#### BYLAW 43-2016

A BYLAW OF STRATHCONA COUNTY IN THE PROVINCE OF ALBERTA, FOR THE PURPOSE OF ADOPTING THE HILLSHIRE AREA STRUCTURE PLAN.

WHEREAS it is deemed advisable to adopt the Hillshire Area Structure Plan;

NOW THEREFORE, the Council of Strathcona County, duly assembled, pursuant to the authority conferred upon it by the *Municipal Government Act, R.S.A. 2000, c. M-26,* and amendments thereto, enacts as follows:

1. That this Bylaw 43-2016 is to be cited as the "Hillshire Area Structure Plan".

2. That Schedule A attached hereto is hereby adopted as part of this Bylaw.

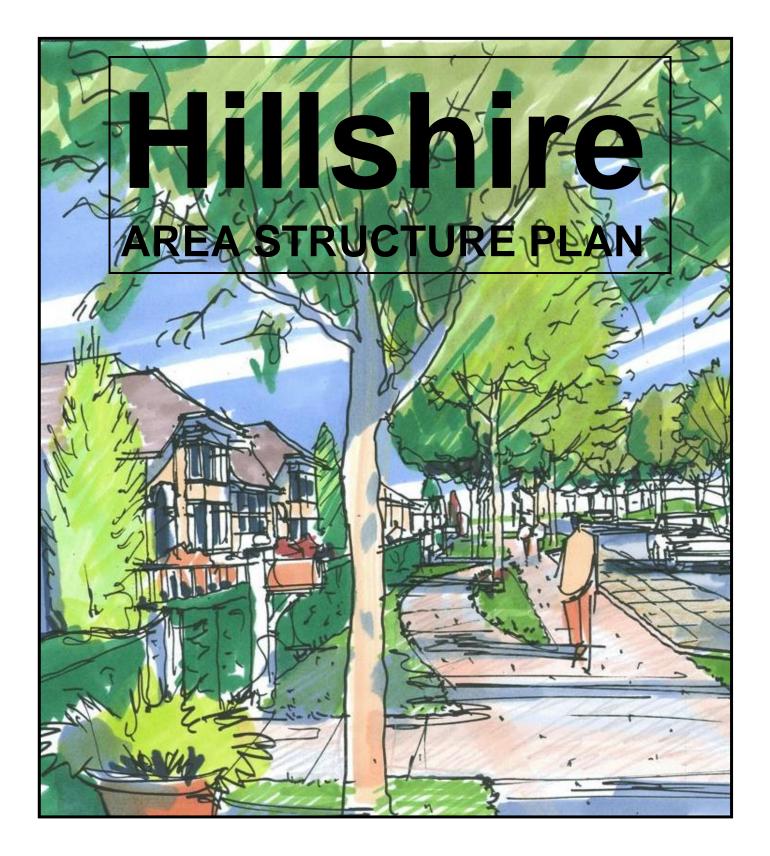
3. This Bylaw comes into effect after third reading and upon being signed.

Read a first time this	29th	day of November, 2016.
Read a second time this	29th	day of November, 2016.
Read a third time and finally	passed this	29th day of November, 2016.
		>
		Mayor

16 MUD

Director, Legislative and Legal Services

Date Signed: November 29,2016



# **Hillshire Area Structure Plan**



SUBMITTED BY:

#### **Hillshire Developments**

(1686962 Alberta Ltd.) 98 Sioux Road Sherwood Park, Alberta T8A 3X5

#### CONSULTING TEAM:

MVH Urban Planning & Design (Planning & Urban Design) Al-Terra Engineering (Engineering) Stantec (Environmental) Ankenman Associates Architects (Architecture) EDA Collaborative (Landscape Architecture) Wuori Design Consultants (Master Planning and Landscape Architecture) Cal Srigley Design Consultants (Urban Design, Architectural Design, and Illustrations)

Submitted November 7, 2016

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# **1.0 INTRODUCTION**

# 1.1 Overview

The Hillshire site is located on the southeast edge of the Sherwood Park Urban Service Area. The continuing residential growth pressures and imminent buildout of Sherwood Park has placed additional pressure on the availability of land supply within the Urban Service Area. The Capital Region Growth Plan directs growth where services are available and more compact growth can occur. Hillshire meets the Capital Region Growth Plan minimum residential density target, connects to adjoining urban services, provides a diversity of housing units, retains important physical and environmental features, and connects to adjoining neighbourhoods where possible with a comprehensive trail and pathway network.

# **1.2** Interpreting this Plan

The objectives and policies of this plan are used to direct development of the site. Any interpretation of these objectives and policies will be up to Strathcona County staff with council giving final direction. Minor deviations from this plan shall be permitted at the discretion of Strathcona County.

# 1.3 Purpose

The purpose of this document is to provide a statutory planning framework that acts as a general guide for the compatible and practical development of this area. This plan addresses development issues comprehensively to effectively facilitate the orderly growth. The Hillshire Area Structure Plan balances environmental, social, and economic responsibilities of Strathcona County by incorporating progressive planning and sustainability policies.

# 1.4 Enabling Legislation

### 1.4.1 Municipal Government Act

The Municipal Government Act (MGA) provides the enabling legislation for planning within the Province of Alberta. Planning follows a hierarchy of plans starting at the regional level with the Capital Region Growth Plan in the Edmonton region, moving to the local level requirements including the Environmental, Social, and Economic Sustainability Frameworks, the Strathcona Municipal Development Plan, Concept Plans, Area Structure Plans, Outline Plans, Land Use Bylaw, and Subdivision Bylaw. The Area Structure Plan (ASP) is required under the Municipal Government Act to provide statutory conceptual planning direction for a specific area within Strathcona County.

### 1.4.2 Capital Region Growth Plan

The Capital Region Growth Plan (CRGP) provides overall direction for growth in the Edmonton region.

Sherwood Park in Strathcona County is designated Priority Growth Area B. Policies to concentrate new growth in the priority growth areas in the Capital Region have been written into the Regional Land Use Plan:

- Most new growth shall occur within priority growth areas.
- Priority shall be given to accommodating growth in major employment areas and in locations that meet at least three of the following four criteria:
  - 1. Existing and proposed multi-mode movement corridors, including transit nodes;
  - 2. Adjacent to existing and proposed major employment areas;
  - 3. Redevelopment and intensification opportunities within existing urban areas; and
  - 4. Locations that utilize existing infrastructure and servicing capacity or logically and efficiently extend the infrastructure.

The Hillshire Area Structure Plan is part of the Sherwood Park Urban Service Area to permit urban development at a density range required by the Capital Region Growth Plan. These targets place an emphasis on vertical growth rather than horizontal growth and efficiency-oriented approaches to land use and transportation planning. Hillshire complies with the requirements of the Capital Region Growth Plan (CRGP):

- 1. Hillshire is adjacent to Wye Road which is a major multi-modal corridor in Sherwood Park;
- 2. Sherwood Park is a major employment centre in the Region;
- 3. Hillshire is in the Urban Service Area; and
- 4. Hillshire will use existing infrastructure and servicing capacity adjoining the site so it is a logical and efficient extension of existing infrastructure.

#### 1.4.3 Strategic Plan

Council's Strategic Plan is the County's principal guiding document for governance, community development, infrastructure, and service delivery. The Strategic Plan directs the long term planning for the County and serves as a foundation for the County's Business Plan, Sustainability Plan, and other plans.

Eight priority areas are grouped under 5 pillars of sustainability in the Strategic Plan. The 5 pillars of sustainability in the Strategic Plan include: Economy, Governance, Social, Cultural and Environment. The 8 priority areas, grouped under the 5 pillars of sustainability in Strathcona County's Strategic Plan are aligned with the Hillshire development.

#### 1.4.4 Municipal Development Plan 1-2007

The Municipal Development Plan (MDP) contains numerous policies that direct and guide overall development within Strathcona County. The site is currently designated "Country Residential Policy Area" within the MDP. The proposed development is designated "Hamlet" on Map #12, and "Low Density Residential Policy Area", "Medium Density Residential Policy Area", "Institutional Policy Area", "Commercial Community Policy Area" and "Open Space" on Map #13 of the MDP.

#### 1.4.5 Area Structure Plan

While the Municipal Development Plan provides overall land use planning and growth guidance for Strathcona County, the Area Structure Plan provides more specific guidance for development in a specific area. This Area Structure Plan outlines the land use concept for the property (Figure 1.1) as well as objectives and policies that direct future development within the context of complying with other policies and regulations within Strathcona County. The Area Structure Plan then provides the framework for further details in the Land Use Bylaw that specifies regulations governing such things as permitted types of land use, height, coverage, setbacks and other special provisions as required. An Area Structure Plan is conceptual and subject to minor variation.

#### 1.4.6 Strathcona County Land Use Bylaw 6-2015

The County Land Use Bylaw 6-2015 stipulates two land use districts for the site: "PS – Services", recognizing Strathcona Christian Academy Elementary School and Elk Island School District offices on the property; and "AD – Agriculture, Future Development" recognizing the current agriculture use with future development plans.

Following with the Area Structure Plan intentions, specialized land use districts will be developed to permit a comprehensive residential development with support commercial and institutional uses. The specialized land use districts will provide development regulations to ensure a sensitive interface with adjacent residential uses, to allow and support a unique range of housing mix, maintain adherence to a high standard of appearance appropriate to the site's exposure along Wye Road and to provide for a safe, aesthetic and livable community.

# 2.0 PLAN AREA

# 2.1 Location

The site is located between Range Road 231 and the Estates of Sherwood Park south of Wye Road on the southeast edge of Sherwood Park. The south boundary is defined by the communities of East Whitecroft and Meadowhawk. The size of the property is 62.49 hectares (154.41 acres). The site is legally described as NE ¼, Section 23, Township 52, Range 23, west of the 4<sup>th</sup> Meridian (NE 23-52-23-W4M) (Figure 2.1).

# 2.2 Site Context

The major intersection of Wye Road and Range Road 231 defines the northeast corner of the site. A shopping centre is located across Wye Road that includes a grocery store and other support retail and professional services. The Alliance Church and Strathcona Christian Academy High School is located across the intersection on the northeast corner of Range Road 231 and Wye Road.

The remaining uses surrounding the Hillshire site are residential developments with a diversity of lots sizes. North of the site across Wye Road is Nottingham which includes standard suburban lots on 0.03 to 0.06 hectares (0.08 to 0.15 acres). The Estates of Sherwood Park, located west of the site, includes larger estate suburban lots from .12 - .20 hectares (.3 -.5 acres). East Whitecroft, south of the site includes larger country residential lots from 1.0 - 1.6 hectares (2.5 - 4 acres). The new Meadowhawk development south of the site is a cluster development that provides a generous green space bordering Hillshire and lots that average approximately 0.16 hectares (0.4 acre).

Finally, Executive Estates located across Range Road 231 east of the site has country residential lots ranging between 1.2 – 1.6 hectares (3 to 4 acres) (Figure 2.2).

The northeast corner of the site is occupied by the Elk Island School District offices and the Strathcona Christian Academy Elementary. Single residences, other buildings, and storage areas are located in the north portions of the property and the southeast corner. The central, southeast, and southwest part of the site is very dramatic in rolling landform with a variety of man-made dugouts and wetlands. The trees in the central portion of the site have been significantly depleted by the elk herd that has occupied this part of the site for over 20 years. There are significant tree stands in the southeast edge and northwest edge of the property. The western portion of the site has the remnants of a former grass air strip and is also rolling terrain with some man-made dugouts and wetlands with various groupings of trees (Figure 2.3).

# 2.3 Land Ownership and Use

This plan includes the Strathcona Christian Academy Elementary School site (Lot 2), the Elk Island School District site (leased from Strathcona County- Lot 1) on the corner of 231 and Wye Road; the central private property (Lots A and C), and the west private property (Lot B). The plan area has been divided into four sections reflecting current ownership and use (Figure 2.4):

Lot 1: Strathcona County	2.79 ha	(6.89 acres)
Lot 2: Private Property	5.07 ha	(12.53 acres)
Lot A and Lot C: Private Property	38.44 ha	(94.99 acres)
Lot B: Private Property	16.188 ha	(40.00 acres)
Total	62.49 ha	(154.41 acres)

\*All title areas are approximate and must be confirmed at the time of subdivision by survey.

The existing property is used as follows:

Lot 1: Elk Island Public School District offices, storage, and parking

Lot 2: Strathcona Christian Academy Elementary School, classrooms, offices, storage, parking, and recreation

#### Lot A and Lot B: Private property residence, business, and farming

Lot B: Private property residences and storage

# 3.0 BACKGROUND STUDIES

A separate preliminary servicing report has been prepared which contains more detail on site assessments completed along with recommended conservation measures, as well as servicing analyses and proposed servicing concepts.

# 3.1 Biophysical Assessment

A detailed biophysical report was completed that details the biophysical components of the site and provides conservation recommendations. (see: Biophysical Assessment, last update, June 2015 by STANTEC Ltd, included in the Preliminary Servicing Report).

The property has a number of different water features including natural wetlands, impounded wetlands and man-made dugouts (Figure 3.1).

- **Man-made dugouts:** There are 9 man-made dugouts that have been used for watering the elk herd over the years. These dugouts are scattered throughout the central area of the property (see D1-D9 on illustration). The major dugout at the north end of the property is both a visual amenity and a functional watering area.
- **Natural wetlands:** There are 29 wetlands on the property varying in size, class and value. These wetlands are scattered throughout the agricultural areas, within the forested complexes (i.e. W17, W22, W23, W24, W28 and W29) and adjacent to developed areas (disturbed by residential and school development W16 and W18). The majority are Class III Seasonal Ponds. However, one Class IV Semi-permanent Pond (W18) and a few Scrub Shrub wetlands (W23, W24, W28 and W29) are also present.

The property also contained two impounded wetlands, which were associated with road infrastructure (I1) and residential development (I2). Impoundment I1 is located in the southeast corner and Impoundment I2 is located in the northwest corner of the property associated with an existing drainage area.

The site's wetlands, man-made dugouts, and forested areas are classified into high, medium, and low conservation areas (Figure 3.2). The land use concept (figure 1.1) incorporates the following conservation areas (Figure 3.3):

- 1. A portion of the southeast forested area (W07)
- 2. A portion of the northeast forested area and drainage area (W05) bordering the western edge of the property;
- 3. Three wetland areas, W17, W18 and I 105;
- 4. Part of W4 is integrated into the site's stormwater management pond and stream system. The constructed wetland/pond will use bio-engineering techniques along the edges to mimic natural conditions with plants and edge details that enhance bird activity, other small wildlife, and enhance water quality.

The Land Use Concept also incorporates the following **medium and low priority conservation** areas:

- 1. Parts of D2 and D9 are integrated into the constructed stormwater system; and
- 2. The western edge woodland buffer (Windrow).

The design of the Land Use Concept was guided by protecting the highest priority natural areas and integrating them into the community. Specific focus was given to the high quality wildlife habitat woodlots and wetlands.

A Wetland Compensation Plan was prepared in June, 2015, as well as an enhanced Stormwater Management Plan, both in collaboration with Strathcona County and Alberta Environment. Approval was received from Alberta Environment for these plans (all included in Preliminary Servicing Report).

A Tree Protection Plan was prepared in October, 2015, and is also in The Servicing Report.

The enhanced stormwater management system, along with follow up monitoring and report by University of Alberta, plus the constructed wetland/pond SWMF, will offset the loss of wetlands and ensure the "value added" features stay in the community being developed.

Figure 3.3 shows the conserved areas as well as the areas that will be lost during the development of the site.

### **3.2 Historic Resources**

A Historic Resources Overview was completed by Altamira Consulting Ltd. The Government of Alberta does not require further work as verified by their clearance letter dated January 7, 2013.

### 3.3 Environmental Site Assessments

A Phase 1 site assessment was done by Canadian Envirotec Inc. in August of 2013, followed by a Phase II in August of 2014, followed by a Phase III in October of 2015. All of these are included with the Preliminary Servicing Report and submitted under separate cover. A summary of findings is as follows:

#### Phase I Findings and Recommendations:

- Three residences dating to the 1960's are on the property. These residences could contain asbestos and lead paint. When these buildings are demolished, samples should be taken and proper care taken to contain these contaminants.
- There is an above ground fuel tank which hasn't contained fuel in years but ground testing should be carried out in the vicinity to check for ground contamination. The same should be done for an old vehicle, as well as a washing machine, dryer and coke machine on the site.
- The barn has various old refrigerators in it, so soil samples should be taken for any leaked Freon.
- The property to the north in Nottingham has an Esso service station so soil ground monitoring should be done in the northerly part of Hillshire for any possible leaked fuel.
- The site immediately east of the northern part of Hillshire is leased by Elk Island Public School District. The School District parks buses near Hillshire so monitoring should be done for any oil or fuel leakage.

#### Phase II Findings and Conclusions:

Various locations of hydrocarbon contamination confirmed. No contamination detected from ESSO station in Nottingham. All hydrocarbon contaminated soils have been remediated through aeration as recommended, and a certificate of remediation has been obtained for all contaminated areas.

#### Phase III Findings and Conclusions:

This report confirmed proper cleanup of hydrocarbons after soil aeration.

Various items identified in the Phase I report have also since been removed from the site.

# 3.4 Geotechnical Evaluation

A preliminary geotechnical evaluation was completed by AECOM in October 2008. The residential development proposed at the time was similar to the current recommended land use concept as it proposed residential buildings, roadways, underground utilities and parking areas. The report stated in part that "based on the soils and groundwater conditions encountered during the field investigation, the site is considered suitable for the proposed development."

An updated geotechnical investigation was completed in July of 2014 and submitted to Strathcona County. The report is included with the Hillshire Design Brief under separate cover. This report stated, in part, that "The native inorganic soils encountered throughout the site are considered satisfactory for supporting wood framed single family dwellings utilizing standard concrete footing foundations." A further statement was "The soils encountered at this site are generally considered suitable for cast-in-place pile installation."

The severely undulating topography will require that deep fills be placed in some areas. Various recommendations are made in the report for proper procedures in filling and grading, Geotechnical monitoring of these fills will be done, and certification provided to The County and lot owners as to the suitability of the fills to support building foundations. This information will also be shown on the lot grading plan for any affected lots to ensure an awareness, and to ensure proper mitigation measures are incorporated in the building so as to alleviate any negative impacts in the long term.

The report indicates varying groundwater elevations, some quite near surface and others well below surface. The lack of drainage on the site results in many contained water holding areas, which would contribute to high ground water conditions. Various recommendations are made in the report for proper procedures in dealing with high groundwater.

A grading program well before development will establish positive drainage in an effort to help lower the groundwater elevations. Provisions to further mitigate shallow groundwater effects on the development will be carried out in conjunction with deep utilities as recommended by the geotechnical and hydrogeological engineering.

Groundwater monitoring will be carried out in areas of concern after the grading program and continue until the time shortly before requesting Strathcona County for endorsement of the subdivision plan. For those lots which continue to show high groundwater levels, restrictive covenants will be registered on title.

### 3.5 Transportation

#### General

The transportation network for the Hillshire area will support the overall plan concept, including a full range of transportation facilities to accommodate the movement of automobiles, pedestrians, bicycles, and transit. A network of collector and local roads will be provided to accommodate traffic activity efficiently and effectively.

A summary of the transportation plan is presented in the following sections. A detailed Transportation Impact Assessment (TIA) has been submitted under separate cover.

#### A Balanced Sustainable Transportation Plan

Providing residents and patrons with a variety of transportation mode choices represents a strategic component of the transportation system envisioned for the Hillshire area. The following guiding principles have been defined to support a balanced and sustainable transportation system:

• Provide a logical, safe and efficient hierarchy of transportation facilities to address the automobile, pedestrian, bicycle, public transit, and service vehicle needs of all population and

user groups moving to, from and through the Hillshire area;

- Design internal roadways to provide effective connections to/from the external roadway system to/from the homes;
- Encourage walkability and alternative travel modes by providing pedestrian connections that link commercial areas with site amenities, open spaces and the external pedestrian system;
- Integrate storm-water management and environmentally sensitive areas into the pedestrian and bikeway system for the area, having regard for the safe, ongoing operation of these facilities; and
- Collaborate with the County to explore options and promote the initiation of transit service at an early stage of development to encourage transit usage in the area.
- Priority locations for transit services include the local commercial mixed use area and medium density area.

#### **External Roadway Network and Access Points**

Wye Road bounds the site to the north. It is currently a four lane arterial road with turning lanes and a posted speed of 70km/h. The widening of Wye Road to 6 lanes has been recommended by the Wye Road planning study and furthermore is one of the recommendations of the newly approved Transportation Master Plan.

Strathcona County currently has the Wye Road widening being designed from Brentwood Boulevard to Clover Bar Road. Timing of construction is still under discussion, and may be influenced by the timing of Hillshire development.

An un-signalized intersection exists at Nottingham Way. This is the proposed main access point for Hillshire from Wye Road. Wye Road planning study shows that a fully signalized intersection at Nottingham Way and Wye Road will be required. It is expected the signals will be installed concurrently with the widening of Wye Road.

A potential right in-right out access is being considered at the east end of the proposed East commercial site, to minimize congestion on the internal intersection of Hillshire Boulevard and to provide a more direct access for "drive by" shoppers. This access off Wye Road would be from an auxiliary lane so as not to interfere with through traffic on Wye Road. Location and design would be such that traffic would not be able to exit from the right out, and attempt to cross Wye Road to the Tim Hortons access on the north side of Wye Road. The right in-right out access would be subject to County approval.

During upgrading of Wye Road, the existing residents along the south side, west of Hillshire Boulevard, will require interim access. It is intended that Hillshire provide access easements for interim access, so as to enable travel from their residences, east along the existing service road, to the location of the existing Nottingham intersection. The proposed interim access is subject to approval of The County, and, if it occupies any portion of ATCO Rights of Way, then also approval of ATCO. Alternate alignments may be required if necessary approvals cannot be obtained.

Range Road 231 is a paved 2 lane roadway with a rural cross section. According to the TIA and based on background traffic growth, this roadway will continue have adequate capacity. A roundabout intersection is recommended at Thompson Road and Hillshire Boulevard to provide a reasonable level of service for traffic from Hillshire and from Executive Estates.

The roundabout will be a single lane, but sufficient right of way width will be provided on the Hillshire side to accommodate future widening to two lanes. Additional right of way may be required on the Executive Estates side if/when the roundabout is expanded to two lanes.

Multi-use trails are currently provided along Wye Road and Range Road 231. These form a part of the larger regional pathway network and will be added to and linked in order to provide contiguous walking trails to, from, and through Hillshire.

#### Internal Roadway Network

There are three classifications of roads proposed within Hillshire: major collector, minor collector and local roads. The central roadway is proposed to be a major collector which winds through the development linking Wye Road to Range Road 231. The roadway has a series of sweeping curves and therefore has built-in traffic calming effects. On-street parking will be provided along portions of the major collector roadway, specifically in front of medium density housing along the roadway. These parking lanes will be bounded by pinch points to enhance traffic calming and create a compact feel to the community. Pedestrian safety will be enhanced at crossing points by pinch points, and on pathways which are shielded by parked cars. Single accesses serving multiple dwellings are permitted onto the major collector. Direct accesses for single, duplex, or row housing will not be permitted onto the major collectors.

A minor collector roadway is proposed along the south side of the community commercial site. This roadway will provide ample room for turning movements in and out of the commercial site, as well as servicing some residential parcels.

Municipal local roads comprise the majority of internal roadways in Hillshire, and will be constructed with sidewalks on both sides to provide for high-quality pedestrian connectivity throughout the entire development.

A comprehensive sidewalk, trail and pathway system is proposed for Hillshire that will connect internal amenities and land uses, as well as the regional trail system and adjoining neighbourhoods. The different walkways will include 1.5m wide concrete sidewalks, 1.5m granular trails, and 3.0m asphalt trails (see Figure 3.4 for locations).

#### Traffic Impact Assessment (TIA)

A TIA has been undertaken by AI-Terra Engineering to investigate the requirements for external and internal roadways. The proposed roadway system has been modeled with Synchro/SimTraffic software and is shown to work acceptably.

The TIA will be updated, as necessary to reflect changing traffic conditions.

### 3.6 Utilities

Municipal infrastructure is stubbed to the boundaries of the site to render it readily serviceable, as outlined in the respective sections to follow.

The land slopes from south to north, toward the sewers that are stubbed out of Nottingham in anticipation of this development. Water connection points are available on every side of the site.

No significant offsite extension of infrastructure is required for this development.

Following is a brief summary of each infrastructure component. More detailed information is presented in a separate Servicing Report.

#### 3.6.1 Water Distribution System

#### General

The development is proposed to be serviced with a distribution system to provide full domestic municipal water service and fire flow.

#### Design Criteria

The current Strathcona County Design and Construction Standards will be used for the design of the proposed infrastructure.

#### Proposed Water Distribution System

Figure 3.5 shows the proposed ultimate network, which will consists of watermains ranging in size from 150 mm to 300 mm in diameter.

The supporting servicing report prepared by Al-Terra Engineering Ltd. includes more detail of network analyses to demonstrate the system capabilities, and pipe size requirements both for interim staged systems and for the ultimate system. The analyses indicate that all required domestic and fire flows can be met, and all required pressures can be met, per County Standards. An updated network analysis will be done at each stage to verify pipe size requirements.

#### 3.6.2 Sanitary Sewer System

#### General

Hillshire is proposed to be serviced with a conventional gravity sewer system connected to two sanitary sewer lines stubbed out of Nottingham for this purpose.

The sewer lines through Nottingham do not have sufficient capacity for the Hillshire development, when wet weather adds to the sewage flows, since Hillshire was expected to have much lower population when sewers through Nottingham were designed. Storage of excess flows during peak wet weather flows is proposed in Hillshire to ensure protection of the downstream system.

Strathcona County has also designated the sanitary line through Nottingham for conveyance of sanitary flows from 200 lots of Country Residential, of which 60 are already developed. In accordance with County policy, sewage flows from Country Residential development are to use off peak capacity, and storage during times of peak flows from urban residential areas. It is proposed to combine the storage required for Hillshire with the storage required for Country Residential, to achieve a more sustainable and more easily manageable system.

#### Design Criteria

Current Strathcona County design standards would indicate that the existing downstream sewers do not have sufficient capacity for the peak dry weather flows for both Hillshire and the Country Residential. In view of the lower flows measured over the past several years in Nottingham and other existing areas, variances to design flows were applied for, and granted by Strathcona County. With the application of these variances for the flows in existing sewers, it demonstrates that the peak dry weather flows from both Hillshire and Country residential **can** be safely accommodated.

#### Proposed Sewer System

The sewer system is proposed to be split into an east basin and a west basin as shown (Figure 3.6). The west basin is very small so flows do not need to be controlled, nor storage provided.

For the east basin, outflow will be controlled to peak dry weather flow rate, and sanitary storage will be provided to accommodate excess flow during wet weather. The stored wastewater will be released during low flow conditions after the storm. The storage facility would not be required until later stages of development. The timing and design details of the storage would be established in consultation with Strathcona County.

The system is described in detail in the Preliminary Servicing Report.

#### 3.6.3 Stormwater Management System

#### General

Hillshire will be serviced with a piped storm sewer system, following the general direction of existing drainage flows on the site. This piping will convey runoff to two stormwater management facilities proposed for the development; one is to be a constructed wetland/pond and the other a wet pond. These facilities will be at locations of existing significant wetlands, so as to mimic prior natural conditions, after development.

#### **Proposed Innovation**

The guidelines outlined by Strathcona County Engineering Servicing Standards and Alberta Environment Stormwater Management Guidelines will be used as a guide for the design of the proposed stormwater management infrastructure and facilities. Significant enhancement of the stormwater treatment is proposed and has been accepted by Strathcona County and Alberta Environment as compensation for lost wetlands. This is a positive initiative for all affected parties, since the compensation for lost wetlands remains in the local area, in the form of stormwater facility enhancements for the benefit of local residents and the overall community.

#### 3.6.4 Franchise Utilities

#### Power and Communication

These utility facilities will be installed by the developer, in collaboration with Fortis, Telus and Shaw. These utility companies are aware of the proposed development and are making provision in their systems to provide required service.

#### Natural Gas

Atco Gas will install the natural gas system. They are aware of this development through the ASP circulation process, and will also have provision in their system for service.

#### 3.6.5 Service to Existing Development

There are existing houses on two properties within the ASP Area which will remain in use for the foreseeable future. When a development stage occurs which is near these properties, water and sanitary sewer will be installed to their property line, or easement provided to enable extension to their property lines. In the interim, existing private servicing is to remain unless required to be modified to meet regulations based on adjusted property boundaries.

The existing dwellings will retain existing gas, power and communications services from Wye Road and stormwater runoff will continue to the existing surface drainage courses until such time as future development occurs.

# 4.0 PUBLIC ENGAGEMENT

# 4.1 Process and Results

The Hillshire Area Structure Plan process began with a community workshop and Design Charrette in November 2012. Workshops with staff were initiated in October 2012. The Design Charrette included a presentation to community members and adjoining landowners so that they could review and comment on strengths and weaknesses of the proposal, and provide input to the design. Discussions between the applicant and County staff have been ongoing and have included an open house as follow-up to the Design Charrette.

A second public meeting was held on February 19, 2014 as part of the Public Engagement Process (PEP). Residents were able to review the Area Structure Plan concepts and provide comments. An estimated 25 participants attended with 12 participants completing the Comment Sheets.

# **PUBLIC ENGAGEMENT PROCESS OPEN HOUSE #2 Comments**

The following comments were submitted at the Public Engagement Process (PEP) Open House #2 on February 19<sup>th</sup>, 2014 held at Strathcona County Conference Room #1 from 7:00 p.m. to 9 p.m.

- 1. What improvements would you make to the land use concept or other plans presented?
  - More green areas mini parks.
  - More nature trails.
  - More executive use of the land beside the storm pond border.
  - Consider incorporating sustainable community aspects into the design beyond what's already been done like; storm water wetland design, building orientations to conserve energy, and using environmentally sustainable building materials.
- 2. What do you like about the land use concept or other plans presented?
  - Transition of property sizes from the outer edge to the centre.
  - The manner in which the natural topography is being maintained to such an extent.
  - Wetland/water and green space allowance is great; variety of density is great for Sherwood Park.
  - Well laid out trail plan nice walkable community.
  - Commercial space close to community.
  - Varity of housing options to allow families to enter into the community as new home owners.
- 3. What do you dislike about the land use concept or other plans presented?
  - Would like less high density residents.
  - Less duplex/townhouse planning in premium property beside the lake. It should be less dense more exclusive to single family homes right beside the lake.
- 4. Other comments
  - Glad you're keeping the tree line along the estates.
  - Very well planned out.

- Salvi Homes has put lots of planning and foresight into this development.
- Thank you for your efforts and attention to quality.
- Salvi Homes has a reputation of building good reliable products and I think they will do a good job of this development.
- Looking forward to this new community and the ways we can be of service to these new families.

#### Statistical Summary: Hillshire Public Engagement Process (PEP 2) Results

Question	Strongly Support %	Somewhat Support %	Total Strong Support and Somewhat Support %	Non Support %
1. Vision and Principles	67%	33%	100%	0%
2. Parks, Trails, Open Space & Wetland Amenities	100%	0%	100%	0%
3. Land Uses	58%	42%	100%	0%
4. Diversity of Housing	67%	33%	92%	8%
5. Roadway Concept	55%	45%	100%	0%

All required public engagement sessions in support of the Hillshire ASP have been completed.

# 5.0 PLAN VISION AND PRINCIPLES

# 5.1 Vision Statement

Hillshire will provide for the necessary compact residential growth in Sherwood Park while retaining important natural features, respecting adjoining neighborhoods' character, and providing a diversity of housing.

# 5.2 Guiding Principles

- 1. Respect the form, views, privacy and character of adjoining neighbourhoods.
- 2. Conserve the important landscape features and character of the site.
- 3. Enhance wildlife habitat and nature education in association with wetlands and tree stands.
- 4. Provide a diversity of quality housing types for a variety of age groups.
- 5. Develop sensitive housing density transitions within and along the edges of Hillshire.
- 6. Encourage the development of social and cultural character in Hillshire.
- 7. Create trail and pathway connections to the adjoining neighbourhoods where possible while respecting the safety and security of each neighbourhood.
- 8. Maximize choices of alternative mobility including walking, cycling and transit.
- 9. Provide local services for daily needs.

# 6.0 LAND USE CONCEPT

# 6.1 Land Use Concept

The Hillshire Area Structure Plan will create a new compact residential community on the southeast edge of Sherwood Park. It will contain a mix of residential housing types and densities interlaced with parks, trails, pathways, pockets of open space and environmental conservation areas to emphasize and encourage walking and cycling (Figure 1.1).

The proposal suggests a variety of land use zones that permit a variety of residential densities and housing types, as well as some community commercial. If necessary, separate land use zoning and design guidelines will be developed prior to subdivision and development permit application, to enable land use forms for which existing bylaws are not in place. The goal is to attain the Capital Region Growth Plan density range of 30 to 35 units per net residential hectare and to create an integrated community with appropriate form and character.

Two small mixed-use commercial developments at the north entrance will complement the existing commercial across Wye Road and provide an appropriate gateway to the neighbourhood. The west component may be oriented to medium residential with commercial overlay, while the east component may be more oriented to commercial with residential overlay.

This plan uses the 12 Themes in the Municipal Development Plan to create an innovative sustainable planning and design approach (see Appendix C for details). All specific design features discussed or illustrated in this ASP are conceptual in nature and subject to refinements at the time of future zoning, subdivision and development permit applications.

The following provides a more detailed description of the land use concept:

#### Residential

A rich mix of single-dwelling houses, semi-detached houses, town houses, row houses, and low-rise apartments, will create a diversity of housing throughout the site. Building heights will range from 1 to 2½ storey single-dwelling houses, semi-detached houses, and through to 3 storey townhouses and rowhouses and 4 storey apartment buildings. The buildings will be sensitively placed on site so that higher buildings are farthest away from existing residential development and in the central to northern parts of the site. The plan will provide opportunities for a range of residential densities that will accommodate up to 1056 units, generating an estimated population of 2,647 residents using Strathcona County projected persons per household for the various types of housing proposed. The overall residential density is estimated at 34 units per net residential hectare in conformance with the Capital Region Growth Plan. Approximately 31% will be single-dwellings, 17% semi-detached dwellings, 17% town houses and row houses, and 35% apartments (Figure 6.1 and 6.2 unit phasing and allocation).

**Low Density Residential:** The areas of low density residential will consist of single-dwelling houses and semi-detached houses along the eastern, western and southern edges of the property. The semi-detached houses will look like single-dwelling houses in form and massing. These single and semi-detached housing areas will be situated adjacent to country and lower density residential uses to provide an adequate transition in terms of built form. Beyond the outer edges of the low density area, ground-oriented town houses and row houses will be added to provide further diversity and choice of housing. These low density areas will range from 1-2 ½ stories in height to match the character of the adjoining residential neighbourhoods.

Low to Medium Density Residential: Areas designated for low to medium density residential will be located farther away from the existing adjacent single family development, in interior areas of the

site. These areas will generally be planned for a rich mix of single family, duplex and townhouse style units of 1-3 stories. A wide range of buildings will provide for a variety of unit sizes creating a diversity of housing choice in the development, and integrate a wide range of income levels.

**Medium Density Residential:** Areas designated for medium density residential will be located farther away from the existing development in the central and north areas of the site. These areas will generally be planned for apartment style units to a maximum height of 4 stories. These buildings will provide for a variety of unit sizes creating a diversity of housing choice in the development.

There is a medium density area within the mixed use overlay located at Wye Road on the west side of the main entry that will allow for some commercial uses similar to the community commercial mixed use centre. The primary focus of this area remains residential

**Housing Types:** and height transitions will make an integrated community form with almost seamless transitions. The housing types could include the following and are further illustrated following the text:

- **Single-dwelling homes** are located on a variety of lot sizes with a distinct street orientation emphasized by a front porch and recessed garage or rear access;
- Semi-detached homes look like large single-dwelling residences with discreet accesses and understated dual entrances (mixed housing)--these products may include up/down duplexes;
- Lane accessed courtyard housing orients to a central courtyard with rear lane access;
- **Town houses and row houses** vary from groups of three to six to create variety in form, and massing along the street can also be a variation of single-dwelling lots;
- **Secondary suites** (as defined in the Land Use Bylaw),--an option to home owners to improve affordability, can provide rental accommodation for seniors, young adults, and other singles;
- **Row houses and apartments** have 3 storey row house form along the main roadway with a 4 storey apartment tucked in behind to create a subtle transition in form and massing; and
- **Apartment housing** may adjoin the commercial area as well as the central boulevard and combines convenience with access to a diverse residential community.

#### **Community Commercial Mixed Use Centre**

The community commercial sites will be located at Wye Road on the east and west sides of the main entry to the development to service local needs. These buildings will be a maximum of 4 stories and will have an architectural character that blends well with the adjoining residential character. The high visibility commercial corridor along Wye Road provides opportunities for ground floor convenience retail, and permit professional office uses and residential uses on the upper floors. Residential only buildings may be considered in this area. Parking will be underground and/or at grade, and will incorporate landscaping to minimize the impact of the paved area while providing pedestrian linkages. Special attention will be given to screening the parking areas from Wye Road. These buildings will also provide some noise attenuation from Wye Road for residences further south.

#### Parks and Recreation

The comprehensive parks and recreational network will consist of the southeast and northwest wooded areas, the west park, the central constructed wetland/pond, and the north stormwater pond,

as well as the interconnection of trails and pathways (Figure 1.1). Extra recreational features will be incorporated adjacent to stormwater facilities, and at trail widenings. Each of these recreation program elements will be conveniently located to optimize use and convenience for the residents, visitors and businesses. Paved pathways as well as narrower - more natural trails (Figures 6.3) will create a recreation network through the community that will connect to adjoining neighbourhoods where possible and to the Strathcona Christian Academy Elementary School, which has existing playground structure and sports fields.

A 3.0 meter pathway along the east side of Hillshire Boulevard is the preferred method of connecting the internal pathway and trail network. Introduction of this pathway will require a variance to Strathcona County's Design and Construction Standards. Should the proposed Hillshire Boulevard cross-section not be supported by Strathcona County, a standard cross-section will be utilized.

The existing vegetative buffer on the western edge of the site will be retained where possible to create a green buffer to the adjoining neighbourhood (Figure 6.4).

The southeast passive park will be complemented by the more active west park, which will include a playground and informal open space.

The variety of park space will appeal to residents and visitors with different interests and activity levels. The idea is to create a healthy lifestyle where residents choose to walk or cycle often and create an engaging community experience.

#### Institutional and School

The existing institutional uses, including the Strathcona Christian Academy Elementary School and the Elk Island School District offices, will be integrated with the proposed development. A pathway network will connect to the adjoining residential and commercial uses for convenience and safety. Children will be able to safely walk or bike to school by a series of pathway connections from the Hillshire community and will use the adjoining southeast park for nature education and passive recreation purposes.

# 6.2 Land Use and Population Statistics

	Area (ha)	% Remaining GDA		
Total Gross Area (**AutoCAD)	62.36			
Environmental Reserve (total)	1.35			
Gross Developable Area (GDA)	61.01	N/A		
Less Exisitng Institutional (*MR Paid)	7.88	N/A		
Remaining Gross Developable Area	53.13	100		
Stormwater Facility	3.29	6.2		
Municipal Reserve	5.86	11		
Public Utility Lots	0.35	0.7		
Roads (total)	10.24	19.3		
Net Developable Area	33.39	62.8	_	
Land Uses		Density (Max. upni	rha) Units	Population
Industrial				
• Light				
Medium				
• Heavy				
Institutional				
Commercial				
Community Commercial				
Arterial Commercial				
Service Commercial				
Rural Commercial				
Hamlet Commercial				
<ul> <li>Highway Commercial</li> </ul>				
Residential				
<ul> <li>Low Density (12-25 upnrha)</li> </ul>	16.48	20	326	945
• Low-Medium Density (26-75 upnrha)	12.66	28	354	1026
<ul> <li>Medium Density (75+ upnrha)</li> </ul>	2.28	126.3	288	518
Mixed Use				
Commercial/Residential	1.97	45	88	158
Total	33.39		1056	2647

Population	
Low Density	945
Low to Medium Density	1026
Medium Density	518
Total	2647

	Public	Sep	Separate	
Elementary & Junior High	(= Population x 0.37) 979	(= F	Pop x 0.12) 318	
High School	(= Population x 0.13) 344	(= F	Pop x 0.02) 53	
Total		1323		371
*MR previously dedicated as cash-in-	lieu for 7.88 ha of exisiting insitutional area. N	IR owing = 5.3	1ha.	
All housing types are assumed 2.9 L	ow + Med Low; 1.8 Med + Comm Persons Per I	Household.		
**Areas shown herein are to be verif	ied at the time of detailed design and subdivis	ion		

# 7.0 PLAN DIRECTION

# 7.1 Residential

#### Introduction

Hillshire provides a wide variety of residential types in a neighbourhood that will accommodate a diverse population. The housing types will include single-dwelling, semi-detached, duplex, town houses, row houses and apartments. Secondary suites, as listed uses within the County Land Use Bylaw, will be permitted with locations to be specified in the land use districts. A transition of densities is proposed that is sensitive to the existing single-dwelling residential neighbourhoods adjoining the south and west parts of the site. Vegetation buffers on the south and west edges of the property will further soften the transition to existing single-dwelling residences adjoining those edges. The high density residential development will be concentrated in the north and central part of the site where the height will not affect adjoining neighbourhoods. The maximum height along the south and west edges will be  $2\frac{1}{2}$  stories while the central and northern portions of the site will permit a maximum of 4 stories. Transition areas in between will permit up to 3 stories. Form and character of these housing types will be further detailed in the land use districts design guidelines. The urban design principles that will guide the development are included in chapter 8.4 – urban design.

#### **MDP Policy Direction**

Hillshire responds to MDP residential policies by:

- providing a mix of housing types;
- providing access to public amenities and community services;
- creating sensitive density transitions to adjoining neighbourhoods;
- ensuring medium density developments are limited in size and scale away from the sensitive edges; and
- creating an open and accessible neighbourhood.

#### ASP Objectives and Policies

It is also important to review the Sustainability and Growth Management policies in section 8 that cover the sustainability components of the Hillshire development. The Parks and Recreation and Environmental Management section in chapter 8 also provides further guidance on residential open space, recreation and environmental sensitive residential development.

**Objective:** to accommodate a diversity of residential options in a compact neighbourhood design that meet the Capital Region Growth Plan density targets yet are respectful of the form and character of adjoining residential neighbourhoods

Policy 7.1.1: Residential development in Hillshire shall meet a minimum overall net residential density of 30 units per net residential hectare.

Policy 7.1.2: There shall be a range of housing types within Hillshire that will include single-dwelling, semi-detached dwelling, townhouses, rowhouses, apartments, and secondary suites.

Policy 7.1.3: Residential development in the low density areas as shown on Figure 1.1 (single and semi) of Hillshire shall strive to meet a range of residential densities of 12 to 25 units per hectare and not exceed  $2\frac{1}{2}$  stories in height.

Policy 7.1.4: Residential development in the low to medium density areas as shown on Figure 1.1 (semi, duplex, townhouse and rowhouse) of Hillshire shall strive to meet a range of residential density of 26 to 75 units per hectare and not exceed 3 stories in height.

Policy 7.1.5: Residential development in the low density ranges shall be ground-oriented with pedestrian accesses directly to the street or common area.

Policy 7.1.6: Residential development adjoining existing single-dwelling residential development on the south and west of the site shall look similar in form and character. The lots along the west side will have an additional existing vegetation buffer along the rear, of minimum 5m depth, protected by restrictive covenant on each lot and to be maintained by the property owner.

Policy 7.1.7: Residential medium density areas will meet a minimum density of 75 units per hectare and shall not exceed 4 stories in height.

Policy 7.1.8: Low density residential areas shall be located adjoining existing residential development on the south and west side of the site.

Policy 7.1.9: Densities will transition throughout the site to ensure compatibility.

Policy 7.1.10: Encourage senior citizens and congregate housing through land use zoning.

Objective: to encourage mixed-use residential design in the north commercial area

Policy 7.1.11: The north commercial areas adjoining Wye Road shall have service commercial and retail uses on the ground floor and may have residential units and/or office space on the upper floors.

Policy 7.1.12: Residential-only buildings may be considered in the commercial area without the inclusion of commercial and retail uses within the building.

Policy 7.1.13: All residents will be within 800 metres of local services, while 50% will be within a 400 metre distance of these services.

### 7.2 Commercial

#### Introduction

Hillshire will have a mixed use commercial area at the north end of the property. These office, retail, service and residential uses will provide for the daily needs of Hillshire while the greater needs of the community will be provided across Wye Road and elsewhere. The intention is to complement the existing uses across Wye Road and provide a variety of smaller commercial and office uses in the development that can support the local needs of Hillshire. Residential uses will also be permitted on the upper floors in the community commercial area and may be considered for a standalone structure within the area. The community commercial development will be within a five to ten minute walk of all Hillshire residents, supported by a convenient cyclist and pedestrian pathway and trail network. Minor home-based businesses will also be an opportunity throughout Hillshire. The land use districts will provide further design guidelines that will help ensure that the scale and character of the mixed use commercial area is compatible with the surrounding residential community.

#### **MDP Policy Direction**

Hillshire responds to MDP commercial policies by:

- locating new commercial development so it is compatible with adjacent residential neighbourhoods;
- limiting the size and scale of development so that the commercial development is complementary to the surrounding residential development;
- providing convenient access for vehicles as well as safe pedestrian and cyclist connections by trails and pathways; and
- creating a variety of community commercial services necessary on a day to day basis.

#### ASP Objectives and Policies

**Objective:** to provide commercial opportunities to service local needs

Policy 7.2.14: Mixed use community commercial services and retail development will be required at the north end of the property to service local needs while also accommodating residential and office uses.

Objective: to encourage pedestrian and cyclist uses of the commercial area

Policy 7.2.15: Parking will be located to the rear or middle of the buildings. or properly screened from Wye Road in the commercial area. Landscaped pedestrian connections will be provided around buildings and within parking lots.

Policy 7.2.16: The commercial area will be connected to the residential areas by pathways to provide easy access for pedestrians and cyclists.

Policy 7.2.17: Private outdoor sitting areas and patios will be encouraged within the commercial area.

**Objective:** to integrate the form and character of the commercial area into the residential character of the neighbourhood

Policy 7.2.18: Land use zoning for the commercial area shall consider compatibility with adjacent residential districts.

Policy 7.2.19: Consider home-based businesses in Hillshire through land use zoning.

#### 7.3 Environmental Management

#### Introduction

Environmental management will be an important component in the Hillshire development as existing significant natural features, tree stands, and wetlands will be protected and conserved. These environmental features will contribute to the stormwater management as well as the parks and recreation on the site. An educational nature interpretation program for the residents and school children, in association with the pathway and trail system, will be implemented as a basis for a healthy and environmentally sensitive neighbourhood.

#### MDP Policy Direction

Hillshire responds to MDP environmental management policies by:

- Conserving important environmental features including wetlands, ravines, and tree stands in the form of Municipal Reserve and/or Environmental Reserve per the Municipal Government Act;
- Promoting higher densities and more compact development to reduce impacts on natural habitat and reduce sprawl.

#### ASP Objectives and Policies

**Objective:** to conserve the natural integrity and character of the site area

Policy 7.3.20: Lands classified as Environmental Reserve under the Municipal Government Act are identified and protected by a conservation plan and associated documentation.

Policy 7.3.21: The tree stands in the southeast corner and the northwest corner of the site shall be retained as well as the topographical features associated with these natural elements.

Policy 7.3.22: The constructed central wetland/pond and the north pond shall be retained including an additional minimum 10 meters from water surface within the PUL surrounding the pond in accordance with Strathcona County "Wetland Policy".

Policy 7.3.23: Compensation/mitigation for disturbed wetlands by the developer shall occur within the plan area in accordance Strathcona County Policy and with the Wetland Compensation Plan prepared by Stantec, and approved by Alberta Environment in July 2015 (plan and approval appended to Preliminary Servicing Report).

Policy 7.3.24: The developer shall incorporate mitigation measures such as replanting and naturalization into the constructed wetlands and develop a tree protection plan according to Strathcona County Tree Conservation policy.

Policy 7.3.25: Developer shall install interpretive signage adjacent to wetlands and significant natural features.

Policy 7.3.26: On-site composting will be encouraged.

Policy 7.3.27: ensure a minimum 50% of green space has habitat value while being sensitive to not attracting large or inappropriate wildlife.

**Objective:** incorporate Low Impact Development principles into the Hillshire landscape standards

Policy 7.3.28: A master landscape plan shall be submitted by the developer at the time of subdivision for the first phase for all lands within Hillshire to the satisfaction of Strathcona County. The plan shall incorporate regionally appropriate native and drought-resistant plantings where possible in accordance with Strathcona Design and Construction Standards and further requirements within the Hillshire land use districts.

**Objective:** balance artificial stormwater engineering with natural bio-engineering methods to reduce hard infrastructure costs and improve natural water features

Policy 7.3.29: Retain the natural stormwater flow on site with ponds and constructed wetlands where possible.

Policy 7.3.30: Use permeable surfaces where possible (e.g., grass or planting beds, gravel/stones) to reduce vast expanses of pavement or impermeable surfaces that reflect and increase heat.

# 7.4 Parks and Recreation

#### Introduction

The parks and recreation program in Hillshire builds upon the significant natural features of the site. The southeast tree stand will become a nature park, the central constructed wetland/pond will be part of the stormwater management system and also double as a natural sanctuary for birds and other wildlife, while the west park will be a flexible open space that will accommodate a playground and possible community garden among other site activities. The parks will be interconnected by a pathway and trail system. The pathways will be wider and paved while the trails will be narrower and softer with a granular surface through the natural areas. The parks and recreation system will build on the natural elements and contribute to the diverse population demands in the community further through a potential joint use agreement between the local elementary school and the developer. The potential working relationship with Strathcona Christian Academy Elementary School will help further Hillshire's outdoor and indoor recreation & education opportunities.

#### MDP Policy Direction

Hillshire responds to MDP parks and recreation policies by:

- Encouraging a variety of recreational opportunities distributed throughout the neighbourhood;
- Providing public open space to accommodate present and future leisure needs;
- Creating multi-use and joint use park and recreation areas; and
- Ensuring that the trail and pathway systems are connected to adjoining neighbourhoods.

#### ASP Objectives and Policies

**Objective:** to develop a parks and recreation network that provides recreation for a variety of ages and needs

Policy 7.4.31: The developer shall develop a pathway and trail network that creates pedestrian and cyclist connections between parks, open spaces and gathering areas in the community and connects to the adjoining neighbourhoods where possible as well as the regional trail system.

Policy 7.4.32: The northwest tree stand shall be retained as a natural area with granular trails.

Policy 7.4.33: The west park to be developed as flexible open space with a playground.

Policy 7.4.34: The south-east park will be retained as a natural woodland setting with granular trails.

Policy 7.4.35: The developer shall create interpretive wildlife habitat signage (birding), seating and viewing areas in the southeast park and along the trails/pathways, and a playground for children in the west park to encourage a healthy and active lifestyle.

Policy 7.4.36: The trails will be 1.5 meters wide with a granular surface, and pathways will be 3.0 meters wide, and paved. (see Figure 1.1).

Policy 7.4.37: Trails and pathways shall comply with Strathcona County's design and construction standards or approved variances.

Policy 7.4.38: Connect the Strathcona Christian Academy Elementary School with the Hillshire trail/pathway network so that children can walk or bike to school safely.

Policy 7.4.39: Developer will design all public spaces to permit residents and visitors from all walks of life including the elderly and those with physical challenges.

Policy 7.4.40: Ensure that the spaces throughout Hillshire are appropriately scaled, permit flexible activity, encourage gathering based on exposure, accessibility and location.

Objective: to incorporate stormwater management facilities as public amenities

Policy 7.4.41: Stormwater management facilities shall be publicly accessible throughout Hillshire.

**Objective:** to provide public amenities throughout the plan area

Policy 7.4.42: Municipal Reserve lands and Environmental Reserve lands shall be available for public use with the extent of use in accordance with Strathcona County policies.

Policy 7.4.43: The developer or builder will design the community landscape to include coniferous trees where appropriate as determined by the landscape designer.

Policy 7.4.44: The developer will reference the natural features of the site in site design and buildings by creating landscape features that accentuate such elements as the unique "knob and kettle" landscape.

### 7.5 Transportation

#### Introduction

The transportation network within Hillshire will encourage walking and cycling through a comprehensive pathway and trail system that will connect the residents with community commercial uses and parks. Convenient transit stops will be located within 400 metres of each resident wherever possible. Where possible, the pathway and trail system will also be connected to the surrounding neighbourhoods and the local elementary school to further enhance alternative travel modes. A clear hierarchy of local streets with sidewalks will create a pedestrian-scaled and safe local street network.

As development proceeds on land controlled by Hillshire Developments, roadway connections, or at minimum, road right of ways will be extended to adjacent undeveloped land.

#### **MDP Policy Direction**

Hillshire responds to MDP transportation policies by:

- Creating a walkable and cyclist-friendly neighbourhood;
- Connecting the trail and pathway system to adjoining neighbourhoods and connecting to Strathcona's multi-use trail network; and
- Providing accessible public transit.

#### ASP Objectives and Policies

**Objective:** to reduce vehicle trips within, to, and from Hillshire

Policy 7.5.45: Hillshire shall provide contiguous, user-friendly public transit stop locations, and a pedestrian and cyclist network, to encourage modal shift away from the personal automobile.

Objective: to reduce personal automobile infrastructure requirements within Hillshire

Policy 7.5.46: The potential for reduced on-site parking will be explored through the required Land Use Bylaw amendments.

Objective: to mitigate vehicular noise along Wye Road and Range Road 231

Policy 7.5.47: Noise Impact Assessment (NIA) will be completed prior to subdivision, and noise attenuation requirements shall be completed by the developer and/or builder for residential uses adjacent to Wye Road and Range Road 231.

**Objective:** to provide user-friendly public transit opportunities within Hillshire

Policy 7.5.48: The Hillshire development should encourage bus stops to be within 400 metre walking distance of all residents wherever possible.

Objective: to provide connectivity to other local and regional trail system

Policy 7.5.49: Pathway and trail linkages from Hillshire shall connect with adjoining trails in accordance with Strathcona County's Trails Strategy.

Policy 7.5.50: Opportunity for a future trail connection to Whitecroft on the south shall be provided; actual connection is dependent on Strathcona County acquiring right of way from one of the adjacent acreages.

Objective: to encourage alternative modes of transportation to access school sites

Policy 7.5.51: The Strathcona Christian Academy Elementary School site shall be integrated into a contiguous pedestrian and cyclist network.

**Objective:** to provide connectivity to the surrounding road network

Policy 7.5.52: The road network within Hillshire shall link the plan area with Wye Road and Range Road 231.

**Objective:** to develop public and private roadways that create a clear hierarchy of streets that are safe and efficient while creating a walkable community

Policy 7.5.53: The cross-sections of all new roadways within Hillshire shall follow the Strathcona County standards or alternative engineering standards as approved by Strathcona County through the variance process.

### 7.6 Utility Systems

#### Introduction

The utility systems include water, sanitary sewer, shallow utilities, communications facilities, and stormwater management. The water and sanitary sewer will be connected to the Strathcona County systems. The stormwater management plan will be designed in coordination with the central constructed wetland/pond, and the north pond on site, and connected to the Strathcona County stormwater system. Electricity, gas, and telecommunications will be coordinated with the shallow utility companies.

#### **MDP Policy Direction**

Hillshire responds to MDP utility systems policies by:

- Connecting to the existing water and sanitary sewer systems; and
- Improve water quality through a comprehensive stormwater management plan.

#### ASP Objectives and Policies

**Objective:** to provide servicing to Strathcona County standards

Policy 7.6.54: Water, sanitary sewer, and storm water servicing shall be in accordance with Strathcona County's design and construction standards and requirements unless alternative standards of servicing have been approved through the variance process.

**Objective:** to ensure stormwater will be managed appropriately in Hillshire

Policy 7.6.55: A Stormwater Management Plan will be developed to the satisfaction of Strathcona County, and Alberta Environment. The Plan will propose enhanced stormwater treatment to exceed the guidelines set out by Alberta Environment. It will also ensure that stormwater is detained and released at a rate equal or less than predevelopment rates.

**Objective:** to ensure phasing and construction complies with development and sustainability objectives

Policy 7.6.56: Prior to issuance of any development permit for the phase of development, engineering design and construction drawings shall be provided within Hillshire to the satisfaction of Strathcona County and shall address all the required guidelines as defined in the Strathcona County Engineering Standards and any approved alternative development engineering standards.

Policy 7.6.57: Proposed amendments to the Strathcona County servicing standards shall be supported by engineering analysis.

Policy 7.6.58: A hydrogeological study shall be completed prior to zoning applications.

Policy 7.6.59: Builders/homeowners will be alerted to near surface water tables for lots where this exists prior to subdivision registration, as described in Section 3.4

Policy 7.6.60: The developer or builder shall implement a construction waste program.

Policy 7.6.61: The developer or builder will include a recycling area as part of development of the apartment developments, such that is coordinated with the Strathcona County recycling program.

Policy 7.6.62: Design site lighting measures to maintain safe light levels while avoiding off-site lighting and night sky pollution. Technologies to be utilized will reduce light pollution and include full cutoff luminaries, low-reflectance surfaces and low-angle spotlights.

Objective: to ensure adequate capacity for shallow utilities and communication facilities in exist

Policy 7.6.63: The developer shall coordinate shallow utilities capacity and installation such as gas, electricity and telecommunications with the shallow utility companies at the time of subdivision.

Policy 7.6.64: The developer will ensure Hillshire conforms to Strathcona County's Light Efficient Community policy SER-009-038.

# 8.0 SUSTAINABILITY AND GROWTH MANAGEMENT

# 8.1 Urban Design Principles

The following urban design principles will help shape the Hillshire development and will be further detailed in Hillshire design guidelines as part of the land use district documentation.

- 1. The character of the landscape shall be retained through sensitive grading that minimizes retention structures and retains vegetation where possible.
- 2. The constructed wetlands and tree stands shall be used as natural amenities in development and respected with appropriate building and trail setbacks.
- 3. Residential developments shall fit into the landscape, integrating landform and vegetation into the development where possible.
- 4. Lower density will be adjoining existing south and west neighbourhoods to provide appropriate transitions.
- 5. Vegetation buffers will be provided along the west and south boundaries to further soften density transitions.
- 6. The highest densities and building forms will be central and north in the site the areas least sensitive to existing residential areas.
- 7. The commercial areas in the north area of the site will be oriented to Wye Road with a residential architectural expression.
- 8. Buildings will not exceed 3 to 4 stories in the north and central sites with the south and west edges of the site limited to 2 ½ story buildings.
- 9. Multiple-dwelling buildings will be designed to minimize mass and, in some cases, create multiple units that look like large estate homes.
- 10. The housing will be street-oriented where possible with front street entrances to increase "eyes on the street" and active street fronts.
- 11. Paved pathways will be a minimum of 3.0 meters wide. Minimum trail width, 1.5 meters with a granular surface per Strathcona County Standards.
- 12. Lighting will be limited to street, parking lot and entrance/exit lighting, with direct lighting only, to minimize glare and off-site impacts.
- 13. Residential parking lots will be limited to the rear, side or centre of development, or shall otherwise be appropriately screened from the adjacent road.
- 14. Commercial parking will be located to the rear or middle of buildings, or otherwise be appropriately screened from adjacent roadways.
- 15. CPTED principles shall increase public safety through street oriented housing and lighting of public spaces.
- 16. Public spaces will be designed to allow access to users of all age and mobility requirements.

# 9.0 IMPLEMENTATION

# 9.1 Amendment

This ASP may require amendment from time to time if any land use, density and associated policies require significant changes. Any amendment would require staff review, public consultation, and Council approval. The ASP may require review by the Capital Region Board if the MDP (Municipal Development Plan) also requires amendment. Minor variations to this plan are anticipated as part of the detailed planning and engineering process, subject to approval by County Administration

# 9.2 Land Use Bylaw Amendment

The Hillshire property will be located within the Strathcona County Urban Service Area boundary. Appropriate land use zones, accompanied by design guidelines, are anticipated to help implement the intentions of the Area Structure Plan. In this way, the development regulations may be customized to address specific needs for the area including development of the mixed residential densities and forms, the varied development standards, and requirements associated with the wetland and other unique features. The applicant will be required to draft the land use zones and the design guidelines, each as separate documents, in advance of subdivision and development permit approvals. There are a number of areas within the ASP plan that may require new zones including:

- Areas permitting secondary suites within specific zones that are not currently permitted;
- Areas permitting town house and row house parcels may require reduced or expanded lot depths to allow some front end access and increased depth for rear lane access; and
- The north mixed use commercial area is not currently permitted in the Land Use Bylaw and will require the creation of a zone to permit retail, office, and residential in the same building.

# 9.3 Phasing

Phasing of the development is expected to proceed generally as shown in figure 6.1, Phasing Plan. The phasing may be influenced by market demand, adjacent land ownership and infrastructure staging. Phases do not necessarily need to occur in numerical order shown. The full development of the property is estimated to take 10 to 15 years.

Development agreements between the developer and Strathcona County will be entered into for each stage and will address all matters as normally covered by County Development Agreements, and as deemed required by Strathcona County, for each stage.

# 9.4 Cost of Area Structure Plan

The developers of Lot C, 4389 MC and Lot B, 3878 MC shall be responsible for their proportionate share of the cost of the Hillshire ASP and engineering preparation.

# **10.0 FIGURES AND TABLES**

#### Figure 1.1: Land Use Concept

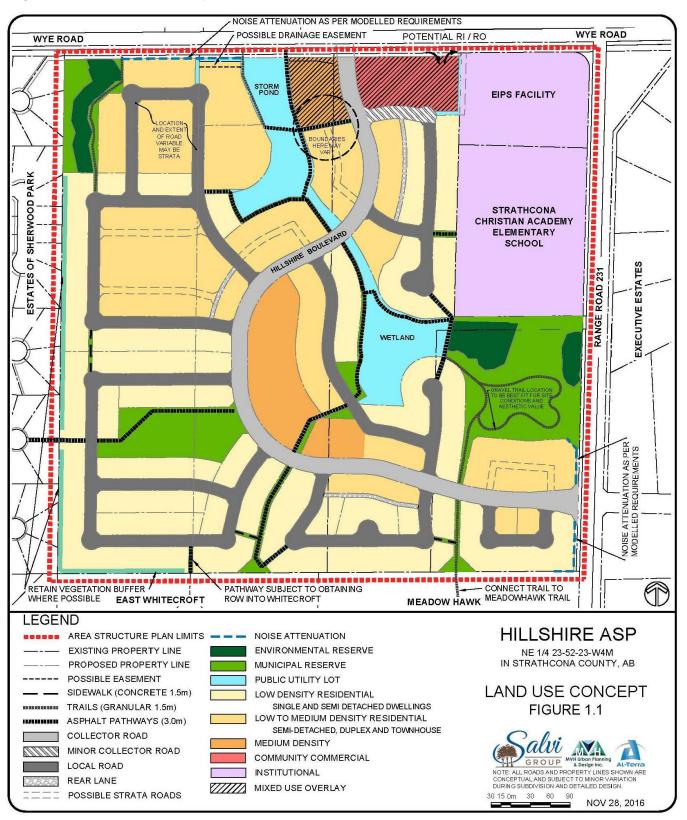




Figure 2.1: Site Location

Figure 2.2: Site Context

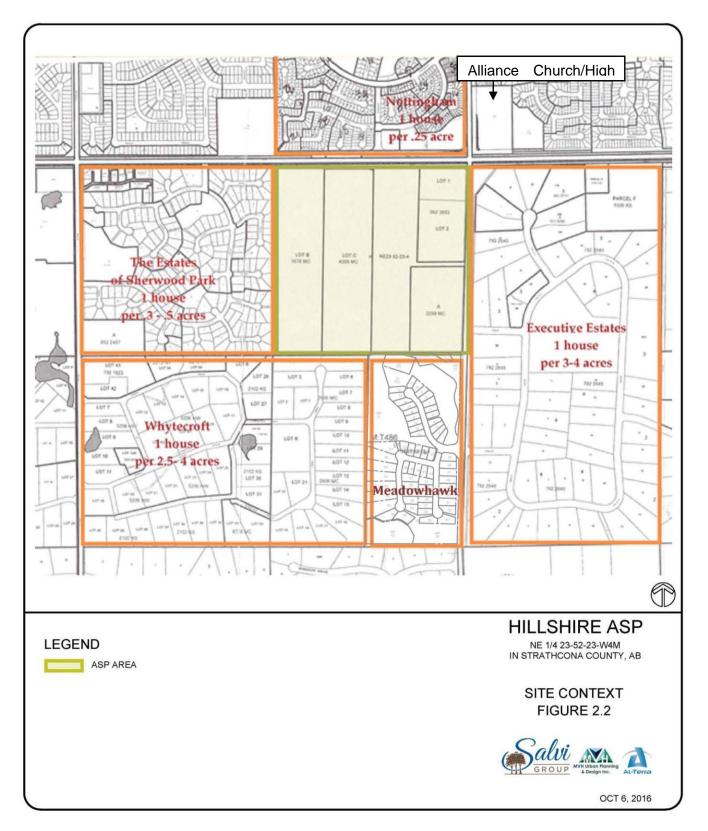
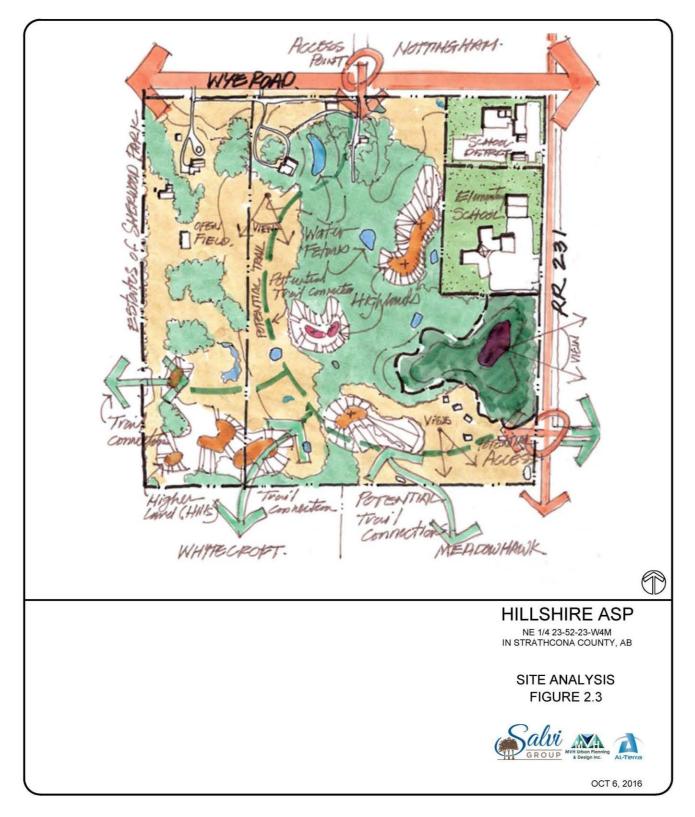


Figure 2.3: Site Analysis



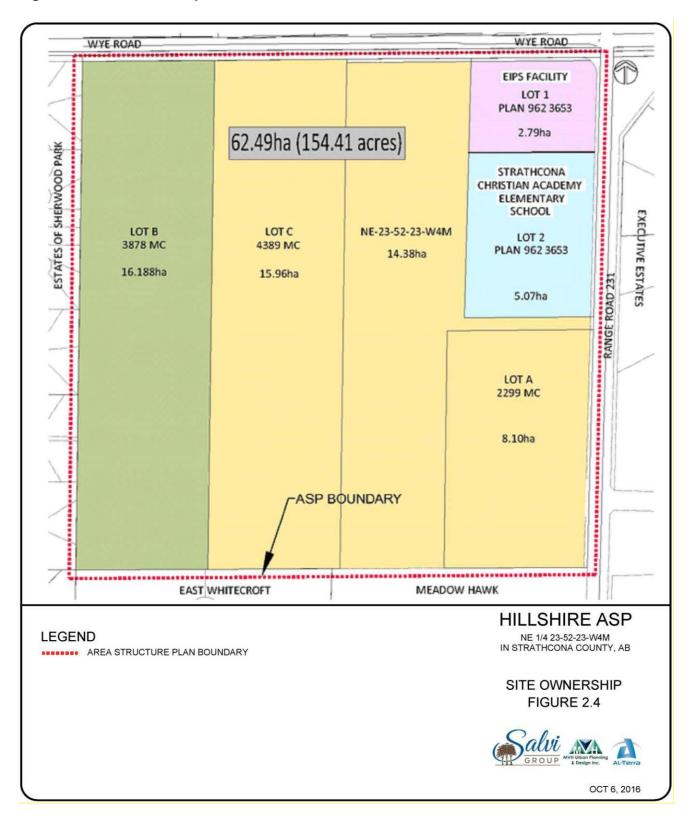
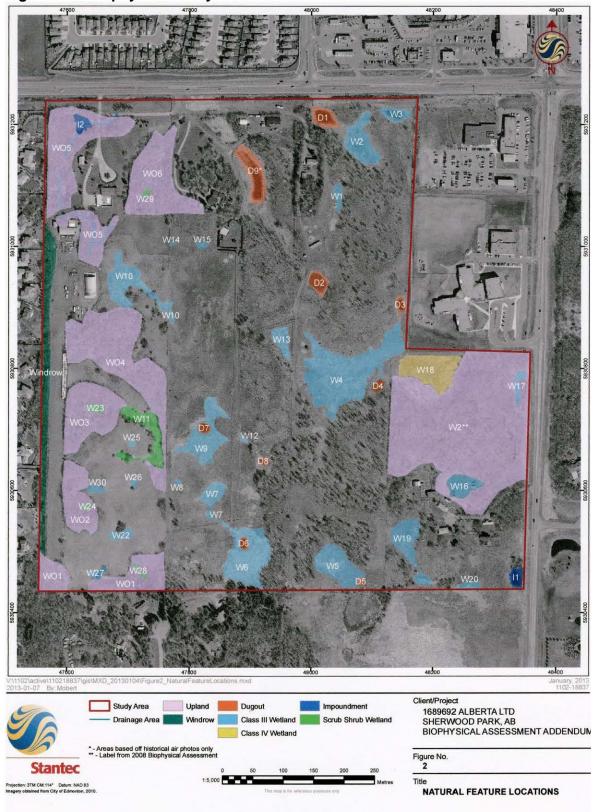


Figure 2.4: Site Ownership





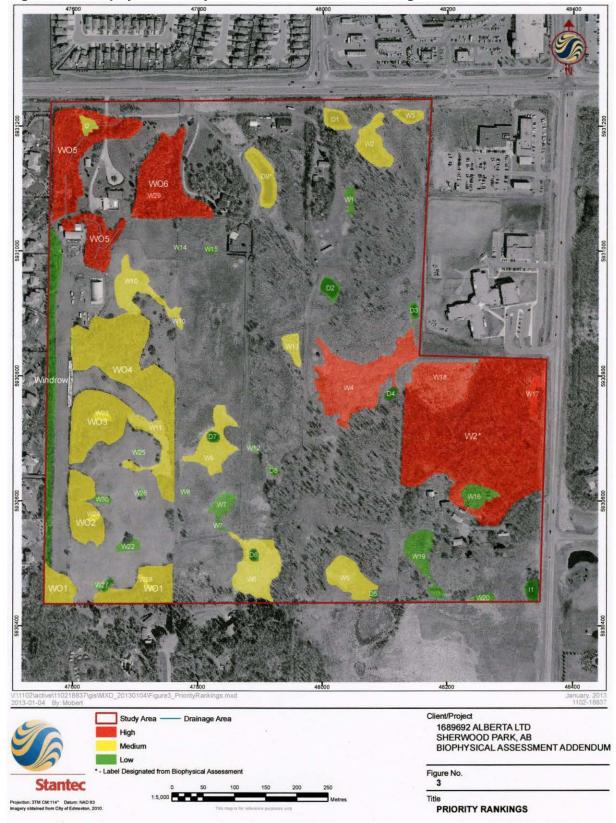


Figure 3.2: Biophysical Analysis - Natural Feature Rankings

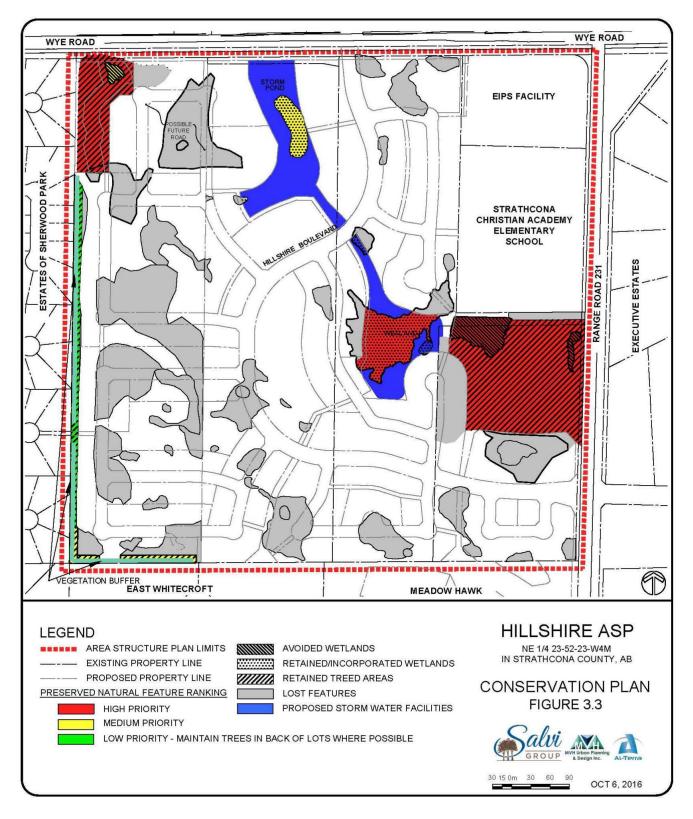


Figure 3.3: Conservation Plan



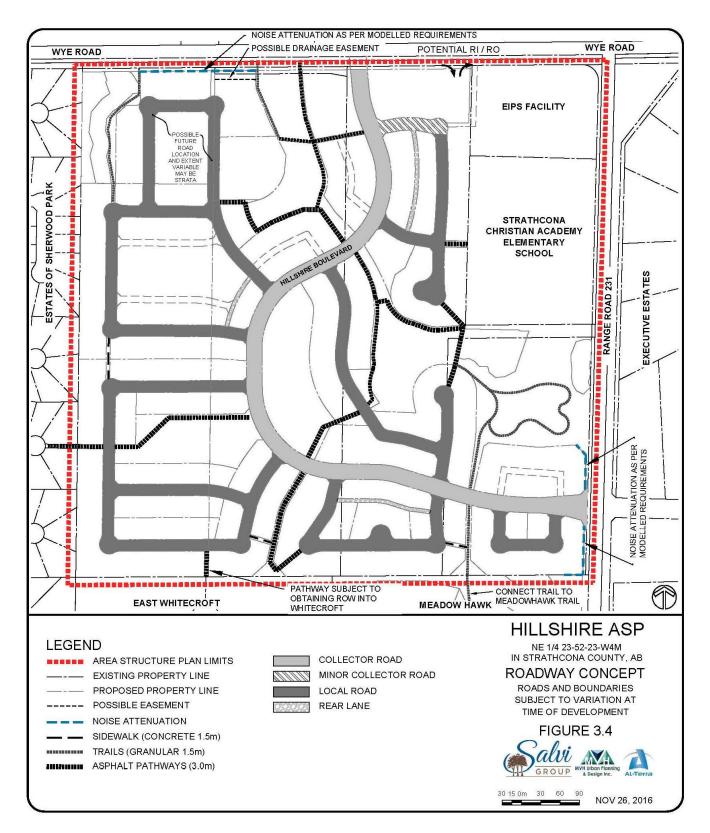
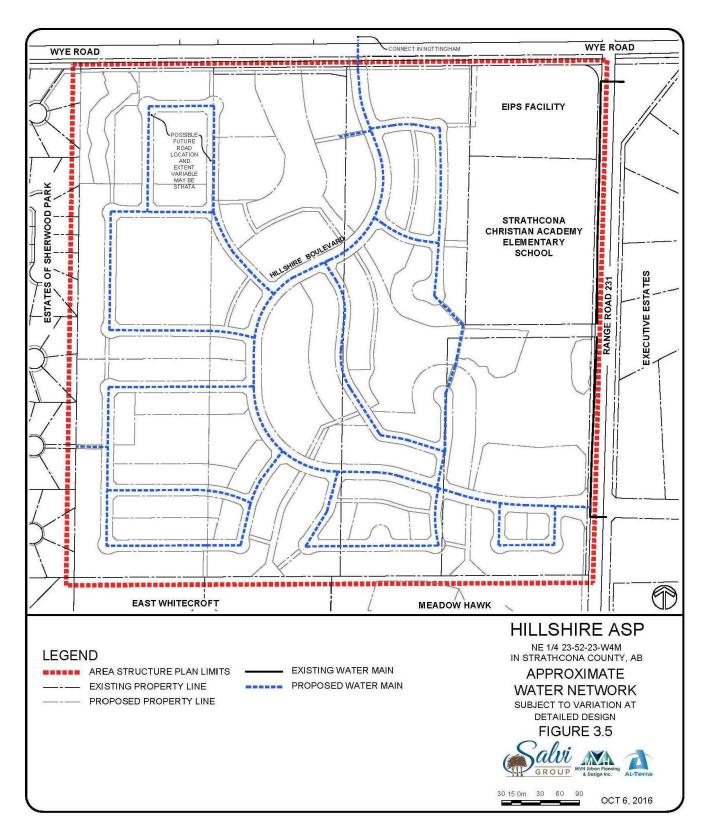


Figure 3.5: Approximate Water Network



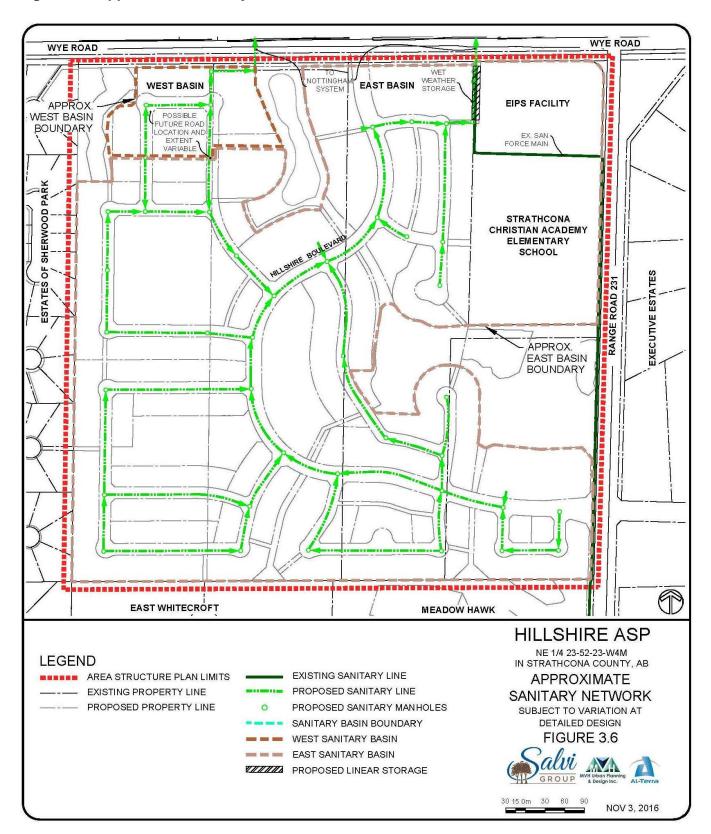


Figure 3.6: Approximate Sanitary Network

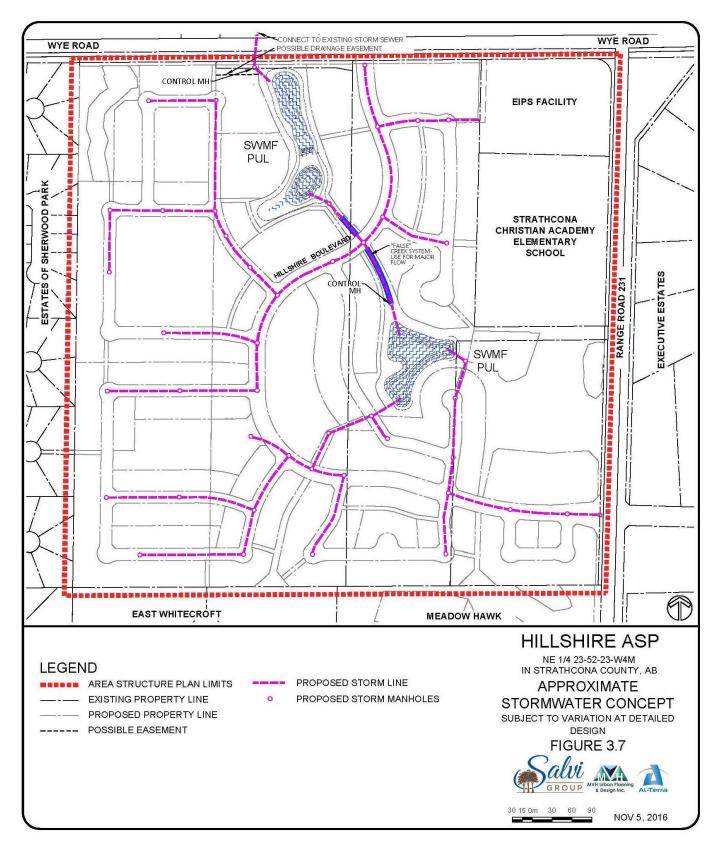


Figure 3.7: Approximate Stormwater Concept

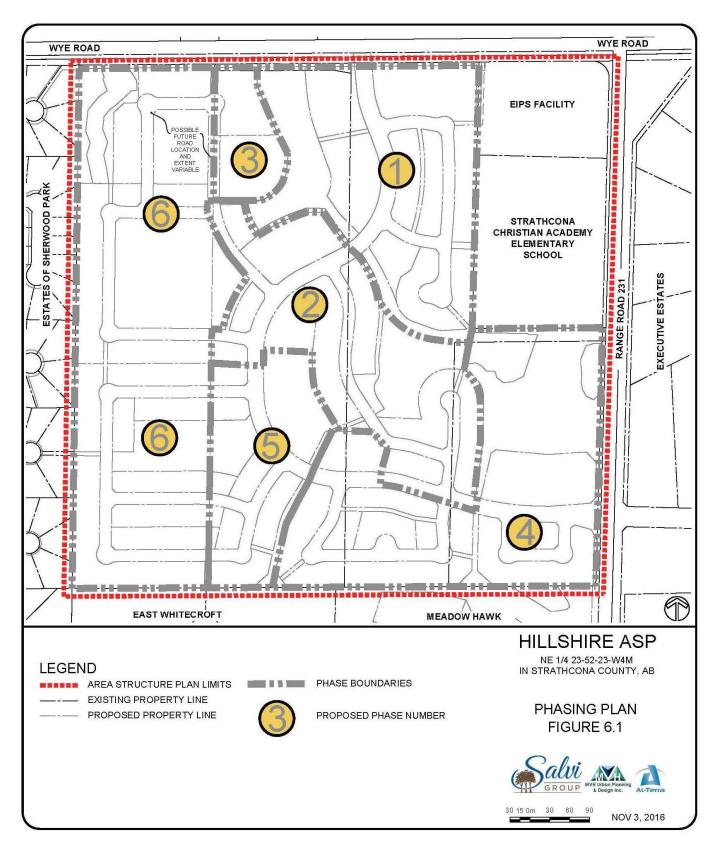


Figure 6.1: Phasing Plan

## Figure 6.2: Development Housing Allocation

Phase	Single- Family	Semi- Detached	Townhouse/ Row house	Apartments	Total Units
1. NORTH	40	39	38	88	205
Phase 1 = 5.85 ha; <u>Density: 35.04 units/ha</u>					
2. CENTRAL	39	49	49	72	209
Phase 2 = 5.92 ha; <u>Density: 35.30 units/ha</u>					
3. SOUTHEAST	73	25	25	72	195
Phase 3 = 6.08 ha; <u>Density: 32.07 units/ha</u>					
4. SOUTHWEST	25			144	169
Phase 4 = 2.50 ha; <u>Density: 67.60 units/ha</u>					
5. WEST	149	65	64		278
Phase 5 = 13.04 ha; <u>Density: 21.32/ha</u>					
TOTAL UNITS	326	178	176	376	1056
Percent Allocation	31 %	17 %	17 %	35 %	100%
Overall Density per hectare Based on Net Residential Density Total Net Developable Residential Area = 31.33 hectares					34 uph
Overall Capital Region Growth Plan MINIMUM TARGET 30 units per net residential hectare X 31.33 ha = 940 units					

Figure 6.3: Trail Cross-Section Concept



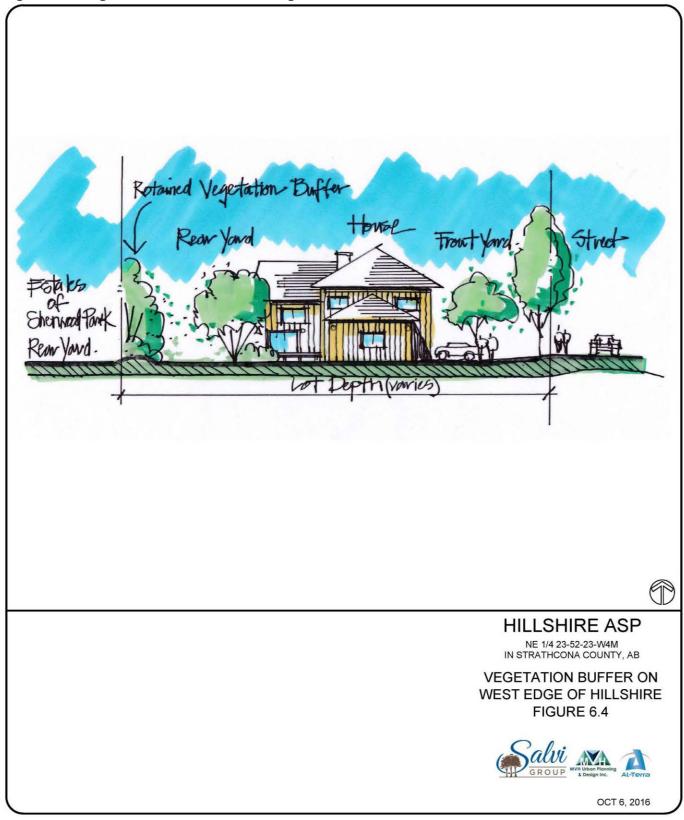


Figure 6.4: Vegetation Buffer on West Edge of Hillshire