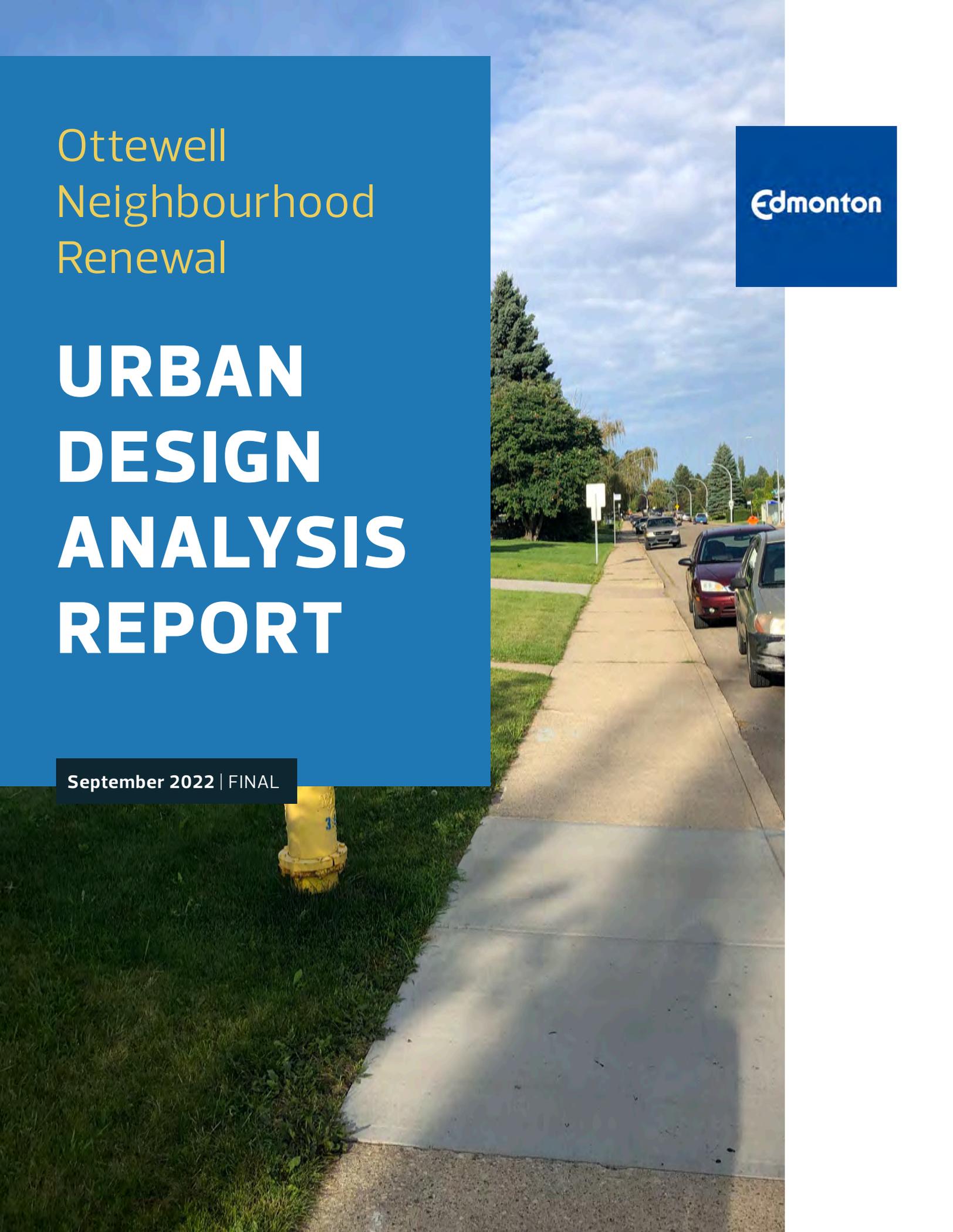


Ottewell
Neighbourhood
Renewal

URBAN DESIGN ANALYSIS REPORT

September 2022 | FINAL

Edmonton



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1

Neighbourhood Background and Context



Neighbourhood Context

We acknowledge that the Ottewell neighbourhood is located within the traditional land of Treaty Six Territory and the Traditional Métis Homeland of Region 4. For centuries, the footsteps of ancestors of First Nations, Métis and Inuit have marked this territory. Their stories and culture continue to make Edmonton a vibrant community to this day.

Europeans first arrived in modern-day Edmonton in the mid-eighteenth century and settlement began in the late 1700's. In the early 1900's, the Ottewell neighbourhood was briefly known as both East Glenora and East Edmonton Park, before being named Ottewell in 1957 (City of Edmonton Naming Committee Archives). The neighbourhood is named after one of Edmonton's earliest farmers, Richard Phillip Ottewell, who arrived in Edmonton in 1881 and settled near Clover Bar. Ottewell originally grew grain and raised hogs, reverting to dairy farming in later years. He opened the Ottewell coal company in 1904, and later, the Campbell and Ottewell Flour Mills. Ottewell's farm of 460 acres was sold in 1951. Today, Ottewell's historic log cabin is on display at Fort Edmonton Park on 1885 Street. The Ottewell area was annexed by the City of Edmonton from Strathcona County on January 1, 1959. By 1961, there were 2,500 residents living in the Ottewell neighbourhood.

Today, the Ottewell neighbourhood in Edmonton is a residential community located south of the North Saskatchewan River in the southeast area of the city. The Ottewell Neighbourhood Renewal project focuses on the area that is bounded by 98 Avenue and Terrace Road to the north, 90 Avenue to the south, 50 Street to the east and 75 Street to the west. Excluded from the scope of renewal within the neighbourhood are: 98 Avenue, Terrace Road, 75 Street, 50 Street, 90 Avenue and alleys. Examining the context and urban design of the neighborhood is the first step in establishing the renewal plan. In order to better understand the context of the neighborhood the Urban Design Analysis Study Area includes key areas of influence outside of the Ottewell neighbourhood boundaries such as community destinations, arterial road crossings, and open space network connections.

The Ottewell neighbourhood encompasses approximately 2.6 square kilometres making it one of the largest neighbourhoods by gross land area in the City of Edmonton. The population of Ottewell is approximately 6,065 based on the 2016 Statistics Canada Census data summarized by the City of Edmonton in 2019. The population density of Ottewell is approximately 2,333 people per square kilometre. Statistics Canada defines a neighbourhood as low

density when at least two thirds of the occupied housing stock consists of single and semi-detached houses and mobile homes, which is the case for Ottewell. Although the neighbourhood contains mostly low-density residential development forms, it has a higher density than the City of Edmonton average, which is 1,361 people per square kilometre, based on the 2016 Statistics Canada Census data.

Ottewell has an active Community League that organizes a number of community programs for Ottewell residents. The Community League hall is located toward the centre of the community and includes a playground, skating rink, splash park, basketball courts and landscaped open space. There are two weekly markets in the neighbourhood, the Capilano Farmers' Market and the Ottewell Artisan Farmers' Market. Ottewell is also a part of the Abundant Community Edmonton program. This initiative encourages neighbourliness and is intended to foster community care and connection to increase a sense of belonging and inclusion. In addition to a number of grocery, retail and other services located within or in immediate proximity to the neighbourhood, a variety of regional destinations surround Ottewell.

Did you know?

Ottewell is one of the largest neighbourhoods by gross land area in Edmonton. At 2.6 square kilometres, Ottewell is about 1.6 times larger than Fort Edmonton Park!

Map 1: Scope of Work

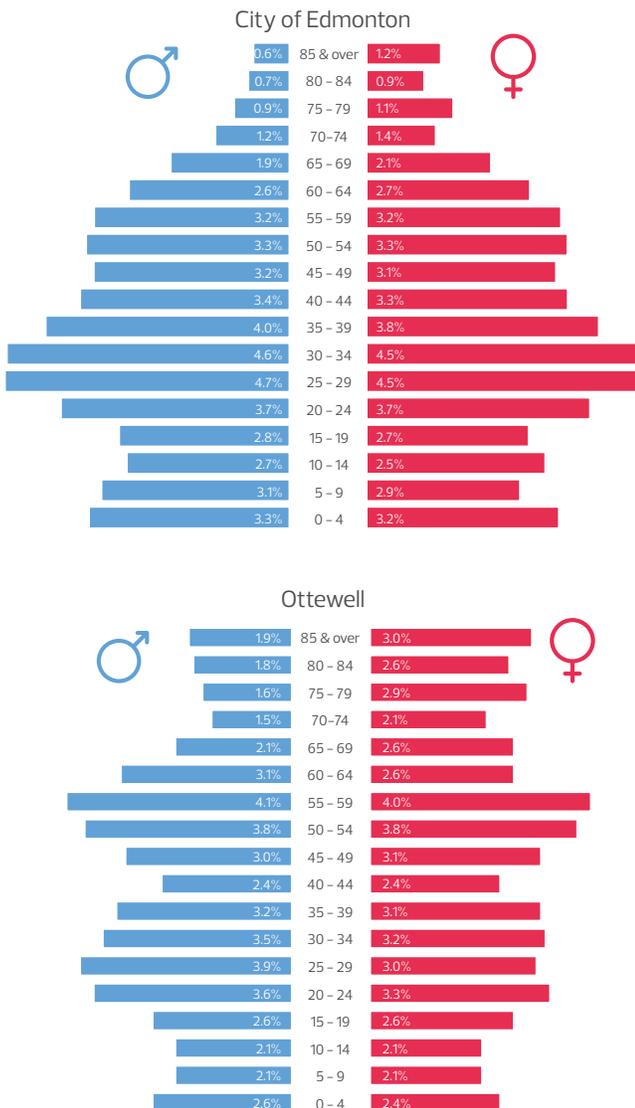


Neighbourhood Statistics

Population

The population in Ottewell has increased by 2.3% between 2011 and 2016, as based on the 2016 Statistics Canada Census data (note that only binary gender information is available for that census year). The Ottewell neighbourhood population is aging and contains a higher proportion of seniors (people over 65) than the City of Edmonton as a whole (22.1% compared to 11.9% city-wide). Residents in Ottewell over the age of 80 make up 13% of Ottewell's population whereas only 3.8% of residents in Edmonton are aged 80 and over. This is not surprising given the number of seniors' housing developments located in the neighbourhood.

Figure 1: Population by Age and Gender



Socioeconomic Characteristics

Socioeconomic characteristics of a neighbourhood can be used as indicators of the strength of the community's "social fabric". The City of Edmonton created a Social Vulnerability Map using 2016 Federal Census data that included nine indicators:

- Education
- Employment
- Government transfer payments
- Home ownership
- Immigration
- Income
- Language
- Lone parent
- Mobility (refers to the movement of people between residences within a 5-year period)

The neighbourhood of Ottewell is split into two tracts in the Federal Census, with 94B Avenue being the boundary of the two tracts. According to the Social Vulnerability Map, social vulnerability in Ottewell is considered 'low' south of 94B Avenue and 'medium', or more vulnerable, north of 94B Avenue. The census tract that covers this north portion of the neighbourhood also includes the Forest Heights neighbourhood, which affects the overall vulnerability score.

Overall, the social vulnerability of the Ottewell neighbourhood is low and it is anticipated that the neighbourhood has a strong "social fabric" of fairly connected and engaged residents. This assessment can be drawn from a number of factors including: the high proportion of homeowners in the neighbourhood, the percentage of households earning over \$40,000 per year, the high percentage of permanent residents, the lower percentage of residents who have moved between 2011-2016, and the low percentage of people who do not have a knowledge of French or English.

Age, Income and Education

Although the average age is higher in Ottewell as compared to the city as a whole (combined average ages for males and females being 43.9 years old and 37.7 years old, respectively), Ottewell still has a fairly large working age population (48.7% of the total population). For household income, Ottewell has a significantly higher percentage of population earning below \$50,000/year and a significantly lower percentage earning over \$100,000/year. Educational attainment in Ottewell closely follows the City of Edmonton as a whole.

Figure 2: Household Income

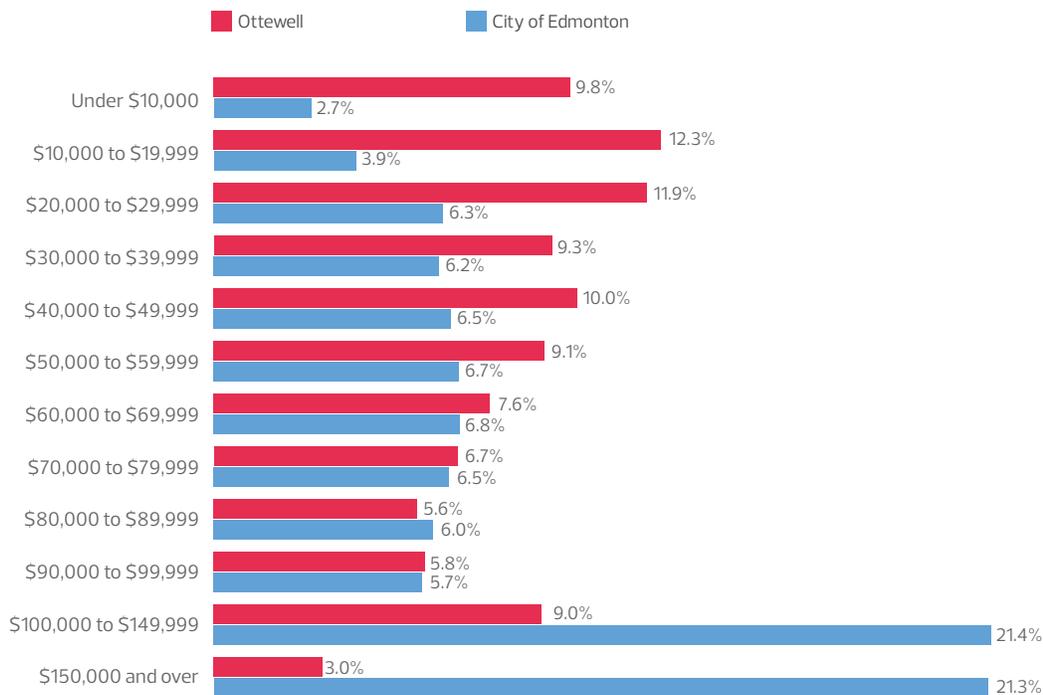
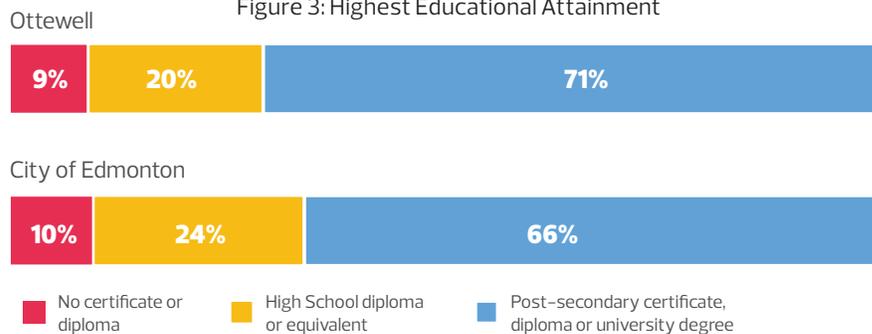


Figure 3: Highest Educational Attainment



Housing, Home Ownership and Mobility

The predominant housing form in Ottewell is single detached housing, which makes up 83% of the housing type. Most of the homes in Ottewell were built before 1980 with 990, or 33%, of homes built in 1960 or before. More people in Ottewell own their home than in the city as a whole, with only 19% of residents renting their homes. A greater number of people live in one or two person households in Ottewell, which is reflective of the private household size across the City of Edmonton as a whole. Approximately 38% of the residents in Ottewell moved between 2011 – 2016, a figure significantly lower than in Edmonton at large.

Figure 4: Occupied Private Dwellings by Tenure



Figure 5: Mobility Status (2011–2016)

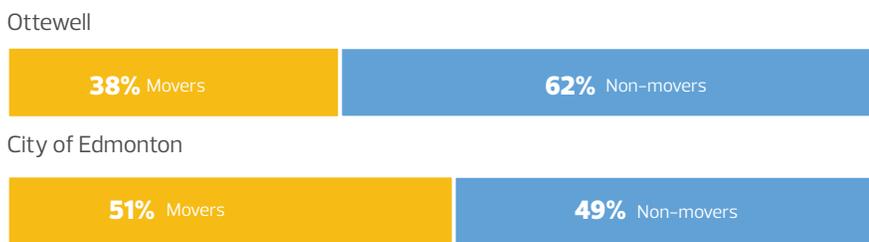


Figure 6: Private Dwellings by Structure Type

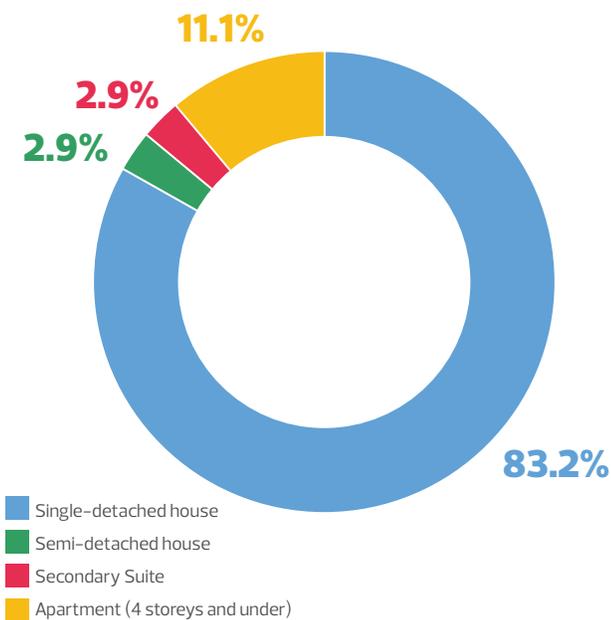
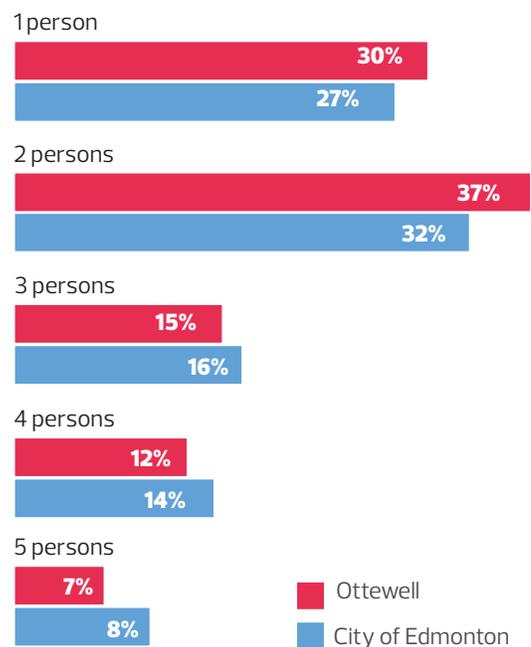


Figure 7: Private Households by Household Size



Immigration and Language

Based on the 2016 census data, approximately 15% of the residents identify as immigrants with approximately 5% of the Ottewell residents having immigrated between 2011–2016. The ethnic origins of the Ottewell neighbourhood population includes First Nations, Inuit, and Métis origins, other North American origins, European origins, Caribbean origins, Central and South American origins, African origins, Asian origins, and Oceania origins. The top five first languages spoken by Ottewell residents are English, French, Ukrainian, German, and Tagalog. The majority of Ottewell residents have a knowledge of English only while approximately 9% of the residents have a knowledge of both French and English. Approximately 1% of the residents in Ottewell either have knowledge of French exclusively or do not have knowledge of either French or English.

Figure 8: Ethnic Origins of Ottewell Residents

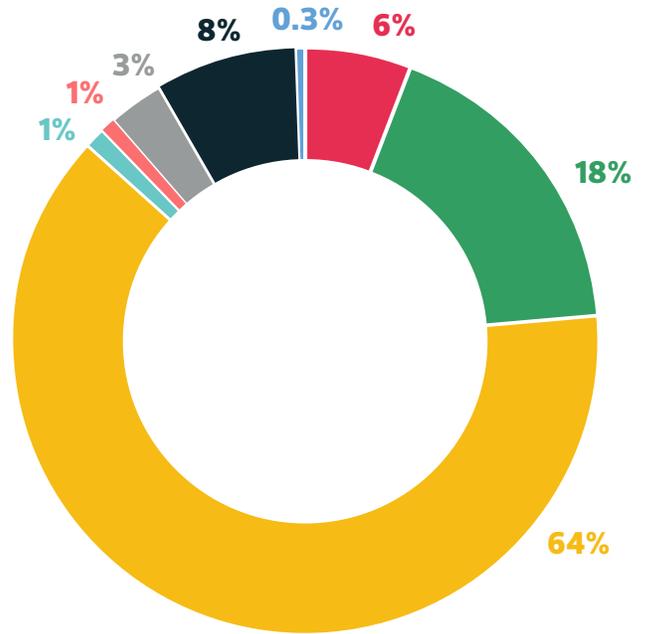


Figure 9: Top 5 Mother Tongues

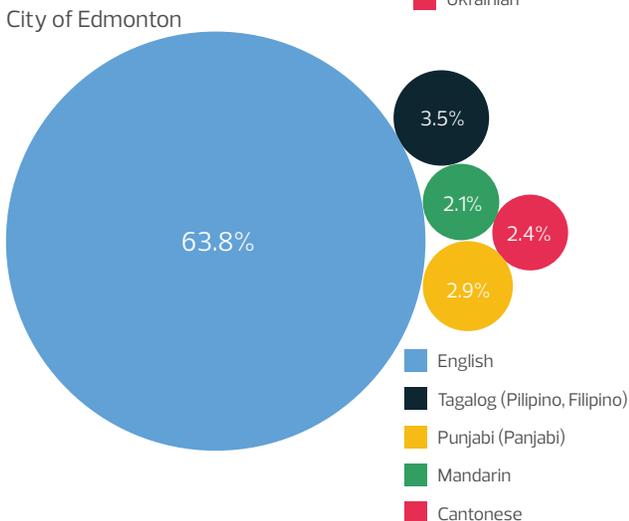
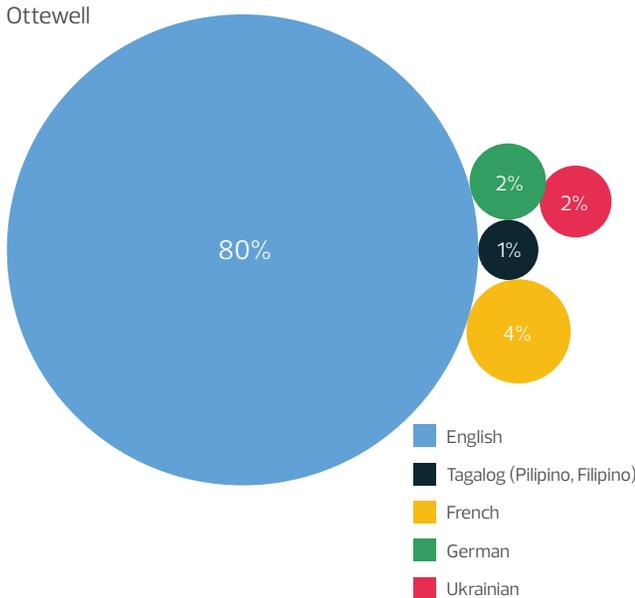
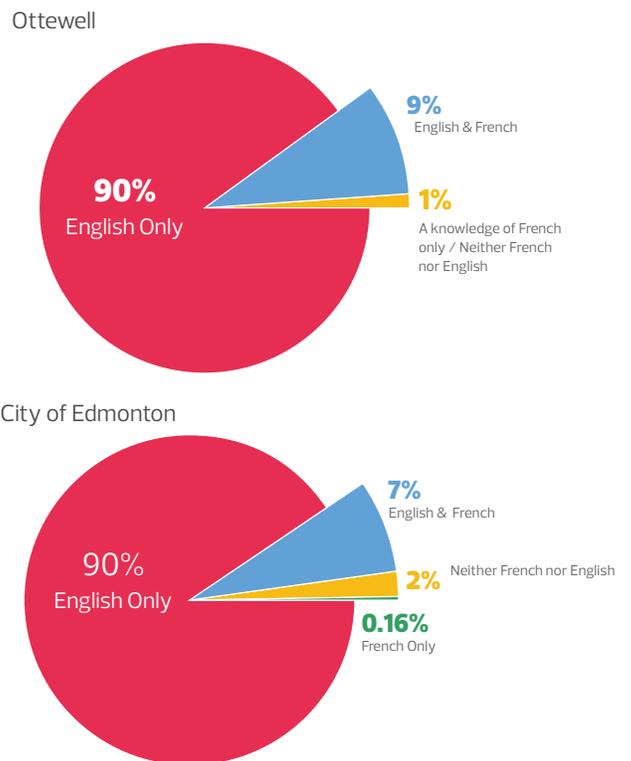


Figure 10: Knowledge of Official Languages



Transportation Mode

Understanding how people get from one place to another is a critical aspect of neighbourhood renewal planning. While transportation is not included in the Social Vulnerability Map, modal split (how people get around) can indicate the transportation opportunities and preferences of residents.

The commuting data indicates that the overall modal split in Ottewell is similar to that found in the city as a whole with automobile use accounting for 72% of transportation modes used. However, as compared to Edmonton as a whole, more people in Ottewell bike and walk to work and fewer people take transit. There are a number of employment areas within 15 to 20 minutes of Ottewell. The multi-lane arterial roads surrounding the neighborhood on all four sides provide direct vehicular access to these employment areas as well as to Downtown and Strathcona County. At the same time, these arterial roads create barriers to safe biking and walking to these destinations.

Figure 11: Journey to Work

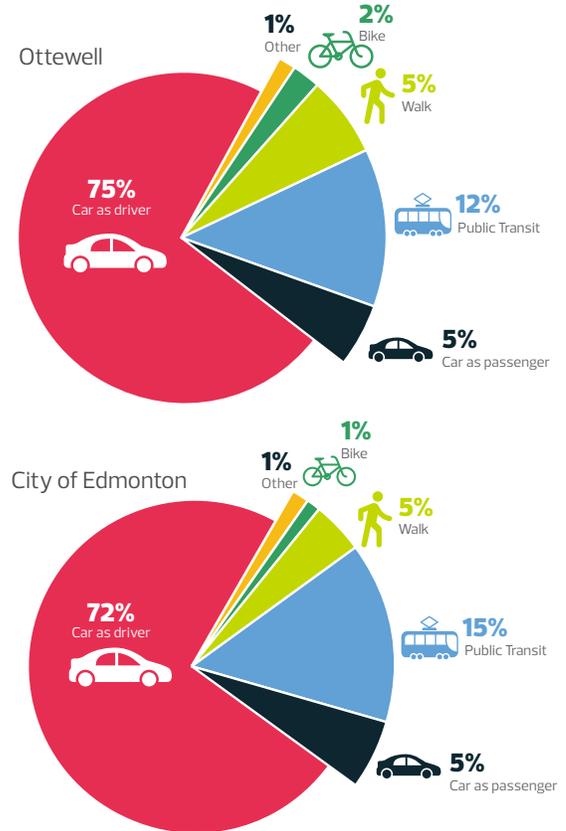


Photo Above

Pedestrians, bicyclists, and drivers in Ottewell

GBA+ Analysis

What is GBA+?

Gender-based Analysis Plus (GBA+) is an analytical tool often used with the intention of advancing gender equality. The “plus” in the name highlights that Gender-based Analysis goes beyond gender and includes the examination of a range of factors such as age, education, race, language, disability, culture and income, and their intersectionality. The goal of GBA+ is to ensure that gender and other diversity characteristics are properly considered in all government programs and policies that affect citizens.

When analyzing Ottewell and developing design recommendations, it is important to remember that all neighbourhoods are made up of diverse people with varying ages, abilities and social factors. These differences must be considered in order to create solutions that work for all residents. This analysis is intended to provide a high-level equity lens on the existing infrastructure analysis to assist in developing design recommendations. It is not intended to be exhaustive.

Analysis Criteria

Based on the GBA+ range of factors and the demographics of the Ottewell neighbourhood, the analysis for GBA+ in Ottewell has been broken down into four user groups:

- Seniors (20% of Ottewell residents are over 65)
- Children
- People with impaired mobility
- Women and gender, racial and cultural minorities

And the GBA+ will analyze four conditions that vary depending on the user group:

- Physical ability
- Personal comfort
- Physical infrastructure
- Safe roadway crossings

Physical Ability

Physical ability varies based on factors such as age and presence of mobility impairments. The following are factors to consider when analyzing how these factors impact one's mobility in their neighbourhood:

- Typical five minute walk for an able bodied adult – 400-500 metres
- Typical five minute walk for a senior or person with a walker or cane – 275-300 metres
 - In addition to a shorter walkshed, seniors and people with impaired mobility require more spaces to rest along their walking journey.
- Typical distance travelled independently by children over the age of 10 – about 500 metres
 - That distance can increase depending on age and mode of transportation (i.e. a child on a bike will travel further). Children under the age of 10 are typically accompanied by an adult or older sibling.

Did you know?

About **35%** of Ottewell residents are over 65 or under 15.

Personal Comfort

Personal comfort in public spaces impacts how people will move and use spaces. The following are perceived personal comfort and safety barriers:

- Children travelling independently in their neighbourhood – traffic volumes, speed of traffic, directness of routes and whether safe infrastructure is available
- Women and gender, racial and cultural minorities – lack of proper sightlines (i.e., hidden or winding walkways and walkways obscured by overgrown vegetation), adequate lighting and other people around

Physical Infrastructure

The provision and condition of infrastructure is important to the equitable use of the public realm. Lack of appropriate infrastructure is not only a comfort and safety concern, but it also encourages illegal usage of infrastructure, such as riding bicycles on the sidewalk or crossing where no crosswalk exists. This often exposes users to the possibility of law enforcement, which has radically different consequences for racialized individuals as compared to non-racialized individuals. The following are some important considerations when analyzing physical infrastructure:

- Lack of appropriate infrastructure for modal uses
- Inadequate sidewalk widths for strollers, wheelchairs, walkers passing or walking side-by-side
- Lack of protection from fast moving traffic or high-traffic volumes
- Inappropriate vehicle speed for local context
- Missing or inappropriate curb ramps
- Lack of places to rest
- Too frequent or poorly constructed driveway crossings

Safe Roadway Crossings

The type of roadway crossings available impact the safety and comfort for seniors, children, and people with impaired mobility. The following are some factors to consider when analyzing roadway crossings:

- Length of roadway crossing (i.e., can a user make it across relatively quickly or should additional infrastructure, such as a refuge island, be provided?)
- Appropriate crossing control type (i.e., overhead flasher, pedestrian activated signal, stop control, uncontrolled)
- Distance between safe crossings (i.e. are crossings provided at the right locations, are there missing crossings?)

Did you know?

About **51%** of Ottewell residents identify as female and **16%** identify as Indigenous or a visible minority.

Policy and Standards Review

General

Edmonton City Plan

The City Plan combines the Municipal Development Plan and the Transportation Master Plan and includes strategic direction on environmental planning, social planning and economic development. The Plan provides a framework to direct Edmonton's population growth to key areas throughout the city as the city grows from one million to two million people. The City Plan provides direction on the mobility systems, open spaces, employment networks and social networks that will create a safe and livable city that is welcoming and attractive to new residents.

The City Plan contains stretch targets and strategic measures that support neighbourhood renewal, including creating districts that enable people to easily complete their daily needs within 15 minutes of their residence and increasing the number of trips made by transit and active transportation through investment in bicycle networks and more frequent and accessible transit.

The City Plan speaks to activating growth in the city by investing in infrastructure upgrades and stimulating area readiness for development or redevelopment, which aligns with the Neighbourhood Renewal Program. The location of Terrace Road and 50 Street is identified as a District Node in The City Plan, which is an area that is envisioned to provide housing, employment and amenities. Although this location is already a commercial retail area that serves multiple neighbourhoods and is also the location of the Capilano Transit Centre, future mid to high rise residential housing could be a consideration on a portion of this site, increasing opportunities for more pedestrian-friendly areas.

Accessibility

Accessibility for People with Disabilities, Policy No. C602 (2019)

The purpose of Policy C602 is to ensure people with disabilities are treated with respect, have equitable access and opportunity to contribute and to provide awareness that the City of Edmonton is committed to the internationally recognized principles of Universal Design, which are founded on the philosophy that accessibility is a fundamental condition of good design.

Access Design Guide, Version 3 (2020)

The Access Design Guide is intended for use when planning, designing, building and maintaining facilities, parks and spaces owned or leased by the City of Edmonton. This includes facilities owned and operated by the City, as well as those built on City-owned land but operated by another organization. It is expected that the guidelines will be incorporated into the planning of all exterior spaces starting with neighbourhood design through the renovation of City facilities and parks. The Access Design Guide also discusses considerations to be made when designing public places and spaces to accommodate the aging population and children, in addition to people of varying abilities.

Design recommendations include barrier-free connections to parks and facilities, seniors' centres, shopping and transit facilities, including:

- Providing open spaces within 400 metres of seniors' housing
- Providing seating adjacent to all amenities with views to points of interest
- Locating benches every 100 metres along pathways and trails
- Considering a variety of seating options that are protected from the elements, such as clusters of benches to help promote socialization
- Providing exterior paths of travel that are a minimum 1800 millimeters wide to allow two wheelchair users to safely pass each other
- Ensuring all walkways and grass areas are maintained and free of trip hazards

Transportation

Complete Streets Design and Construction Standards (2018)

The Complete Streets Design and Construction Standards (CSDCS) integrate best practices in design guidance to support the planning, design, and construction of complete streets in Edmonton. The intent is to develop streets that are safe, attractive, comfortable and welcoming to all users in all seasons while also considering operations and maintenance challenges. The Standards include designing with a retrofit lens, specifically speaking to the challenges that may be encountered in a retrofit context, including the location of existing buildings, mature trees, utilities, private landscaping within the right-of-way and numerous other constraints within an existing right-of-way.

A number of changes were made to the Complete Streets Design and Construction Standards in 2018 that impact neighbourhood renewal:

- Wider minimum sidewalk widths (where feasible)
- Changes to the design of curb ramps to improve the safety of people walking and wheeling

Active Transportation Policy No. C544 (2009)

The purpose of the Active Transportation Policy is to optimize opportunities to walk, roll and cycle, regardless of age, ability, or socio-economic status in Edmonton. The policy supports active transportation by providing infrastructure to enhance safety and accessibility; raise awareness of the options available to Edmontonians and the benefits of being active; educate users of their rights and responsibilities; enact policies, procedures and programs to support and encourage active transportation modes; and support and encourage active transportation through collaboration, cooperation and partnerships.

Neighbourhood renewal presents an opportunity to evaluate the current active transportation networks at the local scale and enhance the safety and accessibility of the infrastructure to support the goals of the Active Transportation Policy.

The Bike Plan (2020)

The Bike Plan provides a strategic planning framework to support the implementation of The City Plan's intentions and

directions related to cycling and the aim to support cycling for people of all ages and abilities in all seasons and for all types of trips (i.e., all reasons). The plan outlines three route types that form the future bike network:

1. District connector routes act as cycling arteries connecting multiple neighbourhoods
2. Neighbourhood routes provide local access to community destinations and opportunities for recreational cycling
3. River Valley district connector routes and shared pathways provide cycling routes along the North Saskatchewan river valley and ravine system for longer distance commuter trips and recreational rides

Six principles outlined in the plan are intended to guide the planning and design of all network elements:

- Health and comfort, which grounds design in safety principles
- Connectivity, which aims to provide a complete network without gaps or missing links
- Directness, which aims to provide routes without undue detours
- Network density, which ensures the spacing of routes matches demand
- Attractiveness, which relates to the pleasing aesthetics of routes
- Integration, which aims to ensure bike routes fit into the local context and area

Safe Mobility Strategy (2021–2025)

The Safe Mobility Strategy's purpose is to achieve Vision Zero through safe and livable streets in Edmonton. Vision Zero is the internationally endorsed long-term goal of zero traffic-related fatalities and serious injuries. The City of Edmonton adopted Vision Zero in 2015 and its first strategy, the Road Safety Strategy 2016–2020, made significant progress in reducing serious injuries and fatalities by targeting hotspot locations for infrastructure improvements and enforcement. The Safe Mobility Strategy builds on this momentum by evolving from a hotspot approach to a combination of location-based and system-wide approaches that will help tackle widespread issues that contribute to crashes, including street design and the deep-rooted cultural norms around traffic and mobility. The strategy directly ties traffic safety to The City Plan and ConnectEdmonton to reflect the interdependence between safe mobility and other City goals such as mixed land use, climate resilience, and health. Neighbourhood renewal

presents an opportunity to realize many of the objectives sought out through the Strategy's Key Actions, notably by designing safe crossings and implementing additional countermeasures around schools.

Community Traffic Management Policy No. C590 (2017)

The purpose of the Community Traffic Management Policy is to support livable, healthy, and safe communities by providing guidance for a systematic and transparent process to identify, assess, respond to, and report on community traffic issues, notably short-cutting and speeding. The supported initiatives should be in line with the goal of Vision Zero and can include physical measures and initiatives to raise awareness and educate drivers. The implementation of initiatives concurrently with neighbourhood renewal is explicitly encouraged in the policy. The toolbox of potential physical measures includes many options that are relevant to Ottewell, such as raised crosswalks, traffic circles, curb extensions and reviewed signal timings.

Open Spaces

Open Space Policy C594 (2017)

The Open Space Policy outlines the importance of green, open space networks to Edmonton's environmental and community wellness. The policy acknowledges that green networks should be connected, multifunctional and equitable. The policy identifies the need for collaboration within City departments and with community members to promote stewardship in open space development and enhancement. The open spaces and open space network in Ottewell should be reviewed under this lens and, with community engagement, opportunities should be identified to make certain that the open spaces serve all residents of the Ottewell neighbourhood.

Breathe: Edmonton's Green Network Strategy and Edmonton's Urban Parks Management Plan (2017)

Breathe: Edmonton's Green Network Strategy and the Urban Parks Management Plan calls for an integrated system of open spaces throughout the city. These open spaces include parks, plazas, pedestrian-friendly streets, natural areas, green ways and green infrastructure. The driving principles of these documents ensure that development

of open spaces is done in a way that supports community celebration and socialization, provides ways for residents to recreate and live healthier lifestyles and preserves and enhances the ecological capital within our city, with strategic directions that include safety, inclusivity, equitable distribution, vibrancy, collaborative planning and other important goals. The open spaces within Ottewell fall under these two important directives and the principles and strategic directions have been used to analyze the existing open spaces and will be considered in the proposal of any enhancements to these spaces.

Parkland Bylaw (Bylaw 2202) and Corporate Tree Management Policy C456C (2020)

The City-owned parkland in Ottewell falls under the City of Edmonton's Parkland Bylaw and Corporate Tree Management Policy. Any work for open space upgrades that includes work around existing trees or removal of existing trees requires review by the City of Edmonton's Urban Foresters. All trees to remain are to be protected during construction in accordance with the Corporate Tree Management Policy.

Urban Tree Canopy Expansion Program

The streets in Ottewell consist exclusively of monowalks, with no boulevards and very few street trees. The Urban Tree Canopy Expansion Program is part of the City's commitment to growing Edmonton's urban forest, and there are many opportunities in Ottewell to be able to contribute to this expansion.

Development Permit

Work in Ottewell's open spaces (City-owned and privately-owned) may require a development permit through Development Services, Urban Form and Corporate Strategic Development. Any variances to the Zoning Bylaw regulations will require a justification letter to indicate if there are unnecessary hardships or practical difficulties to meeting the requirements of the zoning and will include any solutions to reduce the impact of the variance.

North Saskatchewan River Valley Area Redevelopment Plan, North Saskatchewan River Valley and Ravine System Protection Overlay, and Ribbon of Green

Fulton Creek Ravine is part of the North Saskatchewan River Valley Area Redevelopment Plan (ARP). The relevant goals under this plan are for these areas to “ensure preservation of the natural character and environment of the North Saskatchewan River Valley and its Ravine System”, “establish a public metropolitan recreation area”, and “provide the opportunity for recreational, aesthetic and cultural activities in the Plan area for the benefit of Edmontonians and visitors of Edmonton”.

Fulton Creek Ravine is also under the North Saskatchewan River Valley and Ravine System Protection Overlay. This overlay provides a development setback from the North Saskatchewan River Valley and Ravine System, ensuring that all developments maintain a minimum of 7.5m setback from the North Saskatchewan River Valley and Ravine System. It also ensures that the rear or side yard of any residential site that abuts or is partially or wholly contained within the North Saskatchewan River Valley and Ravine System includes permeable landscaping materials. The overlay may be relevant to any enhancements that could occur directly in or adjacent to the Ravine, as part of neighbourhood renewal. Any work requiring a development permit will need to adhere to minimum setback requirements and be developed to maintain the stability of the slope.

The Ribbon of Green provides a strategy to support the ecological protection and recreational use of Edmonton’s River Valley and Ravine System. It contains policies guiding further planning, decision making, monitoring and management of the Ravine System as well as direction to inform future site-specific planning. The Ribbon of Green encourages public access to the System and highlights the implementation of trail networks to provide a connected regional trail system that ties together destinations and neighbourhoods. These visions provide support for Fulton Creek Ravine to serve as a connection from the Ottewell neighbourhood into the greater network of trails in the Ribbon of Green.

Low Impact Development

City of Edmonton LID BMP Design Guide and Edmonton Design and Construction Standards (Drainage)

Low impact development (LID) is a form of stormwater management that mimics natural hydrology by using landscape features to manage frequent, low-volume storm events close to their source. By collecting these storm events in this manner, benefits such as decreased flooding, increased water quality, and decreasing the urban heat island effect as provided. Based on the City of Edmonton’s LID BMP Design Guide, key LID principles include:

- Preserving natural site features
- Small scale, integrated stormwater management controls dispersed throughout the site
- Minimizing and disconnecting impervious areas
- Controlling stormwater as close to its source as possible
- Prolonging stormwater runoff flow paths and times, and
- Creating multi-functional landscapes

Design of the LID facilities in Ottewell will adhere to the City of Edmonton’s LID Best Management Practices Design Guide as well as the Drainage Design Standards prepared by EPCOR (Edmonton Design and Construction Standards, Volume 3).

Winter

Winter Design Policy, Policy No. C588 (2016)

The Winter Design Policy encourages designing year-round spaces with a winter lens. The policy includes the following five winter design principles across neighbourhoods, streets, sites and open spaces that will:

1. Incorporate design strategies to block prevailing winds and downdrafts
2. Maximize exposure to sunshine through orientation and design
3. Use colour to enliven the winterscape
4. Create visual interest with lighting, while being mindful of density, spread and colour
5. Design and provide infrastructure that supports desired winter life and improves comfort in cold weather

Winter Design Guidelines

The Winter Design Guidelines build on the five design principles of the Winter Design Policy by providing a number of goals and outcomes to improve the outdoor experience in winter, championing active winter living. Investments in the public realm and transportation network, along with private sector investment, is encouraged. Specifically, the guidelines speak to ensuring neighbourhoods are designed with winter comfort, safety, access and aesthetic appeal in mind, considering all ages and abilities. These considerations, along with the objective of providing opportunity for winter programming and designing elements to attract residents outside during everyday winter life, will be reviewed through the analysis of Ottewell and contemplated when proposing open space enhancement opportunities.

2

Neighbourhood Analysis



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Analysis Approach

The approach to Neighbourhood Analysis and the creation of concepts for streets and places is based on the philosophy that design needs to reflect the context – current and future.

The purpose of this analysis is to understand the existing conditions and context of the community and identify opportunities, constraints and gaps which are then targeted with design options and analysis of tradeoffs.

The Neighbourhood Analysis is supported with public engagement where analysis findings are shared with the community and their input is sought. The input from the community provides information on their lived experiences that identify areas where the quantitative data from the Neighbourhood Analysis may not be telling the whole story.

The Neighbourhood Analysis was completed through desktop review of geospatial, sociodemographic, and transportation data as well as site visits where notes and photos were used to capture observations. The following areas were analyzed:

- Land ownership and development opportunities
- Commercial nodes and community destinations
- Built form and character areas
- Open space network
- Complete Streets analysis
- Mobility networks
- Infrastructure

In addition, different lenses were also used to analyze the neighbourhood including a Design lens, Gender-Based Analysis Plus (GBA+) lens, and a Winter lens. The following sections present the findings of the analysis and icons associated with each of these noted lenses are included to denote how the opportunities, constraints and gaps can be addressed and/or support each of the design, GBA+ and winter lenses.

Analysis Considerations



Design Consideration

A Design Consideration represents a finding from the analysis where a design solution may be used to address identified issues, constraints, opportunities and gaps.



GBA+ Consideration

A Gender-Based Analysis Plus (GBA+) Consideration represents a finding from the analysis where addressing the identified issues, constraints, opportunities and gaps would support a more inclusive community.



Winter Consideration

A Winter Consideration represents a finding from the analysis where addressing the identified issues, constraints, opportunities and gaps would support a more winter-friendly community.

Land Ownership and Development Opportunities

Land ownership within the Ottewell neighbourhood consists of mostly privately owned residential lots and a few privately owned commercial lots. Since the façade upgrades to the Ottewell Plaza shopping centre in 2013, there has been very little development activity in the neighbourhood based on the low volume of City of Edmonton development applications for Ottewell. There were no significant planned or in-progress City of Edmonton projects in Ottewell as of December 2020.

As shown in the Municipal Holdings map, parcels owned by the City of Edmonton include the land on which the Capilano Fire Hall Number 11 is located, the community league park, Fulton Ravine and lands surrounding the Waldorf Independent School in the northwest corner of the neighbourhood, municipal use properties and transportation (roadway) areas. The areas identified as transportation (roadway) function as pathways that connect the streets and avenues within the Ottewell Place development on the east side of the neighbourhood.

The municipal use properties, which are scattered throughout Ottewell, are mainly used for utility access such as overhead power lines and underground utilities. In some cases, these small lots are used as breezeways or are under a usage agreement between the City of Edmonton and landowners from adjacent properties. Although there are a number of municipal use properties identified, each property is less than 525 square metres in size and most have an area of about 220 square metres so significant redevelopment opportunities on these parcels are nonexistent. However, these parcels could be considered to enhance connectivity through the neighbourhood.

Land Ownership and Development Considerations:

- Evaluate pathway conditions in municipal use properties for potential upgrades and improvements to connectivity.



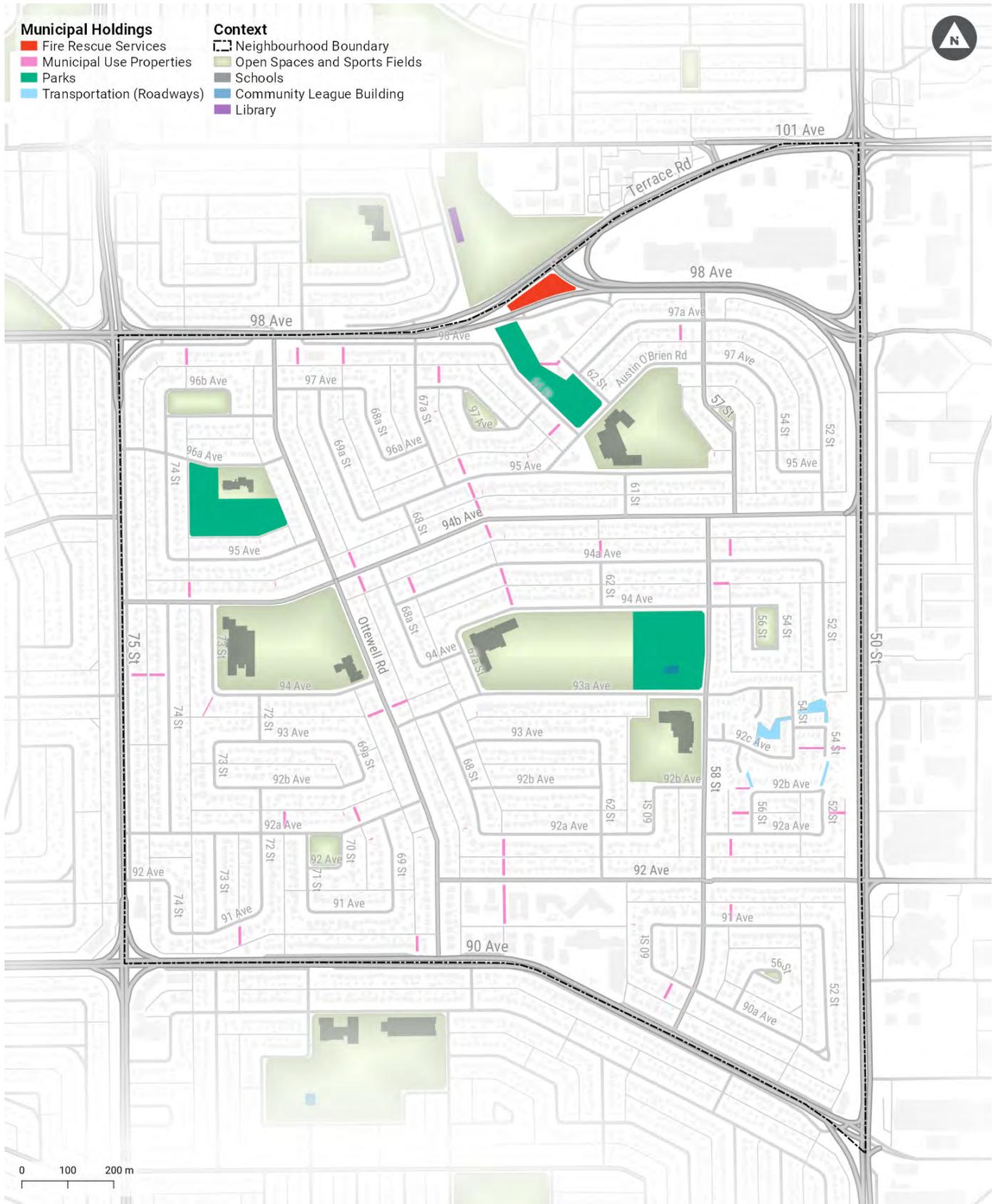
- Review relationship between school-owned lands and public park space.



- Explore opportunities to participate in the City of Edmonton's Corner Stores program with owners of commercial sites.



Map 2: Municipal Holdings



Commercial Nodes and Community Destinations

Commercial nodes and community destinations are scattered throughout the neighbourhood, in addition to a number of destinations right outside the neighbourhood boundary. All commercial nodes and community destinations within the Ottewell neighbourhood are within a five-minute bike ride or a five to ten-minute walk from almost all locations in the neighbourhood. As explained in Edmonton's City Plan (2021), a livable city is one that allows people to easily complete their daily needs within a 15-minute travel time by walking, rolling, biking or transit. The numerous local community destinations and other destinations within a 15-minute travel time of Ottewell means that residents are not required to travel great distances to access essential services and amenities.

Local Community Destinations

The Ottewell neighbourhood is well-served by six schools and one Spanish language school, six religious assemblies and eight open space areas. In addition, King's University, Edmonton's Christian university, is located east of 50 Street between 91 Avenue and 92 Avenue, a short commute from the east side of the Ottewell neighbourhood. The number of schools in the neighbourhood and a diversity of school programs and language programs provide a compelling reason for families to locate in the neighbourhood.

The Local Destinations map shows the location of the following educational, civic, spiritual and commercial amenities in Ottewell.

Local Community Destinations:

Schools

- 1 St. Brendan Catholic Elementary / Junior High School
- 2 Austin O'Brien Catholic High School
- 3 Clara Tyner Public Elementary School
- 4 Ottewell Public Junior High School (includes Mandarin Bilingual Program)
- 5 Braemar School for pregnant and parenting teens and Gabriela Mistral Latin American School K-9 Spanish Language School
- 6 Waldorf Independent School of Edmonton (K-12)

Civic Sites

- 7 Edmonton Fire Hall Number 11
- 8 Ottewell Community League

Spiritual Sites

- 9 Braemar Baptist Church
- 10 Ahmadiyya Muslim Jama'at Mosque
- 11 St. Nicholas Ukrainian Catholic Parish
- 12 Ottewell United Church
- 13 The Salvation Army Edmonton Temple
- 14 mosaicHouse Church and neighbourHouse

Retail Services

- 15 Capilano Mall (includes Walmart Supercentre, Safeway and other retail services)
- 16 Ottewell Plaza (includes No Frills, Rexall, medical clinics and other services)
- 17 Small Commercial Plaza (includes fast food and convenience services)
- 18 Small Strip Mall (includes fast food and convenience services)
- 19 Petro-Canada Gas Station

Map 3: Local Community Destinations



Community Destinations in 15-Minute District

In addition to local destinations within the neighbourhood, Ottewell is surrounded by a number of recreational amenities, educational and cultural institutions and larger retail centres that provide retail and essential services within a 15-minute travel time.

The following major destinations are within an approximately 15-minute walk from the neighbourhood boundary, and within 15 minutes from anywhere in the neighbourhood by other modes:

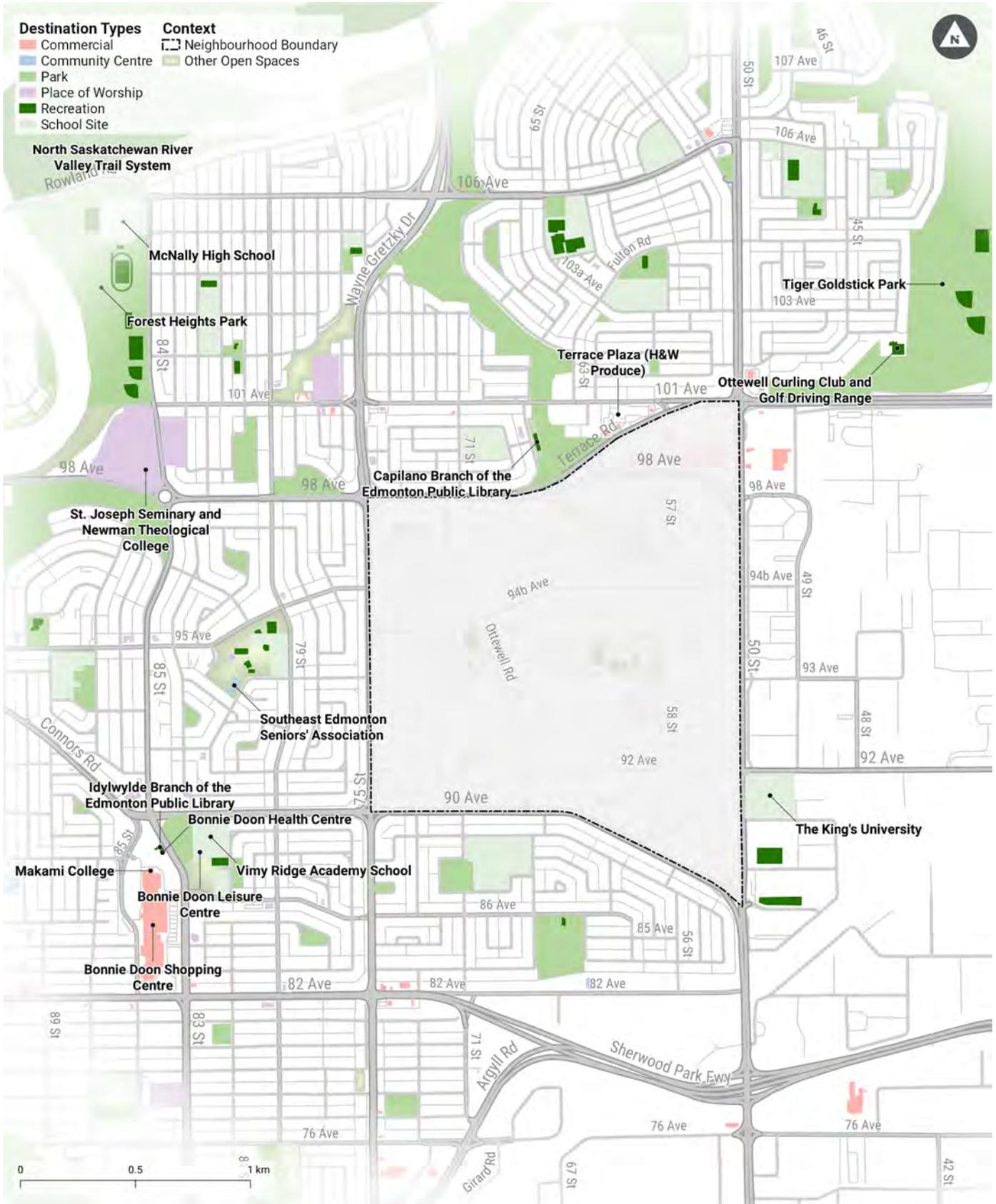
- Terrace Plaza
 - This plaza includes an H&W Produce for groceries, a few fast-food restaurants, Scotiabank, Capilano Eye Centre and a Husky service station, among other retail and essential services.
- Bonnie Doon Shopping Centre
 - A major destination for Ottewell residents, the shopping centre provides essential and retail services as well as entertainment and a variety of restaurants and cafes, amongst others.
- Bonnie Doon Leisure Centre
- Bonnie Doon Health Centre
- Kings University, Edmonton's Christian University
- St. Joseph Seminary and Newman Theological College
- MaKami College
 - Located in the Bonnie Doon Shopping Centre, the College is the largest massage therapy school in Alberta.
- Southeast Edmonton Seniors' Association
- Capilano Branch of the Edmonton Public Library
- Idylwylde Branch of the Edmonton Public Library
- Vimy Ridge Academy
 - An activity-focused public school for grades 7-12 that offers a unique sports, dance and pursuits program.
- McNally High School
- Ottewell Curling Club and Golf Driving Range
- Tiger Goldstick Park
- Forest Heights Park
- North Saskatchewan River Valley Trail System

Commercial Nodes and Community Destinations Considerations

- Review local community destinations and neighbourhood active transportation connections using GBA+ criteria to determine equitable access.



Map 4: Community Destinations in 15-Minute District



Built Form and Character Areas

Road patterns and development within the Ottewell neighbourhood are reflective of typical subdivision planning of the 1950s and 1960s. Almost 70% of the neighbourhood consists of single detached, bungalow-style residential development. Other housing types that are found in Ottewell include:

1. Three pockets of semi-detached / duplex houses comprising approximately 3% of the neighbourhood built form are located in the northeast, southeast, and along the southern portion of Ottewell Road.
2. Ottewell Place, a 156-unit housing development built on approximately 25-foot to 30-foot lots creates a dense few streets and avenues, mostly in the form of cul-de-sacs, located to the east of St. Brendan Catholic School. This was an experimental housing concept when it opened in 1977. The single detached houses are built with a side yard on one side only and lots are approximately half the size of a typical single detached residential lot found in Ottewell.
3. Multi-unit housing consisting of three storey walk-ups is located on 90 Avenue and 92 Avenue in the southeast quadrant of the neighbourhood and along 98 Avenue in the northeast quadrant near the Fire Hall Number 11.
4. In addition, multi-unit housing of one to four storeys run by GEF Seniors Housing is provided along 92 Avenue and consists of Ottewell Manor, Ottewell Terrace, and Ottewell Place, and on 98 Avenue in the northeast quadrant of the neighbourhood, the St. Nicholas Apartment building.

Of the approximately 3,213 occupied dwelling units in the neighbourhood, approximately 73% are owned and 27% are rented. With the exception of the (RPL) Planned Lot Residential Zone area of single detached houses built on small lots (Ottewell Place), properties are built with vehicular access off of the alley. Most of the neighbourhood is characterized by wide streets and wide, well-manicured lots with mature vegetation. It is evident that most of the houses were constructed during the same period as there is very little differentiation between the architectural style aside from unique dormers and roofline projections that provide interest. Within the past five years, there has been very little development activity in the Ottewell neighbourhood based on the low volume of City of Edmonton records for this neighbourhood. A few renovated or redeveloped properties are located scattered throughout the neighbourhood and one lot split was approved but has not been registered to date.

Built Form Examples:



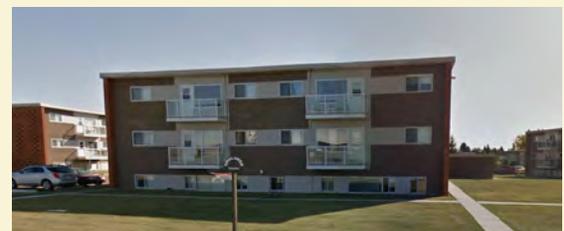
Single Detached House



Single Detached House on 25' to 30' lots



Semi-Detached / Duplex Houses

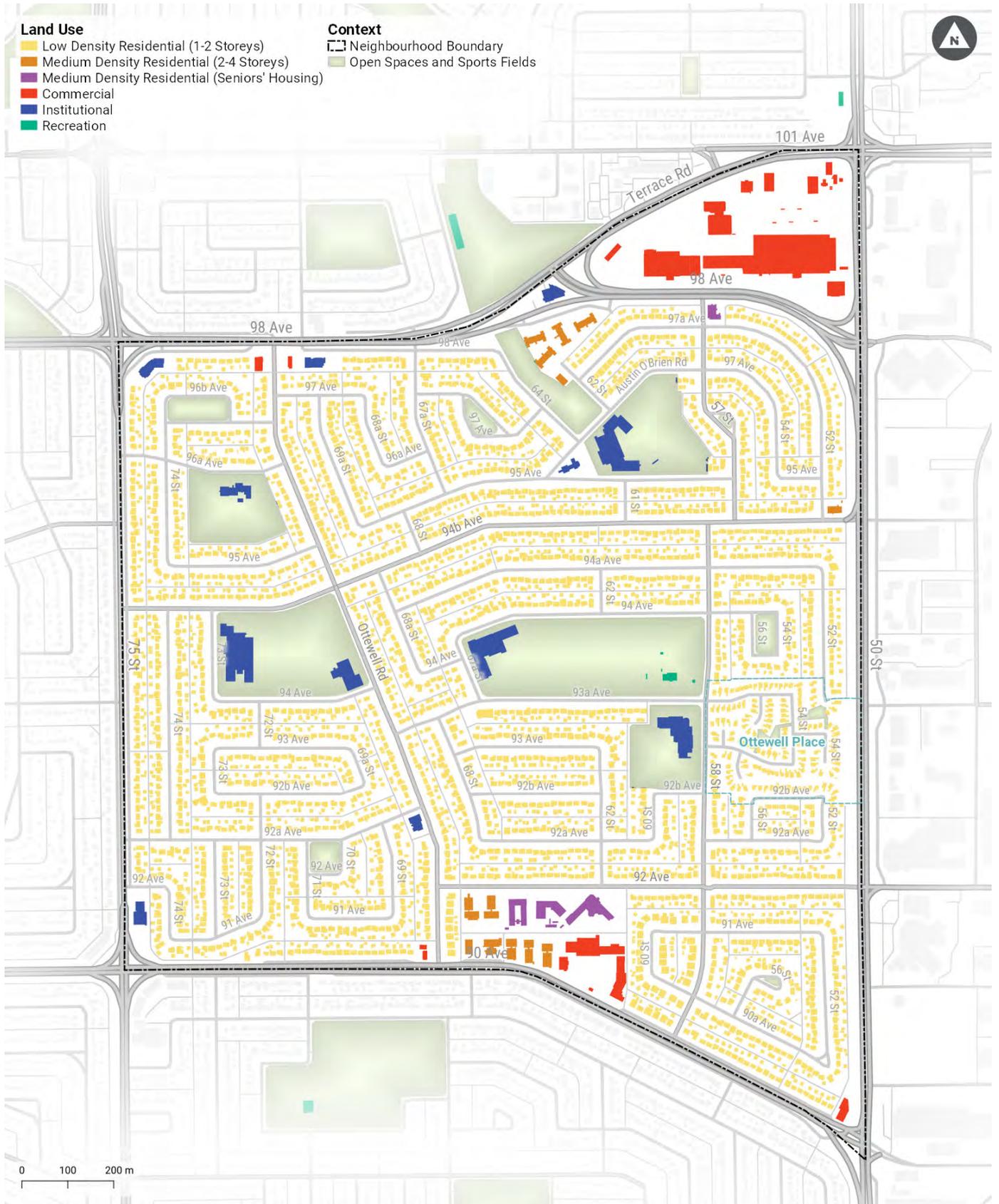


Medium Density Multi-Family



Multi-Unit Seniors' Housing

Map 5: Built Form and Land Use



Open Space Network

Open spaces and open space networks are critical elements of healthy, complete communities. Open spaces provide places to gather, opportunities to practice healthy lifestyles and ecological wellness. Open space networks provide linkages for people to safely and comfortably navigate through their neighbourhood and the city, while also providing habitat corridors to sustain wildlife and important ecological environments. Ottewell has a number of open spaces throughout the neighborhood, varying in size, type and function. The Open Space Map identifies these open spaces, as well as illustrates a 400m access buffer surrounding those open spaces. The open spaces have been sorted into 6 categories, based on aspects such as form, function and ownership.

Access to Open Space and Universal Accessibility

The open space map included with this section identifies a 400 metre "as the crow flies" access zone around the open spaces in Ottewell. This zone represents the residents that may have access to park space within a 400 to 500 metre walking distance. Under the Pocket Parks section in the Urban Parks Management Plan (Section 5.2.4.3) it is identified that pocket parks "are intended to ensure residents have a park opportunity within 0.5 kilometres... walking distance from their home".

As the open space map illustrates, the southeast corner of the neighbourhood is not covered by an access zone. While there is a large school sports field, located on private property, on the east side of 50 Street that could serve this open space purpose, there are several issues that preclude this as a viable open space amenity. Foremost, 50 Street is a wide, heavily used arterial and is not a comfortable crossing experience, particularly for young children or seniors. The function of the park is principally a sports field and not adequately set up for casual use, therefore not inviting to all users. In addition, the park is not universally accessible and does not provide seating, therefore users with mobility aids would not be able to safely nor comfortably use the space. And finally, depending on where the user's home is within the southeast corner of Ottewell, the walking distance can be far more than 500 metres to this green space due to the limited roadway crossing points and the sidewalk grid pattern in the southeast corner of the neighbourhood.

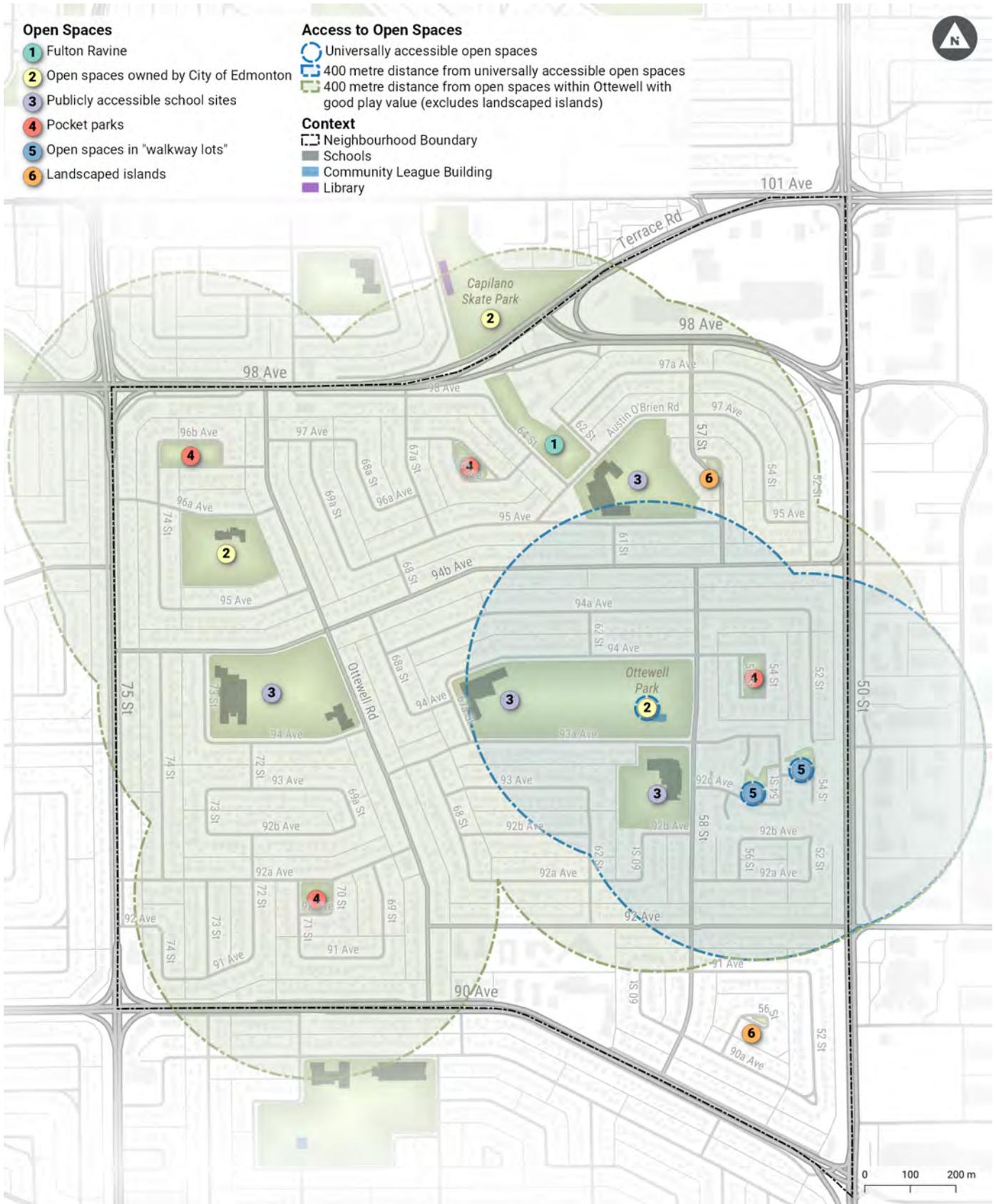
The open space map also identifies the open spaces within Ottewell that would be considered universally accessible for all users. These spaces are shown within a dashed-line border on the map. The City of Edmonton's Accessibility for People with Disabilities Policy states that an accessibility lens will be applied to all City-owned infrastructure, which includes open spaces. As illustrated on the map, the pocket parks in the road right-of-way, and the City-owned field at the Waldorf Independent School, are not considered accessible open spaces. These open spaces do not provide safe access for users with mobility aids, such as a walker or wheelchair, thus greatly reducing the public open space that meets the equitable access standards.

Open Spaces in Winter

Open space functionality in winter is an important consideration. Comfort and safety are as important in the winter months as they are in the summer, and factors such as wind exposure, large amounts of shade and lack of access and amenities are factors that deter people from using spaces in the winter. When analyzing the open spaces in Ottewell, the following elements were reviewed with a winter lens:

- Accessibility and amenities
- Microclimate (shelter from wind and access to sunlight)
- Lighting
- Interest and activities

Map 6: Open Space Network



Fulton Ravine

Fulton Ravine is located in the north-eastern section of the neighbourhood. This space consists of a flat, open field on the south and a treed, depressed ravine area on the north. There is an outfall located along 64 Street that routes storm runoff into the creek, which then runs under 98 Avenue in a culvert. Fulton Ravine is included in the River Valley Area Redevelopment Plan (ARP).

The Fulton Ravine area (both field and ravine) are currently not developed in a way that promotes active use. The field is used as an informal walking path and the ravine does not have any locations that welcome access into the space, however, there are numerous indications that the area is being used. Heavy forest around the perimeter so the ravine provides no natural surveillance in, and because general use is not supported, there is not a critical mass of people entering the ravine. During the site walkthrough litter and burnt wood were observed, which indicates that the ravine may be used for parties or camps, potentially creating unsafe situations. Roadway lighting is located along the field edges, facing away from the field providing little light into the open space. No lighting is provided in the ravine area.



Open Spaces Owned by City of Edmonton

Ottewell Park

Ottewell Park is located on 58 Street, approximately halfway between the north and south neighbourhood boundaries. The park is owned by the City of Edmonton and was redeveloped in 2009. There are a number of amenities in the park space, including the Ottewell Community League building, skating rink, batting cage, basketball hoops, small mountain bike course, playground, spray park, furnishings, picnic shelter, water fountain, open space, parking and mature tree and shrub plantings.

The playground on the south side of the site has open sightlines on all sides. The field on the north side of the site has open sightlines on three sides, with a large planted buffer blocking sightlines from the east side (58 Street). No lighting exists in the open field / mountain bike track, however the rink, parking lot, community league building, and playground area are adequately lit. The playground area is fully accessible, including the playground equipment. The open field has sidewalks on the east and north side, but no accessible access through the field.



Open Space behind Waldorf School

The field located behind the Waldorf Independent School of Edmonton (WISE) is owned by the City of Edmonton. The City also owns the parcel to the west of the school building, which is leased to the school for portables and school use. As a former privately-owned school site, the field behind the school functions as a sports field and is rented out for community sports use.

The field has mostly open sightlines around the space, with the exception of the school building. The field is surrounded on the south, west and east sides with chain link fencing and the north side of the portables site is lined with a hedge. West, south and east perimeters have alley lighting. The south has street lighting that would not spill into the site. There is lighting on the back side of the school.



Capilano Skatepark

The Capilano skatepark is not located in the Ottewell neighbourhood, however is an important community destination. Controlled crossing access from the Ottewell community to Fulton Park is provided only at Ottewell Road (pedestrian activated signal, over 0.5 kilometres from crossing point) and the crossing closest to the Capilano Safeway (overhead flasher across overbuilt 98 Avenue). The lack of crossing points, distance to the park and perceived safety of the crossing points are barriers to users from Ottewell accessing this important community amenity.

Publicly Accessible School Sites

There are four publicly accessible school sites in Ottewell. These open spaces provide additional value to the residents of Ottewell and to the greater Edmonton sports community. Ottewell School / Clara Tyner School, St. Brendan School, and Braemar School fields offer soccer and baseball facilities, while Austin O'Brien School has soccer, football, track and tennis facilities. Clara Tyner and St. Brendan Schools also offer playgrounds and some furnishings.



Clara Tyner School Playground



St. Brendan School Playground

Pocket Parks

These open spaces are located within the road right-of-way and are owned by the City of Edmonton. Their size varies from 0.3 hectare to 0.65 hectare and they are all treated similarly, with plenty of large, mature plant material. Some furnishings are provided in the pocket parks, though type and quantity vary between locations.

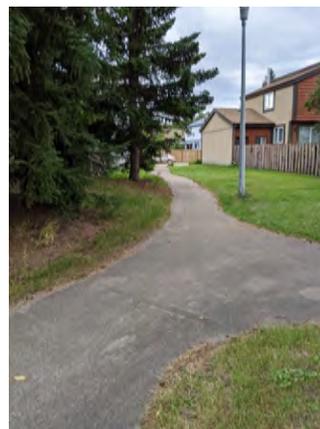
The pocket parks are lined on all four sides by roads. Sightlines into the parks are generally clear, however each park has locations where sightlines are obstructed by large, mature hedges. There are no sidewalks around or through the pocket parks and the curb surrounding the park is straight-faced, meaning the parks are not accessible to users with mobility aids (i.e. wheelchair or walker). The parks do not have lighting within them; there is street lighting facing the park spaces which can provide light spillage into the space, but this illumination can be interrupted by plant material along the park edges.



Open Spaces in “Walkway Lots”

Two open spaces are located within “walkway lots” on the east side of the neighbourhood and are owned by the City of Edmonton. These “walkway” open spaces can be considered enhanced breezeways as they are set up in a way to provide both walking connections and open space opportunities. As breezeways, they provide important linkages connecting “dead-end” blocks to avoid long, circuitous walking routes. As open spaces, while being smaller than a typical pocket park (0.13 hectare and 0.17 hectare), they contain plenty of large, mature plant material as well as furnishings and lighting to support play and gatherings. Sidewalks lead up to and through the park space, providing accessibility to users with mobility aids.

These park spaces are located on the backside of housing with no street frontages. Access to the parks are narrow and, in some cases, winding, providing very poor sightlines into the park space and very little along the pathways. This does not allow users entering or exiting the park to accurately assess the safety of the space. While lighting is provided in the space, a few luminaires are obscured by tree canopies.



Landscaped Islands

The landscaped islands in the neighbourhood are small open spaces (less than 600 square metres) that are predominantly covered in planting beds with large, mature vegetation. The landscaped island in the southeast corner of the neighbourhood has one bench on a concrete pad. Although they provide important natural capital and green network connections, their small size does not meet the criteria to be considered a “pocket park” and they are, therefore, not included in the 400m buffer identified on the open space map.



Open Space Considerations:

- Review open spaces using a Crime Prevention Through Environmental Design (CPTED) lens to ensure spaces offer natural surveillance and feel safe for all users.



- Ensure open spaces meet the accessibility needs of all users within the neighbourhood.



- Evaluate equitable access to open space for all residents (access to open space within a 400 to 500 metre walking distance from their home).



- Improve access and connections to underutilized open spaces from the neighborhood, such as Fulton Ravine.



- Explore safe routes and crossings to popular open space and recreation resources inside and outside of the project boundary.



- Consider the frequency and placement of furnishings to address the varying needs of users and to optimize winter use.



- Review the locations of plant material and structures in open spaces to evaluate natural surveillance and wind breaks to enhance the feeling of safety and comfort.



- Review winter maintenance and amenities, such as seasonal lighting, to support safe and comfortable winter use.



Complete Streets Analysis

The Complete Streets Design and Construction Standards (CSDCS) are used to aid designers and decision makers in the creation of streets that are safe, welcoming, attractive, comfortable and functional for all users in all seasons. These streets are intended to support and enhance the unique characteristics of the neighborhoods and districts they serve.

The City of Edmonton uses a set of principles to help guide the planning, design and operation of streets and aid in the evaluation of possible designs. These principles are described in the CSDCS and include:

- The network of streets, transitways and off-street pathways accommodates all users and allows for efficient and high-quality travel experiences
- The transportation network provides travel options for users of all ages and abilities that are safe, universally designed, context sensitive, and operable in all seasons (including winter)
- Streets are adaptable by accommodating the needs of the present and future
- Streets contribute to the environmental sustainability and resiliency of the city
- Both direct and indirect costs are considered, as well as the value of the public right of way and the adjacent real estate
- Streets are vibrant and attractive people-places in all seasons to contribute to an improved quality of life

Understanding and describing the context in which a street is located is important in providing direction for the planning, design, and reconstruction of Ottewell roads. The CSDCS uses three elements to describe the context of a street: land use, relationship of the building to the street and functional classification. The sub-categories within these three elements are shown in the table below. The sub-categories that are currently represented in Ottewell are shown in bold text. Through the development of options for Ottewell's streets, there may be opportunities to create different street typologies or adjust functional classification such as transforming a Local Street or Alley to a Shared Street.

Table 1: Street Typologies

Typology Element	Typology Sub-Category
Land Use Context	Residential
	Community Destinations and Open Spaces Commercial / Mixed Use Industrial
Relationship of the Building to the Street	Street Oriented
	Non-Street Oriented
Functional Classification	Freeway
	Arterial
	Collector
	Local (including service roads)
	Alley Shared Street Pedestrian Only Street

The typology for each street that is included in the scope of work for the neighbourhood renewal is shown in the Complete Streets Analysis map.

Map 7: Complete Streets Analysis



Ottewell Street Typology

The typology that represents the Land Use Context of the neighbourhood is predominantly Residential, but some streets adjacent to parks and open spaces would be both Residential and Community Destinations & Open Spaces typologies. Only two small portions of Ottewell Road, one adjacent to 98 Avenue and the other adjacent 90 Avenue, would be considered Commercial/Mixed Use.

The Street Orientation category speaks to the relationship that the adjacent buildings have to the street and whether the primary access and accommodation is towards access on foot versus that of a person driving. The building relationship to the street in the neighbourhood is predominantly street oriented. However, it is noted that the surrounding roads of 75 Street, 50 Street, 98 Avenue and 90 Avenue have non-street oriented components, but these are outside of the scope of work for this neighbourhood renewal and not considered in this analysis. While there are a number of non-street oriented buildings in the study area, the more significant areas are: St Brendan Catholic School, Austin O'Brien High School/St. Nicholas Ukrainian Catholic Parish, and the multi-family residential units on 92 Avenue, since parking lots are immediately adjacent to the sidewalks instead of the building entrances.

The final typology element is Functional Classification and is limited to collector, local, and alley in the neighbourhood, however, alleys are not typically included within the scope of work for the Neighbourhood Renewal Program. The collector streets in the neighbourhood are Ottewell Road, 58 Street, 57 Street and 94B Street. All remaining streets considered in the scope of the study area are local streets.

Standard Drawings for street cross sections exist to aid in the design and decision-making for all street types. These cross sections are based on given right-of-way, orientation for street level elements and utility alignments. In Ottewell, most streets are on a 20-metre right-of-way, with the exception of some streets in the east portion of the neighbourhood. Also, the existing roadway width (i.e. distance between curbs) is typically 9.15 metres with notable exception of the collector streets, 92A Avenue, and 92 Avenue, which are 11.6 metres wide (some other streets are also 11.6 metres wide but only for short distances).

Complete Streets Analysis Considerations:

- Review street widths and analyze opportunities for narrowing of the roadway, widening sidewalks and providing boulevard space, including medians.



- Provide consistent accessibility treatments at intersections and driveways.



- Explore traffic calming measures through geometry modifications (e.g. curb extensions at intersections and mid-block) and speed or volume management devices (when applicable).



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Mobility Networks

Road patterns and development within the Ottewell neighbourhood are reflective of subdivision planning typical of the 1950s and 1960s. The modified grid street pattern creates long blocks of houses. Alleys and pathways are located throughout the neighbourhood providing some opportunity for shortcutting on foot or bicycle to access local destinations and bus stops.

Walking and Wheeling Network and Transit Access

With a few exceptions, sidewalks are provided on both sides of all Ottewell streets. All facilities are curbside walks with the 1.5 metre wide sidewalk directly adjacent to the travelled way. Exceptions include 64 Street along the ravine on the north side of the neighbourhood, where the sidewalk is only provided on one side, and missing sidewalks around pocket parks.

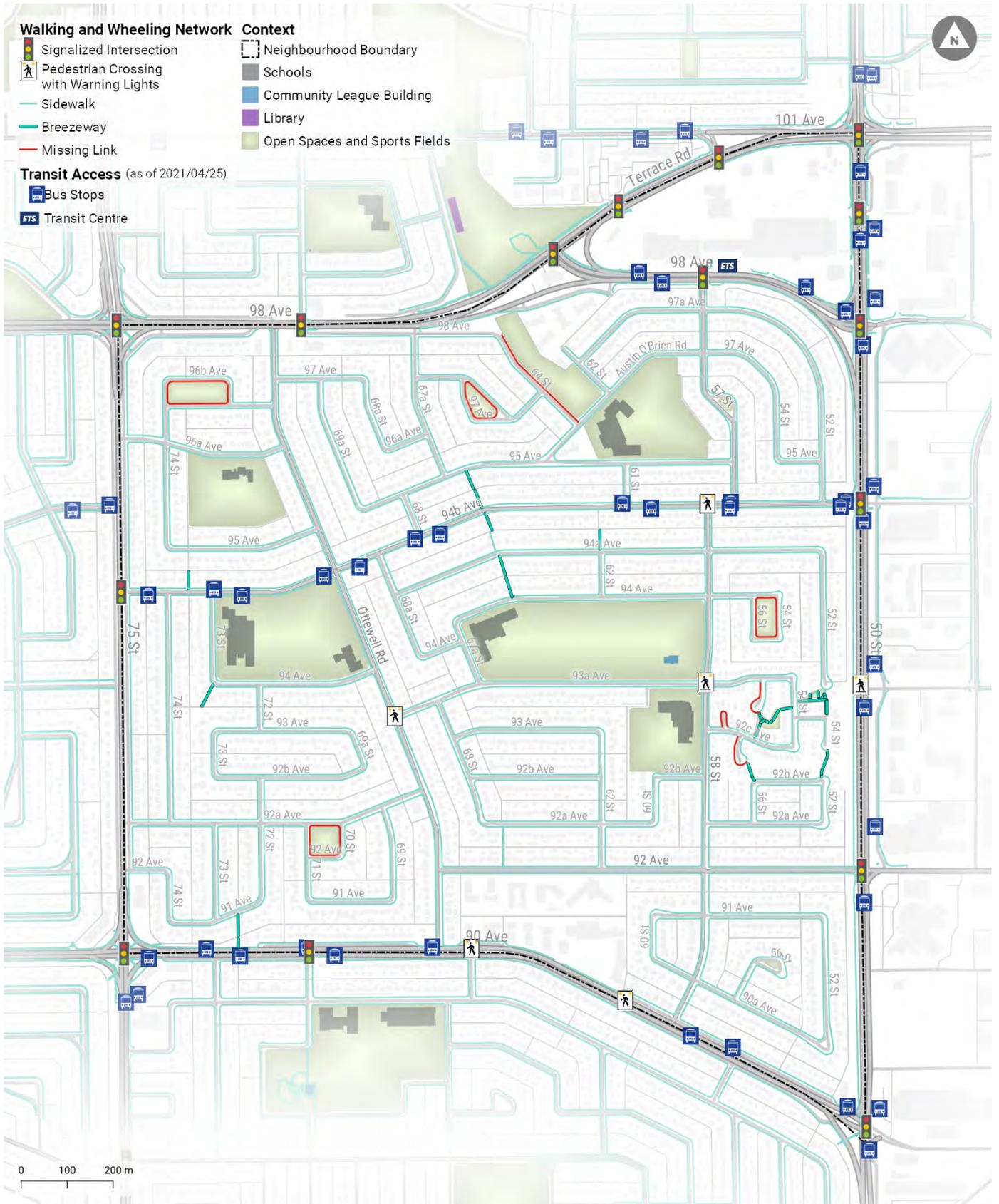
Breezeways (sidewalks between lots) and sidewalks within alleys are also present in a few locations throughout the neighbourhood, shortening walking distance for residents and visitors to local destinations.

While the core walking infrastructure is present throughout the neighbourhood, curb ramps, which allow people using mobility aids, pushing strollers, or children on bikes to transition from the sidewalk onto the travelled way, are sometimes missing.

Crossings in the neighbourhood are mostly unmarked and unsignalized, as is typical in residential neighbourhoods. Within Ottewell, there are three intersections with warning lights for pedestrian crossings. Three other pedestrian warning lights and 14 signalized intersections facilitate crossing major roads to exit or enter the neighbourhood and access the Capilano Transit Centre and Capilano Mall.

With the Bus Network Redesign slated for implementation in 2021, the number of bus stops in the neighbourhood will decrease and remain only on 94B Avenue and on the south and east edges of the neighbourhood (90 Avenue and 50 Street). Capilano Transit Centre will remain an important transit connection on the northside of 98 Ave. For people walking or wheeling, the main access point to the Transit Centre is the signalized intersection at 57 Street.

Map 8: Walking Network and Transit Access



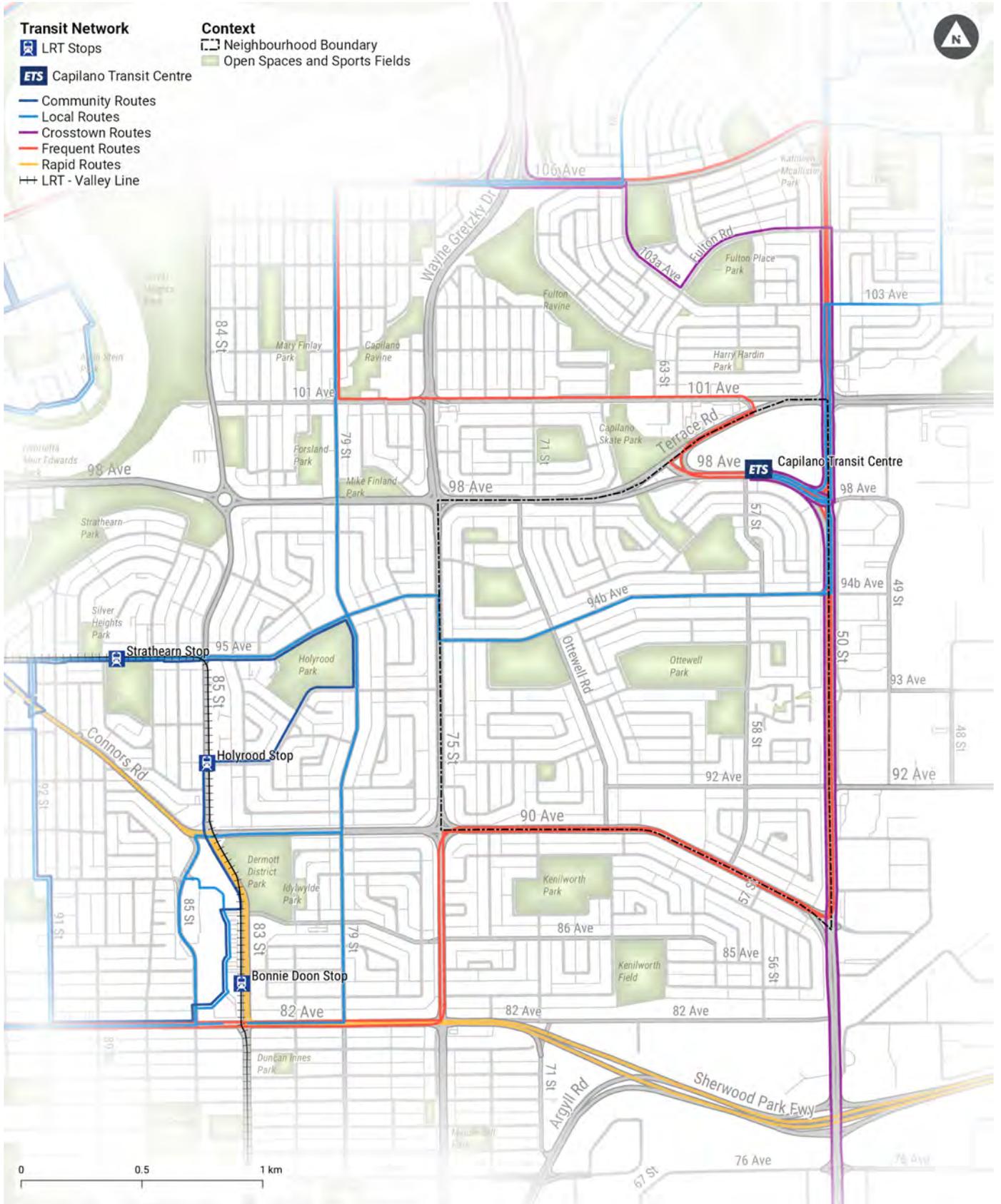
Transit Network

With the implementation of the Bus Network Redesign in 2021, local route 501 will run through Ottewell on 94B Avenue at a typical frequency of every 30 minutes on weekdays, midday on weekends, and 60 minutes late weekday evenings and on weekends. This route will connect with the Strathearn LRT stop located west of the neighbourhood. The local route 522 will operate on a similar service frequency and will be accessible from the Capilano Transit Centre and from bus stops on 79 Street in the Holyrood neighbourhood just west of Ottewell. This route notably connects to Bonnie Doon Mall.

A crosstown route will also be accessible from the Transit Centre and bus stops along 50 Street. Route 53 will provide direct connections to Mill Woods and Clareview Transit Centres.

Two transit routes, Route 1B and Route 4, will also be accessible from the Capilano Transit Centre providing typical service every 15 minutes or less between buses. Route 1B will connect the neighbourhood to Downtown and West Edmonton Mall. Route 4, which will also be accessible from bus stops on 50 Street and 90 Avenue, will connect to the University of Alberta, West Edmonton Mall and Lewis Farms.

Map 9: Transit Network



Bike Network

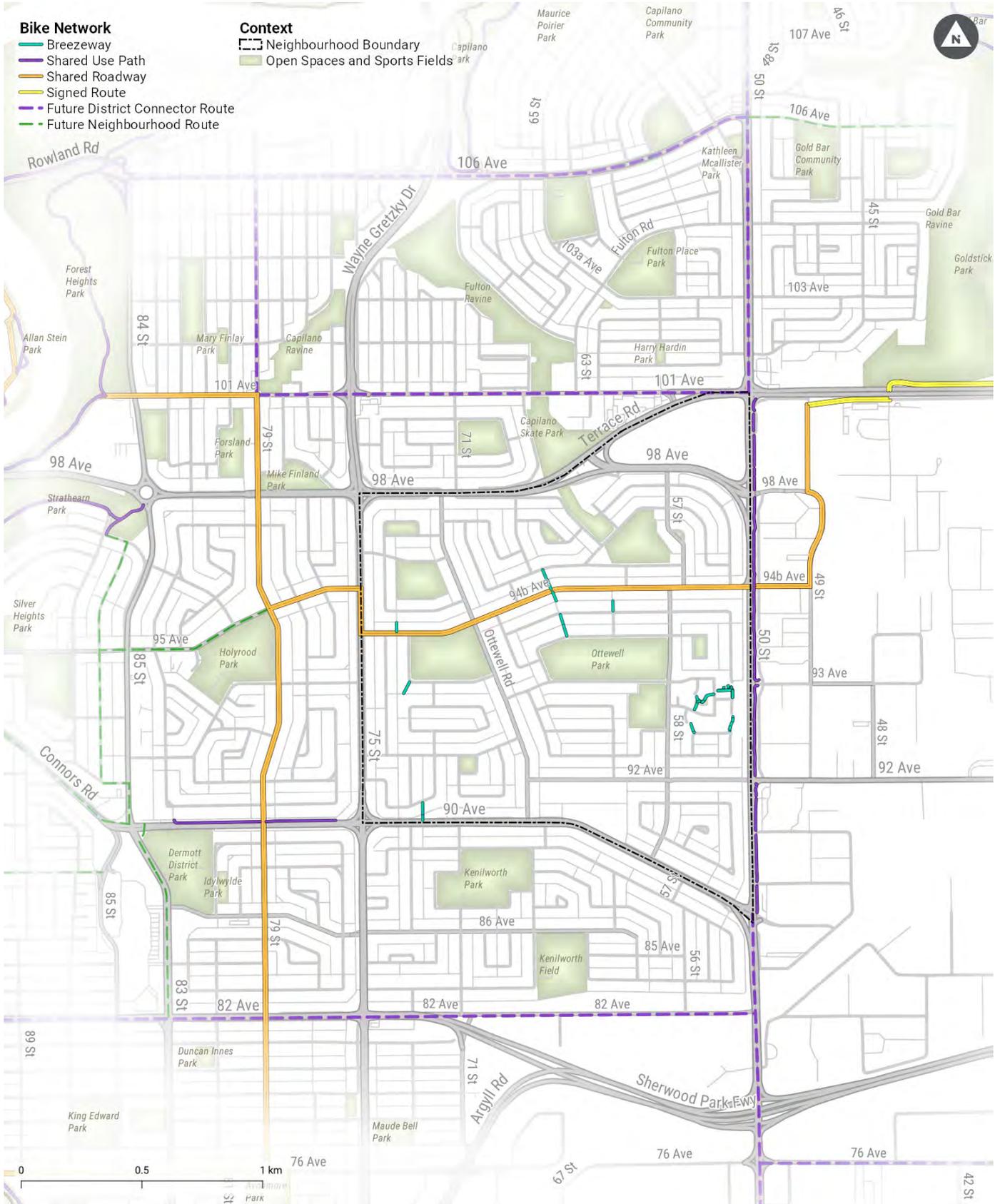
There is one existing designated bike route through Ottewell, a shared roadway on 94B Avenue where people biking are expected to operate in the same space as people driving. In The Bike Plan, this route is designated as an Existing Neighbourhood Route. However, the current design is not considered an all ages and abilities or an all-seasons facility. This bike route does not meet standard safety and comfort levels for all users as it is located on a relatively busy collector road without separation from vehicle traffic.

Two existing shared-use paths are located just outside the neighbourhood. One runs along 90 Avenue on the south side of the neighbourhood just west of Ottewell adjacent to the Holyrood neighbourhood. This path provides an all ages and abilities connection to Dermott District Park. The second shared-use path is located on the east side of 50 Street from 90 Avenue to 101 Avenue. This path, identified as an Existing District Connector Route in The Bike Plan, does not connect to other all ages and abilities routes north or south of the neighbourhood. Future District Connector Routes identified in the Bike Plan and illustrated on the Bike Network map will connect to both the north and south extents of this shared-use path.

Local residential roads in Ottewell are classified as low stress given the speed limit of 40 kilometres per hour and lower vehicle traffic. Breezeways and alleys also offer opportunities for people biking in the neighbourhood, although not in all seasons since alleys are not cleared of snow and ice in winter.

Analyses conducted as part of The Bike Plan showed Ottewell has a medium level of low-stress connectivity to area destinations with medium to high potential for bike trips based on the proximity of destinations. Overall, there may be an untapped potential for more biking in the neighbourhood if more comfortable facilities were available.

Map 10: Bike Network



Traffic Volume and Driving Network

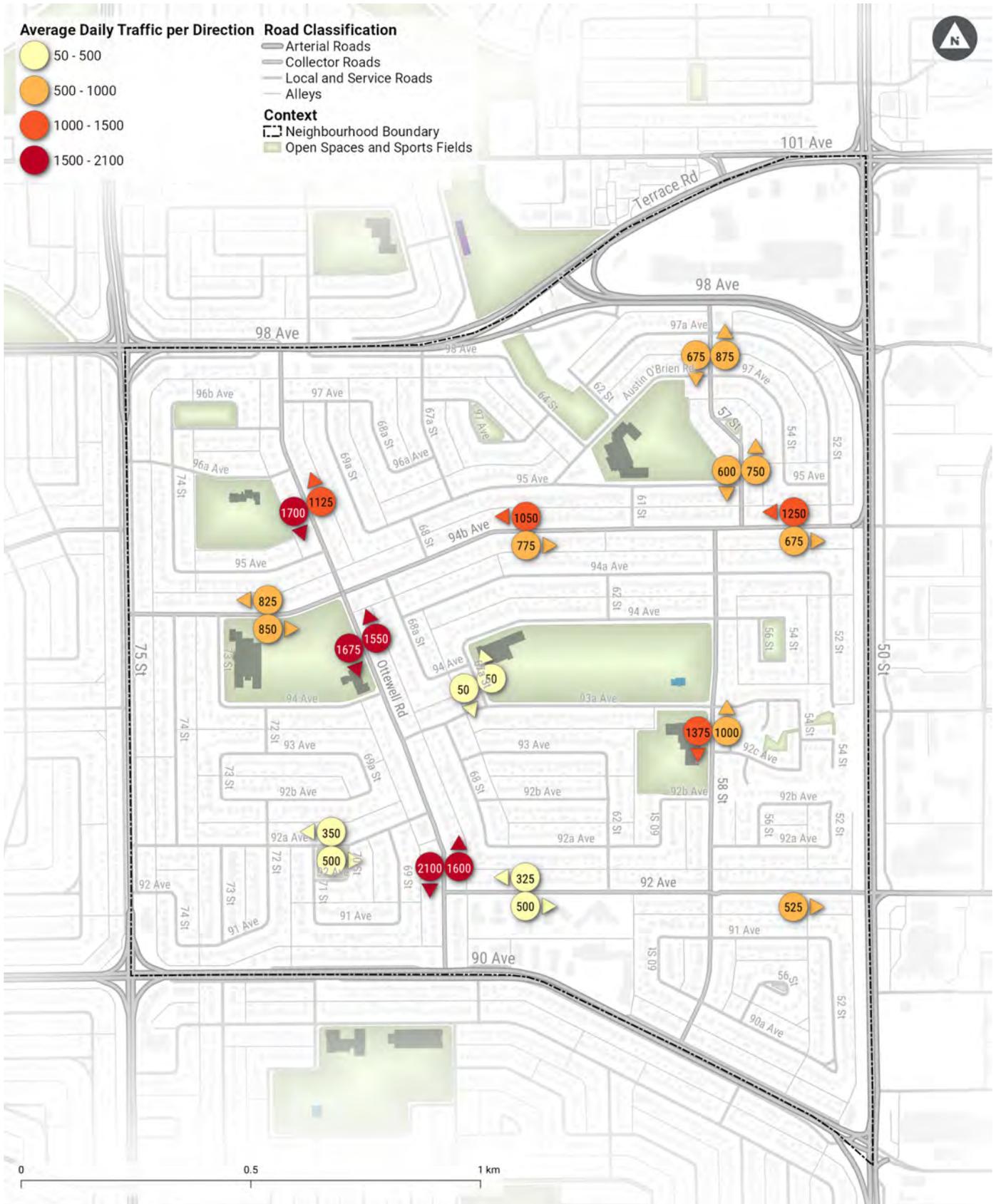
Ottewell is considered a car-centric neighbourhood with its modified grid street pattern and wide residential roads typical of the 50s and 60s. The only roads that run directly through Ottewell are two collector roads – Ottewell Road running north/south and 94B Avenue running east/west. There are two other collector roads within the neighbourhood – 57 Street and 58 Street, providing indirect north/south access through the neighbourhood, and 92 Avenue from Ottewell Road to 50 Street.

Arterials surround the neighbourhood: 75 Street and 50 Street are two major north/south arterials on the south side of the city that delineate Ottewell's western and eastern boundaries. Both provide connections to the Sherwood Park Freeway. 90 Avenue and 98 Avenue provide east/west connections into Downtown from Ottewell while 101 Avenue at Terrace Road and 50 Street provide connections to Baseline Road and Sherwood Park.

Along the boundaries of the neighbourhood, 50 Street, 98 Avenue, and 90 Avenue have been designated by the City as a truck route. 75 Street has been designated as a truck route north of 98 Avenue and south of 90 Avenue, but not for the portion along the west edge of Ottewell. Additionally, in the vicinity of Ottewell, 101 Avenue and the Sherwood Park Freeway are both part of the Dangerous Goods Truck and carry notable truck traffic. In particular, 101 Avenue provides direct access to Capilano Mall where retail goods are delivered to the various businesses located in the shopping centre.

As the traffic volume map shows, the busiest road within the neighbourhood is Ottewell Road, a key collector and entry point in and out of the neighbourhood that typically carries over 1,500 vehicles per day per direction. As the only other collector that continuously runs through the neighbourhood, 94B Avenue also carries a higher traffic volume and, based on available traffic data, is being used by truck traffic as a short cutting route between 75 Street and 50 Street. The other higher traffic roadways within Ottewell include 58 Street between 90 Avenue and 94B Avenue and 57 Street between 94B Avenue and 98 Avenue. The few traffic volume measurements taken on local roads show that, as would be expected for residential roads, traffic volumes are typically limited to no more than 500 vehicles per day per direction.

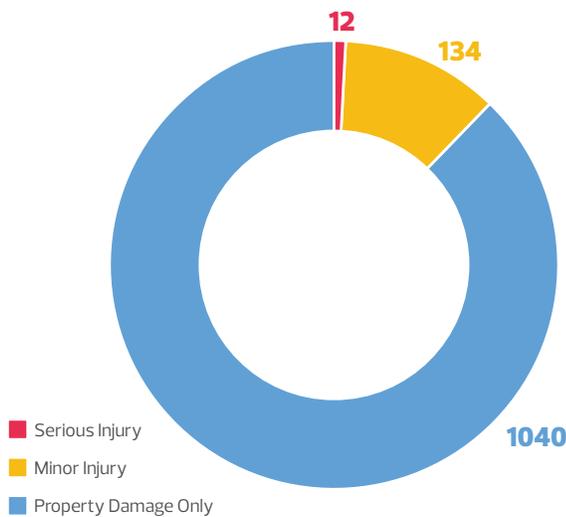
Map 11: Traffic Volume and Driving Network



Traffic Safety

Between 2015 and 2019, 1186 crashes ranging in severity from property damage only to serious injuries occurred in Ottewell and on the arterials surrounding the neighbourhood based on collision reports from the Edmonton Police Service. Of these, 12 involved people walking, six people biking, and seven people riding motorcycles with all others involving only people driving motor vehicles. No fatalities were reported, but 12 crashes resulted in serious injuries requiring hospitalization, including four people struck while walking. 134 crashes also resulted in minor injuries, including eight people walking and five people biking. Two of the people walking and three of the people biking that were injured were children or teenagers.

Figure 12: Crash Severity 2015–2019



Crash Location

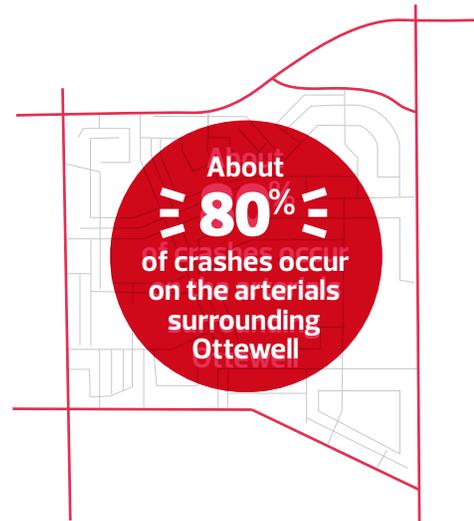
Of the 12 crashes resulting in serious injuries, 10 occurred on the arterials (83%) while the other 2 were on residential streets within the neighbourhood.

Motor vehicle crashes resulting in injuries are concentrated at three major intersections: 98 Avenue and 75 Street, 90 Avenue and 75 Street, and 101 Avenue and 50 Street. Crashes resulting in injuries are rare within neighbourhood streets: about 90% of crashes that occur on neighbourhood streets did not cause injuries and only resulted in property damage.

Crashes involving people walking or biking often occur at intersections and on arterial streets around Capilano Mall and the Capilano Transit Centre. Over half of all the crashes involving these vulnerable road users occurred on Terrace

Road, 101 Avenue, 50 Street and 98 Avenue close to Capilano Mall and Capilano Transit Centre.

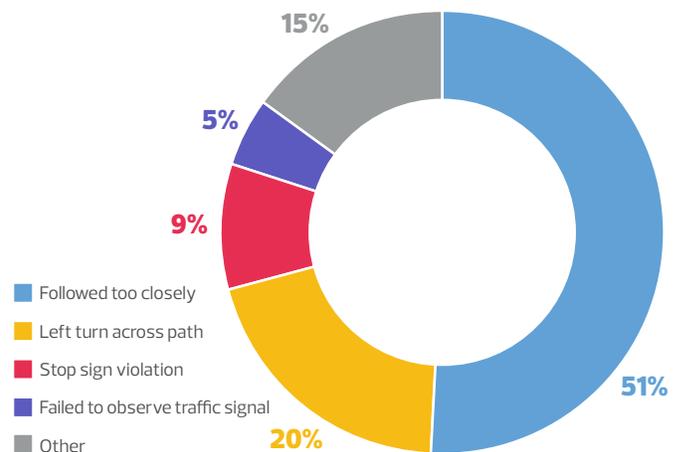
Within Ottewell, reported crashes have occurred along the collector streets of 94B Avenue, Ottewell Road, 58 Street, 57 Street, and 92 Avenue. Of note, these locations are near schools and seniors' residences and children and seniors are particularly vulnerable to injury.



Crash Cause

In the case of drivers of motor vehicles and motorcycles, over half of crashes that resulted in injuries were due to following too closely. One in five crashes was due to a person driving and making a left turn in front of oncoming drivers. Stop sign violations and failure to observe traffic signals are two other notable causes of injury crashes. Additionally, 83% of crashes involving people walking and biking were due to driver error, such as failing to yield to the person walking or biking.

Figure 13: Crash Cause – Minor and Serious Injury Motor Vehicle and Motorcycle Crashes, 2015–2019



Map 12: Injury Crashes 2015–2019



Speeding

Speed surveys were conducted at several locations in Ottewell between 2015 and 2018. The Speeding map shows the locations where speeds were measured and differences between the 85th percentile speed and the speed limit at the time of measurement. The 85th percentile indicates that 85% of people driving travel at this speed or slower. If the 85th percentile speed is higher than the speed limit (indicated by a yellow to red line on the map), it is generally considered that there is a speeding issue at that location.

Ottewell Road has the most notable difference between posted speed limit and actual operating speeds, of the locations where speeds were measured. People driving on Ottewell Road often exceed the speed limit by 15 to 25 kilometres per hour, particularly when travelling south. This represents speeds that are 40% to almost 70% higher than the posted speed limit, with speeds exceeding 50 km/h. A person walking that is struck at 50 km/h has a 90% probability of being seriously injured or killed. 94B Avenue near Ottewell Road also saw 85th percentile speeds exceeding the speed limit by 10 to 15 kilometres per hour in 2015 when measurements were taken at that location. Since then, the speed limit has been reduced to 30 km/h for most of the day as the area is in a school zone, although effects on actual operating speeds have not been measured.

The wide roads typical of Ottewell's street design likely contribute to the difference between the posted speed limit and the speed that people are actually driving.

Previous Traffic Safety Initiatives

Ottewell has been involved in two major traffic safety pilot projects since 2010. As part of the Speed Reduction Pilot project Ottewell was one of six communities where default speed limits were lowered from 50 km/h to 40 km/h to evaluate the effects on traffic safety. Several methods used to ensure lower speeds were followed including speed limit signs and digital displays and enforcement and community programs such as Neighbourhood Pace Cars.

Following the Speed Reduction Pilot, Ottewell was one of three neighbourhoods that retained the lower speed limit permanently. Based on the pilot project results, City Council adopted the Speed Reduction Policy in 2013, which allowed Community Leagues to request a review of residential speed limits in their community and consideration for speed limit reduction. In 2020, City Council approved a city-wide change to the default speed limit on residential roads to 40 km/h to be implemented in 2021.

Ottewell was also part of the Traffic Shortcutting Pilot project initiated in 2015. The project implemented interim shortcutting and speed management measures in four neighbourhoods. In Ottewell, speed humps and driver feedback signs were installed on 94B Avenue and several traffic signals saw their timing changed. Due to several concerns ranging from engagement issues to noise and vibration, the speed humps were eventually removed.

The lessons learned in Ottewell and the other neighbourhoods taking part in the Traffic Shortcutting Pilot informed the Community Traffic Management Policy. Notably, the integration of initiatives during Neighbourhood Renewal aims to allow extensive and meaningful public engagement to ensure issues and potential solutions are identified collaboratively. The toolbox of potential interventions has also expanded beyond speed humps and feedback signs to include several other measures that can help create safe and livable streets.

Map 13: Speed Survey



Mobility Networks Considerations:

- Explore opportunities to add formal walkways through the alleys that connect to breezeways, particularly in locations that would provide more direct access to transit stops, schools and other community destinations.



- Review the minimum width of sidewalks in context with current standards, diverse GBA+ needs of the community and the impact of snow and ice removal policies on the functionality of a given sidewalk design.



- Review street crossings and access to transit stops within the neighbourhood and at surrounding arterial roads, particularly at locations with a history of crashes, to ensure crossing treatments and available infrastructure promote safe and comfortable use for all users.



- Review future bus stop locations and incorporate improved bus stop infrastructure into the streetscape design.



- Investigate the potential to provide dedicated biking infrastructure in the community based on principles outlined in the Bike Plan and community demand.



- Evaluate bike network connections within the neighbourhood and to the surrounding bike and pathway network to ensure safe, comfortable connections are available from the facilities and routes within Ottewell to bike routes and destinations outside the neighbourhood.



- Use evidence-based industry design best practices aligned with Edmonton's Vision Zero policy and Safe Mobility Strategy to develop street and intersection designs that improve safety for Ottewell residents and visitors.



- Consider proven methods to slow traffic and increase safety and livability given the number of schools in the neighbourhood as well as older adults.



- Transform the design and use of 94B Avenue to consider its role as a transit and bike route and school access route, while addressing identified speeding and shortcutting behaviour including by large trucks.



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Existing Infrastructure

Existing Infrastructure Analysis

The neighbourhood infrastructure within Ottewell includes underground utilities such as gas, water, power and combined sanitary and storm lines. Above-ground infrastructure includes overhead power and telecom lines, lighting and street furnishings such as seating areas in parks and open spaces.

Ottewell has a combined storm and sanitary system throughout the neighbourhood. There is also a storm sewer located under 58 Street, which collects storm flows beginning at 90 Avenue and has an outflow at Fulton Ravine. The location of the combined sewer varies throughout the neighbourhood but is typically located near the centre of the roadway or back alley. On larger, collector roadways, such as 94B Avenue, the combined sewer is offset from the curb rather than being in the centre of the roadway. In some locations, typically at bends in the roadway, a section of the combined sewer is located outside of the roadway, under the adjacent sidewalk.

The water mains are mostly located close to the curb line under the roadway. Power, gas and telecom services are provided through the rear of properties from the back alleys. Main distribution lines are present on some streets to connect to service branches located in the back alleys.

Overhead power lines are located in the alleys throughout the neighbourhood and a high-power transmission line runs north-south through the neighbourhood in the back alley between 74 Street and 73 Street. An ATCO pipeline is also located along this alignment. A second overhead transmission line is located adjacent to the neighbourhood, within the right-of-way for 50 Street on the west side of the roadway.

Lighting is an important aspect of safety and comfort along roadways and in open spaces. Street and open space lighting is present along all roadways and in some alleys and open spaces. High pressure sodium and LED luminaires are used in the lighting within the neighbourhood.

Green Infrastructure Analysis

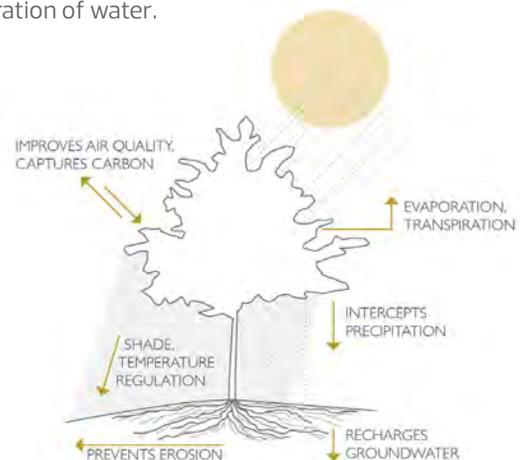
Green infrastructure is a way of designing with nature to mimic the important role that natural areas have in mitigating the impacts of climate change. While typically tied to discussions and interventions related to stormwater management, green infrastructure is also about reducing atmospheric temperature increases by providing transpiration (the release of water vapour from plant material leaves), reducing the reflection of heat off paved surfaces and increasing carbon capture. Together, these efforts help to increase the social and environmental health of our city.

The Green Infrastructure map shows the location of existing street trees in Ottewell as well as locations where water tends to accumulate after rain events. Locations where surface ponding is often observed can be particularly well suited for LID.

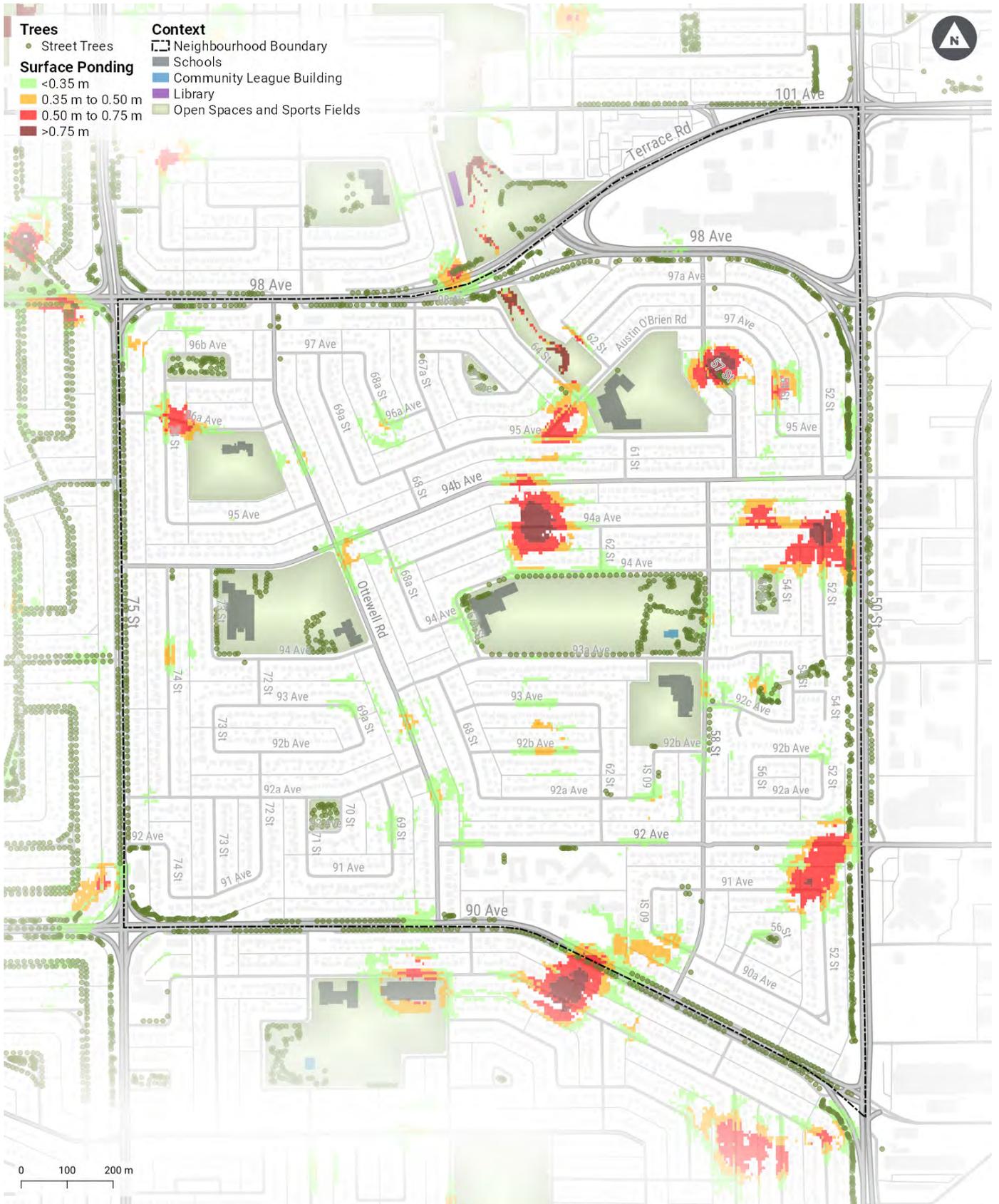
Street Trees

Street trees are considered the ultimate green infrastructure by the American Society of Landscape Architects. Because much of the focus of green infrastructure is on the capture and slow release of storm water, trees are often overlooked in the multiple benefits they provide in stormwater management, temperature regulation and noise pollution.

The Ottewell neighbourhood is profoundly lacking in street trees. This is a result of the dedication of much of the road right-of-way to vehicle space. Given the wide paved streets and lack of street trees, there is very little opportunity for water to be captured prior to reaching the impermeable road surface which puts a great strain on the traditional stormwater collection system and hinders the natural infiltration of water.



Map 14: Green Infrastructure



Green Stormwater Infrastructure (Low Impact Development)

Green stormwater infrastructure, or low impact development (LID), is the provision of natural systems to replace traditional drainage infrastructure, to capture water from minor storm events and allow that water to infiltrate back into the water table, thus replenishing the natural water system and protecting water quality. LID systems also filter pollutants, such as sediment, salts, and hydrocarbons, that get flushed into our natural waterways through drainage outfalls. Water in LID implementations is typically not stored above ground. In some cases, water can be seen flowing in drainage channels, but in most cases, water is stored below the surface in soil or rock reservoirs. This allows the water to be used by the landscaping and any remaining water will be slowly released into the major drainage system. Ottewell also has a combined storm and sanitary system. Redirecting stormwater from this system into LID infrastructure is an important element to decreasing the volume of overflow from the combined system into the ravine and river valley system.



Example of green stormwater infrastructure in a curb bulb

Geotechnical Analysis

Historical geotechnical information from previous projects in Ottewell identifies soils which are typically low to medium plastic clays. These soil types are generally acceptable for roadway construction. However given the limited number of boreholes and the concentration of the borehole site in the southwest corner of the neighbourhood, the historical information will not be sufficient to inform pavement designs or soil/groundwater conditions for LID features proposed as part of this project.

Infrastructure Considerations:

- Assess utility impacts and potential relocations in conjunction with options development.



- Confirm depths of utilities through hydrovac where impacts from design will require excavation.



- Explore ways to include street trees as part of green infrastructure implementation.



- Evaluate neighbourhood topography, open spaces and areas prone to localized flooding to determine areas that would benefit from LID implementations.



- Investigate the potential to create LID educational materials as a way to inform residents and strengthen community pride.



- Review the need for geotechnical study for LID features, roadway reconstruction or other proposed features on a case-by-case basis.



- Evaluate lighting levels at crossing locations, major intersections and in open spaces to determine the need for upgrades to the existing overhead lighting.



3

Neighbourhood Vision and Opportunities



Neighbourhood Vision and Guiding Principles

Ottewell's Vision and Guiding Principles were created through public engagement in Fall 2020 and refined during engagement in 2021.

A Vision is a short description that sets the direction on what the community would like to see for its livability and mobility in the future. Important elements are identified for the City of Edmonton's work on roads, sidewalks, streetlights and outdoor public spaces. These elements tell us the most important things to look at when we create plans to renew a neighbourhood.

Guiding Principles are more pointed ideas on how people live, work, learn and play in their neighbourhood. Guiding Principles help bring the neighbourhood Vision to life and help to guide the Neighbourhood Renewal project.

Ottewell Vision

"A small town in the heart of the city."

Ottewell Guiding Principles

Ottewell is a community that:



Enjoys safe sidewalks that encourage people of all ages to take advantage of good connections through a walkable neighbourhood



Celebrates the neighbourhood's splendid character, with mature trees and parks



Delights in its green spaces, with activities and amenities for all ages and abilities



Values its family-friendly, multi-generational neighbourhood where all are welcome



Appreciates safe streets where people driving respect speed limits and traffic laws



Invites and encourages all kinds of mobility options for people walking, cycling, driving, and other forms of active transportation



Nurtures a strong sense of community where people feel safe and look out for each other

Opportunities and Constraints Analysis

The Neighbourhood Background and Context and engagement activities provided a comprehensive understanding of the Ottewell neighbourhood. Ottewell has a number of great strengths as well as some areas for improvement, including improvements related to GBA+ analysis criteria (denoted by ). From these strengths and areas for improvement, we can then identify the opportunities and constraints for the neighbourhood. The analysis of opportunities focuses on what Ottewell could be in the future if the positive attributes of the neighbourhood are maintained and strengthened and the areas of improvement are addressed. Constraints are the set of factors that create obstacles to fully realizing all the opportunities for the neighbourhood.

Strengths

- Ottewell is a multigenerational neighbourhood where residents feel a sense of pride in their community.
- There is good availability of various amenities in and around Ottewell, including schools, places of worship, a public library, a community league and shopping opportunities. This aligns with the City Plan's vision for 15-minute districts.
- Ottewell has good access to Capilano Transit Centre, connecting residents to other areas of the city by transit.
- There are a number of open spaces throughout Ottewell, including parks, school fields, sports fields and pocket parks. Most residents in Ottewell have access to open space within 400–500m from their home, aligning with the City's Urban Park Management Plan.
- There are no arterial roads within the Ottewell neighbourhood, strengthening community connections.

Areas for Improvement

- There is a history of traffic safety concerns, including short-cutting and speeding.
- There are safety concerns surrounding school areas, particularly during school drop-off and pick-up times. 
- There is inadequate or missing infrastructure within Ottewell for walking and biking, including narrow sidewalks, missing curb ramps and a lack of safe and comfortable biking infrastructure for people of all ages and abilities. 
- There is a lack of places for people to rest when walking around the community, particularly for residents who have a shorter walkshed. 
- For people walking, mid-block connections using alleys are not accessible to all users through all seasons. 
- Biking infrastructure connections within and outside of Ottewell are limited.
- Not all open spaces are accessible to all users, which is inconsistent with the Accessibility for People with Disabilities Policy, the Access Design Guide, Version 3 and the Vision for an Age-Friendly Edmonton Action Plan. 
- There is a lack of street trees throughout Ottewell, which can cause decreased rainwater capture, increased pavement and air temperatures (heat island effect) and increased vehicle speeds.
- Ottewell has areas of increased surface ponding and sewer surcharge after frequent storm events.
- 98 Avenue is a major arterial that cuts the residential area of Ottewell off from Capilano Mall, Capilano Transit Centre and other amenities located north of the neighbourhood, such as the Capilano branch of the Edmonton Public Library and the Capilano skate park.

Opportunities

- Use traffic calming approaches to slow vehicle speeds and discourage short-cutting through the neighbourhood.
- Investigate safer infrastructure and practices for school pick-up/drop-off areas to encourage more children to walk or bike to school. 
- Capitalize on the generous right-of-way widths throughout the neighbourhood by adding biking infrastructure for people of all ages and abilities, widening sidewalks and planting street trees.
- Expand the biking network within the neighbourhood to connect more people to internal and external destinations.
- Provide frequent places for people to rest while walking in the neighbourhood. 
- Upgrade and/or construct new breezeways and alley sidewalks to provide mid-block connections that are accessible year-round. 
- Strengthen connections outside of the neighbourhood by providing safer crossings at arterial roads.
- Upgrade open spaces to be accessible to all users. 
- Plant street trees and use low impact development interventions to reduce surface ponding and sewer surcharge and decrease pavement and air temperatures (heat island effect).
- Enhance neighbourhood entrances to create a sense of welcome and to calm traffic as it enters the neighbourhood.

Neighbourhood Opportunities Map

The Neighbourhood Opportunities Map illustrates where opportunities were identified through background analysis and public engagement. These opportunities will be used to develop options, identify benefits and tradeoffs, and develop the Draft Design for Ottewell.

Constraints

- Changes to 98 Avenue to decrease crossing distances or remove travel lanes are outside of the scope of Neighbourhood Renewal.
- Arterial intersections with Ottewell's collector and local streets and crossings on the edges of the neighbourhood are also out of the scope of Neighbourhood Renewal and changes to address safety concerns will require implementation through the Arterial Renewal program or other City of Edmonton capital programs.
- Alley renewal is out of the scope for Ottewell but select improvements may still be considered.
- On some streets, the homes sit at a considerably higher elevation than the adjacent sidewalk and/or have trees and other landscaping encroaching into the public right-of-way. This may limit the ability to add boulevards for street trees in some areas.
- The location of underground utilities may limit the ability to add boulevards, retain parking, add landscaping, widen sidewalks or add shared-use paths in some areas.
- The schools in the neighbourhood bring high levels of vehicle traffic during pick up and drop off hours that can only be partially mitigated through the scope of Neighbourhood Renewal.

Map 15: Neighbourhood Opportunities Map

