

HUBERMAN TRANSPORTATION CONSULTANTS INC.

Rossdale Centre Rezoning Application

Mobility Assessment
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CORPORATE AUTHORIZATION

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1. INTRODUCTION

1.1 Preface

The City of Edmonton continues to plan for the future. As articulated in the City Plan, the development of higher-density multi-family infill developments planned and integrated with premium transit and alternate mode facilities and services represents a strategic goal of the City.

In this regard, Five Oaks Inc. is in the process of advancing an application to rezone the subject development site (164 ha) in the Rossdale

Neighbourhood from DC1 to a new DC1 to accommodate three high-rise, residential buildings. Based on a review of the Pre-Application Meeting (Reference Number 393483054-001) and subsequent discussions with the City of Edmonton, the need to complete a Transportation Impact Assessment was identified as part of the Rezoning Application.



The municipal addresses of the subject development parcels are 10003-98 Avenue, 9803 to 9856-100 Street, 9803-101 Street, and 9903-Rossdale Road.

1.2 Study Need and Purpose

Transportation accommodation for all user groups generated by a new multi-storey residential development requires an integrated, balanced, and coordinated transportation mobility plan. Understanding the demands placed on the area's transportation infrastructure represents an important dimension in assessing overall development impacts. Aligning the mobility network, land use, and public realm improvements (multi-modal integration strategies) will contribute to the strengthening of the Rossdale Neighbourhood's economic sustainability.

Developing a transportation mobility plan framework and identifying complementary TDM strategies at the rezoning stage will ensure that area roadways can perform satisfactorily, parking accommodation and access facilities and routes are strategically located and appropriately sized, the overall transportation system is designed to achieve City geometric roadway standards, and the overall plan responds to City, landowner and community desires and expectations.

The mobility assessment includes:

- A description of the existing transportation infrastructure including on-street parking characteristics;
- Commentary on existing and future daily traffic volumes on study area roadways;
- The transportation implications associated with the proposed rezoning on the existing and future transportation infrastructure;
- A sensitivity analysis (including the magnitude of traffic change) comparing the proposed DC1 zone with the approved DC1 zone on existing and future transportation infrastructure;
- A rational basis on which to evaluate if the type and scale of the development is appropriate for this particular development area based on a qualitative and qualitative assessment and what

improvements may be necessary, on and/or off of the site, to provide for safe and efficient pedestrian, bicycle, and traffic flow;

- The identification of transportation-related issues that may be of concern to neighbouring residents, businesses, and property owners including roadway, intersection, transit, pedestrian, and bicycle-related strategies that can be considered at more detailed levels of planning.
- The integration of the mixed-use development with existing infrastructure and future changes to the infrastructure associated with City of Edmonton sponsored projects including any overlaps between these and the site transportation plan including the provision of ingress and egress movements;
- A basis for identifying roadway, intersection improvement (Rosssdale Road and 100 Street, Rosssdale Road and 101 Street, 98 Avenue and Rosssdale Road), transit, pedestrian, and bicycle-related strategies that can be considered (if required) at more detailed levels of planning (i.e., Development Permit stage);
- Estimating multi-modal trip generation (walking, cycling, transit, and driving) for the proposed development during the AM and PM peak hours, based on the City's rates, industry best practices, and tailored considerations based on the context of the development and its location;
- Establishing trip distribution and assignment for trips generated by the development during peak hours;
- Discussions on site access strategy, site circulation, residents/visitors parking, and loading and service vehicle accommodations;
- A review of the Rosssdale Neighbourhood Building Great Neighbourhood Program;
- A visual representation of area alternative mode facilities and discussions on the current and future alternative mode level of service, and suggestions to improve pedestrian/cyclist experience (gap identification); if and where applicable (including recommendations for the installation of additional pedestrian crossing infrastructure at nearby intersections as required; and
- Commenting on the existing alley conditions estimating traffic volumes along the alley; and
- Discussions on TDM measures applicable for the development, including specific recommendations to help encourage the use of alternative travel modes.

1.3 Study Purpose

The primary purpose of this qualitative and quantitative technical review is to address the sensitivity in trip-making activity associated with the rezoning application. This will allow for a determination of whether the adjacent and area roadway network will continue to be capable of appropriately accommodating the anticipated incremental increase in site-generated traffic movements as compared to current operating conditions (surface parking lot).

In response to the identified scope, the traffic review attempted to answer four main questions. First, what are the current and proposed site characteristics associated with the development parcel, and what are the anticipated development characteristics associated with the rezoning application? Secondly, what are the current and future roadway, intersection, and traffic characteristics immediately adjacent to the development parcel? Thirdly, what are the anticipated traffic demands associated with this development initiative based on anticipated building and tenant characteristics (at maximum build-out of the subject property)? And finally, does the proposed rezoning application represent an appropriate district for the subject lands in consideration of neighboring properties and adjacent roadway infrastructure characteristics?

1.4 Study Goals and Objectives

The development of a sustainable all-modes plan framework adjacent to the plan area to service levels of development as may be contemplated represents the central focus of the assignment. The mobility assessment evaluates the impacts associated with a contemplated residential development on the immediately adjacent

roadway and alley system. Transportation improvements and strategies required to accommodate site-generated traffic on area roadways, adjacent alleys, and intersections are identified.

Although ensuring ease of access to and from the development by passenger cars is important, roadways and intersections in the area are built out and opportunities to expand these facilities are limited.

The transportation plan acknowledges any constraints identified and ensures that traffic, parking, pedestrian, and bicycle accommodation represent acceptable levels of service based on City Level of Service criteria.

The assessment acknowledges service, waste, and emergency vehicle movements and access. In this fashion, cumulative impacts can be evaluated. Recommended strategies for mitigating any impacts are advanced. The traffic management plan reflects current realities and future trends, to the extent that they can be anticipated. In this context, the primary goals of the transportation mobility plan include:

- Supporting and augmenting the existing active modes network to enhance the transportation network to assist neighbourhood and community-building and to provide access to transit and active modes of transportation;
- Encouraging walking and cycling as safe and attractive ways to move from the development site to the City's pedestrian and bicycle network for people of all ages and abilities;
- Providing attractive and convenient access to transit for trips within the city and region;
- Managing vehicular travel through an examination of on-site parking;
- Helping to recreate attractive neighbourhood streets that are vibrant destinations in and of themselves;
- Ensuring emergency vehicle access; and
- Preserving neighbourhood livability by reducing the negative impacts of vehicle traffic through neighbourhoods.

1.5 Study Methodology

In support of the rezoning application, the study methodology employed represents a combination of multi-modal plan development along with traditional traffic impact analysis. The study follows the City of Edmonton's TIA guidelines with an additional emphasis on pedestrian, bicycle, and transit access. In addition to reviewing the potential impacts on the adjacent City-owned transportation infrastructure, the study considers the transportation interface between the site and the adjacent community.

The methodology recognizes and acknowledges that continued growth within the Rosedale Neighbourhood cannot be evaluated solely on its impact on road capacity and intersection operations. The methodology acknowledges that key roadways in this sector of the Neighbourhood represent major travel corridors. For these reasons, transportation impact studies must identify program and infrastructure requirements and improvements necessary to move people via active mode networks.

In addition, the methodology de-emphasizes the development site and its immediate environment as the primary scale of analysis. The methodology benefits by considering the area at large and takes an area-wide approach with attention to the urban context where the redevelopment site is located. At this larger scale, there is a better ability to understand the various elements that work together to shape travel demand, including but not limited to multi-modal transportation infrastructure and services, and how a mixed-use development building can be integrated into this larger neighbourhood context.

1.6 Area of Significant Traffic Influence

For this assessment, the area of significant traffic influence included 100 Street, 98 Avenue, and the north-south alley west of 100 Street in addition to upstream and downstream roadways and intersections.

1.7 Documentation Review

During the report's preparation, the following documentation was reviewed:

- Rossdale Area Redevelopment Plan, Bylaw 8139, Office Consolidation, May 2020;
- City of Edmonton Traffic Data Information;
- Edmonton City Plan;
- Edmonton Mass Transit Planning for 1.25 Million Population, IBI Group, 2021;
- Edmonton Bike Plan;
- 1.25M City Population Horizon DTA Model Information for the Rossdale Area;
- Rossdale Neighbourhood Building Great Neighborhoods Program;
- Parkwood Development - Formal Presentation To The Edmonton Design Committee;
- Section DC2.1116, Charter Bylaw 19135, May 26, 2020 (Parkwood Development);
- Rossdale Transportation Network and the Rossdale Transportation Network Concept Plan (Dec. 2022);
- Rossdale Road Rehabilitation Project (103 Street to the Low Level Bridge);
- McDougall Hill Bridge; and
- Rossdale Neighbourhood Renewal.

1.8 Report Organization

In addition to this introductory section, this report contains six chapters. A summary of existing area conditions including a review of roadway, parking, transit, and bicycle facilities is included in **Chapter 2**. This background information helped inform the preparation of the mobility assessment.

Chapter 3 presents a summary of future area roadway, transit, pedestrian, and bicycle facilities. The implementation of several significant City sponsored projects is anticipated to modify and alter the mobility network in the Rossdale area.

Chapter 4 reviews a number of the key characteristics and elements associated with the rezoning parcel and preliminary information regarding the multi-storey buildings being considered upon rezoning approval.

Chapter 5 includes a summary of the projected traffic characteristics associated with the development parcel under maximum build-out. An analysis of the impacts of the site traffic activity is also included in Chapter 5.

A multi-modal mobility review is presented in **Chapter 6** while **Chapter 7** includes the summary of the report findings.

2. SITE CONTEXT - EXISTING AREA CONDITIONS

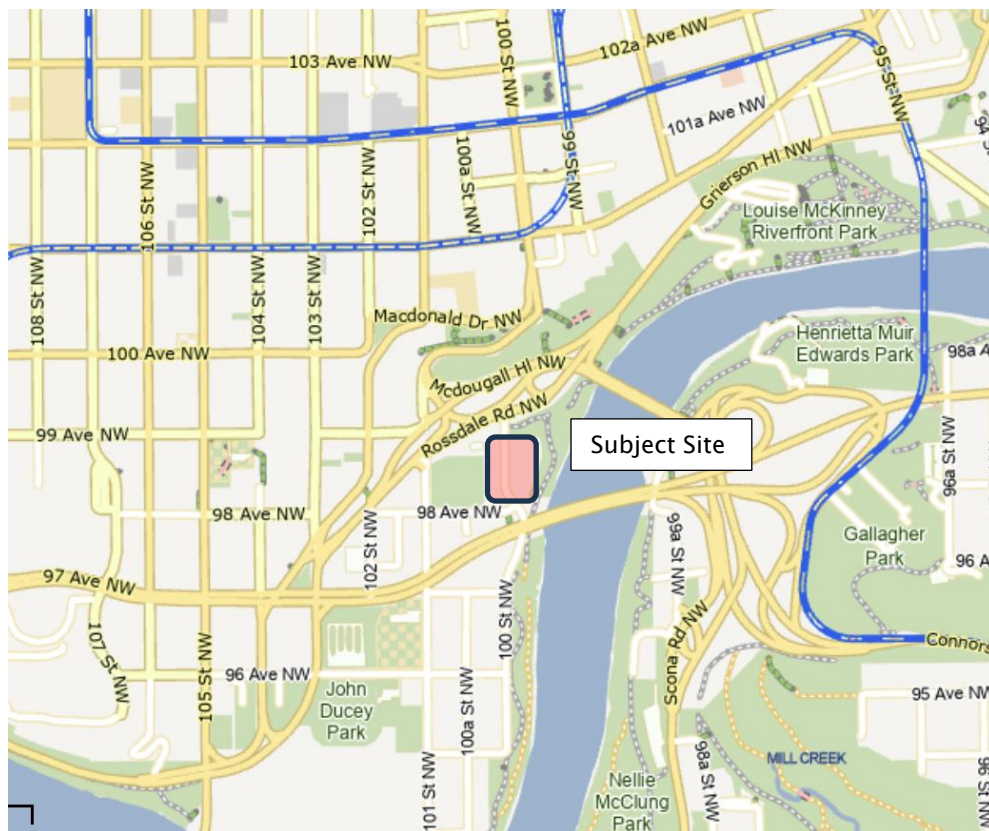
The review of existing conditions includes a qualitative and quantitative assessment of the level of service provided for several multi-modal transport options including transit, walking, cycling, and vehicular traffic activity and parking. These modes were reviewed in terms of existing conditions near the subject development site and, where required, were reviewed from a more neighbourhood context (to review overall neighbourhood connectivity). The baseline data provides a foundation for assessing and integrating active mode movements and traffic and parking accommodation associated with the redevelopment as well as identifying missing gaps.

Given the site's location in the Rossdale neighbourhood with convenient access to transit and bike infrastructure, opportunities to develop the site with a greater emphasis on integrating active modes were considered.

2.1 Site Location

The Rossdale Mixed-Use Project consists of three development parcels located in the north precinct of the Rossdale Neighbourhood. In general, the development parcels abut 100 Street between Rossdale Road and 98 Avenue. The development of a mixed-use residential development in this area of Rossdale supports City Plan and City of Edmonton residential infill initiatives. The project will not result in the displacement of any existing buildings. The development parcels on the west side of 100 Street share the greenspace with Diamond Park but will not interfere with the use and enjoyment of Diamond Park which is designated as a District Level facility. Currently, the site contains the former 1915 brewery which is a designated historical resource. The Brewery Building will be maintained and incorporated into the development plan. **Exhibit 2.1** presents the site location context plan and the relative location of the existing LRT Valley Line and the existing Capital/Metro Lines).

Exhibit 2.1: Site Context Plan



2.2 Surrounding Land Use and Existing Zoning

The north sector of the Rossdale Neighbourhood within which the development parcels are located is characterized by low to medium-intensity urban development, predominantly located west of 101 Street. The Ortona Armoury is located on the west side of 102 Street north of 98 Avenue. Surrounding land uses are primarily parks and roadways.

There hasn't been a significant amount of new land use development activity in the area over the past several years. The nearest buildings are a 4-storey apartment building to the west (west of 101 Street). Parkwood Builders rezoned parcels of land to allow for the development of a two-phased residential project consisting of townhouses and a multi-storey building. This development, located in the southeast quadrant of the 98 Avenue and 101 Street intersection has not been completed. Only the townhouse component of the development was constructed.

Under the existing Edmonton Zoning Bylaw 16543, the site is zoned for (DC1) Direct Development Control Provision, primarily providing for medium-density housing. Other permitted uses include row housing, live-work units, bars and neighbourhood pubs, hotels, professional services, and specialty food services appropriate to the land's relationship to Rossdale, Downtown, and the River Valley.

The governing DC1 (DC1 16543) provisions allow for a maximum height of 19m and a maximum density of 155 dwellings/ha. Based on a review of the Rossdale ARP, the proposed development program is consistent and meets with the intent of the ARP.

2.3 Roadway Network

Vehicular traffic is accommodated in the grid pattern of streets and avenues surrounding the development site. The transportation context of the study area is represented by a standard grid of streets with pedestrian facilities typically provided on both sides of the roadway. The development site is ideally located to take advantage of a strong roadway network.

The Rossdale Transportation Network project is developing roadway and streetscape designs in the Rossdale area that will improve active transportation connections (walking, cycling, and wheeling) and accommodate drivers traveling into and out of the Rossdale Neighbourhood.

The subject site is conveniently accessible from major roadways including 97 Avenue, Rossdale Road, and McDougall Hill Road. Connors Road, 97 Avenue, and 103 Street are all major arterials that connect the downtown area to the rest of the City and are located just a few blocks away.

Connections to the east side of the City and Sherwood Park are accessible from 97 Avenue. Connors Road also provides a route across the river to the south side of Edmonton. **Table 2.1** summarizes the operating characteristics of some of the key roadways in the vicinity of the project site.

The Rossdale Transportation Network Plan includes the closure of Bellamy Hill Road/104 Street between 103 Street and 97 Avenue (the one-way couplet) with traffic rerouted to the intersection at 97 Avenue and Rossdale Road. Rossdale Road north of 97 Avenue becomes a one-way north/eastbound only roadway. Rossdale Road was converted to a one-way eastbound roadway in 2023.

Table 2.1: Existing Roadway Characteristics Adjacent to Site

ROADWAY	CLASSIFICATION	CROSS-SECTION		POSTED SPEED	FACILITIES			
		# Lanes	Median		Parking	Bike Route	Bike Lanes	Bus Stops
Rossdale Road	Arterial	2 North/EB (from north of 97 Avenue)	No	60 km/h	No	No	No	No
McDougall Hill Road	Arterial	3 (lane control)	No	60 km/hr	No	No	No	Yes
97 Avenue	Arterial	7	Yes	60 km/h	No	No	No	Yes
98 Avenue	Local	2	No	40 km/h	Yes	No	No	No
100 Street	Local	2	No	40 km/h	Yes	No	No	No
101 Street	Local	2	No	40 km/h	Yes	No	No	No

97 Avenue is a major roadway that connects drivers between downtown and across the North Saskatchewan River. The segment of roadway that serves the site contains a total of 7 lanes. The westbound approach contains 4 lanes, and 3-lanes in the eastbound, divided by a concrete median. From the eastbound lanes, drivers can access the site by making a left at 102 Street through a signalized intersection or by making a right turn at 101 Street, turning left onto 97 Avenue, and then turning left again to travel north along 100 Street under the James Macdonald Bridge. From the westbound approach, the nearest access is from 101 Street. Both 101 and 102 Street are two-way roadways that also provide an exit route from the site.

2.3.1 Existing Traffic Control

The following existing traffic control devices are currently in place:

- 100, 101, and 102 Streets provide access to Rossdale Road eastbound through stop control signs;
- 98 Avenue is yield controlled at 100 Street (100 Street is free flow through the intersection);
- 98 Avenue is stop-controlled at 101 Street in the eastbound and westbound directions (101 Street is free flow through the intersection);
- 101 Street is stop-controlled at 97 Avenue;
- 102 Street is stop-controlled at 97 Avenue; and
- There is a pedestrian signal on the east approach of 97 Avenue at 102 Street.

Appendix A includes a series of photographs of existing roadway and intersection characteristics.

2.3.2 Traffic Volumes

A review of City of Edmonton traffic data information was completed (Source: City of Edmonton AAWDT Volume Map and Volume Data Reports). **Table 2.2** presents a summary of available historical traffic volume information on several roadways located near the development site between 2017 and 2022.

Table 2.2: City of Edmonton Traffic Volume Summary for Selected Roadway Links

Roadway Link	2017	2018	2019	2020	2021	2022
Rossdale Road West of 100 Street	2,100	2,000	2,100	1,800	2,000	2,100
Rossdale Road West of 102 Street	5,600	5,300	5,500	4,700	5,100	5,400
100 Street North of 97 Avenue	300	300	400	400	500	600
101 Street North of Rossdale Road	300	300	400	400	500	600
98 Avenue East of Rossdale Road	300	300	400	NA	NA	NA

97 Avenue accommodates the greatest number of vehicles daily. Traffic activity on Rossdale Road is about 5,000 vehicles daily. 100 Street and 98 Avenue are anticipated to accommodate low levels of traffic activity.

2.3.3 Existing Intersection Operations

At this time, no traffic operational issues have been identified along 98 Avenue. 98 Avenue is stop-controlled at 101 Street and Rossdale Road.

2.3.4 Existing Alley Operations

The graveled north-south alley on the west side of 100 Street extends from 98 Avenue to the north and terminates at 100 Street. Power poles are located on the east side of the alley. Based on casual inspection, the alley appears to be in satisfactory condition subject to more detailed structural analysis which will be completed during the Development Permit process.

2.4 Pedestrian and Bicycle Facilities



The existing sidewalks surrounding the proposed development can be enjoyed by pedestrians for leisure or travel purposes. Along 100 Street, separate and monolithic walks are found on the west side that connects to 98 Avenue with Rossdale Road. Traveling north to Rossdale Road, the sidewalks continue in the east-west direction or cross an unmarked crosswalk onto McDougall Hill Road. Heading south to 98 Avenue, the pedestrians would be required to cross the street before reaching sidewalks that guide them either west on 98 Avenue, further south on 100 Street, or towards a staircase leading up to James Macdonald Bridge. Sidewalks within the vicinity of the site are continuous and do not require pedestrians to make unnecessary detours. There is no sidewalk on the east side of 100 Street or the north side of 98 Avenue.



Looking North on 100 St. from South of 98 Ave.



Looking North on 100 St. from North of 98 Ave.

Crosswalks

The sidewalks adjacent to the site are generally in the east-west direction on Rossdale Road, with several unmarked crosswalks at 101 Street and 100 Street, and one marked crosswalk at 102 Street. The crosswalks along 97 Avenue, south of the site, are marked at 102nd Street and Rossdale Road due to the presence of heavy traffic.

The redevelopment site is classified as “Somewhat Walkable” with a 60-point score out of 100 using the website Walk Score, indicating that most errands can be accomplished on foot. This measure of walkability examines the site’s proximity to schools, restaurants, banks, coffee shops, parks, grocery stores, pubs, and entertainment. Overall, the development site is located within proximity to a vast array of essential everyday amenities which makes walking an attractive and realistic travel mode for existing and future residents.

Shared Pathways

The proposed site has access to shared pathways in the northeast and southeast directions. A shared pathway is a paved off-street pathway for recreation and commuting purposes for people traveling on their feet, biking, and more. The pathway runs along the North Saskatchewan River where it joins a network of shared pathways that travel in various directions.

The redevelopment site is classified as very bikeable with an 88-point score out of 100 using the website Walk Score suggesting that the overall area is very bikeable.

Based on a review of City of Edmonton databases (Daily Pedestrian and Bicycle Counts), it has been estimated that there are likely about 100 cyclists and 100 pedestrians located on area roadways.

2.5 Transit Facilities



Transit service is provided on arterials in the vicinity of the project (Rossdale Road, 97 Avenue, etc.). Existing transit routes near the site provide excellent transit access to the north, south, and east regions of Edmonton for this area of Rossdale. ETS operates numerous bus routes near the rezoning site on McDougall Hill Road and Bellamy Hill Road. Local, frequent, and late-night bus service is available along these corridors. Frequent service operates north of the site on McDougall Hill Road and west of the site on Bellamy Hill Road. Local service operates north of the site on McDougall Hill Road.

The development site location will allow residents and visitors to consider using surface transit as a primary mode of transportation. Residential building lobbies (from all three residential buildings) are located to provide easy access to 100 Street and then to transit stops located on McDougall Hill.

Exhibit 2.2 illustrates the transit routes in the area of the development project. The route system map represents the route changes implemented upon the opening of the Valley Line.

Edmonton Transit Service (ETS) operates frequent, local, rapid, and late-night Owl bus services near the rezoning area. Frequent, local, rapid, and late-night Owl service operates north of the site on McDougall Hill Road NW. Frequent and late-night Owl service also operates nearby on Bellamy Hill Road NW. There are four bus stops within 600m walking distance from all three proposed buildings on the site. These stops are located near the Rossdale Road NW intersections at Bellamy Hill Road/103 Street NW and McDougall Hill Road NW.

The closest transit routes to the three residential buildings are transit routes 8, 9, and 523 which operate between the early morning and late-night hours during the week. These transit routes provide between 10- and 15-minute frequencies during the AM and PM peak hours.

Pedestrian access to Residential Building A and B (located on the west side of 100 Street) and Residential Building C (located on the east side of 100 Street) are generally located about 50m south of Rossdale Road. The walking distance to bus stop 1351 on McDougall Hill Road from the three residential buildings is approximately 140m (along the sidewalk system).

Route 8 travels from the University of Alberta to Abbotsfield, making key stops along its path including MacEwan University and the Northern Alberta Institute of Technology. Route 523 travels from downtown to the Grey Nuns Community Hospital, before stopping at Mill Woods. Route 9 utilizes Southgate as a turnaround location, traveling to Kingsway/Royal Alexandra Hospital and Eaux Claires respectively. Routes 8 and 9 travel through and/or to downtown, where the Edmonton Light Rail Transit (LRT) is accessible. With the ongoing expansion of the LRT, the future travel time to the outer regions of Edmonton will be improved.

There are two locations where Route 9 stops on Bellamy Hill and 98 Avenue. However, the south and north accesses have different destinations. The south access travels to Eaux Claires whereas the north access travels to Southgate. Similarly, route 523 has two transit stops on McDougall Hill Road. The south access travels to Mill Woods and the north access goes to Downtown.

The site is within 1.5 km walking distance of three LRT stations/stops (Central Station, Bay Enterprise Square Station, and Muttart Stop). However, all three stations are somewhat challenging and inconvenient to access requiring transit riders to use at least one flight of stairs and cross high-volume arterial roads (e.g. 97 Avenue NW, Bellamy Hill Road). As such, walking to the LRT will be unrealistic for most residents.

Making transit use as comfortable, safe, and convenient as possible will facilitate a modal shift. The development site is classified as “Excellent Transit” with an 85-point score out of 100 using the website Walk Score¹, indicating that transit is convenient for most trips. There are several nearby transit options.

Exhibit 2.2: Transit Routes



2.6 Existing Cycling Facilities

There are no protected or painted bike lanes within proximity of the subject site. However, shared pathways can also accommodate bikers wishing to travel along the North Saskatchewan River. **Exhibit 2.3** illustrates the Bicycle Network in the vicinity of the development site.

2.8 Car Share Facilities

The subject parcel is located within the Communauto Car Share FLEX Zone where all FLEX trips start and end.

2.9 On-Street Parking

Historically, on-street parking in the Rossdale Neighbourhood was controlled by a Residential Parking Program. The City recently updated the Residential Parking Program with new program criteria to ensure it is applied consistently in residential neighbourhoods across the city. Based on the new criteria, the Rossdale neighborhood will not meet the new criteria. Although the Residential Parking Program in Rossdale was discontinued on June 1, 2024, there continue to be several parking control signs on 98 Avenue and 100 Street referencing the old Residential Parking Program.

Notwithstanding the above, at the time of writing, the Urban Planning Committee of the City Council has asked for the Residential Parking program to be further evaluated before the new program is implemented. As such, it is not known if the Residential parking program in Rossdale will continue.

Currently, a section of parking along the east side of 100 Street from Rossdale Road south for approximately 100m allows drivers to park for a maximum of 30 minutes between 8:00 AM and 5:00 PM. The west side of 100 Street from Rossdale Road south for approximately 100m historically allowed residents with valid permits to park. The remainder of both the east and west sides of 100 Street allows drivers to park for a maximum of 3 hours between 8:00 AM and 6:00 PM. The same restriction applies to 98 Avenue between 100 Street and 101 Street (notwithstanding that there are no parking control signs on the east side of 101 Street north of 98 Avenue).

The south side of 98 Avenue, between 102 Street and approximately 70m west of 100 Street, historically was for residents with valid permits. The north side of 98 Avenue between 101 Street and 102 Street allows drivers to park for two hours maximum between 8:00 AM and 4:00 PM. The west side of 101 Street has the same restriction, whereas the east side has no parking restrictions.

It is anticipated that parking controls on 100 Street, 98 Avenue, and 101 Street adjacent to the development site will continue to be enforced to discourage all-day parking on these roadways by downtown employees while still allowing area residents reasonable use and access to on-street parking.

2.10 Truck Routes



There are no designated truck routes immediately adjacent to the development parcel. The subject area is surrounded by two designated 24-hour truck routes, which are Rossdale Road and 97 Avenue. The identified routes are coincidentally the only roadways accessible to the site thus, no concern for heavy trucks entering the site. Additionally, the James Macdonald Bridge connected to 97 Avenue permits dangerous goods transported across the North Saskatchewan River.

2.11 Rossdale Neighbourhood Renewal

The neighbourhood renewal project has been started in Rossdale. The Rossdale Neighbourhood Renewal project will include upgrades to the roadway and active mode infrastructure that may directly impact the location of the proposed development, including roadways and sidewalks.

3. FUTURE AREA CONDITIONS

Residential development within the Rossdale neighbourhood supports the City's major employment centres including the downtown and Government precincts. It is also located in very close proximity and with easy access to the University area.

The Rossdale Neighbourhood within which the subject parcels are to be rezoned is undergoing redevelopment and intensification. For the next ten to fifteen years, the Rossdale Neighbourhood will continue to evolve as one of the primary locations of higher-density multi-unit housing in the City. Rossdale will continue to contain an eclectic blend of housing types, including family-oriented units and commercial uses, thereby enhancing the unique blend of uses and activities that defines the character of Rossdale.

3.1 Study Horizon

For this assessment, only one study horizon was assessed. A study horizon of 2029/2030 was selected. By 2030, all three residential buildings are anticipated to be constructed and occupied.

3.2 Future Background Traffic Volumes

Notwithstanding that the Rossdale Neighbourhood is considered to be an area of future development, land use activity and opportunities in the northeast sector of the Rossdale Neighbourhood is somewhat limited, other than the development of vacant lands located on the south side of 98 Avenue east of 101 Street.

It has been anticipated that area roadway traffic volumes will not appreciably change in the foreseeable future other than the new traffic activity associated with the rezoning site.

As documented in Table 2.2, traffic activity on 98 Avenue east of Rossdale Road and 102 Street north of 97 Avenue is in the order of 400 vehicles per day. This finding would suggest that as local roadways, there continues to be spare capacity to accommodate additional traffic without exceeding City of Edmonton traffic volume thresholds for local roadways (which has been assumed to be in the order of 1,000 to 1,500 two-way trips daily. In this regard, the City of Edmonton has acknowledged that to achieve City Plan goals, local roadways in mature inner City neighbourhoods will likely increase in response to increased residential densification.

3.3 Future Roadway Improvements

Several ongoing City sponsored projects could impact the transportation network in the Rossdale area which could affect the mobility characteristics associated with the rezoning application.

3.3.1 Rossdale Transportation Network

The Rossdale Transportation Network project, initially identified in the River Crossing Business Plan, aims to rebalance how people move through the greater Rossdale area by all modes of transportation including walking, cycling, transit, and vehicles. The project aims to enhance the user experience to create streets for all users and abilities while accommodating commuters who travel through the area to access downtown and other parts of the central city. The Rossdale Transportation Network Concept Plans were completed in December 2022.



Although the boundary of the Rossdale Transportation Network does not include the development area, multi-modal facility improvements being considered could impact the mobility characteristics of the rezoning application.

Exhibit 3.1 presents a reproduction of the overall Rossdale Transportation Network Concept Plan. The proposed changes focus on improving and simplifying traffic flows and prioritizing safety for people who walk, drive, bike, and cycle. These improvements will be of benefit to Rossdale residents. Key changes include:

- Transforming Rossdale Road into a Parkway;
- Creating Grand Boulevards on selected streets and avenues (97 Avenue and 105 Street);
- Providing enhanced neighbourhood connectivity through the development of new and enhanced streets and laneway connections throughout the neighbourhood and to Touch the Water Promenade; and
- Simplifying and providing improved connections north across 97 Avenue, prioritizing safe crossings and access for commuters and pedestrians.

Although the Rossdale Transportation Network project area does not include the Rossdale Rezoning project area, enhanced pedestrian and cycling facilities including safer pedestrian crosswalks will be of benefit to all Rossdale residents.

3.3.2 Rossdale Road Rehabilitation Project

As mentioned in Chapter 2.0, the City of Edmonton as part of the Rossdale Transportation Network Project identified changes to Rossdale Road. The Rossdale Rehabilitation Project (103 Street to the Low Level Bridge) focuses on improving traffic flow and prioritizing safety for people who walk, drive, bike, and cycle.

Exhibit 3.2 presents a reproduction of a City of Edmonton graphic illustrating the proposed roadway improvement programs for Rossdale Road and Bellamy Hill Road north of 97 Avenue and Rossdale Road east of 103 Street. **Exhibit 3.3** presents a City of Edmonton illustration of the one-way eastbound Rossdale Road corridor and its intersections at 100 and 101 Streets.

Proposed changes to Rossdale Road include:

- Simplifying traffic movements at intersections to decrease driver confusion and improve safety for those who walk, drive, bike, and cycle;
- Close Bellamy Hill Road/104 Street intersection between 103 Street and 97 Avenue;
- Convert Rossdale Road north of 97 Avenue becomes to one-way operations north/eastbound;
- Providing a shared 3.0 m shared pathway on the south side of Rossdale Road including wrapping the 3.0m shared use path on the east side of 100 Street to tie into an existing shared pathway;
- Upgrading the intersections of Rossdale Road and 100 Street and 101 Street;
- Providing wide sidewalks on the west side connecting to 103 Street; and
- Installing a traffic signal at 102 Street and Rossdale Road (See Exhibit 3.1).

3.3.3 McDougall Hill Road/100 Street Pedestrian Bridge

The City of Edmonton is planning to construct a new bridge over McDougall Hill Road to provide a safe and continuous link over the roadway for pedestrians and cyclists and along the edge of downtown. The new bridge will be located between MacDonald Drive and the Funicular.

Although not near the Rossdale Rezoning project, the construction of the McDougall Hill Bridge will benefit residents of the development by walking/cycling to and from downtown destinations.

Exhibit 3.1: Rossdale Transportation Network Concept Plan (Source: City of Edmonton)



3.3.4 Rossdale Building Great Neighbourhoods

Neighbourhood renewal is planned for the Rossdale community within this budget cycle (2023-2026). **Exhibit 3.4** illustrates the Rossdale Building Great Neighbourhoods (BGN) project area and Adjacent Projects.

The Rossdale BGN project will include upgrades to roadways and active mode infrastructure. The program includes:

- Adding missing links in the biking network - this includes neighbourhood level routes and district connector routes. Could be separate/protected infrastructure, shared pathway, shared on-street w/appropriate traffic calming depending on what's needed for an all ages and abilities network;
- Rebuilding roadways to current Complete Streets Standards - could include widening narrow sidewalks, narrowing wide carriageways, adding street trees/boulevards, etc.

Exhibit 3.2: Rossdale Road and Bellamy Hill Road North of 97 Avenue

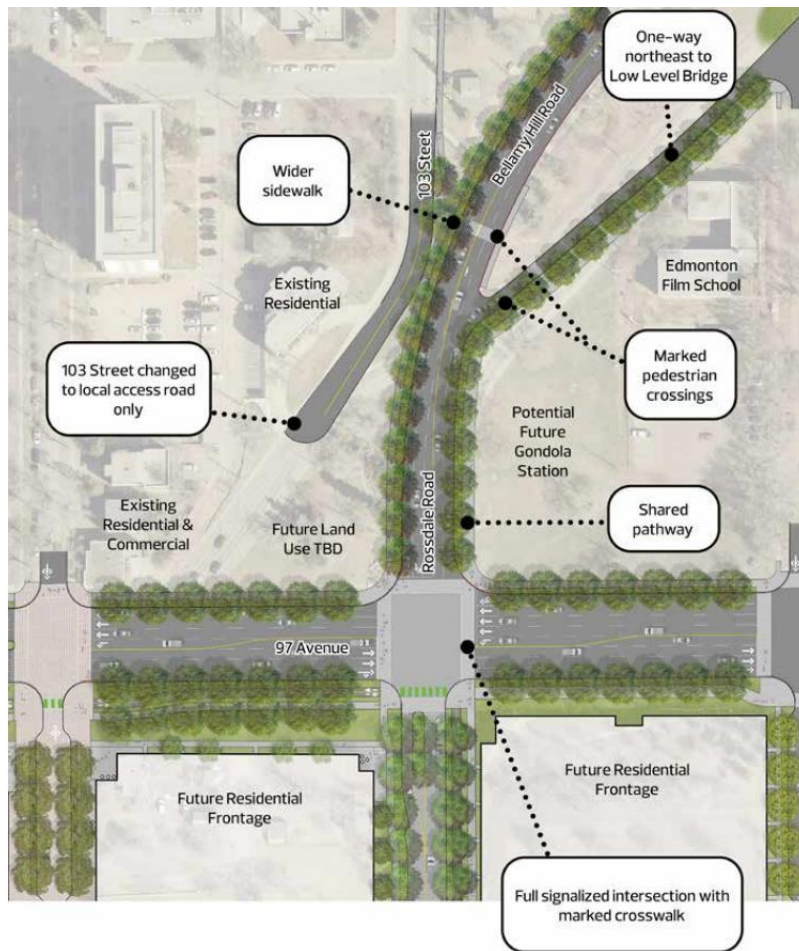


Exhibit 3.3: Rossdale Road Improvement Program

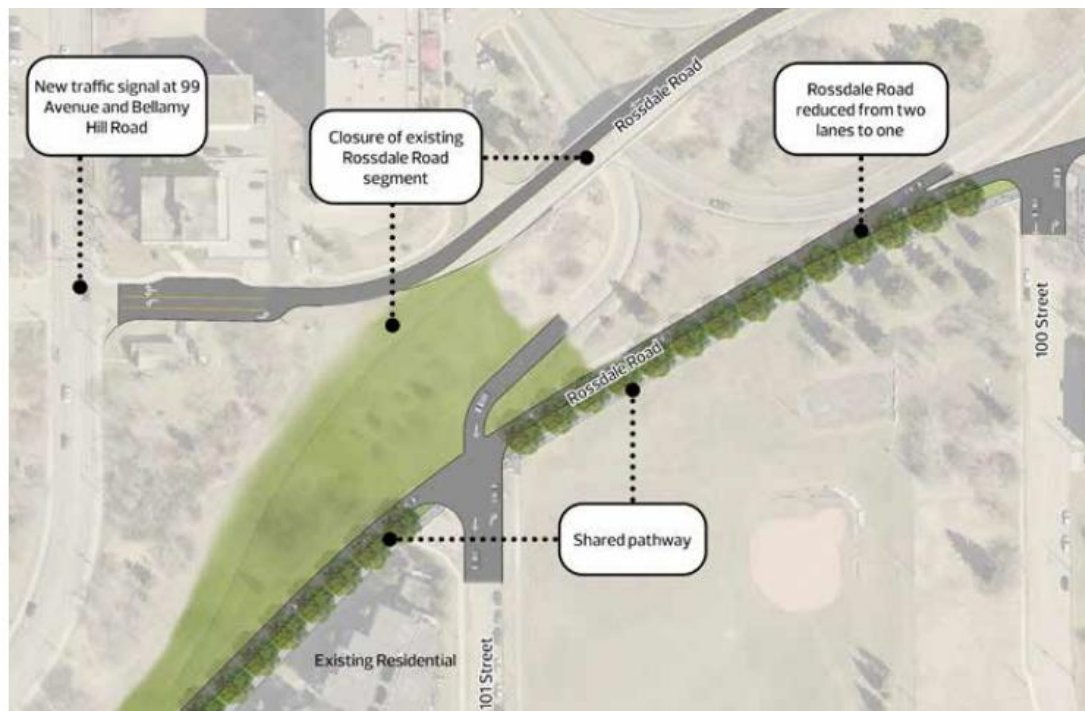
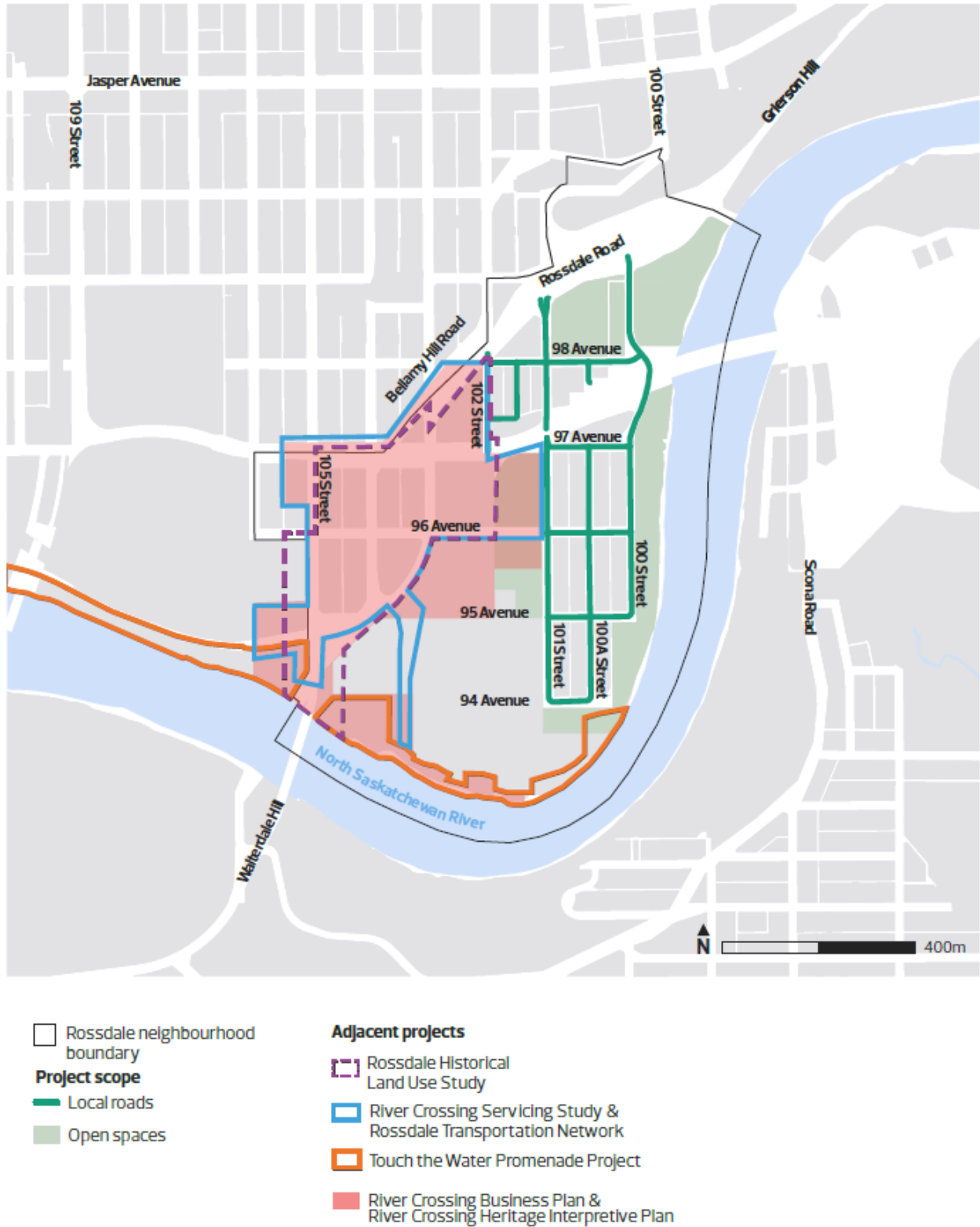


Exhibit 3.4: Building Great Neighbourhoods Project Area and Adjacent Projects



- Replacing aging streetlights/upgrading to LED;
- Closing redundant roads and converting them to open space or space just for active modes;
- Closing existing accesses - typically for traffic safety reasons/alignment with City Policy/Mature Neighbourhoods Overlay;
- Exploring opportunities for low-impact development (in road right of way and open spaces), naturalization, and tree planting;
- Adding missing sidewalk links where possible to improve how people walk, bike, roll, and drive and install seating nodes with benches, bike racks, garbage bins as needed, signs; and
- Implement traffic safety improvements such as traffic calming or geometric improvements (curb extension, speed table, speed humps, landscaping, etc.) as required.

As identified in Exhibit 3.4, the Rossdale BGN project includes 100 Street, 101 Street, and 98 Avenue. Based on discussions with BGN representatives, the following information is provided:

- 100 Street - There is an active transportation network on Rossdale Road. The BGN project may add/improve the connection to the river valley trails around that north corner. Discussions with the proponents of the Rossdale Centre Redevelopment are planned to identify options around the Brewery Building and in general, the Rossdale Centre Redevelopment including connections to the alley, existing sidewalks on 100 Street, streetlights, river valley trail connections, and open space improvements, etc.;
- 98 Avenue - explore options to improve vehicular and pedestrian connections, connection to service alley to and from the private development, streetlights, park lighting, signs, planting, etc.; and
- 101 St - same as above, also will look into parking, planting, etc.

At this time the BGN Project Team is preparing to collect feedback on design opportunities in the neighborhood. And undertaking the completion of an urban design analysis of the overall neighborhood. It is anticipated that the analysis will be published (online) in Feb 2024.

3.3.5 Synopsis of Future Improvement Programs and Rezoning Impacts

Based on the review of the Rossdale Transportation Network Project, the Rossdale Road Rehabilitation Project, the McDougall Hill/100 Street Bridge Project, and the Rossdale Neighbourhood Renewal (BGN) program, the transportation /mobility network in the greater Rossdale area and in the vicinity of the development site will be undergoing significant and extensive changes and modifications. The aforementioned infrastructure projects will impact area roadway circulation and access, pedestrian and bicycle facilities in a positive manner.

In regards to the project site, the roadway, pedestrian, and bicycle improvement projects will only further enhance pedestrian and bicycle site-generated movements in this sector of the Rossdale Neighbourhood. The introduction of a 3.0 shared-use path crossing 100 Street (as part of the development program) will augment and complement future pedestrian and bicycle facilities being sponsored by the City.

In addition to the above, City sponsored improvement projects in the vicinity of the rezoning site are expected to improve overall access and accessibility to transit in the future. The Rossdale Roadway Network project will result in a single eastbound lane on Rossdale Road. The rehabilitation project will also improve the intersections of Rossdale Road at 100 Street, 101 Street, and 98 Avenue.

An unintended consequence of the Rossdale Road Rehabilitation Project is that the closure of the westbound lane of Rossdale Road could reroute westbound traffic to 101 Street and/or 102 Street. In this regard, the City of Edmonton has included full traffic signalization at the intersection of 102 Street and 97 Avenue to assist with any traffic diversions caused on account of the loss of access from 102 Street/98 Avenue to Rossdale Road westbound. The impact of this possible rerouting is further discussed in Chapter 5.

3.4 Future Transit Facilities

The City of Edmonton has identified the expansion of the existing Mass Transit network as a priority to meet Edmonton's growing transportation needs. The continued development of the Mass Transit network is anticipated will be a major mode-split catalyst.

Edmonton's existing mass transit network will grow to include bus-based mass transit routes to complement the LRT service. Bus Rapid Transit routes are planned to be developed to provide a similar level of service to the LRT by giving the buses their own dedicated lanes, priority at intersections, and enhanced stations. When these mass transit routes are combined with existing conventional transit and LRT services, an integrated transit system will be available.

Several mass transit bus routes are anticipated to operate in the vicinity of the Rossdale Neighbourhood as part of the future mass transit network associated with the 1.25 million population scenario of the Edmonton City Plan. Mass Transit bus routes are planned to operate near the site along Bellamy Hill Road NW and/or McDougall Hill Road NW within the 1.25 million population horizon, including one Bus Rapid Transit (BRT) route.

The infrastructure required to accommodate future mass transit in the vicinity of Rossdale is still to be determined but is likely to include improved sidewalks, crosswalks, rebuilt bus stops, and a dedicated lane for transit. The details and design of these corridors are still to be determined, but they will ensure that high-quality, frequent bus service will continue to be available in this area in the future.

To leverage this public investment in transit infrastructure and to support increased transit ridership, the design of the residential buildings will prioritize the needs of pedestrians and cyclists as potential transit users.

Appendix B presents a reproduction of the City's current transit network.

4. PROPOSED DEVELOPMENT DESCRIPTION

4.1 Site Plan

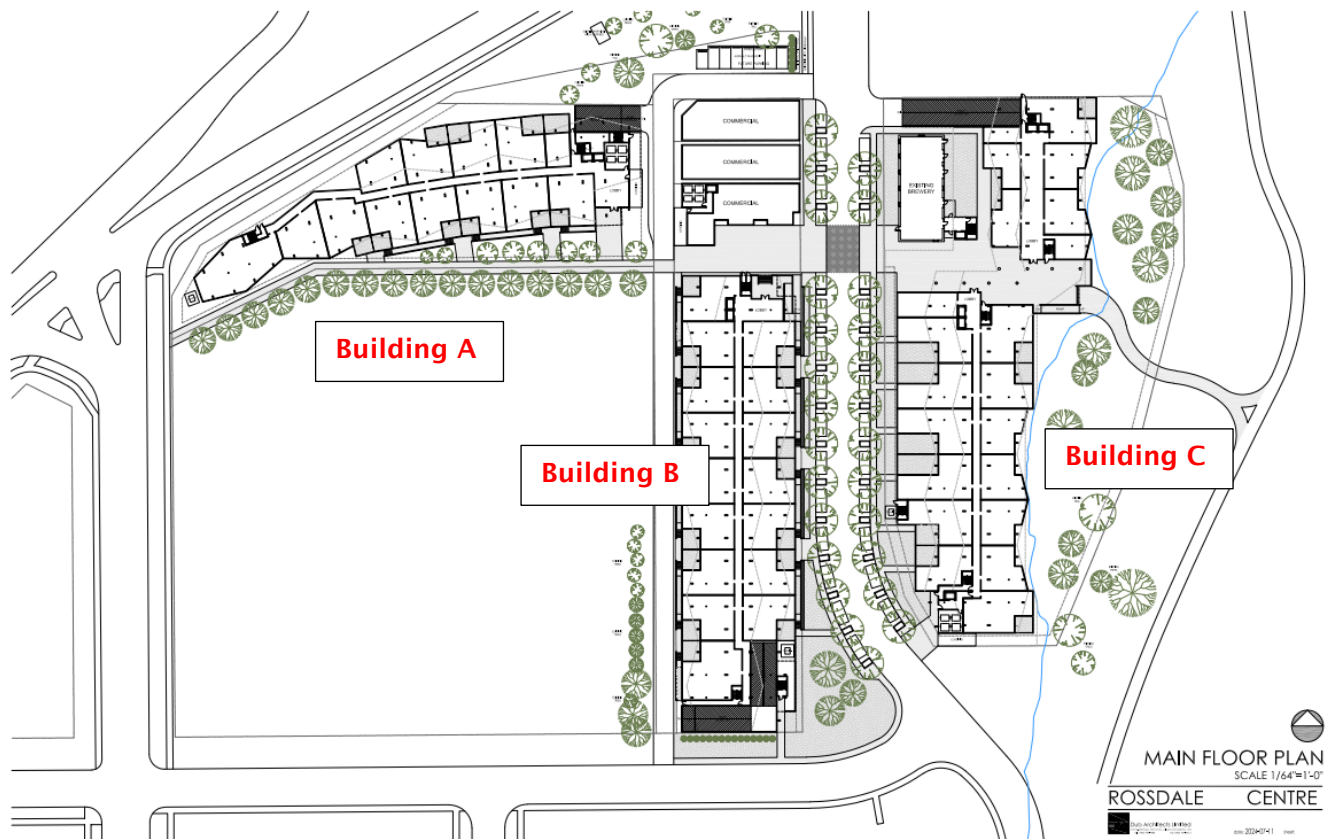
The proposed project predominantly consists of three residential buildings, on separate parcels of land. The 1915 brewery is to be joined to one of the new buildings by a parking structure. Each residential building will rise from 2 storeys to a maximum of 15 storeys.

The site is composed of three separate parcels totaling about 4 ha. The legal description of the parcels are Plan 0021114, Block 2, Lot 2 (Parcel A), Plan 0021114, Block 2, Lot 2 (Parcel B), Plan Q Block 7, Lots 12-15 (Parcel C).

Exhibit 4.1 presents the project site plan. It is anticipated that more refined site plans will be included with the Development Permit Application. The buildings could contain the following number of units: Building A - 115 Units, Building B - 166 Units, and Building C - 198 Units (479 total units).



Exhibit 4.1: Site Plan



The development project includes maintaining the existing Brewhouse Building located on the east side of 100 Street south of Rosedale Road and could include a number of small lots located east of Building A and north of Building B, west of 100 Street. Development on these lots could include low-intensity residential/live-work units. ***At this time, these lots are not part of the rezoning application but have been identified for context.***

The project will likely be built in three stages. It is anticipated that Building A will be constructed first in 2026/2027 followed by Building B in 2028/2029. Building C will be the final Building to be constructed in approximately 2029/2030. The construction of the residential buildings will be subject to market demands.

The project will focus on high-quality products and a unique terraced design emphasizing green roofs complimenting the River Valley and contributing to the vibrancy of the Rosedale neighborhood. The residential buildings may incorporate neighborhood-scale commercial uses on the lower level, such as convenience retail stores, work/live units, specialty food services, and neighborhood amenities. For this assessment, the maximum build-out scenario assumed a total of 479 residential units.

4.2 On-Site Parking Supply

Based on a review of available Zoning Level parking plans, an over-supply of off-street parking is not being provided within the building. At this time, single-level parking decks are being planned below all three buildings. It is however noted that a second parking deck may be constructed based on marketing and building construction and operation. The parking garages will accommodate resident and visitor parking and will likely also accommodate commercial parking.

Based on discussions with Five Oaks Inc., a target parking ratio of 1 stall per residential unit is being planned. No significant surface parking is planned at this time. Notwithstanding this target parking ratio, Five Oaks Inc. has designed the three buildings and the surrounding public realm space to encourage the use of alternative modes. An over-supply of parking could promote increased auto use and represent an inefficient use of space and financial resources. Providing a minimum but marketable amount of parking will assist in promoting and encouraging increased transit use and other alternative transportation modes.

A review of the proposed Parkwood Development DC2.1116 was completed. The approved DC2 allows for the development of a mixed-use site including commercial space, townhouses, and residential units. Based on a review of the Parkwood Development DC2.1116, the project could include about 118 residential units, while the minimum number of parking spaces to be provided was established at about 130 spaces or about 1.1 spaces per unit. (Residential and Visitor). The proposed Rosedale Centre parking program is planned to achieve a parking program that is in line with or less than historical development approvals in the area. Allowing for an off-site blended parking complement of about 1 stall per residential unit would appear to represent an appropriate target parking supply. **Exhibit 4.2** presents a preliminary parking plan.

At this time, it is anticipated that visitor parking will be provided in surface parking areas, in the parking garage, and on-street.

4.3 Parking Garage Access

A total of three (3) vehicular access locations have been identified as illustrated in Exhibit 4.1.

Primary vehicular access to the planned underground parking garage for Building A will be from the north-south and east-west alley in the north sector of the plan area. A gravel alley runs parallel to 100 Street from 98 Avenue, before making a right turn towards 100 Street (approximately 20 meters south of Rosedale Road).

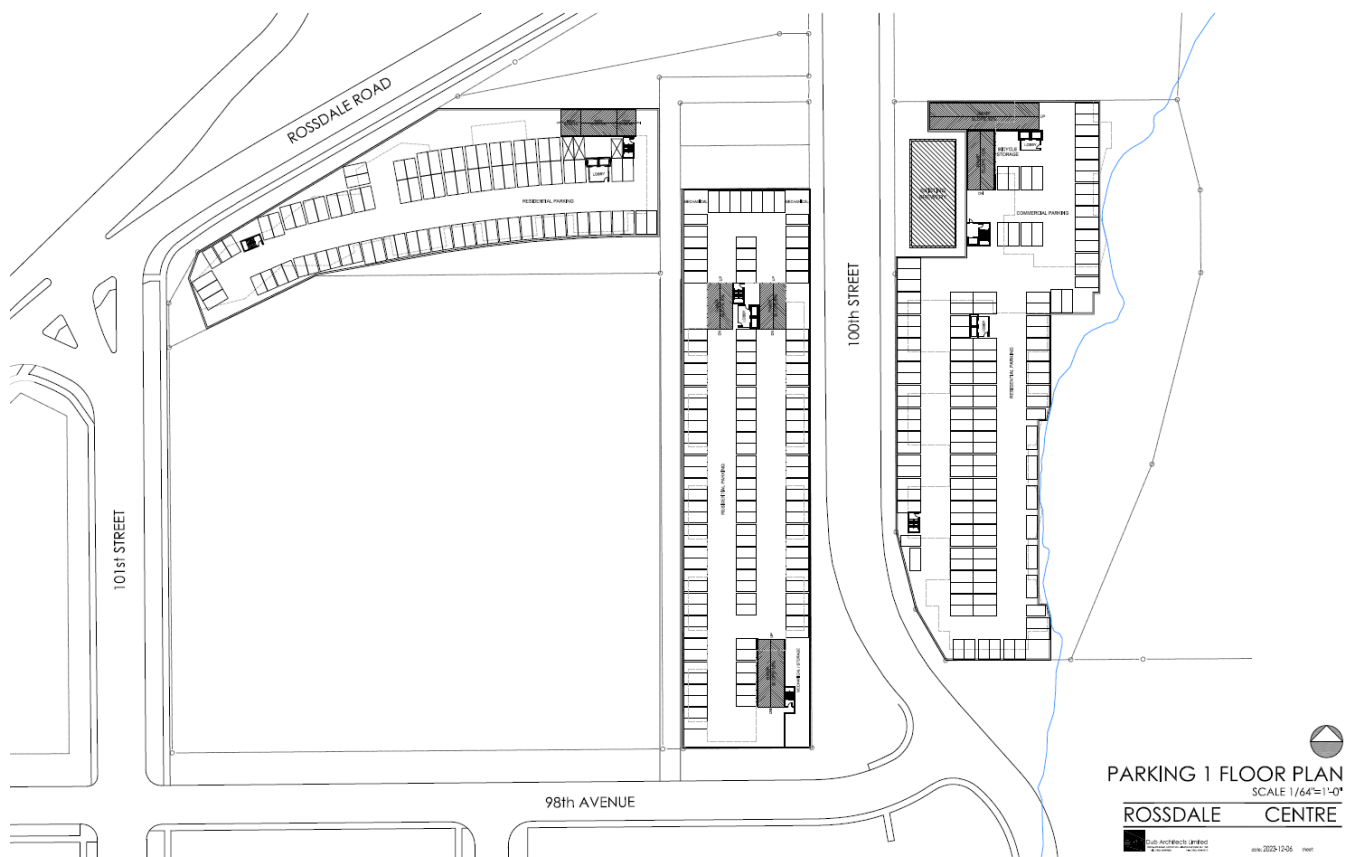
To facilitate the movement of parking garage vehicles and waste management vehicles from Building A, the north-south alley from the pedestrian walkway to the east-west alley and the east-west alley from the north-south alley to 100 Street will be upgraded to a commercial alley standard upon redevelopment.

Relocating the Building A Access further to the south would conflict with the proposed elevator location and public walkway to the east. The location of the Building A parking garage access is considered to be appropriate and functional. The need to relocate the garage access to the south has not been identified.

The parking garage access from Building B has been reoriented to the north-south alley from 98 Avenue. As such, a new sidewalk crossing has been precluded. The north-south alley from the Building B parking garage to 98 Avenue will be upgraded to a commercial alley standard.

One access to the Building C parking garage has been identified. The Building C parking garage access is located north of the Brewery Building and will likely accommodate Brewery, and other commercial and residential visitors as well as controlled access to resident parking.

Exhibit 4.2: Preliminary Parking Plan



As recommended in the NHC Flood Risk Assessment Report, the basement or underground parkade of Building C should be floodproofed by ensuring that all openings are higher than the design flood elevation. As such, access to Building C has been provided at the north end of the parcel.

Based on a review of preliminary parking plans, all three (3) parking garage site accesses meet City of Edmonton Access Management Guidelines in terms of offsets to intersecting roads in addition to allowing the development of an efficient and effective parking garage floor plate below Building A.

The power poles located on the east side of the north-south alley are not anticipated to interfere with vehicle access movements to and from the underground parking garage. A minor widening of the north end of the north-south lane is proposed to facilitate vehicle movements. No direct access to Rossdale Road is planned.

It is understood that swept path studies will be completed by Five Oaks for their internal review of waste management and loading space requirements and to facilitate a future Development Permit application. These additional studies and considerations will be completed at more detailed levels of planning and could include linking the parking garages below Buildings A and B. At the rezoning stage, access to the parking garages can be accommodated. Sightlines are clear at the parking garage intersections, and vehicles are expected to be able to navigate these intersections without significant difficulty.

4.3.1 North-South Alley Operations

The existing north-south alley is a 5m wide residential alley. To better accommodate the movement of vehicles from Building A and Building B (at the south end of the alley) including possibly waste management vehicles, the existing north-south alley and the existing east-west alley will be upgraded to a commercial alley standard within the available right of way. Given the location of the Building A parking garage access relative to 100 Street and Rossdale Road, it is anticipated that the vast majority of entering and exiting vehicles will use 100 Street and the east-west alley and not the north-south alley. Similarly, it is not anticipated that Building B residents will use the north-south alley as these residents will be able to conveniently access 98 Avenue. It is anticipated that the north-south alley will continue to represent a low-volume alley.

To better accommodate traffic movements on the higher volume segments of the alley, a minimum 1.0 m of setback from the north-south alley abutting the site must be hard surfaced and incorporated into the alley and free of obstructions to allow for vehicle use. The additional 1.0m of widening will be provided on the west side of the north-south Alley between the east-west shared pathway and the east-west Alley to the north, and on the east side of the north-south alley for the first 15m north of 98 Avenue (DC 4.3.7.1).

Exhibit 4.3 on the following page illustrates the anticipated movement of parking garage vehicles from Building A and Building B as well as the extent of north-south alley widening.

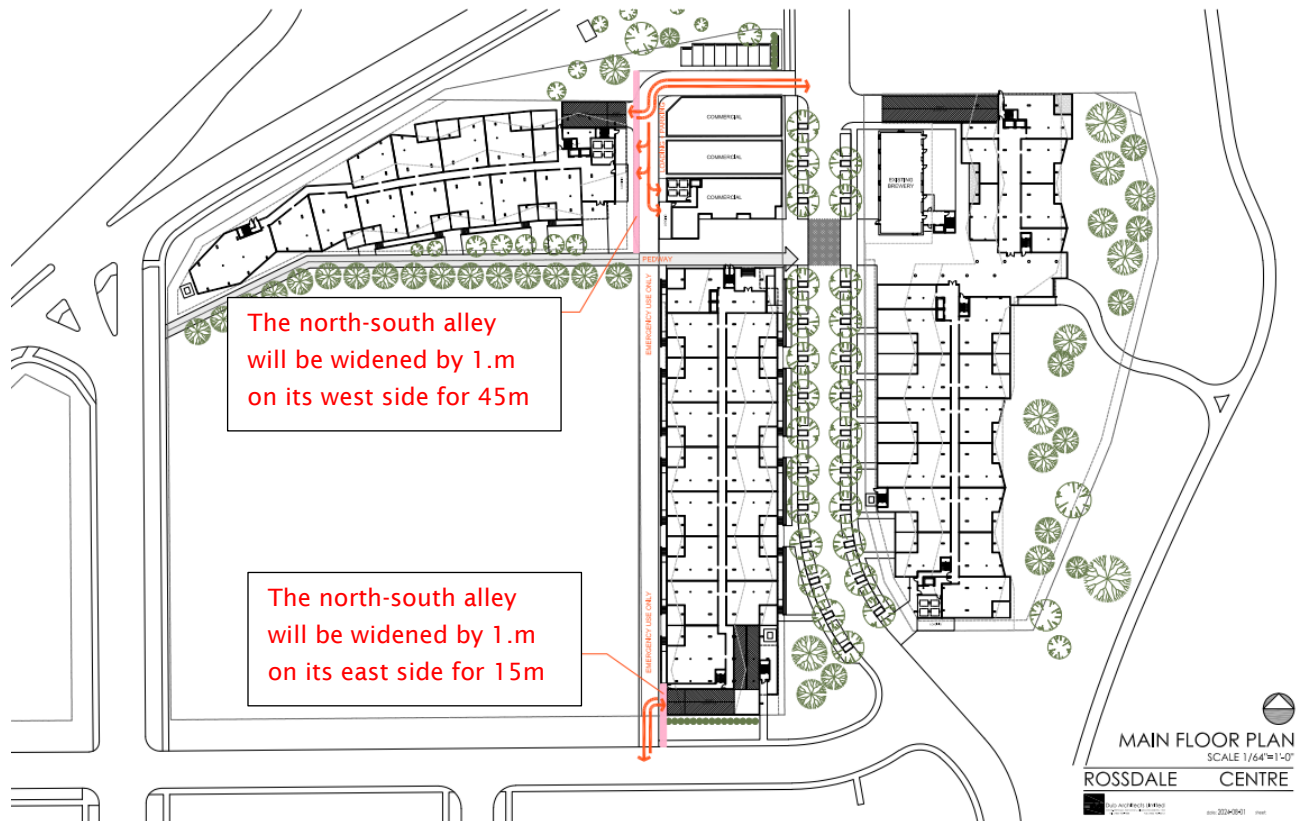
As identified in Exhibit 4.3, the north-south and east-west alleys will be available for emergency vehicle use.

4.3.2 Vehicular Connectivity

This development site is well located to access a variety of transportation options with connections to the surrounding neighbourhood, the trail system, and the City's transit system and it benefits from ease of connectivity to a significant number of paved trails and pathways throughout the city. The street network surrounding the site connects vehicular traffic to the downtown area and the east side of Edmonton using 97 Avenue.

Vehicular traffic is accommodated by streets and avenues surrounding the development site. Connors Road, 97 Avenue, and 103 Street are all major arterials that connect the downtown area to the rest of the city and are located just a few blocks away. Vehicular routes in the area are well connected to downtown via McDougall Hill, Bellamy Hill, and 97 Avenue. Connections to the east side of the City and Sherwood Park are accessible from 97 Avenue. Connors Road also provides a route across the river to the south side of Edmonton.

The project site is within easy walking and biking distance to the North Saskatchewan River Valley Trail system (one block to the east of the site) as well as conveniently located near several transit stops. The site has been recently connected to downtown by the Funicular Railway.

Exhibit 4.3: North-South and East-West Alley Widening**4.3.3 Pedestrian Connectivity**

Given the site's location in the north sector of the Rossdale Neighbourhood and within easy walking distance of the Government Centre, the Downtown Core, and pathways within the North Saskatchewan River Valley, a primary focus of the development plan is to maintain appropriate pedestrian circulation to and from and around the site and to promote pedestrian activity. Pedestrian connections through the development site and along adjacent roadways will be provided.

The number of driveways and site accesses proposed has been minimized to reduce pedestrian crossing requirements. The existing sidewalk along 100 Street will be maintained and connected to the development at the street level. Safe, continuous, and clearly defined pedestrian routes will be provided and pedestrian/vehicle conflict areas have been kept to a minimum. It is anticipated that a new sidewalk on the east side of 100 Street will be constructed in conjunction with Building C and that the existing sidewalk on the north side of Building B will be extended through the parking garage access to the west edge of Building B. All sidewalk facilities will conform and adhere to the Complete Street Guideline. Some sidewalk improvements may be included in the Rossdale Building Great Neighbourhoods program.

A 3.0m shared-use path is being planned to be constructed along the south side of Rossdale Road as part of the Rossdale Road Rehabilitation project. This pathway will cross 100 Street. Historically, a raised channelizing island reinforced the right in and out nature of the movements from Rossdale Road to 100 Street. The channelizing island has been removed and will not be replaced. It is anticipated that a painted crosswalk will be installed on the south 100 Street approach.



Given the level of intensity associated with the three residential buildings (479 units), it is anticipated that there will be increased pedestrian demand to use the transit stop on the north side of Rosssdale Road. Based on a review of the Transportation of Canada's (TAC) Decision Support -Treatment Selection Matrix, given the volume of traffic on Rosssdale Road and the anticipated level of pedestrian movements, a painted crosswalk with side-mounted signs extending across Rosssdale Road NW from the southwest corner of the intersection with 100 Street NW is warranted (DC 4.7.1.10).

Table 4.1 includes a reproduction of the TAC Decision Support -Treatment Selection Matrix

Table 4.1:TAC Decision Support -Treatment Selection Matrix

Average Daily Traffic	Speed Limit ² (km/h)	Total Number of Lanes ¹				
		1 or 2 lanes	3 lanes (two-way)	3 lanes (one-way)	2 or 3 lanes/direction w/ raised refuge	2 lanes/direction w/o raised refuge
1,500 < ADT ≤ 4,500	≤ 50	GM	GM	GM	GM	GM+
	60	GM+	GM+	OF	RRFB or OF ³	RRFB
	70	RRFB	RRFB	OF	OF	OF
4,500 < ADT ≤ 9,000	≤ 50	GM	GM	GM	GM	RRFB
	60	GM+	GM+	OF	RRFB or OF ³	OF
	70	RRFB	OF	OF	OF	TS
9,000 < ADT ≤ 12,000	≤ 50	GM	RRFB	OF	RRFB or OF ³	OF
	60	RRFB	RRFB	OF	RRFB or OF ³	TS
	70	OF	OF	OF	TS	TS
12,000 < ADT ≤ 15,000	≤ 50	RRFB	RRFB	OF	RRFB or OF ³	OF
	60	RRFB	OF	OF	RRFB or OF ³	TS
	70	OF	TS	TS	TS	TS
> 15,000	≤ 50	RRFB	OF	OF	RRFB or OF ³	TS
	60	RRFB	TS	TS	TS	TS
	70	OF	TS	TS	TS	TS

Notes: GM - (crosswalk with side-mounted signs) and GM+ (enhanced crosswalk with side-mounted signs).

RRFB - (rectangular rapid flashing beacons) and OF (overhead flashing beacon systems or special crosswalks).

TS - Traffic signal

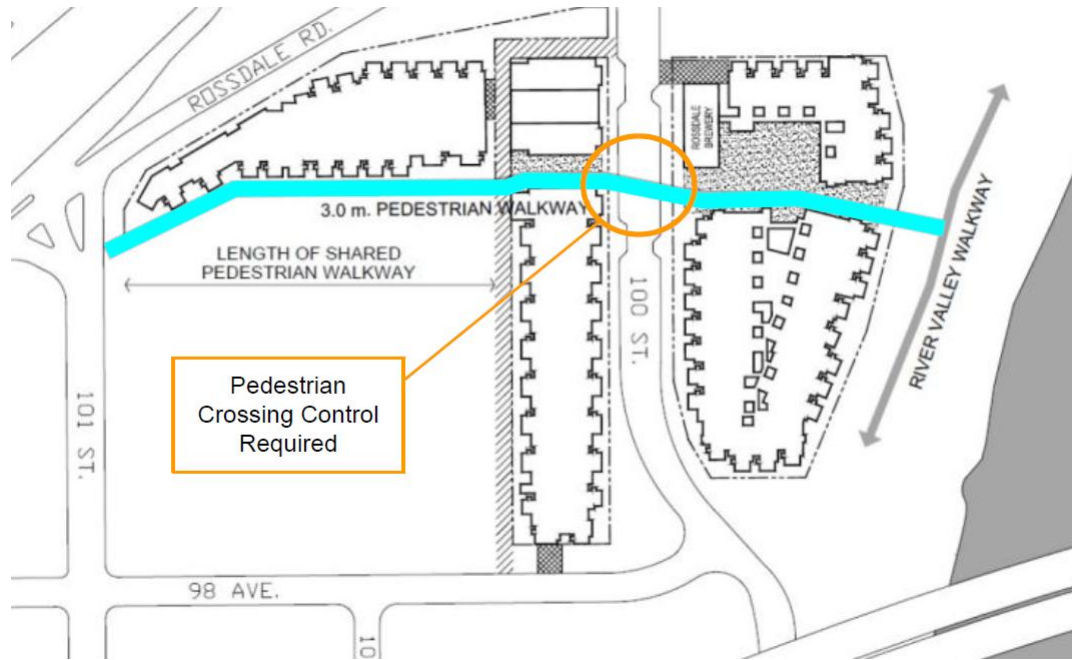
RRFB - (rectangular rapid flashing beacons) and OF (overhead flashing beacon systems or special crosswalks).

TS - Traffic signal

To facilitate pedestrian and bicycle movements across 100 Street, Five Oaks Inc. will design and construct a publicly accessible minimum internal 3.0m wide shared pathway including lighting and landscaping, pedestrian crossing controls as warranted, connecting the River Valley to 101 Street as illustrated in **Exhibit 4.4** on the following page. Five Oaks will be required to register a 24-hour public access easement along the shared pathway.

The City of Edmonton will be a party to this easement. The easement will stipulate that Five Oaks Inc. will not discharge the easement without the express written consent of the City of Edmonton.

It is noted that through Building C, the pathway is likely in the order of 5m or 6m wide. The 100 Street crossing will be kept to a 3.0m width. South of Building A, the 3.0m wide shared-use path can take advantage of the park so in reality, the functional width of the shared-use pathway is greater than 3.0m through the park.

Exhibit 4.4: Shared Use Pathway Across 100 Street

There are a number of options in regard to the design of the 3.0m shared pathway across 100 Street to make the pedestrian crossing more visible. These options could include the use of textured concrete, painting the pavement, or raising the crossing to the sidewalk level (as a raised crosswalk), curb extensions, flashing rapid beacons, etc. . All of these options would be supplemented with appropriate traffic control signs. It is anticipated that the Five Oaks will work with the City at the Development Permit stage to review and determine the most appropriate pedestrian crossing design to prioritize pedestrian crossings.

The design and construction of pedestrian crossing control at the mid-block crossing of the Shared Pathway and 100 Street should be planned and designed as an active mode priority crossing (DC 4.7.1.5).

The proposed pedestrian improvement program will enhance the overall pedestrian/cyclist experience as internal walkway connections will lead residents to adjacent public walkways.

Although it is acknowledged that the overall site is bounded by arterials on almost all sides making everyday amenities/downtown not very accessible for pedestrians/active modes, the combination of pedestrian/bicycle project enhancements, in combination with BGN project improvements including traffic control enhancements and improved access to transit should improve the pedestrian/cyclist experience.

Exhibit 4.5 and Exhibit 4.6 illustrate renderings of the view from the pedestrian corridor on the west side of 100 Street, across 100 Street towards the Building C gateway, and the Building C gateway looking west.

Exhibit 4.5: Pedestrian Corridor Looking East Towards Brewery Building and Building C Gateway



Exhibit 4.6: Pedestrian Corridor Looking West from the Building C Gateway Towards Brewery Building



Given the pedestrian activity in the general area, it will be necessary to develop design strategies at more detailed levels of planning to integrate the pedestrian environment with adjacent roadways and alley vehicular movements in a safe manner. Five Oaks Inc. will further detail these possible options during the Development Permit Application process. It is anticipated that enhanced lighting, wayfinding signs, and physical features such as bollards, raised crosswalks and textured/coloured surfacing materials could be considered in the development of an integrated pedestrian interface. Similarly, it is anticipated that at the Development Permit stage of planning, a more detailed pedestrian and vehicular plan will be developed to integrate the service vehicle zones and waste management zones.

4.3.4 Bicycle Accommodation

Easily accessible and appropriate bicycle accommodation will be provided for both residents and visitors including visitors generated by the commercial retail units. The development will provide a bicycle stall complement that achieves or exceeds Edmonton Zoning Bylaw requirements.

Secure bicycle storage/stalls will likely be located in the underground parking garage. At this time there are no plans to provide a separate entrance into the buildings for bicycles. Given that bicycle parking will be provided in the underground parking garage, the parkade access ramp will be shared by vehicles and bicycles, and bicycles will be permitted on the parkade drive aisles.

Additional details on bicycle accommodation and supply will be provided with the Development Permit application. Area bicycle routes and facilities will facilitate the use of bicycles as a primary transportation mode.

At this stage of planning, consideration is being given to incorporating a bicycle maintenance and wash unit within the building for residents only. A shared bicycle program may also be considered.

Short-term visitor parking spaces will also be provided at the ground level. The number of surface spaces that will achieve City of Edmonton Zoning Bylaw requirements and the number of short-term bicycle spaces to be provided will be determined at the Development Permit stage of application.

4.3.5 Service Vehicle Loading and Waste Management

Every effort will be made at more detailed levels of planning to have waste operations occur such that the waste management vehicles will not interfere with alley, roadway, or pedestrian operations or interfere with the buildings.

The waste management area for Building A will be located on the east side of the building adjacent to the north-south alley. The waste management area for the future commercial buildings (not part of this application) will be located on the east side of the north-south alley while the waste management area for Building B will be.....

The waste management area for the Brewery will be accessed from 100 Street while the waste management area for Building C will be located at the south end of the building via a commercial apron access from 100 Street. The commercial apron access depth will be of sufficient depth to ensure that waste management vehicles do not interfere with sidewalk operations (on the east side of 100 Street).

All waste management, storage, or loading areas will be designed to the satisfaction of the Development Office in consultation with Waste Management Services and Transportation Services. Gates and/or doors of the waste enclosure must not open or encroach into road right-of-way (DC 3.3.8).

5. TRAFFIC REVIEW

5.1 Gross Trip Generation

The residential development is anticipated to generate person trips by various modes including auto, bicycle, transit, and pedestrians. Concerning auto trips, AM, PM peak hour, and daily trip generation rates for the development were applied based on the accepted City of Edmonton rates for medium-density residential development. The trip generation rates applied are summarized in **Table 5.1**.

Table 5.1: Trip Generation Rates

Land Use	Source	AM Peak Hour	PM Peak Hour	Daily
High Density Residential	City of Edmonton	0.34 trips/du	0.40 trips/du	5.81 trips/du

Table 5.2 summarizes the projected traffic volumes associated with the proposed development site based on the proposed build-out under a CB1 Zone assuming approved City of Edmonton trip generation rates.

Table 5.2: Gross Trip Generation Estimates

Land Use	Intensity	AM Peak Hour		PM Peak Hour		Daily	
		In	Out	In	Out	In	Out
Residential Units	479 units	30	133	120	72	1,390	1,390
Total Residential Traffic		163		192		2,780	

It is anticipated that under the maximum build-out scenario, the development could generate in the order of 163 gross two-way trips during the AM peak hour, 192 gross two-way trips during the PM peak hour, and about 2,780 gross two-way trips daily.

5.2 Neighbourhood Travel to Work Profile

Located immediately to the south of the City's downtown core, the Rossdale Neighbourhood is one of the City's older City neighbourhoods. The locational attributes associated with the neighbourhood are reflected in the mode of transportation (home to work) characteristics exhibited by neighbourhood residents. Based on a review of the 2016 Municipal Census (**Table 5.3**), about 65.5% of all residents' home-to-work trips are made by private automobile (or as a passenger). Public transit use (11.29%) and walk trips (17.65%) represent the majority of non-auto trips. About 1.88% of the trips are made by bicycle. The number of home-to-work trips made by transit, walk, or bicycle by residents (about 30.82% of all trips) in Rossdale is higher than City-wide home-to-work averages (about 18.2%).

Table 5.3: City of Edmonton Municipal Census Results – Mode of Transportation Home to Work

Main Mode	Number	Neighbourhood %	City Wide %
Car/Truck/Van (as a driver)	256	60.24%	72.27%
Car/Truck/Van (as a passenger)	23	5.41%	4.61%
Public Transit	48	11.29%	13.41%
Walk	75	17.65%	3.76%
Bicycle	8	1.88%	1.03%
Other	11	2.59%	2.65%
No Response	4	0.94%	2.27%
Total	425	100.00%	100.00%

Notwithstanding that this profile information is somewhat dated, it is anticipated that the mode split to alternate modes will only continue to increase as the Rossdale Neighbourhood continues to intensify. A few causes of this anticipated mode split include the introduction of additional pedestrian and bicycle facilities associated with City-sponsored improvement projects, and the implementation of the new Mass Transit Network Plan (including future Valley Line LRT and Bus-based Mass Transit). It is anticipated that the travel mode profiles reflected in the 2016 census may underestimate and understate the mode split to alternate modes.

5.3 Net Residential Trip Generation Estimate

Based on the results of the 2016 Municipal Census, 30.82% of residents within the Rossdale Neighbourhood use transit, walk, ride their bike, or use other non-auto modes to get to work. The City of Edmonton trip generation rates summarized in Table 5.1 were collected in primarily suburban areas with limited access to transit. Based on a review of several suburban areas, it is anticipated that the rates summarized would reflect areas with a mode split to transit, walking, and cycling in the order of 5% to a maximum of 10%.

For this assessment, a reduction in the base (gross) trip rate of 25% was assumed to reflect current or anticipated area mode split characteristics as it is anticipated that the mode split to alternative transport modes will increase over time reducing the impact of site-generated traffic. **Table 5.4** summarizes the Net Trip Generation estimates.

Table 5.4: Net Trip Generation Estimates

Land Use	Intensity	AM Peak Hour		PM Peak Hour		Daily	
		In	Out	In	Out	In	Out
Residential Units	479 units	23	100	90	54	1,040	1,040
Total Residential Traffic		123		144		2,080	

It is anticipated that under the maximum build-out scenario, the development could generate in the order of 123 net two-way trips during the AM peak hour (0.26 trips /unit), 144 net two-way trips during the PM peak hour (0.30 trips/unit), and about 2,080 net two-way trips daily (4.3 trips/unit). These levels of traffic activity represent about two to three trips (two-way) per minute on average.

In regards to the above, based on recent trip generation surveys undertaken at high-density residential tower developments (HTCI 2023, the Maclaren Residential Tower, 220 occupied units), the following rates were recorded:

- Daily - 2.21 two-way trips per unit
- AM Peak Hour - 0.2 two-way trips per unit
- PM Peak Hour - 0.28 two-way trips per unit

Although the AM and PM Peak Hour trip rates calculated for the Rossdale Centre development are generally in line with those determined by the Maclaren Trip Generation Survey, the Daily Trip Rate may be high.

It is understood that the locational attributes associated with the Maclaren development (102 Avenue and 124 Street) are not reflective of the Rossdale Centre site context (different access to amenities and transit), the Maclaren Trip Generation Survey does provide evidence that high-density developments located near employment opportunities, amenities, transit, and bicycle facilities do influence a development's trip generation characteristics.

The aforementioned information is for information only and was not used to reduce the traffic generation characteristics of the Rossdale Centre development.

In particular, if the daily trip rate is projected to be in the order of 3.0 trips per unit, then the anticipated alley volume generated by Buildings A and B could be in the order of 350 two-way trips per day if all of the residential generated traffic from Building A (115 units) used the North-South alley and the east-west alley. It is anticipated that Building B could generate about 500 two-way trips daily.

The assessment has concluded that the magnitude of daily traffic activity in the north-south alley could be less than the threshold of about 1,000 two-way trips at both its north and south ends.

5.4 Commercial Traffic

The proposed Rossdale Centre redevelopment may include a small commercial component. As mentioned in Chapter 4.0, neighborhood-scale commercial uses on the lower level, such as convenience retail stores, work/live units, specialty food services, and neighborhood amenity land uses may be considered.

It is anticipated that the majority of commercial traffic activity will be generated by Rossdale Neighbourhood residents on foot or bicycle. Given the location of the Rossdale Centre development straddling 100 Street, ease of access to possible future commercial land uses is somewhat circuitous for non-Rossdale residents. It is anticipated that the amount of non-residential commercial site-generated traffic will be low. The commercial land uses are not anticipated to generate a meaningful amount of vehicular traffic movements.

5.5 Background Traffic

Background traffic is the component of traffic on the adjacent streets that would be present regardless of any development of the subject site. A general growth rate is normally applied to the existing traffic to reflect the ongoing growth caused by new developments and general population increases in the area.

Given the timing of the report's completion, overarching post-Covid-19 conditions, and ongoing roadway construction work associated with the Rossdale Road Rehabilitation Project and the BGN Neighbourhood Project, completing traffic counts on 100 Street, 98 Avenue, and Rossdale Road may not have provided traffic movements that are reflective of typical traffic operations or conditions.

The development site is located in a low-intensity area of the Rossdale Neighbourhood. As mentioned in Chapter 4.0, 100 Street and 98 Avenue are best considered as low-volume local roadways with available capacity to accommodate increased levels of traffic movements. For this assessment, 98 Avenue and 100 Street were assumed to accommodate between 1,000 and 1,500 daily vehicle trips. Although a capacity of 1,000 vpd has historically been used for local roads regardless of context, many of the local roads in the core and mature areas are experiencing increased traffic volumes as the area redevelops. Local roadway volumes will continue to increase with increased density as per the City Plan vision.

A review was completed of the 1.25 Million City Population Horizon DTA Model Information for the Rossdale Area. The model is assumed to have included new development in the greater Rossdale Neighbourhood including the Rossdale Centre development.

Based on this review, it was determined that 98 Avenue and 100 Street would both carry less than 100 two-way trips in the AM and PM peak hours other than the north segment of 100 Street south of Rossdale Road. The model predicted that Levels of Service A to C were anticipated. Daily, 98 Avenue and 100 Street were projected to carry about 1,000 two-way trips per day except for the north segment of 100 Street between Rossdale Road and the East-West alley.

The review of the 1.25 Million City Population Horizon DTA Model seems to substantiate our findings that traffic volumes on the local roadway network are anticipated to be low and manageable.

5.6 Trip Distribution and Assignment

Based on a review of the roadway network surrounding the development site, it has been determined that there are multiple opportunities for vehicles to access and egress the development area. Key roadways include 101 Street to Rossdale Road eastbound, 101 Street to 97 Avenue westbound, 100 Street to 97 Avenue eastbound, and 100 Street to and from Rossdale Road, eastbound.

5.7 Traffic Assessment

It is anticipated that 98 Avenue and 100 Street will accommodate the majority of the new traffic activity generated over time by the three buildings.

At a rezoning level of assessment, the anticipated level of traffic activity, which will occur over an extended period of time (three development phases - 479 units) can be accommodated on the area's roadway system. Given the low volume of traffic activity on 100 Street, 101 Street, and 98 Avenue, there is likely spare capacity available on all of these roadways to accommodate additional traffic movements.

Although a quantitative assessment was not undertaken as part of this study, qualitatively, given the anticipated number of site-generated trips in both the AM and PM peak hours, if the movements are generally split between 100 Street, 98 Avenue 100 Street south of 98 Avenue, and 102 Street south of 98 Avenue, the magnitude of new traffic activity is generally low on each of the corridors.

It is also noted that the City will be installing a new traffic signal at the intersection of 102 Street and 97 Avenue (to replace an existing pedestrian traffic signal). Although a formal Synchro assessment was not undertaken (low traffic movements on 102 Street north of 97 Avenue), intuitively, the installation of a new traffic signal at this intersection should mitigate any concerns with accommodating displaced traffic that historically used 102 Street/98 Avenue to access Rossdale Road westbound.

Based on the preliminary traffic review completed, it has been determined that the existing roadway infrastructure near the development site is capable of accommodating site-generated traffic movements.

It is recommended that at more detailed levels of planning a further quantitative review of the 98 Avenue and 100 Street traffic control plan be completed. It is anticipated that the existing eastbound yield control, as a minimum, should be replaced by a stop sign (DC4.7.1.11). The need for higher-order traffic control should be reviewed when roadway construction activity in the area has been completed and traffic volumes return to a more normal state.

No additional roadway improvements or traffic control improvements are being recommended at this time (other than upgrading 45m of the North-South Alley at its north end, all of the east-west alley, and 15m of the north-south alley at its south end to a 6m commercial alley standard).

Phasing the construction of the three buildings over time will allow for intermediate traffic reviews to be completed as required to better understand the trip generation characteristics of the development.

6. MULTI-MODAL TRANSPORTATION ASSESSMENT

6.1 Introduction

The construction of the three residential buildings in the Rossdale Neighbourhood represents a strategic development initiative. The transportation plan prepared for the new buildings should build upon the policies and goals enshrined in City Plan through the development of a sustainable, vibrant, well-designed, and easily accessible building. The locational attributes associated with the development parcel will allow for a sustainable, multi-modal traffic and parking program to be developed that supports key City of Edmonton strategic goals and policies.

6.2 Sustainability Concepts

Redevelopment of the subject parcels represents an excellent opportunity for Five Oaks Inc. to consider and implement where feasible, components and elements associated with sustainable development and to provide leadership in implementing policies to ensure sustainable future growth.

To ensure that the development project will be constructed and operated sustainably, the traffic and parking plan should consider synergies that can be developed between various user groups. The relative location of the project to existing and future residential development activity, retail and commercial areas, employment opportunities, and transit will continue to allow for transit and walk trip opportunities which should reduce reliance on the automobile as the primary means of transportation. From an urban design and parking planning perspective, the development of a sustainable mixed-use development has the following advantages:

- reduces site-generated traffic and parking demands as a result of land use synergies,
- allows people to walk to their destinations: and;
- allows for a more compact development to facilitate pedestrian movement activity.

6.3 Urban Form

The buildings are planned to be oriented towards 100 Street and Rossdale Road. Providing ease of access to these pedestrian corridors provides for excellent connectivity to transit, pedestrian, and bicycle routes. The residential densities in the building are conducive to supporting transit as a major transportation mode. The overall site design attempts to minimize conflict points between vehicles, pedestrians, and bicycles, and appropriate sight distances have been provided in the overall site design.

6.4 Shared Streets

A shared street environment could be considered for 100 Street between Rossdale Road and 98 Avenue where pedestrian activity could be high and where vehicle volumes are generally low and on-street parking should be considered. 100 Street could be reimagined to allow for safe movement and a larger variety of activities and travel modes. Shared streets can significantly contribute to the public space network, adding vibrancy and activity with outdoor dining, public seating, artwork, and landscaping.

It is understood that the City of Edmonton through the Building Great Neighbourhoods program is in the process of implementing several shared street concepts in the City. Integrating a shared street concept with the site design at more detailed levels of planning and design would be considered an innovative form of sustainability.

6.5 Transportation Demand Management

The planned redevelopment of the subject parcels represents an excellent opportunity for the owners and operators to consider and implement, where feasible, strategies and tactics associated with Transportation Demand Management (TDM) and to provide leadership in implementing policies to ensure sustainable future growth given the project's location in a somewhat roadway capacity-constrained area.

The effective application of TDM measures is considered a cost-effective means to reduce the need for additional roadway and parking infrastructure. TDM strategies and objectives can complement and reinforce other policies such as the use of alternative modes of transportation and non-auto modal split targets. The implementation of TDM measures can enhance the livability of the development area by controlling the number of vehicles through a reduction in the number of parking spaces.

At the appropriate time (Development Permit Application stage), a TDM plan is recommended to be developed and implemented for prospective residents to enhance their ability to travel, to as great a degree as possible, without the use of an automobile, thereby reducing the need for residents to own a car. TDM strategies for a development can be divided into two categories.

- Pre-occupancy: things that need to be done while the development is being designed, and
- Post-occupancy: things that can be done once people are using the development.

Pre-occupancy actions are critical because they are most likely to determine how attractive, convenient, and safe alternative travel modes will be once the site is occupied. Before a site is occupied, it can be designed to be convenient and safe for pedestrians and cyclists, and vehicle parking can be provided to meet but not exceed demand.

6.5.1 TDM Strategies

To encourage and support lifestyle adjustments to achieve better sustainability, Five Oaks Inc. could consider developing site-specific TDM programs for their tenants or advise their tenants of possible TDM measures that address specific parking and transportation initiatives associated with the daily transportation needs of building residents, employees, and visitors. TDM plans, measures, and initiatives to achieve an increased non-auto modal split and to reduce single-occupant vehicles could include the following.

Table 6.1 presents a possible Rossdale Centre TDM program.

Table 6.1: Rossdale Centre Candidate TDM Strategies

• Provide bicycle parking above minimum City bicycle space requirements	• Provide marketing and alternate transport Mode Information
• Provide a bike wash and repair station	• Implement a bike-share program
• Provide a car share space	• Parking pricing
• Unbundle parking	• Provide cargo bikes

A more complete review of possible and applicable TDM strategies and measures will be considered with the Development Permit Application. A robust TDM program could provide equal and balanced opportunities for residents to choose what alternate mode of transportation best suits their needs from a range of transportation modes. A TDM program encourages the use of transit and other alternative modes to help achieve long-term City plan goals.

6.6 Electric Vehicle Charging Stations

Many parking facilities have started incorporating EV Charging Stations in response to the growing number of electric cars and trucks on the market. This trend is expected to continue as more new electric car models become available. Additionally, governments are investing heavily in public parking infrastructure to support this shift towards electric vehicles. The federal government of Canada has recently unveiled plans to move away from gas-powered cars and towards electric vehicles, with the majority of the sales of passenger cars, SUVs, crossovers, and light trucks expected to be hybrids, electric, or hydrogen-powered vehicles by 2035. At the same time, many municipalities are expending significant amounts of money in providing robust public parking infrastructure.

Electric vehicles offer several advantages such as lower refueling costs, instant acceleration, and better air quality. However, their main disadvantages are limited range, lack of affordable models, and limited recharging infrastructure.

A review of EV Charging Stations will be reviewed at the Development permit stage of application.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Study Synopsis

Five Oaks Inc. is proposing to rezone vacant parcels in the Rosssdale Neighbourhood. Rezoning approval will allow for the construction of three residential buildings of varying sizes and heights to be constructed in a series of development phases. A total of about 479 residential units could be accommodated in the three buildings.

To assess the transportation impacts associated with the rezoning application, the City of Edmonton requested that the transportation review include the possible traffic impacts associated with the rezoning application. The primary goal of the study was to assess and identify any significant traffic-related impacts associated with the construction and operation of the proposed project.

Off-street parking will be provided in below-grade parking garages located under each of the three residential buildings. A parking ratio of 1 stall per residential unit is being planned.

7.2 Development of the Recommended Traffic and Parking Plan

The development of the overall traffic and parking plan for the development parcel represents an integrated transportation plan. The transportation plan builds upon and leverages existing and future transportation systems planned for this sector of the Rosssdale Neighbourhood.

To ensure that the overall transportation and parking program is developed to accommodate both the needs and requirements of the new building and considers the area of significant traffic and parking influence, the following elements were considered (at a rezoning level of assessment) in the development of the overall transportation plan:

- Traffic accommodation needs including access to the underground parking garage;
- Parking accommodation;
- Pedestrians and bicycle access;
- Accessibility to transit; and
- Service vehicle requirements.

7.3 Sustainability

Redevelopment of the subject parcels for multi-family residential development represents an excellent opportunity for Five Oaks Inc. to consider and implement components and elements associated with sustainable development and to provide leadership in implementing policies to ensure sustainable future growth.

To ensure that the development project will be constructed and operated sustainably, the mobility plan should consider synergies that can be developed between various user groups. The relative location of the project to existing and future residential development activity and transit will continue to allow for transit and walk trip opportunities which should reduce reliance on the automobile as the primary means of transportation. The development of the overall traffic plan for the mixed-use building represents an integrated transportation plan. The plan builds upon and leverages existing and future transportation systems planned for this sector of the City as envisioned in City Plan.

7.4 Key Study Findings

A multi-modal transportation review was completed at a rezoning level of assessment that indicated minimal transportation impacts are expected upon the operation of the staged multi-family residential project. Traffic volumes on area roadways are generally low and no current roadway or alley operational issues were identified.

Study area intersections adjacent to the site are anticipated to continue to operate at acceptable levels of service in the AM and PM peak hours with the addition of site-generated traffic and should continue to do so in 2027/2028 which represents the opening day scenario. The access points to the north/south alley, which provides vehicle access to the site, are also anticipated to operate very well during peak periods. The volumes generated by the proposed development constitute a low proportion of future committed traffic movements from future adjacent developments. The proposed redevelopment will add relatively little traffic to adjacent roadways or intersection congestion.

The typical daily volume threshold on a local roadway (98 Avenue, 100 Street) is 1,000 to 1,500 vehicles per day and it is anticipated that a threshold of 1,000 vpd can be applied to two-way residential alleys. It is anticipated that daily volumes along the north-south alley (to the Building B parking garage access) could be in the order of 500 two-way vehicles per day (just north of 98 Avenue). It is anticipated that daily traffic movements on the north-south alley and the east-west alley could be in the order of about 350 daily two-way movements. These volumes are in line with typical alley volume thresholds. Although a capacity of 1,000 vpd has historically been used for local roads regardless of context, many of the local roads in the core and mature areas are experiencing increased traffic volumes as the area redevelops. The volume will continue to increase with increased densification as per the City Plan vision.

As a core neighbourhood, several multi-modal transportation facilities serve this area of the Rossdale Neighbourhood including sidewalks, bike lanes, and transit routes. The parking requirements for the development were determined based on market and tenant marketing conditions and requirements. The development will achieve or exceed Edmonton Zoning Bylaw bicycle requirements. This development encourages the utilization of active modes of travel as well as the transit system.

7.5 Conclusions

The City of Edmonton should continue to be mindful of evolving mobility choices, technology, and consumer preferences, and their potential implications for vehicle ownership and travel demands, particularly for developments located near transit. The City should continue to look for opportunities to undertake and support City Building goals and overarching city policies related to land use intensification, the development of more efficient and friendly neighbourhoods, and increased use of alternative travel modes.

Based on the traffic and parking analysis completed, it has been determined that the roadway network in the North Rossdale sector should be capable of providing safe and convenient access for vehicles associated with the proposed rezoning application, at acceptable levels of traffic service, while the existing transportation infrastructure is anticipated to provide high levels of pedestrian, cyclist, transit, and vehicle access to the site.

To acknowledge changes and modifications to building footprints and land use schedules that could occur as a result of more detailed planning and design exercises supplemental mobility evaluations should be completed at the Development Permit stage of planning to assist in determining roadway/bicycle interfaces, shared street opportunities, etc. that may be required and the extent of these requirements.

The development project will support the vision of a sustainable, walkable area and encourage the use of the surrounding streets by the public and building occupants. The relative location of the development to existing and future residential development activity, retail and commercial areas, employment opportunities, the immediately adjacent bicycle infrastructure, and transit will continue to allow for transit, bicycle, and walk-trip opportunities which should reduce the reliability of the automobile as the primary means of transportation.

In conclusion, based on the data and analysis, the traffic and parking review concluded that the proposed multi-family development which upon approval would allow for about 479 residential units is:

- Projected to have a small impact on the traffic operations on the existing and future adjacent roadway system and would not negatively impact the operations of study area intersections;
- Not projected to create any adverse traffic or safety issues for any neighbourhood residents within the plan area;
- The traffic analysis completed at a rezoning stage of planning did not identify the need to upgrade the north-south alley from 15m north of 98 Avenue to about 45m south of the east-west alley other than to a residential alley standard within the 5m right of way (the North-South alley is currently a graveled alley);
- Able to take advantage of multiple ways to access the development site from the abutting roadway network;
- Highly accessible to pedestrians and cyclists in the vicinity of the development and surrounding areas, with excellent pedestrian connectivity from the proposed development north, east, and south; and
- Well served by transit and it is expected that transit service will be expanded in the future.

7.6 Study Recommendations

In the context of the overall volume of flows generated by all proposed developments in the area and parking requirements associated with the staged multi-family buildings, it is recommended that the City of Edmonton support the proposed rezoning application.

It is also recommended that:

- With development of the site, missing sidewalks are to be constructed on the east side of 100 Street north of 98 Avenue and on the north side of 98 Avenue between 100 Street and the west edge of Building B;
- A shared pathway from the intersection of 98 Avenue and 100 Street east to the shared pathway within the River Valley should also be constructed with the development;
- Construct a publicly accessible minimum 3.0m wide shared pathway including lighting, landscaping, and pedestrian crossing controls as warranted, and connect the River Valley to the Rossdale Community (terminus 101 Street). Five Oaks will work with the City at the Development Permit stage to review and determine the most appropriate pedestrian crossing design. The design and construction of pedestrian crossing control at the mid-block crossing of the Shared Pathway and 100 Street should be planned and designed as an active mode priority crossing;
- Based on a review of the Transportation of Canada's (TAC) Decision Support -Treatment Selection Matrix, given the volume of traffic on Rossdale Road and the anticipated level of pedestrian movements, a new painted crosswalk with side-mounted signs, extending across Rossdale Road NW from the southwest corner of the intersection with 100 Street NW is warranted;
- The north-south alley right of way be increased by about 1.0m on the east side of the North-South alley north of 98 Avenue for 15m and upgraded to a commercial alley standard through a setback of 1.0m that is hard surfaced and clear of obstructions;

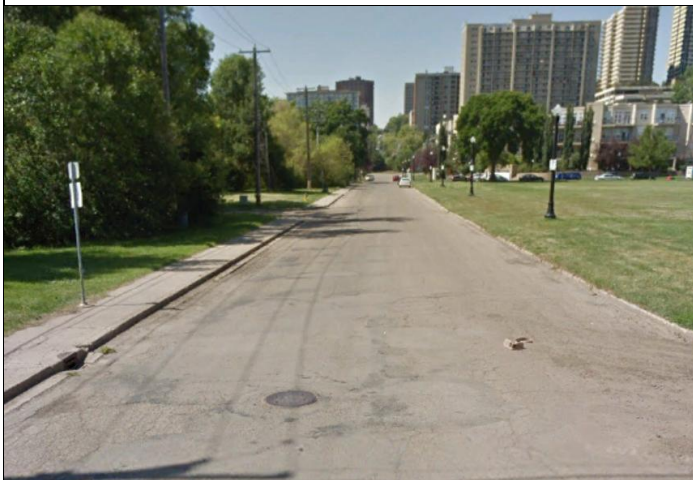
- The north-south alley right of way be increased by about 1.0m on the west side of the North-South from the pedestrian corridor to the east-west alley (about 45 m) through a setback of 1.0m that is hard surfaced and clear of obstructions and upgraded to a commercial alley standard;
- The central segment of the North-South alley between the pedestrian corridor and the Building C parking garage should be upgraded to a commercial alley standard within the available right of way;
- The Installation of a stop sign at the west approach of the 100 Street NW and 98 Avenue NW intersection; and
- Consider the development of a TDM program at the Opening Day horizon to mitigate the impacts of private vehicle travel and to encourage sustainable travel practices for all journeys to and from the proposed development.

APPENDIX A

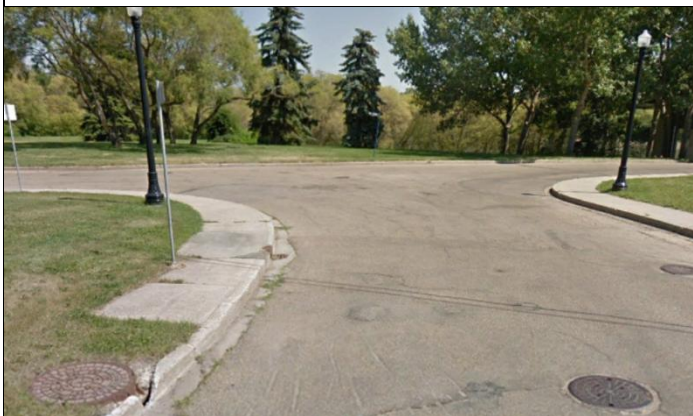
Existing Area Conditions



Looking east on 98 Avenue towards 100 Street



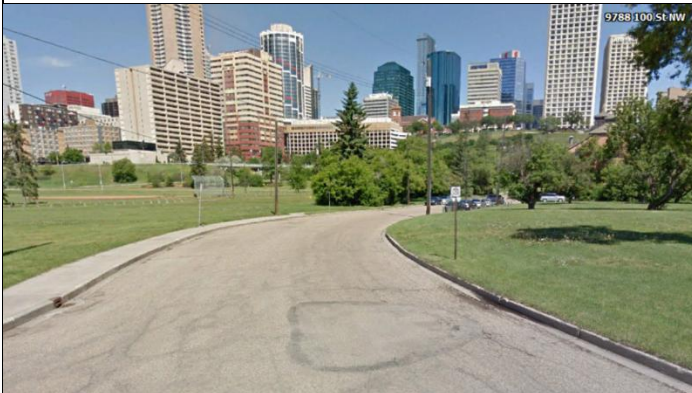
Looking west on 98 Avenue from the North-South Alley



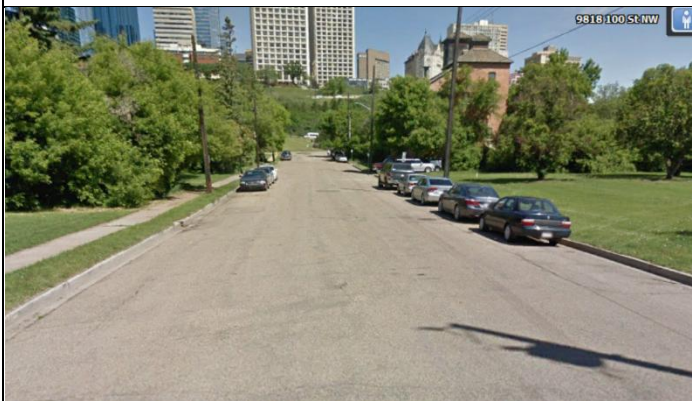
Looking West on 98 Avenue at the 100 Street intersection



Looking north at the North-South Alley



Looking north on 100 Street from 98 Avenue



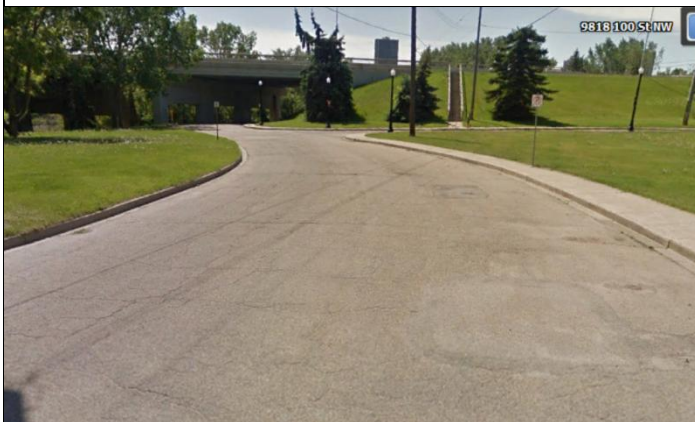
Looking north on 100 Street



Looking at the North-South Aley intersection on 100 Street



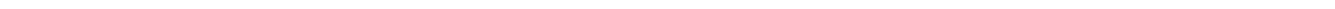
Looking south on 100 Street at the Brewery Building

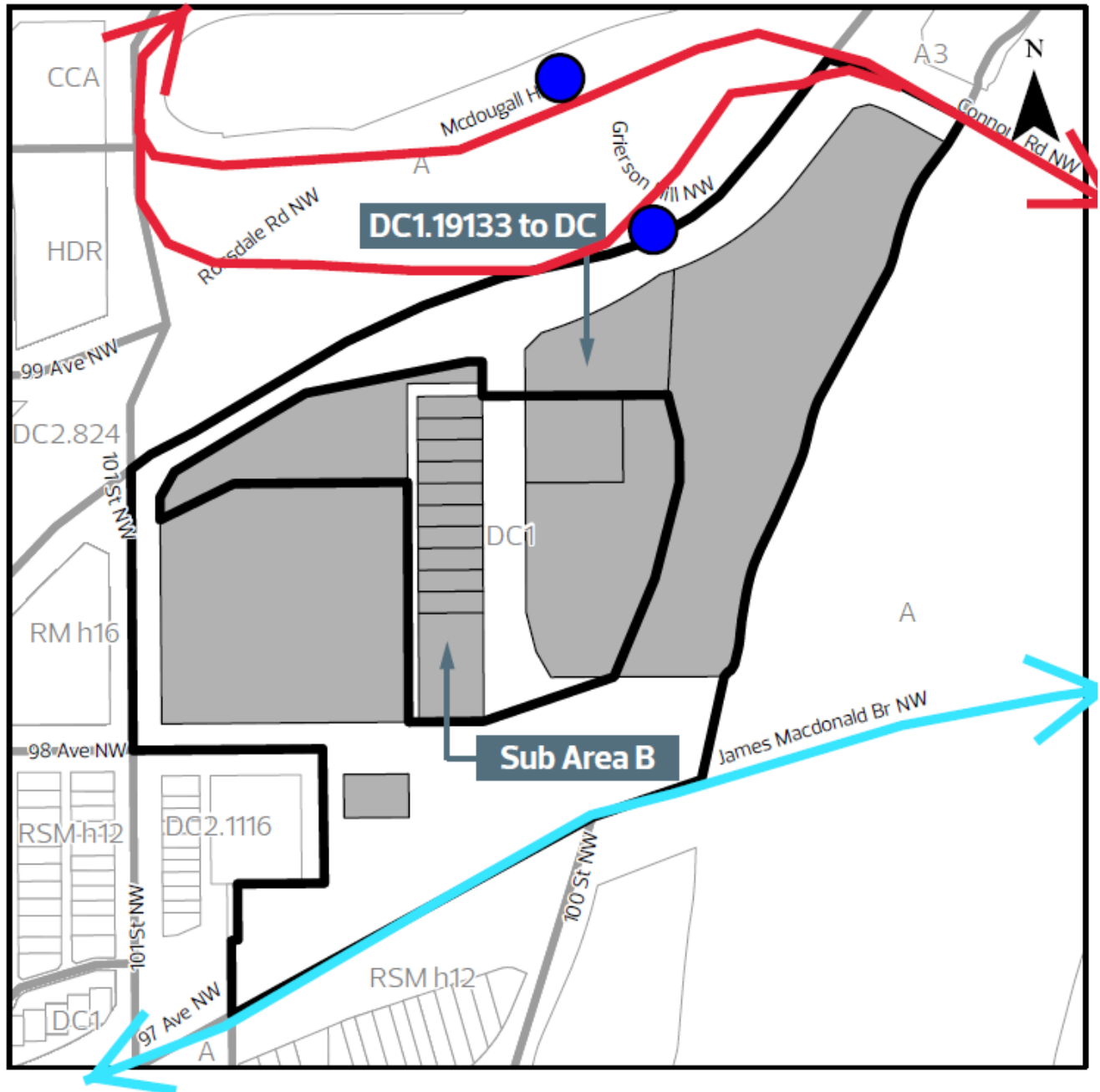


Looking south on 100 Street at 98 Avenue

APPENDIX B

Transit Enclosure





PROPOSED REZONING – Rossdale

Edmonton



In-use Bus Stop



Current ETS Bus Routing



Current Strathcona Transit Routing (Express Only)

