University of Alberta Properties Trust

Michener Park Redevelopment Master Plan and Design Guidelines

June 2022

Stantec

Prepared for:

University of Alberta Properties Trust

University of Alberta
Properties Trust

Prepared by:

Stantec Consulting Ltd.

Stantec

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Chapter 1

Introduction

Overview and purpose of master plan

The Michener Park Redevelopment Master Plan (the Master Plan) has been prepared to guide the strategic growth and development of Michener Park, which is owned and managed by the University of Alberta's Properties Trust. The Master Plan, as it has been prepared, establishes the land use framework for how Michener Park is to grow, as well as the policies and directions that will guide this growth.

The policies and directions within the Master Plan have been crafted to balance between providing clear direction while not being overly prescriptive in order to facilitate innovation in development and design, and to be nimble and adaptive to market conditions as Michener Park develops over time. The Master Plan, as it is relatively high-level in nature, is meant to be read in conjunction with the Michener Park Urban Design Guidelines, which have been prepared to provide more granular guidance on the design of Michener Park related to the built form, public realm, open space, accessibility, mobility, and sustainability, which will be utilized to create a successful urban environmental with an identifiable sense of place. A complementary Mobility Assessment was prepared in support of the Michener Park Master Plan

Policy Structure

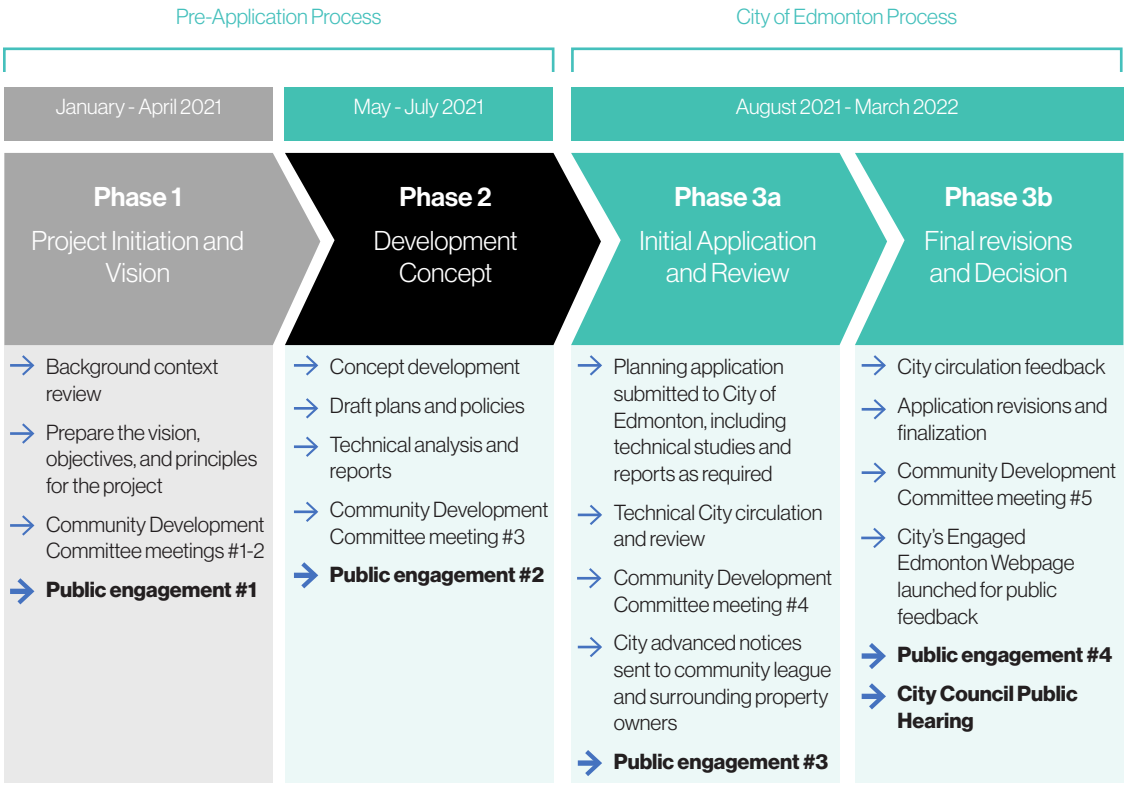
The Master Plan has been drafted utilizing specific terminology to ensure that there is clear meaning and intentions, as well as associated actions with these intentions. Policy within the Master Plan is to be interpreted in the following manner:

- The word **"required"** shall be considered to reflect intentions and actions that must be used in the instances it is used in the Master Plan;
- The word **"encouraged"** or **"may"** shall be considered to reflect intentions and actions that are recommended, but not required to be included within the development; and
- The word **"avoid"** shall be considered to reflect intentions and actions that is strongly not permitted to be included within the development.

Where quantities or numerical standards have been incorporated within the various guidelines, such quantities or numerical standards may be adjusted in the case that the overarching intent of the guideline is achieved, and that the variation is required in order to address a unique circumstance where compliance may not be possible or is impractical for the specific application.

Planning and engagement process

The Michener Park Redevelopment Master Plan and Design Guidelines (the Master Plan) was initiated in December 2020 and completed in the Spring of 2022. The planning process followed a four-phase work plan with strategic opportunities for community and stakeholder engagement during each phase of the project. These opportunities for community and stakeholder consultation and engagement informed the planning process and the eventual development of the Michener Park Redevelopment Master Plan and Design Guidelines.



Summary of engagement activities

The public engagement process presented a key opportunity to share information and gain public and stakeholder input on the Master Plan. The objectives of the engagement activities that were undertaken during this project were as follows:

- Share information with the public on the project;
- Provide surrounding residents the opportunity to share input on the project;
- Foster public trust with consistent, transparent, ongoing, and informative engagement; and,
- Seek input throughout the project from key stakeholders with unique perspectives and local knowledge to share.

While the broader community was engaged throughout each phase of the project, the following Stakeholder Groups / Committees were engaged on regular intervals throughout the project:

Community Development Committee:

Targeted to Community League representatives from neighborhoods within the immediate vicinity of Michener Park, including Malmo Plains, Lansdowne, and Lendrum Place.

Developer Committee:

Comprised of stakeholders in the development industry who can provide market sounding advice and provide input to the business case.

City of Edmonton:

Several formal and informal meetings were held with the City of Edmonton over the course of the development of the Master Plan to discuss process and the direction of the Master Plan. Formal meetings included a pre-application meeting, a meeting with the Edmonton Design Committee, touch base meetings, and Council Public Hearing for the rezoning.

In addition, the City of Edmonton sends notification mailouts and hosts an online engagement platform to collect feedback from surrounding property owners and community leagues.

Other Engagement Activities:

There was one meeting held with the Ward Councillor to discuss the project and provide information.

The UAPT also engages on a regular basis with the South Campus Neighbourhood Coalition.

Three virtual open houses were held throughout the process to provide the larger public with information on the project as well as an opportunity to ask questions and provide feedback.

The following public engagement activities were undertaken in order to assist in the development of the Master Plan:

Activity	Date	Activity Overview
Community Development Committee Meeting #1	February 24, 2021	The first meeting with the Community Development Committee centered on discussing the role of the Development Committee, review the upcoming project's process, discuss context, opportunities, and constraints on the site, and review next steps with the Committee.
Public Open House #1	April 21, 2021	The first public open house occurred in March 2021 and introduced the project and its vision, objectives, and principles to surrounding community members.
Community Development Committee Meeting #2	June 28, 2021	The second meeting with the Community Development Committee centered on sharing the concept options that have been prepared for the redevelopment of Michener Park, obtain feedback on the different concepts, and review the next steps for the project as well as provide an overview of the upcoming open house for the broader community.
Public Open House #2	July 15, 2021	The second public open house occurred in July 2021 and provided an overview of four distinct land use concepts that had been prepared and sought feedback from the community on them.
Community Development Committee Meeting #3	November 15, 2021	The third meeting with the Community Development Committee centered on providing the Committee with a project update as well as an overview of the development concept and rezoning that will be submitted to the City of Edmonton.
Public Open House #3	April 21, 2022	The third open house occurred in April 2022 and provided an update on the Master Plan, proposed zoning, and the timelines for the project.
City of Edmonton online engagement (engaged Edmonton webpage)	April 26, 2022 - May 16, 2022	Notification postcard mailed out April 19, 2022 informing surrounding property owners and community league the opportunity to provide feedback on the proposed rezoning application through the city's Engaged Edmonton platform. Feedback will also be summarized for city council so that they are aware of the public's perspective prior to making a decision.

Chapter 2

Background and Context

University of Alberta Properties Trust

Over the years, the University of Alberta has acquired land through its own resources and generous donors. Since the 1980s, the University of Alberta has respectfully and responsibly consulted with its neighbours, with the municipal and provincial governments, and with Universities across the country on potential land development models. A land trust is a proven and common way to transform university-owned land into financial endowments that will benefit teaching, research, and citizenship for generations to come.

University of Alberta Properties Trust (UAPT or the Trust) was formed by the University of Alberta (UA) to develop or re-develop lands deemed by UA as not central to its academic mission of teaching and research. UAPT is an arm's length, independent incorporated trust with the UA as its sole shareholder.

Governed by a Board of Directors, UAPT works with various stakeholders such as the City of Edmonton, neighborhoods and communities impacted from the land development, land and urban planners, engineers and architects, as well as the UA to develop the lands entrusted to it, with the profits from such activities being returned to UA to further its core mission.

Site Context

Michener Park, which opened in 1967, was home to student housing for families attending the University of Alberta. The housing within Michener Park was primarily comprised of low density, two-storey rowhouses, with the addition of the 42-unit high-rise apartment building of Vanier House.

Michener Park is a 12.95 ha site located in southwest Edmonton, with the following boundaries:

- North: 51 Avenue
- East: Existing low density residential (N-S alley generally located 37 m west of 117A Street)
- South: Whitemud Drive
- West: 122 Street

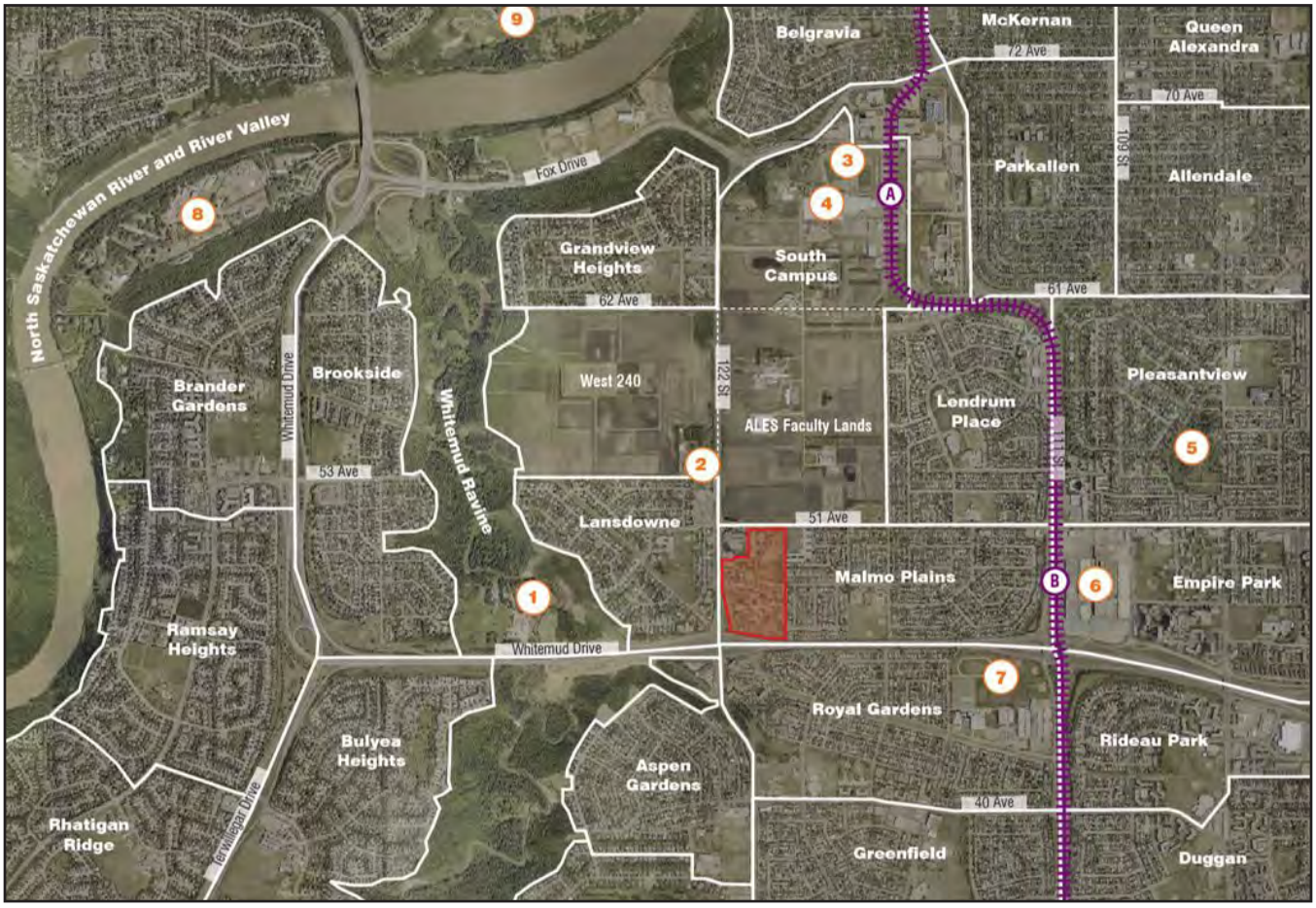
Michener Park is located within the eastern portion of the Malmo Plains neighbourhood. Malmo Plains is primarily a residential neighbourhood developed with single family homes as well as two religious assemblies in the northeast corner of the neighbourhood and an elementary school which is centrally located.

To the north is the University of Alberta (Agricultural, Life and Environmental Sciences Faculty Lands) as well as the Lendrum neighbourhood. The Lendrum neighbourhood is primarily residential with commercial uses fronting onto 111 Street and three schools from elementary to high school. To the east is the Southgate Shopping Centre, a major commercial node. The LRT runs down 111 Street with the Southgate LRT Station located at approximately 111 Street and 48th Avenue NW.

To the south is Whitemud Drive NW and to the west is the Landsdowne neighbourhood which is also primarily residential with a small commercial area north of 51st Avenue NW and an elementary school and religious assembly. The western boundary of the Landsdowne neighbourhood is the Whitemud Creek which provides a connection to the City's overall ravine system and green network.

The following figures illustrate Michener Park's location within a broader geographic context, as well as the surrounding amenities such as recreation facilities, transportation and transit options, and community and commercial amenities.

Site Context

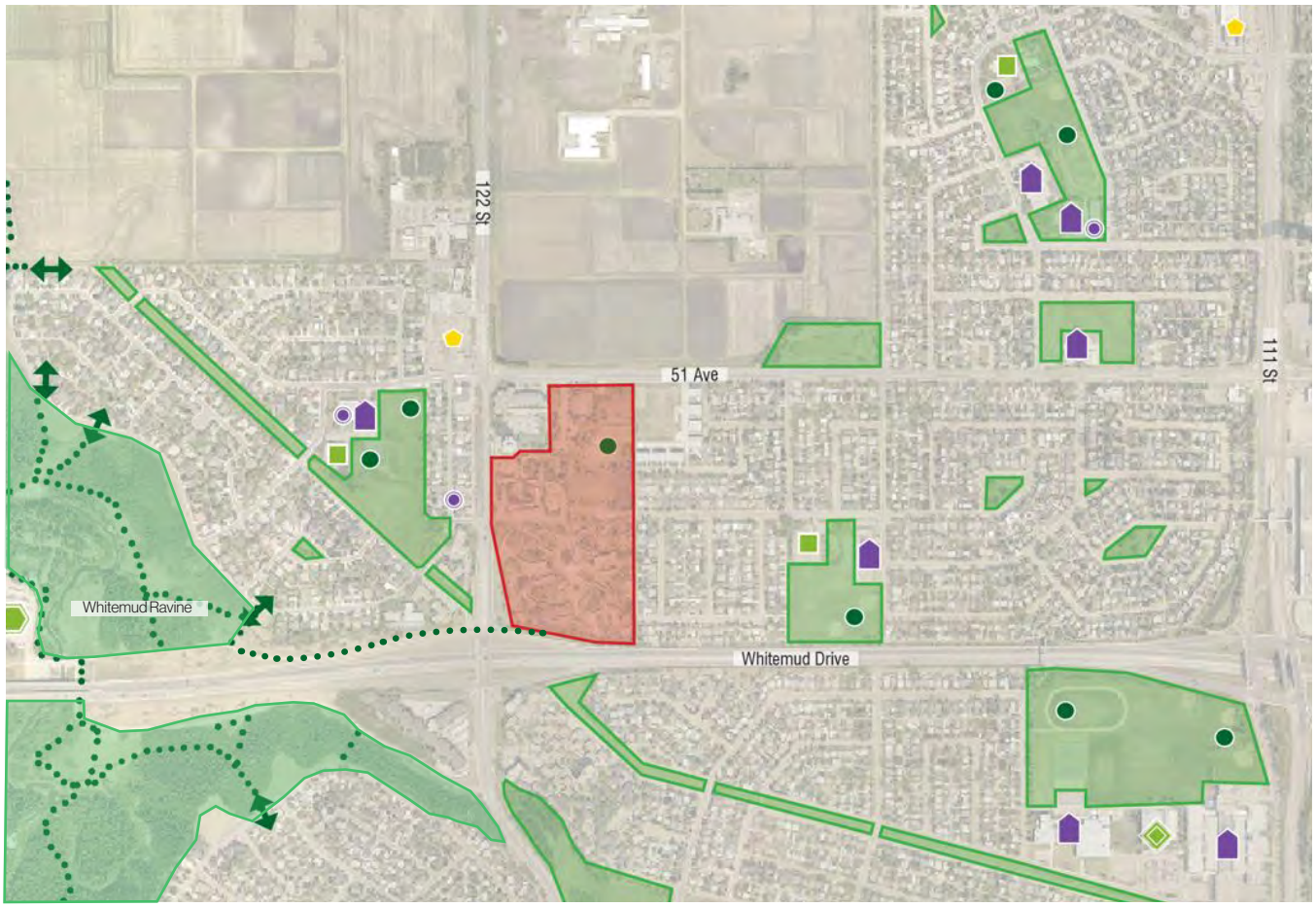


- Site Boundary
- Neighbourhood Boundaries
- LRT and Stations
- (A) South Campus / Fort Edmonton Station
- (B) Southgate Station

Major Destinations

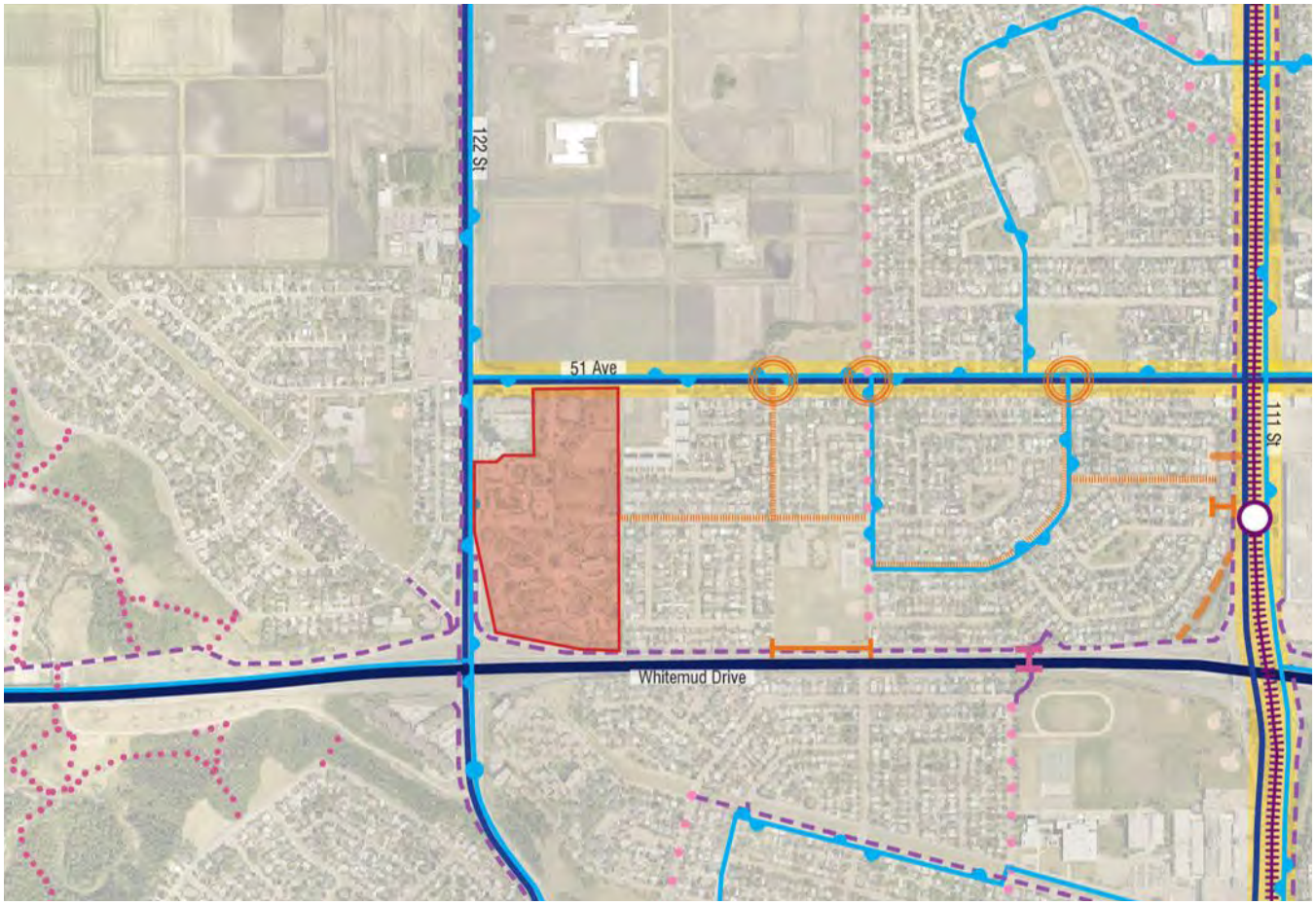
1. Whitemud Ravine and Park, Rainbow Valley and Snow Valley Ski Hill
2. Nothern Forestry Centre
3. Foote Field
4. Saville Centre
5. Mt. Pleasant Cemetery
6. Southgate Centre Mall
7. Confederation Park
8. Fort Edmonton Park
9. Edmonton Valley Zoo

Community Amenities



- Site Boundary
- School
- Daycare
- Neighbourhood Retail
- Shopping Centre
- Park Space
- Sports Field
- Whitemud Ravine Access
- Trails
- Community Centre/League
- Confederation Leisure Centre
- Rainbow Valley Park and Ski Club

Community Connectivity



- Site Boundary
- Whitemud Drive
- Arterial Roadway
- LRT and Southgate Transit Centre
- Bus Routes (effective April 2021)
- Bus Stops
- Shared Use Path
- Bike Route (Shared Roadway)
- Unpaved Trails
- Pedestrian Overpass
- Secondary Corridor (Par City Plan)

Future Neighbourhood Renewall

- Intersection Traffic Calming
- Sidewalk Improvements
- Alley Closure and Enhanced Shared Use Pathways
- New Shared Use Connections

Planning Context

Planning within the City of Edmonton is guided by many policies and guidelines. The proposed redevelopment of Michener Park is in alignment with the policies and guidelines in place at the time of development of the Master Plan. These include City Plan and the Residential Infill Guidelines.

City Plan

City Plan is Edmonton's Municipal Development Plan, which sets the strategic framework for the City to grow to two million people. City Plan designates the Michener Park lands for residential development, with the northern boundary – 51st Avenue, designated as a Secondary Corridor. A Secondary Corridor is a vibrant residential and commercial street that serves as a local destination for surrounding communities, while providing a more residential feel. The Michener Park redevelopment conforms to City Plan as:

- 51st Avenue is a major transit route providing direct access to the Southgate LRT Station;
- 51st Avenue as a Secondary Corridor – provides for new higher density development;
- Increases the density and provides new housing choices in a core neighbourhood;
- Proposes a mix of low rise and mid-rise residential; and
- Proposes a minimum overall density of 75 people/and or jobs per hectare.

Residential infill guidelines

The Residential Infill Guidelines (RIGs) provide direction for how infill development in mature neighbourhoods should occur. The Michener Park redevelopment meets the objectives of the RIGs by contributing to the creation of mature neighbourhoods that are livable and adaptable, contributes to ongoing neighbourhood renewal and revitalization and contributes to the overall sustainability of the City.

The Michener Park site is identified as a large site within the Residential Infill Guidelines as it is a site larger than 1 hectare in area and is in a location that will transition between new and existing development. Located at the edge of the Malmo Plains neighbourhood along two arterial roadways, Michener Park is an ideal location for redevelopment. The redevelopment conforms to the RIGs by:

- Providing integration with the Neighbourhood through open space, enhanced pathways, and connections for pedestrians and cyclists;
- Encouraging buildings to front onto open spaces, major streets, etc. where possible;
- Providing connections for pedestrians and cyclists within and through the site;
- A variety of housing options are proposed; and
- Commercial opportunities are provided to meet daily and weekly needs of residents.

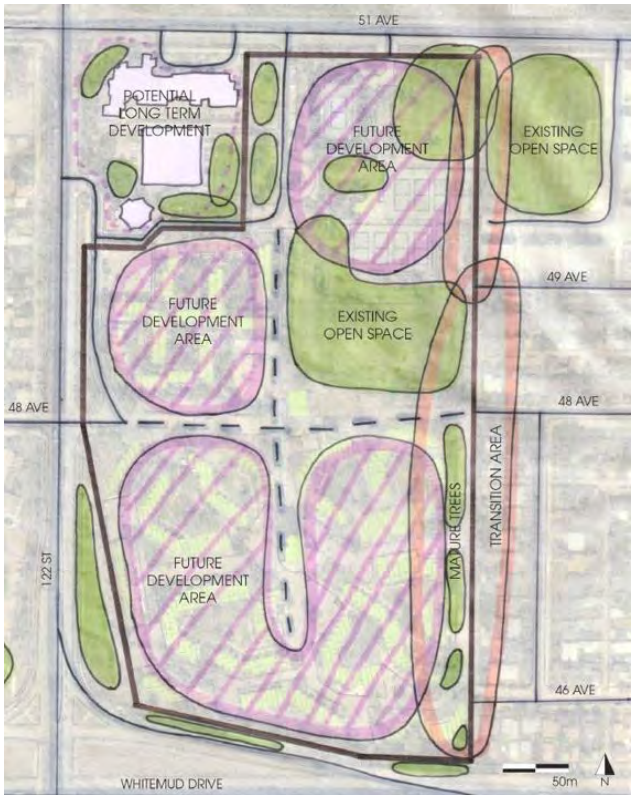
Opportunities and Constraints

A preliminary analysis of the site and surrounding context was undertaken for Michener Park as part of the preparation work associated with the Master Plan. The following chart illustrates the site's opportunities and constraints from an open space, connectivity, and infrastructure perspective.

Topic	Constraint	Opportunity
Open space	Development occurring around mature trees	Create focal point park and streets
	Park ownership and maintenance	Maintain key tree stands where possible
Connectivity	Potential for traffic shortcutting	Vehicular capacity exists on 122 Street and 51 Avenue
	Signaling upgrades may be required at 51 Avenue and 122 Street	Improved site access can be explored
		Improve pedestrian and cycling connections in the neighbourhood
Infrastructure	Additional connections to 122 Street may be required for sanitary and water servicing	Capacity exists for stormwater, sanitary, and water servicing
		Tie-in locations to servicing already exist

Connectivity Opportunities and Constraints

Open space Opportunities and Constraints



Infrastructure Opportunities and Constraints

Chapter 3

Michener Park Redevelopment Plan

Vision and Guiding Principles

From the community and stakeholder engagement, several priorities have emerged around the future development within Michener Park. These priorities were further discussed, refined, and understood during the consultation process and have been reflected in the Vision and Guiding Principles that have been prepared for Michener Park.

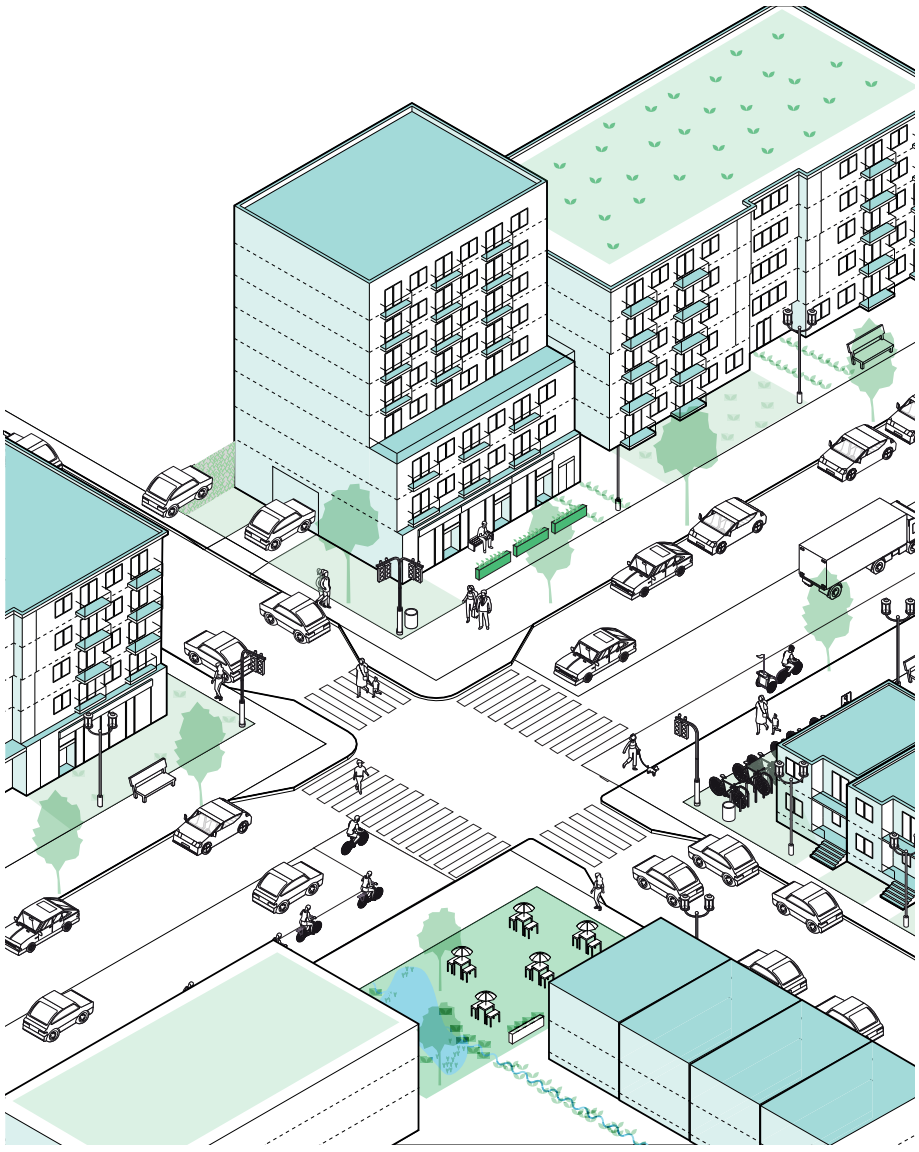
The Michener Park Master Plan has captured the goals of the City of Edmonton's Residential Infill Guidelines, through the vision, principles and guidelines. These goals include: integration with existing neighbourhoods, planning for liveable neighbourhoods, building a complete transportation and pedestrian system, creation of parks and amenity spaces, and building community.

The Guiding Principles are high-level and mutually supportive planning objectives that the Michener Park Redevelopment Master Plan and Design Guidelines will achieve. They provide comprehensive direction for the Master Plan and serve as a critical foundation to inform and direct the future development of Michener Park.

NOTE : All images shown in this document are for illustrative purposes only.

Vision

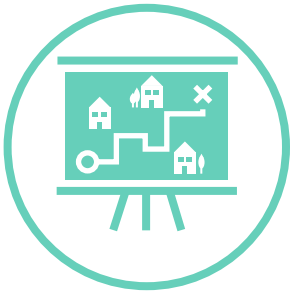
Michener Park presents a unique opportunity for thoughtful and complete redevelopment of a strategically located site that complements that character and existing built form of surrounding communities, provides a range of residential built forms that can accommodate a diverse population of new residents, integrates commercial and retail opportunities to support both residents and the surrounding community, and is connected through an internal street and path network that supports all modes of transportation. Michener Park, when fully redeveloped, will exemplify high-quality urban design, establish a unique community character, and smart growth principles.



Guiding Principles

Create a distinct, yet complementary character for Michener Park

- Align with UAPT objectives of building value through relationships and community building.
- Creation of sense of place and strong neighbourhood identity
- Preparation for character-building architectural details and theme
- Integration with adjacent communities
- Creation of safe, resilient and liveable communities.



Develop a compact, walkable, residential-focused area

- Preparation for a mix of residential built forms that respond to market demand
- Creation of opportunities for commercial mixed use and services
- Encouraging built forms that sensitively transitions to adjacent single-family detached housing areas
- Planning for a variety of unit types and sizes to support a diverse range of users

Establish a logical framework of multi-modal connections

- Provision of access to adjacent arterial roadways and to transit opportunities
- Creation of a simple, and logical street network
- Enhanced trail, bicycle, and pedestrian connections
- Consideration of safety and convenience for all modes of transportation
- Enhancing local connectivity with adjacent development through park, pedestrian, and bicycle networks.

Incorporate high quality public spaces

- Creation of trails, parks, and other open spaces for the benefit of the surrounding community
- Provision for an enhanced public realm along streets
- Provision of public space as an amenity asset for Michener Park and surrounding residents

Land Use Concept

This section of the Michener Park Master Plan establishes the land use framework for achieving the Vision and Guiding Principles for Michener Park, which are reflected in the development concept. The land use concept envisions the creation of a unique and engaging mixed-use development with a diversity of complementary land uses and activities, arranged in a compact form where the needs of daily life can be met within a convenient walking distance.

Four (4) major land use categories have been identified: Residential, Commercial, Open Space, and Movement and Connection. These categories have loosely been defined within the Master Plan to allow for flexibility to accommodate future development objectives while also establishing a framework from which the growth of Michener Park can be organized upon. In addition to these land use designations, Michener Park has been designed around a multi-modal transportation network that not only connects residents to focal points within Michener Park and to surrounding major transportation corridors, but also connects and integrates the surrounding communities with Michener Park.

Residential

The land use concept for Michener Park has incorporated a variety of housing typologies including low density residential (row housing), medium density residential, high density residential, and mixed use that will help establish a community comprised of varying demographics and tenures. When complete, it is anticipated that Michener Park will include approximately 900 to 1300 residential units.

Commercial

The Michener Park development concept has incorporated opportunities for high-quality commercial amenities that are intended to serve the daily needs of Michener Park's residents, as well as the surrounding communities.

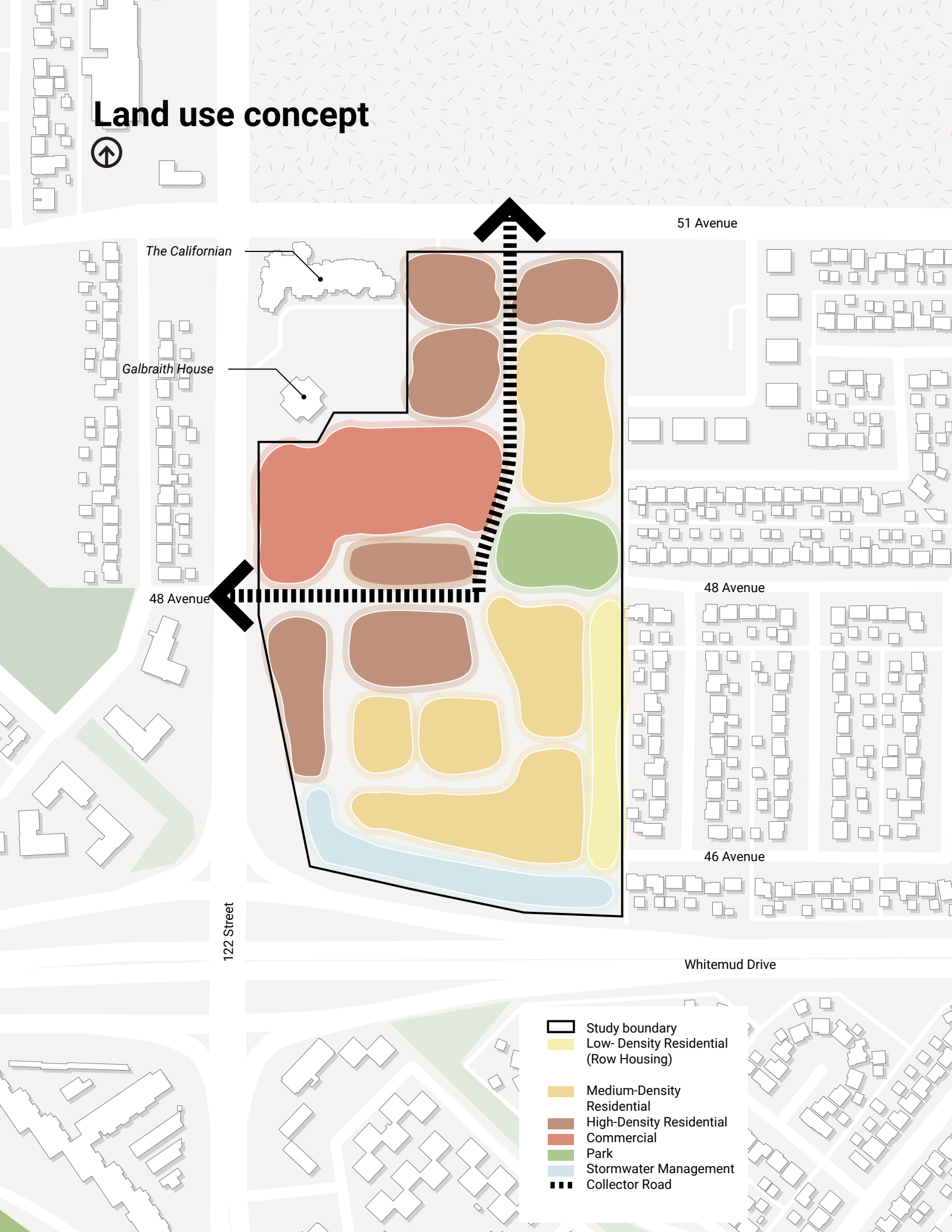
Open Space

Open space and passive recreation amenities have been incorporated and woven throughout Michener Park, with the centre piece of Michener Park's open space network being a centrally located park space that will be utilized not only by the residents of Michener Park, but also by the residents of the surrounding communities. The location of the park is driven by the memory of place as the open space has always resided along the eastern boundary of Michener Park. The park will serve as a bridge between Michener Park and the existing development in Malmo Plains. The park is ideally placed in the centre of the site flanked by adjacent planned residences with access to sunlight and pedestrian paths. The park brings the two communities together into one neighbourhood.

Movement and Connection

The transportation network within Michener Park has been designed to not only provide for the efficient and effective flow of vehicular traffic to and through Michener Park, but also has been designed to promote active transportation, ease of access to transit, and pedestrian movement within Michener Park. Additionally, the roadway network has been designed to ensure the impacts to the existing lower density portion of Malmo Plains and Michener Park have been mitigated while still providing for enhanced pedestrian and other active mode connections at key locations. Connections to the City's larger pedestrian and cycling network are provided at key intersections throughout the site. Providing key pedestrian and bicycle connections between neighbourhoods creates strong neighbourhood bonds and access to amenities between neighbourhoods.

Land use concept



Residential

Michener Park is envisioned as a medium-density, inclusive, residential community. Guided by market demand, the Michener Park Master Plan seeks to respond by incorporating a variety and range of housing types, sizes, and price points. Michener Park will be home for residents of various ages, incomes, and family sizes, creating a diverse and active neighbourhood that fosters formal and informal social connections. Additionally, providing for a range of housing types allows residents to remain within the same community throughout their lives.

Residential development within Michener Park includes housing types of various densities and ranges from rowhouses to medium and high-density multi-unit buildings up to 23 metres in height. In addition to these residential uses, opportunities for mixed-use development have been provided within the centre of Michener Park.

Furthermore, with a mix of built form provided throughout Michener Park, housing forms from row housing to multi-unit developments are expected to provide for family-friendly units (3+ bedrooms) in addition to studio, one, and two+ bedroom units to provide higher density housing options for families.

Objectives

- → Create a compact residential community and urban form that promotes walkability through convenience and accessibility.
- → Promote social, environmental, and economic sustainability through the provision of more intensive forms of residential development.
- → Allow for a variety of housing types, with a range of price points to create an inclusive neighbourhood.
- → Ensure that the residential development within Michener Park respects the existing development within Malmo Plains through contextually sensitive development (i.e., height, massing, landscaping, etc.) along the interface between Michener Park and Malmo Plains.

Policies

1. Require that a mix of housing types be provided within Michener Park, including housing types such as but not limited to rowhouses, stacked rowhouses, and apartment housing, allowing for a greater range of housing choice.
2. Require that more intensive residential uses be located in close proximity to 122 Street or 51 Avenue to ensure residential development is contextually sensitive to existing development within Malmo Plains and in close proximity to major transportation and transit corridors.
3. Encourage intensive and/or innovative housing forms.
4. Encourage a mix of built forms such as row housing, stacked row housing and multi-unit housing that provide options for family friendly units.

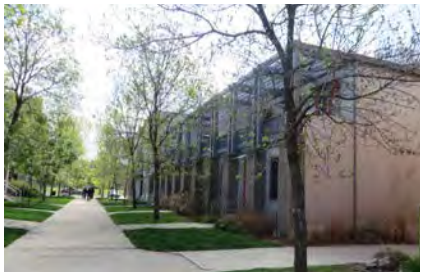
Type 1
Low-Density (Row Housing)

Low-density in the form of row housing has been incorporated within Michener Park to provide for a housing product that will attract families of all sizes to Michener Park. These built forms have predominantly been located within the southern portion of Michener Park to establish a relatively lower density precinct within the community.

The areas identified for Row Housing within Michener Park should not preclude innovative forms of housing that are similar in scale and built form to standard Row Housing. Rather, innovation should be supported through creative approaches to housing design that reflects the development regulations of the underlying zones as well as the intent to create a more human-scaled area within Michener Park. Housing development, whether standard row housing or other innovative forms of housing, within this area should be focused on creating high-quality interfaces with the roadways and public realm amenities including the open space network.

Policies

1. Require that low-density Row Housing provide individual private amenity areas.
2. Encourage the front entrances of low-density Row Housing residential units be oriented towards a public roadway or internal private roadway, a park site, a stormwater management pond, or an internal trail to promote an attractive and activated interface between residential development and the public realm, as well as increase "eyes" on the park and stormwater management pond.
3. Encourage the use of minimum front setbacks to encourage greater connection between residential development and the street.
4. Encourage the use of innovative forms of Row Housing such as reverse housing or housing product similar in scale to traditional Row Housing.
5. Where possible, avoid the use of front driveways that dominate street frontages to promote a pedestrian friendly and attractive urban environment.



Interface with the Existing Malmo Plains Neighbourhood

Michener Park is bounded on its eastern edge by the existing single family homes of Malmo Plains. The residential development within Malmo Plains that interfaces with Michener Park, in particular south of the centrally located park site, is currently comprised of low-density residential development in the form of single-storey bungalows. If existing single family dwellings within Malmo Plains were redeveloped, their current zoning also allows for development of homes up to 10 m or approximately two storeys.

The interface between the new development in Michener Park and the existing single family homes in Malmo Plains, will be recognized through contextually sensitive development in the form of row housing. The intent of the Master Plan is to create a transition to the existing Malmo Plains single family development that serves to connect Michener Park and Malmo Plains through considered built form of development and key pedestrian and bicycle paths. The central park feature will become a community focal point for Malmo Plains and Michener Park further connecting these two areas.

On the northeast boundary of Malmo Plains is a project currently under development that would allow for residential uses from 3.5 storeys to 8 storeys. Sensitive landscape transition and provision of building forms that compliment this pattern of development is proposed.

The northwest portion of Michener Park is flanked by existing mid-rise residential properties (Galbraith House and The Californian). The Michener Park Master Plan proposes complimentary scale projects along 51st Avenue and provides pedestrian connections to Galbraith House from the new north south access and the Commercial parcel.

Currently, a lane runs along the eastern edge of Michener Park between 48th Avenue and 49th Avenue and portions between 48th Avenue and 46th Avenue with a short extension connecting to an existing bicycle path on the North side of the Whitemud Freeway. This lane provides service access to the rear of the homes in Malmo Plains and is currently separated by a low fence, trees and shrubbery. The intent of the Master Plan is to clean up the edge, create a visual connection between the new and existing development, and provide an aesthetic landscape edge along key areas. In addition, key access points for pedestrians and bicycles at 46th Avenue, 48th Avenue at the park, and 49th Avenue will enhance this interface. The development at Michener Park will serve to open the space between the two areas visually and the individual parcels may choose to provide yard amenity spaces and or inter-development paths to elevate sections of the landscape.

Policies

1. Require a contextually sensitive transition between Malmo Plains and Michener Park where abutting existing single family dwellings.

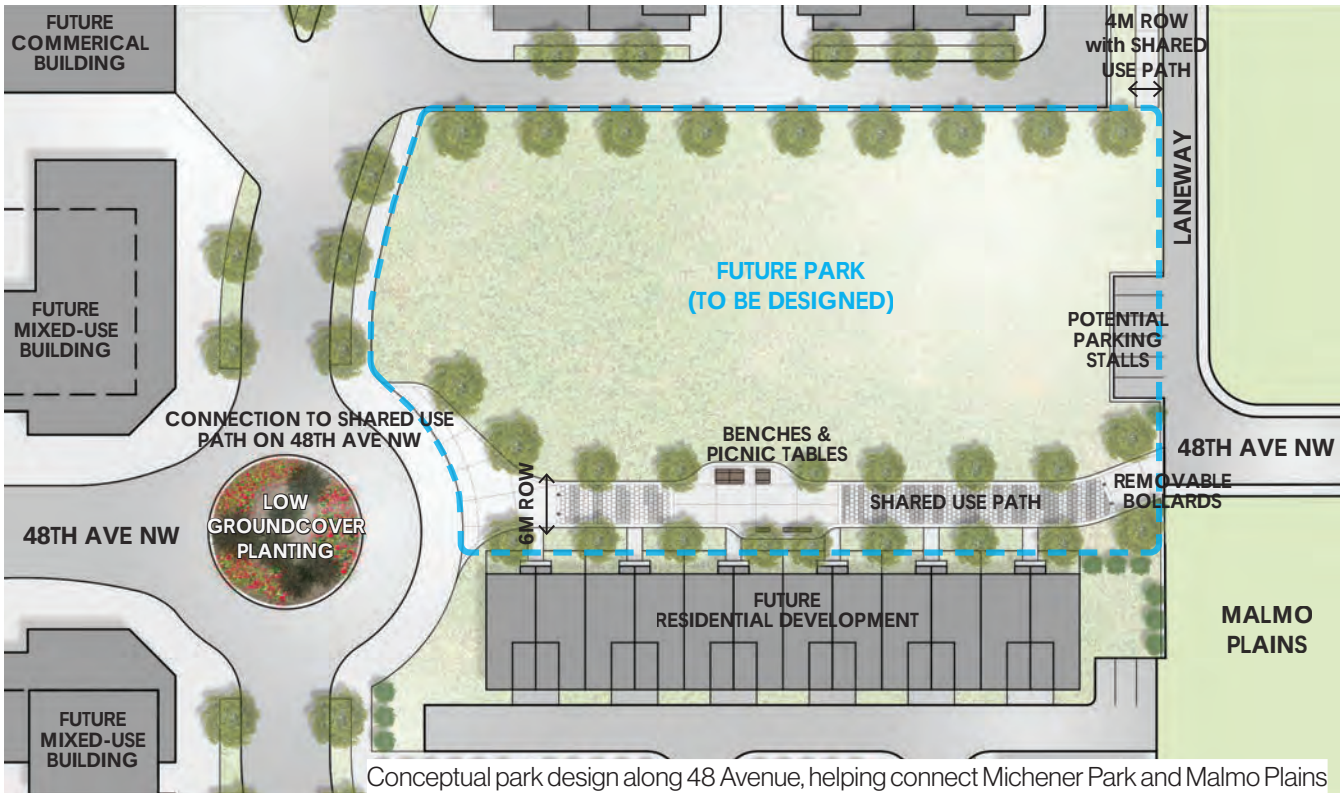
2. Encourage enhanced landscaping to be located adjacent to Malmo Plains south of 48 Avenue to limit views into the backyards of homes in Malmo Plains.

3. Encourage connections for pedestrians and cyclists at multiple points along the interface between Michener Park and Malmo Plains.

4. Require all parcels south of 48th Avenue which abut existing single family dwellings in Malmo Plains to be restricted to row housing with a maximum height of 10.0 m.

5. Any additional public walkways will be determined at the subdivision stage. Where walkways are provided on private property, these will be determined at the Development Permit stage when site layouts are available. Where required to provide connections from existing Malmo Plains, a public access easement shall be registered on title.

6. The location of the pedestrian and bicycle connection at 49th Avenue is shown conceptually on the Open Space and Movement & Connectivity figures. The exact location will be determined at either the subdivision or development permit stage. The intention of the connection is to provide connectivity between Malmo Plains and Michener Park and could include various alignments including but not limited to, a connection south to the Public Park.



Conceptual park design along 48 Avenue, helping connect Michener Park and Malmo Plains

Type 2
Medium-Density Residential

Medium-density housing has been incorporated within Michener Park to provide for a housing product that is suitable to residents of varying ages, incomes, family size, and levels of mobility. Medium-density housing has predominantly been located within the northern portion of Michener Park near to community amenities such as the identified commercial areas and is well connected to the open space network.

Additionally, medium-density housing is predominantly located along collector roadways within Michener Park, as well as within close proximity to major transportation corridors such as 51 Avenue thereby providing a strong connection to Edmonton's broader transportation and transit network. Additionally, medium density housing has been located within Michener Park to serve as a gentle transition from the higher density uses within Michener Park to the adjacent low-density residential development within Malmo Plains.

Medium-density housing is intended to include a mix of row housing, stacked Row Housing and multi unit residential buildings up to four storeys in height with the built form, setbacks, articulation, and massing of medium-density buildings reflective of promoting a human scaled environment throughout Michener Park. Row housing may also be incorporated at grade within multi-unit residential (apartments).

Policies

1. Require that medium-density multi-unit residential buildings be a maximum building height of four storeys.

2. Encourage medium-density residential to be located in close proximity or have connections to, commercial amenities, open space, and transportation and transit corridors.

Type 3
High-Density Residential

Direction on high-density housing has been included within Michener Park to provide the opportunity for the full range of the housing spectrum to provide for housing product that is suitable to residents of varying ages, incomes, family size, and levels of mobility.

High-density residential, shall be located in close proximity to the commercial centre within Michener Park or close to 122 Street or 51 Avenue, in order to locate a greater number of residents within close proximity of Michener Park's commercial amenities and open space as well as the transportation and transit neighbourhood.

High-density residential, up to six storeys is currently permitted within Michener Park. However, should higher heights be proposed in the future, the development shall follow the policies within the master plan as well as all applicable City policies and guidelines and submit a rezoning application.

Policies

1. Require that high-density housing be a maximum height of six storeys.
2. Require new high-density residential development to be located adjacent to areas identified for commercial uses and in close proximity to major transportation and transit corridors and open space.
3. Encourage seniors housing to be located within high-density housing due to the proximity to commercial, open space, and transportation amenities.
4. Avoid locating high-density residential development adjacent to existing single family homes in Malmo Plains.

Type 4
Mixed Use

Michener Park provides opportunities for both vertical and horizontal mixed-use development. Mixed use can be provided with commercial on the ground floor and residential above or residential and commercial uses can be located next to each other. These mixed-use opportunities have been centrally located within the plan area in close proximity to complementary commercial uses, major transportation routes, and are connected to the open space network within Michener Park.

The mixed-use sites have been located adjacent to 48th Avenue to help establish a main street style entrance to Michener Park that facilitates that creation of a high-quality public realm through the provision of street level retail opportunities. This will establish an attractive and inviting pedestrian space that may be activated year-round. It is also intended that mixed-use development within Michener Park will be designed in a manner that is human scaled through the provision of appropriate stepbacks, setbacks, street furniture, and building articulation. The City of Edmonton Main Street Overlay is to encourage and strengthen the pedestrian-oriented character of Edmonton's main street commercial areas that are located in proximity to residential and transit-oriented areas, by providing visual interest, transparent storefront displays, and amenities for pedestrians. The 48th Avenue entrance street is flanked by zoning to allow for commercial and residential uses. With the extension of 48th Avenue to the traffic circle and park, the 48th Avenue gateway will help define the character and identity of Michener Park through appropriate building form, setbacks and sidewalk widths.

Should market conditions not warrant or support the provision of mixed-use development in the areas identified on the land use and development concept, solely residential or commercial uses along 48th Avenue may be explored and approved as an alternative. If there is an opportunity to provide both ground floor commercial and retail on the same parcel, proper separation, and urban design methods that enhance transition and reduce conflict between uses, will be considered.

Policies

1. Encourage a mix of commercial and/or community services be located on the ground floor to facilitate an activated and attractive pedestrian environment and public realm.

2. Encourage residential development located along the ground floor to facilitate an activated and attractive pedestrian environment and public realm. Where residential development is located at grade, active frontages are required.

3. Apply the Main Street Overlay along 48th Avenue.

Commercial

To support the residents of Michener Park, as well as the surrounding communities, ample and diverse commercial opportunities have been provided for within Michener Park. These commercial opportunities consist of a potential opportunity for grocery anchored retail, and complimentary commercial and community services. The commercial and service opportunities within Michener Park are intended to help create a community whereby residents can access their daily needs and will also serve as a central gathering point where residents can interact with one another and build community connections.

In addition to providing services to Michener Park and the surrounding communities, the opportunity for mixed-use commercial fronting 48th Avenue is also intended to serve as a welcoming entrance into Michener Park from 122nd Street by providing active frontages and a high-quality urban and pedestrian environment and will serve as an important corridor within Michener Park.

Objectives

- → Provide the residents of Michener Park and the surrounding communities with a diverse range of commercial amenities and services that enable them to meet their daily needs.
- → Offer a centrally located space within Michener Park where residents can meet and interact with one another to help foster a connected community.
- → Support the local economy by providing space for local businesses.

Policies

1. Require commercial uses, including mixed-use commercial, to be centrally located within Michener Park to facilitate convenient access.
2. Require commercial uses, including mixed-use commercial, to be in close proximity to major transportation and transit corridors.
3. Require commercial development where the rear backs onto public roadways and/or residential development:
   - A To be high-quality in design;
   - B Provide appropriate and sufficient screening of service areas to establish an attractive public realm and reduce the impacts from commercial development abutting public roadways and/or residential;
   - C Require integration into residential areas in a way that promotes walkability and connection to these much-needed services while preserving residential character.;
   - D Require commercial developments to reduce barriers by increased porosity through provision of active sidewalks, glazed storefronts and doors on the street; and
   - E Require screening and landscaping of service areas to reduce visual and traffic impacts .
4. Require all loading, storage, and waste facilities associated with commercial development to be screened from view utilizing attractive and high-quality screening materials and methods, or the use of Moloks.

5 Encourage commercial amenities and community services to be located at ground-level along 48th Avenue to establish a pedestrian oriented and vibrant urban environment.

6 Encourage local businesses to locate within Michener Park to support a vibrant local economy.

7 Encourage developments to provide a selection of smaller commercial retail units in conjunction with larger format stores to promote a vibrant and human scaled environment. This serves to provide a wide variety of services and scales to Michener Park and the surrounding communities.

8 Where possible, encourage commercial development to be oriented towards the street and highly visible to pedestrians.

Open Space

High-quality and interconnected open space has been provided for within Michener Park to encourage residents, and surrounding community members, to explore Michener Park and interact with one another and their community. Open spaces within Michener Park include a centrally located park site, opportunities for interconnected private open space dispersed throughout Michener Park, and a stormwater management facility.

Central to Michener Park will be an approximately 0.60 ha open space that will serve as one of the focal gathering spaces for residents of Michener Park and visitors. This space will be designed to allow for both active and passive recreation outdoor uses. It will be welcoming and useable throughout all seasons of the year and act as a central focal point for the community. The park will also include a 6m wide public ROW in the form of an enhanced pedestrian and bicycle path connecting 48th Avenue to and from Michener Park and the existing Malmo Plains area. Flanked by trees and the placement of street furniture, such as park benches. This connection is park-like and considered as an amenity.

Complimentary to this centrally located open space will be a landscaped and visually attractive stormwater management facility in the southern portion of Michener Park. In addition, there are interspersed and connected publicly accessibly private open spaces and amenity areas that will be developed and reviewed on a parcel by parcel basis. The intent of these open spaces are to provide complimentary open areas that depending on their location, will be used by private residents and the public, act as connector spaces, provide breaks between buildings, and act as a visual amenity to the development. Please note the location of these private open spaces are for illustrative purposes only on all figures within this plan and are subject to change as the development of individual parcels of Michener Park start to develop.

In addition to the open spaces within Michener Park, there are several existing amenities located near Michener Park that residents will be connected to and be able to utilize, such as the Whitemud Creek Ravine trail system and various sports and recreation fields.

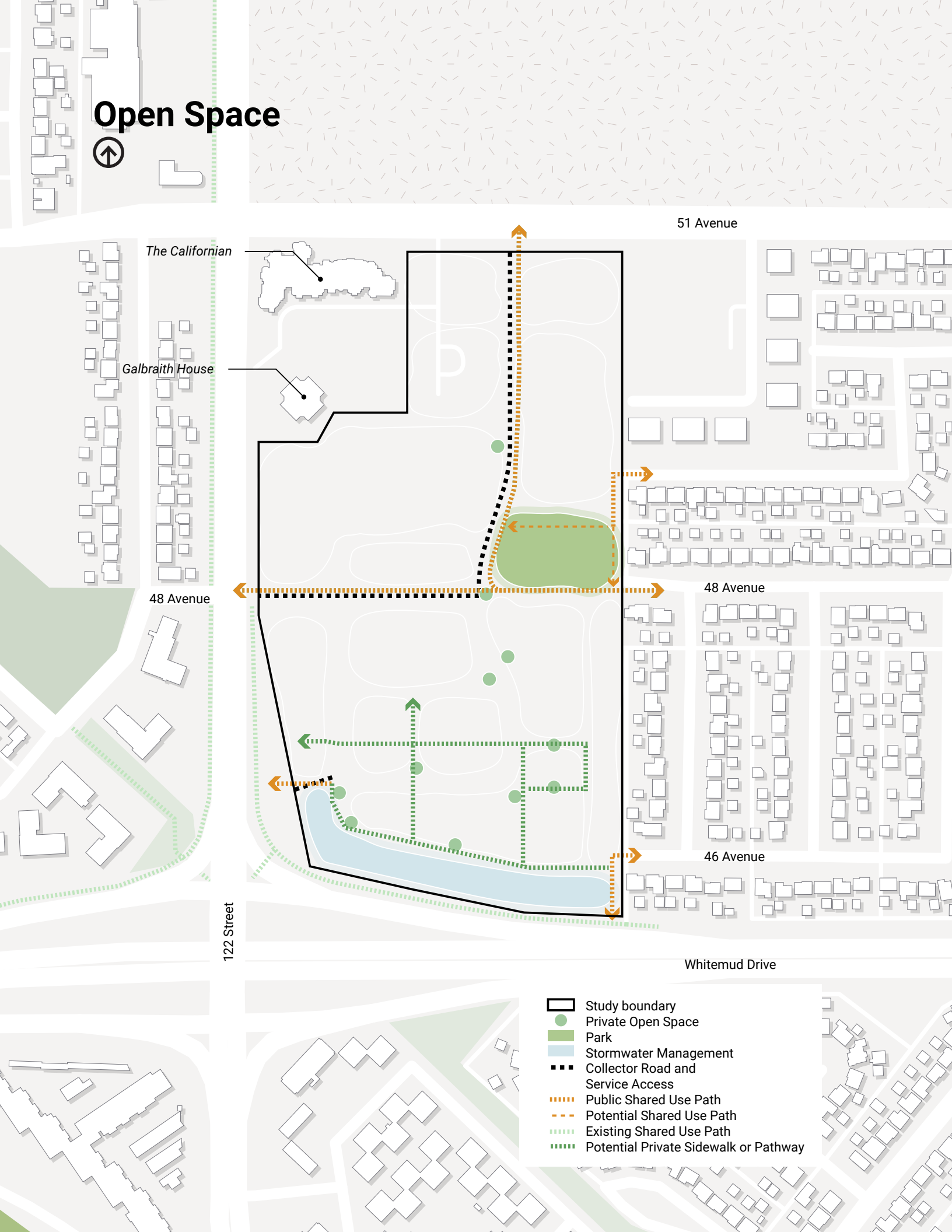
Objectives

- → Offer spaces throughout the community where community interactions can occur.
- → Provide opportunities for passive and active recreation to promote healthy and active living.
- → Provide community amenities that are available for all ages and abilities.

Policies

1. Require open spaces within Michener Park to be connected to the pedestrian and active modes network.
2. Require open space to be attractive, safe, and useable during all seasons through the utilization of CPTED principles and all-season design principles.
3. Require the Storm Water Management Facility within Michener Park to be developed as a naturalized facility .
4. Encourage open spaces within Michener Park to not only be connected internally to the site, but to create an open space network to the greater network and to destination points such as Whitemud and Conderation Park by way of existing trails and paths.
5. Encourage open space to be programmed with a variety of active and passive recreation opportunities.
6. Encourage the use of natural and native vegetation and landscaping within open spaces to provide a timeless look and feel as well as to serve an ecological connectivity function.
7. Require the dedication of the public park with subdivision.
8. Parking shall be considered in the design of the public park to provide access for more residents to the public parké

Open Space


51 Avenue
The Californian
Galbraith House
48 Avenue
48 Avenue
46 Avenue
122 Street
Whitemud Drive
Study boundary
Private Open Space
Park
Stormwater Management
Collector Road and Service Access
Public Shared Use Path
Potential Shared Use Path
Existing Shared Use Path
Potential Private Sidewalk or Pathway

Movement and Connectivity

The connectivity of a community contributes to the development of a compact, integrated community with a balanced transportation network. Movement within Michener Park and beyond has been designed to balance efficiency, safety, and comfort for all types of users and modes.

The mobility system within Michener Park has a high degree of internal and external connectivity. This connectivity within Michener Park is characterized by a high-quality and logical network for movement throughout the community that links destinations within as well as outside of Michener Park. With Michener Park being designed with connectivity as a backbone, all residents' ability to utilize active modes of transportation, such as walking and cycling, will be fostered.

Objectives

→ Mobility and connection infrastructure within the community and connecting to adjacent communities to promote all season use and social interaction.

→ Provide opportunities for passive and active recreation infrastructure such as walking and bicycle paths to promote healthy and active living. Paths to act as functional connections to services and other paths, but also provide a inter-community 'recreation loop'.

→ Provide pedestrian and bicycle amenities that are safe and available for all ages and abilities.

Policies

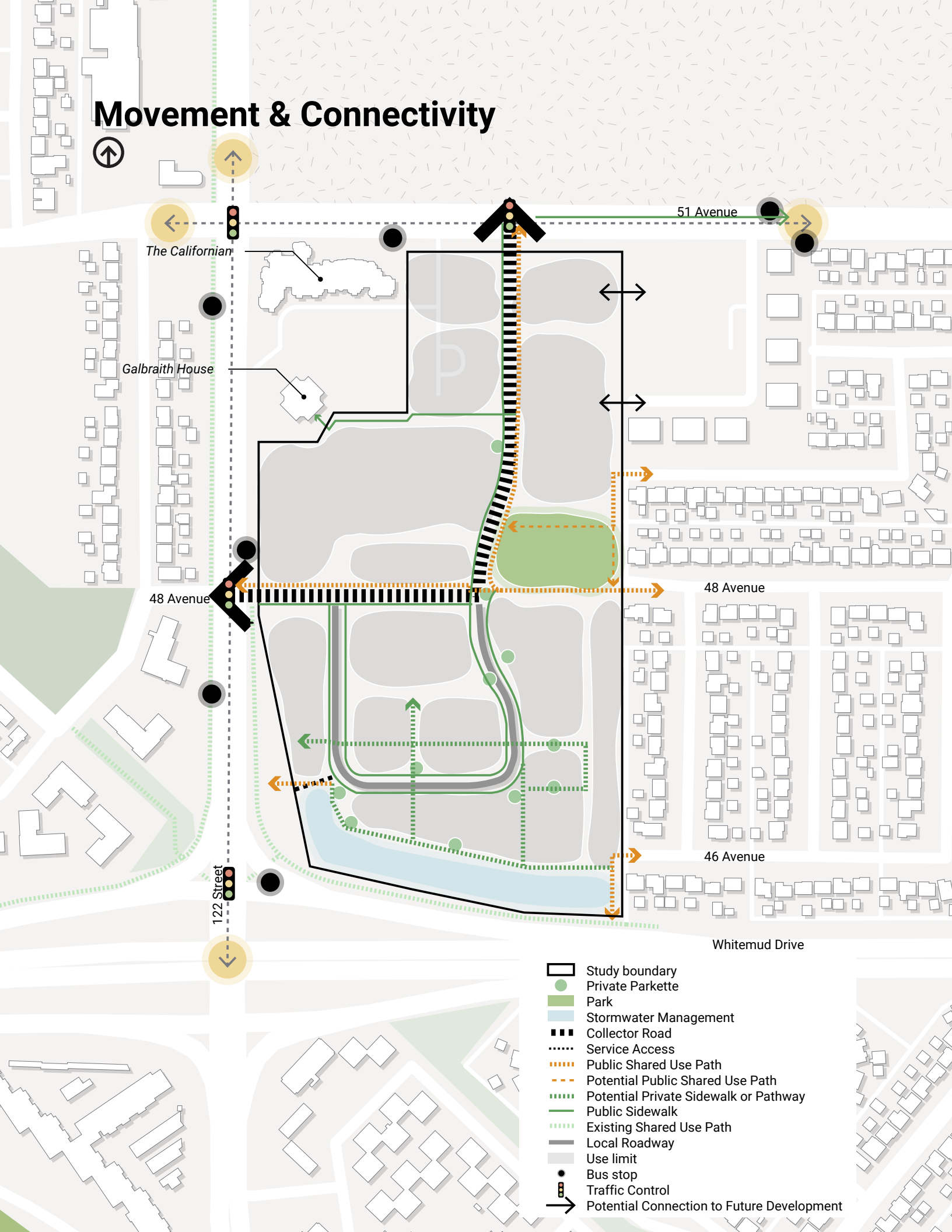
1. Require that the plan area and surrounding connections will be developed in general accordance with the Movement & Connectivity Figure.

2. Require dedication of public road Right-of-Way for an enhanced shared use path connection at 48th Avenue to connect Michener Park to the existing Malmo Plains Neighbourhood. The enhanced shared use path shall include elements such as, but not limited to, special pavement/pavers, landscaping to frame the pathway, and street furniture such as benches.

3. Encourage the registration of Public Access Easements along internal walkways on private property, in general accordance with the Movement & Connectivity Figure. Exact locations will be determined at the Development Permit stage when site layouts are available , and must consider future connectivity through adjacent private property.

4. Where required to provide connections from existing Malmo Plains via the Public Shared Use paths as shown on the Movement a& Connectivity Figure, a public access easement shall be registered on title, or the connection may be provided as public road Right-Of-Way, to the satisfaction of Subdivision and Development Coordination (Transportation).

Movement & Connectivity



Roadway Network

The roadway network within Michener Park is intended to facilitate efficient and effective movement of residents and visitors to and through Michener Park, as well as connect Michener Park with the roadway network surrounding the site. Roadways within Michener Park are organized around the two major collector roadways of 48 Avenue, which is centrally located and runs west to east, and a north/south roadway. These two roadways will serve as the major entrance / exit points into Michener Park from 122nd Street and 51st Avenue respectively.

Vehicular connections between Malmo Plains and Michener Park have not been incorporated into the concept for Michener Park. The Master Plan achieves the vision for the area, which includes promoting walkability, active modes of transportation, sustainability through utilization of existing infrastructure surrounding Michener Park, creating more meaningful pedestrian and bicycle connections and reducing the reliance on vehicles to access daily needs that are within walking distances.

A technical review has been completed which suggested that the projected traffic volumes do not indicate a strong demand for a vehicular connection between Malmo Plains and Michener Park, and identified potential negative impacts of such a connection. The potential benefits of the connection can be achieved by the enhanced shared pathway connection which will provide walking and wheeling connectivity throughout the community.

Policies

1. Require a well-integrated system of public roadways to be established for vehicular circulation within Michener Park.

2. Require that the intersection of the two primary internal roadways (48 Avenue and north/south collector road) incorporates a roundabout to promote traffic circulation, slow speeds, and facilitate efficient and effective access throughout Michener Park.

3. Encourage the use of traffic calming measures along 48th Avenue and the north/south collector road to slow speeds and create a pedestrian oriented urban environment. Traffic calming measures such as a traffic circle, potential for raised crossings at intersections and bumpouts combined with on street parking along 48th Avenue.

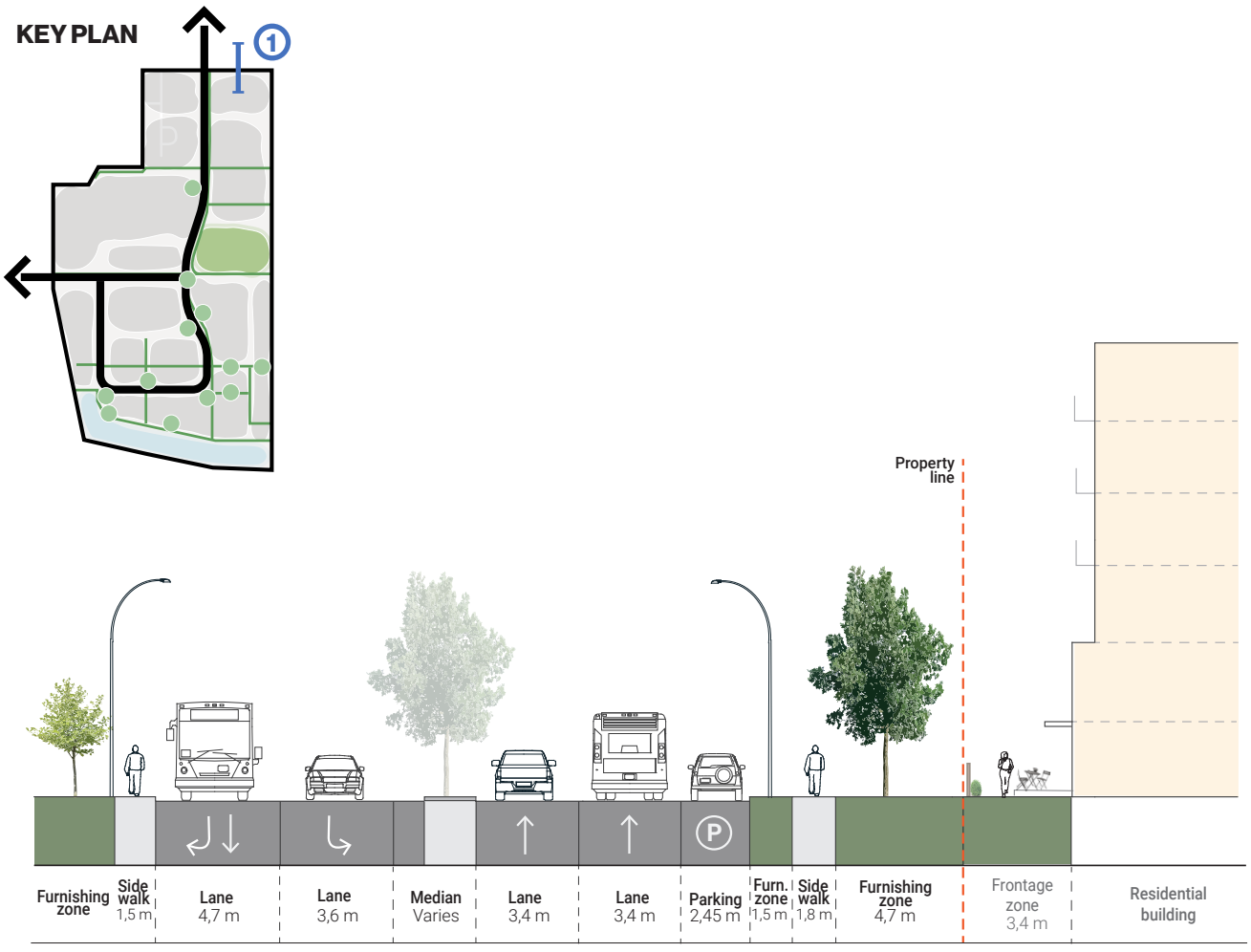
4. Provide key connection points from Mal mo Plains in the form of pedestrian and bicycle paths that open up cross -flow between communities.

5. Require the removal of the existing MacEwan Drive service road along 122nd Street north of 48th Avenue and provide alternate access to Galbraith House. Elimination of this service road will remove a very wide, skewed vehicle crossing, improve safety for vulnerable users, and improve access to the bus stops along 122nd Street.

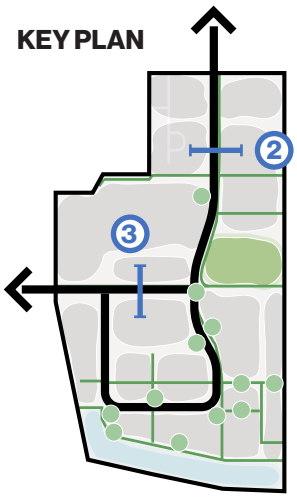
6. Require an updated transportation analysis at the 50% build out horizon.

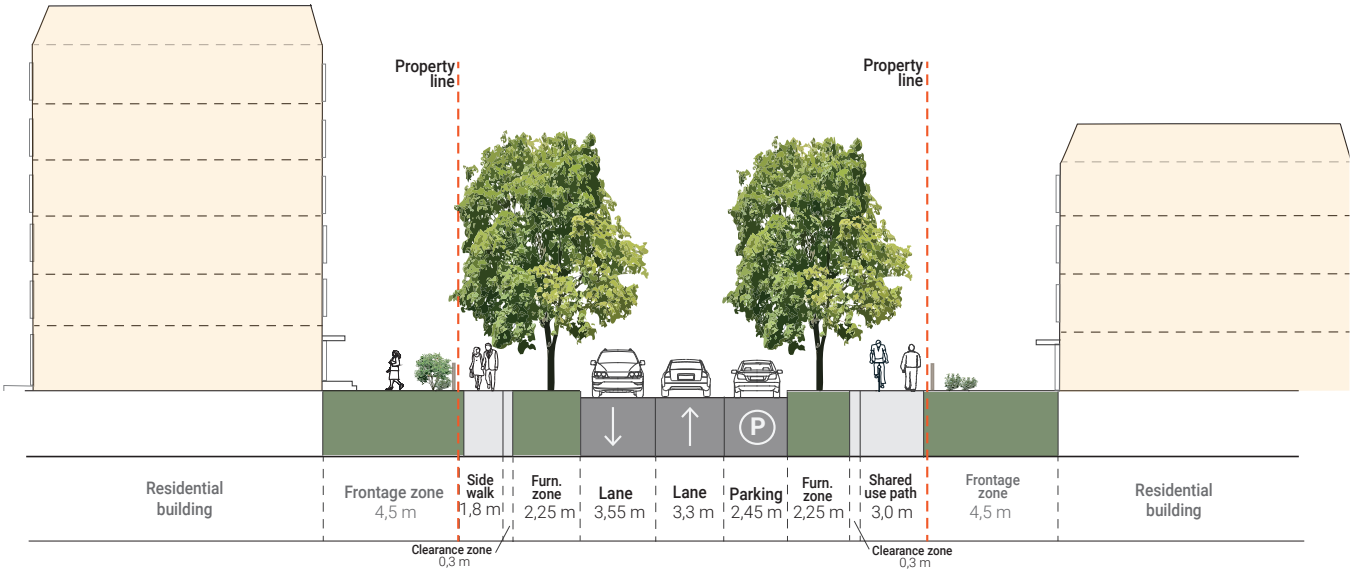
7. With the construction of the north-south collector connection to Michener Park at 51 Avenue, construction of the 51 Avenue access management improvements as identified in the Mobility Assessment are required. Design of these improvements will be reviewed at the subdivision stage.

Roadways within Michener Park shall be developed in general conformance with the below cross sections. Modifications to the cross sections may occur through detailed design. All public roadways will be designed as per City of Edmonton Design and Construction Standards.

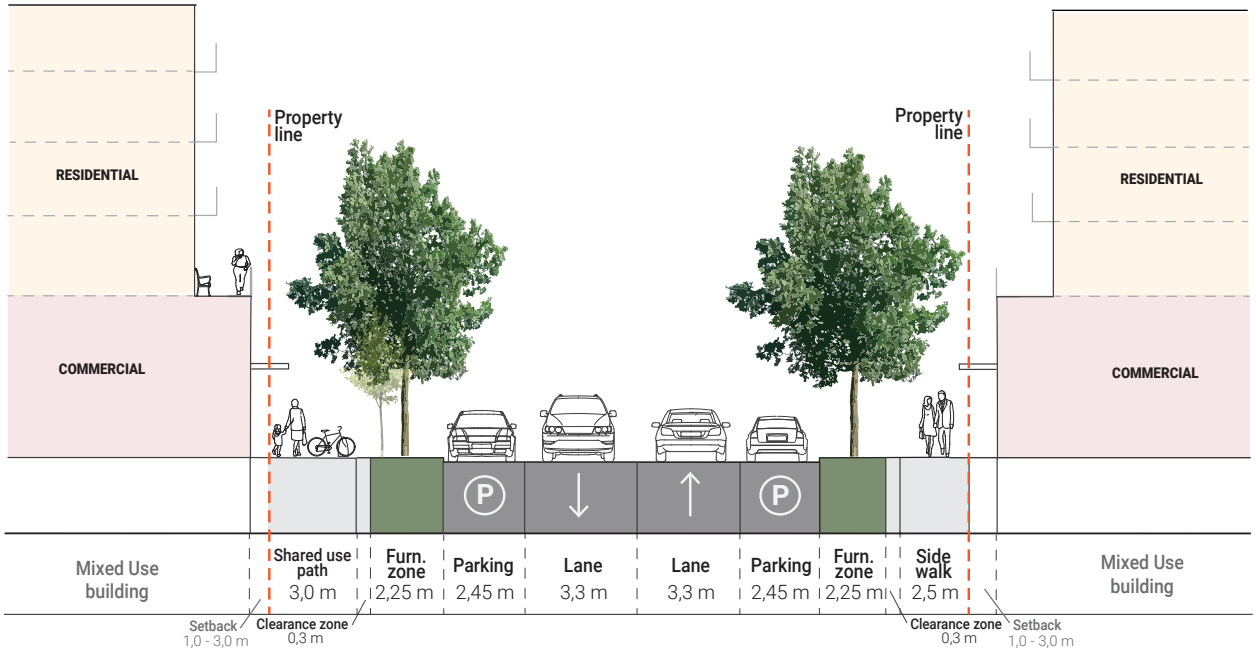


1 51 AVE NW / HIGH-DENSITY RESIDENTIAL

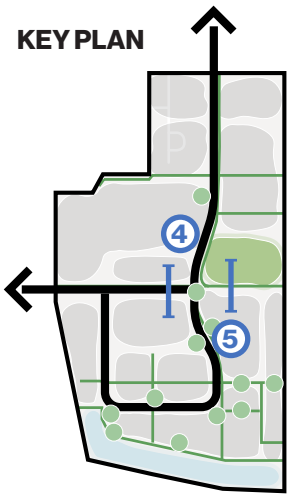


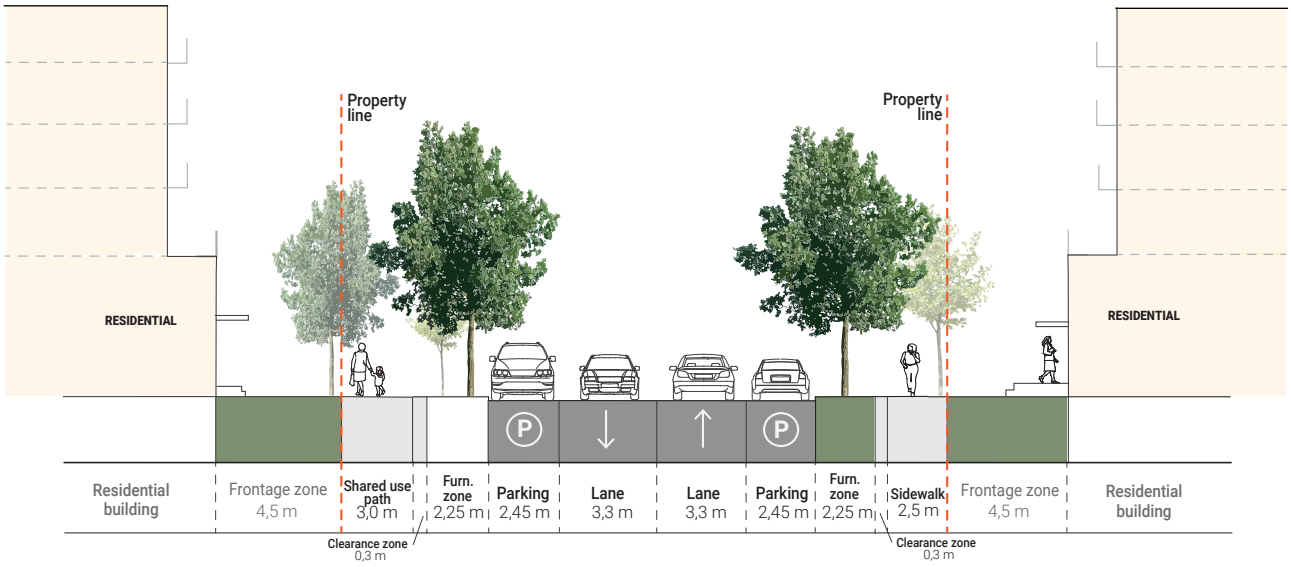


2 MEDIUM-DENSITY RESIDENTIAL

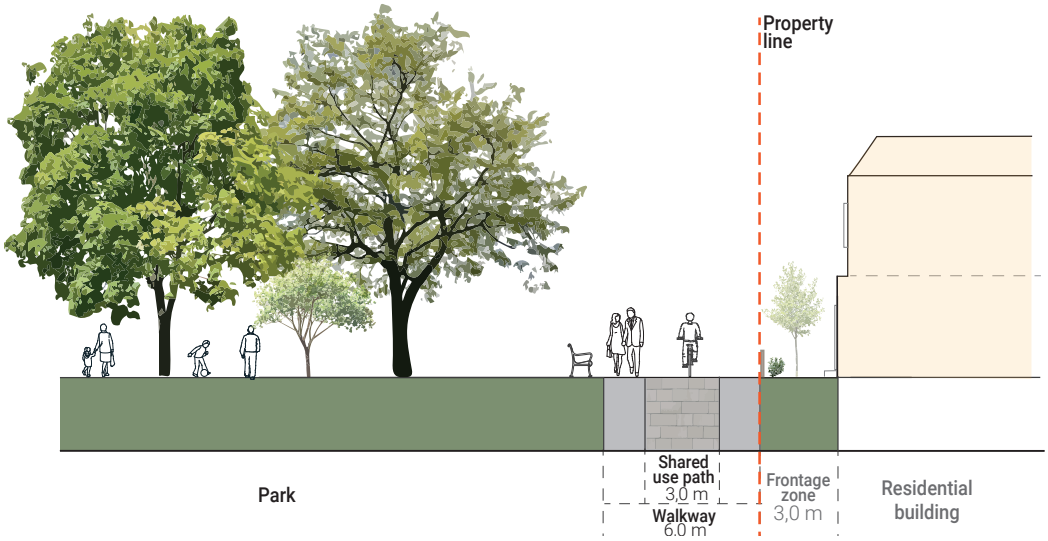


3 MIXED USE DEVELOPMENT WITH COMMERCIAL BASE

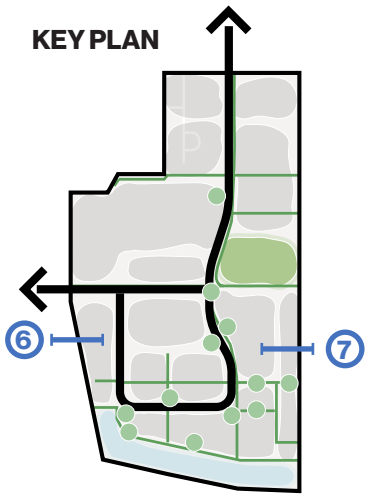


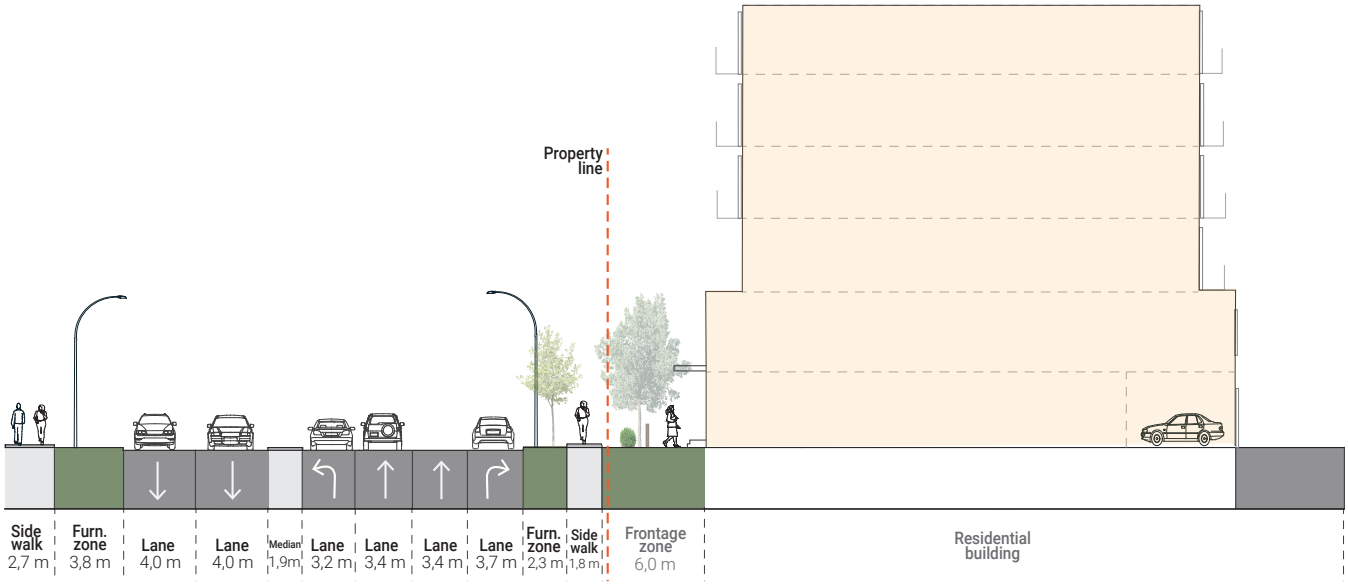


4 MIXED USE DEVELOPMENT WITH RESIDENTIAL BASE

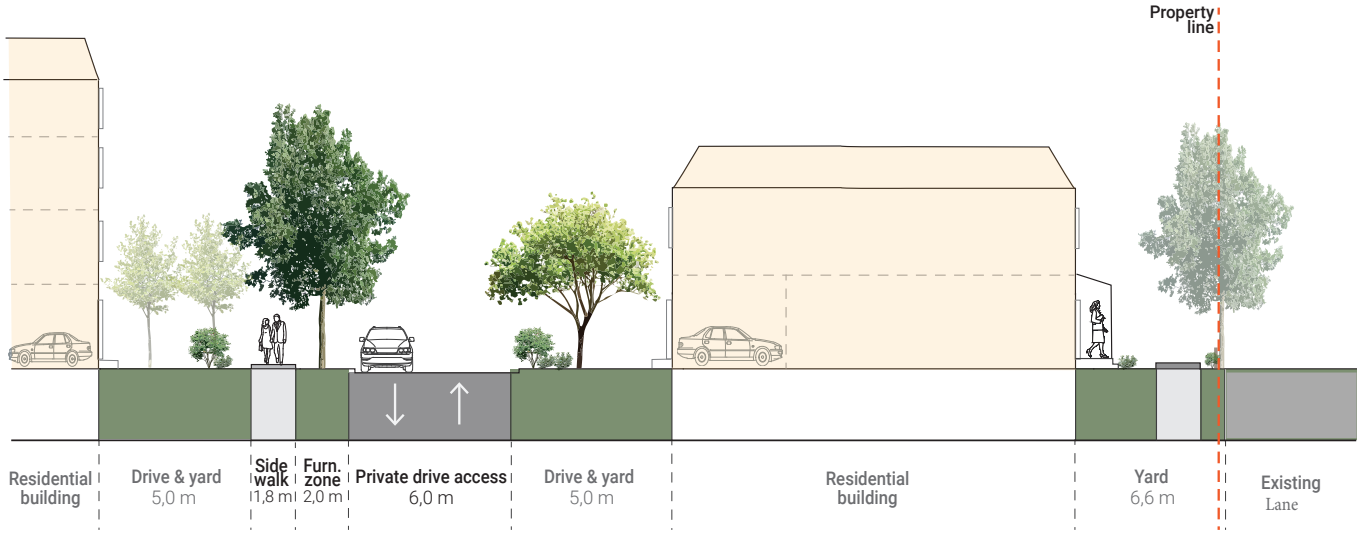


5 PARK

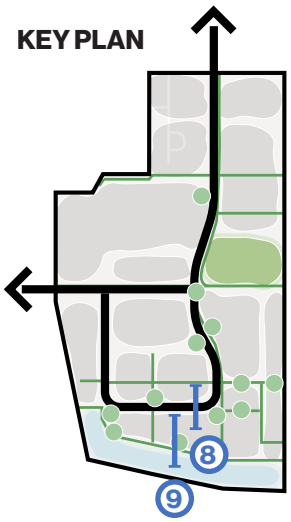


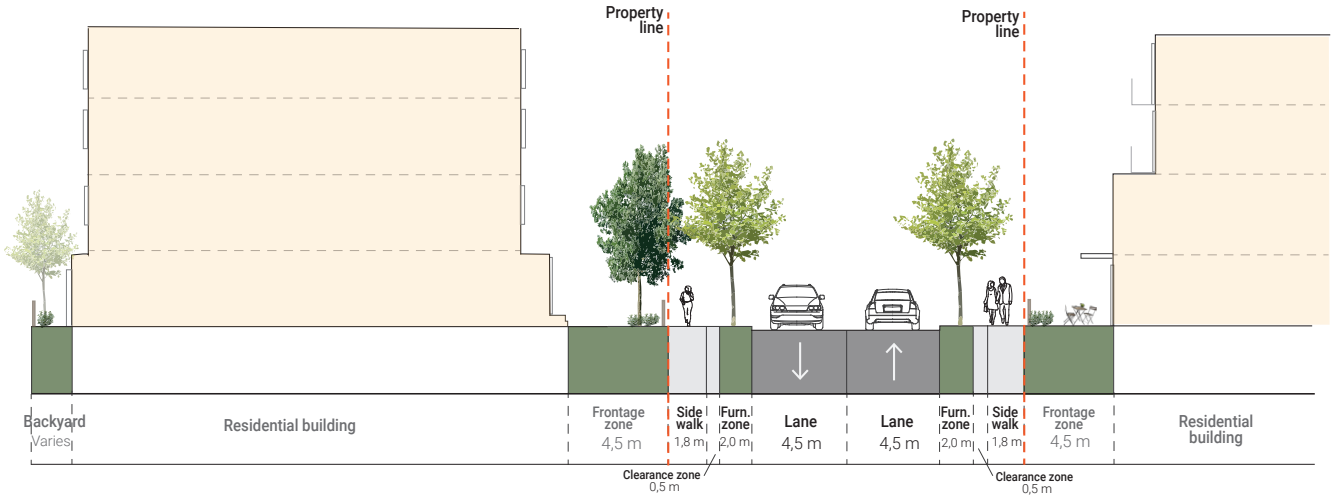


⑥ HIGH-DENSITY RESIDENTIAL

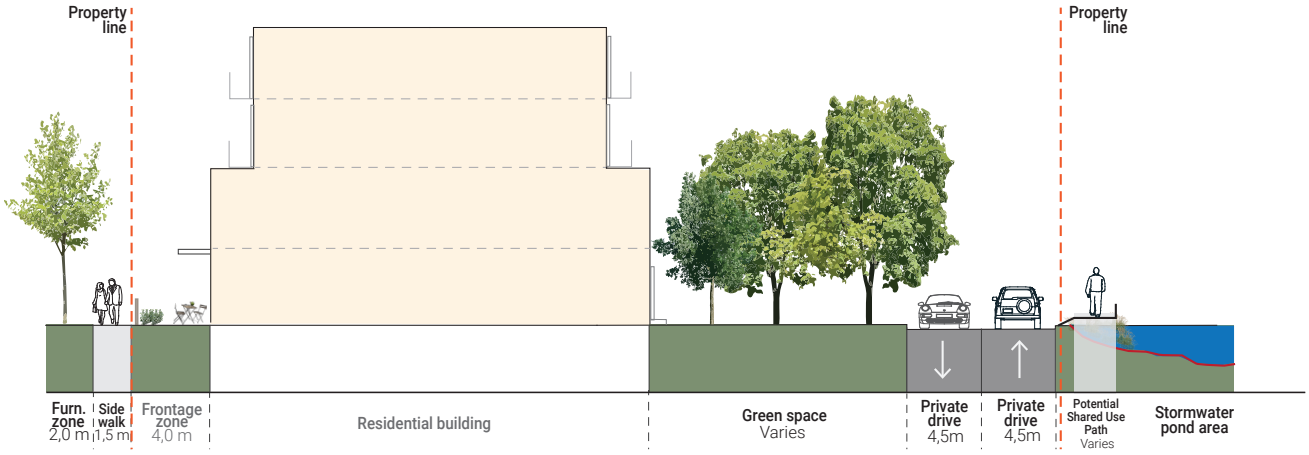


⑦ LOW-DENSITY RESIDENTIAL





8 MEDIUM AND HIGH-DENSITY RESIDENTIAL AREA



9 MEDIUM-DENSITY RESIDENTIAL / STORMWATER POND AREA

Active Modes Network

Michener Park is intended to be a walkable, complete community. This includes providing residents and visitors with alternative modes of transportation that supports users of all ages and abilities to access destinations within Michener Park, such as the various open space and commercial amenities, as well as providing connections to areas that are external to Michener Park such as the Whitemud Creek Ravine.

Michener Park's active modes network will be well connected, which will help reduce the number of vehicle trips within Malmo Plains in addition to promoting active transportation and social interaction. An efficient and continuous pedestrian network, which has been designed around 48th Avenue and the north/south collector road, will serve to connect key destinations within Michener Park, and to the external transit corridors along 122nd Street and 51st Avenue. A combination of sidewalks and shared use paths along these two intersecting roadways will be designed in a manner that encourages pedestrian movement.

In addition to the pedestrian network, cycling will be supported through the provision of cycling facilities along 48th Avenue, the north/south collector road north of 48th Avenue, and adjacent to the SWMF at the southern end of Michener Park, to connect residents to the shared-use paths along 122nd Street as well as 51st Avenue. The connection along 48th Avenue will extend through the centrally located park thereby providing residents of Malmo Plains with a direct cycling and pedestrian connection to the shared-use path along 122nd Street as well as the Whitemud Creek Ravine trail system.

Policies

1. Require a network of hard-surfaced sidewalks, walkways, and shared-use paths be provided to promote walkability, cycling, and access to internal and external community amenities.

2. Require street design features such as but not limited to raised crossings, mid block crossings, traffic bumpouts, pavement material or marking changes, and signage to promote pedestrian, bicycle and vehicular safety.

3. Require active transportation facilities be designed in a manner that are safe for all ages and abilities during all seasons.

4. Require a shared-use path be provided through the centrally located park space. The enhanced shared use path through the park from 48th Avenue shall be a 6m wide public ROW facilitating the safe passage of active transportation users. A change in paving pattern, signage, bench seating, trees and lighting will embed the enhanced shared use path as an amenity within the park.

5 With the construction of the north-south collector connection to Michener Park at 51 Avenue, require the construction of a 1.5 m sidewalk on the north side of 51 Avenue from the collector connection to the existing transit stop to the east, and appropriate pedestrian crossing control infrastructure at the intersection of 51 Avenue and the north-south collector.

6 Require active modes connections to Malmo Plains be provided at 49th Avenue, 48th Avenue, and 46th Avenue. These connections should be of a quality that improves connectivity and community, increases connectivity of Malmo Plains and Michener Park.

7 Require a shared use path to provide connections along 48th Avenue to 122nd Street.

8 Require all local roadways to be designed with sidewalks on both sides of the road.

9 Require mid-block crossings to be designed to facilitate safe pedestrian movements across 48th Avenue and the north/south roadway.

10 Encourage vehicular access to residential developments to be from a rear lane in order to reduce vehicle and pedestrian crossings due to front driveways.

11 Encourage the employment of Transportation Demand Management strategies and tactics as appropriate.

Infrastructure

Analysis was conducted of the site's existing servicing capacity for water, sanitary sewer, and storm water. The results of this analysis and recommendations for new infrastructure are summarized in this section. All of the figures are conceptual. The exact routing and tie-ins will be determined at detailed design and engineering and will not require amendments to this Master Plan.

Each of the proposed lots within the Michener Park Redevelopment will be serviced by sanitary, storm, and water via a network of sewers and mains located within the public road right-of-way. These sewers and watermains will eventually become owned by EPCOR Water and EPCOR Drainage after installation. Each lot will have a single set of water, storm, and sanitary services, and in accordance with City of Edmonton Bylaws, no cross-lot servicing will be allowed.

The new Michener Park sanitary sewer will connect to the existing EPCOR trunk sewer within the 122nd Street right-of-way at the existing manhole located on the southwest corner of the site. The Michener Park sanitary system will also connect Galbraith House from the existing sanitary sewer on the west side of the proposed commercial site. The conceptual layout of the sanitary sewer system is shown in figure x.

The storm sewer system will connect to the existing EPCOR 825 mm storm service located at the south property line of the Michener Park site. Similar to sanitary above, Galbraith House will connect to the new Michener Park system via the existing storm sewer located on the west side of the commercial site. The conceptual layout of the storm sewer system is outlined in figure x.

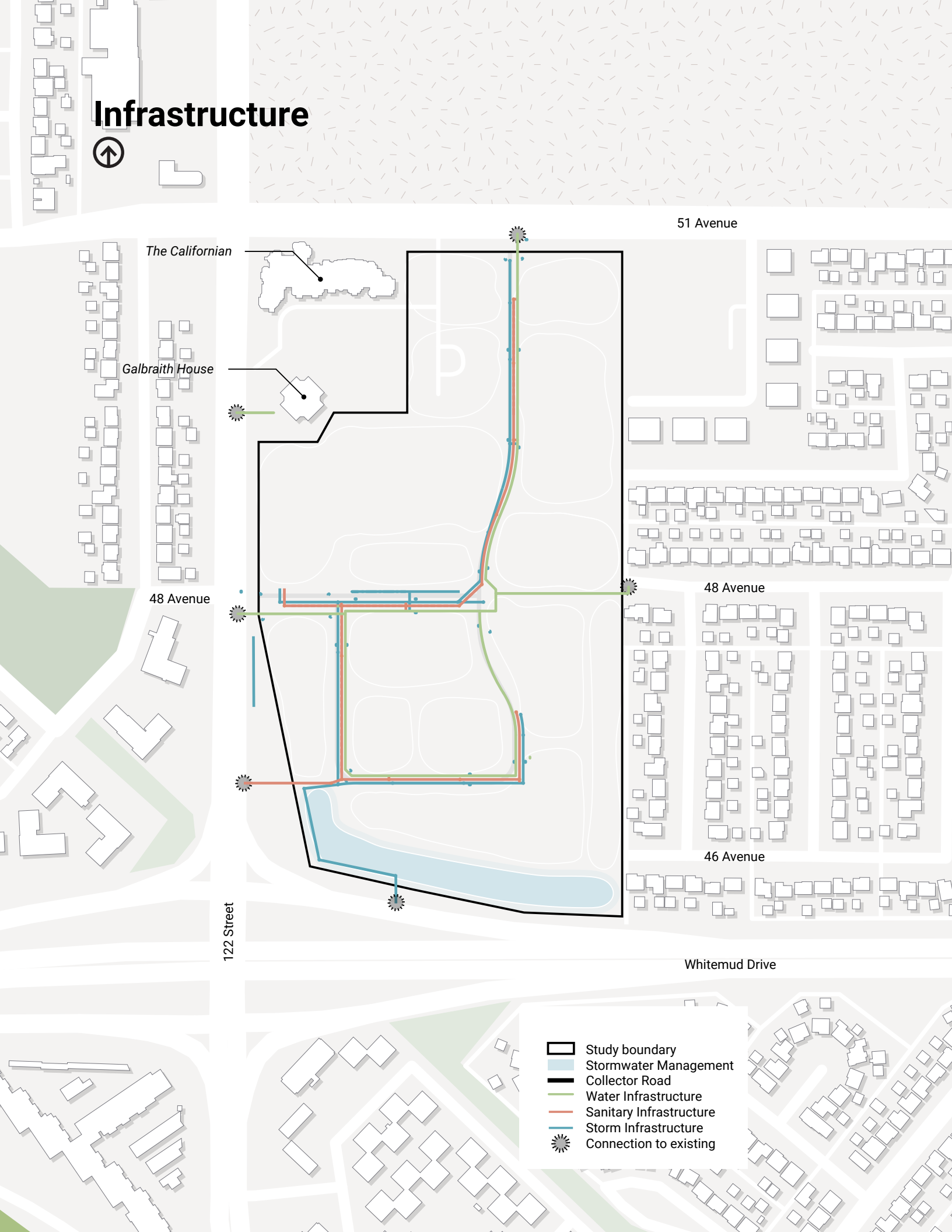
As Michener Park falls within the Whitemud Creek catchment area, allowable storm flows from this redevelopment will be restricted. As such, a stormwater management facility is necessary for storage of the major storm event in excess of the allowable flow release rate. In combination with restricted flows within each site, sufficient storage will be provided for the entire Michener Park redevelopment area. The stormwater management facility will be a public facility owned by EPCOR Drainage after construction, and must be designed to meet all requirements of the City of Edmonton. Design details and requirements are outlined in the Michener Park Drainage Report.

The Michener Park watermain network will have three connection points to the existing EPCOR Water system in order to provide sufficient domestic consumption and fire flows for the proposed lots. There will be a connection to the existing main on 122nd Street at the 48th Avenue access, a second connection to the existing main on 51st Avenue, and a third connection to the existing main on the east Michener Park property line on 48th Avenue. In addition, the current water service for Gallbraith House running through Michener Park will be abandoned, and a new service for Galbraith House will be provided from the existing watermain on 122nd Street. Onstreet hydrants will also be provided within the development to meet City of Edmonton requirements appropriate for the rezoned areas. Detailed flow analysis and requirements are outlined in the Michener Park Hydraulic Analysis.

Policies

1. Require that the water, sanitary, and stormwater drainage systems within Michener Park are provided at a full urban standard.
2. Require sanitary and stormwater servicing to be provided in accordance with the associated Servicing Report for Michener Park.
3. Require water servicing to be provided in accordance with the associated Hydraulic Network Analysis for Michener Park.
4. Encourage the use of Low Impact Development principles that promote stormwater infiltration, filtering, storage, and evaporation.

Infrastructure



Chapter 4

Michener Park Urban Design Guidelines

Introduction

The redevelopment of the Michener Park lands embraces the neighbourhood character from open space, form of development, through to sensitive density interface between the surrounding communities. The results are a diverse, walkable, mixed-use community with a focus on connection.

How to use these guidelines

Urban Design Guidelines (UDG) use a combination of written text, graphics and precedent images to provide a high-level vision that demonstrates the important relationship between buildings and the public realm, components of the public realm and surrounding built form to establish or enhance the character of Michener Park.

This document outlines the guidelines and requirements for the design and eventual redevelopment of Michener Park. By providing guidance on the design related to the built form, public realm, open space, accessibility, mobility, and sustainability, these guidelines are intended to support cohesive design and to create a successful urban environment with an identifiable sense of place.

These guidelines have been crafted to ensure that the growth and redevelopment of Michener Park supports the mandate of the University of Alberta's Properties Trust and is aligned with the goals and principles outlined within the Michener Park Redevelopment Master Plan.

Furthermore, guidelines have been created with reference to existing City of Edmonton plans, bylaws, and standards, as well as applicable building codes and design and construction standards. The result is a set of design guidelines that will help realize the potential of Michener Park by being grounded in best practices for designing a vibrant, attractive, and sustainable community.

Overall Intent: Establish a vibrant, pedestrian-oriented environment and successful mixed-use center.

The intent of the guidelines is to:

1. Assist in implementing the goals of Michener Park's Land Use Concept;
2. Create a sense of identity and connectivity within the Community;
3. Create a sense of identity through the design of built form, streets, and open space that residents and visitors can recognize as characteristics of the community;
4. Address pedestrian comfort and amenities through the provision of well-designed streets and a network of parks and open spaces.
5. Provide a future framework for the logical and cohesive development of the Michener Park community.

Community vision

Michener Park will be a walkable, liveable, and inclusive community with a variety of residential unit types supported by neighbourhood focused retail. Through considered density, legacy open space, streetscape design, and walkable connections, Michener Park will be a vibrant village center with a comfortable relationship to surrounding communities.

Design Intent

Ideas generated by the community consultation

- Community led ideas to encourage buy-in and ownership of the development story
- Enable meaningful community exchanges through physical design
- Inclusion of 'Neighborhood-building' spaces, open space, public realm, and services (Retail, Parks, treed streets)

Creating strong Connections

- Create a mix of public and private open spaces (Size and type, Active Spaces)
- Create clear mobility routes and access to streets, paths, and parking
- Create strong emphasis on complete streets
- Create a community Urban Park as the 'Green Heart' of the Master Plan
- Encourage social interaction, walking and building community resiliency
- Create safe communities through pride of place and Crime Prevention Through Environmental Design principles (CPTED)

Enhance the pedestrian environment

- Promote walkability: network of internal and external pedestrian connections
- Create visual interest along the street
- Incorporate a rich variety of materials
- Provide and enhance pedestrian circulation and focus retail opportunities to provide neighborhood services and be a local destination

Integrate motor vehicle access and parking

- Minimize the visual presence of parked cars
- Create convenient parking around retail nodes
- Provide landscaping opportunities in parking areas

A mix of uses = a mix of building types and unit options

- Create a variety of building types, scales, and materials
- Express a three-dimensional quality to the public spaces
- Encourage different unit/building types to increase diversity in community (ageing in place, seniors, families, singles, and couples)

Appropriate massing and scale:

- Create pedestrian spaces with access to sun and greenspace
- Sensitively address surrounding edges and interface into existing communities (green edges, paths, connections and overlook)
- Express human-scale, detailed street level building facades
- Create massing that address the street with welcoming and social forms of development (i.e.-porches, front doors on street, reduction of blank walls)

Sustainability and Resiliency

- Establish macro-scale/site sustainable strategies that mesh with Master Plan's Sustainability and Resiliency goals
- Pursue building-specific sustainable strategies that are specific, measurable, and achievable
- Encourage commercial tenant-specific sustainable strategies tailored to commercial development

Mixed-use development

- Provide meaningful and targeted village retail opportunities that provide service to the community and respond to the scale of the development
- Provide access and parking that serves the retail and enhances the streetscape, safety, and liveability

Michener Park will feature a mix of uses, across different intensities, throughout to allow needs to be met locally while having access to amenities in the surrounding areas. As part of encouraging healthy, active lifestyles, alternatives to getting around will be provided through walking, cycling and transit.

Relationship to City policy

As Michener Park is located within the City of Edmonton and will be subject to zoning included within the City of Edmonton's Zoning Bylaw. The Design Guidelines are meant to be read in conjunction with all current plans and policies in effect for the development area. It is the intention of these guidelines to provide additional direction beyond the requirements from the City of Edmonton and the Province of Alberta to create a distinct and exceptional development.

The proposed rezoning, Master Plan, and Design Guidelines were presented to the Edmonton Design Committee (EDC) for review. The rezoning, Master Plan, and Design Guidelines are in conformance with EDC's urban design principles which resulted in support from EDC for the application

Community structure

Michener Park's public realm and built form responds to, respects, and incorporates several infrastructure features including a central park and 48th Avenue NW. The community is structured around a central main street on 48th Avenue, a north south spline to 51st Avenue and a centrally located park. A range of land uses including residential, commercial/ employment, and open space, will build a complete community with a variety of services and amenities to meet the day-to-day needs of residents and visitors.

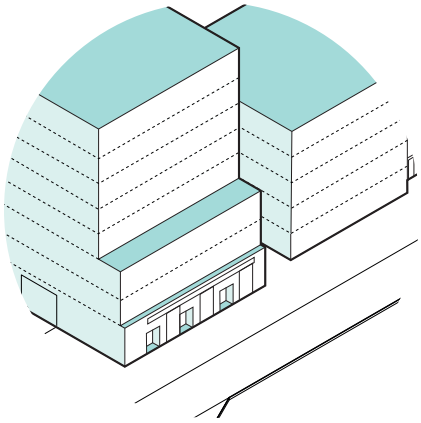
Michener Park's road network is a defining feature, not only as important transportation routes but also as places that will feature high-quality built form, landscaping, and connections to the interior of the neighbourhood to make them inviting and attractive public places. A key part of Michener Park is the pedestrian connectivity with the surrounding communities.

The community's main street, and adjacent streets, are identified as active street frontages to ensure that adjacent buildings are oriented towards these streets and frame the public realm to enhance pedestrian comfort. Buildings along these streets will be held to a higher design standard with the majority of at-grade façades composed of active frontages and upper-floor facades composed of windows and balconies that facilitate passive surveillance of the street below.

A network of sidewalks, shared use pathways, and trails will provide safe and convenient access to and through the community. The community will be composed of a combination of low, mid, and high-rise buildings to facilitate a range and mix of dwelling types and respond to their context and relationship with the public realm. Building heights will vary across the community but generally increase from low-rise (2 to 2.5 storeys) in the southeast closer to existing dwellings up to medium / high-rise dwellings moving north and west.

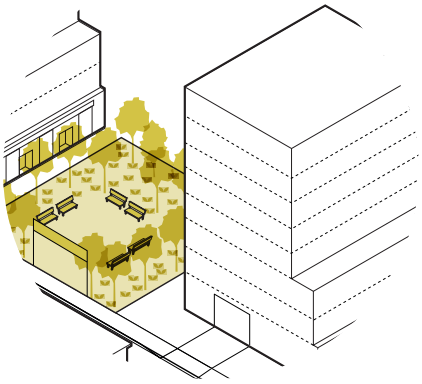
Organization of the Design Guidelines

The Design Guidelines themselves have been organized into four main areas that are listed below:



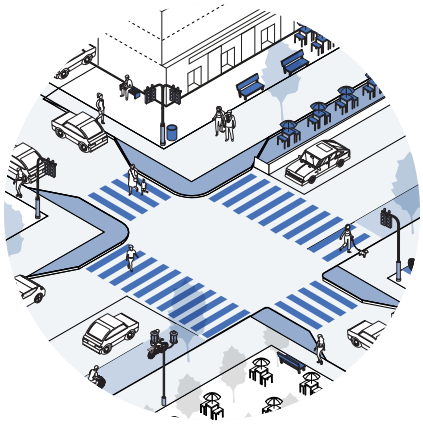
Built Form

which is centered on the buildings and structures found within Michener Park.



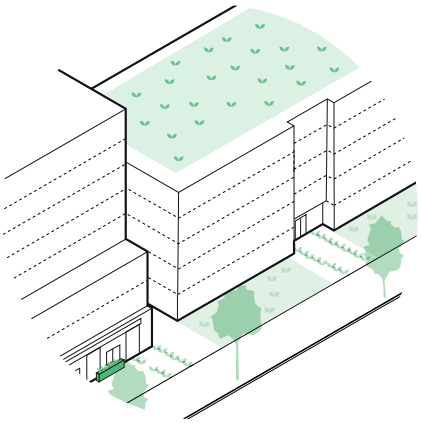
Public Realm and Open Space

which is centered on the performance and design of public spaces and the open space network and landscaping.



Mobility and Accessibility

which focuses on multi-modal movement through the site.



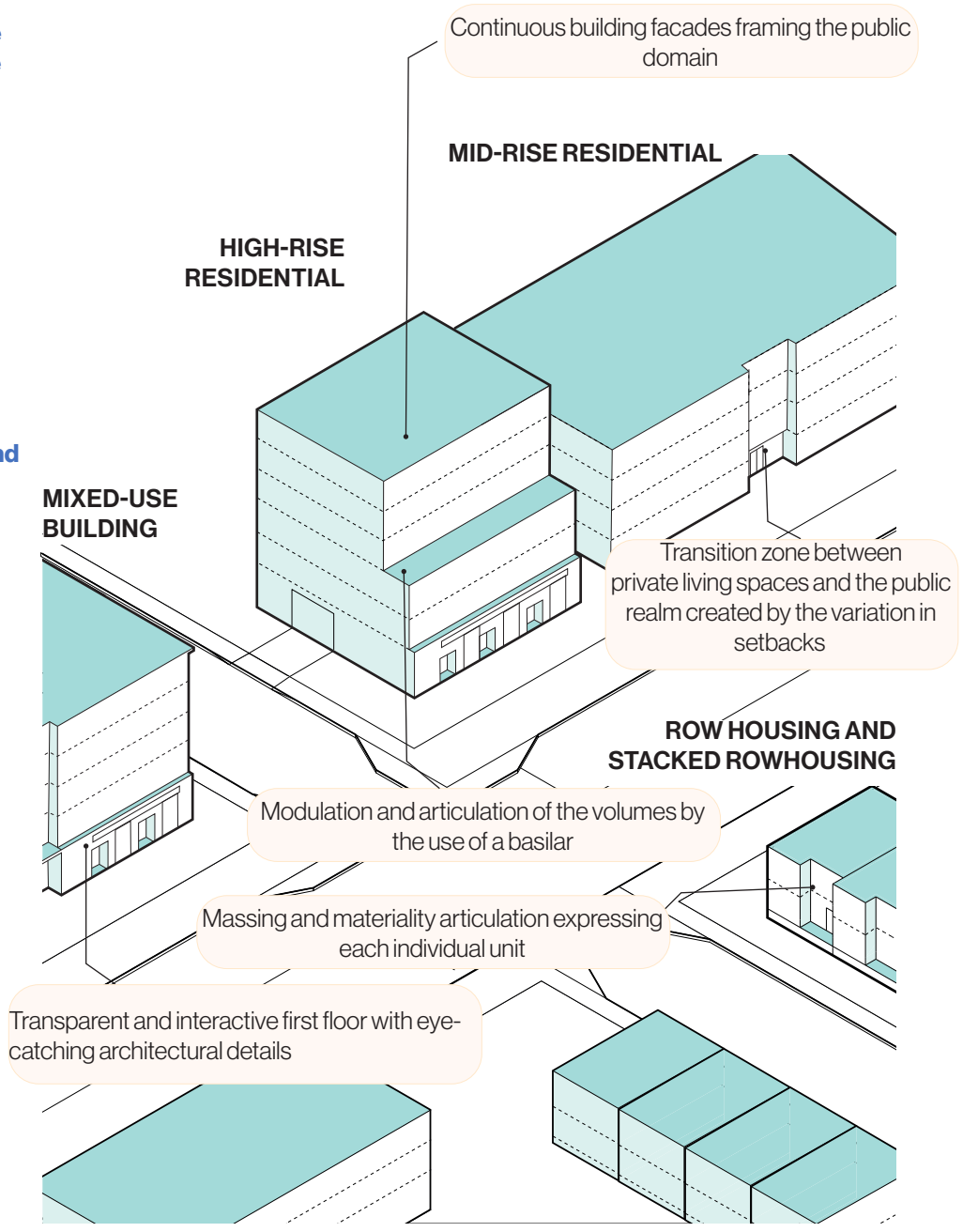
Sustainability, And Resilience

which provides commentary and direction on creating strong sustainable, independent and resilient communities.

These guidelines establish a common language for architects, designers, and builders engaged in or proposing development within Michener Park. Therefore, these guidelines should be applied through subdivision design, zoning, design and construction standards, and developer architectural control.

Built Form

There is an interconnectedness and nuanced relationship between buildings and the public realm. Building design, massing, and interaction with surrounding structures and open spaces impacts the success and vibrancy of urban spaces and the character of any community. The line between private land and public streets, while important, must read as a development 'whole'. This section is meant to provide an overview of the different components of built form including rowhouses and stacked rowhouses, mid-rise residential, high-rise residential and commercial buildings within Michener Park; therefore, this section will provide guidance on how the built form can interact and improve the public realm while creating a sense of place and community.



Design Guidelines

The following portion of the Built Form specific Design Guidelines include direction on areas that are consistent amongst the various building categories outlined above and are not specific to any particular built form as they apply across Michener Park.

Crime Prevention Through Environmental Design (CPTED)

Creating safe and resilient communities is as much a state of mind as it is part of the physical form of a development. Communities that plan for incorporation of CPTED principles, as a part of the design guidelines tend to retain their character and safety for a large cross section of residents from day one and as the community ages.

All designs must consider the following 3 key CPTED principles and answer to those principles in detailed design of each parcel:

- → Territorial Reinforcement
- → Natural Surveillance
- → Access Control

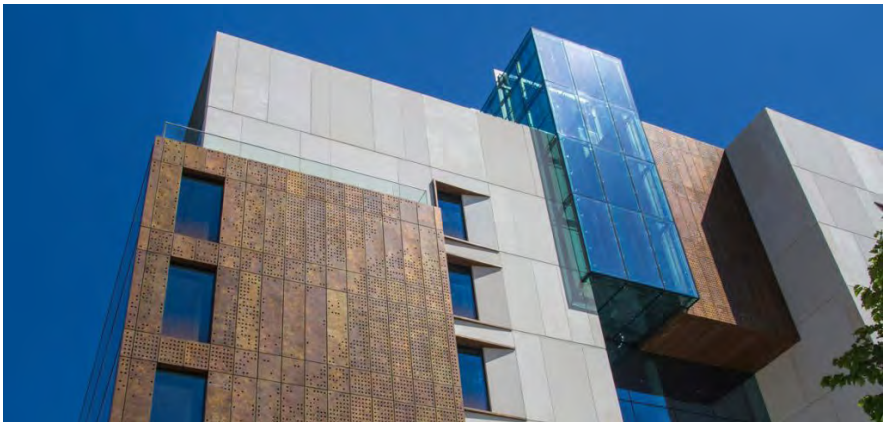
Well-designed communities build in these principles in a way that is not overt or noticeable. Quality developments can be safe, aesthetic, and pleasant environments for current and future generations to enjoy.

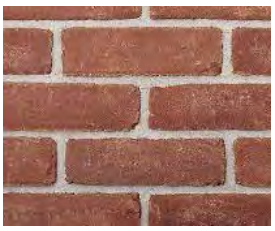
Building Design and Orientation

- Locate the main facade parallel to the street and consider setback of adjacent buildings. Corners should be emphasized with punctuating elements to define corners (i.e.Porches, doors, decks, feature windows, shift in materials). Distinct architectural elements and special materials should be used where appropriate to create interest and character.
- Built forms with covered front porches, stoops, and balconies facing the public realm are encouraged. Dwellings should typically be sited in close relation to the street with minimal setbacks wherever feasible.
- Where possible, driveways should be located at the property line where they can be paired with adjacent driveways to minimize curb cuts.
- Low decorative elements are encouraged to define property lines and define between public realm and private realm (i.e.- low fences, rock gardens, landscaping).
- Porches, balconies, terraces, and stairs are permitted to project a maximum of 2.0 metres from the main building face and feature designs that are complementary to the architectural treatment of the building.
- Windows and interior space planning should encourage active building faces (i.e.- minimize storage, bathrooms, and less 'social' rooms on exterior facades).
- Pedestrian level detail such as lighting, entry doors, mailboxes, benches and fencing to help provide small scale character to the buildings and streetscape.
- A variety of architectural expressions and elevation treatments should be used to avoid monotony within the streetscape.
- Buildings are to be oriented along the street, park and/or open space to establish a street wall that frames the street and creates a vibrant public realm for pedestrian activity.
- Buildings should create a fine-grained streetscape, with individual units and entrances expressed within modulated, articulated building façades. Numerous doors and windows should be provided along the primary façade to increase access and transparency.
- Areas at grade should have pedestrian level forms and detailing to break down the scale of large buildings.
- HVAC equipment, elevator rooms, exhaust fans and other roof top equipment should be incorporated into the overall building design and screened.
- Building setbacks shall establish a strong relationship to the street and define the street edge as the interface between the public and private realms with high-quality pedestrian infrastructure such as shaded seating, lighting and landscape elements.
- Avoid continuous roof lines through the use of projections, changes in vertical plane, and prominent building elements, particularly at entries, on street axes, at pedestrian walkways and at site entrances.
- Anchor key streets and prominent corners by providing noticeable architectural forms. In this regard, buildings will "turn" the corner, i.e., have articulated facades facing both streets.
- Provide built elements that acknowledge view termination axes of streets, or vehicular or pedestrian circulation routes, for example, through a change in shape or material.
- Incorporate utility transformers and vaults as part of the building unless the utility provider requires otherwise. If the use of pad mounted exterior transformers is required, they should be screened through the use of landscaping and placed in less visible locations where possible.

Materiality

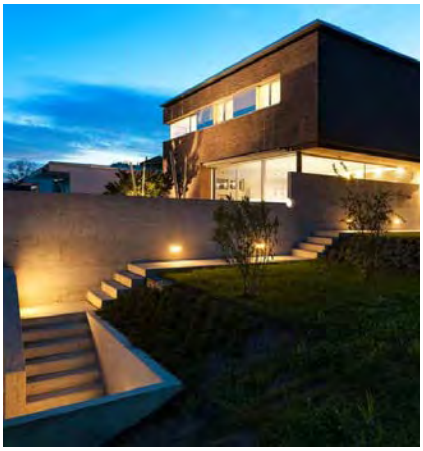
- Provide variation of exterior materials per building to introduce texture and visual diversity to building surfaces such as, but not limited to, brick, stone, or wood.
- Ensure that the materiality of buildings is consistent with the intent of the overall character and design of Michener Park.
- Provide purposeful termination of building façade materials, through plan changes (jogs in the building), projections, or other elements.
- Minimize changes of façade materials within the same plane.
- Provide materials and finishes of high quality, durability, and timelessness.
- Contrasted or saturated colour palettes on building facades is encouraged to improve the year-round and seasonal visual interest of buildings.



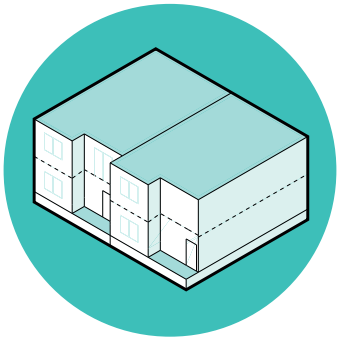


Lighting

- Lighting for buildings should be designed in a manner that improves building design as well as visibility and safety for users and pedestrians.
- Lighting should minimize glare and light pollution while enhancing architectural features.
- Creative and colourful lighting may be utilized to foster visually appealing architecture and designs year-round
- Lighting should be incorporated into the design of buildings that ensure pedestrian and vehicular entrances are easily identifiable at night.
- Consider energy efficient LED lighting, solar street lighting, and full cut-off fixtures.
- Lighting for commercial areas shall be designed to ensure they do not directly shine into residential units.



Type 1
Row Houses

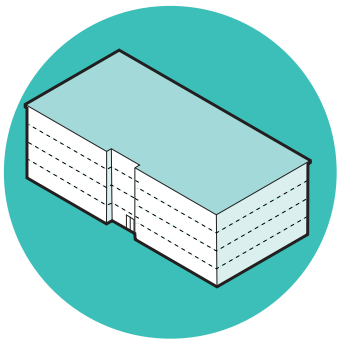


Row Houses are generally 2 to 3 storey structures that share a sidewall with a neighbouring unit. They also have a front and a back.

Design Guidelines

- → Row Houses should be fully attached above grade.
- → The massing and materiality of rowhouses should be articulated to express each individual unit.
- → Garages for Rowhouses are encouraged to be located at the rear and to be accessed from rear lanes.

Type 2
Low-Rise Residential and Stacked Rowhousing

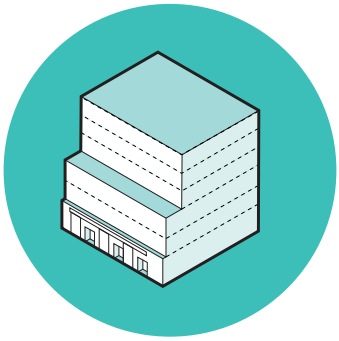


For the purposes of these guidelines Low Residential is any residential building that is a maximum of four storeys.

Design Guidelines

- Consider building forms that have attractive and active ground floors, with elements such as but not limited to pedestrian character, rowhouse style at the base, and avoid monolithic forms.
- Elements such as, but not limited to, architectural features, awnings, ground floor setbacks, and recessed entrances should be included to provide weather protected fronts and building entrances.
- Large windows and upper storey balconies are encouraged in units facing parks to promote casual surveillance.
- Facades should incorporate forms of articulation such as using different building materials to create a transition between upper and lower storeys, material breaks, and window differentiation. This transition should be placed at an elevation that compliments adjacent buildings and helps create a cohesive visual pattern along the street frontage.
- Main entrances should be designed as a focal point of the building and should face the street. They should be recessed or covered and provide visibility to interior lobbies to allow for safe and convenient arrival and departure from the buildings.
- The provision of semi-private amenity spaces (i.e. courtyards, plazas, etc.) at ground level is encouraged.
- Residential apartments are encouraged to include private amenity space (i.e. balconies/ terraces) where feasible to enhance the private living environment of residents.
- Where appropriate, activity-generating and public ground floor uses are encouraged including residential units at grade, lobbies, and amenity areas to support the adjacent public realm.
- Activate the transition zone between private living spaces and the public realm by orienting primary unit entries on the ground floor towards adjacent public amenity areas, open spaces, or public rights-of-way.
- For mixed use buildings, ground floor heights should be a minimum of 4.5 metres to accommodate retail uses and provide sufficient clearance for loading areas.
- Integrate the screening of rooftop mechanical equipment through the design of facades, rooflines, and parapet conditions. Screening should be compatible with other materials and colours used on the building. Where buildings are adjacent to existing or planned high density residential uses or other tall buildings, all rooftop mechanical units shall be enclosed, with louvers or other appropriate means of ventilation employed as required.
- Locate areas for waste storage and recycling within buildings wherever possible. If waste is housed outside, the facility should be aesthetically screened and designed to match the prevailing character of the subject building.

Type 3
Mid-Rise Residential



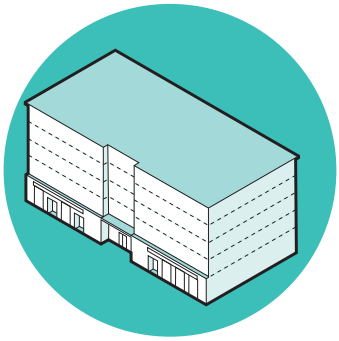
Tall buildings are important in establishing a compact, walkable, and transit-oriented community in Michener Park and are already part of the existing community fabric. They also provide the greatest densities and uses for residents and play a significant role in contributing to the creation of a vibrant community. For the purposes of these guidelines, Mid-Rise Residential is considered any residential building a maximum of 6 storeys.

Although no high-rise residential above 6 storeys is proposed at this time, should an application for high-rise residential be submitted, all design guidelines for mid-rise residential shall be applicable along with any necessary City policies and guidelines. Rezoning will also be required along with any necessary updates to the Master Plan and Design Guidelines.

Design Guidelines

- Buildings shall be sited to create continuous building frontages at street level, increase the efficiency of services, minimize internal circulation, and maximize views.
- Consideration of microclimates, winds, snow build up, access to sun, and shadows must be factored in the design and placement of high buildings.
- For mixed use buildings, ground floor heights should be a minimum of 4.5 metres to accommodate retail uses and provide sufficient clearance for loading areas.
- Street level units that consider 'rowhouse style' must have entrances clearly visible from the street
- Buildings should create a fine-grained streetscape, with individual units and entrances expressed within modulated, articulated building façades. Numerous doors and windows should be provided along the primary façade to increase access and transparency.
- No building should have any length greater than 15 metres without some form of articulation and/or design element that achieves a break in the visual appearance.
- Vent stacks, roof vents, and other mechanical equipment shall be concealed or screened in a manner compatible with the architectural character of the building or incorporated within the building.
- Areas at grade should have pedestrian level forms and detailing to break down the scale of large buildings.
- Integrate the screening of rooftop mechanical equipment through the design of facades, rooflines, and parapet conditions. Screening should be compatible with other materials and colours used on the building. Where buildings are adjacent to existing or planned high density residential uses or other tall buildings, all rooftop mechanical units shall be enclosed, with louvers or other appropriate means of ventilation employed as required.
- Locate areas for waste storage and recycling within buildings wherever possible. If waste is housed outside, the facility should be aesthetically screened and designed to match the prevailing character of the subject building.

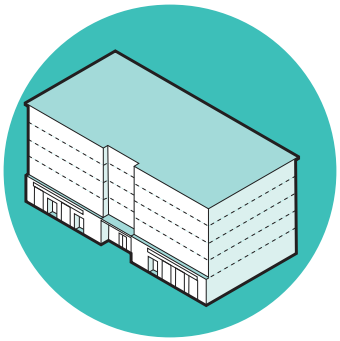
Type 4
Stand Alone and Mixed Use Developments



The following guidelines will apply to standalone commercial uses as well as the retail and/or commercial aspects of mixed-use developments. The design of the residential portion of mixed-use buildings should follow guidelines for Mid-Rise and High-Rise Residential Buildings outlined above.

Design Guidelines

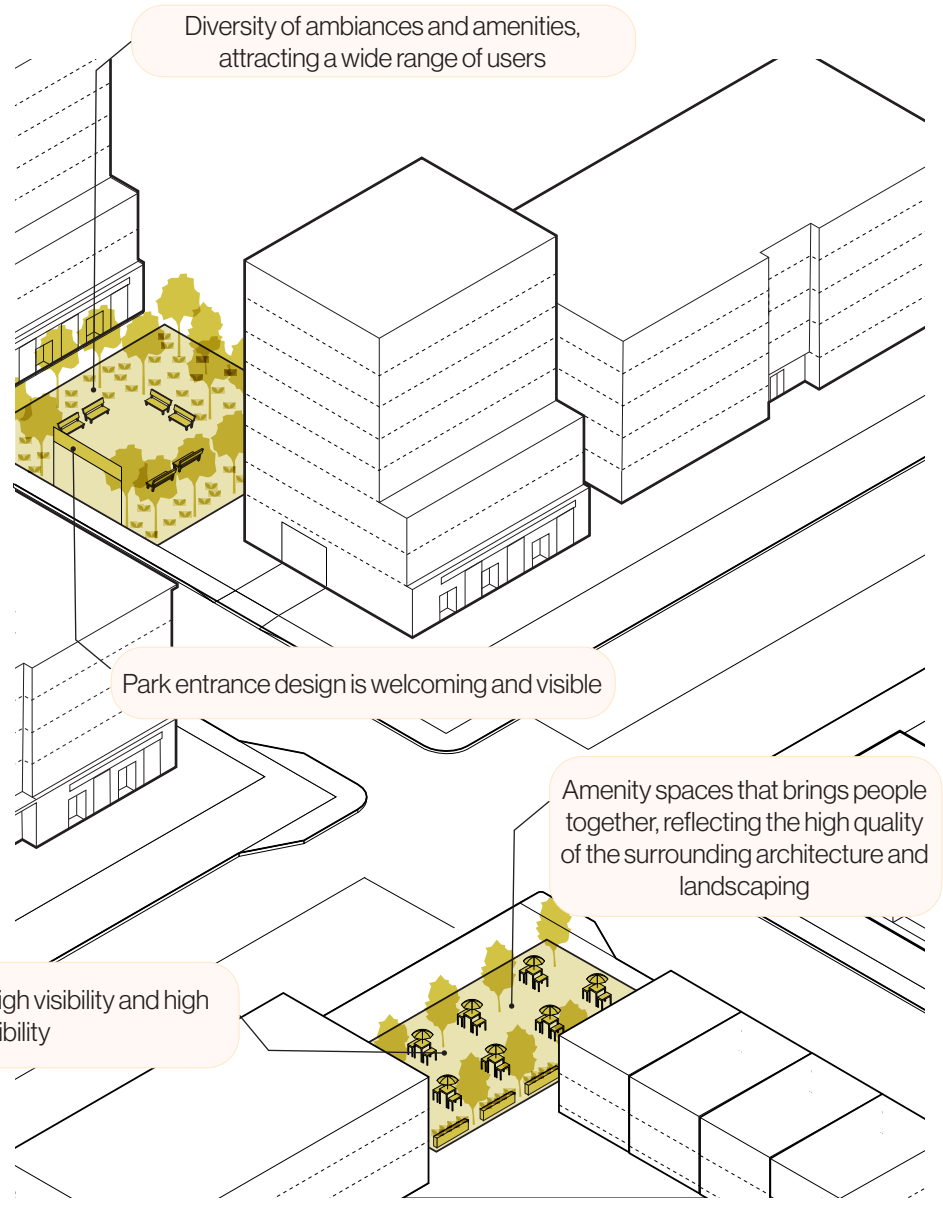
- Where possible, orient buildings to address the street. Building elevations facing adjacent roads shall have a clear "frontal" expression in the detailing of entrances, windows and architectural elements.
- Frontages on pedestrian-oriented streets need to be articulated and avoid monotonous runs and blank faces.
- Frontages on pedestrian-oriented streets need to provide room for public realm features such as, but not limited to, patios, street furniture, and entrances.
- Design spaces at grade that are highly transparent, well-lit, animated, and visible from the outdoor public realm.
- Consider a hierarchy of form and detail to distinguish between retail uses, entrances and residential parts of the building.
- Buildings shall promote a vibrant and pedestrian friendly streetscape through pedestrian scale of details and materials, the provision of windows at grade level, and prominent and sheltered entrances.
- Incorporate a high proportion of windows in the elevations of office/retail components to afford clear, unobstructed sight lines from the office/retail area to adjacent roads, outdoor pedestrian amenity areas, and parking areas.
- Treat side and rear elevations exposed to public view with an appropriate level of architectural detail consistent in vocabulary with the front elevation.
- Integrate the screening of rooftop mechanical equipment through the design of facades, rooflines, and parapet conditions. Screening should be compatible with other materials and colours used on the building. Where buildings are adjacent to existing or planned high density residential uses or other tall buildings, all rooftop mechanical units shall be enclosed, with louvers or other appropriate means of ventilation employed as required.
- Locate areas for waste storage and recycling within buildings wherever possible. If waste is housed outside, the facility should be aesthetically screened and designed to match the prevailing character of the subject building.
- No overhead doors for loading or waste disposal shall be located on a building wall facing an adjacent street, unless screened by another building (e.g., an interior service court).



- Emphasize the main entry using form, colour, and shape coordinated with the building, landscape and signage.
- Provide entrances or entrance elements with an appearance and form that easily leads vehicles and pedestrians to destinations. Encourage principle public entrances to be covered with an entrance canopy or weather protection element.
- Encourage other entrances that are regularly used to have similar architectural vocabulary to the main entrance. Provide distinct and identifiable entrances to individual units within multi-unit buildings.
- Ensure that pedestrian connections to the commercial area are established from all directions and internal pedestrian connections are incorporated within the commercial site's design.

Public Realm and Open Space

The public realm and open space including the stormwater management facility and privately-owned spaces (that are publicly accessible) are part of this section. All components of the public realm and open spaces prov ide spaces that support social interaction, community gathering, social resiliency and recreation, while supporting the ecological and hydrological function of the community. The public realm and open space system will also be functional, safe and interconnected as a system within Michener Park. Connections between communities is as important as connections within Michener Park and should create a network of safe, attractive, and identifiable linkages for pedestrians.

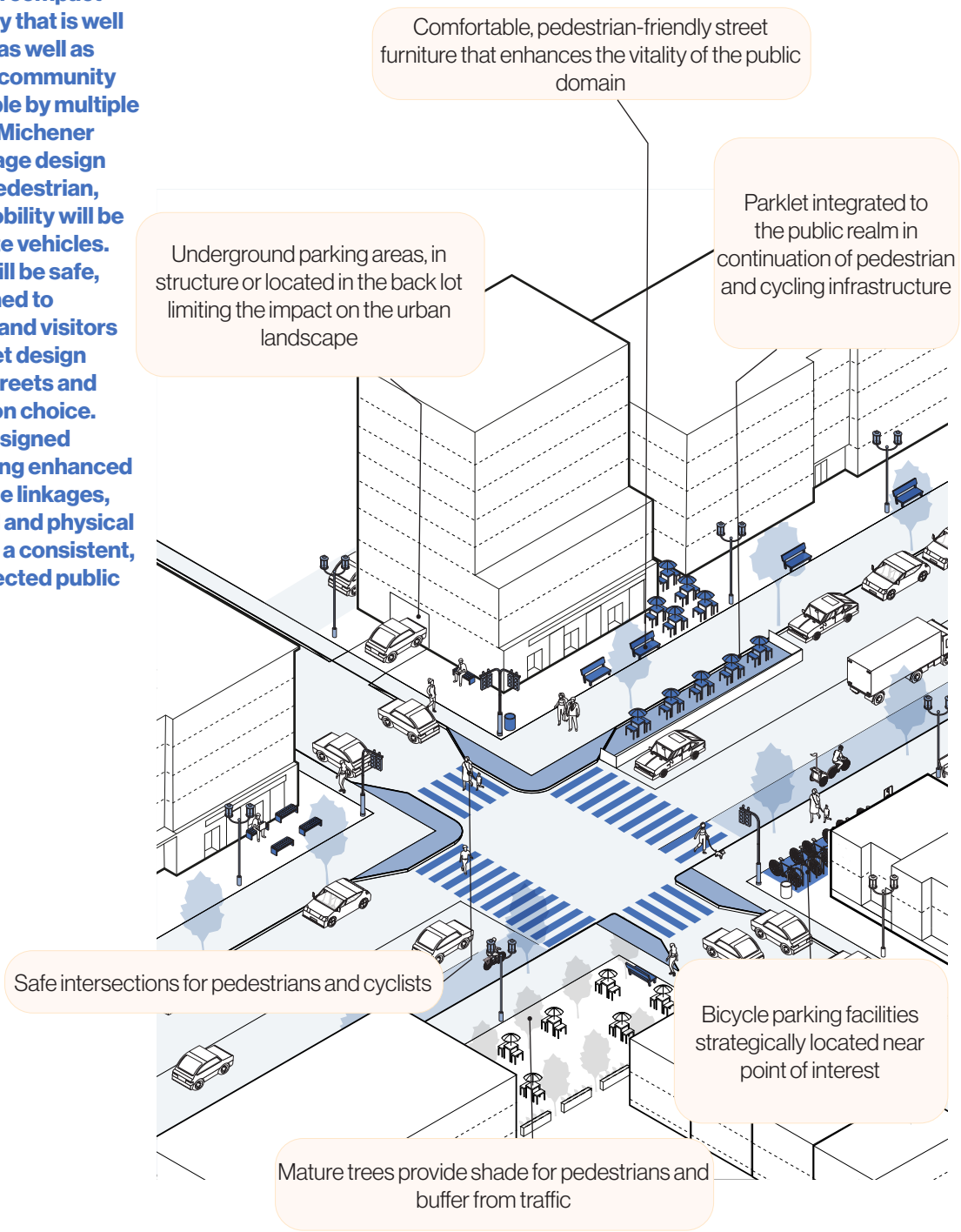


Design Guidelines

- Parks and open spaces to be designed to promote accessibility and usage for all ages and abilities for all seasons.
- Parks and open spaces shall be designed with public safety and CPTED principles in mind.
- Parks will be located strategically for high visibility in the community so that most residents are within a 5-minute walking distance to a neighborhood park or open space.
- The design of parks should consider entrances and amenities such as pedestrian-scale lighting, bicycle racks and wayfinding.
- Built-form adjacent to parks and open spaces, through architectural and/or landscape treatment, will maintain a visual and/or physical connection to parks and open spaces.
- Stormwater management facilities are to be integrated with parkland to visibly create a continuous green space with appropriate measures implemented for public safety.
- Gateways should feature high-quality landscape design that includes elements that enhance the public realm, such as but not limited to wayfinding or landscape features that mark the entry into the community.
- Park entrances should be clearly defined, using landscaping and architectural treatment, pedestrian-scale lighting, and signage to assist in orientation and use of amenities.
- Seating and shade areas should be designed in coordination with pathways and play area locations.
- On-street parking on public roads adjacent to neighborhood parks is encouraged.
- Highly visible connections should link park amenities and facilities to the active transportation network.
- Parks shall connect, wherever possible, to other parts of the parks, open space, and active transportation systems.
- Privately owned, publicly accessible spaces shall ensure a visually pleasing streetscape and contribute to the public realm through high-quality architectural and landscape design that creates a good integration with adjacent built form.
- Large trees along the eastern property line between existing Malmo Plains and Michener Park are to be assessed by an arborist, and where possible, retained to maintain existing green canopy and character. Trees will be assessed on a parcel by parcel basis as Michener develops out.
- Pedestrian and active modes connection from the centrally located park and 48th Avenue (Malmo Plain) shall incorporate design elements that increase the prominence and accessibility of this non-vehicular connection to Michener Park from Malmo Plains.

Mobility and Accessibility

Active transportation, connectivity, and permeability are essential elements of every successful community. Michener Park is conceived as a compact mixed-use community that is well connected internally as well as with the surrounding community and is highly accessible by multiple modes of travel. The Michener Park plan will encourage design and amenity where pedestrian, cyclist, and transit mobility will be prioritized over private vehicles. The street network will be safe, attractive, and designed to encourage residents and visitors to walk or cycle. Street design will facilitate active streets and enables transportation choice. Implementing well designed streetscapes, providing enhanced pedestrian and bicycle linkages, and minimizing visual and physical barriers will establish a consistent, integrated, and connected public realm.



Design Guidelines

- Streets should be framed by buildings to establish a strong street wall.
- Block lengths should be enhanced with breaks in rhythm and punctuated by landscape, lighting, and sidewalks. Larger blocks can be broken up through methods such as, but not limited to, publicly accessible pedestrian connections through the site, walkways, roadways, parks, etc.
- Mid-block connections should promote connectivity to destinations and, where applicable, contribute to existing open spaces.
- Buildings should address the street or corner to which they abut by positioning entrances, large windows, and outdoor features (such as porches, stoops, or balconies) to face the public realm.
- Require that high-traffic pedestrian areas include human-scale pedestrian lighting to ensure safety and comfort of users. Use city-approved fixtures for street lighting along the city streets and master developer approved lighting for private streets.
- Residential sidewalks should be a minimum of 1.8 m in width or greater along streets with active frontages and higher pedestrian volumes. Sidewalk continuity should not be interrupted by driveways or private lanes. Mixed use and commercial frontage sidewalks should be 2.5 to 3.0 m wide as a minimum.
- A 3.0 m shared use path shall be provided along the eastern side of the north south collector and the north side of 48th Avenue.
- Encourage the use of alternative materials or raised crosswalks and walkways within the area to promote a unique, safe, and identifiable character.
- Barrier-free crossings and traffic calming are encouraged where appropriate.
- Encourage the use of pedestrian infrastructure such as boulevard trees, pedestrian-scaled lighting, street furniture, traffic calming bulbs, and garbage receptacles within the furnishing zone of public and private streets to promote an active and robust public realm.
- Trees should be spaced consistently at 6.0 to 9.0 metre intervals (ideally) based on mature size. Additional distance may be required to ensure appropriate clearances from utilities, streetlights, and sight triangles. Sight lines should also be considered in the location of trees planted at intersections.
- Street trees should be placed to grow to maturity under urban soil conditions. In zero lot line, below grade development conditions maintain street tree health through methods such as continuous tree troughs rather than separated tree pits for long term tree viability. A mix of native species should be used within each street for variety and in case of disease.
- Design intersections, crosswalks, and other features where pedestrians and cyclists interact with motor vehicles to prioritize active transportation modes and limit vehicle speeds.
- Where possible, minimize pedestrian crossing distances at intersections and crosswalks by narrowing vehicle lanes and reducing curve radii.

Theme 1
Main Street

48th Avenue NW is conceived as a pedestrian-oriented collector with on-street parking and active frontages. A range of commercial and retail uses with entrances directly onto the sidewalk and active frontages frame the street to create a lively and engaging public space. Wider sidewalks on the north side of main street will allow for safe and barrier-free pedestrian movement as well as patios, outdoor retailing, and congregation. Lighting, street furniture, and garbage receptacles will be regularly spaced along the street and display a consistent high-quality design aesthetic.

Design Guidelines

- Establish contiguous active frontages with entrances, transparent glazing, and uses that are intended to welcome the public. Buildings abutting both the main street and a secondary street or square should continue the active frontage around the corner and along the secondary frontage.
- The main street should ensure a high proportion of tree planting. Closely spaced (6 to 8 metres apart, or double rows) will emphasize the urban tree canopy along the street and walkways. More ornamental tree species may be used to reinforce the importance of the street.
- Encourage patios abutting and within the right-of-way to increase street-level activity and a lively public realm. The main street and streets abutting public open spaces and parks should be the focus of street life. Encroachment agreements with the City of Edmonton may be required to accomodate within public right-of-way.
- The design of the main street abutting walkways, parks, and open spaces will be considered as an integrated public realm with continuation of pedestrian and cycling infrastructure, street furniture, tree and landscape planting, and programmable space.
- Provision of a well-defined furnishing zone set to the curb for plantings, street trees, benches, trash receptacles, signs, etc.
- On-street parallel parking, loading, and taxi/ride-hail queuing are encouraged on both sides of the main street where it does not conflict with sightlines, active transportation safety, or transit operations.
- Distribute bicycle lock-up areas along the street in well-lit and travelled locations while ensuring locked bicycles do not conflict with pedestrian movement or other uses.
- On-street parking may be repurposed for other uses such as patios, on-street vendors, or additional sidewalk space to enhance street activity and reinforce the pedestrian-oriented nature of the street.
- Pedestrian and cyclist comfort and safety should be prioritized over vehicular circulation or travel speeds.
- Sidewalks shall be a minimum of 3.0 m on the north side of 48th Avenue and a minimum of 2.5 m on the south side of 48th Avenue.

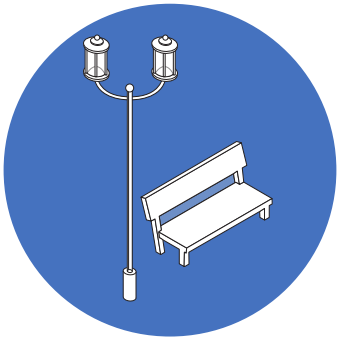
Theme 2
Collectors and Local Streets

Local streets and collectors provide direct access to most dwellings and commercial uses in Michener Park. Streets and lanes are more than travel and access corridors- they form part of the public realm and are often used as informal community spaces. To accommodate this dual nature, streets and lanes should be designed to slow traffic and restrict cut-through vehicle trips.

Design Guidelines

- On-street parallel vehicle parking is permitted on local streets where it does not conflict with sightlines or active transportation safety.
- Provide a sidewalk with a minimum width of 1.5 m on both sides of all streets unless abutting a shared use path.
- Encourage the use of paving stones or other surface treatments at intersections, crosswalks, and parks to emphasize the mixed-modal nature of these areas.
- Ensure streets and lanes do not pose safety hazards to the use of streets for informal community programming (street hockey, skateboarding, dog walking, etc.).
- Consider integrating landscape medians between opposing travel lanes as a traffic calming and landscaping measure.

Theme 3
Street Furniture, Wayfinding and Lighting



Design Guidelines

- Benches shall be provided along retail frontages at a minimum of one per block face.
- Benches should ideally be placed near the curb and face another bench, perpendicular to the street.
- Benches built into building facades are encouraged. Where encroaching into City public right-of-ways, an encroachment agreement may be required with the City of Edmonton.
- Waste and recycling receptacles to be placed in key areas such as high traffic streets, parks and mixed-use areas.
- Encourage the use of uniform decorative pedestrian infrastructure, street lighting, signal lighting and street signage to be incorporated into all areas to promote a consistent character.
- Lighting should be low-impact at a pedestrian scale and designed to prevent 'dark spots'.
- Wayfinding opportunities shall be provided in key locations to orient citizens to parks and open space, trail networks and transit.

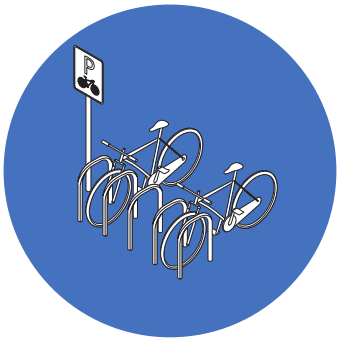
Theme 4
Walkways and Shared Use Paths

Walkways and shared use paths (SUPs) can provide direct active transportation connectivity while limiting vehicular movement. Walkways and SUPs, due to their narrow footprint and low-impact operation, are also suited to provide recreational access to and through natural features and open spaces where vehicular traffic is unnecessary or undesirable.

Design Guidelines

- Walkways or Shared Use Paths should have a minimum width of 3.0 m and be graded and surfaced to be universally accessible.
- A higher order facility should be provided connecting Michener Park to the existing Malmo Plains Neighbourhood at 48th Avenue. The enhanced shared use path shall include elements such as, but not limited to, special pavement/ pavers, landscaping to frame the pathway, and street furniture such as benches.
- Provide wayfinding features (direction flag signs, maps, etc.) where routes and destinations may not be intuitive.
- Locate shade areas that include benches and garbage receptacles at regular intervals along walkways and Shared Use Paths; consider locations with view and outlooks, at converging pathways, and at entrances to parks.
- Balance the need for clear sightlines with the desire to retain and enhance landscaping and vegetation.
- Lots abutting walkways and shared use paths are encouraged to maintain low or transparent fencing to facilitate passive surveillance of the corridor.
- Maintain opportunities for future development to provide pedestrian and cycling connections from the community.

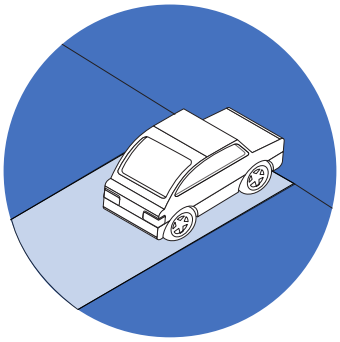
Theme 5
Bicycle Parking



Design Guidelines

- Bicycle parking for residents and visitors should be safe and convenient and should take no longer, and be no less convenient, than parking a vehicle.
- Bicycle parking facilities within civic spaces should be creative, convenient to use, and placed in high visibility areas.
- Projects with residential uses should provide safe long-term and visitor bicycle parking.
- Projects with non-residential uses should provide bicycle parking at a rate set by the City of Edmonton comparable to the intensity of use.

Theme 6
Parking, Loading, and Storage



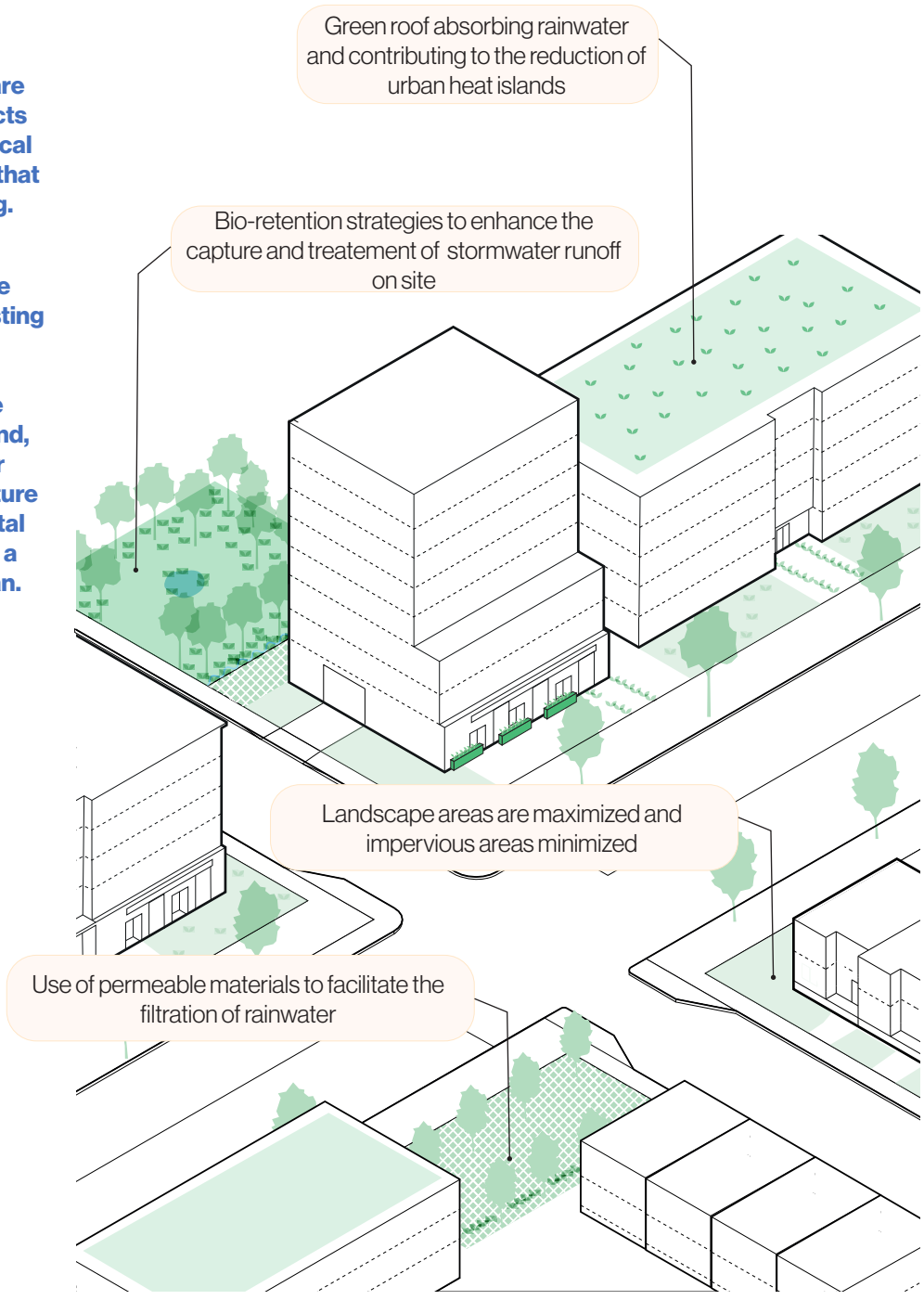
Design Guidelines

- Encourage the shared use of surface parking lots and parking structures to promote efficient use of land.
- Accessible parking spaces should be available near barrier-free access ways to the entry of buildings.
- Consider areas on-street and off-street to accommodate food truck parking spaces in convenient accessible areas to support active frontages.
- Surface parking should be located at the rear of buildings where possible. If the lot is not deep enough, parking should be located at the side of the building.
- Where parking is provided abutting a street, a landscaped buffer shall be provided to screen the parking.
- On street surface parking adjacent to mixed-use developments and retail shall be designed with safety and ease of access. Consider angled stalls and landscaped end islands.
- Elements such as, but not limited to, planting strips, landscaped traffic islands, and/or paving articulation should be used to define vehicle routes and smaller parking lots that provide pedestrian walkways, improve edge conditions, and minimize the aesthetic impact of surface parking.
- All service, loading, and garbage collection areas shall be screened by a combination of planting and architectural treatment similar to the design of the adjacent building. Ramps and entryways to underground parkades are to be designed within the context of the lanes and pedestrian environment by minimizing lane widths, minimizing turning/curb radii, and providing safe pedestrian routes.
- All parkade entrances shall have garage doors. The garage doors should be aligned with the building's architectural character.
- Vehicle entry areas should be clearly marked with signage. Safety sight lines should be maintained.

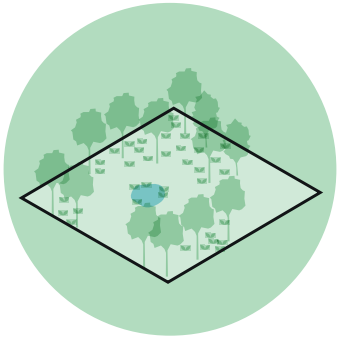
Sustainability and Resilience

Throughout Michener Park, development is intended to be medium-density, compact housing forms with a focus on social connectedness and sensitive urbanization. Sustainability and resilience are tied to both measurable aspects of sustainability and the physical design of space and services that is community lead and serving.

Densification is our biggest nod to sustainability with more compact living and use of existing infrastructure such as roads and civil services. To ensure the long-term resilience of the neighbourhood and city beyond, it will be important to consider sustainable approaches to future development. Each incremental development should put forth a site-specific sustainability plan.



Theme 1
Design for Health and Well Being

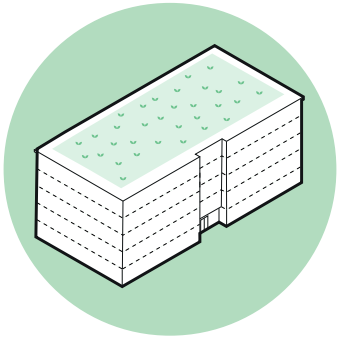


Green streets, walkability, bike-ability, weather protection, park space, and places to connect outside are hallmarks of healthy communities. 'Designing for delight' in all seasons that embraces winter through to summer as well as creation of urban streetscapes that provide quality materials and visual interest all contribute to pleasant, safe, and social communities.

Design Guidelines

- → Provide housing types for a range of tenancies to promote diverse communities.
- → Design for accessibility and social equity by creating safe public open spaces and public realm to encourage the use for all citizens.
- → Provide outdoor spaces and exterior weather protection for all seasons.
- → Provide community-oriented street furniture and meeting/gathering spaces
- → Be considerate in lighting design.
- → Design for source separation of waste receptacles and animal waste in parks and streets.
- → Design for services and maintenance spaces in well designed, screened, and convenient locations for residents and businesses.
- → Provision of space and infrastructure for alternative mobility choices.
- → Provision of opportunities for public art and cultural expression.

Theme 2
Buildings and Energy



Designing for Energy Efficiency is one of the best ways of promoting sustainability and saving money for consumers in a community development. Future development is encouraged to design with energy targets that exceed local requirements where possible.

A focus on compact forms, densification, and creation of buildings that minimize energy loss and heat gain through proper orientation of windows, ratio of window to insulated wall, and sensitive modulation of form to minimize surface area are the largest aspects of sustainable, energy focused development.

Design Guidelines

- → Encourage designs that carefully assesses form modulation, focus on well insulated buildings, and minimizing through wall penetrations.
- → Encourage designs for heat island reduction by providing external shading on building faces that require shading during warmer months.
- → Encourage green building design – siting to take advantage of passive and active solar energy, incorporation of super-insulation materials, and thermal mass.
- → Encourage recycled, locally sourced, renewable construction materials.
- → Use of low carbon building materials (wood and mass timber) are encouraged where possible.
- → Durable and quality materials with low VOC contents.
- → Encourage passive sources of energy to enhance traditional energy sources (I.e.- Solar hot water, solar lighting).

Theme 3
Mobility

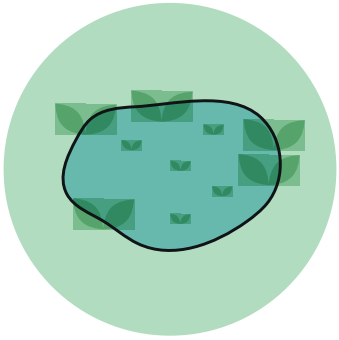
Mobility and transportation play defining roles in the successful evolution of new and evolving communities. Planning for sustainable and accessible movement includes consideration for transit, automobiles, pedestrians, cyclists, and people of all abilities. All aspects of movement should be considered very early in the design phase of the Michener Park Plan. The design of streets, sidewalks, building interfaces and mobility infrastructure should prioritize the pedestrian first.

Mobility should also be considered within the limitations of Edmonton's climate, as local conditions play a significant role in determining both modal and destination choices. Ensuring people of all ages, walks of life, and abilities have options for how they move within, to, and from their communities is a critical component of both the environmental benefit and social aspects of sustainable community design. Creating places that are safe and friendly environments to walk, bicycle, blade, take transit, and drive will offer people true options for mobility.

Design Guidelines

- Design to encourage walking, cycling, and general health through pedestrian friendly streetscapes and amenities such as parks, trails, and recreation areas that are accessible to all ages and abilities.
- Design streets to promote social equity and connectedness through universal design.
- Provision of areas for safe, secure bicycle parking and future areas for bicycle share.
- Signage and wayfinding showing bicycle paths, walking connections, and directions to public transit.
- Paving materials that are durable and designed for both winter and summer conditions.
- Provision of bicycle infrastructure such as bicycle racks, secure in-building bicycle storage, and repair facilities.

Theme 4
Green Space and Stormwater



The greens spaces are designed to conserve and manage stormwater through Low Impact Development techniques. These could include, but are not limited to, naturalized stormwater management ponds, bioswales, infiltration trenches, vegetated filter strips, and permeable materials.

Stormwater management facilities are primary pieces of public infrastructure and are to be located at the southern end of the neighbourhood. In addition to their primary function of water quality and quantity control, stormwater management facilities should be designed to maintain the environmental and ecological integrity of the natural heritage system. They should be designed to provide a benefit to the environmental health and integrity of the community.

Design Guidelines

- Buildings should collect and reuse rainwater in the building and/or for on-site irrigation.
- Design for heat island reduction: provide street trees for shade on heat gain orientations
- Landscaping should include native, child safe, and drought-tolerant species. Irrigation for landscaping should be subgrade for treatment of grey water.
- Landscaped areas should be located to optimize the potential of water infiltration.
- Provide opportunities for urban agriculture and community gardens.
- Impervious surfaces should be minimized, subject to engineering design considerations, particularly for surface parking areas.
- Stormwater should be collected, filtered, and reused on-site through permeable landscape design.
- Designated snow storage areas should be provided to limit the entry of salt and other toxic substances into the stormwater sewer system. They are encouraged to be in filter strips and bioswales.
- Bio-retention areas, both on publicly- and privately-owned lands, are encouraged to capture and treat stormwater runoff where feasible. They can be integrated into a range of landscape areas including medians and cul-de-sac islands, and boulevards. A variety of planting and landscape treatments should be employed to integrate them into the character of the landscape.
- Bio-retention areas should be designed to filter runoff either through infiltration or collection in a perforated under-drain and discharged to the storm sewer system.
- Rain gardens and green roofs are encouraged to detain, infiltrate, and filter runoff discharge from roof leaders, wherever feasible.
- Vegetated Filter Strips are encouraged, wherever feasible, but preferred to treat runoff from roads, roof downspouts, and low traffic parking areas, and can be used for snow storage.

- Rainwater harvesting systems are encouraged, where appropriate, and should incorporate treatment technologies to improve the quality of rainwater before and/or after storage and include provisions for periods of insufficient rainfall and excessive rainfall.

- Stormwater management ponds should be developed as naturalized ponds which incorporate native planting and reflect natural plant associations to minimize maintenance, create natural habitats for pollinator species, and enhance biodiversity.

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