

WEST HILLS CONNUNITY AREA STRUCTURE PLAN April 2021

Presented by:



Pertaining to:

SE1/4-Sec 10-27-1-W5M NE 1/4 Sec 3-27-1-W5M SE 1/4 Sec 3-27-1-W5M



The photos included in this report show the current state of the development site or are intended to be used as inspiration for how the West Hills Community could be developed.



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1.0 Planning Area

This document represents a comprehensive overview of lands identified as the "West Hills Community Area Structure Plan" (the CASP) in the City of Airdrie. It is a policy document adopted by Airdrie City Council to guide future residential, open space and local commercial developments.

The CASP applies to lands three quarter sections described as SE1/4-Sec 10-27-1-W5M, NE 1/4 Sec 3-27-1-W5M, and SE 1/4 Sec 3-27-1-W5M with more detail below in Section 1.1.

The plan area is approximately 195 hectare (482 acres) and is located on the west side of the Airdrie adjacent to the communities of Bayside, Bayview, and Sagewood. Future residential lands are to the south as per the "Future Growth Areas" in the Municipal Development Plan (MDP). To the west are undeveloped annexed lands where future planning is required. To the north is existing country residential lands (Buffalo Rub). Directly adjacent to the subject lands is 24th Street and Yankee Valley Boulevard, as shown in Figure 1: Location Plan.

There is no anticipated impact from noise related to aircraft arriving to and departing from the Calgary International Airport because the subject lands are outside of the flight paths, and are unaffected by the Calgary International Airport Vicinity Special Regulation Boundaries (including Noise Exposure Forecast (NEF) contours restricting uses).

1.1 Land Ownership

The CASP consists of six titled parcels represented by four landowners. See **Figure 2: Land Ownership Plan** and the breakdown is shown in the **Table 1: Land Ownership** below. Registered encumbrances and rightsof-way are provided in the appendix of this report. Municipal reserves, equivalent to 10% of the net developable area of each parcel are owing. POLICY 1.1.1: All municipal reserve and encumbrances noted on title will be confirmed prior to NSP and land use redesignation approval.

Name	Legal Description	Area (+/-)
1210140 Alberta Ltd. ("Westmark")	SE ¼-Sec 3-Twp 27-Range 1- W5M	65.6 hectares (162 acres)
Hawks Landing GP Ltd. ("Lamont")	NE ¼-Sec 3-Twp 27 Range 1-W5M, excepting thereout Plan 1111257	48.49 hectares (119.94 acres)
Kenneth George Reid and Theresa Lynne Reid ("Reid")	Block 1, Lot 1, Plan 1111257	16.21 hectares (40.06 acres)
Minto (Sunnyside) GP Inc. ("Minto")	Lot 1, Block 1, Plan 0313273	18.71 hectares (46.23 acres)
Minto (Sunnyside) GP Inc. ("Minto")	The northerly 1220 feet of the easterly 1420 feet of the SE ½ - Sec 10-Twp 27-Range 1-W5M	16.19 hectares (40 acres)
Minto (Sunnyside) GP Inc. ("Minto")	SE ¼-Sec 10-Twp 27-Range 1- W5M, excepting thereout the northerly 1220 feet of the said quarter; and Plan 0313273	29.8 hectares (73.77 acres)

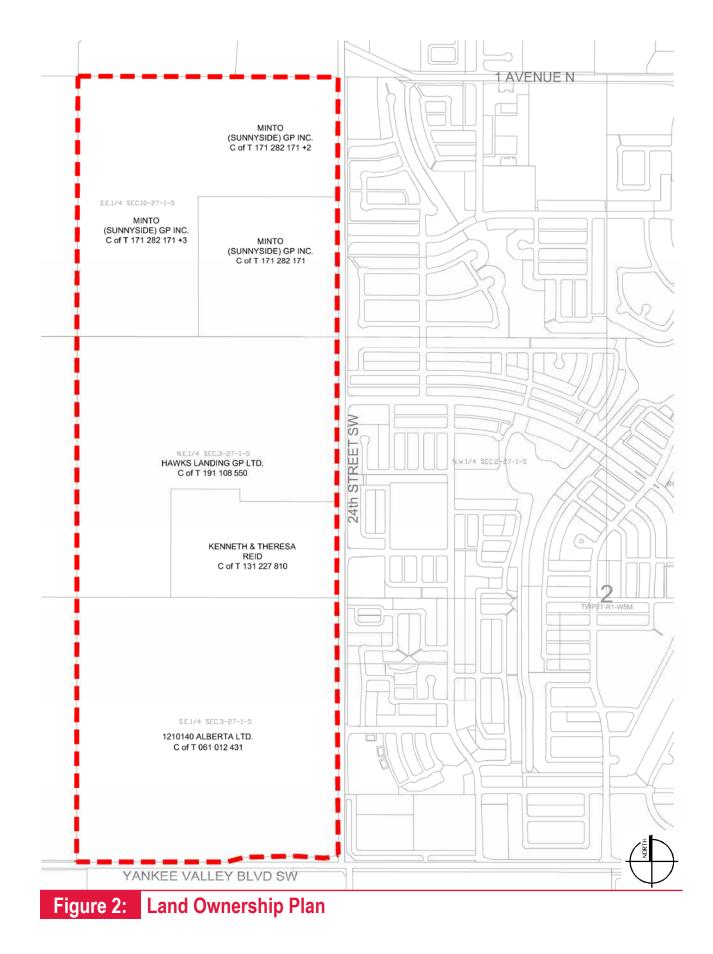
Table 1: Land Ownership





Figure 1: Location Plan









2.0 Planning Context

In March 2012, the Province of Alberta approved the City of Airdrie's annexation application for approximately 5,115 hectares (12,640 acres) of land to the north, east and west of the then current City limits. Due to their location within the annexation boundary, the CASP lands are now subject to City of Airdrie policies to guide future development. Several approved policy documents influence the CASP document and are summarized as follows. The CASP complies with the current policy and plans summarized below.

POLICY 2.1.1: The residential densities of the CASP shall conform to the overall density provisions in the Airdrie City Plan document.

POLICY 2.1.2: All future NSPs shall accommodate a variety of housing types, forms and densities in accordance with the Airdrie City Plan document.

POLICY 2.2.1: Rocky View County will be circulated and invited to comment on this CASP and future NSPs within the plan area.

POLICY 2.2.2: Open space elements within the CASP shall be coordinated with land uses adjacent to the plan area.

2.1 The Municipal Development Plan

The MDP for the City of Airdrie is referred to as the "Airdrie City Plan" and was adopted by City Council in 2014 under Bylaw B-17-2014. The subject lands are identified as being within the Anticipated Growth Boundary for residential uses (*Map 2 – Future Growth Areas*). The document states that there shall be the provision for 10-20 years of planned land supply (Policy 2.10) under approved Community Area Structure Plan (CASP) documents to serve each major land use category. In addition, the MDP acknowledges that future development shall be contiguous to existing development and only proceed when the necessary transportation and infrastructure improvements are planned or in place (Policy 2.4 and Policy 2.11).

The MDP identifies that overall residential density at a CASP level shall average to eight (8) units per gross residential acre (Policy 6.8). The City may limit or modify the density within a proposed Neighbourhood Structure Plan (NSP) to ensure that good planning principles, locational requirements, and livability objectives are adequately demonstrated (Policy 6.10).

2.2 City of Airdrie/M.D. of Rocky View Intermunicipal Development Plan

Approved by the City of Airdrie in August 2001 (Bylaw B-21/2001) and by the M.D. of Rocky View (Bylaw C-5385-2001) in July 2001, the Intermunicipal Development Plan (IDP) is to provide policy direction to both municipalities in areas of common land use development, servicing infrastructure and transportation. A CASP will respect the Intermunicipal policies and accommodate planning for future servicing corridors and transportation networks, address servicing capacities and identify stormwater catchment areas and wetlands.

The CASP area is within the IDP's notification zone (*Map 1 – Intermunicipal Development Plan Area*), meaning that the policy document is subject to review and comment by Rocky View County.





2.3 Utility Master Plan

The City of Airdrie Utility Master Plan (UMP) was endorsed by Council in February 2016 and identifies existing and future infrastructure requirements for water and wastewater servicing. This document outlines future infrastructure needs to service the pre and post annexation lands, and will influence the planning of the subject lands, based on the servicing concepts provided.

2.4 Ecological Inventory Expansion & Environmental Best Practices Report

The City of Airdrie's Ecological Inventory Expansion and Environmental Best Practices Report (November 6, 2013) provides recommendations on the environmental impact of growth in Airdrie. The report identified and ranked the location and relative significance of ecological sites (named Ecological Hotspots) within the City. The CASP area was identified as containing steep slopes within the centre of the site, as well as a riparian corridor at the south edge (Section 4.3.4.4 – Southwest Site: Site M).

The riparian corridor has been identified as a hotspot due to the presence of steep slopes, wetland plants, and two patches of native grassland. The site is identified to have been impacted by cattle grazing with slumping on the steep slopes and a degraded wetland.

POLICY 2.4.1:

Consistent with the recommendations of the Ecological Inventory Expansion and Environmental Best Practices Report, the ecological function of "Site M" will be sustained with a combination of environmental reserve and complimentary land uses. =₽

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POLICY 2.4.2:

The future NSP shall provide further details on how the linear ecological feature identified as "Site M" is to function including details on complimentary land uses, ecological function, and regional drainage.



2.5 AirdrieOne Sustainability Plan

The AirdrieOne Plan (2012) is a non-statutory document that describes the community's vision for a sustainable future and proposes goals, objectives, targets and strategies to achieve that vision. Specifically designed by and for Airdrie citizens and community leaders, the Plan is structured around the five pillars of sustainability: society, culture, economy, environment, and government.

This vision document identifies goals, objectives, actions and measures towards a more sustainable City. Relating to a CASP document, the AirdrieOne Sustainability Plan recommends that the City create whole communities that meet a broad range of resident's needs through the following:

- Built Environment (pages 11 12) that "is vibrant, diverse, inviting and contributes to people's health, safety and well being". It encourages communities to address sustainability through reducing resource usage (i.e. energy, land sprawl and water) while providing amenities for a high quality of life.
- Socially Sustainable Communities (pages 13 14) that "meet the health, well-being and social needs of the community". The document identifies that a healthy community is integral to sustainability through its contributions to overall quality of life, strengthening of the social fabric and potential reduction of health-care costs.
- Sustainable Natural Environment (pages 17 18) that "contributes to environmental sustainability by improving environmental protection throughout the City". This is achieved through preservation of natural systems such as watersheds and natural land forms.

The policies and land uses described within the CASP are designed to implement the vision of this plan.

2.6 Transportation Master Plan (TMP)

The City of Airdrie Transportation Master Plan (TMP) (2020) guides the future direction for the transportation facilities, services and the policies that shape Airdrie's transportation system. The TMP considers growth in population and employment in Airdrie, and the improvements that can be made to ensure viable travel modes are appropriately planned for.

The vision of the TMP is "to develop an integrated, cost-effective, reliable multi-modal transportation system that connects people and places while managing present and future travel demands". Applicable objectives of the TMP to the plan area include the the provision of a comprehensive transportation network that accommodates all transportation modes.

The TMP includes recommendations for 24th Street adjacent to the Plan, including provision of rapid transit. The roadway is designated as part of the proposed Rapid Transit Network (RTN) and intended to be fast, frequent, permanent and support high capacity. While the specific transit facility for the route is not detailed in the TMP, a 49.7-meter right-of-way is planned to accommodate up to six lanes and transitways. Interim and ultimate cross sections for 24th Street are provided. Based on projected population and employment growth, an enhanced transit service along 24th Street is expected by 2039.

2.7 City of Airdrie Transit Master Plan

Completed in June 2016, the Transit Master Plan for the City of Airdrie provides a short and long-term framework for the future of transit services operated by the City of Airdrie Transit. The Plan states that the City will identify key corridors as potential long-term Bus Rapid Transit (BRT) routes with BRT along major



routes as a viable cost-effective solution for providing long-term connectivity between the City of Airdrie and the Calgary Light Rail Transit (LRT) system (*Guiding Principle #2 – Transit will Plan, Design and Implement Sustainable and Accessible Transit Infrastructure and Services for the Community*).

Identified Service Design Standards (*Section 5.2.1; Proximity/Walking Distances to Transit*) target 90% of residences to be within 400 metres walking distance of transit service, and 90% of medium and high density developments to be within 250 metres walking distance to transit service.

The City of Airdrie Transit Master Plan does not currently include specific service for lands in the CASP area, however, NSP's will identify future transit service and walking distances, in accordance with the current Plan at the time of approval.

2.8 Great Places Parks Master Plan

The City of Airdrie Great Places Parks Master Plan was endorsed by City Council in March 2016. It identifies eight environmental, social and economic principles (Section 3.1 – Open Space Principles) which are to be used as guidelines in the provision of high quality open spaces in the City.

- Raise the profile of parks, open space and trail systems within the City of Airdrie's Administration to ensure long term planning for sustainable environments in Airdrie.
- Reflect the environmental context of Airdrie through the respect of natural features and views. Use plants and other materials that are appropriate to the climate and context, protect and enhance biodiversity; and provide a diversity of places for recreation, physical activity, and enjoyment of the outdoors for a diverse population by ensuring that there is a complete range of open space types appropriate for Airdrie.
- Ensure the safety of recreational users in the City of Airdrie is and will continue to be a priority in developing parks, trails and open spaces.
- Ensure a walkable and accessible City, neighbourhoods, and streets to the community's assets.
- Recognize Airdrie's existing special places, create new ones, and provide good linkages through paths, good streets and linear parks.
- Aim to locate parks and open spaces within 5-10-minute walking distances from all residential areas.
- Reflect and respect Airdrie's history and culture.
- Improve pedestrian access to open spaces in residential areas.

A future civic open space node has been identified within the CASP area. See Section 4.3 Public Open Spaces for a description of the open space concepts for the plan area.

2.9 Nose Creek Watershed Management Plan

The Nose Creek Watershed Management Plan was adopted in 2018 with the goal of protecting riparian areas, managing streamflows in the Nose Creek watershed, mitigating impacts of flood and drought, and improving water quality for water users and aquatic life. It sets maximum allowable release rates for both Nose Creek and West Nose Creek which, in the case of this development will be identified in the future Master Plan(s), submitted in support of a Neighbourhood Structure Plan (NSP) application.





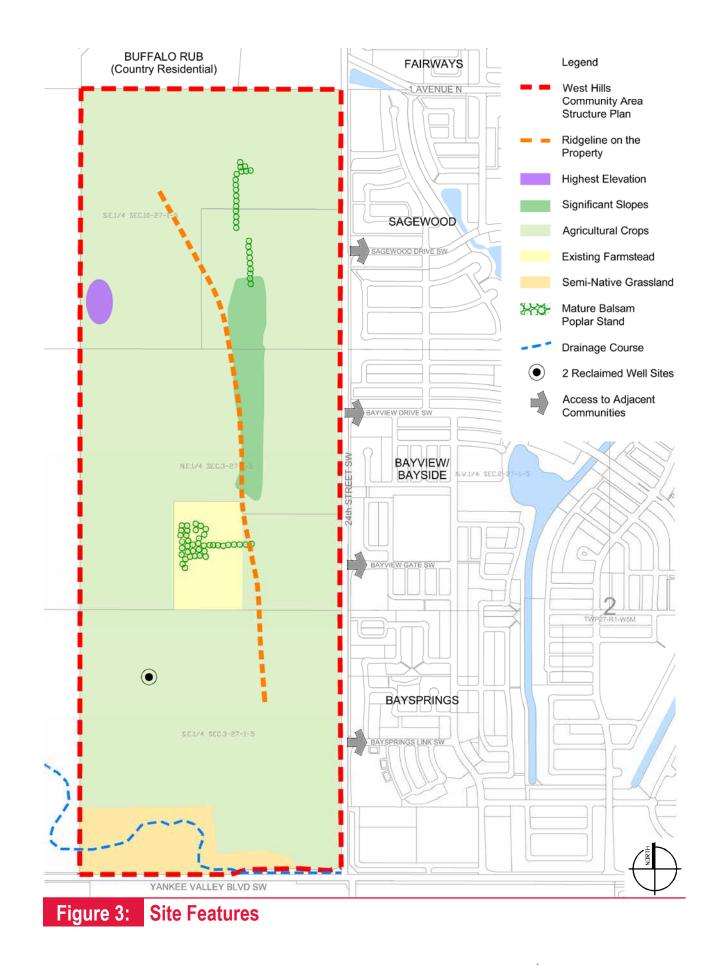
3.0 Original Conditions

3.1 Land Use

The plan area is primarily cultivated and modified pasture, used for grazing and crop production. In the south of the Plan area, there is a drainage course with a permanent marsh and a short steep slope condition. There are currently two residences on the north quarter section, one residence on the central quarter section, and no structures on the south quarter section.

The existing land use for the majority of the site is Ranch and Farm District (RF) from the Rocky View County Land Use Bylaw. The farmstead and yard on the central quarter section is designated as Ranch and Farm Three District (RF-3). See Figure 3: Existing Site Features.









POLICY 3.2.1:

Slopes greater than 15% should be preserved as Environmental Reserve where possible. Pockets deemed suitable for development should be evaluated at NSP stage.

→ POLICY 3.2.2:

Exceptions and boundary adjustments on slopes greater than 15% may be considered following the submission of a geotechnical study which includes a slope analysis and assessment of erosion risk and bank stability conditions.

→ POLICY 3.2.3:

All existing water wells and septic fields shall be decommissioned and environmentally remediated prior to development.

POLICY 3.2.4:

Development will be sensative to the topography and physical characteristics of the site. While the requirement for retaining walls (and their visual impact) will be minimized as much as possible, grade requirements associated with roads, parks, schools sites and residential design may make them unavoidable.

3.2 **Biophysical Features**

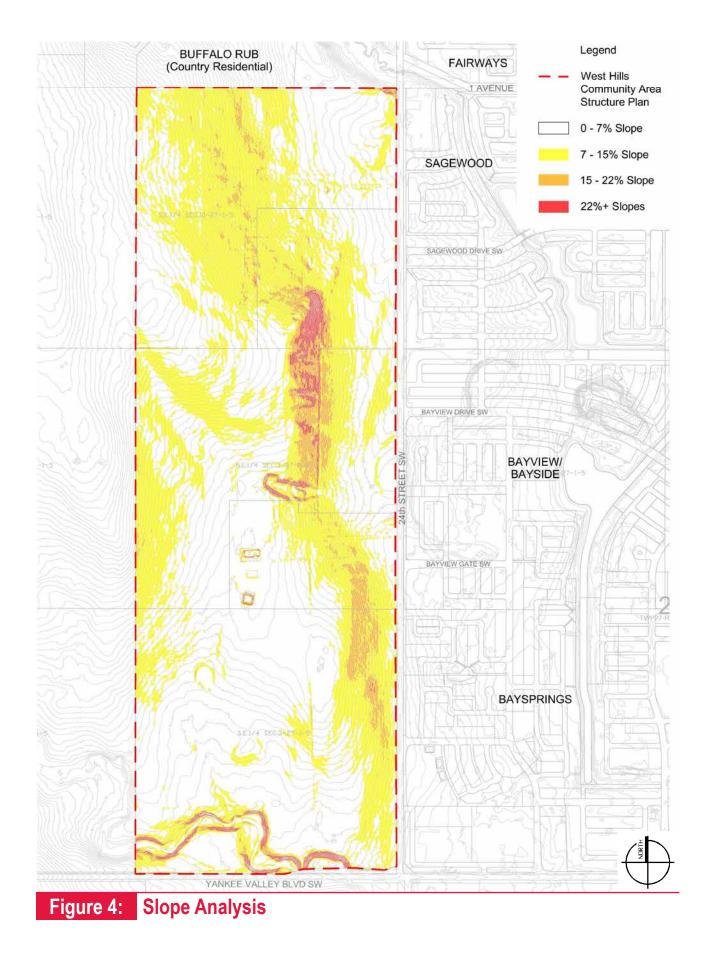
The topography of the plan area consists of rolling hills that rise steadily up from 24th Street on the east, westwards to a total elevation change of up to 60 metres. See Figure 4: Slope Analysis Plan.

An Environmental Impact Assessment (EIA) or Biophysical Inventory Summary (BIS) was prepared for each quarter section of land in the CASP area. The reports for the SE1/4-Sec 10-27-1-W5M and NE 1/4 Sec 3-27-1-W5M identified the study areas as primarily agricultural lands with active farmsteads. A stand of balsam poplar is in the central quarter section in proximity to the existing farmstead. An identified stand of mature trees will be reviewed for possible retention with a future NSP application.

Westhoff Engineering Resources completed a BIS of SE 1/4 Sec 3-27-1-W5M. The study identified the site as having rolling hills with a relatively steep escarpment and a wetland associated with a drainage course in the southern portion of the site. This quarter section is primarily croplands; however, there are two patches of grassland communities along the escarpment which have been impacted and degraded due to cattle grazing. (Westhoff Engineering Resources, 2017).

The drainage course has been analyzed by Alberta Environment and Parks (AEP) and was found to be an area that favours the accumulation of snowmelt and rainfall runoff without a distinct bed and shore and therefore does not meet the criteria of permanence for Crown ownership of bed and shore under Section 3 of the Public Lands Act. The vegetation in the drainage course was classified as a permanent marsh using the Alberta Wetland Classification System (AWCS). Portions of the wetland along the southeast boundary of the site were re-aligned between 1950 and 1962 due to paving and widening of Yankee Valley Boulevard. AEP has given the wetland an Alberta Wetland Rapid Evaluation Tool (ABWRET) value rating of "C" and confirmed that it is not Crown-claimable. However, Airdrie maintains the ability to dedicate it as Environmental Reserve.











3.3 Agricultural Capacity

The Canada Land Inventory Soil Capability for Agriculture was consulted to provide an assessment of the agricultural capacity of the soils within the CASP area. Based on soil survey information, map 'Calgary 82O' identifies the CASP area as "3T" meaning there are moderately severe limitations that restrict the range of crops or require special conservation practices due to adverse topography.

3.4 Geotechnical

Geotechnical investigations were done in 2016/2017 and the subject lands were found to be suitable for development. As each was commissioned independently, they are summarized separately below.

For the SE 1/4-Sec 10-27-1-W5M, the Geotechnical Investigation was conducted by Tetra Tech EBA in August 2016. The drilling program consisted of 30 bore holes. Topsoil was encountered in all boreholes ranging from 0.1 metres to 1.3 metres in thickness. Clay till was found below the topsoil in all boreholes except one. Bedrock was encountered in all boreholes at a depth of 0.5 metres to 8.2 metres.

For the NE 1/4 Sec 3-27-1-W5M, the Geotechnical Investigation was conducted by McIntosh Lalani in October 2017. The investigation consisted of advancing 25 boreholes. The soils were found to consist of thin layers of topsoil overlying layers of silt and silty clay. Topsoil depths across the site range from 0.13 metres to 0.30 metres in thickness. Bedrock was encountered in all 25 boreholes at a depth of 0.5 metres to 5.2 metres. Fill soils were encountered in two boreholes, and it is required to be removed in conjunction with rough grading. A supplemental geotechnical investigation may be undertaken to further assess the fill soils.

For the SE 1/4 Sec 3-27-1-W5M, a Geotechnical Investigation was conducted by McIntosh Lalani in December 2017. The drilling program consisted of 39 bore holes. The soils were found to consist of thin layers of topsoil overlying layers of silt and silty clay. Topsoil depths across the site range from 0.15 metres to 0.36 metres in thickness. Bedrock was encountered in 38 of the 39 boreholes at a depth of 1.5 metres to 8.2 metres. Uncontrolled fill soils were encountered in one borehole and will be required to be removed in conjunction with rough grading.





3.5 Historical

Based on review of historical reports, signoff has been provided by Alberta Culture for all lands within the CASP area.

3.6 Phase One Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) has been prepared for each of the three quarter sections within the CASP area. The results of each ESA are summarized below by quarter section. Refer to the reports referenced below for further details. If necessary, a Phase II ESA shall be completed prior to NSP approval.

For the SE1/4-Sec 10-27-1-W5M, a Phase I ESA was prepared by Tetra Tech EBA in November 2017. The report recommended that a Phase II ESA be conducted to assess the potential sources of environmental concern identified within a former farmstead area which include above ground storage tanks, former mechanic business activities, farm buildings, a former septic field, and fill areas. The Phase II ESA concluded that no further investigation is recommended and that asbestos abatement should take place during demolition of the farm houses. The Phase 1 ESA contains the result of a search of AEP Water Well Database. Eight private water well were identified within the site or within an approximate 500m radius surrounding the site. A hydrogeological assessment will be submitted at NSP to provide a comprehensive evaluation of the potential impacts associated with development on natural ecological features and functions that are supported by underground resources.

For the NE 1/4 Sec 3-27-1-W5M, a Phase I ESA was prepared by Tetra Tech EBA in November 2017. The report recommended that a Phase II ESA be conducted to assess the potential sources of environmental concern identified within the central farmstead area which include above ground storage tanks, chemical use and storage, and potential fill areas. Further, a Hazardous Building Materials Assessment for the buildings on site was recommended prior to removal.

For the SE 1/4 Sec 3-27-1-W5M, a Phase I and Limited Phase II ESA was prepared by Base Property Consultants Ltd in 2005. The report concluded that no significant environmental impairment existed on the subject site, and that no further investigation was required. Two natural gas wells on the site have been reclaimed, with reclamation certificates issued by the Province of Alberta.





3.7 Development Opportunities and Constraints

A summary of the development opportunities and constraints is as follows:

Opportunities:

- The location of the plan area along Yankee Valley Boulevard provides the opportunity for this new community to become a welcoming entry to Airdrie for traffic entering the west side of the city.
- An east-facing ridgeline across the West Hills lands creates interest and provides exceptional views towards Airdrie and to the Rocky Mountains.
- Innovation through housing design will take advantage of varied topography.
- Significant slopes throughout the CASP area may provide an opportunity for public access to panoramic views of the City and the Rocky Mountains.
- Two (2) historical decommissioned gas wells have been reclaimed within the project area.
- An islanded portion of the site at the south end has the potential to become a community focal point with some commercial land uses and medium density residential development.

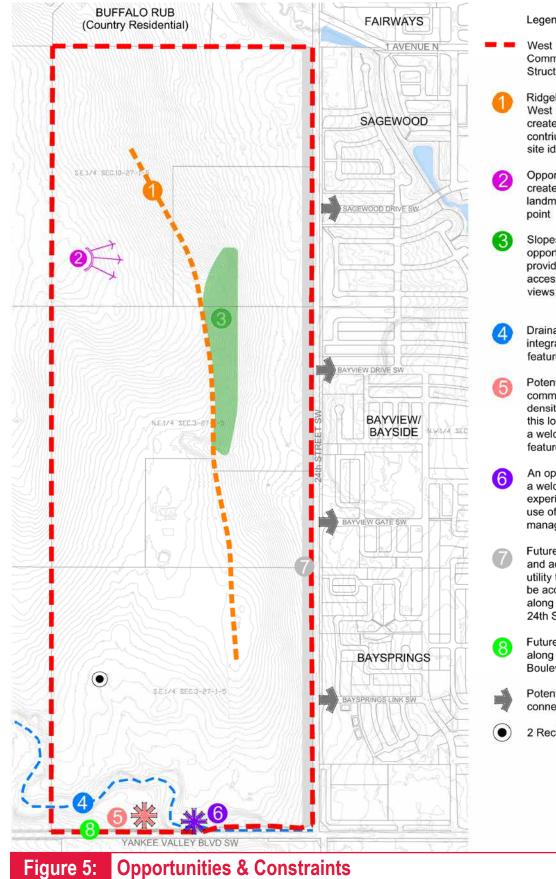
Constraints:

- Interface between the residential community and the 24th Street corridor. The 24th Street corridor is expected to contain a skeletal arterial road, additional width for deep utilities, and potential transit infrastructure.
- Yankee Valley Boulevard may be upgraded to an expressway in future. The nature of the road widening will influence the interface between a skeletal arterial road, future residential development, and the drainage course.
- Slopes and significant elevation changes will require steeper road grades than in existing Airdrie communities, the introduction of a new water pressure zone, and slope adaptive servicing.

See Figure 5: Opportunities & Constraints.







Legend

West Hills Community Area Structure Plan

Ridgeline across the West Hills lands create interest and contriubute to a unique site identity

Opportunities to create community landmark and lookout

Slopes provide opportunities to provide public access to panoramic views of the City

Drainage course will be integrated as a site feature "Site M".

Potential community commercial or highter density residential at this location will create a welcoming entry feature

An opportunity to create a welcoming visual experience through the use of stormwater management.

Future road widening and additional deep utility transit corridor will be accommodated along the west side of 24th Street SW

Future road widening along Yankee Valley Boulevard

Potential road connections

2 Reclaimed Well Sites







4.0 The Development Plan

The Land Use Plan (See Figure 6: Land Use Plan) and the associated servicing and transportation drawings are general in nature and indicative of future development plans. Future NSP's as well as the associated land use redesignations and subdivision plans will further refine the planning and engineering details.

The Land Use Plan demonstrates accesses and connectivity, residential areas of varying densities, schools, community open spaces and utility areas (i.e. storm ponds). The Land Use Plan has been designed to respect the existing natural land forms, existing/adjacent conditions and existing policy targets and directives as discussed in Section 2.0 Planning Context.

Residential development will be a mix of low density and medium density dwellings, consistent with the classifications for residential development in the City of Airdrie Land Use Bylaw (LUB). The development will meet all the policy density ranges and be developed in accordance to the Alberta Building Code, engineering, and road classification design standards. Further details on community densities will be determined at the NSP level.

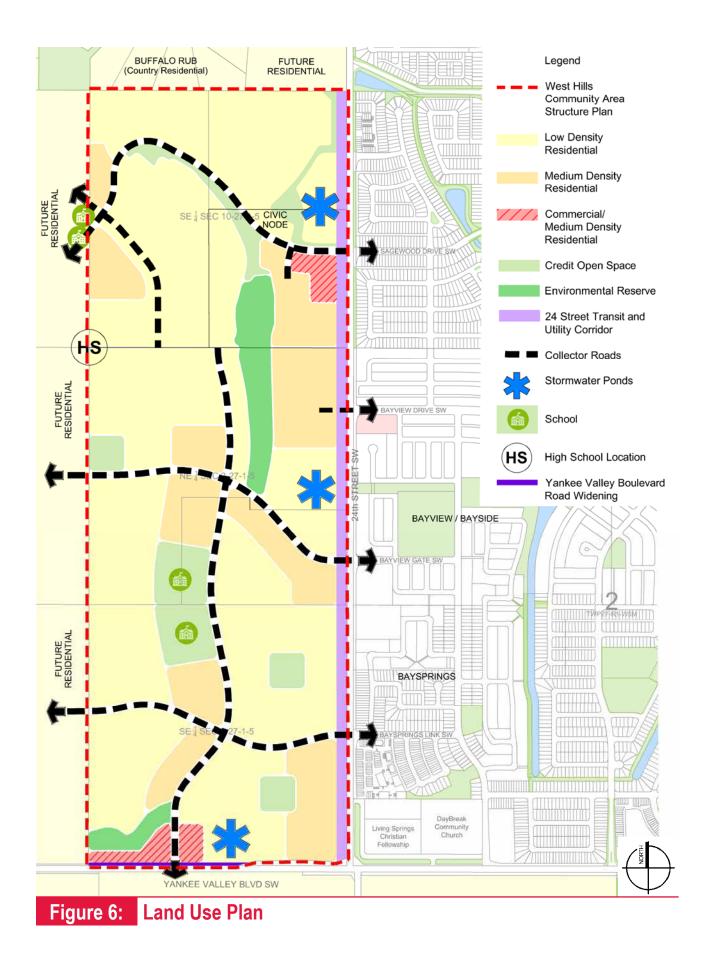
The 24th Street corridor adjacent to the plan area has been identified as a future skeletal arterial road. The City of Airdrie has also indicated that in addition to vehicular traffic, this corridor is expected to provide land to accommodate deep utilities as well as transit infrastructure. While size, width, configuration, and requirements for this corridor will need to be confirmed with future NSPs, the corridor has been included in the CASP to identify community interface opportunities and constraints.

The collector roadway network shown is designed to provide effective access points from the east on 24th Street and to continue westward to connect to future residential lands to the west. There is a north-south collector road proposed to internally connect the southerly two quarter sections for vehicles, transit, bicycles and pedestrians. Regional pathways and local roads will connect the northerly two quarter sections.

4.1 Residential Land Uses

Residential development is the predominant land use type within the CASP area. Neighbourhood-scale community planning will be detailed at the NSP stage, but it is anticipated that all communities will be highly influenced by the natural topography of the land and will include pockets of transit supportive density, neighbourhood landmarks, slope adaptive housing, and a mix of housing types for a diverse range of residents. The range of densities provided within the CASP area may include four-to-six-storey apartments, townhomes, row-homes, duplexes, villas, single family homes, and larger estate style homes.





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SYSTEMS

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The CASP area will contain a variety of housing types to create diversity.

The average density within the CASP area will be a minimum 8.0 units per gross developable acre.

> The low density residential district(s) shall allow for single family detached dwellings and semi-detached dwellings.

The medium density residential district(s) shall allow for a variety of multi unit housing and higher density attached housing. At NSP stage, good community planning principles shall be employed to create livable, diverse, attractive and accessible communities that are slope adaptive. The detailed density analysis of each NSP may be modified from the average density reported below. **Table 2: CASP Density Projection** demonstrates that the CASP area is projected to achieve an average density of 8.0 units per gross developable acre.

Housing and population projections have been determined assuming 2.7 persons per household calculated from the 2017 City of Airdrie Census. **Table 3: CASP Population Projections** shows the projected ultimate CASP population to be +/- 9,180 people and units to be +/- 3,400. The dwelling types are categorized as low density (single family detached dwellings and lower density attached dwellings) that average at approximately 7 units per acre, and medium density (meaning a variety of multi unit housing and higher density attached housing) that average at approximately 19 units per acre. Given the diversity of landowners, housing types and land area within the CASP, housing that suits the needs of a diversity of income ranges will be available within the CASP area.

Table 2: CASP Density Projection

	Hectares (+/-)	Acres (+/-)
Gross Total Area	195	483
Environmental Reserve (Riparian & Slope Areas)	7	17
24 th Street Corridor	8	20
Yankee Valley Boulevard	0.7	1.72
Gross Developable Area*	180	445
Senior High School	8	20
Gross Residential Area	172	425
Municipal Reserves (10%)	18	45
Municipal Reserve (Parks)	7	17
Municipal Reserve (Elementary or Middle Schools)	11	27
CASP DENSITY	8	

* Area rounded too the next whole hectare

Table 3: CASP Population Projections

Dwelling Type	Hectares	Acres	# Units / Hectare	# Units / Acre	Total Units	Population
Low Density	129	320	18	7	2380	6426
Medium Density	22	55	46	19	1020	2754
TOTAL	152	375			3400	9180

**All areas and calculations subject to verification through applicable policy plans and NSP's.





4.2 Commercial Sites

There are two neighbhourhood shopping nodes proposed in the CASP area, as noted on the Land Use Plan. The southern site is located along Yankee Valley Boulevard at the southern edge of the policy boundary and the northern site is located along 24th Street at the south side of the collector road entrance. Both sites may also contain medium density residential development.

Details and viability will be determined with future development applications, but it is envisioned that the retail areas will provide convenience shopping opportunities for residents. They will be accessible to motorists, cyclists and pedestrians through roads and pathway connections. At the NSP stage, opportunities to add neighbourhood commercial uses in proximity to a future high school site will be reviewed.







POLICY 4.3.1:

Public open spaces in the CASP area will provide a range of passive and active recreational opportunities.

> POLICY 4.3.2: Public park spaces will be provided as dedicated reserve lands.

POLICY 4.3.3:

NSPs will provide a range of parks and open spaces that meet the needs of a range of residents lifestyles and offer both passive and active recreational opportunities.

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POLICY 4.3.4: Regional and local pathway systems will be determined at NSP stage.

POLICY 4.3.5: Pedestrian connections shall be made within and between neighbourhoods and school sites.

POLICY 4.3.6: Regional pathways should not be oriented along the front of laneless residential lots.

4.3 Public Open Spaces

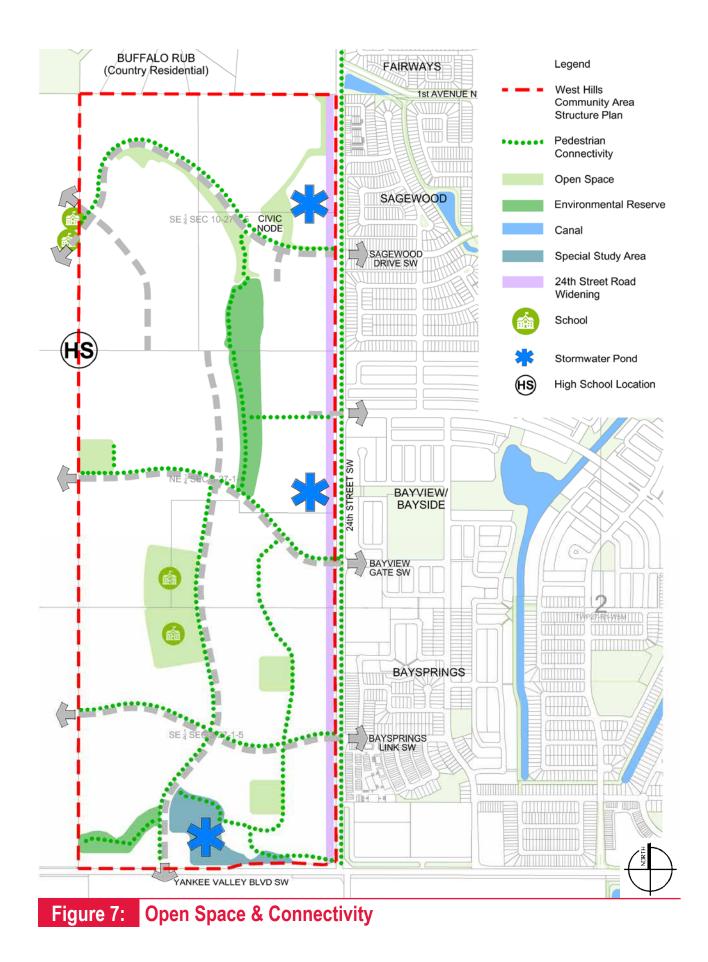
Municipal Reserves equivalent to 10% of the net developable area are owing for all lands within the CASP area. The concept plan (See Figure 7: Open Space & Connectivity) proposes a wide offering of open spaces in the form of linear park connections, neighbourhood parks, community-scale parks and three school sites.

Elementary and Middle School sites will be comprised of Municipal School Reserve (MSR) sites for the building envelope, parking and programmed spaces, as well as Municipal Reserve (MR) for the associated playfields. These open spaces will meet the required 10% municipal reserve dedication for the CASP area.

Major features of the public open space system are envisioned to include:

- A north-south trail connecting all communities together and providing public access to views of the City and the Rocky Mountains.
- Three (3) elementary and/or middle schools spaced through the plan area.
- Providing diversity in recreational amenities by utilizing and enhancing existing physical landscape features and terrain.
- A linear ecological feature along the south perimeter of the CASP area.

The open space system will be designed to continue connections to future development of adjacent lands to the north, west and south. Pedestrian Connectivity may comprise contiguous sidewalks, regional pathways, and linear parks, where appropriate.





POLICY 4.3.1.1:

Elementary and middle school sites will be provided as Municipal Reserve and maintained under the jurisdiction of the City of Airdrie until the need for the school site is identified by the relevant school board designated at CASP stage.

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→ POLICY 4.3.1.2:

School sites shall be allocated to each school jurisdiction in accordance with the agreement between the school boards and the City of Airdrie.

School sites will be located on a minimum of two public roads.

POLICY 4.3.1.4: Phasing of school sites shall be determined at NSP, school sites will be in earlier phases of NSP development, where possible.

POLICY 4.3.1.5: 1. The calculation of the number of required high schools within a CASP area shall be made by LAC in accordance with the Reserve Agreement and shall be identified to the landowners during the review of the CASP (or other statutory) application.

1.1. LAC shall provide direction to the applicants during the review of the application on whether or not to identify a high school site, or sites, within the boundaries of the subject plan area where the student generation numbers result in a fraction of any whole number.

1.2. The area of a high school within a CASP will be approximately 8.0 hectares (20 acres), as calculated through a site design and needs assessment and recommended by LAC.

1.3. The general location of a required high school site shall be indicated by an icon at minimum and may be designated in more detail at the discretion of the applicant. The general location only shall have the force of bylaw under each applicable statutory plan, as adopted by Council.



4.3.1 Schools

The concept plan identifies three (3) elementary or middle school sites; one per quarter section to meet projected growth targets for the local school boards. These projected school site envelopes can vary for either an elementary or middle school, and the amount will be dedicated as Municipal Reserve at time of subdivision.

The actual allocation of school sites will be determined at the time of NSP and/or subdivision based on demonstrated need and population projections. It is expected that stand-alone school sites will be approximately 3.6 hectares (9 acres) with joint use sites at approximately 3.0 hectares (7.5 acres) due to efficiencies of playfield locations.

Continued residential growth in Airdrie creates demand for high schools. The land required to facilitate these educational institutions is considered by the City of Airdrie to be required infrastructure for growth.

The school boards operating in Airdrie and the City of Airdrie have established a Reserve Agreement in accordance with the Municipal Government Act. The Reserve Agreement establishes a Land Allocation Committee (LAC) with representatives from each jurisdiction to identify and address school location and planning issues. The development industry is largely, though not exclusively, represented by BILD Calgary Region (BILD).



The parties described above are committed to the development of a solution (or solutions), which can provide long-term certainty for this form of infrastructure. Negotiations between the applicable parties are currently in progress. Statutory plan applications and land use applications can be advanced to City of Airdrie Council for decision (and to the Calgary Metropolitan Regional Board, where applicable), based on Section 2.0 Policies.

For the purposes of this policy, all references to "serviced land" mean the total cost of the raw land value, plus the costs to provide rough grading, permanent access roads and deep servicing stubs to the property. A third-party arbiter shall determine any disputes on the total costs.

These policies assume that the land and servicing requirements for a high school site will be dispersed over approximately 7,500 units. Council reserves the right to modify the figures noted in Section 2.1 or Section 2.1.1 when the number of units deviates by more than 5%, in their sole discretion.

Nothing in this policy precludes or supersedes Council's role as the Development Authority under the Municipal Government Act (MGA). Nothing in this policy restricts the opportunity to use regulations from the MGA or the Act to Strengthen the Municipal Government Act (once adopted), in order to achieve part or all of the required high school land assembly area within a CASP, or as part of the negotiated solution.

2. Developer(s) of aCASP shall adhere to the negotiated solution for assembling high school lands as developed by the applicable parties and adopted by City of Airdrie Council, via resolution or similar mechanism. In the circumstance that a negotiated solution has not been reached prior to subdivision endorsement for any phase within an approved CASP or NSP, the developers within the statutory planning area shall:

2.1. Pay a levy in accordance with an adopted resolution of Council at the time of subdivision endorsement; or,

2.1.1. At the time of subdivision endorsement, pay an amount of \$2,000 per dwelling unit, adjusted annually for inflation in accordance with the rate set in the City's subdivision servicing agreement (or similar mechanism), if a resolution levy has not been adopted by that time; and;

2.1.2. Register a Deferred Reserve Caveat on the remaining unsubdivided lands to require proportional payment should the value of the serviced land for the required high school site(s) in a CASP exceed the funds collected under Section 2.1.1. The final phase of subdivision from any parcel shall not be granted by the Development Authority until a negotiated solution or levy has been adopted.

3. Any excess monies collected under any part of Policy 2 shall be distributed proportionally to the contributing developers by the City of Airdrie within 180 days of the acquisition of all "site ready" high school sites within the CASP.

4. In lieu of a monetary contribution as established under Policy 2, a developer may provide his/her proportional contribution to the required high school land area as Municipal Reserve, cash-in-lieu of reserve, or over-dedication thereof, when deemed acceptable by Council.

5. Any landowner(s) that is/are required to provide land for a high school site within a CASP shall receive repayment equal to serviced land value, if the mechanism identified under Policy 2 is exercised. Any disputes on cost or value shall be brought to a third-party arbiter deemed acceptable to the property owner(s) and the City of Airdrie.





POLICY 4.3.2.1:

Public open space connections will be provided throughout the CASP area to meet active and passive recreational needs of the community. Exact park locations, sizes, configurations and programming will be determined at the NSP stage.

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POLICY 4.3.2.2:

The pathway and sidewalk systems for pedestrian connectivity shall be as generally shown in Figure 7 – Open Space and Connectivity, and will be a combination of off-street pathways and sidewalks in the road ROW.

POLICY 4.3.2.3:

Public access to natural systems may be integrated into neighbourhood planning with pedestrian linkages, where possible.

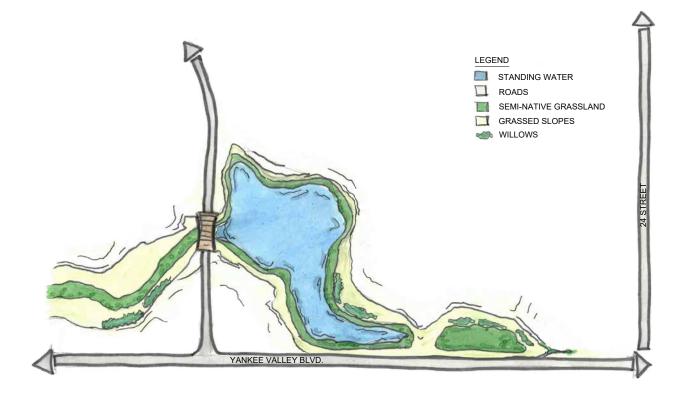
4.3.2 Parks

To provide additional community amenities and open spaces, community and neighbourhood scale parks will be provided throughout the CASP area. Detailed programming and final sizes will be determined at the time of NSP and/or subdivision. The CASP offers a rich variety of terrain and distinct natural features that enhance the site's identity and lends itself to a multitude of both passive and active recreational opportunities.

The diverse landscape includes mountain views, knolls, ridges, a wetland, and two patches of native grassland. Park networks within each neighbourhood will integrate these features into a series of connected open space nodes. These will complement the future complete communities on these lands as well as enhance local and regional connectivity via open space linkages, pathways and sightlines.

As shown on Figure 7, a Civic Open Space Node has been located at the east side of the plan area, along 24th Street. This space will provide an active and programmable green space for all residents of Airdrie to gather for neighbourhood activities and events.





4.3.3 Ecological Feature

The riparian corridor along the south perimeter of the CASP area has been identified in the Airdrie Ecological Inventory & Environmental Best Practices Report as an area of ecological importance (a hotspot). To maintain the diversity of ecosystems and species within this area, and to meet the intent of environmental protection policies in the Airdrie City Plan (2014), the ecological function of the riparian corridor with associated grassland and escarpment are proposed to be sustained. See **Figure 7: Open Space & Connectivity** for the delineation of a Special Study Area for future consideration as an ecological feature.

As illustrated in the image above, the linear nature of the ecological feature will continue along the south perimeter of the plan area. The western portion of the riparian corridor will be preserved with environmental reserve. The eastern portion currently exists within lands owned by the City and designated for road widening by the City of Airdrie and areas subject to backsloping. To preserve the presence of an east-west ecological feature in this area, and to meet stormwater management constraints associated with grading near steep slopes, a stormwater management facility will be incorporated in the central portion. The intent is to have the native grassland, regional drainage and escarpment appear to continue through the site.

The land use boundaries and wetland preservation and/or enhancement will be further defined through the NSP and Staged Master Drainage Plan (SMDP) and environmental reserve will be dedicated through the subdivision process in accordance with the provisions of the Municipal Government Act. Details regarding the delineation of complimentary land uses and ecological function will also be clarified at that time.

Adjacent municipal parks will provide more active recreation and views of the corridor while recreational activities within environmental reserve corridors will be restricted to passive and low intensity use.



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POLICY 4.4.1:

The internal road network shall be defined at the NSP stage and shall be designed to be compatible with the regional road network with facilities for cycling, walking, and transit.

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POLICY 4.4.2:

Collector road connections on 24th Street and Yankee Valley Boulevard shall be spaced to meet road design standards.

• POLICY 4.4.3:

Primary roads internal to the plan area shall be classified as collector/primary collector roadways.

POLICY 4.4.4: Utilization of standard road cross

sections is preferred, however modified cross sections may be required throughout the CASP area to accommodate existing topography.

Roads will be constructed to City of Airdrie Standards.

4.4 Roads

The CASP area will be well connected to adjacent communities via the City's existing road network, which can support the development. The CASP area is bounded by two skeletal arterial roadways: 24th Street to the east, and Yankee Valley Boulevard to the south.

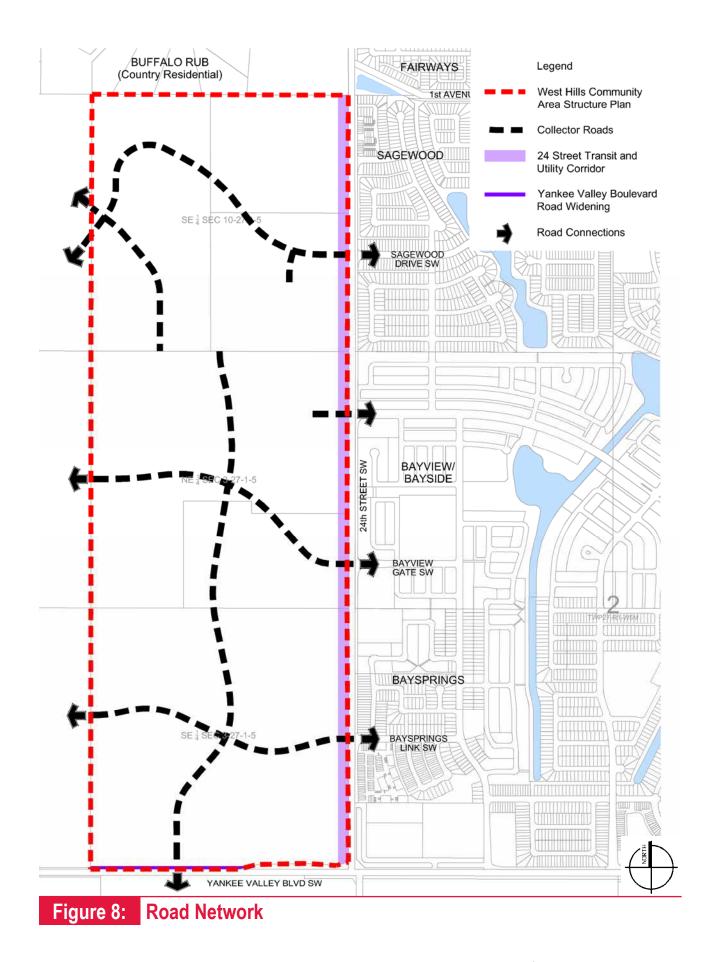
See Figure 8: Road Network.

The CASP will refer to the City's TMP (2020) regarding 24th Street and Yankee Valley Boulevard for their road classifications, capacities and targeted improvements.

The internal road network will be collector roads as shown in **Figure 8**. Local residential roads will be identified at the future NSP stage(s) and will provide strong neighbourhood scale connections. Portions of the CASP area are proposed to be laned and this will be determined also at the NSP stage.

Topography of the plan area rises steadily up from 24th Street to the westerly edge of the plan area. Collector road alignments have been curved according to the land form to allow for City of Airdrie maximum road grades to be met. Community designs at NSP stage will consider topography constraints when placing residential roads, slope adaptive housing, parks and schools.

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4.5 Public Transportation

POLICY 4.5.1: Future transit service will be identified by the City of Airdrie based on population and demand.

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POLICY 4.5.2:
The internal collector
roadway systems will be sized and

roadway systems will be sized and designed to accommodate future public transit stops and routing. Public transportation routes have yet to be planned for the CASP area. Access points to the community and the internal collector road network are planned to accommodate transit service when provided by the City. In general, the collector road network will provide approximate 400 metre walking coverage for future transit access.

Future transit routes and timing will be determined by the City of Airdrie. This includes long term plans for a transit corridor which has been identified to connect with the City of Calgary along 24th Street. The plan acknowledges that lands identified on the west side of 24th Street are to accommodate this infrastructure and that acquisition will be negotiated with future applications.





4.6 Land Acquisition for Road Widening and Utilities

This plan acknowledges that lands will be required for 24th Street to accommodate road widening, transit and major utilities and will be addressed through future NSP application(s). The 24th Street road cross section will be a 49.7 metre right-of-way as proposed in the TMP.

This plan acknowledges lands will be required for Yankee Valley Boulevard to accommodate road widening and it is anticipated that the majority of the widening will occur along the south property line of the existing road right of way. The location and extend of these improvements are shown on **Figure 8: Road Network**.

The total area required for these improvements has been estimated in **Table 2** (<u>Page 18</u>). Details pertaining to the land acquisition, including timing, will be addressed through future NSP application(s).

POLICY 4.6.1:

At the NSP stage, the City of Airdrie will identify land requirements along the west side of 24th Street to meet requirements for deep utility installation and future transit infrastructure. The required land will be purchased by the City of Airdrie.

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5.0 Servicing

5.1 Sanitary Servicing

The City of Airdrie UMP indicates the subject lands will ultimately be serviced by the future South Regional Lift Station #8 and the future sanitary trunk that will extend from the south boundary of Airdrie north along 24th Street adjacent to these lands. See **Figure 9: Sanitary Sewer Schematic**.

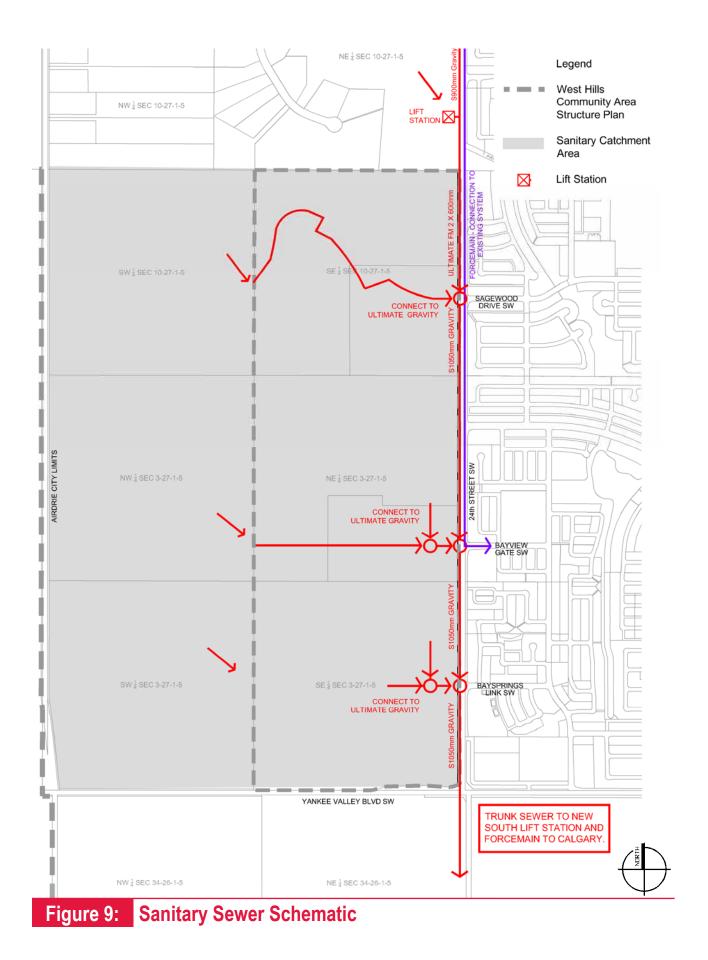
As the timing of this infrastructure is currently unknown, an interim servicing strategy has been established to immediately service the subject lands.

The UMP indicates there are two quarter sections of sanitary capacity remaining to service North West (NW) Airdrie. Initially, it will be shared between the West Hills Community Area Structure Plan lands and the Davy Creek Community Area Structure Plan lands. All sanitary flows will be directed east through Bayview and the Canals. Gravity connections are being considered through Sagewood and Bayview to eliminate the need for lift stations. Analysis is currently underway to determine available capacities in the existing mains. Connection points may be revised upon completion of the analysis.

To service the balance of the subject lands and Davy Creek, upgrades are proposed to the existing 600mm HDPE forcemain to Calgary. Upon construction of the Regional South Lift station #8 and sanitary trunk, the subject lands will connect to this system, allowing additional lands to be serviced by the future/proposed Davy Creek lift station (*Lift Station #2, as per the UMP Figure 4.101*).

Refer to the West Hills Servicing Strategy for additional details regarding staging, cost sharing, and cost recovery.





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5.2 Stormwater Management

The stormwater management concept for the plan area is based on the principle of preserving the natural drainage direction of the land. Slopes within the CASP area drain east towards 24th Street and eventually flow through the Canals storm pond and discharge into Nose Creek. There are three main drainage catchments within the CASP area that discharge at the following locations (See Figure 10: Stormwater Catchment Schematic).

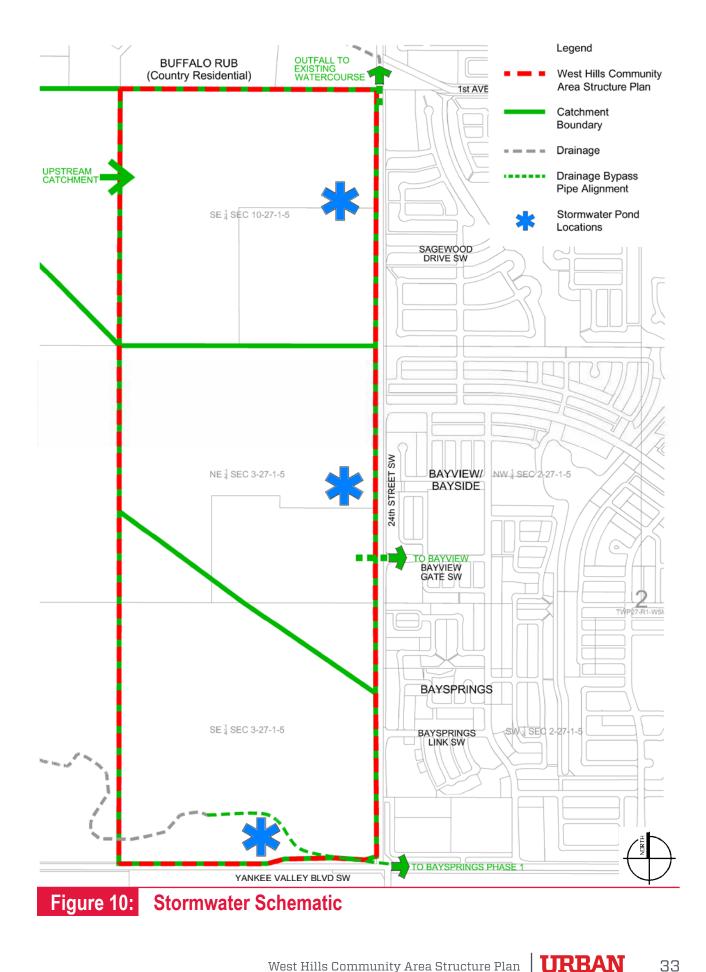
- The un-named drainage course to the north at 1st Avenue.
- A grated top manhole that drains through Baysprings.
- The un-named drainage course within the south portion of the CASP area.

Stormwater management facilities are proposed in each quarter section to represent existing drainage paths. A departure from the Airdrie Master Stormwater Drainage Plan, these facility locations allow for free flow of drainage to be collected without requiring the use of pumps.

Nose Creek Watershed Water Management Plan peak flow and volume control targets apply to the CASP area. Drainage flowing through the plan area at the south end will be collected and redirected to the existing culvert at Yankee Valley Boulevard and 24th Street. Drainage from upstream catchments shall be conveyed through the plan area, bypassing the stormwater management facilities.

Refer to the West Hills Master Drainage Plan (Urban Systems, 2018) for additional details.











5.3 Water Servicing

The UMP indicates that the subject lands will be located within two new pressure zones and serviced by the West and High West reservoirs. It is proposed that north of Yankee Valley Boulevard, the two pressure zones be serviced with the High West Reservoir, to be located west of the northern quarter section (Minto) in the SW 1/4 10-27-1- W5.

The water servicing is proposed in three stages;

- Stage 1 will extend the existing mains stubbed along 24th Street and construct the permanent Booster station to service the High West Reservoir
- Stage 2 includes constructing the initial stage of the High West reservoir and extending the 600mm supply line currently stubbed at the South Windsong Reservoir to the Booster station along 40th Ave and 24th Street. This line will be the main supply line for the NW Reservoir prior to the installation of the new supply line from Calgary.
- Stage 3 will connect the NW Reservoir to the new supply line from Calgary which is anticipated to be installed along Center Street. See Figure 11: Water Distribution Schematic.

Within each stage, a 400mm watermain grid will be created, ultimately extending mains to the west boundary, to service adjacent quarter sections. Each phase of subdivision will proceed upon confirmation of City servicing agreements that will be able to provide sufficient service to the subdivision, including adequate water licensing and capacity.

Refer to the West Hills Servicing Strategy for details on each stage of servicing and thresholds for each stage of construction.









5.4 Shallow Utilities

Shallow utilities will be provided to the subject lands through the extension of existing networks in the surrounding areas. The utilities will be extended through the community with each phase of development. It is understood that each of the four shallow utility companies (Fortis, Atco, Telus and Shaw) are planning feeder mains along 24th Street south of Yankee Valley Boulevard. It is anticipated that these mains will be extended to the subject lands within the 24th Street Right-of-Way (ROW) at the time of development.

5.5 Funding Commitment

Servicing capacity for the West Hills CASP requires Phase 1 and Phase 2 upgrades as identified in the 2016 Utility Master Plan (UMP) to accommodate the maximum possible development. These upgrades will be front-ended by the CASP proponents for any or all of the benefiting lands that proceed to development and utilize the capacity. As of the date of adoption of the West Hills CASP, the development industry and the City are negotiating a 'Funding and Financing Model' for the infrastructure upgrades needed to service the annexation lands that cannot be serviced by the Phase 1 and Phase 2 upgrades identified in the UMP.

Prior to first reading of any NSP within the benefitting lands, a front-ending obligation shall be submitted to the satisfaction of the City that includes:

- 1. The proposed allocation of Phase 1 residual servicing capacity to various ownership groups/ development areas;
- 2. An expiry date for use of each allotted proportion of Phase 1 residual servicing capacity, and a structure for reallocation, where applicable, to the satisfaction of the City;
 - a) The proposed expiry date must establish a minimum two-year lead time for the Phase 2 upgrades to be implemented, to the satisfaction of the City;
- A clause to require the first subdivision relying on Phase 1 infrastructure to fund the entire oversize payment to the developer of Bayview/Bayside NSP (Bylaw No. B-22/2017), and which contemplates a repayment structure to the first developer by the remaining benefiting developers.
- 4. Payment of an acreage assessment to equal the total funding cost for Phase 2 infrastructure;
- 5. Preservation of 10% servicing capacity for Phase 1 non-residential development;
- 6. A clause to require the first subdivision relying on Phase 2 infrastructure to obligate the respective developer registering the subdivision to fund the shortfall between the total Phase 2 infrastructure costs and the total acreage assessment collected to date;
- 7. Preservation of Phase 2 servicing capacity for all of NE13-27-1-W5M and all of the non-residential development in NW13-27-1-W5M, as adopted by Council within the Davy Creek CASP
- 8. Front ending reimbursement methodology that adheres to the ultimate 'Funding and Financing Model' currently being negotiated between the development industry and the City;
- Acknowledgement that the City is under no obligation to supplement (financially or otherwise) Phase 1 and/or Phase 2 UMP upgrades if the required upgrades should not provide sufficient servicing capacity for all of the lands in the (insert name) CASP; and
- **10**. That the City being fair and reasonable is ultimately in control of all residual and constructed capacity.





6.0 Phasing and Sequencing

Lands within the CASP boundary will follow logical phasing and servicing boundaries. Based on servicing availability, road connections and market conditions, development on one or more quarter sections may occur concurrently. Sequencing of development will commence on the easterly edge (24th Street side) of the CASP and progress in a westerly direction as servicing becomes available. Figure 13 indicates development sequencing within the West Hills CASP based on servicing infrastructure. These stages are identified in the West Hills Servicing Strategy Report. Phasing boundaries under an approved NSP will be subject to servicing capacity and market demand.

Future NSPs are expected to encompass up to one or more quarter sections. Should circumstances necessitate a smaller NSP plan area, alternatives including shadow planning may be considered.

POLICY 6.0.1:

Development of the CASP will be phased with NSP boundaries to be determined at each stage of submission.

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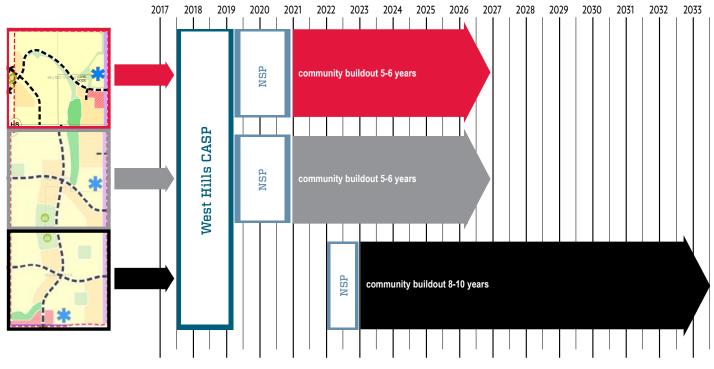
POLICY 6.0.2:

An NSP application may be prepared for all or a portion of an ownership area given that servicing, access and community design is comprehensive.

POLICY 6.0.3:

If an NSP application is only for a portion of an ownership area, then a concept plan shall be provided for the remainder of the ownership area.



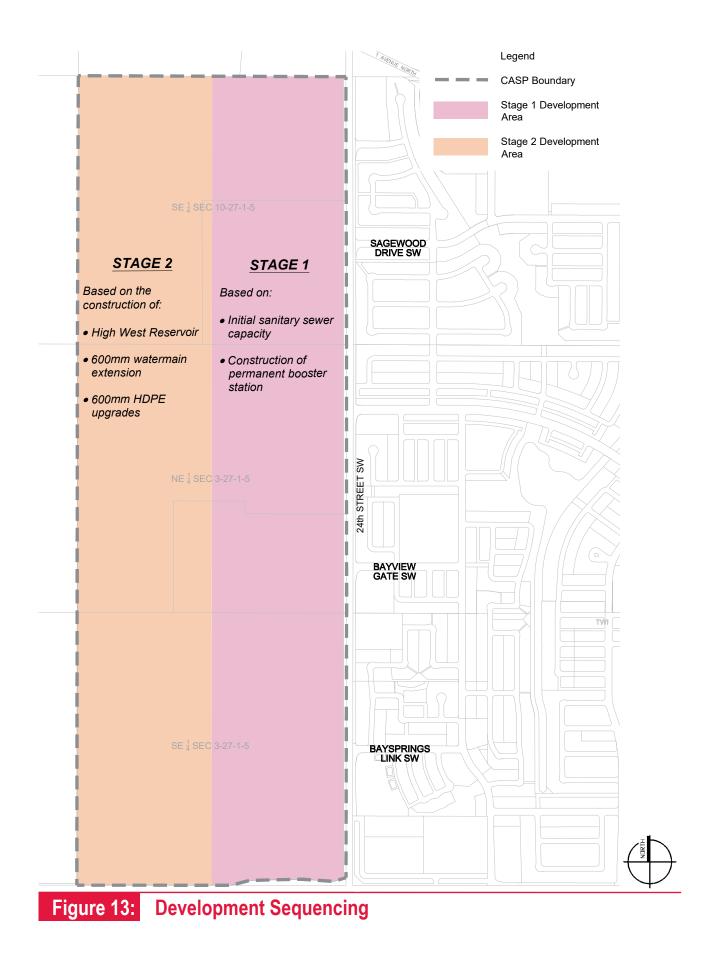


Conceptual staging design is subject to change depending on market conditions and availability of services.





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7.0 Conclusion

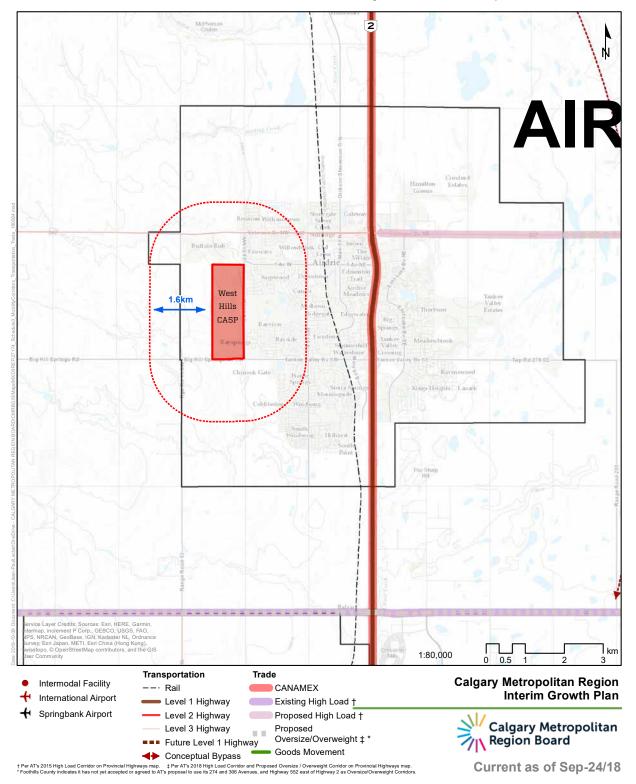
The CASP provides guidance for future NSPs, Land Use Redesignation applications and Subdivision plans. This document will be a reference for more detailed plans, submitted on a neighbourhood scale to further develop communities in Airdrie.

Through the development of this area, the City of Airdrie will continue to grow and offer a new variety of opportunities to its citizens to live, work and play. New and exciting slope-adaptive housing forms will add diversity to these Airdrie neighbourhoods. Exceptional views of the city and the mountains will add a fresh perspective to neighbourhood planning with a focus on new ideas, the changing needs of the market, and by providing amenities and infrastructure to the City of Airdrie.



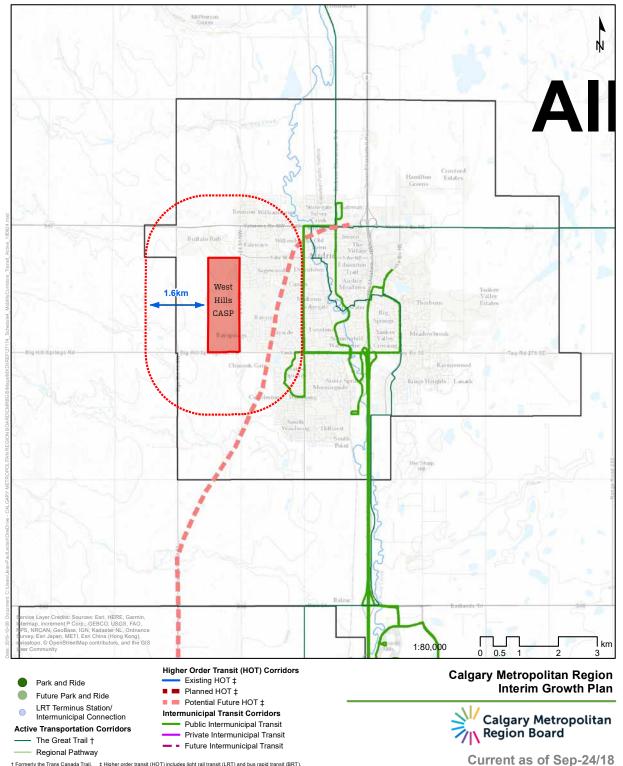






Schedule 3: Mobility Corridors – Transportation and Trade





Schedule 4: Mobility Corridors – Transit and Active Transportation

+ Formerly the Trans Canada Trail. + Higher order transit (HOT) includes light rail transit (LRT) and bus rapid transit (BRT).

