BYLAW 02-23

A BYLAW OF THE TOWN OF OKOTOKS
IN THE PROVINCE OF ALBERTA
TO ADOPT THE TILLOTSON NEIGHBOURHOOD AREA STRUCTURE PLAN

WHEREAS pursuant to the provisions of the *Municipal Government Act (the Act)*, Revised Statutes of Alberta 2000, Chapter M-26 and amendments thereto, Council may adopt an area structure plan for the purpose of providing a framework for subsequent subdivision and development of an area of land; and

WHEREAS the Tillotson Neighbourhood Area Structure Plan was prepared in accordance with Section 636 of the *Act*; and

WHEREAS Council held a public hearing and advertised that public hearing in accordance with Section 692 of the *Act*.

NOW THEREFORE the Council of the Town of Okotoks enacts as follows**:**

1. This Bylaw may be cited as the "Tillotson Neighbourhood Area Structure Plan" or "Tillotson NASP".

2. The Tillotson Neighbourhood Area Structure Plan attached hereto in Schedule 'A' is hereby adopted as the area structure plan for the subject lands.

3. This Bylaw shall come into full force and effect upon third and final reading.

READ A FIRST TIME this 23rd day of January 2023.

READ A SECOND TIME this 27th day of February 2023.

READ A THIRD TIME AND PASSED this 27th day of February 2023.

[redacted] _____
Mayor

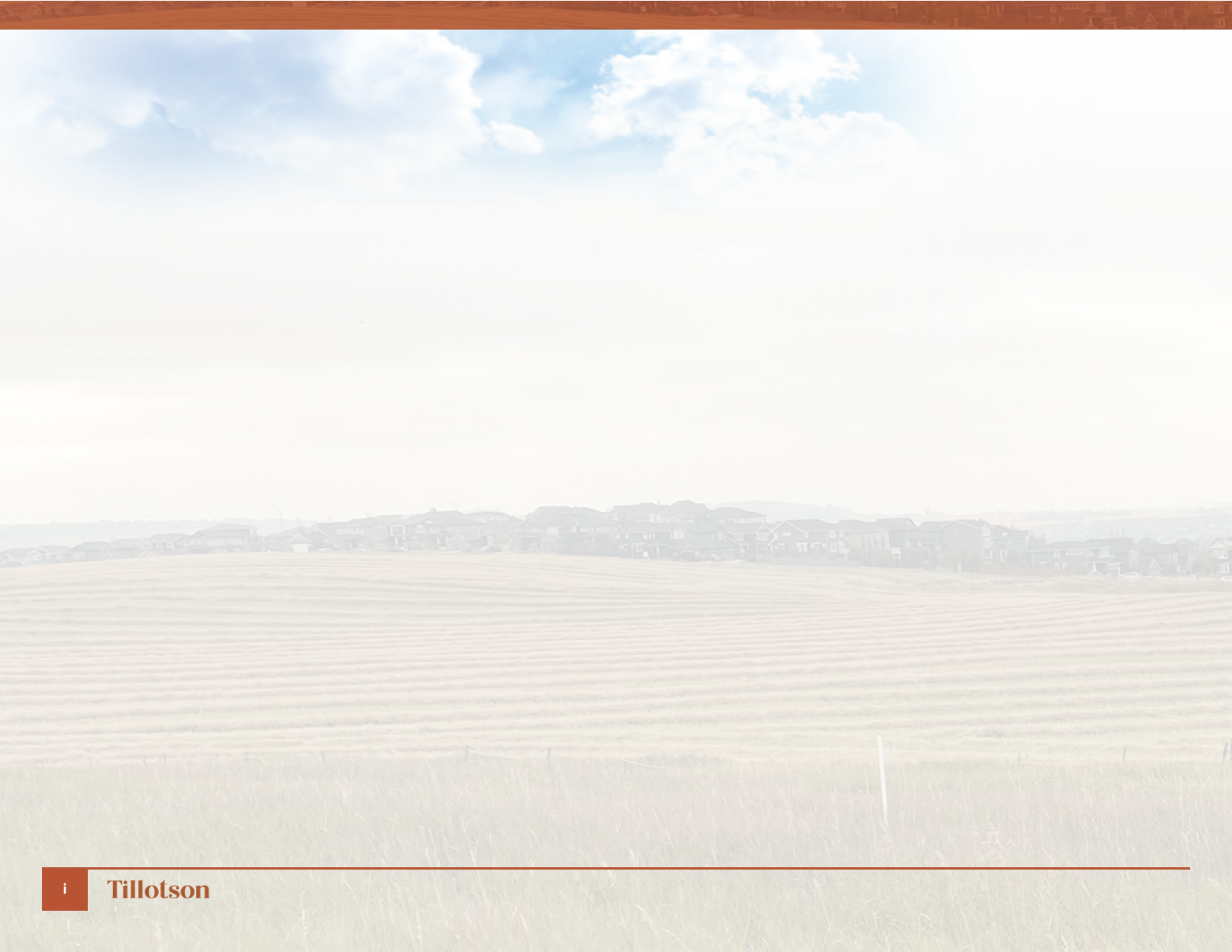
[redacted] _____
Chief Administrative Officer



Tillotson

Neighbourhood Area Structure Plan

TRISTAR COMMUNITIES INC. | FEBRUARY 2023



Tillotson

Neighbourhood Area Structure Plan

FINAL VERSION
BYLAW NO: 02-23
DATE OF APPROVAL: FEBRUARY 27, 2023

Submitted to: TOWN OF OKOTOKS

Submitted by: TRISTAR COMMUNITIES INC

Prepared by: B&A PLANNING GROUP
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In association: WATT CONSULTING GROUP
JUBILEE ENGINEERING CONSULTANTS LTD.
BASSETT ASSOCIATES LANDSCAPE ARCHITECTURE INC.
E2 + ASSOCIATES

The Town of Okotoks would like to acknowledge the traditional territories of the people of the Treaty 7 region in Southern Alberta, which includes Blackfoot Confederacy members Siksika, Piikani, and the Kainai First Nations, the Stoney Nakoda of Bearspaw, Chiniki and Goodstoney First Nations, the Dene of Tsuut'ina First Nations, and the Métis Nation Region 3, and all those that made Treaty 7 lands their home.

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SECTION 1.0

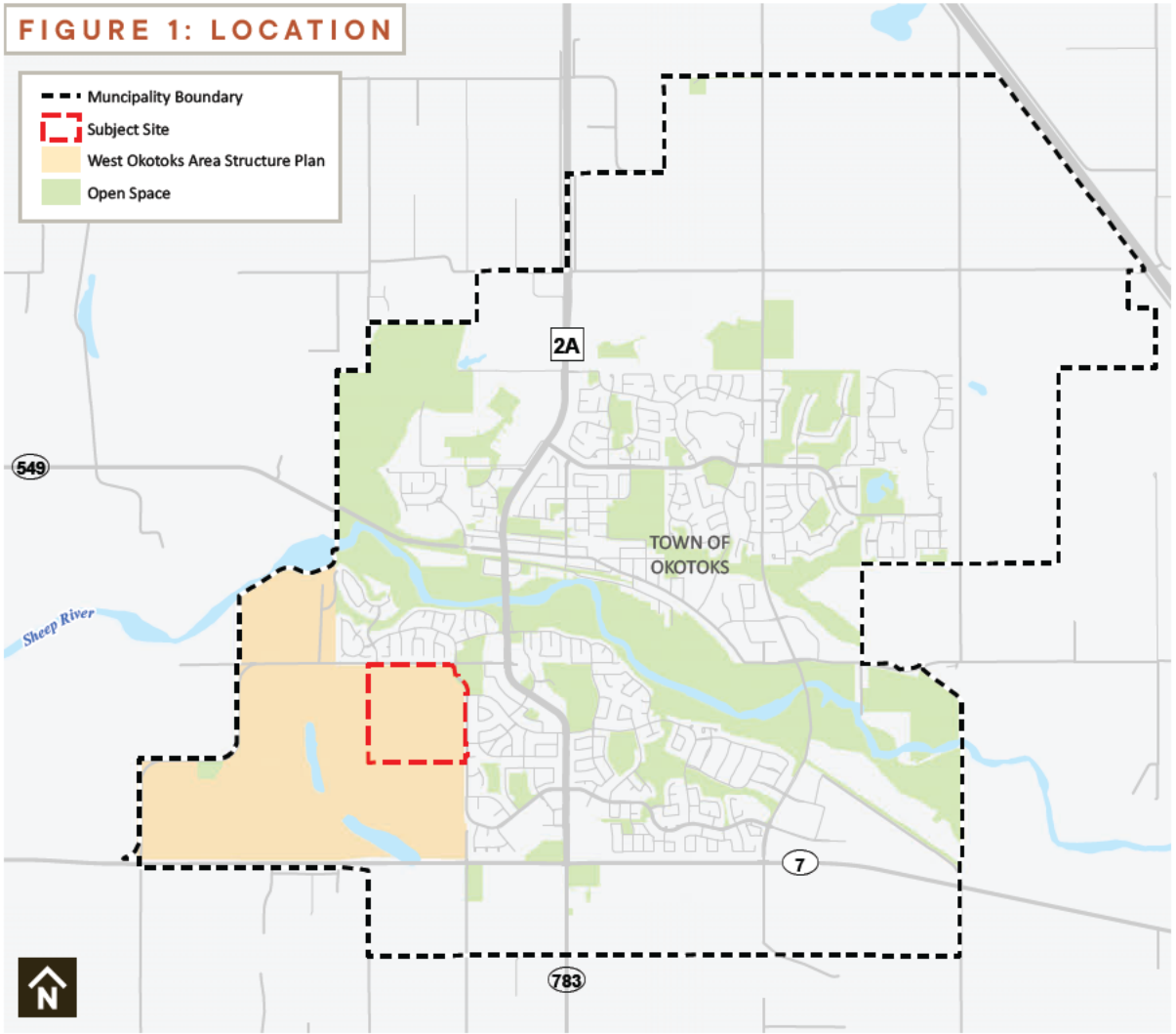
Introduction

1.1 PURPOSE

The Tillotson Neighbourhood Area Structure Plan (NASP) describes the land use concept and development policies to guide development of a new complete community in southwest Okotoks. This plan refines the policies and objectives found in higher order statutory plans, such as the Municipal Development Plan and West Okotoks Area Structure Plan at a neighbourhood level.

The plan area encompasses 63.97 ha (158.07 ac) of land located on NW 20-20-29 W4M, south of Big Rock Trail and west of Westland Street. The Tillotson NASP is the first phase of development within the West Okotoks Area Structure Plan.

FIGURE 1: LOCATION



1.2 NASP POLICY INTERPRETATION

The Tillotson Neighbourhood Area Structure Plan (NASP) has been prepared in response to Policy 1.7.2 of the Town of Okotoks Municipal Development Plan. It is a statutory plan that, upon approval by the Town of Okotoks Council, will provide a detailed framework to guide the development of approximately 158 acres of land situated within West Okotoks. The Plan includes guiding policy statements, and must also be read in conjunction with other relevant statutory and non-statutory plans.



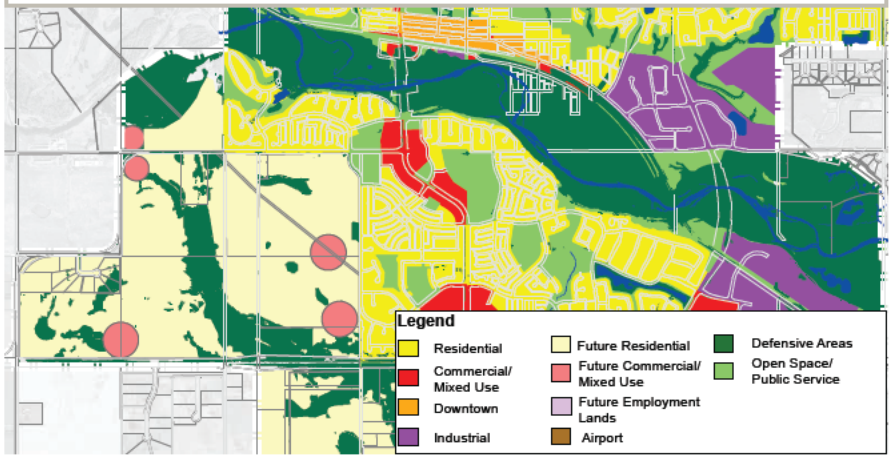
Policy Interpretation | The following points detail how to interpret policies in this Plan:

1. NASP policies that contain the words “must” or "will" outlines mandatory compliance with a given statement.
2. Policy statements that include the word “should” indicate that compliance is encouraged and recommended. However, “should” statements may not be practical in some circumstances and flexibility is provided. “Should” statements will be applied unless it can be clearly identified to the satisfaction of the Approving Authority that the policy is not reasonable, practical, or feasible in a given situation.
3. Where “may” is used in policy statements, there is no obligation to undertake what is proposed, but implies that the Approving Authority must give due consideration to the policy and has some discretion on the application of the policy in decision-making processes.
4. If there is a conflict between the the architectural guidelines within this plan or its supporting attachments and Town standards, then the Town standards will prevail.

Map Interpretation | The following points detail how to interpret Figures in this Plan:

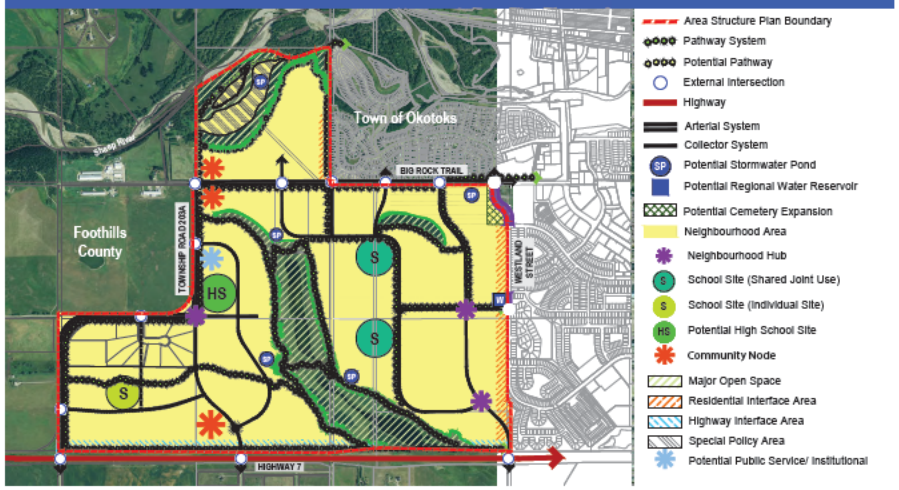
1. Unless otherwise specified within this NASP, the boundaries or location of any symbols, lot lines or land use areas shown in the figures are approximate and may be subject to moderate variation at the Land Use Amendment and Subdivision Application stage.
2. Specific measurements or areas identified in the Figures of this NASP are subject to variation at the Land Use Amendment and Subdivision Application stage.
3. Illustrated plans depicting lot lines and building footprints are for conceptual purposes. The specific lot boundaries, building locations and building forms may vary from those illustrated but should remain in compliance with all applicable policies.
4. Figures depicting the pathway orientations and parks and open space programming are for conceptual purposes. The specific type and location of natural and hard landscaping throughout all parks and open spaces may be subject to variation at detailed design but should remain in compliance with all applicable policies.
5. No amendments to the figures within the NASP are required as a result of further delineation at the Land Use Amendment, Subdivision Application and Development Permit stage, as long as the intent of the applicable polices is maintained.

OKOTOKS MUNICIPAL DEVELOPMENT PLAN



WEST OKOTOKS AREA STRUCTURE PLAN

Figure 12 | Land Use Concept



1.3 POLICY FRAMEWORK

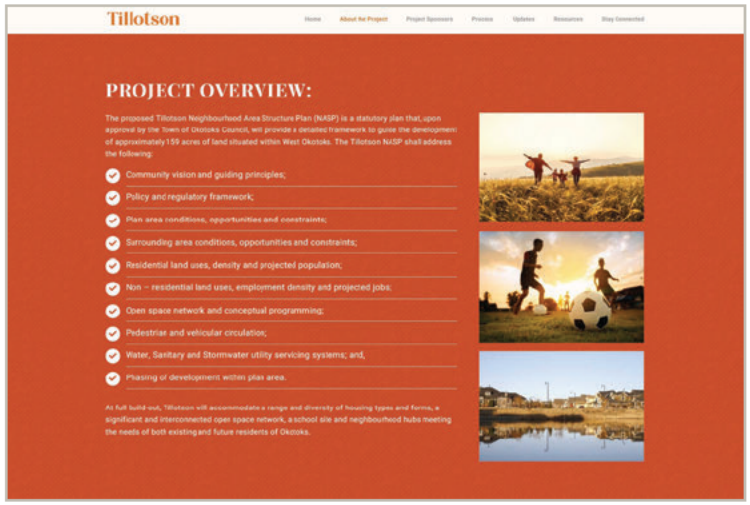
Tillotson was designed with direction from the following policy documents. These guiding documents detail the vision set forth by the Town of Okotoks through its visioning, planning and engagement processes. Tillotson was designed as a complete community in alignment with this framework to ensure the needs of future residents will be met. A Policy Alignment Summary has been prepared by B&A and is attached under separate cover. It details this NASPs alignment with key objectives and policies within key policy documents and Master Plans.

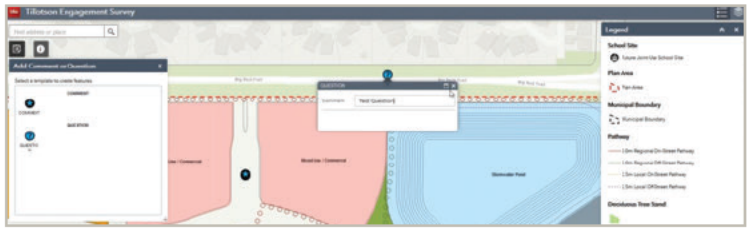
Statutory Plans:

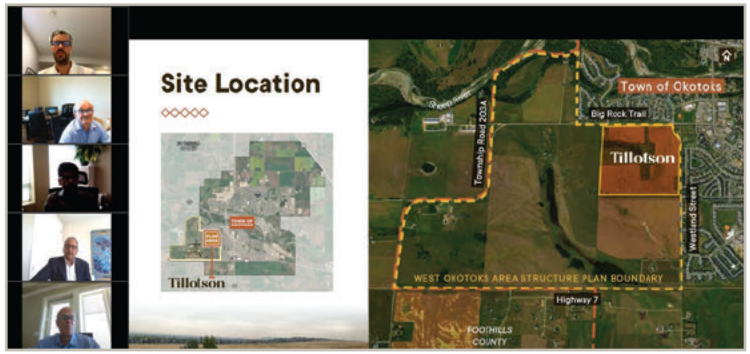
- South Saskatchewan Regional Plan (2014)
- Calgary Metropolitan Region, Growth Plan
- Town of Okotoks Municipal District of Foothills Intermunicipal Development Plan (2016)
- Town of Okotoks Municipal Development Plan (MDP) (2021)
- West Okotoks Area Structure Plan (ASP) (2020)

Community-Wide Non-Statutory Plans:

- Active Transportation Strategy (2015)
- Affordable Housing Strategy (2020)
- Climate Action Plan (2021)
- Culture, Heritage and Arts Master Plan (2018)
- Environmental Master Plan (2018)
- Housing Needs Assessment (2019)
- Local Transit Plan (2019)
- Natural Asset Inventory (2020)
- Recreation, Parks and Leisure Master Plan (2017)
- Social Wellness Framework (2010)







1.4 PUBLIC ENGAGEMENT

To facilitate community knowledge and engagement opportunities for the development of the Tillotson NASP, several communications and engagement initiatives were implemented throughout its drafting and design, including:

- Meetings with Town of Okotoks administration.
- A sign on the Tillotson site with reference to project website.
- A virtual information session.
- An open house.
- Notice about the events were provided by:
  - A mailed postcard,
  - A newspaper ad,
  - An addition to the site signage,
  - E-mails to contacts on the West Okotoks ASP mailing list.
- A project website was published in early 2021, with the following features:
  - Information about the Tillotson NASP.
  - Periodic updates on application progress.
  - A communications portal to submit questions or comments at any time.
  - Following the virtual information session, the session recording was posted and additional opportunity for feedback was provided.
  - Following the virtual information session, an interactive webmap was posted for several weeks to provide opportunity for location specific questions and comments.
  - A What We Heard Report for both engagement events.
  - Key project documents, such as the NASP are available for download.

A detailed Public Engagement Summary has been provided under separate cover in support of this NASP.

SECTION 2.0

Plan Area Existing Conditions

2.1 LOCATION

Tillotson is located in the southwest quadrant of the Town of Okotoks, south of Big Rock Trail and west of Westland Street and was included in the lands annexed into the Town in July 2017. It is comprised of ~63.97 ha (158.07 ac) legally described as the NW quarter of Section 20 Township 20 Range 29 West of the 4th Meridian (NW 20-20-29 W4M). It is adjacent to the existing communities of Westmount, Westridge, Sheep River Ridge and Sheep River Heights.

As demonstrated in **Figure 2: Land Ownership**, the Tillotson NASP:

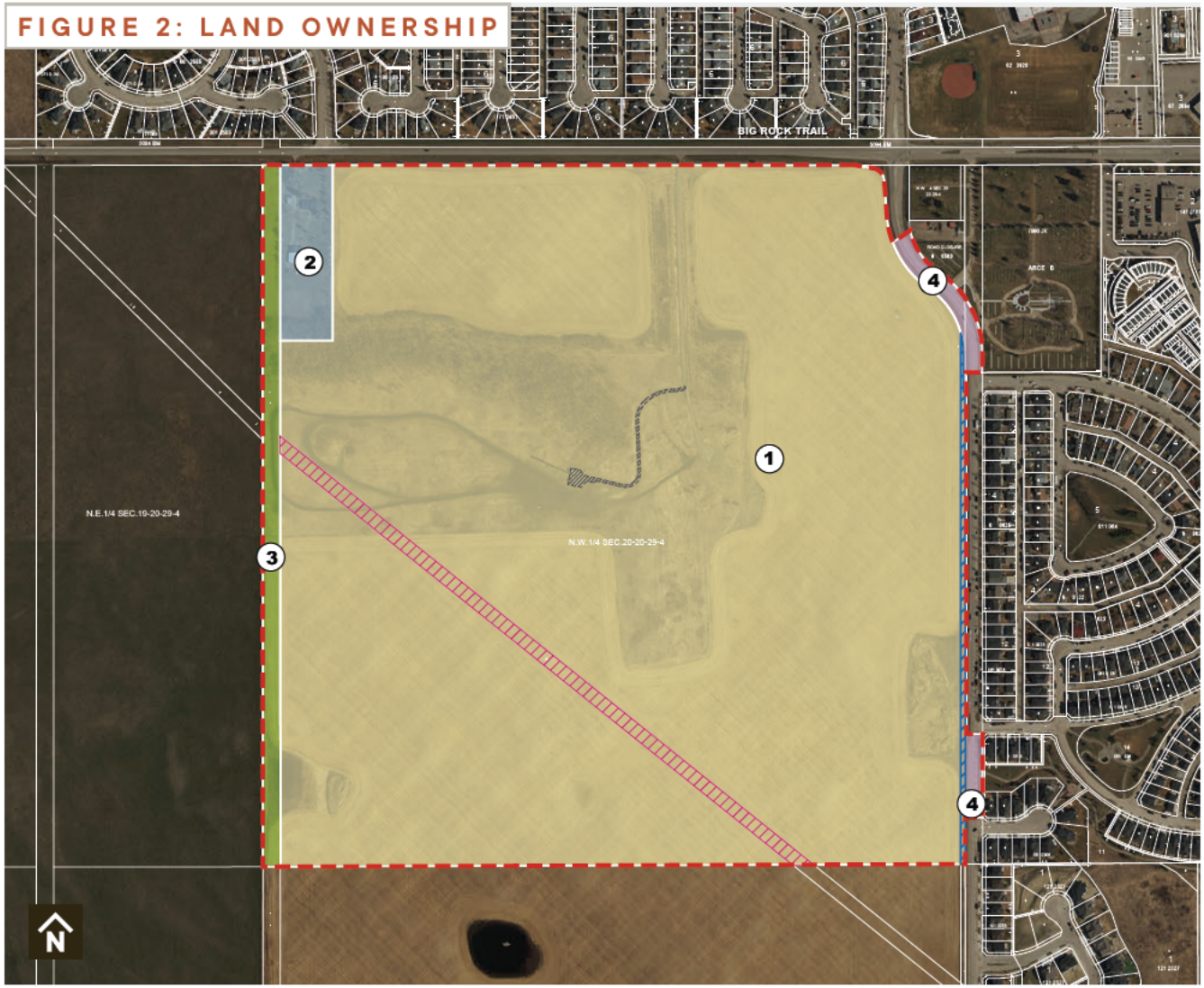
- Is legally described as NW 20-20-29 W4M
- Contains a total plan area of 63.97 ha (158.07 ac)
- Contains two existing parcels and two road rights-of-way. Portions of the Westland Street right-of-way on the eastern edge and an undeveloped road right-of-way along the western edge.
- The 60.47 ha / 149.42 ac parcel is owned by Tristar Communities Inc.
- The 1.21 ha / 3.0 ac parcel is owned by a private landowner.
- Is bordered by Big Rock Trail to the north and Westland Street to the east.
- Is contained within the West Okotoks Area Structure Plan.

Table 1: Ownership

#	Legal Description	Title No.	Ownership	Ha	Ac	%
1	NW 20-20-29 W4M	131 096 689	Tristar Communities Inc.	60.47	149.42	94.5%
2	THE WEST 198 FEET OF THE NORTH 660 FEET OF NW 20-20-29 W4M	201 186 718	Private Landowner	1.21	3.0	1.9%
3	West Road Right-of-Way	5625 K	Crown/Town of Okotoks	1.62	4.00	2.5%
4	Portions of Westland Street Right-of-Way (To Be Closed)	5825 K	Crown/Town of Okotoks	0.67	1.65	1.1%
			Total Area*	**63.97**	**158.07**	**100%**

*Note: The areas demonstrated in the table above are all based on the spatial data, which is minorly different than the areas specified on title.

FIGURE 2: LAND OWNERSHIP



- Subject Lands
- Ownership 1 - Tristar Communities Inc.
- Ownership 2 - Private Landowner
- Ownership 3 - Crown / Town of Okotoks - West Road Right of Way"
- Ownership 4 - Crown / Town of Okotoks - Westland Street Right of Way (Areas to be Closed & 1.6m Existing ROW Reduction)
- Powerline ROW (230 DN)
- Buried Cable R/W (901 1925)
- Telecommunications Lease Boundary


Existing telecommunications site


Existing access road to telecommunications site



View from high point on site facing East towards Westridge



View from Westland Street facing North



View from high point on site facing Northeast

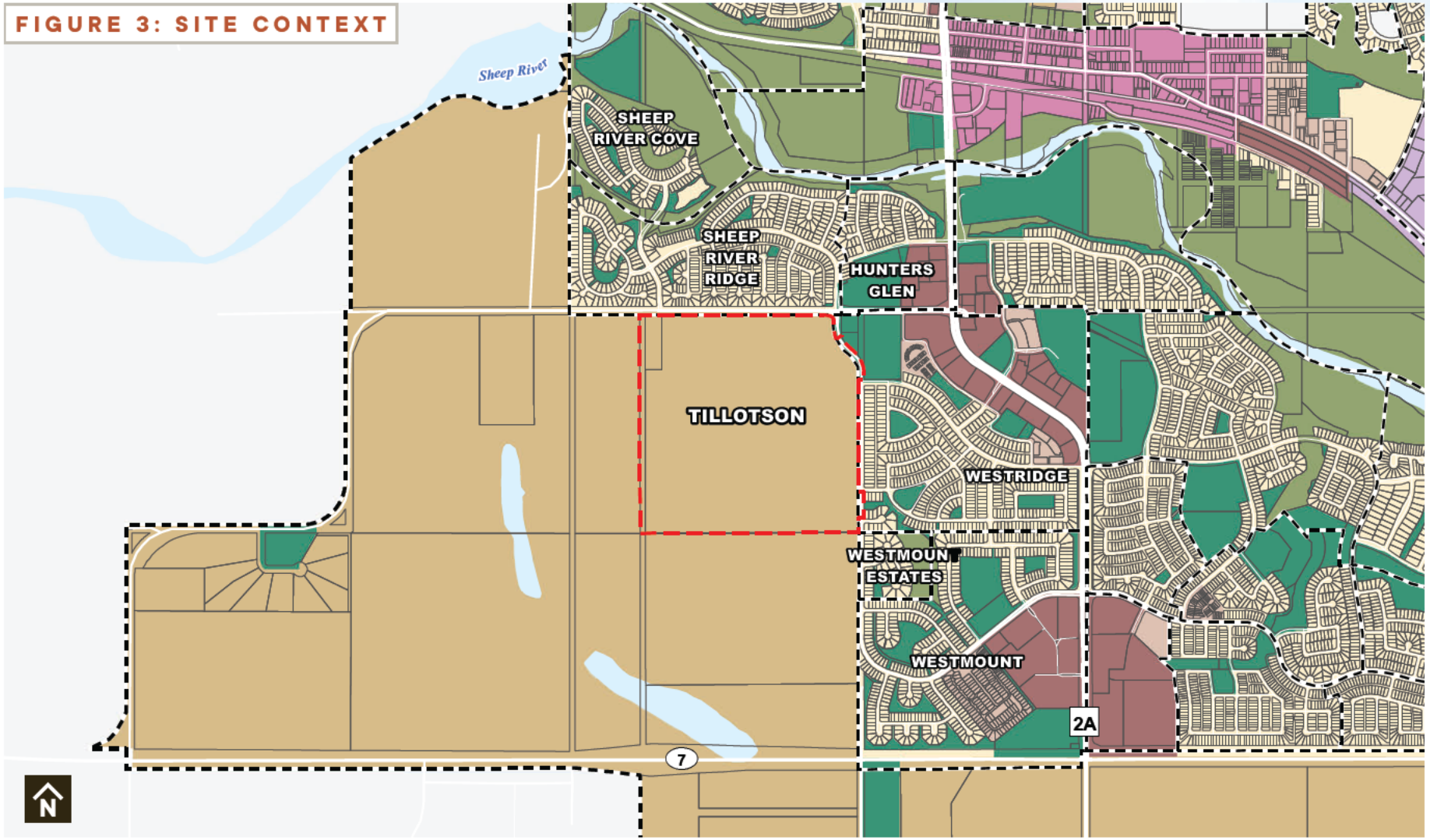
2.2 SURROUNDING LAND USES

Lands within the Tillotson NASP are currently zoned Agriculture and Land Holdings District (ALH) as per Okotoks Land Use Bylaw 17–21 and demonstrated in **Figure 3: Site Context.** The undeveloped lands to the south and west also contained within the West Okotoks ASP are also ALH District. The purpose of the Agriculture and Land Holdings District is to "continue to support rural agricultural activities prior to transitioning to urban style development".

The existing developed communities in the area of Westmount, Westridge, Sheep River Ridge and Sheep River Heights contain a mix of land uses including Traditional Neighbourhood District (TN), Neighbourhood Core District (NC), General Commercial District (GC), Recreation and Open Space District (ROS) and Natural Areas District (NA), and are primarily comprised of single detached residences.

The Tillotson land use concept has been designed to include a similar mix of Traditional Neighbourhood District (TN), Neighbourhood Core District (NC), General Commercial District (GC), Recreation and Open Space District (ROS) and Natural Areas District (NA). Within these land uses will be a mix of single family residences, duplexes, townhomes and multi-family developments, with complementary neighbourhood scale commercial, parks and pathways.

FIGURE 3: SITE CONTEXT



- Muncipality Boundary
- Neighbourhood Boundary
- Parcel
- Subject Site

Existing Land Use

- Ag cultural and Land Holdings District (ALH)
- Downtown District (D)
- General Commercial D strict (GC)
- Industrial Business Pa k Distric (IBP)
- Natural Areas District (NA)
- Neighbourhood Core District (NC)
- Recreation & Open Space District (ROS)
- Traditional Neighbourhood District (TN)

*Note: The land use districts are per Land Use Bylaw 17-21.

2.3 EXISTING SITE CONDITIONS & BACKGROUND STUDIES

2.3.1 EXISTING CONDITIONS

As demonstrated by **Figure 4: Existing Conditions**, the plan area consists of largely cultivated lands, a portion of disturbed area, some non-native grassland, a silverberry patch and deciduous forest. There is an existing residence, barn and shed located in the northwest of the subject lands, owned by a non-participating landowner.

The elevations are generally highest in the west and southwest and lowest in the northeast, with a large escarpment between the two partially vegetated with a deciduous forest. The elevations range from 1112.5m at the high point of the site on the central western edge and 1074.5m at the low point in the northeast corner. The natural slope of the land is towards the northeast where the future storm pond is to be located.

2.3.2 EXISTING INFRASTRUCTURE AND RIGHTS-OF-WAY

A 15.24 m Calgary Power Co Ltd Powerline Right-of-way (RW 230 DN) transects the site however no infrastructure is currently installed within it.

A telecommunications tower site is currently located at the top of the escarpment in the center of the site. A cell tower and some supporting buildings are located within a fenced area and accessed by a gravel road from Big Rock Trail. There are some overhead powerlines and some buried cables along this access road powering the site. Based on communications with the leaseholder the cell tower is anticipated to be removed following the expiration of the existing lease and the lands remediated and incorporated into the land use concept. The telecommunications site will be converted to Municipal Reserve and the access road will be incorporated into the various land uses that it intersects. The telecommunications infrastructure will be relocated as per the providers requirements, but could potentially be accomodated within the Village Centre.

2.3.3 BIOPHYSICAL OVERVIEW

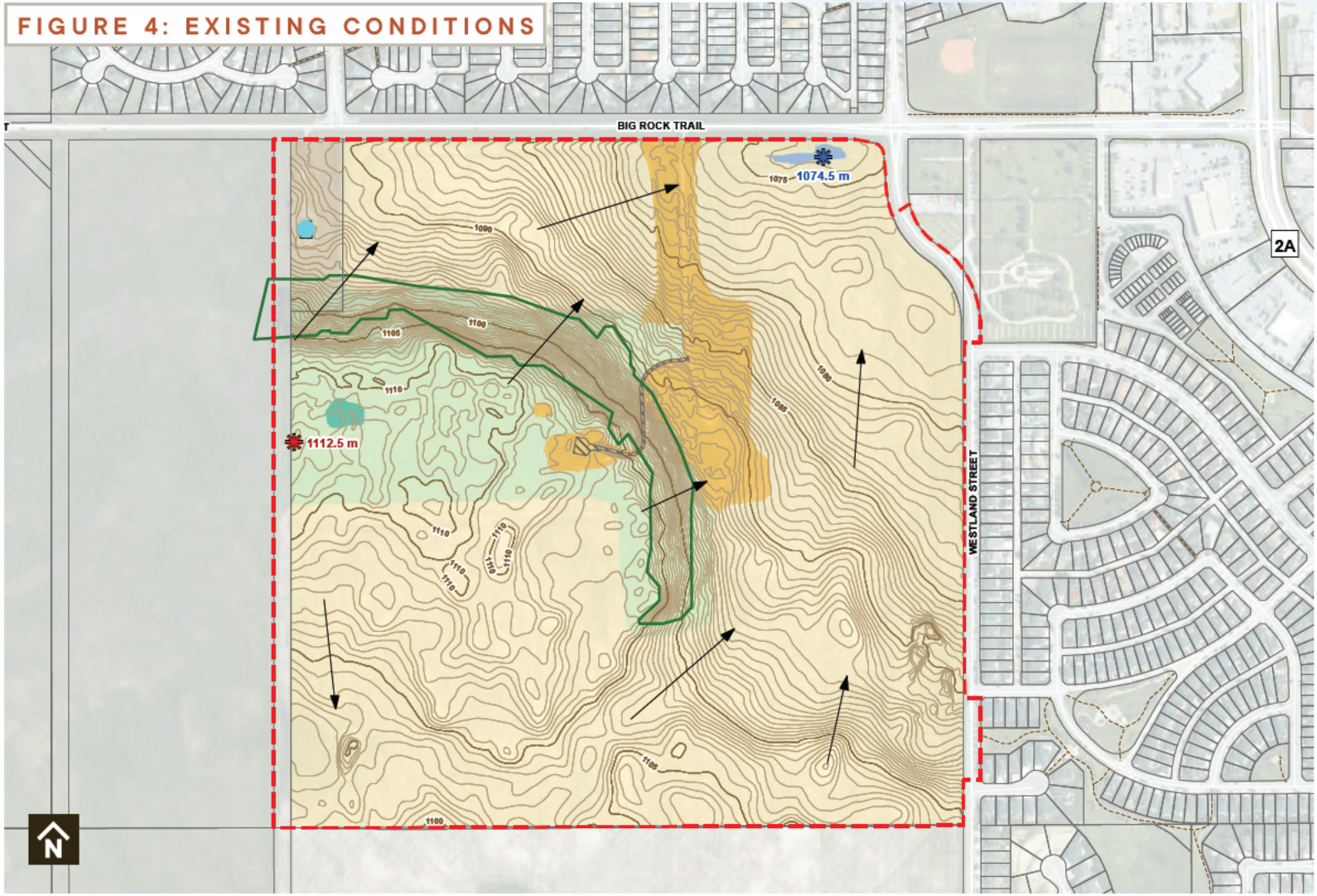
A Biophysical Overview was completed by Westhoff Engineering Resources Inc. in June 2017. This report identified that the ASP area is located within the Parkland Natural Region and Foothills Parkland Natural Subregion, but the native grassland associated with the Foothills Parkland Natural Subregion is no longer represented within the Project Site due to cultivation.

As it relates specifically to the Tillotson lands, the subject lands consist of largely cultivated lands, a portion of disturbed area, some non-native grassland, a silverberry patch and deciduous forest. In addition, one small Ephemeral Waterbody was identified in the northeast corner of the subject site. “Ephemeral water bodies are areas where surface water collects but is not persistent long enough for wetland characteristics to develop.” Based on the field review, the vegetation was not such that the ephemeral waterbody could be considered a wetland based on the Alberta Wetland Identification and Delineation Directive. Some Environmentally Significant Areas were identified within the ASP area, but none extended into the Tillotson lands.





FIGURE 4: EXISTING CONDITIONS



2.3.4 GEOTECHNICAL EVALUATION

A Geotechnical Report was completed on the subject property by McIntosh Lalani Engineering Ltd. (M•L) in April 2017 to evaluate the subsurface soil conditions within the proposed development area and to provide geotechnical recommendations regarding the design and construction of the proposed residential development. The study area for this geotechnical evaluation was specifically the Tillotson lands on NW 20–20–29 W4M, which were referred to in the report as the "East Quarter".

The most prominent topographical feature is the north facing escarpment. The escarpment was described as starting on the west boundary approximately 200m from the northern border of the quarter section and running east, curving south and ending in the center of the quarter section. The main escarpment slopes were identified to range between 18 meters and 7.5 meters, with variable gradients.

As a part of this study M•L utilized the survey data to model and analyze critical cross sections across the excarpment, analyzed twenty-five (25) borehole location and installed wells consisting of PVD standpipes for future groundwater level monitoring.

The findings of report indicate that the site consists of suitable bearing soil for development of a residential community provided the recommendations detailed in the report are followed. Recommendations include but are not limited to recommendations for additional geotechnical evaluation once the cut/fill plan and grading plan are finalized, upon stripping the site, and for each specific multi-family development, as well as several construction specific recommendations.

Based on the slope stability modelling completed in the evaluation it was concluded that no setbacks are required from the top or toe of the main escarpment for all slopes greater than 15% to meet the required Factors of Safety (FOS). Although no setbacks were identified as required based on the geotechnical evaluation, setbacks varying between 6 and 15 metres from the top of slope and 6 metres from the toe of slope were included in the Environmental Reserve dedication as per municipal policy and consultation with Town of Okotoks Administration.







2.3.5 PHASE 1 ESA

A Phase 1 Environmental Site Assessment (ESA) was conducted by G Tech Earth Sciences Corp (G Tech) in 2015, for the West Okotoks ASP. The purpose of the study was to reduce uncertainty concerning potential past or present environmental threats/impacts on or to the subject property, or be the basis for further environmental assessment.

The ESA reviewed the historical and current development and uses on the subject site and identified no specific environmental concerns. The cell tower was reviewed at the site visit and the report cited that “there was no evidence of past or present environmental impact at or around the cell tower base.” The Phase 1 ESA concluded that no further environmental study (ie. a Phase 2 ESA) was warranted.

2.3.6 HISTORICAL RESOURCES

A Historical Resources Overview was completed by Bison Historical Services Ltd in May 2016 for the West Okotoks ASP lands. No historical resource sites were identified within the Tillotson plan area.

A Heritage Resources Clearance application was filed with the Government of Alberta to determine if an HRIA was warranted for the Tillotson NASP. Pursuant to filing this application, Heritage Resources Clearance was granted by the Government of Alberta. The approved Historical Resources Clearance has been provided under separate cover.

2.3.7 COMMERCIAL MARKET OPPORTUNITY ASSESSMENT

A Commercial Opportunity Assessment was completed in February 2017 by Hume Consulting Corporation in support of the West Okotoks ASP. The main findings of this study indicated that West Okotoks would offer abundant developable land and sufficient population to support commercial and retail development. It was stated that "Based on a 25% site coverage ratio, approximately 11.3 to 14.1 hectares (28–35 acres) of land would be required to accommodate the recommended commercial development in West Okotoks." Based on these and other findings identified, two large Community Nodes and two medium Neighbourhood Hubs were identified in the West Okotoks ASP area, with one Neighbourhood Hub in Tillotson. As demonstrated in the land use concept, this Neighbourhood Hub is located on the central northern boundary of the plan area and is intended to support the daily needs of Tillotson residents and the surrounding area.

2.4 BACKGROUND STUDY POLICIES

SECTION 2.0 | BACKGROUND STUDY POLICIES	
2.1	Detailed design grades and slope stability analysis must be submitted for any subdivision applications along the top and toe of slope of the Environmental Reserve parcel.
2.2	Recommendations from the geotechnical report submitted with this NASP will be applied, as applicable, at the subdivision and development stages.

SECTION 3.0

Tillotson Neighbourhood Area Structure Plan

3.1 VISION

Located in Southwest Okotoks, south of Big Rock Trail and West of Westland Street, Tillotson is envisioned as a complete community "where people, business, ideas and a sense of community thrive." It will be a vibrant community for all ages and lifestyles, connected by an extensive pathway network and integrated park system, with a neighbourhood hub providing services and amenities to residents and adjacent neighbourhoods, and defining a unique gateway into the community.

Tillotson has been designed in response to its unique natural landscape and built context within southwest Okotoks. Tillotson celebrates the foothills landscape with the preservation of an expansive sloped natural area through the centre of the community, providing multiple points of connection and complementary programmed gathering spaces. A variety of commercial and retail services will also be provided and have been strategically located adjacent to Big Rock Trail to support safe and efficient access and a distinct gateway into the community.

A range of residential housing options will be offered, including single family residential dwellings, semi-detached dwellings, row housing and multi-family developments, and have been distributed throughout the community to provide pockets of activity and distinctive streetscapes. This variety of housing will support a range of demographic and lifestyle needs. The warped grid road network paired with an extensive on and off-street pathway network will provide area residents convenient access to the variety of destinations throughout the neighbourhood as well as to existing and future adjacent communities.

Tillotson's community design has been guided by the Okotoks Municipal Development Plan and West Okotoks Area Structure Plan, with additional guidance from several Okotoks Master Plans.

3.1.1 COMMUNITY NAME

The name Tillotson was selected to reflect a component of the culture and heritage of the Town and celebrate the history and natural value of the land. Alvie and Fran Tillotson were early pioneers in Okotoks and previously farmed the land where this community will sit. Fran Tillotson was a great Okotokian environmentalist and conservationist, and the Tillotson lands were part of the bluebird trail in the 1980s, when conservationists were trying to rebuild the bluebird population in Alberta. The Tillotson's lived in Okotoks for decades until their passing and the neighbourhood has been named after them to honour their legacy.



3.2 GUIDING PRINCIPLES

In alignment with the West Okotoks Area Structure Plan the Tillotson NASP guiding principles include:



Connection to Nature

Tillotson will provide area residents with a connection to nature through the integration of a connected environmental reserve, municipal reserve, and vegetated open space network.



Shop & Socialize

A gateway neighbourhood hub surrounded by higher density residential and connected park spaces will provide a convenient destination for residents to gather, shop and socialize.



Diverse Housing Options

A broad range of housing options will be provided throughout the community to serve a variety of demographic and lifestyle needs. Housing options will vary not only in their type but in their location within the community, orientation on the natural landscape and proximity to different community amenity spaces.



Active Transportation

A grid-based internal road network and comprehensive on and off-street pathway network provides easy access to destinations. Community focal points are distinctly connected by the collector road network and regional pathways. Multi-model forms of travel and active lifestyles are encouraged within Tillotson.



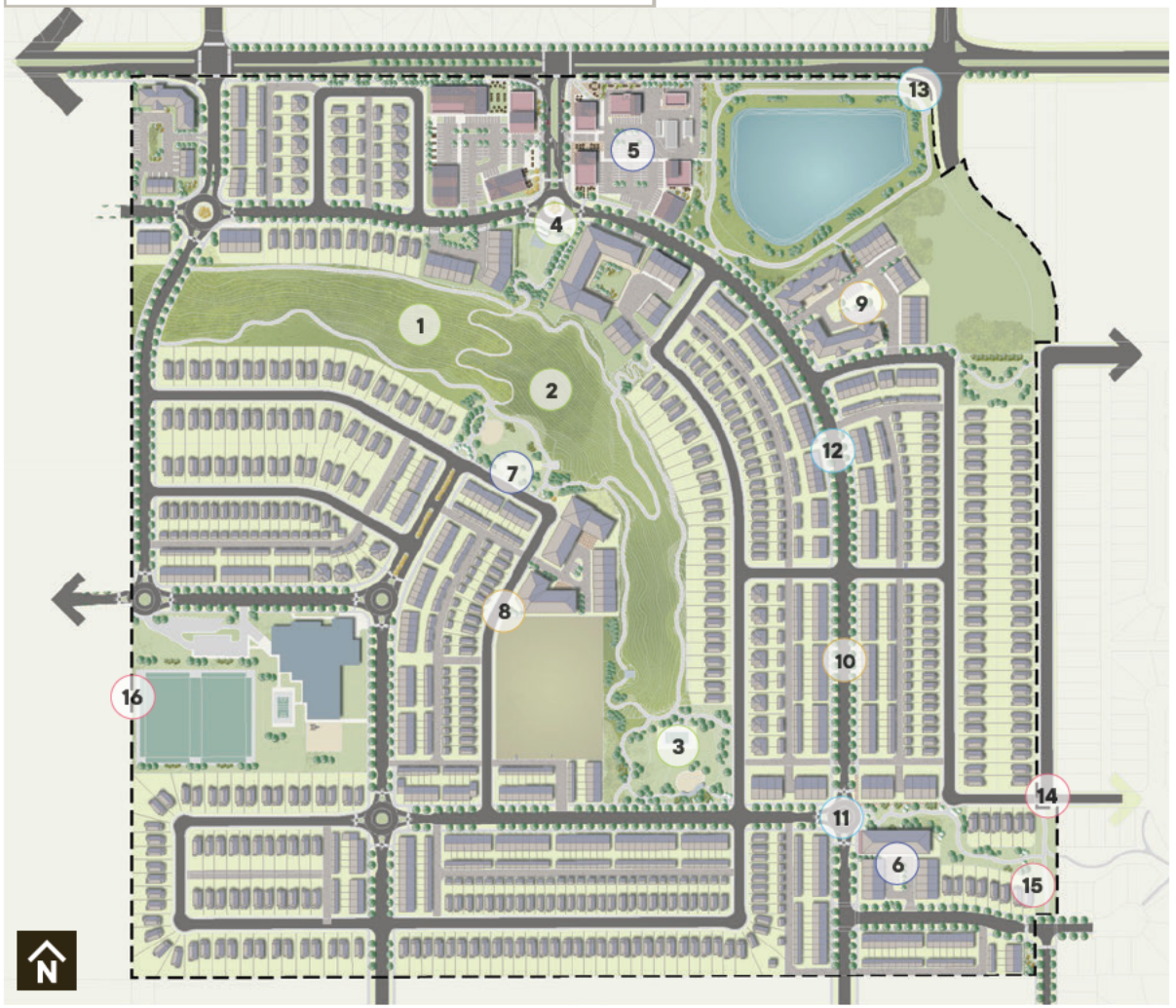
Community Integration

Tillotson will respect the surrounding development context by providing multiple road and pathway connections between each adjacent community. Strategic road closures in alignment with the West Okotoks ASP, and the mirroring of like development forms will support seamless integration with neighboring communities.

3.3 NEIGHBOURHOOD AREA STRUCTURE PLAN

The Tillotson Neighbourhood Area Structure Plan is for a residential community in southwest Okotoks centered around an extensive open space system with a connected pathway network and offset grid road system, with the primary access through a vibrant neighbourhood hub. The plan area will include a variety of housing types to serve a broad range of demographics and lifestyles, with strategic connections between the density and the natural and constructed amenity spaces distributed throughout the neighbourhood. **Figure 5: Illustrated Concept** and **Figure 6: NASP Land Use Concept** demonstrate the transportation and land use design within the plan area, which will be further described throughout this section.

FIGURE 5: ILLUSTRATED CONCEPT



3.4 GUIDING PRINCIPLES & DESIGN ELEMENTS

Connection to Nature

1	Preservation of a large sloped and vegetated natural area within the centre of the community to create a valuable amenity and contribute to the unique sense of place.
2	An extensive and well-connected regional and local pathway network connecting the parks and open spaces.
3	A variety of programming options in the parks across the plan area.
4	View corridors to open spaces throughout the community, creating a connection to nature and sense of community identity.

Places to Shop and Socialize

5	Neighbourhood Hub at gateway into the community providing services and employment to residents and visitors.
6	Opportunity for some neighborhood scale commercial, business, or community activities in high density areas throughout the community.
7	Programming in the variety of park spaces to provide opportunities for events or casual socialization.

Diverse Housing Options

8	A range of housing options throughout the plan area to support a variety of lifestyles and demographics.
9	Pockets of comprehensively planned multi-family residential to create nodes of activity.
10	Medium and high-density development framing the collector road network to create a continuous streetscape contributing to the sense of place.

Active Transportation & Connectivity

11	A warped grid internal road network providing easy access to destinations across the plan area.
12	Street-oriented laned housing along collector roads improves the streetscape and helps avoid driveway conflicts with pedestrian routes.
13	An extensive and well-connected regional and local pathway network connecting destinations throughout the plan area and neighboring communities.

Integration with Existing Communities

14	Multiple road connections to communities in each direction, with sensitive transitions to existing neighbourhoods.
15	Pathway connectivity to adjacent community networks and open spaces.
16	A Joint Use School site will span between Tillotson and the future community to the west.

3.5 LAND USE STATISTICS

The NASP Statistics detailed in Table 2 represent a breakdown of all the lands within the Tillotson NASP. The plan area is predominantly residential with a Neighbourhood Hub along Big Rock Trail at the main entrance to the community and extensive open space network throughout. Municipal Reserve has been dedicated at the required 10% of gross developable area, in addition to a large central Environmental Reserve area to contribute to an open space network that comprises 17.3% of the total plan area.

Table 2: NASP Statistics

	Hectares	Acres	% of GDA
Total Area	**63.97**	**158.07**	
Environmental Reserve	5.18	12.80	
Gross Developable Area	**58.79**	**145.27**	**100%**
Residential Area	29.70	73.40	50.53%
Commercial Area	2.35	5.81	4.00%
Green Space / Municipal Reserve	5.91	14.61	10.06%
PUL (Stormwater Pond)	3.06	7.55	5.20%
Cemetery Expansion	1.62	4.0	2.75%
Municipal Reservoir Site	1.21	3.0	2.07%
Road Area	14.53	36.90	24.71%
Big Rock Trail Road Widening*	0.40	1.00	0.69%

*Note: If the Big Rock Trail Functional Transportation Study identifies that an alternate road right-of-way is required then the adjacent land uses, roads and infrastructure locations will be adjusted accordingly and will not require amendment to the NASP.

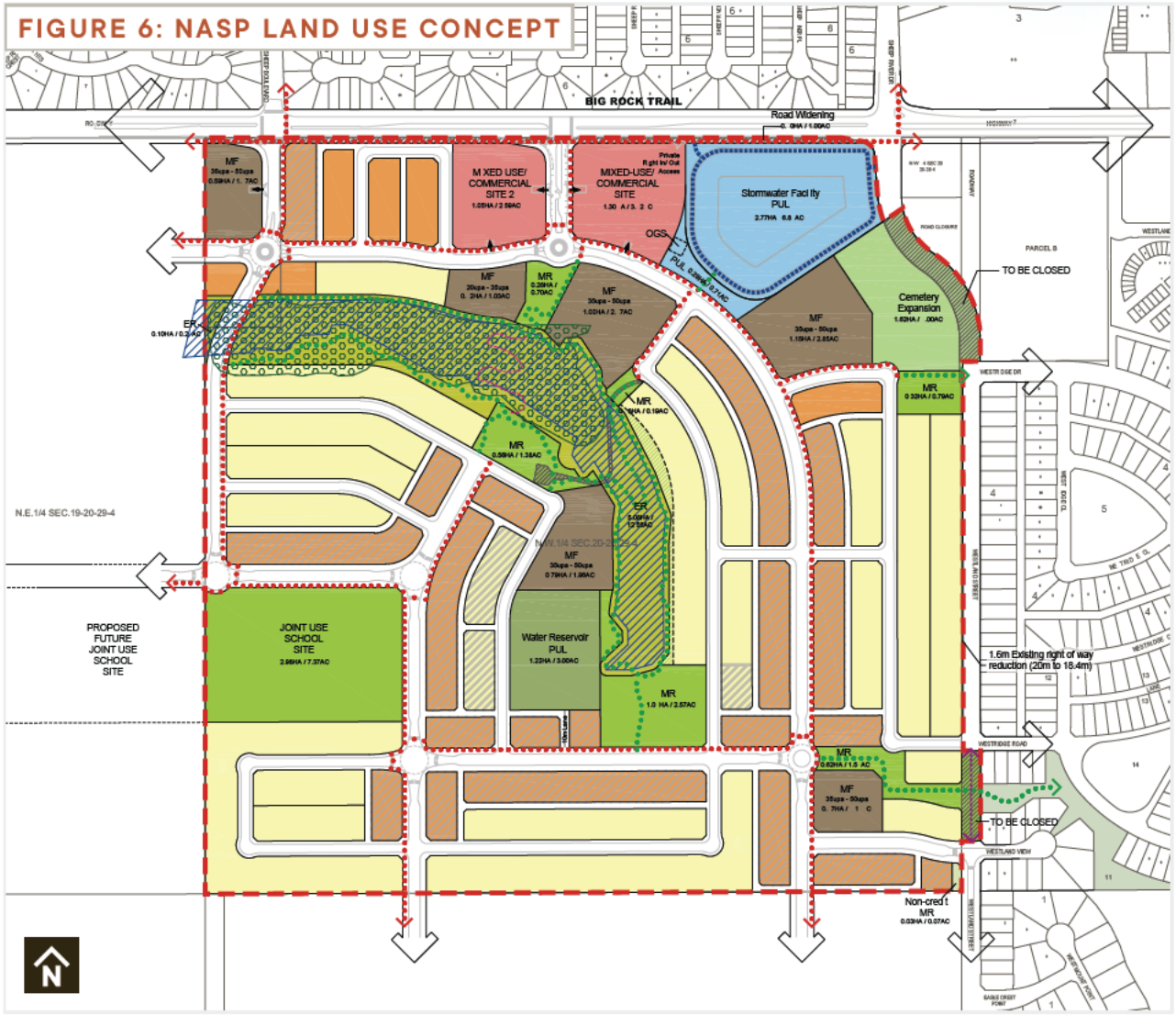








FIGURE 6: NASP LAND USE CONCEPT



- Subject Lands
- 4.0m Maintenance Access Road & Regional Pathway
- 3.0m Regional On-street Pathway
- 3.0m Regional Off-street Pathway
- 2.5m Local/ Connector Off-street Pathway
- 1.5m Local/ Connector Off-street Pathway
- Slopes over 15%
- Deciduous Tree Stand
- Environmental Reserve
- Cemetery Expansion
- Municipal Reserve
- Stormwater Pond
- Water Reservoir
- Mixed Use / Commercial
- High Density Residential
- Medium Density Residential
- Low Density Residential
- Existing Telecommunications Lease
- Toe of Slope Grading Area
- Front Drive Product Not Permitted
- Site Access

3.5.1 LAND USE DISTRICTS

Development within the Tillotson NASP will be in compliance with the Okotoks Land Use Bylaw and the land use concept generally corresponds to the land use districts detailed in Table 3 below.

Table 3: Land Use Districts

	Land Use Concept	Land Use District	Description
	Environmental Reserve	Natural Areas District (NA)	Natural area encompassing slopes >15% and setbacks from the top and toe of slope, to be utilized as a natural amenity space.
	Municipal Reserve	Recreation and Open Space District (ROS)	Programmed parks, open space and a school site.
	Cemetery Expansion	Recreation and Open Space District (ROS)	Expansion of the Okotoks Cemetery to be owned and managed by the Town of Okotoks.
	Existing Telecommunications Site	Recreation and Open Space District (ROS) & Natural Areas District (NA)	MR and ER credit subject to removal, reclamation and discharge of encumbrances.
	Stormwater Pond	Recreation and Open Space District (ROS)	Open water pond for retention of stormwater for the subject site.
	Water Reservoir	Recreation and Open Space District (ROS)	Town owned and managed underground water reservoir.
	Mixed-Use / Commercial	General Commercial District (GC)	Local retail commercial site with a variety of uses.
	High Density Residential	Neighborhood Core District (NC)	Row housing, multi-unit residential buildings and general retail and service uses (does not include single family detached residential buildings).
	Medium Density Residential	Traditional Neighborhood District (TN) or Neighborhood Core District (NC)	Street oriented row housing and semi-detached residential buildings (does not include single family detached residential buildings).
	Low Density Residential	Traditional Neighborhood District (TN)	Single family detached residential buildings (may include semi-detached and street-oriented row housing in accordance with the land use bylaw).

3.6 RESIDENTIAL AREAS

The Tillotson NASP is for a residential community supported by an interconnected open space network and vibrant Village Centre. The housing, services and amenities throughout the plan area are accessed through a well-connected road and multi-use pathway network. Tillotson will provide a range of housing options to appeal to a variety of income levels, household types and demographics. Table 4 below outlines the breakdown of residential housing throughout the plan area by both area and anticipated number of units.

With a mix of land uses and associated housing forms, Tillotson is expected to exceed the MDP target of providing at least 40% of the total proposed housing as units other than single detached housing stock to meet the need for housing choice and affordability.

The Tillotson NASP is anticipated to meet a projected density of 8.2 to 9.3 units per gross residential acre (+/- 20.2 to 22.9 units per gross residential hectare) at full build out providing approximately 1,190 to 1,349 residential units, for a population of approximately 3,451 to 3,912 people. Overall density may change upon full build-out based on market demand but must exceed a minimum of 8 units per acre, as per policy 3.4.2(a) of the West Okotoks ASP. This density was identified to facilitate a sensive transition with the existing surrounding communities.

Table 4: Residential Statistics

Residential Area	Hectares	Acres	% of GDA	Units	% of Units	People[1]
Gross Developable Area	**58.79**	**145.27**	**100%**			
Total Residential Area	**29.70**	**73.40**	**50.53%**			
Low Density[2]	15.97	39.46	27.16%	400	29.7 - 33.6%	1,160
Medium Density[3]	9.30	22.99	15.83%	417	30.9 - 35.0%	1,209
High Density[4]	4.43	10.95	7.54%	373 - 532	31.3– 39.4%	1,082 - 1,543
Total				**1,190 –1,349**	**100%**	**3,451 –3,912**

[1] Assuming 2.9 people per unit for all housing types
[2] Assuming ~9 - 12m wide lots
[3] Assuming ~6.7 m wide lots
[4] Assuming a range of 25–35 units per acre and 35 - 50 units per acre depending on the conceptual site plan

Table 5: Projected Density

Residential Area	Units	Hectares / UPH	Acres / UPA
Gross Developable Area	-	**58.79**	**145.27**
Projected Density (Minimum)	1190 units	20.2 uph	8.2 upa
Projected Density (Maximum)	1349 units	22.9 uph	9.3 upa

Tillotson's variable topography and the large natural escarpment demonstrate some challenges to compact design but have been integrated into the residential land use concept in a way that capitalizes on these natural features and provides a variety of housing types and contexts. Compact and efficient neighbourhood design is crucial to a sustainable community. Tillotson has achieved this through the orientation of the collector road network around the natural escarpment, and the strategic location of medium and high-density housing along this collector road network in proximity to key community destinations. This maximizes residents' access to amenities, creates efficiencies for servicing and future transit services, and allows residents of Tillotson the potential to live, work, shop and play within their community.

Street-oriented housing products are encouraged along the collector roadway to promote an attractive and pedestrian-friendly streetscape. Front-drive access to residential units from collector roads is avoided wherever possible by utilizing rear lane access. This design limits driveway conflicts and improves the continuity and pedestrian interface. Multi-unit sites will be designed to present an attractive and pedestrian-scale interface to the street, especially along collector roads. They will be designed to be contextually appropriate, with heights and density that fit with surrounding uses. Multi-residential parking will be internal to the site and will be screened with attractive landscaping.

The variety of housing types proposed throughout the plan area is in alignment with the Affordable Housing Strategy and Action Plan. The plan provides opportunity for a variety of housing forms (single, semi, row, apartment) to be interspersed throughout the community, and the inclusion of laned lots provides greater opportunities for homeowners to add accessory dwelling units to their properties. This variety facilitates affordable housing options that supports a more livable and inclusive community.
















3.6.1 LOW DENSITY RESIDENTIAL

Low density residential is anticipated to be zoned Traditional Neighbourhood District (TN) and support primarily detached single family residential housing, with opportunities for other housing forms or limited commercial where appropriate and in accordance with the Land Use Bylaw. The single-family residential dwellings will be street-oriented with a mix of laned homes and front entry driveways on less trafficked streets without lane access.

3.6.2 MEDIUM DENSITY RESIDENTIAL

The medium density residential areas are anticipated to be zoned Traditional Neighbourhood District (TN) and support a mix of street-oriented housing such as row-housing and semi-detached houses, with some opportunity for limited commercial where appropriate and in accordance with the Land Use Bylaw. All medium density residential areas have rear lanes and are mostly situated along the collector network. This provides the opportunity for an attractive continuous streetscape for both pedestrians and traffic, uninterrupted by front driveways. Single family detached residential dwellings will not be permitted in medium density residential areas.

3.6.3 HIGH DENSITY RESIDENTIAL

Pockets of high density residential in Tillotson have been strategically distributed throughout the plan area along the collector road network and in proximity to significant neighbourhood amenities such as open space, and the Village Centre. These areas are anticipated to be zoned Neighbourhood Core District (NC) and support a variety of comprehensively developed housing types such as row housing and multi-unit residential buildings with the potential for some associated general retail or service uses in accordance with the Land Use Bylaw. Conceptual site planning for each of the five high density residential sites have been demonstrated in **Figure 5: Illustrated Concept**. Sites include a combination of 3–5 storey multi-family residential and row housing. The designs are conceptual at this time and may be subject to change at the detailed design stage. Single family detached residential dwellings will not be permitted in medium density residential areas.

FIGURE 7: HIGH DENSITY RESIDENTIAL CONCEPTS



FIGURE 8: HIGH DENSITY | SITE 1 CONCEPT

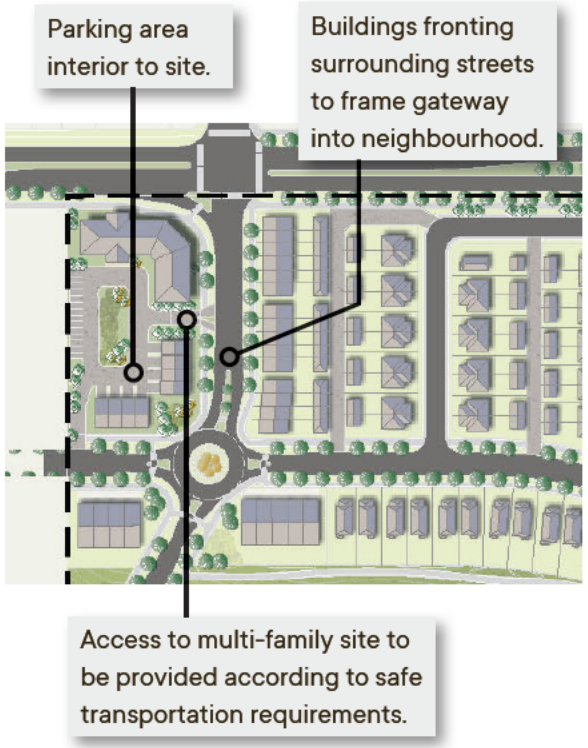


FIGURE 9: HIGH DENSITY | SITE 2 CONCEPT



FIGURE 10: HIGH DENSITY | SITE 3 CONCEPT

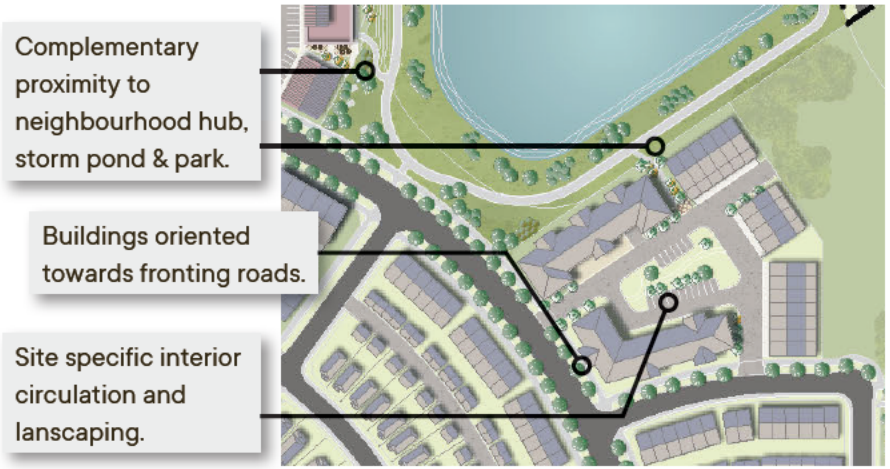


FIGURE 11: HIGH DENSITY | SITE 4 CONCEPT

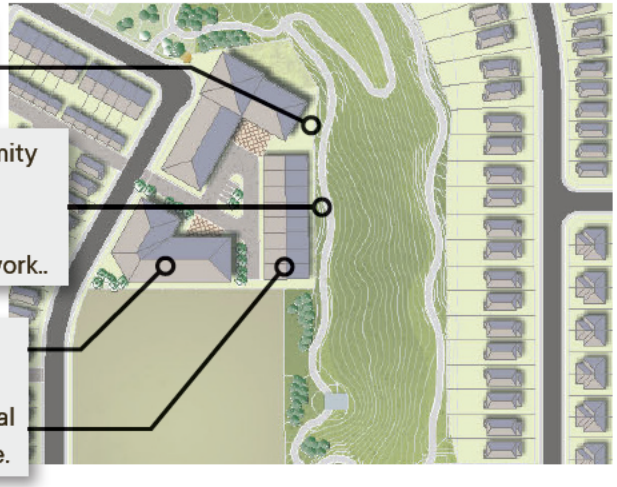
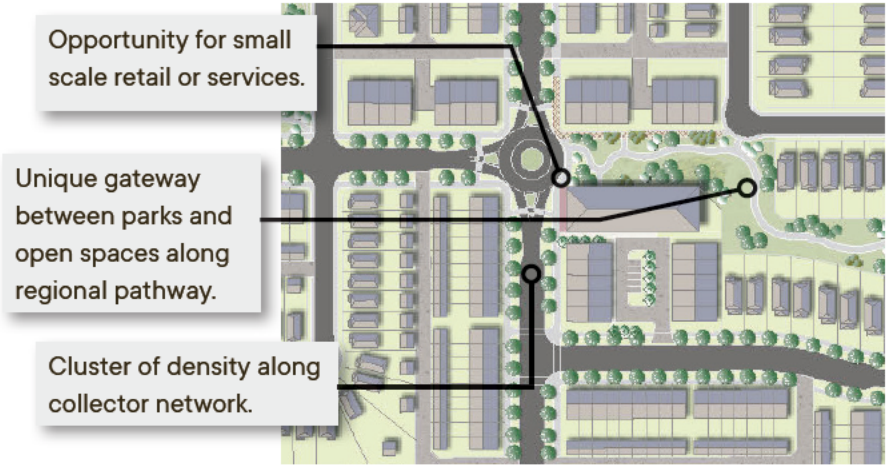


FIGURE 12: HIGH DENSITY | SITE 5 CONCEPT



3.7 COMMERCIAL

3.7.1 VILLAGE CENTRE

Tillotson will include a 2.35 ha (5.81 ac) neighbourhood hub located on the central northern edge of the community and accessed from Big Rock Trail, forming the heart of the "Village Centre". The mixed-use village centre is divided into two sites, framing a unique gateway into the community, and providing efficient access to the amenities and services to be provided. Together the two sites will provide approximately 5,875 – 7,050 m^2 of gross commercial floor area and 118–141 jobs upon full built-out, calculated at 0.25 - 0.30 FAR and 1 employee per 50m^2. This mixed-use destination will support a variety of uses to serve the daily needs of the residents of Tillotson and the surrounding communities. Future development will be consistent with the Land Use Bylaw's General Commercial District (GC).

Table 6: Commercial Statistics

Village Centre	Hectares	Acres	Approx. Building Area [1]	Anticipated Jobs [2]
East Site	1.30	3.22	3,250 – 3,900 m^2	65 - 78
West Site	1.05	2.59	2,625 – 3,150 m^2	53 - 63
Total	**2.35**	**5.81**	**5,875 – 7,050 m^2**	**118 - 141**

[1]Assuming 0.25 – 0.30 FAR
[2]Assuming 50 m^2 / employee

The sites are located at the main entrance to the community, flanking either side of a collector road off Big Rock Trail, and have been identified as the East Site and West Site. This location takes advantage of the visibility and access that Big Rock Trail provides to support vibrancy and utilization of the area. The vegetated median will provide the opportunity for a distinct and attractive entrance to the community. Parallel parking stalls on this entrance road will allow for quick and easy access to the fronting retail uses. The northeast corner of the eastern site will also include right-in-right-out access to Big Rock Trail to alleviate congestion at the main intersection and support safe and efficient access. Final approval of the right-in-right-out onto Big Rock Trail is subject to a traffic impact analysis at the Development Permit Stage.

The East Site is envisioned as a neighbourhood retail centre supporting a variety of retail and service offerings to meet the daily needs of Tillotson residents. It is intended to support street-oriented shop fronts and distinct entries. The West Site will provide more flexible opportunities for a variety of uses, with the potential to support multi-level developments with a mix of commercial, retail, office, or residential uses. The architectural character of both sites will be consistent to maintain a distinct sense of place, as well as remaining cohesive with the surrounding community.

The village centre is in close proximity to several medium and high-density residential sites, promoting walkable amenity access for many Tillotson residents. The area is also well connected to the regional pathway network

with a multi-use pathway along the northern edge (Big Rock Trail), and connections from both the southern and eastern edges to the expansive open space network. The two sites are intended to be walkable with attractive pedestrian oriented facades facing the surrounding streets and sidewalks that provide direct access to the interior of both sites. The buildings along the entrance collector should support both internal and external access points to provide easy access for those utilizing the parallel parking or approaching the site from the regional pathway. The remainder of the building entrances will be primarily internal to the site.

The proximity of the village centre to the stormwater pond and adjacent Municipal Reserve will provide complementary benefits. The retail uses fronting the municipal reserve will have the opportunity to include park fronting patio spaces, while users of the park will have convenient access to the services.

The size, location and proposed uses for the commercial area within Tillotson have been determined based on the local and regional retail context for the plan area. Tillotson is nearby two large regional retail destinations along Southridge Drive (Hwy 2A) to the East. The first spanning between Woodhaven Drive and Cimmaron Drive and the second between Westland Street and Highway 7.
These much larger retail centres are highway adjacent and represent regional destinations with much wider service areas. The Tillotson village centre will be a smaller local scale neighbourhood hub providing services and amenities for the day to day needs of Tillotson residents and the nearby communities. The proximity to these other retail destinations will support Tillotson as a "complete community" by providing residents access to a much wider variety of services and employment areas still within walking or cycling distance.

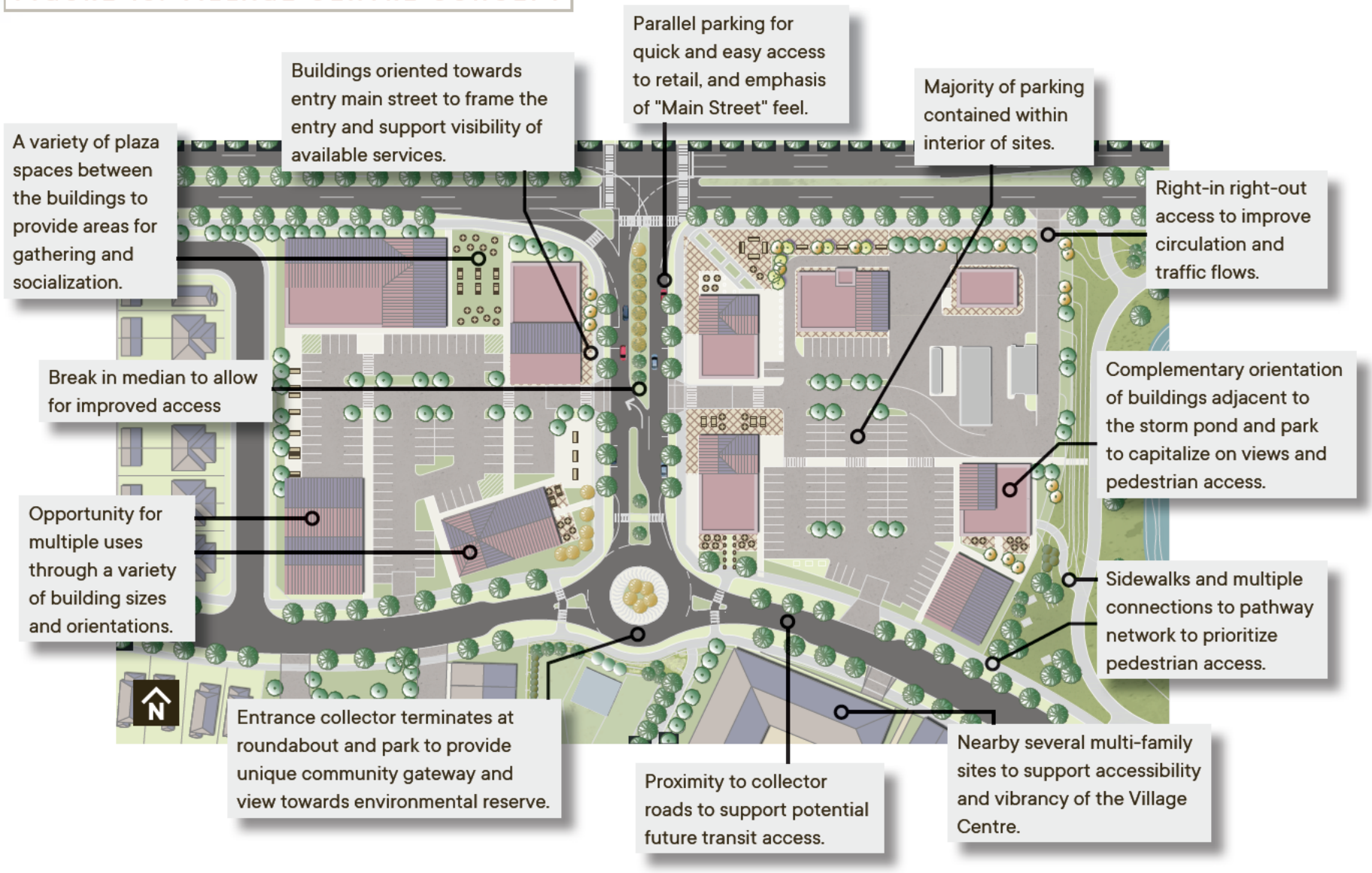
Figure 13: Village Centre Concept illustrates a conceptual layout of the Neighbourhood Hub, to support the vision for the area, but may be subject to change at the detailed design stage.







FIGURE 13: VILLAGE CENTRE CONCEPT



3.8 LAND USE POLICIES

SECTION 3.0 | LAND USE POLICIES	
3.1	Land uses within Tillotson should generally align with those identified in Figure 6: NASP Land Use Concept and Table 3: Land Use Districts. Minor adjustments to the land use concept do not require amendment to this plan provided a minimum gross residential density of 20 units per hectare (8 units per acre) is maintained and the proportion of single detached housing units does not exceed the maximum threshold outlined in the Municipal Development Plan
3.2	A mix of housing types must be dispersed throughout the plan area, including but not limited to single-detached, semi-detached, duplex, and multi-unit housing.
3.3	A mix of housing types are encouraged within blocks to diversify the built form.
3.4	The development of secondary suites and accessory dwelling units should be encouraged throughout the plan area to contribute to greater housing diversity and affordability within the community.
3.5	To promote an attractive and pedestrian-friendly streetscape, front-drive access is prohibited to residential units in the hatched "Front Drive Product Not Permitted" areas identified on Figure 6: NASP Land Use Concept. Front-drive access to residential units with lane access should be discouraged.
3.6	Medium and high-density housing forms within Tillotson should be oriented to the street and located in areas with good access to major roadways, future transit, and amenity spaces.
3.7	Tillotson shall include a Neighbourhood Hub located on the central northern edge of the plan area adjacent to Big Rock Trail.
3.8	The Neighbourhood Hub should provide employment opportunities through various commercial and office buildings and may include higher density residential. Uses may include a mix of office, commercial and residential in a variety of configurations that allow residents to meet their daily basic needs.
3.9	The Neighbourhood Hub should contain a minimum of 60,000 square feet (5,500 square metres) of gross floor area for non-residential uses. The design, composition of uses, and overall density of the Neighbourhood Hub will be determined at the development permit stage in consideration of the conceptual design, guidelines and policies outlined in Section 5 of this plan.
3.10	Medium and high-density residential uses should be located adjacent to the Neighbourhood Hub to increase activity, promote walkable amenity access and ensure appropriate transitions to lower density residential uses.
3.11	Neighbourhood scale commercial uses, in accordance with the Land Use Bylaw, are encouraged throughout the plan area.

SECTION 4.0

Parks & Open Space Network

4.1 PARKS & OPEN SPACE OVERVIEW

The parks and open space network throughout Tillotson has been designed as an integrated network of parks and pathways that provide a variety of natural and programmed amenities for a diversity of different users, and enhance all residents connection to nature. Each park has been specifically designed to offer a unique view corridor, programmed activity or natural connection to the pathway network. Every open space has a connection to the road network and at least one regional or local pathway link. The pathway network has been designed with safe and efficient connections between all the open spaces for pedestrians, cyclists, joggers, mobility aid users and other active modes.

The park and open space network is centered around a large, curved escarpment containing a native deciduous forest on the west and grasslands towards the east. The lands with a slope of over 15% as well setbacks off the top and toe of slope have been identified as Environmental Reserve. Several programmed municipal reserve park spaces have been extended off this area to provide active recreation and gathering opportunities in proximity of this prominent natural feature. Other park spaces have been identified along the eastern edge of the plan area to facilitate connection with the existing community. Finally, half of a future joint use school site is located on the western edge of the plan area, which is anticipated to extend into the future community to the west. The overall site will support two schools and multiple shared playfields.

Table 7: Open Space Statistics

	Hectares	Acres	% Total Area	% of GDA
Total Plan Area	**63.97**	**158.07**	**100.0%**	
Environmental Reserve	5.18	12.80	8.10%	
Gross Developable Area	**58.79**	**145.27**	**-**	**100%**
Municipal Reserve	5.88	14.54	9.19%	10.00%
PUL Stormwater Facility	3.11	7.69	4.86%	5.29%
Cemetery Expansion	1.62	4.00	2.53%	2.76%
Municipal Reservoir Site	1.21	3.00	1.89%	2.06%
Non Credit MR	0.03	0.07	0.05%	0.05%
Total Parks & Open Space	**17.03**	**42.10**	**26.64%**	**20.17%**





In alignment with the Municipal Development Plan and as illustrated in **Figure 14: Open Space Concept Plan**, all residential development within the plan area is within walking distance (400m) to a recreation facility, park or cultural facility. Parks have been strategically located throughout the community to form attractive viewpoints at the terminus of key intersections, and frame unique gateways into the community.

Table 7: Open Space Statistics and **Table 8: Parks and Open Space Classification** outline the various components of the open space network and their areas. Municipal Reserve has been allocated at the required 10% of gross developable area, in addition to a large central Environmental Reserve area to contribute to a functional open space network comprising 17.3% of the total plan area (Environmental Reserve + Municipal Reserve). Although not contributing to the functional open space network, the storm pond, town reservoir and cemetery expansion are undeveloped lands and visually contribute a connection to nature. When added to the total these open spaces comprise of 26.6% of the total plan area.

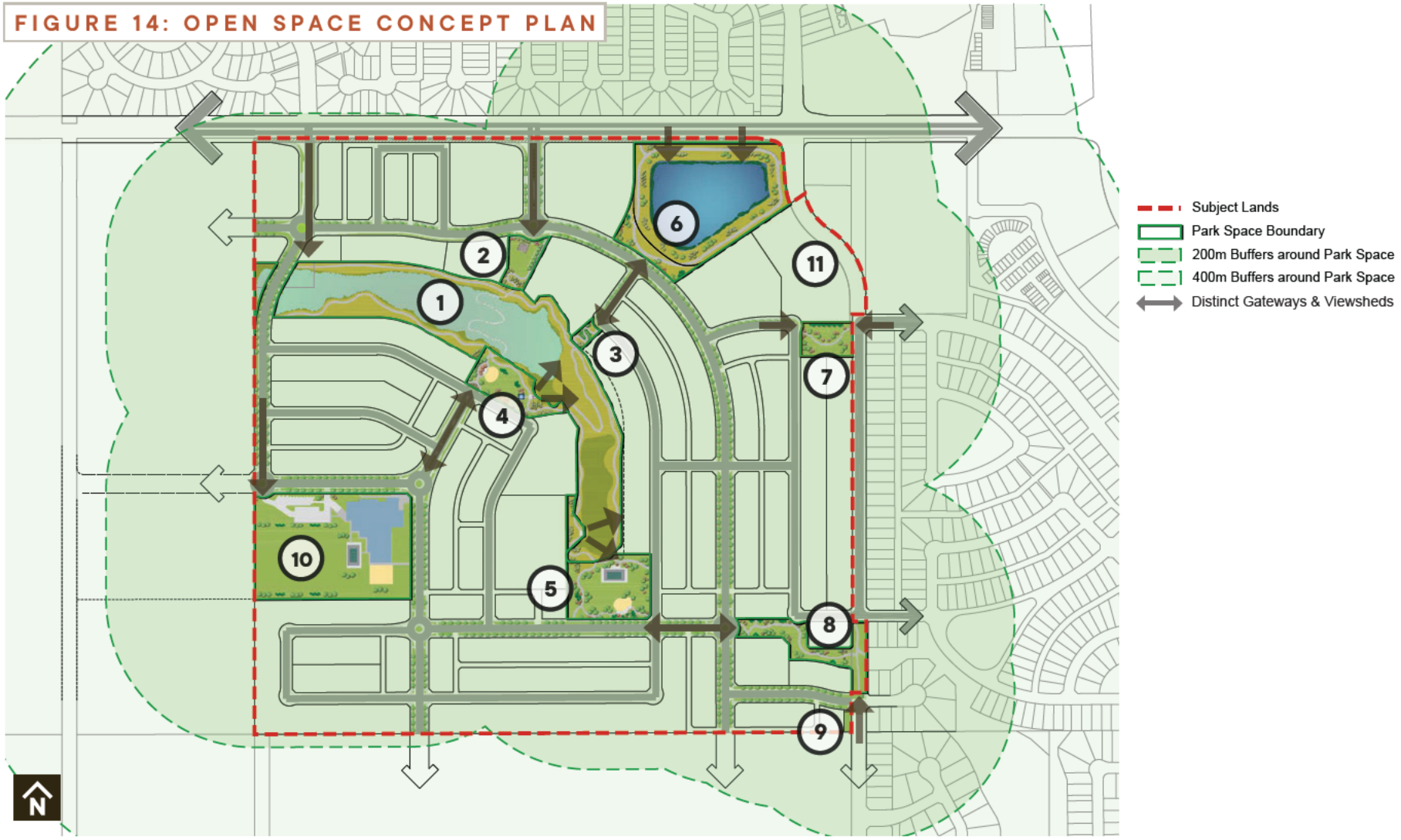


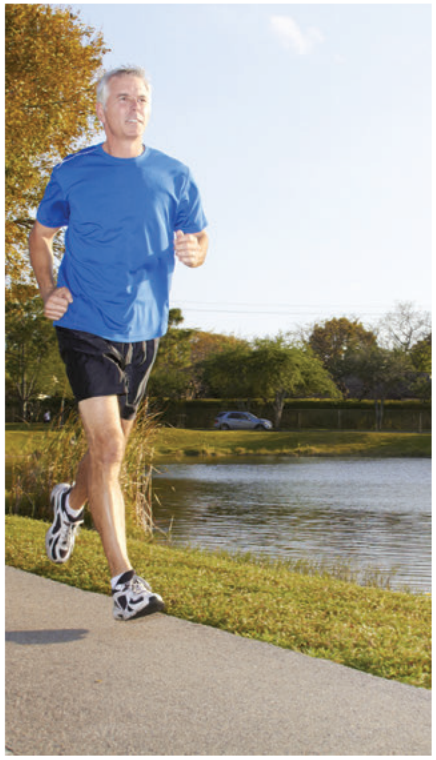


Table 8: Parks & Open Space Classification

#	Park Identifier	Class	Ha	Ac
1	Environmental Reserve	Natural Area	5.18	12.80
2	Gateway Park (MR)	Pocket Park	0.28	0.70
3	Connector Park (MR)	Linear Park	0.08	0.19
4	Viewpoint Park (MR)	Neighbourhood Park	0.56	1.38
5	Neighbourhood Park (MR)	Neighbourhood Park	1.04	2.57
6	Stormwater Park	N/A	3.11	7.69
7	Westridge Drive Park (MR)	Pocket Park	0.32	0.79
8	Southeast Linear Park (MR)	Linear Park	0.62	1.54
9	Additional Open Space (Non-Credit MR)	N/A	0.03	0.07
10	Joint Use School Site (MR)	N/A	2.98	7.37
11	Cemetery Expansion	N/A	1.62	4.00
12	Collector Road & Regional Pathway Network	Streetscapes	-	-

FIGURE 14: OPEN SPACE CONCEPT PLAN











4.2 PARKS & OPEN SPACE CONCEPTS

A variety of parks and open spaces have been distributed throughout the plan area and meet the size, location and programming objectives of the Okotoks Recreation, Parks and Leisure Master Plan. **Table 8: Parks and Open Space Classification** identifies the park spaces throughout the plan area, currently identified by location or functional names. Specific park names in accordance with the Towns naming policy will be identified at a later stage.

Tillotson's unique natural landscape has been integrated into the community through the preservation of an expansive natural escarpment. The natural slope and vegetation of this environmental reserve will be preserved and expanded with adjacent programmed park spaces, and its usage supported with the integration of a connected pathway network. This natural area will be programmed to deliver recreation and leisure areas for residents to enjoy, help enhance the beauty of the community and improve Okotokians' mental and physical well-being.

The large central park is comprised of an environmental reserve, a gateway park, a viewpoint park at the top of the escarpment, a neighborhood park at the southern edge of the escarpment and a pathway connection, providing a total connected open space of 7.14 ha (17.64 ac). Other park spaces throughout the community include the stormwater park, the Westridge Drive park, the southeast linear park, and the school site. Each will be uniquely designed and programmed for their purpose and context and are connected to the central park through the pathway network and vegetated streetscapes.

Conceptual designs for each of the park spaces are included in this section with additional details provided under separate cover.

4.2.1 ENVIRONMENTAL RESERVE

Tillotson's central community park is oriented around a large natural escarpment curving through the plan area, consisting of 5.18ha (12.80ac) of environmental reserve (ER). It is characterized by its steep slopes and mix of deciduous forest towards the west and grassland to the east. The lands identified as ER are those with slopes greater than 15% and a 15m or greater setback off the top of slope in the forested portion and 6m in the grassland section, and 6m setback off the toe of slope.

Most of the ER is intended to remain in its natural state, with regional pathways planned along the top and toe of slope, and two connections bisecting through. A 1.5m wide gravel pathway will join the gateway and viewpoint parks and will meander through the existing tree stand, following a path that limits tree clearing as much as possible. A second connection will start and end at the top and toe of slope near the existing telecommunications access road, but will traverse a greater distance across the ER in order to meet or come as close as possible to meeting the Town's pathway specifications. Variances to the Town's pathway specifications will be considered to minimize disturbance to the area.

This prominent ER will facilitate many unique views both to and from Tillotson. The main street entrance into the community through the Village Centre will terminate at a park fronting the ER and will provide a distinct viewshed of the native deciduous tree stand. The secondary access from Big Rock Trail will also provide distinct views of the treed ER, and will travel through it. In addition, the parks programming at the top of the slope will capitalize on the elevation and provide multiple constructed view points for residents and visitors to look over the plan area towards Okotoks.

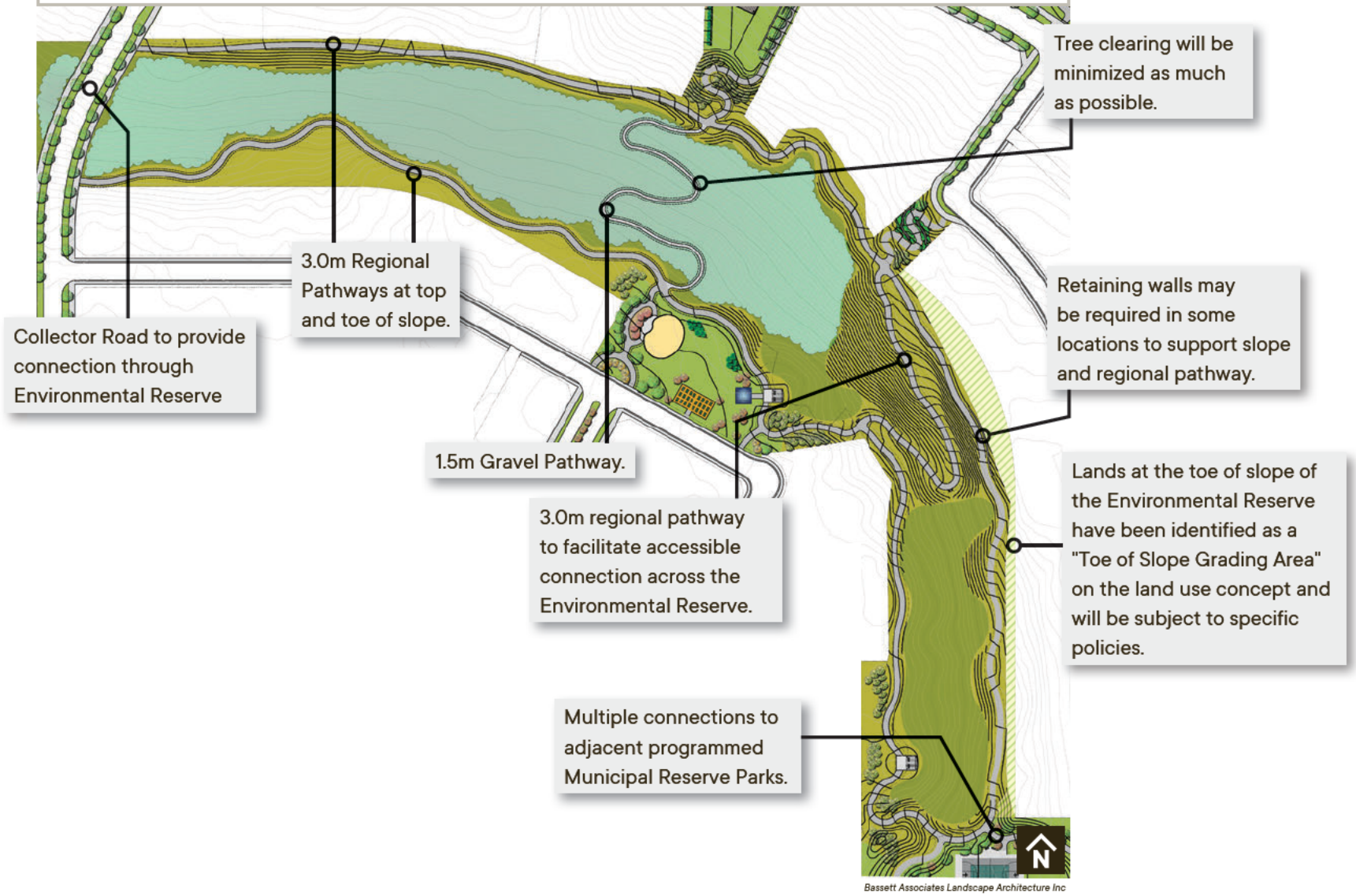
Due to the prominent grade of the ER and the surrounding rolling terrain throughout the plan area, an area identified as "Toe of Slope Grading Area" has been highlighted on **Figure 6: NASP Land Use Concept**, and will be subject to specific policies. This special policy area is intended to protect the integrity of the slope while also allowing for flexible housing options on the low density lots backing onto the ER. To eliminate or limit the requirement for retaining walls at the back of these residential lots, additional depth has been retained in the residential lot, with the intent that the "Toe of Slope Grading Area" may be regraded to ensure stability of the slope. This grading should facilitate more usable yard space and limit the requirement for under-drive housing product. The grading (or retaining walls) on these lands will be subject to detailed engineering and an instrument should be placed on the title of these lots to ensure no regrading of the specified lands occurs.







FIGURE 15: OPEN SPACE CONCEPT | ENVIRONMENTAL RESERVE



4.2.2 GATEWAY PARK

The gateway park is connected to the environmental reserve at the toe of slope and is located at the terminus of the entrance collector road between the two mixed use commercial sites. This park facilitates a distinct view corridor upon entry into the community towards the natural deciduous forest on the escarpment and is a critical component of the overall Village Centre. Due to its prominent location, this park will be designed as an attractive viewpoint with the ability to support a variety of community gathering functions. The northern edge of the park will require a retaining wall to support a relatively flat multi-use grassed area in the centre of the site that could be utilized for many functions such as performances, market stalls or open-ended play. The site will also support a multi-purpose shelter that will be a distinct entry feature on the northern face and provide opportunities for performances facing south.

FIGURE 16: OPEN SPACE CONCEPT | GATEWAY PARK

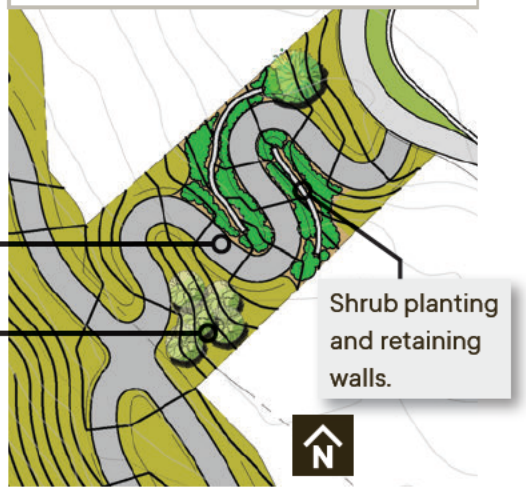


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4.2.3 CONNECTOR PARK

The connector park is a 0.08 ha (0.19 ac) pathway connection at the toe of slope of the environmental reserve. This municipal reserve will support a curved pathway at the base of the staircase that facilitates a connection between the toe of slope regional pathway and the neighbourhood. It is an efficient entry point to the central park for residents in the northeast quadrant of the community and for those utilizing the stormwater park and eastern retail site.

FIGURE 17: OPEN SPACE CONCEPT | CONNECTOR PARK



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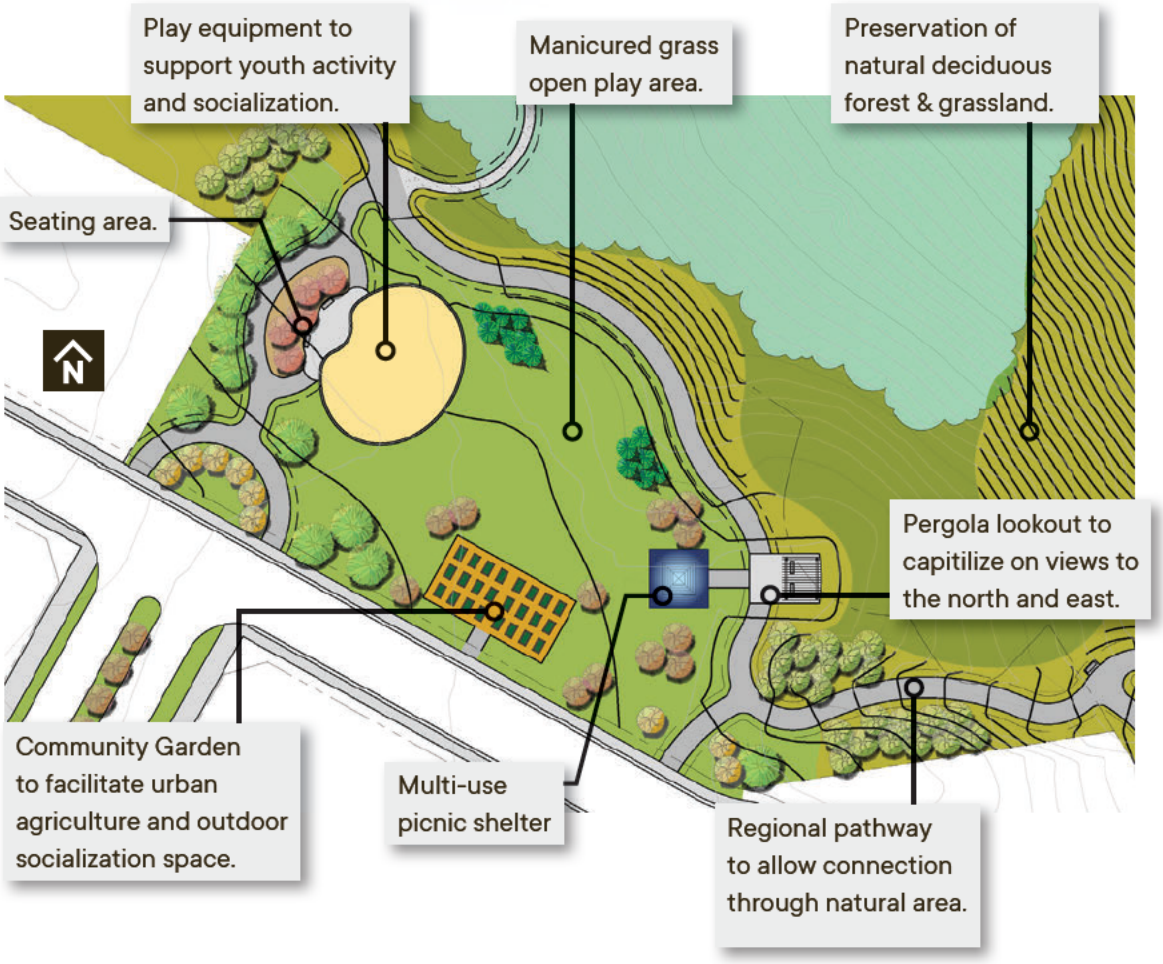
4.2.4 VIEWPOINT PARK

The viewpoint park is connected to the environmental reserve at the top of slope and provides expansive views towards Okotoks to the north and east. It also provides a distinct terminating viewpoint from the northeast collector road connecting to the school site. The pathway in this area and connection through the Environmental Reserve provides a critical link in the safe route between the school and village centre.

This park is in the centre of the community and will be designed with a variety of natural and constructed recreational amenities. The conceptual design includes features such as play equipment, a community garden, a manicured grass open play area and a lookout point towards the east. The park is also connected to regional pathway network along the top and toe of slope of the ER.

The lands identified for the viewpoint park currently contain a telecommunications tower accessed by a gravel road from Big Rock Trail. Following expiration of the current lease, the tower and all associated infrastructure will be removed, and the encumbrances discharged. Following the removal of this facility the lands will be reclaimed and converted to Municipal Reserve and Environmental Reserve.

FIGURE 18: OPEN SPACE CONCEPT | VIEWPOINT PARK



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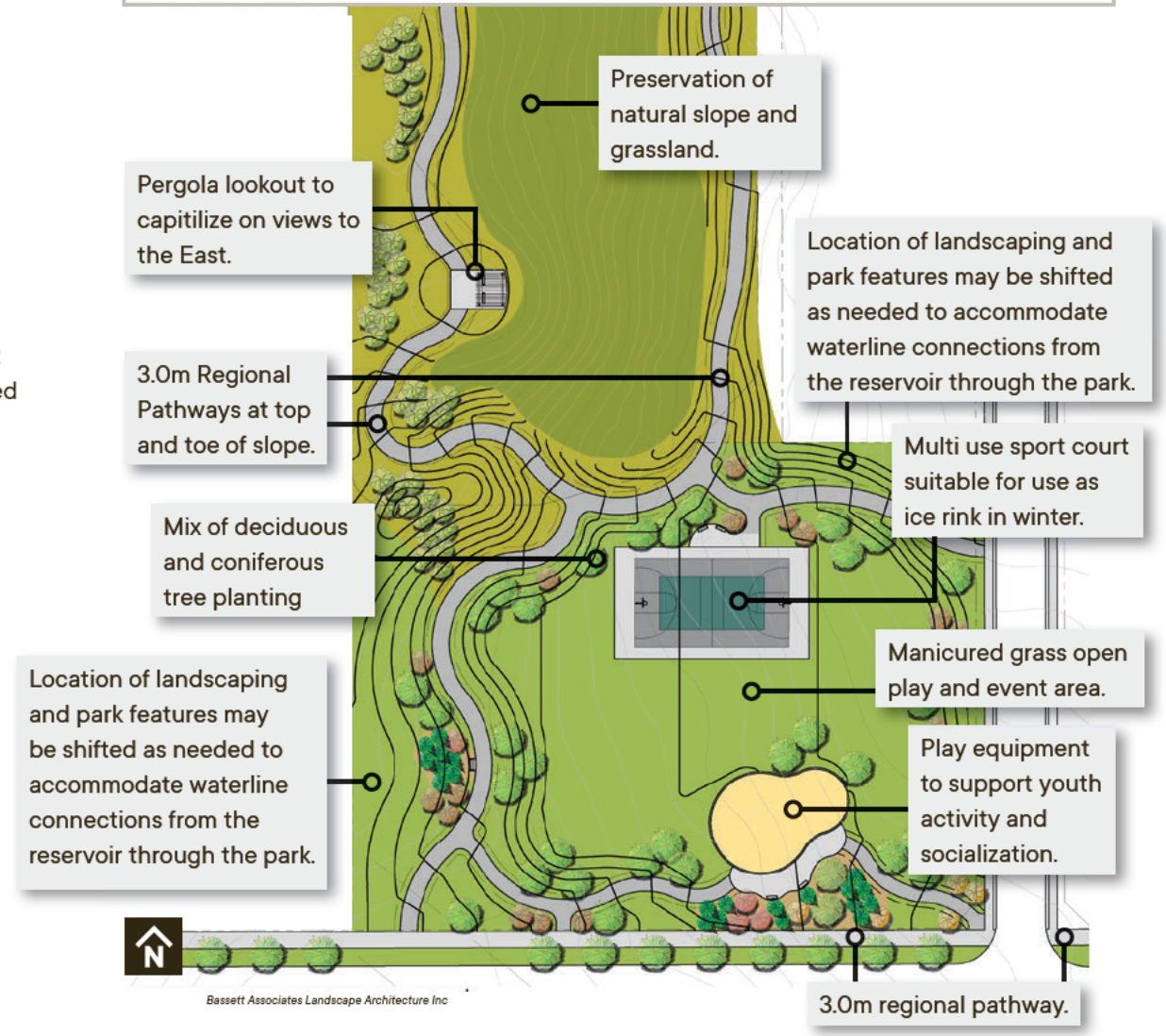
4.2.5 NEIGHBOURHOOD PARK

The neighbourhood park is the largest non-school municipal reserve and will provide several natural, social and recreational opportunities for residents to enjoy. It consists of a 1.04 ha (2.57 ac) municipal reserve distributed between the top and toe of slope, connected by the southern grassland portion of Environmental Reserve. This park has been conceptually designed to include a viewpoint structure at the top of slope, a hardscape multi-use sport court at the toe of slope that could also support an ice rink in the winter, a playground, and a manicured grass open play area all connected with local and regional pathways.

This neighbourhood park is embedded in the residential area of Tillotson and will provide a variety of all-season recreational and social opportunities for residents and residents of neighbouring communities. A regional pathway connection to the southeast of this park space provides an efficient link between this park the open space network in the neighbouring community of Westridge.

As demonstrated in **Figure 37: Water Servicing Concept**, some water lines from the new reservoir will be routed through this park, and future landscaping and programming should ensure these rights of way remain accessible for operations and maintenance.

FIGURE 19: OPEN SPACE CONCEPT | NEIGHBOURHOOD PARK



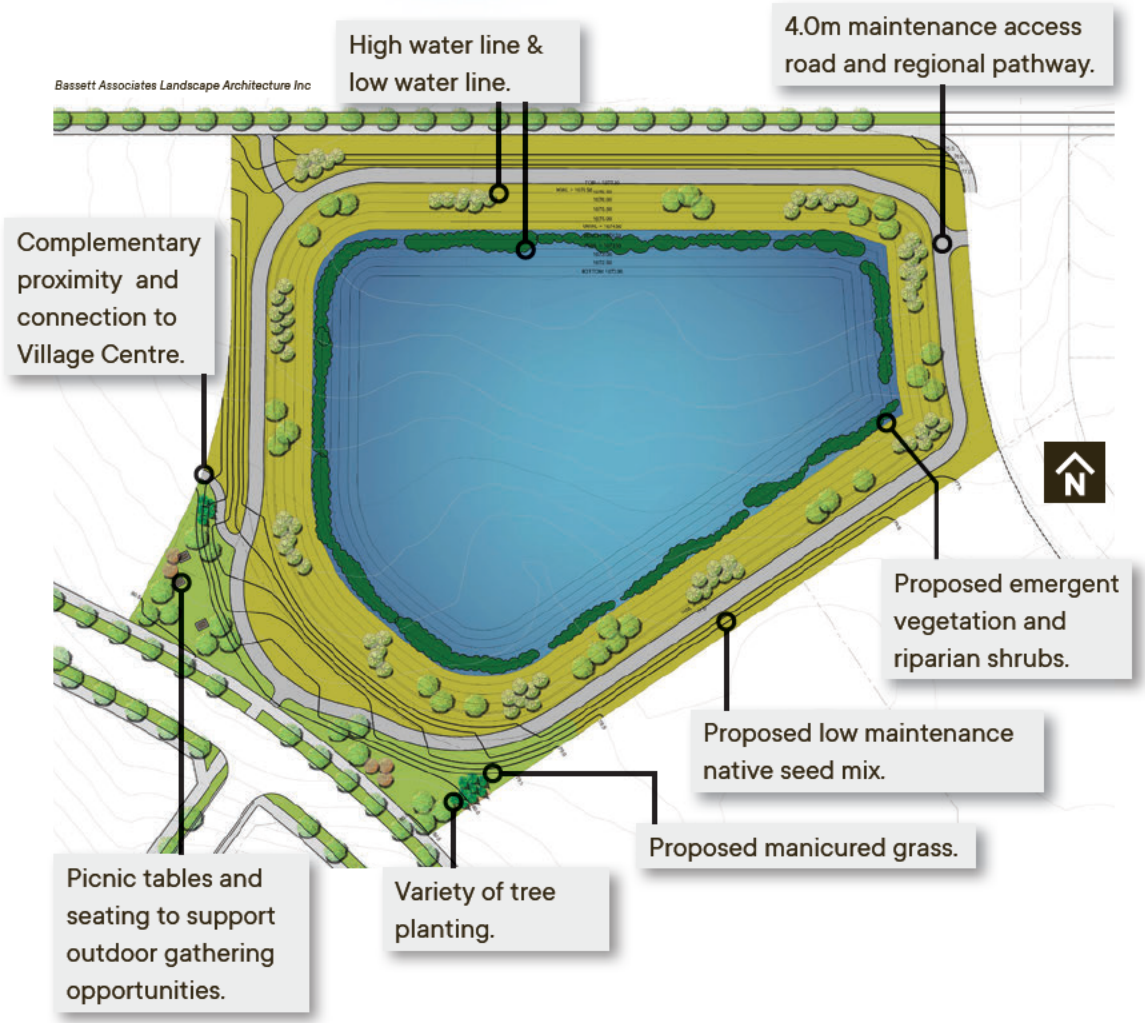
4.2.6 STORMWATER POND & PARK

The stormwater pond is in the northeast corner of the plan area at the natural low point of the rolling topography, and the PUL lot will encompass approximately 3.11 ha (7.69 ac). The pond is designed not only as a functional stormwater management facility but as a viewpoint into the community from Big Rock Trail, a primary pedestrian and cyclist entrance via the pathway network and a destination for gathering and connecting in nature. The pond will be surrounded by vegetated park space and a paved 4.0m wide maintenance access road and regional pathway loop, located above the high-water line.

The stormwater pond is bordered on the north by Big Rock Trail, on the southeast by the Okotoks Cemetery expansion and a multi-family site and on the west by the east commercial site. In addition to the vegetated pathway surrounding the pond, the southern lands will be landscaped and furnished to provide more opportunities for gathering, for those utilizing both the retail services and regional pathway loop.

The park space will be designed to include a variety of vegetation, picnic tables, benches, lighting and garbage receptacles to support casual outdoor gathering, and other uses complementary to the adjacent village centre retail and services.

FIGURE 20: OPEN SPACE CONCEPT | STORMWATER POND & PARK

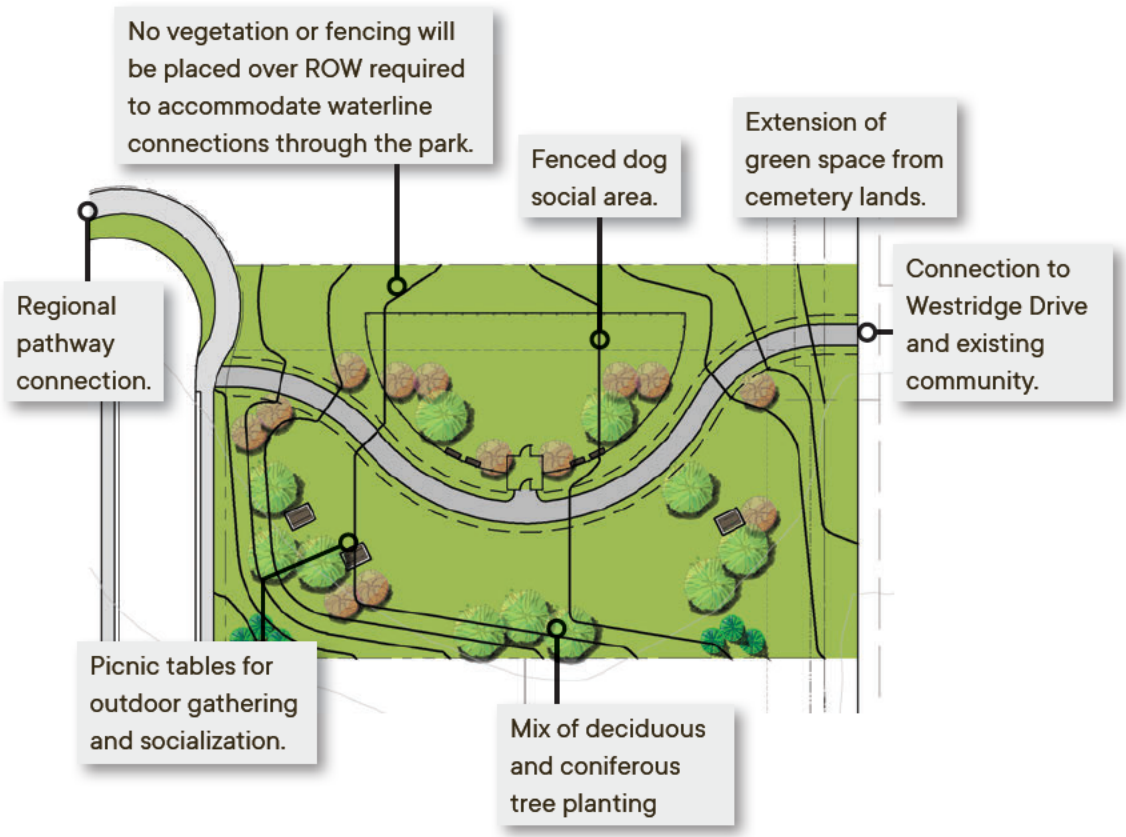


4.2.7 WESTRIDGE DRIVE PARK

The Westridge Drive park will create a visual greenspace extension from the cemetary lands to the north and facilitate a connection between Tillotson and the exsiting community of Westridge to the East. The park is proposed to support a fenced dog social area and some furniture and lighting to support outdoor gathering and socialization.

As demonstrated in **Figure 37: Water Servicing Concept**, some water lines from the new reservoir will be routed through this park, and future landscaping and programming should ensure these rights of way remain accessible for operations and maintenance.

FIGURE 21: OPEN SPACE CONCEPT | WESTRIDGE DRIVE PARK



4.2.8 SOUTHEAST LINEAR PARK

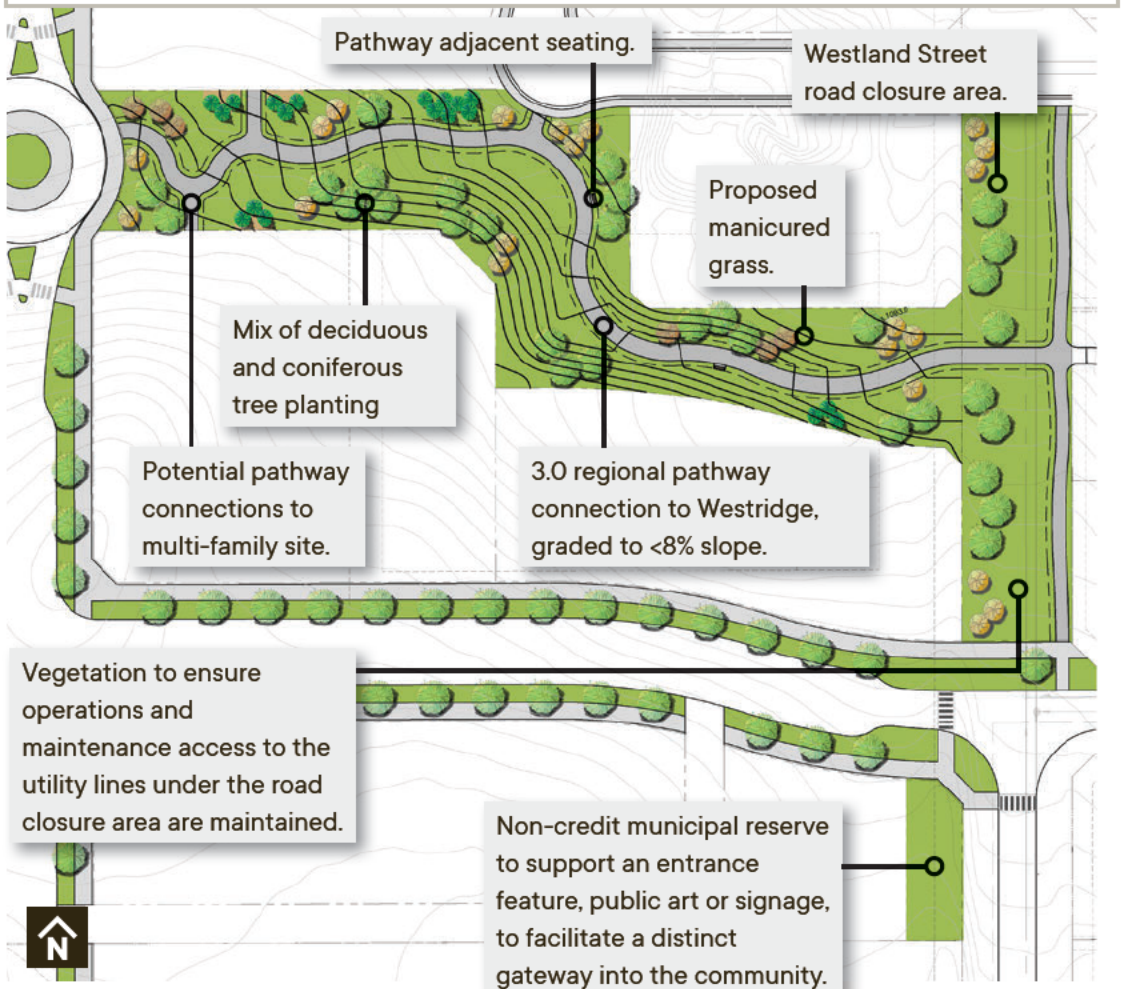
A 0.62 ha (1.54 ac) municipal reserve is located in the southeast corner of Tillotson to facilitate a connection with the existing community of Westridge's regional pathway and open space network. Due to the location of existing servicing lines, the portion of Westland Street being closed will be maintained as open space with pathways and landscaping. The orientation of single family housing backing onto the park, present in Westridge will be mirrored in Tillotson to support continuity with the existing community.

Due to the grade change between the east and west ends of the site, the pathway will be curved to accommodate appropriate slopes below 8%. Pathway, stair or landscaping connections should be made between this park and the adjacent high density sites.

4.2.9 ADDITIONAL OPEN SPACE

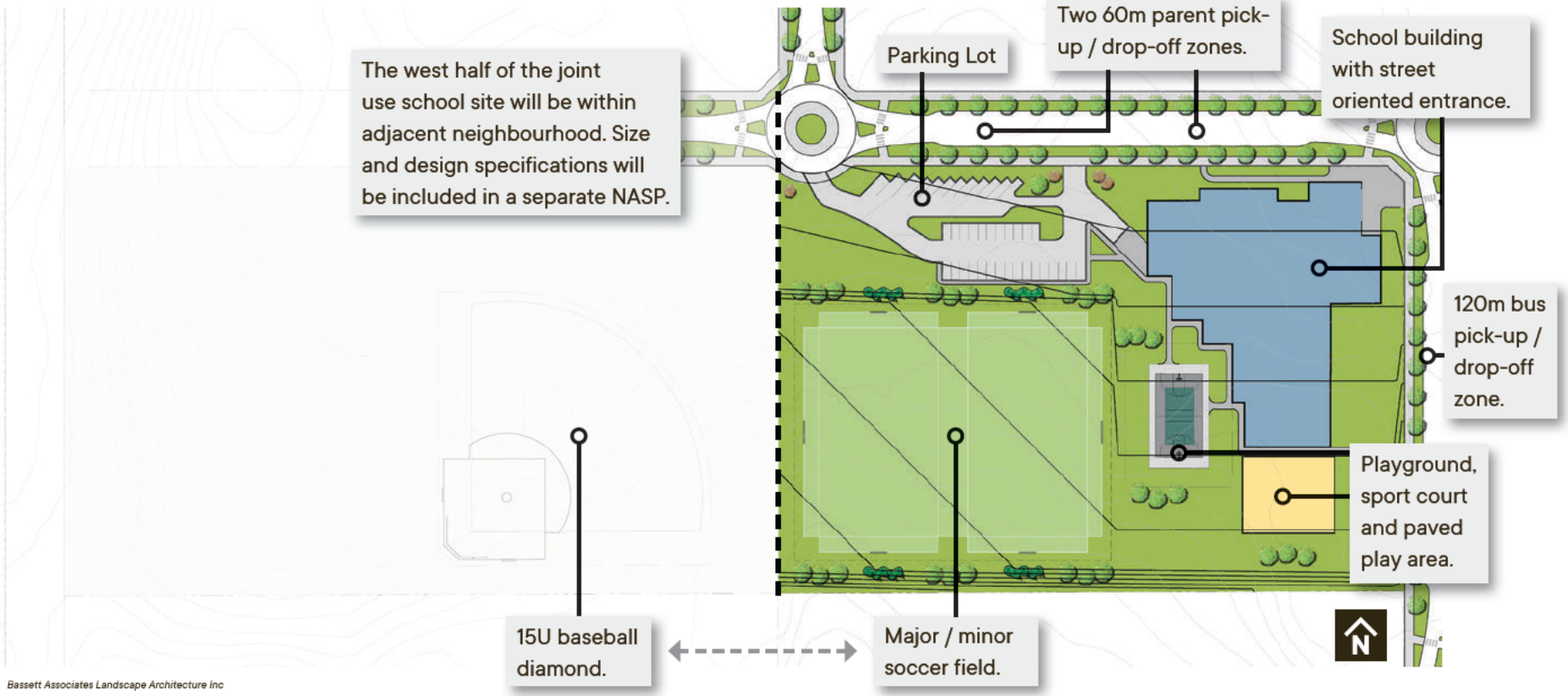
A 0.03 ha (0.07 ac) non-credit municipal reserve is located in the far southeast corner of the community and will provide a space for an entrance feature or sign to facilitate a distinct gateway into the community. Entrance features and/or signage will be subject to the Town's Optional Amenity agreement process.

FIGURE 22: OPEN SPACE CONCEPT | SE LINEAR PARK



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FIGURE 23: OPEN SPACE CONCEPT | JOINT USE SCHOOL SITE



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Note: The school building and site design will be at the discretion of the applicable school division(s) and has been conceptually demonstrated here with all requested programming components.

4.2.10 JOINT USE SCHOOL SITE

The Tillotson NASP includes a 2.98 ha (7.37 ac) portion of a joint use school site that will span between this plan area and the quarter section to the west, also contained within the West Okotoks Area Structure Plan. The total area for the school site will approximately double, depending on the area of land identified in the NASP to the west, and will support two school buildings with shared playfields.

Tillotson's portion of the joint use school site is a key destination in the overall open space system and the largest Municipal Reserve in the plan area. It will include several active recreation amenities and educational facilities to meet the needs of the residents of Tillotson and the surrounding communities.

The school site is bounded on two sides by collector roads and has regional pathway connections in every direction to allow for a variety of active transportation modes and safe routes. As demonstrated in **Figure 23: Open Space Concept | Joint Use School Site**, the site is also easily accessible by vehicle, with an identified bus pick-up/drop-off zone and a parent pick-up/drop-off zone.

As per consultation with the Foothills School Division and Christ the Redeemer Catholic Schools, the area identified should be able to accommodate at least two school buildings, two regulation soccer fields, a regulation baseball diamond and a playground and parking lot for each school. In the past, single school sites with one storey buildings typically accounted for 10 acres of Municipal Reserve. However, to facilitate efficient use of limited Municipal Reserve lands the proposed site is a joint use site with shared playfields, and is located along 2 collectors which allows for on-street bus and parent pick-up/drop-off. Furthermore, the shift from single storey to multi storey school buildings also enables more efficient use of Municipal Reserve lands.

Policy 2.5.4 a in the Okotoks Municipal Development Plan states that schools and school sites should be designed to integrate with the neighbourhood and "optimize the use of limited Municipal Reserve lands in a manner that balances the programming needs of the school authorities with the needs of the community for access to parks and recreation facilities." Due to the large Environmental Reserve and Town Required Municipal Reservoir Site, the Municipal Reserve within the plan area is limited and therefore the school site has been conceptually sized and designed to efficiently accommodate all the programming needs required, while leaving opportunity for other municipal reserve throughout the neighbourhood.

Figure 23: Open Space Concept | Joint Use School Site Concept demonstrates a conceptual layout of the Joint Use School site and how the building and a variety of recreational amenities could be oriented. Ultimately the design and layout of the site will be at the discretion of the applicable School Authorities.

4.2.11 CEMETERY EXPANSION

Although not part of the developable parks and open space system within Tillotson, the expansion of the Okotoks cemetery does contribute to the perception of open space and will likely contain landscaping and pathways throughout. The existing cemetery will be expanded west into the Tillotson plan area through a Road closure of Westland Street and include 1.62 ha (4.00 ac). The northern portion of Westland Street has been excluded from the plan area and is anticipated to be maintained as a public road and provide access to the cemetery from Big Rock Trail. The cemetery lands will be purchased by the Town of Okotoks.

4.3 PARKS & OPEN SPACE POLICIES

SECTION 4.0 | PARKS & OPEN SPACE POLICIES	
4.1	Municipal Reserve will be dedicated at the subdivision stage in accordance with the Municipal Government Act and the provisions of this plan. Minor adjustments to the municipal reserve parcel boundaries may be considered provided no less than 10% of the developable lands are provided as Municipal Reserve.
4.2	The distribution and size of parks and open space, including the school site, must be in general alignment with Figure 6: NASP Land Use Concept.
4.3	Parks must be designed to provide a range of passive and active recreation opportunities for a wide variety of users at various times. Passive recreational features may include, but are not limited to, pathways, seating, viewpoints and landscaping. Active recreational features may include, but are not limited to, play fields, multi-use sport courts, dog parks and play structures.
4.4	Parks should be designed for all-season use and should be flexible to address community needs over time.
4.5	Detailed design of park spaces will be determined at the subdivision stage, in consideration of the policies and conceptual designs shown in this plan, overall ease of maintenance, operation access and use, and the Town's General Design and Construction Specifications.
4.6	Parks and open spaces must be linked to the regional pathway system to ensure an interconnected active transportation network, and provide efficient access for pedestrians, cyclists, joggers, mobility aid users and other active modes.
4.7	Regional Pathways will be designed and constructed to Town of Okotoks specifications considering accessibility for all mobility users and maintenance considerations. Some variance to these specifications may be considered by the Approving Authority for the Regional Pathway through the Environmental Reserve due to constraints of the existing grades.
4.8	Parks spaces and natural areas should include trails and pathways, seating, garbage receptacles, way-finding signage, lighting where appropriate and other features as deemed appropriate by the Approving Authority.
4.9	The location, materials and design of park infrastructure, including but not limited to, fencing, lighting, seating, garbage receptacles, bicycle parking and way-finding signage will be of a consistent aesthetic throughout the community to support a sense of place. Park infrastructure will be in alignment with the Town of Okotoks General Design & Construction Specifications and will be subject to Town approval at the detailed design stage.
4.10	Detailed design of parks and open spaces should include considerations for minimizing wind exposure and maximizing exposure to sunlight.
4.11	Landscaping in parks and along walkways should be placed to provide for attractive pedestrian environments while retaining clear sightlines to promote natural surveillance.
4.12	The design of parks, open spaces and stormwater management facilities should incorporate plant species that are low maintenance and considered non-invasive.
4.13	Low-water and drought tolerant landscaping will be required in all parks and open spaces and is encouraged on private property.

4.14	Lands shown as Environmental Reserve on Figure 6: NASP Land Use Concept will be dedicated as Environmental Reserve at the time of subdivision. Minor adjustments to the boundary shown in Figure 6 may be approved by the subdivision authority in consideration of detailed design grades, slope stability analysis, regional pathway constructibility and maintenance. In no case may a subdivision property line setback from the top or toe of slope be less than 6.0 m.
4.15	Disturbances to the Environmental Reserve Natural Area should be minimized and every effort should be made to retain existing and native vegetation.
4.16	Lands identified as "Toe of Slope Grading Area" in Figure 6: NASP Land Use Concept, should have protective instruments placed on the titles of the intersecting residential lots to prevent regrading of specified lands at the toe of slope of the Environmental Reserve. The specific bounds of these areas will be determined by an engineering assessment at the subdivision stage.
4.17	Landscape design of the stormwater management facility should be enhanced to support this feature as a neighbourhood amenity and destination for the community and surrounding areas.
4.18	The school site should be designed to integrate with a future school site on the adjacent parcel to the west so that it may function as a joint school site once both parcels are developed.
4.19	Multi-story building(s) are encouraged on the school site in order to maximize the use of the site and ensure sufficient land for play fields and other school site amenities.
4.21	Pick-up and drop-off, and bus loading areas for the school site should be located on the public street to maximize use of the school site for buildings and landscaping as well as encourage active transportation use.
4.22	Some municipal reserve may be encumbered by utility rights-of-way for water lines extending from the municipal reservoir site. These rights-of-way should be kept as open space, free of landscaping and parks infrastructure that could interfere with operations and maintenance.







SECTION 5.0

Tillotson Community Character

5.1 TILLOTSON COMMUNITY CHARACTER

Neighbourhood urban design is the process of designing and shaping the physical features of new neighbourhoods. It brings together many elements of placemaking including land use planning, transportation planning, architecture, landscape design, public art, and engineering. Thoughtful urban design has been integrated into many components of the Tillotson NASP to meet the goals of the Okotoks Municipal Development Plan and ultimately build a great community for a diversity of Okotokians.

Tillotson will be a unique community due to a variety of character defining elements. First, the large natural escarpment and associated parks and pathway network at the heart of the community is a feature unique to Tillotson that is visible from the wider Okotoks area and will be a well-utilized natural amenity. Second, the village centre has been designed to create a unique main street and gateway into the community, while providing a variety of neighbourhood scale goods and services designed with a village-feel. Finally, the character of the residential development throughout the community will allow for variety reminiscent of small Towns.

The following sections detail some of the key elements of urban design and innovation in Tillotson. The sections are organized to provide an overview of design within the Village Centre, low, medium and high density residential designs throughout the community, unifying elements in the public realm and how these come together to form a great neighbourhood in alignment with the MDP.

5.2 VILLAGE CENTRE

The northern gateway into the community is designed as a small-town Village Centre designed around a modest main street and town square (gateway park). This centre provides a diversity of public spaces and land uses, serving as the commercial and social hub for the neighbourhood. The layout emphasizes a sense of arrival with an active main-street shopping area leading to a slightly elevated gateway park that sits on the base of the prominent treed slope and natural area.

5.2.1 THE MAIN STREET

The main street is a complete street integrating slow moving vehicles entering and exiting the neighbourhood, cyclists, and pedestrians. Wide sidewalks, street tree planters, decorative lighting, enhanced pavement treatments, and pedestrian and cyclist-oriented furnishings allow for an active village street scene. Fronting buildings activate the street through clear glazing, awnings, pedestrian level signage, and clear connections to building entries either directly to the sidewalk, at corners, and/or sidewalk connections to interior entries. Several outdoor public spaces also interface the street providing gathering, outdoor dining, and programmed event opportunities. A key gateway to the neighbourhood, community identity and directional signage also integrates with the main street. Pedestrian crosswalks enhance crossings to the other side of street and to the gateway park to the south.





5.2.2 THE EAST COMMERCIAL BLOCK

The commercial block to the east of the main street is focused on neighbourhood service commercial. A gas station and convenience store are tucked away from the main street, allowing a range of community shops that face both interior parking and public spaces to interface with the main street. Rather than large format commercial buildings with a strip-commercial character, the massing seeks to break large buildings into smaller increments both at the roof and at the base. A range of unique shopfronts, gabled and parapet roofs, smaller façade widths, awnings, and unique signage deliver a "village character" reminiscent of Okotoks's Elizabeth Street. And like Elizabeth Street, while buildings are generally 1–2 stories, taller floorplates and parapets provide for a clear "street wall" and sense of enclosure. This block also interfaces with the storm pond and park to the east, with interior buildings that can interface with the pond and pathways with active facades and patios. Interior parking areas will bring in elements of the Main Street character with trees, decorative lighting, unique pavement treatments and other elements. Clear sidewalks and pathways ensure pedestrian permeability and safe access around and through the block.

5.2.3 THE WEST COMMERCIAL BLOCK

With community services met on the East Block, the West Block has been identified for more innovation and different uses. Potential office, mixed office and retail, and unique employment opportunities will be explored. Multi-story buildings will be explored to increase activity and provide a stronger street wall. As future uses are considered, mixed residential over retail will remain an option, and the potential will be explored in response to changing market demands. Massing, building interface, parking lot treatments, and building materials will be consistent with the east commercial block.

5.2.4 GATEWAY PARK

Terminating the main street and at the base of the treed slope is a large multi-use green intended for passive and active use. An open air multi-use structure is positioned to serve as a performance venue facing onto a large flat lawn and as a view terminating element from main street. The lawn is suitable for events and passive recreation. Shade trees along perimeter sidewalks form the boundary, along with active frontages of multifamily units that help shape the square - creating a strong sense of enclosure with the treed slope as a backdrop. Sidewalks bound the edges of the square and include furnishings, lighting, and signage. Direct connections to fronting residential units will be considered with adjacent development. The square serves as both a gateway to the main street, and a gateway to the pathways of the natural areas leading through and to the top of the slope. This is a primary connection for residents on the upper bench of the slope (viewpoint park).

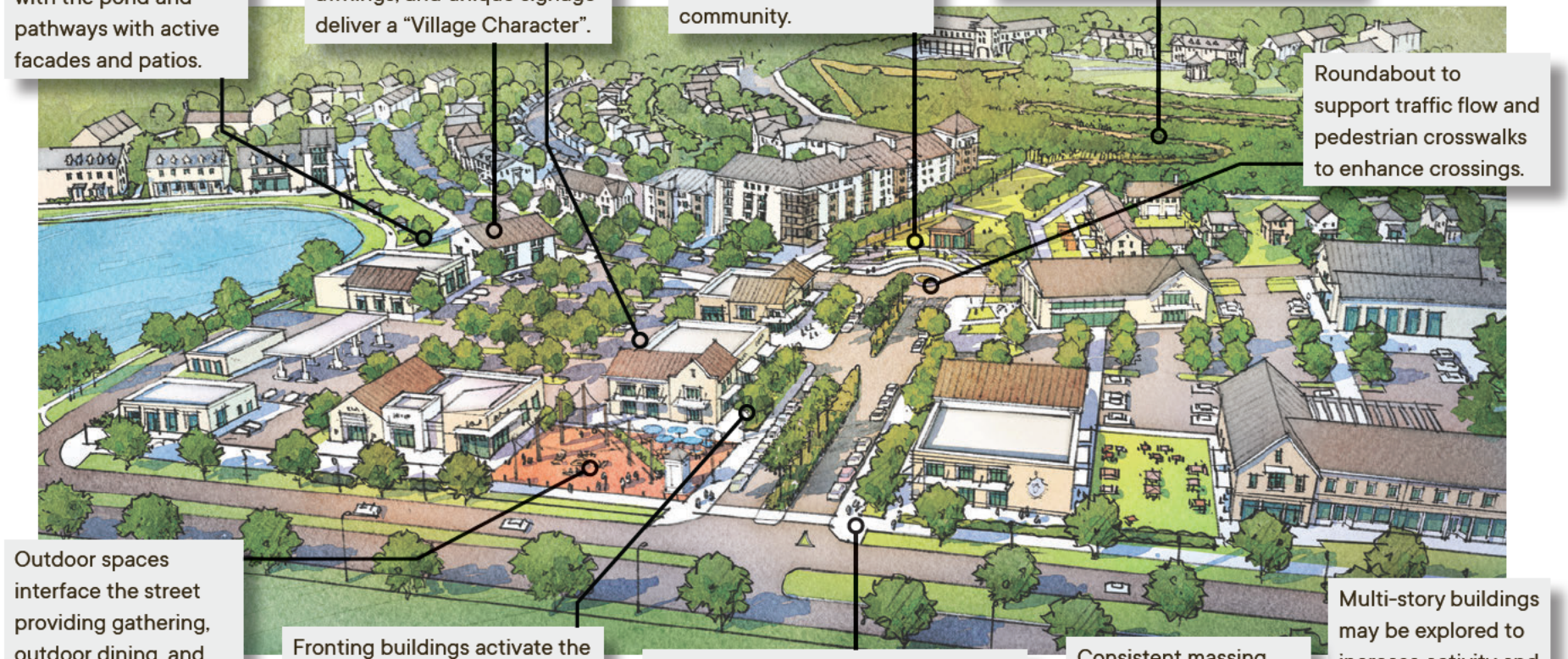
To build character and wayfinding, the trajectory of the main street toward the gateway park forms an important viewshed, linking the base of the hill to the viewpoint park at the hilltop. From main street to gateway park, to viewpoint park, a series of public spaces form an important spine through the neighbourhood. Along the way, several vertical elements add to the terminated view including the gateway park performance pavilion, a potential tower element at the far corner of the multifamily building, and elements of the park at the top of the hill. This spine also continues further on the hilltop with a distinct connection to the school site, providing another key viewshed from southwest to northeast.

5.2.5 SIGNAGE

Signage within the village centre is important for businesses to make their services known, but is also a contributing factor to the overall character of the area. Signage should reflect the character of Tillotson and be of an appropriate scale to reinforce it's identity as a neighbourhood scale village centre. Some signage design guidelines for reference at the detailed design stage are as follows:

- To support the village feel, signs should be located at the pedestrian scale.
- Signage should accompany building entrances along the entrance main street.
- Multiple-tenant buildings and complexes should develop a master sign program to minimize the potential visual conflicts and competition among tenant signage, while ensuring adequate identification for tenants to accommodate their corporate logo and colours.
- Building signs should be located within an area of the facade that enhances and complements the architectural design.
- Signs should not be permitted on top of any roofs, and no sign attached to a wall or eave should project above the eave line of the building.
- Singage should be sensitive to the architecture of the building and should be integrated into the project from the facade of the building or through the use of canopies.

FIGURE 24: CONCEPTUAL VILLAGE CENTRE ILLUSTRATION



*This illustration is conceptual and may be subject to change

5.2.6 COMMERCIAL DESIGN GUIDELINES

All commercial buildings and uses are intended to convey a sense of a small-town village, integrating into surrounding public spaces and with adjacent residential, and balancing safe pedestrian, cycling, and vehicular movements. A pedestrian friendly "Village Character" will be achieved by:

- Street and parking lot design that provide safe pedestrian pathways and slow vehicular speeds.
- Electric vehicle charging stations should be incorporated into the site design.
- In accordance with Municipal Development Plan policy, drive-thrus are prohibited.
- Wide sidewalks, street tree planters, decorative lighting, enhanced pavement treatments, and pedestrian and cyclist-oriented furnishings along the main street allow for an active village street scene.
- Building interfaces that support an active, well-conceived main street environment. Stores may provide access and shopfronts on any side of the building, but must provide an active interface through clear glazing, access doors, high quality shopfronts, outdoor dining opportunities, and appropriate landscaping. Large expanses of blank walls are discouraged along the main street.
- Commercial buildings design that integrate stylistically with the surrounding residential buildings and overall community theme.
- Consistent massing, building interface, parking lot treatments, and building materials between the two sites. Multi-story buildings may be explored to increase activity and provide a stronger street wall.
- Screening of all service areas, and rooftop mechanical equipment from view of the main street sidewalk and surrounding streets.
- Providing massing and character appropriate to a “village scale” that compliments adjacent residential. This is achieved through:
  - Providing a well composed mix of parapet walls, gables, and hip roofs.
  - Breaking large facades into smaller masses and individual shopfronts where there are multiple stores.
  - Visually breaking down large building masses through rooflines, facades, and wall articulation.
  - Utilizing tall floor plates along with the use of transom and clearstory windows.
- Utilizing similar materials and material applications as found in traditional main streets including:
  - Solid base and foundation materials such as concrete and stone.
  - Large open shopfronts with clear glass.
  - Awnings providing shade and decorative elements.
  - Pedestrian level lighting and signage.
  - Enhanced metal and/or decorative, unique shopfronts.
  - Use of Brick, stucco, composite siding materials, limiting the number of materials on individual facades.

5.3 RESIDENTIAL NEIGHBOURHOOD

The residential development in Tillotson is comprised of a variety of housing types varying the density throughout the community. The design and character of these homes will contribute to the overall community character, and to ensure cohesion and high quality design the following sections provide some design guidance.

5.3.1 HIGH DENSITY MULTIFAMILY DESIGN GUIDELINES

Multifamily development is intended to integrate with their residential and/or commercial context and support a “village” character. This is achieved by:

- Using of a range of gable and hip roof styles.
- Breaking long, contiguous facades and rooflines into small masses.
- Providing direct access to sidewalks for ground floor units and lobbies through stoops, porches, and shopfronts (for large multifamily lobbies).
- Providing solid base and foundation materials such as stone, masonry, and concrete.
- Utilizing upper story cladding materials reflective of the residential design guidelines and limiting the number of materials used.
- Utilizing best practices in traditional window trim including appropriate headers.
- Utilizing vertical proportioning in massing and windows.
- Avoiding upper story stone and masonry unless supported by same below. All openings should have appropriate header materials that visually appear to support the stone or masonry load

5.3.2 LOW AND MEDIUM DENSITY DESIGN GUIDELINES

Low and medium density housing within Tillotson will include a range of housing types including single detached residential, duplexes, semi-detached, row houses, and secondary suites, with a mix of front drive or rear lane access. To promote an attractive and pedestrian-friendly streetscape, front-drive access is prohibited to residential units fronting collector streets, parks and multi-family developments as identified by the hatched "Front Drive Product Not Permitted" areas on **Figure 6: NASP Land Use Concept**. In addition, front-drive access to residential units with lane access is discouraged.

As identified in the Architectural Controls, housing in Tillotson will maintain a strong connection to traditional styles by presenting streetscapes utilizing strong traditional forms borrowed from the popular architectural styles – Prairie, Craftsman, Urban and Farmhouse and develop a progressive persona through the inclusion of Classic and Modern exteriors. The community will enhance the southwest quadrant of the Town of Okotoks with new takes on traditional architectural styles. This variety in styles will provide housing for a variety of personal preferences while allowing for a variability in the streetscape that provides visual interest reminicent of small towns. Builders and designers are to choose home designs based on the grading and site topography in order to take full advantage of views, maximize lot space and minimize retaining walls.

Additional details are provided in the Architectural Controls attached to this NASP under separate cover.

CONCEPTUAL ILLUSTRATION OF WESTLAND STREET STREETSCAPE



E2 + Associates

5.3.3 WESTLAND STREET INTERFACE

Tillotson is directly adjacent to the existing community of Westridge. The development concept has been designed to thoughfully integrate with the existing community through strategic road closures along Westland Street, the provision of park spaces and connections to the regional pathway network. The eastern edge of Tillotson will support a row of single family housing directly across from existing single-family homes, fronting onto Westland Street. Due to grading and servicing constraints within the Tillotson plan area, the provision of lane access housing is not feasible.

In order to support a cohesive streetscape the single family front-drive housing fronting onto Westland street should be designed to match the scale and form of existing housing on the east side of the street as best as possible. This can be achieved by:

- Using of a range roof styles that match the exising housing on the east side of the street.
- Using similar materials or appearance of materials as the exising housing on the east side of the street.
- Using similar colour palatte as the exising housing on the east side of the street.
- Distributing driveway locations to allow street parking on the west side of the street as much as possible.
- Minimizing the size and appearance of size of front garages.
- Matching some landscape features as the existing lots on the east side of the street.

5.4 ARCHITECTURAL CONTROLS

Architectural Guidelines have been prepared by e2 + associates for Tillotson and have been provided under separate cover in support of the NASP.

The Architectural Guidelines have been prepared to promote a high level of architectural detail, ensure a pleasing building form, and promote an awareness of environmental sustainability. Builders and designers will use the Architectural Guidelines as a guide when planning homes and commercial buildings throughout the community. The Guidelines propose a blend of classic and modern renditions of known architectural themes including Prairie, Craftsman, Urban and Farmhouse to provide future residents with choice and variety while providing the community with diversity.

The Architectural Guidelines refer to single and multi-family residential as well as commercial buildings and landscaping throughout Tillotson. The Architectural Guidelines will be registered against all lots at the time of subdivision. If there is a conflict between the architectural guidelines and Town standards, then the Town standards will prevail.



5.5 PUBLIC REALM

The community character of Tillotson will be realized not only in the built commercial and residential housing forms, but in the more subtle public realm features throughout the community. The public realm is the space between buildings and the streets. It is a transitional space that is woven throughout the community. The public realm consists of features such as sidewalks or pathways, lighting, signage, landscaping, garbage receptacles, seating, parks and public art. The high level framework for the public realm is identified in the NASP, with specific design details confirmed at detailed design. To support the development of an attractive and identifiable public realm in Tillotson the following guidelines should be referred to at the detailed design stage:

- Street trees and native vegetation should be used to unify the public realm and provide definition to edges along major street corridors and in parks.
- Landmarks of various sizes and forms should be located at major gathering places and terminating viewpoints to support community identity and provide visual interest.
- Buildings adjacent to the public realm and parks spaces should be oriented to those spaces as much as possible to frame the space and reinforce their use.
- Infrastructure features throughout the public realm such as fencing, lighting, and street furniture should be of a consistent aesthetic throughout the community to contribute to a distinct sense of place. Specific designs for these features will be identified at the detailed design stage.
- Distinct signage and wayfinding should be identified at the detailed design stage to to help reinforce the character of Tillotson as well as aiding visitors navigate its various amenities.

5.6 DESIGNING GREAT NEIGHBOURHOODS

The Tillotson NASP has been designed to achieve the following outcomes articulated in section 2.1.1.b) of the Municipal Development Plan:

Neighbourhoods are compact and mixed use: Tillotson has been designed in a compact form around an extensive natural open space network. Tillotson plans for a variety of residential housing types and densities distributed throughout the plan area integrated with diverse parks and open space and a central village centre. This distribution of housing and built and natural amenity spaces ensures that all residents are within walking distance of one of the many destinations within Tillotson.

Neighbourhoods are inclusive: Tillotson is planned for a wide variety of housing including single family detached, semi-detached, row housing and low to mid rise multi-family developments. This diversity of housing is strategically distributed across the plan area to provide a variety of opportunities for many demographics and lifestyles.

Neighbourhood amenities and facilities support the social, cultural, and recreational needs of residents: Tillotson includes a unique village centre, a large natural area, a joint use school site and a variety of neighbourhood scale parks distributed throughout the plan area. The park, social and amenity distribution and integration with the local and regional pathway networks ensure these destinations are accessible to all community residents.

Neighbourhoods are connected: The Tillotson road network has been designed in a warped grid around the central park with a mix of complete street sections. Two road connections, with associated pedestrian infrastructure, have been provided off each edge of the plan area to existing and future development areas. The road network is complemented by an interconnected on and off-street pathway network in the form of sidewalks and local and regional pathways. These pedestrian, cyclist and mobility device options allow for active connections between housing and community amenities.

Neighbourhoods embrace all seasons: Many of the park spaces have been designed to support year-round use with flexible programming and associated infrastructure such as seating, lighting, and wayfinding. The regional pathways have also been designed with connectivity that facilitates efficient snow clearing.

Neighbourhood Health Equity: Many components of Tillotson have been designed to support the health and happiness of future residents. These include features such as the provision of a diversity of housing, the preservation of a large natural area, the inclusion of street and park landscaping, the active transportation network and the diverse village centre supporting daily service and social needs.

Neighbourhoods are innovative, flexible and adaptable: The Tillotson NASP describes a unique village centre which could support a variety of commercial and retail uses in response to market demand. In addition, there are a variety of multi-family sites throughout the plan area that could support a range of densities in response to market demand. Finally, the provision of a significant amount of laned housing product throughout the plan area allows opportunities for the addition of accessory dwelling units.

5.7 URBAN DESIGN POLICIES

SECTION 5.0 | URBAN DESIGN POLICIES	
5.1	Key gateways, entrance points and viewsheds as identified on Figure 14 should provide enhanced signage, landscaping, architecture, or public art. Neighbourhood identification signage or features should be located on private property; however, if these features are located on public property they will be subject to the Town's Optional Amenities Agreement.
5.2	Buildings, streetscapes and public realm features should be designed to enhance key gateways, entrance points and viewsheds as identified on Figure 14.
5.3	The main street into Tillotson between the Neighbourhood Hub sites should be designed as an attractive pedestrian scaled main street with features such as wide sidewalks, street tree planters, decorative lighting, enhanced pavement treatments, enhanced crosswalks and pedestrian and cyclist-oriented furnishing.
5.4	All buildings fronting onto the main commercial entranceway should have direct access to the public street.
5.5	Buildings within both Neighbourhood Hub sites should be oriented towards the entrance main street and have features that enhance the community character and pedestrian experience such as clear glazing, awnings, pedestrian level signage, and clear connections to building entries either directly to the sidewalk, at corners, and/or sidewalk connections to interior entries.
5.6	The architectural character of the neighbourhood bub should be consistent between the east and west sites with a distinct sense of place. The architectural character should also be cohesive with the surrounding residential development and park infrastructure.
5.7	The neighbourhood hub should be designed with a variety of buildings sizes and orientations to facilitate a mix of uses and flexibility of users over time.
5.8	Massing within the Neighbourhood Hub should seek to break large buildings into smaller increments both at the roof and at the base.
5.9	An outdoor amenity space must be provided within the Neighbourhood Hub to provide a place for outdoor gathering, socialization or seasonal patios.
5.10	Buildings within the neighbourhood hub should be oriented around the perimeter of the sites to promote walkability and pedestrian scale development. All buildings should have clearly identified entry points, from either the interior of the site or both the interior and exterior.
5.11	Parking within the Neighbourhood Hub should be located on the interior of the site or otherwise screened with landscaping.
5.12	The Neighbourhood Hub should be designed to present an attractive and pedestrian scale interface to all adjacent streets, parks and residential uses.
5.13	To ensure high quality urban design and appropriate integration with the surrounding uses, the Neighbourhood Hub should be designed in accordance with Section 5.2 of the Tillotson NASP, the Conceptual Village Centre Illustration in Figure 24, and the Architectural Guidelines. Consideration should be given to contextually appropriate treatment of landscaping, lighting, waste management facilities, loading and unloading areas and signage.

5.14	Signage within the Neighbourhood Hub should be designed and located in accordance with the signage guidelines in Section 5.2 and should be of a consistent theme, pedestrian in scale, and to prevent sign clutter.
5.15	Development adjacent to the stormwater management facility will be designed to facilitate an attractive pedestrian interface and active pedestrian frontages
5.16	Architectural guidelines will be registered at the time of subdivision.
5.17	Comprehensively planned high density sites should be designed to present an attractive and pedestrian scale interface to the street, especially along collector roads.
5.18	Comprehensively planned high density sites should visually screen parking areas by locating them interior to the site or screening with landscaping.
5.19	To ensure high quality urban design and appropriate integration with the neighbourhood, multi-family sites should be designed in accordance with Section 5.3 of the Tillotson NASP and the Architectural Guidelines.
5.20	Development adjacent to existing communities should be designed to facilitate sensitive transitions and compatible interfaces.
5.21	The interface area adjacent to Westland Street should consist of single or semi-detached dwellings that are similar in form and scale to existing houses that front towards Westland Street. Similar landscaping features should be considered.

SECTION 6.0

Mobility

6.1 REGIONAL ROAD NETWORK

The Tillotson plan area is bounded on the north by Big Rock Trail, to the east by Westland Street and to the south and west by future development lands within the West Okotoks Area Structure Plan. Big Rock Trail will be the primary entrance to the community and connection to the regional road network. Westland street will be closed in multiple sections to support expansion of the Okotoks cemetery and discourage cut-through traffic to Southridge Drive (Hwy 2A) through the community of Westridge. A secondary connection to Westland Street will be maintained in the southeast corner of the plan area.

Big Rock Trail adjacent to the plan area is currently a two-lane collector road designed to rural standards, and east of the plan area until Highway 2A as an urban primary collector. Big Rock Trail between Southridge Drive and Township Road 203A is the subject of a Functional Transportation Study to identify the most appropriate design and phasing of upgrades to accommodate growth. Due to the future expansion of Big Rock Trail a strip of land along the northern boundary of Tillotson will be provided to accommodate road widening.

As demonstrated in **Figure 25: Regional Road Network**, the subject lands have convenient access to the regional road network via Big Rock Trail with a secondary connection via Westland Street to the South Additional connections will be made to the regional road network as West Okotoks continues to develop.

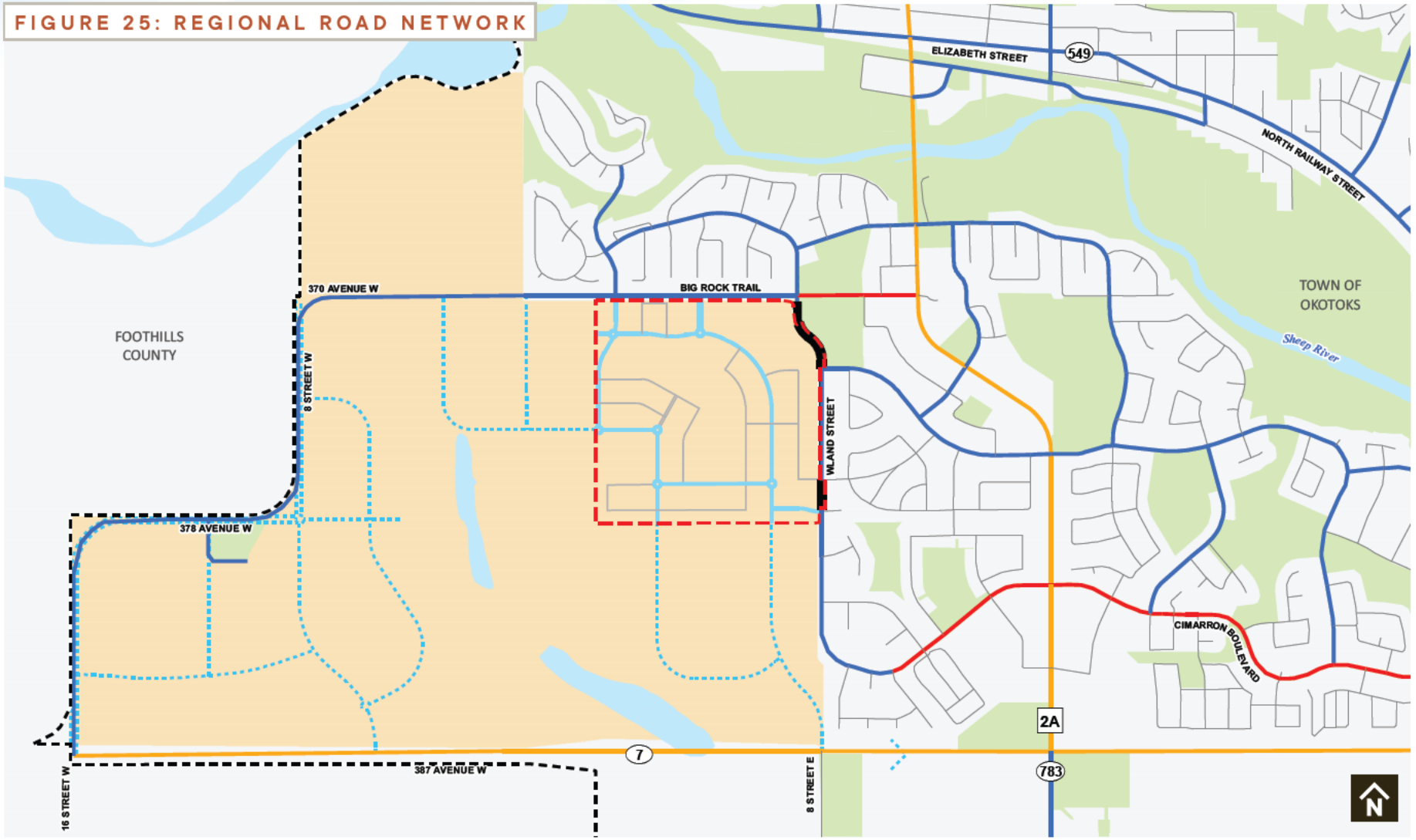








FIGURE 25: REGIONAL ROAD NETWORK



6.1.1 BIG ROCK TRAIL FUNCTIONAL TRANSPORTATION STUDY

The Big Rock Trail Functional Transportation Study is being undertaken as an independent study by Watt Consulting Group in consideration of the Tillotson NASP. The Study will identify the most appropriate design and phasing of upgrades of Big Rock Trail to accommodate growth. The study area spans between Southridge Drive and Township Road 203A, including the section directly north of the Tillotson plan area.

Based on preliminary outcomes of this Study and the analysis of several different section designs with varying right-of-way widths, Tillotson has been designed to accommodate a 36.0m road right-of-way, as illustrated in **Figure 26: Big Rock Trail Arterial Section (36.0m)**. The section illustrated represents an ultimate design which may be phased in over time. As identified in **Figure 6: NASP Land Use Concept**, the 36.0m right-of-way will be accommodated with the dedication of a 5.8m wide (0.4 ha / 1.00 ac) strip of land along the north edge of the plan area to support widening of the road right-of-way. If the Big Rock Trail Functional Transportation Study identifies that a different right-of-way width is required then the plan area and the adjacent land uses, roads and infrastructure locations will be adjusted accordingly at the subdivision stage, but will not require update to the NASP.

In addition to the right-of-way width, the Big Rock Trail Functional Transportation Study will compare and identify appropriate intersection treatments. This includes consideration of both traditional stop-sign / light controlled intersections, as well as one and two lane roundabouts. All figures throughout this NASP illustrate traditional stop sign / light controlled intersections along Big Rock Trail. If the Big Rock Trail Functional Transportation Study identifies that alternate intersection treatments are required, then the plan area and the adjacent land uses, roads and infrastructure locations will be adjusted accordingly at the subdivision stage, but will not require update to the NASP

The Big Rock Trail Functional Transportation Study will ultimately identify the final right-of-way requirements, the preliminary roadway design, intersection treatments, noise modeling and attenuation requirements (if required) and the phasing and timing of the identified improvements. A preliminary 36.0m section for Big Rock Trail has been identified in **Figure 26: Big Rock Trail Arterial Section (36.0m)**, but may be subject to change based on the final outcomes of the Study.

FIGURE 26: BIG ROCK TRAIL ARTERIAL SECTION (36.0M)

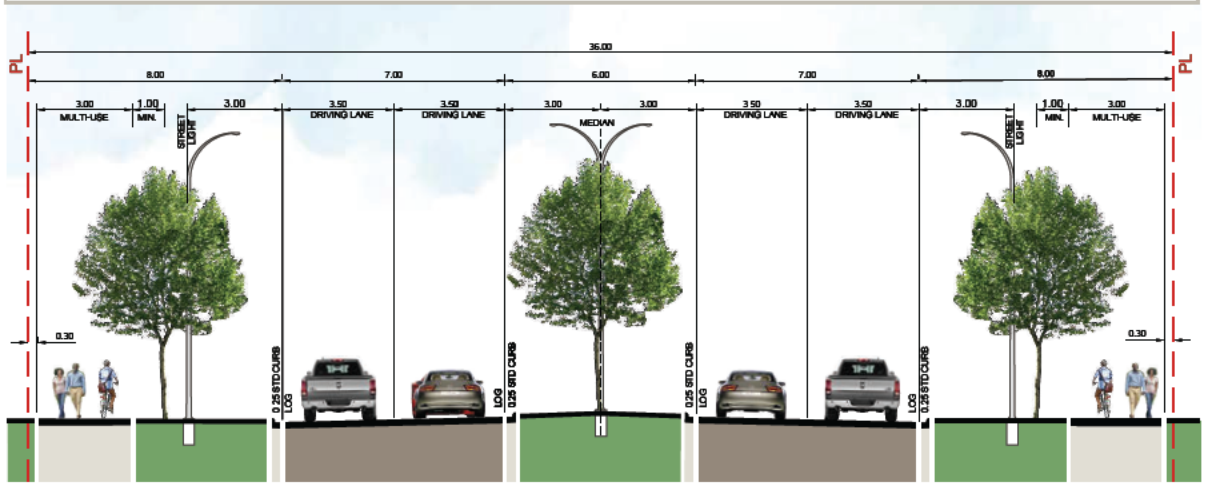
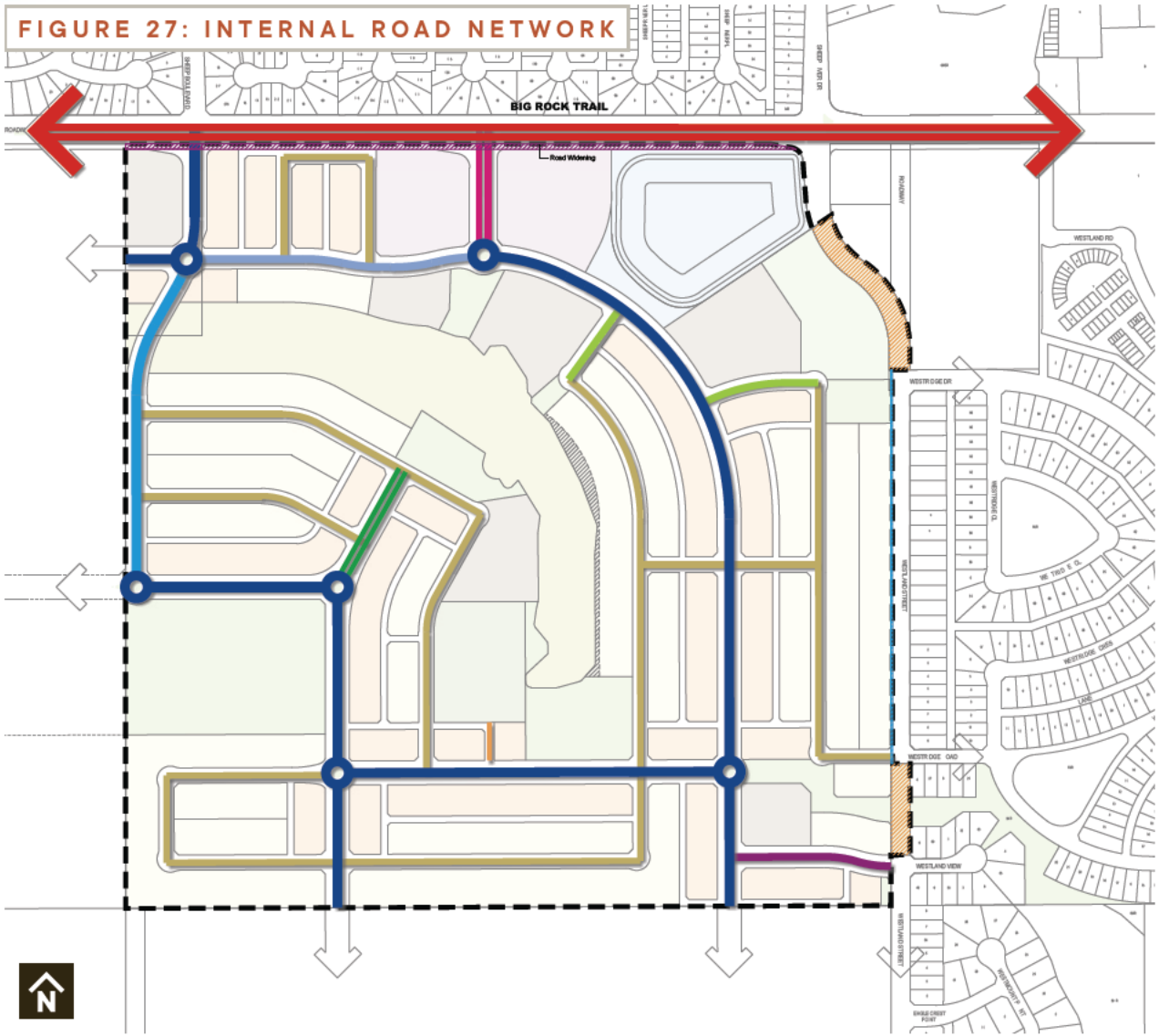


FIGURE 27: INTERNAL ROAD NETWORK



- Subject Lands
- Road Closure Areas
- Big Rock Trail Road Widening
- Westland Street Road Narrowing
- Roundabout
- Big Rock Trail Arterial Road - 36.0m
- Modified Entrance/Commercial Collector - 29.0m
- Standard Collector Road - 25.2m
- Modified Collector Road - 23.2m
- Standard Collector Road - 22.5m
- Standard Collector Road - 22.0m
- Modified Residential Entrance Road 26.5m
- Modified Residential Road 18.6m
- Standard Residential Road 16.0m
- Lanes 10.0m wide

**Other Lanes are 7.0m wide*

6.2 INTERNAL ROAD NETWORK

The Tillotson internal road network has been designed to provide safe and convenient access throughout the community for all modes of transportation. The network is structured as a warped grid around the central Environmental Reserve, finding a balance between the preservation of the natural landscape with efficient connectivity. The road network includes several on street pathway options and is connected through the parks and open space network with additional off-street local and regional pathways.

The internal road network, illustrated in **Figure 27: Internal Road Network** is comprised of eight (8) different road sections that are in alignment with or slightly modified from the Town of Okotoks Complete Streets Guidelines:

- Modified Commercial Collector (29.0m) **(Figure 28)**
- Standard Collector Road (25.2m) **(Figure 29)**
- Modified Collector Road (23.2m) **(Figure 30)**
- Standard Collector Road (22.5m) **(Figure 31)**
- Standard Collector Road (22.0m) **(Figure 32)**
- Modified Residential Entrance Road (26.5m) **(Figure 33)**
- Modified Residential Road (18.6m) **(Figure 34)**
- Residential Road (16.0m) **(Figure 35)**

The internal collector roads mirror the orientation of the central environmental reserve and park spaces and provide multiple connections to surrounding communities and the regional road network. This collector loop supports not only day-to-day use but the possible implementation of an efficient transit loop through the community with stops adjacent to high density nodes and community destinations. The local road network branches off from the collector roads and is comprised of residential roads with some modifications to frame unique viewsheds or improve regional pathway connectivity. The on-street regional pathway network has been oriented to efficiently connect to the off-street regional pathway network located within the parks and open spaces, facilitating uninterrupted pedestrian, cycling and scooter access. This extension of the pathway network is in alignment with the Municipal Development Plan policy to prioritize people and sustainable modes of transportation.

Green streets objectives will be achieved in Tillotson through the inclusion of street trees along all collector and entrance roads, enhancing the urban forest and supporting attractive streetscapes. In addition, the extensive on and off street pathway network helps encourage active modes of transportation.

Tillotson is well connected to the surrounding areas with two road connections to Big Rock Trail to the north, two connections to Westland Street to the east, and two connections each to the future communities to the south and west. These road connections all include adjacent pathways or sidewalks for pedestrian access with three additional active only connections to the open space network: between of Westridge Road and Westland View, to Westridge Drive and to the northeast towards Sheep River Drive adjacent to the storm pond.

6.2.1 ROAD CLOSURES

In alignment with the West Okotoks Area Structure Plan, and identified in **Figure 27: Internal Road Network**, Westland Street adjacent to the plan area will be closed in two sections. The northern section will support expansion of the Okotoks Cemetery with a closure north of Westridge Drive. The northernmost section of Westland Street has been excluded from the plan area to maintain cemetry and storm pond access from Big Rock Trail. The southern section between Westridge Road and Westland View will accommodate park space and facilitate expansion of the open space and regional pathway network from the existing Westridge community. Both these closures are intended to limit cut-through traffic to and from Southridge Drive through existing communities. The road closure process will be undertaken in accordance with the provisions of the Municipal Government Act.

6.2.2 TRANSPORTATION IMPACT ASSESSMENT

In support of the Tillotson NASP a Transportation Impact Assessment (TIA) was undertaken by WATT Consulting Group and has been included as part of the NASP submission under separate cover. The TIA report provides a detailed assessment of the proposed development and the potential impacts on the surrounding transportation network.

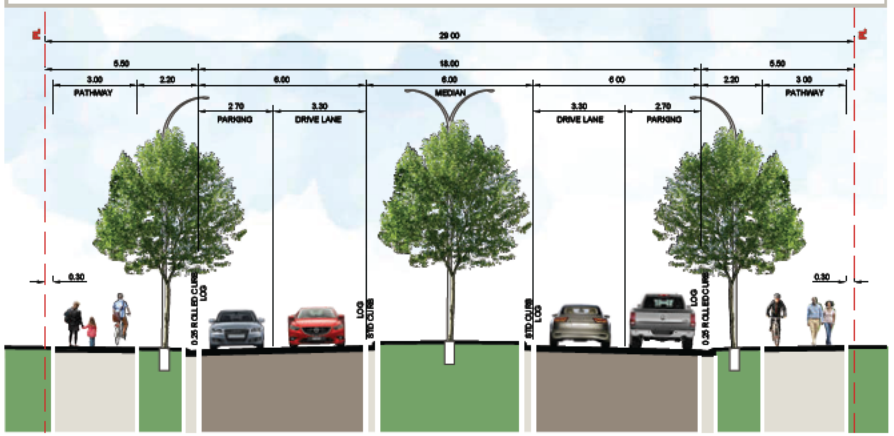
Key conclusions and recommendations of the TIA are as follows:

- All study intersections at the 2045 horizon are expected to operate at acceptable levels with the exception of the intersections at Southridge Drive / Big Rock Trail and Southridge Drive / Westland Street, east of the plan area.
- According to the analysis results all study intersections will operate an acceptable levels at the 2045 horizon under either signalized or roundabout intersection control (except for the above noted intersections).
- The analysis conducted as part of the TIA indicated that although most traffic is expected to use Big Rock Trail, there is a desire line for some drivers to use Westland Street to access Southridge Drive and communities east of Tillotson.
- To address the potential increase in traffic within the Westridge and Westmount communities, traffic calming measures should be considered. A new connection to Highway 7 from West Okotoks should shift the desire lines for some of these trips, thereby reducing the traffic volumes along Westland Street.
- Existing and proposed active transportation infrastructure and transit will provide adequate accommodation for the Tillotson

community and will encourage the use of active transportation for local trips.

- A traffic monitoring program should be initiated, once connections are made between Tillotson and the existing communities, at key locations to provide up-to-date information on operational conditions throughout the development progression to ensure that the required improvements are introduced in a timely fashion.
- To support Tillotson and other planned neighbourhoods in West Okotoks, the following transportation network improvements are recommended by the year 2045:
  - Upgrade Big Rock Trail to a four-lane urban arterial roadway (this could be staged as a two-lane arterial road as development proceeds).
  - The following intersections should either be signalized or upgraded to two-lane roundabouts based on findings from the Big Rock Trail Functional Study: Big Rock Trail and Sheep River Drive / Tillotson Main Commercial Access / Sheep River Boulevard.
  - Provide traffic calming measures as required in the Westridge and Westmount communities.
- The above transportation infrastructure improvements can be staged as development proceeds in Tillotson as well as other areas of West Okotoks. The staging of Big Rock Trail as an urban two-lane roadway through West Okotoks will be reviewed as part of the Big Rock Trail Functional Study that is currently underway.

FIGURE 28: MODIFIED COMMERCIAL COLLECTOR SECTION (29.0M)



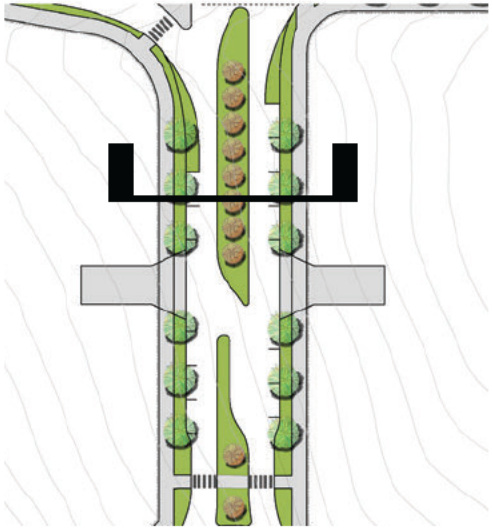


FIGURE 29: STANDARD COLLECTOR ROAD SECTION (25.2M)

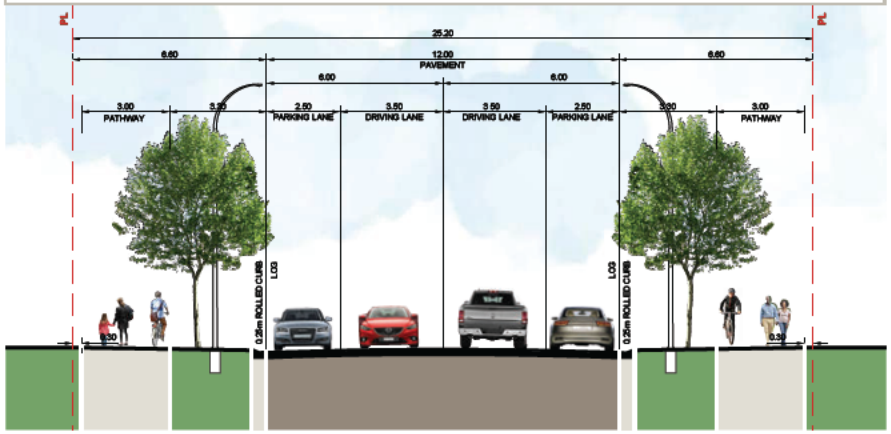
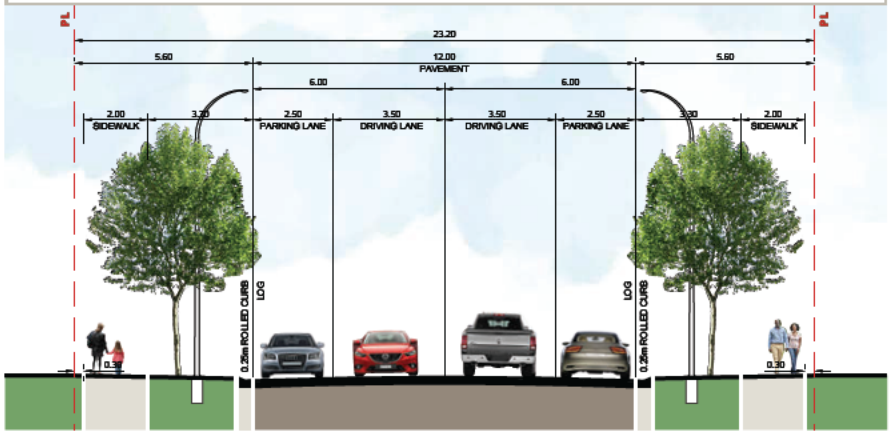


FIGURE 30: MODIFIED COLLECTOR ROAD SECTION (23.2M)



**Sidewalk widths reduced from 3.0m to 2.0m.*

FIGURE 31: STANDARD COLLECTOR ROAD SECTION (22.5M)

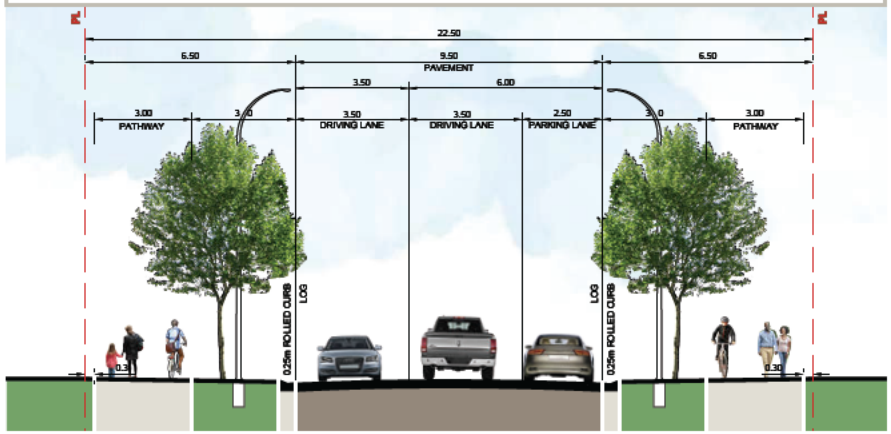


FIGURE 32: STANDARD COLLECTOR ROAD SECTION (22.0M)

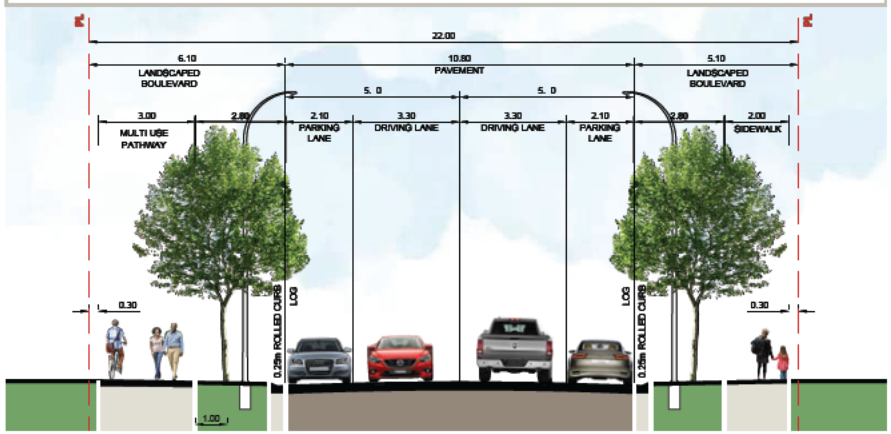
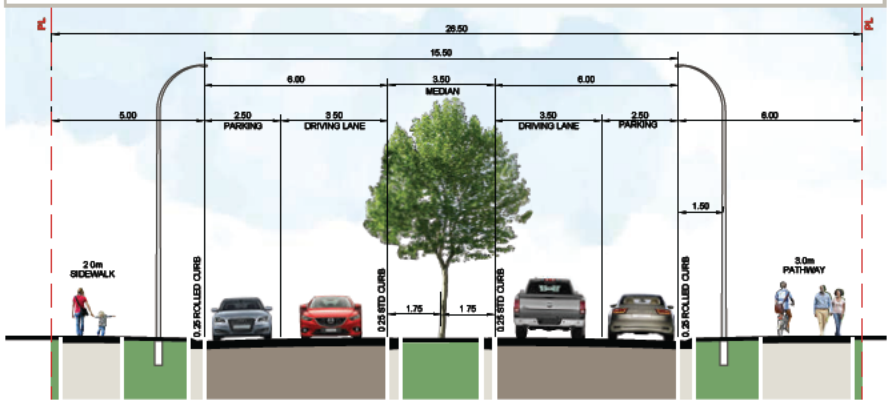


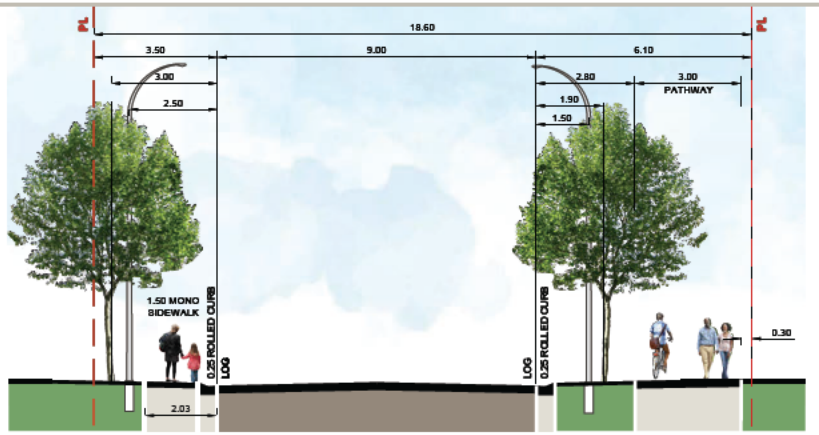
FIGURE 33: MODIFIED RESIDENTIAL ENTRANCE ROAD SECTION (26.5)



*Sidewalk widened on one side to 3.0m regional pathway.

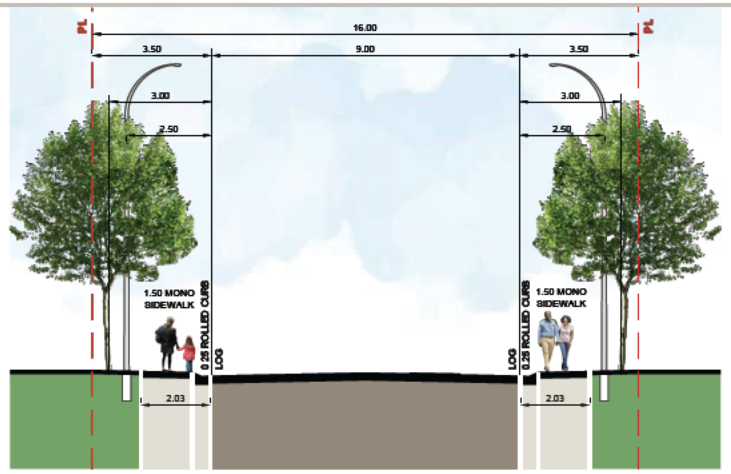


FIGURE 34: MODIFIED RESIDENTIAL ROAD SECTION (18.6M)



*3.0m regional pathway added to one side of standard 16.0m residential road section.

FIGURE 35: STANDARD RESIDENTIAL ROAD SECTION (16.0M)



6.3 ACTIVE TRANSPORTATION NETWORK

Tillotson facilitates and encourages active transportation through the inclusion of an interconnected on street and off-street sidewalk and pathway system throughout the community. In addition to the inclusion of sidewalks along all streets, most collector roads include a separated 3.0m regional pathway, and 1.5 to 4.0m pathways throughout the parks and open space system facilitating connections across the central park and into neighboring communities. Multiple active connections are identified in every direction around Tillotson.

This interconnected pedestrian and cycle network allows residents choice in determining their mode of travel when moving through the plan area. Residents have the ability to walk, run, cycle or roll to various destinations throughout the community whether for recreation, social or business purposes. As demonstrated in **Figure 36: Active Transportation Network**, the pathway network is connected to the village centre and school site and every multi-family site and park providing efficient connections between all amenities.

Urban design elements of the street sections and the distribution of housing across the plan area has also been devised to enhance the pedestrian experience. The sections illustrated in **Figures 28, 29, 30, 31, 32, 33, 34 & 35** demonstrate that all collector and entrance roads will contain street trees, and the pedestrian zone is separated from the road by the vegetated area. This green street element supports residents' safety and connection to nature. The distribution of housing types throughout the plan area will also enhance the pedestrian environment as the majority of the regional pathway is located on streets with rear lane access, to facilitate a safe and continuous path uninterrupted by driveways.

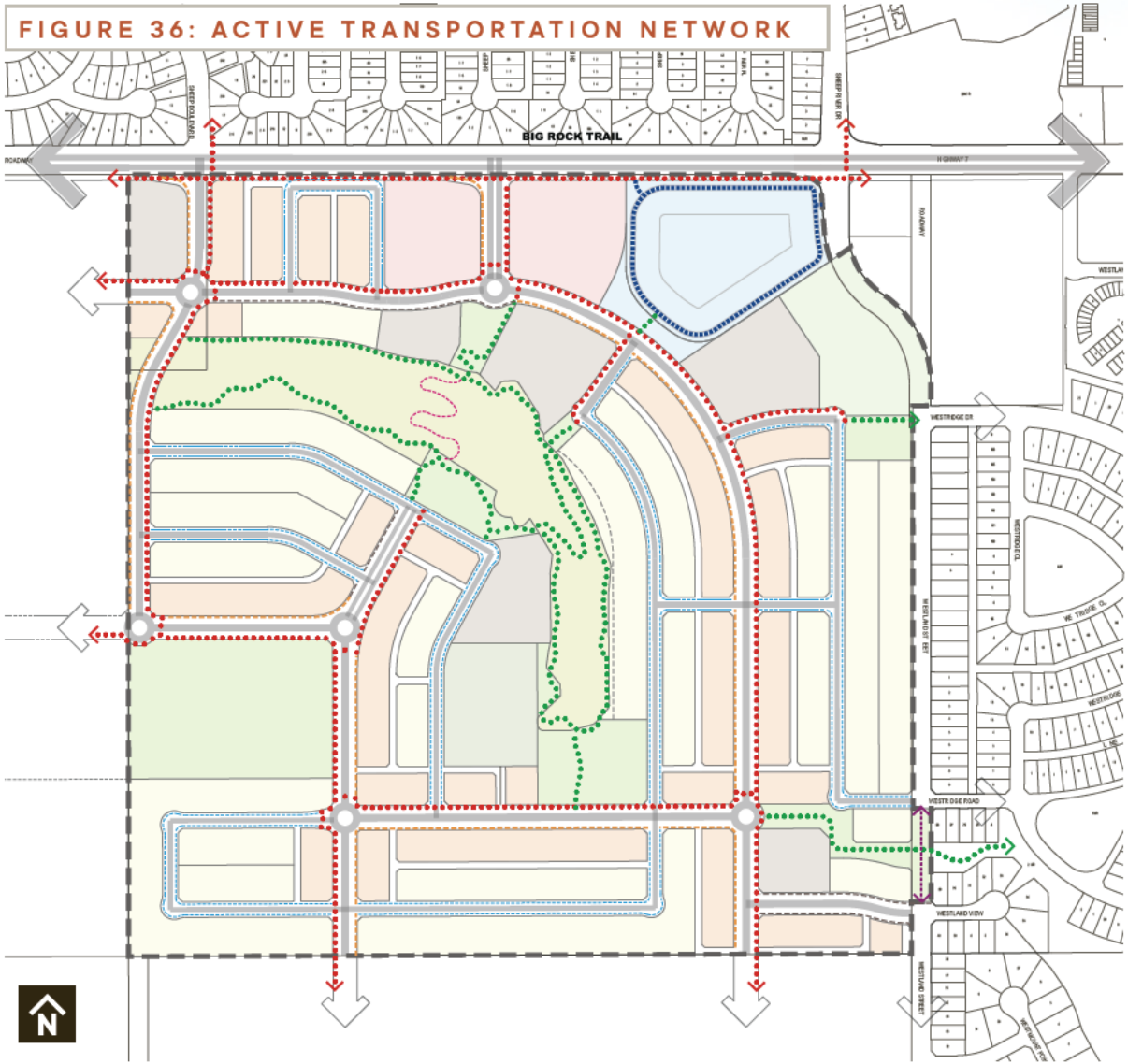
The active transportation network will be supported by pedestrian oriented lighting, clear signage and wayfinding, and dedicated active modes infrastructure at community destinations such as bike racks and storage facilities. In addition, the primary network has been designed for use in all seasons, as the surface, width and continuity of the regional pathway system supports efficient snow clearing.







FIGURE 36: ACTIVE TRANSPORTATION NETWORK



- Subject Lands
- 4.0m Maintenance Access Road & Regional Pathway
- 3.0m Regional On-street Pathway
- 3.0m Regional Off-street Pathway
- 3.0m Local/ Connector On-street Pathway
- 2.5m Local/ Connector Off-street Pathway
- 1.5m Local/ Connector Off-street Pathway
- 2.0m Separate Sidewalk
- 1.5m Mono Sidewalk

6.3.1 SAFE ROUTES

As noted in the Okotoks 2015 Active Transportation Strategy, a Safe Route *"is an established, defined route that is designed to allow children to safely use active transportation to get to major facilities and to get to and from school daily"*. The Tillotson NASP supports the implementation of safe routes throughout the neighbourhood, especially between key destinations. The features addressed that encourage active transportation throughout the community also support the provision of safe routes.

The school site is directly connected to the regional pathway network on two sides which extends through most of the neighbourhood adjacent to the collector road network. This connection allows children throughout the community a defined active route to the school for walking, cycling or rolling.

Street crossings in proximity of the school will implement design features that maximize visibility and increase motorist awareness of crossing areas. These design features may include but are not limited to pavement marking, raised pavement, enhanced signage, and various traffic calming measures.

Safe route features are also encouraged in other areas of the community to provide children safe access to a variety of destinations. For example, the school site and village centre are connected by a variety of pathways through the central natural area to support a direct connection through active modes that could not be achieved for vehicles due to the slope.

6.4 TRANSIT

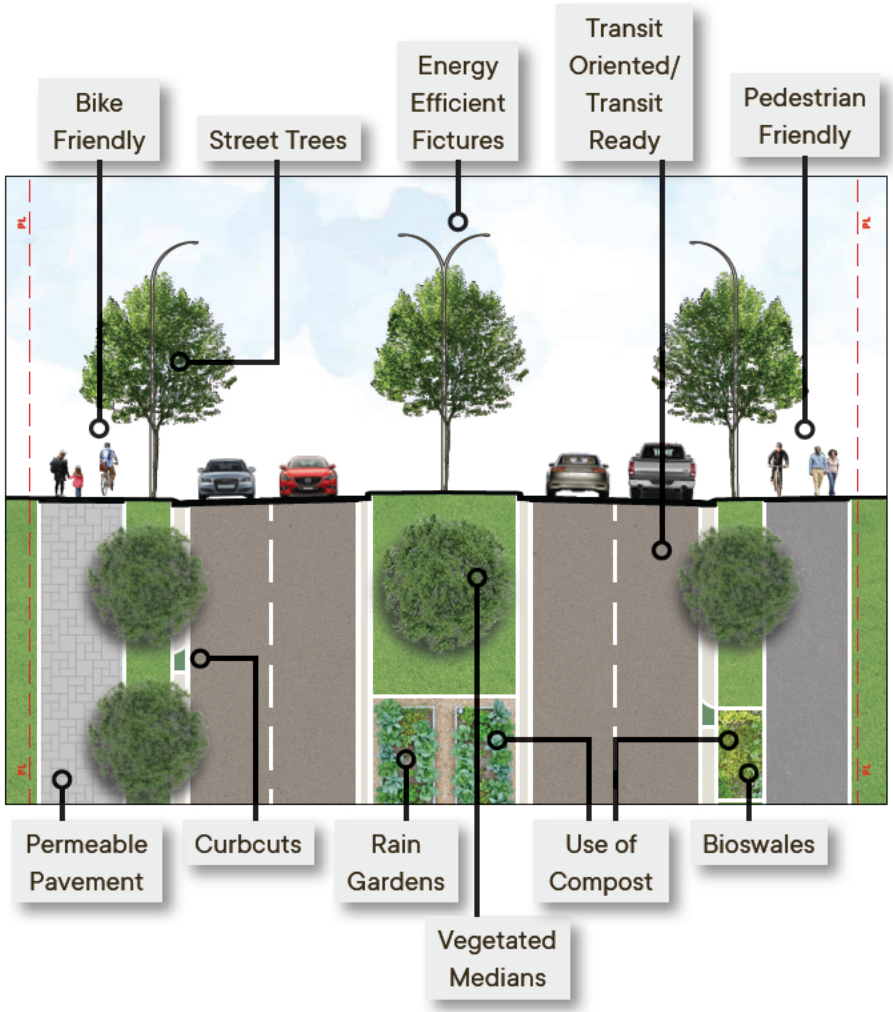
The 2019 Okotoks Local Transit Implementation Plan identified that a public transit system will be implemented in the Town of Okotoks, which is currently operating as an on-demand system. Tillotson will be able to easily accommodate a public transit loop through the community along the collector road network with two connections to Big Rock Trail or connections between Big Rock Trail and Westland Street. Transit stops will be located in close proximity to the multi-family sites and key community destinations such as the village centre and school site.

6.5 GREEN STREETS

Green streets are a stormwater management approach to street design that incorporate vegetation, soil and engineered systems to slow, filter and cleanse storm water runoff from impervious surfaces. They are a natural systems approach to reduce stormwater flow, improve water quality, reduce urban heating, enhance pedestrian safety, reduce carbon footprints and beautify neighbourhoods. Tillotson's internal road network is comprised of eight (8) different road sections that are in alignment with or slightly modified from the Town of Okotoks Complete Streets Guidelines. The street sections must be in alignment with those illustrated in this plan, but additional green street features may be explored in collaboration with the Town of Okotoks at the detailed design stage for specific locations in Tillotson.

6.6 MOBILITY POLICIES

EXAMPLES OF GREEN STREET FEATURES:



SECTION 6.0 | MOBILITY POLICIES	
6.1	Prior to subdivision within the plan area, the Town and landowner must enter into an agreement on the closure and consolidation of lands within the undeveloped road allowance along the western edge of the plan.
6.2	At the time of subdivision an approximately 1.6m strip of land along the west side of Westland Street between Westridge Drive and Westridge Road will be consolidated with the land uses as shown in Figure 6: NASP Land Use Concept, resulting in a narrowing of Westland Street.
6.3	The Big Rock Trail Functional Transportation Plan must be accepted by the Town prior to subdivision.
6.4	The ultimate right-of-way width and the design of intersections along Big Rock Trail will be in alignment with the final recommendations of the Big Rock Trail Functional Transportation Plan.
6.5	Any differences between the figures, text, or statistics in this NASP and the final recommendations of the Big Rock Trail Functional Transportation Plan will not require update to the NASP.
6.6	If the Big Rock Trail Functional Transportation Plan identifies an alternate right-of-way or intersection treatments that result in changes to the adjacent developable areas, the discrepancies will be addressed at the time of subdivision, ensuring that Municipal Reserve is still provided at the required 10%.

6.7	At the time of subdivision a strip of land along the northern edge of the plan area must be provided to accommodate road widening in accordance with the accepted Big Rock Trail Functional Transportation Study.
6.8	At the time of subdivision, the developer will be responsible for the construction of required upgrades and urbanization (pedestrian walkways, removal of overhead power lines, etc.) to Big Rock Trail adjacent to the plan area (on the south side). Urbanization is as generally defined in the Town's Off Site Levy Bylaw. In accordance with the Municipal Government Act, the developer will also be responsible for construction of an urbanized pedestrian connection from the plan area on the south side of Big Rock Trail to Southridge Drive. The Town will determine the required improvements to be completed at each phase of subdivision.
6.9	A noise impact assessment and attenuation study must accompany any residential subdivision and/or development applications adjacent to Big Rock Trail. The installation of any required noise attenuation infrastructure will be the responsibility of the developer.
6.10	The internal road network and pathways must be in general alignment with Figure 27: Internal Road Network and the corresponding cross sections in this plan. Minor adjustments to the internal road network and pathways will not require an amendment to this plan provided adequate connectivity is maintained throughout and beyond the plan area for all modes.
6.11	The number of street and lane crossings should be minimized on collector roadways. Where significant pedestrian crossings are required on collectors they should be marked, and design elements should be used to ensure high visibility and sight lines of crossing.
6.12	Street crossings in proximity to the school site should incorporate design features that maximize visibility and increase motorists awareness of crossing areas. These design features may include, but are not limited to pavement markings, raised crosswalks, enhanced signage and various other traffic calming measures.
6.13	Roundabouts must be designed to facilitate safe and comfortable pedestrian connections in accordance with applicable specifications, including but not limited to minimum inscribed circle dimension and fastest path analysis.
6.14	Private right-in-right-out access has been identified on the eastern commercial site onto Big Rock Trail. Detailed design and approval of the right-in-right-out onto Big Rock Trail is subject to a traffic impact analysis at the Development Permit Stage.
6.15	At each phase of subdivision, the developer should be required to provide and implement a traffic monitoring program to provide updated operational conditions and to monitor impacts to adjacent communities throughout development progression. Information gathered from traffic monitoring programs will be used to inform potential traffic calming measures, network improvements and the timing of future road closures along Westland Street.

6.16	Timing of the road closures along Westland Street between Westridge Drive and Big Rock Trail as shown on Figure 6: NASP Land Use Concept will be determined based on current and anticipated traffic volumes, traffic monitoring programs, completion of suitable alternative road connections within Tillotson to Big Rock Trail and to Westland Street and cemetery planning.
6.17	Closure of the portion of Westland Street between Westridge Road and Westland View as shown on Figure 6 NASP Land Use Concept will occur during the development of Phase 3 as shown on Figure 40: Phasing Plan concurrent with the construction of alternate connection to Westland Street.
6.18	Any future road closures along Westland Street should accommodate, as applicable, existing underground infrastructure, cemetery access and stormwater management facility access.
6.19	Pathways should be in accordance with the pathway classifications shown in Figure 36: Active Transportation Network and the Town's General Design and Construction Specifications.
6.20	A continuous on-street and off-street regional pathway network must be provided to facilitate connections for residents to parks and open spaces, commercial areas and amenities, school sites, and future transit facilities within and beyond the community.
6.21	Enhanced crosswalks will be required where an on-street or off-street regional pathway crosses a road.
6.22	The active transportation network shown in Figure 36: Active Transportation Network should be supported by pedestrian oriented lighting, clear signage and wayfinding, and dedicated active modes infrastructure at community destinations, such as bike racks and storage facilities. Supportive infrastructure should be of a consistent aesthetic throughout the community to support a sense of place and will be subject to Town approval at the detailed design stage.
6.23	The Neighbourhood Hub must be well-connected to the surrounding residential areas, amenity spaces and the stormwater management facility through a network of pathways and walkways that provide convenient and safe connections for active modes of transportation.
6.24	A paved off-street regional pathway connection should be constructed through the Environmental Reserve parcel to facilitate a connection between the school site and Neighbourhood Hub. The detailed design and alignment of this regional pathway will be determined at the subdivision stage in consideration of minimum grades, ease of maintenance and least disturbance within the natural area.
6.25	The collector road network will be designed to accommodate future transit routes and stops.
6.26	The developer will be responsible for installing features that limit headlight glare from vehicles exiting the community onto Big Rock Trail. The specific mitigative features will be identified based on the findings of the Big Rock Trail Functional Study, the grading plan and as deemed appropriate by the Approving Authority.

SECTION 7.0

Utility Servicing

Tillotson will be a fully serviced master planned community providing full water, sanitary, storm and shallow utility servicing. These services will be extended from the surrounding communities and span through the plan area. In support of the Tillotson NASP a Servicing Study addressing water, sanitary, storm and shallow utility servicing and a Master Drainage Plan providing additional detail on stormwater management were undertaken by Jubilee Engineering Consultants Ltd. and have been included as part of the NASP submission under separate cover. The following section details an overview of the servicing strategy for water, sanitary, storm water and shallow utilities, and additional details may be found in the full Servicing Study.

7.1 WATER SERVICING

As illustrated in **Figure 37: Water Servicing Concept**, water infrastructure in Tillotson will not only support water servicing within the plan area, but additional infrastructure supporting water service for the Town as a whole, in the form of new reservoir and the associated lines to multiple pressure zones.

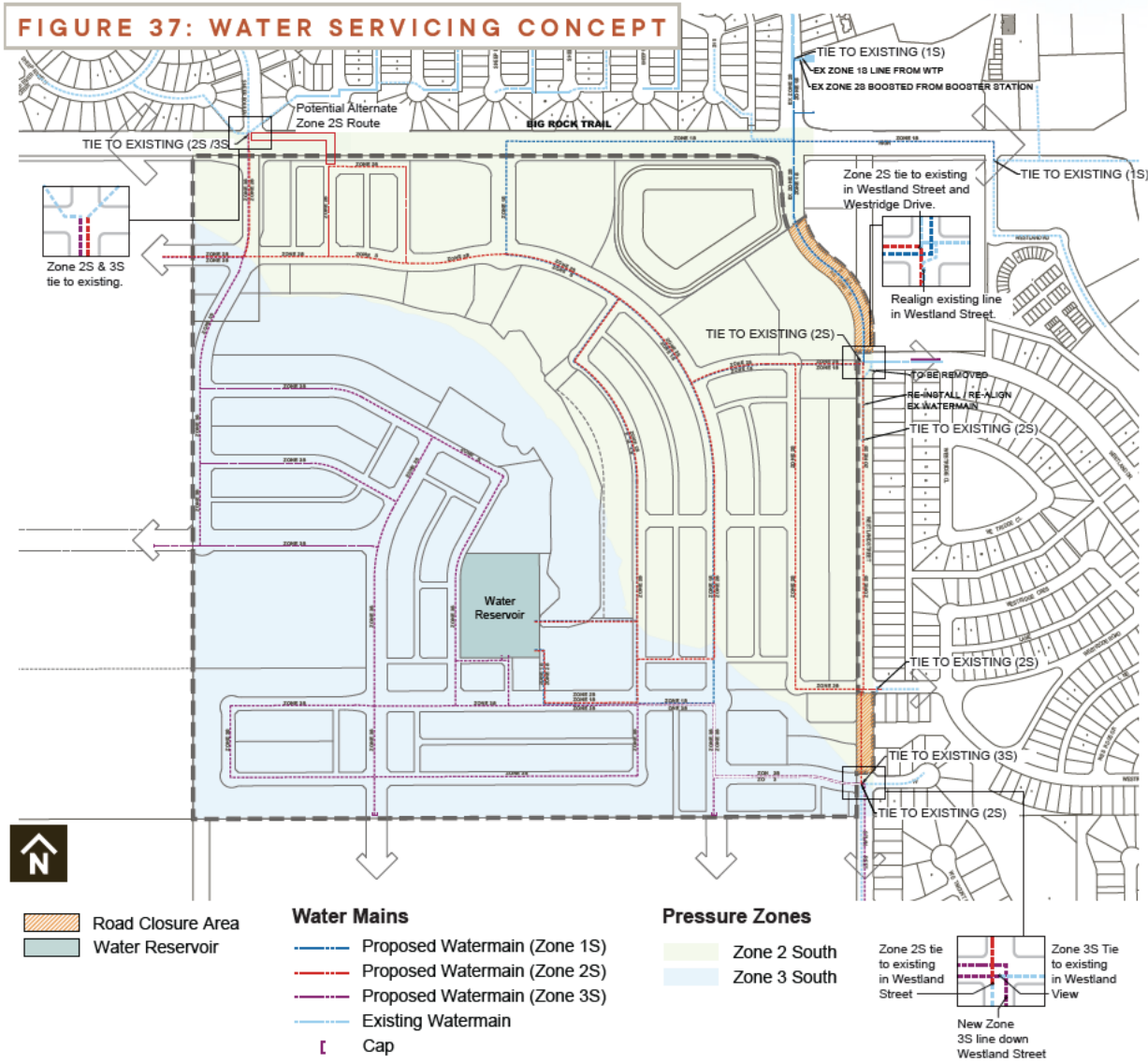
A Reservoir Feasibility Study initiated by the Town of Okotoks and completed by CIMA+ in April 2022 justifies the need for a new water reservoir in the Town, to be located within Tillotson. To accommodate the reservoir site, 1.2ha (3.0 ac) parcel of land has been identified in the centre of Tillotson. This location was identified to satisfy the elevation requirements to facilitate sufficient pressure. The reservoir will have two water line connections for each of the three pressure zones in Okotoks (1S, 2S and 3S) to facilitate a looped system, resulting in a total of six lines.

Tillotson is located across two pressure zones within the Town of Okotoks – Zone 2 South and Zone 3 South. The site is divided between these two zones diagonally from the northwest corner to the southeast corner, with the northeast in Zone 2S and the southwest in Zone 3S. The earlier phases of development are located in Zone 2 and will be serviced from the Big Rock Booster Station, while later phases of development will be dependent upon the new reservoir. Zone 1S lines will also be present within the plan area to facilitate connections with the new reservoir, but Zone 1S lines will not provide servicing to the Tillotson lands.

Two Zone 1S lines will be extended into the Tillotson reservoir. One from the existing line at the intersection of Westland Road and Big Rock Trail. The other extension will be made from the existing Zone 1S line at Sheep River Drive prior to it entering the booster station. These two extensions will be the supply lines for the reservoir during off peak hours. The same lines will also be used to provide water to Zone 1S in case of shortage.

A Zone 2S loop between the existing water mains will support early phase development within Tillotson. The Zone 2S loop will be created by extending the lines from Big Rock Trail / Sheep Boulevard, Westland Street / Westland Drive, Westland Street / Westridge Road and Westland Street / Westland View. Depending on when the NW lands, identified as TBD in the phasing plan, become available, the 200mm watermain from Sheep River Boulevard may enter Tillotson under the western collector road, or may be run east along Big Rock Trail for a block before entering the residential road right-of-way in Phase 1.

FIGURE 37: WATER SERVICING CONCEPT



The Zone 3S lands are those with elevations higher than 1096m in the southwest of the plan area. The existing booster stations and south reservoir do not have the capacity to supply water to these lands, so will be supported by the new reservoir on site. The Zone 3S lines will be looped to and from the reservoir within the later phases of Tillotson and eventually extend beyond the plan area to support future West Okotoks development. In addition, once the reservoir is built a Zone 3S line will connect to the line running into Westland View to provide water at a higher pressure for these houses.

The preliminary phasing plan for Tillotson identifies phases three (3) through six (6) within Zone 3 South, therefore these lands will be developed pending completion of the new reservoir. Tillotson's internal water servicing will consists of a water distribution network within the road rights of ways, with a few connections through municipal reserve to support looping of water lines between the reservoir and existing network.

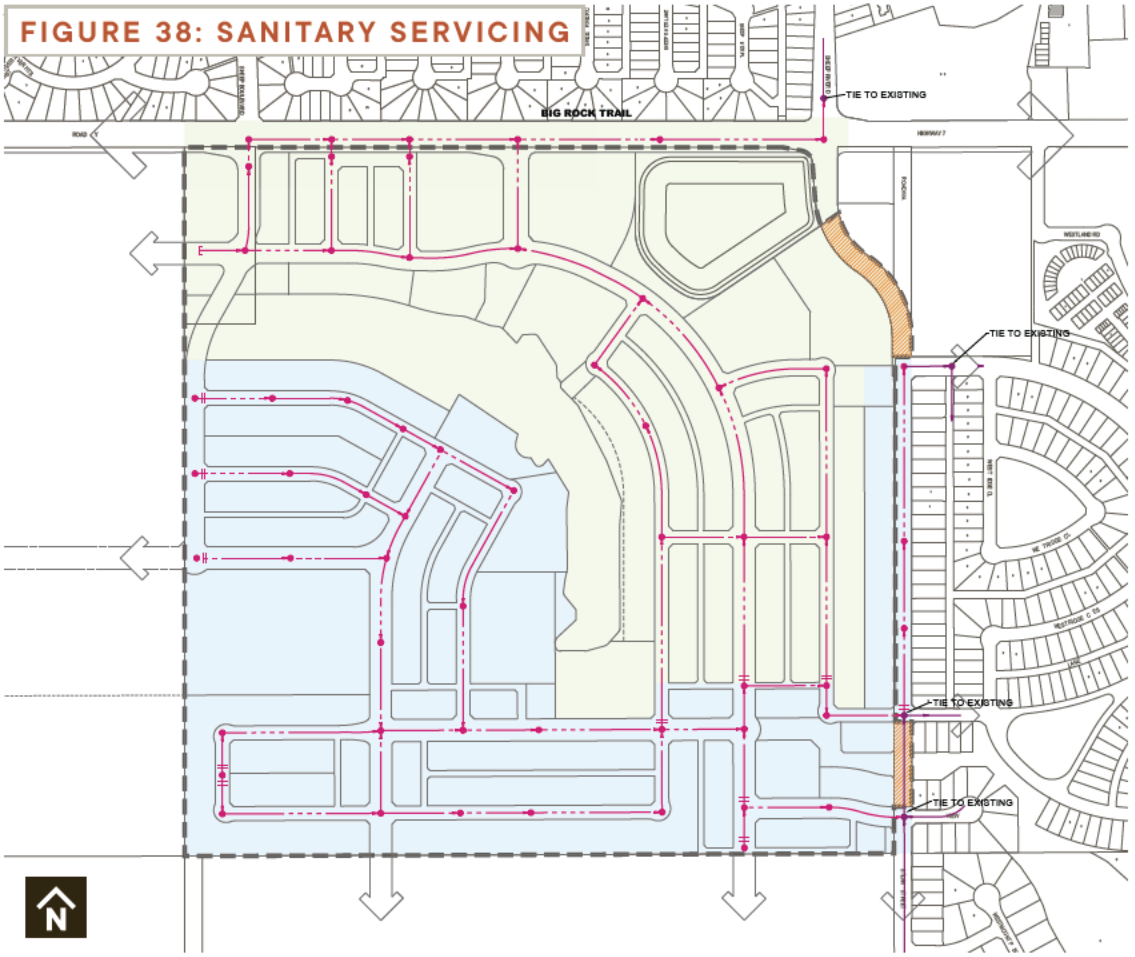
7.2 SANITARY SERVICING

The Tillotson NASP plan area spans two identified catchment Zones within the Town of Okotoks. The majority of the plan area is within Catchment 30–23, and the southwest corner is within Catchment 30–20. Catchment 30–23 is identified to tie into a 200mm sanitary line in Sheep River Drive, northeast of the plan area, while Catchment 30–20 was identified to tie into a point south and east of the plan area. As the development horizon of the lands South of Tillotson are unknown, additional modelling was undertaken to explore the feasibility of including the southwest lands within Catchment 30–23.

Scenario modelling was undertaken and identified that including the southwest lands north to Sheep River Drive could cause the existing sanitary system to be negatively impacted. Therefore, sanitary flows within Tillotson will instead be split between two tie-in locations within Catchment 30–23, one directed north to Sheep River Drive and the second directed to the east to the community of Westridge. Modelling indicated that this division would eliminate sanitary constraints on existing neighbourhoods or proposed Tillotson development.

Tillotson's internal sanitary servicing will consists of a network within the road rights of ways as illustrated in **Figure 38: Sanitary Servicing Concept**.

FIGURE 38: SANITARY SERVICING



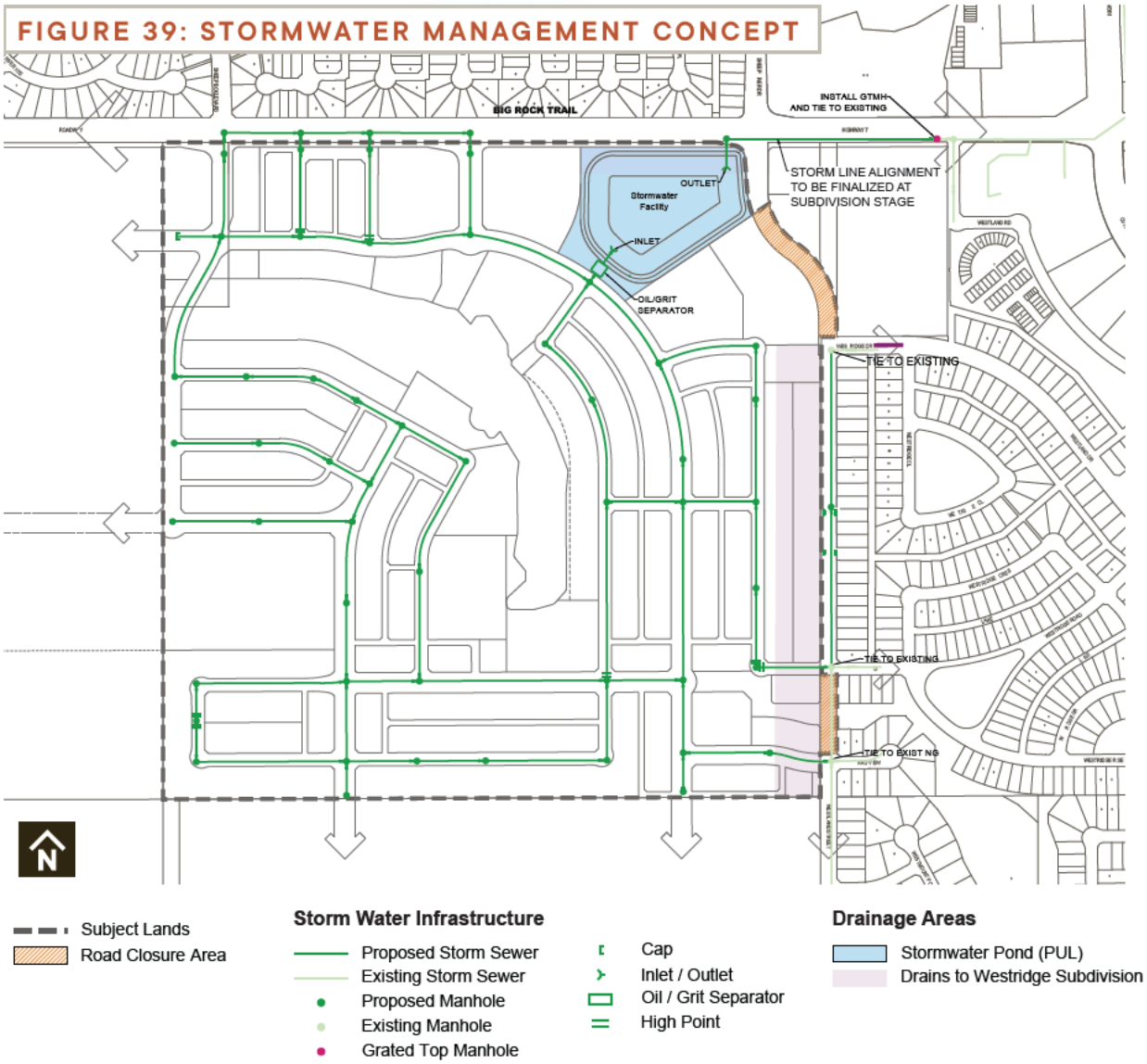
7.3 STORMWATER MANAGEMENT

As demonstrated in **Figure 39: Stormwater Servicing Concept**, a storm pond is proposed in the northeast corner of the Tillotson Plan area, to manage stormwater flows, as well as a piped system throughout the neighbourhood. The storm water tie-in at Sheep River Drive is at capacity, and there are no existing storm lines in Big Rock Trail, therefore it is proposed that a new storm line be installed in Big Rock Trail into which the storm pond will tie into through gravity. This line would then run east and connect to the existing 450mm CON pipeline at the intersection of Big Rock Trail and Westland Road. The precise alignment of this proposed stormwater line will depend on the outcomes of the Big Rock Trail Functional Transportation Plan.

Similar to the sanitary catchments, the majority of the plan area naturally drains to the northeast, while the southwest portion of the plan area naturally drains to the southwest. As development plans to the south are currently unknown, these lands will also be directed to drain towards the storm pond in the northeast.

Due to grading and existing Westridge subdivision catchment boundaries, a small portion of the plan area on the eastern edge adjacent to Westland street will drain east to the Westridge subdivision.

FIGURE 39: STORMWATER MANAGEMENT CONCEPT



Tillotson's stormwater management system will consist of a network within the road rights of ways as illustrated in Figure 39: Stormwater Management Concept. Storm water will drain into the identified manholes, the majority of which will be directed to the storm pond in the northeast corner of the plan area. From there a gravity main will connect outflows to the existing 450mm CON pipe at the intersection of Big Rock Trail and Westland Road.

The pond has been designed for a 1:100 storm event and will support drainage for the whole Tillotson plan area as well as a portion of Big Rock Trail. An oil / grit separator will be installed at the inlet to the storm pond to ensure the quality of the stormwater discharge meets Alberta Environment and Protection Areas guidelines.

With respect to innovations in stormwater management, in addition to providing detention storage the storm pond may also provide irrigation for Big Rock School, the cemetery and the bulk fill station. To facilitate this irrigation a pumphouse would be required, and based on preliminary discussions with the Town may be located on the cemetery lands. Irrigation plans will be refined at the detailed engineering stage.

The Master Drainage Plan includes the following best management practices to achieve stormwater quantity and quality targets:

1. All roof drainage from single-family houses and garages should be directed to landscaped areas prior to draining to streets or lanes.
2. Topsoil should be increased to a depth of 300mm in landscaped areas across the site.
3. Rear lot drainage from all homes backing onto municipal reserves and environmental reserves should be sheet flow where no slope stability, infiltration area or drainage path concerns exist.
4. Pervious areas on all multi-family and commercial sites should be maximized.

Additional stormwater management techniques may also be considered by developers and private landowners within the community of Tillotson to manage stormwater flows. The following tactics are encouraged:

- The use of rainbarrels connected to downspouts should be encouraged. This practice stores water before releasing it into the overall system and limits the requirement for potable water use in irrigation.
- On comprehensively planned sites, instead of connecting the roofs directly to a stom line they should be directed to landscaped areas or to rain barrels to use for future irrigation of landscaped areas.
- On comprehensively planned sites, parking stalls should be located adjacent to green spaces, and the use of wheel stoppers as opposed to curbs should be encouraged to allow for water infiltration to the green spaces.
- Within larger parking lots, bioswales should be encouraged between rows of parking stalls to allow infiltration of some stormwater flows.
- Underground tanks for rain water storage and irrigation and non-potable uses are encouraged adjacent to buildings.
- Outdoor patios and public spaces in the Village Centre should consider the use of permeable pavers to enance curb appeal and allow for stormwater infiltration.

7.4 SHALLOW UTILITIES

Shallow utilities include telephone, natural gas, electrical, internet and cable services. These shallow utilities will be installed throughout Tillotson in consultation with the applicable shallow utility providers, and in accordance with the Town of Okotoks Standards, in general consisting of a 3.5m easement along the road rights-of-way.







7.5 UTILITY SERVICING POLICIES

SECTION 7.0 | UTILITY SERVICING POLICIES	
7.1	All utility servicing must comply with the Town of Okotoks General Design & Construction Specifications.
7.2	Off-site levies will be required in accordance with the Municipal Government Act and the Town's Off-site Levy Bylaw
7.3	All infrastructure constructed or installed by the developer that benefit lands beyond the plan area will be subject to appropriate cost sharing arrangements.
7.4	All future land use redesignations, subdivision and development within the plan are will be subject to the Town of Okotoks Water Allocation Policy.
7.5	Water distribution mains must be located within public roads or utility rights-of-way and create a looped system to service the plan area, in accordance with accepted servicing studies and pressure zone boundaries.
7.6	Lands required to accommodate a regional water reservoir, as shown on Figure 6: NASP Land Use Concept must be designed to sensitively integrate with the aesthetic of the surrounding community. Exposed concrete should be minimized.
7.7	Until such time as the Town constructs the water reservoir and pump station, the developer will be responsible for any required capacity upgrades to the Westmount Booster, Big Rock Booster and the South Reservoir pump station to support development within the NASP area.

7.8	Subdivision and development within the Zone 3S pressure zone will be limited until the water reservoir and pump station are operational.
7.9	Concurrent with subdivision, the developer must construct Zone 1 South supply lines for the Zone 3 South reservoir.
7.10	At the time of subdivision of the applicable phases, the developer will be required to construct water servicing lines to future Zone 3 tie-ins to adjacent communities.
7.11	The stormwater pond located in the northeast corner of plan area should be designed as a naturalized feature performing both stormwater servicing and passive recreational functions.
7.12	Stormwater quality best management practices should be incorporated during subdivision and development, including but not limited to: (a) All roof drainage from single family dwellings and garages should be directed to landscaped areas prior to draining to streets and lanes. (b) Topsoil should be increased to a depth of 300mm in landscaped areas across all sites. (c) Rear lot drainage from all homes backing onto municipal reserves and environmental reserves should be sheet flow where no slope stability, infiltration area or drainage path concerns exist. (d) Pervious areas on all multi-family and commercial sites should be maximized.

7.13	The developer is responsible for installing the necessary infrastructure to ensure the stormwater management facility is stormwater re-use ready for irrigation of the adjacent school fields and cemetery, and provide a truck-fill as a minimum. This includes ensuring sufficient volume, piping infrastructure and pre-installation of distribution lines (purple pipe).
7.14	The stormpond outfall pipe must be tied in to the storm system in accordance with the Tillotson Master Drainage Plan.
7.15	Electrical and gas servicing should be provided to all lots within Tillotson.
7.16	The developer is responsible for incorporating the existing overhead power line along Big Rock Trail as part of the required urbanization of Big Rock Trail to support development within this NASP.

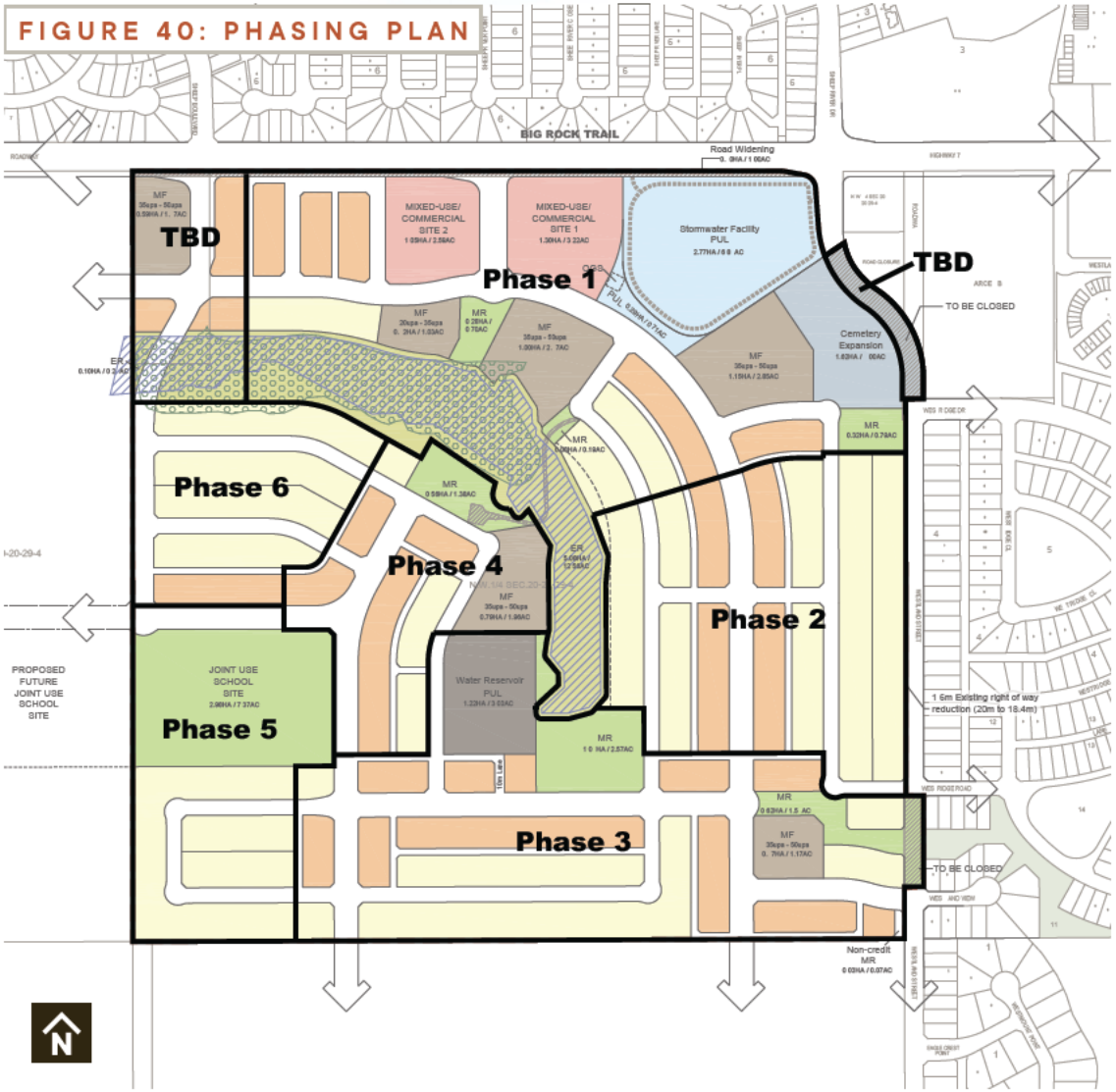
SECTION 8.0

Phasing

8.1 PHASING

Tillotson will be developed in up to seven phases as conceptually illustrated in **Figure 40: Phasing Plan**. The phase boundaries have been ordered based on the most economic and efficient infrastructure and servicing plans and market demand forecasts. The first phase of development will include the north portion of the plan area adjacent to Big Rock Trail. This will include the extension of the Okotoks Cemetery, the stormwater pond, the village centre and a variety of residential housing down to the environmental reserve. Phases two through six will be developed in a generally clockwise direction extending existing development from the Westridge community from East to West. The seventh phase has been identified as "TBD" (to be determined) and will take place when those lands become available through development or sale by the existing landowner. This phase may occur at any time following Phase 1 and will facilitate a secondary collector connection between the northern and southern portions of the plan area and an additional connection to Big Rock Trail. Phasing will be coordinated to provide emergency access as required over the course of development.

FIGURE 40: PHASING PLAN



8.2 PHASING POLICIES

SECTION 8.0 | PHASING POLICIES	
8.1	Development in Tillotson should be phased in the order generally outlined in Figure 40: Phasing Plan. Minor variations to the phase boundaries may be permitted, at the discretion of the Approving Authority.
8.2	Lands identified as "TBD" in Figure 40: Phasing Plan may be developed at any time following Phase 1.
8.3	Lands beyond Phase 3 as shown in Figure 40: Phasing Plan, cannot proceed to subdivision until the western most access to Big Rock Trail as shown on Figure 27: Internal Road Network is secured, to the satisfaction of the Town.
8.4	If Phase 1 as shown in Figure 40: Phasing Plan progresses in advance of the telecommunications tower decommissioning, temporary access to the site will be provided through a combination of the new road network and the existing unpaved access road.
8.5	Should the telecommunications tower and associated infrastructure be removed, the removal and all remediation must be completed prior to subdivision of Phase 4 as shown in Figure 40: Phasing Plan in order for the lands to be considered credit Municipal Reserve. Should the telecommunications tower and associated infrastructure be retained, the lands occupied by the structures will be dedicated as a public utility lot or integrated into a private site at the time of subdivision and additional municipal reserve provided within the plan area.
8.6	The developer will be required to construct the stompond and complete urbanization and upgrades to Big Rock Trail (as required by BRT functional study), from Southridge Drive to the main community entrance as part of the subdivision of Phase 1.

SECTION 9.0

Background & Technical Studies

The following materials in support of the Tillotson NASP have been provided under separate cover:

Background Studies:

1. Commercial Opportunity Assessment, Hume Consulting Corporation (February 2017)
2. Geotechnical Report, McIntosh Lalani Engineering Ltd. (April 2017 / November 2022* appendix figures only)
3. Phase 1 Environmental Site Assessment, G Tech Earth Sciences Corp (September 2015)
4. Biophysical Overview, Westhoff Engineering Resources Inc. (June 2017)
5. Historical Resources Overview, Bison Historical Services Ltd (May 2016)
6. Historical Resources Clearance, Alberta Culture and Status of Women (September 2021)

Technical Studies:

7. Big Rock Trail Functional Transportation Study, Watt Consulting Group
8. Transportation Impact Assessment, Watt Consulting Group (November 2022)
9. Servicing Study, Jubilee Engineering Consultants Ltd. (November 2022)
10. Master Drainage Plan, Jubilee Engineering Consultants Ltd. (November 2022)

Design Details:

11. Parks & Open Space Detailed Design Concepts, Basset & Associates Landscape Architecture Inc. (November 2022)
12. Architectural Guidelines, e2 + associates (November 2022)

Public Engagement:

13. What We Heard Report Virtual Engagement, B&A (August 2021)
14. What We Heard Report Open House, B&A (November 2022)

Planning Policy:

15. Policy Alignment Summary, B&A (July 2022)



Tillotson

NEIGHBOURHOOD AREA STRUCTURE PLAN