



Waterford Station Outline Plan

Sylvan Lake | June 2016

Blackstone Developments Inc.



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Character image - Pleasant Hill, California.

1 Introduction

Developed around existing tree stands, the old railroad trail and natural features of the land, Waterford Station will create an exceptional residential setting, unlike any community in central Alberta. Envisioned as a compact, walkable, park-like, and complete community, the neighbourhood character has been carefully determined through land use, recreational amenities, interconnected natural spaces, and mobility. The focus of planning is based on connecting people; with both one another, and with nature.

At the center of the open space system in Waterford Station, is a 1.87 ha (4.63 ac) forest that will be preserved and protected for future generations. It will serve as a nature retreat and be the heart of a well-connected walkable community. 11.63 ha (28.75 ac) of trails, open spaces, ponds and natural areas will be integrated into the community to provide both active and passive recreation space for all ages.

Waterford Station will be a unique and identifiable community with cohesive design vernacular and uncompromising architecture to over 730 homes. Located around natural space, linear parks, ponds and enhanced streetscape, each home will connect to a special element of the community.

Direct and vibrant landscaped connections to the trail network, enhanced sidewalks and upgraded roadways will lead people travelling by all modes to and from the Community, and out to the rest of the Town. A vibrant commercial center with retail shops, restaurants, services and public space will be located along 60th Street and function as an integrated live, work, play environment for local residents and adjacent communities. The commercial area will feature a village inspired boutique area, surrounding a feature pond, and serving as a social gathering place for people to connect, relax and enjoy life.

Waterford Station: A retreat. Walk the trails. Relax in the tranquility of forest. Life is for living... *really* living.

1.1 PURPOSE

The purpose of the Waterford Station Outline Plan is to describe the land uses and development objectives for a parcel of land located in southwest Sylvan Lake. This master planned community is envisioned to be a supportive community that offers residents high quality areas to live, work, and play.

1.2 PLAN AREA

As shown on **Figure 1 - Location Plan**, Waterford Station is located in west Sylvan Lake, northwest of the 60th Street/Memorial Trail intersection, directly west of the Lakeway Landing neighbourhood.

The Waterford Station Plan Area can generally be described as the SE ¼ of Section 30-38-01-W5M, which is bisected by Railway Plan 748AF which runs at a diagonal near the north boundary of the quarter.

The Plan Area consists of approximately 61.20 ha (151.21 ac) and does not include the railway area.

1.2.1 HISTORY OF THE PLAN AREA

The Waterford Station Plan Area was annexed into the Town of Sylvan Lake from Red Deer County in January of 2016.

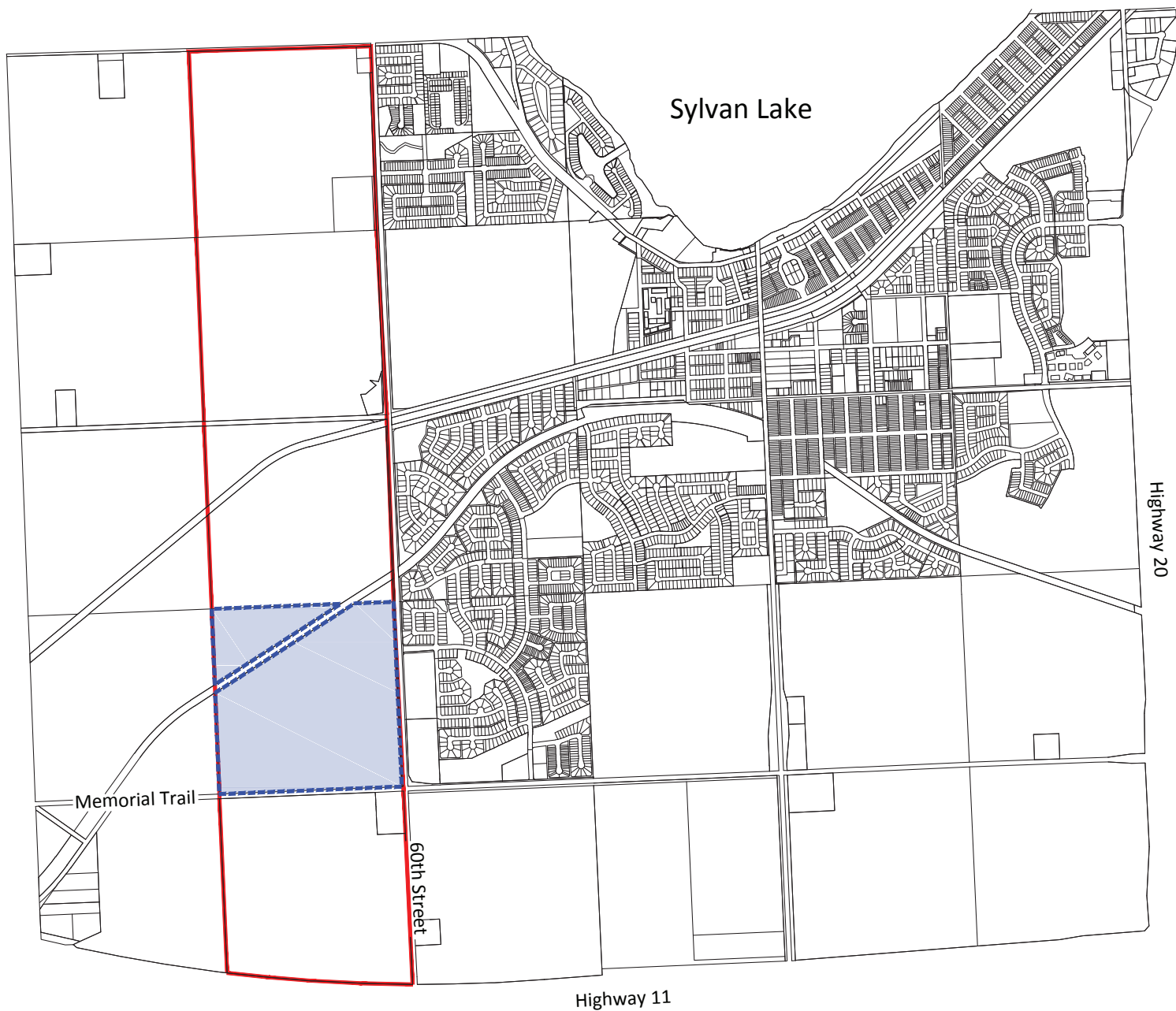
The historic land uses associated with the area are agricultural in nature. Arvid Lütj was the original owner of this land, purchased in January of 1905; unfortunately, no further information could be found about Mr. Lütj. More recently the Plan Area was owned by Arthur and Edith Ada whose family had used the land for crop production from 1937 to 2012.

1.2.1.1 Historical Resources

A Historic Resources Overview was completed for the Plan Area in 2014 with a Historical Resources Act Clearance granted in January of 2015.

1.3 PLAN INTERPRETATION

The Waterford Station Outline Plan is intended to guide development within the Plan Area; all pictures as shown in this Outline Plan have been included for visioning purposes only and should not be used to identify definitive locations or be considered an indication of exactly what will be constructed.



Legend:
— West Area Structure Plan Boundary
- - - Outline Plan Boundary



FIGURE 1 - LOCATION PLAN



Character image - Stonebridge, Saskatoon.

2 Plan Area Attributes

2.1 PLANNING FRAMEWORK

This Outline Plan is to be read in conjunction with the following documents. Each document has been reviewed and referenced in preparation of this Outline Plan.

2.1.1 STATUTORY PLANNING DOCUMENTS

Municipal Government Act

The *2000 Municipal Government Act* (MGA) of Alberta outlines the purpose and powers of Municipalities. One of these powers is to require an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land.

The guidelines set by the MGA for creation of comprehensive planning documents, Area Structure Plans, have been used as a guide for the creation of the Waterford Station Outline Plan; as such, this Outline Plan will describe:

- *the sequence of development proposed for the area*
- *the land uses proposed for the area, either generally or with respect to specific parts of the area*

- *the density of population proposed for the area either generally or with respect to specific parts of the area*
- *the general location of major transportation routes and public utilities*
- *and may contain any other matters the council considers necessary*

Town of Sylvan Lake / Red Deer County Intermunicipal Development Plan

The *Town of Sylvan Lake/Red Deer County Intermunicipal Development Plan* (IDP) was approved in 2011 and amended in November 2014. It sets the shared vision for area surrounding the Town to ensure the interests of both Red Deer County and Sylvan Lake are considered during future development.

With the addition of the recently annexed lands, the IDP will be amended to reflect the new Town boundary as well as planning policies for the area. Amendments to the IDP will be approved by the Town of Sylvan Lake prior to the approval of all lower-level documents such as the West ASP and Waterford Station Outline Plan.

Town of Sylvan Lake Municipal Development Plan

The *Town of Sylvan Lake's Municipal Development Plan* (MDP) was approved in September 2014. It sets a vision for the Town to build on the quality of its environment, small town identity, and its location in Central Alberta.

It identifies the following objectives related to new residential development which have been used to guide the Waterford Station neighbourhood:

- *Encourage innovative neighbourhood designs that respond to economic, demographic and market conditions that are in Sylvan Lake's best interests and align with the goals, objectives and policies in this Plan.*
- *Encourage a mix of housing types and forms in all residential neighbourhoods and avoid concentration of any single type of housing.*
- *Distribute parks and open spaces throughout the neighbourhood to ensure maximum accessibility for all residents. Parks and open spaces should be:*
 - » *Designed to provide a mix of uses and types, including both active and passive recreational opportunities for all ages;*
 - » *Designed to retain as much of the existing natural vegetation and tree cover as possible where not used for active recreation;*
 - » *Linked by a hard surfaced trail system, providing connectivity throughout the neighbourhood; and*
 - » *In line with the Town's Parks and Open Space Master Plan and any applicable Area Structure plans.*
- *Design street layouts to maximize connectivity and provide safe spaces for all users, including, pedestrians, cyclists, vehicles and emergency response services.*
- *Promote Complete Streets design that include features such as traffic calming, street trees, wide sidewalks and multi-modal access throughout the Town, considering the needs of people of all ages and abilities.*
- *Minimize the use of cul-de-sacs and dead end streets as part of the transportation network design of new subdivision and development. Where dead-ends are unavoidable, ensure the grid is supported by multi-modal links providing additional mobility options.*

The MDP's Future Land Uses figure identifies the Waterford Station Plan Area as future growth and will be amended to reflect the new Town boundary, land uses, policies and direction of the recently annexed lands.

Town of Sylvan Lake West Area Structure Plan

The Town of Sylvan Lake West Area Structure Plan (ASP) describes development objectives, generalized land uses, and servicing alignments for the areas annexed into the municipality in 2016, including the Waterford Station Plan Area.

Through the creation of the West ASP, the Developer met with the Town to ensure that the Waterford Station Outline Plan is consistent with the guidelines and policies of the West ASP; in addition, the following specific policies identified in the West ASP have been used to guide the design of Waterford Station.

- *The minimum residential density shall be 13 units per net developable hectare for all lands within the West ASP. Densities less than the specified amount shall be considered by the Town if the proposed outline plan includes additional open space or natural area preservation over the 10% Municipal Reserve dedication.*

Waterford Station's residential density is shown in **Table 2 - Housing Mix** and estimated at 14.1 du/ha; this density calculation does not include the commercial area.

- *Each neighbourhood plan shall indicate a variety of housing options with a minimum mixture of 60% single family detached dwellings, 20% single family attached and 20% multi-family. The Town, in consultation with the Developer, may at its discretion adjust these percentages due to existing market demand and conditions.*

The residential housing mix of Waterford Station is described in **Table 2 - Housing Mix**.

- *Residential development shall be appropriately screened and buffered, for visual and noise impact mitigation, from all commercial areas, arterial roadways, railway tracks, and oil and gas facilities, where deemed necessary. Buffering measures may include a mix of berming, fencing, landscaping, increased setbacks, or sound attenuation to the satisfaction of the Town.*

Buffering for Waterford Station is described in **Section 7.3.2 Buffering**.

- Create walkable neighbourhoods based on a maximum five to ten minute walking distance (400-800 m radius) to key destinations such as parks, schools and shopping areas.

Waterford Station has been designed to allow convenient walking access to the neighbourhood's key destinations as shown on **Figure 8 - Walking Distances to Commercial Areas** and **Figure 10 - Walking Distances to Community Amenities**.

Town of Sylvan Lake Land Use Bylaw

The 2016 *Town of Sylvan Lake Land Use Bylaw* (LUB) describes all available land use districts to be used throughout the Town. The existing land use designation for the Plan Area is FD Future Designation for future development.

It is intended that the land use currently identified for the Plan Area will be replaced with those described in this Outline Plan as land use redesignation occurs.

2.1.2 SUPPORTIVE PLANS

Town of Sylvan Lake Growth Strategy

The *Town of Sylvan Lake Growth Strategy*, approved in September 2008, includes many planning considerations that apply to the Waterford Station development. It identifies that the Town of Sylvan Lake's vision is to be "a town for all seasons", where natural beauty is celebrated, a spirit of neighbourhood and belonging exists, people are connected, where healthy living support is available, and where a balance between small town atmosphere and growth is struck.

The Growth Strategy identifies that Sylvan Lake will continue to grow over time, and that the Waterford Station Plan Area will be used to accommodate up to 25 ha of commercial land. The West ASP has refined this general concept to include both residential and commercial uses, and reflect the planning completed for Waterford Station which provides 7.38 ha of commercial land.

Town of Sylvan Lake Municipal Sustainability Plan

The *Town of Sylvan Lake Municipal Sustainability Plan* (MSP) was completed in March 2010 and provides a road map leading to a sustainable future. It specifically addresses the built environment as a part of the achievement of Sylvan Lake's sustainability goals.

Sustainability goals and principles identified in *The Town of Sylvan Lake Municipal Sustainability Plan* are primarily intended to guide future decisions made by the Town of Sylvan Lake; however, the following goals have been reviewed and influence the Waterford Station neighbourhood.

- *Preserve and protect Sylvan Lake's native flora and fauna populations.*

A large area of existing vegetation has been preserved in the southwest portion of the Plan Area.

- *Practice and promote water conservation.*

Waterford Station has been designed to minimize impermeable surfaces by reducing the amount of land used for roadways. A typical residential development utilizes approximately 25% of the Net Developable Plan Area for roadways; whereas, Waterford Station utilizes approximately 20.4%.

- *Reduce Sylvan Lake's resident dependency on fossil fuels.*

The design of Waterford Station promotes the use of alternative modes of transportation for residents and provides commercial services within the neighbourhood. The close proximity of these services is intended to allow residents to access the area by alternative transportation or reduce the overall distance residents are required to travel by automobile.

- *Promote active transportation. Foster healthy lifestyles and active citizens.*

Waterford Station's pedestrian realm is the main focus of the community including both the public park spaces and providing separated sidewalks along major roadways. This level of detail encourages and promotes active transportation for residents.

- *Provide diverse housing options that meet the needs of residents today and in the future.*

Waterford Station provides a range of housing types for residents allowing them to age in

place and find appropriate housing options at all stages of life.

- *Neighbourhoods are vibrant and feature mixed uses allowing for a variety of housing forms and options.*

Waterford Station provides residents with high quality opportunities to live, work, shop, and play within their neighbourhood.

- *Provide diverse leisure opportunities for all residents.*

Waterford Station's open space network, as further described in **Section 7 Open Spaces**, provides passive and active recreation opportunities to residents.

- *Create an inclusive social community that strives to provide interaction and opportunities for people of all ages.*

Waterford Station is a supportive community that provides opportunities for all residents, including seniors, to enjoy recreation and socialization with their neighbours.

- *Integrate culture and heritage into the built environment.*

Waterford Station's open space network may include interpretive signage to educate residents about the history of Sylvan Lake.

Town of Sylvan Lake Environmental Management Plan

At the time of this Outline Plan, the Town of Sylvan Lake is working on an Environmental Management Plan for the Town; however, its information was not available for reference at the time of this submission.

Town of Sylvan Lake Recreation, Parks, and Open Space Master Plan

The 2010 Recreation, Parks, and Open Space Master Plan is intended to provide guidance and direction for Town Staff regarding future planning and maintenance of indoor and outdoor recreational facilities and services. Priorities and preferences identified in this Plan, as listed below, have been incorporated into the design of Waterford Station's open space concept.

Recreation, parks, and open space priorities incorporated into the Waterford Station development:

- *Protect and incorporate significant natural areas into the open space system*

Existing natural areas have been incorporated into Waterford Station's open space system

- *Connect open spaces and passive parks using a regional trail*

Trail connections have been provided to regional trails along 60th Street and the CP rail line

- *Develop a continuous trail along the old rail line*

The CP rail line has been used as a primary trail linkage throughout Waterford Station

- *Improve and expand the Town's trail system for pedestrians and cyclists*

Over 4km of trails have been proposed throughout Waterford Station.

- *Emphasize teen-orientated play within the parks system using outdoor fitness equipment, rock climbing, mountain bicycle trails, or teen shelters*

Specific programming of open spaces in Waterford Station will be completed in consultation with the Town of Sylvan Lake at the time of detailed design.

- *Recognize the importance of soccer fields and provide pedestrian connections to existing fields*

Pedestrian linkages have been provided to the existing soccer field, located southwest of the Waterford Station Plan Area.

Town of Sylvan Lake Infrastructure Study

The 2010 Infrastructure Study identifies future infrastructure and servicing required in the Town of Sylvan Lake for the purposes of future prioritization and budgeting.

Although servicing layouts shown in the Infrastructure Study have been reviewed in preparation of this Outline Plan, the roadway layouts shown in the Infrastructure Study were superseded by the 2015 Transportation Study; therefore, the location of some services have been shifted.

Town of Sylvan Lake Transportation Master Plan (Final Draft)

The Transportation Master Plan was completed in 2015 to identify long-range transportation planning for the Town. [Figure 5 - Future Roadway Network](#) of the Study identifies a proposed roadway layout for the Waterford Station Plan Area which includes a collector roadway running parallel to the abandoned CP railway and a second collector running north-south through the centre

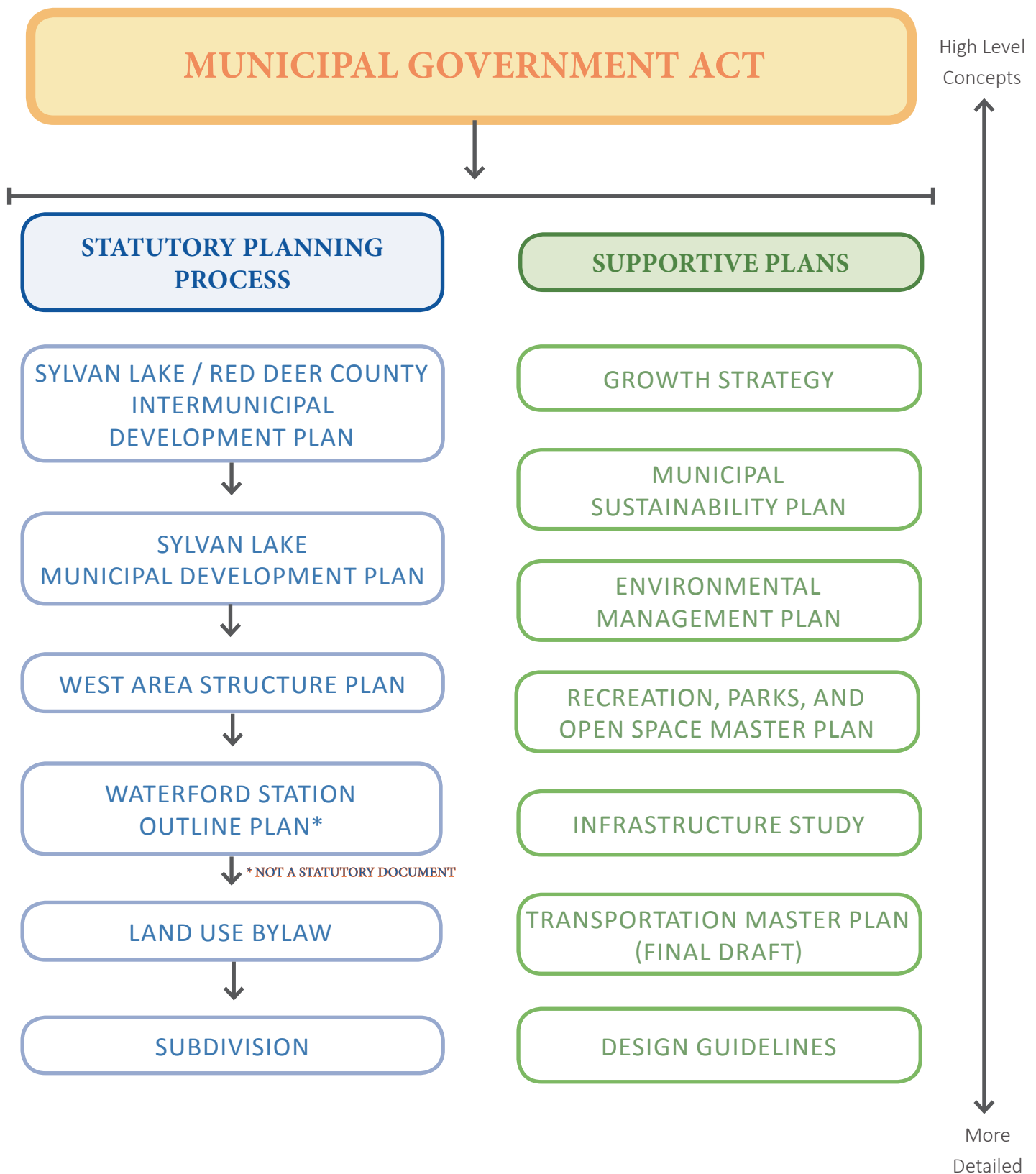


FIGURE 2 - PLANNING PROCESS

of the quarter section. One access into Waterford Station from 60th Street is shown at Lakeway Boulevard and an arterial roadway is shown running along the south boundary, Memorial Trail. Primary trail linkages are shown along all collector and arterial roadways. The Waterford Station Outline Plan generally follows this approach.

A variety of traffic calming policies were identified in the Transportation Master Plan including roundabouts which have been incorporated into the Waterford Station design.

Town of Sylvan Lake Design Guidelines

The Town of Sylvan Lake Design Guidelines (2016) lays out the Town's standards regarding subdivision design, servicing, and the construction approval processes. All development within the Plan Area will be designed in accordance with the Town's Design Guidelines.

2.1.3 ADDITIONAL STUDIES

Waterford Station Phase 1 Environmental Site Assessment

A Phase One Environmental Site Assessment (ESA) was completed in March 2015. The Phase One ESA report is based on a visual site inspection, a review of public records and personal interviews with the landowner.

The Phase One ESA indicates that the property was used primarily for agriculture for more than 50 years, and the farmstead was vacant at the time of inspection. Other activities on the subject property include oil and gas well leases with associated compressor stations, metering stations, and access roads.

Based on the review of information collected for this Phase 1 ESA, no additional investigation was recommended for the subject property in the short-term; however, investigation to address areas of potential environmental concern was recommended as design and construction progresses, that is, prior to earthworks. Areas identified of potential environmental concern primarily reflect historic and existing oil and gas facilities and are identified on **Figure 3 - Existing Conditions**.

It was recommended that this further information gathering may take the form of a Phase 2 ESA for the affected area and may include intrusive sampling of soils and groundwater as the subdivision is developed. Any impact present is expected to be minimal; however, sampling will only be required for the affected area prior to construction.

Waterford Station Wetland Impact Assessment

The *Waterford Station Wetland Impact Assessment* was completed in January 2016. This Assessment identifies the classification of all existing wetlands within the Plan Area, of which there were six; these wetlands are further described in **Section 2.2.1.3 Wetlands**.

Town of Sylvan Lake Municipal Census

The *2013 Town of Sylvan Lake Municipal Census* identified the Town's population at 13,015 persons. The age distribution information provided in the 2013 Census has been used to determine the number of students expected within the Waterford Station neighbourhood.

Waterford Station Development Strategy

Completed in July 2015, Blackstone Development Inc commissioned MXD Development Strategists to assess, identify and define the optimal retail development program for Waterford Station. It was identified that Waterford Station could sustain a minimum of 14.0ac of commercial lands to provide the need of various services for the Town, region and community. Results of this study were shared with the Town to be utilized on future commercial needs assessments.

2.2 EXISTING CONDITIONS

The subject property borders the west edge at the southern limits of the Town of Sylvan Lake and is currently used for agriculture with a tree stand, hedgerows, and a gas well lease. It is bisected by a former railway corridor.

The properties surrounding are also used for agriculture, oil and gas, and residential purposes.

2.2.1 NATURAL CONDITIONS

2.2.1.1 Vegetation

As shown on **Figure 3 - Existing Conditions**, the Plan Area is bordered by a windbreak along the west and north boundaries along with linear corridors of trees along either side of the abandoned railway. In addition, two windbreaks extend south from the railway running north to south, the south central portion of the Waterford Station Plan Area is heavily treed, and there are thin and spare trees located along 60th Street.

The Phase One ESA described the Plan Area vegetation as composed of wheat crop stubble, weedy species along ditches and in disturbed areas, and trees and shrubs in the hedgerows and forested area in the southwest. Species included thistles, yarrow, caragana, clover, smooth brome, timothy, cow parsnip, prickly rose, trembling aspen, and spruce. Lichens were common on downed trees and on the north facing side of tree trunks.

2.2.1.2 Topography and Soil

The Plan Area has an undulating and rolling topography which slopes generally from south to north towards Sylvan Lake although there is a high spot in the centre of the property.

Based on the Canadian Land Inventory's Land Capability for Agriculture map, the Plan Area can be categorized using Class 2 and Class 3 soil classifications.

The southern portion of the Plan Area is identified as Class 2 Moderate Limitations due to adverse climate. The northern portion of the Plan Area is identified as Class 3 Moderately Severe Limitations due to cumulative adverse soil characteristics.

A geotechnical investigation for the Plan Area will be submitted by the Developer under separate cover.

2.2.1.3 Wetlands

The *Waterford Station Wetland Impact Assessment* identified six wetlands in the Plan Area, of which five were considered ephemeral and do not require compensation to remove. The ephemeral wetlands were generally located in the south half of the quarter section with four in the southeast corner.

Located in the northwest corner of the Plan Area, there is one wetland that has been classified as a MG (II) Marsh Graminoid Temporary Wetland, sized at 0.35 ha. The assessment describes that direct effects to the MG wetland may require compensation to Ducks Unlimited Canada, although it will likely be given a relative wetland value of "D", which is the lowest. This will be confirmed through an Alberta Wetland Rapid Evaluation Tool (ABWRET) application to the province.

2.2.2 BUILT ENVIRONMENT

As shown on **Figure 3 - Existing Conditions**, the Plan Area includes gas leases, a compressor station, and an access road. In addition, the property is divided by a former railway corridor. A barbed-wire fence runs along most boundaries of the property, and there is an electric fence that separates the north section of the Plan Area from the railway corridor.

2.2.2.1 Storage Tanks

In the northwest portion of the Plan Area, there are two gas lease teardrops, one containing a metering station and the other containing oil and gas infrastructure associated with a single-well battery including a large above ground storage tank within a secondary containment enclosure, as well as polyethylene above ground tanks, kept elevated on stands, containing methanol and another unknown fluid which are used by the compressor. The compressor station is contained within a lease site, no permanent structure is envisioned in the area until the operations and remediation have concluded.

2.2.2.2 Existing Infrastructure

There are currently no services to the Plan Area although there are a number of low pressure natural gas pipelines in utility rights-of-way and an overhead power line running along the south boundary of the Plan Area.

Transportation Network

The Plan Area is bound by existing roadways on two sides: 60th Street along the east boundary, and Township Road 384 along the south, otherwise known as an extension of Memorial Trail.

One farm access exists into the Plan Area from 60th Street, and one from Memorial Trail.

2.2.3 NATURAL RESOURCES

2.2.3.1 Utility Rights-of-Way

There are five utility rights-of-way located in the Plan Area, as shown on **Figure 4 - Legal Conditions** and further described below.

Right of Way 112 4005 - To be Relocated

Extends from the active well site north to Right-of-Way 882 0292. Registered to AltaGas Ltd.

Right of Way 072 1094

Enters the Plan Area travelling east parallel to the north boundary, from the west, approximately 200m south of the north boundary. Registered to Anderson Energy Ltd.

Right of Way 072 3158

Enters the Plan Area travelling northeast, from the west, approximately 300m south of the north boundary. Registered to Anderson Energy Ltd.

Right-of-Way 882 1443 - To be Relocated

Runs along the north boundary of the Plan Area, from the west, to the centre of the quarter section, extends south through the middle of the quarter section to the south boundary. Registered to Alberta Government Telephones.

Right-of-Way 872 2573 - To be Relocated

Runs from southeast to northwest through the center of the Plan Area; this right-of-way also extends east, parallel to the south boundary of the Plan Area. Registered to AltaGas Ltd.

Right-of-Way 882 0292 - To be Relocated

Comes into the Plan Area at the northwest corner and extends southeast. Registered to NE Resources Ltd.

2.2.3.2 Pipelines

The Waterford Station Phase 1 Environmental Site Assessment identifies numerous utility and pipeline rights-of-way crossing the Plan Area. Available information does not show how the pipelines are aligned within the rights-of-way nor does it indicate that a pipeline exists within each right-of-way. To confirm the presence and alignment of any underground infrastructure, field utility locates will be necessary prior to construction.

A full description of this information can be found in the ESA, available under separate cover.

The Developer will work with pipeline owners and right-of-way holders to re-route and/or remove pipelines as appropriate prior to development of each stage that it may be impacted by. If pipelines are not removed or relocated due to timing, subdivision may need to be revised to reflect an alternative construction boundary to allow for development of the phase.

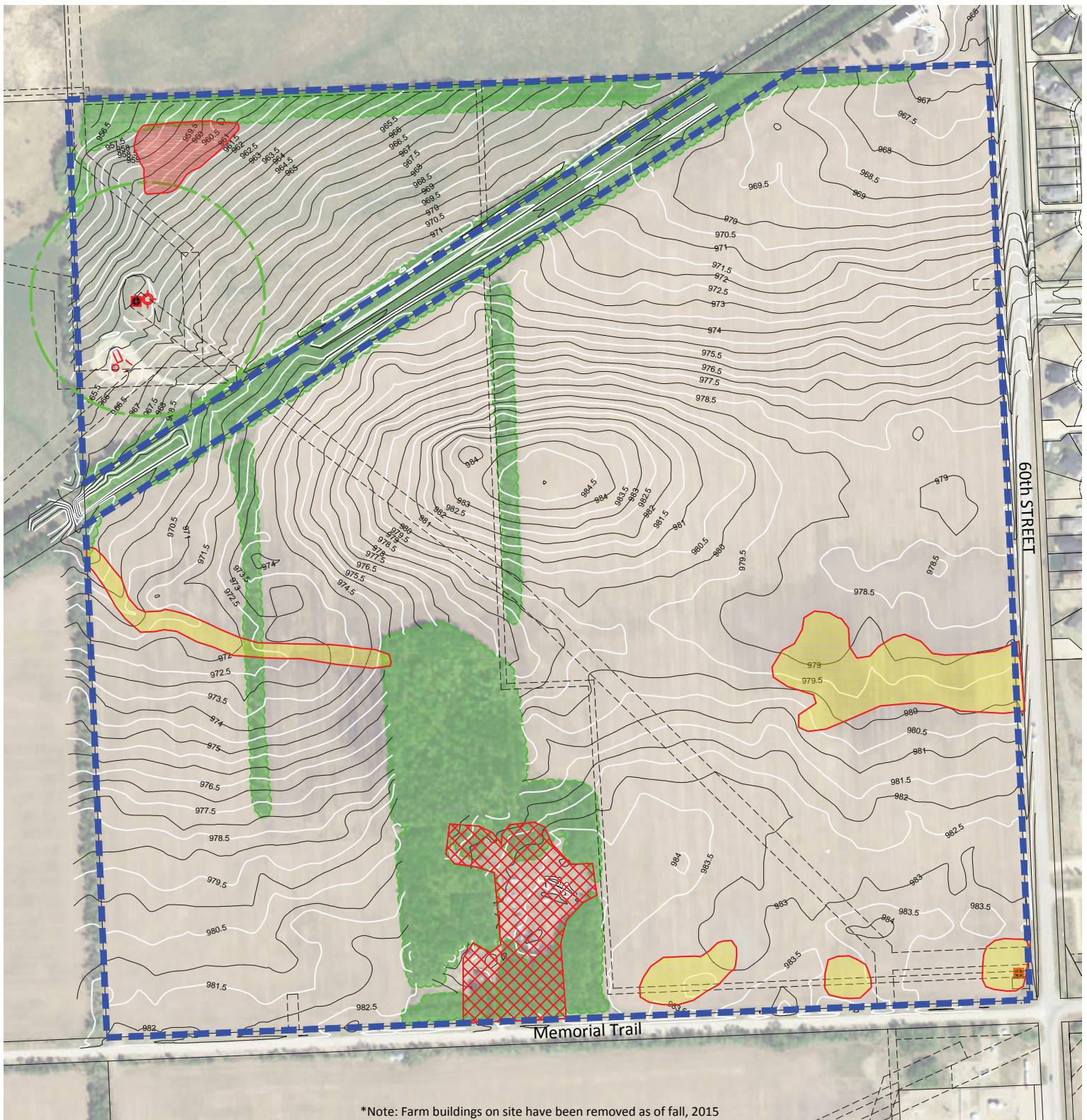
Wells

There is a gas well in the northwest area of the subject property and, within the teardrop lease, there is a flow metering and monitoring station with a sign that reads, "Anderson 102 Medriv 7-30-38-1 W5". Twenty meters to the southwest there is another gas lease teardrop with a compressor station, above ground tanks, and meter station that possibly serves the aforementioned gas well.

The Waterford Station Plan has recognized a potential permanent structures development setback of 100m. On going discussions between the Developer and well operator will determine a potential reduction in setback and use of the area.

2.2.3.3 Abandoned Wells

There are two abandoned wells located in the Plan Area: one in the northwest corner (License 0104668) and one in the southeast corner (License K005688D). Both wells can be considered abandoned and will require only minimal setback for potential future access via a public utility lot, access agreements and/or located under roadways.



- | | |
|----------------|---|
| Legend: | |
| | Area of Potential Environmental Concern |
| | MG (II), Marsh Graminoid - Temporary |
| | Ephemeral Wetland |
| | Treeline |
| | Structure |
| | Utility Right of Way |
| | Active Wellsite |
| | Abandoned Wellsite |
| | 100m Well Setback Line |
| | Contour Line |
| | Outline Plan Boundary |



FIGURE 3 - EXISTING CONDITIONS

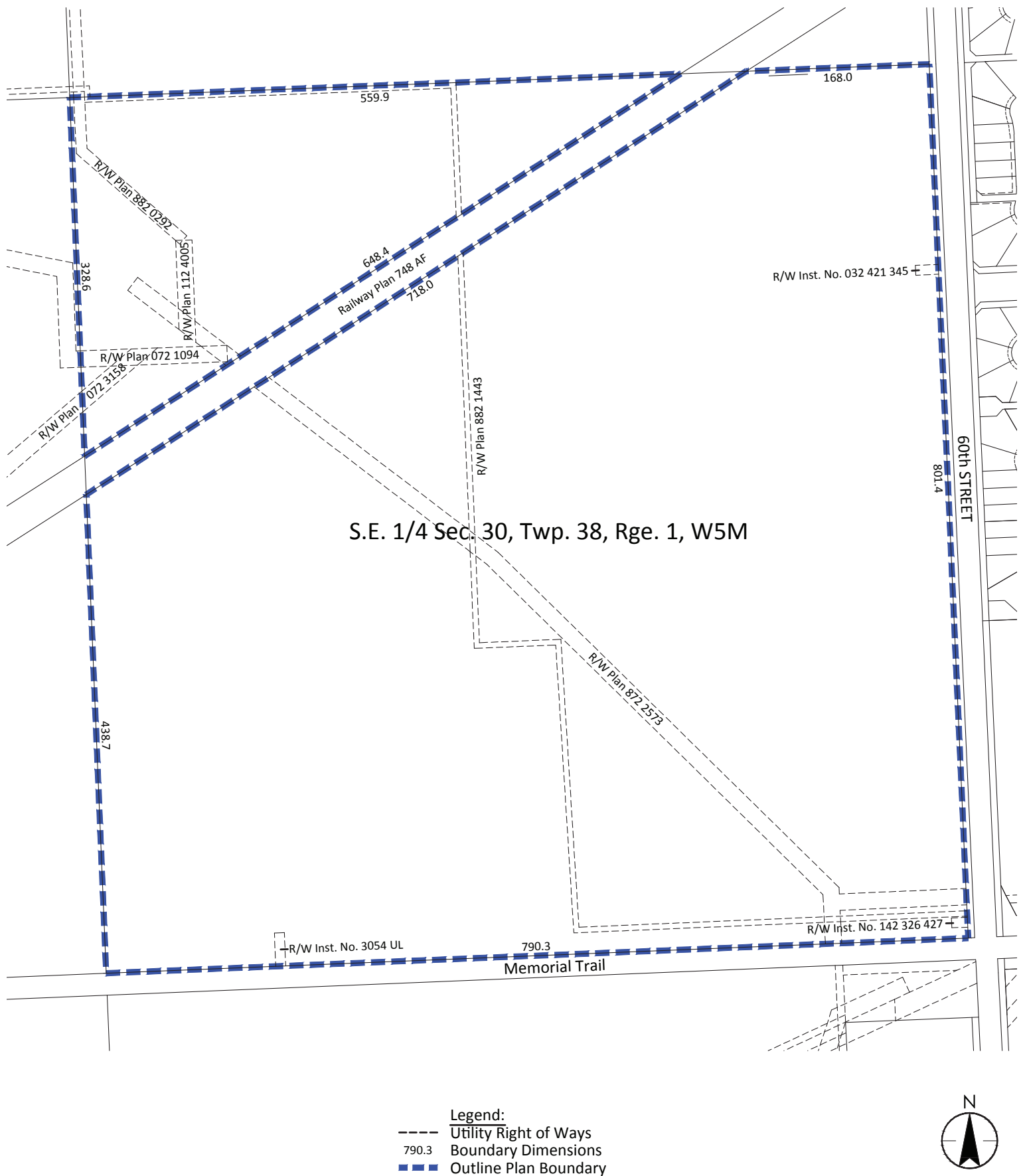


FIGURE 4 - LEGAL CONDITIONS

2.3 SURROUNDING DEVELOPMENT

2.3.1 LAND USES

The Plan Area is surrounded by undeveloped agricultural land to the north, west, and south.

West

Land west of the Plan Area is undeveloped agricultural land within the jurisdiction of Red Deer County, largely segmented by the CP Rail line. Areas west of the CP line are uncultivated with an existing acreage accessible off of Rge Rd 15A, an extension of Memorial Trail.

North

Land north of the Plan Area is currently undeveloped agricultural land with one acreage located on the north boundary of the Plan Area; however, it is understood that this area is intended for a future residential subdivision.

East

The residential subdivision of Lakeway Landing is located directly east of the Plan Area, across 60th Street.

South

Land south of the Plan Area is undeveloped agricultural land with a meter station and compression site located at southwest quadrant of the Memorial Trail/60th Street intersection.

According to the *2008 Growth Study*, the compression station does not have a legislated setback and is not considered a sour gas facility. This information is contradictory to that in the *2007 South Area Structure Plan* which identifies a 100m development setback from the site and will be updated in the Town of Sylvan Lake's West Area Structure Plan.

2.3.2 NEARBY AMENITIES

2.3.2.1 Recreational

The water body known as Sylvan Lake is located approximately 2.5km northeast of the Plan Area which is about a 30min walk.

Lakeway Landing provides a variety of recreational amenities within walking distance of the Plan Area. There is an off-leash dog park located east of the Plan Area along 60th Street and several soccer fields located in Leader Field, east of the Plan Area along Memorial Trail. There is also a small sledding hill and two skating rinks located in Leader Field during the winter months and this area is also the future home of the Sylvan Lake Spray Park.

Trail Connections

A potential trail node has been identified at the intersection of Memorial Trail and 60th Street. Trails originating at this location continue northeast through Lakeway Landing via the utility right-of-way corridor.

Three regional trail connections are within proximity to Waterford Station. The north-south alignment is located along the east side of 60th Street, north of Lakeway Boulevard. Two east-west alignments are located along the north side of Memorial Trail and within the abandoned CP railway.

2.3.2.2 Commercial

There are no commercial areas directly surrounding the Plan Area; however, there is a small convenience store at the intersection of Lakeway Boulevard and Memorial Trail that consists of a gas station and neighbourhood service businesses.

2.3.2.3 Educational

The nearest existing schools to Waterford Station are École Mother Teresa, a Catholic education school for grades 3-9; the École Fox Run, a public education school for grades 6-8, and the Beacon Hill Elementary School, a public education school for kindergarten to grade 5. These schools are located in the Fox Run neighbourhood, approximately 1.5km northeast of the Plan Area, and are accessible via both off-street trails and sidewalks.

In addition to these two schools, the Beacon Hill Elementary School is located 1.5km east of the Plan Area, also accessible via off-street trails and sidewalks.



3 Community Framework

3.1 INTENT

Waterford Station is a complete neighbourhood that incorporates sustainable community development principles to create a socially inclusive space, integrated with commercial and recreational uses creating a unique destination within Sylvan Lake and beyond.

3.2 LAND USE CONCEPT

HEALTHY COMMUNITY

Waterford Station has been designed to foster a healthy community by preserving natural spaces and over dedicating open space, beyond that which is legislated, to encourage an active interaction with the environment, and providing areas where social interaction can naturally occur.

PRESERVE NATURAL SPACES

As described in **Section 2.2.1 Natural Conditions**, there are several areas of mature vegetation located throughout the Waterford Station Plan Area that has been preserved and integrated into the open space

system. Existing vegetation provides opportunities for natural space inclusion in the neighbourhood, pedestrian trail connections, education and integration with the active and passive open space network.

WALKABILITY

Waterford Station has been created using enhanced roadway cross-sections, strong connections and a interconnected pedestrian trail network to create a walkable neighbourhood with a focus on providing pedestrian connections between residents and neighbourhood destinations. This walkability is intended to breed healthy lifestyles both physically and emotionally by offering residents high quality areas to relax and engage with their neighbours.

SOCIALLY INCLUSIVE

Waterford is visioned as a socially-inclusive community that embraces residents of all ages and social backgrounds. A range of housing types at a variety of price points allow residents to find accommodation throughout all stages of their lives.

MIXED LAND USES

The design of Waterford Station incorporates a mix of land uses to create a complete neighbourhood allowing opportunities for residents to live, work, shop, play, and socialize in the community.

Live

A variety of housing types have been provided in Waterford Station to accommodate many different residents at a range of price points. This variety allows opportunities for residents to age in the community rather than having to move away as their needs and preferences change.

For example: a single person just moving out on their own may find a suitable rental apartment unit; at some point he or she may decide to start a home with a partner and shift into a somewhat larger unit with a little outdoor private amenity space- such as a townhouse. Should this couple decide to start a family, they may want to look for a little extra space by moving into a single detached home to better accommodate their growing family. After the children leave the home, this couple may then decide to save a little money and reduce their home maintenance demands by moving into something a little smaller such as a semi-detached home or condo.

Work and Shop

Approximately 13.9% of the neighbourhood has been identified as commercial and community facility development. These areas are anticipated to provide a range of employment and shopping opportunities for Waterford Station and Sylvan Lake residents.

In addition to providing employment opportunities, providing commercial uses within the neighbourhood is anticipated to reduce vehicle usage by allowing residents to walk to services from their nearby homes.

Play

A variety of recreational areas have been accommodated throughout Waterford Station which are further discussed throughout the Outline Plan.

The integration of open spaces in Waterford Station encourages residents to include recreation into their lives and embrace alternative modes of transportation to

travel throughout the community. Waterford Station's off-street trail network is intended as the primary pedestrian route, supported by on-street sidewalks.

TRANSITION BETWEEN USES

The design of Waterford Station provides a transition between higher intensity land uses such as commercial areas frequented by high levels of consumer and large commercial style traffic and lower density uses such as single family housing. A gradual reduction in density, scale, and massing assists with the transition from high-traffic commercial areas to high density residential areas, larger massing medium scaled housing, to higher density single family housing to large lot single family homes.

Design including land use transition also directs traffic to primary neighbourhood roadways to discourage high levels of through-traffic.

In residential areas adjacent to commercial uses, landscaping buffers such as common fencing and tree plantings will be provided to provide privacy to residents and minimize any potential visual disturbances created by the commercial areas.

HOUSING OPTIONS

Five land uses have been accommodated in Waterford Station to provide a variety of housing options and price points. Housing options located throughout the community allow for the inclusion of a wide range of demographics as well as supporting up/down sizing opportunities for changing lifestyles.

SUSTAINABILITY

Waterford Station has been designed with a limited use of lanes to increase the permeable area of the development thereby reducing the overland flow of stormwater. This design also reduced the overall area of constructed infrastructure reducing municipal maintenance costs.

3.3 OPPORTUNITIES AND CONSTRAINTS

After reviewing the existing conditions and past planning completed for the Plan Area, the following have been identified as potential opportunities and constraints.

3.3.1 OPEN SPACE CONNECTIONS

As described in **Section 2.2.1 Natural Conditions**, there are several areas of mature vegetation located throughout the Waterford Station Plan Area. As shown in **Table 4 - Total Open Space Dedication**, Waterford Station has been designed to retain 19.0% of the developable plan area as open space to connect residents to nature by incorporating existing vegetation and providing natural spaces for recreation and pedestrian trail connections.

3.3.2 COMMERCIAL OPPORTUNITIES

Sylvan Lake's existing commercial and retail development is primarily located along the east side of Town along Highway 20, currently the primary entrance into Town. Waterford Station's location along 60th Street has been identified as a second primary entrance into Town with a future interchange at Highway 11. This creates an opportunity for Waterford Station to serve as Sylvan Lake's west commercial and retail destination. In total, Waterford Station has been designed to provide approximately 7.75 ha (19.15 ac) of commercial space.

3.3.3 RESOURCE INCLUSION

3.3.3.1 Abandoned Well Site Setback

Two abandoned well sites are located in the Plan Area. These sites will require a small setback to allow for potential future access. To accommodate this setback, a 5m radius, well sites can be located in Public Utility Lots, roadways, parking lots, or unencumbered areas of the commercial site.

3.3.3.2 Pipeline Corridor

All active pipelines will need to be relocated or accommodated in the Plan Area. Further discussions with the pipeline companies are being undertaken to facilitate the implementation of an Outline Plan for this area.

3.3.3.3 Out Parcel

Two small out parcels have been identified along the north boundary of the Plan Area. These parcels have not been included in the Waterford Station neighbourhood to prevent constraints and limitation to the north adjacent lands. Rather than compromise the design of the future north community, the out parcels will allow both Developers to create a transportation network that recognizes appropriate land uses, land use transitions and lotting efficiencies.

Blackstone Development Ltd has entered into discussions with the owner of the north quarter section to discuss comprehensive planning and opportunities for connectivity when that quarter section is designed.

3.3.3.4 Future Designation

There is an active well site, located in the northwest portion of the Plan Area. This well will remain functional as long as desired by Anderson Energy.

Following the well's deactivation and reclamation, this area is intended to be utilized for the storage of recreational vehicles by Waterford Station residents. This storage area will help reduce the amount of recreational vehicles and boats that are parked along the public roadway and overall will increase the visual appearance of the streetscape.

The active well site has been identified as FD - Future Designation, its existing zoning, as shown on **Figure 5 - Concept Plan**. Because the lifetime of this well site and its remediation is unknown, it is important that future consideration be given to the future development and zoning of this area to ensure that alternative light industrial uses are not welcomed into Waterford Station. As storage of recreational vehicles is listed as a discretionary use within the Future Designation district, it is proposed that the FD zoning remain to accommodate such a use.

3.4 LAND USE SUMMARY

Table 1- Land Use Calculations

| Land Use Category | Hectares | Acres | % of Net Plan Area |
|--|--------------|---------------|--------------------|
| Gross Plan Area | 61.19 | 151.20 | |
| Out Parcels | 0.31 | 0.79 | |
| Road Widening- Memorial Trail | 0.79 | 1.94 | |
| Net Plan Area | 60.09 | 148.47 | 100.0% |
| Residential | 26.90 | 66.46 | 44.8% |
| R1A- Medium Lot Residential | 7.70 | 19.03 | 12.8% |
| R5- Narrow Lot Residential | 8.81 | 21.77 | 14.7% |
| R2- Medium Density Residential | 5.18 | 12.81 | 8.6% |
| <i>R2 - North Area</i> | <i>1.19</i> | <i>2.95</i> | <i>2.0%</i> |
| <i>R2 - Potential Direct Control District</i> | <i>3.99</i> | <i>9.86</i> | <i>6.6%</i> |
| R5A- Narrow Lot Duplex Residential | 2.20 | 5.45 | 3.7% |
| R3- High Density Residential | 2.99 | 7.40 | 5.0% |
| Social Care or Place of Worship | 0.59 | 1.45 | 1.0% |
| Social Care or Place of Worship (Alternative as R3) | 0.28 | 0.68 | 0.5% |
| Social Care of Place of Worship (Alternative as R1A) | 0.31 | 0.77 | 0.5% |
| Commercial | 7.75 | 19.15 | 12.9% |
| CNS- Neighbourhood Shopping Centre | 7.75 | 19.15 | 12.9% |
| Well Site / Recreational Vehicle Storage | 1.57 | 3.87 | 2.6% |
| UR- Urban Reserve | 1.57 | 3.87 | 2.6% |
| Open Space | 11.63 | 28.75 | 19.4% |
| MR- Municipal Reserve* | 8.51 | 21.02 | 13.9% |
| <i>MR - Preserved Tree Stand</i> | <i>1.87</i> | <i>4.63</i> | <i>3.1%</i> |
| <i>MR - Other</i> | <i>6.63</i> | <i>16.39</i> | <i>10.8%</i> |
| PUL- Public Utility Lots | 1.55 | 3.85 | 2.6% |
| PUL- Stormwater Management Facility (SWMF) | 1.57 | 3.88 | 2.6% |
| Transportation | 11.65 | 28.79 | 19.4% |
| Collector Roadways | 4.50 | 11.12 | 7.5% |
| Local Roadways | 6.72 | 16.60 | 11.2% |
| Lanes | 0.43 | 1.07 | 0.7% |

* Municipal Reserve percentages are based on Gross Plan Area less Environmental Reserve



Legend:

- Medium Lot Residential District (R1A)
- Medium Density Residential District (R2)
- High Density Residential District (R3)
- Narrow Lot General Residential District (R5)
- Narrow Lot Duplex Residential District (R5A)
- Neighbourhood Shopping Centre District (CNS)
- Future Designation (FD)
- Social Care/Place of Worship
- Municipal Reserve (MR)
- Public Utility Lot (PUL)

- Roadway/Lane
- Outparcel
- Park Fronting Homes (No front garage)
- Entry Feature
- Community Amenity
- Potential 4m Front Setback Location
- Potential Access Location
- 100m Well Setback Line
- Multi Modal Trail
- Outline Plan Boundary



FIGURE 5 - CONCEPT PLAN



- Legend:**
- | | |
|---|--|
| Medium Lot Residential District (R1A) | Roadway/Lane |
| Medium Density Residential District (R2) | Outparcel |
| High Density Residential District (R3) | Park Fronting Homes (No front garage) |
| Narrow Lot General Residential District (R5) | <div style="position: absolute; top: 5px; left: 5px; width: 5px; height: 5px; background-color: black;"></div> Entry Feature |
| Narrow Lot Duplex Residential District (R5A) | <div style="position: absolute; top: 5px; left: 5px; width: 5px; height: 5px; background-color: red; border-radius: 50%;"></div> Community Amenity |
| Neighbourhood Shopping Centre District (CNS) | Potential 4m Front Setback Location |
| Future Designation (FD) | Potential Access Location |
| Social Care/Place of Worship | 100m Well Setback Line |
| Municipal Reserve (MR) | Multi Modal Trail |
| Public Utility Lot (PUL) | Outline Plan Boundary |



FIGURE 6 - CONCEPT PLAN WITH AERIAL



Character image - Terwillegar Towne, Edmonton

4 Residential Uses

4.1 INTENT

A variety of residential uses are anticipated in the Waterford Station neighbourhood including single family and multi-family options which will provide significant housing styles at a broad range of price points. The majority of residential areas have been designed with unique lot features such as; backing onto open spaces, park fronting homes, enhanced streetscapes, access to open space and connectivity to retail. These housing choices will contribute to Sylvan Lake's overall inventory of homes and introduce new styles for potential residents such as adult living homes and those fronting on to park spaces. All homes in Waterford Station will be constructed using a high level of architectural design detail.

4.2 LOW DENSITY HOUSING

Low density housing in Waterford Station has been identified in the form of single family homes. Single family homes will be accommodated in Waterford Station through the inclusion of various low density residential land use districts, as further described below. Low density housing has been located throughout the neighbourhood primarily in areas adjacent to parks, trails, and passive recreation spaces.

In addition to the various low density residential uses as identified, smaller lot homes have been located along the neighbourhood's collector roadways; whereas, larger lot homes have been located along local roadways and park spaces.

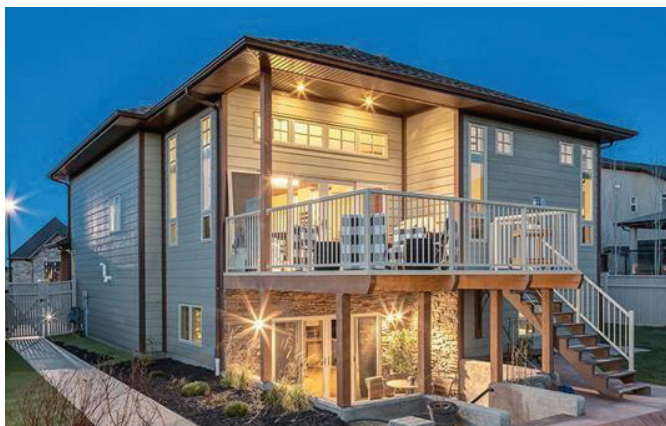
4.2.1 MEDIUM LOT RESIDENTIAL (R1A)



Example of medium lot house with front double attached garage.



Example of medium lot house with three car garage and high levels of architectural detail.



Example of R1A house with walkout basement.



Example of two-storey medium lot house with front porch.

The R1A Medium Lot Residential District is intended to accommodate low density, single family detached housing. This land use will accommodate the largest residential lots in the neighbourhood at a minimum lot size of 460m². Appropriate housing types in this land use district include bungalows, bi-levels, modified bi-levels, or two-storey.

Secondary suites may also be accommodated within this land use district, as per the Town's Land Use Bylaw regulations. Walk-out basements may also be available in some areas which will be identified within the Waterford Station Servicing Study.

Medium lot housing has been located throughout Waterford Station in areas that either back onto the neighbourhood's open space network or front onto park spaces. In areas where housing has been located fronting onto park spaces, modified street access will be provided, as further described in **Section 4.5.1 Park-Fronting Homes**.

4.2.2 NARROW LOT GENERAL RESIDENTIAL (R5)



Example of narrow lot house with front attached garage.



Example of narrow lot house with front attached garage.



Example of modified two-storey park front house with rear parking.



Example of two-story R5 house without front attached garage.

The R5 Narrow Lot district offers a more affordable single-family housing option to residents due to its decreased lot width. Appropriate housing types in this land use district include bungalow, bi-level, or two-storey homes with or without front attached garages.

Secondary suites are identified as a Discretionary Use in this district and may be accommodated as per the Town's Land Use Bylaw regulations. Walk-out basements will also be available in some areas which will be identified within the Waterford Station Servicing Study.

The majority of Narrow Lot housing has been located in areas backing onto the neighbourhood's open space network without rear lane access. In areas where housing has been located fronting onto park spaces, modified roadway access will be provided, as further described in **Section 4.5.1 Park-Fronting Homes**.

4.2.3 NARROW LOT DUPLEX RESIDENTIAL (R5A)



Example of R5A duplex with front attached garage.



Example of R5A duplex with rear parking.

The R5A Narrow Lot Duplex Residential District is intended to accommodate narrow lot duplex housing which provides a more affordable housing type that still offers residents private outdoor amenity space and in some cases front attached garages. Housing types in this land use district are envisioned to include bungalows, bi-levels, and two-storey homes with or without front attached garages.

4.3 MEDIUM DENSITY (R2)



Example of two-storey rowhomes fronting on to park.

The R2 Medium Density Residential District is used selectively in Waterford Station to accommodate a range of medium density housing such as single detached homes, duplexes, fourplexes, rowhomes, and stacked rowhomes with varied architecture, design, and building styles and landscaped areas.

Located adjacent to the neighbourhood's open space system, the R2 sites are intended to create a park-like setting where residents are integrated into the open space network and encouraged to engage in active outdoor lifestyles and form diverse housing nodes.

Both Medium Density Residential nodes have also been located in close proximity to the neighbourhood's collector roadways to provide convenient vehicular and pedestrian access for residents. Both of these areas are intended to accommodate housing to form active adult communities, market permitting.

The north east R2 area has been designed with traditional homes backing on park spaces. The vision of this area is to create an intimate housing option that encourages residents to interact and utilize the linear open space adjacent to their backyards. Rear setback will be



Example of single detached bungalow with front attached parking.

developed to a minimum in order to encourage such use.

Due to the potential varying housing options within the area: lots size, yard setback and site coverage will be reviewed and discussed with the Town. The Development of this R2 site may require relaxation to the District, amendment to the District or the creation of a Direct Control District.

Potential Direct Control District

The south R2 area is envisioned as an active adult community designed using a comprehensive site plan and incorporating a variety of different housing styles as further described in **4.6 Land Use Bylaw Review**.

4.4 HIGH DENSITY RESIDENTIAL (R3)

R3 High Density Residential housing can take a variety of forms as further described below. This type of housing provides an affordable multi-family residential option that provides a variety of different choices. This type of housing appeals to a variety of residents including but not limited to renters, first time home buyers, and retirees.

Five areas of higher density housing have been located in the Waterford Station neighbourhood: one in the west portion of the neighbourhood, one adjacent to the entrance roundabout, and three areas fronting the main north-south collector roadway. These locations have been chosen to disperse density throughout the neighbourhood, provide walkability to neighbourhood destinations, and provide a buffer between lower density housing and the commercial area.

Multi-family housing is considered a suitable transitional use between commercial uses and lower density housing due to the anticipated buildings' overall size and height, site design, and higher level of architectural elements often associated with this housing type.

The R3 land use district can accommodate a variety of multi-family housing types such as those listed below, all of which can take the form of rental or condo facilities.



Example of apartment style multi-family housing.

Apartment-Style

Apartment style buildings have shared entries, hallways, and often offer residents shared indoor amenities such as fitness centres, hot tubs, conference facilities, etc. Apartment sites will be designed with internal, private, roadways and offer residents either surface lot parking or underground parking.

Rowhomes

Rowhomes consist of three or more attached units which do not overlap one another and have shared common walls from foundation to roofs. Rowhomes can be designed to have either internal roadways or to front along a public roadway; in either case, Rowhomes can have front attached parking or rear parking.



Example of street-fronting rowhomes.

R3 uses identified along the west north-south collector roadway may be constructed as street-front Rowhomes. In this area, Rowhomes are intended to be fronting onto the public roadway with a minimal front setback and rear parking. The use of this land use along the collector roadways will provide a consistent visual for the neighbourhood and act as a transitional use between the commercial areas and lower density residential uses.



Example of stacked rowhomes with surface parking lots.



Example of stacked rowhomes with some garage parking.

Stacked Rowhome

Stacked rowhomes are buildings containing 3 or more dwelling units, each separated by common walls and having a private access from grade. Dwelling units in these buildings can be located wholly or partially over or under other dwelling units.

Stacked rowhomes can be designed to have either internal roadways or to front along a public roadway. Regardless of the style of roadway used to access this housing type, rowhomes can have front attached parking or rear parking. In areas where stacked rowhomes are designed around internal roadways, surface lot parking may be used.

4.5 HOUSING DETAILS

4.5.1 PARK-FRONTING HOMES



Example of lane-accessed rowhomes fronting onto park.



Example of lane-accessed single family homes fronting onto park.



Example of two-storey duplexes fronting onto park.



Example of two-storey house with front porch fronting onto park.

In many areas of Waterford Station, houses have been designed to front onto park spaces with pedestrian access from the park and vehicular access from a modified roadway. Park front housing has been included in the design of Waterford Station to increase the interaction between residents and open spaces. This interaction is intended to increase the use of public park spaces, provide opportunities for neighbours to socialize with one another, foster a sense of community, encourage active lifestyles, provide enhanced views from homes, increase access and reduced walking distances to open spaces, and provide a higher level of passive surveillance on park spaces.

Park-fronting homes are designed to have a shared lot line with a public park space such as Municipal Reserve which in turn has reduced setbacks from that line, and a shared lot line with a modified roadway, which also may have reduced setbacks. To support a rear-access design, rear garages will be encouraged off the modified roadway.

Park-fronting homes will also be required to have a sidewalk in front of the home, within the Municipal Reserve, to provide access from the public open space to the front door. Each home will connect to the sidewalk/trail via a private walkway.

4.5.2 SECONDARY SUITES

Secondary suites are an increasingly popular form of housing for a variety of reasons: suites are affordable rental properties for tenants, they provide a source of income for home owners which can make mortgages more manageable, and as our population ages they can also be used as mother-in-law suites.

Secondary suites are discretionary uses in single detached dwellings within the R1A Medium Lot Residential district, R2 Medium Density Residential district, and R5 Narrow Lot General Residential. Additional regulations regarding secondary suite location requirements are listed in the Town's Land Use Bylaw under **Section 4.5.2 Secondary Suites**.

4.5.3 REAR ACCESS HOUSING

In areas where parking is located at the rear of the lot, home builders will be encouraged to use house layouts that support the use of rear parking. These homes are encouraged to be designed with entry ways at both the front and rear of the home. This design will make entry at the rear of the home more convenient and reduce the amount of on street parking experienced in these areas.

4.6 LAND USE BYLAW REVIEW

To ensure the overall vision of the Waterford Station neighbourhood can be accommodated using the existing Town of Sylvan Lake Land Use Bylaw, the Developer will work with the Town of Sylvan Lake to review the LUB with specific regard for Waterford Station's proposed housing areas as identified below.

- **R2 Medium Density Residential District**

As noted in **Section 4.3 Medium Density (R2)**, the south R2 Medium Density Residential district is envisioned to be developed as a comprehensive site which incorporates a variety of different housing styles and amenities. The intention of Developer is to preserve existing tree stands and characteristic of the area by clustering housing development

within. The creation of this area will highlight the open space and natural area by designing houses to fit the area, modifying roadway cross sections and recognizing the uniqueness of each lot.

The south adults site has been identified as a R2 land use district, additional review and site design at a later stage will determine whether the land use supports the needs of a active adult living area.

Due to the potential varying housing options within the area: lots size, yard setback, site coverage, and roadways will be reviewed and discussed with the Town. The Development of the R2 site may require relaxation to the R2 District, amendment to the R2 District or the creation of a Direct Control District.

- **R1A Medium Lot Residential and R5 Narrow Lot Residential Districts**

Rear access housing located throughout Waterford Station has been identified as R1A Medium Lot Residential and R5 Narrow Lot General Residential zoning. These two land use districts will be reviewed for their specific application to accommodate rear access housing.

- **Rear Accessed Homes' Front Setback**

In areas where houses will be accessed from the rear, and a front garage is not anticipated, a 4.0m setback is proposed. These areas are identified on **Figure 5 - Concept Plan**. As per the policies identified in the Town of Sylvan Lake's LUB, houses in these areas will not permit front parking; therefore, all parking will be provided along the rear of the lot as facilitated by the inclusion of a 9.0m wide modified roadway.

4.7 HOUSING MIX & POPULATION PROJECTION

The anticipated housing density of Waterford Station is 14.1 du/ha, with a total housing stock of 738 units, and a population of 1,692 residents. As shown below, Waterford Station's anticipated density is above the West ASP's required 13.0 du/ha.

Table 2- Housing Mix

| Housing Mix | # of Dwelling Units ¹ | % of Housing Stock | Estimated Population ² |
|---|----------------------------------|--------------------|-----------------------------------|
| Total Housing Stock | 738 | 100.0% | 1,692 |
| R1A- Medium Lot Residential District | 148 | 20.1% | 339 |
| <i>R1A - Park Front Homes</i> | 25 | 3.4% | 57 |
| <i>R1A - Backing on to Parks</i> | 123 | 16.7% | 282 |
| R5- Narrow Lot Residential District | 191 | 25.9% | 437 |
| <i>R5 - Park Front Homes</i> | 26 | 3.5% | 59 |
| <i>R5 - Backing on to Parks</i> | 113 | 15.3% | 259 |
| <i>R5 - Front and Rear Lane Access</i> | 52 | 7.0% | 119 |
| R2- Medium Density Residential | 179 | 24.3% | 411 |
| <i>R2 - North Area</i> | 40 | 5.4% | 92 |
| <i>R2 (Potential Direct Control District) - South Area</i> | 139 | 18.8% | 319 |
| R5A - Narrow Lot Duplex Residential | 64 | 8.7% | 147 |
| R3- High Density Residential | 156 | 21.1% | 358 |
| <i>R3 - Street-fronting Rowhomes</i> | 58 | 7.9% | 133 |
| <i>R3 - Apartment</i> | 67 | 9.1% | 154 |
| <i>R3 - Internal Roadway Rowhomes or Stacked Rowhomes</i> | 31 | 4.2% | 71 |
| Density: 14.1 du/ha 738 dwelling units / 52.34ha Total Dwelling Units / (Gross Plan Area less Out Parcel, Memorial Trail, and Commercial Areas) | | | |

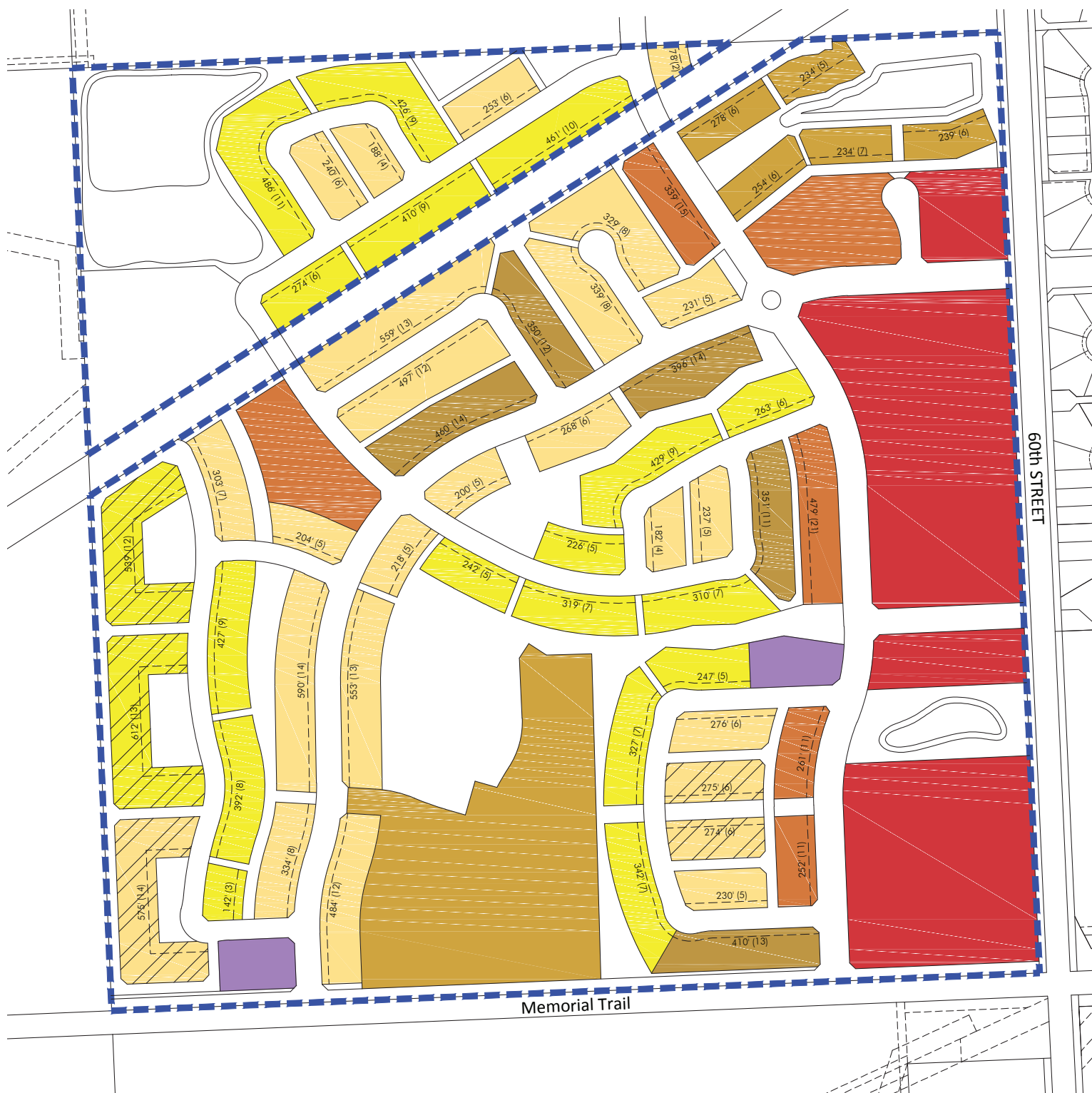
¹ Units are based on minimum lot size regulations in the Town of Sylvan Lake Land Use Bylaws, 35 du/ha for rowhomes, and 85 du/ha for apartments.

² Population estimates are based on an average household size of 2.3 persons per household. This information is as reported by the 2013 Town of Sylvan Lake Municipal Census.

Table 3- School-Aged Residents' Population Projection

| | Total Population | School Aged Children ³ | | | Other Residents |
|---|---------------------|-----------------------------------|------------|-----------|--------------------|
| | | K-5 | 6-9 | 10-12 | |
| R1A - Medium Lot Residential | 339 | 24 | 24 | 8 | 283 |
| <i>R1A - Park Front Homes</i> | 57 | 4 | 4 | 1 | 48 |
| <i>R1A - Backing on to Parks</i> | 282 | 20 | 20 | 7 | 235 |
| R5 - Narrow Lot Residential | 437 | 30 | 30 | 10 | 367 |
| <i>R5 - Park Front Homes</i> | 59 | 4 | 4 | 1 | 50 |
| <i>R5 - Backing on to Parks</i> | 259 | 18 | 18 | 6 | 217 |
| <i>R5 - Front and Rear Lane Access</i> | 119 | 8 | 8 | 3 | 100 |
| R2 - Medium Density Residential | 411 | 28 | 28 | 10 | 345 |
| <i>R2 - North Site</i> | 92 | 6 | 6 | 2 | 78 |
| <i>R2 - South Site</i> | 319 | 22 | 22 | 8 | 267 |
| R5A - Narrow Lot Duplex Residential | 147 | 10 | 10 | 3 | 124 |
| R3 - High Density Residential | 358 | 25 | 25 | 9 | 299 |
| <i>R3 - Street-fronting Rowhomes</i> | 133 | 9 | 9 | 3 | 112 |
| <i>R3 - Apartment</i> | 154 | 10 | 10 | 4 | 130 |
| <i>R3 - Internal Roadway Rowhomes or Stacked Rowhomes</i> | 71 | 5 | 5 | 1 | 60 |
| Total | 1,692 | 117 | 117 | 40 | 1,418 |

³ The amount of school age children anticipated in Waterford Station (K-5 at 7.1%, 6-9 at 7.1%, 10-12 at 2.7%) is derived using the age distribution as reported by the 2013 Town of Sylvan Lake Municipal Census.



Legend:

- Medium Lot Residential District (R1A)
- Medium Density Residential District (R2)
- High Density Residential District (R3)
- Narrow Lot General Residential District (R5)
- Narrow Lot Duplex Residential District (R5A)
- Neighbourhood Shopping Centre District (CNS)
- Social Care/Place of Worship
- Outline Plan Boundary

- Park Fronting Homes (No front garage)
- Frontage (Potential Lots)

Lots have been determined based on widths:

| | |
|-----|-----|
| R1A | 44' |
| R2 | 24' |
| R5 | 40' |
| R5A | 29' |



FIGURE 7 - DWELLING UNIT COUNT



5 Commercial Uses

5.1 INTENT

Waterford Station features a variety of commercial opportunities along the east boundary of the Plan Area along 60th Street. Commercial development supports the commercial growth within the Town of Sylvan as well as Waterford Station's vision of providing opportunities to live, work, and shop, within their neighbourhood thereby encouraging residents to stay within the community to access many of their needs.

Three different commercial areas are envisioned in Waterford Station: a convenience-based commercial node along 60th Street at the north community entrance road, typical large format commercial uses between the two 60th Street entrance roads, and a pedestrian-focused "High Street" in the south portion of the Plan Area. Each of Waterford Station's commercial areas are further described throughout the remainder of this section.

As shown on **Figure 8 - Walking Distances to Commercial Areas**, all residences are located within an 800m walking distance to the commercial areas which represents a 10 minute walk; residences along the east side of Waterford Station are located within a 400m walking distance which represents a 5 minute walk.

5.2 NEIGHBOURHOOD SHOPPING CENTRE (CNS)

Located at the entrance of Waterford Station, a 1.4 ac commercial parcel of land is intended to accommodate a range of smaller scale retail and services for the neighbourhood residents and those living in adjacent neighbourhoods. Examples of commercial uses for this area include convenience retail, a gas bar, retail sales, small medical offices, restaurant, or salon.

Two larger commercial areas along 60th Street will accommodate larger commercial uses in an attractive environment. These uses are intended to include uses that serve all residents and visitors of Sylvan Lake. The two areas have a different vision and purpose. The north site would include a variety of larger scale commercial uses such as grocery stores, banks, or restaurants as well as service uses such as a medical or other professional offices.

The south site, "High Street", is envisioned to accommodate more pedestrian-focused uses such as boutique retail shops, professional services, restaurants, and pubs. This area will be designed as a pedestrian destination within the community by integrating sidewalk and trail connections and identifying areas for public



Example of an envisioned CN commercial use with high quality architectural detail.



Example of landmark destination architecture within a neighbourhood commercial centre.



Example of alternative architecture styles used on common franchise businesses.

gatherings or markets. Buildings in this area will be specifically designed to enhance pedestrian interaction with shops and the amenity provided by the adjacent stormwater management facility, which will be designed as a water feature.

Although the vision differs between the north and south CNS areas, a full range of commercial uses may be considered in either areas.

5.3 SITE DESIGN & ARCHITECTURAL DETAILS

The Town of *Sylvan Lake's Municipal Development Plan* outlines several development guidelines for Town Centre style commercial developments that make them particularly appealing. These characteristics are further described below.

To make Waterford Station's commercial areas memorable and desirable destinations for Town residents, a set of architectural design guidelines will be created. These guidelines will outline building materials, colours, landscaping, and lighting for use by builders. By implementing these guidelines, Waterford Station's commercial areas are envisioned to become landmarks for the community providing "3rd place" areas for neighbours to spend time away from home and work to relax and interact with one another.

The following will be considered in the Waterford Station commercial guidelines:

- **Imageability**

The quality of place that makes the area distinct, recognizable, and memorable.

- **Enclosure**

The degree to which streets and public spaces are visually defined by visual elements such as buildings, walls, and trees to create spaces that feel sheltered, engaged, and safe for pedestrians.



Example of pedestrian-scaled architectural



Example of front facade - varying window treatment, pedestrian areas and visual elements that draw attention and provide interest.



Example of high quality landscaping, pedestrian areas, and signage increasing legibility.

- **Human Scale**

How the size, texture, and physical elements reflect the level of detail that appeals to pedestrians and provides interest for those walking through the area rather than driving by.

- **Transparency**

The degree to which people can see, or perceive to see, what is beyond the edge of the street - windows rather than walls, semi-transparent fencing, landscaping as a buffer rather than fencing.

- **Complexity**

The visual interest of a place, which, as previously discussed, is very important for creating a vibrant commercial area. Often described as “organized chaos”, commercial areas should be full of things to look at including architectural detail, window designs, sidewalk signs, seating areas, landscaping, lighting, and site furniture.

- **Coherence**

A sense of order. Although “organized chaos” can be visually appealing - it must be organized in a consistent way to provide a collective sense of place.

- **Legibility**

How easily the area can be navigated using visual connections, signage, pedestrian linkages.

- **Linkage**

A physical or visual connectivity between elements. This can include building heights, landscaping areas, or pedestrian accesses.

As identified in the *Town of Sylvan Lake's Land Use Bylaw*, all commercial districts will require a comprehensive development plan be submitted to the Development Authority prior to site construction. These plans must illustrate architectural treatment of buildings, landscaping, lighting, parking, and access.



- Legend:**
- Municipal Reserve (MR)
 - Public Utility Lot (PUL)
 - Commercial Area/Node
 - Outline Plan Boundary

- Walking Distance to Commercial Destination**
- 400m - Trail Network
 - 400m - Sidewalks
 - 800m - Trail Network
 - 800m - Sidewalks



FIGURE 8 - WALKING DISTANCES TO COMMERCIAL AREAS



6 Community Facility

6.1 INTENT

Community facilities in Waterford Station may include a medical office, urgent care centre, and social care facilities such as a temporary care home, child care, or a place of worship. These facilities are envisioned to be wellness hubs for the community, destinations for the entire Sylvan Lake population and areas which can produce spin-offs including a need for doctors offices, pharmacies, banks, and food and beverage establishments.

6.2 URGENT CARE AND MEDICAL OFFICE

Sylvan Lake has been working towards opening an emergency care facility for a number of years to address a need for enhanced access to health services in the community. Although the project has been delayed, the Waterford Station neighbourhood has been designed with the inclusion of this use in mind.

Should the funding for an urgent care facility become available in the future, Waterford Station could accommodate this use in its commercial centre.

To maintain flexibility for the development of the Waterford Station commercial centre, specific locations for the urgent care facility and medical office have not been identified.

6.3 SOCIAL CARE SITES

As per the West ASP regulations, two areas have been identified in the Plan Area for the potential development of affordable housing, a place of worship, adult or social care residence, or day care facility. These properties will be advertised for sale, in a manner acceptable to the Town, for a period of one year after the registration of the plan of subdivision for the development phases in which they are located. If the properties are not sold for the intended purpose within the one year period the sites will be redesignated to a residential land use district (R3 High Density for the site located along the south boundary or R1A Medium Lot Residential for the central site) without requiring an Outline Plan amendment.



Character image - MacKenzie Towne, Calgary.

7 Open Spaces

7.1 INTENT

Waterford Station is a community designed to connect residents to nature. Unlike any other neighbourhood in Sylvan Lake, Waterford Station fully integrates residential areas with recreation spaces to encourage active living for residents of all ages. Existing vegetation and topography is utilized as the basis of the community's open space system to provide residents with convenient access to natural areas as well as a wide-reaching and robust open space network. In order to achieve this vision, the Developer of Waterford Station has gone above and beyond their required Municipal Reserve dedication.

As required by the Municipal Government Act, up to 10% of the Developable Plan Area is required to be dedicated as Municipal Reserve which equates to 6.12 ha (15.12 ac). An additional 3.9% of Municipal Reserve has been dedicated to create the overall open space system. The over dedicated Municipal Reserve equals 2.39 ha (5.90 ac) and intended to preserve an existing stand as identified in **Section 2.2.1 Natural Conditions**. The protection of this stand of trees will ensure that the area is protected, vibrant, and remains natural for many generations. This MR dedication reflects of the Developer's commitment to creating a high quality neighbourhood that is truly

unique where residents of Waterford Station and Sylvan Lake as a whole can connect with nature.

Open space and Municipal Reserve dedication is further described in **Table 4 - Total Open Space Dedication**.

To complement to the open spaces identified throughout this section, additional amenities and gathering spaces will be developed within the commercial area to create a cohesive open space system found throughout the entire community. Opportunities to incorporate play space, seating areas, community market and other pedestrian focused activities will be determined during site design.



Example of passive recreation space with houses backing on to public park.



Example of trails found within the linear parks



Example of playground with houses backing on to public park space.

7.2 TYPES OF OPEN SPACES

As identified in **Table 4 - Total Open Space Dedication**, Waterford Station has identified 19.0% of its Developable Area as open space. This variety of open spaces has been distributed throughout Waterford Station to provide a range of public open spaces within close proximity to all residents. Each of the different open space styles is further described on the following pages.

7.2.1 PASSIVE PARKS

Waterford Station has been designed primarily around passive parks, areas that do not include active recreation elements such as sport fields. These types of parks are envisioned for passive recreation use such as walking along trails, playing frisbee, picnics, flying kites, and may include playground equipment.

7.2.1.1 Pocket Parks

Pocket parks are small scale areas intended to provide access to open space by residents in all areas of the neighbourhood. These parks have been used to provide opportunities for housing to front and back onto open spaces and encourage residents to extend their activities into public parks.

7.2.1.2 Linear Parks

Linear parks are intended to extend Waterford Station's open space network throughout all areas of the neighbourhood and provide off-street pedestrian trail connections. These areas also provide opportunities for housing to back on to green spaces and provide convenient access to the open space network from residents' homes.

Development within linear parks is envisioned to include multi-use trails in some areas, with seating nodes dispersed throughout and opportunity for other community gathering amenities.



Example of houses backing on to stormwater management facility with trail surrounding the pond.



Example of pedestrian multi-use trail running along stormwater pond.



Example of existing access into CP Rail trail network.

7.2.2 COMMUNITY AMENITIES

Three Community Amenities have been identified for inclusion in Waterford station's open space network. These amenities are envisioned to include active recreation nodes such as playground equipment, outdoor exercise equipment, and seating nodes. Community amenity areas will provide destination areas for residents to gather and socialize. As shown on **Figure 10 - Walking Distances to Community Amenities**, all residences are located within an 800m walking distance to the community amenities with the majority of residences located within a 400m walking distance which represents a 5 minute walk.

7.2.3 STORMWATER MANAGEMENT AREAS

Three areas in the Plan Area have been identified for the purposes of stormwater management: one in the northwest, one in the northeast, and one in the central-east. These areas will consist of stormwater management ponds designed to accommodate flows from storm events. The stormwater ponds will also act as passive recreation destinations in the community with houses backing on to the facilities and walking trails adjacent the ponds.

7.3 TRAIL SYSTEM

Over 4.0km of trails have been identified throughout the Waterford Station's open space network to allow pedestrians convenient access throughout the community and encourage active modes of transportation and recreation. These trails are intended to be constructed as 2.5m wide paved trails and provide short-cutting opportunities for residents complementing the overall sidewalk network. External trails located surrounding the Waterford Station neighbourhood have been shown on **Figure 11 - Multi-Modal Network**; however, these trails are anticipated to be constructed as part of the arterial road upgrades.

The intersections of 60th Street and Memorial Trail and Lakeshore Boulevard will become a major pedestrian crossings; to facilitate safe pedestrian connections in

these areas, formalized crosswalks and traffic calming may be required. This level of design will be completed at the time of intersection upgrades.

7.3.1 ABANDONED RAILWAY

An abandoned railway runs diagonally along the north boundary of the Plan Area. This rail line was constructed in 1914 and removed in 1983; the right-of-way is now owned by the Town of Sylvan Lake and acts as a primary trail linkage throughout the Town of Sylvan Lake.

The railway trail runs through the Town from west to east and will connect Waterford Station to HJ Cody School along 50th Street, Steffe Wolma Elementary School along 45th Avenue, and the west side of Sylvan Lake at Highway 20. Use of this trail will allow residents to easily be transported throughout Sylvan Lake without relying on the Town’s roadway network.

The overall trail design of Waterford Station is intended to maximize non-vehicular access to the abandoned railway trail network.

7.3.2 BUFFERING

It is understood that there may be buffering required along Memorial Trail and 60th Street where adjacent to residential properties. This buffering may take the form of a continuous fence, berm, or enhanced landscaping which will be located within the roadway right-of-way and supplemented with the Municipal Reserve areas dedicated along the Plan Boundary.

Table 4 - Total Open Space Dedication

| Land Use Category | Hectares | Acres | % of Developable Plan Area |
|-----------------------|----------|--------|----------------------------|
| Gross Plan Area | 61.19 | 151.20 | |
| Environmental Reserve | 0.00 | 0.00 | |
| Developable Plan Area | 61.19 | 151.20 | 100.0% |

| | | | | |
|------------------------|------------------------------------|------|-------|-------|
| Required MR Dedication | 10% of (Net Developable Plan Area) | 6.12 | 15.12 | 10.0% |
|------------------------|------------------------------------|------|-------|-------|

| | | | |
|--|-------|-------|-------|
| Open Space Dedication | | | |
| Total Municipal Reserve Dedication | 8.51 | 21.02 | 13.9% |
| Municipal Reserve - Preserved Tree Stand | 1.87 | 4.63 | 3.1% |
| Municipal Reserve - Other | 6.63 | 16.39 | 10.8% |
| Total Public Utility Lot | 3.13 | 7.73 | 5.1% |
| PUL- Public Utility Lots | 1.55 | 3.85 | 2.5% |
| PUL - Stormwater Management Facility | 1.57 | 3.88 | 2.6% |
| Total Open Space | 11.63 | 28.75 | 19.0% |



- Legend:**
- Municipal Reserve (MR)
 - Public Utility Lot (PUL)
 - ✱ Community Amenity
 - Multi Modal Trail
 - Outline Plan Boundary



FIGURE 9 - OPEN SPACE NETWORK



Legend:
 Municipal Reserve (MR)
 Public Utility Lot (PUL)
 Community Amenity
 Outline Plan Boundary

Walking Distance to Community Amenity
 400m - Trail Network
 400m - Sidewalks
 800m - Trail Network
 800m - Sidewalks



FIGURE 10 - WALKING DISTANCES TO COMMUNITY AMENITIES

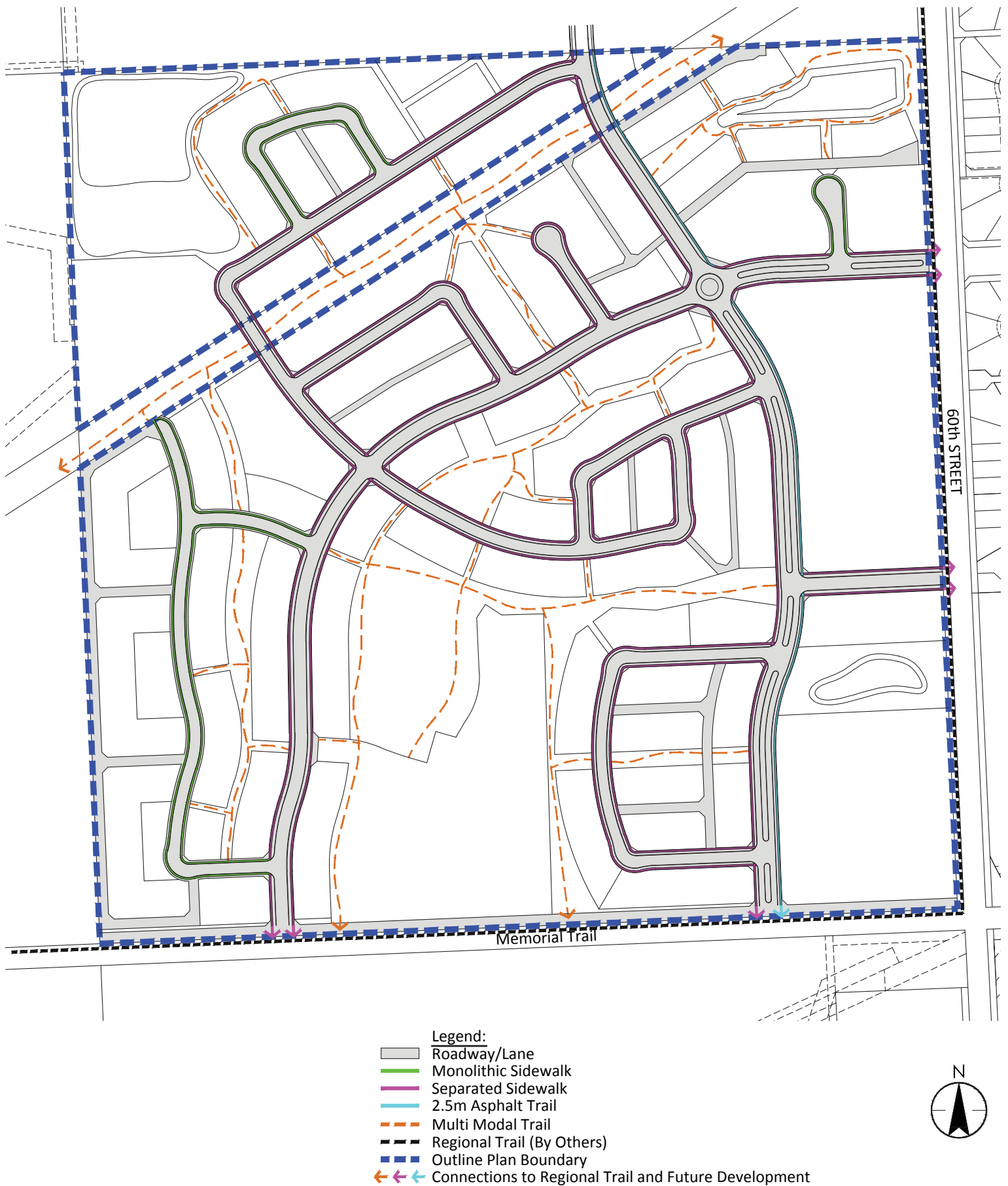


FIGURE 11 - MULTI-MODAL NETWORK



8 Mobility

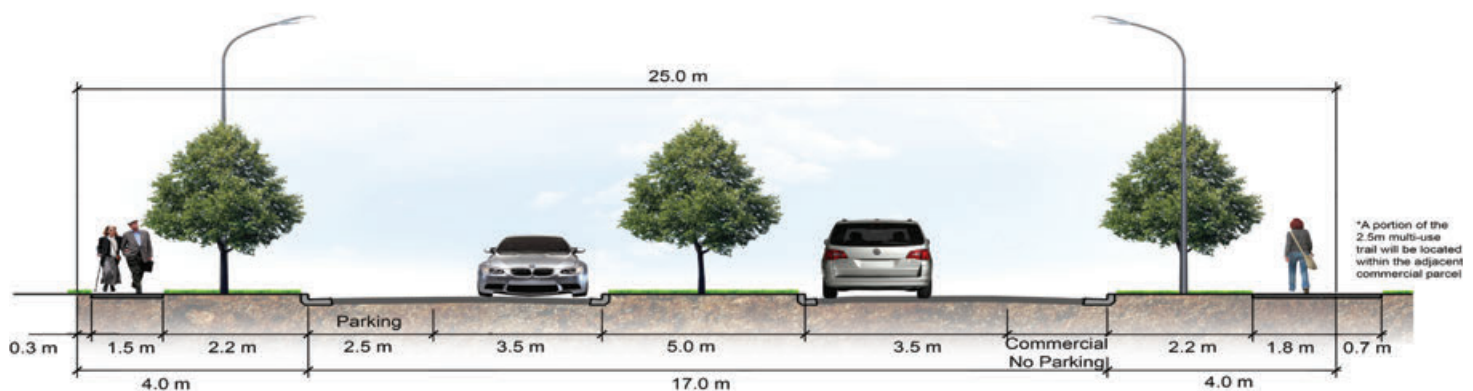
8.1 INTENT

Waterford Station has been designed with an interconnected roadway network as well as off-street pedestrian trails to accommodate alternative modes of transportation and encourage healthy living. As shown on **Figure 12 - Roadway Hierarchy**, a variety of roadway cross-sections have been used throughout Waterford Station. Each cross-section is further described below.

8.2 CROSS-SECTIONS

25.0m Commercial Collector Roadway

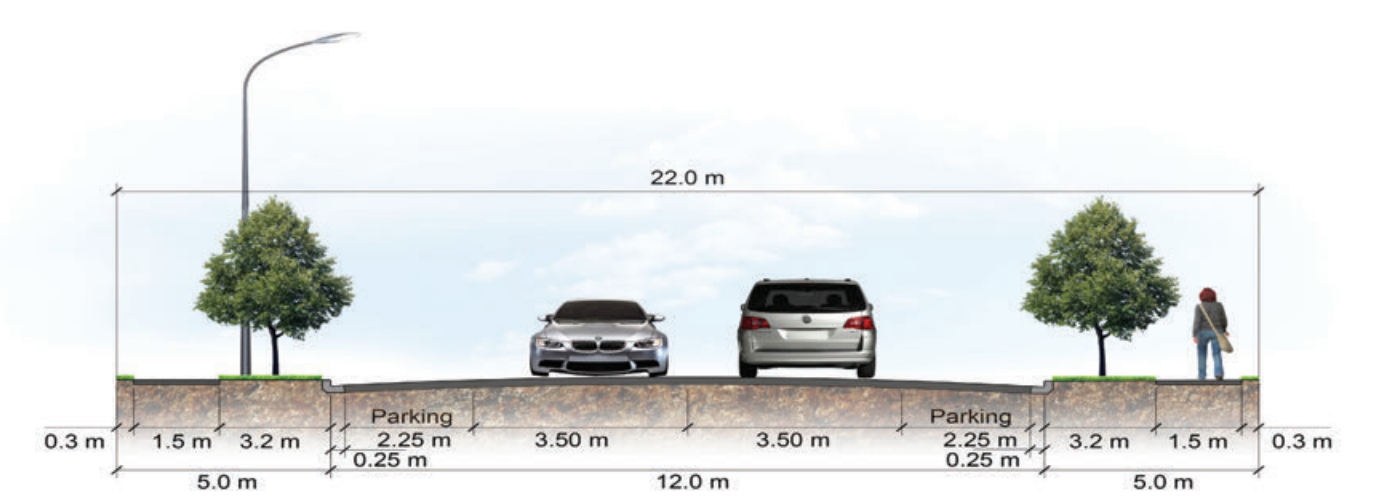
A modified collector roadway will be utilized adjacent to the commercial areas to accommodate the anticipated volumes of traffic, create a pedestrian-friendly streetscape while providing high quality aesthetics. Rowhomes and commercial uses have been identified to front along this roadway to provide a level of consistency and highlight the architecture of the visual massing. Landscaping along this roadway will enhance the visual appearance of the roadway and delineate the vehicular and pedestrian realms.



The specifications of the roadway include a 25.0m wide right-of-way, one 3.5m travel lane, a 1.5m separated sidewalks and 5.0m planted center median. As identified in the cross-section above, the 2.5m wide multi-use trail is proposed along the east side of the roadway which will be partially located in the adjacent commercial site.

22.0m Collector Roadway

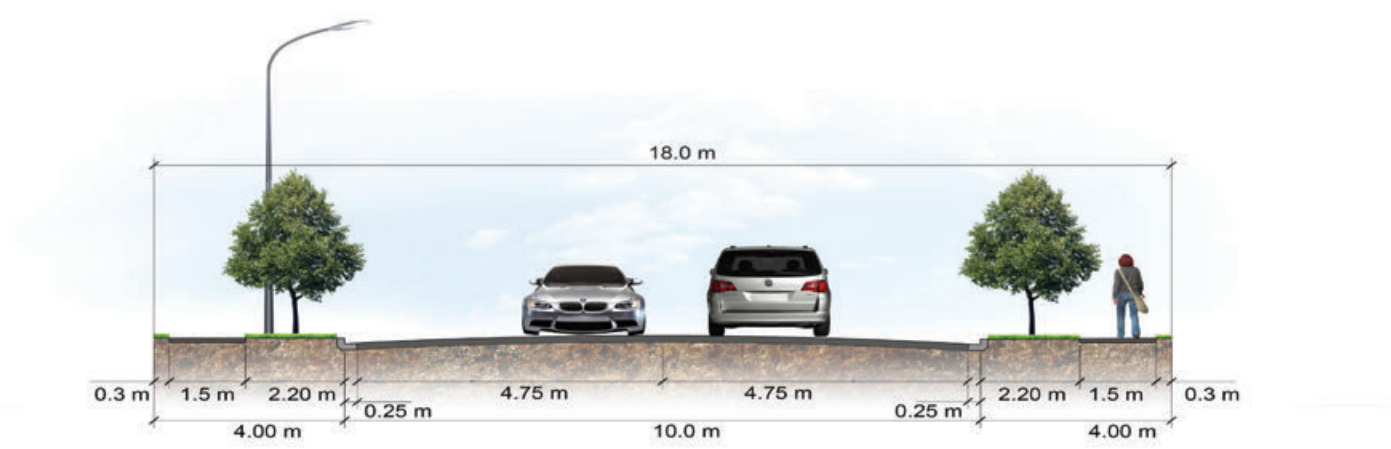
A 22.0m wide collector roadway has been used to provide connectivity throughout Waterford Station. This particular roadway has been used to accommodate higher traffic volumes and create a pedestrian-friendly streetscape throughout residential areas.



The specifications of the roadway include a 22.0m wide right-of-way, one 3.5m travel lane and a 2.5m parking lane in either direction, with 1.5m separated sidewalks. A 1.5m separated sidewalk has been implemented to encourage the use of the extensive multi use trail system adjacent to the collector roads located throughout the community.

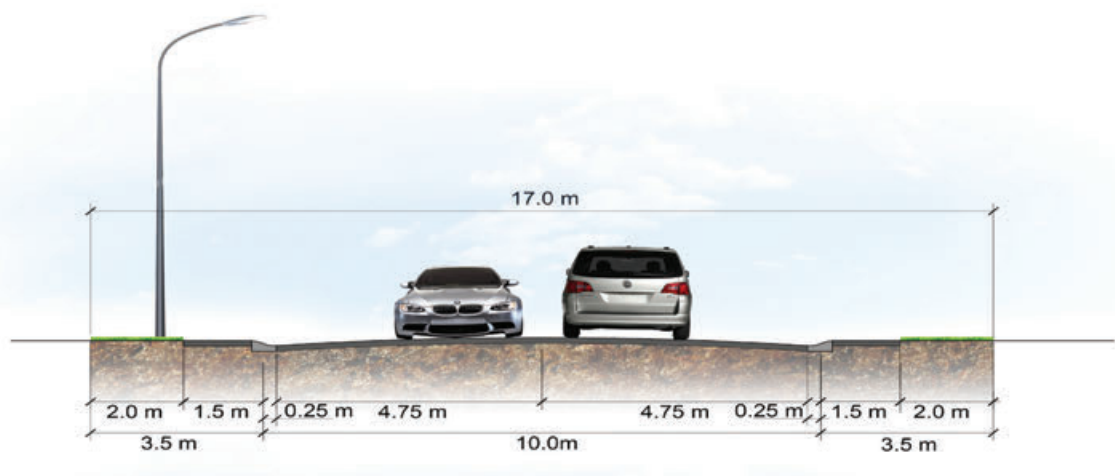
A modified sidewalk has been identified within the collector roadway north of the roundabout. A 1.5m and 2.0m separated sidewalk will ensure safe and direct pedestrian access to the regional trail found within the abandoned railway.

18.0m Local Roadway



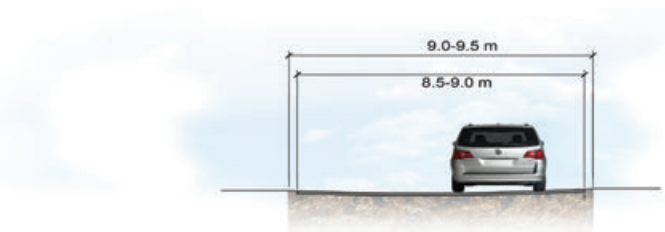
An 18.0m wide local roadway has been used to service areas of low density residential throughout Waterford Station. This roadway includes an 18.0m wide right-of-way one 4.75m travel lane in either direction and 1.5m separated sidewalks.

17.0m Local Roadway



A 17.0m wide local roadway has been used to service low density residential areas throughout Waterford Station. This roadway includes one 4.75m travel lane in either direction and 1.5m monolithic sidewalks.

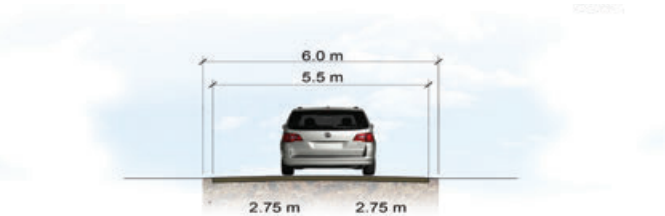
9.0m/9.5m Modified Local Roadway



9.0m and 9.5m wide modified roadways have been used to service park adjacent housing. To facilitate emergency response, general deliveries, municipal operations and winter seasons for park-fronting homes; lanes will paved and include mandatory home numbers on the rear garages as well as illumination of the numbering.

In an effort to prevent short cutting to the commercial node from the west future development, post and cable fencing will be installed along the southwest boundary of the Plan Area, access to the modified roadway will not be granted to future developments.

6.0m Lane



A 6.0m lane as per the Town of Sylvan Lake standards has been used throughout Waterford Station.



Example of single-lane roundabout with central landscaping.



Example of intersection bump-out with highlighted pedestrian crossing.



Example of protected parking, intersection bump-outs, and landscaped median.

8.3 ROUNDABOUTS

A single-lane roundabout will be located at the community's northeast entrance. This style of intersection will safely and efficiently transport residents through the community and provide a focal feature for the community's gateway entrance. The functional design of this roundabout will be completed as part of the Waterford Station Phase One detailed design. The Developer will work with the Town of Sylvan Lake during that process to ensure all municipal regulations are met.

TRAFFIC CALMING

Potential traffic calming methods may include highlighted pedestrian crossings, speed humps, and intersection bump-outs designed to reduce vehicle travel speeds, increase pedestrian safety, and ensure on-going maintenance by the Town of Sylvan Lake. Traffic calming may be provided in areas where trail connections intersect the roadway network and surrounding the Waterford Station commercial centre.

The design of Waterford Station's traffic calming will be developed in conjunction with the Town of Sylvan Lake during the Waterford Station Servicing Study and detailed design.

8.4 COMMERCIAL ACCESS

Through consultation with the Town, it was determined that the Town would support granting right-in/right-out accesses to the north and south Highway Commercial areas provided that:

- The accesses are used to access business only and do not provide through routes via internal road

systems.

- The accesses shown between the commercial areas shall also be a right-in right-out an/or shall have significant traffic calming installations to discourage short cutting between 60 Street and the collector road parallel to 60 Street.
- Any road access onto 60 Street shall meet collector road standards.

8.5 TRANSIT

Waterford Station's collector roadways have been designed to facilitate their use by public transit buses. Although the Town of Sylvan Lake does not currently have this service, bus routes could be located along the community's collector roads should it become available in the future.

8.6 PARKING

All parking facilities will be designed in accordance with the *Town of Sylvan Lake's Engineering Design Guidelines*. Temporary parking will be accommodated along public roadways in Waterford Station except within close proximity to intersections with other public roadways and lanes.

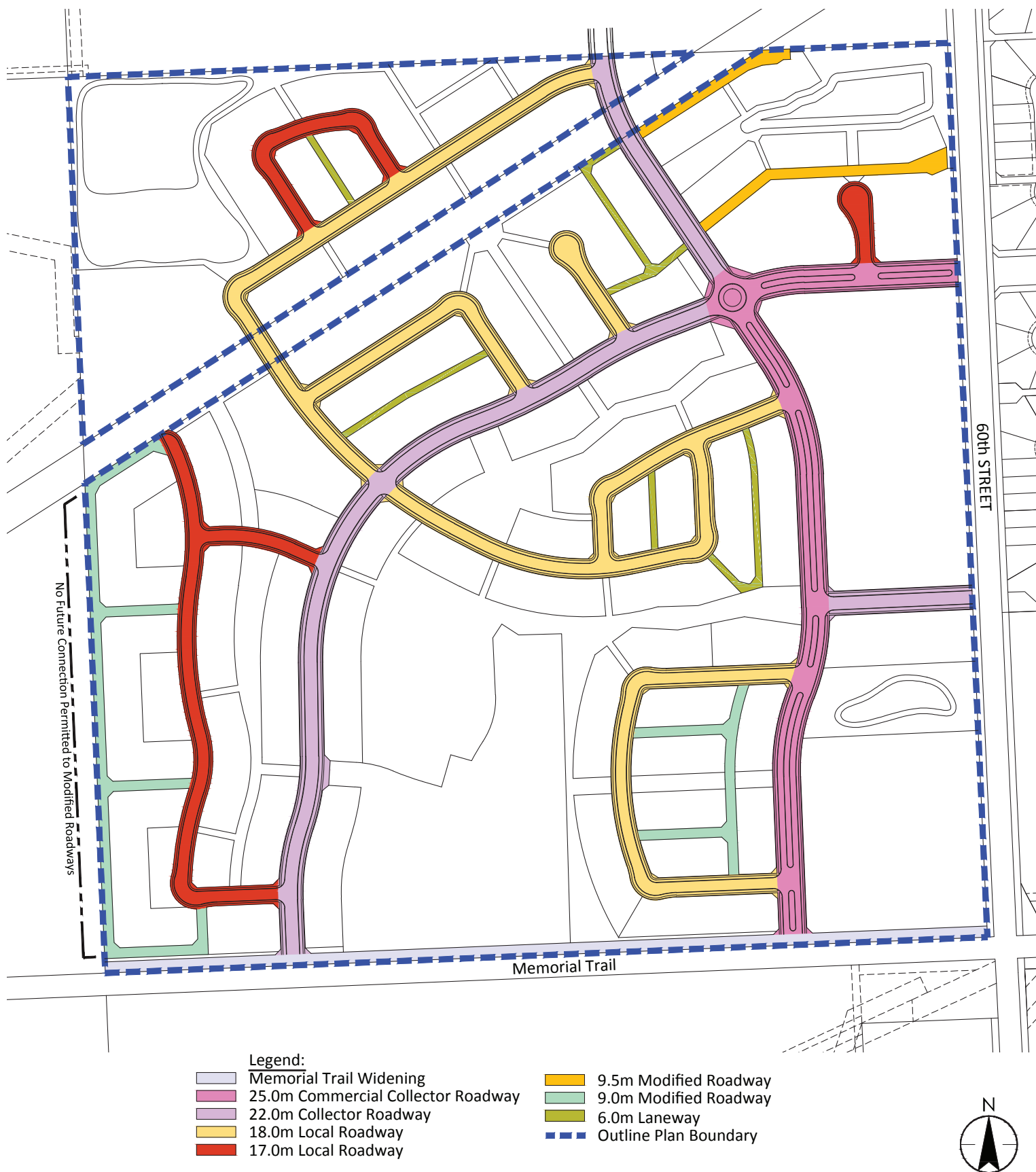


FIGURE 12 - ROADWAY HIERARCHY



Character image - MacKenzie Towne, Calgary.

9 Servicing

9.1 INTENT

Servicing for Waterford Station has been designed based on the extension of existing infrastructure and to ensure that each system can serve the requirements at full build out as well as providing logical extensions into future lands.

9.2 WATER SERVICING

The overall water distribution system needed to service the Plan Area is shown on **Figure 13 - Water System**. This system is an extension of the existing system from the Lakeway Landing neighborhood, to the east. In order to accommodate water looping through the community, two water connections are proposed to Lakeway Landing. Water stubs will be provided to service future development areas to the north.

All water mains in this development will be designed in accordance with the *Town of Sylvan Lake Design Guidelines*.

9.3 SANITARY SERVICING

All wastewater generated from the Waterford Station neighborhood will be collected by gravity sewer system: as shown on **Figure 14 - Sanitary System**. This system will generally drain north and east through the development to a connection in the northeast corner of the Plan Area, adjacent to 60th Street. This connection will be a sanitary trunk that will be constructed along the west side of 60th Street and will eventually connect into the existing sanitary system, located in 48th Avenue.

Due to the grade of the land, the wastewater collected from the crescent on the north side of the abandoned railway may be required to be temporarily pumped back into the gravity system, located on the south side of the right-of-way. This would be accomplished by installing a temporary lift station and force main in this area. Ultimately, the lift station would be removed, and the wastewater would be directed into the future gravity system that will be extended through the development area to the north.

All sanitary sewer facilities will be designed in accordance with the *Town of Sylvan Lake Design Guidelines*.

9.4 STORMWATER SYSTEM

9.4.1 MAJOR DRAINAGE SYSTEM

There are three stormwater management facilities (SWMF) proposed throughout the Plan Area. These facilities will be designed to accommodate 1:100 year stormwater flows for the Waterford Station neighbourhood and restrict outflows to pre-development rates. This system has been analyzed in the *Waterford Station Stormwater Management Plan*, to be submitted to the Town of Sylvan Lake under separate cover.

It is anticipated that a portion of all of Waterford Station's SWMF facilities will be constructed as wet ponds. These facilities will not only detain stormwater from major storm events but also enhance water quality to meet Alberta Environment's standards before discharging the water. These facilities will also serve as visual and recreational amenities for residents in this community.

Stormwater collected and detained in the northwest pond will be treated and discharged directly into Golf Course Creek, which is in close proximity to this facility. Stormwater from the two eastern storm ponds, will be detained, treated, and discharged into the 60th Street roadway ditch. This water will also discharge into Golf Course Creek near 48th Avenue. All three stormwater management facilities will discharge stormwater at pre-development flow rates.

9.4.2 MINOR DRAINAGE SYSTEM

An underground storm pipe system will convey minor storm events, less than 1 in 5 year intensity, from the Waterford Station neighbourhood into one of the three stormwater management facilities, as further described above.

Waterford Station's underground storm pipe system has been designed to act as two separate stormwater catchment systems: one will encompass the west half of the development and direct stormwater to the northwest pond, the other will encompass the east half of the development and direct stormwater into the SWMF in

the northeast corner which will then outlet into the 60th Street ditch.

There will also be a SWMF adjacent to the commercial site which will collect runoff from the commercial area and discharge into the east portion of the drainage system.

The proposed/existing pipe system is shown on **Figure 15 - Storm System**.

All stormwater management facilities will be designed in accordance with the *Town of Sylvan Lake Design Guidelines*.

9.5 FRANCHISE UTILITIES

Shallow utilities will be required for this development within the Town. These utilities include power (Fortis), telephone (Telus), cable (Shaw) and gas (ATCO) and will be extended from the existing community to the east, Lakeway Landing.

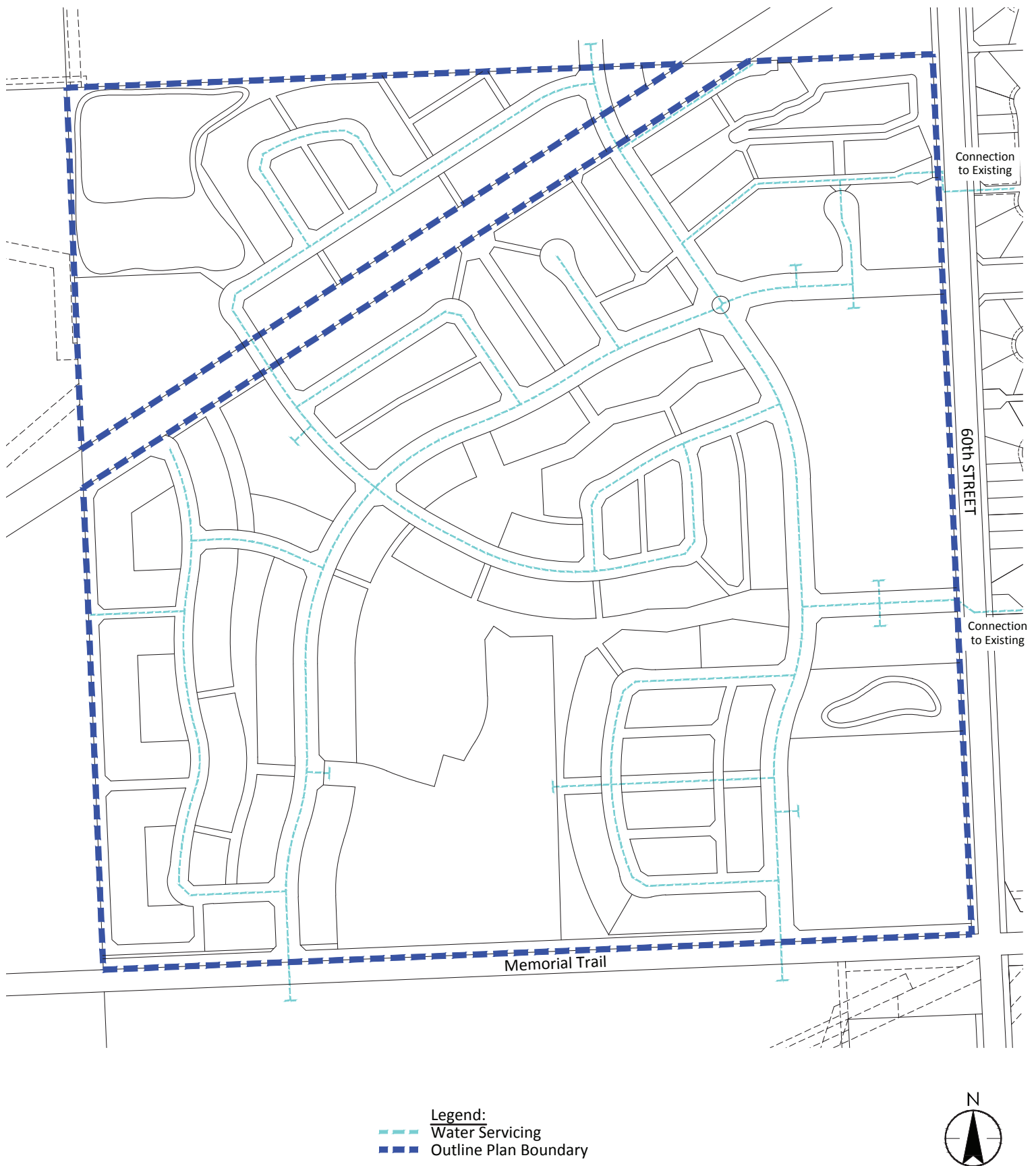


FIGURE 13 - WATER SYSTEM



FIGURE 14 - SANITARY SYSTEM

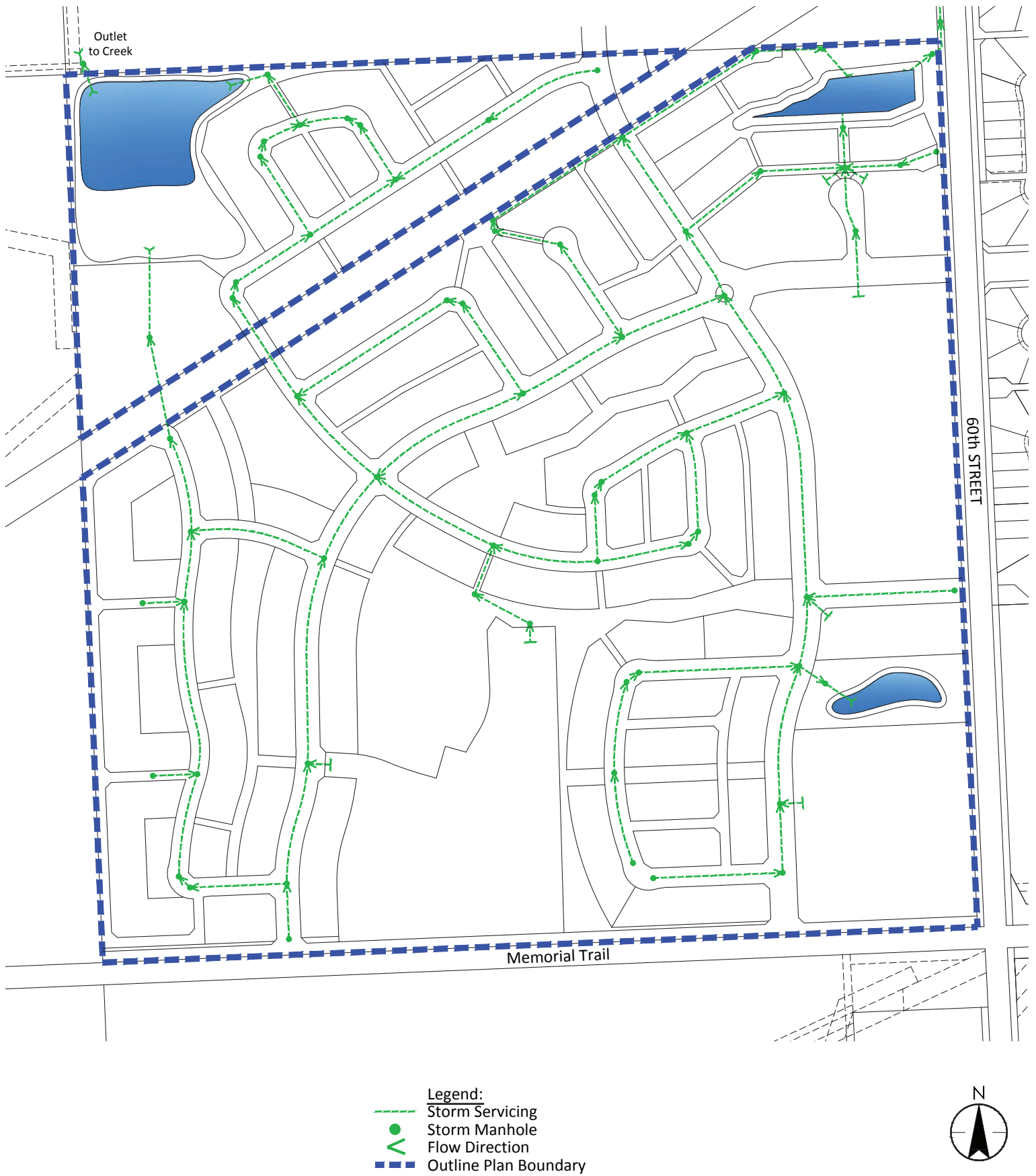


FIGURE 15 - STORM SYSTEM



Character image - Wind Song, Airdrie.

10 Implementation

10.1 INTENT

Staging of development is dependent upon many factors, one of which includes infrastructure servicing to this development. Existing shallow utilities, water and sanitary mains, will be extended into the Plan Area from their existing location to the east of 60th Street.

As 60th Street will be the primary entrance point to Waterford Station, and the location of servicing extensions, it is logical for development to begin in this area of the community. Phase 1 of the development will consist of developing the residential and commercial areas directly off of 60th Street.

Subsequent to the completion of Phase One, additional phases will continue to the west and south, completed based on the logical and economical extension of servicing infrastructure, as well as a reflection of market demand for housing types.

Portions of separate phases may be developed concurrently if there is sufficient demand and/or if municipal servicing is made more efficient as a result.

10.2 PHASING

As shown on **Figure 16 - Phasing Plan**, development of Waterford Station is proposed to be undertaken in several phases. These phases may be refined into smaller areas in the Waterford Station Servicing Study.

10.3 REDESIGNATION AND SUBDIVISION

Redistricting and subdivision applications to conform to the land use designations described in this Outline Plan will be undertaken as necessary. Guided by *The Town of Sylvan Lake Municipal Development Plan*, redesignation and subdivisions must conform to the uses identified in *The Town of Sylvan Lake Land Use Bylaw* and all applicable statutory plans in addition to the informational requirements necessary for each application.



Legend:
 4(2B) Phase Number (Potential Phase Number)
 - - - Phase Boundary
 - - - Outline Plan Boundary



FIGURE 16 - PHASING PLAN