



OUTLINE PLAN

FOR A CLUSTER RESIDENTIAL DEVELOPMENT

M.D. FOOTHILLS NO. 31
AS ADOPTED
DECEMBER 3rd, 2014

ACKNOWLEDGEMENT PAGE

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1.0 INTRODUCTION

1.1 Purpose of this Plan

This Outline Plan was prepared pursuant to the M.D. of Foothills Municipal Development Plan (*Bylaw 78/2010*). It is a non-statutory plan intended to describe the developer's rationale & motivation to establish a new 'environmentally-sensitive' country residential subdivision. It includes a policy framework that describes how the new subdivision will be implemented in accordance with various 'principles of sustainability' as contemplated by the MDP. The policies of this Plan have been prepared to concisely-inform ongoing decision-making regarding subsequent land use redesignation, subdivision, and development permit applications required to implement **The Springs at DeWinton** development.

1.2 Development Rationale

The subject lands are located within the M.D. of Foothills, between the City of Calgary and the Town of Okotoks, situated approximately 1 mile south of the Hamlet of DeWinton. This portion of the M.D. has been subject to significant country residential development primarily due to the area's gently-rolling topography, spectacular views to the Rocky Mountains and efficient access to employment areas and service amenities within the City of Calgary and the Town of Okotoks.

The subject lands are situated adjacent to an existing wetland owned by the Province of Alberta. The site includes a series of relatively-flat benches traversed by sloped areas – which generally 'step down' the lands from higher elevations in the northwest to lower-lying areas in the south east, adjacent to the wetland. The subject lands have been subject to a lengthy history of agricultural activities, primarily cattle grazing, which have generally degraded a significant portion of the site's natural habitat areas.

The site's existing topographical conditions and proximity to the adjacent wetland facility make it an ideal candidate to support a 'cluster residential' subdivision design. The intent of cluster subdivision design is to concentrate residential development within specific portions of the site as compared to conventional country residential developments and to preserve other areas as perpetual open space. The MDP's Residential Policies promote this form of development provided specific criteria can be satisfied as described later within this Plan.

1.3 Primary Development Considerations

The Springs at DeWinton is proposed as a 'cluster residential' subdivision incorporating the following design considerations:

- **Clustered residential uses** will be situated within the site's relatively flat plateau areas with sloped & low-lying lands preserved as open space;

- **An extensive open space system** will be established to preserve sloped and low-lying areas. The valley-bottom adjacent to the CPR tracks will be maintained as an Agricultural area to preserve a 'scenic vista' from 274th Avenue looking towards the wetland;
- **A comprehensive trail network** will be established to facilitate pedestrian and equestrian activities within the site. Although the trail system will be privately-owned and maintained by a Home Owner's Association, it will be accessible to adjacent landowners;
- **Transportation** will be provided by internal subdivision roads constructed by the developer within public road ROW's situated along alignments that respect sloped and low-lying areas;
- **Water & Wastewater services** will be provided by communal utility servicing infrastructure systems licensed by the Province of Alberta and constructed in accordance with all Provincial and municipal regulatory requirements and design standards. The systems will be owned by a Home Owner's Association who will contract their ongoing operation and maintenance services to a qualified utility management provider;
- **Stormwater management** will be accommodated through implementation of roadside ditches, overland drainage swales and detention facilities that will ensure the quantity and quality of surface run-off exiting the site respects all Provincial and municipal regulatory requirements. Implementation of Low Impact Development techniques will retain the volume of run-off within the Plan area and improve its quality prior to eventual release to downstream areas;
- **An Environmental Stewardship Program** will be implemented by the Home Owner's Association to ensure the private (communal) open space areas within the development are appropriately maintained. A **Landscaping Reclamation Program** will be implemented by the developer at the onset of development to re-establish native plantings within the site. An ongoing Management Program will be implemented by the Home Owner's Association to ensure these areas are properly maintained; and
- **A Development Committee** will be established by the developer to review each house plan to ensure compliance with specific **Architectural Guidelines** specifically designed to maintain a consistent theme & superior visual quality for each dwelling, related accessory uses & landscaping treatments; and

The policies of this Outline Plan describe how the referenced cluster residential design considerations will be implemented within **The Springs at DeWinton**.

1.4 The Outline Plan objectives

The intent of **The Springs at DeWinton** Outline Plan is to:

- a) Summarize a comprehensive baseline review of existing conditions within the Plan area to identify development opportunities and significant constraints which require appropriate mitigation strategies;
- b) Establish a development concept with an integrated land use framework to facilitate implementation of a new country residential development and related uses in accordance with the M.D.'s policy provisions established by the Municipal Development Plan (MDP);
- c) Establish a strategy to implement appropriate transportation and utility service infrastructure improvements as required for country residential development and related uses;
- d) Determine the general configuration of public and private open spaces within the development area - including a framework to address ongoing maintenance expectations;
- e) Establish expectations for provision of emergency response within the Plan area;
- f) Establish an overall phasing strategy for development within the Plan area based on infrastructure availability and market demand;
- g) Summarize a community consultation program implemented to inform & educate affected landowners and interested stakeholders;
- h) Rationalize the residential development in accordance with the M.D. Foothills adopted statutory and non-statutory policy framework;

2.0 COMMUNITY GUIDING PRINCIPLES

2.1 The Community Guiding Principles

The M.D. Foothills Municipal Development Plan establishes a broad-based policy framework designed to facilitate new residential development that respects rural character, promotes environmental conservation & enhancement and implements innovative & cost-effective infrastructure systems.

Using the MDP as its guiding policy, the Outline Plan establishes a series of **Community Guiding Principles** intended to connect the MDP's strategic development objectives with the developer's motivation to establish **The Springs at DeWinton**. These Guiding Principles are described as follows:

2.1.1 Promote natural capital

- a) **Open Space** - approximately 65 % of the total site area will be set aside as a combination of open space and agricultural lands.
- b) **Compact form of development** - residential land uses will be concentrated within a relatively small footprint to conserve environmentally-sensitive lands;
- c) **Enhanced Biodiversity** - the configuration of open space within the development will maintain strong connections between upland and low-lying areas to preserve connected habitat areas for unfettered wildlife movements.

2.1.2 Preserve rural character

- a) **Open Space** - the community will include an extensive open space area designed to preserve the site's existing environmental features.
- b) **Agricultural Preservation** - a portion of the valley-bottom adjacent to the CPR track will be maintained as an 'agricultural' area to preserve a significant scenic 'rural vista' from 274th Ave when looking south towards the wetland.
- c) **Dark Skies** - architectural controls will be implemented by the developer to maintain 'dark skies' aimed to reduce the 'spillage' of light from the community onto adjacent lands.

2.1.3 Implement environmental conservation & habitat improvement

- a) **Environmental Preservation** - the site's existing environmentally-significant features will be preserved within open space areas.
- b) **Riparian Buffer** - will be established adjacent to the wetland in accordance with the requirements of the Municipal Government Act.
- c) **Landscape Reclamation** - the developer will implement a Landscape Reclamation Program within portions of the open space area to re-introduce native plantings previously- eroded due to ongoing grazing activities.

- d) **Environmental Stewardship** - a Home Owner's Association will implement an ongoing Environmental Stewardship Program to ensure the open space habitat areas are positively-maintained.

2.1.4 Implement an innovative form of residential development

- a) **Cluster Residential** - the design of the community will implement of a 'cluster residential' design in accordance with the MDP's Residential Policies.
- b) **Open Space** - the community will maintain a rural character through deliberate preservation and enhancement of natural open space areas.
- c) **Compact form of development** - residential uses will be developed within a smaller footprint to reduce the infrastructure required to service the community.

2.1.5 Provide opportunities for recreation amenities

- a) **Walkability** - a comprehensive 'publicly-accessible' pathway system will be established to facilitate experience of the site's natural habitat areas.
- b) **Municipal Reserve** - a Municipal Reserve (MR) will be dedicated to provide opportunity to implement recreational activities such as a soccer pitch, ball diamond or outdoor ice rink.
- c) **Agricultural Preservation** - the valley-bottom adjacent to the CPR tracks will be preserved as a working agricultural area with opportunity to accommodate a private equestrian facility.

2.1.6 Implement innovative and cost-effective infrastructure systems

- a) **Compact form of development** - 'cluster' subdivision design will deliberately situate residential uses within a compact footprint to reduce the infrastructure required to service the community.
- b) **Improved access** - new roadways will be designed and constructed in accordance with municipal engineering design standards.
- c) **Communal water system** - Provincial and municipal regulatory approvals will be secured to divert groundwater and construct a communal water treatment & distribution system in accordance with all applicable engineering design standards.
- d) **Water conservation** - will be implemented with techniques such as metering usage for each dwelling, mandating low-flow plumbing fixtures and implementing irrigation restrictions. Each residential building site will implement rain harvesting techniques to provide a non-potable water source for landscaping.
- e) **Communal wastewater system** - a communal wastewater collection & treatment system will be installed in accordance with all applicable Provincial regulatory requirements and municipal engineering design standards. Treated wastewater may be used to irrigate the Agricultural Preservation area and/or adjacent agricultural lands.

- f) **Stormwater Management** - a series of roadside ditches, overland drainage swales and detention areas will retain surface drainage within the site and limit the volume & improve the quality of surface drainage prior to release to downstream areas.

2.1.7 Facilitate an open & transparent stakeholder engagement process

- a) **A two-way dialogue** - an extensive stakeholder engagement process will be completed to inform interested stakeholders regarding the project details, solicit feedback about technical issues and achieve measureable community support for the project.

2.1.8 Implement a 'quality' development with a 'quality' assurance

- a) **A sustainable model 'benchmark'** - the developer wishes to establish a new benchmark in the M.D. of Foothills for a more sustainable rural residential community.
- b) **Compact form of development** - the cluster residential design will limit the amount of public roadway infrastructure requiring maintenance by the M.D. New roads will be designed with current engineering design standards that should require very little structural maintenance for many years.
- c) **Communal utility infrastructure ownership** - the developer will transfer ownership of the communal water/wastewater system to a Home Owner's Association (HOA).
- d) **Utility Infrastructure Monitoring, Maintenance and Replacement** - The HOA will contract ongoing operation & maintenance to a qualified utility management provider to be financed by monthly utility rates. The HOA will also maintain a Capital Reserve Fund to finance costs for upgrades/replacement once the infrastructure concludes its life-cycle. There will be no associated cost to the M.D.
- e) **Ongoing Provincial communal infrastructure oversight** - the Province will require ongoing reporting as affecting the operation/treatment of potable water and any significant changes/alterations to groundwater levels. Similarly, reporting regarding the operation/treatment of wastewater will be required. If discrepancies are noted, the HOA (as owner/operator of the communal utility systems) shall be required to rectify.
- f) **Development Guidelines** - the developer will implement Architectural Guidelines to ensure the form of residential development reflects an attractive & high quality appearance.
- g) **Development Review Committee** - the developer will establish a Development Committee to review development plans for each new dwelling to ensure compliance with the Architectural Guidelines.
- h) **Landscape reclamation** - the developer will implement a Landscape Reclamation Program to re-introduce native plantings within the open space areas which have been previously-disturbed by grazing activities.

- i) **Environmental stewardship** - an Environmental Stewardship Program will be implemented by the Home Owner's Association to ensure the environmental features within the open space areas are appropriately maintained.
- j) **Walkability (pathways)** - the developer will construct a comprehensive publicly-accessible trail system within the open space areas. Ongoing maintenance of this trail system will be provided by the Home Owner's Association.

The Springs at DeWinton Outline Plan is prepared to describe how the developer proposes to implement a 'cluster subdivision' residential community which reflects the above-referenced development principles in accordance with the M.D Foothills Municipal Development Plan. It includes a policy-framework outlining the various obligations and commitments of the developer to ensure the residential development is implemented as anticipated. The Outline Plan is intended to inform subsequent decision making regarding land use amendment, subdivision and development permit considerations.

3.0 PLAN AREA DESCRIPTION

3.1 Location

As shown on **Figure1: Regional Context**, the Outline Plan area is illustrated within the broader context of Highway 22, Highway 552, the CPR line, 274th Avenue, the Hamlet of DeWinton, the City of Calgary and the Town of Okotoks. Since the 1970's, this portion of the MD has evolved to support a concentrated area of country residential development. Rolling topography, spectacular mountain views and convenient access to services in Calgary and Okotoks make this an ideal location for continued country residential development.

3.2 Legal Descriptions & Ownership

As shown on **Figure 2: Legal Descriptions**, the Plan area includes four individually-titled parcels legally-described as follows:

Parcel Reference	Legal	C of T	ha (±)	ac (±)
Parcel 1	NE 24-21-1-W5M	091 222 487 +2	10.22	25.27
Parcel 2	NE 24-21-1-W5M	091 222 487 +1	17.93	44.31
Parcel 3	SE 24-21-1-W5M	091 222 487 +3	64.4	159.16
Parcel 4	NE 13-21-1-W5M	091 222 487	41.24	101.9
TOTAL AREA			±133.8	±330.6

The lands are currently owned by **Sincerus (Hawk Springs) GP Ltd.**

3.3 Local Development Context

As shown on **Figure 3: Local Development Context**, existing subdivision surrounding the Plan area include a mix of country residential developments and agricultural parcels generally characterized as follows:

- Residential developments situated west and north of the subject lands typically include parcels ranging in size from ± 6 ac, most containing single-family homes serviced by groundwater wells and private septic treatment systems (PSTS).
- Agricultural developments situated east of the subject lands include quarter sections, or portions thereof, supporting small-scale cultivation and grazing operations.
- A Provincially-owned wetland abuts the south-eastern portion of the Plan area including a significant drainage feature that forms part of a regional conveyance route for surface drainage between the Sheep and Bow rivers. The wetland area includes a series of marshes and surface ponds.
- 274th Avenue forms the north boundary of the Outline Plan area. This municipal roadway is a paved collector road for the surrounding area providing access between Range Road 12 and Highway 2 via Hwy 2A.



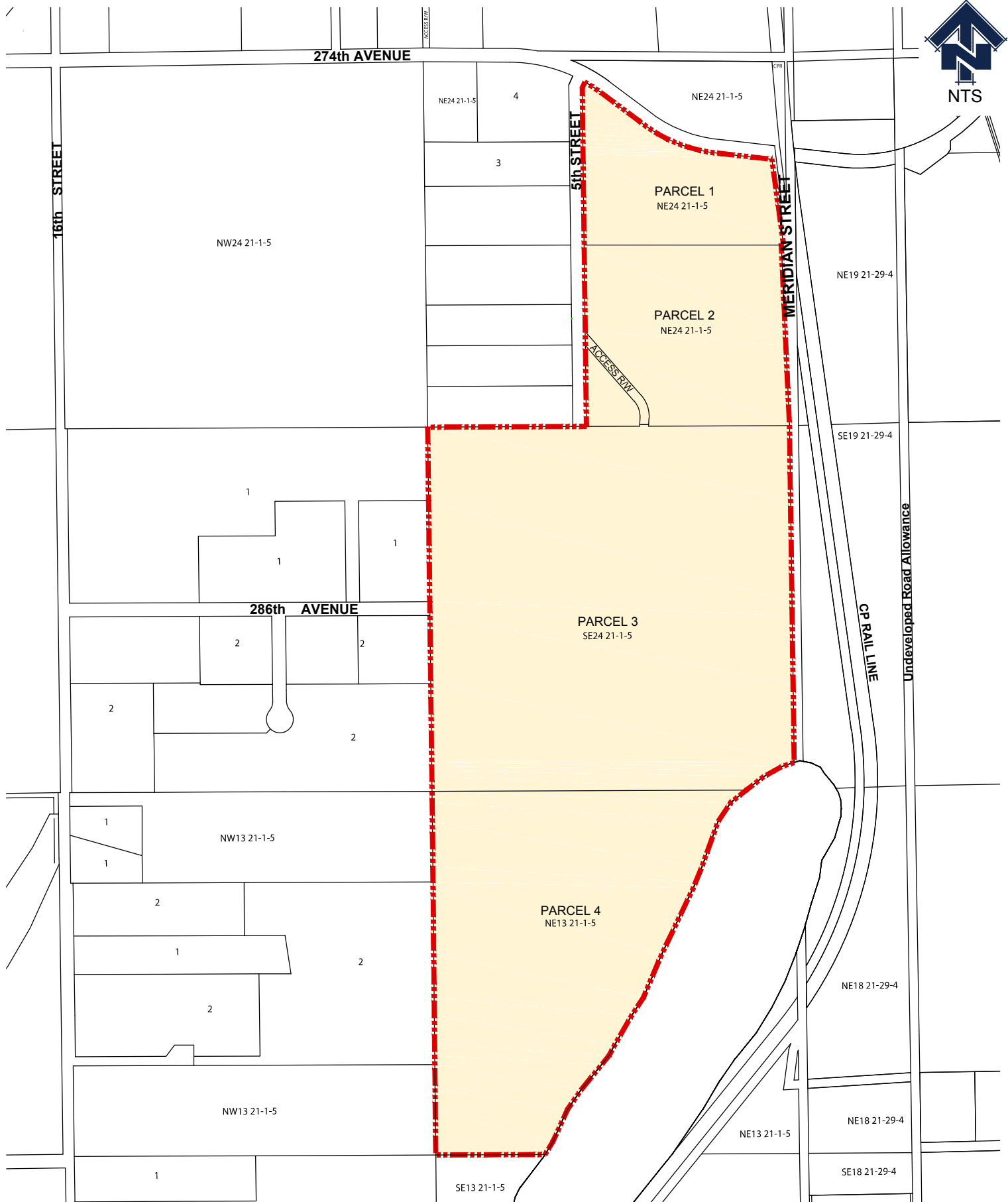
Legend

 Subject Lands



Figure 1
Regional Context

September 2012



Legend

----- Subject Lands



Figure 2
Legal Description

September 2012



- The CPR mainline forms the eastern boundary for a portion of the site. This railway provides a key linkage for transporting freight and commodities between Calgary and various communities situated to the south and southeast. CPR recently upgraded the rail crossing at 274th Avenue to include signals as illustrated.



274th Avenue / Meridian Street (westbound)

3.4 Existing Land Use

As shown on **Figure 4: Existing Land Use**, the Outline Plan area is currently designated Agricultural in accordance with the M.D Foothills Land Use Bylaw No. 1/99. The purpose of the Agricultural District is to allow for a broad range of agricultural uses. Existing and recent historical agricultural use of the property has been limited to the grazing of cattle.

Adjacent residential development includes parcels with Country Residential designation interspersed with occasional parcels with Country Residential (Sub A) designation. The purpose of both of these designations is to accommodate residential development in a rural environment. Adjacent agricultural development includes parcels with an Agricultural designation.

Surrounding developments include a mix of Agricultural and Country Residential land uses. Areas of Commercial Rural and Industrial Natural Resources designations are situated approximately 1 mile to the southwest of the subject lands. Two (2) areas of Direct Control (DC) land use are situated approximately 1 mile southeast of the Plan area including an equipment shelter/communications tower site (DC 8) and an Equine Centre with various commercial and supporting residential uses (DC14).

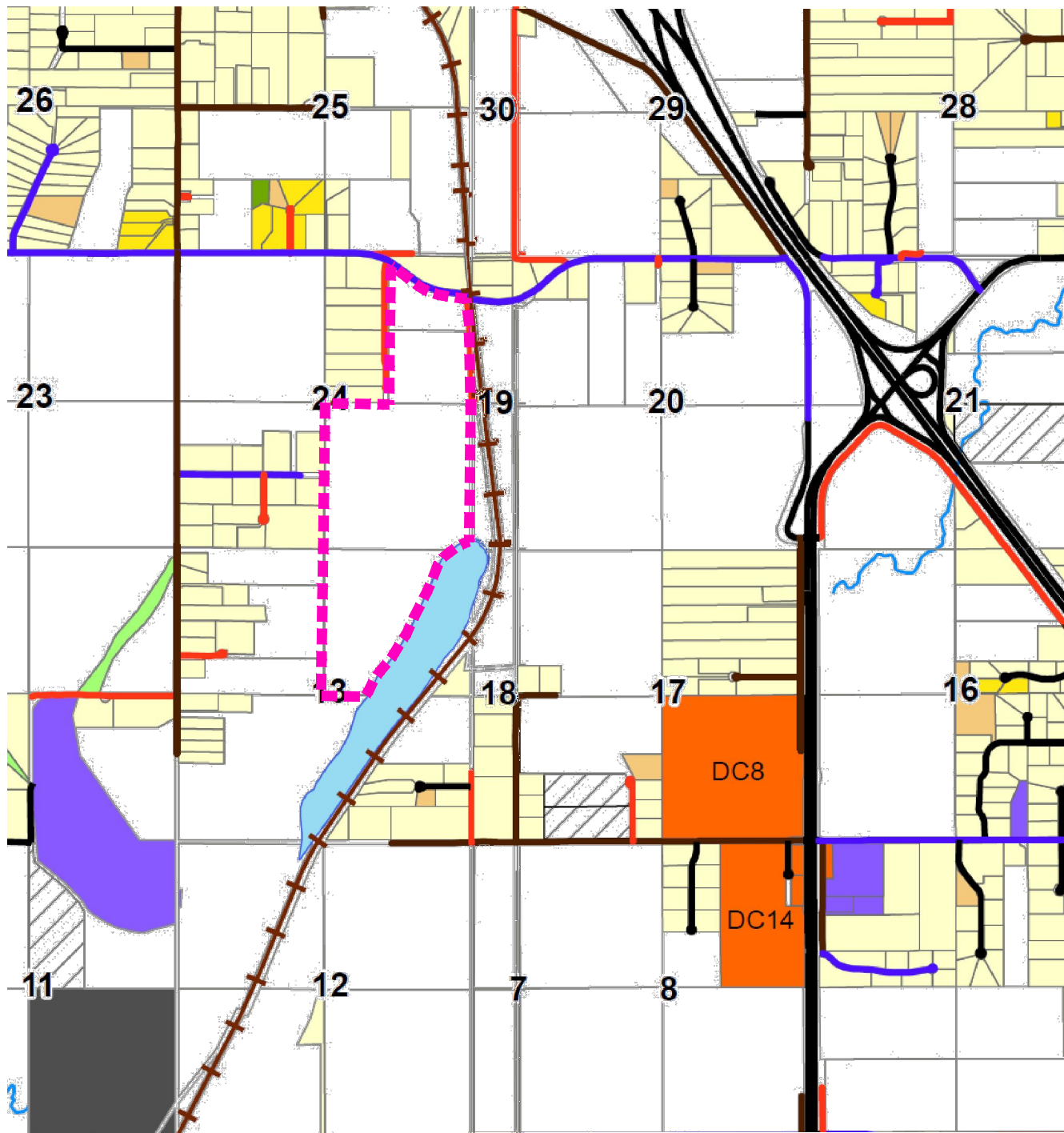
3.5 Existing Site Conditions

As shown on **Figure 5: Existing Site Conditions**, the subject lands include areas of variable topographic and biophysical/vegetation conditions described in the following sections. The Plan area includes two building sites each including a single family residence and various accessory buildings previously associated with agricultural activities. Both building sites have not been maintained and are generally in poor condition. Each dwelling is proposed to be demolished concurrent with the site's proposed redevelopment.

3.5.1 Existing Access

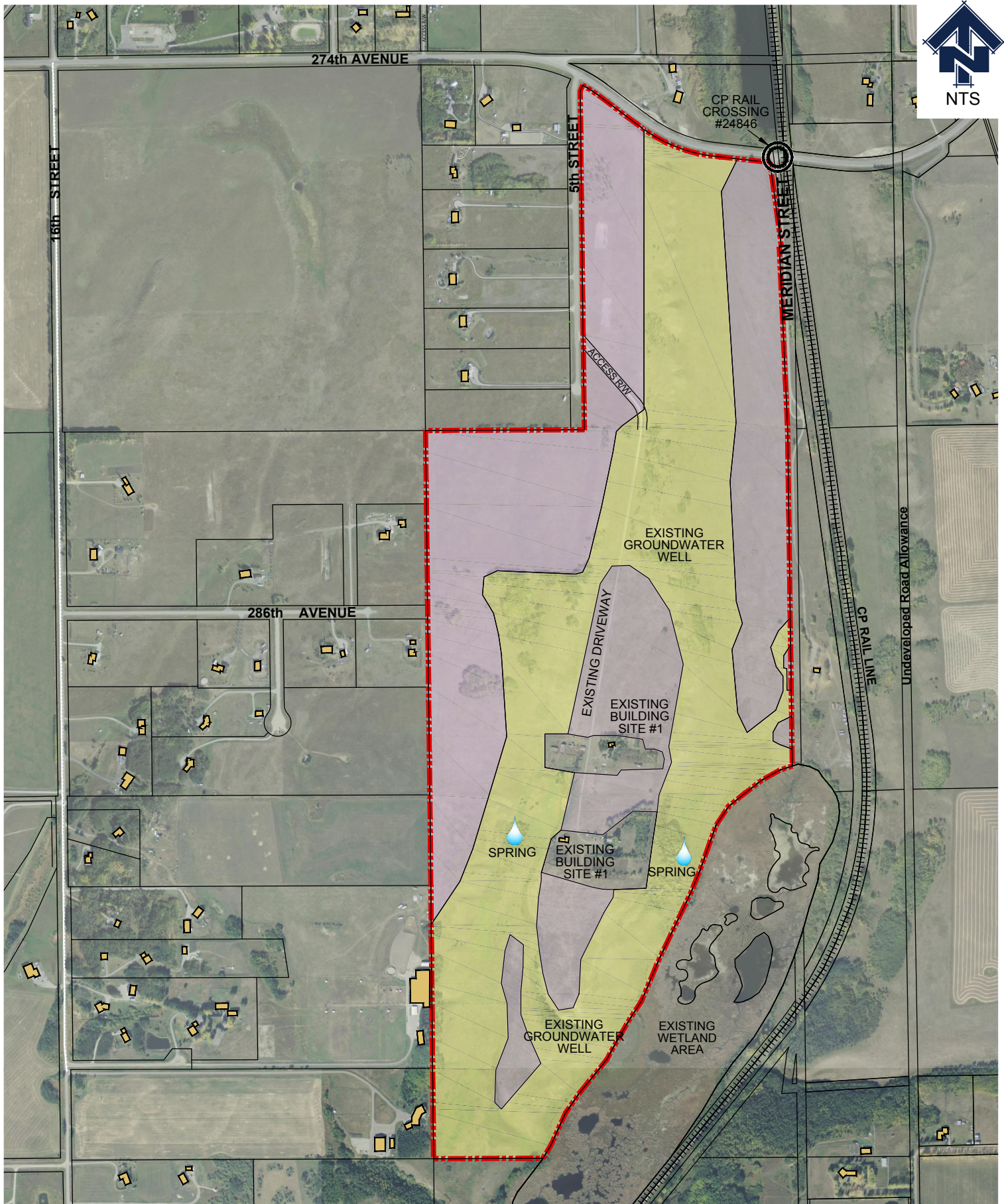
The Plan area can be accessed from three locations described as follows:

- **5th Street** (via 274th Avenue) – a recently upgraded paved municipal roadway providing access to seven (7) country residential lots situated directly northwest of the Plan area.



- | | | |
|--------------------------------|-----------------------------------|---------------------------|
| A- Agricultural | EP- Environmental Protection | R- Residential |
| CMH- Commercial Hamlet | ER- Environmental Reserve | RA- Residential Sub A |
| CMP- Commercial Park | INH- Industrial Hamlet | REC- Recreation |
| CMR- Commercial Rural | INN- Industrial Natural Resources | SR- School Reserve |
| CMY- Commercial Highway | INP- Industrial Park | Multiple Landuse i.e A/CR |
| CR- Country Residential | INR- Industrial Rural | Hamlet Boundary |
| CRA- Country Residential Sub A | MR- Municipal Reserve | |
| Direct Control District | PUL- Public-Utility | |

June 15, 2011



- Legend**
- - - - - Subject Lands
 - Class 5 Soils
 - Class 6 Soils
 - Existing Buildings

Figure 5
Existing Site Conditions

September 2012

- **Range Road 10 / Meridian Street** (*via 274th Avenue*) – a gravel municipal roadway situated parallel to the CPR line providing access to one (1) agricultural lot situated directly southeast of the Plan area.
- **286th Avenue** (*via the undeveloped portion of the statutory road allowance directly west of the Plan area*) – a paved municipal roadway providing access to thirteen (13) residential lots.

Access to the two existing building sites within the Plan area is provided by a gravelled driveway that extends within the site from 5th Street.

3.5.2 Agricultural Soils Assessment

A **Soils Arability Assessment** (*Matrix Solutions Inc., September 2006*) was completed within the subject lands to rate the agricultural capacities of native soil conditions. The assessment concluded that 46% of the site contains **Class 5** soils and 51% **Class 6** soils. For purposes of this assessment, the 3% of the total site area including the two existing building sites was not rated.

Class 5 soils have very severe limitations for sustained arable agriculture. Annual cultivation using common cropping practices is not recommended. The severity of the limitations of these soils renders the soils unsuitable for annual cultivation. While improvement practices are feasible, their capability is restricted to the production of perennial forage crops.

Class 6 soils have very severe limitations for sustained, arable agriculture. The severity of the limitations of these soils renders them unsuitable for annual cultivation. They are capable only of producing perennial forage crops with limitations too severe to support agricultural practices.

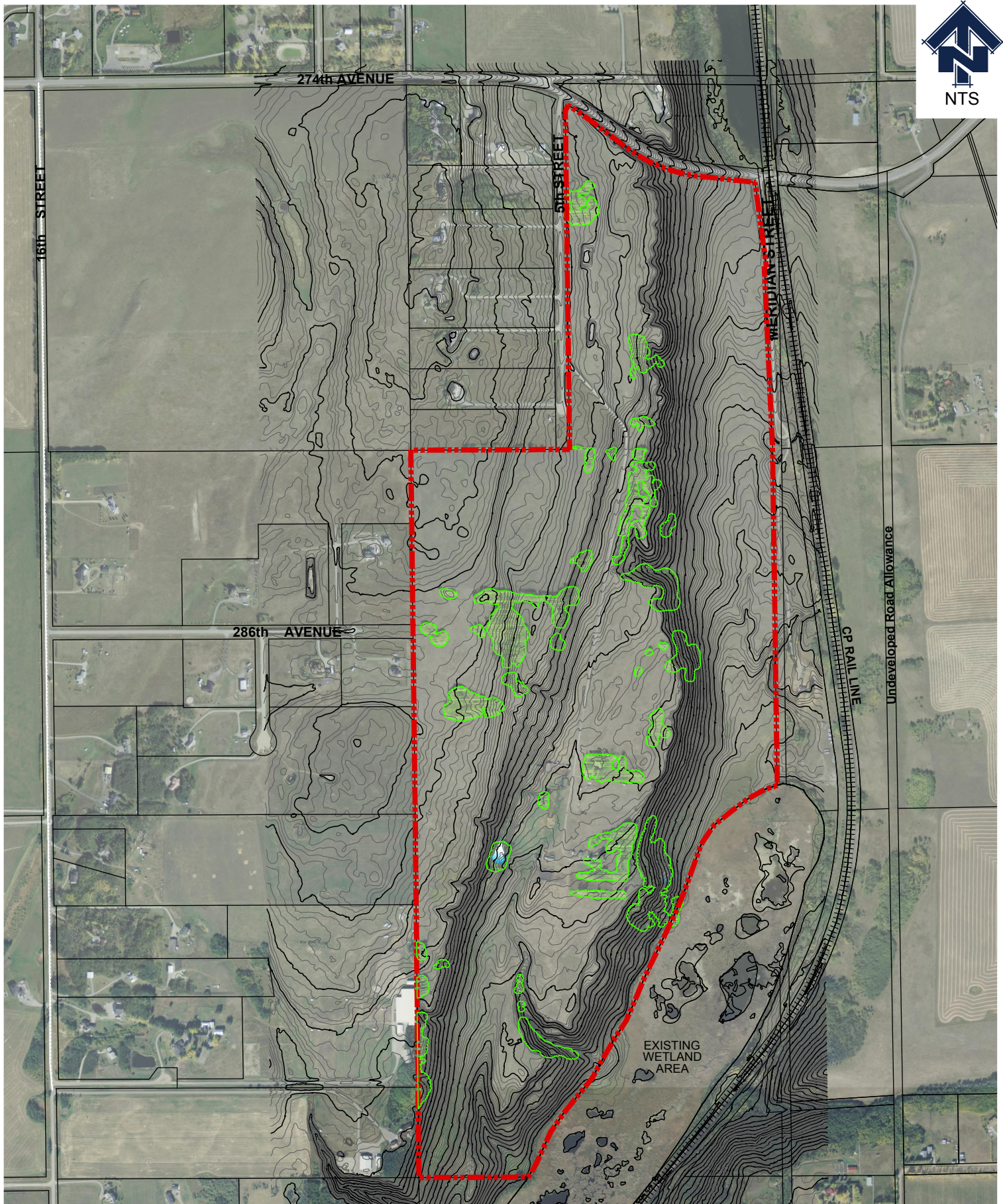
The Assessment concludes that native soil conditions within the Plan area are not favourable for support agricultural production.

3.5.3 Topography & Surface Drainage




Generally, topographical relief within the Plan area slopes from the northwest towards the southeast. As illustrated on **Figure 6: Topography, Slope Analysis & Environmental Features**, the subject land is characterized by contiguous areas of steep slopes which traverse the site generally from north to south. The sloped areas include gradients that generally vary from about 15 % to greater than 30%.

Generally slopes that are:

- less than 15% are considered suitable for residential development;
- 15 % - 33% can be incorporated into residential development; however, a detailed Geotechnical Assessment should be prepared at the subdivision tentative plan to demonstrate the slopes will remain stable after development.
- greater than 33% are not considered suitable for residential development.



Legend

-  Subject Lands
-  Existing Vegetation
-  Springs

The orientation of the sloped areas within the site forms three (3) distinct plateaus that include relatively flat terrain that appears ideally-suited for residential development.

An initial **Slope Stability Assessment** (*McIntosh Lalani Engineering Ltd., July 2006*) was completed within the subject lands to assess subsurface conditions within the site and determine their suitability for residential development.

The conclusions of the Assessment determined that:

- The sloped areas within the site are considered naturally stable and do not demonstrate visual evidence of historical or active instability.
- No evidence of any significant erosion was found on the site. Grading and landscaping associated with residential development should be designed to prevent erosion of slopes by preventing the concentration of water runoff. Alternatively, surface drainage features such as swales could be constructed along slopes to collect and control surface water.
- Existing groundwater and surface drainage are not expected to pose concern for residential development; however some design measures including sub-drainage (weeping tile) systems may be required adjacent to below-grade foundations.

The Assessment concludes that the Plan area, from a geotechnical perspective, is considered suitable for the proposed development. Specific development setbacks from the top of the valley slope will be determined by a more-specific geotechnical assessment to be prepared at the subdivision and/or development permit stage to ensure the integrity of the slopes is properly respected.

3.5.4 Biophysical Considerations

A **Biophysical Assessment and Environmental Management Plan** (*Sweetgrass Consultants Ltd., February 2011*) was completed within the subject lands to assess the type & extent of existing habitat areas within the site.

As illustrated on **Figure 6: Topography, Slope Analysis & Environmental Features**, the majority of the Plan area is covered by tame grasses, disturbed native grassland and occasional aspen groves & low shrubbery which have been heavily impacted by grazing activities. The lands surrounding the two (2) naturally-occurring groundwater springs and the slopes adjacent to the wetland include more frequent & substantial areas of aspen-balsam, poplar-woodland and low / tall shrubbery of various species.

Although the Plan area contains a rich diversity of native plant species, extensive disturbances from ongoing agricultural activities has facilitated invasion of non-native grasses within the site leading to an overall deterioration in the health & natural quality of the aspen woods. That being said, the sloped areas within the southern portion of the Plan area include native grasslands that are relatively undisturbed.

The Assessment concludes the most important habitats for conservation within the subject lands are the springs and associated woodland areas which should be preserved. The natural springs support a significant above-ground discharge which sustains the habitat areas that

surround them and the adjacent wetland complex. As such, the springs and their associated habitat areas should be preserved and enhanced as much as possible.

The Assessment recommends widespread agricultural activities should be discontinued within the site in favour of implementing residential development that respects as much of the natural features as possible. The Assessment also recommends an ongoing stewardship program be implemented to restrict unfettered access to the natural areas by domestic animals, primarily dogs and horses. Similarly, the alignment of pedestrian pathways should respect appropriate setbacks from the springs and their associated habitat areas.

3.5.6 Archaeological & Historical Resources

A **Historical Resources Impact Assessment** (*Historical Resource Management, August 2006*) was completed within the NE 13-21-1-W5M to assess whether or not the site is likely to contain significant archaeological resources, and if so, determine appropriate measures to prevent/mitigate disturbances. Since the lands situated in proximity to the wetland were considered most likely to contain evidence of previous human settlement, the Assessment focused its investigation in the southern portion of the Plan area.

Field work involving surface reconnaissance and below-ground shovel testing were undertaken. No archaeological resources were recorded. As such, the Assessment recommended that a Clearance from Alberta Community Development be granted. On October 3, 2006, Alberta Community Development indeed provided the Clearance thereby authorizing the project to proceed in accordance with the Alberta Historical Resources Act.

If required by Alberta Community Development, an additional Historical Resource Impact Assessment will be completed as affecting the remaining parcels within the Plan area. Confirmation of Clearance in accordance with the Historical Resources Act shall be required as a condition of subdivision contemplating multi-lot residential development within the Plan area.

4.0 DEVELOPMENT CONCEPT

4.1 The Springs at DeWinton Development Concept

As illustrated on **Figure 7: The Springs at DeWinton Development Concept**, the design of the community incorporates a 'cluster residential' subdivision pattern contemplated by the policies of the MDP.

The design of the residential area is rationalized by natural conditions within the site including several flat plateaus traversed by sloped areas which serve to 'step down' topography within the site from higher elevations in the northwest towards low-lying areas in the southeast located adjacent to the wetland. This Outline Plan's fundamental design goal is to concentrate residential uses within the flatter portions of the site while preserving, maintaining and enhancing the significant environmental features.

4.1.1 Open Space Design Considerations

The Open Space Areas within **The Springs at DeWinton** generally align with significant topographical features and incorporate the majority of existing vegetation and active agricultural areas. Approximately **213 ac (± 65 % of the total site)** will be provided as 'open space' described as follows:

- A **Private Open Space Area** will generally follow the alignment of naturally-sloped areas within the site as illustrated on **Figure 7**. Approximately **152.5 ac (± 47 % of total site area)** will be maintained as Private Open Space. An, **Environmental Reserve Easement (ERE)** will be dedicated within portions of the Private Open Space to preserve the steeper slopes and maintain a minimum 75 development setback adjacent to the wetland in accordance with the MD's Riparian Setback Matrix Model. All other private open space areas will have encumbrances registered on title to prohibit any subsequent redevelopment for residential purposes. A publicly-accessible trail system will be constructed within the Private Open Space area.
- An **Agricultural Area** will be maintained within the site as illustrated on **Figure 7**. This area will include **± 32.6 ac (± 10 % of total site area)** located within the relatively-flat 'valley bottom' area adjacent to the CPR railway. Agricultural activities, mainly pasture or limited crop production, will continue in this area. The Agricultural Area's alignment will maintain a rural vista when viewing the valley-bottom area to the south from 274th Avenue towards the wetland. Access to this Agricultural Area will be provided by Meridian Street.

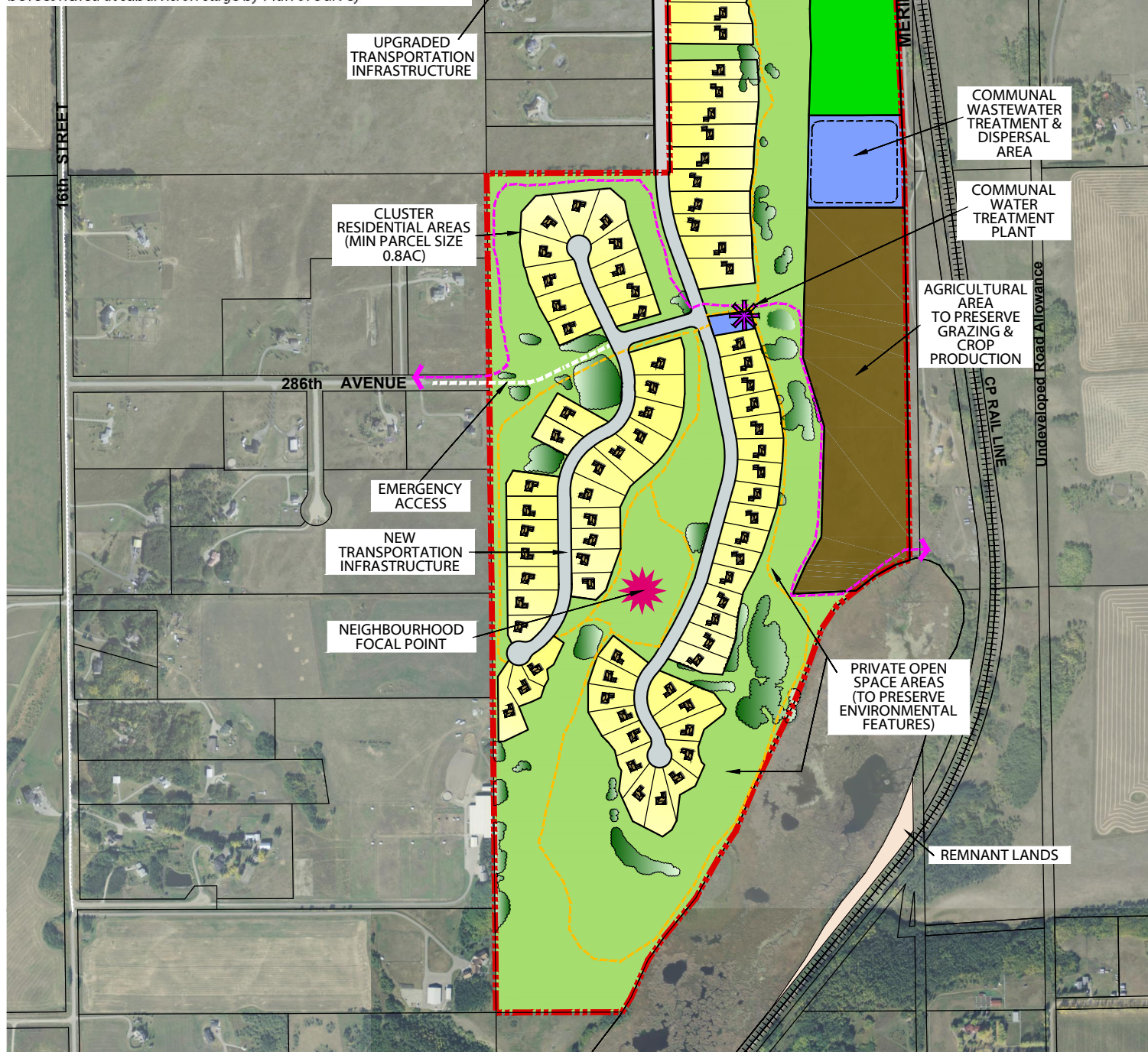
The Agricultural Area could potentially accommodate a private equestrian facility, subject to the M.D. Foothills Land Use Bylaw development permit requirements. However, the implementation of such facility is not contemplated by the developer pursuant to the provisions of this Plan. If a qualified facility operator with a demonstrated business plan to support such a facility comes forward, the developer is willing to offer the Agricultural Area for this potential use. Otherwise, the developer

THE SPRINGS AT DEWINTON OUTLINE PLAN DEVELOPMENT STATISTICS

	ac	ha	%
Residential Area	96.5	39.05	30
Private Open Space Area	152.5	61.71	47
Municipal Reserve (MR)	19.1	7.73	6
Agricultural Area	32.6	13.19	10
Public Utility Lot (PUL)	8.8	3.56	3
Roads	14.7	5.95	4
Remnant lands*	2.5	1.01	1
TOTALS	326.7	132.21	100

* Portion of NE 13 directly southeast of the Provincial wetland

Note: Discrepancy between C of T and area shown to be reconciled at subdivision stage by Plan of Survey



Legend

- Subject Lands
- Pedestrian Trail
- Potential Equestrian Trail

Figure 7
Development Concept

September 2012



expects to lease the lands to a local agricultural operator for the purposes of grazing/limited crop production.

- A public **Municipal Reserve (MR)** will be dedicated within the site as illustrated on **Figure 7** including **± 19.1 ac (± 6 % of total site area)**. The MR will be accessed from Meridian Street and will extend the valley-bottom's wide-open open sight line thereby preserving a rural scenic vista when viewing the site to the south from 274th Avenue.
- Two (2) **Public Utility Lots (PUL)** will be dedicated within the site as illustrated on **Figure 7** including **± 8.8 ac (± 3 % of total site area)**. The PUL's will include various components of the communal water and wastewater treatment facilities.

POLICIES:

4.1.1.1 *The provision of Open Space shall be generally in accordance with Figure 7: The Springs at DeWinton Development Concept.*

4.1.2 Residential Design Considerations

The **Residential Area** is designed in accordance with a 'cluster subdivision' subdivision configuration concentrated within the Plan area's relatively-flat plateaus including **± 96.5 ac (± 30 % of total total site area)** as illustrated on **Figure 7**.

Section 15 of the M.D. Foothills MDP's Residential Policies establishes specific criteria with which proposals for Cluster Residential subdivision must comply described as follows:

- Minimum size of the parent parcel must be 40 ac.
- Parent parcel can be based on a single parcel or combined contiguous parcels.
- Maximum density of Cluster Residential subdivision is 1 parcel per 4 ac of the parent parcel.
- Cluster Residential parcels, including the balance parcel(s), shall be encumbered by mechanisms that permanently disallow further subdivision of these lands.
- Minimum parcel size is 0.8 ac, maximum size is 1.99 ac.
- Utility services shall be provided by communal water systems and communal wastewater systems which comply with Municipal and Provincial standards and requirements for testing, licensing, design, maintenance, monitoring and reporting.
- Subdivision is zoned Cluster Residential to allow for the number of units.

The Springs at DeWinton incorporates these referenced MDP policy provisions

POLICIES:

4.1.2.1 *The configuration of Residential Areas shall be generally in accordance with Figure 7: The Springs at DeWinton Development Concept.*

4.1.3 Population Projection

The population within The Springs at DeWinton is anticipated as per the following table:

# of Dwellings	# of Persons / Dwelling	Anticipated Population
82	2.8 (as per M.D. Foothills 2006 Civic Census)	230

4.2 Transportation Considerations

Access to **The Springs at DeWinton** will be as generally illustrated on **Figure 8: Transportation Considerations**. Access will occur from 274th Avenue via 5th Street – a recently upgraded municipal road with a paved surface. 5th Street will be extended within the Plan area as an internal subdivision road to be constructed by the developer.

4.2.1 Traffic Impact Assessment

A **Traffic Impact Assessment** (*Eagle Engineering Corp., May 2011*) was completed to:

- establish expectations for new vehicle trips expected to be generated by the proposed development; and
- determine the expected distribution of this additional traffic.

The intent of the analysis was to assess the potential impacts on surrounding municipal roadways and intersections and determine what upgrades may be required to support same.

The TIA examined the following two (2) intersections' capacities to accommodate additional traffic movements anticipated by this development:

- 5th Street / 274th Avenue intersection; and
- 15th Street / 274th Avenue intersection.

The conclusions of the TIA indicate access to the Plan area can be accommodated by the developer upgrading the intersection at 5th Street/274th Avenue to a Type 1A engineering standard. This design can be achieved by minor improvements including an eastbound right turn lane and basic geometric upgrades. No additional improvements are required at 15th Street / 274th Avenue. Notwithstanding the conclusions of the TIA, the developer is prepared to upgrade this intersection to a Type II engineering standard.

The Assessment also recommends widening of 5th Street to a 7.0 m paved surface in accordance with municipal road design standards.

POLICIES:

4.2.1.1 The developer shall upgrade the 5th Street/274th Avenue intersection and widen 5th Street in accordance with recommendations of the Traffic Impact Assessment (Eagle Engineering Corp, March 2011), to the satisfaction of the municipality.

4.2.1.2 Notwithstanding the TIA recommendations, the developer shall construct the 5th Street/274th Avenue intersection to a Type II engineering standard, to the satisfaction of the municipality.



274th AVENUE

Existing Intersection
(to be upgraded to
Type 1A standard)

5th Street
(to be widened)

Recently
upgraded CPR Crossing
(no additional
improvements required)

Internal
Subdivision
Road (to be
constructed)

286th AVENUE

Emergency Access
(to be constructed)

CP RAIL LINE

Undeveloped Road Allowance

Legend

Subject Lands



Figure 8
Transportation Plan

September 2012

4.2.2 Local Transportation Improvements

The Residential Areas will be accessed by a new paved internal road constructed by the developer in accordance with all municipal engineering design standards. The internal roadways will be situated in a 25 m ROW rural cross-section with ditching to convey surface drainage. In some cases, the ROW maybe widened to accommodate divided medians, traffic calming structures and turnarounds to facilitate efficient and safe access within the community. All internal roads will be finished with a paved surface treatment.

The Municipal Reserve and Agricultural Area will be accessed via Meridian Street.

POLICIES:

4.2.2.1 Access within the Plan area shall be generally in accordance with Figure 8: Transportation Considerations.

4.2.2.2 The internal subdivision road shall be constructed by the developer with a paved surface in accordance with all applicable M.D. Foothills engineering design standards.

4.2.2.3 The internal subdivision road will be constructed in a 25 m ROW with a rural cross-section.

4.2.3 Street Lighting

Street lighting is not anticipated within the Outline Plan area to preserve the rural character of the surrounding area by limiting unnecessary light pollution and maintaining 'dark skies'. However, illumination may be required within the 274th Avenue / 5th Street intersection for safety purposes.

POLICIES:

4.2.3.1 Installation of street lighting is not expected within the Plan area to respect the 'dark skies' character of the surrounding area.

4.2.3.2 If required, the 274th Avenue / 5th Street intersection will be illuminated in accordance with the MD Foothills Street Lighting Policy ADC-STR-1.

4.2.4 Emergency Access

The developer will construct an 'all-weather-access' from the Plan area's internal subdivision road to 286th Avenue as generally illustrated by **Figure 8**. This road connection will establish an access meant only to be used by emergency response vehicles only in the event access from 5th Street is impassable.

POLICIES:

4.2.4.1 An emergency access shall be provided from the Plan area to 286th Avenue as generally illustrated on Figure 8.

4.2.4.2 The emergency access shall be constructed by the developer in accordance with municipal engineering design standards governing same.

4.3 Utility Servicing Considerations

The Springs at DeWinton will be serviced by a communal potable water & wastewater utility system in accordance with the policy provisions of the Municipal Development Plan as generally illustrated on **Figure 9: Utility Servicing Plan**.

Implementation of water/wastewater infrastructure systems shall be provided by the developer in accordance with all applicable Provincial & municipal regulatory requirements and engineering design specifications.

4.3.1 The Springs at DeWinton Potable Water System

The Springs at DeWinton will be serviced by a communal potable water system supplied by groundwater, as generally illustrated on **Figure 9**.

Two (2) production wells already installed within the east-central and southern portions of the site will supply a centrally-located Water Treatment Facility to be constructed by the developer at the subdivision stage. The treatment facility will treat the groundwater prior to its distribution throughout the Residential Areas. A distribution main shall be installed within the road ROW's with individual services provided to each residential parcel. The design of the distribution system will be in accordance with all applicable regulatory requirements and engineering design standards.



Example Water Treatment Plant

POLICIES:

4.3.1.1 *A communal water system shall be constructed within the Plan area as generally in accordance with Figure 9: Utility Servicing Plan.*

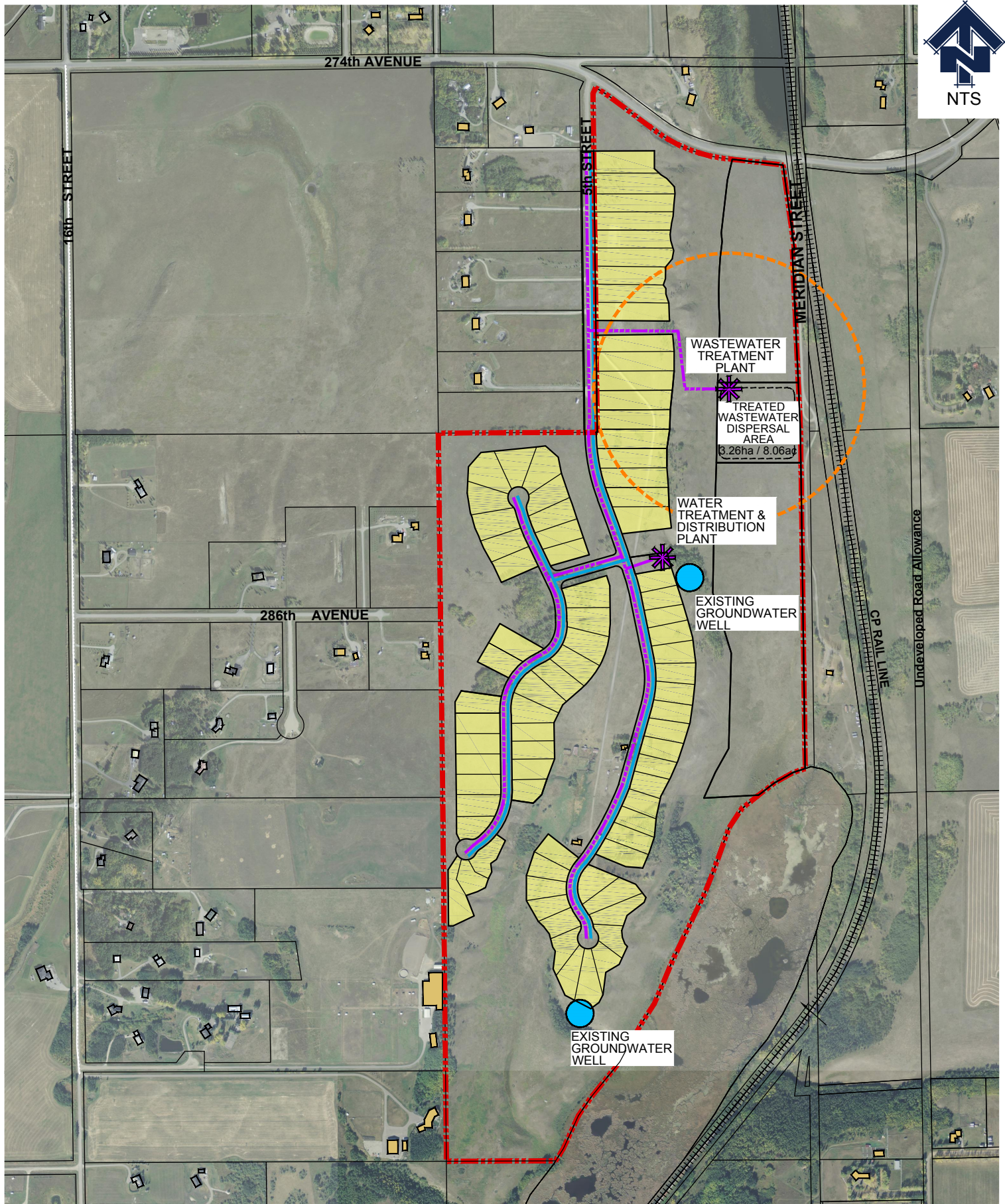
4.3.1.2 *The system shall include two (2) production groundwater wells, a centrally located water treatment facility and a series of water distribution mains constructed by the developer in accordance with all Provincial and municipal regulatory requirements and engineering design standards.*

4.3.1.3 *The water system shall include a distribution network designed to meet all applicable regulatory requirements and engineering design standards.*

4.3.2 Alberta Environment Regulatory Approvals

In accordance with various Provincial Acts and Regulations, a communal water system requires a license from Alberta Environment for a groundwater diversion in accordance with the Water Act and an approval to construct a waterworks system in accordance with the Environmental Protection and Enhancement Act (EPEA).

In May 2006, Alberta Environment granted approval for a Preliminary Certificate (No. 00235374-00-00) in accordance with the Water Act authorizing diversion of up to 43,632 m³ of



Legend

- Subject Lands
- Water Servicing
- Sanitary Servicing
- - - - - Waste Water Treatment Plant Setback (300m)

groundwater annually from the two (2) production wells situated within the Outline Plan area. Alberta Environment's endorsement of this groundwater diversion was based upon extensive hydro-geological investigations and production well/monitoring well testing previously completed within the site by Moncur Groundwater. The conclusions of the detailed analysis indicated sub-surface groundwater conditions can accommodate the operation of the communal water system for the proposed residential development without negative impact on existing groundwater users within the surrounding area.

In March 2011, Alberta Environment amended the Preliminary Certificate to reflect the Plan area's current ownership and to reference a maximum 82 lots anticipated within the Plan area.

In March 2011, Alberta Environment approved an application for a Waterworks System No. 003-247485 and endorsed a registration of the proposed engineering design of the system in accordance with the Environmental Protection and Enhancement Act (EPEA).

As such, the Province has approved a License to Divert Groundwater as required to supply the 82 lots and have similarly endorsed the engineering design of the communal waterworks system. All that remains is approval from the M.D. Foothills for the subdivision tentative plan.

4.3.3 Water System Ownership, Operation & Maintenance

The developer shall construct the communal water system within a Public Utility Lot (PUL) to be established at the subdivision stage. The communal water system will be owned by a Home Owner's Association. The Association shall contract its operation and maintenance to a qualified utility management provider. Regular reporting concerning ongoing operation and maintenance activities shall be provided to Alberta Health Services. Ongoing reporting of groundwater levels within the production wells and surrounding monitoring wells will be provided to Alberta Environment. The MD will reserve the right to purchase the communal water system if it decides to become the utility service provider.

POLICIES:

- 4.3.3.1 *The communal water system shall be owned by The Springs at DeWinton Home Owner's Association.***
- 4.3.3.2 *The Home Owner's Association shall contract the operation and maintenance of the water system to a qualified utility management provider.***
- 4.3.3.3 *Ongoing reporting respecting the communal water system's operation and maintenance shall be provided to Alberta Health Services.***
- 4.3.3.4 *Ongoing reporting with respect to groundwater levels within the productions wells and surrounding monitoring wells shall be provided to Alberta Environment.***
- 4.3.3.5 *If the conclusions of reporting described by 4.3.3.3 & 4.3.3.4 determine deficiencies with the operation and maintenance of the communal water system, the Home Owner's Association shall be responsible to rectify said deficiencies in accordance with Provincial licensing requirements.***
- 4.3.3.6 *The MD reserves the right to purchase the communal water system at some future date should it decide to become a utility service provider.***

4.3.4 Water Conservation

Water conservation shall be implemented within **The Springs at DeWinton**. The water service for each residential dwelling will be metered to monitor monthly consumption. Utility rates will be established by the Home Owner's Association with a fee structure that penalizes excessive consumption.

The use of potable water to irrigate landscaping will be strongly discouraged. Instead, each owner will be required to implement a planting scheme that restricts the area of 'manicured' landscaping within each residential parcel in favour of natural 'drought-resistant' plantings that do not require regular maintenance. Limited areas of 'manicured' plantings must be irrigated by a source other than the communal water system (i.e. rain-harvesting).

Water conservation will also be implemented through implementation of architectural guidelines that promote installation of low-flow plumbing fixtures and water-conserving household appliances.

POLICIES:

4.3.4.1 *A variety of techniques shall be implemented within The Springs at DeWinton to conserve potable water.*

4.3.4.2 *Each residential dwelling will be metered in order to monitor monthly consumption. Utility rates shall be established by The Home Owner's Association and are expected to include provisions that penalize excessive consumption by individual owners.*

4.3.4.3 *A Landscaping Scheme shall be established within each residential lot to ensure the majority of each lot includes natural and/or drought-resistant plantings. Where extensive areas of 'manicured' plantings are proposed, the Owner must demonstrate how irrigation maybe provided without reliance on a potable water source (i.e. rain water harvesting).*

4.3.4.4 *The use of potable water for irrigation purposes shall be strongly discouraged by The Home Owner's Association.*

4.3.4.5 *Installation of water conserving plumbing fixtures and appliances within each dwelling will be encouraged through implementation of architectural guidelines.*

4.3.5 An investigation of potential well interference

The developer consulted extensively with adjacent landowners directly west of the Plan area on 286th Avenue to discuss whether or not pumping of the two production wells within **The Springs at DeWinton** would have any negative impacts to existing groundwater wells servicing local country residential parcels.

Notwithstanding that Alberta Environment has already approved a Preliminary Certificate for a groundwater diversion and a registration for a waterworks system, the developer commissioned a Study (*Waterline Resources Inc., Feb 2011*) to further investigate the potential for drawdown interference resulting from groundwater withdrawals necessary to supply a communal water system within the Plan area.

The conclusions of the Study determined there should be **no significant impacts to existing groundwater users** situated directly west of the Plan area along 286th Avenue as a result of the operation of the communal groundwater system in **The Springs at DeWinton**.

4.3.6 Wastewater Collection & Treatment System

The Springs at DeWinton will be serviced by a communal wastewater system as generally illustrated on **Figure 9**.

A series of wastewater collection mains will be installed within the internal subdivision road ROW with individual services provided to each residential lot. The wastewater mains will collect effluent from each dwelling and direct it via gravity to a wastewater treatment facility to be situated within the east-central portion of the Plan area.

Treated effluent will be piped from the treatment plant to a dispersal fields situated along the eastern portion of the Agricultural Area as illustrated on **Figure 9**. The wastewater treatment system shall be designed and operated in accordance with all applicable regulatory requirements and engineering design standards.

The Municipal Government Act requires a 300 m setback distance between a wastewater treatment plant and residential uses. As illustrated on Figure 9, the 300 m setback extends into residential areas proposed within the Outline Plan, the proposed Municipal Reserve and adjacent lands. Alberta Environment can consider reducing this 300 m setback upon application from the MD. As such, subsequent to 1st reading of the land use amendment, the MD will make application to the Province to reduce the wastewater setback accordingly. If Alberta Environment refuses this application, the site plan will have to be revised to respect the 300 m setback prior to Council granting 2nd reading to the land use amendment.

POLICIES:

4.3.6.1 A communal wastewater system shall be constructed within the Plan area as generally in accordance with Figure 9: Utility Servicing Plan.

4.3.6.2 The communal wastewater treatment system shall be constructed by the developer in accordance with all Provincial and municipal regulatory requirements and engineering design standards.

4.3.6.3 Prior to Council granting 2nd reading of the land use amendment, the MD will apply for a variance to the wastewater setback in accordance with Alberta Environment requirements. If the variance is refused, the site plan will have to be revised to reflect the required setback.

4.3.7 Wastewater System Ownership, Operation & Maintenance

The developer shall construct the communal wastewater system within a Public Utility Lot (PUL) to be established at the subdivision stage. The communal wastewater system will be owned by a Home Owner's Association. The Association shall contract its operation and maintenance to a qualified utility management provider. Regular reporting of ongoing operation and maintenance activities shall be provided to Alberta Environment in accordance with Provincial licensing requirements governing same. The MD will reserve the right to purchase the communal wastewater system if it decides to become the utility service provider.

POLICIES:

4.3.7.1 The communal wastewater system shall be owned by The Springs at DeWinton Home Owner's Association.

4.3.7.2 *The Home Owner's Association shall contract the operation and maintenance of the wastewater system to a qualified utility management provider.*

4.3.7.3 *Ongoing reporting respecting the wastewater system's operation and maintenance shall be provided to Alberta Environment*

4.3.7.4 *If the conclusions of reporting described by 4.3.7.3 determine deficiencies with the operation and maintenance of the communal wastewater system, the Home Owner's Association shall be responsible to rectify said deficiencies in accordance with Provincial licensing requirements.*

4.3.7.5 *The MD reserves the right to purchase the communal wastewater system at some future date should it decide to become a utility service provider.*

4.3.8 Utility Infrastructure Lifecycle and Capital Replacement Strategy

The infrastructure for the communal water and wastewater utility systems shall be constructed by the developer in accordance with all applicable Provincial and municipal regulatory requirements and engineering design standards. Accordingly, all of the capital infrastructure improvements shall be financed by the developer.

As discussed, the communal water and wastewater systems within Plan area will be owned by The Springs at DeWinton Home Owner's Association. In turn, the operation and maintenance of same will be contracted to a qualified utility management provider. As part of the utility management process, the Home Owner's Association will be expected to establish utility rates to address ongoing operational expenses. Likewise, the user fees will include a Capital Reserve Replacement Fund specifically designed to accommodate financial capacity necessary to eventually implement an upgrades and/or replacement program for the communal water and wastewater utility systems at such time their anticipated life-cycle is concluded.

POLICIES:

4.3.8.1 *The Home Owner's Association will establish a capital reserve funding strategy designed to implement significant utility system upgrades and/or replacements at the end of their anticipated infrastructure lifecycle.*

4.3.9 Stormwater Management

A report of Stormwater Management Strategies for The Springs at DeWinton (*Westhoff Engineering Resources Inc., October 2006 – Revised April 2011*) to establish expectations for the management of surface drainage within the Plan area resulting from the site's redevelopment.

The report's conclusions indicate the Plan area is ideally-suited to implement a series of Best Management Practices (BMPs) to manage surface drainage created at the individual lot level, within the conveyance areas (i.e. ditches and overland swales) and within storage facility areas (i.e. wet and/or dry ponds) as generally illustrated on **Figure 10: Stormwater Management Plan**.

Residential lot BMP's will encourage implementation of low impact development (LID) techniques intended to capture run-off within each residential parcel and re-use wherever

possible to irrigate landscaping (e.g. rain barrels, bio-swales/rain gardens, etc.). Grading of each lot is recommended towards the public road ROW's in order to ensure drainage from roofs and hard surfaces is directed to the road-side ditches to be routed into wet/dry pond areas prior to eventual discharge (to maintain the integrity of the sloped areas and/or adjacent wetland).

Conveyance BMP's will also encourage low impact development (LID) techniques intended to facilitate sediment removal and manage overland drainage flows during periods of peak precipitation. Implementation of natural plantings within the road-side ditches (i.e. cattails) will facilitate this strategy.

Storage BMP's will include appropriately-designed detention systems (wet/dry ponds) to manage overland drainage during peak precipitation periods and will facilitate surface water quality improvements. The wet/dry ponds will be integrated with the Private Open Space areas and will facilitate ultimate surface water discharge to downstream areas in accordance with pre-development release rates. The quality of surface water release from the site will achieve a Total Suspended Solids (TSS) loading in accordance with Alberta Environment regulatory requirements.

POLICIES:

4.3.9.1 *The developer shall construct a stormwater management system within the Plan area as generally illustrated by Figure 10: Stormwater Management Plan.*

4.3.9.2 *The system shall include a series of Best Management Practices (BMP's) designed to retain surface drainage within the site, improve its quality and eventually release it to downstream areas at pre-development rates.*

4.3.9.3 *The design of the BMP's shall be in accordance with all applicable Provincial regulatory requirements and municipal engineering design standards.*

4.3.10 Shallow Utilities

Shallow utilities (i.e. electricity, telecommunication, natural gas, etc.) will be provided by the developer at the subdivision implementation stage in consultation with all applicable shallow utility providers.

POLICIES:

4.3.10.1 *Shallow utilities shall be installed and/or financed by the developer at the subdivision stage in consultation with all applicable utility providers.*

4.3.10.2 *The alignment of utility installations shall be determined at the subdivision stage in accordance with municipal engineering design standards.*



274th AVENUE

16th STREET

SIX STREET




MERIDIAN STREET

286th AVENUE

CP RAIL LINE

Undeveloped Road Allowance

Legend

-  Subject Lands
-  Proposed Detention Ponds (Dry / Wet)
-  Surface Drainage

Stormwater Management Plan

Figure 10

September 2012



4.3.11 Solid Waste Management

Provision of solid waste refuse management by a qualified solid waste management provider will be managed through a contract provided by the Home Owner's Association.

POLICIES:

4.3.11.1 Solid waste management shall be provided within the Plan area by a qualified waste management provider through a contract managed by the Home Owner's Association.

4.3.12 Refuse Recycling Initiatives

The implementation of responsible waste management practices are an important consideration that this Outline Plan's proponent want to promote and encourage.

As such, the following waste management strategies are proposed:

- The developer shall require individual home builders to implement a Waste Management Audit during house construction. The builder will be required to separate recyclable and non-recyclable construction materials and shall provide documentation concerning the type & amount of materials diverted from a landfill.
- The Home Owner's Association will be encouraged to implement household recycling initiatives within the community according to the following:
 - Individual owner's participation in a curb-side recycling program implemented by a waste management provider via a contract managed by the Home Owner's Association; or
 - The developer will provide a centrally-located community recycling facility for home owners to place recyclable materials into separate 'animal-proof' storage bins. The bins will be emptied and maintained by a waste management provided via a contract managed by the Home Owner's Association.



POLICIES:

4.3.12.1 The developer shall require each individual home builder to complete a Waste Management Audit and implement construction practices to separate recyclable and non-recyclable materials during construction activities. The builder shall provide the developer with documentation concerning the type and amount of materials diverted from the landfill.

4.3.12.2 The developer shall encourage the Home Owner's Association to implement household recycling programs and initiatives. If the Home Owner's Association requests it, the developer shall construct a Community Recycling Centre to include a series of 'animal-proof' storage bins for recyclable materials.

4.3.12.3 Implementation of household recycling programs shall be provided by a qualified waste management provider via contract with the Home Owner's Association.

4.4 Open Space Considerations

4.4.1 Private Open Space

As illustrated on **Figure 11: Open Space Plan**, the majority of the site's existing natural features will be preserved & maintained within a Private Open Space Area to be owned by The Springs at DeWinton Home Owner's Association.

POLICIES:

4.4.1.1 *Private Open Space shall be established within the Plan area as generally illustrated by Figure 11: Open Space Plan.*

4.4.1.2 *The Private Open Space will be owned and maintained by the Home Owner's Association.*

4.4.2 Environmental Reserve Easement (ERE)

The Plan area contains significant environmental features including steeper slopes, natural springs and areas of existing vegetation. The Municipal Government Act directs that such areas should be dedicated as Environmental Reserve (ER) to prevent development disturbances and preserve environmental integrity. ER parcels are owned and maintained by the municipality.

Conversely, the Municipal Government Act includes a provision for such areas to be dedicated as Environmental Reserve Easement (ERE), wherein development disturbances can be prevented in favour of maintaining their environmental integrity. The difference being that the lands are retained in private ownership.

Given this Plan's stated intention to maintain these areas as private open space, it is proposed that certain sloped areas and low-lying lands adjacent to the wetland be dedicated as Environmental Reserve Easement (ERE) as generally illustrated on **Figure 13: Proposed Subdivision Plan**. The specific alignment and boundaries of the ERE will be determined via preparation of more detailed Geotechnical & Slope Stability Assessment to be completed at the subdivision stage.

POLICIES:

4.4.2.1 *Environmental Reserve Easement (ERE) shall be dedicated within certain portions of the Private Open Space area as generally illustrated by Figure 13: Proposed Subdivision Plan.*

4.4.2.2 *The exact boundaries of the ERE shall be determined in accordance with a Geotechnical & Slope Stability Assessment to be completed at the subdivision stage.*

4.4.3 Agricultural Area

The relatively-flat 'valley bottom' area adjacent to the CPR railway will be maintained as an Agricultural Area as illustrated on **Figure 11** to support pasture/grazing activities or limited crop production. The alignment of the Agricultural Area will maintain a scenic 'rural vista' when viewing the site towards the south from 274th Avenue and will retain a sizable parcel within agricultural production to respect the surrounding area's rural character. Access to the Agricultural Area will be provided from Meridian Street.

274th AVENUE

16th STREET

-  Private Open Space
-  Municipal Reserve
-  Agricultural Area
-  Public Utility Lot
-  Pedestrian Trail
-  Potential Equestrian Trail
-  Community Entrance Feature
-  Neighbourhood Focal Point

5th STREET


MERIDIAN STREET

286th AVENUE

CP RAIL LINE

Undeveloped Road Allowance

Legend

 Subject Lands

The Agricultural Area could *potentially* accommodate a private equestrian facility; however, implementation of such facility is not contemplated pursuant to the provisions of this Plan. If a qualified facility operator expresses interest to establish such a facility, the developer is willing to lease the Agricultural Area for this potential use. The operator would have to produce a business plan to support such a facility and the MD will have to approve a development permit for this use in accordance with the Land Use Bylaw. Otherwise, the parcel will be leased to a local agricultural operator for grazing and/or crop production.

POLICIES:

4.4.3.1 *An Agricultural Area shall be established within the Plan area as generally illustrated by Figure 11: Open Space Plan. Any further subdivision of the Agricultural Area will require an amendment to this Outline Plan.*

4.4.3.2 *The Agricultural Area will be leased to a local operator for grazing activities or limited crop production.*

4.4.3.3 *The Agricultural Area may be irrigated with treated wastewater subject to all applicable regulatory requirements governing same.*

4.4.3.4 *A private equestrian facility may be developed within the Agricultural Area; however, the proponent of this Plan does not intend to develop, own or operate such a facility. Notwithstanding, the developer is prepared to lease the parcel to a qualified equestrian facility operator provided viable business plan is provided and the provisions of the M.D. Foothills development permit process can be satisfied in accordance with the Land Use Bylaw.*

4.4.4 Municipal Reserve (MR)

Dedication of Municipal Reserve (MR) shall be provided by the developer within the Plan area at the subdivision stage in accordance with the provisions of the Municipal Government Act.

A MR parcel will be dedicated within the north eastern portion of the site as illustrated on **Figure 11**. The MR will be accessed from Meridian Street and the orientation of the site will extend the sight-line of valley-bottom area adjacent to the CPR railway thereby maintaining a scenic vista when looking across the site to the wetland from 274th Avenue.

Although no specific public recreational use is contemplated for the MR at this time, the parcel is ideally-located to support athletic facilities such soccer pitches, ball diamonds or other uses should the M.D. determine them to be warranted.

An approximate calculation of the proposed disposition of outstanding MR is as follows:

MUNICIPAL RESERVE (MR) CALCULATION	<i>ac</i>	<i>ha</i>
Gross Developable Acreage (GDA)	± 326.7	± 132.2
less Environmental Reserve Easement (MGA Sec. 674 exemption)	± 129.7	± 52.5
Net Developable Acreage (NDA)	± 197	± 79.7
MR outstanding (10 % NDA)	± 19.7	± 7.97
less MR parcel (to be dedicated)	± 19.1	± 7.7
MR OUTSTANDING (MGA Sec. 666)	± 0.6	± 0.27

POLICIES:

4.4.4.1 *A Municipal Reserve (MR) parcel shall be dedicated within the northeast portion of the Plan area as generally illustrated by Figure 11: Open Space Plan.*

4.4.5 Public Utility Lots

The Springs at DeWinton will include Public Utility Lots (PUL's) dedicated to the MD to include various components of the communal water and wastewater treatment facilities as generally illustrated on **Figure 11**.

4.4.6 Pedestrian & Equestrian Trails

The Springs at DeWinton will be a community where residents will be encouraged to engage in recreational pursuits while experiencing the spectacular beauty of the natural habitat areas. As such, a system of pedestrian and equestrian trails will be provided within the Private Open Space as generally illustrated on **Figure 11**. The configuration of the trail system will include a series of looped connections that offer different distances & destinations with varying pedestrian experiences. Wherever possible, pedestrian and equestrian trails will be separated to limit potential for human/animal conflicts.

Trail alignments will respect the environmental sensitivity of sloped & low-lying areas and will generally avoid the areas surrounding the natural springs and their associated surface drainage conveyance channels & vegetated areas.

The trails shall be constructed in accordance with applicable municipal engineering design standards – but are anticipated to include a gravel and/or shale surface treatment.

The Home Owner's Association will own and maintain the trail system within the Plan area. The Association may allow residents of adjacent parcels to access the private pedestrian/equestrian system subject to completion of a '**Trail System Access Agreement**'. The Agreement will establish a legal contract between the Home Owner's Association and adjacent residents who desire access to the private trails and shall address matters such as maintenance fees and legal liabilities. The specific terms of the Agreement will be established by the Home Owner's Association.

A strategically-located neighbourhood focal point will be established by the developer within the Private Open Space as generally illustrated on **Figure 11** to provide a local gathering area for social interact and more formal recreation activities such as a skating pond, barbecue pit, picnic area, etc.

The developer shall construct the trail system in accordance with a development phasing program later described by this Plan. The specific trail alignment, width and surface treatment will be determined in accordance with a Landscaping Plan to be prepared by a qualified professional at the subdivision stage.

POLICIES:

4.4.6.1 *A trail system shall be constructed by the developer within the Private Open Space area as generally illustrated by Figure 11: Open Space Plan.*

4.4.6.2 *The alignment of the trail system shall avoid environmentally significant lands such as sloped and low-lying areas.*

4.4.6.3 *The trail system shall be owned and maintained by the Home Owner's Association, but may be accessible by residents of adjacent properties subject to the provisions of a Trail System Access Agreement.*

4.4.6.4 *The specific alignment, width and surface treatment of trail system shall be determined by a Landscaping Plan to be prepared by a qualified professional at the subdivision stage.*

4.4.7 Environmental Stewardship Plan

As described, the environmentally significant areas within the Plan area will be maintained within a Private Open Space Area to be communally-owned by a Home Owner's Association. This common ownership will facilitate opportunities for ongoing environmental stewardship of the site's naturally significant features.

As a component of **The Springs at DeWinton** architectural guidelines, the developer shall establish an **Environmental Stewardship Plan**. The purpose of this Plan will be to design and implement:

- A **Landscaping Reclamation Program** to enhance the quality of landscaping previously-eroded by grazing activities;
- A **Trail System** constructed within specific alignments that do not conflict with environmentally significant areas; and
- An ongoing **Awareness Program** to facilitate an ongoing educational program for local residents to highlight the potential sensitivities of the site's natural habitat areas such as:
 - Nesting habits of various bird species;
 - Types and frequencies of wildlife movements; and
 - Potential migration of invasive weeds; etc.

POLICIES:

4.4.7.1 *An Environmental Stewardship Plan shall be prepared by a qualified professional at the subdivision stage to implement the recommendations of the Biological Assessment and Environmental Management Plan (Sweetgrass Consultants Ltd.).*

4.4.7.2 *The recommendations of the Environmental Stewardship Plan shall be implemented by the Home Owner's Association.*

4.5 Fire, Police and Emergency Response Considerations

Primary fire response will be provided from The Town of Okotoks with secondary response from The City of Calgary.

Policing will be provided by the RCMP Detachment in The Town of Okotoks with support from the MD of Foothills Community Peace Officers.

Emergency Response will be addressed by the 911 system with dispatch of ambulance service from the EMS facility in the Town of Okotoks.

5.0 IMPLEMENTATION FRAMEWORK

5.1 The Outline Plan Implementation Process

Adoption of this Outline Plan will establish specific expectations that will guide the implementation of **The Springs at DeWinton**. The Plan provides a framework of land use policies that must be considered prior to subsequent consideration of land use amendment and/or subdivision tentative plan approval for multi-lot residential development with the Plan Area.

Consideration of this Plan by M.D Foothills Council will occur following a statutory Public Hearing during which all matters will be considered and considerations from municipal staff, technical agency requirements and area landowner will be clarified. M.D. Foothills Council will consider adoption of this Outline Plan pursuant to the requirements of the Municipal Government Act.

Subsequently, consideration of land use amendment, subdivision and development permit applications will follow in accordance with the policies of this Outline Plan and other M.D. Foothills development requirements.

5.2 Proposed Land Use

Land use amendment (zoning) is expected to be applied by Council in accordance with the M.D. Foothills Land Use Bylaw as generally illustrated by **Figure 12: Proposed Land Use Plan** described as follows:

- The Residential Areas will be designated Country Residential / Cluster Residential District;
- The Private Open Space will be designated Environmental Protection District (with a site-specific amendment to allow for specific community amenities);
- The Municipal Reserve parcel will be designated MR;
- The areas including the water and wastewater treatment facilities will be designated as PUL; and
- The Agricultural Area will be designated Agricultural District.

It is expected that Council will assign these land use amendments within the Plan area in accordance with one (1) application to be considered concurrently with this Outline Plan. Prior to 2nd reading of a land use amendment bylaw, the developer will be required to execute a Development Agreement for the construction of required municipal and on-improvement fees





POLICIES:

5.2.1 *Specific land uses are expected to be applied by a Council Zoning Amendment as generally illustrated by Figure 12: Proposed Land Use Plan.*



274th AVENUE

16th STREET

-  CR - Country Residential
(Cluster Residential District)
-  EP - Environmental
Protection District
-  MR - Municipal Reserve
-  A - Agricultural District



Neighbourhood Focal Point

5th STREET

MERIDIAN STREET

286th AVENUE

CP RAIL LINE

Undeveloped Road Allowance

Legend


 Subject Lands



Figure 12
Proposed Land Use Plan

October 2014

5.3 Proposed Subdivision

Implementation of subdivision within the Plan area is expected to occur as generally illustrated by **Figure 13: Proposed Subdivision Plan** according to specific subdivision design criteria described as follows:

- A maximum of **82 residential parcels** with individual lot sizing as per the Cluster Residential policy and regulatory provisions of the Municipal Development Plan and the Land Use Bylaw (i.e. minimum 0.8 ac and maximum of 1.99 ac).
- A ± 152.5 ac Private Open Space parcel;
- A ± 129.7 ac Environmental Reserve Easement (ERE) affecting the Private Open Space parcel;
- A ± 19.1 ac Municipal Reserve (MR) parcel;
- A ± 32.6 ac Agricultural parcel;
- Two (2) Public Utility Lots (PUL) including ± 8.8 ac;
- Implementation of all supporting transportation & utility servicing infrastructure.

It is noted that the ± 152.5 ac Private Open Space Area may be implemented through creation of a variety of unique ownership blocks implemented in accordance with a phasing program described in Section 5.5 of this Plan. For example, the developer may wish to create unique ownership for the Environmental Reserve Easement area, the Neighbourhood Focal Point area, the Wastewater Treatment Dispersal area and the Community Entrance Feature area. The exact configuration of the Private Open Space Area shall be determined at the subdivision stage

The developer is prepared to dedicate ± 2.5 ac area of remnant land situated southeast of the wetland as Environmental Reserve at the subdivision stage.

POLICIES:

5.3.1 Implementation of subdivision is expected to proceed as generally illustrated by Figure 13: Proposed Subdivision Plan.

274th AVENUE

16th STREET

5th STREET

MERIDIAN STREET

286th AVENUE

CP RAIL LINE

Undeveloped Road Allowance

MUNICIPAL RESERVE
7.71ha /
19.06ac

PUBLIC UTILITY LOT
3.26ha /
8.06ac

AGRICULTURAL AREA
13.19ha /
32.59ac

PRIVATE OPEN SPACE
61.71ha / 152.49ac

52.51HA / 129.75AC

Legend

- Subject Lands
- Environmental Easement Area
52.5ha / 129.7ac
- Emergency Access

Figure 13 Proposed Subdivision Plan

September 2012

5.4 Architectural Design Considerations

As previously described in this Plan, the configuration of residential lots shall be in accordance with the parcel size and specific development regulatory requirements as established by the Land Use Bylaw.

5.4.1 Architectural Guidelines

The developer will establish and implement specific **Architectural Guidelines** to ensure all residential development reflects a consistent style and coordinated theme. Specific benchmarks for exterior building criteria will be established to consider design elements such as:

- Minimum building footprint (2,200 ft² expected);
- Exterior material finishes and colours to match the palette of natural landscaping. Use of natural materials such as stone & stucco is encouraged;
- Roof-lines with variable peaks, gables and dormers will be encouraged;



Example Building Elevations

- Roofing materials will reflect a natural colour palette;
- Exterior illumination will be minimized;
- Areas of extensive 'manicured' exterior landscaping will be minimized in favour of natural drought-resistant plantings that require minimal irrigation & maintenance requirements.

The developer will register the Architectural Guidelines against the certificate of title for each residential property to advise the future owners of their specific development requirements.

POLICIES:

5.4.1.1 The developer shall establish Architectural Guidelines to regulate specific residential building criteria such as material finishes, colours, landscaping, exterior illumination, etc.

5.4.1.2 The developer shall register the Architectural Guidelines against the title of each residential lot to provide notice to future owners.

5.4.2 The Springs at DeWinton Development Committee

The developer will establish The Springs at DeWinton **Development Committee** to review house plans prepared by each owner to ensure compliance with the Architectural Guidelines.

As part of the review of each owner's building plans, the Development Committee will review considerations such as:

- Lot grading;
- Building setbacks (to ensure compliance with MD zoning requirements);
- Building setbacks (as per any Geotechnical recommendations regarding proximity to slopes);
- Building elevations;
- Exterior treatments (colours, finishes, roofing materials, window treatments, etc.);
- Landscaping treatments;
- On the Lot BMP's (i.e. Low Impact Development techniques);

Each owner will be expected to provide documentation of an approval from the Development Committee prior to submitting an application for residential building permit to the M.D. Foothills.

POLICIES:

5.4.2.1 The developer shall establish a Development Committee to review the plans for each residential building prior to the Owner submitting an application for Development Permit and/or Building Permit to the MD Foothills.

5.4.3 Community Entrance Feature

The developer will construct an entrance feature within the portion of the Private Open Space Area situated at the southeast corner of the 274th Avenue / 5th Street intersection.

The Entrance Feature is expected to include a community sign with enhanced landscaping designed to



Example Community Entrance Feature

provide an attractive gateway to the community and thereby signal arrival at **The Springs at DeWinton**.

This area could incorporate a community mailbox and a school bus lay-by.

The specific design of the Community Entrance Feature will be confirmed at the subdivision stage.

POLICIES:

5.4.3.1 The developer shall construct a Community Entrance Feature within the Private Open Space area situated adjacent to the 274th Avenue / 5th Street intersection.

5.4.3.2 The specific design of the entrance feature will be determined at the subdivision stage as a component of the Landscaping Plan to be prepared by a qualified professional.

5.4.4 Landscaped Buffers to screen adjacent residential lots

The Outline Plan proponent supports the concept of maintaining an appropriate transition between existing residential lots and proposed development within **The Springs at DeWinton**.

Specifically, the existing residential lots along 5th Street and the two parcels situated at the east end of 286th Avenue.

As part of the **Landscaping Plan** to be prepared at the subdivision stage (reference Section 4.4.5), the developer shall implement specific landscaping treatments within the Plan Area as part of the residential along 5th Street and within the Private Open Space Area east of 286th Avenue.

The developer shall consult with

landowners directly west of the Plan area prior to finalizing the proposed treatment along the community's western boundary. Where possible and practical, landscaping clusters shall be installed within the Private Open Space Area to establish visual screening to block conspicuous sight-lines between existing and proposed residential building sites.



Example perimeter buffer (before)



Example perimeter buffer (after)

POLICIES:

5.4.4.1 *The developer shall provide landscape improvements in certain strategic areas along 5th Street and east of 286th Avenue to provide visual buffering between existing and proposed residential building sites.*

5.4.4.2 *The specific type, extend and location of these landscaped improvements will be determined at the subdivision state via preparation of a Landscaping Plan.*

5.5 Development Phasing

Development within The Springs at DeWinton is expected to proceed in three (3) phases as generally illustrated by **Figure 14: Development Phasing**. The developer will install transportation, utility servicing and recreational infrastructure as required by each development phase as required by the municipality in accordance with the terms of a Development Agreement.

The implementation of phasing as illustrated by **Figure 14** may be adjusted to reduce or extend the number of phases subject to the granting of approval from the M.D. Foothills Subdivision Approval Authority and the availability of any required infrastructure.

POLICIES:

5.5.1 *Implementation of subdivision is expected to proceed in phases as generally illustrated by Figure 15: Development Phasing.*

5.5.2 *The phasing program may be adjusted subject to an approval from the MD Foothills Subdivision Approval Authority and the required infrastructure can be provided.*

5.6 Construction Management Plan

The developer shall prepare a Construction Management Plan at the subdivision stage to establish measures as may be required to mitigate ongoing construction issues which could create negative impact for surrounding residents such as dust control, noise, truck access routes and construction access to the Plan area.

POLICIES:

5.6.1 *A Construction Management Plan shall be provided by the developer at the subdivision stage to establish potential mitigation requirements as may be necessary to limit negative impacts to surrounding residents during ongoing construction activities.*



274th AVENUE

16th STREET

5th STREET

MERIDIAN STREET

286th AVENUE

CP RAIL LINE

Undeveloped Road Allowance

1

3

2

Legend

■■■■■ Subject Lands



Figure 14 Subdivision Phasing Plan

September 2012

6.0 MUNICIPAL DEVELOPMENT PLAN

6.1 Municipal Development Plan (MDP)

The M.D. Foothills adopted a new Municipal Development Plan (MDP) in June, 2010. The MDP was adopted by Council based on the following vision statement:

The MD of Foothills encompasses a diverse rural landscape in which leadership and planning support a strong agricultural heritage, vibrant communities, a balanced economy and the stewardship of natural capital for future generations’.

The MDP establishes a series of ‘**planning principles**’ which all future developments within the municipality are expected to respect including:

- Preserving natural capital;
- Planning for growth;
- Conservation & focussed development;
- Community development;
- Sustainable development;

The MDP aims to promote new development that respects ‘**rural character**’ through consideration of:

- Maintaining wide open spaces & scenic vistas;
- Respecting dark skies & limiting unnecessary light pollution;
- Preserving historic & archaeological resources;
- Maintaining air, water and soil biodiversity.

The MDP includes a **policy framework** to facilitate the ongoing development of a variety of agricultural, open space, residential, recreational, and business land uses and supporting transportation & utility infrastructure systems that implement the ‘planning principles’ above-referenced.

The MDP’s Residential Policies establish certain criteria to support a ‘**cluster residential**’ community development form that implement a type of subdivision that respects the carrying capacity of the land, implements a more cost-effective infrastructure system and respects the rural character of surrounding lands through the maximization of open space.

The Springs at DeWinton Outline Plan includes a focused and deliberate implementation strategy to establish a new residential community that reflects the MDP’s vision statement, planning principles and policy framework. The Plan proposes to implement the ‘cluster residential’ concept as a model benchmark for a new rural residential community based upon a more sustainable and environmentally-sensitive development framework.

7.0 COMMUNITY CONSULTATION SUMMARY

The proponents of **The Springs at DeWinton** are committed to ensuring the implementation of a cluster residential community as contemplated by this Outline Plan not only respects the natural environmental capacities of the land itself, but also respects the existing community that surrounds it. The goal is to create a high-quality community with a demonstrated commitment to all aspects of environmental stewardship.

Throughout the lengthy Outline Plan preparation process, the developer reached out to a variety of adjacent landowners and community stakeholders to facilitate a 'two-way' process of open, transparent, frequent and meaningful engagement. The developer engaged a community liaison specialist to meet with individual landowners and groups to facilitate opportunity for the developer to explain the planning rationale motivating the project; allow questions to be raised about specific issues relating to the development, and provide clarity regarding various development matters to be implemented as part of **The Springs of DeWinton**.

During the ongoing community consultation program, a series of common questions and concerns were raised by adjacent landowners. The developer prepared this Plan to respond to these key questions described as follows:

- **What will be the impact of communal water system on my existing groundwater well?**

The Provincial communal water licensing program required extensive pump-testing of the existing production wells within the Plan area. While the production wells were being pumped, groundwater levels in various observation wells surrounding the site were also recorded. There was no evidence of interference. The Province has approved the Preliminary Certificate

- **How will the site be accessed? Will additional traffic created by the new development create safety issues for surrounding roads and intersections?**

The developer will construct a new internal subdivision road to access the community. The road will be designed to meet all municipal engineering standards. 5th Street will also be widened to accommodate the additional traffic. A Traffic Impact Assessment was prepared to assess what, if any, impacts the additional traffic created by this development might have on the surrounding roadways and intersections. The Assessment determined that no upgrades to the surrounding roadways will be required.

- **Will there be any negative impacts to the adjacent Provincial wetlands?**

The utility servicing and stormwater management infrastructure systems will be designed, constructed and operated in accordance with all applicable regulatory requirements and municipal engineering design standards so as to limit potential for any negative impacts to the wetland.

- **How will wildlife activities currently taking place within the site be respected and maintained?**

- The design of the community will include an abundance of open spaces to preserve and enhance the quality of the existing habitat areas within the subject lands. The sloped areas that traverse the site will all be left intact providing a contiguous 'ribbon of green' to provide pronounced wildlife corridors between the upland areas within the site and the adjacent low-lying valley-bottom and wetland area.

- **Will the community have a pedestrian trail system? How will it be maintained?**

The community will include an extensive trail system to provide a series of looped connections designed to provide a variety of experiences within the site. The trails will include linkages for both pedestrian and equestrian activities. The Trail System will be owned and maintained by a Home Owner's Association. Residents who live adjacent to the Plan area may be permitted to utilize the trails provided they enter into a Trails System Access Agreement with the Home Owner's Association.

- **What assurances are there to prevent developers from coming back in a few years to apply for zoning for more residential lots within the development?**

Implementation of the Cluster Residential land use will be in accordance with the provisions of the Municipal Development Plan. A significant portion of the Private Open Space areas will be dedicated as Environmental Reserve Easement (ERE) which will prohibit them from further subdivision and development.

- **Will the developer implement architectural controls & guidelines to ensure the quality of the community is maintained?**

The developer will establish and implement specific Architectural Design Guidelines to ensure all residential development within the Plan area reflects a consistent style and theme. Specific benchmarks for exterior building criteria will be established to consider design elements such as exterior material finishes & colours, roofing materials, landscaping and illumination. The developer will register the Architectural Design Guidelines against the land title for each residential property. The developer will create a Development Committee to review all new house plans prior to their submission to the MD Foothills to ensure compliance with the Architectural Design Guidelines.

As such, the developer believes **The Springs of DeWinton** Outline Plan includes a policy framework that responds to and clarifies the community issues that were identified as part of the Outline Plan preparation process.

SUPPORTING TECHNICAL INFORMATION

1. Assessment of Arability (*Matrix Solutions Inc., September 2006*)
2. Initial Slope Stability Assessment (*McIntosh Lalani Engineering Ltd., July 2006*)
3. Historical Resources Impact Assessment (*Historical Resource Management, August 2006*)
4. Notification of Clearance in accordance with the Historical Resource Act (*Alberta Community Development, October 2006*)
5. Biological Assessment and Environmental Management Plan (*Sweetgrass Consultants Ltd., October 2006 – Revised February 2011*)
6. Preliminary Certificate for Groundwater License to Divert (*AENV, May 2016*) with Certificate Amendment (*AENV, March 2011*)
7. Registration for Waterworks System, (*AENV, March 2011*)
8. Investigation of Potential Drawdown Interference (*Waterline Resources Inc., February 2010*)
9. Preliminary Wastewater Management Assessment (*Worley Parsons Canada, January 2011*)
10. The Springs at DeWinton Traffic Impact Assessment (*Eagle Engineering Corp., March 2011*)
11. Stormwater Management Strategies for The Springs at DeWinton (*Westhoff Engineering Resources Inc., October 2006 – Revised April 2011*)
12. Community Consultation Summary Report (*Kim Smith, November 2011*)