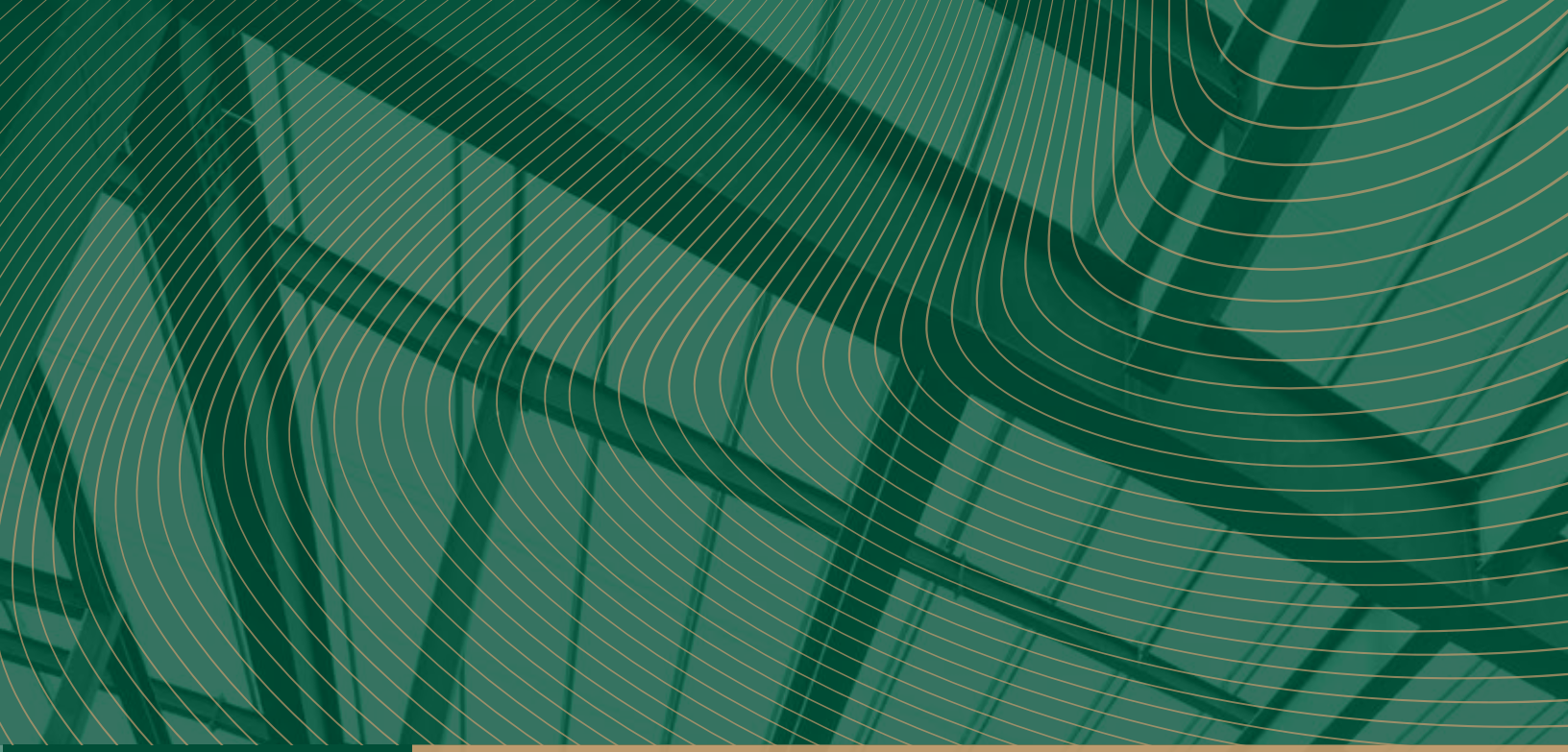

HIGHFIELD

SPRING VALLEY NEIGHBOURHOOD STRUCTURE PLAN

AUGUST 2023

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AUGUST 2023

SUBMITTED TO:

CITY of AIRDRIE
COMMUNITY & OPPORTUNITY

PREPARED BY:

B&A

ON BEHALF OF:

HIGHFIELD

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APPENDIX

1.0 Introduction

1.1 Plan Purpose

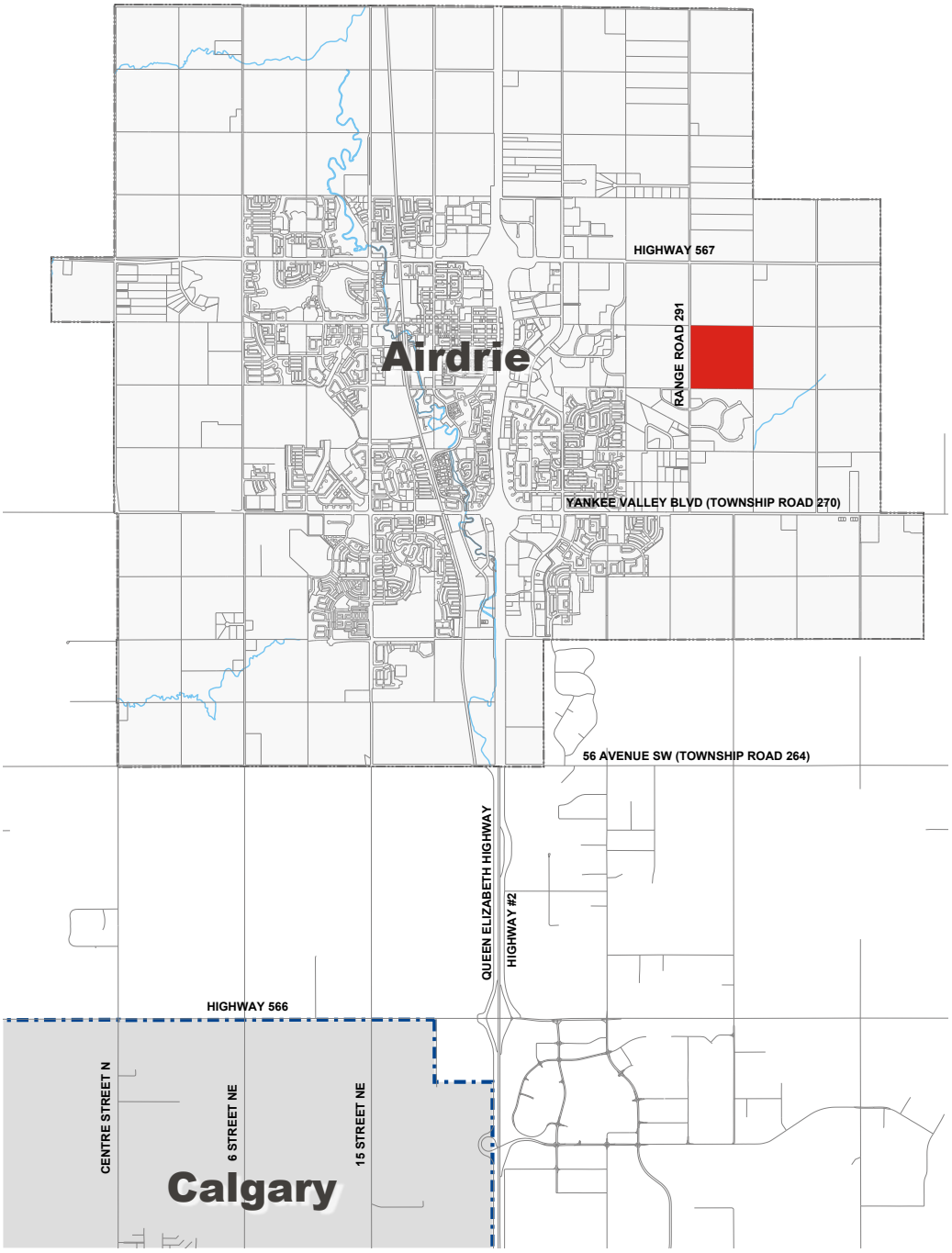
This Neighbourhood Structure Plan (NSP) is a statutory document prepared for the City of Airdrie on behalf of Highfield Investment Group, to guide future industrial and residential development of the subject lands. Adoption of this NSP signifies the commencement of Airdrie's East Points Community Area Structure Plan (CASP), adopted in December 2020. The Spring Valley NSP is guided by the high-level policy framework outlined within the East Points CASP and provides additional detailed planning information including a land use concept, servicing model, and policy framework to guide subsequent applications for zoning and subdivision.

Sections 1.0 to 9.0 of the NSP make up the statutory portion of this document. All Appendices are included in the document for information purposes only and do not form part of the adopted NSP. Administration may freely interpret any content within the NSP and all Appendices.

1.2 Process

As per Policy 14.9 of the City Plan, an NSP is required for all residential development contained within a CASP area. The NSP shall be in alignment with the CASP providing increased details regarding land use, housing mix, density, transportation, and development timing, among other things. Following approval of an NSP, the developer must acquire subdivision and Development Permit approval, in alignment with the NSP, prior to any construction taking place.

FIGURE 1 LOCATION



Airdrie Boundary
Plan Area Boundary
City Of Calgary Boundary

2.0 Plan Area Characteristics

2.1 Location and Site Context

The Spring Valley NSP lands, herein referred to as the subject lands, are located on the eastern edge of the City of Airdrie within the 2012 annexation area. The single quarter-section is bordered by Range Road 291 to the west, a paved two-way municipal road in good condition. A dirt road access connects to Range Road 291 approximately 0.4 kilometers north from the southern site boundary providing access to an existing rural farmstead, 11.61 acres in size. The farmstead consists of two residential structures and a barn.

The subject land boundaries are defined by:

- Rural Residential subdivision to the south known as Yankee Valley Estates.
- Range Road 291 to the West
- Agricultural lands to the north envisioned for future industrial development within the East Points CASP.
- Agricultural lands to the east, contemplated for future development within a future CASP.

2.2 Land Ownership

The Spring Valley NSP contemplates development of approximately 159.18 acres, or the entire SW ¼ of 12-27-29-W4M, including the previously subdivided Lot 1, Block 1, Plan 0715033 making up approximately 11.61 acres. These lands are owned by Spring Valley Estates Corp and private owners in care of Highfield Investment Group. **See Figure 3: Ownership**.

TABLE 1 OWNERSHIP

Legal Description	Hectares	Acres	Ownership
Ptn SW-12-27-29-W4M	59.61	147.43	Spring Valley Estates Corp. c/o Highfield Investment Group
Lot 1, Block 1, Plan 0715033	4.70	11.61	Private Ownership c/o Highfield Investment Group

2.3 Oil & Gas Facilities

The Spring Valley NSP area contains no pipelines, wells or rights of ways affecting the lands. Mineral interests and known hydrocarbon resources are understood to exist in the plan area, and mineral rights owners have been consulted as a part of the NSP process.

Policy 2.3.1: The Developer will continue with meaningful consultation with the mineral rights owners as per policy 9.2.2.1 of the East Points CASP at both the subdivision and development permit stages.

Policy 2.3.2: The City of Airdrie will refer future subdivision and development permit applications within the Spring Valley NSP area to the mineral rights owners.

FIGURE 2 LOCAL CONTEXT

FIGURE 3 OWNERSHIP

2.4 Existing Conditions & Site Assessments

The Spring Valley NSP area contains two glacial erratics along the south and east boundaries. Additionally the lands contain a semi-permanent wetland along the south boundary and a man-made dugout north of the existing panhandle driveway. The erratics are not contemplated to remain in the project area, and no wetlands are to be retained. The subdivided panhandle parcel includes two residential structures and a barn which share the gravel access road. Each residence is surrounded by a mature tree-stand and other plantings.

Topography and Drainage

The subject lands have been maintained in an agricultural condition and recently cultivated. The lands are relatively flat with the highest points in the northwest around 1,124 m above sea level, gradually decreasing to the southeast where the lowest points reach approximately 1114 m. Drainage generally follows the topographic relief from north to south.

Geotechnical

The geotechnical evaluation was completed by a qualified engineer on December 13, 2022. Field investigation consisted of thirty-one (31) boreholes to assess the lands for future residential and industrial development. Subsurface conditions were found to generally consist of surficial topsoil overlying silt overlying glacial till and sedimentary bedrock. Soils encountered are suitable for the proposed development. Site-specific reports will be required for commercial, industrial or pond development.

A conventional strip and spread footing foundation system is feasible for the proposed residential development provided the recommendations of the Geotechnical Report (December 13, 2022) are followed. The foundations for all residential structures should be placed on competent and undisturbed native soils or approved engineered fill. A shallow foundation system is expected to be feasible for industrial or commercial development dependent on the final grades and design loading. Final design and loading must be reviewed by Englobe to confirm acceptable performance. A deep foundation system would be most suitable for commercial and industrial development if confirmed by a site-specific geotechnical investigation. For slab-on-grade and parking lot structures the on-site soils are suitable. Soils below slab-on-grade should be visually inspected prior to construction and any loose materials should be removed. Soils located at the proposed pond location are suitable for use in the construction of a compacted clay liner for the proposed pond. A site-specific stormwater pond report will be required upon final design.

Groundwater levels were measured at depths ranging from 1.90 to 8.74 metres below existing grade. Temporary excavations in the non-cohesive silts and silt tills requires a 1 horizontal to 1 vertical or 45 degree cut back from the toe of slope. The site soils are competent to support utilities however to

prevent erosion of bedding soils by water flowing through the bedding gravel compacted clay or lean-mix concrete plugs should be constructed at regular intervals along utility lines. Drains should be installed on the upstream side of manholes to drain groundwater into the storm system. Prior to construction, any organic soil, vegetation and poor quality fill material encountered should be removed from areas under the proposed building or parking areas.

The on-site fine soils should be considered highly frost susceptible which will result in frost heave displacement in the soil when frozen. For protection against frost action, perimeter footings or grade beams in heated structures should be extended to such depths as to provide a minimum soil cover of 1.4 metres. Exterior footings or grade beams in unheated structures should have a minimum soil cover of 2.1 metres, unless provided with equivalent insulation.

In all unheated areas, the site soils will likely experience some degree of heave due to frost formation during the winter months. If proper consideration is given to the recommendations contained in the report, proper drainage will prevent the subgrade from becoming saturated and will help reduce the severity of frost heave. Nevertheless, concrete flatwork should be designed with anticipation of some frost heave occurring.

Historical Resource Assessment

A targeted archaeological Historical Resource Impact Assessment (HRIA) was undertaken in June 2023 by Lifeways of Canada Limited (Lifeways). Each of the three glacial erratics were assessed and shovel tests were excavated in the surrounding buffer zones. Based on the results of the HRIA, no additional work is recommended within the Project Area and Historical Resources Act Approval is recommended. The report is currently under review by the Province, and **the Historical Resource Act clearance shall be submitted to the City as part of the stripping and grading application.**

Biophysical Impact Assessment

A Biophysical Impact Assessment (BIA) was prepared by Trace Associates Inc. (Trace) on behalf of Highfield Investment Group for the subject site and updated by Urban Systems. The BIA has been prepared in accordance with the City of Airdrie Biophysical Inventory & Biophysical Impact Assessment Framework. The subject site is currently used as agricultural cropland (most recently as hayland), with a wetland surrounded by shrubs and grasses along the south boundary. A country residence is situated on the eastern portion of the Site. No provincially mapped significant landforms are present on the Site, and during the site visit, Trace identified five suspected glacial erratics.

Soils on the Site consist primarily of Orthic Black Chernozems. Soils are moderately suitable for agriculture with limitations due to heat. The soil was described as clay loam, very stony, hard, very dry, very friable, medium brown in colour, and compacted at 15 centimetres (cm) in depth. Rooting

depth was approximately 10 cm. There are three small areas with rich soil, but they are not unique. Surface water features on the Site include a dugout and one semi-permanent graminoid marsh. As per the Alberta Wetland Policy, Trace submitted a request to Alberta Environment and Parks (AEP) on August 9, 2022 asking for both the relative value of the wetland and if the wetland is Crown claimable. The AEP responded that the province will not claim the wetland and the Relative Wetland Value (RWV) is B. The wetland occurs in an area of the province with few wetlands and the province assigned an abundance factor of 1, which raises the wetland value from a C to a B. Legislation applicable to wetlands and waterbodies includes the Water Act, the Alberta Wetland Policy, and the Public Lands Act. The province requires demonstration of avoidance or mitigation of wetland impacts and the City of Airdrie may request retention of wetlands.

No rare ecological communities were identified at the Site. Trace personnel observed two provincially designated Noxious weed species on the Site, creeping thistle and perennial sow thistle. According to the Alberta Weed Control Act, 'Noxious' weeds must be controlled by the landowner from growing or spreading. The Site lies within two provincially mapped key wildlife ranges: Sensitive Raptors and Sharp-tailed Grouse. Wildlife species in Alberta (including active nests, chicks, and eggs) are protected under the Alberta Wildlife Act; migratory birds are additionally protected under the Migratory Bird Convention Act. There is no key wildlife habitat or movement corridor on the site or associated with the site. If development activities occur during the migratory bird nesting period, a wildlife sweep by a qualified professional is required in advance of vegetation removal.

Based on the criteria for Environmentally Sensitive Areas (ESAs) established by the City of Airdrie, the Site contains nine polygons considered ESAs of low value and one polygon of medium value. The 200 m buffer contains additional high value ESAs concentrated around the watercourse southeast of the Site, consisting of the watercourse and adjacent native grassland areas. Higher value ESAs correspond with those previously identified by O2 Planning and Design Inc. as environmentally sensitive. The provincial mapping to quarter section resolution by Fiera Biological Consulting Ltd. gave the Site an ESA score of 0.025; the values for the neighbouring quarter sections scores range from 0.045 to 0.1805, which are all less than the 0.189 cutoff for ESAs.

Based on the findings of this BIA and considering the recommended mitigations, the residual impacts are the loss of vegetation and wildlife habitat. The loss of distinct/unusual landforms may also occur if glacier erratics are not incorporated into landscape architecture design. The loss of the 0.75 hectares semi-permanent graminoid marsh is considered in NSP and stormwater planning and compensation under the Alberta Wetland Policy. Due to the low magnitude and local scale of predicted residual impacts, the impacts are not considered significant but do contribute to a small extent to the cumulative impacts in the region. Additional surveys are required in Spring 2023 to assess to determine presence of species at risk for plants, amphibians, breeding birds, wildlife, or raptors including nests.

Environmental Site Assessment

Trace has prepared a Phase I Environmental Site Assessment (ESA) in support of this NSP and it was updated by Englobe to address outstanding items. Findings show the east portion of the Site has been developed as a residential farmstead since the 1990s, and the remainder of the Site has remained undeveloped. Based on the information collected during this study, Trace has identified the following potential sources of contamination from on-site sources:

- Above-ground Storage Tank (AST) Area situated on the east boundary of the Site: Four fuel ASTs, approximately 500 litre (L) (one), 1,000 L (two), and 2,000 L (one) capacity, steel construction, satisfactory condition (three), rusted condition (one), stored on risers, and secondary containment. According to aerial imagery, the ASTs have been in their current location since at least 2000, with fueling activities potentially occurring since that time. Based on Trace's experience with similar sites, these types of fueling tanks utilized over the course of decades have a potential for localized soil impacts from minor leaks/spills. Suspected staining was observed beneath three of the four fueling tanks during the site visit.

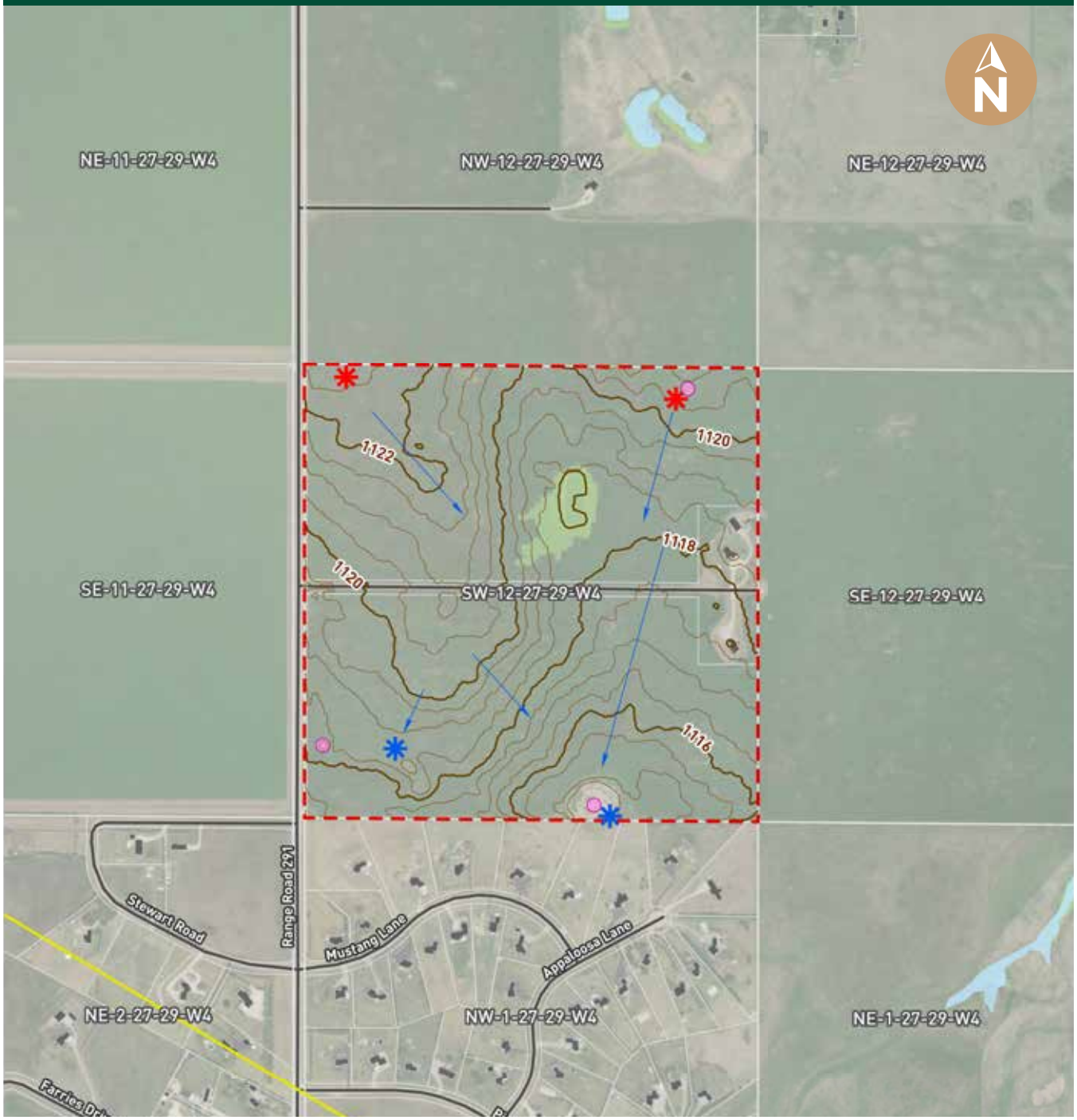
Trace did not identify actual or potential sources of contamination from off-site sources which would warrant further investigation at the Site.

Based on the findings of this assessment, a Phase II ESA entailing soil and groundwater assessment is not warranted at this time; however, Trace recommends the following:

- Contract a qualified environmental professional to conduct surficial soil sampling below the AST Area concurrent to homestead area decommissioning activities.
- Decommission the water well and septic tank in accordance with applicable acts, regulations, and guidelines when no longer in use.
- If buried debris, stained soils, or soils of unknown quality are encountered elsewhere on site during development/redevelopment, contract a qualified environmental professional.

The applicant does not have access to the existing parcel on the subject land. Upon the first phase of subdivision or the first development permit affecting the Geier parcel, the Phase 1 ESA shall be updated to include the in-person investigation of the buildings, septic fields, etc. and submitted to the City for review and approval as part of the subdivision application.

FIGURE 4 EXISTING CONDITIONS



3.0 Guiding Policy

3.1 Statutory Documents

Calgary Regional Growth Plan

The Calgary Metropolitan Region Board (CMRB) was established in 2018 with the intent to provide direction for future development within the Calgary Metropolitan Region and to ensure collaboration between member municipalities. The board is comprised of elected officials representing numerous municipalities, including the City of Airdrie, Rocky View County, and the City of Calgary. The Regional Growth Plan was approved by the Minister of Municipal Affairs and has been in effect since August 15th 2022.

The Growth Plan is regulated by the Municipal Government Act (MGA) and the Calgary Metropolitan Region Board Regulation (Alberta Regulation 190/2017 of the Municipal Government Act).The Plan encourages growth to be oriented towards existing developed / developing and planned centres such as the City of Airdrie. The East Points CASP received approval under the Interim Regional Evaluation Framework (IREF) in November 2020. The plan was found to be consistent with the objectives of the Interim Growth Plan and IREF. The proposed NSP shall align with the approved East Points CASP and the principles, objectives, and policies of the Growth Plan.

Airdrie City Plan

The Airdrie City Plan is a Municipal Development Plan (MDP) adopted by the City in 2014, and most recently amended in 2018. The City Plan was developed in alignment with the AirdrieOne Sustainability Plan to encourage a sustainable future for the City. Policies within the City Plan guide future statutory and non-statutory planning documents including Neighbourhood Structure Plans (NSPs). The City Plan identifies the NSP lands as a Future Growth Area where the predominant land use would be General Industrial. Map 6 of the MDP, Development Influences, highlights the southern border of the NSP area as an industrial-residential transition area. The intent of this area is to protect the long-term viability of the industrial lands while also protecting established residential communities to the south from potential off-site impacts of industrial development.

Intended uses within the transition area may include: stormwater facilities, regional pathways, access roads, landscape berms and buffer strips, public utility corridors, and low-intensity/low-impact recreational and accessory land uses. In alignment with the East Points CASP, the Spring Valley NSP contemplates only residential uses along this transition area, negating any conflict with the existing residential subdivision.

The City's long-term target is to move toward a 25/75 percent non-residential/residential assessment split. The non-residential component is to be comprised of industrial, commercial, institutional, and business park development, like that proposed within the NSP. The East Points CASP itself provides an 11% residential, 89% non-residential assessment base split. The NSP development concept accommodates a 59% residential, 41% non-residential assessment base split.

The City of Airdrie / Rocky View County Inter-municipal Development Plan (IDP)

The City of Airdrie and Rocky View County IDP was adopted in August of 2001, prior to the City's annexation of approximately 12,640 acres from Rocky View County in 2012. At the time of IDP adoption, the subject lands were identified as being part of the Notification Zone. The IDP is intended to guide inter-municipal collaboration and consideration of shared concern on key issues such as transportation, utilities servicing, open space, and recreation. The Spring Valley NSP shall address the policies of the IDP and coordinate with Rocky View County as needed.

East Points Community Area Structure Plan (CASP)

The East Points CASP was approved by City Council in December of 2020. The Plan was strategically pursued by the City in an effort to promote industrial growth. The subject lands make up one of six quarter-sections contemplated by the CASP, located in the southeastern corner of the Plan area. An extension of the East Lake Hill road is proposed through the southern portion of the CASP area, curving north as it moves east across the plan area. Lands to the south of the East Lake Hill extension are contemplated for residential development with a storm water facility. Residential development adjacent to the existing acreage subdivisions should achieve a minimum of 12 units per gross developable residential hectare. Lands to the north of the East Lake Hill extension are anticipated for a park or institutional flex site serving as a buffer between residential and proposed light industrial, office or employment development. An environmental study area is noted within the southeast corner of the subject lands. This area requires further investigation at the NSP stage to determine specific ecological value. A regional pathway is proposed along East Lake Hill NE and Range Road 291. Pathways are also to be included along storm ponds to provide pedestrian linkages. At the time of CASP approval, no upgrades to existing watermains were anticipated to service the area, however the northeast reservoir was expected to require upgrades prior to any CASP development.

The storm water facility proposed within the subject lands may be considered outside the plan area on lands identified as NE ¼ of 01-27-29-W4M with approval from the City with a new or revised Master Drainage Plan. The Spring Valley NSP aligns with this document by accommodating the East Lake Hill Road realignment in a format that produces an appropriately sized and proportioned school site as per the Airdrie Reserve Agreement. The Spring Valley NSP area provides industrial / employment land along the northern boundary of the plan area, as is contemplated within the CASP,

and provides complimentary residential development adjacent to the existing residential acreage development along the southern interface. The high school site is provided in the location of the flex site and shall serve the communities educational and recreational needs as required. The Spring Valley NSP also considers the relocation of the proposed stormwater management facility to an off-site location (NE ¼ Sec 1-27-29-W4M) as outlined in Section 8.4.2 of the CASP.

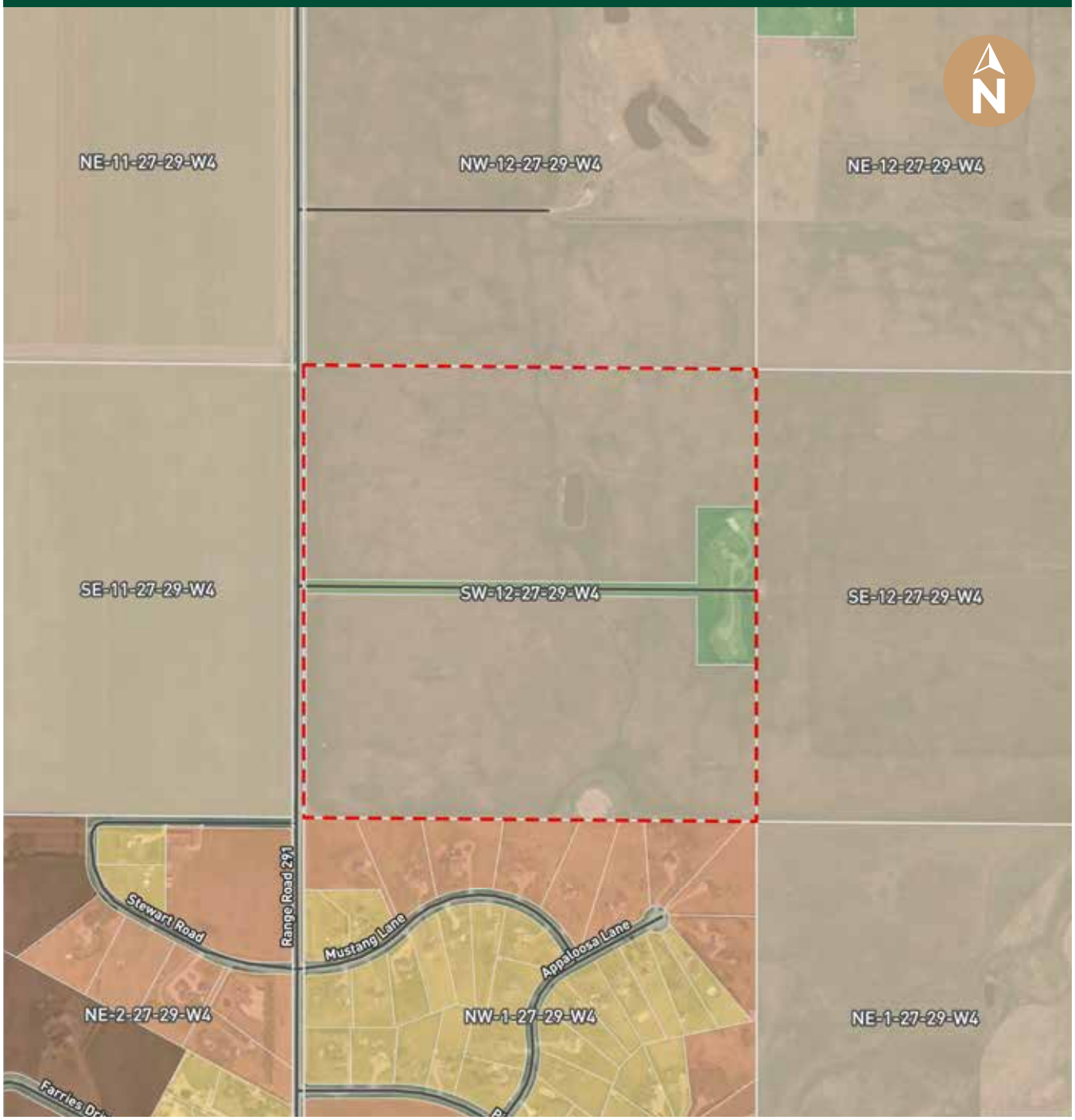
Airdrie Land Use Bylaw

Lands within the NSP area are currently designated as General Agriculture District (A-GEN) and Rural Farmstead District (F).

FIGURE 5 EAST POINTS CASP

PLAN BOUNDARY
STORM WATER FACILITY
SUBJECT SITE
REGIONAL PATHWAY
EXISTING PATHWAY
THE GREAT TRAIL
EXISTING TREE STAND
ENVIRONMENTAL STUDY AREA
INDUSTRIAL-RESIDENTIAL TRANSITIONAL AREA (40M MINIMUM WIDTH)
HEAVY INDUSTRIAL
PARK/INSTITUTIONAL FLEX SITE
INSTITUTIONAL
LIGHT INDUSTRIAL/OFFICE/ EMPLOYMENT
MEDIUM INDUSTRIAL
PARK
RESIDENTIAL
SERVICE COMMERCIAL

FIGURE 6 CURRENT LAND USE



3.2 Non-Statutory Documents

Nose Creek Watershed Water Management Plan

The Nose Creek Watershed Water Management Plan (NCWMP) was approved in 2007 and updated in 2018. The Nose Creek Watershed is a significant natural feature in the City of Airdrie and plays a vital ecological role in the region. There is no tributary or significant drainage from the watershed within the NSP area, however there is a significant tributary located to the southeast of the plan area. Neighbourhood development will adhere to the established allowable release rate of 1.257 litres per second per hectare and the approach to meet volume control targets of 25 mm. The development will incorporate Low Impact Development (LID) and integrated stormwater solutions to mitigate any impacts to the natural drainage infrastructure. Mitigation measures are to include:

1. Providing absorbent landscaping with increased topsoil depths (minimum 300 mm).
2. Divert larger volumes of surface drainage towards vegetated, pervious areas prior to entering stormwater facilities.
3. Reusing of stormwater for irrigation in school sites, roads, and private industrial lots.

12 Thousand Acres Plan

In 2012, the City of Airdrie annexed approximately 12,640 acres of land from Rocky View County to support the City's future population with a 50-year land supply intended to offer a mix of residential, employment, and recreational land uses. To establish a vision for the newly acquired lands, the City adopted a comprehensive growth management plan, known as the 12K Plan, in 2018. Since this time, numerous CASPs and NSPs have been approved in preparation for the City's growing population.

The East Points CASP was in progress at the time of publication of the 12K Plan. The land use concept contemplates the subject lands to be developed for non-residential employment uses with a Transitional Land Use Area along the southern boundary. The Transitional Area signifies an area where employment uses border established residential communities. The Spring Valley NSP proposes residential uses along this interface to mitigate any potential conflicts. The Spring Valley NSP supports the goals of the 12K Plan by providing significant industrial and employment lands, supporting the City in achieving their tax assessment ratio target of 75% non-residential and 25% residential tax base.

City of Airdrie Great Places Plan

The Great Places Plan was approved in 2016 and establishes guidelines and a conceptual planning framework to ensure the City's open space needs are addressed. This plan includes a typology of open spaces, identifies open space needs throughout the City, and establishes a long-range vision for Airdrie's open space system. The plan does not identify any specific open space types proposed within the subject lands, however the plan shall include a high school site, which would be considered a District Level Open Space Node.

Other important elements contributing to a healthy open space system include:

- *Connectivity*
- *Accessibility*
- *Safety*
- *History and Culture*
- *Recreational opportunities*
- *Placemaking*

AirdrieOne Sustainability Plan

The AirdrieOne Sustainability Plan is a high level, strategic plan adopted in 2012 to establish sustainability goals, objectives, actions and measures to guide the community into the future. The Plan explores strategies for economic, social, cultural, ecological, and infrastructural sustainability. The Spring Valley NSP supports the AirdrieOne goals by providing opportunities for economic growth and providing a safe and efficient transportation system.

Airdrie Transportation Master Plan (140K Plan)

The City of Airdrie Transportation Master Plan (TMP) (2020) establishes policy to shape the future direction of Airdrie's transportation network. The TMP contemplates both upgrades to existing infrastructure, and new transportation facilities to ensure safe and efficient movement throughout the City as areas develop and intensify. The plan looks forward to the 140,000 population horizon.

At the 2039 horizon, the 140K Plan anticipates Range Road 291 to widen from 2 lanes to 4 lanes between Yankee Valley Boulevard and Veterans Boulevard, directly adjacent to the subject lands. This upgrade is coupled with a widening of both Yankee Valley Boulevard and Veterans Boulevard at the Range Road 291 intersections. These upgrades will support safe and efficient movement for the existing residential and industrial traffic within the City, and provide support for future growth within the Spring Valley NSP. Both Range Road 291 and the future East Lake Hill road extension are identified in Figure 38 of the TMP as Future Dangerous Goods Routes. Veterans Boulevard is an existing Dangerous Goods Route.

Airdrie Transit Master Plan

The Airdrie Master Transit Plan was approved in 2016 to provide a short and long-term framework for future transit services within the City of Airdrie. Service Design Standards target 90% of residences to be within 400 m walking distance of transit service, and 90% of medium and high density developments to be within 250 m walking distance. The closest identified transit routes currently exist along East Lake Boulevard SE and Yankee Valley Boulevard SE. Possible transit routes will be contemplated throughout the circulation process of this application based on existing capacity and anticipated demand of future development in the NSP area.

4.0 Neighbourhood Design

4.1 Vision

The Spring Valley NSP is envisioned to be a key connecting piece between existing residential acreage development and future industrial development, offering employment, educational and housing opportunities. Development of this Plan area is critical in connecting major transportation infrastructure via the East Lake Hill Road NE extension, addressing the vital need for a High School, and managing the transition between land uses and future growth of two CASP areas.

4.2 Guiding Principles

The following principles establish a foundation by which to achieve the vision set out for Spring Valley as a vibrant, diverse, and connected neighbourhood.

1. Provide thoughtful transition between existing residential communities and future employment lands to minimize off-site impacts and land use conflicts.

2. Create a network for safe and efficient movement of personal vehicles, industrial truck traffic, and pedestrians.

3. Incorporate a mix of residential building typologies to address City goals for housing diversity.

4. Establish a well-integrated High School site.

4.3 Sustainability

The Spring Valley NSP endeavors to support the City in its pursuit of triple bottom line sustainability for new urban development. As per the AirdrieOne Sustainability Plan, development of the subject lands will promote sustainability through:

ECONOMIC PROSPERITY

New industrial/business lands approved for non-residential use will bring investment and jobs to the City, initiating development of the East Points CASP.

BUILT ENVIRONMENT

Diverse residential development will bring a mix of housing opportunities to people of all ages and abilities, to live and grow in Airdrie.

SOCIALLY SUSTAINABLE COMMUNITIES

The high school site will bring activity to the neighbourhood and regional pathways will connect residents to numerous opportunities for social interaction.

4.4 Complete Community

The Spring Valley Plan area acts as a key puzzle piece between existing country residential development in Yankee Valley Estates, planned industrial lands of the East Points CASP, and the future planned lands of the East Nose Creek CASP (ENC CASP) area. The Spring Valley NSP takes a holistic view of the future development within east Airdrie and envisions the lands as an important connection and transition between numerous developed and planned lands. Future residents of these lands will be supported by existing and future commercial development, open spaces, and regional pathway connections. For example the planned residential lands of Spring Valley are adjacent to a future planned dog park within the East Points CASP, and will be connected by regional pathways (both planned and existing) to the future open spaces of the East Nose Creek CASP, the future glacial erratic park of the East Points CASP and the existing open spaces of the East Lake area. The nearest grocery store is 4.0 km away in Kingsview, and future opportunities for commercial development are planned along YVB by the SE YVB CASP and the ENC CASP.

Opportunities for seniors housing are enabled as a discretionary use under each of the proposed land use districts. Additionally, diverse housing forms including multi-unit development and townhomes provide opportunities for aging in place and downsizing. This diversity will also provide increased opportunity for first-time homebuyers to enter the market with more affordable product. By maintaining the housing stock the City will better be able to sustain their relative affordability.

5.0 Land Use

5.1 Land Use Summary

The proposed land use concept for Spring Valley is comprised of residential, industrial, and institutional uses. Residential uses make up approximately 35% of the plan area and are located along the south and eastern boundary adjacent to existing and future residential development. This area will include a mix of single- and semi-detached housing typologies with front-drive or laneway access, as well as a multi-family residential site. Development of this area is intended to compliment the character of existing acreage development in Yankee Valley Estates while increasing density with a population to support the industrial and institutional uses.

Industrial land uses are allocated north of the realigned East Lake Hill Road and make up approximately 34% of the plan area. Future development within the East Points CASP area is expected to support these industrial land uses with intensified employment and industrial use north of the NSP area.

Municipal Reserve within the Plan area will be designated as Public Facilities District (P-2) for the High School site, making up 13% of the total plan area. The proposed land use concept aligns with the intent of the East Points CASP by designating lands south of the realigned East Lake Hill Road as residential and lands north of the road as industrial. The CASP Land Use Concept included a park / institutional 'flex site' anticipated to serve the community's social, educational, and recreational needs as well as create a buffer between industrial and residential uses. This will be fulfilled by the proposed High School site which has been identified for these lands by the City's Land Allocation Committee.

5.2 Land Use Bylaw Amendment

A Land Use Bylaw amendment application has been submitted under a separate cover to support the proposed development of Spring Valley.

FIGURE 7 PROPOSED LAND USE CONCEPT

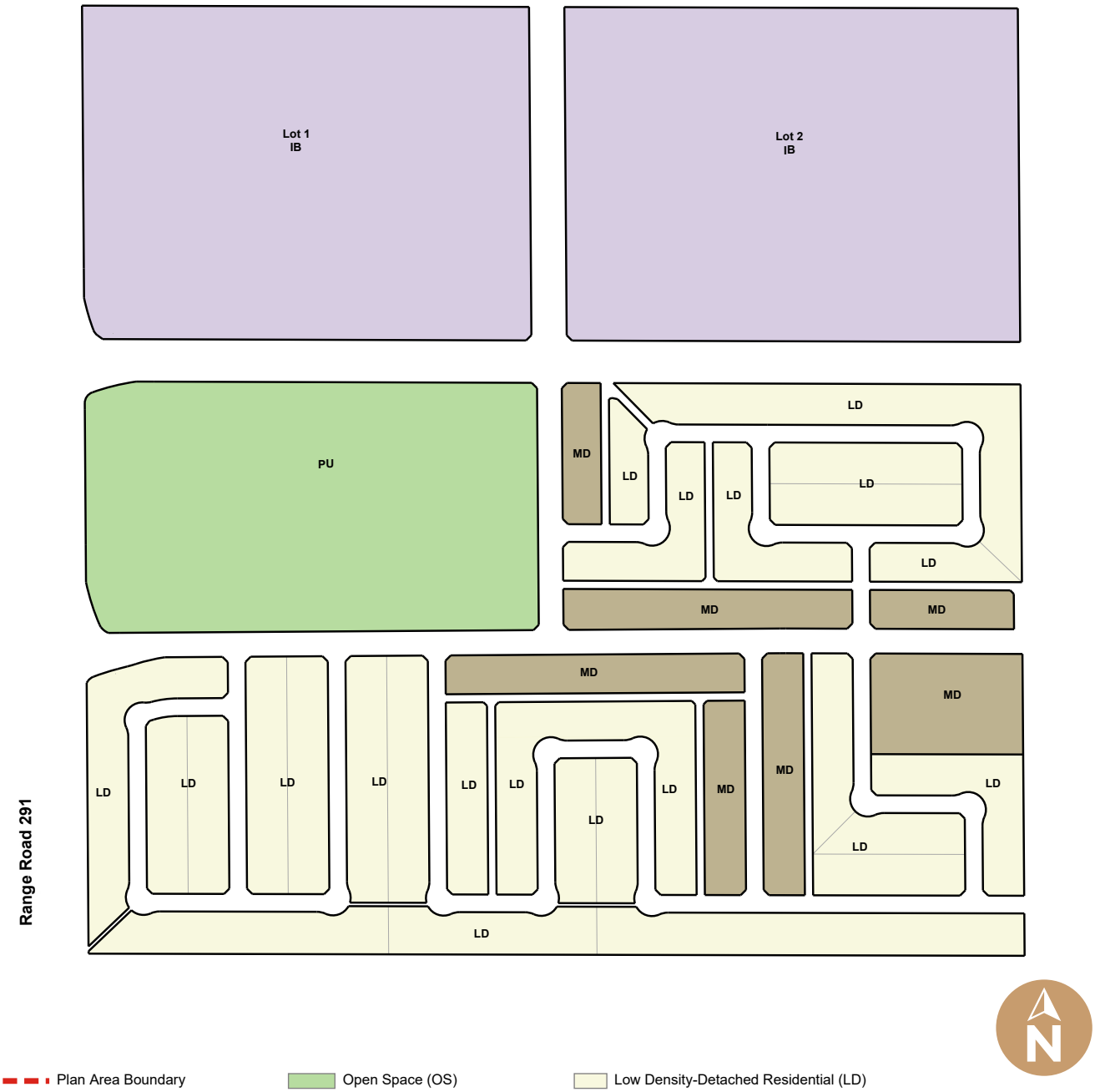


TABLE 2 LAND USE STATISTICS			
	ha	ac	%
Gross Total Area (GTA)	**64.42**	**159.18**	
Non-Developable Area	N/A	N/A	
Gross Developable Area (GDA)	**64.42**	**159.18**	**100%**
Residential	22.36	55.25	35%
Low Density Residential	17.50	43.25	N/A
Medium Density Residential	4.86	12.01	N/A
Industrial / Business	21.66	53.51	34%
Roads and Utility	12.31	30.42	19%
Open Space (School Site)	8.09	20.00	12%

5.3 Residential Land Use

The southern portion of the Spring Valley Plan will consist of a residential neighbourhood making up approximately 35% of the lands within the plan area. This results in 22.40 hectares (55.35 acres) of lands distributed amongst a series of low and medium density residential land uses expected to develop with a variety of built forms.

Low Density Residential

Low density development within Spring Valley will consist of various lot sizes and configurations including wider estate-style residential lots, lots for single-detached dwellings with front drive and rear lane access, and small lots to accommodate narrow single-detached dwellings. Lot sizes may range from approximately 8.50 to 14.00 metres wide. Low density residential is anticipated to account for 27% of the GDA, contributing approximately 477 units.

Medium Density Residential

Residential development within this community will include various mid-density housing typologies, including semi-detached and ground-oriented built forms. Medium density residential development is anticipated to account for 8% of the GDA, contributing approximately 256 units based on the assumed land use districts.

Housing Mix

The City of Airdrie strives to supply a broad range of housing types to support diverse housing needs and ensure efficient development forms.

Attached-Style Housing:

Policy 6.15 of the City Plan states that "30% of the housing stock within an NSP area should be comprised of a mix of duplex, semi-detached, townhome, apartment, and other attached housing styles." The proposed development concept for Spring Valley provides up to 256 attached style (medium density) units making up 35% of the total anticipated units (733).

Small Lot Single-Detached Housing:

City Plan policy also dictates that narrow and small-lot single-detached development should not exceed 35% of the housing stock within an NSP area (Policy 6.16). Small-lot development is defined within the Lanark NSP as "any lots which are less than 11.0m in width and provide a 2-car front-drive garage." As per Table 3, Narrow Low Density Laneless residential development is anticipated to develop with 9.7 m lot widths based on Land Use Bylaw district R1-U, accounting for roughly 191 dwelling units. Small-lot single detached dwellings are anticipated to account for ~26% of the total anticipated units.

Estate Residential Lots:

This residential development form is anticipated along the southern interface area and is assumed to include single detached residences with front-drive garages and large yards on a minimum of 14.0 metre (46 feet) wide lots. This results in approximately 706 metres (2,316 feet) of frontage and 50 units. The southern interface accounts for 7.05 ac (2.85 ha) of the plan area, with 50 units this will result in no more than 17.54 residential units per hectare, as per Policy 5.3.3.

TABLE 3 HOUSING MIX

Residential Type	Units	% of Total
Attached/Semi-detached Total	256	35%
Small Lot Single-Detached	194	26%
Total Units	**733**	**100%**

TABLE 4 RESIDENTIAL POPULATION			
Land Use	**ha**	**ac**	**Units**
Low Density Residential Total	**17.50**	**43.25**	**477**
Low Density Estate-Style	2.85	7.05	50
Low Density Laneless	3.24	8.01	85
Small Lot Single-Detached Laneless	6.84	16.90	194
Low Density Laned	4.57	11.29	148
Medium Density Residential Total	**4.86**	**12.01**	**250-256**
Semi-attached	1.30	3.21	55
Ground-Oriented Laned	2.46	6.07	135
Comprehensive Townhome Site	1.10	2.73	60-66
Total			**728-733**
Population (2.7 persons per unit)	1,967 - 1,980 people		

TABLE 5 RESIDENTIAL DENSITY		
Gross Residential Area	**22.36 ha**	**55.25 ac**
Overall Residential Density *excluding High School and Industrial	**21.14 upha**	**8.55 upa**
Estate Residential Density (max 50 anticipated units)	17.54 upha	7.09 upa

TABLE 6 ANTICIPATED JOBS	
Industrial lands	53.51 acres (21.66 hectares)
Jobs (11 jobs / acre or 28 jobs / hectare)	589 jobs

728-733 residential units supporting a population of 1,967 - 1,980 people. The anticipated residential density is 8.55 upa or 21.14 upha.

Residential-Industrial Interface

The residential and industrial uses will be separated by a 36.0 m ROW for the East Lake Hill Road extension, along with an additional 8.0 m setback at the rear of residential lots, and a minimum 6.0 m setback on the industrial parcel. This creates an overall anticipated setback of approximately 50.00 m between residential and industrial built form. The 36.0 m ROW will include a median to provide an additional buffer between uses, and increased landscaping shall be provided in the setback areas.

Design Guidelines - Purpose & Guiding Principles

As directed by the East Points CASP, any land designated for Light Industrial purposes shall be subject to Architectural Controls and/or Urban Design Guidelines that identify the intended design and appearance of the area. These Guidelines shall be submitted for review and approval as a condition of the first phase of subdivision, prior to endorsement.

The Urban Design Guidelines shall address the following:

- Building design;
- Building interface treatments;
- On-site parking and loading;
- Site lighting;
- Outside storage;
- Landscaping;
- Fencing and screening;
- Signage;
- Interface conditions; and
- Pedestrian circulation.

The guiding principles of these guidelines will be:

To effectively manage the transition between industrial and non-industrial uses.
To promote high-quality building design, with parking/storage hidden.
To maintain appropriate interface conditions with landscaping to minimize visual impacts and by orienting buildings & entrances by the street for pedestrian access.
To respectfully address pedestrian circulation, and accessibility for multi-modal transportation.

> **Policy 5.3.1:** Spring Valley Design Guidelines shall be submitted for review and approval as a condition of Phase 1 subdivision, prior to endorsement, addressing the principles of this NSP.

Policy 5.3.2: Spring Valley shall meet the City Plan's minimum of 30% housing stock comprised of attached and semi-detached dwelling units.

Policy 5.3.3: As defined under the Lanark Neighbourhood Structure Plan (Bylaw B-19/2021), small and narrow lot single-detached development should not comprise more than 35% of the housing stock within Spring Valley.

Policy 5.3.4: As per the East Points CASP, residential uses adjacent the existing residential acreages should achieve a minimum density of 12 units per gross residential hectare.

Policy 5.3.5: Attached and multi-family style housing should be located along Major Roads, Collectors, or Residential Roads with direct access to either a Major Road or Collector.

Policy 5.3.6: Attached and multi-family style housing shall not be located adjacent to existing estate development or agricultural lands.

Policy 5.3.7: Semi-detached and townhouse dwellings shall be located on lots with laneway access.

Policy 5.3.8: Residential dwellings fronting on any road bordering the school site shall be accessed via a rear lane and not support any front-drive garages.

Policy 5.3.9: No residential development within the Spring Valley area shall front onto the same road as industrial or employment development.

Policy 5.3.10: Buffering methods such as vegetation screening, fence screening, or berm treatment should be incorporated where industrial uses are adjacent.

Policy 5.3.11: The use of sound walls and other man-made barriers shall be limited through the use of effective design measures and land use placements instead.

5.4 Industrial Land Use

Industrial, employment-based land uses are contemplated within the northern portion of the Spring Valley NSP area where complimentary uses are anticipated to continue within adjacent lands to the north. The Land Use Concept anticipates two industrial parcels, each approximately 11 hectares (27 acres) in size. The East Points CASP anticipated industrial development within the Stage 1 plan area to accommodate business industrial uses in an urban form exhibiting a high standard of building design and landscaping. Due to the proximity of these uses to residential and institutional development, this industrial area should act as a transition towards heavier industrial uses to the north.

The City of Airdrie's Growth Report: Tracking Development and Change (2021) reported an average of 11 jobs per acre for industrial land uses, and the East Points CASP has outlined a minimum anticipated intensity of 25 jobs per hectare (~ 10 jobs per acre). Job estimates in **Table 6** are based on the City average of 11 jobs per industrial acre.

Policy 5.4.1: Development proposals requiring the storage of hazardous materials shall be directed to areas within the East Points CASP identified for heavy industrial uses.

Policy 5.4.2: Industrial areas adjacent to major roadways or residential areas should conform to quality architectural, landscaping, and site development guidelines regarding landscaping, screening, parking and access, garbage containment, outside storage, signage, lighting, and appearance guidelines.

Policy 5.4.3: As per the East Points CASP, industrial development within this area shall be pedestrian friendly with sidewalks provided on at least one side of the street of the north-south industrial road. This connection should minimize pedestrian crossings of industrial roads to and from the school site.

Policy 5.4.4: A landscape plan shall be provided for the industrial parcels at the Development Permit stage and shall provide enhanced landscaping / screening fronting onto the East Lake Hill Road extension.

Policy 5.4.5: The City may require an update the TIA, servicing, and stormwater reports at the time of Development Permit application for the Industrial parcels.

6.0 School Site

A High School site is identified within the Spring Valley NSP as per the direction of City administration and the East Points CASP. The CASP identified a 20-acre Park/Environmental Flex Site within the NSP area. This site was envisioned to accommodate either recreational or institutional uses. The proposed High School site is 20 acres in size bordered to the west by Range Road 291, and the north by the future East Lake Road extension. In alignment with the Land Use Bylaw (B-01/2016), the school site shall be designated Public Facilities District (P-2). This district is intended to provide for higher intensity civic and institutional uses that would normally exist in an urban context, including schools.

6.1 Municipal Reserve Dedication

As per the Municipal Government Act, the school site lands shall be dedicated as Municipal Reserve (MR) not exceeding 10% of the Gross Developable Area. Of the 20 acres (8.09 hectares) designated for the school, 15.92 acres (6.44 hectares) or 10% of the gross developable area will be dedicated as municipal reserve. The remaining 4.08 acres (1.65 hectares) shall be a High School Purchase by the City.

TABLE 7 MUNICIPAL RESERVE CALCULATION

	ha	ac	%
Gross Total Area (GTA)	**64.42**	**159.18**	
Non-Developable Area	N/A	N/A	
Gross Developable Area (GDA)	**64.42**	**159.18**	**100%**
Total Open Space	8.09	20.00	13%
Credit Reserve	6.44	15.92	10%
High School Purchase	1.65	4.08	3%

Policy 6.1.1: The general location and distribution of municipal reserve land will occur as generally illustrated on **Figure 7: Land Use Concept.**

Policy 6.1.2: Dedication of municipal reserve at the time of subdivision shall align with policies 8.12 through 8.17 of the City Plan.

6.2 School Site

As per the City of Airdrie Reserve Land Agreement (December 4th, 2019) Neighbourhood Structure Plans are to provide definitive school site location including size and shape, while building footprints, parking areas, playgrounds, and playfields are to be conceptualized. **Figure 8: Proposed School Site Design** demonstrates the proposed concept for this site based on the requirements of the Land Reserve Agreement.

The proposed concept is intended to demonstrate one possible design of the site, as per the policy requirements. Once assigned to a specific school jurisdiction the design will be subject to change.

The proposed school site design contemplates a future high school building in the southwest corner of the site with ample parking for students and staff. The site is accessed from the future residential collectors along the site's southern and eastern boundaries. Assumed recreational programming may consist of a football field and surrounding track loop, baseball diamond, soccer field and flexible lawn space. The proposed building envelope is located on the eastern side of the school site to accommodate vehicular and pedestrian access from internal residential collector roads. Various pathway connections, plantings, and landscape treatments may be incorporated to increase connectivity within the site and create buffers between surrounding uses. The proposed regional pathway along Range Road 291 will not be available until the road right-of-way is widened and constructed, to be triggered by surrounding development.

General Site Criteria

The school site should:

- Front onto at least one collector road and be adjacent to an arterial road;
- Capitalize on local and regional pathway systems;
- Be located within earlier phases of development where practical;
- Should be as rectangular as possible to optimize spatial efficiencies;
- Should not have adjacent roads with driveways for residential dwellings;
- And, should have a monolithic sidewalk, no less than 2.0m in width extending the length of all identified bus and parent drop-off zones.

Policy 6.2.1: The School Site identified within Spring Valley shall be a high school site.

Policy 6.2.2: As per Section 4.14 of the ARLAC Reserve Agreement, reserve land shall be transferred to the school jurisdiction by the City on an as-is, where-is basis, subject to Schedule 2 of the Agreement.

Policy 6.2.3: Documentation from the developer verifying the site is suitable for design and construction of the school building is required and these documents shall be submitted to the City of Airdrie and ARLAC prior to transfer of title to the receiving school board.

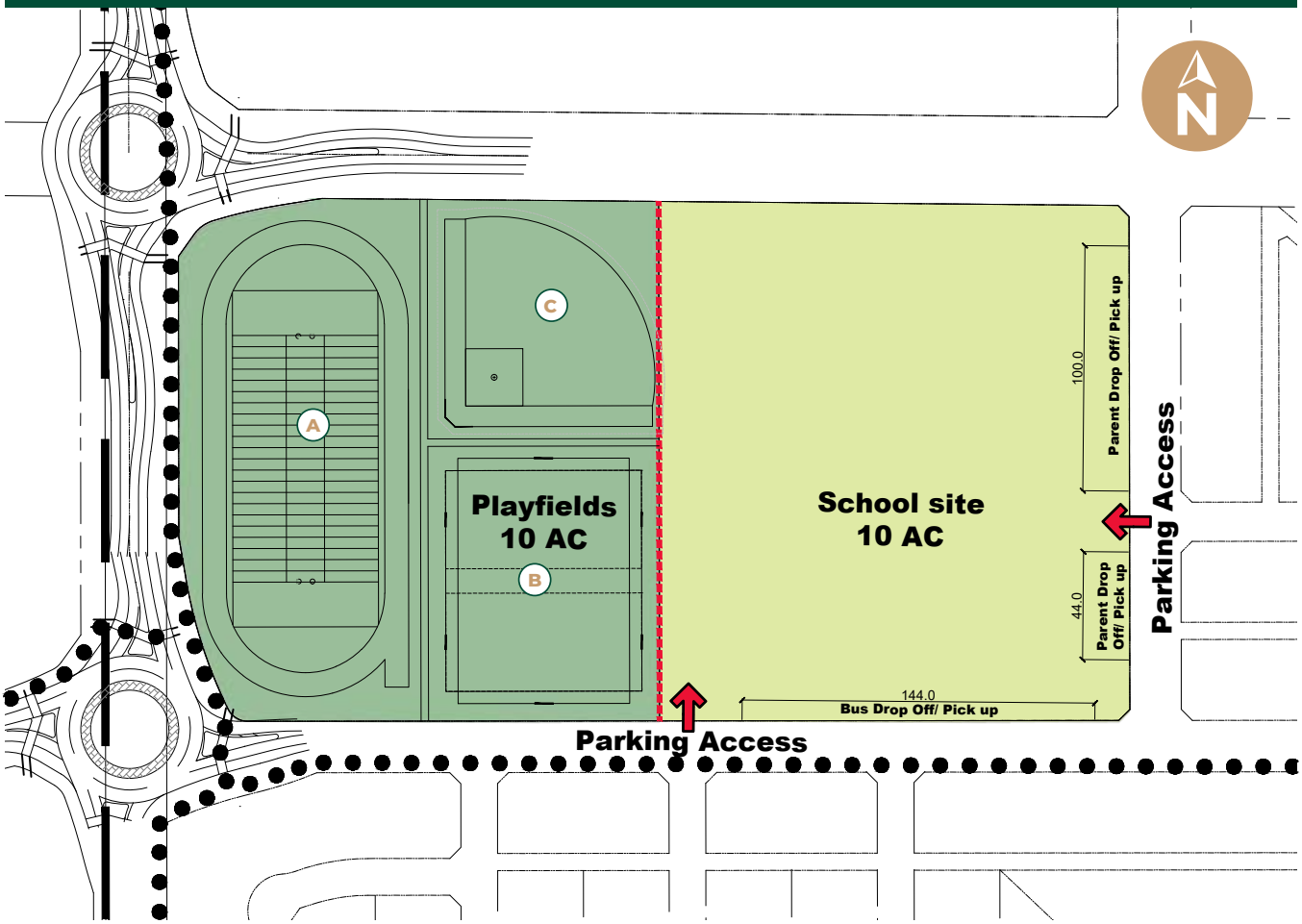
Policy 6.2.4: Pursuant to Schedule 2 (Section 2.IV.C Documentation) of the ARLAC Reserve Agreement, the Developer shall:

- 1) conduct and provide compaction test reporting to ensure the footprint portion of the site is designed with engineered fill suitable to construct the school. Testing must meet 98% proctor.
- 2) perform four (4) borehole tests within the footprint of the school building envelope using a methodology to the satisfaction of the City of Airdrie and the LAC. As part of the report, the Developer shall ensure that the school site complies with the Assessment of Natural Arsenic Concentrations Soil Arsenic Management (2019) and Soil Arsenic Management and Communication Strategy (2020).
- 3) provide documentation of Environmental Site Assessment(s) to (and to satisfaction of) the City of Airdrie and LAC verifying the site is appropriate for school building construction pursuant to the Provincial Site Readiness Checklist.
- 4) provide a Stormwater Management Report including the school site.
- 5) Provide documentation of a Traffic Impact Assessment including traffic volumes generated by a school on the proposed site.

Policy 6.2.5: Spring Valley shall provide for direct connections through sidewalks and pathways between residential areas and the school site.

Policy 6.2.6: The collector cross section will be modified to incorporate a standard 2.0 meter wide monowalk adjacent to the high school site at the time of land assembly and subdivision.

FIGURE 8 PROPOSED SCHOOL SITE DESIGN



A Football Field & Track

B Major/Minor Soccer Field

C Baseball Diamond

** This plan is conceptual only and subject to change.*

7.0 Mobility

7.1 Regional Road Network & Access

Currently, vehicular access to the Spring Valley plan area is limited to Range Road 291 which runs north-south along the western boundary of the plan area. This roadway accommodates two-way single-lane traffic along a paved road. The City's Transportation Master Plan (TMP) outlines future upgrades to Range Road 291 between Yankee Valley Boulevard and Veterans Boulevard. These upgrades are anticipated by the 2039 horizon and expected to consist of road widening from 2 lanes to 4 lanes to become a major divided arterial road condition with a 40.0 m ROW. This road provides connection to major roadways such as Yankee Valley Boulevard to the south and Veterans Boulevard (Highway 567) to the north, both of which provide access to Highway 2, a key north-west connection for the region. The East Lake Hill Road extension is a truck route which will ultimately extend to Range Road 292 to provide alternate access to the neighbourhood.

7.2 Internal Road Network

The internal road network within the Plan area will be constructed generally as shown in **Figure 9: Transportation Network.** Range Road 291 will provide two main access points to the plan area via two roundabouts. These roundabouts will be constructed with the City's timeline for upgrades to Range Road 291, and appropriate intersection treatments will be required to support the development in the interim. The first main access, the East Lake Hill Extension, is envisioned as a 36.0m divided arterial roadway that will provide access to the northern industrial parcels. This roadway is proposed to be developed at a rural standard with the centre median to be constructed in Stage 1 as shown in Appendix A. Secondly, a 21.0m Collector will act as the primary access for residential and school traffic. Local residential roads are proposed as a 15.0 m ROW with an efficient grid pattern network. The collector standard will be modified to include a 2.0 m monowalk adjacent to the school site.

The Plan has been designed to separate residential and industrial traffic by creating two distinct zones, a north industrial zone, and a south residential zone. Industrial traffic is anticipated to travel from the greater transportation network on the larger arterial standard roads. We have provided smaller road standards within the residential zone to decrease the desire of industrial traffic users, as well as create a safe and comfortable environment for future residents and pedestrians. Access to the school will be along the residential roadways minimizing student traffic along industrial roadways. In addition, only a single intersection between the East Lake Hill extension and residential network is provided to limit integration of industrial and residential traffic.

Policy 7.0.1: All streets should be generally located as shown on **Figure 9: Transportation Network**.

Policy 7.0.2: The internal road systems for Spring Valley should align with current City of Airdrie design standards.

Policy 7.0.3: Industrial areas shall be provided with direct vehicular linkages to major transportation routes (Veterans Boulevard and Range Road 291).

Policy 7.0.4: Heavy vehicles and dangerous goods transportation shall abide by the policies outlined within Section 7.2.2 of the East Points CASP.

Policy 7.0.5: At the time of subdivision, and at the City's discretion, an update to the Transportation Impact Assessment may be required.

Policy 7.0.6: At the time of subdivision, a sound attenuation study will be required for the homes adjacent to Range Road 291.

Policy 7.0.7: Multi-modal access to the future school site is encouraged, when available.

Policy 7.0.8: A street connectivity index of 1.4 will be targeted.

Policy 7.0.9: Signage indicating 'No Trucks' shall be installed at the intersection of the East Lake Hill extension and North-South residential collector adjacent the school site.

Policy 7.0.10: Site specific Transportation Impact Assessments will be required for the industrial lands and school site, with Development Permit submission. The TIA must consider mitigation of truck traffic using the residential street network if the use will generate more truck traffic than a data centre use.

Policy 7.0.11: Timing and funding of the ultimate widening of East Lake Hill Road extension (from 2 to 4 lane arterial standard), shall be determined through a Transportation Study completed for the future East Nose Creek CASP.

7.3 Rural Cross-Sections

The East Lake Hill Road extension is proposed as a semi-rural standard with a landscaped median and sidewalks, as well as rural elements. This is proposed as an interim stage of construction planned to accommodate the ultimate urban standards as such time as they are warranted with development of the East Nose Creek CASP. The north-south industrial road is proposed as a rural standard as it will be intended to service the two industrial parcels only and an urban standard is not warranted. A sidewalk will however, be provided on one side of the road to provide pedestrian access in a location to minimize pedestrian crossings with industrial traffic.

> **Policy 7.3.1**: Overhead power lines adjacent to residential and Institutional/open space uses shall be buried at the Developer's expense.

7.4 Connectivity Index

The Spring Valley development concept has been analyzed using the street connectivity index to assess the level of neighbourhood connectivity based on two measurements; links and nodes. Links consist of all non-arterial roadway segments and nodes refers to all non-arterial intersections and cul-de-sacs. These numbers are divided to output a street connectivity index number.

The street network of Spring Valley consists of 25 links and 14 nodes resulting in a connectivity index of 1.79 (25/14), as illustrated in **Figure 12: Street Connectivity Index**. The active modes network consists of 33 links and 19 nodes for a connectivity index of 1.74 (33/19), as illustrated by **Figure 13: Active Modes Connectivity Index.** This result demonstrates a high level of connectivity for the community exceeding the minimum standards set out in the Airdrie Transportation Master Plan.

7.5 Transportation Impact Assessment

A Transportation Impact Assessment (TIA) was completed by Bunt and Associates in support of this NSP. The analysis utilized anticipated residential density, alongside industrial square-footage and estimated student population to determine peak hour traffic counts. Based on these findings, **Table 8: Findings & Recommendations** outlines the suggestions.

TABLE 8 FINDINGS & RECOMMENDATIONS			
Section		**2023-2028 After Development**	**2028+**
Roadway	Range Road 291	Upgrade to four lanes to accommodate growth in traffic. Upgrade is expected to be required around 2030 depending on construction of surrounding developments.	
	Veterans Boulevard (East Lake Blvd realigned RR 292)		Expansion from two lanes to four lanes by the 2039 Horizon. This is in line with the Airdrie TMP.
	Yankee Valley Boulevard (Kings Heights Gate Realigned RR 292)		Expansion from two lanes to four lanes by the 2039 horizon. This is in line with the Airdrie TMP.
Intersections	Range Road 291 & Yankee Valley Boulevard	Signalise the intersection by the 2028 background horizon. Provide left turn lanes in the east – west direction by the 2028 after development horizon.	Add an extra left turn lane on all legs by the 2039 Background horizon.
	Range Road 291 & Veterans Boulevard	Signalise by the 2028 Background horizon. Separate left turn lanes on all legs, and separate eastbound right turn lane by the 2028 After Development horizon.	Add an extra left turn lane on southbound, two left turn lanes on eastbound, dual right lanes to southbound, and a left turn lane on northbound by the 2039 Background horizon. Add an extra left turn lane on northbound leg by the 2039 After Development horizon.
	Kingsview Boulevard & Yankee Valley Boulevard		Provide extra left turning lanes on westbound and southbound legs in either the 2028 after development scenario or the 2039 background scenario.
	Range Road 291 & North Site access	Provide a roundabout by the 2039 horizon if both the west adjacent quarter section and the Spring Valley NSP are fully developed.	
	Range Road 291 & South Site access	Provide a roundabout by the 2039 horizon if both the west adjacent quarter section and the Spring Valley NSP are fully developed.	

FIGURE 9 TRANSPORTATION NETWORK

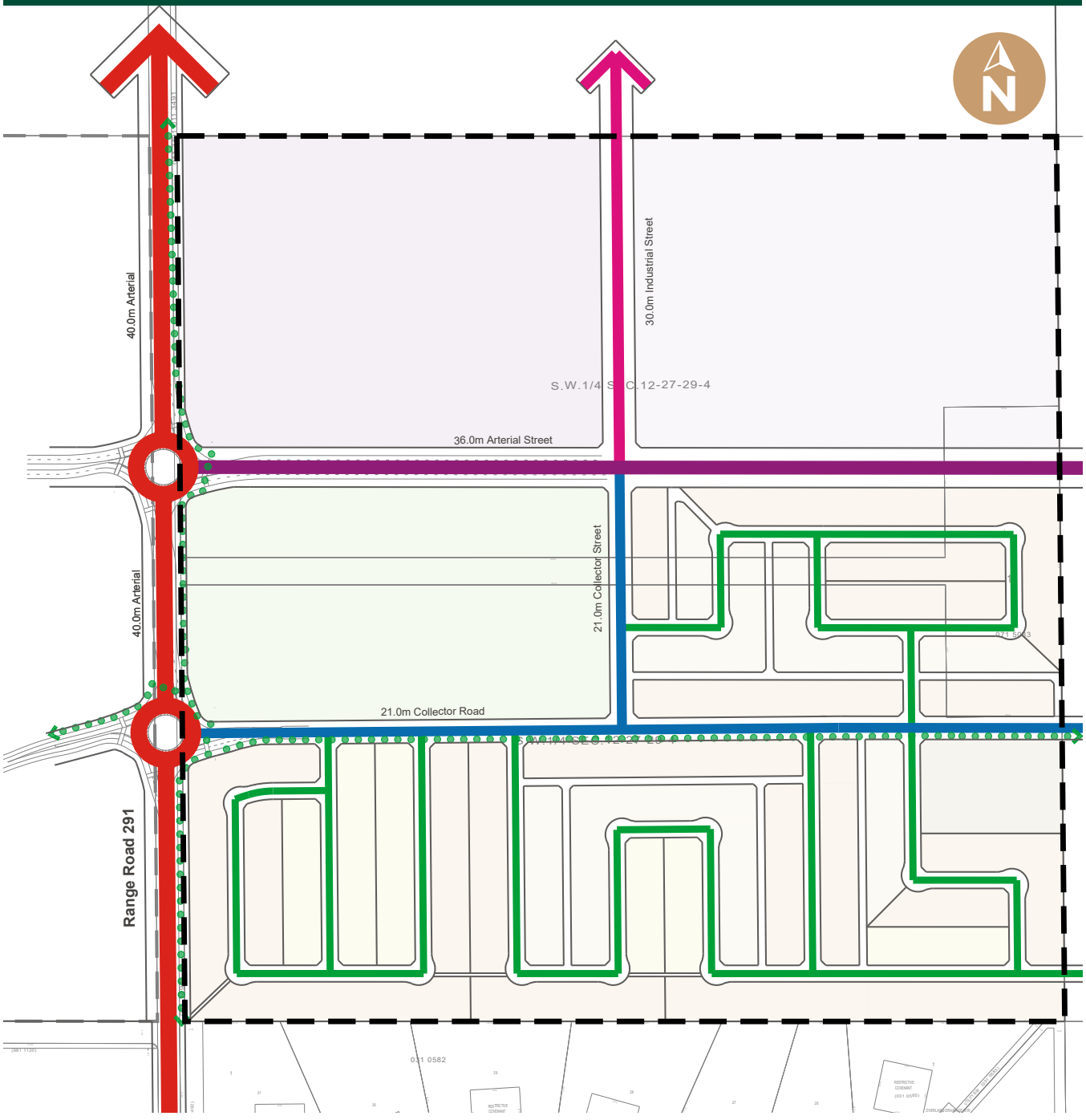


FIGURE 10 **30.00 M CROSS SECTION**

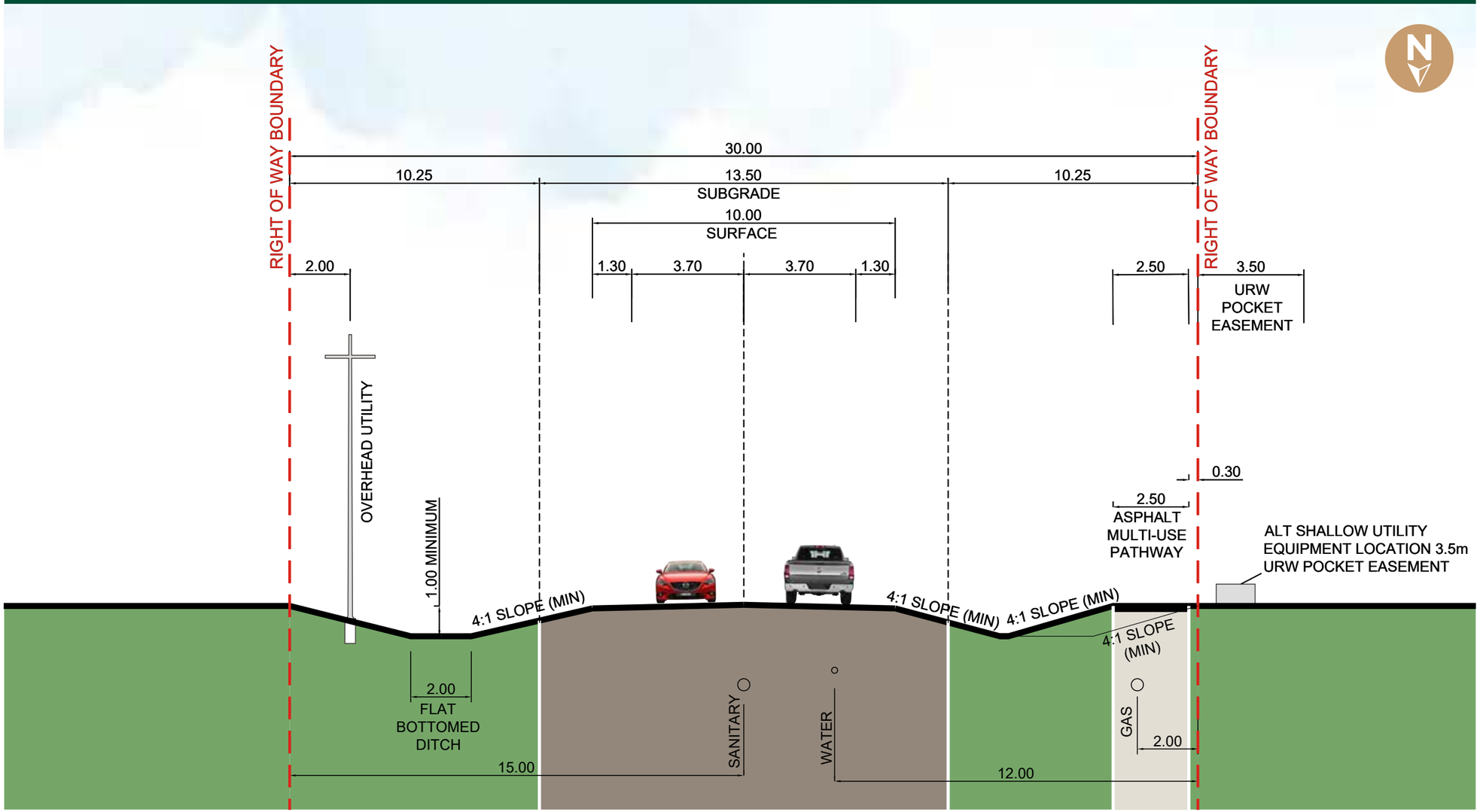


FIGURE 11 36.00 M CROSS SECTION

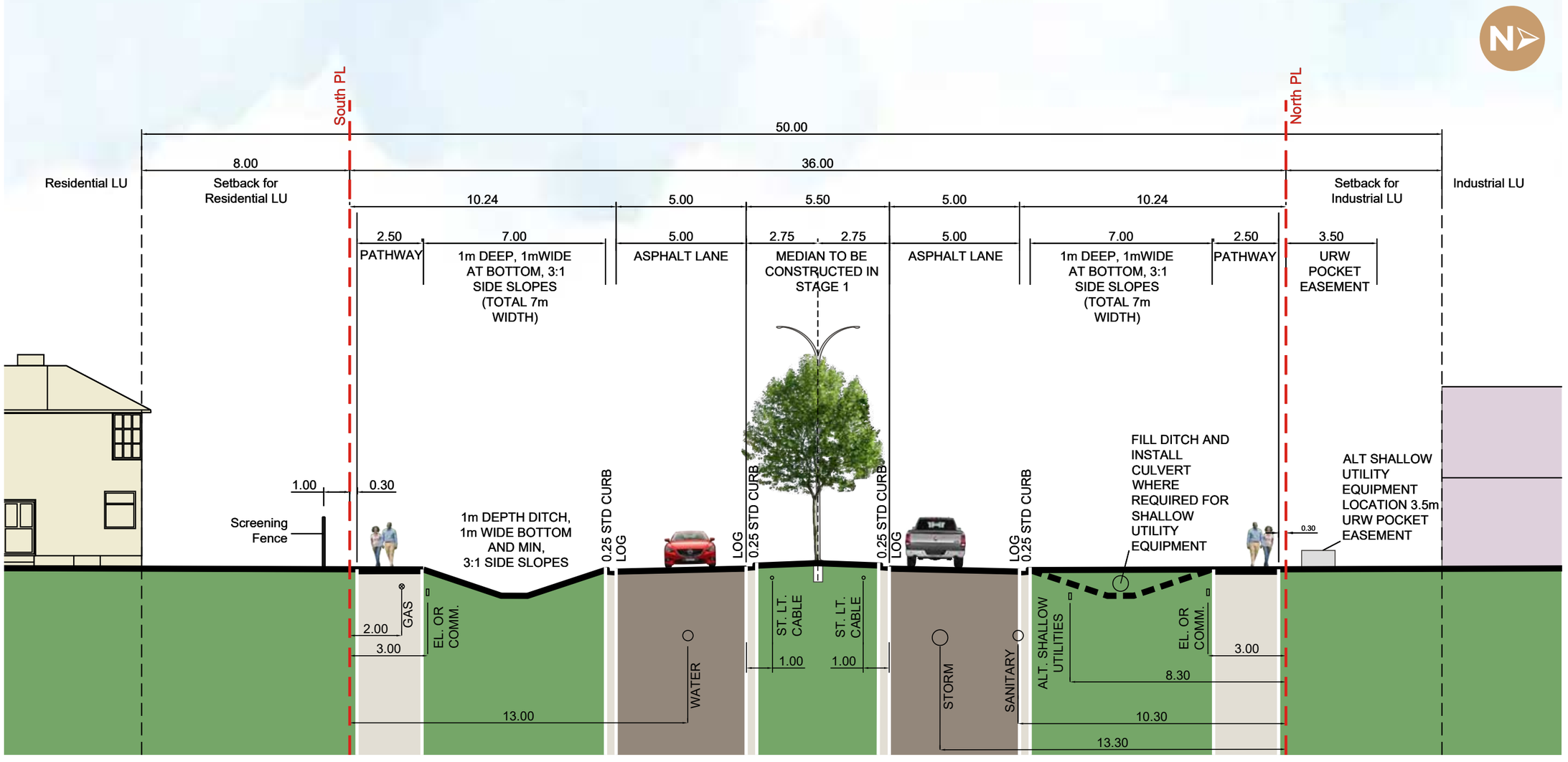
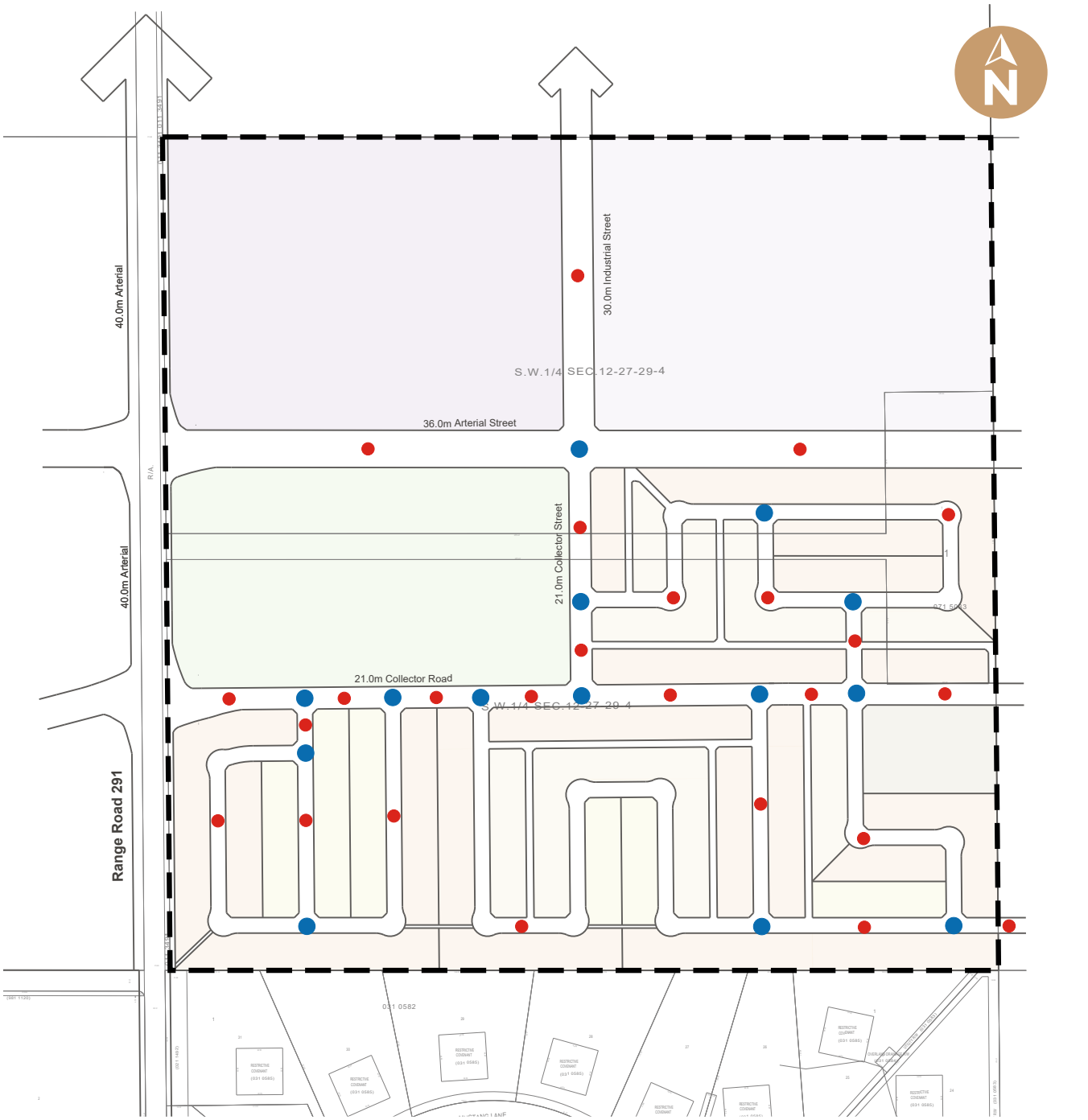


FIGURE 12 STREET CONNECTIVITY INDEX



7.5 Transit

As per the East Points CASP, the Plan area is expected to be serviced by public transit services to provide safe, accessible and affordable connections to the community. This service will occur over time as the NSP and surrounding areas develop, bringing potential ridership to the area. The City will not be able to provide transit service to the neighbourhood until the required road network has been upgraded to accommodate safe transit infrastructure. The transportation network has been designed to accommodate future potential transit routes and potential stops along the proposed road network.

The Transit Master Plan recommends a staged approach whereby transit services are introduced by stages of development. Demand-responsive transit services may be introduced at an earlier stage.

The potential future transit network is shown in a loop running from Range Road 291 east along the residential collector, turning north along the school site and diverting west back to Range Road 291 along the East Lake Hill extension. Potential future connections are also shown north and east throughout the community as surrounding lands develop.

Please refer to **Appendix C** for an overview of the conceptual transit connections within Spring Valley based on City standards.

Policy 7.5.1: The timing and design of both interim and ultimate transit routes will be determined by Airdrie Transit and is subject to ridership demand in the Plan area, available funding for the service, and the suitability of the road standard to accommodate transit.

Policy 7.5.2: The transit network shall be designed as such that a minimum of 90% of all dwelling units in Spring Valley are located within a 5-minute or 400 m walking distance of a proposed transit stop.

Policy 7.5.3: The transit network shall be designed as such that a minimum of 90% of all medium or high density residential developments in Spring Valley are located within a 250 m walking distance of a proposed transit stop.

Policy 7.5.4: The transit network shall be designed as such that a minimum of 90% of all industrial uses in Spring Valley are located within a 600 m walking distance of a proposed transit stop.

Policy 7.5.5: Bus stops shall be planned in accordance with Objective 2.2 Integration of Accessible Services in the Airdrie Master Transit Plan.

Policy 7.5.6: The developer shall ensure appropriate pedestrian and vehicular connections to the transit corridor as detailed plans become available for this plan area.

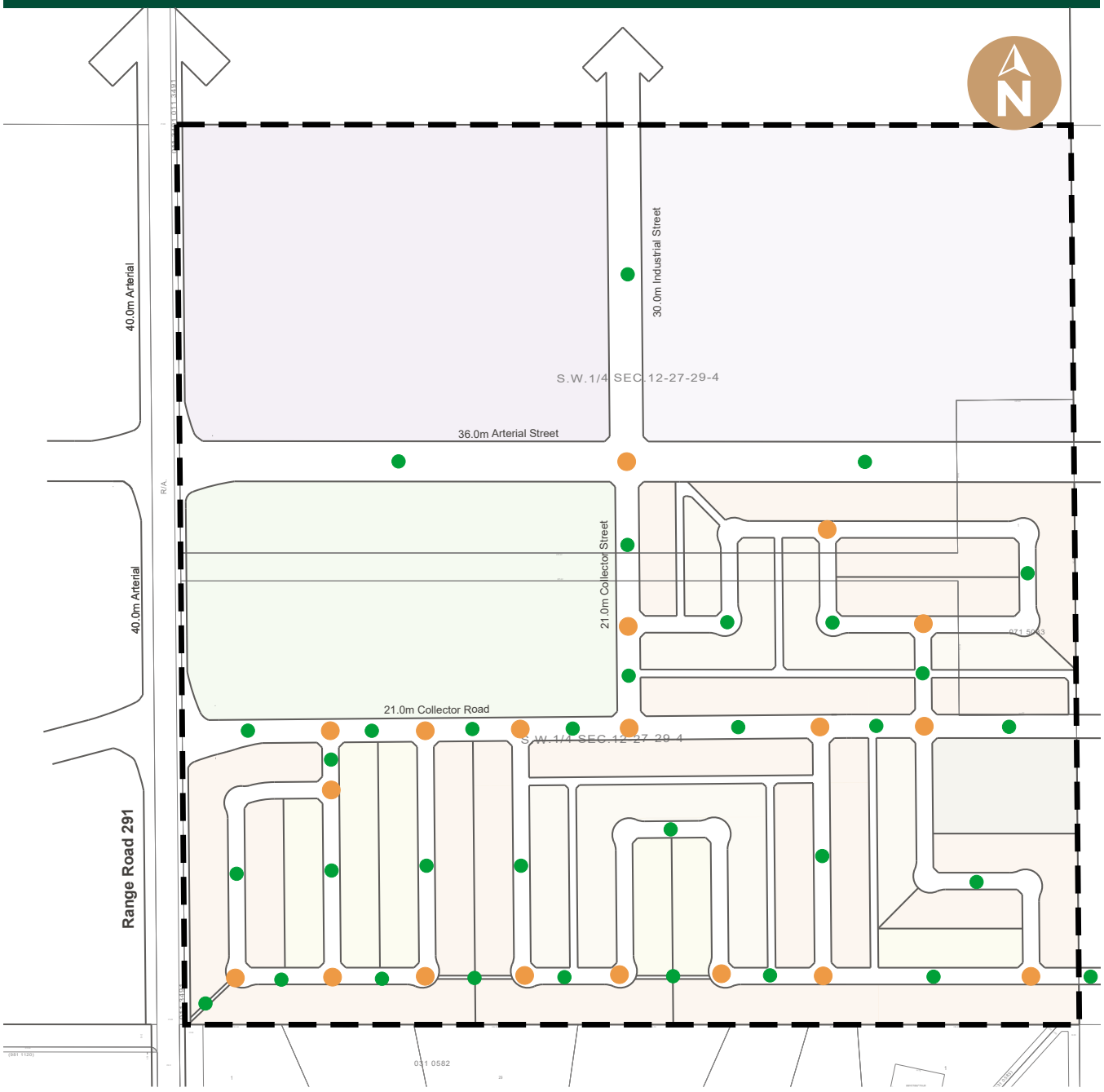
7.6 Active Modes

To accommodate active modes within the community, two key regional pathways are oriented north-south along Range Road 291 and east-west along the residential collector. These pathways intersect with numerous sidewalks along local streets and will connect future residents with key destinations including the high school site, existing regional pathway network in East Lake, future planned dog park to the west, and the future planned glacier park to the north.

Policy 7.6.1: An active mode connectivity index of 1.6 will be targeted.

Policy 7.6.2: Active modes of transportation shall be accommodated throughout the neighbourhood to provide efficient connections to transit stops.

FIGURE 13 ACTIVE MODES CONNECTIVITY INDEX



8.0 Servicing

The City of Airdrie's ability to provide potable water and sanitary servicing is contingent on securing capacity from the City of Calgary, and the conditions of the City's Master Servicing Agreement with Calgary.

8.1 Water Servicing

CIMA+ completed a servicing analysis on June 28, 2022 with various options for water supply. Due to landowner constraints, Scenario 2 is likely the option required for development of the subject lands. The entire development will be within the Northeast Pressure Zone with water supply from the main pressure zone. A booster station is proposed in East Lake Rd and additional storage is required in the main pressure zone to supplement the necessary pressure and flow requirements to meet the minimum water servicing requirements for the development. The storage upgrade in the main pressure zone is not a requirement for immediate servicing of Spring Valley, however, is part of the overall servicing requirement for the CASP area.

Subject to ownership constraints, the off-site water extensions are proposed as follows:

Option 1

- A single 300mm watermain connection at East Lake Road and Veteran's Boulevard, east on Veteran's and south on Range Road 291.
- A 300mm watermain connection at the end of East Lake Hill NE and extending east through the Westside lands along the future alignment of the roadway to Range Road 291.

Option 2

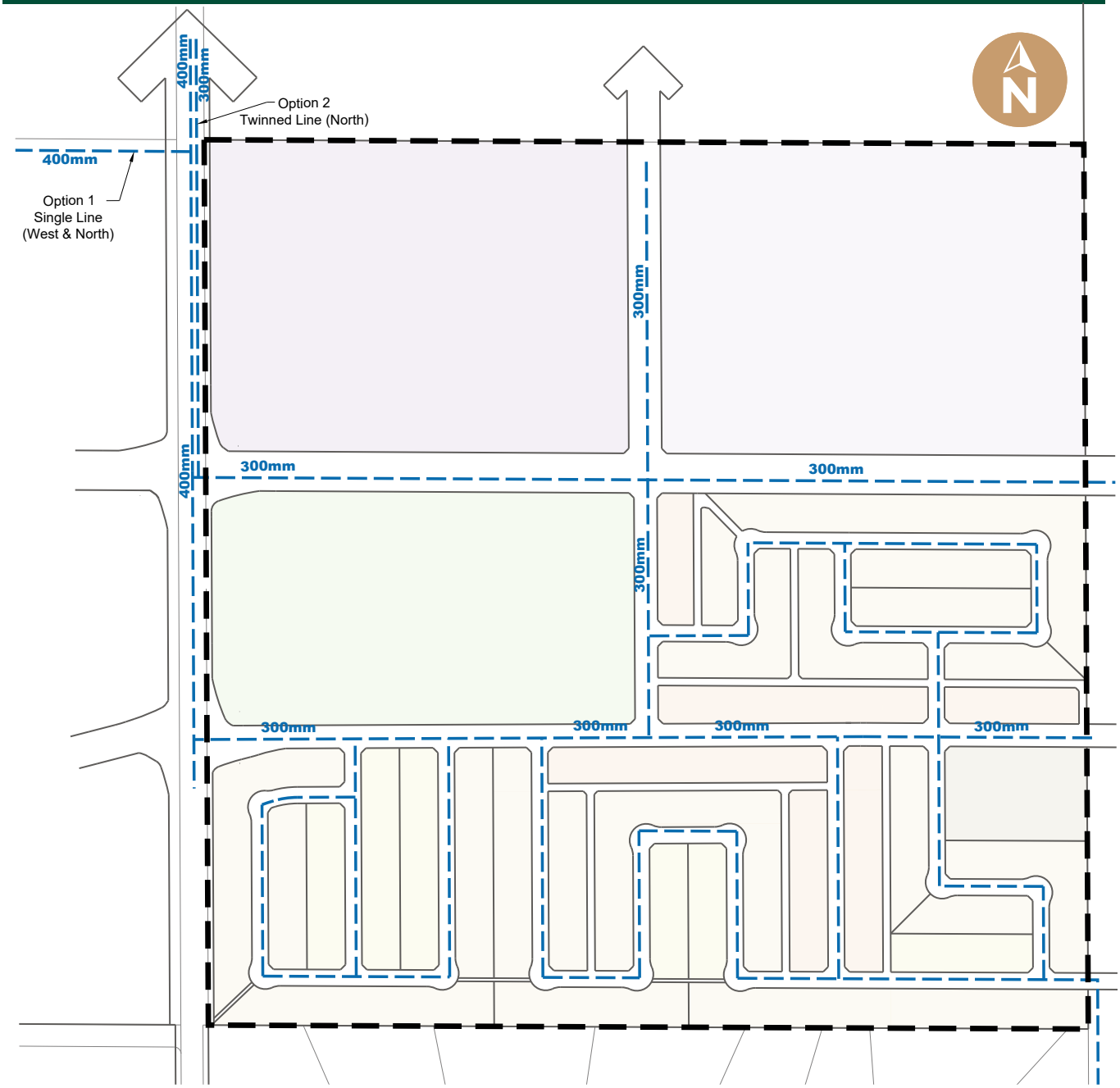
- Twinned watermain connections (300mm and 400mm) at East Lake Road and Veteran's Boulevard, east on Veteran's and south on Range Road 291.

> **Policy 8.1.1:** A water model will be provided with each phase of subdivision to the City's satisfaction.

Policy 8.1.2: The Spring Valley NSP requires construction of a potable water booster station and extension of water mains, as per the May 19 2023 servicing analysis completed by CIMA+, to provide pressure zone, fire flows, and maximum daily demand water servicing to the development area. At time of Subdivision of the first phase of the Spring Valley NSP, the developer shall construct water mains and enter into a Front-Ending Agreement to fund the design and construction of the booster station that meets the intended water flow, pressure, and operational performance of the May 19 2023 CIMA+ servicing analysis.

Policy 8.1.3: Any development completed prior to the construction of the potable water booster station must be designed and constructed to acknowledge the risk and liability for the available fire flows by demonstrating that the development will meet minimum fire protection requirements of the Fire Underwriters Survey and applicable building code.

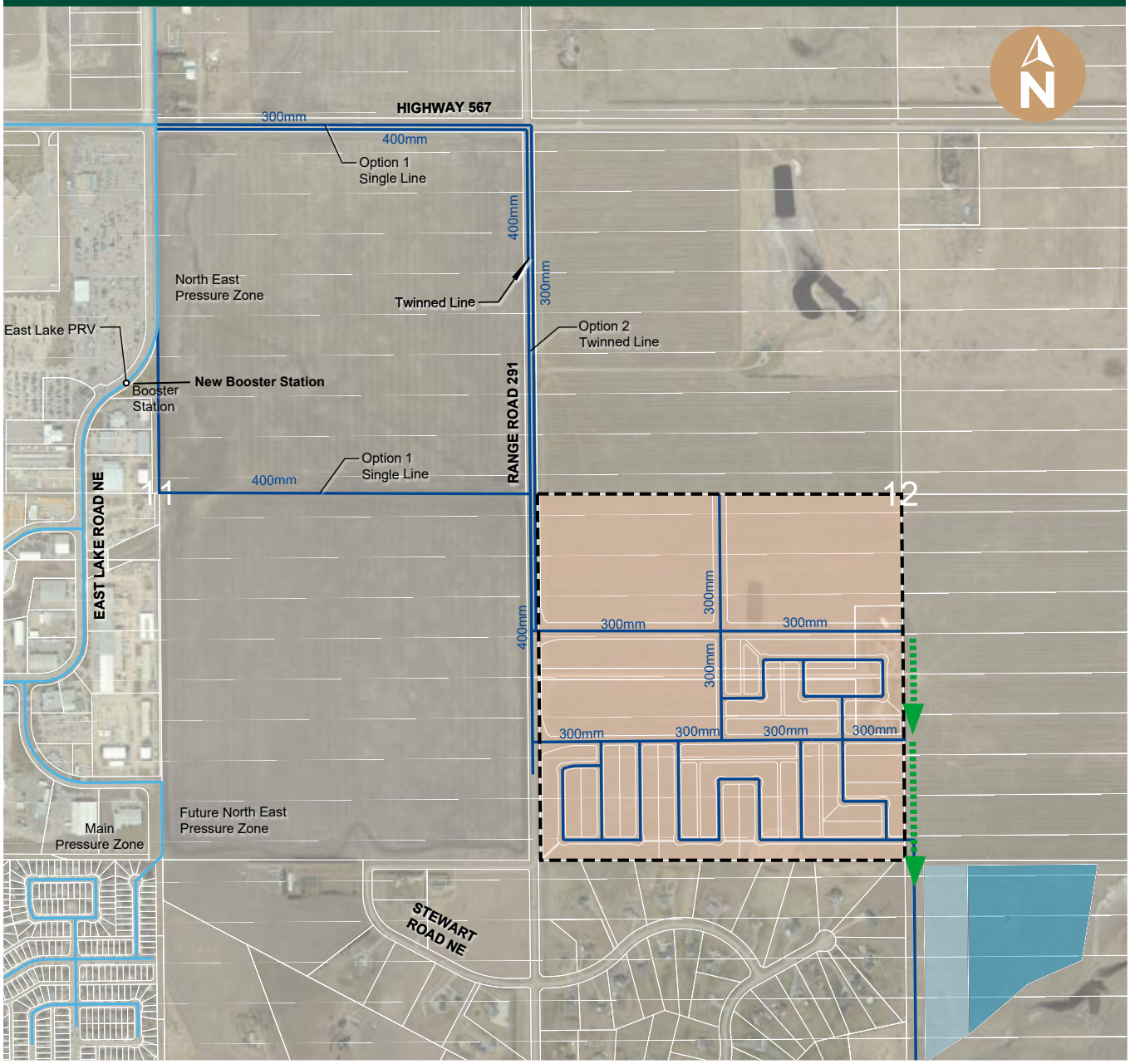
FIGURE 14A WATER SERVICING



Plan Area Boundary

Water Pipes Proposed (300mm)

FIGURE 14B WATER SERVICING PROPOSED CONNECTION SCENARIO



Servicing Boundary
Interim Pond
Ultimate Pond
Proposed Water Pipes
Existing Water Pipes
Drainage Channel

8.2 Wastewater Servicing

Downstream sanitary capacity was also reviewed in the CIMA+ June 28, 2022 servicing analysis based on a connection to the existing sanitary within East Lake Hill NE. Initial modeling identified potential capacity constraints within the pipes on East Lake Road NE and upgrades are likely required subject to further monitoring and analysis as development occurs over multiple phases. The Developer is responsible for downstream pipe upgrades in East Lake Road NE with potential recoveries from benefiting lands (if applicable). Subject to ownership constraints, the off-site sanitary extensions are proposed as follows:

Option 1

- A 300mm sanitary connection at the end of East Lake Hill NE and extending east through the Westside lands along the future alignment of the roadway to Range Road 291.

Option 2

- A 300mm sanitary connection at the end of East Lake Hill NE, south to Thornburn and east within a URW and Stewart Road to Range Road 291.

TABLE 9 INFRASTRUCTURE IMPROVEMENTS

Improvement	Trigger
Construct Booster Station as per Policy 8.1.2.	Spring Valley NSP Phase 1
Extension of Water Mains as per Policy 8.1.2.	Spring Valley NSP Phase 1 Subdivision
Fund Downstream Upgrades to the East Lake Industrial and Tanner Drive Sanitary Sewer Systems.	Either Council approval of additional non-residential lands in the CASP area or subdivision of the Spring Valley NSPs last phase of residential as per Policy 8.2.1.

Policy 8.2.1: The City's existing sanitary system capacity is limited within the East Points CASP area. The East Points CASP prioritizes available sanitary system capacity for non-residential purposes. In order to ensure that residential development within the Spring Valley NSP does not reduce the sanitary system capacity for additional non-residential development, the Spring Valley developer will be required to fund downstream upgrades to the East Lake Industrial and Tanner Drive sanitary sewer systems to provide capacity for the equivalent residential servicing impact.

The May 19 2023 CIMA+ servicing analysis has estimated approximately 40 L/s of capacity for up to two (2) quarter sections of non-residential development in the East Points CASP area without surcharge occurring in the East Lake Industrial sanitary sewer system. The May 19 2023 CIMA+ servicing analysis demonstrated the City's sanitary capacity can be increased to 63 L/s or three (3) non-residential quarter sections by allowing limited surcharge to occur in sections of the East Lake Industrial sanitary sewer system. The residential component of the Spring Valley NSP will require 27 L/s (68%) of the City's existing sanitary capacity, which will necessitate upgrades to the East Lake Industrial sanitary sewer system.

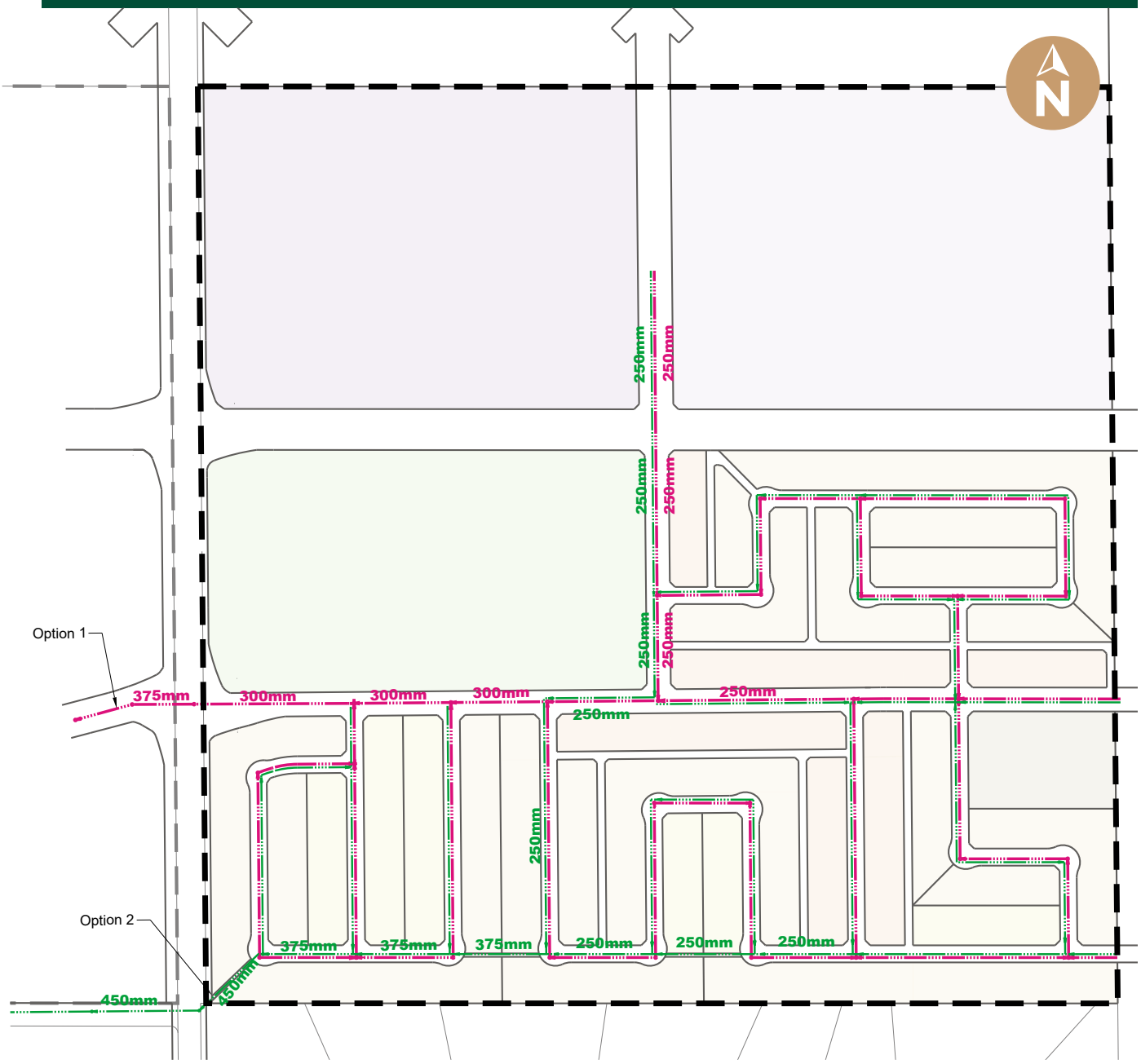
The Spring Valley developer shall fund the required downstream upgrades to the East Lake Industrial sanitary sewer system to provide capacity for development of the residential component of the Spring Valley NSP. The East Lake Industrial downstream upgrades will be designed to reduce surcharging in the East Lake Industrial sanitary sewer system and will be in accordance with the May 19 2023 servicing analysis complete by CIMA+.

Timing of the upgrades will be trigged by either occurrence:

1) Council approval of an additional non-residential NSP within the East Points CASP area
2) At time of Subdivision of the last phase of residential development within the Spring Valley NSP

The connection to the Tanner Drive sanitary system is eligible for cost recovery from the third quarter section of non-residential development in the East Points CASP.

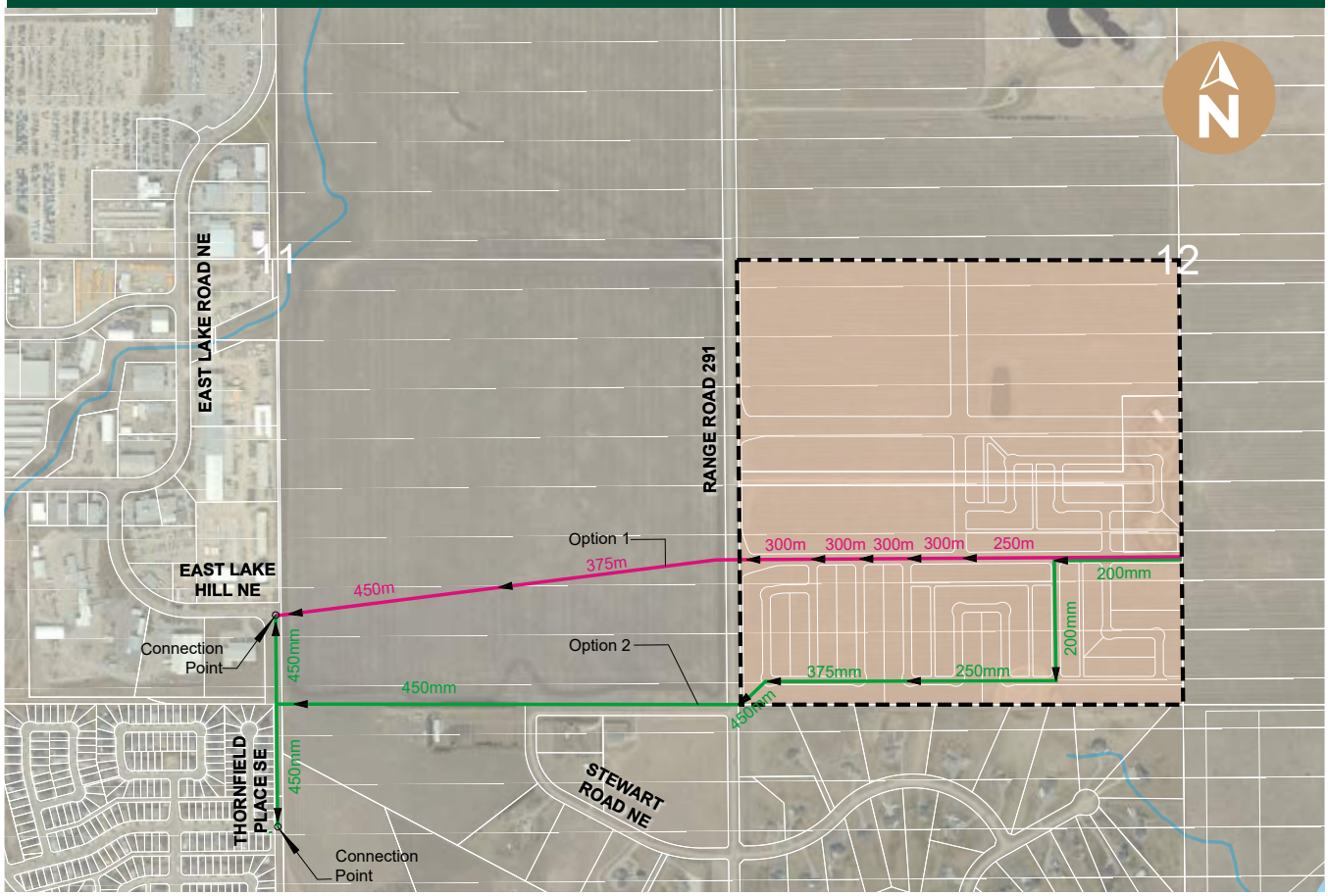
FIGURE 15A WASTEWATER SERVICING



Proposed Sanitary Pipes Option 1

Proposed Sanitary Pipes Option 2

FIGURE 15B WASTEWATER SERVICING PROPOSED CONNECTION SCENARIO



8.3 Stormwater Management

Stormwater is proposed to be managed by Pond P20/21 which is to be constructed in the adjacent parcel to the southeast of the subject lands. The City of Airdrie Master Stormwater Drainage Plan originally showed separate Ponds 20 and 21, however they are proposed to be consolidated into a single pond. The consolidation of Ponds P20 and P21 was an option considered in the East Points CASP. It is noted that the proposed 2:1 slopes of the pond are currently not accepted and public safety and slope stability will need to be addressed to the City's satisfaction.

> **Policy 8.3.1:** A comprehensive update to the technical memo update of the East Points CASP MDP, shall occur as part of the adjacent East Nose Creek CASP, where a Master Drainage Plan will be prepared.

Policy 8.3.2: The Spring Valley NSP area is within the Nose Creek Watershed and shall adhere to an allowable release rates and volume control targets established by the Nose Creek Watershed Water Management Plan.

Policy 8.3.3: For the purposes of the current Nose Creek Watershed Water Management Plan volume control targets, the private re-use of stormwater for irrigation purposes from the public stormwater facility, to the industrial parcels is permissible with the emphasis of irrigating the enhanced landscaping area fronting East Lake Hill Road extension. Stormwater irrigation water shall be metered and the City compensated for this supply cost with conditions to be specified in the Development Permit for each lot. A Restrictive Covenant or Easement shall be registered on title requiring this enhanced landscaped area to be maintained and irrigated by the private owner.

The Spring Valley Pond

As per the Stormwater Management policies of the East Points CASP, the Spring Valley NSP contemplates the location of the storm pond in the eastern adjacent quarter section legally described as NE-01-27-29-W4M. The pond may be developed in a staged process, whereby in the initial stage the pond will not be dug to its ultimate depth, at the time of development for this NSP, at the cost of the developer. Stormwater management during stage one will be supplemented with increased stormwater irrigation reuse on the school site, industrial parcels, and a portion of the eastern adjacent quarter section. The pumphouse will be designed for the ultimate pond, and provincial approvals will occur as a staged process. An overland drainage channel is proposed along the east side of the development to convey water to the pond, following the natural slope of the lands. Discharge flow and volume release to the tributary is to be in conformance with City policy and requirements. The ultimate pond will be constructed with development of the adjacent East Nose Creek CASP lands. A Staged Master Drainage Plan was prepared to support the Spring Valley NSP and further details pertaining to the stormwater design are provided in that report.

Policy 8.3.4: The Spring Valley storm pond shall be designed to avoid a dam classification as defined by the Water (Ministerial) Regulations.

Policy 8.3.5: The Spring Valley NSP requires the registration of easements to allow for overland drainage. The developer shall, at the time of the first Subdivision for the affected area, register overland drainage easements for the following:

1) A private drainage easement shall be registered within the industrial parcels located on the north side of the NSP to accommodate overland drainage from the NSP and the neighbouring parcel to the north, quarter section NW-12-27-29-4. This private easement may be removed through mutual consent of all the parcel owners who benefit from the easement.
2) An Overland Drainage Right of Way within quarter section SE-12-27-29-4 to the benefit of the City to allow for overland drainage from quarter section NW-12-27-29-4 and to accommodate overland flows from the Spring Valley NSP to the off-site Stormwater Management Facility (SWMF)
3) The area where the SWMF is located so the area is protected to construct and maintain the pond.

Policy 8.3.6: To service the Spring Valley NSP the developer shall utilize a stormwater management facility (SWMF) proposed to be located outside the plan area. At time of Subdivision of the last phase of residential development for the Spring Valley NSP the developer shall complete the following:

1) Subdivide the SWMF area as PUL from the parent parcel.
2) Off-site Levies will be collected by the City for the area Subdivided for the SWMF
3) Register a deferred Municipal Reserve (MR) caveat on quarter section SE-12-27-29-4 for any MR dedication that is owing for the SWMF identifying where the MR will be used.
4) Apply for construction completion certificate (CCC) and after four (4) year maintenance period final acceptance certificate (FAC) for the SWMF in accordance with the Subdivision Servicing Agreement for the subdivided SWMF
5) Register Right of Ways required for all off-site sewers, water services, irrigation infrastructure easements, off-site irrigation areas, pathways and maintenance access roads to the City's benefit.

Policy 8.3.7: The off-site Stormwater Management Facility (SWMF) may be staged however, each stage will be designed and constructed as a permanent facility and will meet all City of Airdrie and Provincial requirements for SWMF, including meeting targets established in the Nose Creek Watershed Water Management Plan.

The City will consider future expansion of the staged SWMF to accommodate additional development areas within the East Points CASP area or East Nose Creek CASP area provided it can be demonstrated that the pond can be expanded without determent to the functionality of the existing pond and that the proposed expanded pond will meet City of Airdrie and Provincial Requirements, as well as meeting targets established in the Nose Creek Watershed Water Management Plan.

Policy 8.3.8: A purchasers agreement (or other suitable agreement) outlining all the steps in the policy above will be registered on the NE-01-27-28-W4M with the stripping and grading permit for the SW-12-27-29-W4M.

Policy 8.3.9: Although utility infrastructure is being advanced prior to the approval of the East Nose Creek CASP, it should be noted that residential densities will be required to meet the minimum's of the East Nose Creek CASP/Municipal Development Plan, and NE-01-27-29-W4M will form part of the overall density calculation.

Policy 8.3.10: Technical evaluation of the storm pond lands including HRIA, BIA and Geotechnical reporting will be required for the area of the storm pond in the NE1 27-29-W4M prior to excavation and concurrent with the first stage of subdivision within the Spring Valley NSP.

FIGURE 16A STORMWATER MANAGEMENT

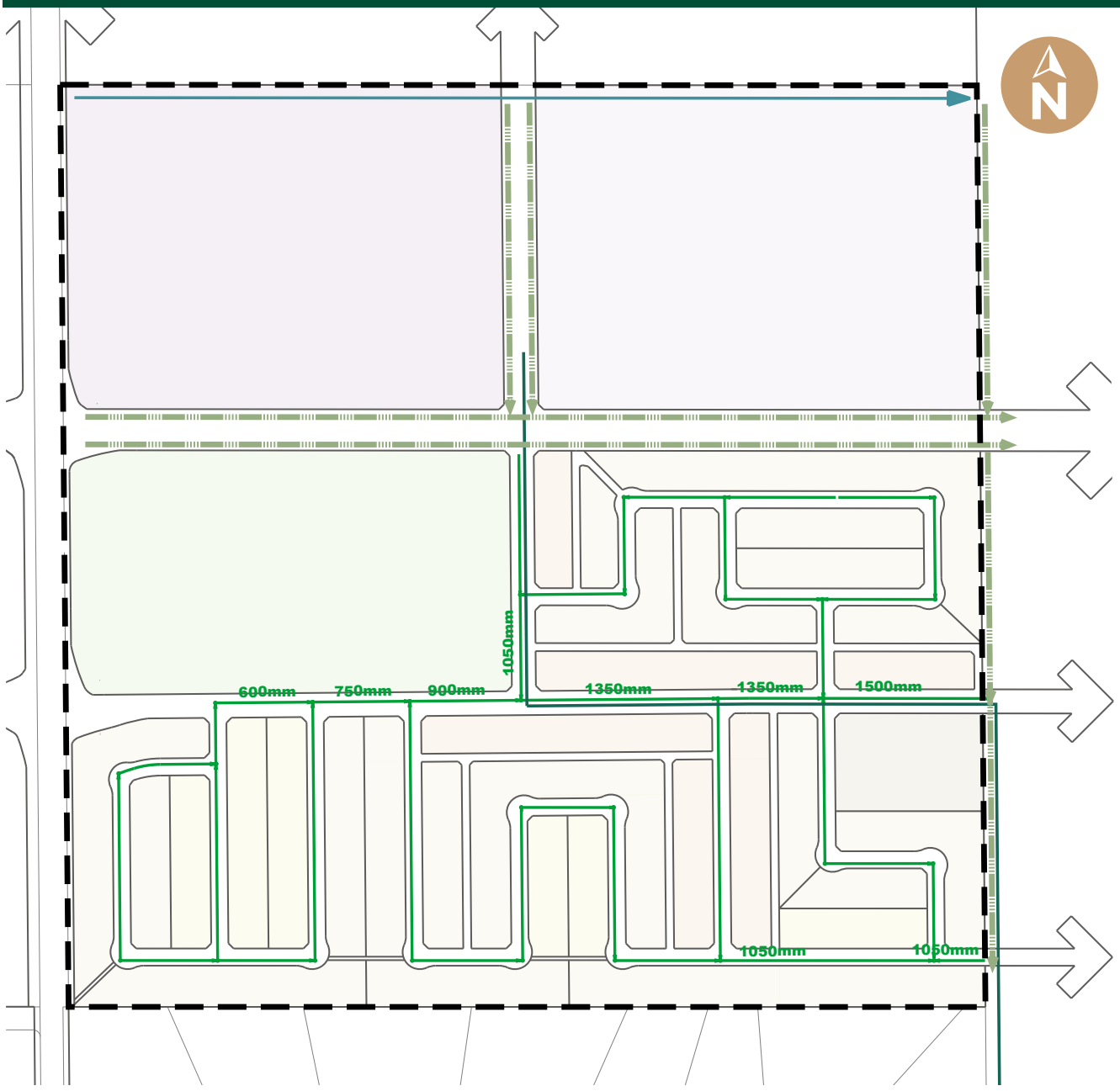


FIGURE 16B STORMWATER MANAGEMENT PROPOSED CONNECTION SCENARIO

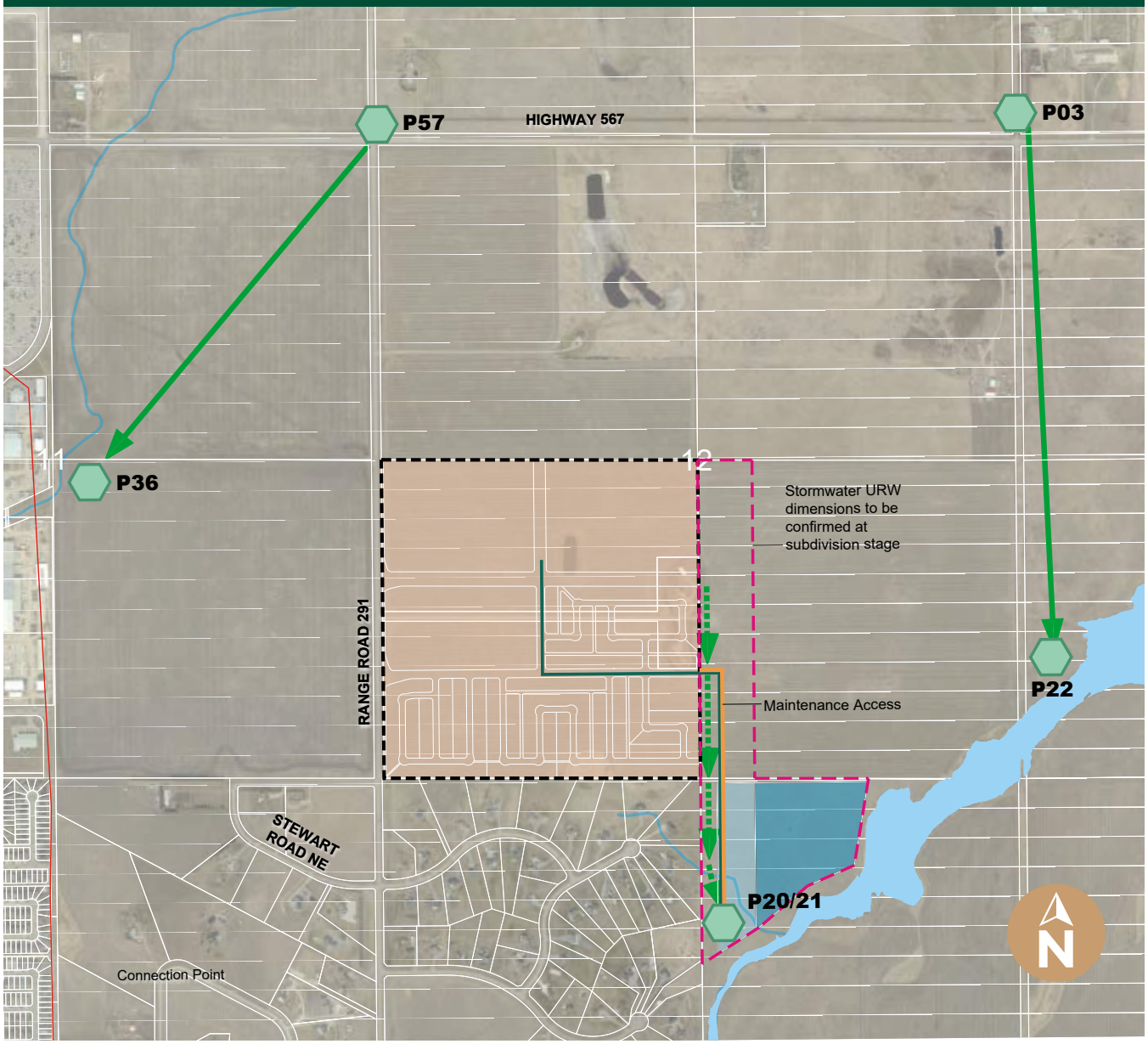
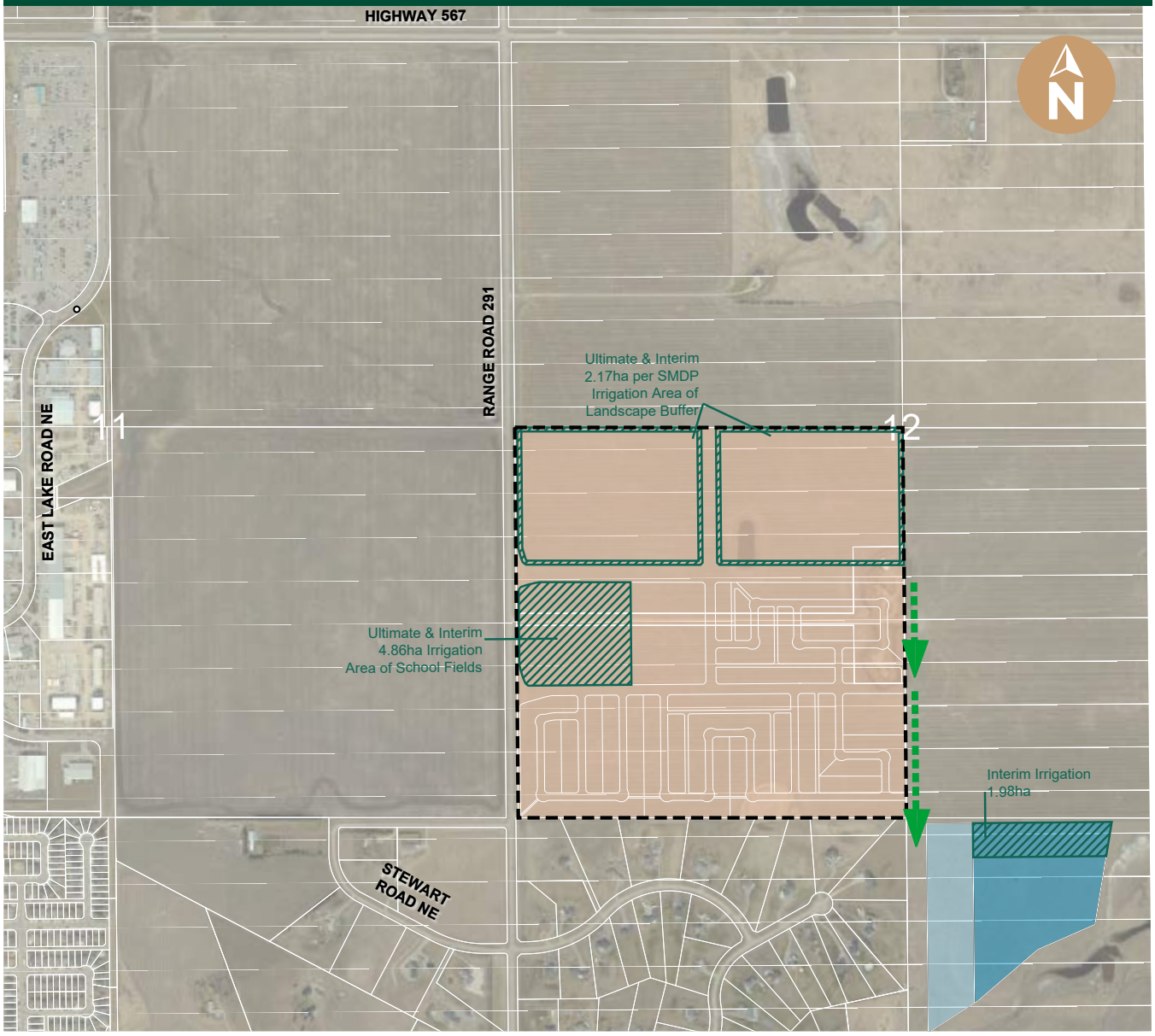


FIGURE 17 Irrigation



Servicing Boundary

Interim Pond

Ultimate Pond

Drainage Channel

9.0 Plan Implementation

9.1 Phasing

The development of the subject lands as the first phase of the East Points CASP aligns with Airdrie City Plan policies 2.14-2.17 in the following ways:

- Development of the proposed development enhances the proportion of non-residential lands within the City
- The proposed development sparks developer-funded infrastructure and increases the City assessment base
- The proposed development contributes community infrastructure in the form of a high school site
- All necessary environmental and technical review of the lands has been completed in support of the proposed development

The Spring Valley area is anticipated to develop within a series of phases based on market demand, ownership, and servicing capacity. The sequence of development is expected to proceed generally as depicted on **Figure 18: Phasing**.

Spring Valley NSP amendments may be initiated by City Council, City of Airdrie Planning or Engineering departments, developers, landowners, or school boards. Amendments can be related to the NSP or its appendices.

Generally, amendments to the Spring Valley NSP may be required in the following circumstances:

- Where significant shifts in the location of community facilities such as parks or schools are proposed; and / or
- Where significant shifts in the design or layout of infrastructures such as roads and sanitary and storm services are proposed; and / or
- Where shifts in land use categories, such as from residential to industrial are proposed; and / or
- Where shifts within a land use category that result in changes to density, such as from a single family designation to a multi-family designation, are proposed and / or;
- At the discretion of the City of Airdrie, where the interests of the public necessitate that formal amendments occur.

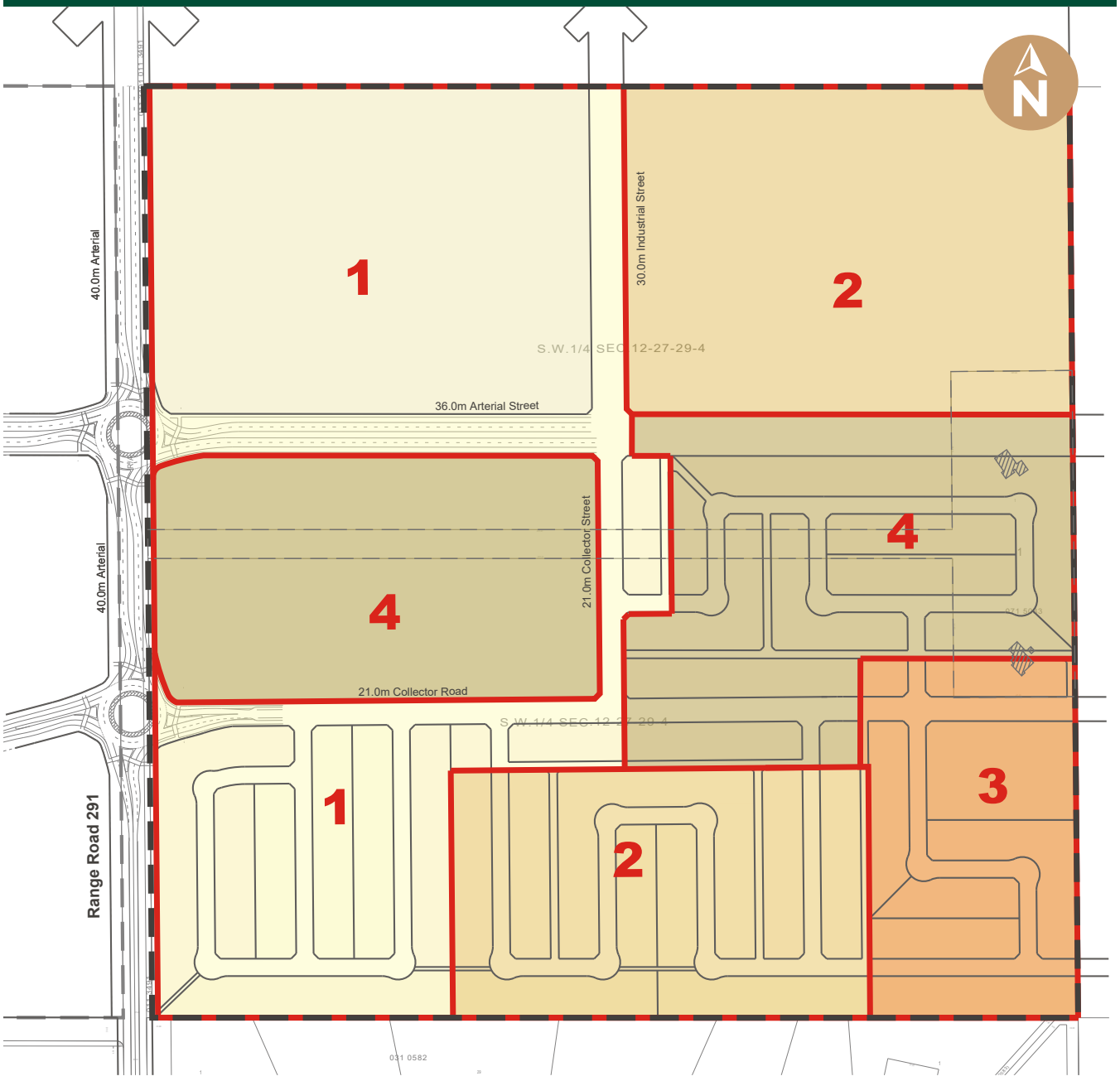
9.2 Funding & Financing

The developer acknowledges that servicing capacity for the NSP requires new infrastructure identified in the 2016 Utility Master Plan (UMP), 2020 Wastewater Lift Station Needs Assessment (WLSNA), and the 2020 Airdrie Pre-annexation Capacity Assessment for Main and West Lift Stations (CAMWLS). The development industry (BILD CR) and City of Airdrie negotiated the framework for a 'funding and financing model'. In this case, the NSP proponent will enter into a 'Contribution Agreement' for the infrastructure needed to service NSP lands. New infrastructure will be initiated by contribution by the NSP proponent(s) to front-end infrastructure for the benefiting lands.

Initial servicing capacity for the NSP requires use of the City's existing residual servicing capacity (Phase 1) and Phase 2 improvements as recognized in the 2020 CAMWLS to accommodate the development. The upgrades will be funded through mechanism described in Contribution Agreement for any or all of the benefiting lands that proceed to subdivision and utilize the capacity. Prior to first reading of the NSP, the contribution agreement obligation shall be signed and submitted to the City to accommodate the proposed development. The agreement generally entails:

1. The City will allow proposed Phase 1 residual servicing capacity to be made available to various ownership groups;
2. The Contribution Agreement may be amended to add a new developer of a new NSP but this must occur prior to first reading of the new NSP.
3. Contribution Agreement will outline payment of an acreage assessment equal to the total funding cost for Phase 2 infrastructure.
4. The ownership group, party to the Contribution Agreement, will pay an acreage assessment based on benefiting area towards the Phase 2 capacity infrastructure as part of the subdivision servicing agreement (SSA) process.
5. The ownership group is responsible to monitor the proposed Phase 1 residual servicing capacity to 100% upon which development will cease should Phase 2 not be available.
6. The developer is responsible to monitor the Phase 1 residual servicing capacity to 75% , upon which the City will actively use funds generated by the Contribution Agreement for Phase 2 improvements. The City will utilize such contributions, to design and construct Phase 2 wastewater pumping and transmission capacity and bring forward capital budget amendments and borrowing bylaws to Council.
7. The City is under no obligation to supplement (financially or otherwise) Phase 1 and/or Phase 2 capacity for the lands in the NSP; and
8. The City being fair and reasonable is ultimately in control of all residual and constructed capacity.

FIGURE 18 PHASING



** This plan is conceptual only and subject to change.*

Plan Area Boundary

Phasing Plan Boundary

Existing Residential Building

APPENDIX

A

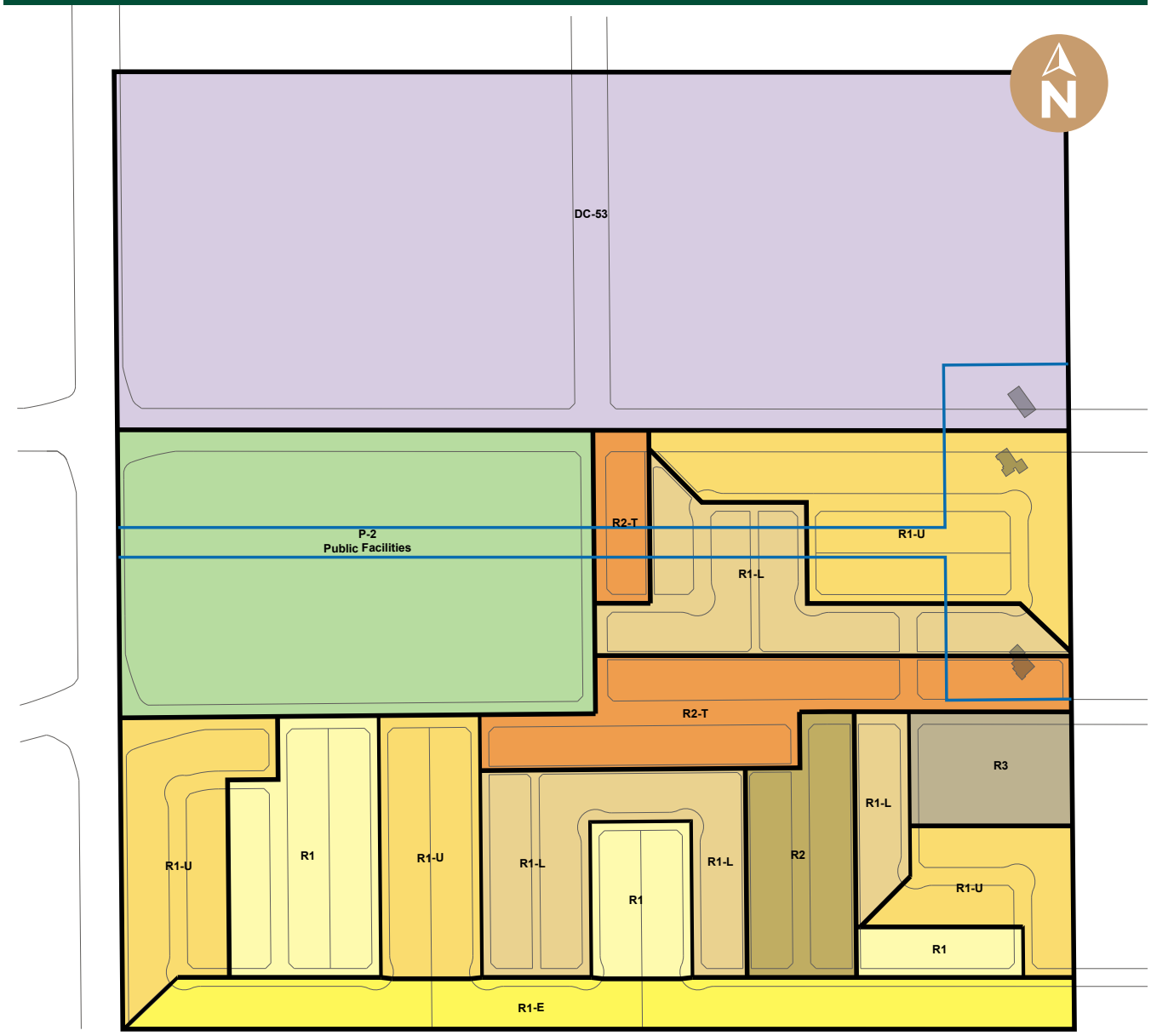
LAND USE

TABLE 8 SW SEC12-27-29-4 LANDS TO BE REDESIGNATED STATS			
From Land Use District	**To Land Use District**	**ha**	**ac**
F	DC-53	0.58	1.44
F	P-2	1.00	2.47
F	R1-U	1.90	4.70
F	R1-L	0.70	1.74
F	R2 -T	0.50	1.24
AG	DC-53	23.52	58.13
AG	P-2	8.61	21.28
AG	R1-E	3.36	8.31
AG	R1	4.29	10.61
AG	R1-U	7.72	19.07
AG	R1-L	5.72	14.14
AG	R2	1.84	4.54
AG	R2 -T	3.35	8.27
AG	R3	1.31	3.24
Total		**64.42**	**159.18**

DETAILED LAND USE

- Plan Area Boundary
- 3.0m Regional Pathway
- Proposed Transit Stop
- P-2 Public Facilities
- DC-53 Direct Control Based on: I-BI - Mixed Business/ Employment
- R1L Narrow Lot Laned Residential
- R1 Single Detached Residential
- R1-U Urban Standard Residential
- R2 Low Density Residential
- R2-T Townhouse Residential
- R3 Low Rise Multi Family Residential
- R1-E Estate Residential

LAND USE REDESIGNATION



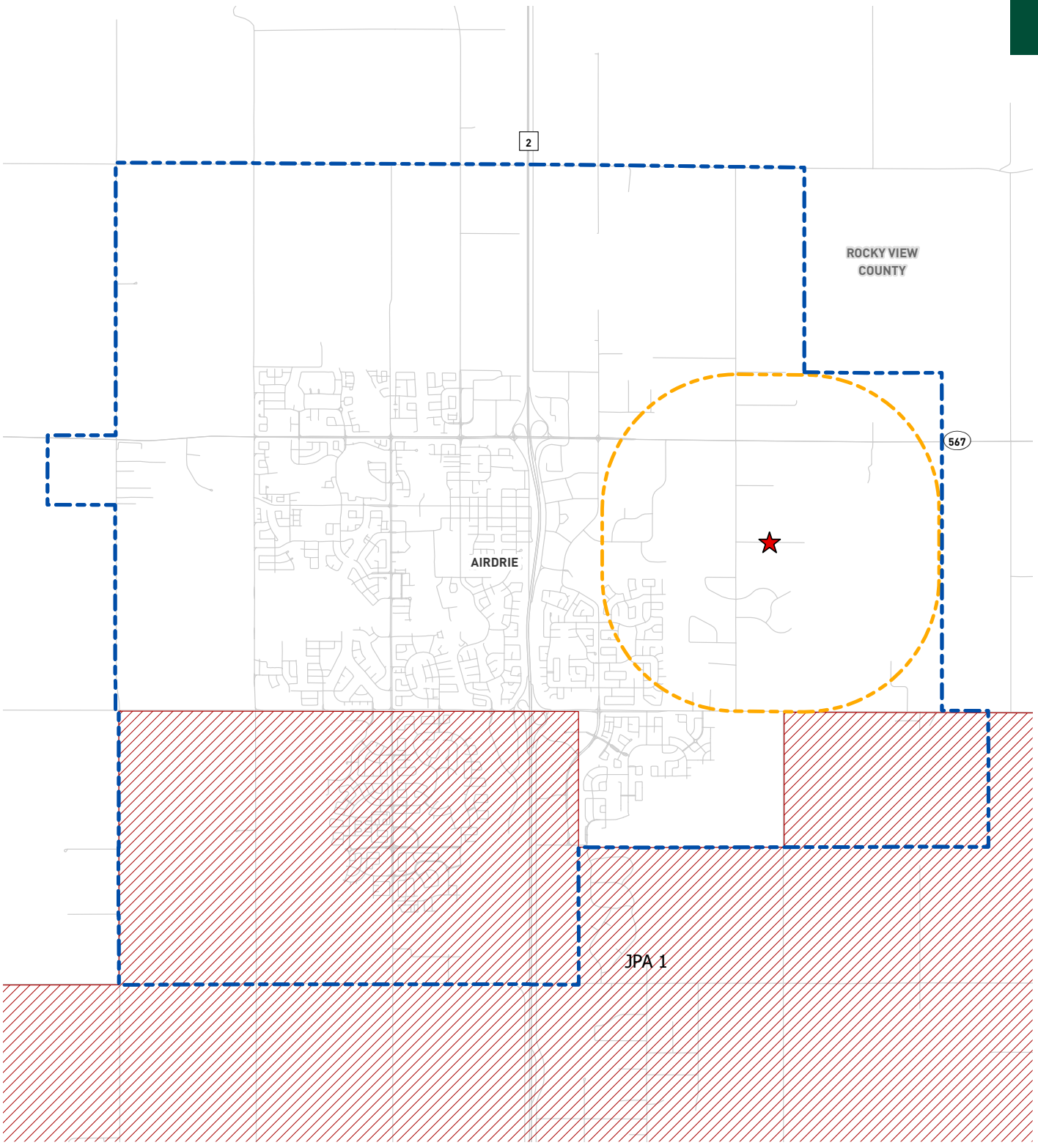
Existing Land Use Boundary

Existing Buildings

APPENDIX

B

CMRB GROWTH PLAN



Subject Site
Subject Site Buffer (1.6 km)
Regional Growth Structure Class
Rural Municipality
Urban Municipality

1:60,000

0 1 2 3 kilometres

Highfield Land - East Points

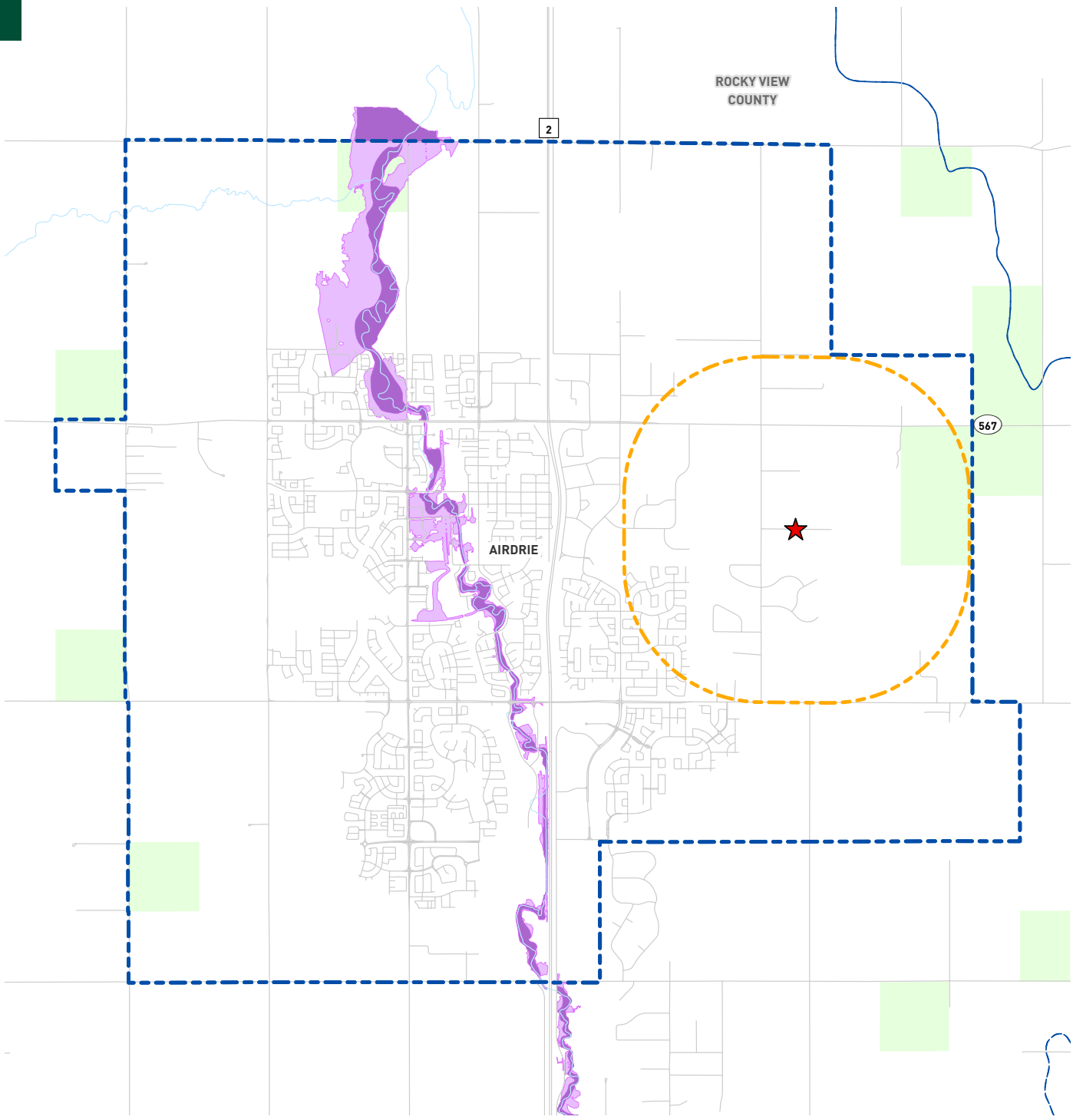
Schedule 1 - Regional Growth Structure

Highfield Investment Group
SW-12-27-29-W4

August 2023

Data Sources: Altalis, Calgary Metropolitan Regional Board
Aug 1, 2023 - 11:38 AM W:\2022-081_Highfield Land_East Points_NP\5.0 Technical\5.1 Technical Production\5.1.2 GIS_Maps\2022-081_Mapping\2022-081_Mapping.aprx

APPENDIX
B



Subject Site
Subject Site Buffer (1.6 km)
Provincially Designated Flood Fringe
Provincially Designated Floodway
Provincial Environmentally Significant Area (ESA)
Sub-watershed Boundary
Regional Growth Structure Class
Urban Municipality
Rural Municipality
Watercourse

1:60,545

0 1 2 3 kilometres

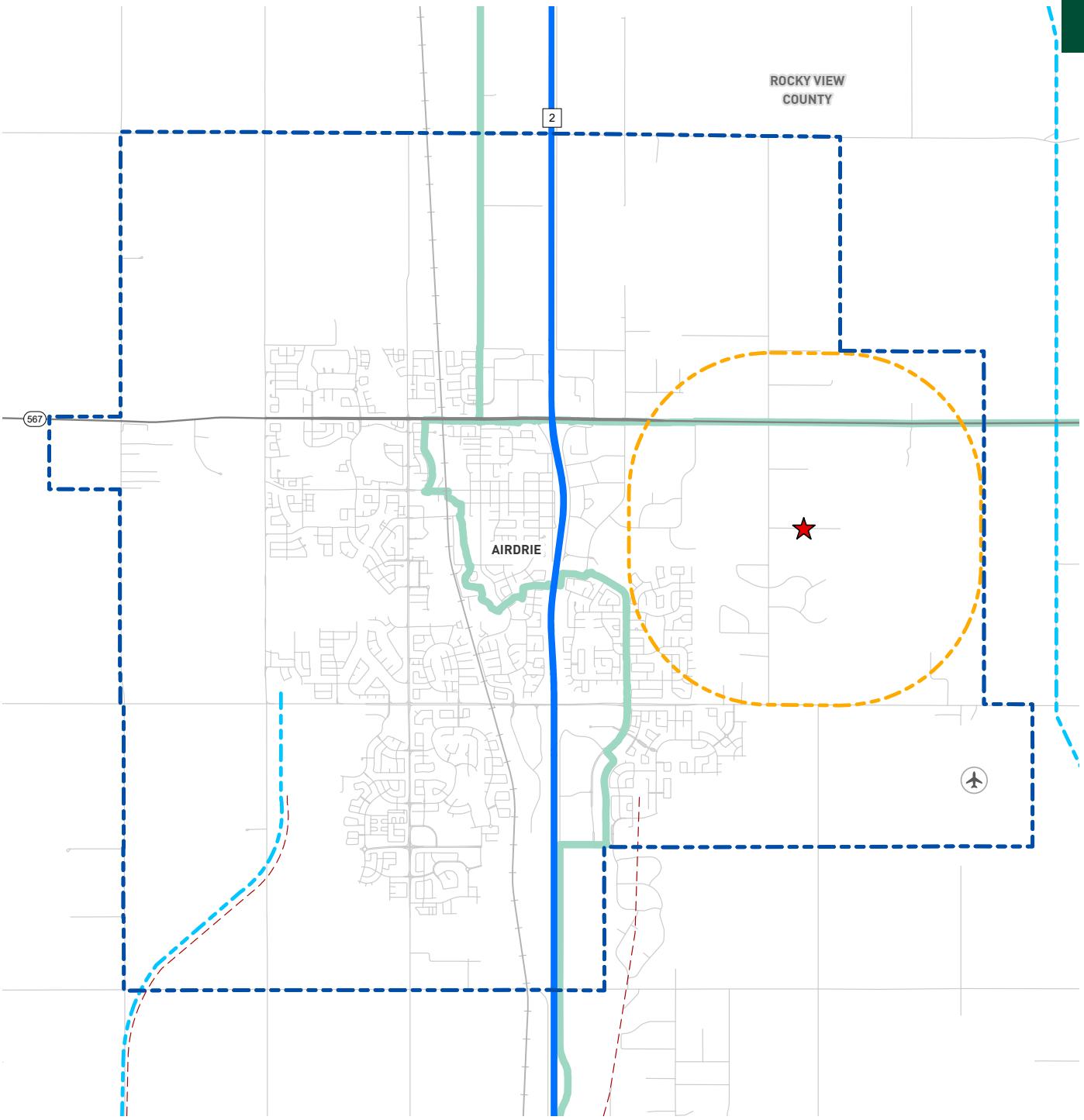
Data Sources: Altalis, Calgary Metropolitan Regional Board
Aug 1, 2023 - 11:38 AM W:\2022-081_Highfield Land_East Points_NP\5.0 Technical\5.1 Technical Production\5.1.2 GIS_Maps\2022-081_Mapping\2022-081_Mapping.aprx

Highfield Land - East Points

Schedule 2 - Natural Systems

Highfield Investment Group
SW-12-27-29-W4

August 2023



Subject Site
Subject Site Buffer (1.6 km)
Airport
Existing Level 1 Highway
Existing Level 3 Highway
Existing Rail
Existing and Proposed Major Active Transportation Corridor
Proposed Regional Roadway Corridor
Proposed Regional Transit Corridor
Regional Growth Structure Class
Urban Municipality
Rural Municipality

1:60,000

0 1 2 3 kilometres

Highfield Land - East Points

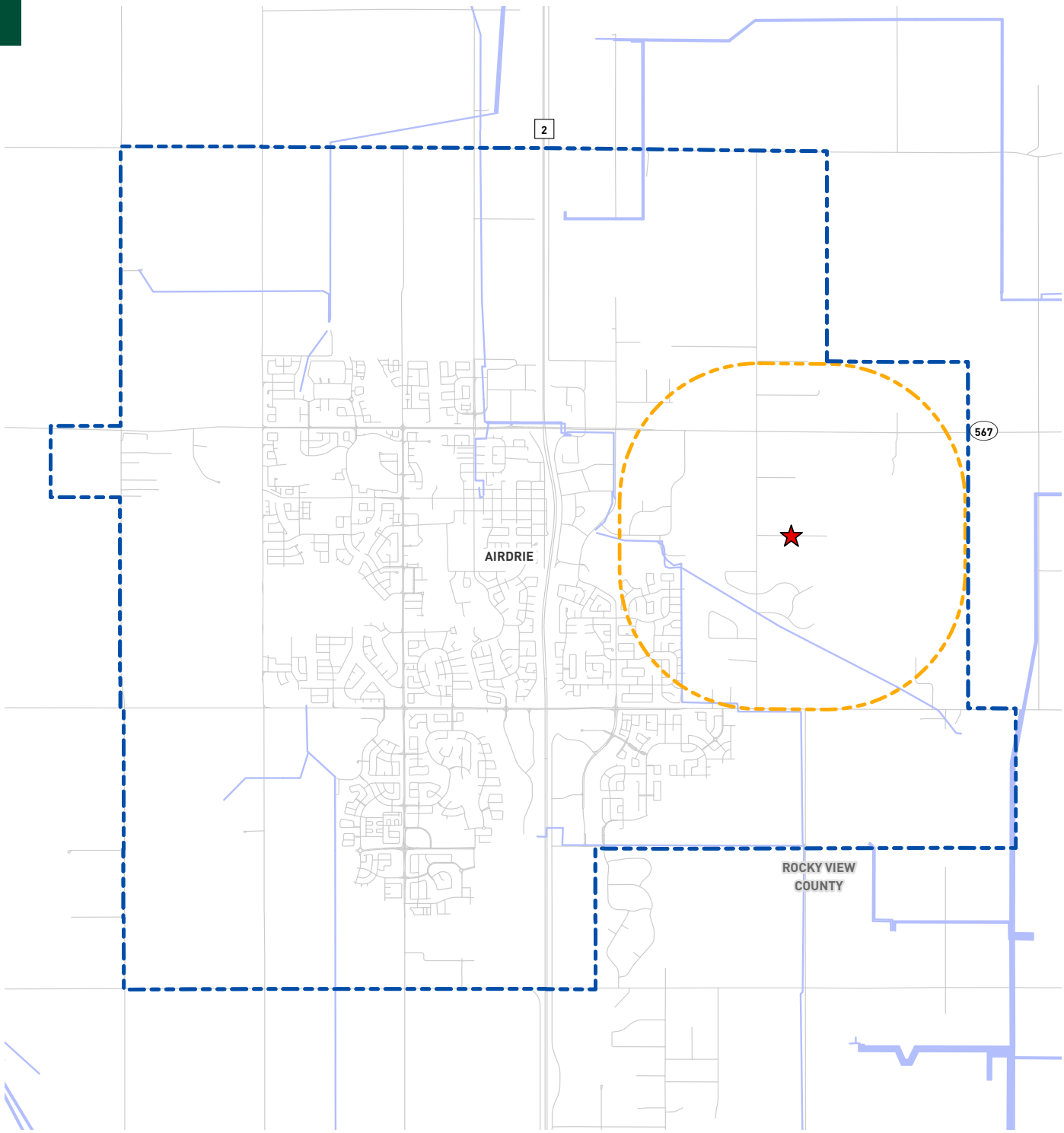
Schedule 3 - Regional Transit and Transportation

Highfield Investment Group
SW-12-27-29-W4

August 2023

Data Sources: Altalis, Calgary Metropolitan Regional Board
Aug 1, 2023 - 11:38 AM W:\2022-081_Highfield Land_East Points_NP\5.0 Technical\5.1 Technical Production\5.1.2 GIS_Maps\2022-081_Mapping\2022-081_Mapping.aprx

APPENDIX
B



Subject Site
Subject Site Buffer (1.6 km)
Pipeline
Rural Municipality
Regional Growth Structure Class
Urban Municipality

1:60,000

0 1 2 3 kilometres

Highfield Land - East Points

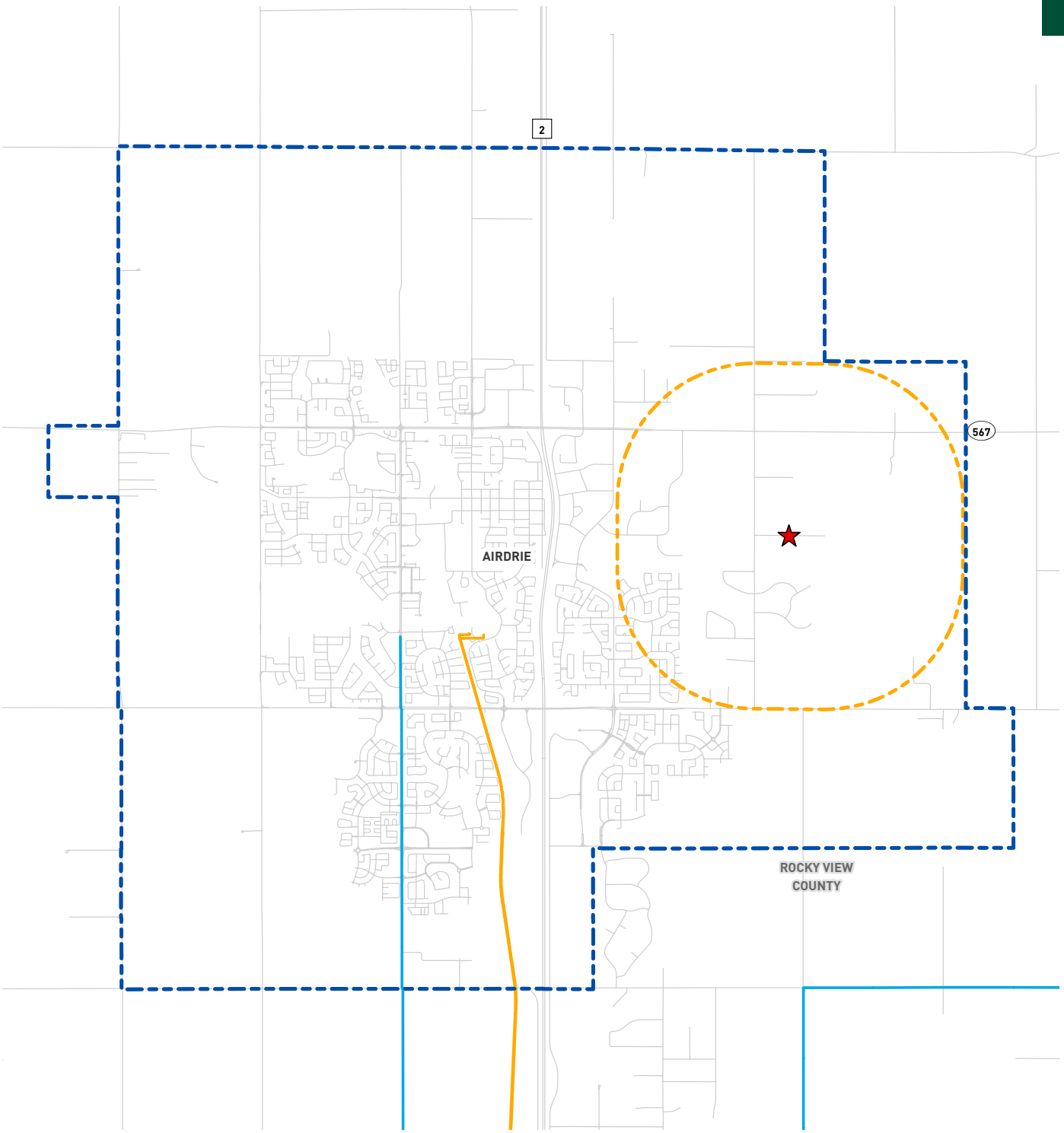
Schedule 4 - Regional Energy and Utility Infrastructure

Highfield Investment Group

SW-12-27-29-W4

August 2023

Data Sources: Alberta Energy Regulator, Altalis, Calgary Metropolitan Regional Board
Aug 1, 2023 - 11:38 AM W:\2022-081_Highfield Land_East Points_NP\5.0 Technical\5.1 Technical Production\5.1.2 GIS_Maps\2022-081_Mapping\2022-081_Mapping.aprx



Subject Site
Subject Site Buffer (1.6 km)
Existing Wastewater Corridor
Existing Water Corridor
Rural Municipality
Urban Municipality
Regional Growth Structure Class

1:60,000

0 1 2 3 kilometres

Highfield Land - East Points

Schedule 5 - Regional Water & Wastewater Infrastructure

Highfield Investment Group

SW-12-27-29-W4

August 2023

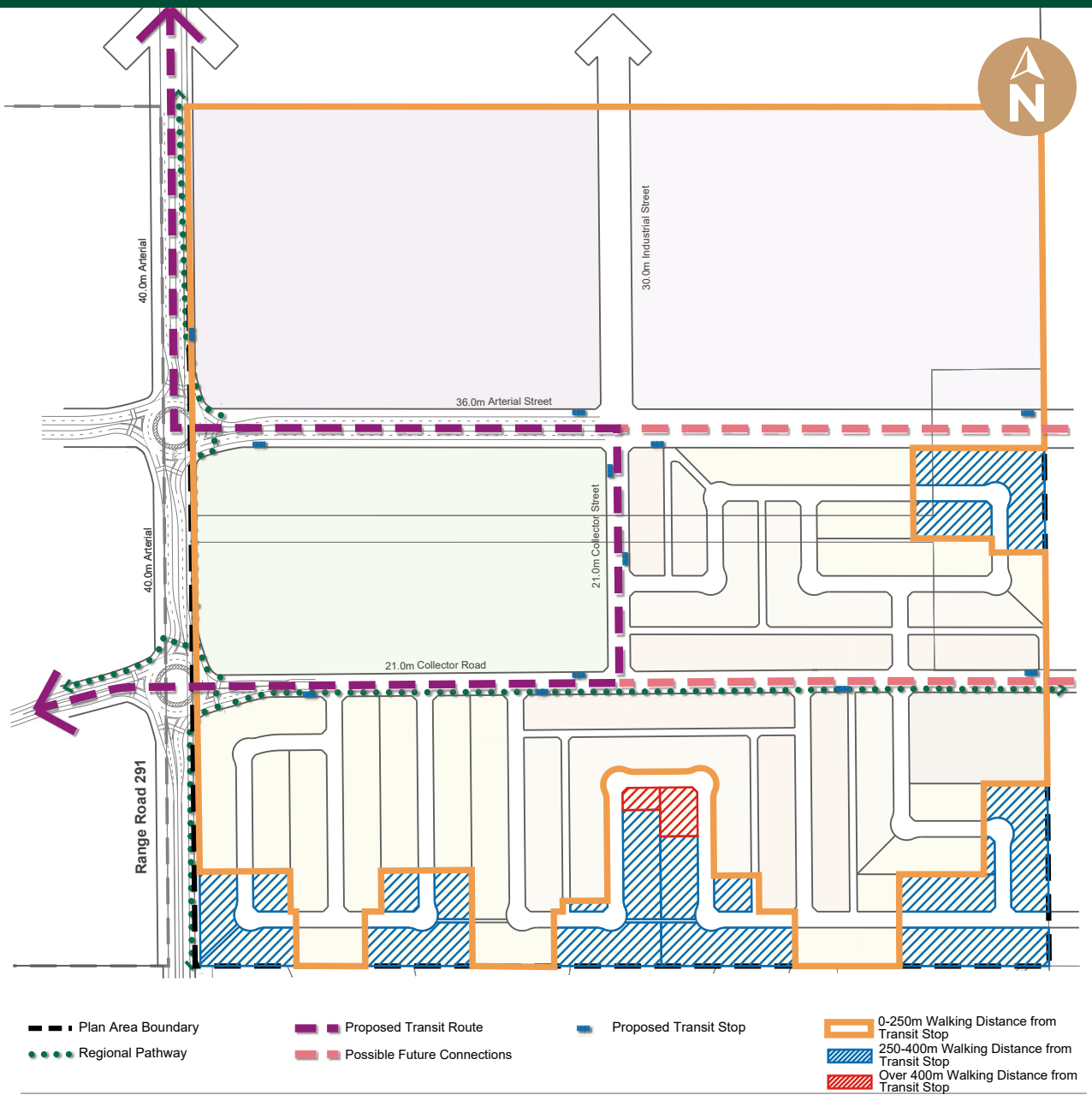
Data Sources: Altalis, Calgary Metropolitan Regional Board
Aug 1, 2023 - 11:38 AM W:\2022-081_Highfield Land_East Points_NP\5.0 Technical\5.1 Technical Production\5.1.2 GIS_Maps\2022-081_Mapping\2022-081_Mapping.aprx

APPENDIX

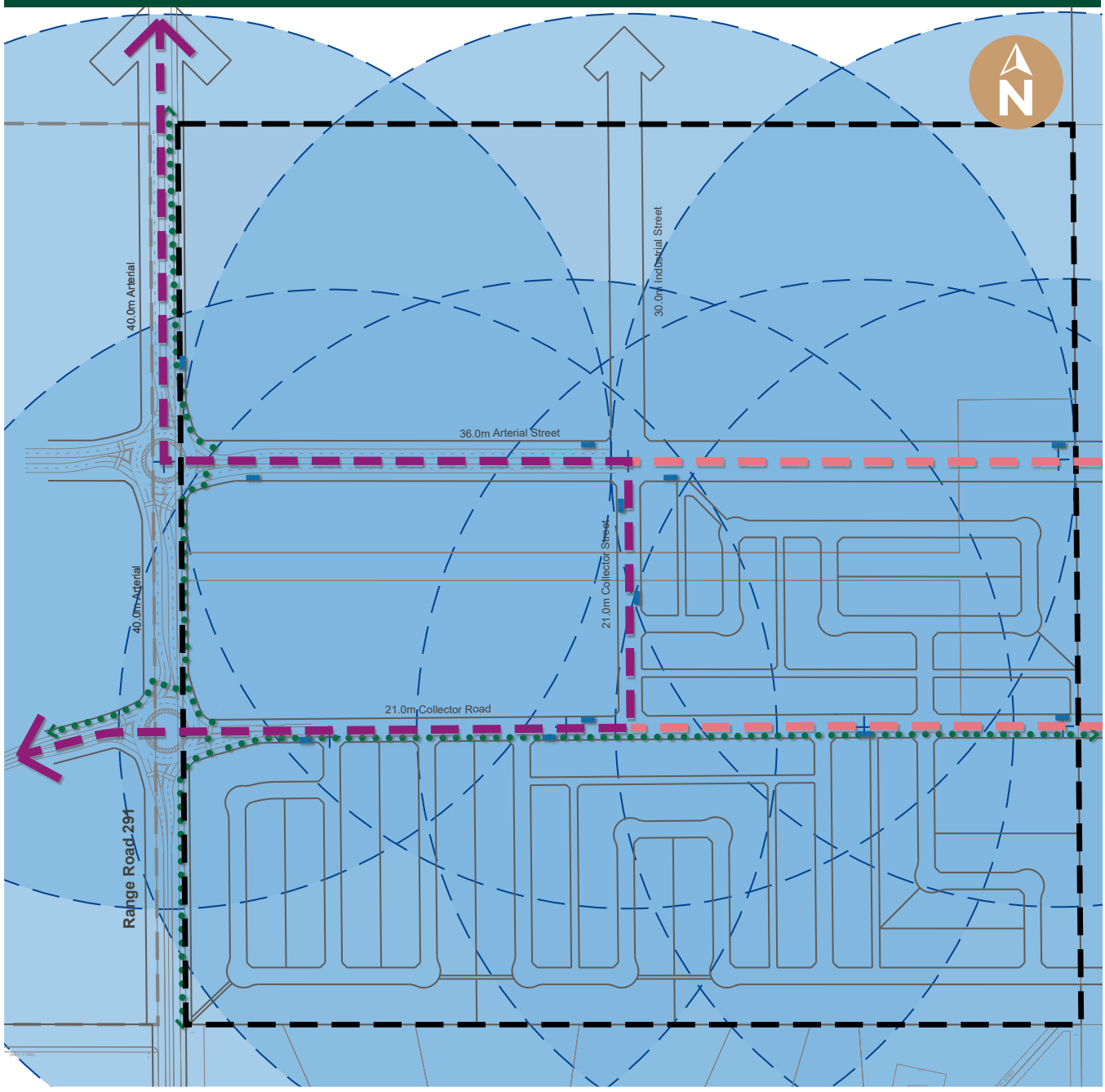
C

TRANSIT FIGURES

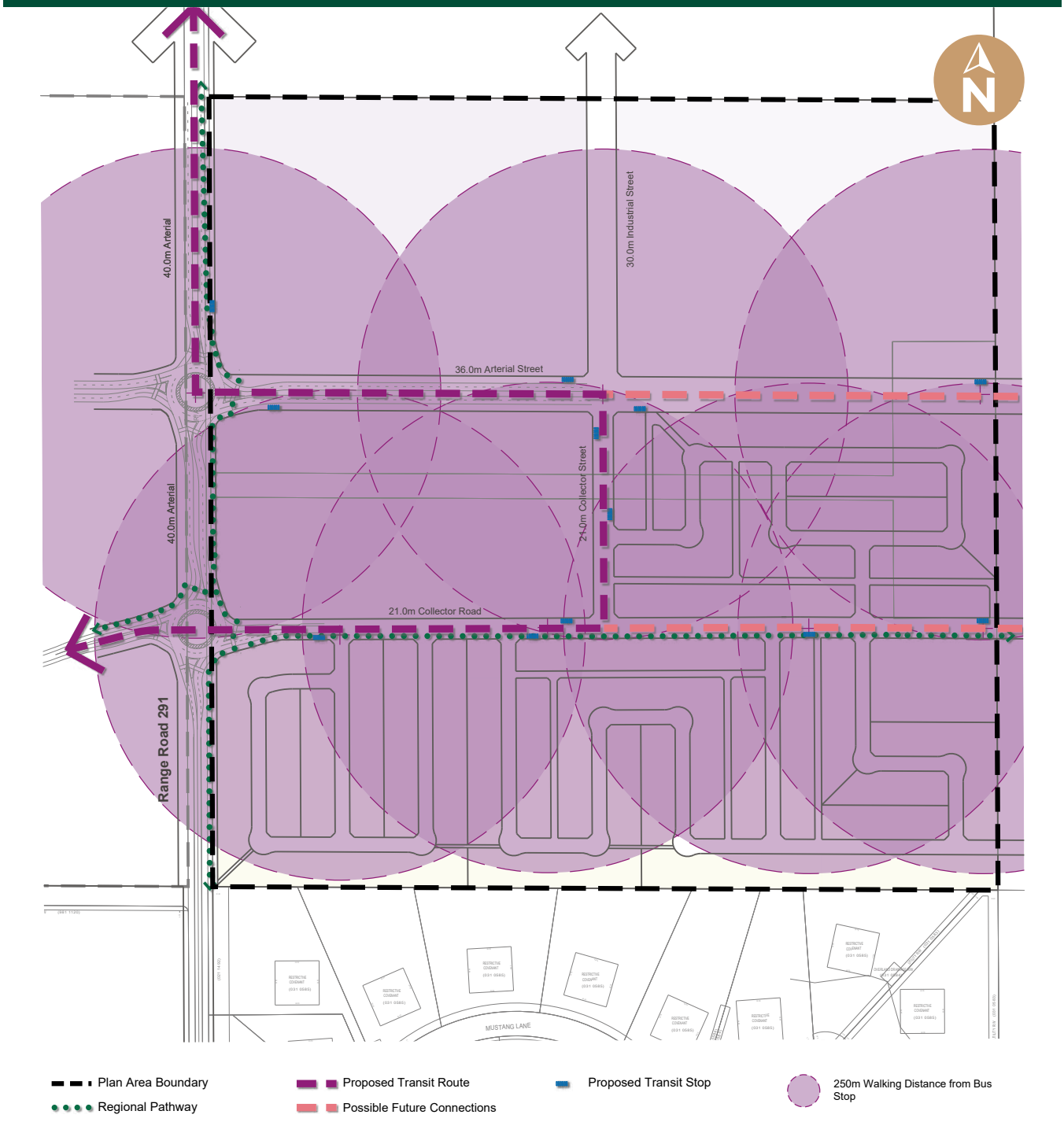
TRANSIT COVERAGE



TRANSIT CAPTURE - 400 M RADIUS



TRANSIT CAPTURE - 250 M RADIUS



APPENDIX

D

CITY PLAN POLICY CONFORMANCE

Spring Valley NSP - City Plan Policy Review

Section		Addressed in the NSP	Page
1. Population Projections and Land Requirements			
Goal: To responsibly anticipate and plan for a projected population of 90,000.			
Plan Requirement			
1.2	All development plans, including, but not limited to, Community Area Structure Plans and Neighbourhood Structure Plans, shall have regard for the population and dwelling unit projections and shall include a planning justification that relates the proposed development to the projections.	The Spring Valley NSP considers the future population and dwelling unit projections for the residential portion of the neighbourhood in Table 4. These projections are justified by the proposed land use amendment and proposed land use districts, as well as within the East Points CASP which outlined an anticipated residential area for which this NSP aligns.	29
2. Growth Management			
Goal: Ensure that urban development is accommodated in an orderly, economical and sustainable manner.			
PLAN DESIGNATION POLICIES			
Plan Designations			
2.1	The City shall direct future residential, commercial, industrial, and public service uses to the areas conceptually shown for each of the major land uses on the Generalized Land Use Concept Mapping and the Future Growth Areas.	The NSP is shown as predominantly General Industrial within the Future Growth Area. The proposed land uses in the NSP are roughly equally split between residential and industrial uses. The loss of anticipated industrial lands from the City Plan and CASP level is largely due to the amount of land required for the high school site allocated to this NSP and the requirement to buffer existing acreage development with residential uses.	26
Plan Consistency			
2.2	The City will require that all Community Area Structure Plans, Neighbourhood Structure Plans, Area Redevelopment Plans, Land Use Bylaw redesignations, subdivision and development approvals generally conform to the land uses designated in the Land Use Concept Map while allowing for minor adjustments to the boundaries of those policy areas without a City Plan amendment if such adjustments are supported by detailed planning studies.	The NSP is identified within the City Plan future land use concept as predominantly industrial. At the CASP stage this land use concept was refined including a large open space and residential uses adjacent to existing acreage development. The NSP aligns with the adjustments to the City Plan land use concept as adopted by bylaw at the CASP stage.	26

Section		Addressed in the NSP	Page
GROWTH MANAGEMENT POLICIES			
Long-term Land Supply			
2.4	The City will take steps to ensure that the municipal land base is developed in an efficient and effective manner in order to avoid sprawl, minimize the need for future expansions and ensure cost-effective servicing.	The NSP is located within the Anticipated Growth Boundary identified by Map 2 of the City Plan. The developer is committed to working with adjacent land owners to find solutions for efficient and effective servicing and has proposed a cost-effective servicing strategy for the Plan area.	
DEVELOPMENT EXPANSION AREA POLICIES			
Contiguous Development			
2.15	Future development shall be permitted only in locations that are contiguous to existing development and that follow a logical sequencing of development. Development should not proceed unless the required infrastructure and transportation improvements are planned and/or in place to support it. Exceptions may be made where the provisions of policy 2.17 are met.	The City Plan defines contiguous as: immediately adjacent and sharing a substantial common boundary, with no intervening vacant land, and with an existing or potential substantial physical interface of road connections, parks and land uses. The NSP lands are immediately adjacent to the Yankee Valley Estates residential subdivision sharing a common boundary along the south of the plan area. The NSP also shares common boundaries to the east, north and west with potential substantial physical interfaces of road connections, parks and land uses both approved by the East Points CASP and proposed within a future CASP. Notwithstanding, policy 2.17 also permits "out of sequence" development in the event a clear benefit to the City and public good is demonstrated and there is an acceptable strategy in place for required infrastructure extensions. This NSP provides benefit to the City by bringing non-residential tax base and employment opportunities as well as housing variety and growth. The other benefits and strategy for financing infrastructure extensions is outlined within this NSP document.	57
Efficient Use of Infrastructure			
2.16	The City shall give priority to the efficient utilization of existing and planned capacity in utility and transportation infrastructure in determining appropriate short-term growth directions.	The NSP proposes an efficient strategy for infrastructure considering constraints of ownership. At this time no other landowners within the CASP are proposing development and the developer commits to working with adjacent landowners to maximize efficiency where possible.	57

Section		Addressed in the NSP	Page
3. Environmental Sustainability			
Plan Requirement			
3.1	Through the Community Area Structure Plan process, the City shall require that lands considered unsuitable for development because it is subject to flooding, contains steep slopes or consists of a natural drainage course or wetland be identified as environmental reserve. The actual boundaries will be further defined through the NSP and dedicated as environmental reserve through the subdivision process in accordance with the provisions of the Municipal Government Act.	Through policy initially identified in the East Points CASP the NSP have been assessed as part of a targeted Historical Resource Assessment, Biophysical Inventory and Environmental Site Assessment. There have been no lands within the NSP area identified as qualifying for Environmental Reserve as per the MGA.	12
Sustainability & Environmental Preservation & Conservation			
3.5	All environmentally significant areas (ESA), natural environments suitable for parks, and significant wildlife and fish habitat will be conserved, or protected (as the case warrants) through the dedication of reserve lands and other forms of conservation techniques.	Map 5 of the City Plan did not identify any Ecologically Significant Areas within the NSP lands. Additionally, through policy initially identified in the East Points CASP the NSP has been assessed via a targeted Historical Resource Assessment, Biophysical Inventory and Environmental Site Assessment. There have been no lands within the NSP area identified as ESAs.	12
3.7	The City will utilize the Ecological Inventory and Environmental Best Practices Report, as updated from time to time, as a key starting point to land use planning in Airdrie	The Ecological Inventory and Environmental Best Practices Report was used as a guideline in the preparation of the Biophysical Impact Assessment undertaken in support of the NSP.	
Use & Access Restrictions in Environmental Reserve			
3.8	Lands dedicated as environmental reserve are intended to remain in their natural state and/or be used as part of a passive park and pathway system. Major municipal infrastructure may cross environmental reserve lands in the least intrusive manner possible by minimizing the impact of the crossing and taking into consideration sensitive environmental features in the vicinity of the crossing.	Map 5 of the City Plan did not identify any Ecologically Significant Areas within the NSP lands. Additionally, through policy initially identified in the East Points CASP the NSP has been assessed via a targeted Historical Resource Assessment, Biophysical Inventory and Environmental Site Assessment. There have been no lands within the NSP area identified as ESAs.	12
3.9	Lands with slopes of 15 percent or more, as identified on Map 4, are considered to be unsuitable and unsafe for urban development and shall be identified as environmental reserve. Exceptions and boundary adjustments may only be considered following submission of a geotechnical study which includes a slope analysis and assessment of erosion risk and bank stability conditions. All such studies shall be at the developer's cost.	Map 4 of the City Plan does not identify any areas exceeding 15% slope within the NSP lands. Additionally, topographic assessment in support of the NSP confirmed this.	11
3.10	Access through environmental reserve lands should be limited, and in some cases, restricted through sensitive design. Where access is restricted, development of appropriate interpretive signage is encouraged to explain why access is restricted and the ecological significance of the sensitive ecosystems.	Map 5 of the City Plan did not identify any Ecologically Significant Areas within the NSP lands. Additionally, through policy initially identified in the East Points CASP the NSP has been assessed via a targeted Historical Resource Assessment, Biophysical Inventory and Environmental Site Assessment. There have been no lands within the NSP area identified as ESAs.	12

Section		Addressed in the NSP	Page
PROTECTION OF NOSE CREEK AND FLOOD PRONE AREAS			
Riparian Setback			
3.13	The minimum riparian setback width shall be 15 m from top of bank, or 25m from centre of creek or the 1:100 year high water mark (whichever is greater) or as recommended by a biologist report that considers floodway and rate of erosion amongst other factors acceptable to the City as per the Nose Creek Watershed Management Plan.	Through policy initially identified in the East Points CASP the NSP has commissioned a Biophysical Inventory and Environmental Site Assessment. There were no riparian areas identified within the NSP lands.	
3.16	The floodways and flood fringes of all watercourses, as designated by the Canada-Alberta Flood Damage Reduction Program and illustrated on Map 4 Terrain and Drainage, shall be limited to uses such as natural areas, parks, trails and essential utilities that do not impede flood discharge. All other development is prohibited, unless developed in accordance with Policy 3.18.	Through policy initially identified in the East Points CASP the NSP has commissioned a Biophysical Inventory and Environmental Site Assessment. There were no flood fringe or floodway identified within the NSP lands.	
3.17	The subdivision and development of land within the 1:100 floodway will not be allowed.	Through policy initially identified in the East Points CASP the NSP has commissioned a Biophysical Inventory and Environmental Site Assessment. There were no flood fringe or floodway identified within the NSP lands.	
3.18	Subdivision and development within the flood fringe may be allowed providing the required Provincial flood proofing measures are undertaken and the requirements of the Land Use Bylaw are met.	Through policy initially identified in the East Points CASP the NSP has commissioned a Biophysical Inventory and Environmental Site Assessment. There were no flood fringe or floodway identified within the NSP lands.	
SUSTAINABLE DESIGN			
Green Infrastructure			
3.25	Development proponents are encouraged to design and build developments and neighbourhoods that:		
	1. Work with existing topography and drainage patterns.	The stormwater management network is design to direct flows across the site in the most efficient manner according to existing topography and drainage patterns.	
	2. Reflect environmental and green building standards such as LEED or BuildGreen Alberta.	Detailed approaches to sustainability will be explored further at the future subdivision and detailed design stage.	
	3. Use low impact development approaches appropriate for the site.	Irrigation of playfields and industrial lands is proposed in order to reduce stormwater flow rates.	
	4. Use best management practices to reduce water and energy consumption.	Detailed approaches to sustainability will be explored further at the future subdivision and detailed design stage.	
	5. Reduce construction waste and recycle and reuse materials.	Detailed approaches to sustainability will be explored further at the future subdivision and detailed design stage.	

Section		Addressed in the NSP	Page
Landform Protection			
3.26	To preserve existing topography and natural hydrology, buildings and roads should be strategically located to reduce the area disturbed by cutting and filling and minimize the amount of surface area susceptible to erosion.	Site design considered the minimization of land stripping, grading and filling. Reduction of earthworks also provides a cost benefit to the developer.	
Stripping and Grading			
3.27	Land stripping, grading and/or filling should be minimized to preserve valued ecosystem components (e.g. riparian areas, wetlands, tree stands)	Site design considered the minimization of land stripping, grading and filling. Reduction of earthworks also provides a cost benefit to the developer.	
IMPACT ASSESSMENTS			
Biophysical Impact Assessment (BIA)			
3.32	A Biophysical Impact Assessment (EIA) may be required for any proposed development which may adversely affect any ecologically significant areas identified on Map #5 and areas of steep slope and flood risk identified on Map #4 (Terrain and Drainage). Where other studies have been completed, they may be accepted as part of the EIA. EIAs may be required to include one or more of the following: 1. A description of the proposed development including its purpose, alternatives and phasing; 2. A description of the biophysical environment that would be affected by the development; 3. A prediction of the effects the development may have on the biophysical environment, including the long term and cumulative environmental impacts and the impacts of construction and operating activities; 4. Identification of appropriate and feasible mitigation measures to reduce the negative impacts on the biophysical environment, including land planning, project design, construction techniques, and operational practices; and 5. Other elements identified by the City.	A BIA was prepared by Trace Associates Inc. (2022) which addresses all required items listed and has been submitted along with the NSP application.	
3.33	Issues to be addressed in the Biophysical Impact Assessment may include, but are not limited to, the following: 1. Soils, terrain and slopes and erosion potential; 2. Drainage patterns, hydro-geology and flood potential; 3. Surface and bedrock geology; 4. Fish and wildlife and associated habitat; 5. Vegetation; 6. Air quality; 7. Land and resource use; 8. Cultural and heritage resources; and 9. Construction and demolition waste management.		
Environmental Site Assessment			
3.35	The City will require the completion of a Phase One Environmental Site Assessment, by a qualified professional in accordance with generally accepted geo-environmental engineering practices, prior to subdivision and/or development.	A Phase I ESA was prepared by Trace Associates (2022) and has been submitted along with the NSP.	

Section		Addressed in the NSP	Page
5. Economic Prosperity & Employment Lands			
COMMERCIAL AREAS			
5.21	Different types and forms of retail development will be accommodated throughout the city as follows: 1. Community Commercial are intended to accommodate retail uses and services that meet the daily needs of local residents while also providing the opportunities to serve multiple neighbourhoods in a pedestrian and transit-oriented form. 2. Mixed Use Centres consist of an integrated mix of commercial, residential and community-serving uses developed in the form of walkable, medium density nodes serving a large sector of the city. 3. Neighbourhood Commercial areas are intended to accommodate small-scale retail uses and services that meet the daily needs of local residents.	N/A - Commercial land use was not contemplated within the NSP area at the CASP stage as the industrial development took priority for employment uses within East Points. Service commercial land use is allocated elsewhere in the CASP.	
COMMUNITY COMMERCIAL			
Centre Designation			
5.32	Community Commercial areas will be designated in Community Area Structure Plans and are designed to serve a larger sector of the city than a neighbourhood centre.	N/A	
Use Mix			
5.33	Community Commercial areas are intended to accommodate a mix of retail, offices, institutional and open space uses. They may include a mix of residential if integrated with other uses.	N/A	
Public Realm			
5.34	Community Commercial areas shall include high-quality public realm, including a range of gathering places, parks, plazas and high quality street furniture.	N/A	
Pedestrian & Transit Orientation			
5.35	Community Commercial areas are required to have a strong pedestrian orientation with good connections to pathways, adjacent buildings, the street network and transit.	N/A	
NEIGHBOURHOOD COMMERCIAL			
Centre Location			
5.36	The City will encourage neighbourhood commercial development to locate in neighbourhood centres or on the periphery of neighbourhoods along arterial or major collector roads.	N/A	
Walkable Centres			
5.37	All neighbourhood commercial areas shall incorporate smart growth principles and ensure that each area is walkable and provides safe, convenient access to accommodate a variety of mobility levels.	N/A	
Compatibility			
5.38	Ensure new neighbourhood commercial development is compatible with the adjacent neighbourhood in terms of size, scale, use, and overall design. Vehicle-oriented uses and drive-through facilities are not considered compatible with neighbourhood commercial developments unless the site is located adjacent to an arterial roadway.	N/A	

Section		Addressed in the NSP	Page
6. Community Design and Development			
GENERAL POLICIES			
Community Design Principles			
6.2	1. Support the co-location of compatible residential, commercial, employment and institutional uses within the downtown and within centres and designated corridors;	The NSP addresses a key transition between existing acreage residential development and planned future industrial development by co-locating compatible residential uses adjacent to existing development and buffering residential from future industrial with the use of a landscaped median along an major roadway.	32
	2. Incorporate neighbourhood nodes or activity centres within new communities to encourage community interaction and neighbourhood engagement;	The NSP includes a High School site which will encourage community interaction and engagement.	34
	3. Locate sites for medium and/or higher density residential development in areas with good access to transit and where adequate amenities are provided;	The NSP allocates a single multi-family residential site along with some anticipated townhome development all located along collector standard streets with access to future transit when available.	
	4. Include an appropriate mix of housing types and tenures to meet a broad range of lifestyle and income needs;	The NSP will include single detached (laned and laneless, standard and narrow lot), semi detached, and townhouse / multi residential housing types.	
	5. Protect and incorporate natural features including streams, wetlands, stands of trees and natural topography;	The NSP plan area does not have any identified natural features of significance.	
	6. Provide adequate parks and open space to appeal to a broad range of needs. These spaces shall be distributed throughout the neighbourhood to ensure accessibility by the majority of homes;	The NSP area was identified by the City as the ideal location for a future high school site. A portion of this site was allocated as Municipal Reserve to the maximum 10%. Any additional open space allocations would need to be acquired via a purchase by the City. The NSP area will leverage planned open spaces in adjacent quarters and provide regional pathway connections to these amenities.	
	7. Integrate and connect the neighbourhood to the city-wide pathway system through appropriate links with neighbourhood pathways and trails, parks, open space, municipal reserve, public utility lots and school reserves;	The NSP proposes regional pathway connections north-south along Range Road 291 and east-west along the interior residential collector.	
	8. Create safe, walkable streets by utilizing a modified grid street pattern. Single loop roads should be avoided. Cul-de-sacs should include pedestrian links to adjacent pathways and roads; and	The road network is designed to follow a modified grid network and does not include any cul-de-sacs.	
	9. Provide adequate landscaping, particularly along streetscapes and neighbourhood entry-ways.	Plantings will be provided along neighbourhood streets and a landscaped median is proposed within the 36.0 m ROW for the East Lake Hill extension to act as a buffer between residential and industrial land uses.	

Section		Addressed in the NSP	Page
Winter City Design			
6.3	Development proponents should plan and design developments within the context of Airdrie being a winter city and a prairie city: This considers design aspects such as: 1. Orienting buildings and open spaces to maximize sun exposure; 2. Creating windbreaks through effective site planning, landscaping and building design; 3. Preserving shelter belts and trees to the greatest extent possible; 4. Incorporating compatible mixes of uses to reduce travel distance between homes, shops and services; 5. Utilizing site and building lighting and colour treatments to offset darkness and monotony; 6. Utilize modified grid street system to reduce walking and driving distances through communities; 7. Ensuring adequate provision for snow storage in the design of communities and non-residential areas, including, but not limited to, boulevards, parking lots, and side yards; and 8. Large-scale snow storage areas should not be located in an area that drains directly into Nose Creek or within environmental reserve areas.	The NSP is based on a grid road network to reduce walking and driving distances within the community. Detailed design measures such as landscaping, building design, lighting, and colour treatments will be determined at a later stage. No large-scale snow storage areas shall drain directly into Nose Creek and no environmental reserve land is anticipated.	
Community Nodes/ Activity Centres			
6.4	New communities should be focused around a neighbourhood node or activity centre that creates a vibrant, walkable gathering place for residents and provides opportunities for small-scale shops and services and housing choices. Community nodes may include, but are not limited to, the following: 1. Medium to high density housing. 2. Commercial mixed use development. 3. Live/work spaces. 4. Small-scale retail and businesses. 5. Small-scale cultural facilities and /or community meeting spaces. 6. Civic offices or facilities. 7. Transit access and related facilities.	The residential development of this NSP will be oriented around the future high school site which will include transit access once available, and may offer various cultural facilities, community meeting spaces, and other facilities.	
RESIDENTIAL DENSITY			
Density Strategy			
6.7	In order to sensitively integrate mixed density uses within communities, the City shall promote the following; 1. Medium and higher density development should be oriented to transit-serving corridors or locations that can be easily served with transit. 2. Medium and higher density developments should be located in areas well-served by public amenities, including parks and pathways systems. 3. The highest densities shall be located in, or adjacent to, mixed use nodes located at arterial and/or collector road intersections. 4. Mixed-use developments should be oriented to the street, along transit-serving corridors and adjacent to pedestrian facilities. 5. Large-scale, isolated blocks of higher density development are discouraged.	Medium density residential in the neighbourhood is located adjacent to potential transit routes along major arterial and collector roads.	
Density Targets and Ranges			
6.8	The average residential density level, established at the Community Area Structure Plan level, shall be eight (8) per gross residential acre, subject to meeting the established community design and development principles of this plan.	As per Appendix One of the City Plan, the City uses Gross Residential Area to determine density. The NSP exceeds the established eight (8) units per gross residential acre.	
6.9	The actual densities and development form, approved in new communities through the Neighbourhood Structure Plan, shall reflect the following: 1. The ability to facilitate and support mixed use and transit-supportive development; 2. The proximity to the Downtown and community and regional commercial developments; 3. The servicing capacities associated with the development areas; and 4. The form and design of the proposed development.		

Section		Addressed in the NSP	Page
RESIDENTIAL DESIGNATIONS			
Low Density Residential			
6.11	Low density residential use designations are intended for a variety of low rise, low-density housing forms including conventional single-detached dwellings, small-lot single-detached dwellings, semi-detached and duplex buildings.	The NSP includes a variety of housing types that are considered low density including single detached (laned and laneless, typical and narrow lot width) and semi detached format dwellings.	
Medium Density Residential			
6.12	Medium density residential use designations are intended for a variety of housing types including, street-fronting townhouses, stacked, and low-rise apartment buildings and other attached housing forms.	The NSP includes medium density residential sites which will include street-fronting townhouses and a comprehensively designed townhome site.	
High Density Residential Districts			
6.13	High density residential use designations are intended primarily for large multi-unit and apartment-type developments. The following locational criteria shall be applied: 1. Developments should be located where transit access is optimized; 2. Developments should be located adjacent to a through street to optimized resident and fire access. High density developments should not be situated on cul-de-sacs or sites without a secondary access route; 3. Sites should be located within 10 minute walking distance of designated commercial shopping areas, service-commercial areas and institutional, community recreational facilities and major community parks; 4. The size, depth and configuration of the site must be sufficient to accommodate the associated resident and visitor parking, emergency access and circulation, landscaping and private amenity space; 5. Higher-density developments should be considered where natural features and environmentally sensitive features would be better preserved with clustered development and smaller overall footprints; and 6. f) For sites that are adjacent to low-density residential areas, the configuration, location and design of the building(s) shall ensure a compatible interface through the appropriate use of building height (e.g. stepping the building down near the interface with low-rise buildings), landscaping, siting and building design.	N/A - The NSP does not proposed any high density uses.	
HOUSING MIX			
Housing Diversity & Integration			
6.14	The City shall promote a broader range of housing types throughout the city by: 1. Encouraging dwelling units in combination with compatible non-residential uses, live-work units, secondary suites and housing above shops in appropriate locations; 2. Developing land use policies in Community Area Structure Plans, Neighbourhood Structure Plans and Area Redevelopment Plans that support a sensitive mix and integration of housing types within communities; 3. Developing design guidelines to promote housing integration in new and existing communities; and 4. Updating the Land Use Bylaw to facilitate greater housing type mix in new and existing communities	Included alongside the NSP application is a land use application which includes various residential land uses, all which allow secondary suites as a discretionary use. The proposed land uses accommodate a range of single-detached dwellings with both front-drive and rear land access, as well as semi-detached and townhome dwellings.	

Section		Addressed in the NSP	Page
Housing Mix			
6.15	To meet a broad range of housing needs and to ensure an efficient development form, at least 30% of the housing stock within a Neighbourhood Structure Plan (NSP) area should be comprised of a mix of duplex, semi-detached, townhome, apartment and other attached housing styles.	As per Section 5.3 under Housing Mix, the NSP anticipated approximately 35% of units to be an attached-style built form.	
Small Lot Development			
6.16	The City supports the development of small-lot and narrow-lot development within neighbourhoods to provide affordable housing options and contribute to housing choice. However, it is not the intent of the City to encourage this housing form as the dominant housing option within a neighbourhood. Small and narrow lot single-detached development, as defined in the Land Use Bylaw, should not exceed 35% of the housing stock within a Neighbourhood Structure Plan area.	The NSP proposes to utilize the R1-U land use district which qualifies as a narrow-lot development form. This land use is estimated to account for 26% of the total dwelling units and shall not exceed 35%.	
6.17	The City's interest in regulating housing mix and lot size is to create residential developments that are sustainable, inclusive and meet the needs of different demographic groups and lifestyle needs. To that end, the City may modify the housing mix requirements within a proposed Neighbourhood Structure Plan to ensure good planning principles, innovation and housing needs are adequately demonstrated, regardless of the targets established in this Plan.	The NSP proposes to utilize the R1-U land use district which qualifies as a narrow-lot development form. This land use is estimated to account for 26% of the total dwelling units and shall not exceed 35%.	
HOUSING AFFORDABILITY			
Affordable & Supportive Housing			
6.2	Affordable and below-market housing is encouraged to locate close to schools, shops, services and parks, and locations capable of being served by transit.	Medium density residential housing will be located adjacent to the high school site, major collector roads, and on-demand transit stops. This type of residential development will be more attainable than single-detached housing.	
SPECIFIC NEEDS HOUSING			
Age-in Place Options			
6.24	To facilitate greater independence, housing geared to seniors should be located within easy walking distance to shops, services and amenities.	Although a location for seniors housing is specifically identified within the NSP, all proposed residential uses include Supportive Housing as a discretionary use permitted this type of housing in the future.	

Section		Addressed in the NSP	Page
7. Sustainable Transportation			
SAFE STREETS/COMPLETE STREETS			
7.5	Roads should be planned and designed as complete streets, accommodating a range of users, including pedestrians, transit users and private vehicles.	The NSP uses a grid network with a focus on separating industrial and residential traffic to support safe pedestrian-friendly environments. All residential cross-sections use the City of Airdrie standards which are based on Complete Streets design principles.	
7.9	In addition to any requirements of the municipal engineering servicing standards, the following design elements may be considered for new roadways in new communities and when re-designing or re-developing existing roadways: 1. Provision for the safe and efficient movement of emergency and protective services vehicles, particularly along arterial and collector roads; 2. Use of a modified grid road system to provide travel options and reduce walking distances, particularly between homes, schools and local shops; 3. Use of treed boulevards between sidewalks and traffic lanes along collector roads in order to separate pedestrians and provide adequate snow storage; 4. Adequate spacing of traffic lights and crosswalks to contribute to a safe pedestrian environment; 5. Use of short blocks on local roads to reduce potential for speeding; and 6. In commercial areas, reducing mid-block curb cuts for entry/exit of vehicles to parking lots to improve pedestrian safety and reduce road congestion.		
TRANSIT			
Transit-Supportive Design			
7.2	The City will encourage the use of transit by locating medium to high density development and other uses that may generate higher transit use adjacent to transit corridors and collector roads.	Medium density residential housing is located adjacent to collector road standards with potential future transit stops.	
Transit-Supportive Network			
7.21	All residences in new subdivisions should be located within a 400 metre walking distance of a transit stop, with shorter walking distances encouraged for high density residential areas and developments intended for affordable and supportive housing.	Appendix D includes transit coverage analysis demonstrating a potential transit service format. It is noted that long term transit for this area will likely be provided by on-demand service. The transit coverage analysis demonstrates a distribution of proposed transit stops that results in 100% of residents being within a 400m walking distance from a transit connection.	
WALKING AND CYCLING			
7.3	New communities and subdivisions shall provide for direct connections through sidewalks and pathways between residential areas and key destination, such as commercial areas, schools and transit stops.	The proposed high school site is connected with the residential community by regional pathway connections along RR 291 and the interior east-west residential collector as well as potential future transit stops in Appendix D.	

Section		Addressed in the NSP	Page
MONITORING AND IMPACT ASSESSMENT			
Transportation Impact Assessments			
7.37	The City will require a transportation impact assessment (TIA) to be submitted where the City determines that the development may impact the mobility and/or safety of the surrounding area. The traffic impact study shall address: 1. The projected traffic volumes associated with the proposed development; 2. The potential impacts on the local neighbourhood that would occur as a result of the development; 3. The method and means by which the development can be efficiently and effectively served by transit; and 4. The required road, parking, transit, cycling and pedestrian facilities necessary to support the proposed development.	A TIA has been prepared by Bunt (December 2022) and submitted under separate cover.	
8. Parks, Pathways and Municipal Reserve			
8.3	As new areas are planned and developed, the City shall ensure the design of the parks, pathways and open space system provides: 1. Linkages to major parks and the Nose creek corridor; 2. Pathway and pedestrian connections within and between neighbourhoods; and 3. Linkages with natural systems, as identified in the City's Ecological Inventory and Environmental Best Practices Report in order to strengthen Airdrie's ecological network.	The NSP provides open space within the context of the high school site, as well as pedestrian connections via regional pathways to future planned parks within the East Points CASP, notably the proposed dog park directly west of the plan area.	
Gathering Spaces			
8.1	In conjunction with streetscapes and other public realm areas, parks and open spaces should be designed to be easily accessible to pedestrians and create opportunities for area residents to gather and interact wherever possible.	The NSP provides open space within the context of the high school site, as well as pedestrian connections via regional pathways to future planned parks within the East Points CASP, notably the proposed dog park directly west of the plan area.	
MUNICIPAL RESERVE			
8.12	The dedication of municipal reserve (MR) at the time of subdivision will generally be ten percent of the land remaining after any environmental reserve land has been dedicated. Pursuant to the Municipal Government Act, the City may seek additional municipal reserve lands where population densities warrant.	The NSP provides 10% of its developable land as Municipal Reserve as indicated in Table 6. This 10% is included within the high school site, and the remainder of the site shall be acquired by the City via purchase.	
8.13	In residential areas, municipal reserve dedication shall be provided in the form of land. In non-residential areas it may be provided in the form of land, cash-in-lieu, or a combination of land and cash-in-lieu.	The NSP provides 10% of its developable land as Municipal Reserve as indicated in Table 6. This 10% is included within the high school site, and the remainder of the site shall be acquired by the City via purchase.	
Municipal Reserve Sites			
8.16	Emphasis shall be placed on the provision of usable open space when dedicating credit municipal reserve. Walkways which solely provide connections between streets and facilities shall be provided as part of the road system or as public utility lots.	All Municipal Reserve within the plan area is functional space, specific programming will be determined during detailed design of the high school site.	

Section		Addressed in the NSP	Page
THE PATHWAY SYSTEM			
Pathway Connectivity			
8.19	New development areas shall provide linear pathway systems, linking school sites, recreational facilities and major open space areas such as Nose Creek to the rest of the community.	The NSP aligns with the pathway network outlined in the East Points CASP, providing regional pathway connections north-south along RR 291 and east-west through the NSP area. These pathways will connect the community and high school site to future planned amenities in the CASP area including major park areas identified west and north of the plan area.	
8.2	All commercial business parks and commercial/retail developments areas shall be connected by a regional and/or local pathway system.	N/A	
Limitations in Environmental Reserve			
8.22	Pathways may be included in Environmental Reserves in order to provide pedestrian access and opportunities to appreciate the natural area. Where possible, pathways within environmental reserves should be located on the periphery of significant habitat areas and pathway alignments should respect the topography of the land and ensure that flow patterns in creeks are not impeded.	N/A	
8.23	To the extent possible, pathways located within environmental reserve should utilize raised boardwalks and alternatives to asphalt such as crushed stone or woodchips.	N/A	
Development/Area Structure Plan Requirements			
8.25	The City shall require the following information be addressed through Neighbourhood Structure Plans and/or Area Redevelopment Plans: 1. The location and area of all parks, open space and pathways proposed in the plan area; 2. The amount and location of proposed reserves; 3. The amount and location of reserve land intended for a future school site; 4. The rationale and purpose of the parks and open spaces; and 5. The integration of neighbourhood parks and pathways into the City parks and pathway system.	All noted components are considered in the NSP and are illustrated on the Concept Plan.	
9. Educational Facilities & School Sites			
Facility Siting			
9.3	New school sites and facilities should be designed and located in a manner which optimizes the limited availability of municipal reserve land and provides for shared lands, facilities and play areas among the school authorities and the City.	The proposed future high school site was identified as the preferred location by the City, and oriented to align with the open space location identified in the East Points CASP. The NSP outlines a possible lot configuration with the building envelope located to the interior of the site with residential collectors fronting both the east and south boundaries. Playfields are allocated to the west side of the parcel flanking RR 291. Regional pathway connections are to be provided both south and west of the site along with a 2m wide sidewalk adjacent to the school. All residential development adjacent to the school will be accessed via laneways to minimize potential conflicts associated with vehicular traffic.	
9.4	When reviewing area structure plans and plans of subdivision, the City will require that designated school sites be shown and will ensure the following criteria are addressed: 1. Sites and lot configuration should consider buildings, portables, parking and loading requirements as well as play fields; 2. New school facilities should be located on collector roads and may flank arterial roads; 3. To the extent possible, new school sites will be situated in a location which will minimize hazards associate with students crossing arterial roads. The City will ensure that adequate pedestrian circulation systems are incorporated into development plans to minimize potential dangers associated with vehicular traffic; and 4. Where a new school facility is located adjacent to a municipal park, the site design will ensure that the school and park facilities are integrated for pedestrian movement between the two sites.		

Section		Addressed in the NSP	Page
10. Community & Recreational Facilities			
Protective Services			
10.3	The City shall assess the proximity and accessibility of emergency and protective service facilities to serve proposed developments through the Community Area Structure Plan and Neighbourhood Structure Plan processes.	The NSP area is just outside the 7 minute response area for existing Kings Heights Fire Station. A future NE fire station location would provide fire and emergency services for the plan area.	
COMMUNITY SERVICES			
Facility Siting			
10.7	Wherever possible, major community facilities should be located on municipally owned land other than dedicated reserves in order to maximize the amount of open space available for use by the citizens of Airdrie.	The entirety of the NSP site is owned by Spring Valley Estates Corp and the Geier family, and as such the high school site must be provided on dedicated reserve land in combination with land purchased by the City. The high school site within the NSP is centrally located and accessible to all.	
Compatibility Criteria – Community Facilities			
10.8	The City will enhance the compatibility of all community facilities with adjacent neighbourhoods by applying appropriate standards for development through land use and design criteria which include, but are not limited to, the following: 1. Large scale community facilities should generally be located on an arterial or collector roads. Access to local streets may be permitted where it can be demonstrated that traffic movements will not flow through low density residential areas; 2. Facilities should be located in close proximity to transit services; 3. The design of the development should accommodate pedestrian circulation and minimize potential for vehicular-pedestrian conflicts; 4. d) Utilities, water and sewer services must be adequate to service the intended use; 5. Facility buildings that are significantly different from the surrounding residential uses shall be sufficiently set-back from any nearby residential area to minimize potential adverse impacts associated with height, massing, materials and layout of buildings; 6. The visual appearance of parking lots which are visible from the public road system should be enhanced through landscaping measures; and 7. Light spill over or glare from any source including signs onto adjacent residential uses should be minimized by such means as directed lighting and reduced lumens.	N/A	
Places of Worship and Public Assembly Facilities			
10.9	The City encourages places of worship and public assembly facilities to be developed: 1. In such a way as to minimize traffic impacts on residential land uses; 2. Adjacent to, or in conjunction with, other institutional facilities; 3. Close to neighbourhood commercial areas; 4. Along arterial or collector roads.	N/A	

Section		Addressed in the NSP	Page
11. Infrastructure Services			
SERVICING & UTILITIES			
Infrastructure Provision			
11.2	Infrastructure and utilities shall be extended in a logical and economically practical manner having regard to the available capacity and the growth management policies of this plan.	As described in Section 8 Servicing, the NSP can be serviced through the logical extension of existing and planned infrastructure, utilizing existing and planned servicing capacity, taking into account ownership constraints.	
11.3	The design of water, wastewater and stormwater drainage systems in the city shall have regard for long-term maintenance requirements and ease of future servicing and infrastructure replacement.	As described in Section 8 Servicing, the NSP can be serviced through the logical extension of existing and planned infrastructure, utilizing existing and planned servicing capacity, taking into account ownership constraints.	
Integration with Environment			
11.5	Utility easements and rights-of-way should be located in a manner which respects the natural environment, optimizes space utilization and enhances the opportunity for the rights-of-way to complement the open space system.	Utility easements and rights-of-way will be located in a manner which respects the natural environment, primarily located within road rights-of-way.	
Integration with Streetscape Design			
11.6	Utility rights-of-way should be designed to reduce the setback of buildings from the street wherever possible in order to contribute to attractive streetscapes and healthier street trees.	Utility easements and rights-of-way will be located in a manner which respects the natural environment, primarily located within road rights-of-way.	
Servicing Responsibility			
11.7	Developers shall be solely responsible for the installation of services to municipal standards necessary to service their development. Construction of new developments shall proceed only when City utility services to the new developments are in place. Oversizing of utilities with cost recovery may be required to facilitate future development.	Servicing and utilities within the NSP will be provided at a standard acceptable to the City of Airdrie.	
Servicing Sizing			
11.8	The sizing of sewer and water facilities shall be based on the projected patterns of development within the various catchment and pressure zone areas. Consideration for continuous development shall be designed for.	Servicing and utilities within the NSP will be provided at a standard acceptable to the City of Airdrie.	
WATER & WATERSHED MANAGEMENT			
Stormwater Facility Design			
11.1	The location and size of stormwater ponds shall be guided by the Master Drainage Study and shall be confirmed through more detailed development planning processes.	The location and sizing of stormwater ponds is guided by the Staged Master Drainage Plan (SMDP) prepared by Urban Systems (2023), submitted under separate cover.	
11.11	The regional stormwater management storage facilities may be wet ponds, constructed wetlands, dry ponds or a combination thereof. If dry ponds are constructed, then the required water quality enhancement must be achieved through the use of sediment forebay(s) ir implemented in a downstream wet pond or constructed wetland.		

Section		Addressed in the NSP	Page
11.12	A Staged Master Drainage Plan (SMDP) shall be prepared as part of a Community Area Structure Plan or Neighbourhood Structure Plan. The SMDP is intended, at minimum, to interpret the recommendations established in the Master Drainage Plan, confirm catchment boundaries and locations of stormwater management storage facilities.	A Staged Master Drainage Plan (SMDP) prepared by Urban Systems (2023), has been submitted under separate cover.	
11.13	A stormwater management plan must be prepared and implemented for all residential subdivisions, multi-unit developments, commercial and industrial developments. The plan shall include, but is not limited to the folding: 1. Existing drainage features; 2. Flood risk; 3. Erosion risk; 4. Minor and major system design criteria; 5. Design criteria for flows originating off-site; 6. Design criteria for addressing conditions established in the Nose Creek Water and Watershed management plan; and 7. Where appropriate, options for use of naturalized or reconstructed wetlands.	A Staged Master Drainage Plan (SMDP) prepared by Urban Systems (2023), has been submitted under separate cover. The SMDP includes the stormwater management plan and pond report components described.	
11.14	A Pond Report must be prepared for all stormwater facilities within the City.		
Release Rates			
11.17	All new development will be required to regulate and control surface runoff during and following construction and shall include the incorporation of treatment for storm water runoff designed to improve the quality of the runoff entering the receiving body.	The SMDP will reflect the regulation, control and treatment of storm water runoff.	
Natural Hydrology			
11.18	To preserve existing topography and natural hydrology, buildings and roads should be strategically located to reduce the area disturbed by cutting and filling and minimize the amount of surface area susceptible to erosion.	The plan area has been designed to minimize cut and fill wherever possible.	
Green Infrastructure			
11.19	The City will work with development proponents and regulating agencies to facilitate the use of low impact designs and green infrastructure, including but not limited to, the following best practices: 1. Reduction of impervious surfaces through compact building design and use of permeable pavements. 2. Maximizing natural infiltration through bio-retention, bioswales and rain gardens. 3. Rainwater harvesting for reuse. 4. Use of absorbent landscaping.	The SMDP includes recommendations for hard surface disconnection, absorbent landscaping and stormwater reuse through irrigation.	
ENERGY-RELATED INFRASTRUCTURE			
11.25	The City will promote energy efficiency and sustainable energy systems by: 1. Encouraging the use of energy design and management systems such as LEED, Built Green, Go Green or equivalent rating systems as guides to integrating energy efficiency into buildings. 2. Promoting building orientations and street design patterns that maximize passive solar gain. 3. Encouraging the incorporation of micro-energy systems, solar panels and micro wind turbines subject to appropriate community design and Land Use Bylaw considerations. 4. Ensuring that energy efficiency is part of the design considerations for area structure plans and general land use and transportation planning.	Detailed approaches to sustainability will be further explored at the future subdivision and detailed design stage.	

Section		Addressed in the NSP	Page
14. Implementation and Monitoring			
Neighbourhood Structure Plan (NSP)			
14.9	A Neighbourhood Structure Plan is required for all residential developments contained within a CASP and covers an area of approximately 160 acres. The NSP shall address the same information as outlined for the CASP, but in more detail. In addition, an NSP shall include: 1. A detailed land use and development concept which identifies the neighbourhood node(s) and the land use and housing mix; 2. The proposed arrangement of density to support housing choice, walkability and transit use; 3. A connectivity analysis which includes street connections and active modes; and 4. Anticipated development timing, direction of development and phasing.	An NSP has been prepared which is in alignment with the intent of the East Points CASP, and amendment to the CASP has been proposed to address any areas of misalignment.	
14.1	The NSP must be consistent with the approved CASP. No Council authorization is required to initiate a NSP providing the land area falls within an approved CASP.		

SPRING VALLEY NEIGHBOURHOOD STRUCTURE PLAN

AUGUST 2023