

Settler's Green

Langdon

Conceptual Scheme

SE 14-23-27 W4M



SCHULE'S CONSULTING



Sim-Flo Systems Inc.

Carswell Planning



Approved February 27, 2018

BYLAW C-7753-2018

A Bylaw of Rocky View County, known as the Settler's Green Conceptual Scheme

The Council of Rocky View County enacts as follows:

PART 1 – TITLE

This Bylaw shall be known as Bylaw C-7753-2018.

PART 2 – DEFINITIONS

In this Bylaw, the definitions and terms shall have the meanings given to them in the Land Use Bylaw (C-4841-97), County Plan (C-7280-2013), Langdon Area Structure Plan (C-7564-2016), and the Municipal Government Act.

PART 3 – EFFECT OF BYLAW

THAT The “Settler's Green Conceptual Scheme” be adopted to guide future redesignation, subdivision, and development within SE-14-23-27-W4M consisting of a total of ± 64.7 hectares (± 160.00 acres) of land, as defined in Schedule 'A' attached to and forming part of this Bylaw.

PART 4 – TRANSITIONAL

Bylaw C-7753-2018 comes into force when it receives third reading, and is signed by the Reeve/Deputy Reeve and the CAO or Designate, as per the Municipal Government Act.

Division: 4

File: 03214001/03214009 – PL20170043

PUBLIC HEARING WAS HELD IN COUNCIL this

27th day of *February*, 2018

READ A FIRST TIME IN COUNCIL this

27th day of *February*, 2018

READ A SECOND TIME IN COUNCIL this

27th day of *February*, 2018

UNANIMOUS PERMISSION FOR THIRD READING

27th day of *February*, 2018

READ A THIRD TIME IN COUNCIL this

27th day of *February*, 2018



Reeve



Charlotte Satink
CAO or Designate

February 27, 2018

Date Bylaw Signed



SCHEDULE 'A'
FORMING PART OF BYLAW C-7753-2018

A Conceptual Scheme affecting SE-14-23-27-W4M consisting a total of ± 64.7 hectares (± 160.00 acres) of land, herein referred to as the Settler's Green Conceptual Scheme.

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INTRODUCTION

1.1 Purpose of this Plan

This Conceptual Scheme, named **Settler's Green**, has been prepared pursuant to the Rocky View County (RVC) Plan (Bylaw C-7280-2013) and Langdon Area Structure Plan (Langdon ASP) to provide supporting rationale for redesignation and subdivision of 64.7 ha (160 ac) comprising lands described as SE-14-23-27-W4M.

The Conceptual Scheme is a non-statutory plan intended to describe the developer's rationale and motivation to establish a new subdivision with associated land uses. The policies of this Plan have been prepared to provide direction regarding subsequent land use redesignation, subdivision, and development permit applications required to implement the **Settler's Green** development.

"A non-statutory plan, subordinate to an area structure plan, and may be adopted by bylaw or resolution. To ensure the opportunity for public input, the County will continue its practice of adopting a conceptual scheme by bylaw with a public hearing. If an area structure plan is amended to include a conceptual scheme, the conceptual scheme becomes a statutory plan. Conceptual schemes provide detailed land use direction, subdivision design, and development guidance to Council, administration, and the public. Conceptual schemes are meant to be developed within the framework of an area structure plan. If a conceptual scheme is of sufficient size that further detail is required for specific areas and phases, the subsequent document will be referred to as a 'development cell'. Upon approval, the 'development cell' document will be amended into the conceptual scheme as an appendix." (RVC County Plan).

It is the intent to apply the policies and design of this plan to guide its first phase of development in the western portion of the Conceptual Scheme. Land use and subdivision for the first phase of development will be applied for following adoption of this conceptual scheme. Future development for mixed use within **Settler's Green** is to be considered at a subsequent phase.

1.2 Development Rationale

The subject lands of this Conceptual Scheme are referred to as **Settler's Green** or the *Plan Area* in this document. The full service Hamlet of Langdon in RVC has been subject to significant pressure for development primarily due to existing hamlet development and services, proximity to southern Calgary, transportation connections to the Trans-Canada Highway and Highway 22x, and the identification of this area as Hamlet - Full Service within the Rocky View County Plan.

It is the intent of the **Settler's Green** development to provide opportunities for more commercial / light industrial employment lands and affordable housing. This will move Langdon towards a more complete community. It is a contiguous extension of the built area of Langdon that integrates well with adjacent land uses by also offering traditional residential built form.

As an adjoining development to the Hamlet, existing services located are easily extended to service the **Settler's Green**. The site is undeveloped agricultural land, relatively flat and well situated for development.

1.3 Primary Development Considerations

Primary development considerations include:

1. Diversity of residential uses, predominantly single, semi and multi-family (townhouses) dwellings for variety of choice for different stages in life and affordability;
2. Extensive open space which provides linear pathway connectivity providing connections between neighbourhoods and sub-neighbourhoods;
3. A water feature as part of the open space and which acts as a storm water management through an east-west canal system resembling a more natural water feature and allowing a controlled regional storm water flow;
4. Provision of commercial / light industrial employment lands with related non-residential transportation focused towards Highway 22x, as opposed to going through the Hamlet for safety and efficiency for the movement of goods;
5. Transportation connections through a major east-west collector and other internal roads in a curvilinear grid pattern with some variety offered in roundabouts, landscaped courts and divided road entrance features for aesthetics, functionality and traffic calming;
6. Water and wastewater using existing utility services with water provided by Langdon Water Works and sanitary waste piped to the Langdon Waste Treatment Facility taking into account capital and operational considerations for a preferred option.

1.4 Conceptual Scheme Objectives

The intent of the **Settler's Green** Conceptual Scheme is to:

- a) Provide a comprehensive summary 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 residential uses, commercial / light industrial uses and related uses;
- c) Present strategy options to implement appropriate transportation and utility service infrastructure improvements as required for the phases of development;
- d) Determine the general configuration of public open spaces within the *Plan Area* and connections to adjacent lands;
- e) Outline an overall phasing strategy for development within the *Plan Area* ensuring a looped roadway, pathways, storm water drainage and runoff, water services, and sanitary wastewater services;
- f) Rationalize the mixed use development balancing traditional residential development with commercial / light industrial development, while investigating incentives for affordable housing.

2.0 POLICY CONTEXT

2.1 Introduction

The Municipal Government Act, RVC's County Plan, Agriculture Master Plan, Parks and Open Space Master Plan, and the Langdon ASP all provide guidance to the **Settler's Green** Conceptual Scheme. These documents establish a policy framework to ensure that development respects rural character, promotes open space and recreational opportunities, respects the natural environment, implements cost-effective servicing infrastructure systems of roads, water and sanitary wastewater, and provides appropriate built form to the community.

Settler's Green aligns with the County's Plan by concentrating this development in a Hamlet on full services. The Hamlet of Langdon is enhanced and strengthened as integral part of the County through the provision of traditional residential, commercial / light industrial for employment lands and an affordable housing component needed in Langdon.

2.2 Hamlet of Langdon Area Structure Plan

Settler's Green represents contiguous growth within the Langdon Area Structure Plan – Bylaw C-7564-2016, adopted May 10, 2016. The Langdon ASP provides direction for growth and policies for land within the Hamlet boundaries.

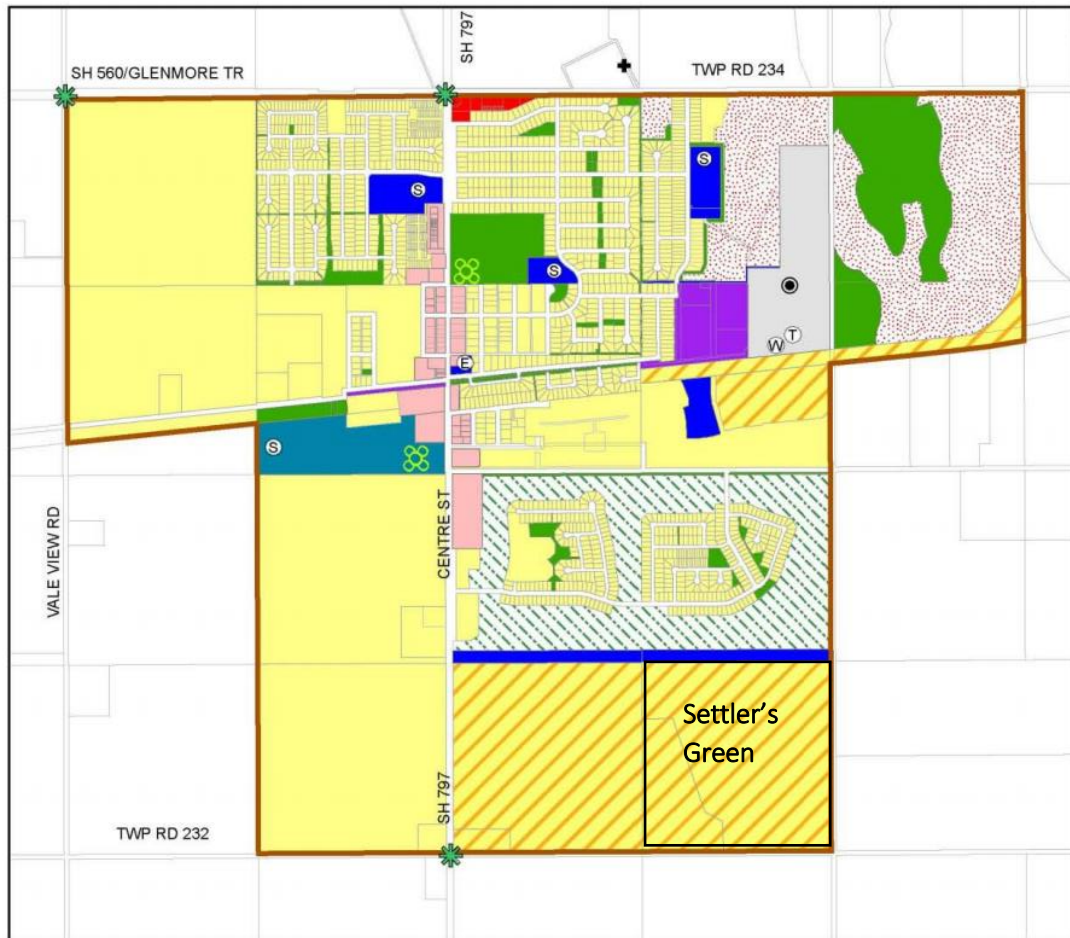
The Langdon ASP sets population at 13,400 and density at 9.88 units per ha (4 upa) for 545 ha (1346 ac) gross residential area and 146 ha (361 ac) for mixed use. The *Plan Area* is identified as mixed use, envisioned for mainly light industrial and business park uses that provide employment opportunities and increase the County's business assessment. The intent of **Settler's Green** is to align with the overall principles and Land Use Scenario identified in the ASP thereby creating growth that is compatible with existing development, as well as adding

employment lands and affordable housing for more well-rounded development within the Hamlet of Langdon.

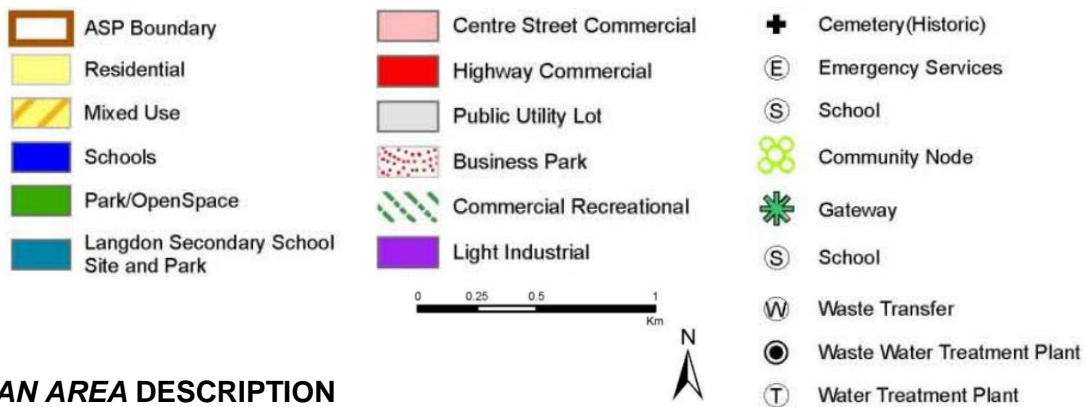
The mixed use shown in the two (2) quarters at the southern boundary include commercial / light industrial and residential land uses. The western quarter section is next to Centre Street. The Langdon ASP identifies Centre Street Commercial development to continue to encourage a main street corridor that incorporates local shops and services and an active transportation corridor for pedestrians and cyclists. Centre Street provides the main street focus for small and medium scale commercial development in Langdon. The next tier of lands from Centre Street still offers locational advantages for commercial development. The quarter section adjacent to Centre Street is better suited for commercial/light industrial placement.

Non-residential land uses are expected to focus on light industrial and business uses. From a land use, fiscal and transportation perspective, light industrial is more suited to the periphery of Langdon. Access will be provided to the south and west along Township Road 232 to separate truck transport from vehicular transport where possible, both for time considerations and safety.

Figure 1: Langdon ASP



This map is conceptual in nature. No measurements or area calculations should be taken from this map.



3.0 PLAN AREA DESCRIPTION

3.1 Location

Settler's Green is on a quarter section SE-14-23-27-W4M in the Hamlet of Langdon, Rocky View County, Alberta. Geographically, the *Plan Area* is centred on 50.93° N, 113.66° W. It provides contiguous development to the Boulder Creek development to the north.

3.2 Legal Descriptions & Ownership

As shown below, ownership involves two (2) companies, Metro and Concord. A transmission line right-of-way and a pipeline right-of-way separate **Settler's Green** from Boulder Creek development.

Figure 2: Legal Descriptions Map

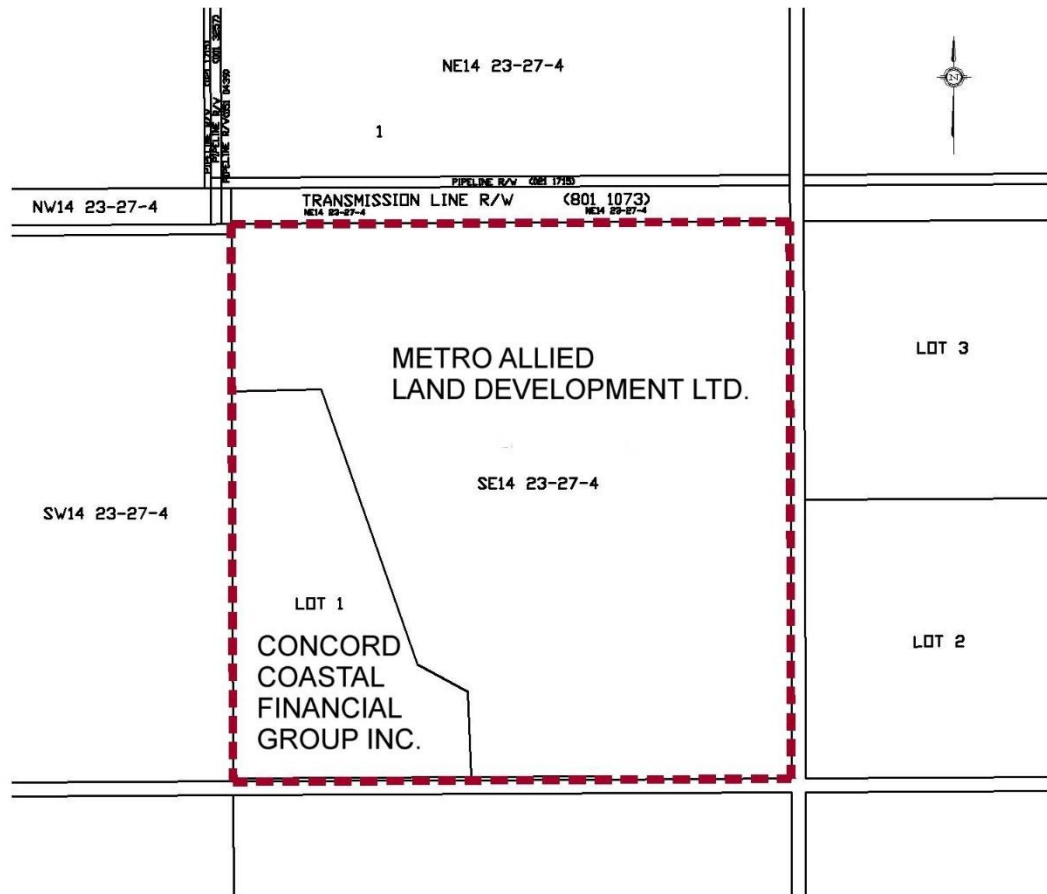


Table 1: Legal Descriptions

Legal	Certificate of Title	Ownership	Hectares	Acres
Plan 9210066, Lot 1	141 347 278	CONCORD COASTAL FINANCIAL GROUP INC.	13.4	33.11
SE14 23-27-4 except Plan 9210066	071 534 458	METRO ALLIED LAND DEVELOPMENT LTD.	51.3	126.9
Total			64.7	160

4.0 LOCAL DEVELOPMENT CONTEXT

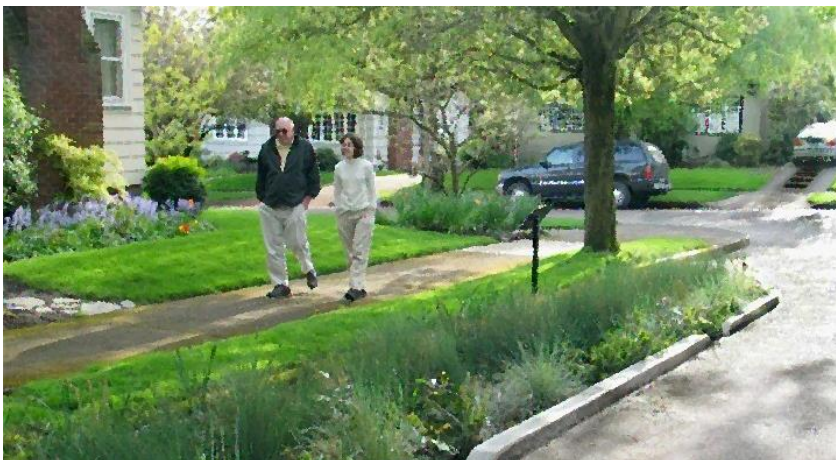
4.1 Introduction

The Hamlet of Langdon has experienced considerable development pressure attributed to its close proximity to the City of Calgary, approximately 20 minutes via the TransCanada Highway. Langdon is a highly desirable family-oriented community designed from strong planning principles and a commitment to serving the housing, lifestyle and amenity needs of its residents.

Improved employment opportunities could exist in Langdon where businesses and individuals find more affordable land prices and an alternative to living in the City of Calgary. In anticipation of an emerging market, Settler's Green could target commercial / light industrial areas which may include a diversity of sizes of lots and businesses.

Commercial / light industrial ventures are encouraged in the southern portion of the *Plan Area*. Non-residential development provides an average net contribution ratio (revenues vs. costs) of 1.8 to RVC and is preferred as part of **Settler's Green** (Langdon WWTP facility upgrade financing alternatives, Stack'd Consulting, January 2017). Condominium and rental housing forms may also be considered, should the commercial / light industrial market not achieve build-out. Potential for affordable land, an affordable labour force and proximity to the Calgary market all make this attractive for investment.

Residential lands on the northern portion of the *Plan Area* will resemble the adjacent Boulder Creek golf course community with single family dwellings. Residential lands on the southern portion of the *Plan Area* will be "Green Street" development with single family dwellings and medium density (three or more attached dwelling units that may be townhomes, rowhouses, and multi-unit complexes). Green Street infrastructure refers to natural and human-made elements that provide eco-friendly buildings, materials, energy efficient lighting, building orientation and attractive streetscapes.



4.2 Community Infrastructure and Institutions

Currently, recreational facilities in Langdon include: Langdon Ball Diamonds, Langdon Fieldhouse, community rink, and community playground. Some of the community facilities currently serving Langdon include: the Langdon Softball Association, Langdon Community Association, Langdon Older Kids Seniors Club, 1st Bow Valley Scouts, Langdon Theater Association, and the Chestermere Area Youth and Community Development Society. Applications for developing, maintenance, programming and operations are submitted through the Langdon Special Tax grant program collected through a special tax levy on households within the Hamlet of Langdon. Other services include curbside garbage pickup, a transfer site for household garbage and recyclables, and a bottle depot.

Schools in Langdon include Langdon School (Grades K-9) and Sarah Thompson School (Grades K-4). Growth in Langdon will contribute greater revenues for facilities in the future.

Figure 3: Settler's Green and Adjacent Lands



4.3 Adjacent Lands

To the north on NW-14-23-27-W4M and NE-14-23-27-W4M, is the Boulder Creek development which includes a residential neighbourhood and golf course. The 18-hole private golf course, shared right-of-way and wetland are adjacent to the *Plan Area*.

To the east, is agricultural development and wetlands.

To the south is Township Road 232, it's right-of-way and agricultural development.

To the west on SW-14-23-27-W4M, is future development intended to support connections to roads, pathways, storm water, utilities, and land use compatibility. Proximity to Centre Street provide opportunities for a greater portion of lands for non-residential land uses.

Further to the west on east half of 15-23-27-W4M, is a future development owned by Pollyco (Langdon North) Land Corp. and Alida, known as the Bridges of Langdon (Bylaw C-7622-2016, adopted January 10, 2017). It is primarily a residential development interspersed with neighbourhood centres of multi-family, seniors housing and local commercial.

4.4 Existing Transportation Infrastructure

The transportation system serving Langdon connects into the provincial highway system at Highway 560 (Glenmore Trail) and Highway 797 (Centre Street). Langdon has an internal system of collector and local roads. Centre Street provides a north-south route with associated commercial streetscape through the centre of the Hamlet of Langdon.

The *Plan Area* is approximately 800m (i.e. ½ mile) east of Centre Street. To the south is Twp. Rd. 232 which is currently a two lane gravel road and will connect via an interchange at the south east ring road with Stoney Trail in Calgary. To the east is an undeveloped north-south road allowance to connect to Twp. Road 233 (Dead Horse Road).

The *Plan Area* and Langdon are served by east-west Highway 22x south of Langdon; east-west Highway 560 (Glenmore Trail) at Langdon's northern boundary; and north-south Highway 797 north of Langdon to Highway 1 (Trans-Canada Highway).

The Canadian Pacific Railway had a line running through the central portion of the Hamlet of Langdon in roughly an east-west direction. The rail right-of-way is now privately owned and runs north of Dead Horse Road.

4.5 Existing Utility Services

Langdon Waterworks Ltd., a privately owned and operated utility company, provides potable water servicing throughout the hamlet through a franchise agreement with the County. Upgrades and expansion of the water treatment system and network will be implemented, as required, to support this development.

Wastewater services are managed by Rocky View County. Wastewater is treated at RVC's Treatment Plant, north of the *Plan Area* with treated effluent eventually discharged to Weed lake. Upgrades are in the planning stages with RVC.

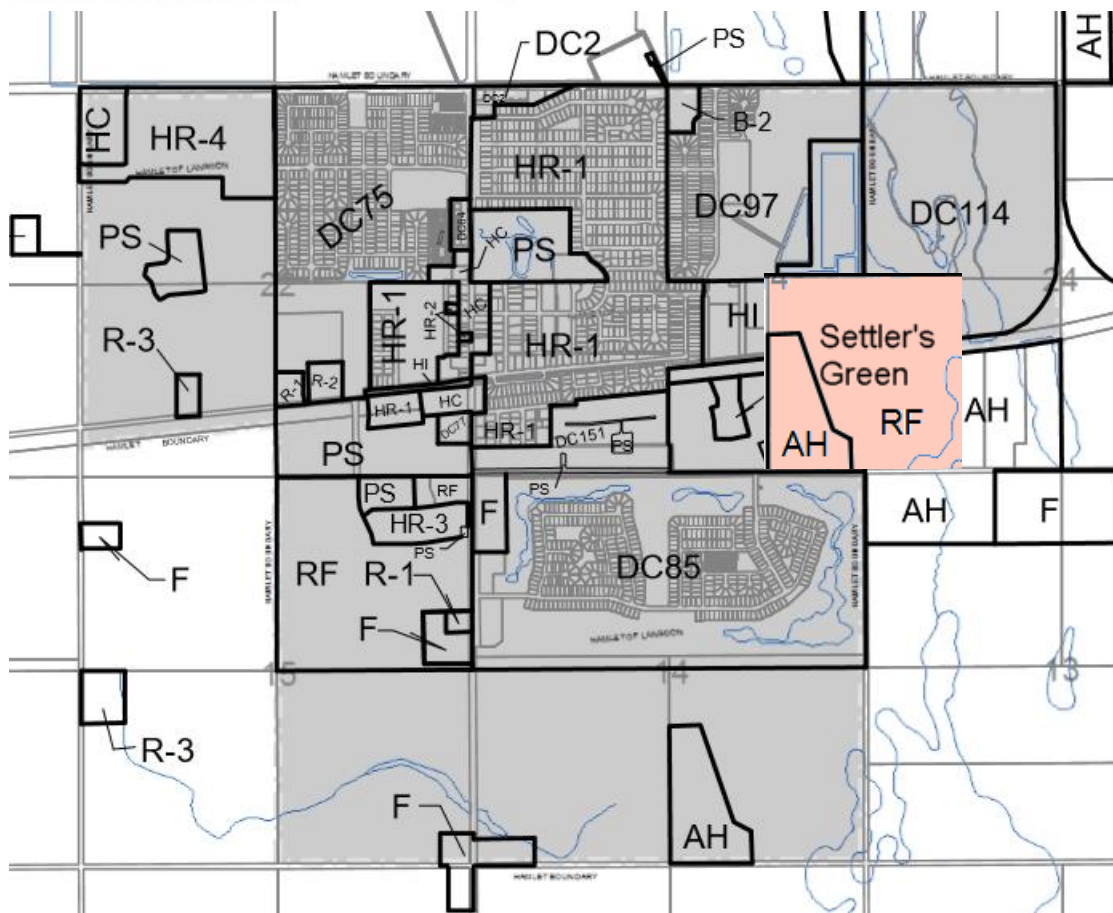
4.6 Existing Land Use

As shown in the figure below, the *Plan Area* is currently designated Ranch and Farm District (RF) and Agricultural Holdings District (AH) in accordance with RVC Land Use Bylaw C-4841-97. RF permits a broad range of agricultural uses and covers most of the County. AH provides for a range of parcel sizes for agricultural uses including smaller lot sizes. The *Plan Area* is currently agricultural lands mostly for haying with a residential dwelling towards the southwest portion. The majority of lands outside the Hamlet of Langdon are agricultural, mainly used in crop cultivation of cereal crops (wheat/barley) and oil seeds (canola).

Figure 4: Existing Land Use

Legend

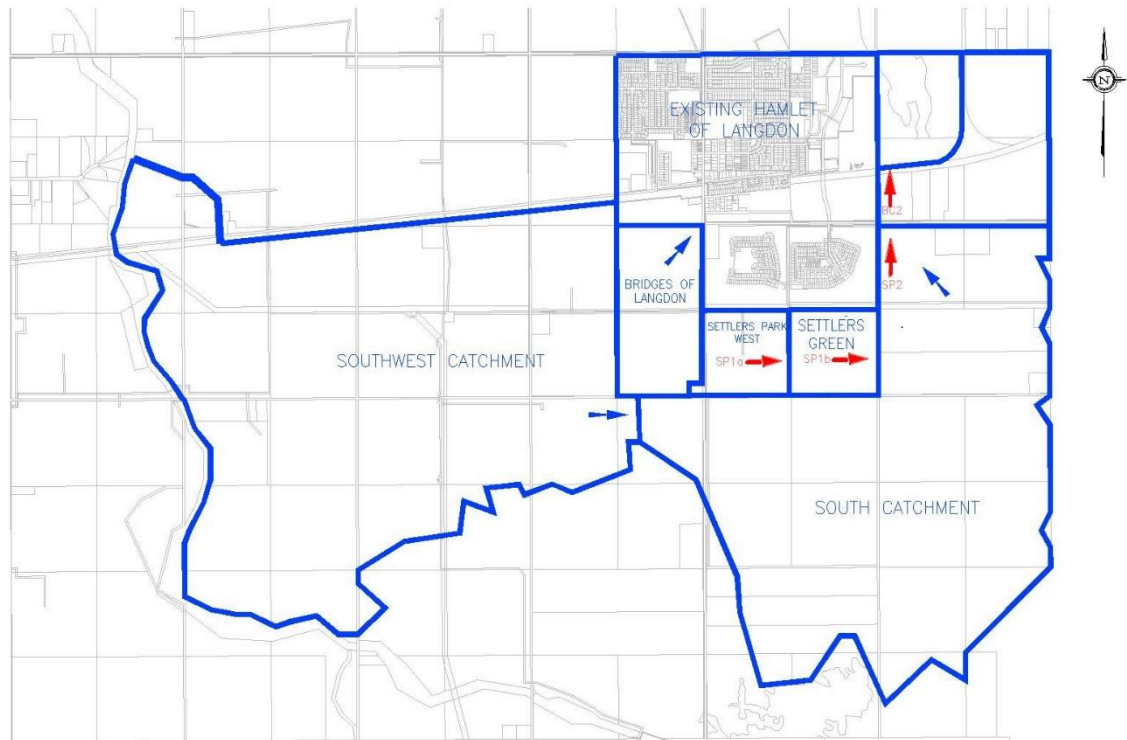
AGRICULTURAL HOLDING DISTRICT	AH
RANCH AND FARM DISTRICT	RF
FARMSTEAD DISTRICT	F
RESIDENTIAL ONE DISTRICT	R-1
RESIDENTIAL TWO DISTRICT	R-2
RESIDENTIAL THREE DISTRICTS	R-3
GENERAL BUSINESS DISTRICT	B-2
PUBLIC SERVICE DISTRICT	PS
DIRECT CONTROL DISTRICT	DC
HAMLET RESIDENTIAL SINGLE FAMILY DISTRICT	HR-1
HAMLET RESIDENTIAL (2) DISTRICT	HR-2
HAMLET RESIDENTIAL (3) DISTRICT	HR-3
HAMLET RESIDENTIAL (4) DISTRICT	HR-4
HAMLET COMMERCIAL DISTRICT	HC
HAMLET INDUSTRIAL DISTRICT	HI



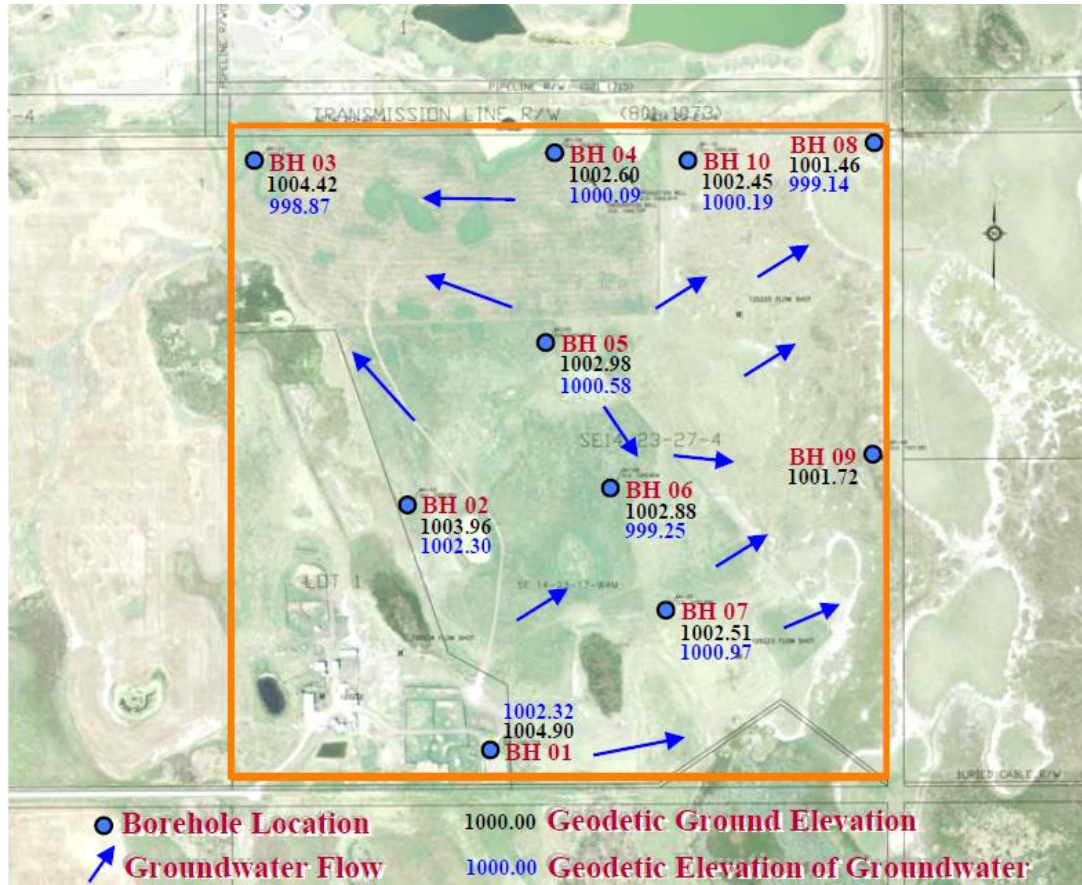
4.7 Existing Site Conditions

Existing site conditions of overland drainage and soil conditions are described below.

Figure 5: Overland Drainage Conditions



In general, Langdon is characterized by prairie grasslands, major wetland complexes, water fowl migration areas, a high water table, and groundwater discharge. **Settler's Green** is part of a larger catchment area that feeds into Weed Lake through the natural drainage courses, with the regional drainage ditch running through the hamlet along Railway Avenue. More specifically, storm water is collected from the west and passes through Settler's Park (SP1a) and **Settler's Green** (SP1b) before travelling north (SP2), then east of Boulder Creek (BC2).

Figure 6: Geotechnical Boreholes with Geodetic Elevation Map

A Geotechnical Investigation of the *Plan Area SE-14-23-27-W4M* for Metro Allied Development Inc. was conducted in 2010. Groundwater was encountered between about 1.5m to 5.5m in borehole tests and at a geodetic elevation between about 999m and 1002m. Soil bearing pressures were strong, even in low-lying marshy areas and increased with depth throughout the site. Basically, subsurface conditions for the soil profile are topsoil underlain by glacial till above a bedrock consisting of weathered sandstone and siltstone. The land provides generally favourable soil and groundwater conditions. The geotechnical report and can be viewed under separate cover.

4.8 Protective and Emergency Services

Langdon is serviced by Langdon Fire Station 111 provides fire coverage for the southeast area of the County. Emergency Services are coordinated through volunteers at the RVC Fire Hall, located central to the Hamlet of Langdon at Centre Street on Railway Avenue.

5.0 DEVELOPMENT CONCEPT

5.1 Development Concept

The following figure and calculations form the development concept for **Settler's Green**.

Figure 7: Development Concept

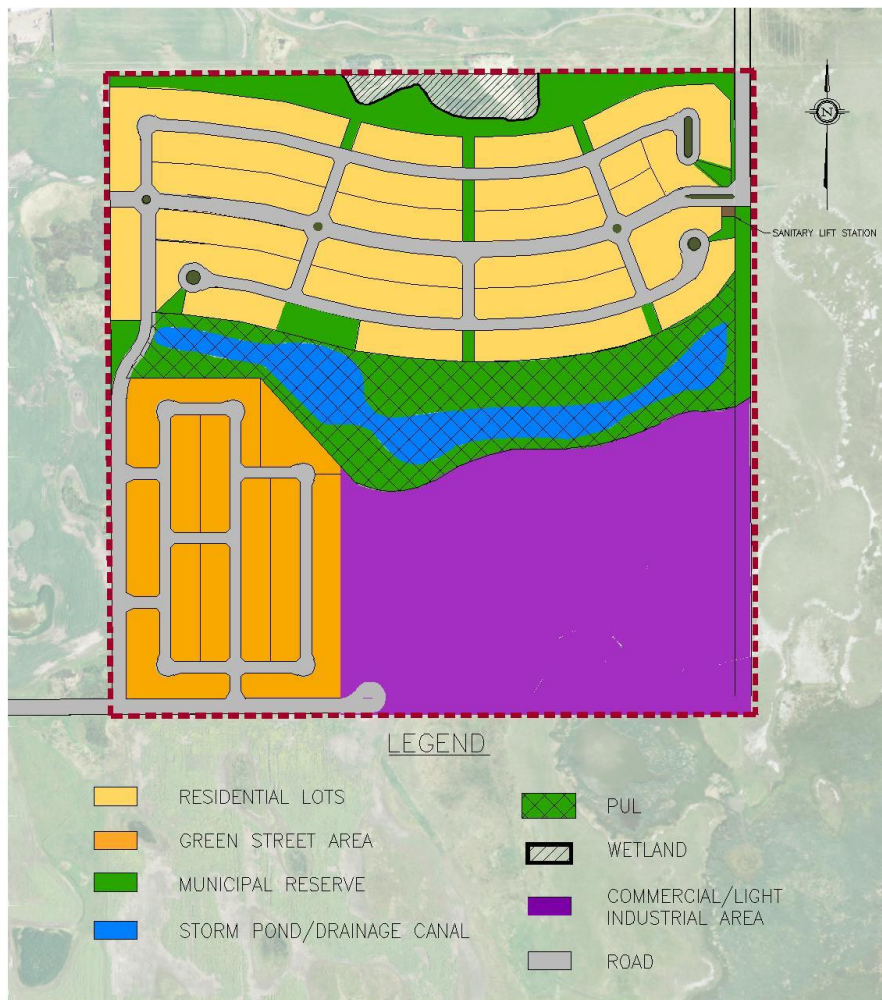


Table 2: Development Concept Calculations

Land Use	Hectares	Acres	Percentage
Municipal Reserve	5.83	14.40	9.0
Environmental Reserve	1.05	2.59	1.6
Public Utilities	7.87	19.45	12.2
Residential	17.48	43.20	27.0
Green Street	9.09	22.47	14.0
Roads	5.87	14.51	9.1
Commercial / Light Industrial	17.58	43.44	27.2
Total	64.7	160	100

As shown in the above Development Concept, the net developable area after the wetlands, municipal reserves, public utility reserves and roads are taken out is 35.06 ha, plus a Green Street component of 9.09 ha.

A variety of housing alternatives are encouraged in the County Plan and the Langdon ASP in order to provide a range of affordability and lifestyle opportunities for county residents. **Settler's Green** supports existing housing forms and character that appeal to residents, while allowing housing stock to diversify to meet the needs of residents in all stages of their lives. This translates into an affordable labour force to satisfy employment in the Hamlet of Langdon and long-term community residents being able to remain in the community into retirement.

As directed by the Langdon ASP, the mixed use area where the *Plan Area* is located should comprise the following uses: a. light industrial uses; b. business uses; c. residential uses; and d. other uses for which a market demand can be demonstrated. The *Plan Area* is considered an area where development is expected to contain a mix of commercial, light industrial, and residential development.

Settler's Green provides housing in the northern portion, some commercial/alternative housing, as well as a future employment area proposed in the southern portion of the *Plan Area*. As the Langdon ASP states in the introduction, "An ASP does not predict the rate of development within the Plan Area; ultimately, growth is determined by market demand which reflects the overall economic climate of the region."

Policy

- 5.1.1 Arrangement of the land-use areas shall be in general conformance with that illustrated in Figure 7 - Development Concept.
- 5.1.2 A mix of land uses shall be implemented, approximately as illustrated in the accompanying Table 2 Development Concept Calculations.

5.2 Commercial / Light Industrial Area

From a land use, fiscal and transportation perspective, light industrial is more suited to the periphery of Langdon. Flexibility in road layout and lot sizes is required to support and market this employment area for the Hamlet of Langdon. Blocks of land supporting commercial / light industrial uses require flexibility to meet their needs. Access will be provided to the south and west to try and separate truck transport from vehicular transport where possible, both for time considerations and safety. Township Road 232 is a gravel road that will be extended and upgraded to provide a regional transition paved road to serve the commercial and light industrial area.

The *Plan Area* has provisions for attracting commercial / light industrial development, including flexibility of lot sizes, servicing, internal road configuration and affordable housing for the labour force. Lots and uses will typically be a range of general business, commercial and light industrial uses with a mixture of parcel sizes that is suited to a direct control bylaw.

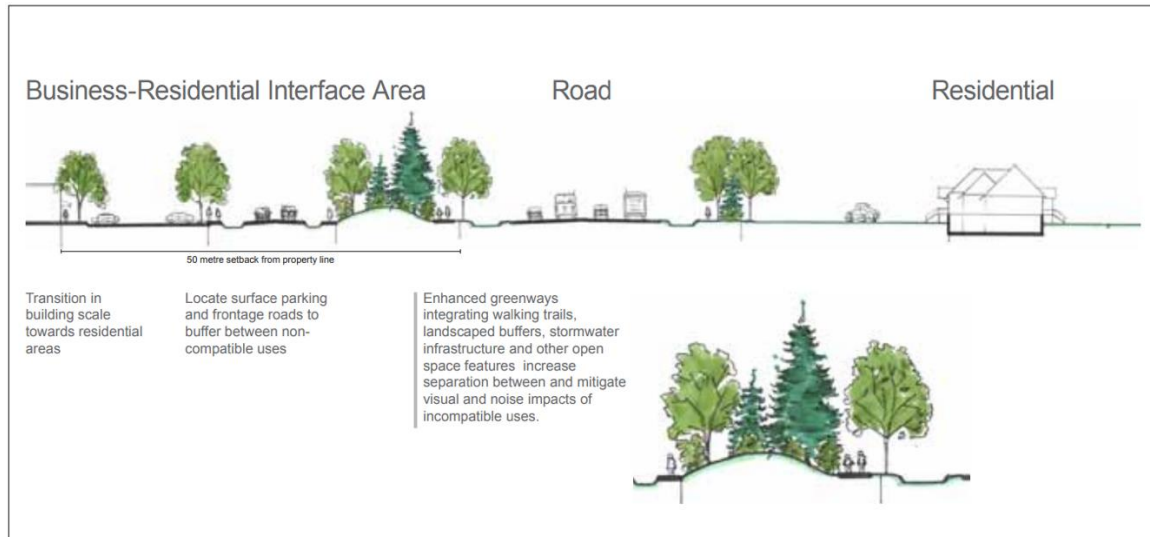
Policy

- 5.2.1** The commercial / light industrial area may be amended through a conceptual scheme amendment with details provided at the redesignation stage.
- 5.2.2** Notwithstanding policy 5.2.1, temporary uses on commercial / light industrial areas do not require a master site development plan.
- 5.2.3** Landscaping requirements and architectural controls to ensure visual quality of the commercial / light industrial area shall be detailed in Architectural and Design Guidelines to be submitted at the subdivision stage of the development approval process.
- 5.2.4** Pathways and pedestrian routes serving the commercial / light industrial area and its surroundings shall be identified at the subdivision stage.
- 5.2.5** Development of the commercial / light industrial area shall conform to Commercial, Office and Industrial Guidelines for Rocky View County.
- 5.2.6** All commercial / light industrial development shall be designed and constructed in accordance to recognized Crime Prevention Through Environmental Design (CPTED) best practices.
- 5.2.7** Residential land uses are not considered appropriate uses within the light industrial area.
- 5.2.8** Light industrial uses such as: agricultural related uses, warehousing, transportation, services, construction, and manufacturing that do not have a significant off-site impacts are encouraged within the industrial area.
- 5.2.9** Institutional and business uses that are compatible with industrial uses and have minimal impact on the local infrastructure, and do not generate large retail traffic volumes may be appropriate within the industrial area.
- 5.2.10** All private lighting, including security and parking area lighting, shall be designed to respect the County's "dark sky" Land Use Bylaw requirements, conserve energy, reduce glare, and minimize light trespass onto surrounding properties.
- 5.2.11** Lots located adjacent to future residential use shall comply with the appropriate interface area policies of the Langdon ASP.
- 5.2.12** Lots adjacent to an agricultural operation should consider edge treatment such as incorporation of appropriate landscaping and fencing with guidance from the County's Agricultural Boundary Design Guidelines.

5.3 Residential Area

As per the Langdon ASP future residential uses adjacent to future commercial / light industrial land uses shall be buffered with an appropriate interface area as shown in the following figure from the ASP. Where commercial / light industrial uses are located adjacent to planned Green Street residential, an appropriate interface area shall be designed with setbacks and landscaped buffers that use local/native plant species and present a high quality visual appearance.

Figure 8: Business-Residential Interface Area



Residential use located on the northern portion of the *Plan Area*, north of the storm water canal resembles development of the Boulder Creek community to the north. Layout is a curvilinear grid with parallel avenues for east-west travel and streets for north-south. Lots and uses will typically be single detached residential.



Green Street development is located on the southern portion of the *Plan Area*. Residential lands will be “Green Street” with single detached dwellings and medium density dwellings (three or more attached dwelling units that may be townhomes, rowhouses, and multi-unit complexes). Other community-oriented uses such as conference centres or clubhouses may also be

supported. Green infrastructure refers to natural and human-made elements that provide eco-friendly building construction materials, energy efficient lighting, building orientation, compact form, and attractive streetscapes. Various frontages, tenures and design are not precluded from being built in any of the locations proposed for residential development.

Multi dwelling units are envisioned as grade oriented townhomes or street oriented development that integrates with the scale of development of the surrounding area.

Medium density residential is a higher density form of housing compared to single detached housing units, consisting of three or more attached dwelling units that may be town homes, row housing, and multi unit complexes. Medium density residential will provide a variety of housing options for people in all stages of life while continuing to maintain the Hamlet of Langdon rural look and feel throughout design.

Where densities more than 9.88 units per ha (4.0 units per acre) are considered, the character and physical design is to be similar to what already exists or is approved in Langdon. Architectural design guidelines will promote front yard aesthetics, street trees and street-oriented porches or patios in the neighbourhoods. Street names, architecture emphasizing a rural look and feel, and landscaping using local / native plant species are to be incorporated in the design at the time of subdivision.

Single detached residential is envisioned to include small houses on small lots. This has been gaining popularity for those seeking affordable options, community interaction at street level and a neighbourhood protected from being over-built. Lots and uses will typically be single detached, semi-detached and row housing as supported in the Land Use Bylaw as Hamlet Residential (4) District (HR-4), a similar residential mixed housing district, or direct control bylaw.

Policy

- 5.3.1** Where new residential neighbourhoods are developed in proximity to existing residential neighbourhoods, the design for the new residential neighbourhoods should provide an acceptable transition to the existing areas through a residential building form that is similar in height, massing, and architectural design to the surrounding community.
- 5.3.2** The predominant land use within the residential areas shall be single detached residences; multi-dwelling residential such as semi-detached homes, row houses and multi-unit buildings may also be considered.
- 5.3.3** The following uses in the residential area may be allowed where they are determined to be compatible and appropriate: seniors housing; public, recreational, and institutional uses such as schools, child care facilities, special care facilities, churches; convention centres, and neighbourhood commercial.
- 5.3.4** Multi-dwelling units shall be grade oriented, comprised of articulated façades that define individual units at street level. Entrances to individual dwelling units shall be visually prominent from the front façade or from the inner façade fronting on a common open area.
- 5.3.5** Medium density residential development should: a. be oriented to the public street with parking located in the rear or side; and b. be located in proximity to community amenity

areas such as open space, a park, Centre Street, institutional, or neighbourhood commercial.

- 5.3.6** All medium density residential development shall be designed and constructed in accordance to recognized Crime Prevention Through Environmental Design (CPTED) best practices.
- 5.3.7** All private lighting, including security and parking area lighting, shall be designed to respect the County's "dark sky" Land Use Bylaw requirements, conserve energy, reduce glare, and minimize light trespass onto surrounding properties.
- 5.3.8** Residential / non-residential interface policies shall comply with the appropriate interface area policies of the Langdon ASP.
- 5.3.9** Manufactured homes shall be made compatible with the existing development through the provision of architectural controls at the subdivision stage of the approval process.
- 5.3.10** Homes in the Green Street Area shown in Figure 7: Development Concept shall be made compatible with the existing development through the provision of architectural controls at the subdivision stage of the approval process.
- 5.3.11** Architectural controls should address the rear façade and landscaping of lots backing onto Open Space and promote neighbourly interaction with front yard aesthetics, street trees and street-oriented porches or patios. This is to ensure aesthetically coordinated development is in keeping with Prairie Heritage architectural design elements and should be provided at the subdivision stage of the approval process.
- 5.3.12** Lots adjacent to an agricultural operation should consider edge treatment such as incorporation of appropriate landscaping and fencing with guidance from the County's Agricultural Boundary Design Guidelines.
- 5.3.13** A more precise distribution of residential units in each phase of development shall be determined at the subdivision stage of the approval process.

5.4 Open Space Area

Open space, parks, pathways, and trails provide opportunities for passive and active recreation for a wide range of accessible, connected, inviting, and safe spaces. There may be instances where the regional pathway, trail, boardwalk, or sidewalk network cannot be located within a park, storm water conveyance system, natural water course, riparian area, or natural area. In this case, they may be located within a road right-of-way in accordance with applicable County standards or in municipal reserve land adjacent to a road. Accordingly, pathways located adjacent to storm water management ponds will be located above the high water line of storm water management infrastructure. The *Plan Area* has made locating pathways within the open space areas a priority.

As per the Langdon ASP, the layout of the development should provide for a pathway, trail and sidewalk network that generally aligns with the network shown on Map 7 of the ASP. This includes providing connection within, and external to, the local plan area; addressing parks and open spaces during all phases; locating the network within, or aligning with a park, wetland, storm water conveyance, water course, riparian area, or natural area; incorporating crime

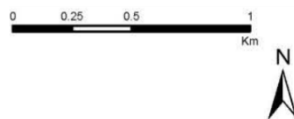
prevention through environmental design; and contribution to the regional trail and pathway system.



Figure 9: Langdon ASP: Open Space and Pedestrian Connections Map



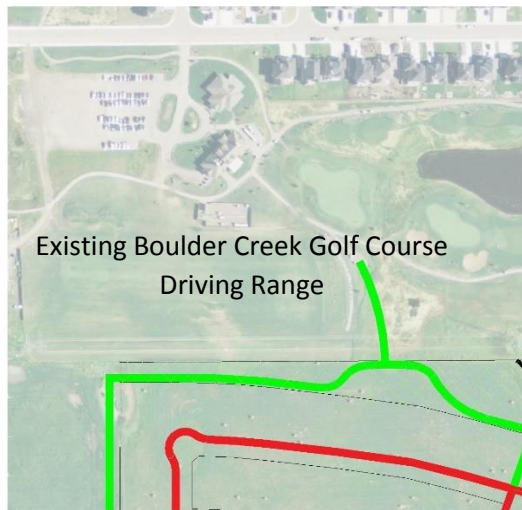
This map is conceptual in nature. No measurements or area calculations should be taken from this map.

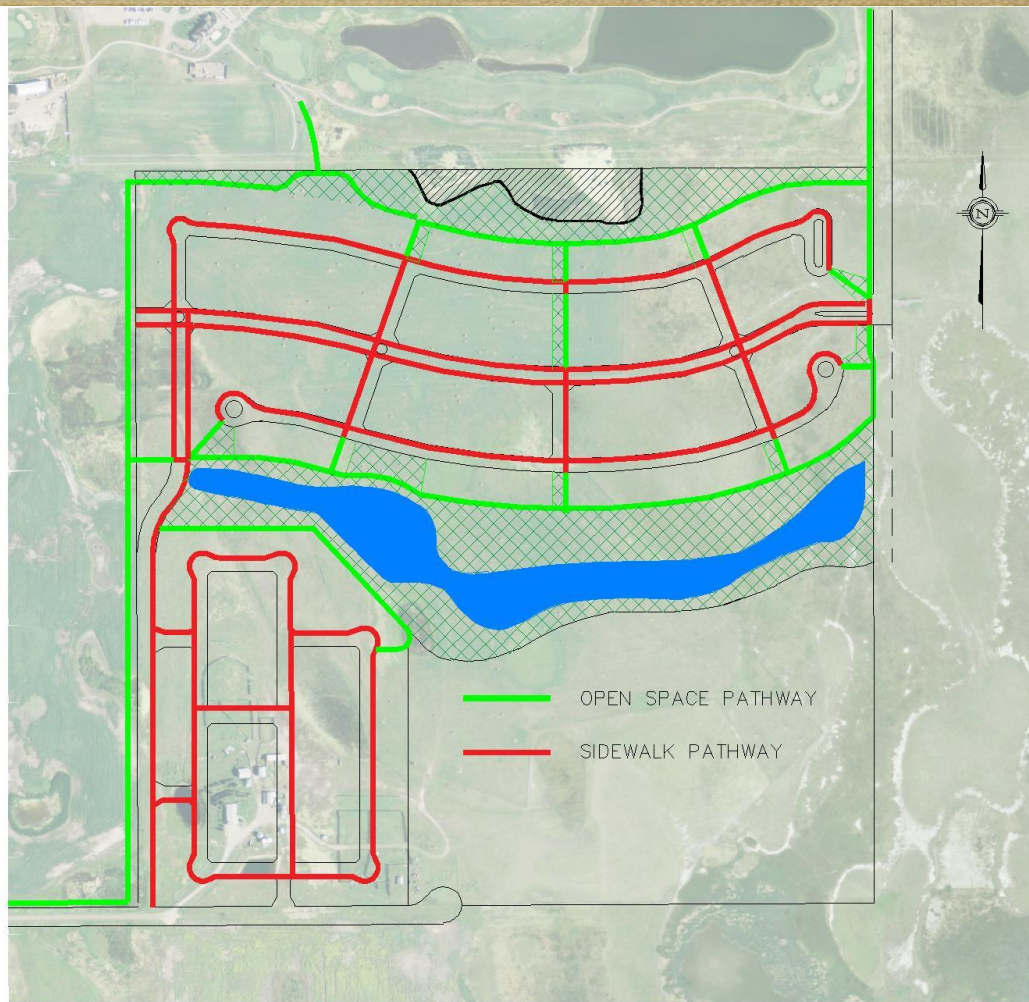




Settler's Green will include an extensive linear open space and pathway along the northern boundary of the site adjacent to the golf course. Negotiations are encouraged with Boulder Creek Golf Course for access to pathways for greater connectivity in the Hamlet of Langdon.

Figure 10: On-Site Open Space and Pedestrian Map





Within the *Plan Area*, pathway design will be connected and looped for both the residential and non-residential component. Pathways will exist along the northern boundary and centrally in proximity to the storm water canal water feature. To connect sub-neighbourhoods, pathways and open space networks will be integral to internal subdivision design. A connection to a north / south pathway to the existing pathway on Dead Horse Road is planned. In addition, a connection north towards the Boulder Creek Golf Course is planned. A connection to an east / west pathway along Twp. Road 232 is also planned. In addition, connections west towards the quarter section to the west are planned.

Pathways will be landscaped and paved with a hard surface. A sustainable and low maintenance for of landscaping is encouraged and should consist of natural prairie grasses and drought resistant foliage suitable for the local environment.

Policy

- 5.4.1** The location of Open Space should be in general conformance with the Figure 7: Development Concept.
- 5.4.2** Open space development, including pathway design, shall be in conformance with the Rocky View County Parks and Open Space Master Plan, Rocky View County Servicing

Standards and the Parks and Pathways: Planning, Development and Operational Guidelines.

5.4.3 A detailed Open Space Plan, including landscaping and any pedestrian bridges shall be provided to the satisfaction of the County at the subdivision stage.

5.4.4 Pathway connections should be planned:

- a)** north towards Boulder Creek;
- b)** north at the northeast corner along an undeveloped north-south road allowance towards Twp. Road 233 (Dead Horse Road);
- c)** west at the southwest corner at Twp. Road 232 towards Centre Street; and
- d)** west to the adjacent quarter section at multiple locations.

The design of the pathway system shall be included in the Open Space Plan provided at the subdivision stage of development.

5.4.5 Local pathways shall be established in the Plan Area, as generally identified on Figure 10: On-Site Open Space and Pedestrian Map and as aligned with the Langdon ASP.

5.4.6 Wherever possible, pathways, trails and sidewalks should be located within, or align with a park, wetland, storm water conveyance system, natural water course, riparian area, or natural area. Where these locations are not feasible, consideration should be given to road right-of-ways or municipal reserves adjacent to a road.

5.4.7 Designs and locations for pathways and landscaping of reserve lands shall be subject to County approval in accordance to applicable County standards and guidelines.

5.4.8 All open space development shall be designed and constructed in accordance to recognized Crime Prevention Through Environmental Design (CPTED) best practices.

5.4.9 Crime prevention through environmental design principles shall be adopted, especially in any commercial, industrial, public use or dense residential areas. Adequate lighting, visibility and safety will be provided along streets and pathways to create a sense of security and to ensure a safe pedestrian environment.

5.5 Municipal Reserves

The MGA Section 666(2) "The aggregate amount of land that may be required under subsection 1, (*namely developable land that is the subject of a proposed subdivision*) may not exceed the percentage set out in the municipal development plan, which may not exceed 10% of the parcel of land less the land required to be provided as environmental reserve and the land made



subject to an environmental reserve easement.” The County Plan requires 10% of net developable area.

Policy

- 5.5.1** The location of Municipal Reserve should be in general conformance with the Figure 7: Development Concept.
- 5.5.2** Municipal reserve shall be dedicated in accordance with the proposed plan of subdivision to a maximum of 10% of that portion of the *Plan Area* identified in the residential development.
- 5.5.3** The provision of municipal reserves on account of non-residential development may be by payment of cash-in-lieu of municipal reserve and based on a market value appraisal determined at the time of subdivision in accordance with the MGA.
- 5.5.4** Municipal Reserve dedication shall be determined at the subdivision stage in accordance with the Municipal Government Act.

5.6 Environmental Reserve

As directed in the MGA and Langdon ASP, environmental reserves are lands dedicated to the County as public land during the subdivision process. Environmental reserves include the wetland along the northern boundary and the wetland in the southeast portion of the *Plan Area*.

Policy

- 5.6.1** Wetlands within the *Plan Area* shall be evaluated through a biophysical impact assessments and individual wetland impact assessments.
- 5.6.2** Lands that qualify as environmental reserve should be dedicated as environmental reserve or environmental reserve easement through the subdivision process, as per the Municipal Government Act.
- 5.6.3** Storm water treatment should avoid the use of natural wetlands.

5.7 Transportation Considerations

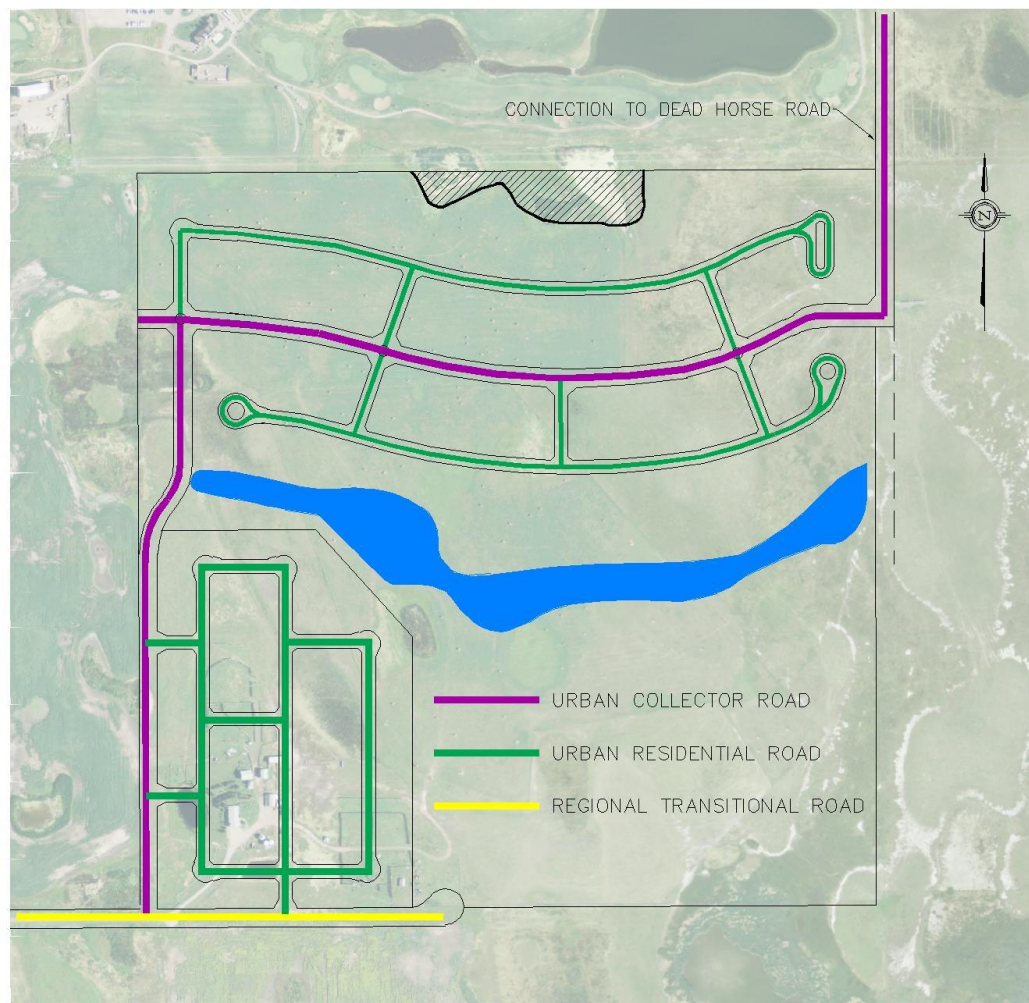
As described in the Langdon ASP, the *Plan Area* will provide for an internal road network that contributes to a high quality built environment and efficiently and safely aligns to the regional road network. The transportation network will integrate development within Langdon and provide regional opportunities for walking, cycling, and public transportation. Township Road 232 is a gravel road that needs to be extended and upgraded in order to tie into the southern portion of **Settler's Green**. A Collector 2 Lane is needed to tie into the northeastern portion of **Settler's Green** for a connection north to Twp. Road 233 (Dead Horse Road SE). Two access points shall always be provided during build-out at all phases of development.

As shown on the following map, the layout in the northern portion of the *Plan Area* is a curvilinear grid for the most part while maintaining good site lines, maximizing efficient lot yields, providing cost-effective on-site servicing, and offering future potential for intensification. Three avenues provide east-west traffic flow for the residential area. The central avenue is the main

collector traverse the *Plan Area* facilitating the efficient movement of vehicles in and out of the subdivision. As such, it has greater design widths and traffic circles (roundabouts) to support traffic flows, provide energy efficiencies in terms of starting and stopping, offer traffic calming, and provide a landscaped feature. Connecting the avenues are north-south streets which serve as logical locations for storm water drainage via gravity towards the storm water canal water feature. At the east and west ends of the residential area, different court designs are highlighted with central landscape features that offer privacy and variety in lot configurations.

Road landscape features are part of the Plan Area, especially at medians at entrances, traffic islands and cul-de-sacs for aesthetics. In accordance to Section 671(2) of the Municipal Government Act: traffic islands, boulevards/medians shall not be dedicated as municipal reserve; as they serve no tangible park, recreational benefit and pose undue risk due to being bounded by roadway on all sides. Rather, these lands are to be considered part of the road plan and are to be designed with aesthetically pleasing and context appropriate landscaping so as not to create sightline and maintenance / operational issues.

Figure 11: Transportation Network



Portions of the *Plan Area* south of the storm water canal water feature are intended for commercial / light industrial use and Green Street use. Access from the western boundary is provided by a north-south street and an improvement and extension of Twp. Road 232 south of the *Plan Area* and connecting to Centre Street. Access is provided at the northeast corner of the *Plan Area* along an undeveloped north-south road allowance towards Twp. Road 233 (Dead Horse Road). Should street connections be required interior to the *Plan Area* to serve the south portion, potential exists where the storm water canal water feature narrows and logically ties into the road network to the north. Internal roads serving the south portion of the *Plan Area* are determined by the lot sizes and configuration required for the land use.

Roads shall be to RVC servicing standards. Internal roads will be paved with an asphaltic concrete and designed with rolled curbs and gutters. Collector roads will also have sidewalks along both sides with appropriate street lighting. Residential roads will have a sidewalk on one side. All roads will be designed to permit emergency vehicle access and acceptable turnarounds where required. Roundabouts in the *Plan Area* are designed to the same standard as others found in Langdon, namely Langdon Crossing West. Corner configurations are similar to those found to the north in Boulder Creek.

As a scenario, an entrance landscape feature provides a divided roadway with greenspace. This provides additional safety for pedestrians crossing the road, traffic calming and additional noise suppression for neighbouring lots. Court-like road networks north and south of this feature ensure the rear property line of the residential lots and not frontages and driveway entrances face this landscape feature. Courts may also have landscaped features in the centre designed for safety within the courts, traffic calming, reduction of street parking, and curb appeal for residential lots, while still providing access for emergency vehicles.

Settler's Green internal roads will be constructed in accordance with RVC Servicing Standards typical of the cross-sections provided below.

Figure 12: Typical Internal Road Cross-Section – Urban Residential (400.1)

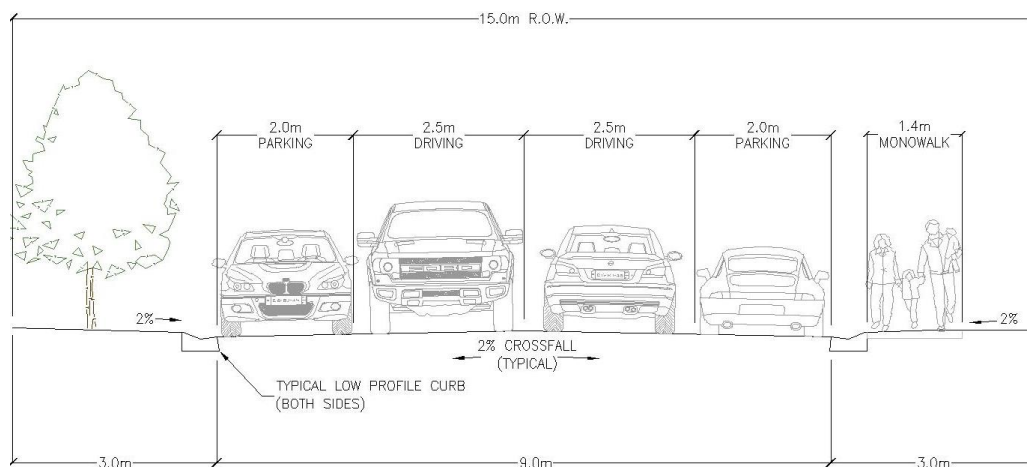


Figure 13: Typical Hamlet Collector Road Cross-Section – Modified Urban Residential Collector (400.2)

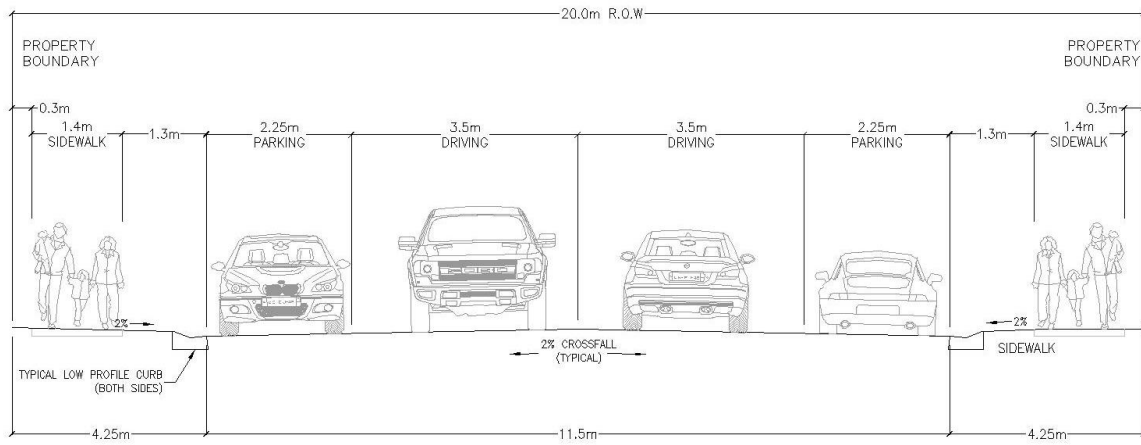


Figure 14: Typical Regional Transitional Paved (400.11)

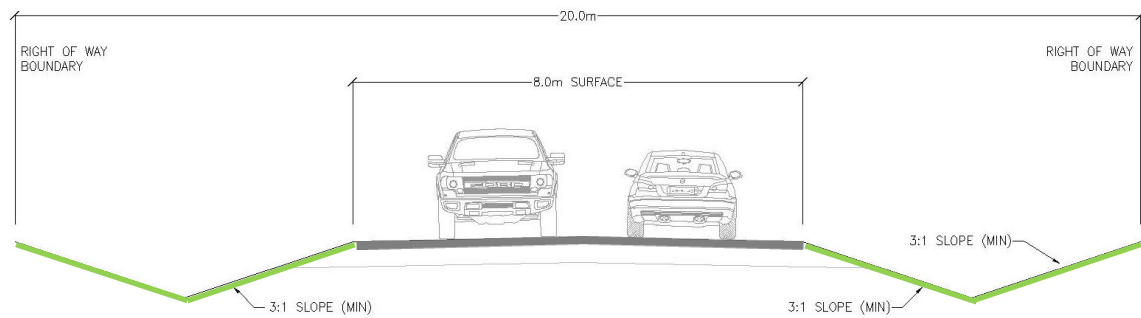
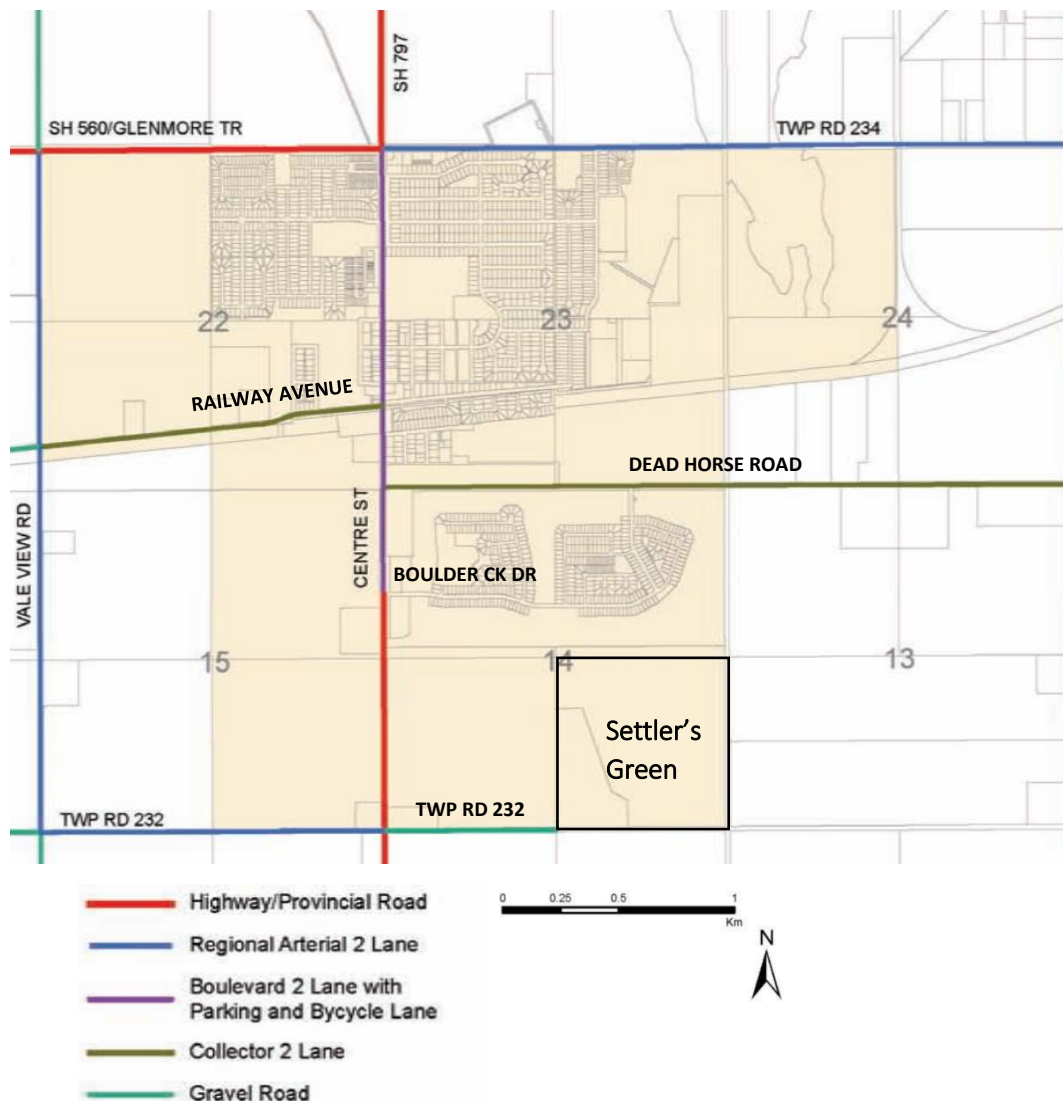


Figure 15: Langdon ASP: Transportation Network 2020-2030

Bunt and Associates Engineering (Alberta) Ltd. submitted, *Settler's Green Traffic Impact Assessment Final Report*, April 2017, available for viewing under separate cover. Weekday peak hour intersection capacity analysis was completed at five (5) key intersections for the background and post development horizons for the years 2020, 2030 and 2040.

The County prepared a Transportation Network Analysis for Langdon to determine the long-term impacts of the transportation network from the development and growth of the Hamlet and new development areas. Bunt and Associates background analysis shows the anticipated daily traffic volumes are expected to operate within the capacity for the years studied. Some off-site improvements were suggested. The road network will consist of a hierarchy of collector roads and residential roads in the *Plan Area*.

Policy

5.7.1 Development within the *Plan Area* shall generally conform with the *Settler's Green Traffic Impact Assessment Final Report* referenced in this Conceptual Scheme.

5.7.2 The developer shall enter into a development agreement with Rocky View County regarding the construction of internal roadways and all related infrastructure at the subdivision stage of the process

5.7.3 The developer shall provide lands required for roads for each phase, ensuring two entrances are always available.

5.7.4 Roads connecting the commercial / light industrial area to 22x will be encouraged.

5.7.5 Road, pathways, sidewalks, driveways and building construction considerations are to follow recommendations provided by the Geotechnical Investigation.

5.7.6 The proposed transportation network of roads, pathways and trails shall connect adjacent neighbourhoods and include alternate modes of transportation for safe movement of pedestrian, cycling and vehicular traffic.

5.7.7 Road landscape features such as traffic islands and boulevards/medians are to be considered part of the road plan and designed to be aesthetically pleasing with landscaping so as not to create sightline and maintenance/ operational issues.

5.7.8 All boundary roadways shall be designed in conformance with the recommendations contained within the Langdon Network Analysis.

5.7.9 The road classification and layout may be refined through further transportation analysis at the time of subdivision application. Minor changes or modifications will not require an amendment to this Conceptual Scheme.

5.7.10 All applicable transportation off-site levies shall be collected upon endorsement of each phase of subdivision.

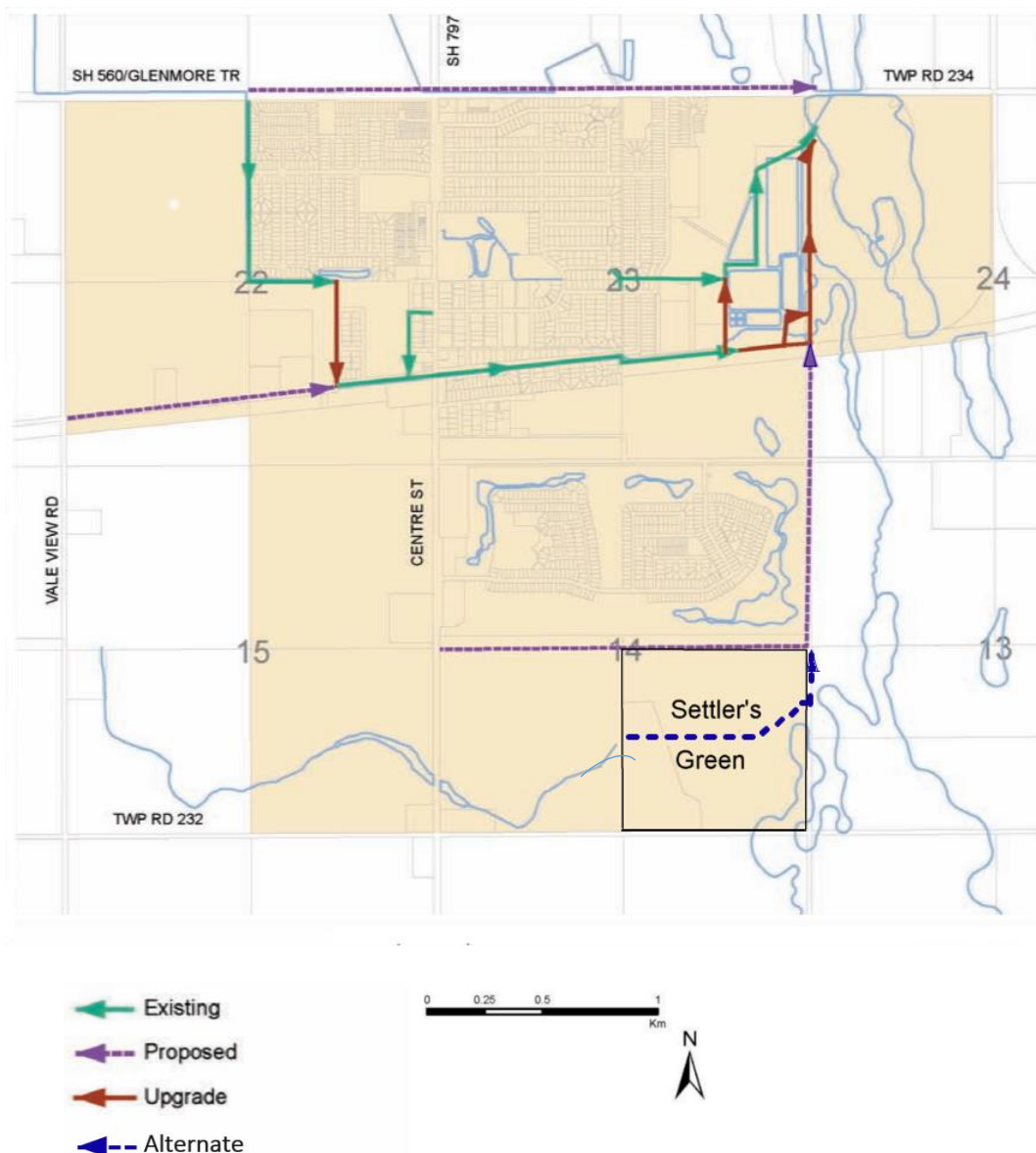
5.7.11 The developer shall be eligible for the recovery of an appropriate portion of the costs associated with improvements to off-site roadways

5.8 Utility Services - Storm water

As the following figure shows, the proposed regional storm water system poses some issues. Along the north boundary of **Settler's Green** is a high voltage transmission line, pipeline right-of-way and a wetland that pose conflicts for the conveyance of storm water. As such, it is not likely that approval will be granted to construct a drainage ditch within the west-east right-of-way between **Settler's Green** and Boulder Creek.

Wetlands also exist east of the *Plan Area* and east of an undeveloped north-south right-of-way that connects to the Weed Lake basin wetland. Natural drainage of these wetlands is separate and not part of the storm water servicing.

Figure 16: Langdon ASP: Proposed Storm water (modified)



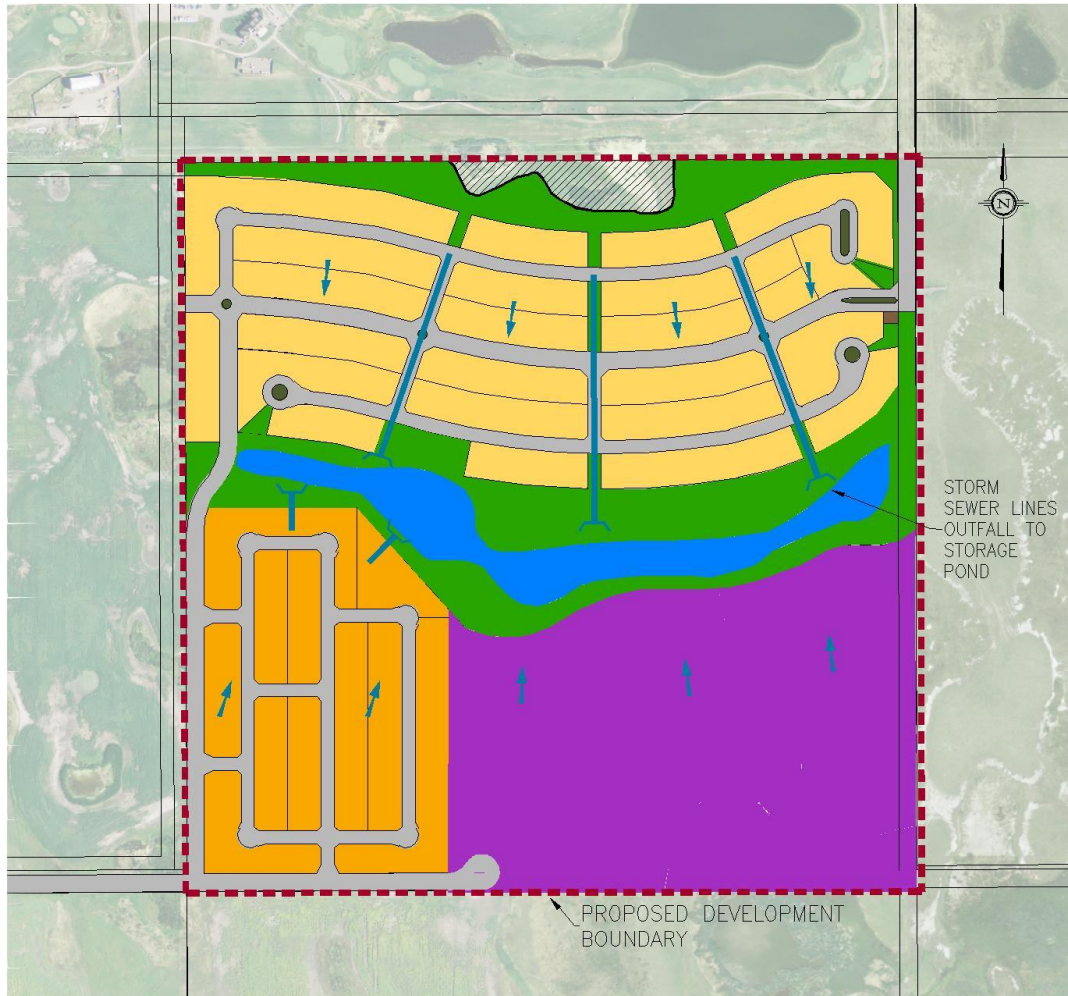
Lands to the west normally discharge downstream to the southeast into the *Plan Area*. Lands on the east half of 15-23-27-W4M and west of Centre Street, being the approved "Bridges of Langdon" Conceptual Scheme, do not allow for drainage into **Settler's Green**. The quarter section immediately west of **Settler's Green**, known as Settler's Park is anticipated to discharge

into **Settler's Green** and has been accounted for in calculations. Runoff of each development is managed internally within the Settler's Park and **Settler's Green** developments.

Settler's Green provides a water feature that acts as a storm water canal through the central portion of the *Plan Area*. This avoids these conflicts and follows actual hydraulic gradients for a true gravity storm water drainage and management system.

Storm water servicing requires a storm water canal/pond to collect gravity feed lines from phases of development in **Settler's Green**. Roadways and open space corridors offer locations for these lines.

Figure 17: On-site Storm Water Servicing Map



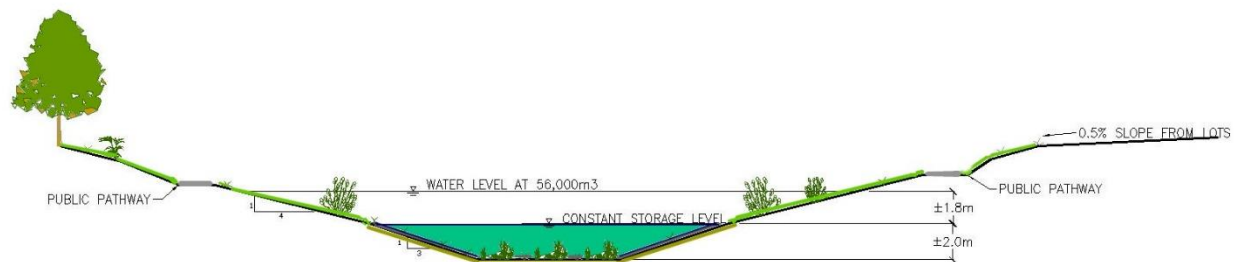
Sim-Flo Systems Inc. submitted, *Settler's Green Subdivision Storm Water Plan*, March 2017, available for viewing under separate cover. The proposed regional storm water system was described within the Langdon Comprehensive Storm Water Review and has been modified to take into account:

- Undevelopable wetland areas located east of the proposed development site;
- Infrastructure conflicts between proposed ditches and high voltage transmission lines and pipeline right-of-ways to the north of the proposed development; and
- Actual hydraulic gradients to provide for a true gravity storm water drainage and management system.

Storm water runoff flows from the west side of the adjacent undeveloped quarter section to the west through the proposed development area and into the existing wetland area east of the proposed development quarter section. The discharge from the storm water pond is to be directed through a buried pipe to be installed along the undeveloped north-south right-of-way on the east side of the Boulder Creek Golf course and is to discharge into the proposed ditch BC2.

This is a modified regional storm water scheme that recognizes the actual constraints imposed on runoff routes and closely mirrors that proposed by the Langdon Comprehensive Storm Review produced by MPE Engineering Ltd.

Figure 18: Typical Cross-Section of Storm Water Area



Catchment areas and drainage have been modified to take into account the water feature that acts as a storm water canal through the central portion of the *Plan Area* in the post development map as shown in the following figures.

Figure 19: Pre-Development Catchment Areas and Drainage

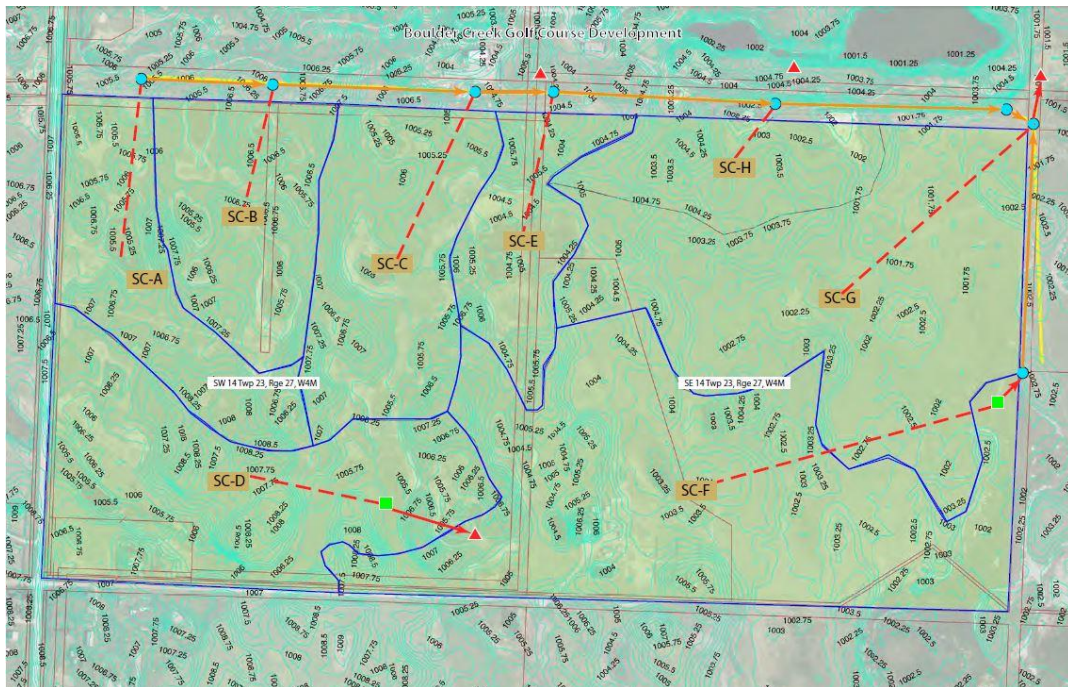
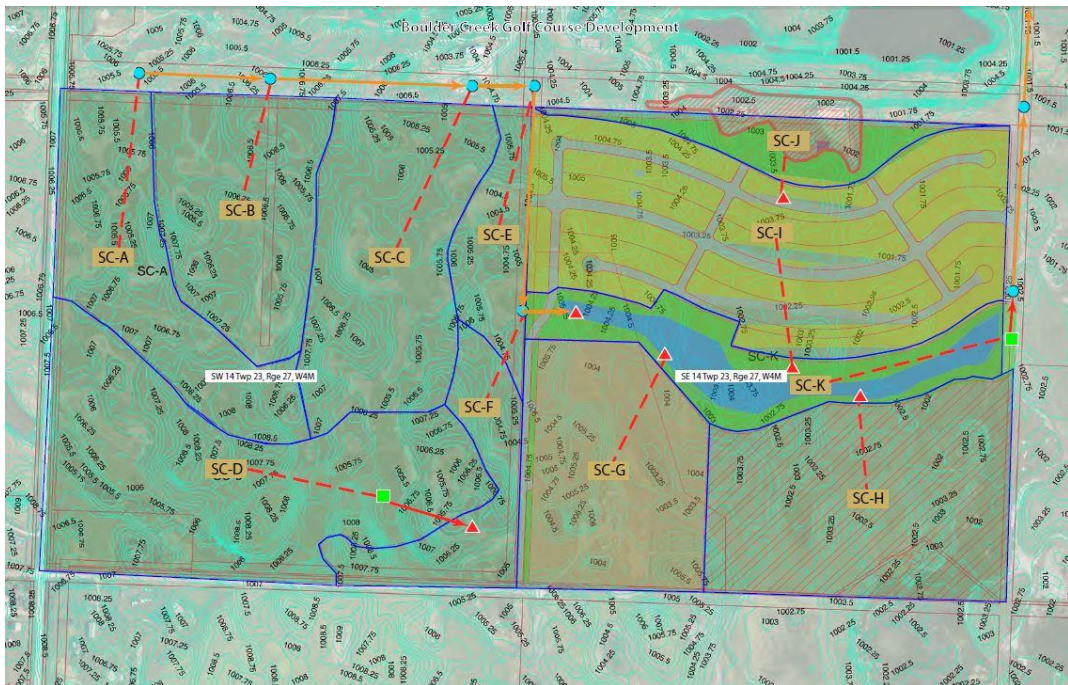


Figure 20: Post Development Catchment Areas and Drainage



Best management practices (BMPs) and alternative solutions for the improvement of storm water quality and reduction of storm water quantity are part of storm water management. As Policy 24.20 of the Langdon ASP suggests, solutions may include:

- a) design of storm water facilities to incorporate source controls to reduce the amount of water moving downstream and the need for end-of-pipe storm water treatment solutions;
- b) use of low impact development methods, such as constructed wetlands and bio-swales;
- c) reduction of impermeable surface runoff;
- d) reuse of storm water for irrigation;
- e) consideration of sub-regional storm water ponds to support the reuse of storm water; and
- f) protect downstream conveyance routes and properties.



Policy

5.8.1 Development within the *Plan Area* shall generally conform with the *Settler's Green Subdivision Storm Water Plan* referenced in this Conceptual Scheme, as well as County Servicing Standards, County Policy, Langdon Comprehensive Stormwater Review, and Provincial Regulations.

5.8.2 Storm water gravity lines, force-mains, lift stations and canals / ponds will be designed in accordance to Alberta Environment and Rocky View County Standards.

5.8.3 Storm water management shall include conservation methods such as Low Impact Development (LID) and Best Management Practices (BMPs) and should incorporate storm water reuse principles, in accordance with Policy 24.20 of the Langdon ASP.

5.8.4 Landscaping of the water feature acting as a storm water canal will be addressed through detailed plans at the subdivision stage to integrate these utilities with the Open Space Plan for the *Plan Area*.

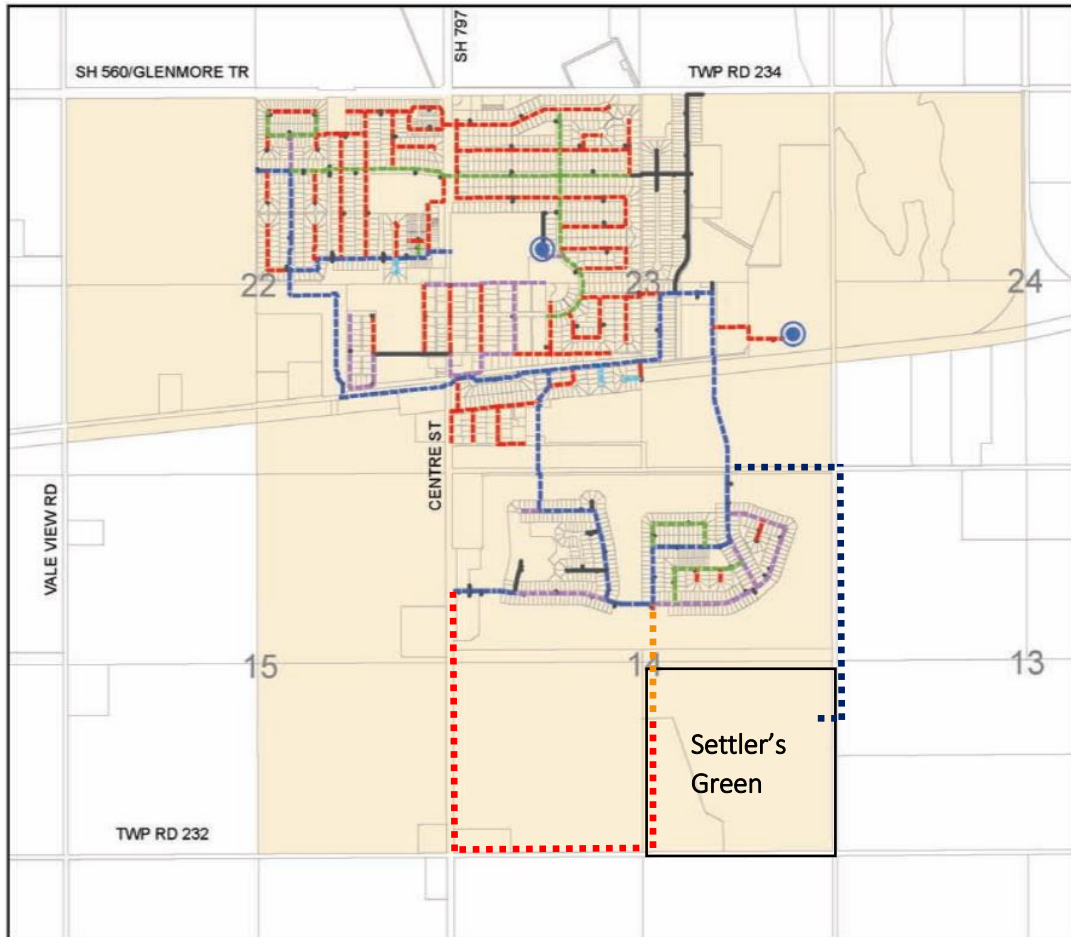
5.8.5 Agreements respecting offsite storm water improvements (cost sharing / endeavour to assist) will be considered in collaboration with the County to ensure any benefiting or excess capacity resulting from required infrastructure improvements are appropriately compensated. All applicable storm water off-site levies shall be collected upon endorsement of each phase of subdivision.

5.8.6 The developer shall be eligible for the recovery of an appropriate portion of the costs associated with improvements to utilities

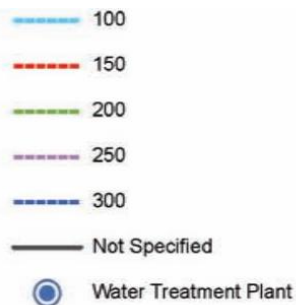
5.9 Utility Services – Water

Settler's Green ties into the existing water network and is proposed as a looped system. Alternate routes are proposed in the figure below.

Figure 21: Langdon ASP: Water (modified with Settler's Green route options)



This map is conceptual in nature. No measurements or area calculations should be taken from this map.



- Route 1 Water
- Route 2 Water (preferred)
- Route 3 Water

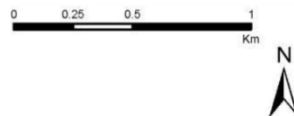
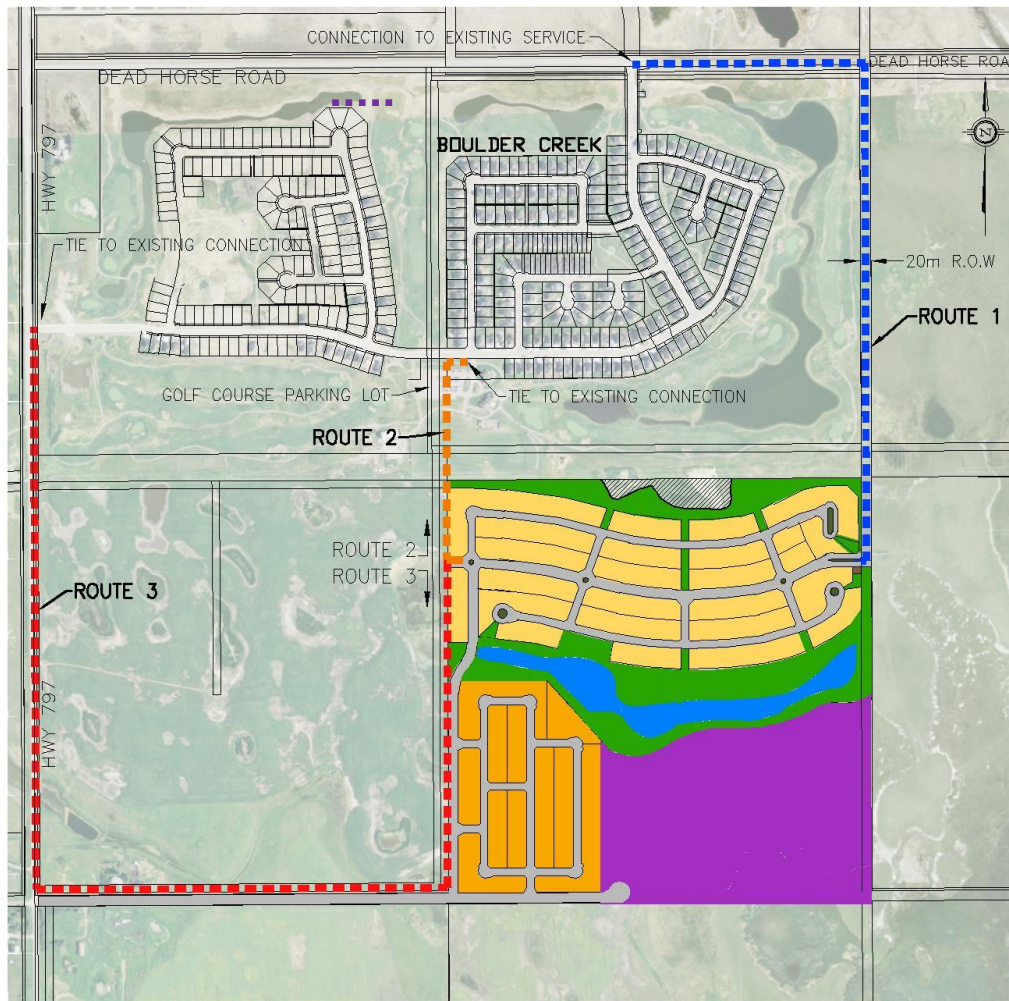


Figure 22: Off-Site Water Servicing Map

(Route 1 = Blue; Route 2 = Orange; Route 3 = Red)



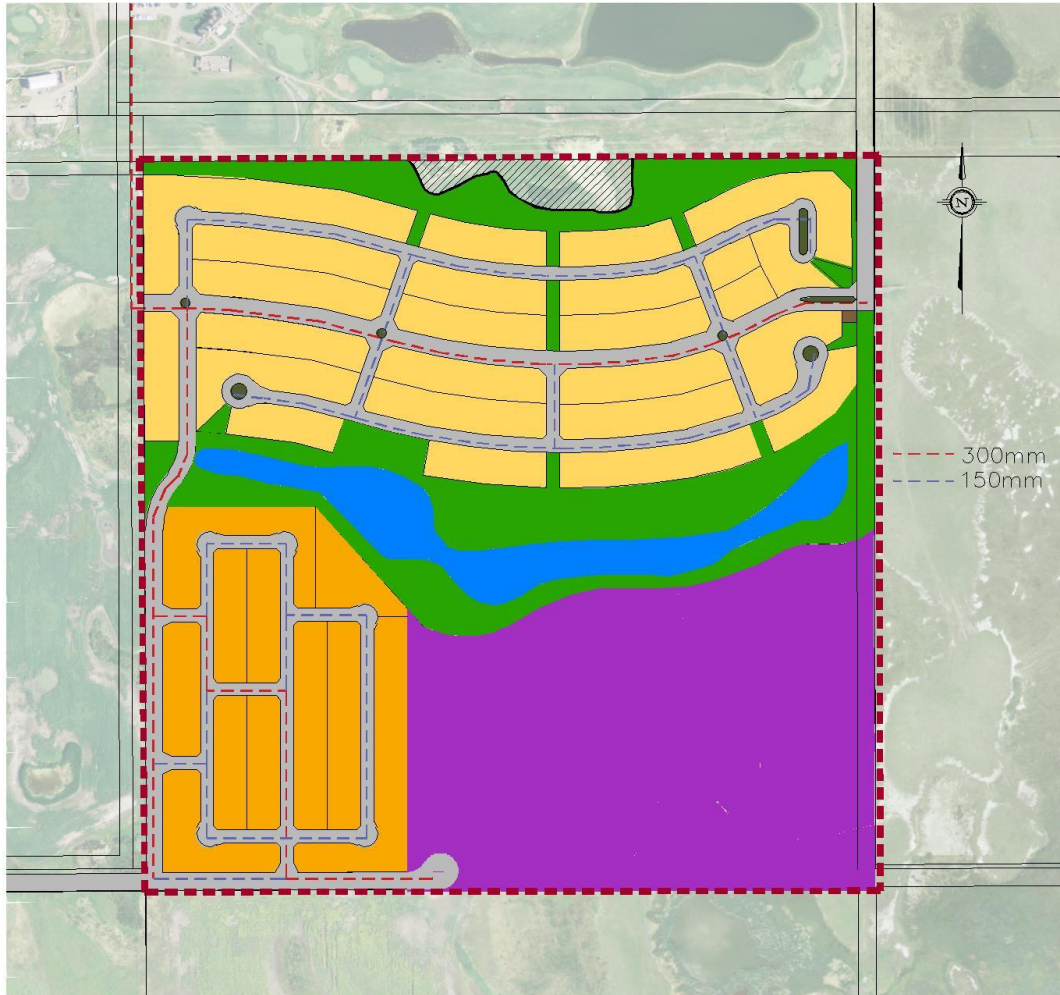
Route 1 will extend the water distribution system from the intersection at Boulder Creek and Dead Horse Road East to the undeveloped road allowance. The pipeline would then be routed south along the undeveloped road allowance and connect into the subdivision distribution system at the east side of the development.

Route 2 is preferred as it extends the water distribution pipeline from the capped stub in Boulder Creek near the golf clubhouse. This pipeline could be extended across the golf course and connect into the west side of the proposed development. This would support early phases of development and be the shortest route.

Route 3 is the least desirable routing of the water distribution pipeline. This connection requires the extension of the water pipeline from the intersection at Boulder Creek and Centre Street south to the subdivision access road. The pipeline would then run east along the subdivision access road then north within the subdivision. The connection to the subdivision distribution system would be on the west side of the subdivision.

On-site water servicing follows roads and other features in the *Plan Area*. A combination of two routes described above should be implemented to support the *Plan Area* and a looped water supply that taps into the existing water supply and distribution system for the Hamlet of Langdon.

Figure 23: On-Site Water Servicing Map



Policy

5.9.1 Water mains and distribution pipes within the *Plan Area* shall be in conformance with Langdon Waterworks' current servicing standards.

5.9.2 The water system will take into account fire protection standards, accessibility by emergency response vehicles for the suppression of fire, site access, property identification, and best practices for water distribution.

5.9.3 As per the Langdon ASP, a Water Use Assessment will be submitted with a subdivision application. The Water Use Assessment shall be reviewed by the County and Langdon Waterworks to determine the water demand and infrastructure requirements to confirm that sufficient water capacity exists to service the proposed development.

5.9.4 Utility rights-of-ways and easements shall be provided as required to accommodate County and potable water utilities and shallow utilities at the subdivision or development permit stage, as deemed necessary.

5.9.5 The detailed design for the water distribution system, on a per phase basis, shall be completed in accordance with the current Langdon Waterworks and Rocky View County Servicing Standards, and all applicable provincial guidelines at the subdivision stage.

5.10 Utility Services – Sanitary Wastewater

Settler's Green ties into the existing sanitary wastewater network. Alternate routes are proposed in the figure below.

Figure 24: Langdon ASP: Off-Site Sanitary Wastewater

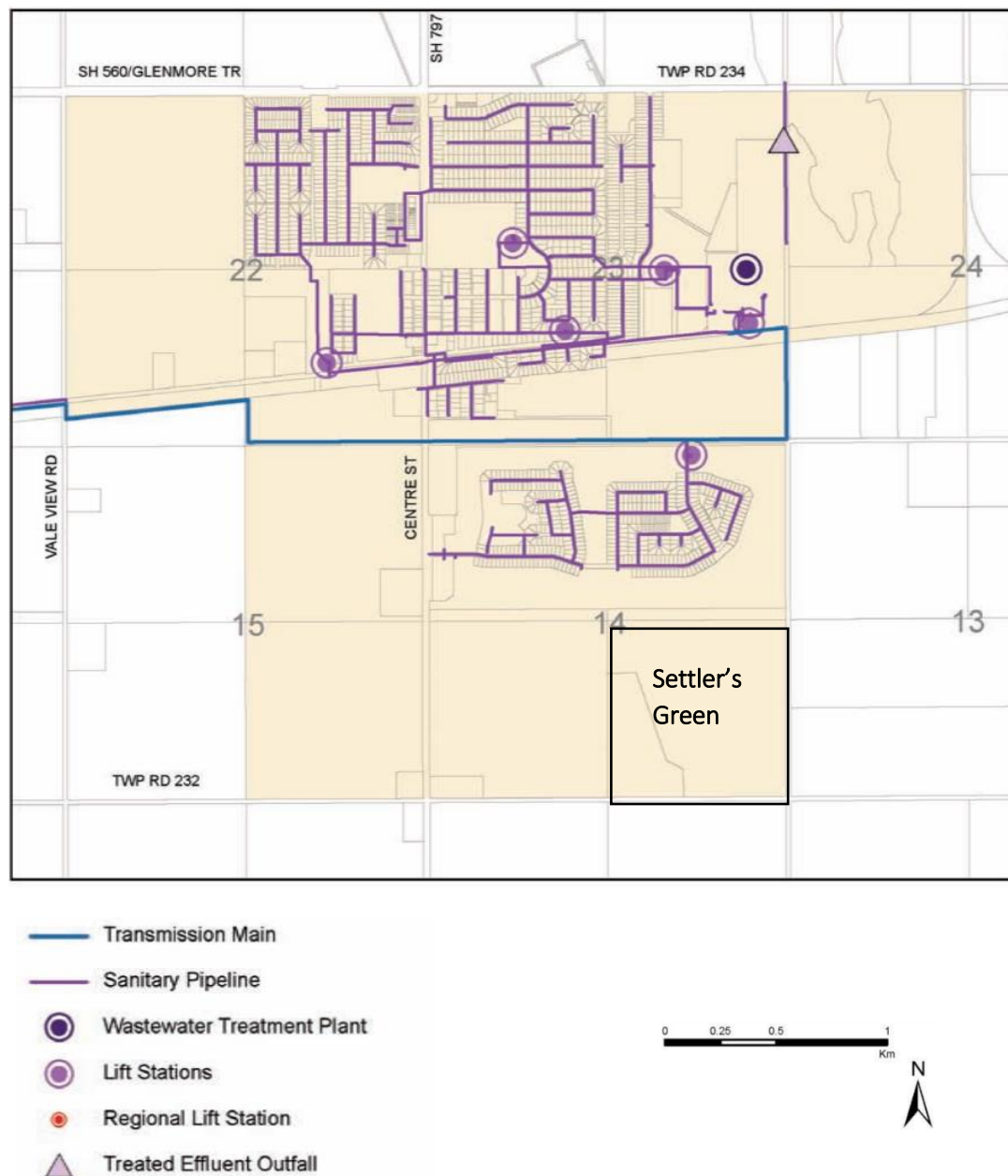
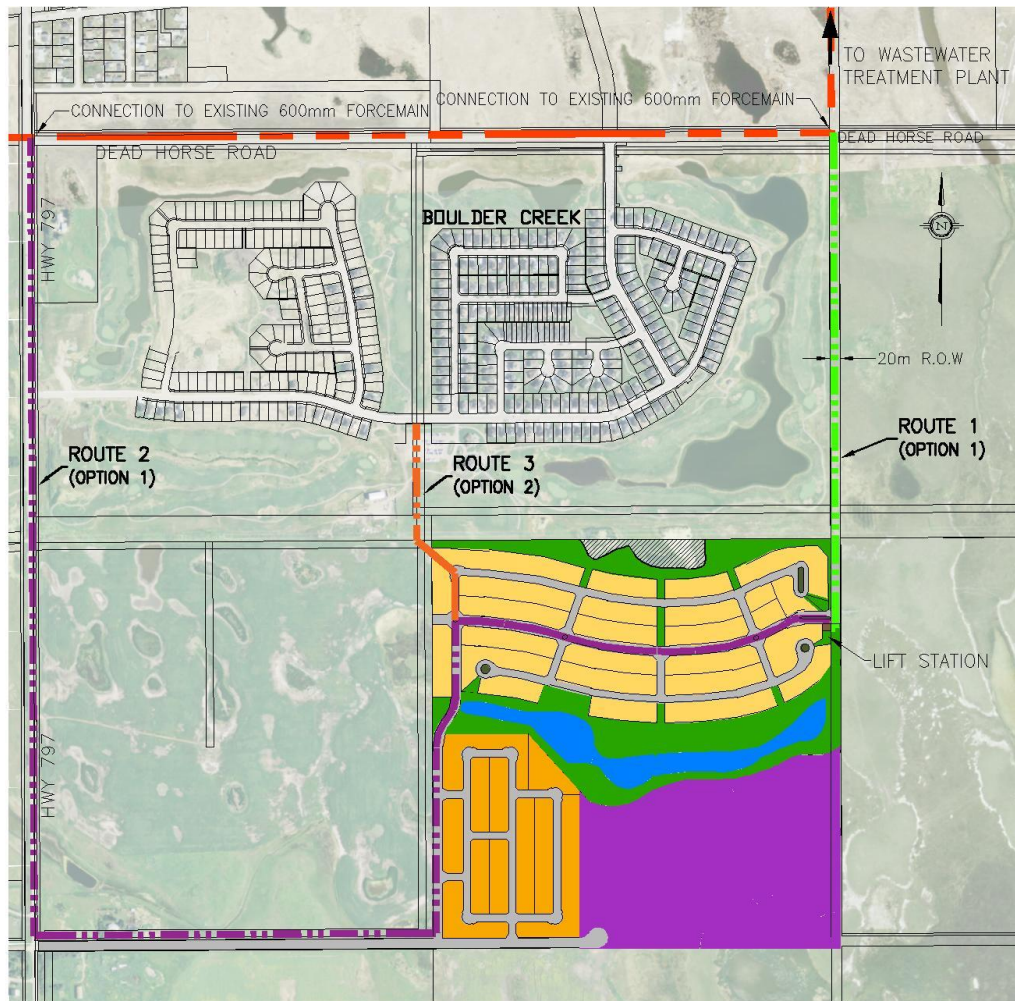


Figure 25: Offsite Sanitary Services Map

(Route 1 = green; Route 2 = purple; Route 3 = orange)



Route 1 (Option 1) for sanitary servicing requires a lift station pumping north utilizing the road right-of-way east of Boulder Creek, then connection to the existing 600 mm forcemain at Dead Horse Road. For any of the phases of development discussed later, this is the preferred option.

Route 2 (Option 1) for sanitary servicing requires a lift station pumping west, then to the southwest of the *Plan Area* to follow the new Settlers Green entrance road to the southwest of the property, before following Centre Street.

Route 3 (Option 2) is a gravity sewer main that drains to the Boulder Creek lift station. This option will only service a limited number of lots in the northwest corner of the development. The lift station will pump into the gravity sewer main as shown in figure 27.

There are two options for servicing Settler's Green. Option 1 is a self-contained alternative that directs sanitary flows to a lift station located on the east side of Settler's Green as shown in figure 26. This lift station can be designed to accept flows from the adjacent quarter section to the west. This lift station will pump sewage into the regional wastewater treatment plant forcemain directly either through route 1 or 2 as shown in figure 25.

Option 2, will provide gravity sewer service to a limited number of lots in the north west corner of the proposed development. The remainder of the development will be service by gravity sewer mains to a lift station similar to Option 1. A forcemain will be constructed to the gravity sewer manhole within the proposed subdivision as shown in figure 27. Sewage will be directed by gravity through the Boulder Creek lift station.

Figure 26: Onsite Sanitary Services Map (Option 1)

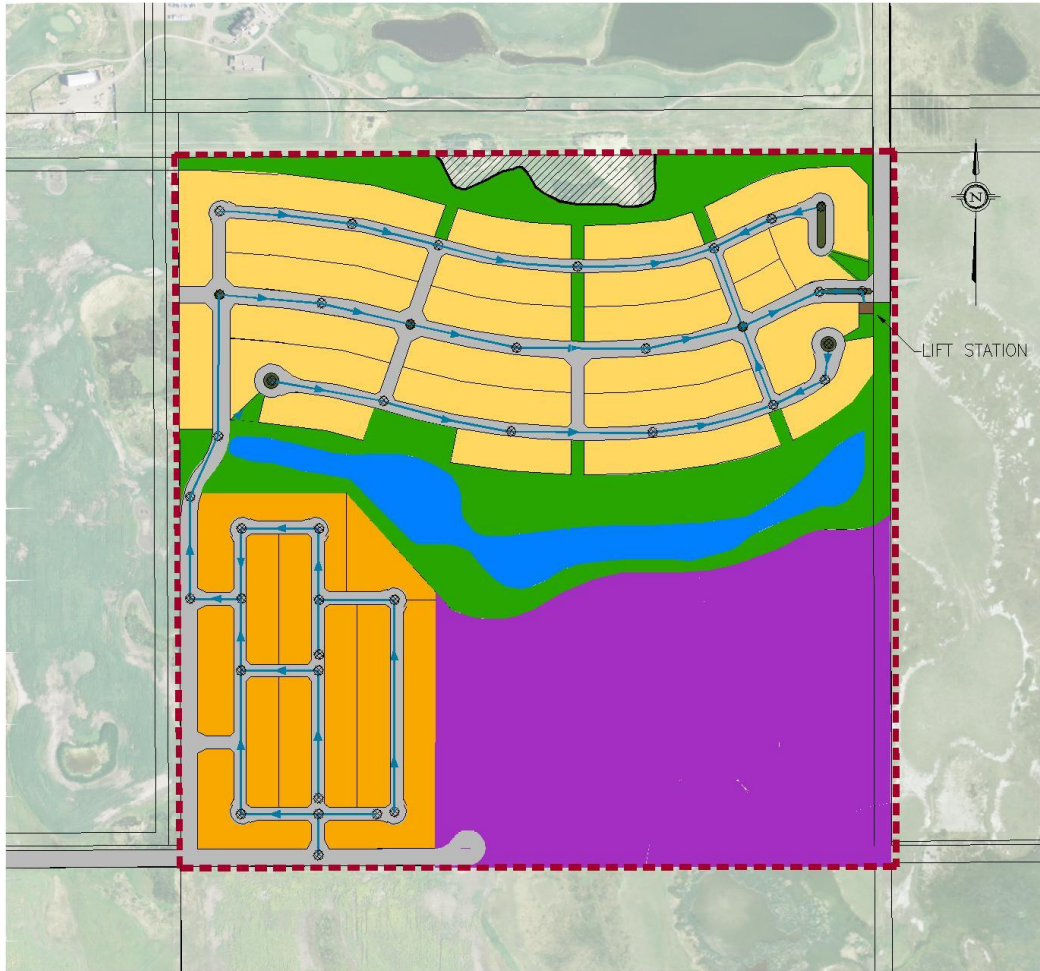
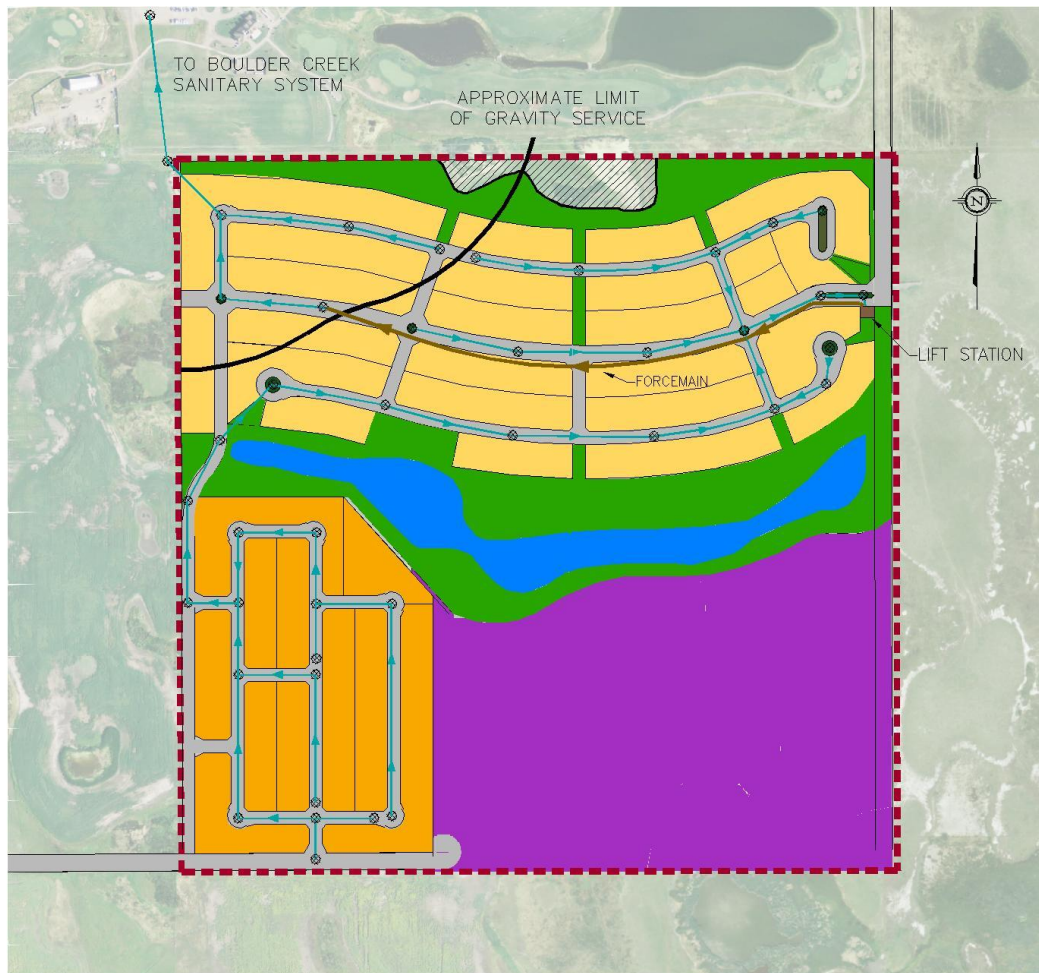


Figure 27: Onsite Sanitary Services Map (Option 2)

(Approximate limit of gravity service to Boulder Creek Sanitary System = cobalt blue)



Policy

5.10.1 Sanitary sewer gravity lines, forcemains and lift stations will be designed in accordance with Alberta Environment and Rocky View County Standards.

5.10.2 As per the Langdon ASP, a Wastewater Servicing Study will be submitted with a subdivision application. The Wastewater Servicing Study shall be reviewed by the County to determine wastewater demand and infrastructure requirements to confirm that sufficient wastewater treatment capacity exists to service the proposed development.

5.10.3 Utility rights-of-ways and easements shall be provided as required to accommodate sanitary wastewater utilities at the subdivision or development permit stage, as deemed necessary.

5.10.4 Sanitary wastewater lift station facilities shall be constructed on a Public Utility lot.

5.10.5 The detailed design shall incorporate measures to mitigate groundwater infiltration into the wastewater collection system, on a per phase basis, shall be completed in accordance with the current Rocky View County Servicing Standards, and all applicable provincial guidelines at the subdivision stage.

5.10.6 Agreements respecting wastewater improvements (cost sharing / endeavour to assist) will be considered in collaboration with the County to ensure any benefiting or excess capacity resulting from required infrastructure improvements are appropriately compensated. All applicable wastewater off-site levies shall be collected upon endorsement of each phase of subdivision.

5.10.7 The developer shall be eligible for the recovery of an appropriate portion of the costs associated with improvements to utilities.

5.11 Shallow Utilities

Telecommunications, phone, cable, fiber optics (where available), electrical and natural gas services will be provided to the *Plan Area* at the subdivision stage, as per utility owner's guidelines and availability.

Policy

5.11.1 Each phase of the development shall be fully serviced with private shallow utility systems such as electrical, natural gas, and telecommunications.

5.11.2 Locations for easements and line assignments for shallow utility extensions shall be determined at the subdivision endorsement stage.

5.11.3 Utility line assignments (buried/surface/overhead) are to be located within road right-of-ways and not within municipal or environmental reserve lands.

5.12 Solid Waste and Recycling

Langdon provides residential pickup of solid waste to residents within the Hamlet. It is anticipated that this service will be extended to the *Plan Area*. A local transfer site managed by Rocky View County is also available within Langdon for recycling and garbage.

5.13 Protective and Emergency Services

Langdon is served by a volunteer fire department centrally located within the Hamlet. 911 Emergency Response for fire, police or ambulance is dispatched through the local volunteer Fire Department in Langdon. Police services are provided by the R.C.M.P. enforcing the law through a detachment in Strathmore or RVC Peace Officers enforcing selected government acts and municipal bylaws. Medical emergencies are directed to facilities in the City of Calgary.

6.0 PHASING PLAN

The proposed Phasing Plan, as described below, is conceptual only and represents the most likely scenario for development in **Settler's Green**.

Figure 28: Phasing Map



Table 3: Phasing Calculations

Phases	Single Lots	Semi Lots	Multi Lots	Total Lots	Total Area
1a	80	--	--	80	8.2 ha (20.2 ac.)
1b	50	30	50	130	11.2 ha (27.7 ac.)
2	74	--	--	74	7.6 ha (18.8 ac.)
3	76	--	--	76	7.7 ha (19.0 ac.)
4	--	--	--	--	16.3 ha (40.3 ac.)
Total	280	30	50	360	51.0 ha (126.0 ac.)

* Total area includes internal roads and open space

In the phasing of **Settler's Green**, no phase precludes the development of another. It indicates the preference of how development could proceed. The above figure and accompanying table present one scenario with single lot equivalencies provided on the map. Each phase shall have appropriate storm water management and a looped system of internal roads. Included in the assumptions are average lot sizes for single detached lots of 0.08 ha (0.2 ac.) number of variables affect phasing, namely logical extension of infrastructure services, market demands, housing mix, industrial/commercial prospects, and financial considerations.

Construction access from the western boundary is provided by a north-south street and an extension of Twp. Road 232 right-of-way south of the *Plan Area*. Access from the eastern boundary is provided by construction of Range Road 271 northward to Twp. Road 233 (Dead Horse Road), both which shall be gravel at first.

6.1 Phases

- 1a** Land use within this phase is residential primarily for singled detached homes. The storm water canal acts to separate Phase 1a and 1b.
- 1b** This "Green Street" residential area has a highly sought after ownership mixed use component where flexibility is required depending on market needs. Housing and tenure variety provides options for rental, condominium and ownership.
- 2** This area covers 7.6 ha (18.8 ac.) on the central portion of the *Plan Area* flanking the main collector road and north of the storm water canal. The land use within this phase is single family residential.
- 3** This area covers 7.7 ha (19.0 ac.) on the northeast portion of the *Plan Area* and is jogged with adjoining phases for similar lot numbers and areas. As a scenario of how this area could develop, an entrance landscape feature at the east boundary of the *Plan Area* in the form of a divided road is shown where entrances begin on this road west of this feature. Court-like road networks north and south of this feature ensure the backs of the residential lots are adjacent to the landscape feature. South of the entrance, a Public Utilities (PUL) component in the form of a lift station for sanitary sewage services and a pump station for water services are likely. The provision of sanitary sewage services to this location are also likely at the initial phase of development.
- 4** This cell covers 16.3 ha (40.3 ac.) on the southeast portion of the *Plan Area* and is intended for future use. A right-of-way on the eastern boundary of the *Plan Area* could serve an access road and provide for water servicing and sanitary sewage servicing. Access is provided west of this phase off of Phase 1 and the right-of-way south of Phase 1, once the road is built. The primary use of this property is likely commercial / light industrial. Should interest in this phase occur in advance of the other phases, adequate access and servicing will be provided.

Policy

- 6.1.1** Phasing should generally be in accordance with the Phasing Plan. There will always be no less than two access roads into the development during all phases of development.

- 6.1.2 Utilities for water distribution system, on-site storm water, wastewater collection; and private shallow utility systems such as electrical, natural gas, and telecommunications shall be in place during all phases of development.
- 6.1.3 Parks and open spaces components should be incorporated during all phases of development.
- 6.1.4 The proposed Phasing Plan is conceptual only and will be confirmed at the time of subdivision.
- 6.1.5 No amendments to this plan will be required due to changes in the boundary or number of phases.
- 6.1.6 Design of all phases of the *Plan Area* shall include provision for active transportation inter-connectivity via pathway and/or trails located within municipal and environmental reserves or public utility lots and sidewalks located within the road plan.
- 6.1.7 In the phasing of the *Plan Area*, no phase precludes the development of another.

7.0 PLANNING AND IMPLEMENTATION FRAMEWORK

7.1 The Conceptual Scheme Implementation Process

Adoption of this Conceptual Scheme will establish specific expectations that will guide the implementation of **Settler's Green**. Consideration of this Conceptual Scheme by Council will occur following a statutory Public Hearing. RVC will consider adoption pursuant to the MGA. Subsequently, consideration of land use amendment, subdivision and development permit applications will follow.

Policy

- 7.1.1 Amend Rocky View County Water and Wastewater Off-Site Levy Bylaw No. C-7273-2013 to reflect the intent of the **Settler's Green** development having a lift station to serve the *Plan Area* and not subject to off-site levies associated with Area #3 Boulder Creek Lift Station Service Area shown Schedule B-3, Service Area Map for Langdon.

7.2 Land Use Redesignation

Settler's Green intends to work with the County to apply relevant land use districts for a land use redesignation application. Following anticipated adoption of this Conceptual Scheme, a land use amendment is expected to be applied by Council in accordance with the RVC Land Use Bylaw.

Figure 7: Development Concept shows the areas for redesignation. This includes the areas for Residential, Green Street Residential and Commercial / Light Industrial.

Residential is proposed to accommodate single detached dwellings with a comprehensively planned neighbourhood. Developments shall be located within the area of an adopted local plan.

Green Street residential development is proposed to accommodate modest low and medium density residential development on a range of lot sizes within a comprehensively planned neighbourhood. A mix of compatible housing types provides market opportunities and encourages diversity in the built form. Development shall be located within the area of an adopted local plan. The intent is to:

- i) design lots to accommodate dwellings that are affordable, such as small houses on small lots;
- ii) ensure the character and architectural integrity of the neighbourhood is protected from being over-built;
- iii) provide for a variety of housing types, some on the same lot size; and
- iv) provide for a modest garage suite that a small lot could accommodate.

To help meet this intent, width of the sites, heights of buildings and other Land Use District parameters could have ranges for minimums and maximums. Green Street development for mixed housing includes a variety of housing types such as: single detached, semi-detached, row housing, medium density and multi-dwelling units.

Commercial / Light Industrial is proposed to provide for the development of a range of commercial and light industrial uses as fully serviced sites. The site development is intended to include a mixture of parcel sizes supporting indoor and outdoor uses. Development shall be located within the area of an adopted local plan.

7.3 Subdivision Application

A Subdivision Application is expected to follow an anticipated land use redesignation of the *Plan Area*. Subdivision applications may include several phases and development blocks, with sizes and configurations deemed appropriate for development.

7.4 Architectural Design Considerations

The developer will establish and implement specific Architectural and Design Guidelines to ensure all development and landscape design reflects a consistent style and theme.

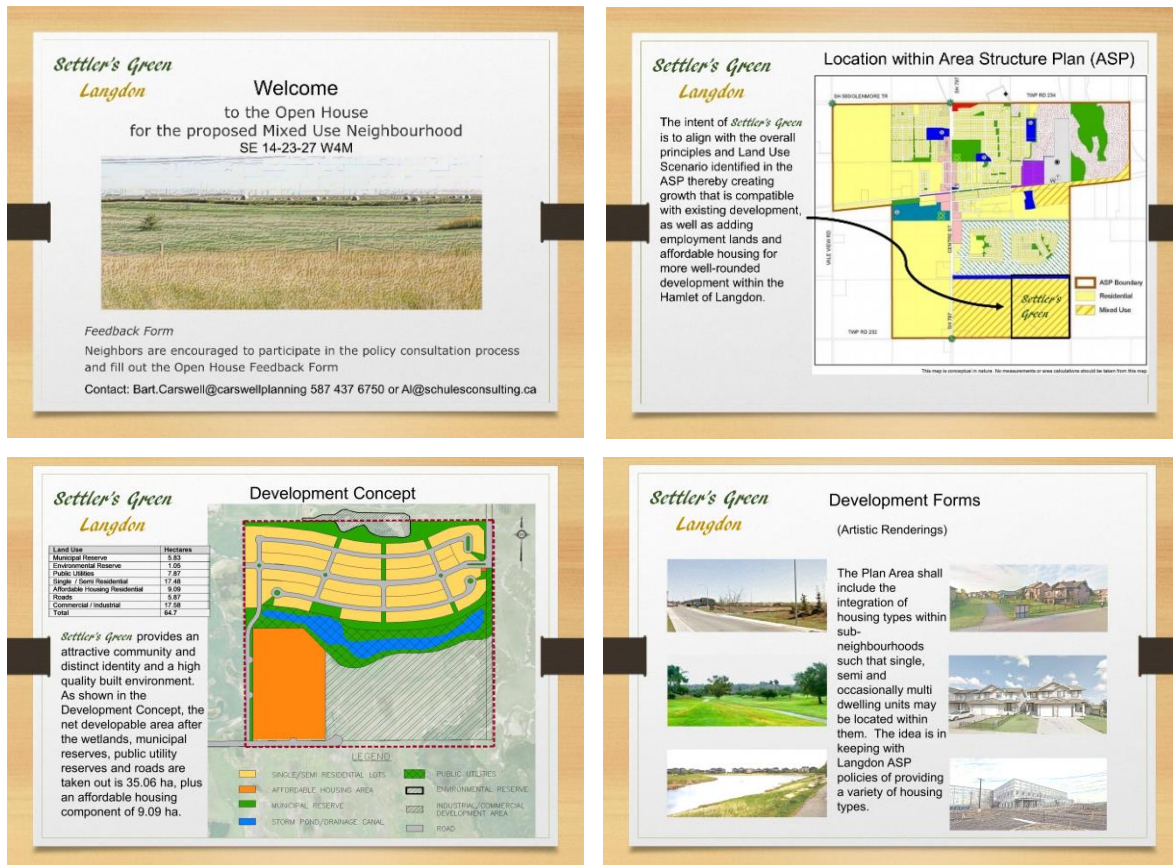
Policy

- 7.4.1** A document outlining Architecture and Design Guidelines and will be submitted at the subdivision stage of the development approval process.

8.0 PUBLIC ENGAGEMENT

8.1 Public Open House

A Public Open House was held July 17, 2017 at the Boulder Creek Course Events Centre to receive feedback on the proposed Conceptual Scheme and Redesignations. The number and size of parcels were presented on the mailouts and on the storyboards at the Open House.



From the survey, many believe that employment lands and affordable housing are needed with a comment that affordable housing is supported as long as there are controls and bylaws in place. There is support for diversity of residential uses with comments that Langdon needs seniors housing, preferably in an area designated for that purpose. Open space pathways provide connections and many would like neighbourhoods to be connected, including connections with Boulder Creek with this new development. Many see the street pattern fitting in with Langdon's street pattern provided it is aesthetically pleasing. Specific comments and responses have been provided to RVC to their satisfaction.