# Gariepy Neighbourhood and Alley Renewal

# URBAN DESIGN ANALYSIS Chapter 1: Background Report



Edmonton

January 2022

# Land acknowledgement



The City of Edmonton acknowledges the traditional land on which we reside, is in Treaty Six Territory.

We would like to thank the diverse Indigenous Peoples whose ancestors' footsteps have marked this territory for centuries, such as nêhiyaw (Cree), Anishinaabe (Saulteaux), Nakota Isga (Nakota Sioux), Niitsitapi (Blackfoot), and Dené peoples. We also acknowledge this as the Métis' homeland and the home of one of the largest communities of Inuit south of the 60th parallel. It is a welcoming place for all people who come from around the world to share Edmonton as a home.

Together we call upon all of our collective, honoured traditions and spirits to work in building a great city for today and future generations.



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CHAPTER 1

# GATHER BACKGROUND INFORMATION AND PERFORM ANALYSIS



# **1.0** Introduction

# 1.1 Background

Gariepy is a mature neighbourhood in west Edmonton located along the North Saskatchewan River Valley. Sidewalks, streets and infrastructure within the neighbourhood are in need of repair. Neighbourhood and Alley Renewal construction for Gariepy is scheduled to start in 2024 with anticipated completion by 2025.

#### **Neighbourhood Renewal Program**

The City of Edmonton's Neighbourhood Renewal Program is part of the Building Great Neighbourhoods (BGN) Branch. The purpose of the Neighbourhood Renewal Program is to outline cost-effective and long-term strategic approaches to renew and rebuild infrastructure within mature neighbourhoods and along collector roadways. The scope of work for Neighbourhood Renewal typically includes the following elements:

- Replacement of sidewalks, local roadways and collector roadways
- + Upgrading street lights and LED luminaires
- + Construction of curb ramps and other intersection improvements
- + Addressing missing links in the sidewalk and bike network

The Neighbourhood Renewal Program also offers the opportunity for two types of cost-sharing Local Improvements: sidewalk reconstruction and decorative street lights. Opportunities to improve other city-owned areas, such as green spaces and parks, will also be reviewed with Neighbourhood Renewal. The intention is to make desired upgrades and enhancements in coordination with the Neighbourhood Renewal Program and leverage other funding sources.

#### **Alley Renewal Program**

Alley Renewal will also be included as part of this project. The Alley Renewal Program outlines a cost-effective, long-term strategic approach to renew and rebuild alleys across the City over the next 25 years. Alley Renewal involves alley reconstruction and repaving, improvements to surface drainage where possible, and upgrading of existing alley lighting to LED fixtures. Utility assessments and repairs, along with removals and pruning of trees and shrubs, are also completed and minor enhancements to improve pedestrian and/or bike movement and traffic safety are explored.



Typical local residential road in Gariepy

## 1.2 Urban Design Analysis

Urban design is an overarching city-building discipline that is concerned with how people experience the urban environment during their day-to-day activities. Urban design focuses on how streets, parks, trails and open spaces are organized, function and connect with larger city-wide networks.

An urban design analysis (UDA) looks at Gariepy through an urban design lens in terms of the existing urban context, character areas, design aesthetics, access to day-to-day community destinations and connectivity with other parts of the city. Key objectives of the UDA include:

 Presenting concepts, developed based on City policies and programs and consideration for technical requirements and public input.
 Concepts will inform Neighbourhood and Alley Renewal efforts and develop a community plan to inform future City initiatives in the neighbourhood

- Identifying gaps and opportunities within the neighbourhood from different lenses such as walkability, connectivity and universal design
- + Guiding future investment and redevelopment to enhance the overall quality of life

The project team will use the UDA to support decision making throughout the neighbourhood/ alley renewal process (concept/design/build). Concepts selected for implementation will require detailed engineering prior to construction and consideration of appropriate funding sources. Funding could come from the public, private or community sectors. It is recognized that limited financial resources are available, so while some initiatives will be prioritized, others will likely be developed over longer time frames or reassessed in time.



## 1.3 **Project Approach and Process**

The Gariepy UDA is part of the Concept Phase to align with the BGN Road Map (see **Figure 1**) and the public feedback collected.

The key UDA steps in the Concept Phase (see **Figure 1**) are:

- Gathering background information, including initial outreach to community stakeholders and performing an analysis
- 2. Building a neighbourhood Vision for livability and transportation with the community to support generating ideas and exploring opportunities
- Developing options by analyzing neighbourhood urban design features to identify strengths and opportunities for renewal
- Developing a draft design identifying priority projects that respond to the opportunities

The draft design recommended within the UDA will inform the development of the final design and construction drawings.





Design

Phase

Build

Phase

Celebrate

Operate

Phase

with Us

Figure 1. BGN Road Map

Opportunities

Public Engagement

and Communications

Construction on

Your Streets

Concept

Phase

# **2.0** Neighbourhood background and context

# 2.1 Study area

The scope of Neighbourhood and Alley Renewal in Gariepy includes the roadways and open spaces shown in **Map 1** (alleys, local roads, collector roads and cityowned lands). The arterial roads surrounding Gariepy, Callingwood Road and Lessard Road, are not part of the Neighbourhood and Alley Renewal scope. However, these surrounding roadways and neighbourhood's area of influence are included in the UDA to help examine connections and destinations within and around the neighbourhood.

## 2.2 Neighbourhood context

The following are key characteristics of the Gariepy neighbourhood.

#### History

 Named after Joseph Hormidas Gariepy, who was a one term Edmonton Town Council Alderman in 1896 and Catholic School Board Trustee from 1914–1924. He was also a successful businessman with a general store and real estate ventures. Much of his business was partnered with his son-in-law, Prosper–Edmond Lessard, whose name is used for the larger community league and the arterial road to the west.

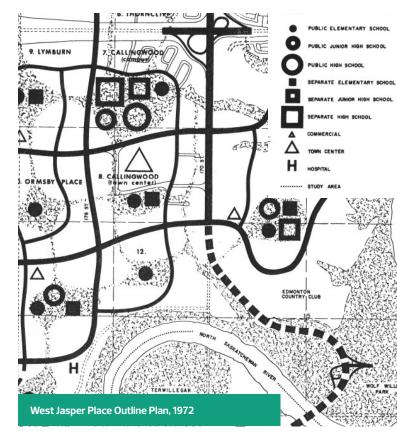
1. 2019 Municipal Census

#### Development

- + Developed in the 1970s and early 1980s under the West Jasper Place Outline Plan
- + Home to approximately 1,868 residents<sup>1</sup>
- Two-thirds of the neighbourhood housing is categorized as single-detached housing

#### Streets and sidewalks

- Curvilinear road network with multiple cul-de-sacs
- Four vehicular access points only (located at 55, 57 and 59 Avenue and 172 Street)
- + Collector roadway (57 Avenue and 172 Street) with sidewalk and treed boulevard on both sides
- + Four access points dedicated for walking and rolling only (breezeways)
- + Majority of sidewalks are curbside and narrow with rolled face curb
- Large multi-unit developments (Lessard Village and Carriage Lane Condominiums) with private internal sidewalks/roads



#### Utilities

- Utilities such as Telus Fibre Optic, vaults in the sidewalk and other telecommunication infrastructure is located throughout the neighbourhood in locations that may constrain design changes
- Existing street lights will be replaced on the existing pedestals and updated to LED as applicable. Some of the neighbourhood appears to have already been converted to LED and it may be possible to reuse the luminaires
- Standard water and gas lines exist in Gariepy to service homes, there are no high pressure or high voltage lines
- The gas lines are currently at the back of the properties in an easement. ATCO is abandoning this layout in other neighbourhoods and installing new lines in the road right-of-ways and new service connections. It will be important to check with ATCO on whether or not they intend to perform this work in Gariepy for project coordination

#### Parks and open spaces

- + Gariepy Park is centrally located in the community
- Park amenities include sports fields, an ice rink, a playground, informal walking paths through a forested area and the Lessard Community League Building (which serves the Gariepy, Donsdale and Callingwood South neighbourhoods)
- + The park lacks internal hard surfaced connections for all ages and abilities
- The North Saskatchewan River Valley is located along the south edge of the neighbourhood.
   View points exist within the neighbourhood but no formal/informal pathways or stairs due to the steep/forested terrain
- + Gariepy Ravine is located on the east side of the neighbourhood

#### Schools

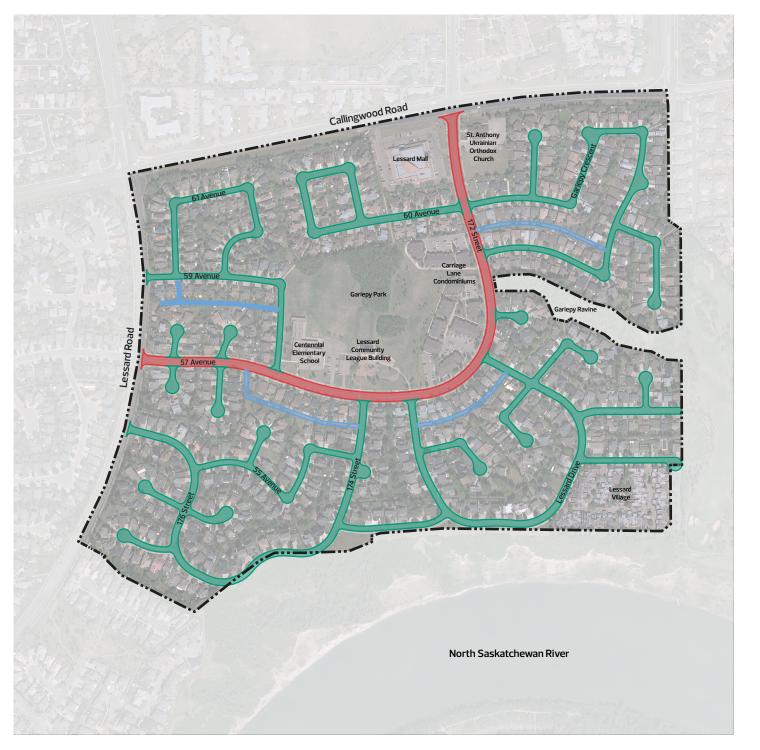
+ Centennial Elementary School – Public

#### **Commercial amenities**

- + Lessard Mall is located in the north-central edge of the neighbourhood
- Large scale commercial anchors and amenities are located near the neighbourhood, for example the Marketplace at Callingwood and Hawkstone in Dechene. These commercial amenities include grocery stores, gas stations, fast-food restaurants, professional and medical services, banks, and clothing stores

#### **Transportation**

- The neighbourhood accesses ETS bus routes and stops along the collector roadway (57 Avenue and 172 Street)
- The nearest future LRT (Valley Line West) stop is located at West Edmonton Mall, approximately 2.5 km from the Gariepy neighbourhood boundary



# Map 1. Study area

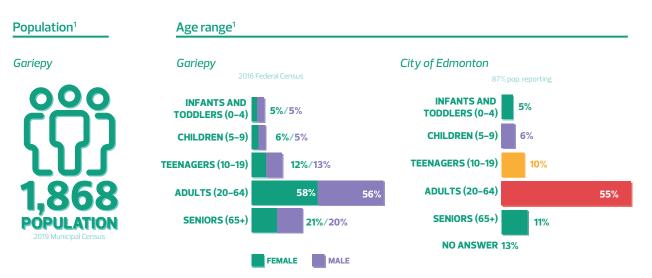
Gariepy neighbourhood boundary
Roads in scope
Collector road
Local road
Alley

**2**00m

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## 2.3 Neighbourhood stats

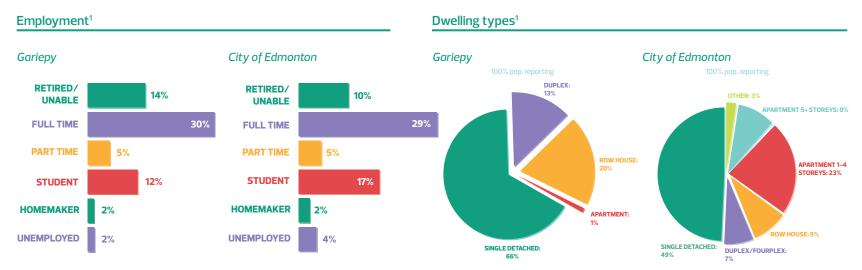
The following are key stats about the Gariepy neighbourhood





- The majority age demographic is 25–64, with a large percentage of the population in the 60–64 and 65–69 range
- Higher percentage of seniors (20%/21%) when compared to the City average (11%)
- During public engagement, it will be important to include the perspectives of residents of varying ages in the conversation. This will include communication and engagement tactics that support those at the upper end of this age range (e.g. face to face meetings, paper mail, etc.) as well as those who are at the lower end of the range (e.g. information distributed through Centennial School, community pop-ups, etc.)
- + Communication and engagement tactics will also include strategies to develop relationships with local businesses, community leaders and community groups who serve these community members and bring engagement to the places where residents naturally gather

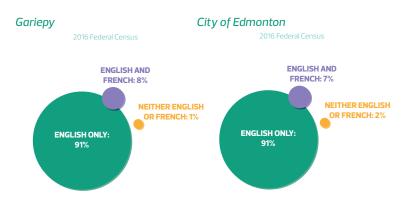
1. 2019 Municipal Census



- There are fewer students (12%) and unemployed (2%) when compared to the City average (17% and 4%, respectively)
- There is a larger percentage of retired/unable (14%) when compared to the City average (10%) which aligns with the higher senior age population in Gariepy
- Public engagement events should be offered during both evenings and weekends to capture a wide range of input. Engagement tactics (e.g. community pop-ups) will be used that bring engagement to the places where people naturally gather
- Higher percentage of single detached dwellings (66%) when compared to the City average (49%)
- + The majority of homes in Gariepy are single-detached buildings with front attached garages and curbside walks. Sidewalk design should avoid curb ramps at driveways to provide a level surface for people who walk
- + Design concepts should consider how private walkways and roads within the multi-unit apartment areas in Gariepy connect to the overall network
- Project information will be provided to all dwellings in the area along with contact information for the project manager so that individual residents can reach out to discuss concerns one on one for their individual dwellings

<sup>1. 2016</sup> Municipal Census

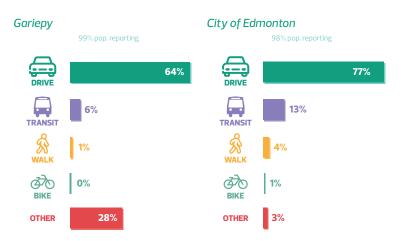
#### Knowledge of official language<sup>1</sup>



- + Comparable knowledge of the official language between the neighbourhood and City average
- + During public engagement activities, the project team will develop relationships with local businesses and community leaders that serve ethnic community members who are new to the neighbourhood

#### 1. 2016 Federal Census

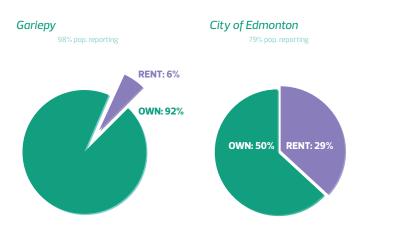
#### Mode of transportation from home to work<sup>2</sup>



- + Majority of the population in Gariepy drive to work
- + Lower than average to commute to work:
  - + Take public transit (6%) when compared to the City average of 13%
  - + Walk to work (1%) when compared to the City average of 4%
  - + Bike to work (0%) when compared to the City average of 1%
- + The project team will need to consider connectivity to public transit stops and facilities as well as improvements to, and around the facilities themselves
- + Explore design concepts to encourage more people to bike, walk and take transit
- + Engagement and communication tactics will target those who work, live and play in the area
- + Engagement will ask residents about their mode of transportation for non-work related commutes (i.e. trips to school, errands, recreation)

<sup>2. 2016</sup> Municipal Census

#### Home ownership<sup>1</sup>



- + Higher percentage of those who own (92%) when compared to the City average (50%)
- During public engagement, it will be important to hear the voices of both residents who own and rent in Gariepy. This will include letter and postal code drops to reach residents and owners in the neighbourhood, along with direct outreach to property managers of rental properties in the area.

#### Years in the neighbourhood<sup>1</sup>



- + A large proportion of the population has called Gariepy home for more than five years
- Public engagement events should capture the input of both long-term residents and new residents as they may have different perspectives.
   Bringing engagement activities and opportunities for input to where people naturally gather will help achieve this

<sup>1. 2016</sup> Municipal Census

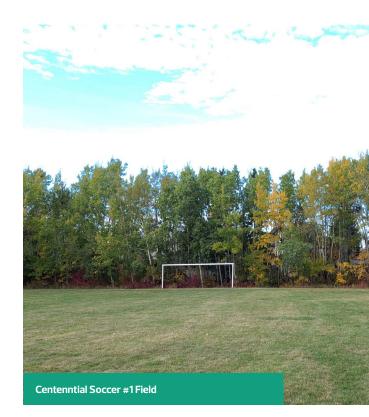
#### Sports field use in Gariepy Park<sup>1</sup>

Gariepy



Centennial Soccer #1 Centennial Soccer #2 Baseball Diamond

- The Gariepy baseball diamond has only been booked for 47 hours over the last four years
- Centennial Soccer #1 is the most used sports field in Gariepy (383 hours over four years), followed by Centennial Soccer #2 (154 hours over four years)
- During public engagement, Centennial
   School and neighbouring Lessard
   Community League will be key stakeholders
   and engaged to determine how best to
   connect with those who use these spaces.
   It will also be important to gather feedback
   from the community about informal use of
   the sports fields



<sup>1.</sup> City of Edmonton Data

### 2.4 Policy and standards review

City policies and programs provide the overall direction for Neighbourhood and Alley Renewal designs. Public input and technical constraints will help guide how City policies and programs are applied in Gariepy.

The Neighbourhood Renewal Program implements City guiding policies, standards and strategies to maximize opportunities for the Gariepy Neighbourhood and Alley Renewal. Plans, policies and standards that are uniquely applicable to Gariepy are identified below.

#### Economic Action Plan (Action 10)

The Edmonton Economic Action Plan (Action Plan) is a 10-year roadmap to building a vibrant, inclusive and sustainable economy. This Action Plan is one of the key elements of the City Plan and aims to create jobs, attract investment and strengthen our economy.

Action 10 in the plan aims to develop tools and strategies to attract commercial, residential and mixed-use development in nodes and corridors. The Neighbourhood Renewal program can support this action by partnering with the Corner Stores Program to incentivize the revitalization of the Gariepy corner store area (Lessard Mall).

#### North Saskatchewan River Valley Area Redevelopment Plan and Protection Overlay

Additional considerations are required when Neighbourhood Renewal occurs within the North Saskatchewan River Valley Bylaw boundary. The North Saskatchewan River Valley Area Redevelopment Plan (adopted in 1985) identifies the boundary for the river valley and ravine system and a set of policies and development approval procedures for lands within this boundary. It helps to preserve the natural character, environment, and ecological network of the river valley and ravine system.

The purpose of the North Saskatchewan River Valley and Ravine System Protection Overlay is to identify which lands fall within the river valley and ravine system and provide a development setback from it.

- In Gariepy neighbourhood, the North
   Saskatchewan River Valley Overlay (refer Map 6)
   is applicable to:
  - + All of the Gariepy Ravine
  - The majority of green space located south of Lessard Drive/53 Avenue near the North Saskatchewan River Valley. There are three triangular land parcels where the North Saskatchewan River Valley Overlay is not applicable
- Development considerations for the lands where North Saskatchewan River Valley Overlay apply include:
  - + Only the lands zoned as AP (Public Parks Zone), may be developed
  - + Any development in the park space will require a Development Permit approval
  - All developments shall maintain a 7.5 m setback from the North Saskatchewan River Valley and Ravine System or receive approval for a variance from the Development Officer
  - The Development officer may require additional studies or apply specific conditions prior to approving the Development Permit application

#### Access Design Guide

The Access Design Guide is intended for use when planning, designing, building and maintaining facilities, parks and open spaces owned or leased by the City of Edmonton. This includes transportation and open space infrastructure, and it is expected that the guidelines will be incorporated into the designs for Neighbourhood Renewal Program projects.

In Gariepy, the demographics show an aging population. As a result, the Neighbourhood Renewal Program should include design considerations to improve access in the neighbourhood for older residents such as ensuring open spaces within 400 metres of senior housing provide barrier-free connections and supportive amenities.

#### **Bike Wayfinding Guide**

The document is under development as of January 2022. The project team will review key destinations, within and surrounding the neighbourhood such as the River Valley, to help inform potential wayfinding locations in Gariepy.

#### **Urban Forest Management Plan**

Edmonton's Urban Forest Management Plan (UFMP) is a strategy for sustainably managing and enhancing our diverse urban forest. The plan is routed in four guiding principles:

- Promote a healthy and sustainable urban forest
- + Engage the community in protecting and managing the urban forest
- + Think globally and regionally; plan and act locally
- Use best practices, innovation, science, information and technology

The project team will consider how to maintain existing trees and add new trees, where possible to align with UFMP. This will include the large forested area in Gariepy Park.

#### Gender Based Analysis Plus (GBA+)

Gender Based Analysis Plus (GBA+) is a process where policies, programs, initiatives or services are evaluated for their diverse impacts on various groups of individuals. A GBA+ approach recognizes that people are influenced by intersecting identity factors that are either marginalized or privileged, and that change over time. Although there is no City of Edmonton guide for applying GBA+ to projects, there are best practices that project teams can follow. Applying GBA+ requires ongoing research, reflection, sharing and evaluation. The Gariepy project team will use a GBA+ Tracking Tool to monitor progress/gaps when evaluating and engaging the neighbourhood to include diverse perspectives.



# **3.0** Neighbourhood analysis

# 3.1 Land ownership and development opportunities

Land ownership is an important consideration for Neighbourhood Renewal. Different parcels of land are associated with different organizations, such as the City of Edmonton, the Public and Catholic School Boards and other privately owned land. These lands may be subject to different land governance requirements, and require different types of approvals in order to build improvements. Land ownership within the Gariepy neighbourhood is identified on **Map 2**.

#### Walkway holding

- + Used for breezeways (see Section 3.7 for more information on breezeways)
- Walkway lots are a Transportation Holding and are treated as road right-of-way when undergoing approvals

#### Municipal Use Properties

- Municipal Use Properties (MUPs) provide land to be used for public consumption or benefit for utilities, infrastructure and transportation
- + Similar to walkway lots, MUPs in Gariepy are typically used for breezeways
- + City's Municipal Use Properties Holding do not need easements for public access or utilities
- 1 The MUPs on the south side of the neighbourhood are used for ATCO Gas and EPCOR drainage utilities
- 2 The MUPs on the northwest side of Gariepy Park includes underground telephone utilities
  - The MUP on the northwest side of the neighbourhood between 174 Street and 176 Street contains a water main

#### Land ownership and leases

- The City of Edmonton has established joint-use agreements with Public and Catholic School Boards for respective school sites
- Map 2 shows the lands owned by the City of Edmonton (parks holding), lands under the joint– use agreement with the Edmonton Public School Board for Centennial Elementary School, and lands leased to the Lessard Community League

#### **Potential Corner Store Program site**

 The commercial/retail area located at the southwest corner of Callingwood Road and 172
 Street (Lessard Mall) has been identified as a potential site for the Corner Store Program.
 Planning, design and construction will be coordinated with Gariepy Neighbourhood and Alley Renewal.



#### Planned and in-progress projects

| Project                            | Timeline  | Impact   |  |
|------------------------------------|---|--|--|
| + Overland improvements<br>project | <ul> <li>Preliminary design: January<br/>2022</li> <li>Proposed construction:<br/>summer 2022*</li> </ul> | <ul> <li>Improvements include<br/>re-grading and adding new<br/>swales or shallow sloped<br/>ditches in Gariepy Park near</li> </ul> |  |
|                                    | *Depending on funding   | Carriage Lane Condominiums   |  |



#### Opportunities

- + Explore opportunities to enhance connections through Gariepy by adding new pathways, adding/upgrading lighting and adding landscaping
- + Coordinate with Edmonton Public School Board to explore Neighbourhood Renewal opportunities on their lands in Gariepy Park such as new pathways and seating areas
- Where possible, coordinate public
   engagement activities with other ongoing
   City and community–led projects
- + Coordinate the development and construction of the potential Corner Store Program site as part of the Gariepy Neighbourhood and Alley Renewal





**=** 200m

# 3.2 Commercial nodes and community destinations

The existing commercial nodes and community destinations in and surrounding Gariepy are identified on **Map 3**.

#### **Community facilities**

 Lessard Community League, which serves the Gariepy, Donsdale and Callingwood South neighbourhoods

#### **Commercial services**

 Lessard Mall, which includes medical clinics, a mosque, daycares, restaurant, grocery store, music school, pharmacy, boutique and an educational centre

#### Place of worship

- + Muslim Association of Canada (located at Lessard Mall)
- + St. Andrew Ukrainian Orthodox Church

#### Schools

+ Centennial Public Elementary School

#### Parks and open spaces

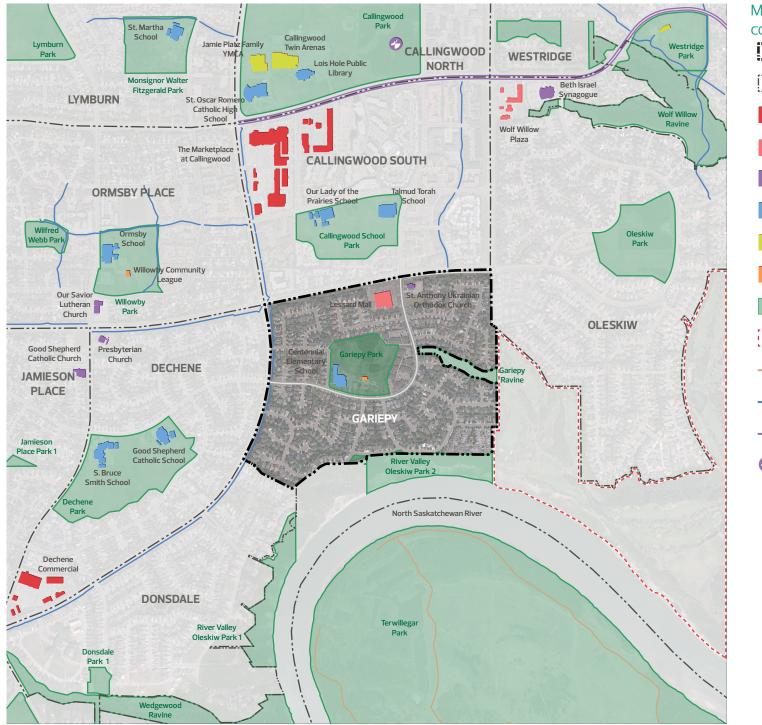
- + Gariepy Park
- + Gariepy Ravine
- + North Saskatchewan River Valley



Lessard Community League Building and Gariepy Park playground

#### Opportunities

- + Concentrate improvements to the public realm around key nodes and community destinations
- + Explore opportunities to enhance the experience along key walking routes for people who walk
- + Explore opportunities to enhance connections within the neighbourhood to and from surrounding destinations





## 3.3 Built form and character areas

The general built form types and character areas within Gariepy are identified on **Map 4**.

#### **Built form**

#### Low-density residential

- + One- to two-storey single-detached homes setback from roads with front yards
- The majority of homes do not have rear alleys and have front attached garages with driveways

#### Low-density, multi-unit residential

- One- to two-storey, street-oriented, semidetached homes setback from roads with front yards
- Row housing with private internal roadways, walkways, and fenced yards (Lessard Village)
- + The majority of homes have front attached garages

#### Medium-density, multi-unit residential

- Two-storey apartment buildings (Carriage Lane Condominiums) set back from roads with internal parking lots, walkways and small amenity spaces (balconies, patios)
- + Buildings are both street-oriented and internally oriented

#### Commercial

- Two-storey, auto-oriented commercial building that is setback from roads with internal parking spaces surrounding all sides
- Two vehicle accesses from the collector road (172 Street) and one access from the arterial road (Callingwood Road) exist

#### Institutional

- Two places of worship (one located within Lessard Mall commercial area) located along the collector road (172 Street) setback from the road with internal parking lots
- St. Anthony Ukrainian Orthodox Church has one sidewalk along the west side of the site and a bus stop along Callingwood Road on the north side of the site. A sidewalk along the north side of the site, south side of Callingwood Road, is missing



- The Muslim Association of Canada, located in Lessard Mall, has one sidewalk along the east side of the site. A sidewalk along the north side of the site, south side of Callingwood Road, is missing
- + Lessard Mall does not have a connector walkway between the entrances and the City sidewalk
- + St. Anthony Ukrainian Orthodox Church has a connector walkway between the entrance and the City sidewalk

#### **Character areas**

#### Community hub

- Gariepy Park serves as a central open space of the neighbourhood
- A community hub is created by the configuration of breezeways and roads leading towards the centrally located Gariepy Park and the clustering of recreational amenities (soccer fields, rink, baseball diamond, playground), a school and the Community League building
- The park and amenities provides a space for the community to gather and connect with one another



#### **Mature residential**

- Predominantly low-density single-detached homes, semi-detached homes and row housing with front yards and front attached garages with driveways
- + Network of wide curvilinear roadways with cul-de-sacs
- Narrow curbside sidewalks line both sides of most local residential roads
- + Several breezeways provide walking connections

#### **Travel corridor**

- Multi-unit residential development (Carriage Lane Condominiums) with private internal parking lots, walkways and several parking lot access points along the collector road
- Roads are lined with boulevard sidewalks and mature trees
- Multiple short cul-de-sacs with access directly to the collector roadway (57 Avenue and 172 Street)
- Low-density residential development near the community hub fronts onto the collector road and typically has rear alley access
- Bus routes 918 and 910X travel along the collector roadway in this corridor (57 Avenue and 172 Street)

#### Opportunities

- Strengthen walking connections within the neighbourhood by exploring new pathway connections to or from the community hub
- Improve walking connections from the community hub and residential areas in the neighbourhood to the North Saskatchewan River Valley
- + Examine opportunities to improve the functionality of the collector road for all users while striving to maintain existing trees
- + Consider community-led public art near Lessard Mall, Lessard Community League building and Gariepy Park playground to foster a strong sense of place
- Collaborate with the City's Corner Store Program and business owners in Lessard Mall to explore placemaking opportunities on public and private land





00m

### 3.4 Surrounding open space network

It is important to analyze the surrounding context of a neighbourhood to understand the availability of various types of open spaces and the amenities within them. By doing so, insights can be gathered to identify opportunities and gaps within the open space network. Various parks and amenities in the neighbourhoods surrounding Gariepy are identified on **Map 5**.

Park amenities surrounding Gariepy shown on **Map 5** include:

- + Soccer fields: 30
- + Baseball diamonds: 15
- + Rinks/Arenas: 3
- + Playgrounds: 7
- + Basketball courts: 7
- + Dog parks: 1
- + Spray parks: 2
- + Skate parks: 1
- + Tennis courts: 4
- + Golf course:1

#### 15 minute walk and bike ride from Gariepy

- + The City Plan promotes 15 minute districts where people can easily complete their daily needs in a 15 minute walk, bike ride, or transit trip
- Map 5 shows what parks and amenities surrounding Gariepy are within a 15 minute walk from the edge of Gariepy (average walking speed of 5.0km/h)
- All parks and amenities shown in Map 5 are less than a 15 minute bike ride from the edge of Gariepy (average speed of 15.0km/h)

#### Opportunities

- Explore opportunities to add amenities that do not exist and may benefit current and future residents of Gariepy and surrounding neighbourhoods
- Improve connections for people who travel between Gariepy and surrounding open space destinations





#### 3.5 Gariepy open space network

The public open spaces and amenities in Gariepy are identified on **Map 6** and summarized below. Any improvements to titled property (parks spaces) will require a Development Permit. Typically construction needs to start within a year of the Development Permit being issued.

#### **Gariepy Park**

- Largest open space in Gariepy with an area of approximately 14 acres
- Centrally located and connected to the neighbourhood by sidewalks along the edges
- + The park contains several informal walking paths in the forested areas
- Three breezeways along the edge of the park provide connections to the broader neighbourhood
- + The park is shared with Centennial Elementary School and the Lessard Community League Building
- A series of semi-detached homes and multiunit apartments (Carriage Lane Condominiums) back onto the edge of the park

- Park amenities include:
  - + Soccer fields: 2
  - + Baseball diamond: 1
  - + Hockey rink:1
  - + Playground:1
  - + Park benches: 5
  - + Picnic tables: 6
  - + Gazebo:1
- Site review showed that surface ponding may occur at an internal catch basin within the park during major storm events

#### **Gariepy Ravine**

- Linear, naturalized ravine with an area of approximately 3 acres
- + Located in the east of the neighbourhood connecting to the Edmonton Country Club
- Two breezeways cross the ravine, currently through a deep swale, and provide connections to the broader neighbourhood
- + A series of single-detached homes back onto the edge of the ravine
- Gariepy Ravine falls within the North
   Saskatchewan River Valley and Ravine System
   Protection Overlay

#### North Saskatchewan River Valley – Top-of-Bank

- Linear, landscaped area with maintained grass and a tree with bushes at 53 Avenue and Lessard Drive
- Three viewpoints with benches overlook the River Valley and a wood fence runs along most of the top of bank
- A curbside sidewalk runs along most of the topof-bank area along the North Saskatchewan River
- Most of the top-of-bank area is in the North Saskatchewan River Valley and Ravine System Protection Overlay
- There are currently no formal/informal pathways or stair access into the North Saskatchewan River Valley due to the steep/forested terrain



#### **Breezeways**

- 13 breezeways exist in Gariepy that provide additional access and connection points for people who walk and bike
- + A majority of breezeways contain hard-surfaced pathways lined with grassed areas
- Three breezeways along the south side of the neighbourhood do not contain any pathways
- + Elements that vary in each breezeway include trees and additional lighting

#### Opportunities

- Improve the functionality of Gariepy Park, Gariepy Ravine and the North Saskatchewan River Valley – Top–of–Bank
- + Explore opportunities to enhance the design of parks and open spaces with a focus on user experience during the winter
- Incorporate design elements in parks and open spaces (such as benches, lighting, etc.) that provide comfort during the winter and enhance the accessibility of these areas
- + Enhance breezeways to strengthen connections for people who walk and bike

- + Enhance the accessibility of existing pathways
- + Collaborate with Centennial Elementary school and Lessard Community League when assessing the functionality of Gariepy Park
- + Review additional approval requirements for infrastructure proposed in Gariepy Ravine and next to the North Saskatchewan River Valley
- Review options that could be used to mitigate the impacts of climate change, including review of possible surface ponding in Gariepy Park





North Saskatchewan River Valley looking towards Terwillegar Park



### 3.6 Complete streets analysis

The City of Edmonton uses the Complete Streets Design and Construction Standards (CSDCS) to govern roadway design. The Complete Streets approach provides direction for designing streets that reflect the surrounding context, land use and users. Complete Streets are designed to be:

- + Safe
- + Attractive
- + Comfortable
- + Welcoming to people of all ages and abilities

In a retrofit context such as Neighbourhood Renewal, design must consider the location of existing buildings, mature trees, utility infrastructure, private landscaping within the public right-of-way, and numerous other constraints within an existing right-of-way. These constraints must be addressed while striving to balance the needs of all street users and incorporating input through public engagement. Strategic compromises and tradeoffs may need to be explored to balance costs, technical feasibility, and other constraints. CSDCS acknowledges that it may not be feasible or possible to completely align with the standards in a retrofit context. In these instances, it should be clearly identified where there is a variation from the standards and the rationale for the deviation should be documented using a Design Exception.

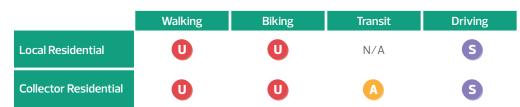
#### **Complete Streets Review**

Roadway classifications in Gariepy that are part of the project scope are identified on **Map 7**:

- + Alley
- + Local residential
- + Collector residential

The table below ranks the user experience of people who walk, bike, ride public transit and drive in Gariepy along with different roadway types as:

#### Table 1: User experience rankings of roadway types





- S Satisfactory: Mode facilities provide the user with a high level of comfort with no or few barriers or challenges for all ages and abilities
- A cceptable: Mode facilities provide the user with a medium level of comfort with minor barriers or challenges for all ages and abilities
- Unsatisfactory: Mode facilities provide the user with a low level of comfort and many barriers or challenges for all ages and abilities





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#### Local residential roads

#### **Existing modal priority**



#### **User experiences**

#### Driving – Satisfactory

- Roads with minimal on-street parking restrictions, some are wider (11.5 m) than the typical standard (refer to Map 7)
- + Mostly front private driveway accesses
- High profile rolled face curbs have resulted in some residents using ramps at driveways for driving comfort

#### Walking - Unsatisfactory

- No boulevard trees, only a few trees behind the curbside sidewalk
- Narrow curbside sidewalks make it difficult for two people to walk side-by-side or for two people in wheelchairs/scooters or with strollers/walkers to pass each other
- Minimal separation between the narrow curbside sidewalks and on-street parking/traffic
- Walking through open spaces is not accessible to all users due to a lack of hard-surfaced pathways into the space
- Front driveways frequently cross the sidewalk, which increases potential conflicts between people who walk and drive and may impact safety/comfort for people walking in the winter

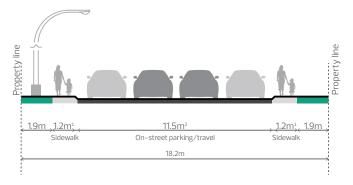
#### Biking - Unsatisfactory

- No bike facilities exist on local roads
- Bikes share the low traffic local roads with vehicles
- Low traffic volumes and speeds of vehicles may increase the comfort of people who bike
- As there are no bike facilities in the neighbourhood, people who bike do not have a snow-cleared path to travel on during winter
- Curvilinear roads in the neighbourhood decrease the clear line of sight and may create blind spots for people who drive

#### Nearby land uses and frontages

- Single-detached and semidetached homes are oriented towards the street. Although the majority of homes have frontattached garages, they also include separate front entries and windows, which provide for some 'eyes on the street'
- Row housing with internal roadways in the southeast of the neighbourhood (Lessard Village) back onto local roads, which reduces 'eyes on the street', and connect through private accesses
- Front yards often consist of private driveways which may increase conflict between people who walk and drive
- Centennial Elementary School fronts onto a local road along one side





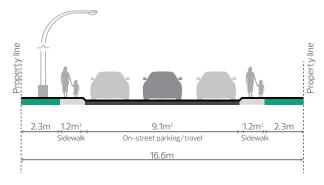




Complete Streets Design and Constructions Standards (CSDCS) 1. CSDSC requiries a minimum sidewalk width of 1.8m for curbside sidewalks

2. CSDCS requires a minimum roadway width of 9.0m for local roads





Complete Streets Design and Constructions Standards (CSDCS) 1. CSDSC requries a minimum sidewalk width of 1.8m for curbside sidewalks 2. CSDCS requires a minimum roadway width of 9.0m for local roads





#### **Collector residential roads**

#### **Existing modal priority**



#### **User experiences**

#### Walking - Unsatisfactory

- Narrow sidewalks make it difficult for two people to walk side-by-side or for two people in wheelchairs/scooters or with strollers/walkers to pass each other
- As the primary walking route to local destinations (school, commercial area, etc.) the narrow sidewalk width impacts a higher volume of users – this is the only route in/out of the neighbourhood

- Boulevard along both sides of the road provides separation between the sidewalks and on-street parking/traffic and includes trees which provides some weather protection
- Crossing infrastructure across the wide collector roadway has been installed in a few locations to increase safety for people who walk:
  - Rectangular rapid flashing beacons are located at the intersection of 174 Street and 57 Avenue and include a zebra marked crosswalk to access Gariepy Park
  - Zebra marked crosswalk and signs at 175 Street and 57 Avenue to access Centennial Elementary School
  - Marked crosswalk at
     172 Street and Gariepy
     Crescent near Carriage
     Lane Condominiums and
     Gariepy Park

#### Biking - Unsatisfactory

- + No bike facilities exist on the collector residential
- Bikes share the road with vehicles
- High traffic volumes and speeds of vehicles, as well as transit/ school buses, may decrease the comfort of people who bike
- + People who bike may use the sidewalk for increased comfort
- Since there are no bike facilities in the neighbourhood, people who bike will not have a snowcleared path to travel on during winter

#### Driving – Satisfactory

- + Wide roads with minimal onstreet parking restrictions
- Few private driveway accesses as the majority use an alley for driveway access
- Design of roadway prioritizes vehicle movement and has no traffic calming/control measures

#### Transit - Acceptable

- + Several bus stops are located along the collector
- Bus stop amenities (shelter, bench, waste receptacles, etc.) vary between bus stops
  - + Total shelters: 6
  - + Total benches: 7
  - Total bus stops without amenities: 5 (includes 2 along the south side of Callingwood Road)
- Bus stops are accessible by sidewalks from the nearby local residential roads

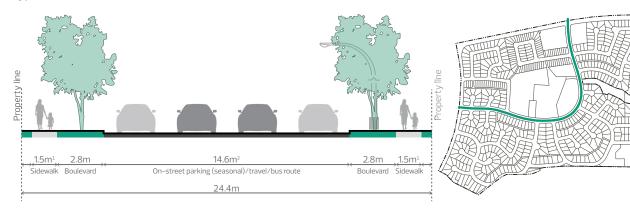
#### Nearby land uses and frontages

- Single-detached homes along 172 Street/57
   Avenue (between 175 Street and Lessard
   Drive) have individual entrances, windows and
   landscaped front yards, which provide for some
   'eyes on the street'
- Multi-unit apartments (Carriage Lane Condominiums) located along the west side of 172 Street have private internal parking lots and walkways. Some multi-unit apartments have frontages along the collector roadway, while others front on the internal parking lots

#### Typical collector residential cross section | 57 Avenue, 172 Street

- Gariepy Park and Centennial Elementary School have internal walkways and parking lots that are connected to the sidewalk network along 57 Avenue and 175 Street
- + Commercial and institutional uses have driveway accesses to internal parking lots







#### Complete Streets Design and Constructions Standards (CSDCS)

1. CSDSC requries a minimum sidewalk width of 1.8m for boulevard sidewalks

2. CSDCS requires a minimum roadway width of 11.5m for collector roads

#### GARIEPY URBAN DESIGN ANALYSIS | CHAPTER 1 BACKGROUND REPORT



#### Neighbourhood wide opportunities

- + Where possible, retrofit streets to meet the CSDCS
- Improve roadway conditions to shift the modal priority to align with CSDCS and other policies and standards
- Identify roadways with speeding and shortcutting issues and explore the feasibility of implementing measures to ensure the safety of all road users throughout the neighbourhood, specifically around the school and playground
- + Identify popular walking connections to inform where to widen sidewalks
- Identify key bike routes and connections and create safe and comfortable bike facilities to encourage people to bike who are interested but concerned

#### Local residential road opportunities

- + Explore widening sidewalks along all local roads to meet at least minimum standards for people who walk
- + Explore the feasibility of planting trees along local streets
- + Change high profile rolled face curbs to low profile rolled face curbs

#### Collector residential road opportunities

- Explore the feasibility of implementing measures to address any speeding and shortcutting
- + Explore widening sidewalks to improve connectivity to key destinations in the neighbourhood
- + Identify bus stops where improved amenities would have the greatest impact



# 3.7 Mobility network – walking and rolling

Existing and missing infrastructure for people walking and rolling within the Gariepy neighbourhood is identified on **Map 8**.

#### Sidewalks

- Most roads in Gariepy have curbside sidewalks along both sides
- + Local residential roads have narrow curbside sidewalks with rolled face curbs
- Collector residential roads have narrow boulevard sidewalks with a grassed and treed boulevard

#### **Missing sidewalks**

- + South side of 53 Avenue near the River Valley between 174 Street and 176 Street
- + South side of Callingwood Road between Lessard Road and 170 Street

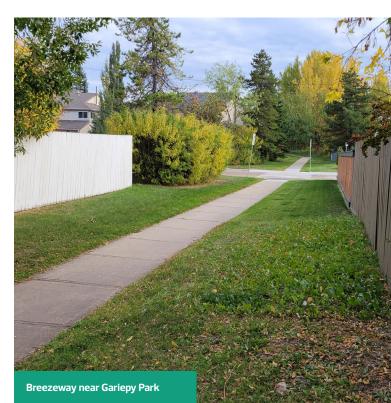
#### Breezeways

Breezeways are connections within or between neighbourhoods that you can travel through by walking, rolling or biking. Many are located at the end of a cul-de-sac or street and are designed to connect to local parks, schools and other amenities. Some breezeways are also used by utility and emergency vehicles.

Refer to **Map 8** for the location of breezeways in Gariepy

- 13 breezeway locations in Gariepy
- Ten locations (1-10) create through-block connections between streets, one has been leased to nearby landowners (1) and underground utilities
- Two locations create through-block connections to Gariepy Park (4 and 7)
- + One location creates a through-block connection to Lessard Mall (3)
- One location creates a connection to a breezeway system in the Donsdale neighbourhood (10)
- Breezeway widths vary between 6.0 m to
   10.0 m and where there are walkways the widths are approximately 1.5 m

- Walkway surface material typically consists of concrete pathways with grass on either side however five locations do not have pathways or have incomplete pathways
- + Elements along breezeways vary (lighting, metal t-bollards and wooden bollards)



#### **Informal pathways**

 There are two well defined informal pathways in Gariepy Park, which are shown on Map 8

#### **Roadway crossings**

The following crosswalk types and control devices are in Gariepy (refer to **Map 8** for locations):

- + Marked crosswalk
- + Zebra marked crosswalks
- + Pedestrian-activated amber flashers
- + Traffic signal-controlled intersections at the arterial roads

#### Alleys

 Alleys can serve as a walking or rolling route because the vehicle traffic is typically low in volume and speed. They can also be a desirable route to connect to pathways and other destinations. Gariepy has four alleys.



- + Improve connectivity within and through Gariepy Park and Gariepy Ravine for people who walk
- + Explore opportunities to enhance existing sidewalk connections and add new sidewalks at missing locations
- + Examine the feasibility of developing pathways in breezeways that do not have hard-surfaced sidewalks
- + Explore improvements to roadway geometry at crossings, such as curb extensions, road narrowing or other alignment changes
- + Increase accessibility for people walking and rolling to parks through wider and continuous sidewalk connections

- Relocate catch basins away from sidewalk crossings to reduce pooled water and ice build-up
- + Explore opportunities for new shared pathways to accommodate snowclearing equipment
- + Explore opportunities to convert curbside sidewalks to boulevard sidewalks along key walking routes
- + Review the creation of shared alley spaces that connect destinations or create direct routes
- Evaluate all breezeways to examine if new walkway connections would be beneficial



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#### 3.8 Mobility network – transit

Gariepy is served by the Edmonton Transit Service (ETS) bus service. The bus network redesign was implemented in spring 2021. There are now five types of routes including:

- Frequent routes, which arrive every 15 minutes or better at most times of the day and most days of the week
- Rapid (express) routes, which have limited stops and quickly connect the suburbs with central locations
- + Crosstown routes, which directly connect key suburban destinations without going through downtown
- + Local routes, which connect neighbourhoods to local destinations and other routes
- Community routes, which connect seniors' residences with nearby services

Existing bus routes and stops in Gariepy are identified on **Map 9**.

#### Within the neighbourhood boundary

#### Bus Route 918

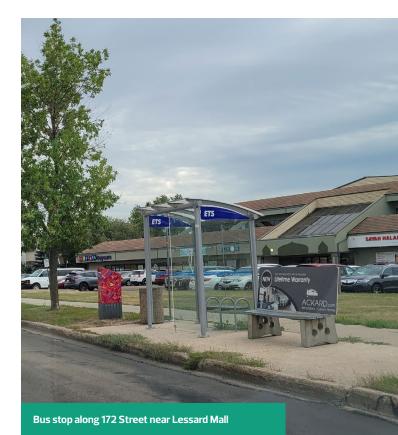
- + Connects Gariepy residents to and from the West Edmonton Mall Transit Centre
- + Travels along Lessard Road, 57 Avenue and 172 Street
- + Destinations: Gariepy Park, Callingwood Park and West Edmonton Mall Transit Centre
- + Route Type: Local/Community Route

#### **Bus Route 910X**

- Connects Gariepy residents to the South Campus/Fort Edmonton Transit Centre and LRT Station
- + Travels along 57 Avenue and 172 Street
- + Destinations: Callingwood Park, South Campus/ Fort Edmonton Transit Centre and LRT Station
- + Route type: Rapid Route

#### DATS

+ Indicates there are no high ridership locations within the neighbourhood



### On Arterial roads along the neighbourhood boundary

#### **Bus Route 913**

- + Connects Gariepy residents to the West Edmonton Mall Transit Centre and the community of Jamieson Place
- + Travels along Lessard Road
- + Destinations: West Edmonton Mall, Callingwood Park, Dechene Park and Colonel FC Jamieson Park
- + Route type: Local/Community Route

#### **Bus stop conditions**

- Ten bus stops are located within the project
   scope located along 57 Avenue and 172 Street
- + Amenities such as shelters, benches, waste bins and concrete pads vary at bus stop locations

#### **Bus Route 923**

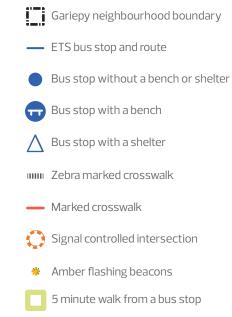
- + Connects Gariepy residents to the West Edmonton Mall Transit Centre
- + Travels along Callingwood Road
- + Destinations: West Edmonton Mall, Oleskiw and Callingwood Park
- + Route type: Local/Community Route

- + Enhance connections to bus stops and routes
- Identify priority bus stops for additional bus stop amenities that improve user experience, such as winter weather protection





#### Map 9. Mobility network - transit



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### 3.9 Mobility network – people riding a bike

The bike network surrounding Gariepy is identified on **Map 10**.

#### **Edmonton Bike Plan**

The City of Edmonton's Bike Plan establishes a high-level strategic plan to guide the continued improvement and growth of the bike network and supporting programs. The following are highlights of the Bike Plan in relation to Gariepy and the surrounding bike network.

- Callingwood Road is identified as a future neighbourhood route
  - Neighbourhood routes provide local access, opportunities for recreational bike riding and connections to destinations outside of the district connector network
  - + Facility types vary depending on the local context
- The breezeway in the Callingwood South neighbourhood is identified as an existing neighbourhood route

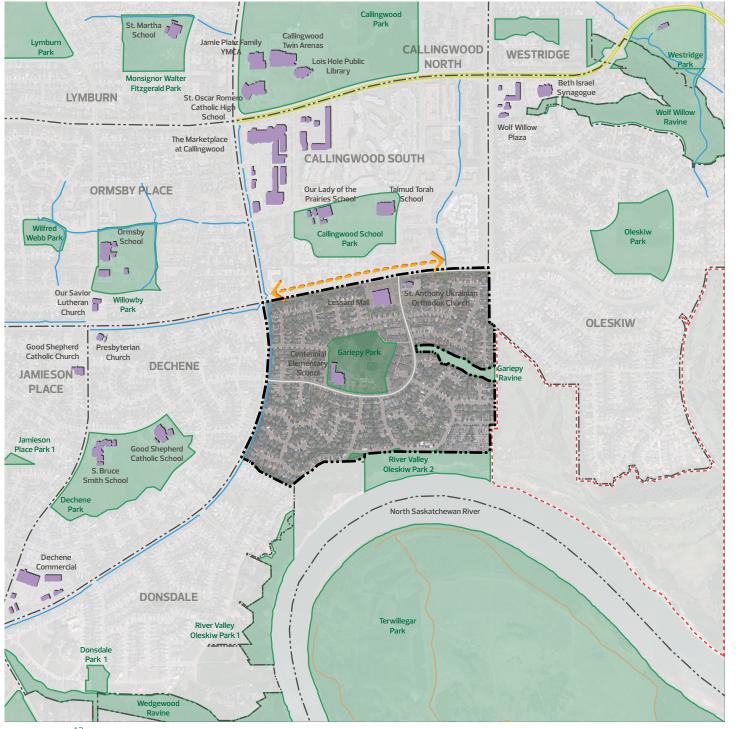
- + Lessard Road is identified as an existing district connector route
  - District connector routes are bike routes that serve as bike riding arteries extending across multiple neighbourhoods, connecting districts and prioritizing the most direct route to key destinations
  - Facility types identified along district connector routes include protected bike lanes or shared pathways
  - When a project is planned or located close to a future district connector route, it should confirm the exact location of the bike route and complete the infrastructure changes as required

#### Existing bike infrastructure

- + Gariepy has no dedicated bike routes
- Breezeway connections in Gariepy provide through-block connections for people who walk and bike (approximately 1.5 m wide)
- Bike routes close to Gariepy help connect residents to destinations such as The Marketplace at Callingwood, Wolf Willow Ravine, Callingwood Park, Ormsby Place, Willow Park and commercial development in Dechene

- + Shared pathways located close to Gariepy include:
  - + Eastside of Lessard Road
  - + Southside of Callingwood Road west of Lessard Road
  - Breezeway connection on the east side of Callingwood South neighbourhood (only 1.8 m wide)

- + Explore opportunities to enhance bike connectivity to the overall network, including along Callingwood Road
- Explore new bike routes and different bike facility types to major destinations within Gariepy to enhance user safety and comfort in all seasons
- + Explore opportunities to widen pathways to 3.0 m where possible
- + Explore opportunities to connect residents and nearby neighbourhoods to the North Saskatchewan River Valley



# Map 10. Mobility network – people riding a bike



Key Map



# 3.10 Mobility network – parking and traffic controls

There are four vehicle access points into Gariepy from the surrounding arterial roads. The residential collector road of 57 Avenue/172 Street provides direct access through the neighbourhood and ETS bus service. The parking and existing traffic controls in Gariepy are shown on **Map 11**.

#### Parking

#### **On-street parking**

- On-street parking is allowed along both sides of most local residential roads in Gariepy
- With predominantly front-driveways, parking can be limited on some streets (refer to Map 4).
   Most residents park on their driveways rather than the roads

#### Time-restricted parking (2 hours)

 On-street parking is restricted to a maximum of 2 hours in one cul-de-sac off of 172 Street

#### On-street parking restrictions

- On-street parking is restricted in Gariepy (to align with Bylaw restrictions), at intersections, marked crosswalks (5.0 m), ETS bus stop locations driveways and private accesses (2.0 m) such as those located near Carriage Lane Condominiums and Lessard Village
- The school's drop-off bay on the north side of 57 Avenue is signed manually by staff with an A-frame sign as bus parking during pick up and drop off

#### **Accessible parking**

- Accessible parking/passenger loading zones exist in front of Centennial Elementary school along 175 Street
- Accessible parking zones are typically 7.5 m to
   10 m long, which accommodates one vehicle
- Residents can request the City of Edmonton to install parking/passenger loading zones on public property in front of residences and businesses
- No accessible parking zones in front of residences have been noted to date

#### **Playground zone**

- Traffic increases around Centennial School at certain times of the day such as drop-off and pick-up times, typically between 8:15 - 8:45 a.m. and 3:00 - 3:45 p.m. except Thursdays when pick-up is 1:45 - 2:30 p.m.
- The playground zone in Gariepy also includes a zebra marked crosswalk at 174 Street that provides a direct connection to the playground at Gariepy Park and a zebra marked crosswalk at 175 Street
- + Playground zones are marked by signage indicating a reduction in speed





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#### Caution/play zone

- Caution/play zones are similar to playground zones where a speed limit reduction has been identified
- A caution/play zone is marked in Gariepy Crescent next to the breezeway through Gariepy Ravine

### Controlled intersections with stop or yield signs

- Yield and stop controlled intersections are typically located along the collector roadway (172 Street and 57 Avenue), where people who drive must yield or stop before turning onto the collector roadway
- Stop controlled intersections include those along the playground zone, roads that intersect with Lessard Road, and the intersection of 174 Street and 53 Avenue
- + A majority of intersections in Gariepy are uncontrolled intersections

#### Traffic Safety

- The neighbourhood includes several curvilinear roadways and cul-de-sacs with limited opportunities for speeding and shortcutting
- + An analysis of existing traffic data will help inform the design
- An analysis of speed data will assist in determining where measures to slow traffic should be implemented
- + Incident data will also help reflect where safety improvements may be needed

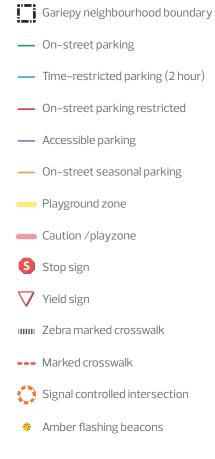


- Identify if traffic calming measures are needed to address speeding and shortcutting concerns identified through stakeholder engagement, 311 inquiries, School safety assessments, traffic volume data, collision data and High Injury Network Maps
- + Opportunity to redesign the collector roadway (57 Avenue and 172 Street) to support city-wide speed limit changes
- Evaluate traffic safety around important destinations (schools, parks, etc.) and along key routes to destinations for people who walk and bike

- Existing and missing traffic control signage will be reviewed
- Reviewing existing on-street parking
   locations will help identify constraints when
   exploring options and tradeoffs for potential
   new bike routes and traffic calming measures
   within the neighbourhood
- Review the limits of existing caution/ playground zones and determine, along with stakeholder engagement, if design changes would be beneficial



# Map 11. Mobility network – parking and traffic controls



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#### 3.11 Infrastructure

#### Utility considerations

There are many existing utilities in the neighbourhood that provide essential services to everyone in the community. Careful review of these utilities during design and construction will minimize the impacts of implementing any design changes or new infrastructure. Some utilities that are reviewed during Neighbourhood and Alley Renewal include:

| Shallow utilties   | Deep utilities  |
|--|---|
| <ul> <li>+ ATCO (Gas)</li> <li>+ Power</li> <li>+ Telecommunication<br/>(Telus, Shaw, Zayo)</li> </ul> | <ul> <li>Water (EPCOR)</li> <li>Drainage (EPCOR) –<br/>Storm and Sewer</li> <li>ATCO Pipelines</li> </ul> |
| A few of these utilities hav   | ve visible elements on the  |

surface including: manholes, vaults, catch basins, valves, hydrants, street lights, pedestals and traffic controls. When designing sidewalks and paths near a vertical element (such as street lights and pedestals) appropriate offsets should be maintained to maximize the usable space. For people walking or rolling the offset should be a minimum of 0.2 m and for people biking the offset is 0.2 m for elements less than 0.75 m tall and 0.5 m for elements that are taller than 0.75 m. Other utility considerations are listed in the table below:

| Infrastructure               | Considerations  | Mitigation   | Phases                     |
|------------------------------|---|--|----------------------------|
| All underground<br>utilities | <ul> <li>To reduce surface restoration costs<br/>it is best not to align concrete<br/>infrastructure over underground<br/>utilities that are likely to require<br/>maintenance through surface<br/>trenching</li> </ul> | <ul> <li>Use hydrovac to locate the utility<br/>and align infrastructure to avoid<br/>it, unless there are no other<br/>alignment alternatives</li> </ul>                                      | Design                     |
|                              | <ul> <li>Coordination of existing<br/>infrastructure and planned<br/>infrastructure</li> </ul>  | <ul> <li>Communication began in May<br/>and November of 2021 and will<br/>continue throughout the project</li> </ul>   | Concept<br>Design<br>Build |
| Shallow utilities            | + Conflicts with reconstruction of the<br>pavement structure  | <ul> <li>Hydrovac shallow utilities<br/>in all alleys and in proposed<br/>reconstructed road sections</li> </ul>   | Design<br>Build            |
| Telus Fibre<br>Optic         | <ul> <li>Vaults can be difficult to relocate<br/>due to the congestion of existing<br/>utilities in the road right of way</li> <li>Residential connection points are<br/>typically easy to relocate</li> </ul>          | <ul> <li>Notify Telus at least one year in<br/>advance to explore relocating</li> <li>If not feasible, design to<br/>accommodate the existing<br/>location of the vault</li> </ul>             | Design<br>Build            |
| Street lights                | <ul> <li>May require relocating to<br/>accommodate realigned sidewalks<br/>or curbs</li> </ul>  | <ul> <li>Design to minimize the need to<br/>relocate</li> <li>Typical renewal includes new<br/>poles and LED fixtures on the<br/>original base</li> </ul>                                      | Concept<br>Design<br>Build |
| Drainage                     | <ul> <li>Additional hard surfacing increases<br/>runoff capture which could impact<br/>the overall system</li> </ul>  | <ul> <li>Design to decrease hard<br/>surfacing and increase<br/>permeable surfaces throughout<br/>the neighbourhood</li> <li>If necessary consult with EPCOR<br/>on system modeling</li> </ul> | Concept<br>Design<br>Build |
|                              | <ul> <li>Catch basin relocation may be<br/>required for new curb alignments<br/>and some measures to slow traffic</li> </ul>  | + Design to minimize the need for relocation   | Design<br>Build            |

#### **Crossing Agreements**

Crossing agreements are required to work above underground infrastructure that has an established right of way on the surface.

- To date, no utility right-of-ways, high pressure gas lines, pipelines or high voltage power lines have been identified that would require an agreement for the scope of work proposed in Neighbourhood and Alley Renewal
- Should an application be needed, it should be made during the detailed design phase, several months prior to the anticipated construction.
   Crossing agreements are typically valid for one year

### Encroachment Agreements/Licences of Occupation

An encroachment agreement/Licence of Occupation is a written confirmation between the City and an owner of a property that allows for the private use of the public right-of-way. Often, encroachment agreements/Licences of Occupation within residential areas are used to extend private yards onto public right-of-ways. Encroachment agreements can also exist for City infrastructure on school board land.

+ Consideration should be taken if there is any potential impact to an existing encroachment agreement/Licence of Occupation. This information will be reviewed as received and inform design decisions

#### Land Acquisition

During Neighbourhood Renewal, the City may need to acquire portions of private land to accommodate any proposed improvements.

- Small land acquisitions are occasionally needed for new signal placements, installation of measures to slow traffic and new sidewalks within narrow public right-of-ways. While this is typically rare, it will be reviewed during the concept phase
- + Land acquisitions and related requirements will be identified at a later stage



