boundary Road and both parcels of land were included in the MSS of the Town of Strathmore.

study compared the level of proposed development on the two subject sites with the development assumed for these areas within the Town of Strathmore's Master Servicing Study (MSS) and then reviewed how the traffic generated by these two sites might affect North Boundary Road and associated intersections between Range Road 253 and Highway 817 (Wheatland Trail).

The assumptions included that the North Hill Heights site will include approximately 828 residential dwelling units and approximately 5 acres of commercial/retail uses that will draw primarily from within the adjacent community and from pass-by traffic already on the network. This community, when adjusted to account for factors outlined in the MSS, can be expected to generate approximately 7,360 vehicle trips per day. This is almost identical to the volume forecast in the MSS and as such, this site is well represented within the MSS forecasts. Bunt has concluded that all of the roadways currently proposed within North Hill Heights are adequate for the expected build out site traffic volumes. The development of the sites (including Lakewood Meadows) will require that North Boundary Road be constructed with two lanes. Although the ultimate configuration of North Boundary Road will be that of a four lane divided arterial roadway (to accommodate full build out in addition to existing traffic), only two of these lanes need to be provided at this time to accommodate the two communities. Development of the two sites would require the widening of North Boundary Road and Highway 817 at the Highway 817/North Boundary Road intersection to accommodate separate left turn lanes on all four approaches and signalization of this intersection will be required.

4.3 Historical and Archaeological Assessment

After review by the Historical Resources Management Branch, it has been determined that a Historic Resources Impact Assessment is not required. By letter dated December 29, 2011 the Alberta Government provided clearance for the proposed residential subdivision development located in the SE of Section 27-24-25 W4M. If any archaeological, palaeontological, Aboriginal traditional use sites and/or historic sites be encountered during development activities, the Land Use Planning Section of the Historic Resources Management Branch will be contacted.



5. Land Use Strategy

The following policies will guide the development of the lands within the community of North Hill Heights.

5.1 Overall Development Concept

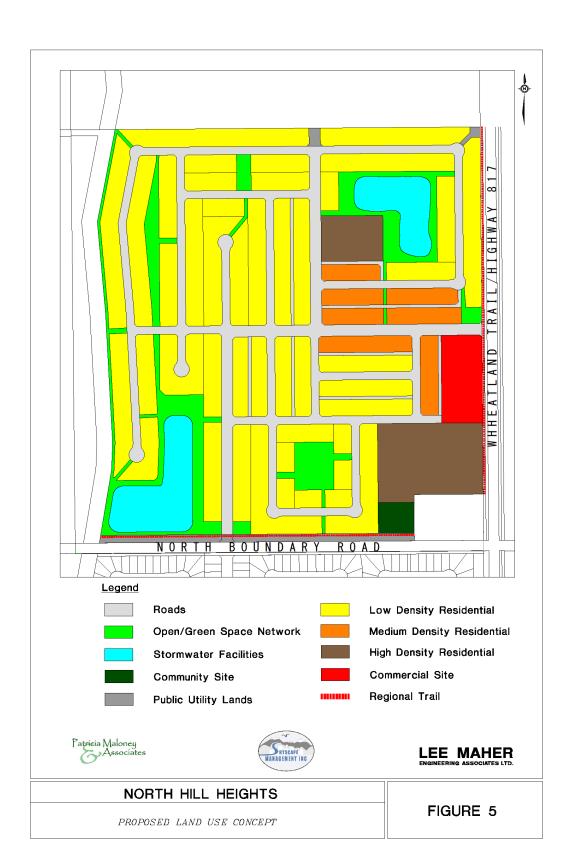
The overall development concept is for a predominantly residential development with opportunities for a variety of housing styles including low density residential (including narrow lot development), medium density development (including townhouse and duplex development) and high density multi family residential. A site has been identified for a neighbourhood/commercial site, with the opportunity for residential development on upper floors (which would provide bonus residential development in the community). The stormwater ponds, along with the proximity to the WID Canal, offer open space opportunities for walking and cycling, with the attempt to reduce the dependency on personal vehicle use. The development of North Hill Heights will generally follow the land use breakdown illustrated on Figure 4 and the land use concept outlined on Figure 5. The Area Structure Plan is conceptual only and specific areas and lot layouts will be determined at the time of subdivision. The developer is responsible for applying for the appropriate land use designation for the lands prior to subdivision and development. The following chart illustrates the land use areas proposed for North Hill Heights.

Figure 4
Land Use Breakdown

Land Use	Area	% of Site
Low Density Residential	27.7671 ha (68.61 ac)	47.8
Medium Density Residential	3.1622 ha (7.81 ac)	5.3
High Density Residential	4.0194 ha (9.93 ac)	6.9
Commercial	1.3590ha (3.36 ac)	2.2
Municipal Reserve ³	5.7715 ha (14.27 ac)	10.0
Storm Ponds	3.6184 ha (8.94 ac)	6.1
Public Utility ⁴	1.0566 ha (2.61 ac)	1.6
Internal Roads	10.9136 ha (26.77 ac)	18.7
Road Dedication	0.9185 ha (2.27 ac)	1.4
Total Land Area	57.678 ha (142.5 ac)	100.0

³ The Municipal Reserve includes parks and open space, pathways and trails and the proposed future fire hall site.

⁴ Includes storm ponds and lift station location in north east corner of site.



- 5.1.1 The development of the North Hill Heights community will generally follow the land use concept illustrated on Figure 5.
- 5.1.2 Specific areas and lot lines will be confirmed at time of subdivision.
- 5.1.3 Access for the community site proposed for a future fire hall will be a controlled access directly onto North Boundary Road.

5.2 Residential Policies

- 5.2.1 The development of the North Hill Heights community will generally follow the land use concept illustrated in Figure 5 and will be predominantly residential development.
- 5.2.2 The concept for residential development is to create a traditional community with a modified grid system and street presence for all front elevations of dwellings.
- 5.2.3 Low Density Single Family Residential housing will be the primary residential use for the community.
- 5.2.4 Single family lot widths will vary to create visual appeal, different designs, price ranges and variety of frontage treatment.
- 5.2.5 Narrow lots will be required to have rear access only and will not be permitted to have front access garages.
- 5.2.7 Medium Density Residential development will be located in the community along collector roads and be situated in close proximity to recreational amenities and will provide a variety of housing styles including duplex and townhouse developments.
- 5.2.8 High Density Residential development will be located close to shopping and/or recreational spaces.
- 5.2.9 The mix of housing styles will be designed to create a safe and interesting community while achieving the Town goals for density requirements.
- 5.2.10 All residential development will relate directly to the street, and will be integrated with open spaces to create a pedestrian environment, reducing the need for personal vehicles and providing linkages to adjacent communities and local neighbourhood commercial.
- 5.2.11 Residential units are encouraged on the second and third levels of the neighborhood commercial development.
- 5.2.12 Home offices are encouraged in all single family dwellings to create a sustainable community, reducing vehicular traffic and creating interest and activity in the community.

5.3 Commercial Policies

- 5.3.1 The local neighbourhood commercial site, that has been provided in the south east corner of the community, will provide local convenience, retail and personal services to the adjacent communities.
- 5.3.2 The land will be designated C1 (Neighbourhood Commercial District).

- 5.3.3 Apartments and/or professional offices will be encouraged on the second and third storeys of the commercial development.
- 5.3.4 Design of the commercial area will include a theme, controlled pedestrian and vehicular patterns, landscaping, street orientation. Architectural guidelines will include direction on frontage of structures, service entries, waste bin locations and location of parking.
- 5.3.5 Residential units incorporated into the commercial development may achieve a total of 36 units.⁵

5.4 Population Projections and Densities

The proposed development is divided into nine phases. This allows for the market and infrastructure to lead the development of the community. Figure 10 illustrates the units and population by phase. The density has been calculated according to the Town of Strathmore policy by using the gross area of the site, 57.667 ha (142.5 acres) and deducting the arterial road widening for North Boundary Road, the commercial site and the future fire hall site, leaving a net developable site of 1 acres.

The net developable area is 135.82 ac⁶. With the proposed 1067 units, this provides a density of 7.87 units per net acre. While this is slightly below the expected density of 8 to 10 units per acre as directed by the Calgary Regional Partnership, there are two opportunities to increase this density:

- An optional 36 residential units built as part of the commercial development (bringing the density to 8.12 units per acre)
- The Town is currently developing a new land use district that will allow lots with minimum 32 foot width, which may be applied to certain areas of the community which would increase the density.

This Area Structure Plan strives to re-create the overall ambiance and standards of the Town of Strathmore and it is felt that this density is appropriate for North Hill Heights because it creates variety, options and diversity.

The population figures have been calculated based on 2.6 persons per residential unit (based on CMHC and StatsCanada figures for the Calgary region. This calculation is illustrated in Figure 6.

⁵ The calculation of the residential units within the commercial development has been based on the total area (3.36 acres) and a 50% site coverage and a gross area of 2,000 sq. ft per residential unit (to account for the pubic and utility spaces required). This would accommodate 36 residential units. These units have not been calculated into the overall density and provide bonus residential units (since they are optional for the commercial developer).

⁶ The net developable land has been calculated on the gross area of 142.5 acres, minus the Firehall site (1.04 ac), minus the commercial site (3.36 ac), minus the 15m road widening for North Boundary Road (2.27 ac) for a total net developable land of 135.83 acres.

Figure 6
Residential Type Breakdown

Land Use	Units	Population
Low Density Residential	630	1,638
Medium Density Residential	136	354
High Density Residential ⁷	301	782
Total Land Area	1067	2,774

5.5 Development Standards

- 5.5.1 Appropriate land use designations must apply to the land prior to subdivision and development.
- 5.5.2 Parking will meet the Town of Strathmore standards.

5.6 Architectural Controls

- 5.6.1 Architectural controls will be developed that reflect the prairie and craftsman style features and provide guidance for colour and materials to create a harmonious community.
- 5.6.2 Architectural controls will be developed for the multi-family and commercial sites.
- 5.6.3 Architectural controls will be enforced by the developer and residents of the community and not the Town of Strathmore.







Housing Styles proposed for North Hill Heights are similar in design and model to those currently developed in Hillview.

⁷ There are potentially 36 residential units that could be developed as part of the commercial development, contributing an additional 94 people.

6. Open Space Strategy

Open space, trails, parks and playgrounds provide an important element of any comprehensively designed community. The concept for open space in North Hill Heights is for paths and connectivity to encourage pedestrian movements, reduce dependency on personal vehicles and create green spaces for separation, buffering and visual interest.

The Municipal Government Act requires 10% of the gross developable land to be dedicated as municipal reserve in either land, cash in lieu or a combination of land and cash in lieu. In urban centres, the reserves are generally provided in land to ensure an excellent quality of life of residents, provide opportunity for exercise and provide for visual enhancement of the community. The North Hill Heights community provides the required 10% of land for municipal reserve and combines this land with more functional elements such as storm water ponds (designated at Public Utility lots) to provide a comprehensive open space strategy, illustrated on Figure 7.

6.1 General Open Space

- 6.1.1 There is no land that qualifies as Environmental Reserve on the North Hill Heights lands.
- 6.1.2 School reserves are not required on these lands.
- 6.1.3 Open space will be provided primarily in linear form in the North Hill Heights community.
- 6.1.4 The open space strategy will generally follow the open space illustrated on Figure 7, with the understanding that this is conceptual and actual areas and lot lines will be determined at time of subdivision.
- 6.1.5 All portions of the site not covered with structures, parking or roads will be landscaped according to the Town of Strathmore policies.
- 6.1.6 Regional pathways will be included and incorporated into the road widening for both North Hill Heights and Wheatland Trail.
- 6.1.7 An access easement will be provided along the east side if the WID canal. At time of adopting this ASP, negotiations were still in progress for the specifics of the easement and the details of such will be determined at the subdivision stage.





6.2 Municipal Reserve

- 6.2.1 A total of 5.962 ha (14.76 ac) or ten percent of the net developable land, is provided as Municipal Reserve.
- 6.2.2 The Municipal Reserve is broken down into internal parks and path space, regional pathway and the future fire hall site.
- 6.2.3 A strip of Municipal Reserve is provided surrounding the storm ponds (identified as public utility lots). Even though the ponds are utilitarian and not considered municipal reserve, they provide an amenity to be enjoyed by the residents. The actual boundary of the Municipal Reserve and the 1:100 high water level will be determined at time of subdivision.
- 6.2.4 Pathway surfaces will be to the Town of Strathmore standards to provide linkages and connections for pedestrians and bicycles.
- 6.2.5 The regional pathway will be incorporated into the major arterial roads that border the site on the east and south side.
- 6.2.6 Landscape plans for all public open spaces will be provided at time of subdivision.



7 Infrastructure Policy

North Hill Heights is located in the northern portion of the Town on lands recently annexed into the Town. The Master Servicing Study has a strategy for extending services to the area in conjunction with development and assisted by developers. The development of the North Hill Heights lands will be staged and contingent upon the extension of major infrastructure facilities.

The following policies will guide the servicing of the North Hill Heights community. The Servicing Strategy is illustrated on Figure 9.

7.1 Transportation and Access

It is noted that the Master Servicing Study of the Town of Strathmore accounted for the development of these lands and the development proposed in this Area Structure Plan is within the 6% of the predicted traffic.

- Policy 7.1.1 The road layout and intersection treatments will follow the recommendations of the Bunt Engineering Report (November 27, 2011).
- Policy 7.1.2 A full Traffic Impact Assessment, to the satisfaction of Alberta Transportation will be completed prior to application for Phase 3.
- Policy 7.1.3 The intersection with Highway 817 will be to the satisfaction of Alberta Transportation.
- Policy 7.1.4 The road system and standards will conform to the Master Servicing Study of the Town of Strathmore.
- Policy 7.1.5 Intersections with town roads at North Boundary Road and Wheatland Trail will be upgraded as required.
- Policy 7.1.6 Internal roads will be constructed to Town of Strathmore standards with special attention to sidewalks and boulevard treatments to create a walkable community.
- Policy 7.1.7 Emergency access will be provided for the first phases of development onto North Boundary Road as illustrated on Figure 8.
- Policy 7.1.8 A 15 metre road widening right of way has been dedicated on both North Boundary Road and Wheatland Trail where they are adjacent to the North Hill Heights community.
- Policy 7.1.9 Access to North Hill Heights will be via North Boundary Road and Wheatland Trail.
- Policy 7.1.10 Prior to any development beyond Phase 2, the Transportation Impact Assessment will be updated to the satisfaction of the Town of Strathmore and Alberta Transportation.

7.2 Water Supply

The Town of Strathmore is provided potable municipal water via a water line from the City of Calgary. This provides sufficient capacity for the full development.

- Policy 7.2.1 Potable water distribution system shall be designed in accordance with the Standards and Specifications of the Town of Strathmore, in conformance with the Master Servicing Study.
- Policy 7.2.2 The system will be designed as a looped system, as per Town policy and will be looped at the appropriate time.
- Policy 7.2.3 A temporary water connection to Hillview will be permitted to be connected at the project entrances on North Boundary Road (as illustrated on Figure 8). No additional development will proceed beyond Phase 1 without a connection to transmission mains and water looping.
- Policy 7.2.4 The development will tie into the transmission main in the area when it is available.
- Policy 7.2.5 Detailed engineering drawings will be prepared at time of Subdivision.
- Policy 7.2.6 All development will be encouraged to incorporate water conservation and low flow fixtures in all residential development.

7.3 Sanitary Wastewater

The Town of Strathmore has accepted an Interim Sanitary Sewage Conveyance solution (letter dated October 28, 2011 from Jesse Parker) for the first 100 residential units of development in North Hill Heights. This agreement allows for off peak pumping to Hillview from the Lakewood Meadows lift station. Details of the operation will be provided at time of subdivision and in the Development Agreement including agreements for developer responsibility, Emergency Response Plan, agreement of reduction of setbacks once the interim solution is decommissioned, Alberta Environment approval and a decommissioning plan.

- Policy 7.3.1 Development will be phased to coordinate with the capacity and capability of the Town of Strathmore sanitary wastewater system.
- Policy 7.3.2 The interim off peak system has been approved and will allow the first 100 residential units (Phase 1) to be serviced by an interim off peak pumping solution, as approved by the Town and Alberta Environment..
- Policy 7.3.3 North Hill Heights will either construct, or pay their fair share for a portion of the Sewer Trunk Line to be installed.
- Policy 7.3.4 The Sanitary waste water collection system shall be designed and constructed in accordance with the Standards and Specifications of the Town of Strathmore.
- Policy 7.3.5 Future Sanitary Sewer Trunk lines will be accommodated within the rights of way of major roads.
- Policy 7.3.6 The proposed location of the sanitary lift station will be finalized at FSR discussion as part of the Master Serivcing Study Review and Subdivision process.

7.4 Stormwater Management

North Hill Heights will ultimately direct storm water from the western half of the project to the Lakewood Meadows storm pond facility. Storm water drainage for North Hill Heights generally splits down the middle of the community, creating two separate drainage areas; one on the east half and one on the west half. The eastern catchment

area will be directed to the drainage ditch along Highway 817 (Wheatland Trail). Should the drainage ditch not be available, storm water can be pumped from the east side to the pond located in the southwest corner of the community (see Figure 8) which will then be directed to the Lakewood Meadows facility. However, the storm water will be held on site until such time as there is a discharge solution. The storm water will be held on site for the first phases of development and the storm water ponds will act as evaporation facilities so as to not allow runoff to leave the site. This is an interim solution until the Lakewood Meadows project (to the south) develops with a main pond facility. The final storm water solution for North Hill Heights will send the storm water that has been held and treated to be directed from the North Hill Heights to the storm water facility provided in Lakewood Meadows, as well as the drainage ditch along Highway 817.

- Policy 7.4.1 Storm water will be designed, constructed and managed in conformity with the Town of Strathmore Servicing Study and the Standards and Specifications of the Town of Strathmore and the standards of Alberta Environment.
- Policy 7.4.2 The proposed storm facilities in the community will provide the storm water retention pond function.
- Policy 7.4.3 The maximum number of residential units to be developed will correspond to the capacity and area of the evaporation facilities and the capacity for storm water management, as per the Town of Strathmore Standards and Specifications.
- Policy 7.4.4 To comply with the Town of Strathmore Master Servicing Study requires aeration, natural filtration, recirculation and the consideration of irrigation for storm water, fountains will be installed in the reservoir pond for both aesthetic and functional purposes to create aeration to assist with treating the storm water. As well park irrigation will be considered utilizing storm water.
- Policy 7.4.5 All wet ponds will include installation of fountains for aeration and evaporation.
- Policy 7.4.6 Treatment of storm water, through the construction of forebays, will be completed to the Town of Strathmore standards.
- Policy 7.4.7 Drainage into the Highway 817 ditch will require approval by Alberta Transportation, as well as potential downstream impacted authorities.

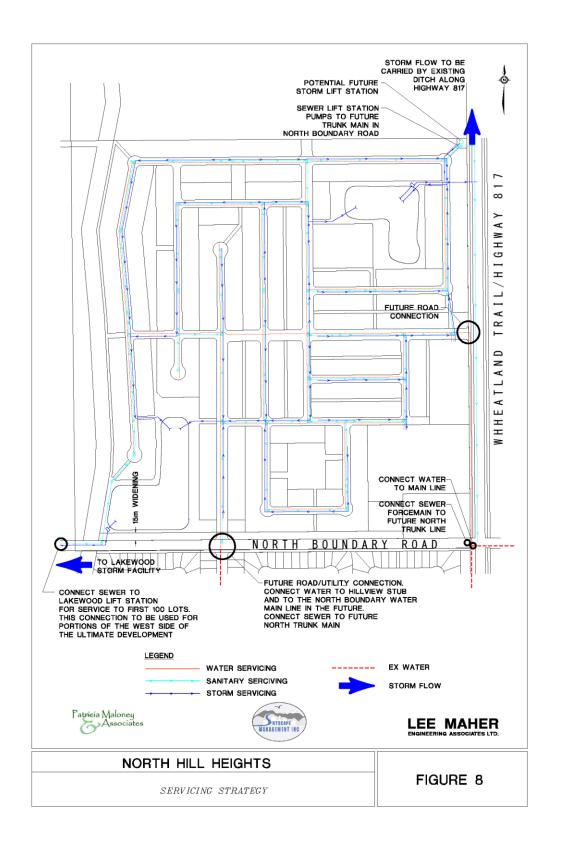


- Policy 7.4.8 North Hill Heights will be required to contribute their share to the ultimate storm water solution for the North/Northwest area of the Town of Strathmore.
- Policy 7.4.9 Storm water shall be used to irrigate green spaces where ever possible.
- Policy 7.4.10 The storm water ponds will have capacity for the 1:100 storm event, or greater, and there will be no release or downstream discharge of storm water at peak flows, greater than pre development rates.
- Policy 7.4.11 The Town of Strathore currently has a zero discharge policy. Any future discharge of storm water from the site will require Town of Strathmore approval and agreements between the Town, the developer and the Western Irrigation District.

7.5 Shallow Utilities

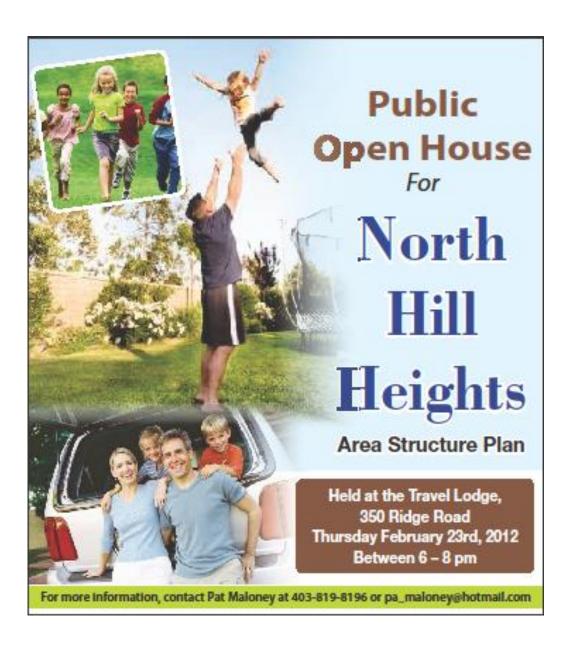
Shallow Utilities are those utilities that provide power, cable, telephone, and natural gas.

Policy 7.5.1 Detailed design of the shallow utilities shall occur at time of subdivision in collaboration with the utility provider.



8 Public Consultation

An Open House held by the developer at the Travelodge in Strathmore on February 24th, 2012. The Open House was advertised twice in the Strathmore Standard (February 15 and 23, 2012) and approximately 130 letters were mailed out to neighbouring residents. Approximately 15 people attended including Town of Strathmore Staff and Western Irrigation Staff. No significant issues were raised at the open house.



9 Phasing and Implementation

Development of North Hill Heights will be phased to match the infrastructure capacity and the market demand. Figures 9 and 10 illustrates the general phasing anticipated. The community has been divided into 9 phases. The unit count and anticipated population per phase is provided here. It is recognized that these are estimates per phase and the final unit count will determined at time of subdivision.

Figure 9
Phasing Breakdown

Phase	Proposed Development	Total Units	Population Projection
1	Low Density 100 units	100	260
2	Low Density 50 units	277	720
	Medium Density 5 units		
	High Density 222 units		
3	Low Density 64 units	144	374
	Medium Density 80 units		
4	Low Density 47 units	98	255
	Medium Density 51		
5	Low Density 71 units	150	390
	High Density 79 units		
6	Low Density 99 units	99	258
7	Low Density 59 units	59	153
8	Low Density 81 units	81	210
9	Low Density 59 units	59	153
Total			2,773

In addition, the potential residential units over the commercial site, would be developed in Phase 3 of the community.

9.1 ASP Phasing

- Policy 9.1.1 The study area is divided into nine phases for progressive and comprehensive development.
- Policy 9.1.2 The phasing generally follows the logical progression of the installation of infrastructure. Should timing of the service installation change due to adjacent lands being developed, the North Hill Heights development may progress out of sequence with the phasing numbering, without any amendment to this plan if adequate servicing is available.
- Policy 9.1.3 Should development proceed out of numerical order of the phases, this will be completed in consultation with the Town Staff and approved by the
- Policy 9.1.4 Stripping and grading of the entire site may be approved to ensure comprehensive storm water pond construction is completed.

Policy 9.1.5 The commercial site may develop at any time, depending on the available infrastructure capacity, regardless of the phasing of the residential development.

9.2 Implementation

- Policy 9.2.1 The North Hill Heights Area Structure Plan will be adopted by bylaw.

 Policy 9.2.2 Any applications for redesignation, subdivision and development, should comply with the adopted Area Structure Plan bylaw.
- Policy 9.2.3 All development permits will be issued by the Town and comply with Town policy and this Area Structure Plan.

9.3 Plan Review and Amendment

- Policy 9.3.1 Policies in this document should be periodically reviewed and implemented by the Town of Strathmore.
- Policy 9.3.2 Amendments to this Area Structure Plan will be required for any significant change in the land use or the design.
- Policy 9.3.3 Amendments to land use or redesign shall require a public process.



