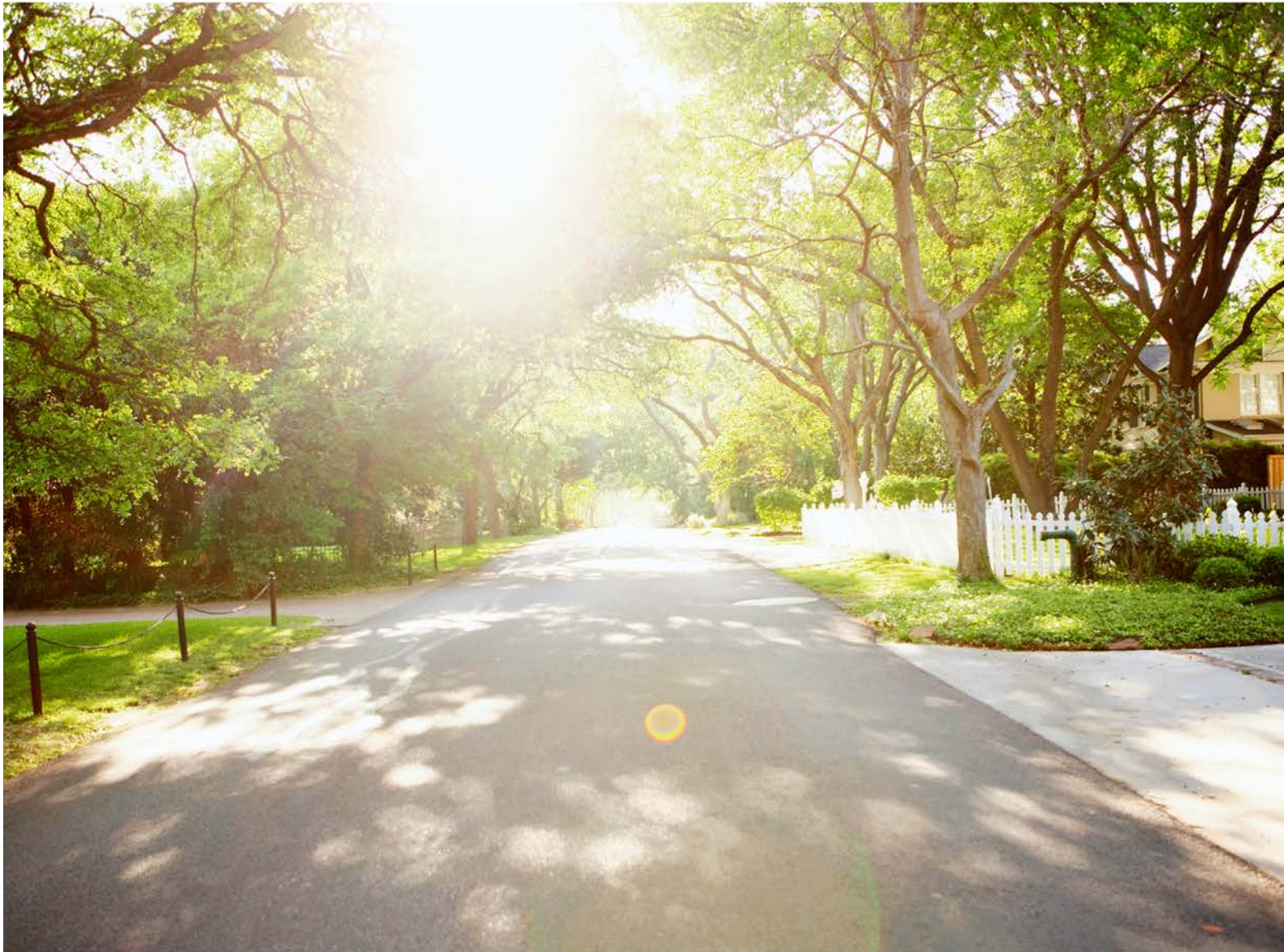


Section 13 NW/SW NEIGHBOURHOOD AREA STRUCTURE PLAN



CITY OF RED DEER

BYLAW: 3217/C-2016

ADOPTED: June 20, 2016

AMENDED: August 20, 2018

AMENDED: March 1, 2021

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TABLE OF CONTENTS

1	Introduction	1
1.1	Overview	1
1.2	Planning Context.....	5
1.3	Existing NASP Area Conditions	11
1.4	Opportunities and Constraints.....	23
2	Plan Vision.....	27
2.1	Overview	27
2.2	Sustainability & Neighbourhood Planning Principles	27
3	Land Use & Housing.....	37
3.1	Overview	37
3.2	Land Use Plan.....	37
3.3	Land Use Area Calculations.....	45
3.4	Housing Types & Density	47
3.5	Park-facing Homes.....	56
3.6	Housing Mix	58
4	Parks and Open Space.....	60
4.1	Overview	60
4.2	Park & Open Space Types	60
5	Mobility & Connectivity.....	66
5.1	Overview	66
5.2	Multi-Modal Movement.....	66
5.3	Street Types and Sections	70
5.4	Street Hierarchy.....	75
5.5	Other	76
6	Neighbourhood Design & Character	77

6.1	Overview	77
6.2	Built Form and Public Realm	77
7	Infrastructure & Servicing	79
7.1	Overview	79
7.2	Storm Water.....	79
7.3	Sanitary Sewer System	82
7.4	Potable Water Distribution System.....	82
7.5	Shallow Utilities	85
7.6	Garbage, Recycling, Snow Removal	85
7.7	Removal of Oil & Gas Infrastructure.....	85
7.8	Green Building & Landscaping Practices	85
7.9	Emergency services	86
7.10	Groundwater	86
8	Implementation	87
8.1	Development Phasing.....	87
8.2	Re-zoning and Subdivision	88
8.3	Plan Interpretation.....	88
9	Appendix – Development Checklist	91

Figures

Figure 1: Location Plan.....	3
Figure 2: Legal Plan	4
Figure 3: Planning Hierarchy	8
Figure 4: East Hill Major Area Structure Plan with Planning Area Indicated.....	9
Figure 5: Section 13 Multi-Neighbourhood Plan.....	10
Figure 6: East Hill Natural Areas	17
Figure 7: Delineated Area of Contaminated Soil Around Active Gas Wells.....	19
Figure 8: Development Context & Opportunities	21
Figure 9: Development Constraints Map.....	22
Figure 9(a): Proposed Commercial Development Conceptual Site Plan.....	41
Figure 9(b): Proposed Commercial Sites Access Locations.....	42
Figure 10: Land Use Plan	43
Figure 11: Land Use Plan Superimposed Over Aerial Photo.....	44
Figure 12: Park-facing Homes.....	57
Figure 13: Percentage of Different Housing Types.....	58
Figure 14: Parks & Open Spaces	64
Figure 15: School and Park Site Conceptual Layout Plan.....	65
Figure 16: Multi-modal Transportation Network.....	67
Figure 17: Arterial Road Cross-Section (Ross Street Commercial Area).....	70
Figure 18: Arterial Road Cross-Section (60m)	71
Figure 19: Typical Collector Road Cross-Section	72

Figure 20: Typical Local Road Cross-Section	72
Figure 21: 20.6m Local Road Cross-Section	73
Figure 22: Typical Lane Cross-Section	73
Figure 23: Primary Access Lane Cross-Section	74
Figure 24: Street Hierarchy	75
Figure 25: Stormwater System	80
Figure 26: Sanitary Sewer System.....	83
Figure 27: Potable Water Distribution System.....	84
Figure 28: Development Phasing.....	90

Tables

Table 1: Oil & Gas Facilities Within NASP Area	13
Table 2: Oil & Gas Facilities Adjacent to NASP Area.....	14
Table 3: Land Use Mix and Densities	46
Table 4: Housing Mix & Estimated Population.....	59
Table 5: Parks and Open Space.....	65

1 INTRODUCTION

1.1 OVERVIEW

1.1.1 PURPOSE AND BACKGROUND

The purpose of the *Section 13 NW/SW Neighbourhood Area Structure Plan* (NASP) is to provide a high level plan for the NW and SW quarter sections of Section 13-38-27-W4M, located on the eastern edge of the City of Red Deer. The location of the NASP area is shown in Figure 1: Location Plan. The Section 13 NW/SW NASP addresses each of the City's nine planning and design principles and includes direction for land use, housing types, street and trail networks, parks and open space, conceptual engineering, and development phasing for the neighbourhood.

This NASP, prepared on behalf of the City of Red Deer Land and Economic Development Dept. (the developer), is the result of planning work by Modus and Stantec consulting in collaboration with the developer, Overwaitea Food Group Inc. (part owner of the lands), and City of Red Deer staff.

The NASP addresses the requirements of the Alberta Municipal Government Act (MGA), which governs the development of municipal statutory plans. A Neighbourhood Area Structure Plan is one type of municipal statutory plan. Section 633 of the MGA allows a municipal Council by bylaw to adopt an area structure plan for the purpose of providing a framework for subsequent subdivision and development of an area of land. An area structure plan must describe the:

- proposed development sequence;
- proposed land uses for the area;
- proposed population density of the area;
- general location of major transportation routes and public utilities; and,
- may contain other matters that council considers necessary.

1.1.2 HISTORY OF THE NASP AREA

The area has been farmed dating back to at least the 1950's and likely much longer. A farmstead in the northwest corner of the property was developed in the 1960s and later two other acreage properties were developed on the eastern boundary and southern boundary. The area has been explored and drilled for oil and gas development since the 1960s. Two gas wells and a compressor station remain active and an oil well has since been abandoned.

The Alberta Listing of Historic Resources (consulted December 2015) does not identify the plan area as having any historical resources.

1.1.3 LEGAL BOUNDARIES

The site is based on two quarter sections but has been diminished by the 20th Avenue right-of-way

which has been widened by the City to allow for an expressway. Therefore, the total size of the planning area is 117.71 Ha. (290.64 acres). The NASP area is bounded by 20th Avenue to the west, 39th Street to the south, and 55th Street (Highway 11) to the north. The eastern boundary is the boundary of the quarter sections and the AltaLink right-of-way.

1.1.4 LAND OWNERSHIP

Two different owners currently own the majority of the land. The southern portion of the land is owned by the City of Red Deer Land & Economic Development Department. The northern portion is owned by Overwaitea Food Group (1219669 Alberta Ltd.) with the exception of Lot A – 772-1882 shown on Figure 2 which is also owned by the City of Red Deer. The two landowners have an agreement that Overwaitea will sell the remaining lands to the City with the exception of the 2 and 4 hectare (5 acre and 10 acre) commercial parcels located north and south of Ross Street (Figure 10). A small (1.2 Ha./2.96 acre) acreage lot on the southern boundary of the NASP area is by a different private owner.

Figure 1: Location Plan

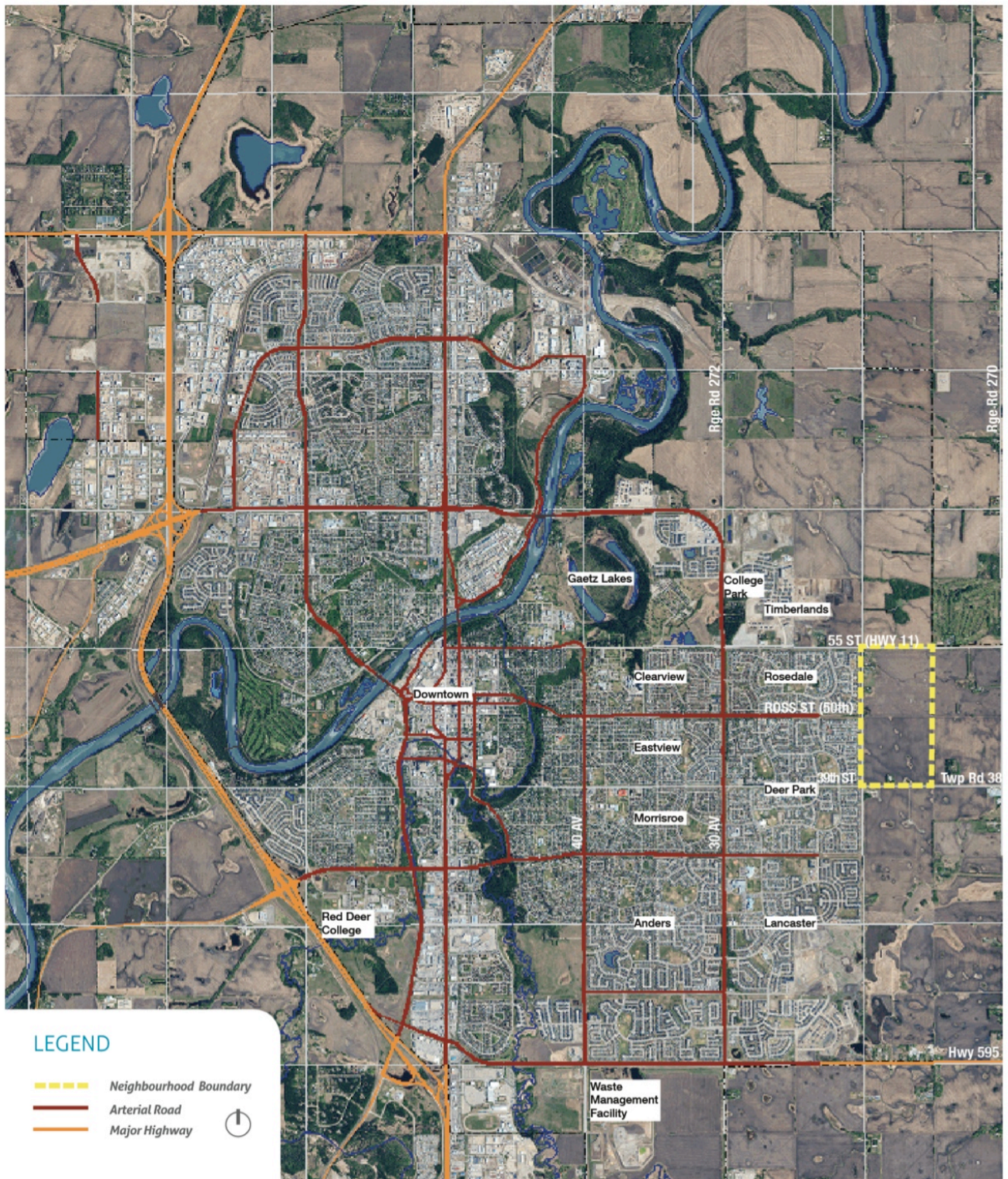
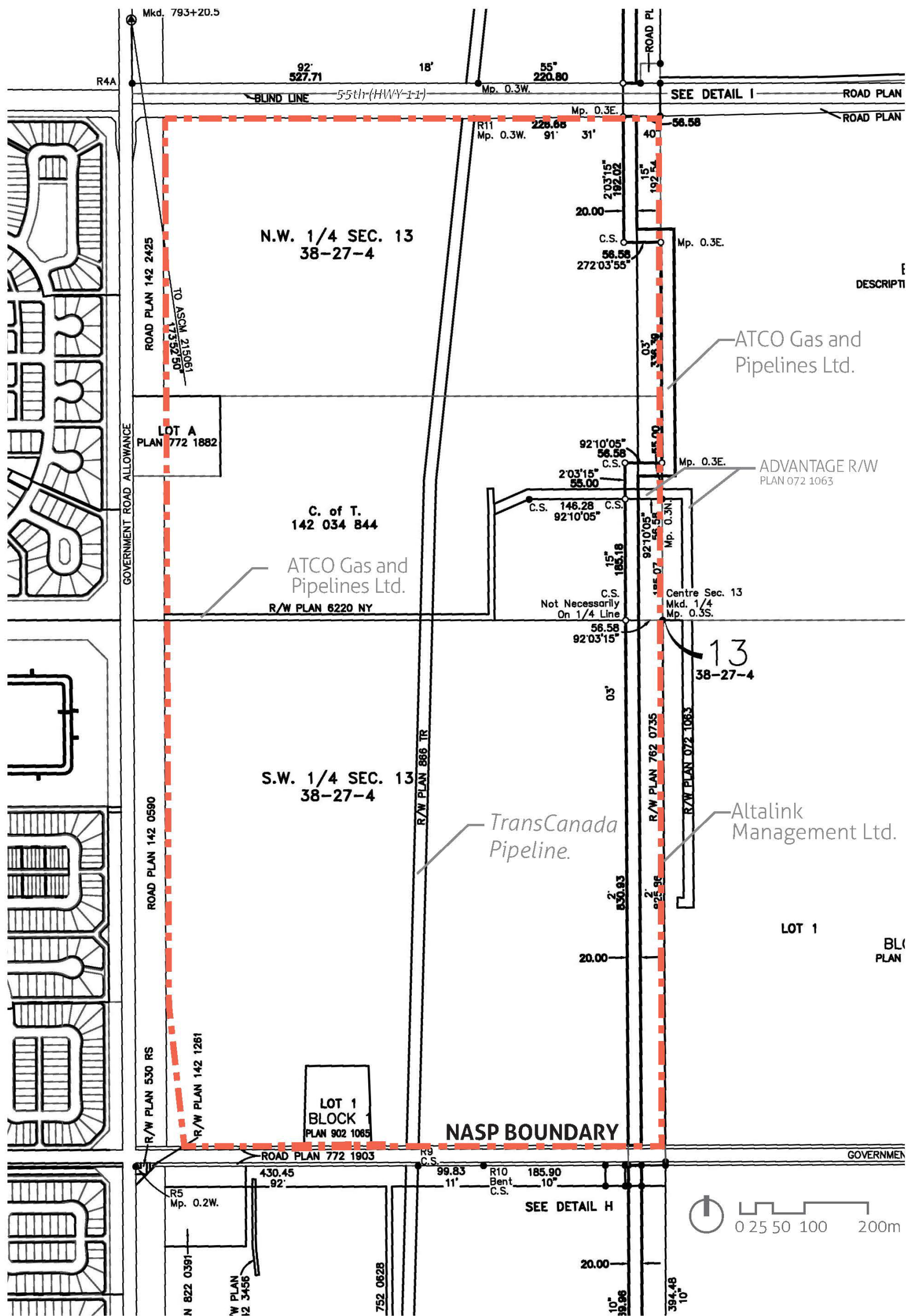


Figure 2: Legal Plan



Section 13 NW/SW Neighbourhood Area Structure Plan

1.2 PLANNING CONTEXT

1.2.1 RELEVANT PLANNING DOCUMENTS

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

Development of the NASP is guided by several high level plans and policies. In turn, once adopted, the NASP will guide a more detailed servicing study, subdivision and development of the neighbourhood. The following relevant documents have been reviewed and referenced in preparation of this NASP.

Province of Alberta - Municipal Government Act RSA 2000c M-26 (MGA): The Municipal Government Act (MGA) of Alberta outlines the purpose and powers of Municipalities including the power to require an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land. As stated in section 633(2) of the MGA, an Area Structure Plan must describe:

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

The City of Red Deer - 2015/2018 Strategic Plan (2014): The City's Strategic Plan identifies City Council's top priorities in four year periods. The three top priorities for 2015 to 2018 are: 1) Dialogue: Engaging our community and enhancing our relationships; 2) Community Amenities: Planning great spaces and places for community living; and 3) Financial Leadership: Creating a sustainable financial foundation. Council is also continuing the work from the previous strategic plan that included the priorities of 1) Identity: Identify and promote our Red Deer identity 2) Safety: Enable and promote a safer community 3) Movement: Design for and facilitate integrated movement and 4) Design: Design and plan our community to reflect our character and values; and 5) Economy: Shift our primary economic development focus and activity to within Red Deer. Several of these priorities have influenced the development of higher-level documents such as the Mobility Playbook and Neighbourhood Planning & Design Standards, which have had a direct influence on the design of the Section 13 NW/SW Neighbourhood.

Statutory Documents

The City of Red Deer - Municipal Development Plan (Bylaw 3404/2008 Approved May 5, 2008): The Municipal Development Plan (MDP) includes broad policies for guiding growth and changes in the City for the next twenty-five years. It promotes the concepts of "balanced growth", "smart growth" and "integrated land use and transportation" where land uses are mixed to reduce the need to travel large distances. Section 13 is identified as "Residential" on the Generalized Land

Use Concept Map in the MDP. The MDP also sets out the following policies regarding neighbourhood designs:

- Density in new neighbourhoods shall ensure a minimum of 17.0 dwelling units per net developable hectare.
- The City shall continue to require a mix of housing types and forms in all residential neighbourhoods.

The City of Red Deer - East Hill Major Area Structure Plan (Bylaw 3499/2013): This plan describes high level policy, servicing and land uses for the East Hill area. It indicates the conceptual location of residential land uses, commercial areas, utility corridors, major roads, environmentally-sensitive areas and a location for a Catholic K-9 school in the north-eastern part of the Section 13 NW/SW NASP area. It also suggests the use of the AltaLink right-of-way as part of the City's trail system.

The Section 13 NW/SW NASP is consistent with the City's other statutory plans described above.

Land Use Bylaw

City of Red Deer Bylaw No. 3357/2006: The Land Use Bylaw regulates the use of land and buildings and controls building heights and setbacks. The Land Use Bylaw is one of the key City tools for implementing the NASP. Each of the proposed land uses in this NASP is referenced to a corresponding zone within the Land Use Bylaw.

Adopted Planning Tools

- *Stantec Consulting Ltd. - Northland Drive/20 Avenue Functional Planning Study (2008):* This report provides functional design for 20th Avenue Expressway that forms the western boundary to the Section 13 NW/SW Neighbourhood. It includes the location of proposed traffic signals and proposed lane configurations and intersection designs and indicates the location of a proposed pedestrian overpass at 20th Avenue and 39th Street. The report was reviewed during the preparation of the Section 13 NW/SW NASP to ensure an adequate right-of-way for 20th Avenue and to understand intersection improvements.
- *The City of Red Deer - Mobility Playbook (2013):* The Red Deer Mobility Playbook is a user-friendly tool for action and positive change in Red Deer. It identifies a linked set of strategies and actions needed to provide Red Deerians with more mobility choices, and as such a better quality of life.
- *The City of Red Deer - Neighbourhood Planning and Design Standards (2013):* Provides standards for Neighbourhood Area Structure Plans based around nine principles of good planning and design. These principles are all described further and reflected in the Section 13 NW/SW NASP.
- *The City of Red Deer - Trails Master Plan (2005):* This plan does not include the Section 13 NW/SW planning area. However, the overall intent of the trails master plan has been embraced and several trails are included in the Section 13 NW/SW NASP including part of a N-S regional trail.
- *City of Red Deer Environmental Master Plan: Our Environment, Our Future (2011):* This high level plan articulates 7 goals, which have been considered in the development of the Section 13

NW/SW NASP.

- **Water:** To improve the quality of our water resources and increase water conservation.
 - **Ecology:** To protect and enhance the terrestrial and aquatic health of the natural heritage system.
 - **Transportation:** To prioritize active and public transportation.
 - **Built Environment:** To create vital, well-integrated compact communities that minimize negative environmental impacts.
 - **Energy:** To reduce energy use and move towards using renewable energy sources.
 - **Waste:** To decrease the amount of waste going to landfill and increase waste diversion opportunities.
 - **Air:** To improve air quality and reduce emissions.
- ***City of Red Deer Engineering Design Guidelines (2013):*** This document provides detailed engineering standards and guidelines that provides guidance for servicing new neighbourhoods, as well as standard street cross section design for roads and streets. Section 13 NW/SW has been designed in accordance with these standards except where noted in the plan, some alternative street cross sections have been included to create a more walkable pedestrian environment.
 - ***City of Red Deer Community Culture Vision (2008)*** – The Community Culture Vision is a 10 year planning document based on a broad vision of culture in our community and the role culture plays in all. It is a guide for the community and for The City of Red Deer to develop the kind of community we want to live in - a vibrant, creative community where we can all thrive.

Other

- ***The City of Red Deer - Section 13 Multi-Neighbourhood Plan (Feb 2015):*** this plan provides a high level conceptual plan for all four quarters of Section 13. It includes conceptual land uses, road and trail network, natural spaces and key connections. It also includes high-level policy directions. See Figure 5.

Together, these documents point to a new and evolving direction for how the City plans and develops residential neighbourhoods. There is a new focus on more compact, complete, mixed-use communities that are well served by transit and encourage active modes of transportation to balance the use of personal vehicles. Where they exist, the City encourages natural areas to be preserved and incorporated into new neighbourhoods. A variety of housing types, densities and prices to meet a variety of needs is encouraged. Finally, there is an emphasis on low impact, resilient development and on high quality urban design to create unique, livable, sustainable communities.

Figure 3: Planning Hierarchy

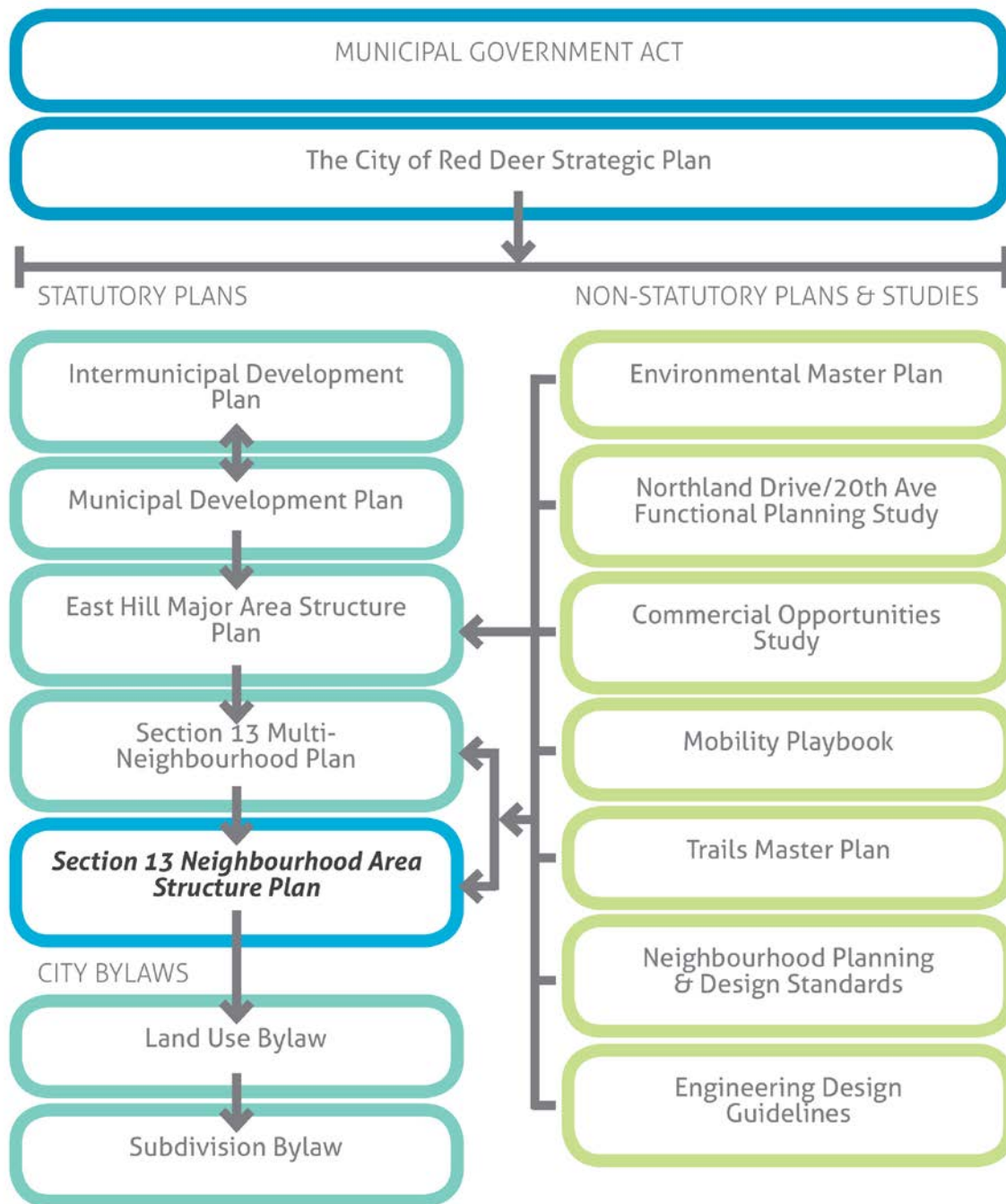
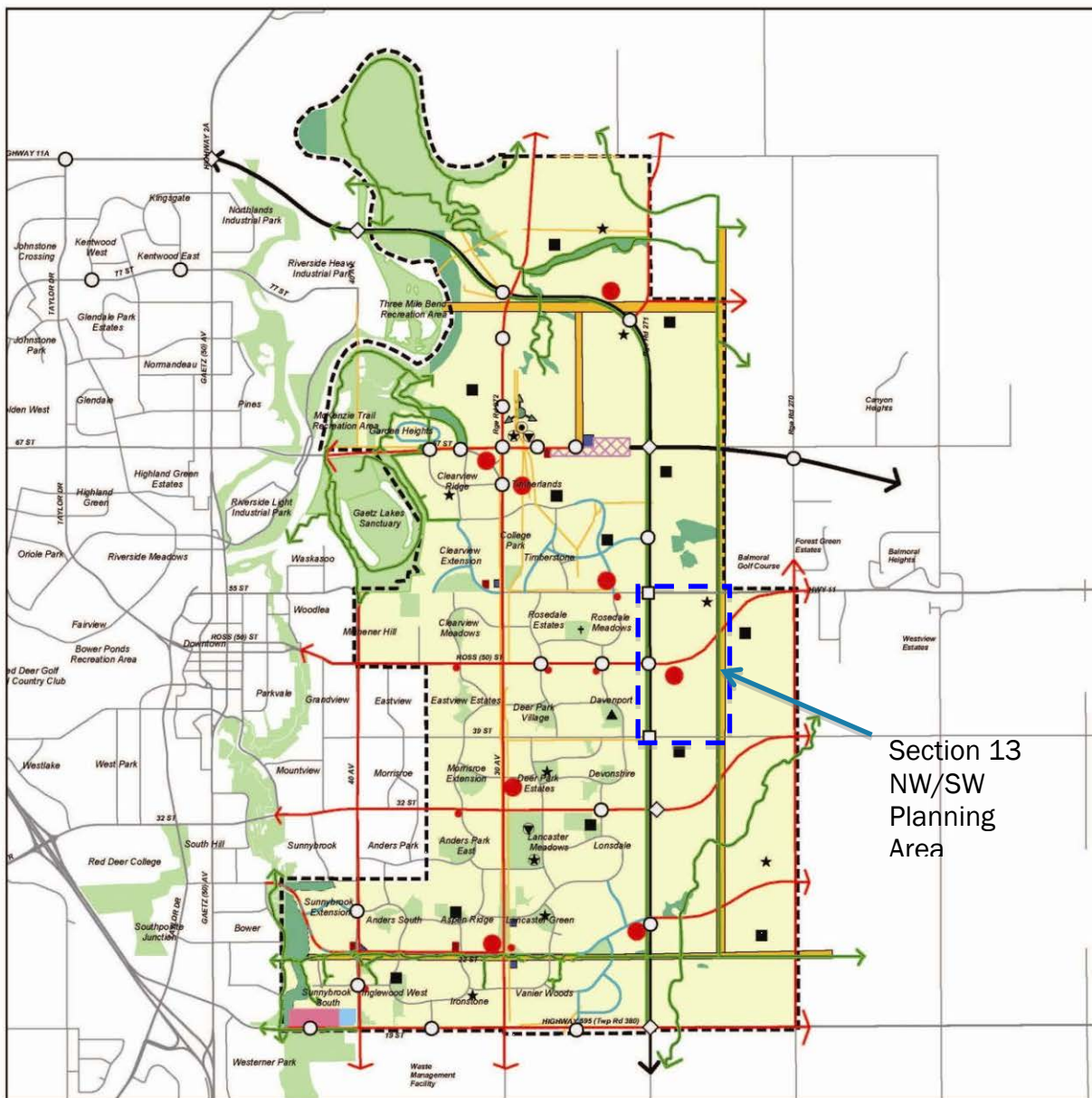


Figure 4: East Hill Major Area Structure Plan with Planning Area Indicated



Section 13
NW/SW
Planning
Area

Figure 5: Generalized Land Use Concept - East Hill



April, 2013

Figure 5: Section 13 Multi-Neighbourhood Plan



The purpose of a Multi-Neighbourhood Plan is to establish a high level conceptual plan that achieves the 9 *Neighbourhood Planning Principles*, identifies synergies, features, and connections, and creates distinct neighbourhood character. A Multi-Neighbourhood Plan outlines broad land uses, including environmental reserve and open space, and arterial and collector road patterns. Neighbourhood area structure plans may vary in design and layout from the Section 13 Multi-Neighbourhood Plan if the intent of the overall multi-neighbourhood plan is retained. The completion of a multi-neighbourhood plan does not mean that the land is development ready. Development readiness will be determined by the sequencing of services of the lands within the overall city servicing context and approval of capital expenditures by Council.

1.3 EXISTING NASP AREA CONDITIONS

The NASP area is currently being used for crop-based agriculture with some associated residential and farm buildings.

1.3.1 TOPOGRAPHY, SOILS AND VEGETATION

Natural characteristics are fairly consistent throughout the NASP area. The lands are almost flat and slope very gently towards the west and southwest. The NASP area has been used extensively for farming and little natural vegetation remains. Some large trees exist surrounding farm and residential buildings as well as some shelter-belts along the NASP area perimeter. Cattails and other vegetation exist within small patches that are lower lying and seasonally wet.

Several boreholes drilled as part of a geotechnical investigation (Shelby Engineering, 2007) show topsoil underlain by claytill. Standpipes installed as part of geotechnical investigations found groundwater between 3.97 and 2.78 metres below ground.

In addition, there is one ribbon of soils with slightly different colour on the orthophoto in the northern portion of the site, possibly indicating a seasonal water-course but there is no apparent aquatic vegetation associated with this.

The East Hill Major Area Structure Plan includes a map of “Natural Features” reproduced as Figure 6.

1.3.2 IMPROVEMENTS

Improvements to the land include:

- a house, farmyard and related outbuildings in the northwest corner;
- an acreage with associated paddocks further south on the west side;
- an acreage, part of which is also used for a commercial business, on the southern perimeter of the NASP area;
- two gas wells and associated compressor station serviced by an unpaved access road along the eastern perimeter;
- a powerline with several towers along the NASP area’s eastern edge; and,
- a telecommunications tower in the north-east corner.

1.3.3 OIL AND GAS CONSTRAINTS AND FUTURE DEVELOPMENT IMPLICATIONS

Significant oil and gas activity has occurred and will continue to operate within the NASP area. The following sections of the NASP set out the existing conditions, summarize the preliminary assessment of the contaminated areas, and indicate what processes and requirements will guide future assessment of the land’s suitability for the uses proposed in the Land Use Concept (Figure 10) prior to development in certain portions of the NASP area.

This plan describes how future development will conform to both the Municipal Development Plan, and the East Hill Major Area Structure Plan Oil and Gas Policies. The Municipal Development Plan Section 5.13 sets out requirements for development impacted by Oil and Gas facilities. The MDP states The City shall endeavour to ensure that:

- Appropriate development setbacks are established and maintained. Development setback requirements from oil or gas development will meet or exceed provincial or federal minimum requirements. The City may require Developers to provide professional risk assessment respecting whether the minimum setback distance should be increased and measures to otherwise mitigate risks and land use conflict. (In this regard, see section 1.4.2, Risk Assessment Plan Requirement)
- Developers inform The City of known potential oil or gas contamination and if it is being remedied. An ESA shall be completed with any Area Structure Plan if oil and gas activity is or has been present. The City shall require professional environmental site assessment prior to soil stripping or grading. The land is to be made suitable for its intended use prior to subdivision or development; (See section 1.3.4)
- The City appropriately uses available regulatory measures such as Land Use Bylaw amendments, statutory plan development, transportation and utility corridor dedication, registrations on land titles and with the AER, and provincial and federal referral and participation processes to mitigate anticipated off-site impacts from oil and gas development and to limit land use conflicts in proximity to oil or gas development. (see section 1.3.6 and Section 1.4.2)

The East Hill Major Area Structure Plan Section 3.2 requires developers to work with licensee of any oil and gas facility during the development of a NASP and during all future stages of development as required. The East Hill MASP requires NASPs to include:

- The location of all oil and gas wells, abandoned wells, pipelines or facilities, their sour gas level and current licensee (see Figure 2, and section 1.4.2)
- The results of the Environmental Site Assessment (ESA) of any abandoned oil or gas well, pipeline or facility. (see section 1.3.4 & 3.2.7)
- A requirement for a Phase 2 ESA and subsequent reclamation confirmation where the well file shows an earthen pit, drilling sump, oil or water storage tanks, or buried tanks prior to surface development (including stripping and grading) being permitted.
- The property line setback distance from any active or abandoned oil or gas well, pipeline or facility to the surface development (see Figure 9, section 1.4.2)
- A plan on how to co-exist with any active oil or gas wells, pipelines or facilities (See section 1.4.2, Risk Assessment and Coexisting Plans)

1.3.4 ENVIRONMENTAL SITE ASSESSMENT

Phase 1 and Phase 2 Environmental Site Assessments were completed by Shelby Engineering Ltd. for the northwest and southwest quarter sections in 2006 and 2007. In October and December 2015, Shelby updated the Phase 1 ESAs for each quarter section. An acceptable or new Phase 2 ESA will be required prior to stripping and grading, development, subdivision or redesignation within the NASP area.

Table 1: Oil & Gas Facilities Within NASP Area

Facility # (See figure 9)	Type	Licensee	Location	Status
1	Oil Well Stekoll McConnell Joffre 00/12-13-38-27	Suncor Energy Inc.	NW quarter	Abandoned
2	Sweet Natural Gas Well Due West Joffre 00/11/13-038- 27	Advantage Oil & Gas	NW quarter	Active
3	Sweet Natural Gas Well AVN 102 Joffre 02/11/13-038-27	Advantage Oil & Gas	NW quarter	Active
4	Gas Compression Station SUN JOFFRE 11-13MU- 38-27	Advantage Oil & Gas	NW quarter	Active
5	Natural Gas Pipeline *2 pipelines	ATCO Gas and Pipelines Ltd.	NASP Area	Active
6	Natural Gas Pipeline	Advantage Oil & Gas	NASP Area	Active
7	Natural Gas Pipeline	Nova Gas Transmission Ltd. (TransCanada)	NASP Area	Active

Table 2: Oil & Gas Facilities Adjacent to NASP Area

Facility # (See figure 9)	Type	Licensee	Location	Status
8	Sweet Natural Gas Well AVN ET AL JOFFRE 2-13-38-27	Advantage Oil and Gas Ltd.	Outside NASP – East of SW quarter	Active
9	Sweet Joffre Gas Processing Plant	Advantage Oil and Gas Ltd.	Outside NASP – South of SW quarter	Active
10	Gas Well NPOG JOFFRE 16-11-38-27	Spry2 Energy Inc.	Outside NASP – South of SW quarter	Active
11	Oil Well COGI JOFFRE 4-24-38-27	Canadian Oil & Gas International Inc.	Outside NASP – North of NW quarter	Active

NW Quarter Section

The Phase 1 (2015) ESA notes the presence of one abandoned oil well site (Facility #1) in the southwest corner of the quarter section. The abandoned well site was the Stekoll McConnell Joffre 00/12-13-38-27 well that was advanced in 1959 and produced crude oil until it was abandoned in 1966.

The Phase 1 ESA (2015) also identifies two active gas flow well leases licensed by Advantage Oil & Gas on the site (Facility #2 and Facility #3). The active well sites are the Due West Joffre 00/11/13-038-27 and AVN 102 Joffre 02/11/13-038-27 which were advanced in 1967 and 2003 respectively. A natural gas compression station (Facility #4) is located in the same general area. Facilities #2-4 are accessible via an access road running from Highway 11 south along the NASP area's eastern edge. The Phase 1 ESA confirmed significant contamination in this area (see Figure 7). The results of the 2006 Phase 2 ESA show significant hydrocarbon impacts around Facilities 2 and 3 and a contaminant plume that extends off-lease to the south and west. It is expected that the updated Phase 2 ESA and further assessments will confirm the extent of contamination.

Various oil & gas pipelines within the NASP area were also identified in the Phase 1 ESA (Facilities 5-7).

The Phase 1 ESA also noted the potential risk associated with above-ground storage tanks and vehicle storage areas in the farmstead area. While the ESA indicates that the potential risk is considered minimal, further testing was recommended in the vicinity of these areas.

When the new/updated Phase 2 ESA is completed for the NASP area it will be reviewed by the City to determine if it meets City requirements and the Canadian Standards Association Guidelines (CSA) ZF68-94.

As further explained in section 3.2.7, below, the developer will not proceed with development until contamination has been remediated to Provincial standards and City Standards (see Section 3.2.7).

SW Quarter Section

The Phase 1 ESA identified the potential of environmental concerns/ liabilities stemming from an oil and gas processing plant (Facility #9) located outside of the NASP area and a gas well site located approximately 50m east of the NASP area (Facility #8).

An ESA Phase 2 was completed for the SW quarter section in July 2007 by Shelby Engineering Ltd. but requires updating. The developer is currently completing a new Phase 2 ESA for the NASP area which will be reviewed by the City to determine if it meets City requirements and the Canadian Standards Association Guidelines (CSA) ZF68-94.

1.3.5 EXISTING ACREAGE RESIDENTIAL

Southwest of the planning area, there is an existing residential acreage property under different ownership. This property is not owned or under contract by the plan proponents. However, following discussions with the parcel owners, it has been included in the NASP area. Modus contacted the owners of this property by letter in August 2015 and followed up by phone in October 2015. The owners indicated that they may be interested in developing the property for either commercial or residential purposes in the future. Therefore, future development of this property has been taken into consideration to ensure future connectivity and consistency with the Section 13 NW/SW NASP. However, the NASP has been designed so that development of this property is not a pre-requisite for developing the area around it. Therefore, property could continue to be used as it is currently for some years to come.

A Phase 1 ESA for the acreage will be required when they plan to develop this area as it was not included in the Phase 1 ESA completed in 2016.

1.3.6 SURROUNDING DEVELOPMENT & AMENITIES

Figure 8 illustrates the surrounding development context and some opportunities that the NASP could exploit. Development to the north is currently agricultural and the proposed land use is indicated as residential in the East Hill Major Area Structure Plan (MASP). The Balmoral Golf Course lies to the north-west and includes landscaped areas, club house buildings and parking space.

Lands to the east are currently agricultural and proposed to be residential in the East Hill MASP. Development to the south is currently agricultural and proposed to be residential in the East Hill MASP. Facility #8, the producing gas well east of the southwest quarter section, is located about 50 m east of the property line. There is a minimum 100m setback which extends onto the southwest quarter section. The Phase 1 ESA will need to address possible contamination within the plan area.

Prior to development being approved in this area (see section 3.2.7) in this area, a Risk Assessment Plan will be required to determine the appropriate development setbacks.

South of 39th Street (in the NW corner of NW 12-38-27-4) is the Joffre gas processing plant (Facility #9) licensed to Advantage Oil and Gas Ltd. A gas processing plant is an arrangement of equipment used to change the composition of the raw natural gas by the extraction of hydrogen sulphide, helium, ethane, natural gas liquids, or other substances from the natural gas. Prior to development being approved in this area, (see section 3.2.7) a Risk Assessment Plan will be required to determine the appropriate development setbacks.

A producing gas well also exists near the Joffre gas processing plant (Facility #10).

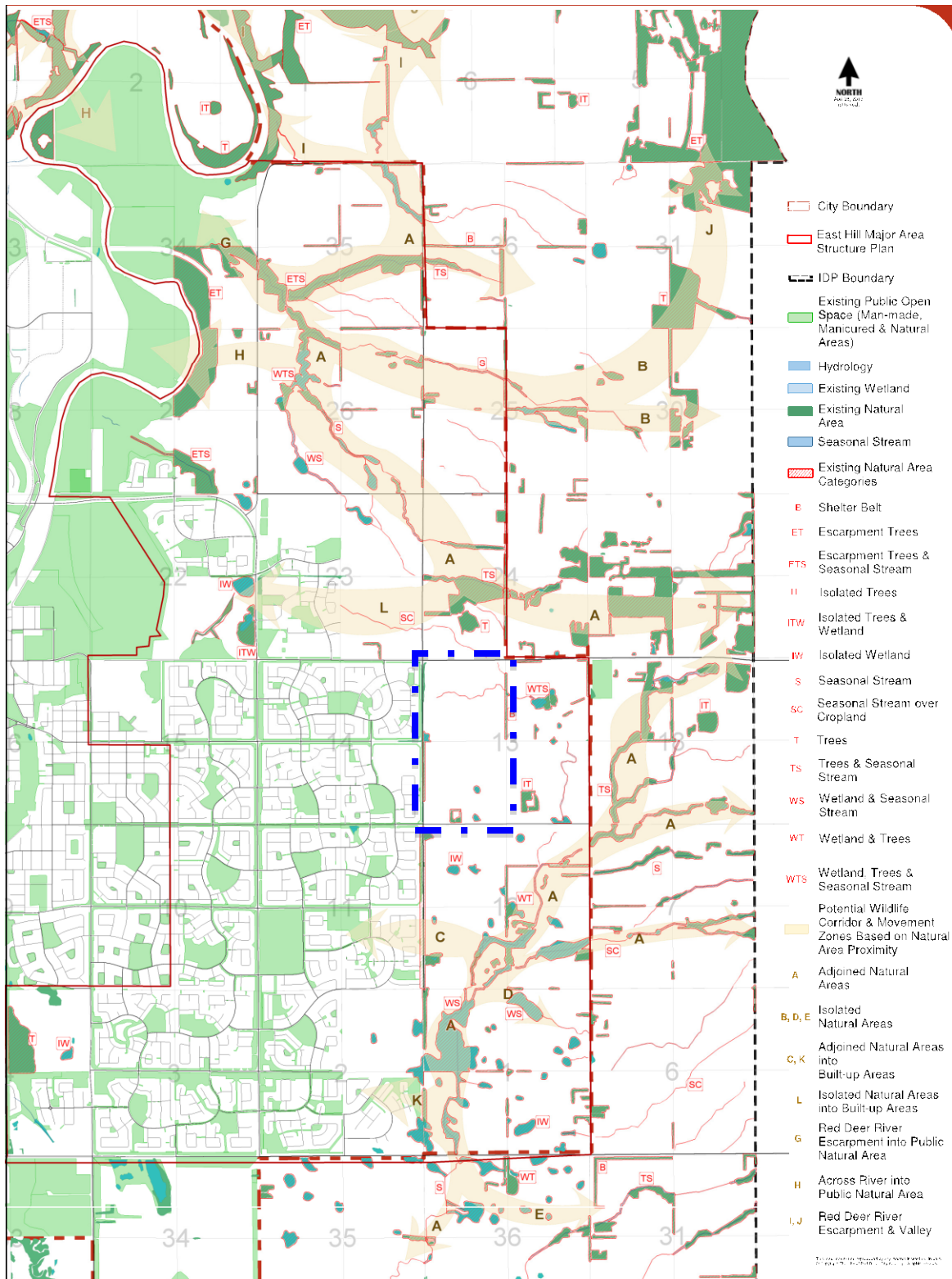
To the west are the existing Deer Park and Rosedale residential neighbourhoods including small lot single-detached homes and a mobile home park.

There is a direct connection to downtown Red Deer via Ross Street and a regional trail is proposed to run in a north-south direction along the east side of the property.

Three new schools are proposed in the immediate area including a Catholic K-9 school with the NASP area.

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

Figure 6: East Hill Natural Areas



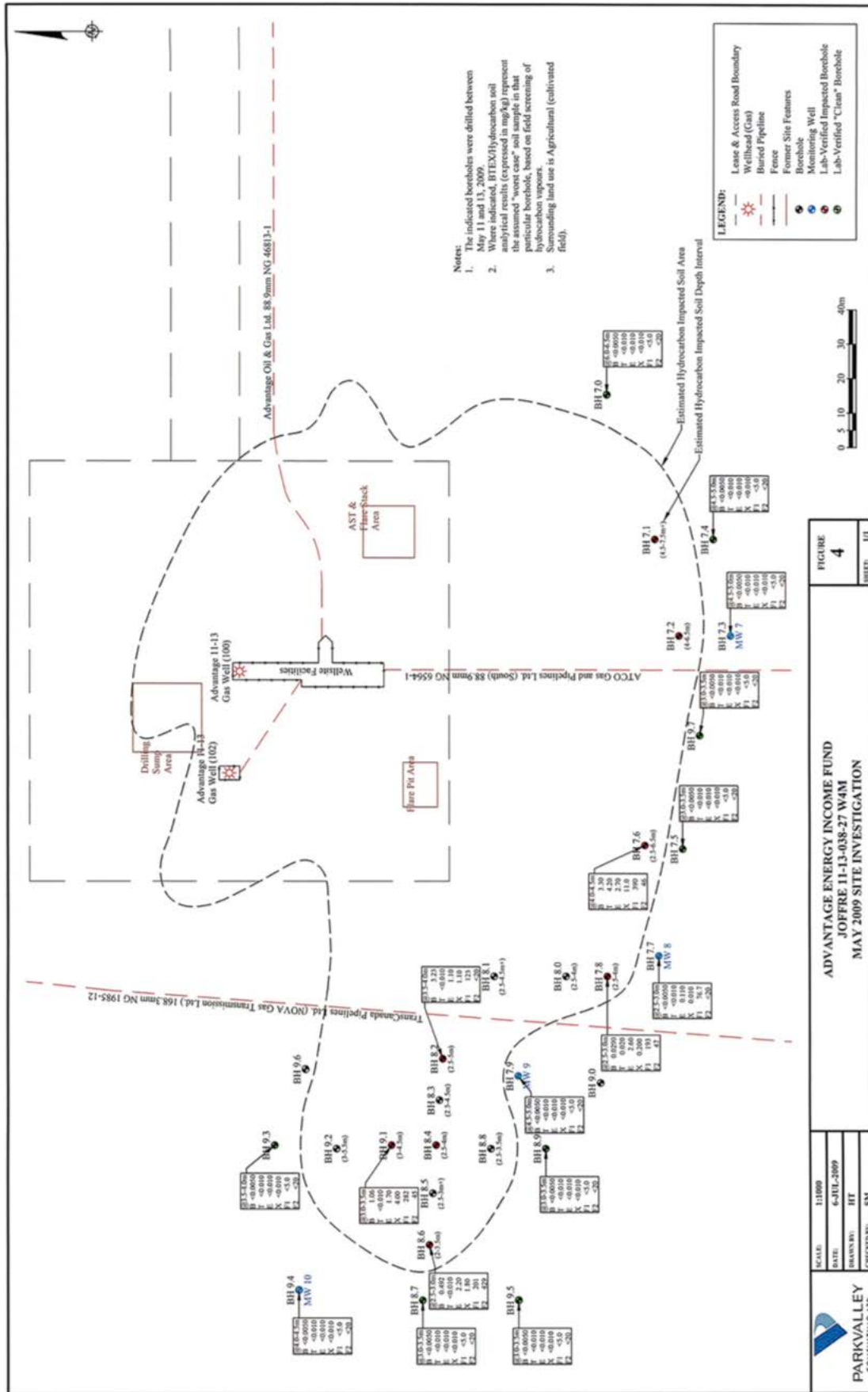


Figure 7: Delineated Area of Contaminated Soil Around Active Gas Wells

Figure 8: Development Context & Opportunities

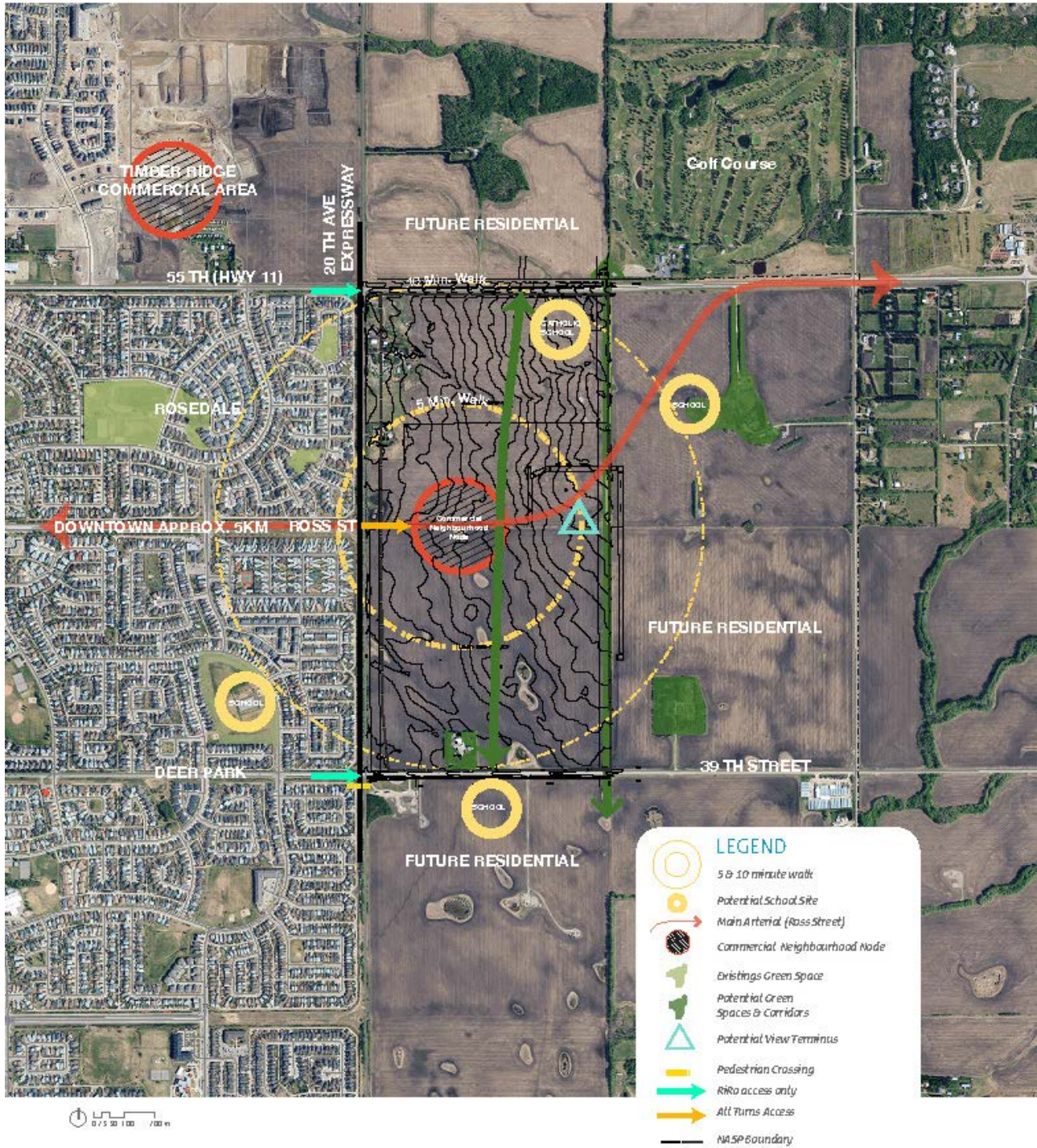
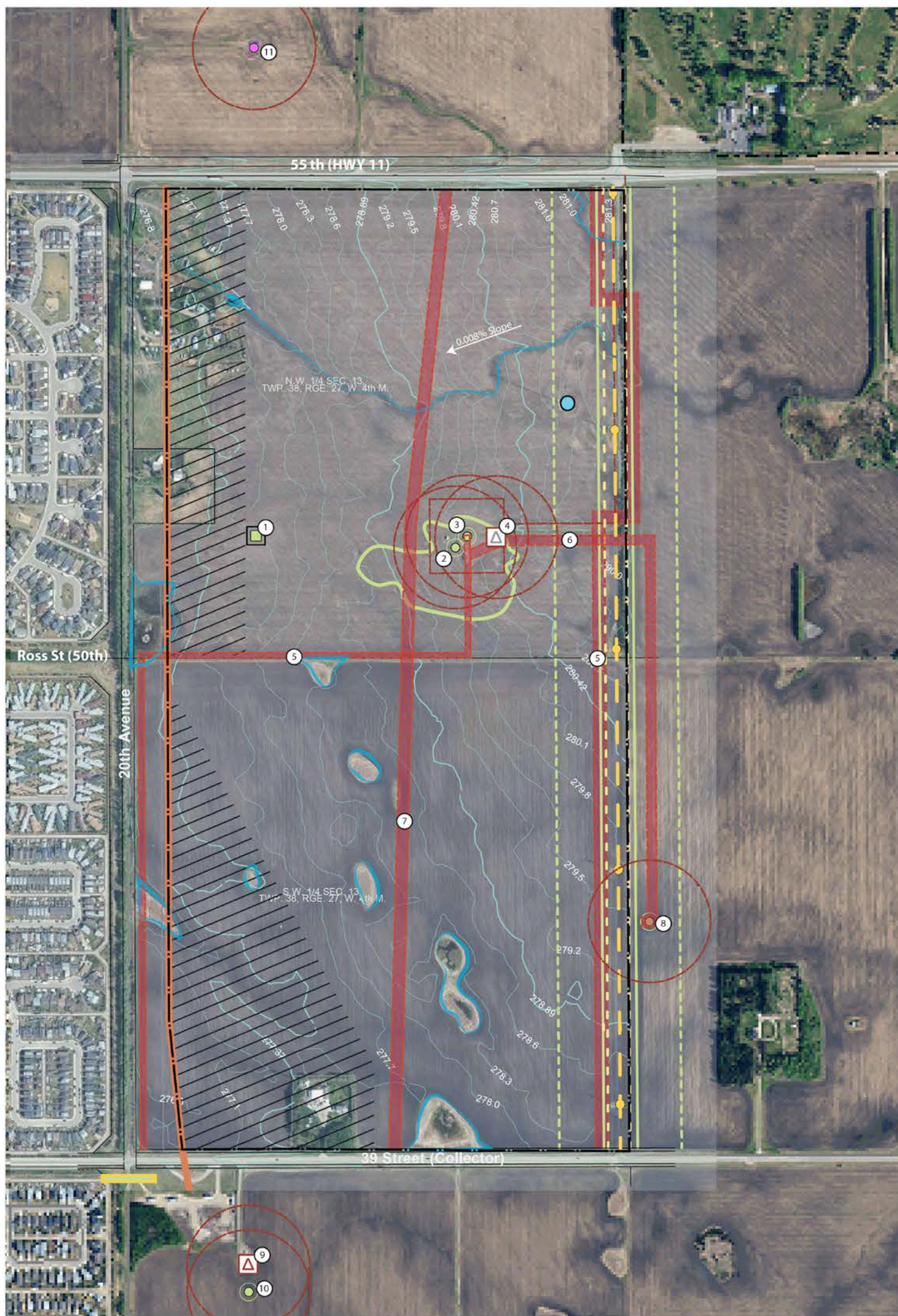
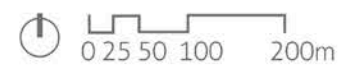


Figure 9: Development Constraints Map



LEGEND

- | | | |
|----------------------------------|---|---|
| Oil/Gas Pipeline Right of Way | NASP Boundary | 278.3 Contour Line |
| Active Gas Well (Setback 100m) | AltaLink High Voltage Line | Seasonally Wet Areas |
| 100m Setback | AltaLink 36 m Right of Way | Potential Area to Locate Stormwater Management Facility |
| Gas Facility | AltaLink 30 m Notification Zone | Proposed Pedestrian Overpass |
| Oil Well, Abandoned (5m Setback) | AltaLink Electrical Transmission Line Tower | Approximate Estimated Hydrocarbon Impacted Soil Area |
| 95 m Road Widening Setback | Cellular Tower | |
| Active Oil Well (Setback 100m) | Cellular Tower | |



1.4 OPPORTUNITIES AND CONSTRAINTS

The physical characteristics of the NASP area, and its location, and the surrounding area present a number of opportunities and constraints for development as shown on **Figure 8** and **Figure 9** and described below.

1.4.1 OPPORTUNITIES

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

The location of the NASP area at the intersection of a future expressway (20th Avenue) and an arterial highway (Ross Street) with strong, direct connections to the downtown provides the opportunity for a major district commercial node as noted in the East Hill MASP. This node can provide shopping for the immediate neighbourhood but also the surrounding area. The node is where various pedestrian-oriented and public uses come together in a fairly compact area including the commercial sites, adjacent multi-family residential development, community amenities and public open spaces. The node also provides the opportunity to congregate community uses at this location along with a transit stop and more affordable multi-family housing.

The gently west sloping land creates the opportunity for views to the west that should be explored when designing open space and buildings (e.g. window placement). The gently sloping land also provides an opportunity to manage stormwater in the south-western corner of each quarter section. The stormwater management facilities themselves provide the opportunity for creating some passive park space and semi-natural areas, sight lines to commercial properties, and to buffer the neighbourhood from the traffic noise and pollution that will be generated by 20th Avenue.

The East Hill MASP identifies the need for a K-9 Catholic school site. This creates an opportunity for a combined school and park site with sports fields that can serve the residents as well as the school.

Anticipated low volume traffic on 39th Street (bordering the NASP area to the south) provides an opportunity to create multiple street and trail connections through to the adjacent neighbourhood to the south. In addition, the pedestrian overpass planned at the intersection of 39th Street and 20th Avenue will be an opportunity for pedestrians to connect to amenities west of the NASP area.

The bend in Ross Street provides the opportunity for a view terminus as one enters the NASP area along Ross Street looking eastwards. The view could be terminated either by a significant building or, as proposed in this plan, by a larger landscape feature such as a "hill" of top soil landscaped with grass and other plants.

The AltaLink Transmission Corridor on the eastern edge of the NASP area creates an opportunity for a N-S regional trail system with multi-modal transportation options, in keeping with the East Hill MASP and City of Red Deer Trails Master Plan. A pedestrian crossing will be developed where the regional trail crosses Ross Street

Some of the existing seasonally wet areas contain aquatic vegetation that can be re-used in the development of stormwater management facilities (wet ponds). It is likely these wet areas will disappear once development starts to occur and drainage patterns change.

It may be possible to re-use some materials from the existing farm sites, which could be incorporated into landscaping (old timbers and farm machinery as public art for example).

1.4.2 CONSTRAINTS

Utility Right-of-Ways

The AltaLink electrical transmission line is contained within a 36 metre wide right-of-way at the eastern edge of the property (illustrated on Figure 2: Legal Plan). No buildings are allowed within this right-of-way.

The AltaLink Transmission Corridor with its large towers creates an undesirable visual aesthetic. The swing of the cables limits the proximity of tall buildings and vegetation that could interfere with the lines. Notification to AltaLink is required for any proposed development within 30 metres of the line.

A 20 metre wide right-of-way for the high pressure ATCO gas pipeline was recently established along the eastern edge of NASP area, just west of and adjacent to the AltaLink right-of-way. No buildings can be constructed within this right-of-way.

Oil and Gas pipelines and associated right-of-ways present a constraint to development as no buildings or landscaping should be located on these right-of-ways. Roadways are generally allowed to cross right-of-ways where necessary, provided approval has been obtained from the Licensee.

The NASP area is roughly bisected east-west by the north-south oriented underground

TransCanada (sweet gas) pipeline which is contained within an 18 metre wide right-of-way. According to the East Hill MASP and the Land Use Bylaw, an additional 7 metre setback from the edge of the right-of-way is required. This has been allowed for by increasing the depth of the lots adjacent to the right-of way.

Risk Assessment Plan

Because of the significant oil and gas activity within and adjacent to the NASP area, the Developer will be required to provide a Professional Risk Assessment Plan which will assist the City, as the planning authority, to determine appropriate development setback distances, address public safety, identify mitigation measures, manage nuisance factors, ongoing industry access requirements, emergency planning, risk communication and public participation. The Assessment will address all Facilities located within the NASP area, as well as those within 100m of the NASP boundary. The developer will work with the Licensee(s) to address the Risk Assessment findings.

The Licensee has identified an area around Facilities 2 and 3 that has been contaminated. The approximate extent of the contamination has been determined as shown in Figure 7. This contaminated area will be remediated to Provincial and City standards prior to any surface development being approved (see section 3.27).

A minimum 5 m development setback, from the well centre to the property line, must be maintained around the abandoned well in the NW quarter (Facility #1). Access to the well is also required to be maintained, in accordance with provincial regulations.

Coexisting Plan

Facility #4 is a gas compression station located near to the active gas wells in the northwest quarter. A gas compression station is comprised of service equipment to maintain or increase the flowing pressure of the gas it receives from a well prior to delivery to the gas processing plant. After the Professional Risk Assessment Plan is completed, the Developer will provide a “Co-existing Plan” to indicate how the proposed residential development could coexist with operating gas wells, compression station, and pipelines. The plan needs to address: nuisance issues (noise, emissions, visual, and aesthetics), ongoing access, public education, and ongoing public involvement. Facilities 2- 4 will require vehicle access for maintenance and emergencies during their operating lifetime as well as after abandonment. While operating, vehicle access can continue to be provided via the existing access road along the eastern perimeter of the NASP area. After abandonment, access can be provided via the neighbourhood road network.

Setbacks for Facilities Outside of NASP Area

Suggested development setbacks for Facilities 8 and 9 have been identified on Figure 9. These development setbacks may be amended depending on the results of the Risk Assessment, and may require an amendment to the NASP.

Cell Tower Setback

There is a cellphone tower (TM Mobile) located on the northern quarter (see Figure 9). It is understood that the lease for this tower expires in 2021 at which time it does not have to be renewed. Given the development phasing (see section 8), it is not anticipated that the area will be needed for residential or school uses until that time and, therefore, the cell tower is unlikely to pose a constraint to development. However, should development proceed more quickly than anticipated, the cell tower and supporting cables may delay the development of the school playing fields/park and the area of Residential – Medium Density to the south of the school. If the School District wants to proceed with development and believes that the cell tower is impeding that development, an earlier termination of the cell tower lease will be negotiated by the developer.

Ross Street Right-of-Way

The City of Red Deer has indicated a desired general orientation for Ross Street Arterial as indicated on the City’s Multi-Neighbourhood Plan for Section 13. Ross Street is planned as a 4-lane arterial road and the City’s standard arterial right-of-way is 60 metres wide. This type of road can pose a barrier to pedestrian and cycling connections within the neighbourhood and, if located with a typical right-of-way, can undermine the goals of creating a compact community node. Therefore, this plan proposes a modified 40-metre road right-of-way for Ross Street through the commercial area/neighbourhood node.

The right-of-way for 20th Avenue has been widened to 95 metres by the City of Red Deer to accommodate a planned 6-lane expressway and regional trunk sewer line as well as berms on both sides and a regional multi-use trail on the west side. The City has purchased land to allow for the 95 metre right-of-way. The construction date for this road is not known at this time but will likely be constructed in a phased sequence and expanded as traffic volumes warrant. When completed it is anticipated that this road will generate high volume, high speed traffic and act as a barrier to pedestrians wanting to travel outside the neighbourhood. A pedestrian crossing across 20th Avenue has been proposed by the City at 39th Street. The 20th Avenue right-of-way will also generate considerable noise and hence a noise attenuation berm will be constructed on both sides of 20th Avenue. Access from 20th Avenue onto 55th Street will be right-in/right-out only. The access from 20th Avenue onto 39th Street will also be right-in/right-out only. Access at Ross Street will be an all turns signalized intersection.

55th Street

Due to the volume and speed of traffic on 55th Street (Highway 11), homes fronting onto this road will not be able to be developed until such time as Ross Street is completed and the Highway designation is removed from 55th Street and it is designated a collector roadway.

2 PLAN VISION

2.1 OVERVIEW

2.1.1 VISION STATEMENT

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

The Section 13 NW/SW Neighbourhood is envisioned as a highly livable neighbourhood with a variety of land uses that includes 6 hectares (15 acres) of commercial development, a Catholic school, and anticipated housing for 4,079 residents. It will be an area of high quality urban design, varied parks and open spaces, local and district serving shopping opportunities and a wide variety of housing.

2.1.2 NEIGHBOURHOOD HIGHLIGHTS

- a unique neighbourhood identity created through the modified grid pattern of streets, neighbourhood park focus, park-facing housing, carriage home lots and variety of commercial uses
- an affordable community – 38.1% of the housing stock is multi-family which includes apartment units, townhomes, row houses and multiplexes. In addition, many homes may have secondary suites or carriage homes
- a compact community - overall net housing density is 18.62 du/ha
- a community of choice - 8 different types of housing
- a walkable community - strong pedestrian connections to transit, within the neighbourhood and beyond
- a community with a variety of types and sizes of parks and open spaces

2.2 SUSTAINABILITY & NEIGHBOURHOOD PLANNING PRINCIPLES

The City of Red Deer Planning & Design Standards contain a set of nine planning principles adopted by City Council. These principles are listed below. This section describes how the NASP fits with the intent of these principles. Images are illustrative of the principles only and not intended to depict final design.

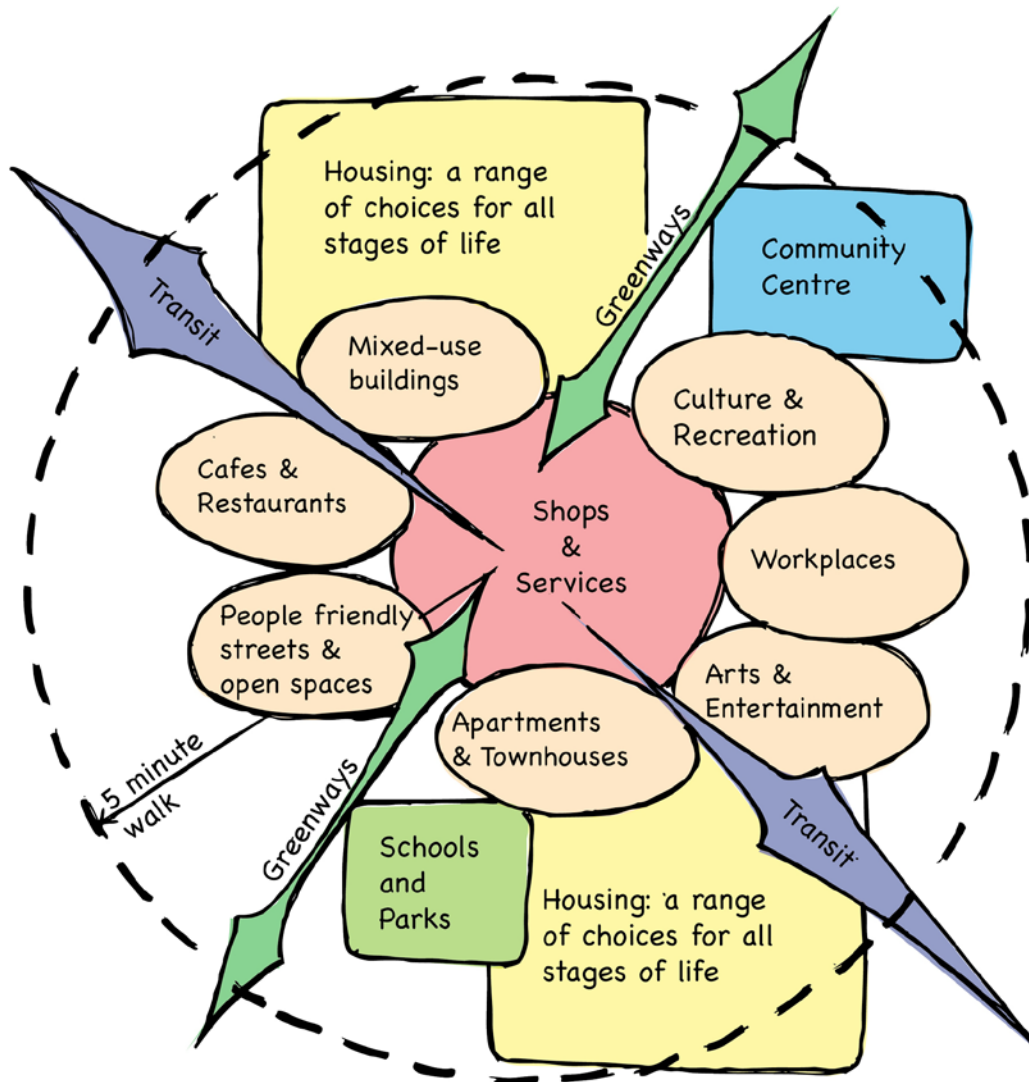
PRINCIPLE 1: Natural Areas

While there are few existing natural areas on the site, there are opportunities to use natural landscaping within the areas surrounding the stormwater management facilities. It may also be possible to preserve some of the trees in shelter belts and on the existing farm properties depending on the proposed location of buildings and the amount of re-grading required.



PRINCIPLE 2: Mixed Land Uses

The proposed Neighbourhood Plan features a variety of land use types including variety of residential types and densities, district and local serving commercial uses, community amenity uses and public uses such as parks, a school and stormwater facilities.



PRINCIPLE 3: Multi-modal Choice

The plan includes a proposed bus route and stop locations that are located conveniently close to most residences, to the proposed school and close to the proposed commercial shopping areas. The street network is a highly connected modified grid (few cul-de-sacs) and is well connected to the regional trail system. Bikeways exist both on and off-street.



PRINCIPLE 4: Compact Urban Form & Density

The plan uses land efficiently through a modified grid pattern of streets. It features a high proportion of multi-family housing units in the form of apartments, townhouses and cluster housing surrounding a community node that includes district-serving and neighbourhood- serving commercial and community amenities. The plan exceeds the City's required housing density of 17 dwelling units per net residential hectare.



PRINCIPLE 5: Integrated Parks & Community Spaces

The plan features a large (~10 acre) combined school and park site as well as a number of neighbourhood parks surrounded by homes. Each park is well connected to the surrounding neighbourhood through the modified grid pattern. Cut-throughs (linear parks) have been provided to provide easy pedestrian access to greenspaces. Pipeline and Altalink right-of-ways provide strong linear connections through the neighbourhood including part of the regional trail system.



PRINCIPLE 6: Housing Opportunity & Choice

The plan features eight different types of residential lots to encourage a range of housing types. 38% of the proposed housing units are within attached forms of housing which includes apartment units, townhomes, row houses and multiplexes. In addition, many homes may have secondary suites or carriage homes.



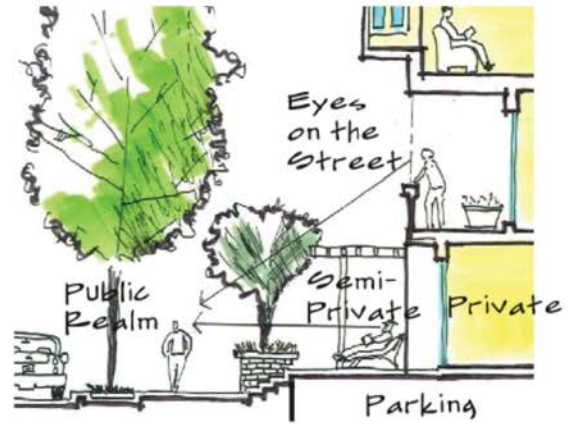
PRINCIPLE 7: Resilient & Low Impact Neighbourhoods

The proposed neighbourhood has been designed to be a walkable and transit-friendly neighbourhood that will reduce energy use. The modified grid structure of the plan makes future adaptability easier as a grid pattern can accommodate a range of future land use types more easily than a curvilinear road system. The extensive park network could provide an opportunity for urban gardening. Landscaping should be designed to reduce the need for irrigation with potable water. House design should be energy and water efficient and incorporate passive solar design and renewable energy systems.



PRINCIPLE 8: Safe & Secure Neighbourhoods

Front facing units make sure that there are “eyes on the street” and overlook neighbourhood park areas. Streets and trails are designed to be safe for pedestrians and cyclists. Detailed design will apply CPTED principles.



Residential buildings oriented to animate the public realm and create eyes on the street



PRINCIPLE 9: Unique Neighbourhoods

The variety of housing types, modified street grid pattern, houses clustered around neighbourhood parks, unique park-facing housing and strong commercial node will give the proposed neighbourhood its unique identity.



3 LAND USE & HOUSING

3.1 OVERVIEW

Land uses in Section 13 NW/SW are primarily residential and commercial with some supporting community and park uses.

3.2 LAND USE PLAN

The Section 13 NW/SW neighbourhood includes a variety of land use types including a variety of residential land uses, district- and local-serving commercial uses, community amenity and school uses and public uses such as parks and stormwater management facilities. **Figure 10** shows the land uses.

3.2.1 RESIDENTIAL USES

The Section 13 NW/SW Neighbourhood includes a variety of residential uses. These diverse housing types are intended to serve a wide range of incomes, lifestyle choices and life stages allowing residents to age in place.

The higher density multi-family uses have been clustered around the commercial/community node where there is easy pedestrian access to shopping, amenities and transit as well as neighbourhood parks.

Lower density residential uses are intended to accommodate a variety of housing styles including traditional single-family dwellings, wide-shallow housing, dwellings with secondary suites, carriage houses, and cottage cluster housing (small single-detached or semi-detached residential units in a cluster formation gathered around a private green space). Some of the homes are “park-facing” i.e. their primary orientation faces onto a public park or public utility lot.

Houses are proposed facing onto 55th Street (currently Highway 11) and 39th Street. Houses facing onto these streets will be accessed via rear lanes and therefore no front driveways will be permitted in these areas.



3.2.2 COMMERCIAL USES

The plan includes two commercial areas:

- 1) a larger 4 hectare (10 acre) district-serving commercial parcel on the south side of Ross Street which is intended as a shopping centre anchored by a grocery store and including a variety of smaller scale retail and commercial service outlets, restaurant uses and small professional offices (doctor, lawyer, accountant, dentist etc.); and
- 2) a smaller 2 hectares (5 acre) neighbourhood-serving commercial parcel that will accommodate a range of smaller commercial uses including a gas station, convenience commercial etc.

Figures 9(a) and 9(b) provide a detailed conceptual plan and proposed access points for the two commercial area. Figure 9(a) is for conceptual purposes only and changes to the design do not require an amendment to the NASP.

Together, these commercial uses will contribute to a complete community with a variety of uses where most of the daily needs of Section 13 NW/SW residents can be met within the neighbourhood. These commercial parcels would be zoned either C2B or C5 (City of Red Deer Land Use Bylaw) which allows for a mix of commercial uses and a shallow front-yard building setback to allow for a more walkable urban cross section along Ross Street where the buildings frame the street.

3.2.3 OPEN SPACE USES

A variety of open spaces have been located throughout Section 13 NW/SW to allow active and passive recreation of various types including sports, children's play, sitting and quiet reflection, and appreciation of nature. These open spaces include strong linkages to the trail system to allow comfortable travel from space to space by foot or bike. A focal park is included in each sub-neighbourhood that creates a strong sense of identify and convenient access for residents.

3.2.4 COMMUNITY AMENITY SITES

One community amenity site of 1.1 hectare (2.6 acres) has been located within the Section 13 NW/SW neighbourhood. This parcel is intended to accommodate the possible development of community uses such as: temporary care, assisted living, adult or regular day care, place of worship, or other community uses proposed and approved by the City.

The community amenity site has been located in close proximity to the commercial node and transit stops to facilitate its use by all members of the public. It should also be designed so that buildings "frame" the street and the intersection at Ross Street and the North-south unnamed street to create a comfortable pedestrian environment in this location.

The community amenity site will be advertised for sale through local media and the City of Red Deer website for one year; if it is not purchased for its intended use within that time period, the site will be developed as R2 or R3 multi-family.

3.2.5 SCHOOL USES

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

The Section 13 NW/SW neighbourhood includes a joint use school/park (sports field) site suitable for a Catholic K-9 school. The school is situated to allow easy access by pedestrian, cyclists, transit and cars. It is not known when this site will be developed so it may function as a larger open space for the community for some time until it is developed as a school.

3.2.6 NEIGHBOURHOOD NODE

Together, the commercial uses, community amenity site and surrounding medium density residential uses form a compact neighbourhood node that will create a unique mix of uses with walkable streets and transit accessibility. This node will create an accessible shopping and amenities for residents and an attractive urban identity to the neighbourhood.

3.2.7 SEQUENCE OF FUTURE DEVELOPMENT

The ESAs identified several sites requiring further review and assessment prior to development. This NASP also identifies that Facility #2-4 will remain in operation long term and will require a Coexisting Plan for proposed future residential and commercial development. An operating gas well within city urban development requires unique planning considerations as described below. Accordingly, the area within the setback for Facilities #2-4 has been identified for "Potential Future Development" in Figure 10. This area can only be developed once the gas well has been properly decommissioned and any soil contamination and remediation addressed by the well-site Licensee. Once wells are decommissioned, and the site is remediated to Provincial standards and City standards, the area is envisioned to develop as residential.

In 2016 an updated ESA Phase 1 was completed as a requirement of the NASP review process. The following reviews and assessments must be completed at the identified development stage below to address the existing oil and gas constraint conditions as the area develops in the future:

- Phase 2 ESA – complete assessment to be submitted satisfactory to the City, prior to stripping or grading, servicing, redesignation to residential or commercial uses or subdivision for both the north and south quarter sections;
- Reclamation Plan – for any area where a completed Phase 3 ESA reclamation plan is recommended by a prior plan, a Phase 3 ESA shall be completed prior to stripping or grading, or redesignation to residential or commercial uses;
- Risk Assessment Plans for Facilities 1-11 – must be submitted to the satisfaction of the City prior to redesignation to residential or commercial uses;
- Coexisting Plan – Plan to be submitted, reviewed and completed, prior to re-designation to residential or commercial uses for Facilities #2-4;
- A phase 1 ESA will be required for acreage sites at the time of redevelopment, prior to stripping or grading, prior to redesignation to residential or commercial uses.

The results of the assessments and plans described above may require amendments to this NASP and/or the Land Use Bylaw depending on recommended development setbacks.

3.2.8 ACREAGE PARCEL

The land use for the acreage parcel (1.21 Ha.) on the south perimeter has been identified on Figure 10: Land Use Plan as Commercial Neighbourhood Convenience (C3) / Single-Detached Residential (R1). The owners of this parcel have indicated an interest in developing neighbourhood-serving commercial development and/or residential development at some point in the future. If either of these uses are proposed, an amendment to this plan will not be required. Transitioning between the acreage's future use as commercial and the adjacent residential may be needed or requested. These will be determined at the development permit stage and may include items such as, but not limited to landscaping, building heights, and building orientation.

Either of these uses could be accessed from 39th Avenue without interfering with surrounding development so long as the access is at least 45 metres from the nearest road to the east. A potential cul-de-sac is indicated for access should the site be developed for residential uses but other internal road layouts are possible.

Figure 9(a): Proposed Commercial Development Conceptual Site Plan

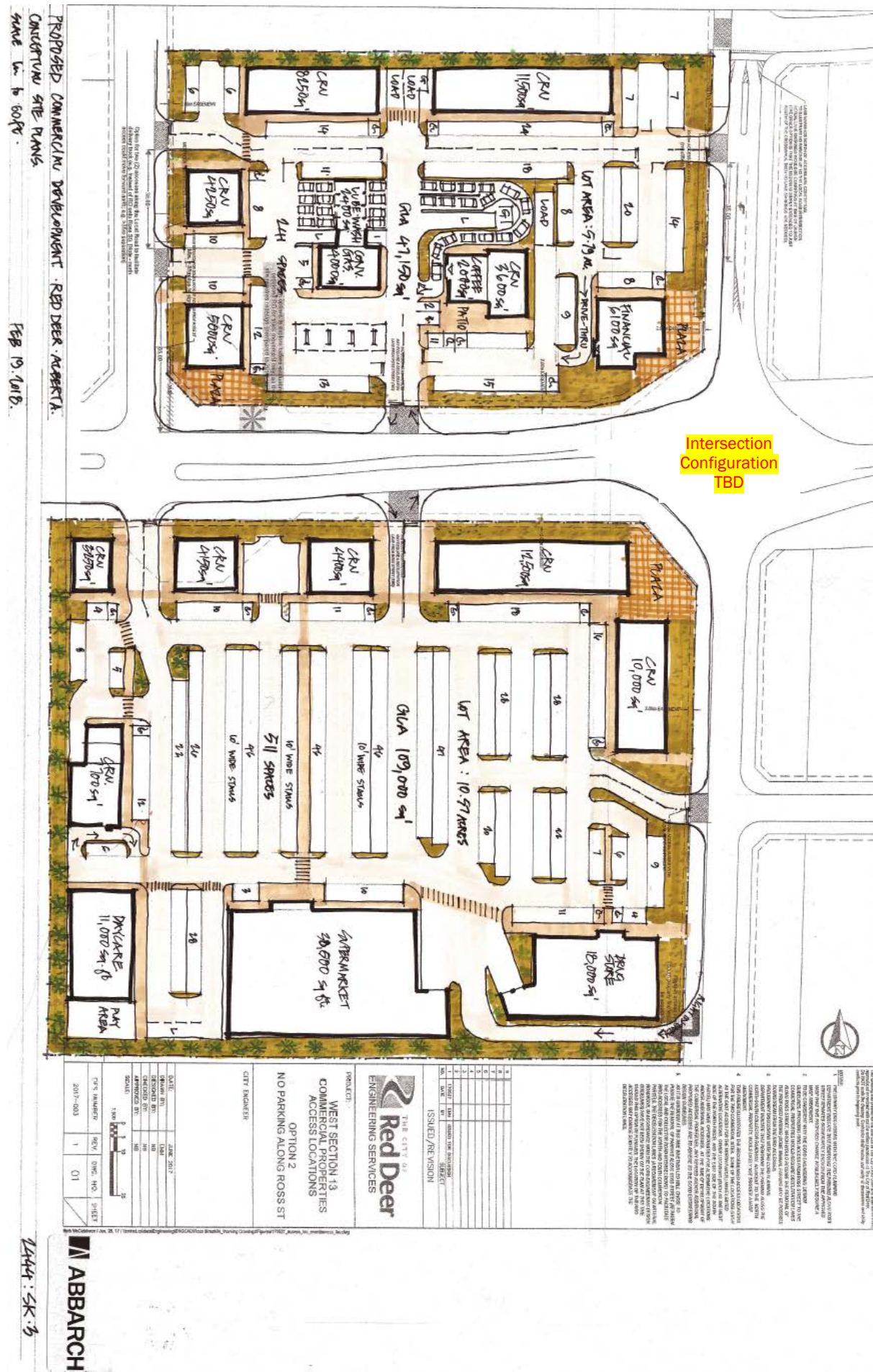


Figure 9(b): Proposed Commercial Sites Access Locations

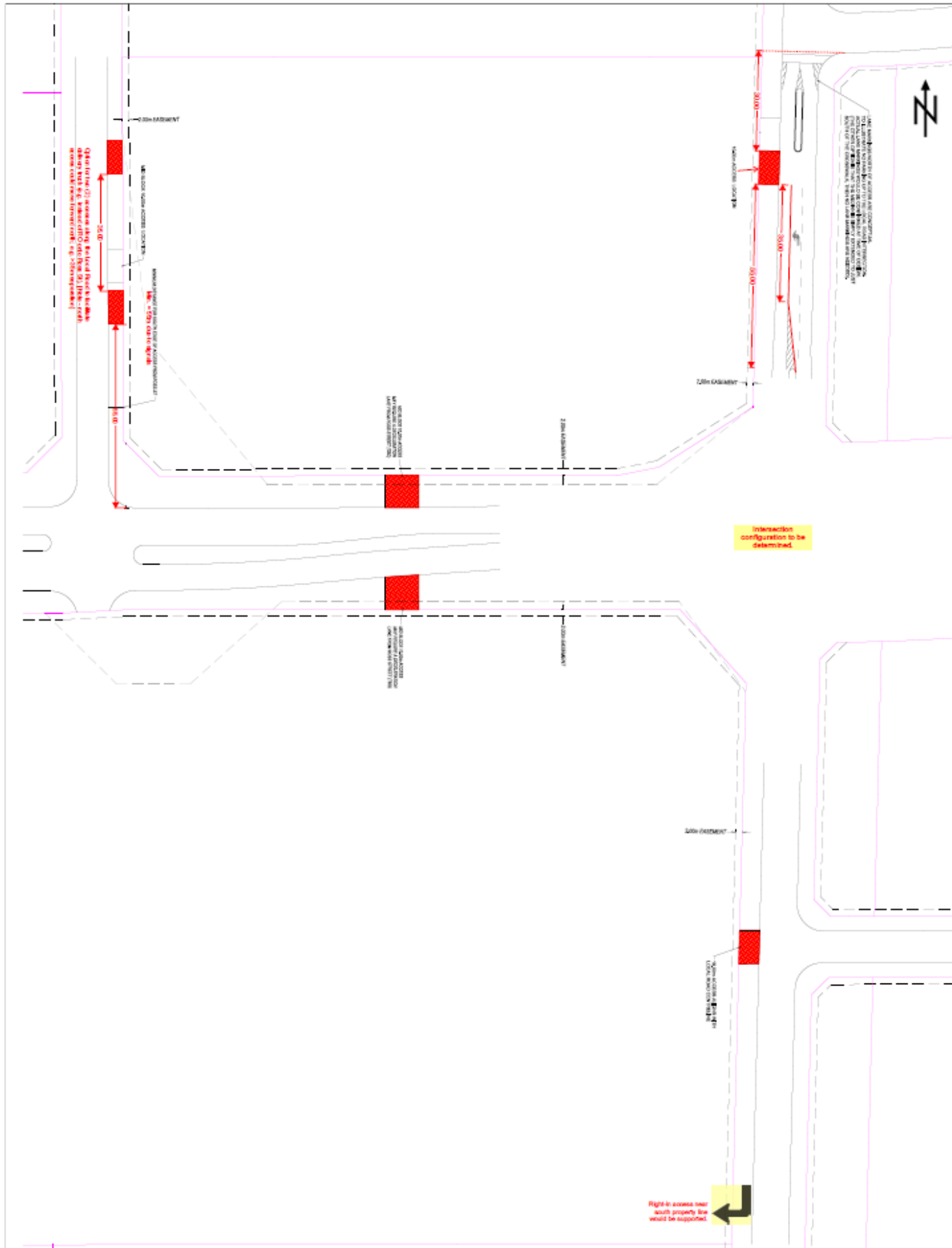
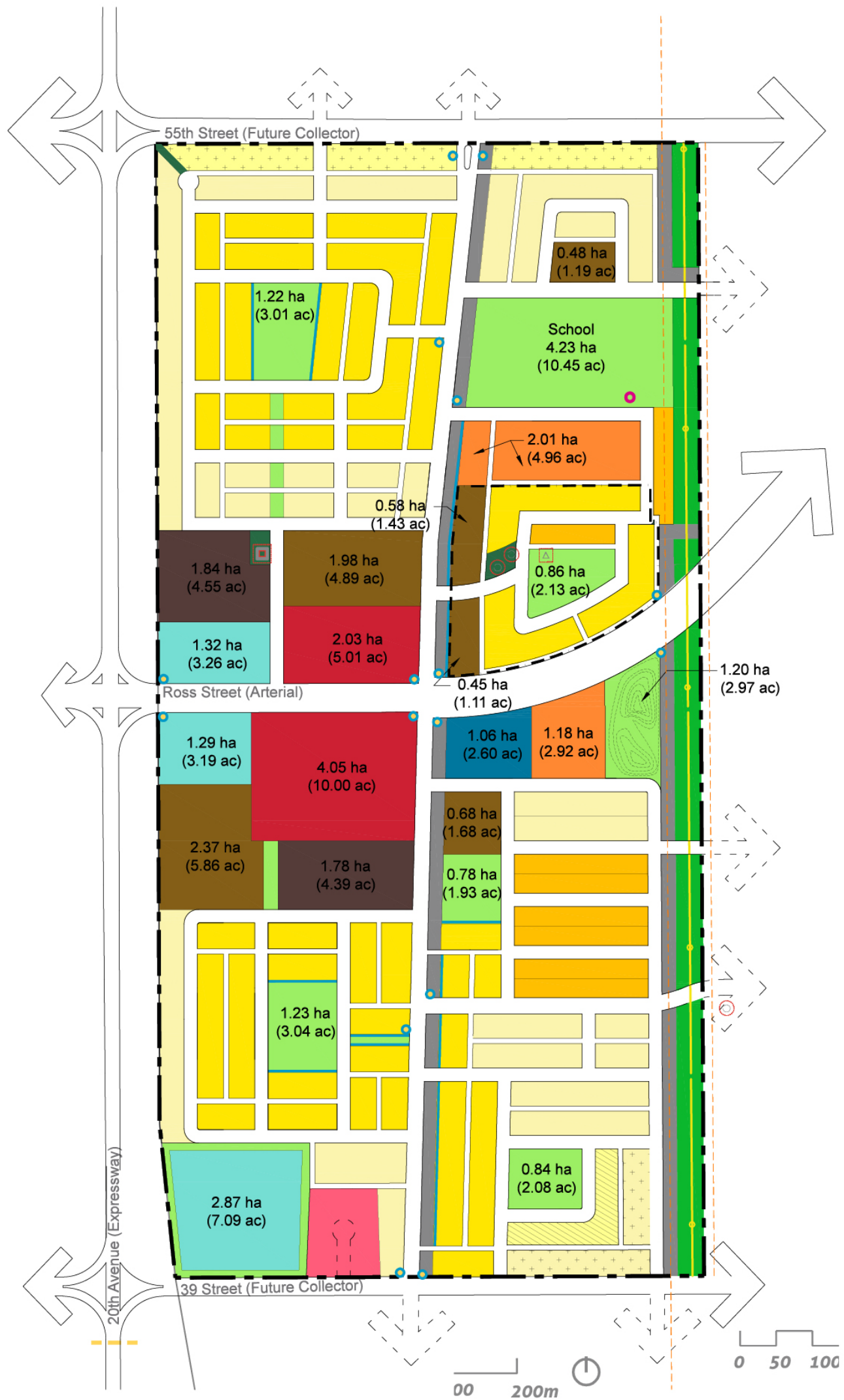


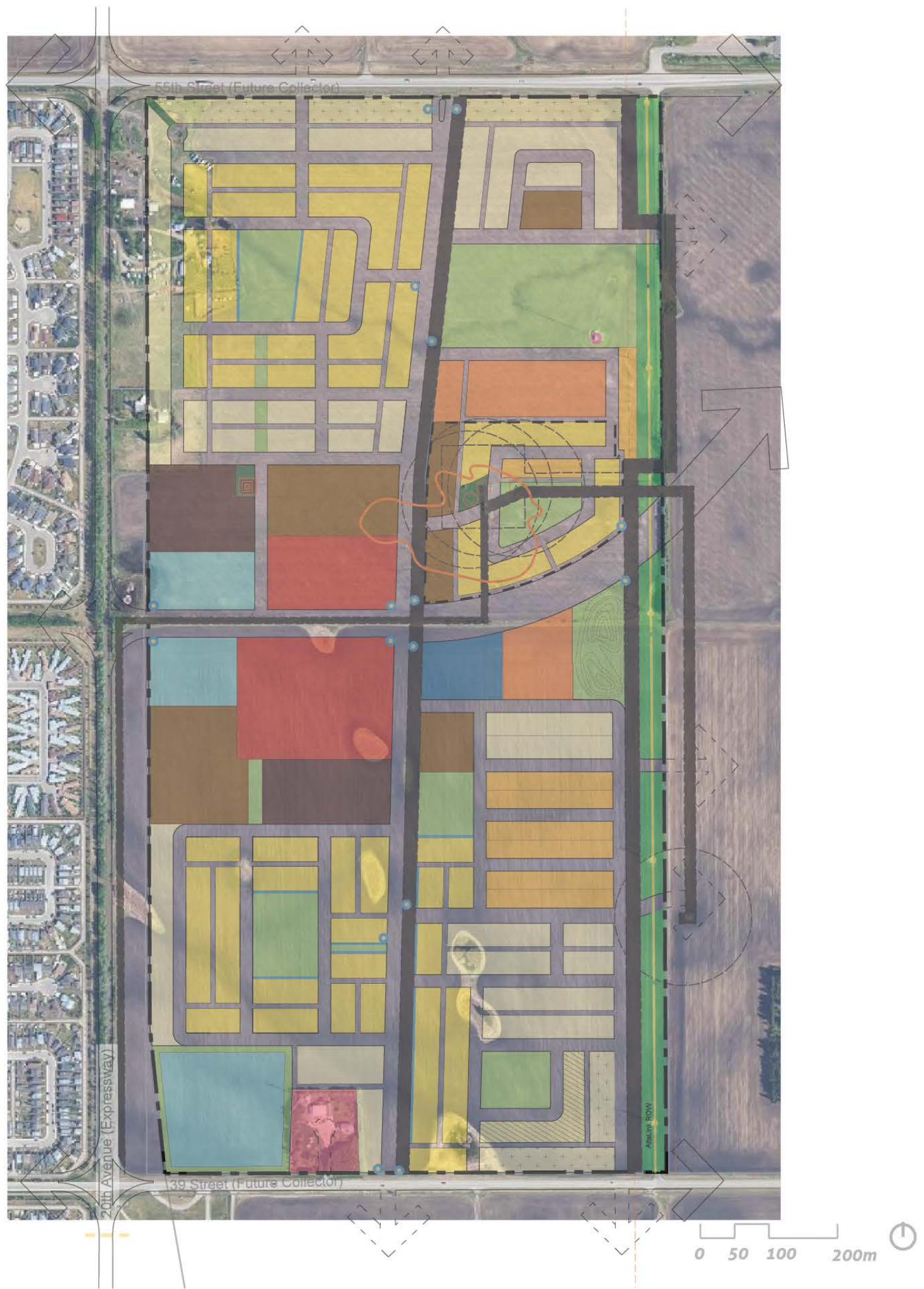
Figure 10: Land Use Plan



LEGEND

- | | | | |
|---|--------------------------------------|--|--|
| LAND USE | | Community Amenity (PS/R3) | Pedestrian Overpass (Proposed) |
| Single-detached (R1) | Homes Facing Park or PUL | Potential Transit Stop | UTILITIES AND INFRASTRUCTURE |
| Single-detached with Narrow Lot (R1-N) | OPEN SPACE | Active Gas Well showing future 5m Setback once abandoned | Abandoned Oil Well w/ 5m Setback |
| Single-detached Carriage House Lots (R1C) | Municipal Reserve Lands (P1) | Active Gas Compressor station showing 5m setback once abandoned. | AltaLink High Voltage Line, and Electrical Transmission Towers |
| Single-detached - Wide-Shallow (R1WS) | Pipeline Right of Way (PUL) | AltaLink 30m Notification Zone | Cellular Towers |
| Residential - Medium Density (R2) | AltaLink Right of Way (PUL) | Potential Future Development | Potential Road Connections |
| Semi-detached (R1A) | Stormwater Management Facility (PUL) | | |
| Townhouse (R2T) | Other (PUL) | | |
| Apartment (R3) | PROPERTY BOUNDARIES/OTHER | | |
| Commercial (C2B or C5) | Site Boundary | | |
| Commercial - Neighbourhood Convenience (C3) or Single-detached Residential (R1) | Potential Future Development | | |

Figure 11: Land Use Plan Superimposed Over Aerial Photo



- | | | |
|---|--|--|
| Single-detached (R1) | Oil/Gas Pipeline Right of Way (PUL) | Municipal Reserve Lands (P1) |
| Single-detached with Narrow Lot (R1-N) | Active Gas Well (Setback 100m) | Stormwater Management Facility (PUL) |
| Single-detached Carriage House Lots (R1C) | Gas Well Setback (100m) | Other (PUL) |
| Single-detached - Wide-Shallow (R1W5) | Abandoned Oil Well w/ 5m Setback | Site Boundary |
| Residential - Medium Density (R2) | Active Gas Compressor station showing 5m setback once abandoned. | Potential Future Development |
| Semi-detached (R1A) | AltaLink High Voltage Line, and Electrical Transmission Towers | Pedestrian Overpass (Proposed) |
| Townhouse (R2T) | AltaLink 30m Notification Zone | Potential Transit Stop |
| Apartment (R3) | AltaLink 36m Right of Way | Approximate Estimated Hydrocarbon Impacted Soil Area |
| Commercial (C2B or C5) | Cellular Tower | |
| Commercial - Neighbourhood Convenience (C3) or Single-detached Residential (R1) | | |
| Community Amenity (PS/R3) | | |
| Homes Facing Park or PUL | | |

3.3 LAND USE AREA CALCULATIONS

The overall gross plan area for the Section 13 NW/SW NASP is 117.71 hectares (290.64 acres). After subtracting the area of Arterial Roads (Ross Street), commercial parcels, SWMFs and AltaLink and pipeline right-of-ways, the net developable plan area is 92.52 hectares (228.44 acres). Land for the 20th Avenue expressway right-of-way is not included in the NASP area.

Table 3 shows the area and percentage of each land use type as well as the number of lots and density of each of the residential land uses. References in this section to the Land Use Bylaw (LUB) acknowledge that this is only a snapshot in time and current LUB regulations will apply at time of rezonings and subdivision. In the event of a conflict between the NASP and the Land Use Bylaw, the Land Use Bylaw shall apply.

Note: Because it is under different ownership than the rest of the NASP, the southern acreage parcel has not been assessed for MR requirements shown in Table 3. The owners/developers of this parcel will also be responsible for an MR dedication or cash in lieu contribution at the time of its redevelopment. In addition, this area is not included in calculations of residential density shown in Table 3.

Table 3: Land Use Mix and Densities

Land Use Category	Hectares	Acres	% of Developable Area	Assumed Avg. Lot Size	Residential Density (uph)	# of Dwelling Units (based on av lot size)
Gross Plan Area	117.71	290.64				
Gross Plan Area (not including southern acreage parcel)	116.51	287.68				
Environmental Reserve	-	-				
Arterial Road (Ross Street)	3.80	9.38	3.2% of GPA			
Pipeline & Altalink ROWs	9.90	24.44	8.4% of GPA			
Stormwater Management Facility (SWMF)	5.48	13.53	4.7% of GPA			
Commercial Sites	6.07	14.99	5.2% of GPA			
Developable Plan Area	91.26	225.33	100.0%			
Residential						
Single-detached (R1)	13.42	33.14	14.7%	464.0	21.6	289
Single-detached with Secondary Suites (15% of R1 units)						43
Single-detached Narrow Lot (R1-N)	3.43	8.47	3.8%	381.0	26.2	90
Single Detached Carriage House Lots (R1C)	18.18	44.89	19.9%	464.0	21.6	392
Carriage Houses (assume 33% of R1C lots)					7.1	129
Single Detached Wide Shallow (R1WS)	3.74	9.23	4.1%	464.0	21.6	81
Residential Medium Density (R2)	3.19	7.88	3.5%		35.0	112
Semi-Detached (R1A)	0.80	1.98	0.9%	297.5	33.6	27
Townhouses (R2T)	6.54	16.15	7.2%		35.0	229
Residential Multiple Family (R3)	3.62	8.94	4.0%		85.0	308
Total Residential	52.92	130.67	58%		32.1	1699
Net Residential Density (units per net hectare)						18.62
Other Uses						
Community Amenity Sites						
Community Amenity Site	1.06	2.62	1.2%			
Open Space						
Municipal Reserve (P1)	11.68	28.84		10.0%	of Gross Plan Area	
Public Utility Lot Excluding SWMF	0.32	0.79		0.3%	of Gross Plan Area	
Subtotal	12.00	29.63				
Transportation						
Collector Roadways	4.98	12.30	5.5%			
Local Roadways	15.80	39.01	17.3%			
Lanes	4.35	10.74	4.8%			
Subtotal	25.13	62.05	27.5%	21.6%	of Gross Plan Area	
Other Uses						
Emergency Services Site						
Commercial - Neighbourhood Convenience (C3)/ Single-detached Carriage Home (R1C)	1.20	2.96				

3.4 HOUSING TYPES & DENSITY

3.4.1 R1 – RESIDENTIAL (LOW DENSITY)



The R1 - Residential (Low Density) land use district allows for low-density, single-detached lots with a variety of housing styles. This type of housing is intended to provide for families who need a spacious house and lot. Most of the R1 lots in the neighbourhood will be serviced via lanes and therefore include rear detached garages. However, some of the lots are designed without lanes and therefore are more suitable for front attached garages.

Appropriate Housing Styles

- Bungalow (single storey)
- Bi-level
- 2-storey
- Walk-out basement
- Secondary suite

Density

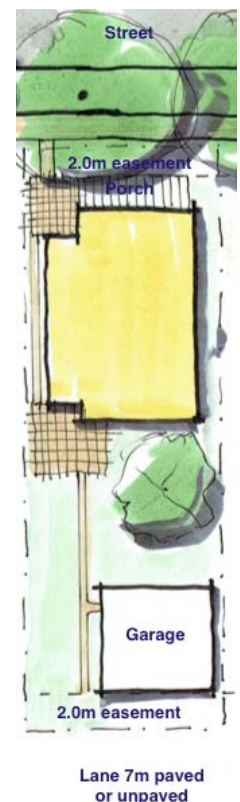
It is estimated that the density within the Section 13 NW/SW neighbourhood will be approximately 21.5 du/ha. This assumption is based on an assumed average lot size of 464 m² as per the City of Red Deer Neighbourhood Planning & Design Standards.

Height

Maximum 2 storeys measured from the average of the lot grade

Setbacks

A smaller front yard setback than the typical R1 setback is proposed for Section 13 NW/SW. It is proposed that the minimum front yard setback is 3.0 metres and the maximum 4.5 metres for the live portion of a dwelling unit, and a minimum 6.0 metres for any front attached garage portion of a dwelling unit. This would require an amendment to the Land Use Bylaw.



Parking & Access

Parking and access is generally from the rear lane. However, in some cases no lane is proposed and therefore access and parking would be at the front of the unit accessed from the street. It is encouraged for parking and access to be accommodated off the rear lane to maintain a consistent character throughout the neighbourhood i.e. limited front drive parking and access.

Secondary Suites

Secondary suites may be accommodated in this land use district as per the City of Red Deer Land Use Bylaw. Homes with secondary suites will require additional parking as per the City's LUB.

3.4.2 R1C - RESIDENTIAL (CARRIAGE HOME)



of the lot. Some of units are park-facing homes i.e. front onto a public park (see Section 3.5).

The R1C - Residential (Carriage Home) land use district allows for low-density single-detached lots with a carriage house. This type of housing provides a slightly higher density than a conventional single-family neighbourhood while maintaining a single-family character. It also improves safety in the lanes because there is natural surveillance from the carriage homes. All of these lots are serviced via lanes and therefore include detached garages (some with a carriage house) at the rear



Appropriate Housing Styles

- Bungalow (single storey)
- Bi-level
- 2-storey/2.5 storey
- Walk-out basement
- Carriage home
- Secondary suite (if no carriage home)

Density

It is estimated that the density will be approximately 28.66 du/ha. This assumption is based on an assumed average lot size of 464m² as per the City of Red Deer Neighbourhood Planning & Design Standards and that 33% of lots will see carriage houses built.

Height

Maximum 2.5 storeys measured from the average of the lot grade. For a carriage home, the maximum height is 2 storeys measured from the average of the lot grade.

Setbacks

Minimum 3.0 metres and maximum 4.5 metres for the live portion of a dwelling unit, except when a parcel fronts onto a P1 Parks and Recreation District (Park-facing home), then the minimum is 2.0 metres and the maximum is 3.0 metres as per the City of Red Deer Land Use Bylaw.

Parking & Access

Parking is located within a garage separate from the main dwelling unit and access is proposed from the rear lane. Each lot will include parking space for the main house and the carriage home as per the City of Red Deer Land Use Bylaw.

Secondary Suites

Secondary suites will be accommodated in this land use district as per the City of Red Deer Land Use Bylaw. However, no secondary suite is currently allowed for units with a carriage home. Homes with secondary suites will require additional parking as per the City's LUB.

3.4.3 R1WS RESIDENTIAL (WIDE/SHALLOW) DISTRICT

The R1WS Residential (Wide/Shallow) District allows for single-detached lots with a greater width and a shallower lot depth than is conventional in Red Deer. The R1WS housing type allows for a different format of home layout and provides main access from the front of the lot.



Appropriate Housing Styles

- Bi-level
- 2/2.5-storey
- Bungalow

Density

It is estimated that the density will be approximately 21.5 du/ha. This assumption is based on an assumed average lot size of 464 m² as per the City of Red Deer Neighbourhood Planning & Design Standards

Height

Maximum 2.5 storeys measured from the average of the lot grade.

Setbacks

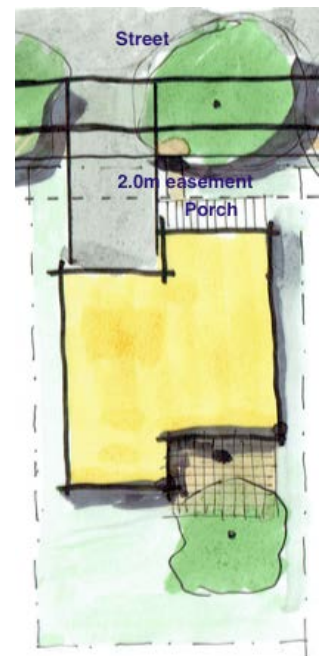
Typically, the minimum front yard setback is 3.8 metres for the live portion of a dwelling unit, and 6.0 metres for the front attached garage of the dwelling unit as per the City of Red Deer Land Use Bylaw.

Parking & Access

Parking is located at the front of the building and accessed via the street. No lane is proposed for these units.

Secondary Suites

As per the City's Land Use Bylaw, secondary suites are a discretionary use in this land use district.



3.4.4 R1N - RESIDENTIAL (NARROW LOT) DISTRICT



The R1N Residential (Narrow Lot) District allows for single-detached residential homes on narrow lots. This type of lot allows for a compact, more affordable home with lane access.

Appropriate Housing Styles

- Bi-level
- 2-storey
- Bungalow

Density

It is estimated that the density will be approximately 24.3 du/ha based on the assumed average lot size of 381m² as per the City of Red Deer Neighbourhood Planning & Design Standards.

Setbacks

Front yard setback of 4.0metres as per the City of Red Deer Land Use Bylaw

Height

2 storeys measured from the average of the lot grade.

Parking & Access

Parking and access is from the rear lane for these lots.

Secondary Suites

As per the City's Land Use Bylaw, secondary suites are not permitted in this land use district.



Lane 7m paved or unpaved

3.4.5 R1A RESIDENTIAL (SEMI-DETACHED DWELLING) DISTRICT

The R1A (Semi-Detached) District allows for either single-detached or semi-detached dwellings. This type of lot provides for a more affordable, ground oriented form of housing that occupies less space than conventional single-detached housing.



Appropriate Housing Styles

Semi-detached

Density

It is estimated that the average density will be 33.6 du/ha based on the average lot size of 297.5m² in the City of Red Deer Neighbourhood Planning & Design Standards.

Height

2 storeys measured from the average of the lot grade.

Setbacks

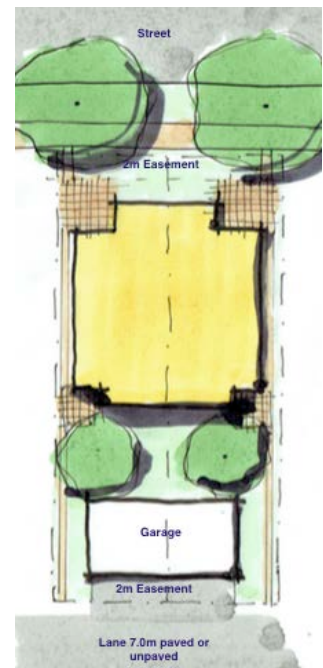
The front yard setback is proposed to be a minimum 3.0 metres and maximum 4.5 metres for the live portion of a dwelling unit. This would require an amendment to the Land Use Bylaw.

Parking & Access

Parking and access is proposed from the rear lane for these lots although front access will also be permitted.

Secondary Suites

As per the City's Land Use Bylaw, secondary suites are not permitted in this land use district.



3.4.6 R2 – MEDIUM DENSITY RESIDENTIAL

The R2 – Medium Density Residential Land Use District allows for a variety of residential uses and densities. In the Section 13 NW/SW neighbourhood, the intention is to provide flexible sites that can accommodate townhouses, multiple-family residential up to three storeys and small single-detached or semi-detached residential units in a cluster formation i.e. gathered around a private green space.

Density

It is estimated that the density will be approximately 35 du/ha as per the City of Red Deer Land Use Bylaw.

Height

2 storeys measured from the average of the lot grade except for multiple family buildings and assisted living facilities which may be three storeys.

Parking & Access

Parking will generally be provided as surface parking at grade, tucked under the building at the rear or within a standalone parking garage shared amongst multiple dwellings behind the building.



3.4.7 R2T - TOWN HOUSE RESIDENTIAL



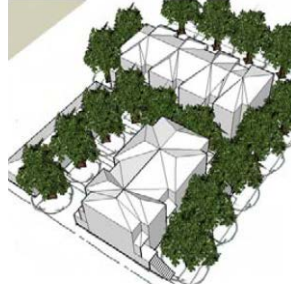
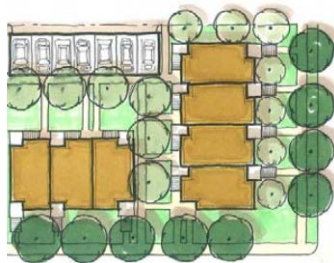
The R2T Town House Residential Land Use District allows for town house or row house development in traditional side-by-side lots, clustered or stacked format. This type of housing is intended to provide affordable, higher density ground oriented housing. Some of these lots have been designed as park-facing homes (see Section 3.5).

Density

It is estimated that the density will be approximately 35 du/ha as per City of Red Deer Neighbourhood Planning & Design Standards.

Height

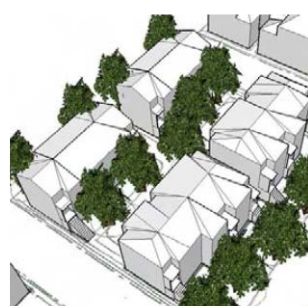
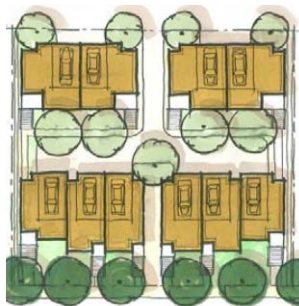
Maximum 2½ storeys measured from the average of the lot grade. Minimum: 2 storeys as per City of Red Deer Land Use Bylaw.



Traditional fee-simple row housing with car access from lane

Parking & Access

Parking will generally be provided at grade and integrated into the building under the living space or as a standalone parking garage shared amongst multiple dwellings. Those units that are “park-facing” will be accessed from the rear lane only.



Carriage court town houses with access from lane



3.4.8 R3 - MULTIPLE FAMILY RESIDENTIAL



The R3 Residential (Multiple Family) District allows for medium-density and high-density attached residential development up to 4-storeys in height. This type of housing is intended to provide affordable rental and ownership housing for a variety of age groups.

Density

It is estimated that the density for this land use district will average 85 du/ha.

Height

The maximum height in this land use district is 2 storeys measured from the average lot grade

except: 4 storeys for Assisted Living Facility, Temporary Care Facility or Multiple Family Building.

Parking & Access

Parking will generally be provided as surface parking at grade, tucked under the building, underground parking or within a standalone parking garage shared amongst multiple dwellings.



3.5 PARK-FACING HOMES

Several of the lots in the R1C and R2T land use categories are designed so homes face directly onto a park or green corridor (PUL) instead of a municipal road. These lots are indicated on **Figure 10: Land Use Plan**.



This is one of the unique characteristics of the Section 13 NW/SW neighbourhood and it provides easy access to green space for residents, and excellent surveillance of public green space that will increase the safety and care of these areas. Vehicle access and addressing of both the principle home and the carriage home will be from the lane and, therefore, the lane would need to be named and part of the municipal addressing system. Park

fronting homes may require additional design considerations for safety and emergency access. This may include but is not limited to the addition of a PUL(s) to provide access to the front of the lots.

Special attention to the lanes utilized for park-facing homes will be required to ensure there is clear illumination of house numbering for use by Emergency Services, delivery vehicles, taxis, etc. The Developer will work with the City of Red Deer’s Electrical Light and Power department during the Servicing Study stage to determine the most appropriate solution for providing this lighting in the lane. If municipal lighting is deemed inappropriate, an architectural control will be used to require that lighting be provided on the rear garages to facilitate home address recognition.

Park-facing homes will require a paved sidewalk at the front of the unit. Lanes behind these park-facing homes will be 7.5 metres wide and paved.



Figure 12: Park-facing Homes



3.6 HOUSING MIX

The anticipated average net density of the Section 13 NW/SW Neighbourhood is 18.41 du/ha with a total of 1,699 housing units and an estimated population of 4,079 (based on an average occupancy of 2.4 people per unit). Figure 13 and Table 4 show the proportion of the total residential units of each housing type.

Figure 13: Percentage of Different Housing Types

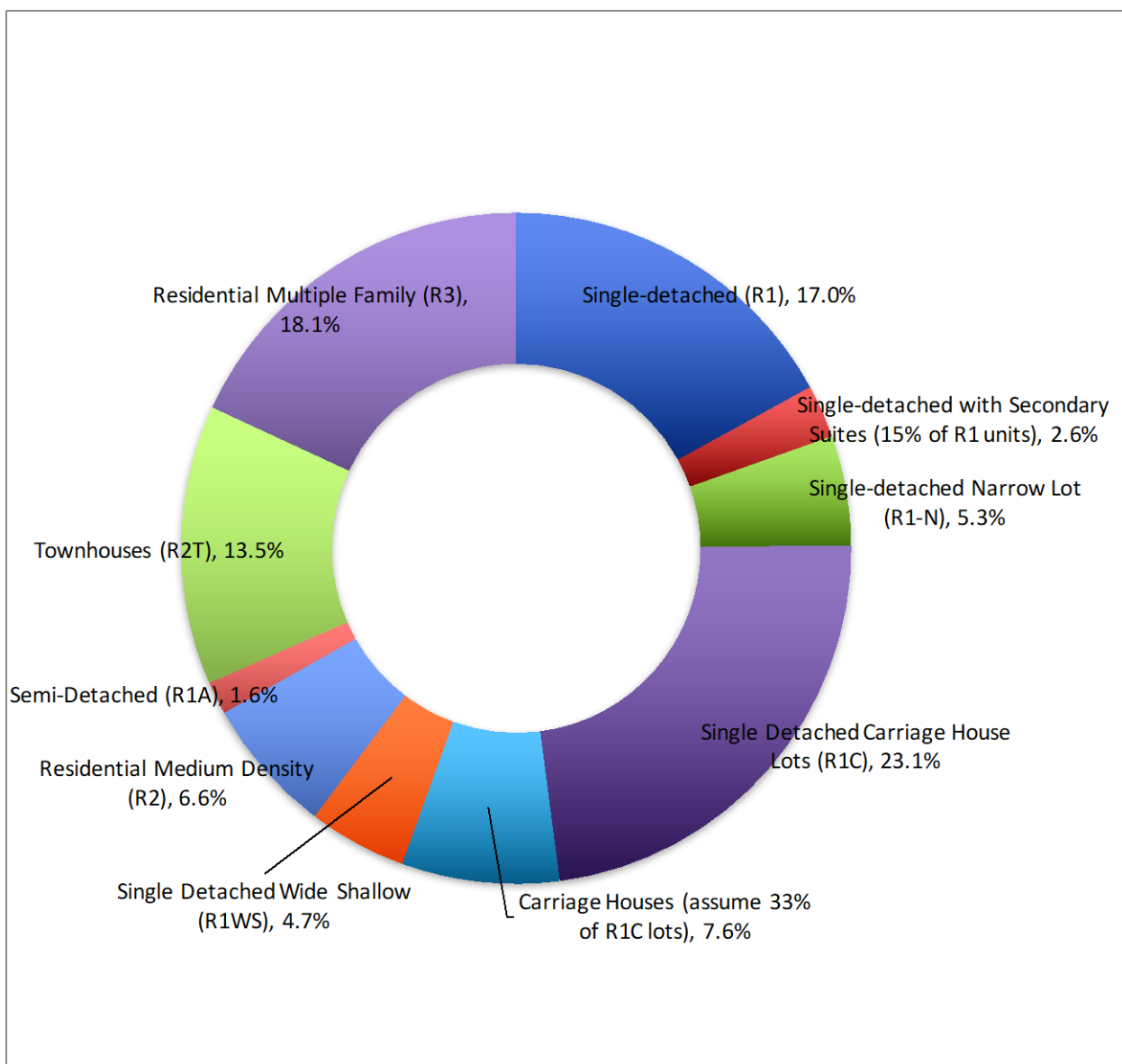


Table 4: Housing Mix & Estimated Population

Housing Mix	Hectares	Acres	# of Dwelling	% of Housing	Estimated Population
Single-detached (R1)	13.42	33.14	289	17.0%	694
Single-detached with Secondary Suites (15% of R1 units)	-	-	43	2.6%	104
Single-detached Narrow Lot (R1-N)	3.43	8.47	90	5.3%	216
Single Detached Carriage House Lots (R1C)	18.18	44.89	392	23.1%	940
Carriage Houses (assume 33% of R1C lots)	-	-	129	7.6%	310
Single Detached Wide Shallow (R1WS)	3.74	9.23	81	4.7%	193
Residential Medium Density (R2)	3.19	7.88	112	6.6%	268
Semi-Detached (R1A)	0.80	1.98	27	1.6%	65
Townhouses (R2T)	6.54	16.15	229	13.5%	549
Residential Multiple Family (R3)	3.62	8.94	308	18.1%	738
Total Residential	52.92	130.67	1,699	100.0%	4,079
<i># Number of residents per dwelling unit based on 2011 Census</i>	2.4				
<i>Densities calculations are based on the assumptions as outlined following assumed averages, exact density and unit counts may differ at the time of subdivision and development permit.</i>					
	R1	<i>Average lot size:</i>		464.00	
	RC1	<i>Average lot size:</i>		464.00	
	R1N	<i>Average lot size:</i>		381.00	
	R1WS	<i>Average lot size:</i>		464.00	
	R1A	<i>Average lot size:</i>		297.50	
	R2	<i>du/ha</i>		35	
	R2T	<i>du/ha</i>		35	
	R3	<i>du/ha - estimated density for a</i>		85	
		<i>four storey building with under building parking</i>			

4 PARKS AND OPEN SPACE

4.1 OVERVIEW

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

Section 13 NW/SW has been designed to provide easy access to high quality parks and green spaces for all residents. The neighbourhood includes a variety of parks and open spaces. Parks and open spaces include:

- Neighbourhood parks, including:
 - a park associated with the K-9 Catholic school site
 - a park at or near the centre of each residential area
- Linear parks/greenways, including:
 - greenways along existing utility right-of ways
 - naturalized green spaces surrounding the stormwater management facilities
 - small linear parks or 'cut-throughs' to provide easy pedestrian movement
- Other Public Utility Lots (PULs) including areas surrounding abandoned oil/gas wells

In total, the Section 13 NW/SW NASP includes 27.38 Ha (67.60 acres) of green space representing 23.5% of the gross plan area.

4.2 PARK & OPEN SPACE TYPES

4.2.1 NEIGHBOURHOOD PARKS

A 4.22 hectare (10.42 acre) neighbourhood combined school/park site is included in the north-east portion of the plan. This school/park site is anticipated to include sports fields that can be used by the school and neighbourhood. A conceptual layout for the school site is shown below as Figure 15.

Each residential district (neighbourhood sub-area) has been designed with a neighbourhood park at its centre. This provides easy access to high quality green space for all residents as well as resident surveillance of the parks. Anticipated amenities located within the neighbourhood parks include children's play structures, seating nodes and possibly community gardens and food forests. These parks are roughly 0.8 to 1.2 hectares (2 to 3 acres) each.

In some cases, lots are designed so that homes will face directly onto the park providing an even greater level of surveillance and community "ownership".



4.2.2 LINEAR PARKS & PEDESTRIAN CONNECTIONS

Several linear parks are included to facilitate pedestrian and cycling connections through the neighbourhood and to adjacent regional trails and other neighbourhoods. These linear parks are at least 10metres wide each, in order to accommodate a multi-use trail and landscaping. Seating areas may also be included.



4.2.3 NATURAL AREAS

The planning team carefully considered the merits of incorporating the existing seasonally wet areas into the parks and green space system. However, it is unlikely that these areas will continue to function as wetlands once development has occurred around them and therefore the team has decided not to incorporate them into the neighbourhood green spaces. Furthermore, the existing wet areas were not considered good locations for neighbourhood parks as they are not central to the housing areas. The developer will work with the City to incorporate aquatic vegetation from these wet areas into the stormwater management ponds areas. The developer will also work with Alberta Environment and Parks to attain the appropriate approvals.

4.2.4 UTILITY RIGHT-OF-WAY CORRIDORS



The Section 13 NW/SW neighbourhood includes two major linear green spaces. One is the TransCanada Pipeline right-of-way (18 metres wide). The other is the AltaLink (transmission line) right-of-way (36 metres wide) and adjacent ATCO Pipeline right-of-way (20 metres wide) on the eastern edge of the property which is likely to continue to be used for many more years. These right-of-ways provide the opportunity for strong north-south off-street pedestrian and cycling routes. In the case of the TransCanada Pipeline right-of-way, some houses face onto this linear green corridor. These lands are not included as Municipal Reserve Lands (MR).

4.2.5 STORMWATER MANAGEMENT FACILITY AREAS

Three stormwater management facilities (wet ponds) are included in the Section 13 NW/SW neighbourhood. The engineering concept for these areas is described in Section 7. In addition to providing stormwater management function, these areas also provide the opportunity for creating valuable green space for the community, and habitat for wildlife. These areas will incorporate more natural vegetation than other parks in Section 13 NW/SW and, therefore, will provide a “green refuge” for observing nature. These areas will also contain trails and seating areas. Access to these areas will be via the municipal road system.



Figure 14: Parks & Open Spaces



Table 5: Parks and Open Space

Open Space Type	Hectares	Acres	% of Gross Plan Area
Municipal Reserve (P1)	11.68	28.84	10.0%
Neighbourhood Parks	6.87	16.96	5.9%
School/Park site	4.23	10.44	3.6%
Linear Parks (not including utility ROWs)	0.58	1.43	0.5%
Public Utility Lot Excluding SWMF	0.32	0.79	0.3%
Stormwater Management Facility (SWMF)	5.48	13.53	4.7%
Pipeline & Altalink ROWs	9.90	24.44	8.5%
Total	27.38	67.60	23.5%

At 10% of the gross plan area, the amount of Municipal Reserve (MR) meets the 10% that may be required of a developer by the municipality under the Municipal Government Act. MR has not been calculated for the southern acreage lot but will be required if the owner of this lot decides to subdivide. If this acreage property does subdivide, the city would prefer the preservation of some of the existing trees rather than a cash-in-lieu payment. It is also understood that the developer will not be compensated for providing any public utility lot (PUL) over 30% of the developable area.

Figure 15: School and Park Site Conceptual Layout Plan



Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3217/B-2021)

5 MOBILITY & CONNECTIVITY

5.1 OVERVIEW

The Section 13 NW/SW NASP has been designed to create connections to surrounding destinations and encourage its residents to adopt multiple modes of transportation with an emphasis on high quality pedestrian connections and convenient, accessible transit. Cycling is also encouraged through the provision of safe, connected cycling routes. Cars are accommodated but the intent is that vehicles and their associated infrastructure (roads, parking lots) do not dominate the neighbourhood. The design of the neighbourhood is intended to create connections to surrounding destinations including the Timber Ridge commercial area, Balmoral Golf Club and adjacent neighbourhoods.

5.2 MULTI-MODAL MOVEMENT

5.2.1 PEDESTRIAN ENVIRONMENT

The neighbourhood design emphasizes a high quality, safe pedestrian environment including safe and accessible walking/cycling routes to school. This is achieved by:

- Providing shopping, transit stops and community amenities in a central node that is within walking distance of all residences;
- Including sidewalks or trails on both sides of all streets;
- Planting shade trees along streets;
- Creating linear parks that includes off-street trails to make walking convenient, and enjoyable.
- Reducing the right-of-way width of Ross Street adjacent to the commercial parcels to create pedestrian-friendly “urban” cross section and reasonable pedestrian crossing distances.
- Including pedestrian-friendly amenities and infrastructure around the commercial areas including seating and weather protection.

Off street multi-use trails will be constructed as 2.5 to 3.0 metre-wide paved surfaces suitable for walking, running, cycling, roller-blading, strollers and wheelchairs and designed to link key destinations within and beyond the neighbourhood. Separated sidewalks of 1.5 metres will be installed along local streets. Collector streets will include a 2.0 metre wide sidewalk and a 3.0 metre wide multi-use trail.

Connections from the internal pedestrian network to the regional trail network will be provided at the periphery of the neighbourhood via sidewalks and multi-use trails. A pedestrian overpass has been proposed in the Northland Drive/20th Avenue Functional Planning Study (2008) to cross 20th Avenue at 39th Street and this will be connected to the Section 13 NW/SW trail system.

Figure 16: Multi-modal Transportation Network



5.2.2 CYCLING

Today, only 1.3% of all trips are made by bike in Red Deer. Red Deer's relatively small geographic size means that many vehicle trips could be made by bicycle. As described in Red Deer's Mobility Playbook, median commuter distances are 3 to 4km, which is a 12-minute cycle ride. Downtown is approximately 5 to 6km from Section 13 NW/SW making it a reasonable length trip (20 minutes) to complete by bicycle.

However, encouraging residents to cycle means providing a safe, convenient cycling environment and that means providing high quality cycling infrastructure.

Cycling in Section 13 NW/SW has been designed to be safe and comfortable and will be accommodated as follows:

- Local streets and collectors will accommodate cycling on the street;
- Off street cycling is accommodated along the regional trail system (contributing to the regional trail system identified in the East-Hill MASP) and in linear park areas; and
- Bicycle racks will be provided in the commercial areas, and, in front of multi-family and institutional buildings.

It is also hoped that improvements will continue to be made to the city-wide bicycle network.

5.2.3 PUBLIC TRANSIT

Currently, only 3.8% of all trips are made by bus in Red Deer. In order to give residents a realistic choice of using transit, buses must be relatively frequent, reliable and close to homes and services (convenient). In addition, bus and bus shelter accessibility and comfort are important factors in encouraging people to use transit. Bus stops must be convenient and should be located within a 5-minute walk (roughly 400 metres) of most residences.

A bus route is included along Ross Street and along the collector streets within Section 13 NW/SW as shown in **Figure 16**. Stops are included at the entrance points to the community, the commercial node, near the school and centrally within the southern part of the residential area. These locations provide access to a bus stop for almost all residences within a 5 minute (400metre) walk and no residence is more than 450metres from a bus stop.

5.2.4 DRIVING & PARKING

Most commuters will travel via local and collector roads to the Ross Street arterial and then head west to downtown or turn north or south on the 20th Avenue expressway. Section 13 NW/SW is designed to accommodate vehicles whilst not letting them dominate the environment. Lanes are used throughout most of the neighbourhood so that vehicle access and parking is at the rear. This allows for on-street parking at the front of the unit, less curb cuts, more street trees and a more visually appealing streetscape.

A modified grid pattern of streets allows for convenient access to all parts of the neighbourhood and a fairly even distribution of traffic across a large area.

Major traffic generators in the neighbourhood are the commercial parcels and the school. Therefore, these are located along the arterial or collector streets to promote transit access and minimize excessive traffic on local streets.

Commercial Areas adjacent to busy streets like Ross Streets can still be designed to be pedestrian-friendly by including wide sidewalks, street trees, pedestrian weather protection (awnings) and glazing that gives the impression of street-fronting retail.



5.3 STREET TYPES AND SECTIONS

5.3.1 20TH AVE. EXPRESSWAY

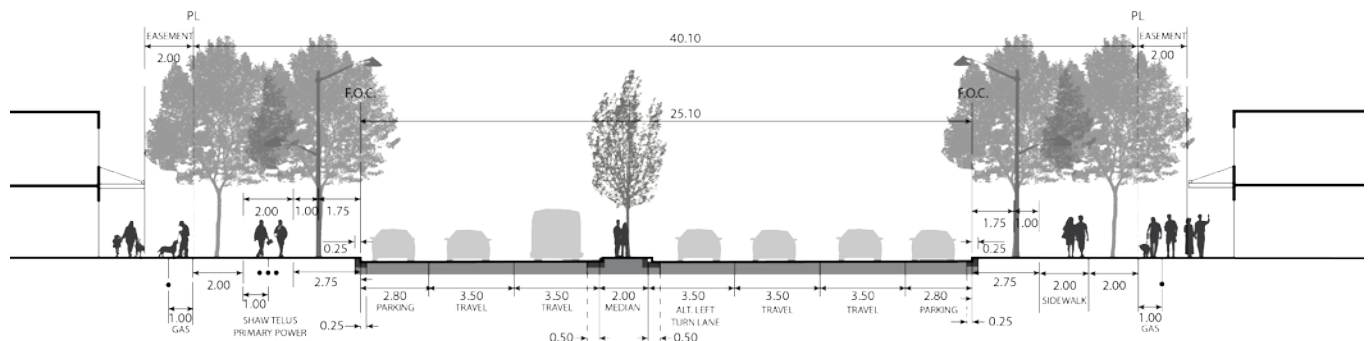
While not part of the neighbourhood planning area, the 20th Avenue expressway forms an important part of the future context for Section 13 NW/SW. Access to the expressway will generally be every 1,200 to 1,600 metres via grade separated interchanges or at-grade intersections (such as the planned at-grade signalized intersection at Ross Street). In the vicinity of Section 13, additional access to the 20th Avenue expressway is planned, as the intersections with 39th Street and 55th Street will remain, but will be converted to at-grade right-in/right-out accesses.

The City has proposed a 95 metre wide right-of-way to accommodate the future expressway as well as a trunk sewer line, regional multi-use trail and noise attenuation berm.

5.3.2 ROSS STREET GATEWAY ARTERIAL

The eastward extension of Ross Street is one of the primary access points to the neighbourhood and also will act as a gateway to the City. Ross Street curves gently to meet 55th Street (Highway 11) eastwards of the intersection with 20th Avenue. 55th Street is currently a highway (Highway 11), but it will eventually be downgraded to Collector Road status once Highway 11 is realigned as part of Alberta Transportation's long-term plans.

Figure 17: Arterial Road Cross-Section (Ross Street Commercial Area)



While the normal City standard for an arterial is 60 metres wide (Figure 18), the plan proposes a reduced width cross section of 40.1 metres through the commercial area (Figure 17). This will allow a more urban, pedestrian-friendly cross section in this location where there is likely to be a lot of foot traffic. This reduced width will also lend itself to a “gateway” treatment at this location, which is one of the objectives of the City’s multi-neighbourhood plan. The cross-section includes a

double row of trees to provide pedestrian shade, separation from traffic and an attractive environment. Additionally, the Ross Street arterial should include pedestrian and cycling related infrastructure such as benches, pedestrian lighting, dedicated bike lanes, etc. It may be desirable for the City to reduce speed limits through this area.

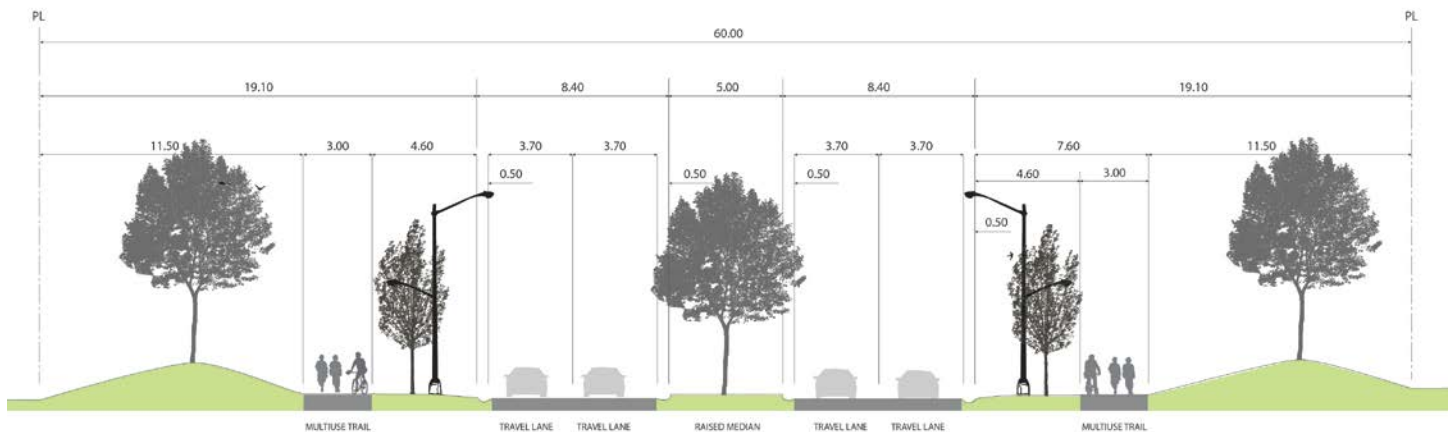
As the width of the travel lanes is slightly narrower for this part of Ross Street, the travel lane width should taper gradually to avoid abrupt changes in width at the intersection.

CPTED principles should be applied to the design of this area. This includes avoiding landscaping or building entryways that provide places to hide or obstruct public views and ensuring well lit pedestrian areas.

5.3.3 STANDARD ARTERIAL ROADS

Eastward of the Gateway commercial area, Ross Street will take on a more standard 60-metre wide arterial cross-section. In this stretch, berms will be built on either side of Ross Street, to minimize the visual and acoustic impact of traffic on the adjacent development. The berm design will be consistent with the City’s Engineering Design Guidelines.

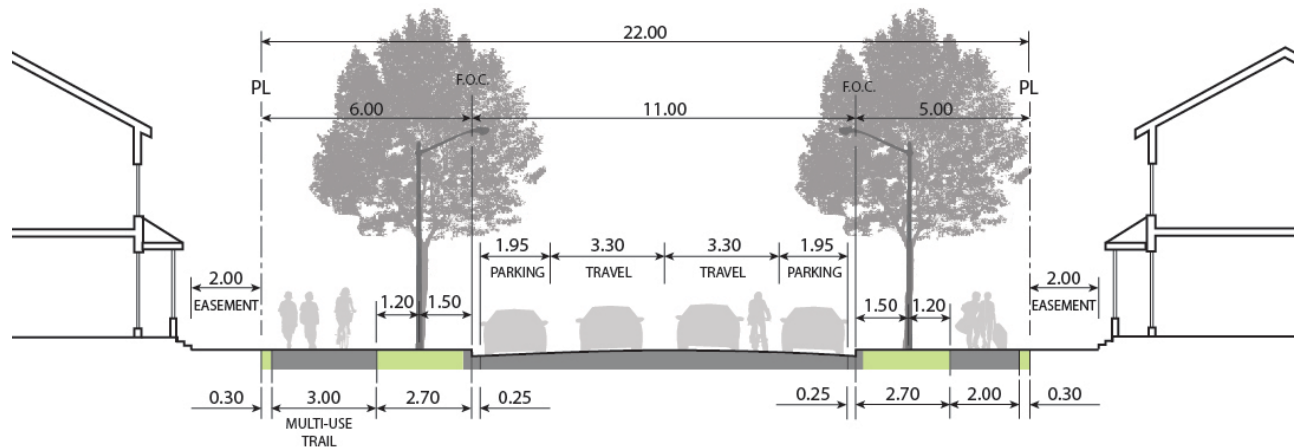
Figure 18: Arterial Road Cross-Section (60m)



5.3.4 COLLECTOR ROADS

Collector roads in Section 13 NW/SW will have a 22 metre wide right-of-way with 3.3 metre travel lanes as shown below. The collectors are designed as the main thoroughfares through the residential parts of the neighbourhood and to be the main route for transit vehicles. Homes can front onto the collector roads.

Figure 19: Typical Collector Road Cross-Section



5.3.5 LOCAL ROADS

Local roads are designed to carry light traffic accessing residential areas. They are designed for slow-moving vehicles and can also accommodate bicycles safely within the travel lanes. Typical local roads in Section 13 NW/SW are contained within an 18.5 metre wide right-of-way as shown below. Travel lanes are proposed to be 2.75 metres. Narrower travel lanes are a way of calming traffic through residential areas.

In addition, a 20.6 metre local road cross section will be used where the local road is the only access road to a property (i.e. no secondary alternative access exists). In this case travel lanes are proposed to be 3.5 metres. This will ensure emergency vehicles have clear, unobstructed access to all properties.

Figure 20: Typical Local Road Cross-Section

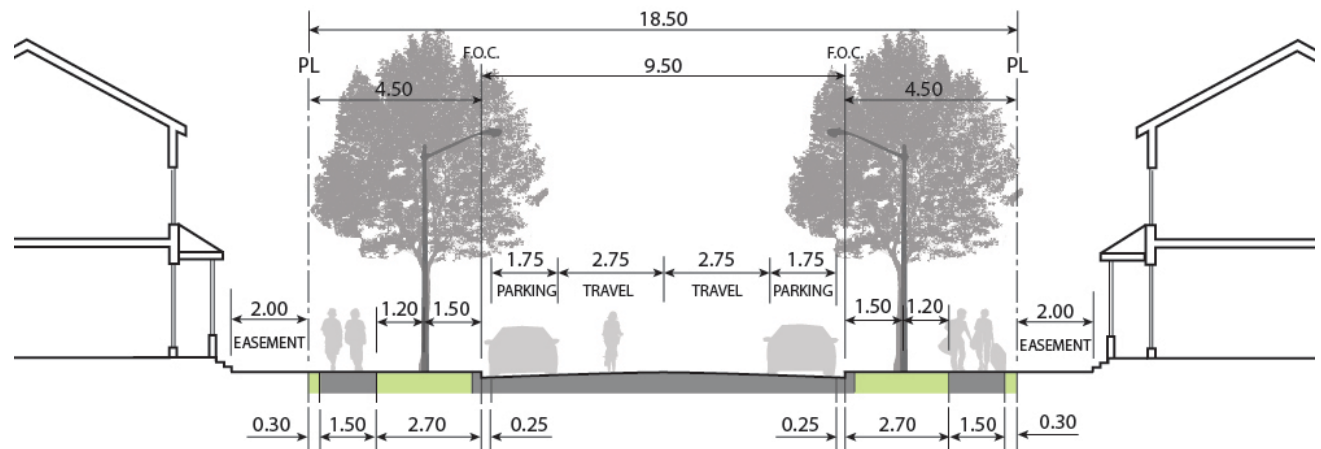
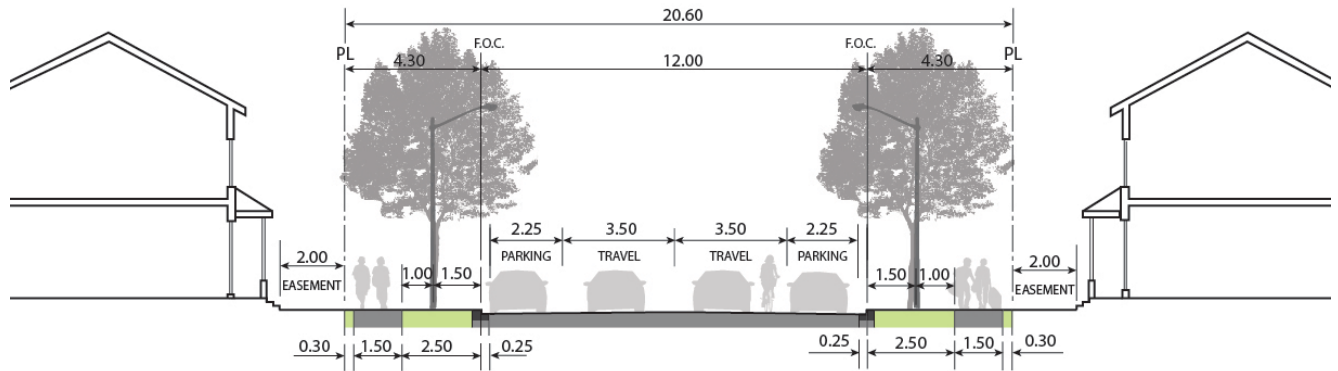


Figure 21: 20.6m Local Road Cross-Section



5.3.6 LANES

Lanes are used to access parking spaces (garages at the rear) for most of the lots in Section 13 NW/SW. Lanes are designed for slow-moving local traffic and can be used as alternate pedestrian and cycling routes through the neighbourhood. Typical lanes will have a 7.0metre wide cross-section with a 2.0 metre easement on the adjacent property to protect the working space for potential repairs to the utilities within the lane and/or for shallow utilities. In some cases, where homes are park-facing (section see section 3.5), lanes are the primary vehicle access point to the home. Where the lane is the only means of vehicle access, a slightly wider (8.1metre) paved lane cross-section will be applied (Figure 23). Lanes will also be paved where they are used to access carriage home (R1C) lots.

Figure 22: Typical Lane Cross-Section

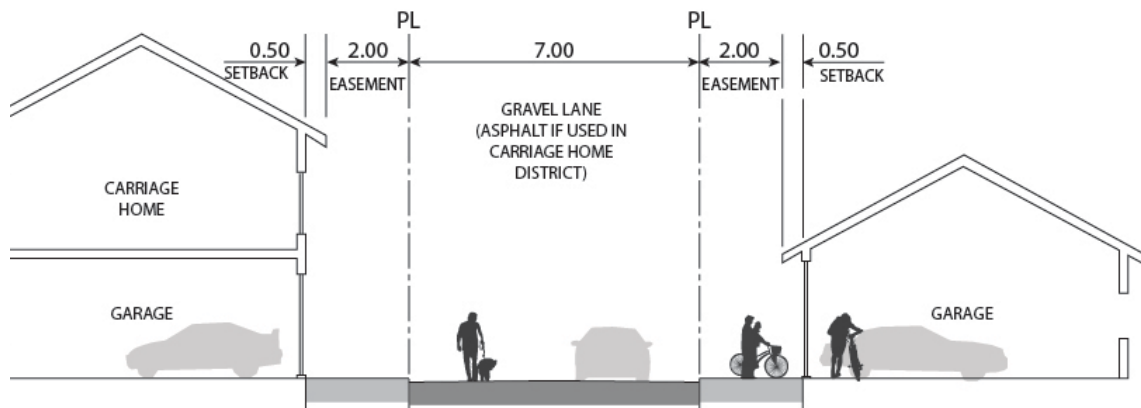
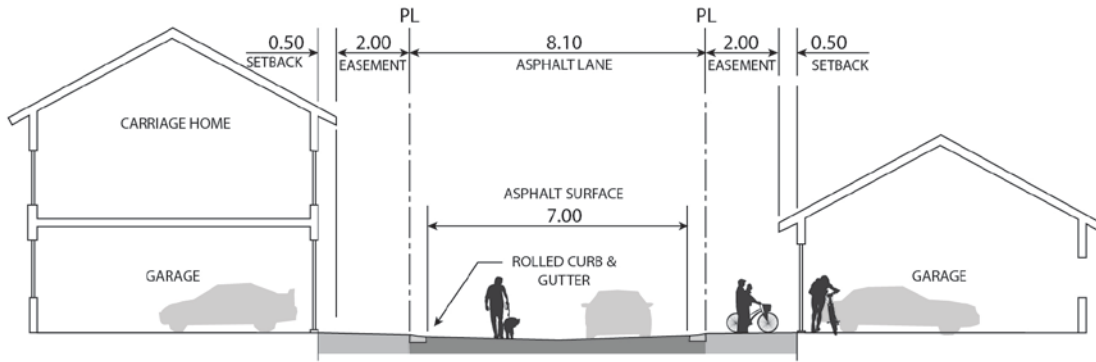


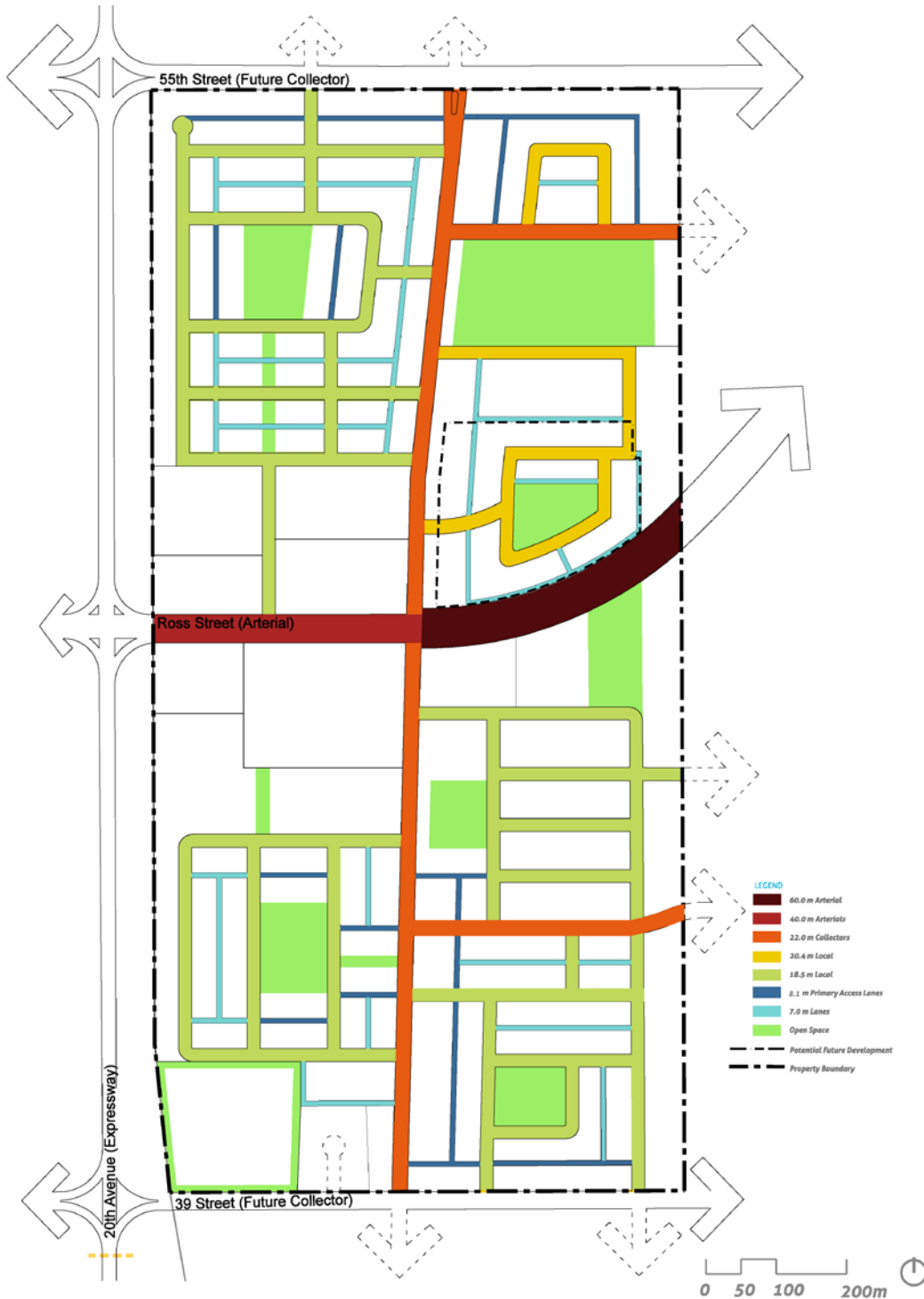
Figure 23: Primary Access Lane Cross-Section



5.4 STREET HIERARCHY

Figure 24 shows the location of each type of street in the Section 13 NW/SW neighbourhood.

Figure 24: Street Hierarchy



5.5 OTHER

5.5.1 PARKING

On-street parking will be allowed on all Section 13 NW/SW local and collector roads to accommodate visitors. On-street parking will be regulated by typical Red Deer parking bylaws including those regarding extended stays and restricted parking surrounding intersections, fire hydrants and crosswalks.

Parking will be allowed on Ross Street adjacent to the commercial area. This on-street parking provides additional protection for pedestrians, slows traffic through the commercial area and provides convenient access for shoppers.

5.5.2 TURN-AROUNDS

Some roads constructed for Section 13 NW/SW will connect through to the future neighbourhood to the east. Until such a time that this adjacent development occurs, roadways intended to connect into adjacent neighbourhoods will be constructed with turn-arounds at their termini. These turnarounds will be built to City of Red Deer standards.

5.5.3 DRIVEWAYS

Driveways should be designed to meet the roadway at 90 degrees and are not permitted to 'flair out'. This will preserve boulevard space and create more space to accommodate trees and on-street parking.

5.5.4 TRAFFIC CALMING

Section 13 NW/SW has been designed to lower traffic speeds on local roads using a number of interrelated approaches. By funnelling traffic quickly onto the collector and arterial road network, drivers spend less time on local roads and therefore the psychological need for speed on local roads is reduced. The grid pattern of street network has numerous intersections and short blocks (closely spaced intersections) which means drivers have to stop frequently on local streets, preventing the build-up of high speeds.

Most of the local roads in the Section 13 NW/SW have been designed with narrow travel lanes (2.75 metres). These narrow lanes create a sense of restricted movement for drivers and therefore encourage slower speeds. On street parking will be allowed on all local and collector streets in Section 13 NW/SW (except around major intersections). Along with street trees and shallow front yard setbacks, on-street parking creates a sense of enclosure in the street, simultaneously forming a comfortable pedestrian environment as well as slowing local traffic.

6 NEIGHBOURHOOD DESIGN & CHARACTER

6.1 OVERVIEW

Urban design for Section 13 NW/SW will place great emphasis on the quality and character of buildings, streets and open spaces and the relationship of these elements.

6.2 BUILT FORM AND PUBLIC REALM

The relationship of buildings to streets in the Section 13 NW/SW Neighbourhood should foster an active pedestrian-oriented street life and public realm. Buildings should relate well to the street and to each other. Building design should provide opportunities to maintain views and sunlight penetration to streets and open spaces and minimize shadowing. Residential buildings should generally front onto streets and/or public spaces.

While this plan is not intended to specific architectural design, a high quality of design and architectural variety within an overall theme is encouraged.

6.2.1 ARCHITECTURAL CONTROLS

A set of architectural controls will be developed by the developer and utilized by home builders in Section 13 NW/SW to maintain consistency and high quality design throughout the neighbourhood. Items addressed in these controls may include:

- . architectural style
- . house size, massing, and style repetition
- . colours and building materials
- . garage details, driveway materials
- . special guidelines for buildings on corner lots and at view termini
- . design and efficiency standards for outdoor lighting (energy efficient, timer or light cell regulated, shielded to meet dark skies principles)
- . landscaping design (nature-scaping and native species requirements).

The plan will make use of one of the pre-approved City of Red Deer lighting standards.

6.2.2 COMMERCIAL GATEWAY TREATMENT

Ross Street within the commercial area of the Section 13 NW/SW neighbourhood will act as a Gateway to east Red Deer and as such should be designed with a special treatment of the street cross-section (see section 5.3). The street cross section here is narrower, more urban and pedestrian friendly and should include urban street infrastructure such as decorative bi-directional street light poles, high quality side-walk paving treatments, benches, waste receptacles etc.

The commercial area will also have regard for the gateway. While buildings within this area will primarily orient towards internal parking lots, the side of the buildings facing Ross Street should be attractive and present a friendly face to street by including signage, attractive landscaping and other architectural details to avoid long stretches of blank walls.

7 INFRASTRUCTURE & SERVICING

7.1 OVERVIEW

Section 13 NW/SW will be serviced using a conventional approach to stormwater, sanitary sewer and potable water distribution as described below. All three systems are intended to tie into future trunk mains along 20th Avenue when they are extended to the NASP area.

7.2 STORM WATER

Ultimately, the development lands will be serviced by a storm trunk sewer that will be constructed within the 20th Avenue (Expressway) roadway right-of-way. In order to provide stormwater servicing to this development the existing storm trunk, which is currently constructed to the intersection of 30th Avenue and The Expressway, will need to be extended approximately 4,700 metres east and then south along the future Expressway roadway alignment. This storm trunk discharges directly to an existing outfall to the Red Deer River just south of the River Bend Golf Course.

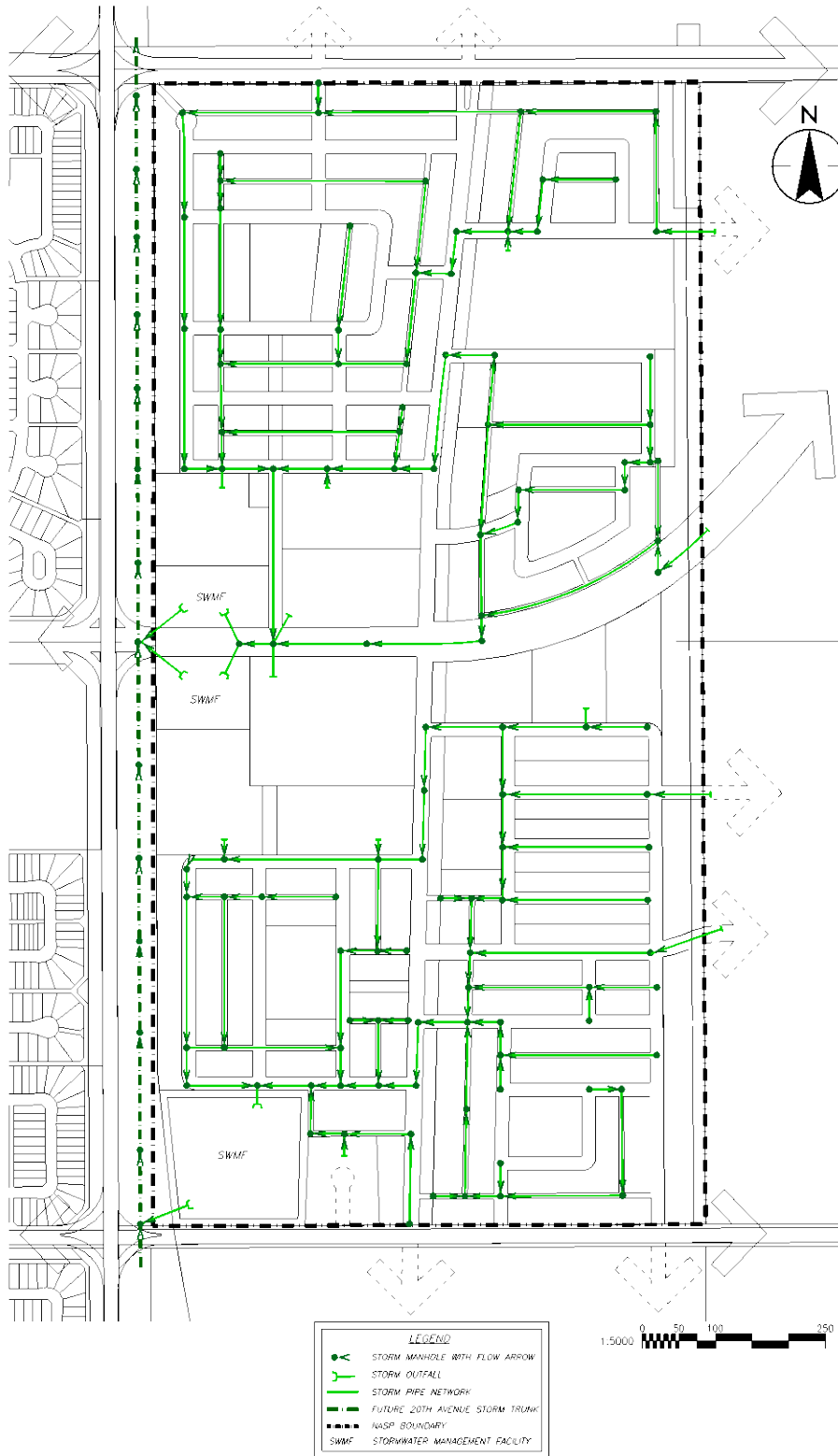
The natural drainage from these lands is east to west and the minor and major storm drainage system will be constructed to follow the natural topography of the land. The minor storm system will consist of storm pipe infrastructure constructed below ground to convey stormwater during minor events. A major stormwater system, consisting of overland drainage routes within the roadways and lanes, will be developed to control stormwater generated from the very large, infrequent, rainfall events.

All stormwater generated from the both the minor and major storm systems in this development will be routed through a stormwater management pond. In this development there are three stormwater ponds. The first is located in the extreme southwest corner of the south quarter section. This stormwater facility will detain stormwater runoff from the south quarter section during major events and will control the discharge rate into the 20th Avenue storm pipe system. Similarly, two interconnected ponds at the intersection of Ross Street and 20th Avenue, will provide stormwater detention and controlled discharge from rainfall events from the north quarter section.

Ultimately, the development lands will be serviced by a storm trunk sewer. The stormwater management ponds in this development will be developed as constructed wetlands. These facilities should be designed to act as bio filters and remove sedimentation and pollutants before discharging into the 20th Avenue storm trunk and ultimately the Red Deer River. They should be designed to mimic as close as possible the processes found in a natural wetland ecosystem. When development proceeds on the individual phases any opportunity to incorporate onsite stormwater best management practices to infiltrate and re-use stormwater should be encouraged and supported. The stormwater system is shown in **Figure 25**.

An access agreement will need to be registered on title to ensure that access is maintained through the commercial site to the SWMF immediately south of Ross Street.

Figure 25: Stormwater System



Section 13 NW/SW Neighbourhood Area Structure Plan

7.3 SANITARY SEWER SYSTEM

Similar to the storm sewer system, the development lands are intended to be serviced from a sanitary trunk to be constructed in the 20th Avenue (Expressway) roadway alignment. The construction of this new trunk was recently initiated when it was connected to the City's Wastewater Treatment Plant, extended east under the Red Deer River, and then up the river valley escarpment to its current termination point at the intersection of 30th Avenue and Expressway Intersection. In order to service this development the sanitary trunk will need to be extended approximately 4700 metres, along the future Expressway roadway alignment, to the northern boundary of this development. Ultimately, it is anticipated the sanitary trunk to be constructed from 55 Street, along 20th Avenue right-of-way, to 39th Street.

As illustrated in **Figure 26**, there are three connections to the 20th Avenue trunk to service the entire development area. All the wastewater generated from the entire development will be collected by an underground sanitary sewer system and routed to these 20th Avenue trunk connection points.

In the event that City of Red Deer 20th Avenue sanitary trunk is not constructed prior to development proceeding, there may be an opportunity to negotiate a connection to the SRD Regional Sewer Line. As illustrated on **Figure 26**, there is an existing tee that was installed at the intersection of 20th Avenue and Ross Street. In order to connect to this tee a lift station would be constructed in the development. Most likely this lift station would be built near in the extreme northwest corner of the development. This lift station would pump wastewater from the gravity system, via a force main, to a connection to the SRD Regional Sewer Line tee. In the event that this servicing option was deemed required there would need to be a NASP amendment in order to incorporate a public utility lot into the plan area to accommodate the proposed lift station.

7.4 POTABLE WATER DISTRIBUTION SYSTEM

This development will be serviced from a new water reservoir and pump house at the future intersection of the 20th Avenue and 67th Street. This new water reservoir will service future development areas east of 20th Avenue that will be situated in a new City of Red Deer water pressure zone.

A water trunk will be routed from the water reservoir, within the 20th Avenue roadway alignment, to service this development. As shown in the water servicing concept, three water connections are contemplated to connect to the 20th Avenue water trunk. From these connection points water will be distributed throughout the neighbourhood to meet both domestic and fire flow needs for the community. The water system will be designed in accordance with the standard City of Red Deer water grid system. This will consist of a main running east/west along both the north and southern boundaries of the development as well as a main running east/west through the middle of the development. The overall water distribution system is shown in **Figure 27**.

Figure 26: Sanitary Sewer System

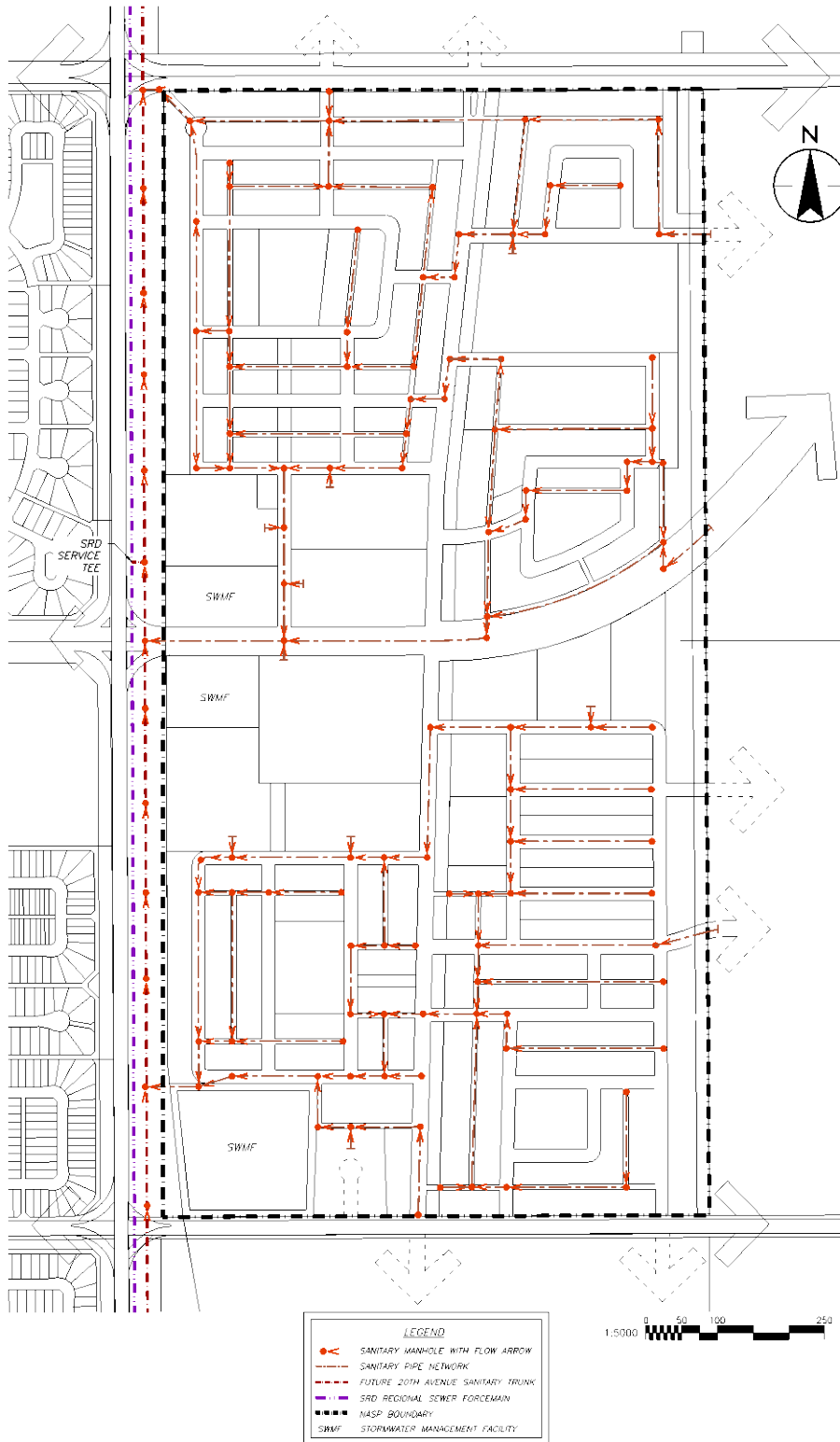
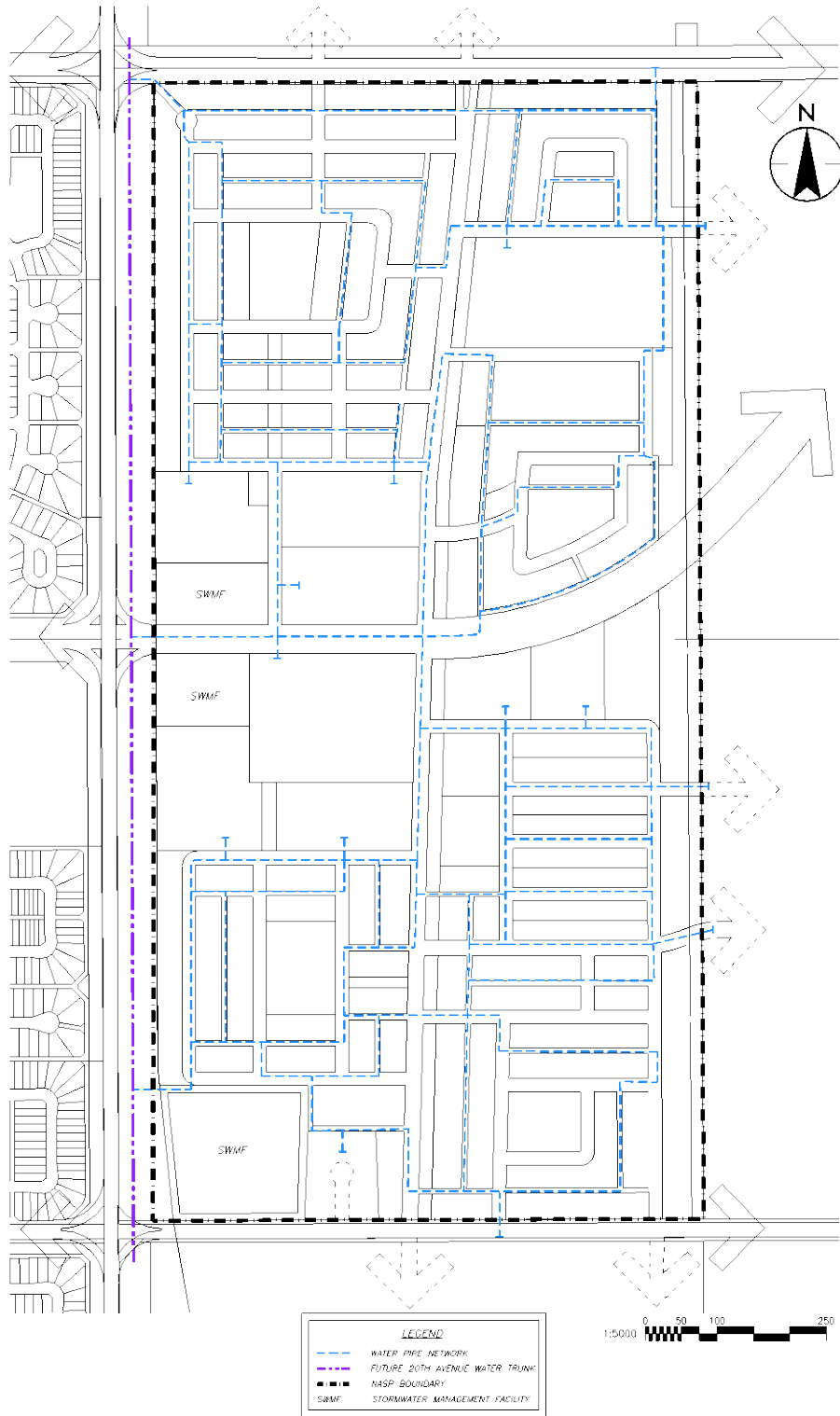


Figure 27: Potable Water Distribution System



7.5 SHALLOW UTILITIES

Shallow utility services may be provided by the following companies:

- ATCO Gas (Natural Gas)
- The City of Red Deer E.L. & P. Department (Electrical and Streetlights)
- Telus Communications (Telephone)
- Shaw Cable (Cable Television)

The shallow utility alignments will be established during preparation of the Servicing Study for the Section 13 NW/SW NASP area.

7.6 GARBAGE, RECYCLING, SNOW REMOVAL

Garbage and recycling collection, and snow clearing, will be the responsibility of the City of Red Deer for all areas in the neighbourhood except for the multi-family and commercial sites with internal roadway networks, schools and assisted living facilities. These sites will have their removal will be done by a private company arranged by a condominium association or apartment management company or by the site operator. In most instances, the garbage pickup will be via the lanes except in locations where there are no lanes, in which case garbage pick-up will be from the front of the unit.

7.7 REMOVAL OF OIL & GAS INFRASTRUCTURE

It is anticipated that the oil and gas infrastructure in the area may remain operational for some years to come and therefore development of some of the area will be delayed until such time as this infrastructure is no longer in use. The developer or owner will work with pipeline owners and well operators during the initial site preparation process, completed on a phased basis, to decommission and remove all infrastructure located within the plan area once it is no longer needed and prior to development. Following physical removal of the pipelines, the developer or owner will request the right-of-way be discharged from the title.

7.8 GREEN BUILDING & LANDSCAPING PRACTICES

Developers of large multi-family and commercial sites are encouraged to consider district energy systems that provide heating and/or cooling to more than one building.

Builders and home-owners are encouraged to adopt high standards of energy and water efficiency in their buildings and landscapes and to consider rating systems such as BuiltGreen and standards such as the Model National Energy Code for buildings. Other encouraged practices include:

- Using LED lighting

- Using energy infrastructure that can be easily adapted to alternative energy sources and servicing (e.g. hydronic space heating and central hot-water systems that could be retrofitted to connect to use renewable energy; solar hot water ready construction)
- Use building materials with recycled content and locally-sourced materials where available
- Provide 3-stream recycling facilities (recyclables, organics, garbage) within multi-family, commercial and institutional buildings. Providing composting facilities or area for this on site, is encouraged
- Provide secure, easily accessible storage of bicycles for at least 15% of regular building occupants required in all multi-unit residential (more than 3 units), commercial and institutional buildings in addition to outdoor bicycle racks
- Charging stations for electric vehicles within commercial and institutional buildings
- In larger projects, preferred parking should be provided for very small vehicles (smart cars), and alternative fuelled vehicles (hybrids, electric vehicles, biodiesel etc.)
- Avoid irrigation by using Low Impact Development techniques, nature-scaping, rain water capture
- Use only water saving fixtures and Energy Star appliances
- Plan more than the minimum requirements of trees
- Consider rooftop gardens/living roof
- Make public parking and commercial areas idle free zones by posting signs to that effect

7.9 EMERGENCY SERVICES

A new fire station in the Timberlands neighbourhood has been proposed which is less than five minutes away. The street network in the Section 13 NW/SW neighbourhood has been designed to allow emergency access to all buildings. Local roads with only one access point will be wider than typical local roads to ensure emergency vehicles can access all properties quickly and efficiently (see section 5.3).

7.10 GROUNDWATER

Ground water is known to be shallow in many parts of the NASP area and this may impact servicing and/or construction. Details on how this will be addressed will be included in the Servicing Study and more detailed analysis (and greater area coverage) of the ground water depths will be provided in later development phases. The area may require the infrastructure and building construction methods to be built to a higher standard to mitigate the impact of high groundwater.

8 IMPLEMENTATION

8.1 DEVELOPMENT PHASING

As a large mixed-used neighbourhood, it is not feasible or desirable to build all of the infrastructure to service the Section 13 NW/SW neighbourhood at one time. Rather, development will be phased as shown in **Figure 28**. The general phasing of Section 13 NW/SW begins at the 20th Avenue / Ross Street intersection and initially continues north. The phasing boundaries shown are intended to be general and conceptual in nature and may vary when applications to change land use and subdivision applications are made. As well, portions of separate phases may be developed concurrently if demand warrants it and/or if municipal servicing is made more efficient as a result.

Access to the existing gas wells and compressor station will continue to be provided via the service road off 55th Street (Highway 11) along the eastern property boundary.

Homes Fronting onto 55th Street

The properties facing onto 55th St. will not be permitted to be developed until Highway 11 has been realigned and 55th St. has been reclassified as a collector roadway. This is because currently 55th St. is a Provincial Highway and has an average daily volume of 9,000 vehicles/day which would require a noise attenuation berm to mitigate noise issues and would also present safety issues for vehicles accessing driveways. However, once Highway 11 is realigned as per Alberta Transportation's long-term plans, it is anticipated that traffic volumes on 55th Street will fall below 5,000 vehicles per day.

Homes facing 55th Street will be zoned R1N (Single-detached Narrow) which does not permit vehicle access from the front of the house. Therefore, vehicle access to homes fronting onto 55th Street will be via rear lane only. Front access by vehicles will not be permitted.

Until such time as these lots are developed, the land will remain vacant and planted with grass or field crops. A sign will be erected stating "Future Residential Land" to indicate the long-term intended use of the land.

Homes Fronting onto 39th Street

The homes fronting onto 39th Street can be developed immediately, however on-street parking will not be permitted on 39th Street until mitigation measures to slow country road traffic have been put in place. Additionally, if the city extends the bike lane from the west, this may potentially prevent on-street parking. The two local road accesses onto 39th St. may not be permitted until the above-mentioned mitigation measures have been put in place. This means that they could be constructed, but access will be limited/prevented until deemed safe by the City of Red Deer Engineering Department.

Homes facing 39th St. will be zoned R1N (Single-detached Narrow) which does not permit vehicle access from the front of the house. Therefore, vehicle access to homes fronting onto 39th St. will be via rear lane only. Front access by vehicles will not be permitted.

8.2 RE-ZONING AND SUBDIVISION

Following approval of this NASP by the City of Red Deer Council, it is anticipated that the developer will apply to amend the Land Use Bylaw to permit the new uses in this plan. For some of the land uses, alternative setbacks have been proposed in this NASP including:

1. Residential Single-Detached (R1) – Minimum front yard setback be reduced from 6.0m to 3.0m (minimum)/4.5m (maximum) for the house portion and 6.0m for any front-facing portion of the garage.
2. Residential Single-Detached Carriage Home (R1C) – Amend the Front Yard setback provisions to allow frontage onto a PUL lot (as well as a P1 zone).
3. Residential Semi-Detached (R1A) - Minimum front yard setback be reduced from 6.0m to 3.0m (minimum), 4.5m (maximum) for the house portion and 6.0m for any front-facing portion of the garage.

In these cases, it is requested that the City include these proposed setbacks for the Section 13 NW/SW Neighbourhood in the appropriate district in the Land Use Bylaw.

Subdivision to create lots must conform to The City of Red Deer Land Use Bylaw and all applicable statutory plans in addition to the informational requirements necessary for each application. Variances are allowed pursuant to the test in the MGA being met.

8.3 PLAN INTERPRETATION

8.3.1 AMENDMENTS

Once adopted, this Plan may be amended if necessary through a formal amendment process including consultation with the City of Red Deer and approval via municipal Council. Amendments will be required if major changes are made to roadway alignments or land uses. No amendments will be necessary due to servicing revisions, minor land use boundary changes, or minor adjustments to road cross-sections provided the intent of the NASP is maintained.

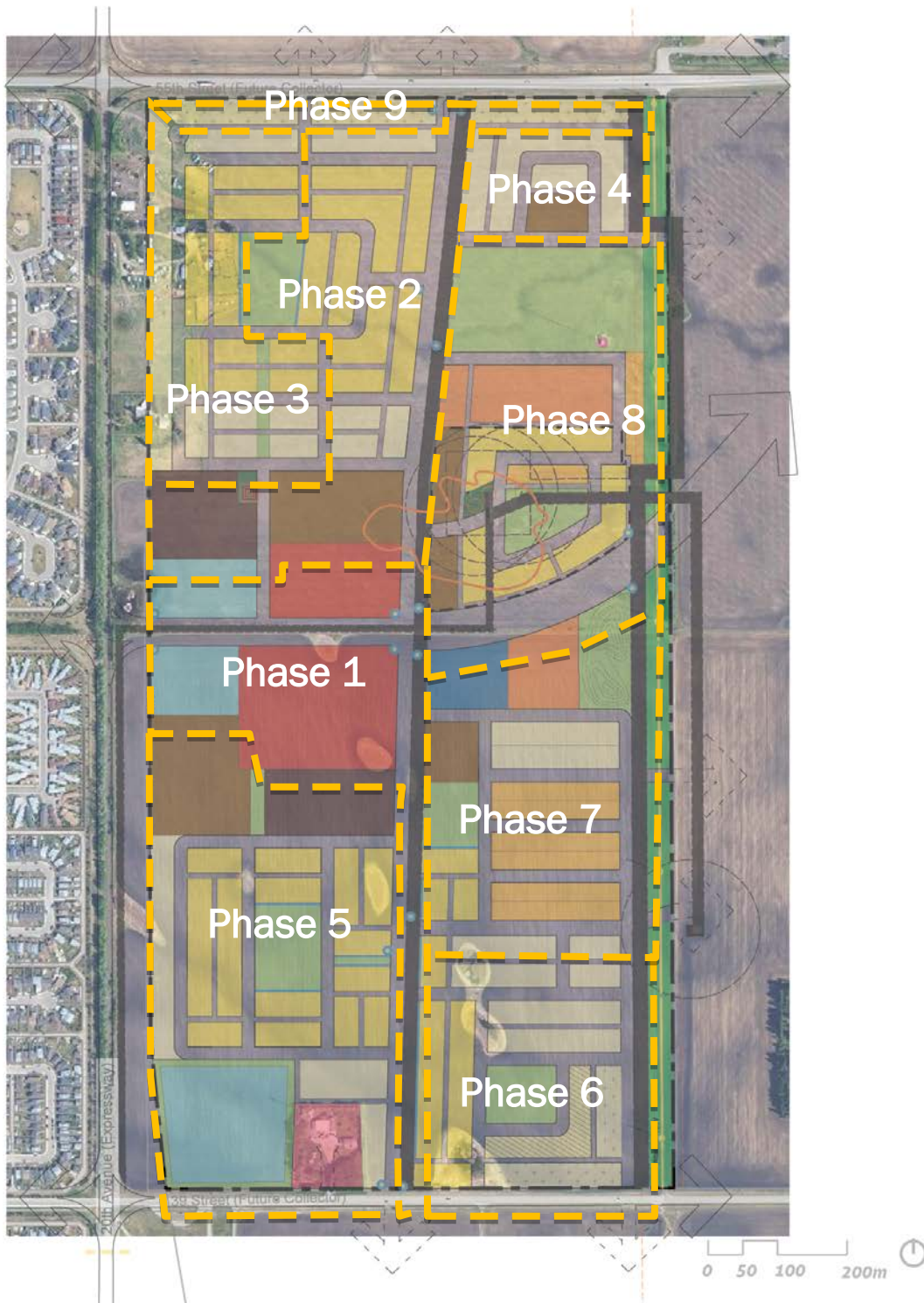
An amendment will not be necessary in the event that the linear park (pedestrian connection) in the NW quadrant is removed if engineering decides that mid-block crossings cannot be built to a sufficient safety standard. Consideration should be provided to realign the parcels, but if it ultimately has to be removed an amendment will not be required.

This NASP identifies two potential future land uses for the acreage parcel (Lot 1, Block 1 Plan 902 1065) located at the southern boundary of the planning area. An application to amend the zoning of this land to low residential uses (R-1) or Neighbourhood Commercial uses (C3) shall not require an amendment to this plan. This NASP also includes a detailed proposed commercial development conceptual plan (Figure 9(a)). Any future changes to the conceptual layout of these commercial sites, at the time of a development application, will not require an amendment to this plan and any future development of these commercial sites will not need to comply with this conceptual plan.

8.3.2 FINANCIAL IMPLICATIONS

Once adopted and following the maintenance period, it is anticipated that all roads, infrastructure and public spaces will become the property of the City of Red Deer. However, private roads and infrastructure, such as a bare land condominium development with named internal roads, will not be the property of the City.

Figure 28: Development Phasing



9 APPENDIX – DEVELOPMENT CHECKLIST

General Purpose

The purpose of the Development Checklist is to highlight conditions associated with future stages of development. The checklist is an internal administrative tool created to assist City staff when reviewing the various applications within the plan area. The checklist does not form part of bylaw for the approved area structure plan

Servicing Study and Detailed Design

- Noise and other environmental mitigation measures for the active gas compressor station will be determined at the servicing study stage.
- Buildings and roads shall not be located over abandoned wells.
- Detailed design will consider the concepts of CPTED.
- Houses facing onto 55th and 39th street will be accessed via rear lanes. Therefore no vehicle access to the front of the houses is proposed. Additionally, on street parking may be restricted if the 39 St. bike lanes are extended eastward into this area.
- The Developer may work with the City of Red Deer's Electrical Light and Power department during the Servicing Study stage to determine the most appropriate solution for providing lighting in the lane for park fronting homes.
- Lanes behind the park-facing homes should be 7.5 metres wide and paved.
- The developer will work with the City to incorporate aquatic vegetation from the existing wet areas into the stormwater management ponds areas.
- The stormwater management ponds will be developed as constructed wetlands.
- Determine appropriate method for pedestrians, moving along regional trail, to cross Ross Street.
- Determine reasonable access design and spacing for commercial area.
- Determine if on-street parking is appropriate along the gateway adjacent to the commercial area.
- Work with the developer and licensee to remove or relocate the pipeline right-of-way within Ross Street.
- Ensure safe sightlines for lane intersections.
- The 2.5m collector sidewalk should be located on the east side of the North-South collector.
- The 2.5m collector sidewalk should be located on the north side (school side) of the street for the East-West collector in the north quarter-section
- The 2.5m collector sidewalk would preferably be located on the north side of the street for the East-West collector in the south quarter section.
- Additional access requirements related to fire and emergency response for park fronting homes will have to be developed. One solution may be the addition of a PUL for frontages/spans greater than 60m (approximately 5 R1C lots). These PULs could also provide space for hydrants outside of the laneway.
- Mid-block crossings at laneways require additional safety considerations. Engineering will decide at the servicing study if the developer can move forward with construction.
- It is anticipated that electrical feeds to this area will come off the overhead line running north-south along the 20 AV URW. Single phase loops will run through the perimeter of the site to service the mainly residential development. A three phase loop will run through the center of the site to service the larger commercial loads anticipated.
- In order to facilitate this development, the overhead line currently running down the center of the 20 AV road right-of-way will need to be located to either the east or west side of

the widened right-of-way. This relocation must be done prior to development.

- FORTIS currently has a line running east-west on the south side of the 55 ST road right-of-way. While EL&P is in talks with FORTIS about the takeover of this line there is currently no timeline in place for the takeover. Any proposed changes to this road right-of-way will need to be done in conjunction with both EL&P and FORTIS.
- The NASP Area has identified high groundwater. Ensure that the conditions are further examined, and if required, construction will mitigate the effects of high ground water
- The configuration and signage relating to the intersection of the two Local roadways and the lane in the 'Potential Future Development' zone is to be confirmed at the design stage of that phase of the development.
- Phase 2 ESA – complete assessment to be submitted satisfactory to the City, prior to stripping or grading, servicing, redesignation to residential or commercial uses or subdivision for both the north and south quarter sections.
- Prior to development being approved in the southwest corner of the quarter section a Risk Assessment Plan is required to determine the appropriate development setback.
- Provide a Professional Risk Assessment Plan to determine the appropriate development setback distances address public safety, identify mitigation measures, and manage nuisance factors, ongoing industry access requirements, emergency planning, risk communication and public participation.
- The alignment of the trail in the park in the south-east of the north quarter section should align with the crosswalk on the western edge

Top Soil Stripping and Grading

- Prior to the issuance of top soil striping and grading, a Phase 2 ESA for the NW and SW quarters shall be completed and accepted by administration.

- Prior to the issuance of top soil striping and grading, remediation of the hydrocarbons will be required around the active well leases.
- Further soil and groundwater testing is recommended prior to proceeding with any remediation plans.
- A 100-metre setback is required around each active well-site. Lands within this setback cannot be developed until the wells are abandoned and decommissioned and the soils surrounding the area remediated.
- Access to both the active gas wells and the compressor station is required at all times.
- The developer will work with the City to incorporate aquatic vegetation from the existing wet areas into the stormwater management ponds areas.
- Crossing agreements will be required for the existing right-of-ways.
- The NASP Area has identified high groundwater. Ensure that the conditions are further examined, and if required, construction will mitigate the effects of high ground water.
- Phase 2 ESA – complete assessment to be submitted satisfactory to the City, prior to stripping or grading, servicing, redesignation to residential or commercial uses or subdivision for both the north and south quarter sections.
- Reclamation Plan – for any area where a completed Phase 3 ESA reclamation plan is recommended by a prior plan, a Phase 3 ESA shall be completed prior to stripping or grading, or redesignation to residential or commercial uses.
- A phase 1 ESA will be required for acreage sites at the time of redevelopment, prior to stripping or grading, prior to redesignation to residential or commercial uses.
- Provide a Professional Risk Assessment Plan to determine the appropriate development setback distances address public safety, identify mitigation measures, and manage nuisance factors, ongoing industry access

requirements, emergency planning, risk communication and public participation.

Redistricting

- In the commercial area, a building setback of 4 metres from Ross Street is recommended to allow for a more walkable urban cross section.
- The minimum front yard setback for R1 is 3.0 m with a maximum of 4.5m for the live portion of a dwelling unit. The minimum setback for any front attached garage portion of a dwelling unit is 6.0 m.
- Vehicular access/parking in some areas within the plan is restricted to the rear even though the district permits front access. Refer to map in NASP and details in the LUB.
- The front yard setback for R1A is proposed to be a minimum 3.0 m and maximum 4.5 for the live portion of a dwelling unit.
- The properties facing onto 55 St. will not be permitted to be developed until Highway 11 has been realigned and 55 St. has been reclassified as a collector roadway.
- LUB Secondary Suites map will need to be updated.
- On street parking along 55 St. and 39 St. may be restricted, particularly in the event that the 39 St. bike lanes are extended eastward into this area.
- Phase 2 ESA – complete assessment to be submitted satisfactory to the City, prior to stripping or grading, servicing, redesignation to residential or commercial uses or subdivision for both the north and south quarter sections.
- Reclamation Plan – for any area where a completed Phase 3 ESA reclamation plan is recommended by a prior plan, a Phase 3 ESA shall be completed prior to stripping or grading, or redesignation to residential or commercial uses.
- Risk Assessment Plans for Facilities 1-11 must be submitted to the satisfaction of the

City prior to redesignation to residential or commercial uses.

- Coexisting Plan – Plan to be submitted, reviewed and completed, prior to redesignation to residential or commercial uses for Facilities #2-4.
- A phase 1 ESA will be required for acreage sites at the time of redevelopment, prior to stripping or grading, prior to redesignation to residential or commercial uses.
- Prior to development being approved in the southwest corner of the quarter section a Risk Assessment Plan is required to determine the appropriate development setback.
- Provide a Professional Risk Assessment Plan to determine the appropriate development setback distances address public safety, identify mitigation measures, and manage nuisance factors, ongoing industry access requirements, emergency planning, risk communication and public participation.

Subdivision

- A 100-metre setback is required around each active well-site. Lands within this setback cannot be developed until the wells are abandoned and decommissioned and the soils and other environmental considerations surrounding the area have been remediated.
- Access to both the active gas wells and the compressor station is required at all times.
- A minimum 5 m setback radius around an abandoned well must be maintained and access provided in case repair is needed. The 5 m setback is from the well to the property line.
- Roads shall not be located over abandoned wells.
- Houses facing onto 55th and 39th street will be accessed via rear lanes. Therefore, no vehicle access to the front of the houses is proposed.

- The properties facing onto 55 St. will not be permitted to be developed until Highway 11 has been realigned and 55 St. has been reclassified as a collector roadway.
 - Ensure linear PULs adjacent to residential properties are not zoned P1. This will make it easier to lease them should they not be needed by the city.
 - If subdivision occurs on the southern acreage parcel, engage parks early in the process. They have expressed some interest in potentially acquiring some of the tree stand through MR.
 - Phase 2 ESA – complete assessment to be submitted satisfactory to the City, prior to stripping or grading, servicing, redesignation to residential or commercial uses or subdivision for both the north and south quarter sections.
 - Prior to development being approved in the southwest corner of the quarter section a Risk Assessment Plan is required to determine the appropriate development setback.
 - Provide a Professional Risk Assessment Plan to determine the appropriate development setback distances address public safety, identify mitigation measures, and manage nuisance factors, ongoing industry access requirements, emergency planning, risk communication and public participation.
- access provided in case repair is needed. The 5 m setback is from the well to the property line.
- Buildings and roads shall not be located over abandoned wells.
 - Houses facing onto 55th and 39th street will be accessed via rear lanes. Therefore no vehicle access to the front of the houses is proposed.
 - The minimum front yard setback for R1 is 3.0 m with a maximum of 4.5m for the live portion of a dwelling unit. The minimum setback for any front attached garage portion of a dwelling unit is 6.0 m.
 - Vehicular access/parking in some areas within the plan is restricted to the rear even though the district permits front access. Refer to map in NASP and details in the LUB.
 - The front yard setback for R1A is proposed to be a minimum 3.0 m and maximum 4.5 for the live portion of a dwelling unit.
 - CPTED principles should be applied to the design of the gateway.
 - Driveways will be designed to meet the roadway at 90 degrees and are not permitted to 'flair out'.
 - Commercial buildings facing Ross Street should be attractive and present a friendly face to street by including signage, attractive landscaping and other architectural details to avoid long stretches of blank walls.

Development

- Notification to AltaLink is required for any proposed development within 30-metres of the right-of-way.
 - No buildings or landscaping should be located on pipeline right-of-ways.
 - A 100-metre setback is required around each active well-site. Lands within this setback cannot be developed until the wells are abandoned and decommissioned and the soils surrounding the area remediated.
 - A minimum 5 m setback radius around an abandoned well must be maintained and
- The properties facing onto 55 St. will not be permitted to be developed until Highway 11 has been realigned and 55 St. has been reclassified as a collector roadway.
 - On-street parking will not be permitted on 39th Street until mitigation measures to slow country road traffic have been put in place. If the city extends the bike lane from the west, this may potentially prevent on-street parking on 39th street.
 - 39th Street traffic mitigation measures are the responsibility of the developer as it is a collector roadway.

- Parks Section to be engaged by developer prior to the wetlands being modified in order to ensure seed material can be reused.
- The fixtures used on structures adjacent to the lane for park fronting homes should be energy efficient, timer or light cell regulated, and consider dark skies principals.
- Ground disturbances and surface work within 30-metres of the ATCO pipelines ROW require prior written approval before commencing any work. 1-888-420-3464
- Crossing agreements will be required for the crossing of the various utility ROWs within the area.
- The NASP Area has identified high groundwater. Ensure that the conditions are further examined, and if required, construction will mitigate the effects of high ground water.

Plan Amendments

- For the acreage parcel along the southern boundary, an application to amend the zoning to low density residential uses (R-1) or to neighbourhood commercial uses (C3) shall not require an amendment to this plan.
- Amendments will be required if major changes are made to roadway alignments or land uses.
- An amendment will not be necessary due to servicing revisions, minor land use boundary changes, or minor adjustments to road cross-sections.
- An amendment will not be necessary for the addition of PULs or other considerations related to emergency access for areas of park fronting homes.
- An amendment will not be necessary in the event that the linear park (pedestrian connection) in the NW corner if engineering decides that mid-block crossings cannot be built to a sufficient safety standard. Consideration should be provided to realign the parcels, but if it ultimately has to be removed an amendment will not be required.