



MONTGOMERY

Gateway to the Rockies

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EVDP 644 - Francisco Alaniz Uribe
PROFESSIONAL PLANNING PRACTICE



UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE,
PLANNING AND LANDSCAPE

Thank you to

Our Professor, Francisco Alaniz Uribe

And the Steering Committee:

John Hall - City of Calgary

Ben Bailey - CivicWorks

Janice Mackett - Montgomery Community Association, Planning Committee Chair

Marilyn Wannamaker - Montgomery Community Association

Laura Kornfeld - Montgomery Community Association



TABLE OF CONTENTS

- 1.0 EXECUTIVE SUMMARY..... 01
- 2.0 PROJECT INTRO..... 03
 - 2.1 About the Project
 - 2.2 Meet the ADAPT Team
 - 2.3 Historic Context
 - 2.4 Regulatory Framework
 - 2.5 Site Context
 - 2.6 Methodology
- 3.0 ANALYSIS..... 13
 - 3.1 Demographics
 - 3.2 Environmental Analysis
 - 3.3 Land Use
 - 3.4 Transportation
 - 3.5 Housing Typologies
 - 3.6 Densification
 - 3.7 Open Space
 - 3.8 Functional Analysis
- 4.0 WHAT WE HEARD..... 26
 - 4.1 Community Workshop
 - 4.2 Feedback
 - 4.3 Community Wish List
- 5.0 DESIGN GUIDELINES & INTERVENTIONS..... 30
 - 5.1 Community Growth and Development
 - 5.2 Mobility
 - 5.3 Open Space & The Public Realm
 - 5.4 Special Sites
- 6.0 MOVING FORWARD..... 103
- 7.0 REFERENCES..... 105

An aerial photograph of a city, likely San Francisco, showing a winding river, a bridge, and various urban structures. The image is faded and serves as a background for the text.

1.0

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Montgomery is an inner-city Calgary neighbourhood with a rich history and abundance of opportunity. As Calgary grows, Montgomery faces pressures to densify and intensify. As a gateway community facilitating significant traffic in and out of the City, Montgomery faces unique pressures. ADAPT Consulting + Design has developed this document to provide strategies and suggestions for the Montgomery Community Association. Based on analysis, observation, and engagement with community members, ADAPT proposes a series of strategies for community growth and development, mobility, open spaces, and special sites. Each topic will be explored in depth and supported with policy frameworks. This document will start by outlining our team's vision, background about the project and community, and the findings of our extensive analysis. Based on our findings we identified some key issues including unsafe pedestrian environments, disruptive roadways, mistaken identity with Bowness, and pressure for densification. As a response to these issues we focused on creating an accessible, safe and connected public realm, with multiple mobility options, a diverse land use plan that supports growth without changing community identity, and an open space network that is adaptable, connected, and accommodating.



An aerial photograph of a city, likely San Francisco, showing a river (the San Francisco River) winding through the urban landscape. The city is densely packed with buildings and streets. A dark blue vertical bar covers the right side of the image, serving as a background for the text.

2.0

PROJECT INTRO

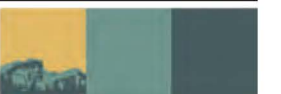
2.1 ABOUT THE PROJECT

This collaboration between the School of Architecture, Planning, and Landscape, and the Montgomery Community Association began in January 2020 as part of the Advanced Professional Planning Studio for second year planning students. The project gives planning students experience working closely with an existing community to develop strategic solutions to real problems. This document is not only an academic project, but also acts as a recommendation document for the community association. Other community partners include the Department of Neighbourhood Services from the City of Calgary, and the Federation of Calgary Communities. The unique experience of this project helps prepare students to enter the world of professional planning, and fosters a relationship with Calgary communities.

Throughout this process, some assumptions were made:

- We assumed that the feedback we received from engagement attendees and community association members was representative of the greater Montgomery community
- We assumed that there was no budget
- We anticipated a need for approximately 1000-1500 housing units by 2042

We began by analyzing the existing conditions of Montgomery through site visits, document review, and map analysis, identifying opportunities and constraints within the community. From those we identified three main values that would propel our plan forward – sustainable growth, diversity, and connectivity. Those values led us to developing a vision for our plan that – by 2042 Montgomery will be a vibrant community that offers choice and provides connections between people and places. These values and vision are the foundation to our redevelopment plan, which aims to bring the community of Montgomery together.



2.2 MEET THE ADAPT TEAM



BRYCE DEVEREAUX

SENIOR URBAN PLANNER
BSc., MPlan

Bryce graduated from the School of Architecture, Planning, and Landscape at the University of Calgary. With an undergraduate degree in geography and geomatics, he is interested in the intersection between urban design, technology, and mobility. Bryce has prior experience in regional and city planning, which has allowed him to gain experience in public consultation, performing technical analysis to support policy development, and reviewing development applications. He believes in social, environmental, and economic sustainability for all communities.



BRYANA PARAHONIAK

JUNIOR URBAN PLANNER
BKin., MPlan

Bryana is a second year Master of Planning student at the University of Calgary. With an undergraduate degree in Kinesiology, she has a passion for exploring the connections between the built environment and public health and using this information to develop healthy communities. She has experience working as a planning assistant in a municipal planning and development department. Bryana is an advocate for positive change and equity in our communities.



LAUREN ARMENEAU

URBAN PLANNING TECHNOLOGIST
BA., MPlan

Lauren is a soon-to-be graduate from the School of Architecture, Planning, and Landscape at the University of Calgary. Growing up in Calgary, she has a strong grasp of the City context. Her interests lie in urban design, and the public realm. Lauren believes in social and environmental equity for all communities.



THE ADAPT APPROACH

ADAPT Consulting & Design was established in 2010 and has since Become a leading urban design firm, focusing on the redevelopment of existing communities. ADAPT prides itself on being a company dedicated to bringing new life to communities, ensuring aging communities become desired places, as they once were and thus, ensuring sustainable growth of our cities. The success of the company is largely due to its commitment to extensive community and stakeholder engagement through all stages of a project, which ensures citizens concerns are addressed and helps to ensure change is seen as positive in the community.

The work of ADAPT strives to improve citizens quality of life, ensure sustainable growth of cities and create vibrant, exciting places for people to live, work and play. ADAPT is composed of a small team of planning experts, all of whom, exemplify a diverse skill set composed of not only planning skills, but also design, communication and public engagement skills. Each team member has a diverse skill set and brings unique attributes, but the team shares the same overall planning values of socio-economic equity, creative and innovative design of public spaces, use of existing buildings and infrastructure to ensure sustainable growth of cities, and health and wellness of communities.

SUSTAINABLE GROWTH



CONNECTIVITY

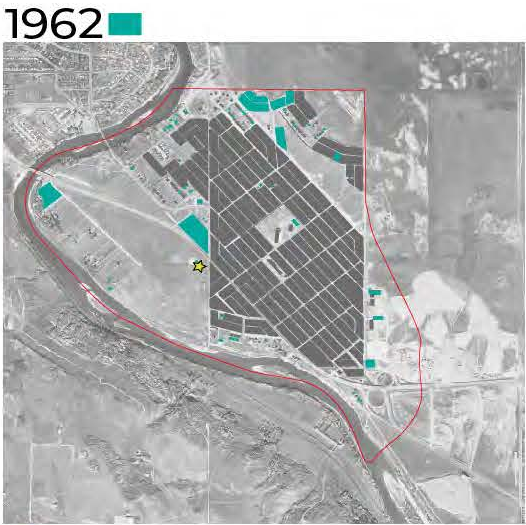
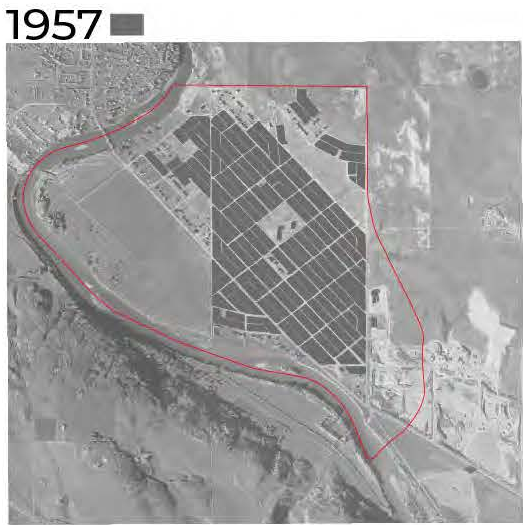


DIVERSITY

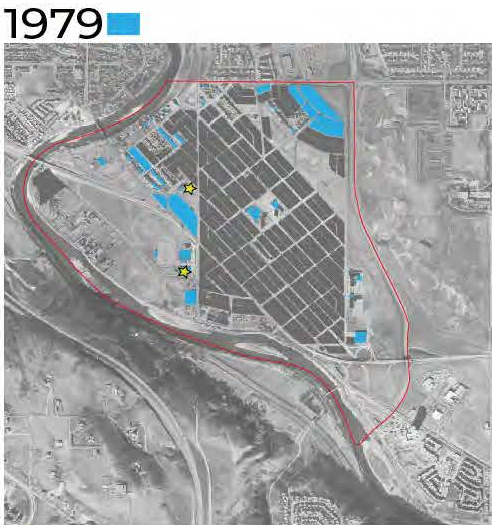


2.3 HISTORIC CONTEXT

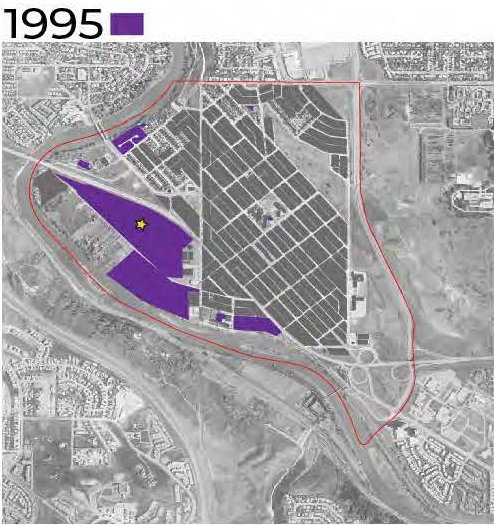
The land Montgomery is built on was originally purchased by James Shouldice in 1906 for ranching purposes. It is here that the Shouldice family established their roots and built a twenty-five room brick mansion on top of the hill that Home Road now runs adjacent to. In 1910, the Shouldice family donated 100 acres of land along the Bow River to the City of Calgary and it became dedicated park space. This area is currently home to the Shouldice Athletic Park, which serves as a regional recreation area for the City of Calgary. The designation of the area to park space started to bring a lot of people to the area and by 1911, the community known as Shouldice Terrace was established. In 1943, the post office requested that the community change its name and the Shouldice family chose the name Montgomery in honor of a “Bernard Law Montgomery” who was a celebrated military leader from Great Britain, who played an important role in World War 1 & 2. Montgomery was home for approximately sixty dwellings by 1947, but it wasn’t until 1949 that natural gas started to be installed for homes to have heat. After mortgages became available in the 1950’s, the community grew to approximately 1069 homes by 1947. This population led to Montgomery being designated as a town in 1958 at which time, they also elected their first Mayor. The community finally got water and sewer connections by 1959 and by this time, Montgomery was in need of a community destination and provincial funds helped to build the Montgomery Recreation Centre, which is now known as the Community Centre. The community association currently leases the building, parking lot and two rinks to the City, which are all a part of the regional athletic park. On August 15th, 1963 Montgomery was annexed by the City of Calgary, the community had grown to a population of around 5000 with a variety of stores, services and homes and there was a need for more infrastructure to support the growing population. At the time, Montgomery was not happy about joining the City of Calgary, as they didn’t want to lose their small town charm and pride or mountain views. However, in the years after becoming a part of Calgary, Montgomery seen the build out of two more important community facilities, the Shouldice Arena and the Town Hall, both of which are still used in the community today. The Town Hall has seen many different uses over the years, but was always an important building in the community and today it is home to the City of Calgary Community & Neighbourhood Services & Bowmont Seniors Assistant Association. By 1995 Shouldice Athletic Park was fully built out and being used for many sporting events. In more recent years, Montgomery has tried to create an identity by implementing bright colored signage at the East entrance to the community and on the front of the community centre. The Montgomery Business Revitalization Zone was established in 2011 and has tried to continue with building an identity through new street signs and banners. This revitalization zone has also spurred efforts to improve the commercial districts. The most influential development in the community to date is the “Notable” building, which was the first of its density and type in Montgomery with the intention to initiate redevelopment and revitalization of the community, which is the overall intent of this strategic action plan.



★ Montgomery Recreation Centre (Community Centre)



★ Shouldice Arena
★ The Town Hall (City of Calgary Community & Neighbourhood Services & Bowmont Seniors Assistant Association)



★ Shouldice Athletic Park



★ Notable



A Snapshot in Time



1906

James Shouldice purchases 480 acres west of Calgary to start ranching



1910/1911

James Shouldice donates 100 acres of land to the City (Shouldice Athletic Park)



1943

Community named changed to Montgomery after "Bernard Law Montgomery"



1947-1957

The community had grown to approximately 1069 homes



1958-1959

Montgomery was designated as a town & elected its first Mayor

The community Shouldice Terrace was established



1962

The Montgomery Recreation Centre was built



1963

Annexed by the City of Calgary



1964

Provincial Society Registered Date for the Community Association of Montgomery



2010/2011

Montgomery Business Revitalization Zone

Notable was built, bringing a new density and form to the community



2014-2019

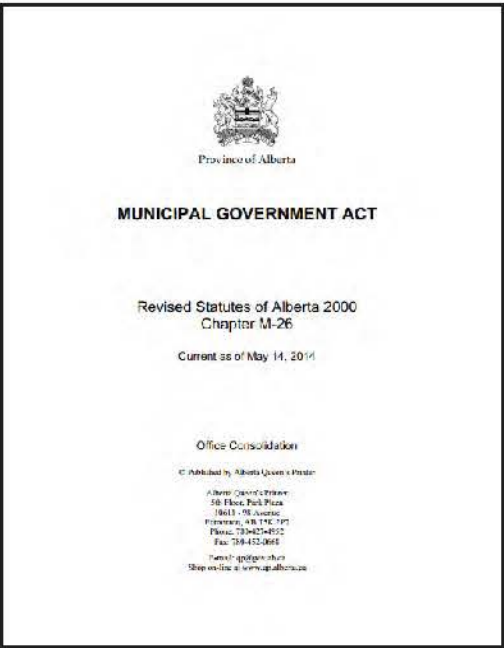
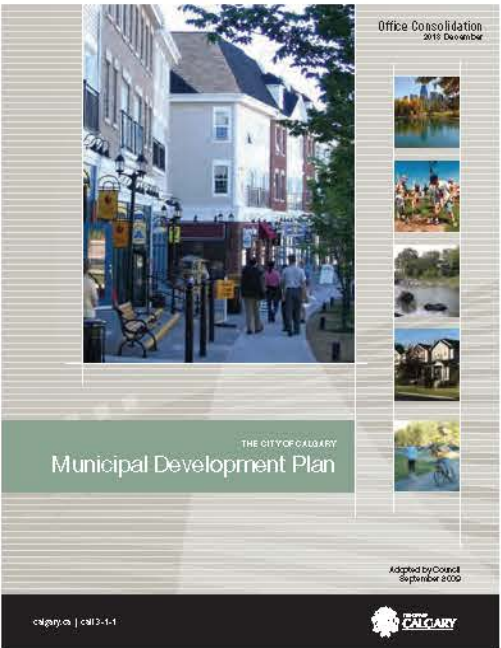
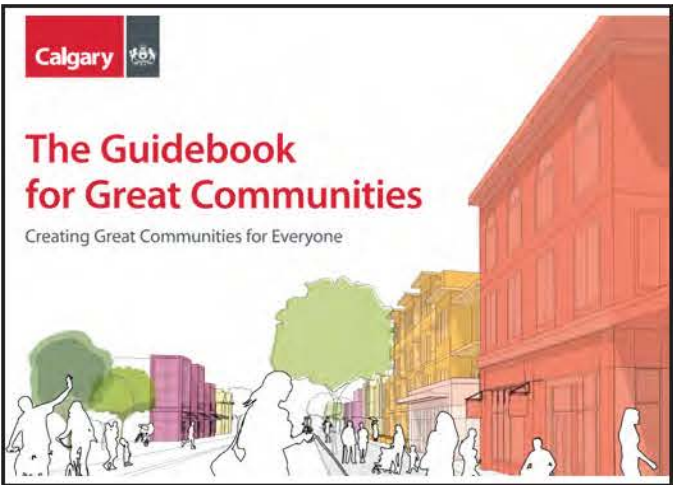
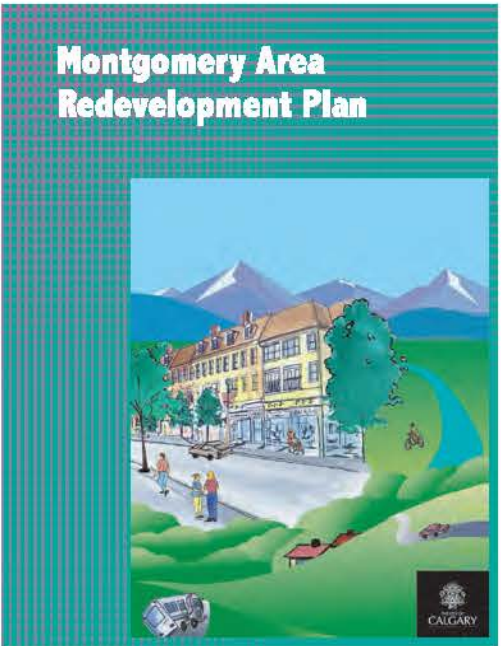
Montgomery Community Association celebrated its 50th Anniversary

Area Redevelopment Plan & Corridor Study

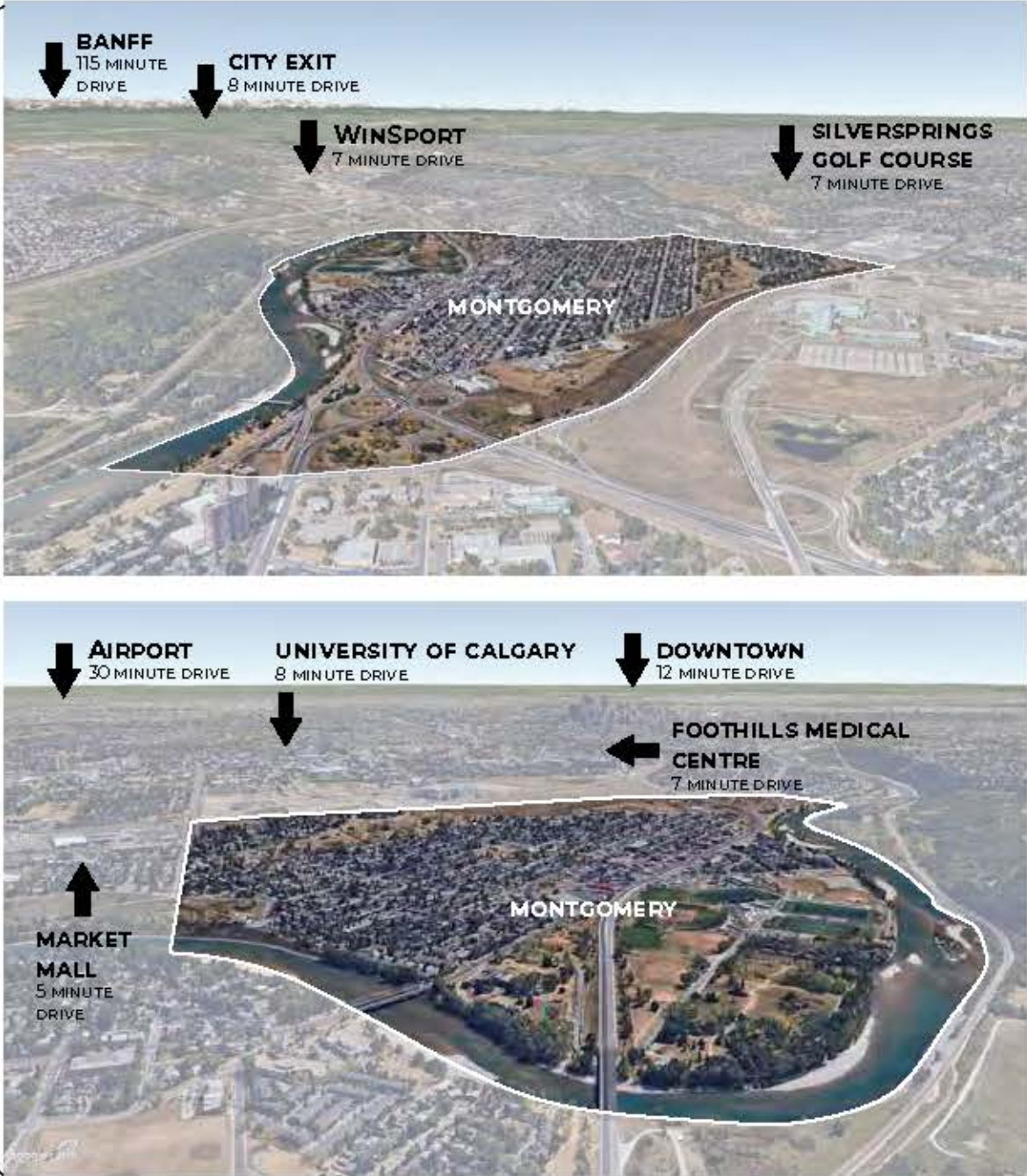
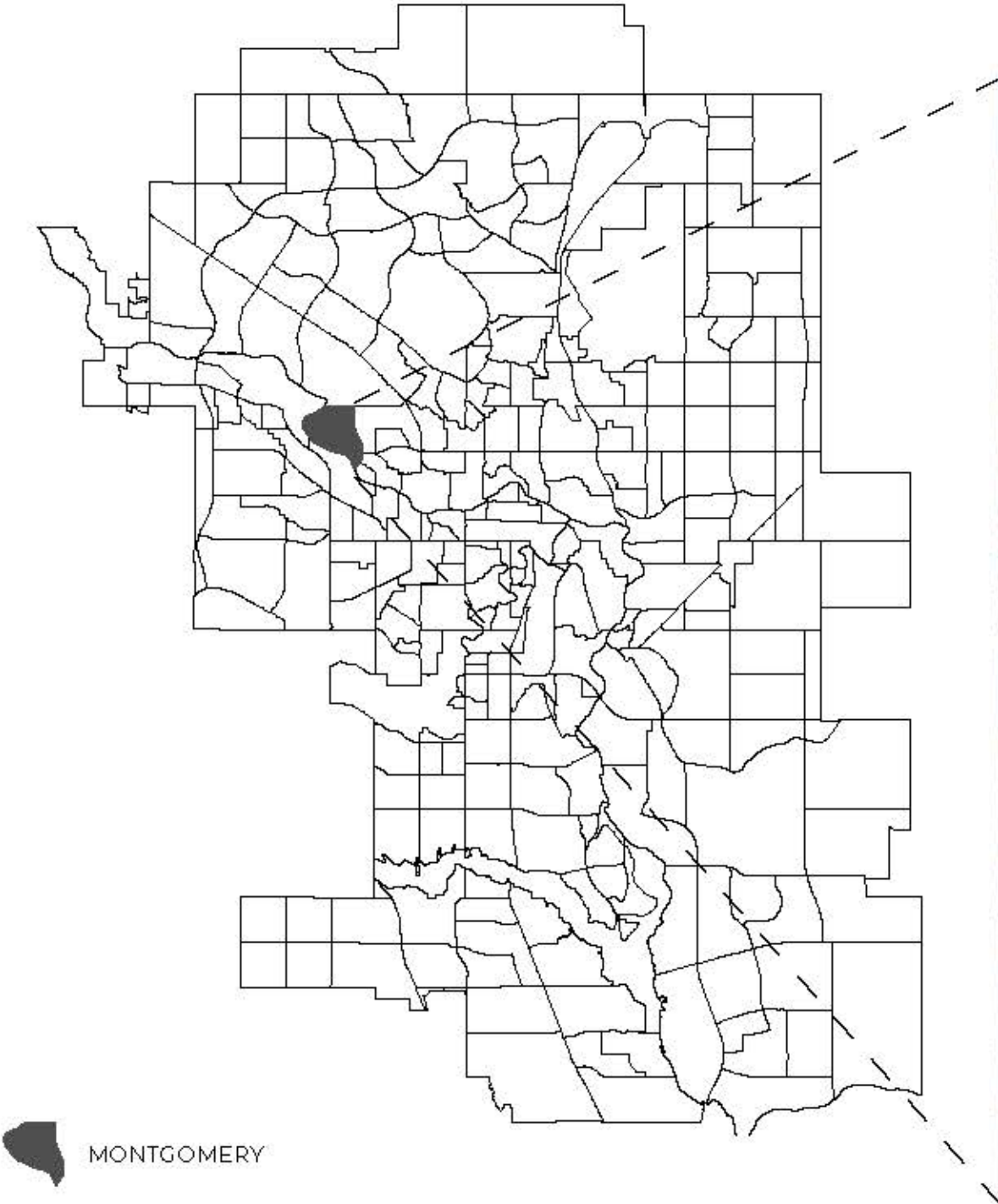
2.4 REGULATORY FRAMEWORK

ADAPT is committed to adhering to the Municipal Government Act (MGA) and incorporating the goals of any existing policy plans that will affect the project; therefore, the team will ensure the overall goals of Calgary's Municipal Development Plan and of Calgary's Guidebook for Great Communities are being integrated into the strategic plan. The goals of the Municipal Development Plan that will be considered when developing strategies for the community are; a prosperous economy, compact city, great communities, good urban design, connecting the city, greening the city and managing growth and change. The principles and goals of the Guidebook for Great Communities that will be considered are; opportunity & choice, health & wellness, social interaction, the natural environment, economic vitality, and identity and place.

The Area Redevelopment Plan for Montgomery will also be considered throughout this project and its goals for the community, which includes; revitalization of the Bowness Road/46 Street Main Street Area as mixed-use core, encouraging a range of quality medium density housing types adjacent to the mixed-use commercial core, remove the Land use Bylaw setback requirements on Bowness Road, encourage traffic calming and street tree planting on Bowness Road, encourage attractive community gateways, ensure quality low-density residential redevelopment and where appropriate, slope adaptive design, maintain and enhance existing parks, protect floodplain/floodway for passive recreation and possible pedestrian overpass, encourage two-way bike and pedestrian routes.



2.5 SITE CONTEXT



Overview

The community of Montgomery is located in Calgary's northwest quadrant. It is geographically situated along a south-facing valley and north of the Bow River - creating some beautiful views and enjoyable riverfront access.

Montgomery has a rich history. It was named after Bernard Law Montgomery and worked as its own stand-alone town until annexed by the City of Calgary in 1963.

The community is well connected due to its proximity to several regional amenities and Highway 1 accessibility. Montgomery connectivity has made it into a inner city neighbourhood, being only a 12 minute drive outside downtown Calgary.

Montgomery is an amenity rich community and provides plenty of opportunity. Therefore, when redevelopment occurs, it's important to ensure Montgomery identity is reflected.



2.6 METHODOLOGY

Project Planning and Initial Research

Base Mapping

- Generating maps to communicate basic information including road networks and dimensions, block patterns, parcel sizes, and building footprints. This information provides a preliminary understanding of the community before more significant engagement takes place.

Photo Inventory/Site Visit

- The initial site visit supplements the understanding of the community gained through research and base mapping. This will consist of exploring main streets and landmarks, taking photographs, and learning from a community member as our guide. It's important to get boots on the ground as early as possible to get a sense of the community and its members.

Review of Legal Framework and Existing Plans:

- Existing planning policy will guide the formulation of our strategy. Plans will be reviewed, and key elements will be identified to ensure adherence to all existing policy. Plans that encapsulate development in all of Calgary include:
 - Municipal Development Plan
 - Calgary Transportation Plan
 - Calgary's Guidebook for Great Communities
 - Plans specific to Montgomery include:
 - Montgomery Area Redevelopment Plan
 - Montgomery Community Association – Strategic Business Plan

Initial Research

- Research regarding the Montgomery community in the initial phase will be done to identify key characteristics, and issues facing the community. This could involve historic analysis, news article reviews, and preliminary demographic research. More depth will be achieved in the analysis phase.

Project Proposal

- The final deliverable of this phase will be a project proposal which outlines our intentions and guides our progress throughout this project. This is important because it will inform each step of the project and help to keep us accountable and on track.

Community Analysis

Environmental Analysis

- The team will be responsible for obtaining any environmental analyses that the City of Calgary may have on the area such as:
 - Geotechnical Analysis
 - Soil Analysis
 - Vegetation Surveys
 - Tree Identification
 - Archaeological Findings
- As an inner-city community Montgomery will have a long history to research. This will include aerial photo analysis to highlight physical growth from a birds-eye-view. Any historical buildings or sites of importance in the community will be inventoried and researched. We will also research any written history of the community to best understand the community's character, and to highlight important events or evolutions.

Land Use and Functional Analysis

- Analysis of land uses will most likely materialize as a map which identifies the mix of residential, commercial, industrial, institutional, and natural areas. The balance (or imbalance) of these uses can directly impact movement within the community and reveal the accessibility of resources.

Infrastructure Analysis

- The team will be responsible for collecting any data possible on the water and sewer capacity for the area, as well as, quality of the streets and traffic counts.

Housing and Building Typology

- Building typologies and uses directly influence the public realm, street environment, and community demographic. Here we will analyze the range of housing available, including single-detached homes, townhomes, row housing, and higher density typologies. A range of housing type and tenure attracts a diverse population.

Public Realm Inventory and Walkability

- Taking inventory of park space, and other public realm elements will help quantify the balance between public and private space, identifying gaps or potential areas of improvement. Montgomery encompasses multiple major park spaces which will play a major role in this calculation. Walkability will be assessed through the generation of walksheds, through participant observation, and through engagement with community members.



Community Profile - Socio-demographics

- The socio-demographic profile of Montgomery will include analysis based on age, gender, family unit, income, housing type and tenure, ethnicity, and many other indicators. This quantitative analysis will paint a picture of the community which will be supplemented through the engagement process.

Physical Model Construction

- Preparation of Digital Files: After identifying the direction and vision of the physical model, there will need to be preparation of digital files to utilize resources such as laser cutters or CNC machines.
- Material Selection: Materiality of the model will be important and directly relate to the machinery used, and the budget allotted.
- Assembly

Open House / Workshop

- The open house workshop will take place on February 29th with members of the Montgomery community to review the progress we have made and to discuss the findings of our analysis. This workshop will involve:
 - Review Analysis and Workshop with Community Members
 - Community Mapping
 - Discussion of Issues, Opportunities and Constraints
 - Conceptual Design

Conceptual Design

- After the open house we will begin to formulate conceptual design guidelines and strategic steps for the community to accomplish goals identified throughout the analysis and engagement process. Some themes that will be addressed in this design include:
 - Land use and density
 - Mobility
 - Housing diversity
 - Neighbourhood commercial corridors
 - Open space system including street network and pedestrian movement
 - Urban design
- This is the draft design; it is still subject to change pending input from the Montgomery community.

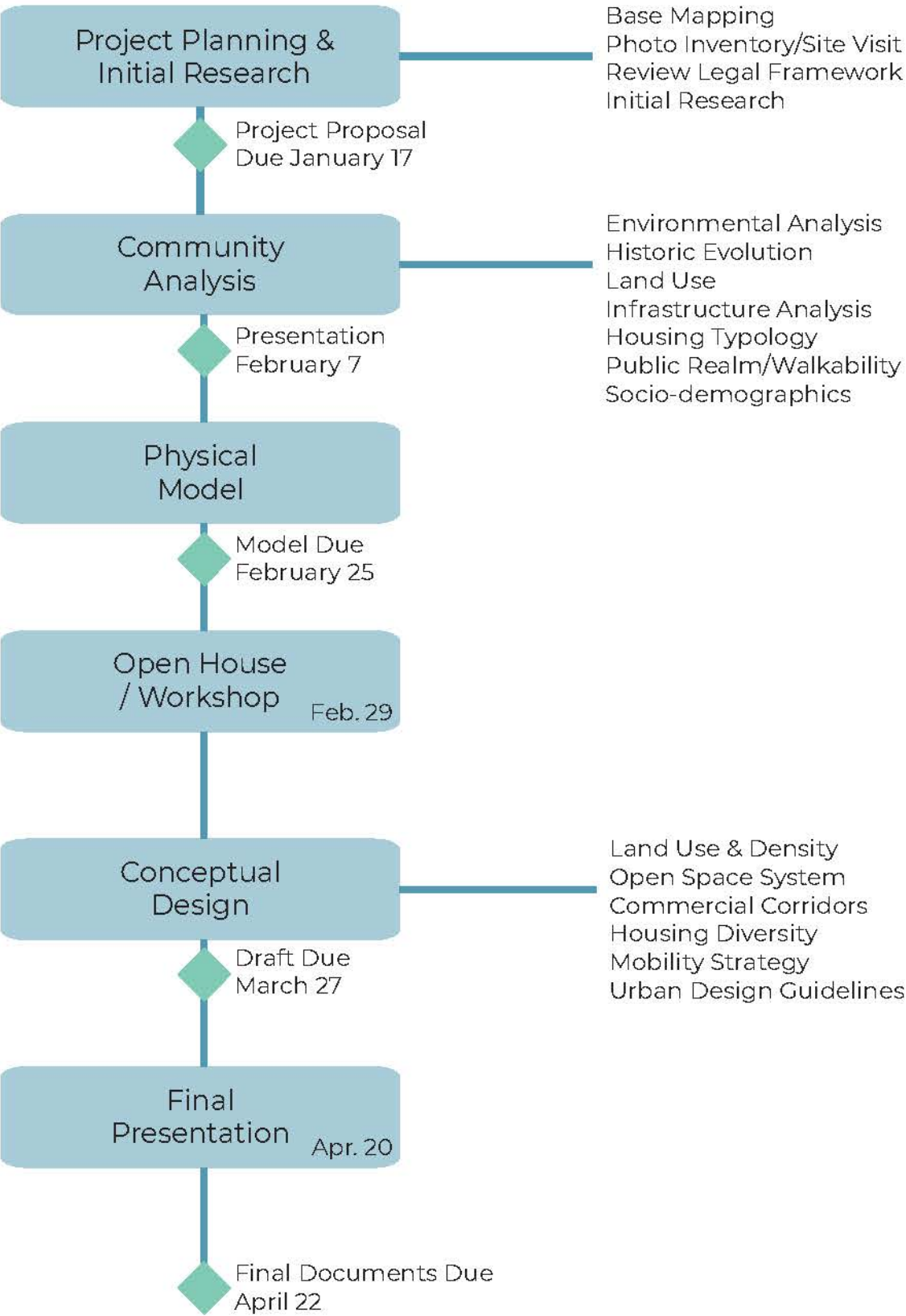
Concept Design Review

- The draft design document will be presented as a PowerPoint presentation to the steering committee on March 20th. The steering committee will provide input based on experience within the community, the city, and the urban planning industry.

Revisions to Concept Design

- After the presentation to the steering committee, revisions will be made to the document based on the input and feedback provided.

Final Presentation



An aerial photograph of a city, likely St. Louis, showing the Mississippi River winding through the urban landscape. The image is split vertically: the left half is a grayscale aerial view, and the right half is a solid dark teal color where the text is located. The text '3.0' is in large, bold, white font, and 'ANALYSIS' is in a slightly smaller, all-caps, white font below it, separated by a thin horizontal orange line.

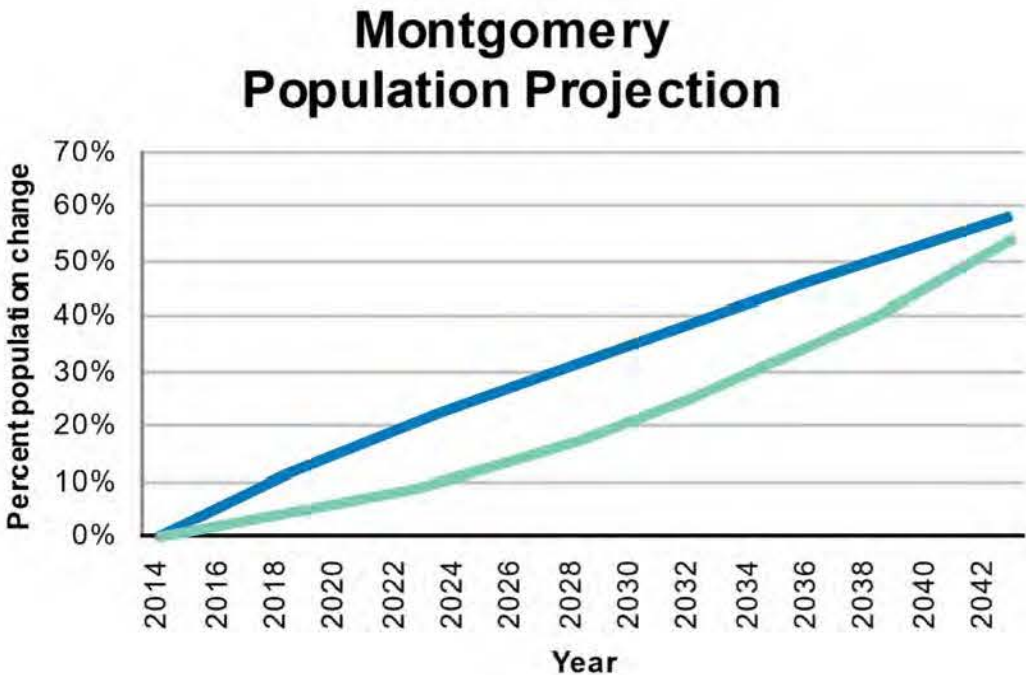
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ANALYSIS

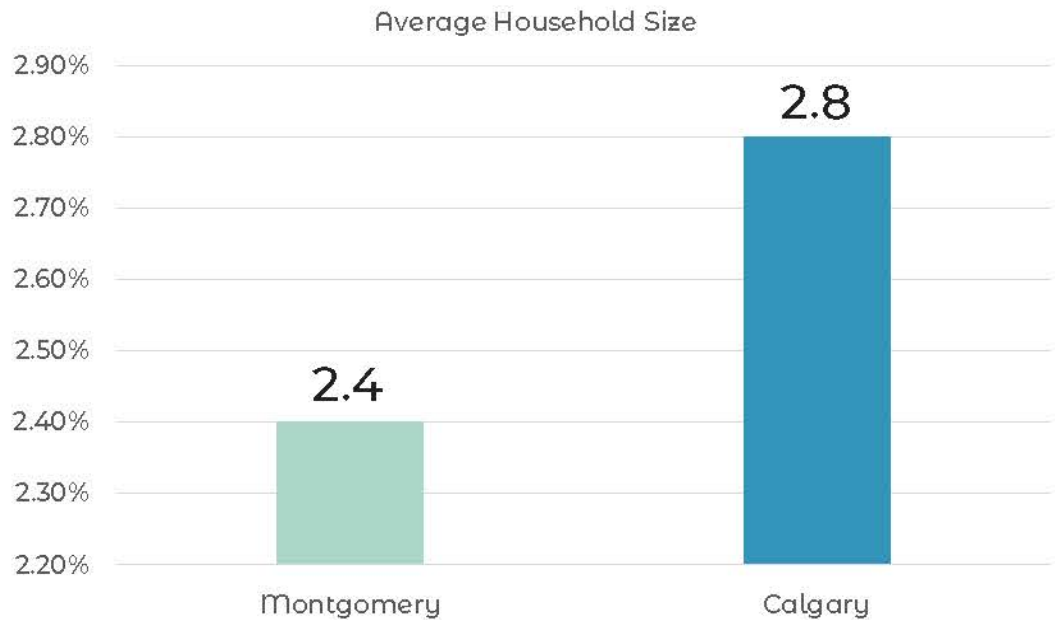
3.1 DEMOGRAPHICS

POPULATION

In line with general statistics that older communities often see a decline in population, Montgomery is no different, as they have seen population decline over the years. This also correlates to the fact that Montgomery has a slightly lower than average household size at 2.4 persons per household compared to Calgary's average of 2.8 persons per household. Neighbourhoods often see life-cycles like this because years ago the neighbourhood was home to many young and growing families and then those kids grow up and leave home and the dynamics of the neighbourhood start to change. Although there is approximately 12% of the population in Montgomery over 65 years of age, census data does show an increase in children and individuals aged 25-39 in recent years and we know that this age group values different things then the current aging population. With all of this being said, population projections do expect Montgomery to see an increase in population of approximately 55% by 2042. Considering all of these facts, this redevelopment plan looks to implement strategies that will support these demographic shifts and provide a variety of opportunities for Montgomery residents.

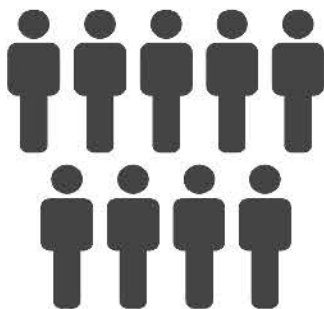


AVERAGE HOUSEHOLD SIZE

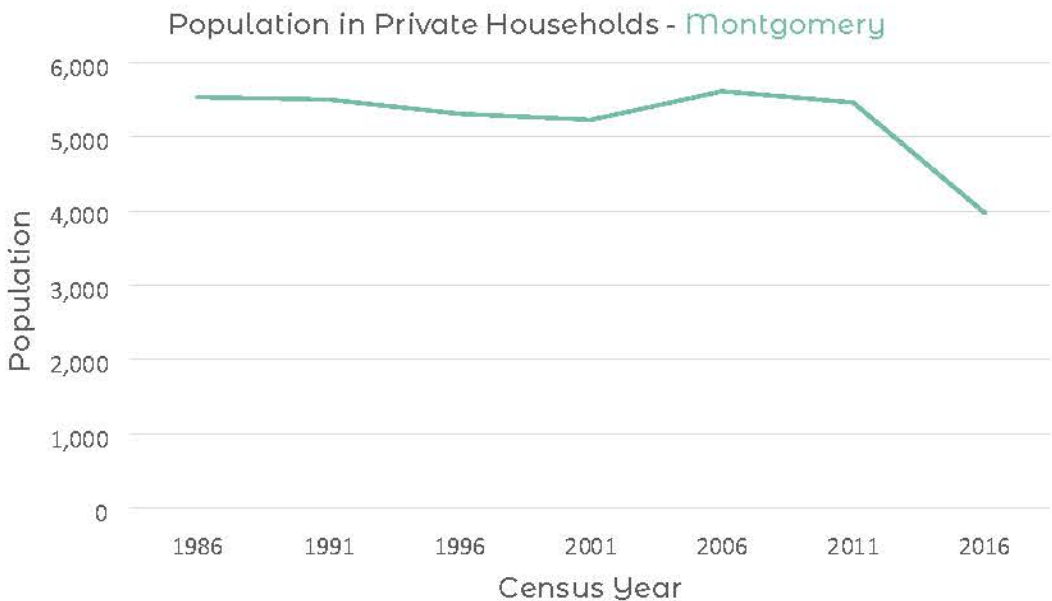


CURRENT POPULATION

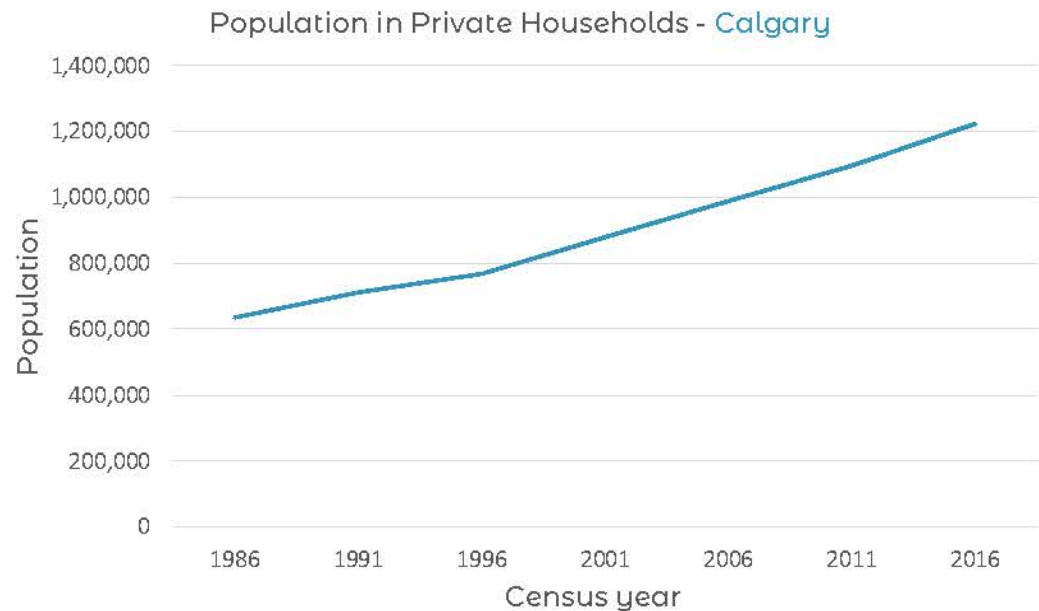
3,975



MONTGOMERY POPULATION TREND

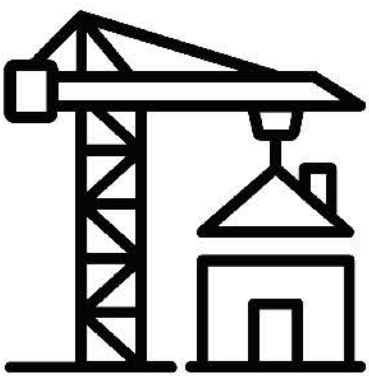
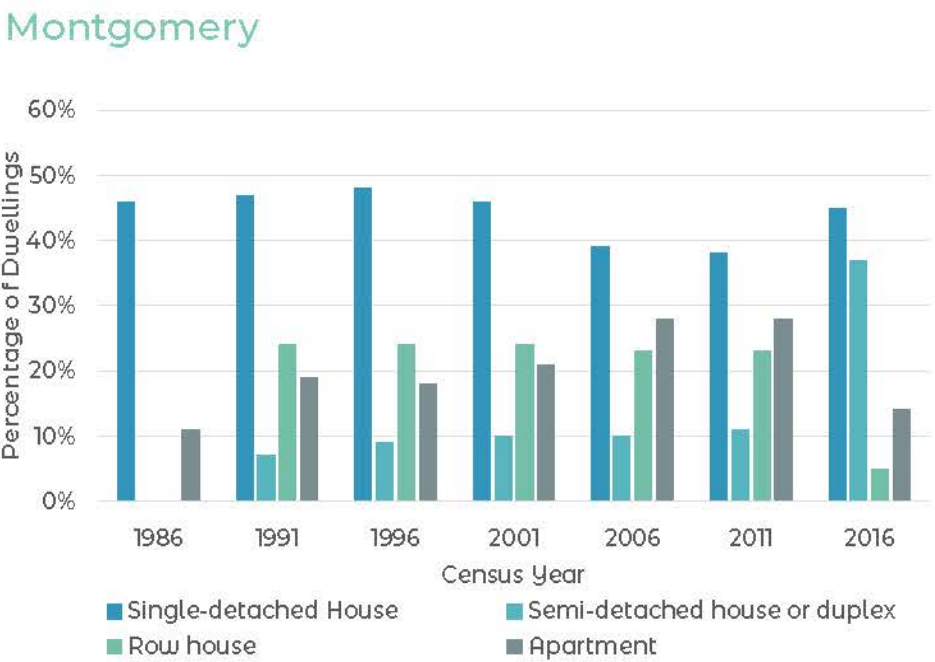


CALGARY POPULATION TREND



HOUSING DEMOGRAPHICS

Montgomery is still home to many of its original homes constructed in or before 1960, which means a significant percentage of the housing stock is nearing the end of its lifecycle and requiring major repairs, this is another indication that the neighbourhood is due for redevelopment. Redevelopment is necessary in order to meet the MDP's objective to, "reinforce the stability of Calgary's neighbourhoods and ensure housing quality and vitality of its residential areas (City of Calgary, 2009). Montgomery has seen redevelopment pressures in recent years with new dwelling construction about six percent higher than Calgary as a whole. This is reflected with a significant increase in semi-detached dwellings and a shift in housing tenure from owner households to rental households. ADAPT's redevelopment plan implements strategies that will allow for sensitive intensification and provide a range of housing options to ensure present day demands are being met.



PERCENTAGE OF DWELLINGS CONSTRUCTED IN OR BEFORE 1960

Montgomery **35%** Calgary **10%**

PERCENTAGE OF DWELLINGS CONSTRUCTED FROM 2011-2016

Montgomery **16%** Calgary **10%**

AFFORDABILITY

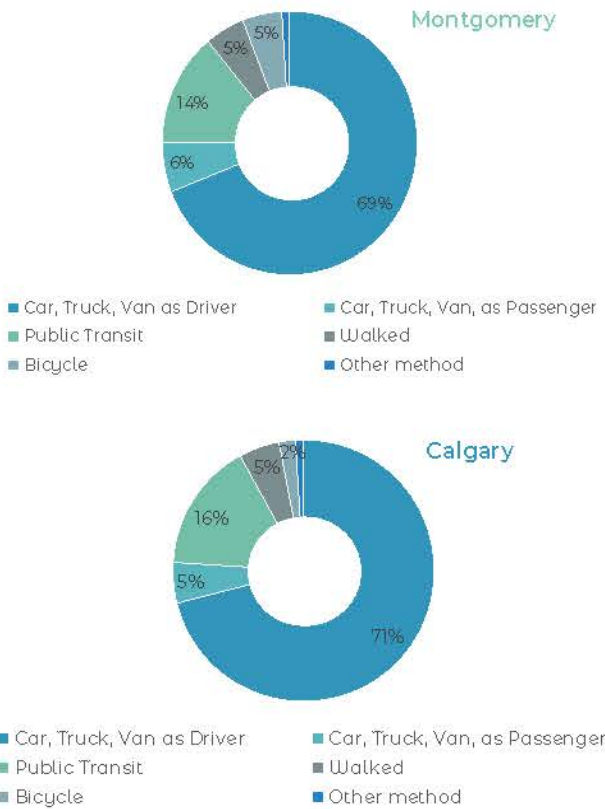
Montgomery is a desirable neighbourhood because of its close proximity to downtown, the University, Foothills Campus, Market Mall, the Bow River and the mountains. This location comes at a high cost, with an average home costing approximately half a million dollars. The ADAPT team looks to address this issue with land use strategies that will allow for a range of housing types and tenures, that address the need for densification, but also provide options for people at every stage of life, for all life styles and include people of all economic and demographic backgrounds to live within the community.

\$557, 885 Average Price of a Home

\$421 Average Price / SqFt

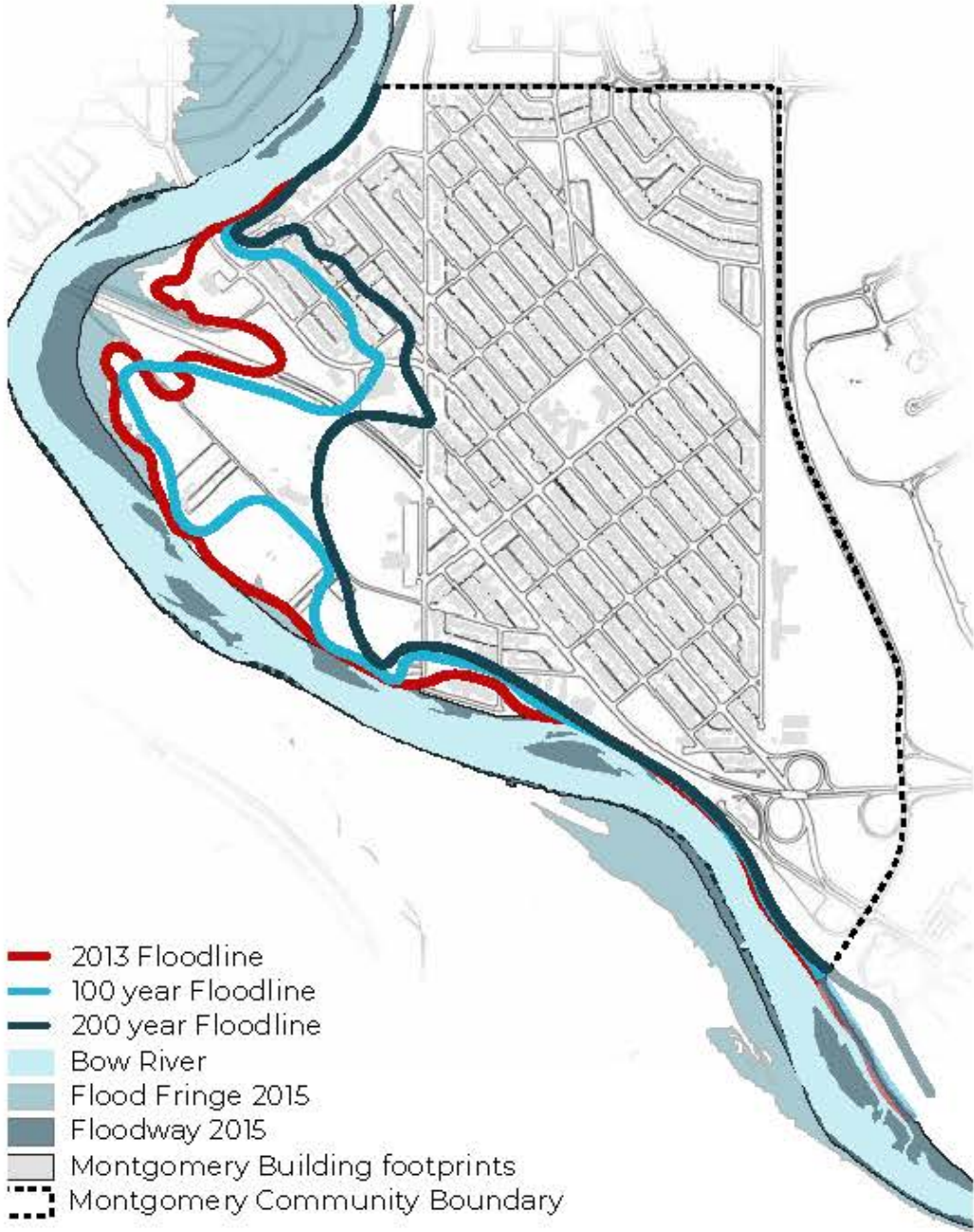
TRANSPORTATION

Like most of Calgary, Montgomery is a community built for the automobile, with large parking lots at the front of buildings and wide streets. Montgomery also has the Trans Canada highway running through it, which poses as a significant barrier for the community, making pedestrian and cycling connectivity challenging. With this being said, Montgomery does have a slightly higher rate of individuals cycling to work compared to Calgary as a whole and this is likely due to the Bow River pathway running along the southern edge of the community. ADAPT's redevelopment plan implements strategies to shift to a more pedestrian-oriented design and provide connectivity through the community by providing a variety of travel options that are safe for users of all ages and abilities.



3.2 ENVIRONMENTAL ANALYSIS

FLOODLINES



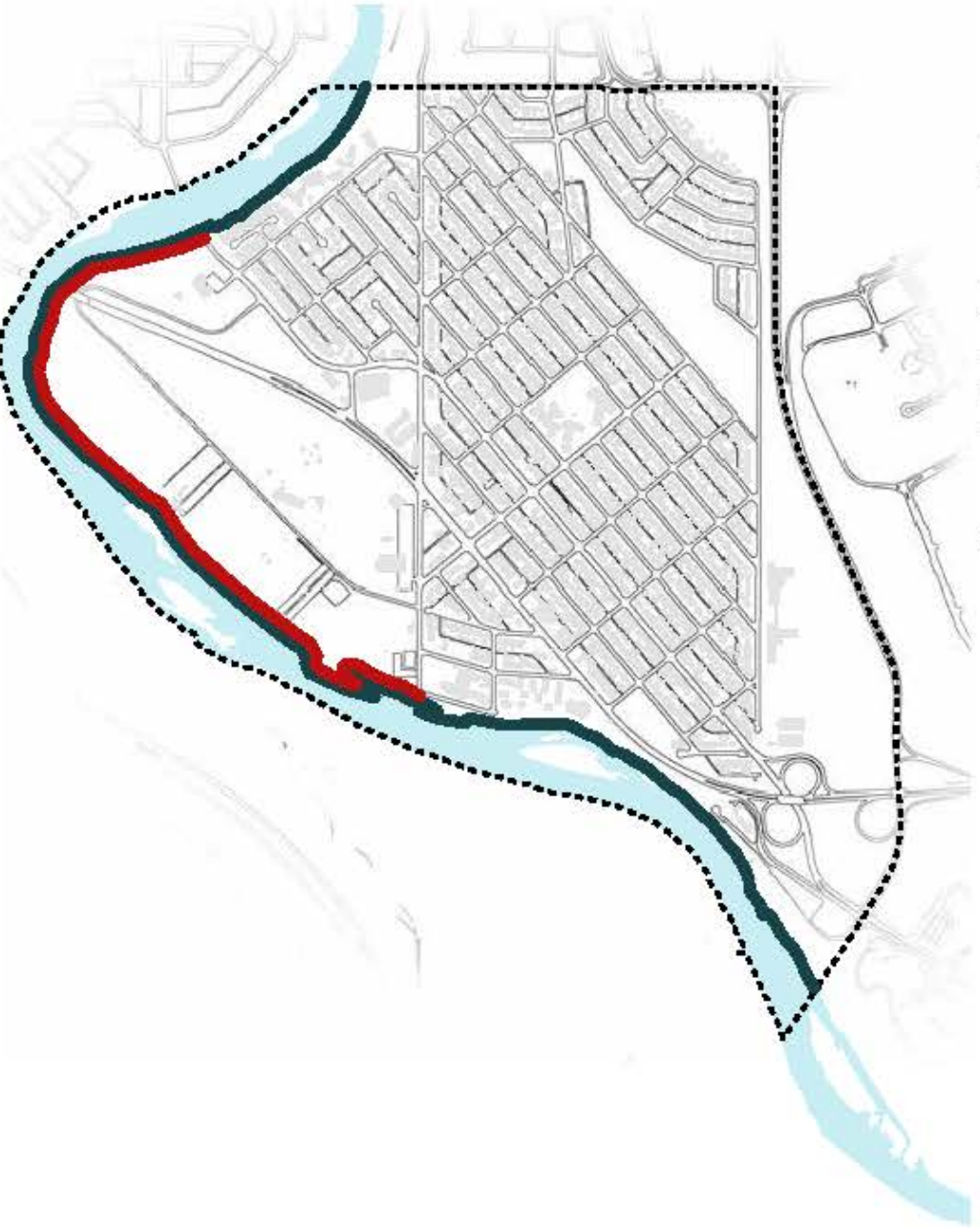
OVERVIEW

Due to the proximity to the Bow River, Montgomery is susceptible to flooding. In 2013, the water table, Shouldice Park, and the seniors home were flooded. However, the 2013 flood was a third of how far a 200-year flood could reach. Therefore, careful consideration is needed for the areas that are at risk.

QUICK FACTS:

- **0.1km²** of Montgomery flooded in 2013.

EROSION



OVERVIEW

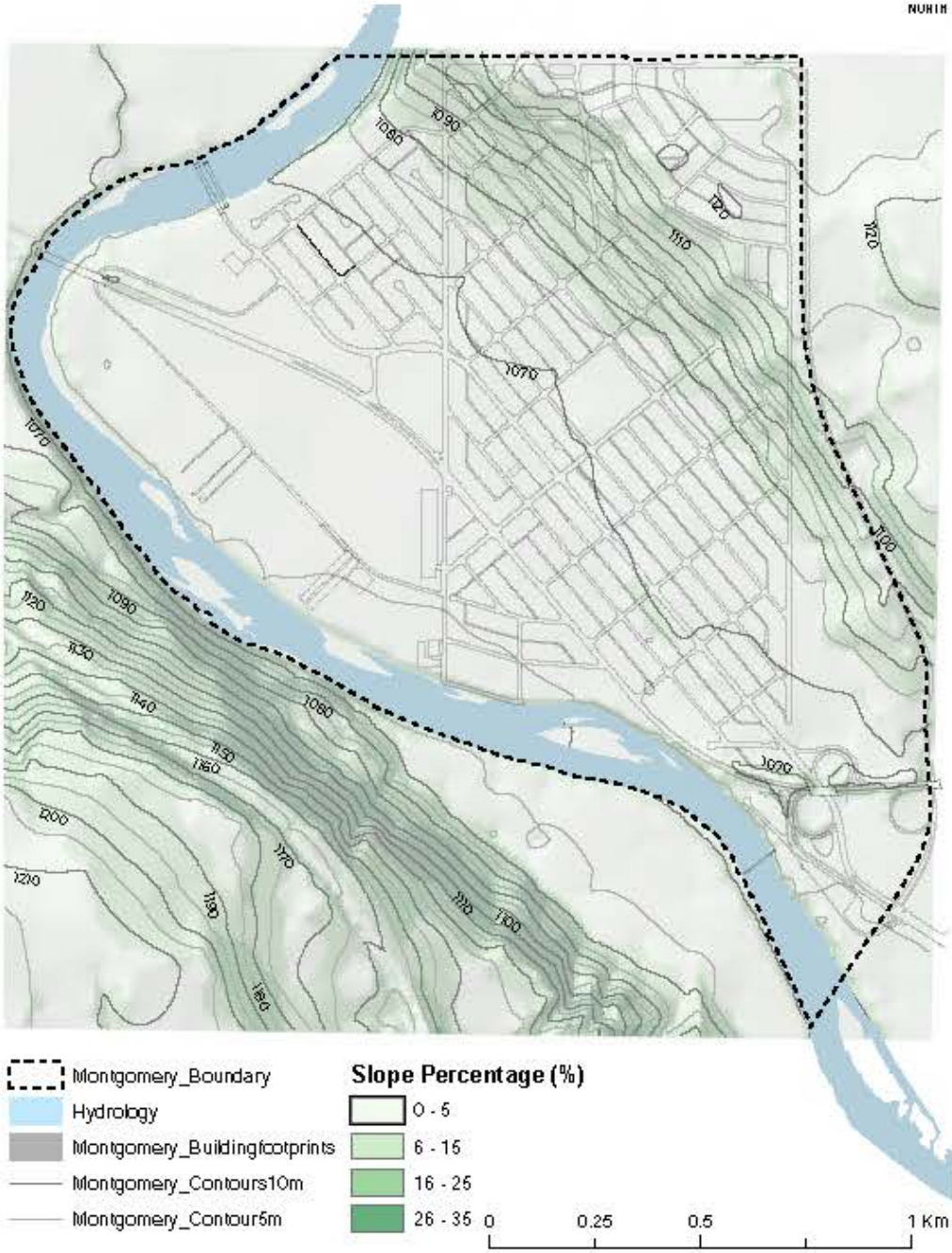
Montgomery shares its boundary with the Bow River. Therefore, natural changes in the rivers edge occurs. However, during major events, such as a flood, large changes can occur causing slope failure. After the 2013 flood, two large portions of Montgomery rivers edge have been selected for riverbank re-stabilization projects.

QUICK FACTS:

- **3.7km** Montgomery River Edge.
- **1.9km** Shouldice River Edge.

3.2 ENVIRONMENTAL ANALYSIS

SLOPE



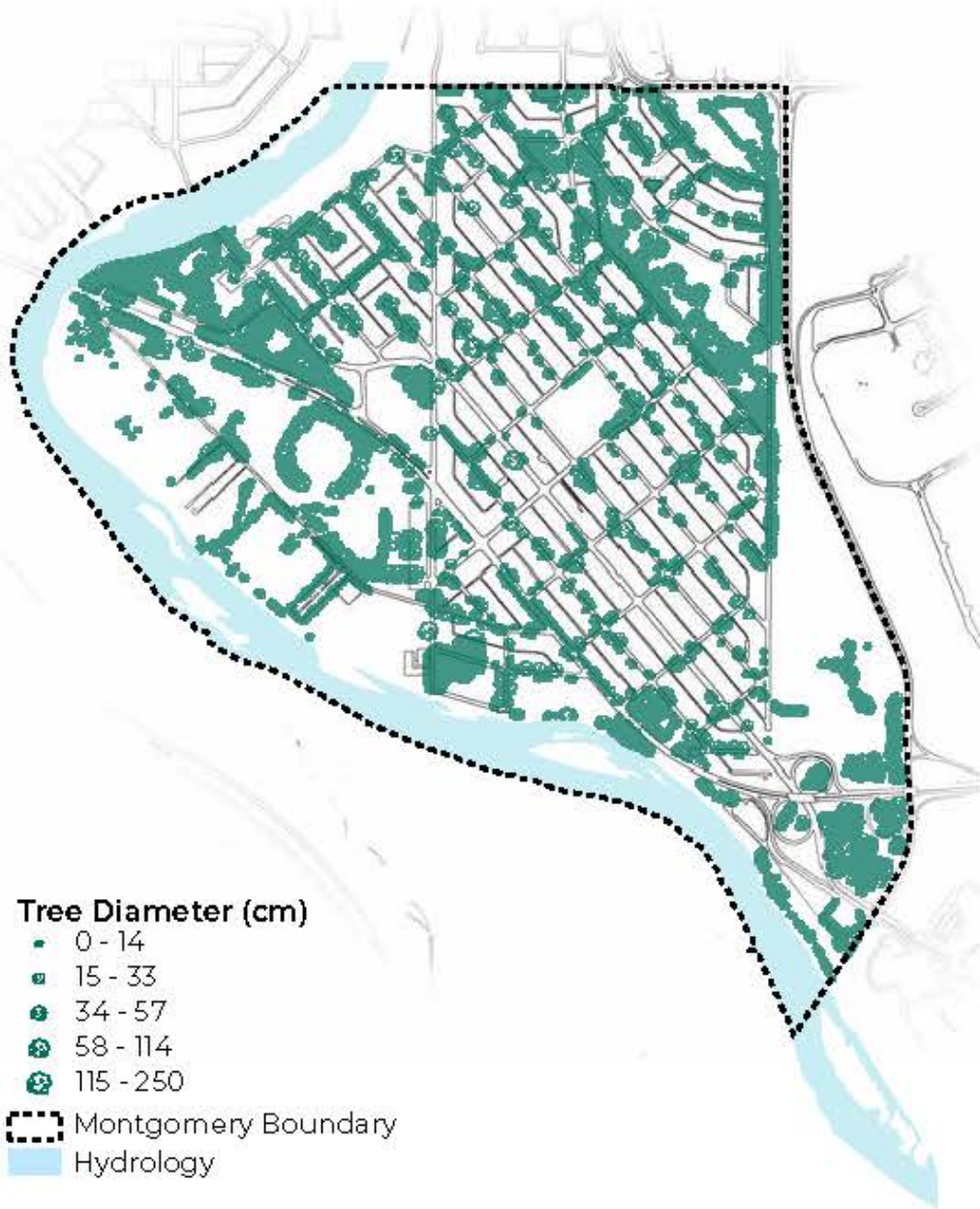
OVERVIEW

Montgomery is geographically located along a south-facing valley. This drastic change in elevation lends itself to spectacular views of the Rocky Mountains, COP, and the entire community. However, large changes in elevation over short distances can present challenges for drainage, development, accessibility, and mobility.

QUICK FACTS:

- **0.5km²** of Montgomery area **greater** than **15% slope**.
- **1.7km²** of Montgomery **less** than **15% slope**.

URBAN FOREST



OVERVIEW

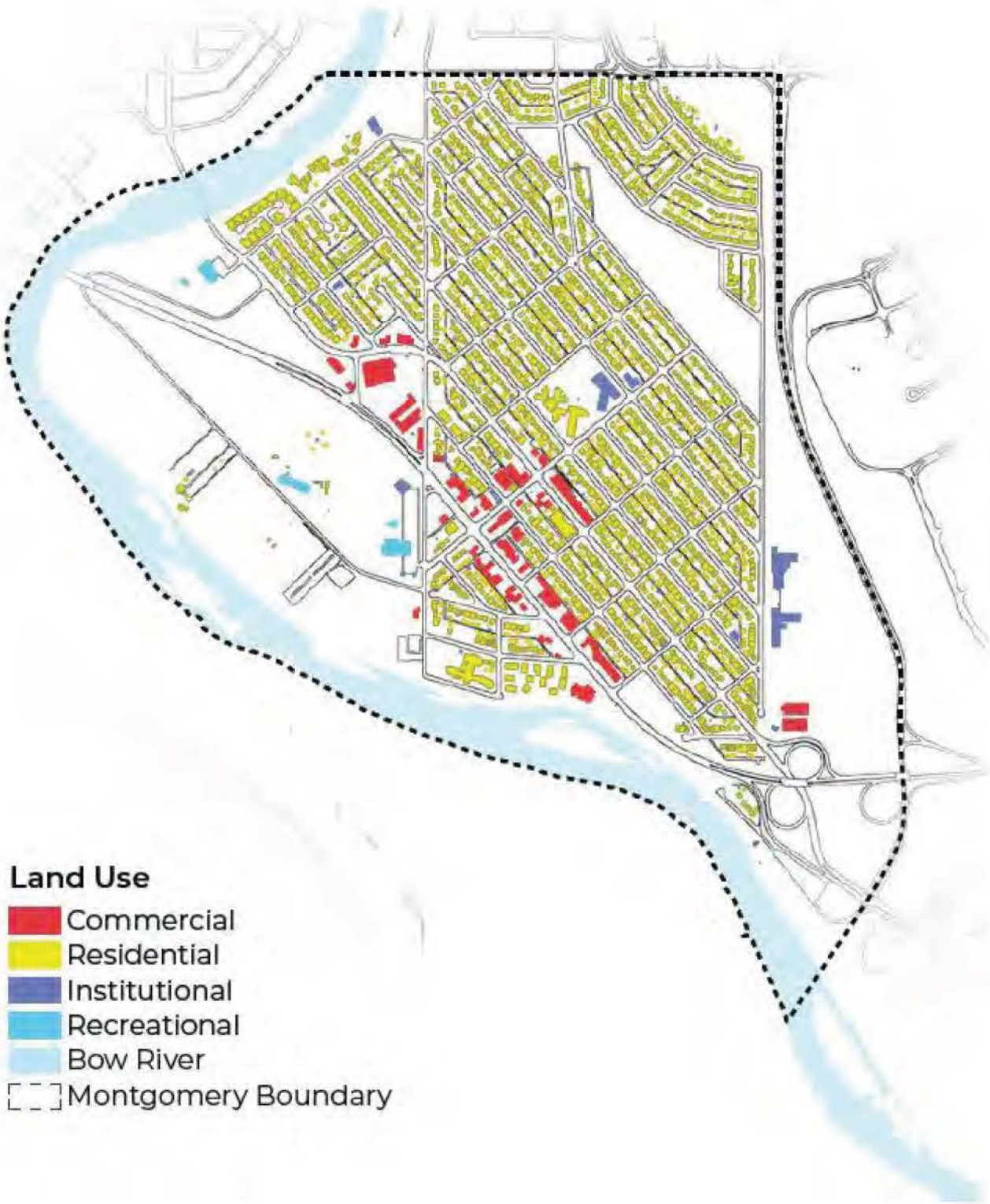
At first glance, Montgomery seems to have a large amount of trees. However, most of these trees are located in the public/private parks within the community. Leading to a misrepresentation of how many trees are within the public realm. Redevelopment and public realm improvements should look to increase their street tree capacity.

QUICK FACTS:

- **70%** are mature in size.
- **78%** Deciduous and **22%** Evergreen

3.3 LAND USE

COMMERCIAL LAND USE



Office



Hospitality



Strip Mall Retail



'Big Box' Retail



Gas Station



Mixed-Use

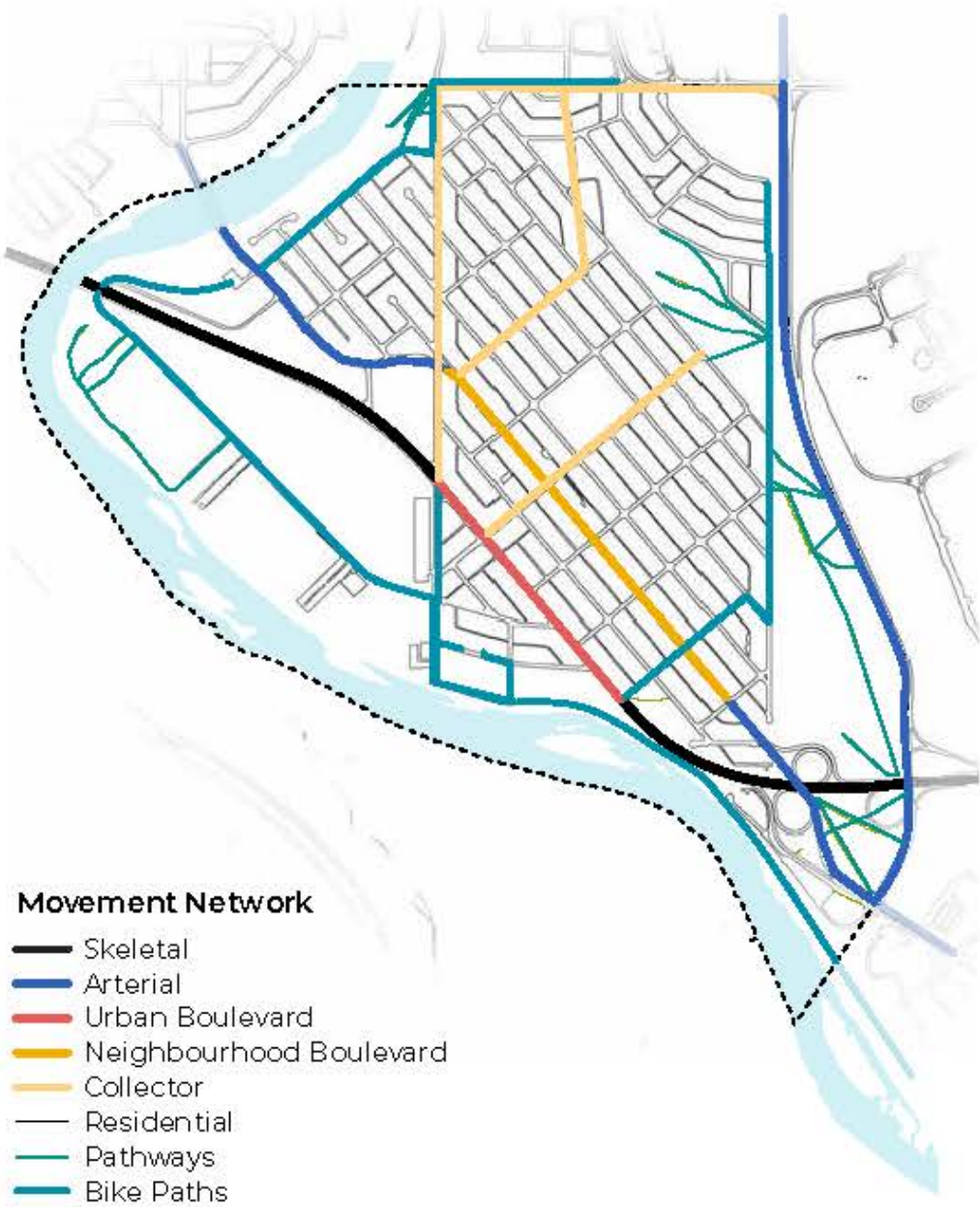


Light Industrial

Commercial land use in Montgomery is concentrated along the two main streets (Bowness Road, and 16 Avenue). There are many auto-oriented uses such as gas stations, drive-thru food, auto shops, and stores with large parking lots. 16 Avenue traffic also brings travel-based uses such as hotels, and car rental shops. Much of the office space is used for medical offices and clinics.

3.4 TRANSPORTATION

MOVEMENT NETWORK



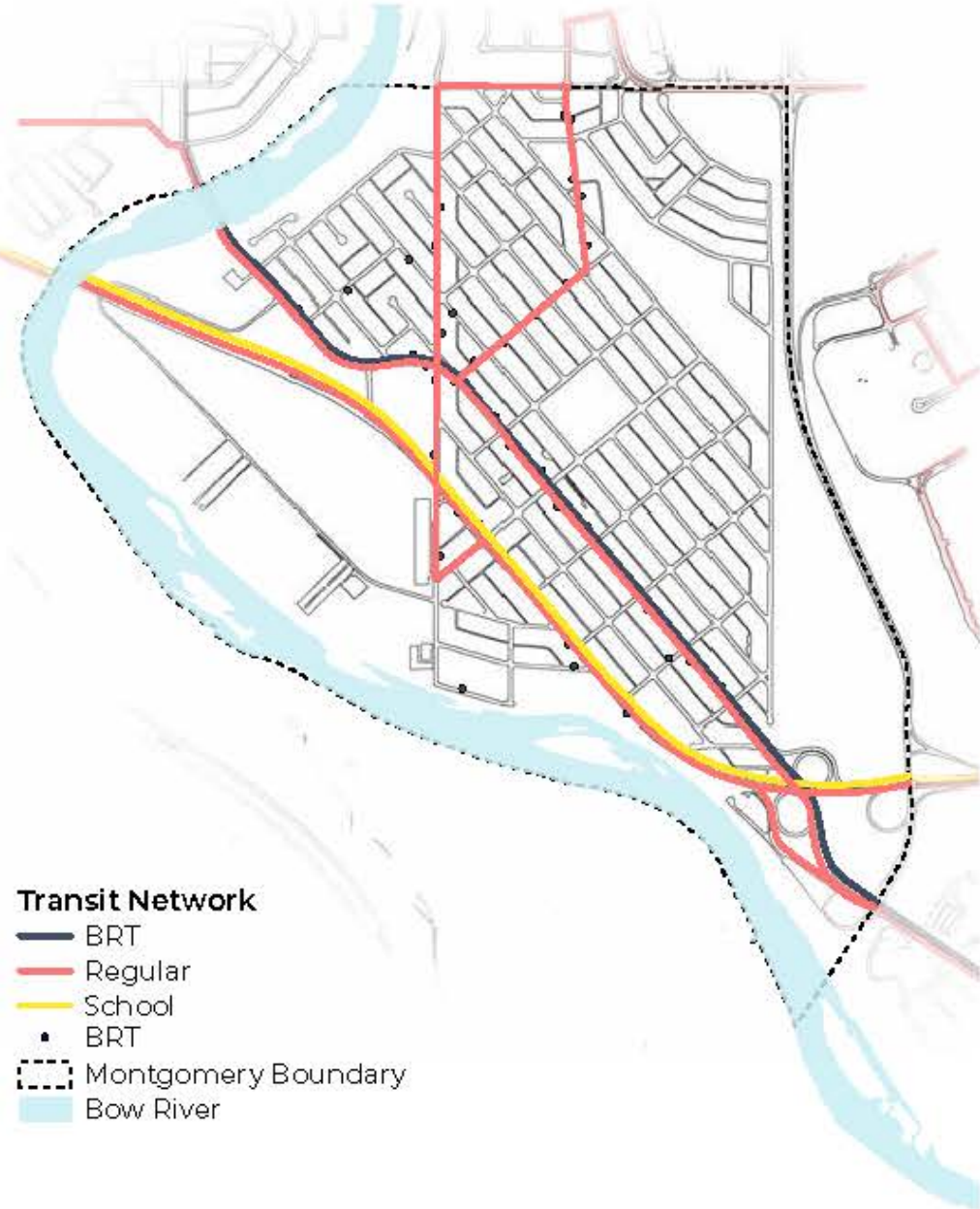
OVERVIEW

The street network suggest a diversity of streets, however, the streets are all oriented towards the movement of vehicles. This creates challenges for other modes of transportation such as walking or cycling. The community, however, is well situated along the Regional Pathway, but does not provide safe or well connected routes to the Regional Pathway or within the community itself.

QUICK FACTS:

- **7.8km** Bike Paths
- **4.8km** Pathways
- **95%** Streets and **5%** Roads.

TRANSIT



OVERVIEW

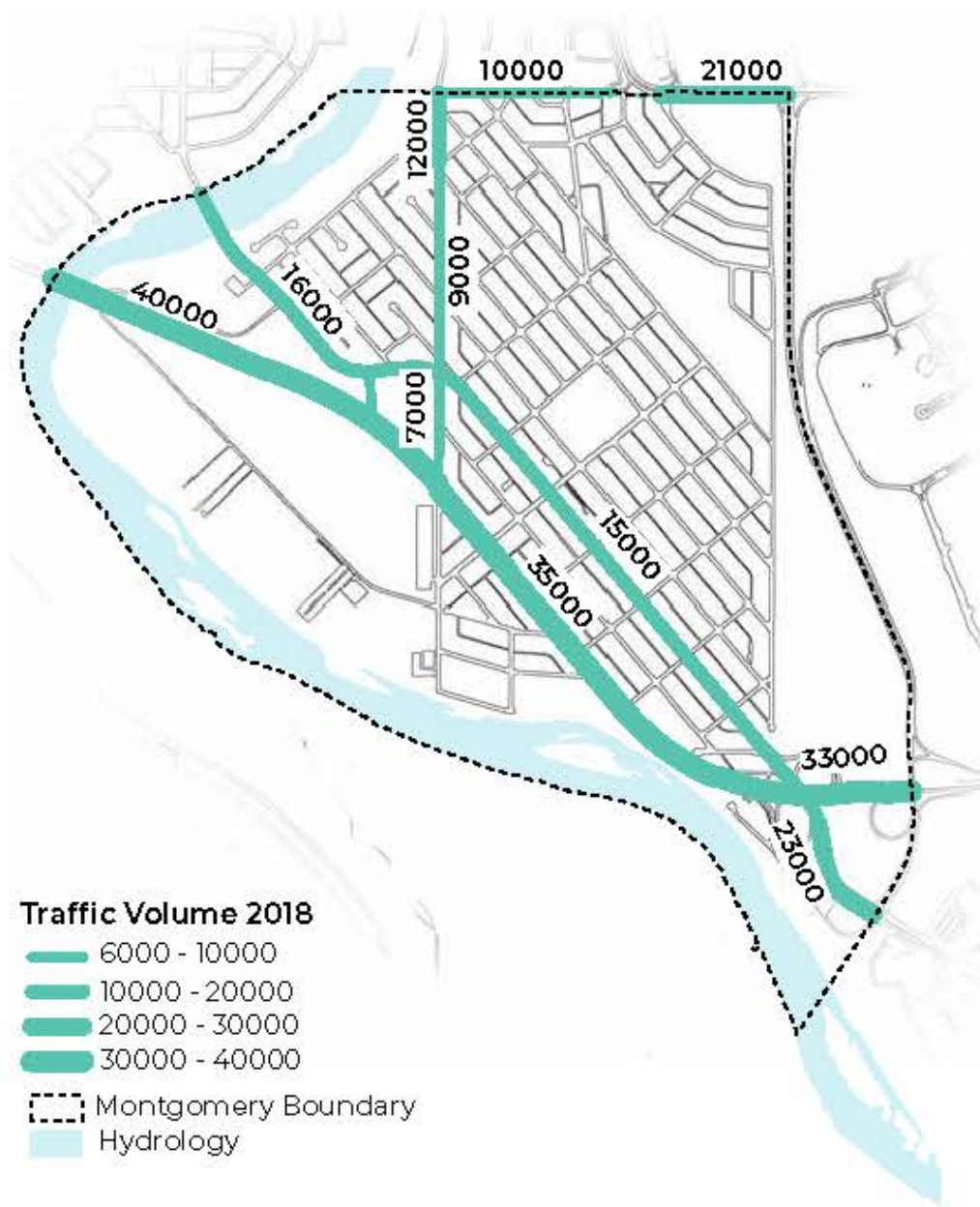
The transit network provides several routes throughout the community, however, the western portion of the community has far less option compared to the eastern part of the community. Also, bus stop infrastructure is outdated or non-existent. This creates unpleasant transit experience and discourages people from using their local transit services.

QUICK FACTS:

- **12** Bus Routes
- **47** Bus Stops
- All bus routes are **within 600m walk**.

3.4 TRANSPORTATION

TRAFFIC VOLUME



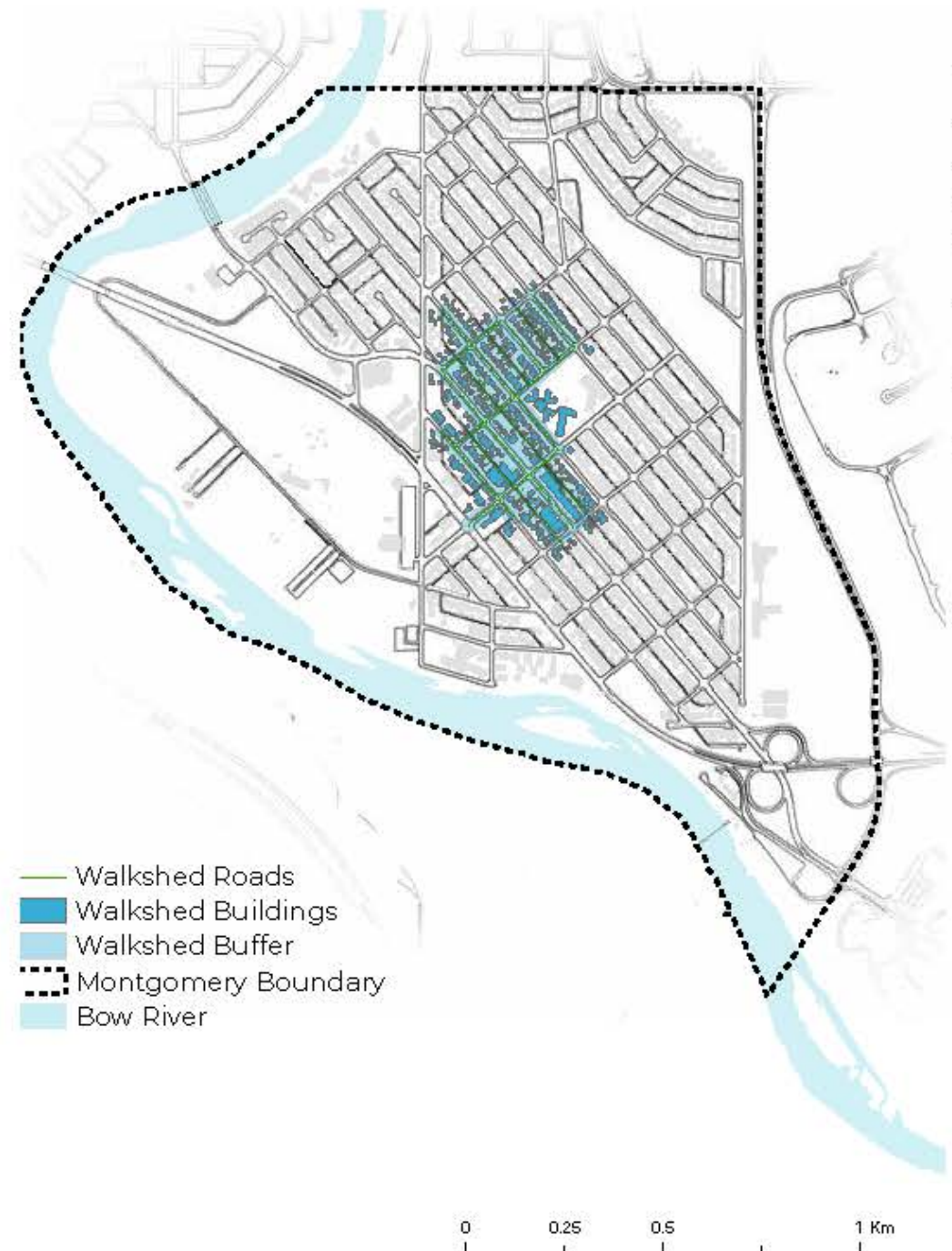
OVERVIEW

Large volume of traffic use both 16 Ave NW and Bowness Rd NW, however, this divides the community and creates challenges for pedestrians and cyclist. In recent years, there has been an increase in cut through traffic along Home Rd NW and 48 St NW. This poses challenges to the inner community safety for other modes of transportation.

QUICK FACTS:

- **Trans Canada Hwy and Bowness Rd** remain major thoroughfares.
- Traffic volume **increase** along Home Rd and 48 St NW.

WALKSHED



OVERVIEW

Montgomery has an extremely strong grid network and block lengths. This creates the foundation for a strong walkable and cycleable community. To increase more sustainable modes of transportation and to support land use, densification, community amenities, and public realm improvement should be considered in the blue highlighted area on the map.

QUICK FACTS:

- **8%** Street Access
- **20%** of people live within 600m of each community destination.

3.5 HOUSING TYPOLOGIES



Single Detached - 76%



Semi-Detached - 22%

The current housing stock of Montgomery is majority (76%) single-detached housing. This is common for historical, inner-city communities and still reflects our society's value for home-ownership. The single-detached homes range from brand new multi-storey homes, to small older-style bungalows. Many of the newer infill developments consist of semi-detached and row-style housing. Based on our observation, we expect the number of this mid-density development to increase.



Row House - 1%



Low-Rise - 0.4%

Low and mid-rise developments are scarce in Montgomery, however the ARP proposes zoning for much higher densities. Mixed-use developments such as the NOtaBLE restaurant provide opportunity for higher density living and accessible amenity space.



High Rise - 0.3%

The Montgomery ARP aims to preserve the areas small-town character, and to encourage high quality, thoughtful intensification.

Special Cases:



LANEWAY HOUSING:
Laneway housing is a great way to increase density while maintaining the existing stock of single family homes. Difficulties surrounding laneway homes include safety concerns in unlit laneways, and lack of curb appeal in laneway infrastructure.



AFFORDABLE HOUSING:
Affordable housing in Montgomery can be found along the Bow River Pathway in the Southern tip of the community. Affordability is an important element in building a diverse, and inclusive community.



SENIORS HOUSING:
Seniors housing in Montgomery is found in along the Bow River at Bow Manor, and in the heart of the community at Silvera Seniors Living. It is important that seniors housing is accessible, and safe. The Montgomery Community Association keeps seniors very involved and provides many opportunities for interaction.



3.6 DENSIFICATION

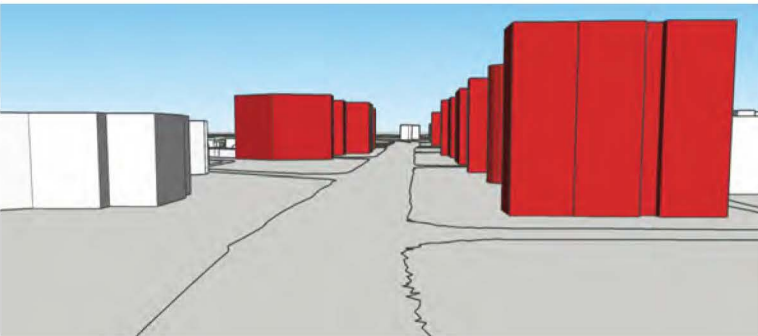
CURRENT DENSITY



Currently, Montgomery is a low density neighbourhood with single-detached housing making up 47% of its gross developable area. Montgomery has 4.3 units per gross residential acre. The Area Redevelopment Plan (ARP) includes zoning for a much higher density in the future. For example, building height allowance along 16 Avenue is permitted up to 22 meters as per the ARP. This level of density has not been well-received by the community, and has caused uncertainty for residents.

DENSITY COMPARISON:

MONTGOMERY	2,509 people/km ²
BELTLINE	8,999 people/km ²
BOWNESS	2,214 people/km ²



ARP Proposed height along 16 Avenue

SHADOW STUDY

16 Avenue NW

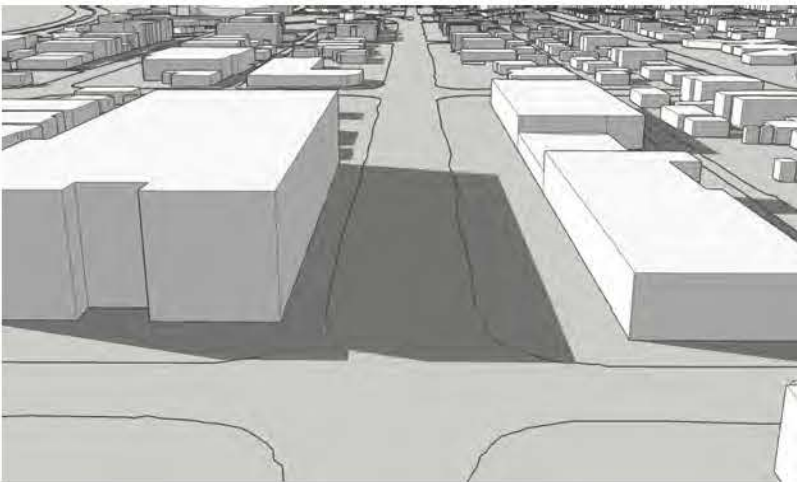
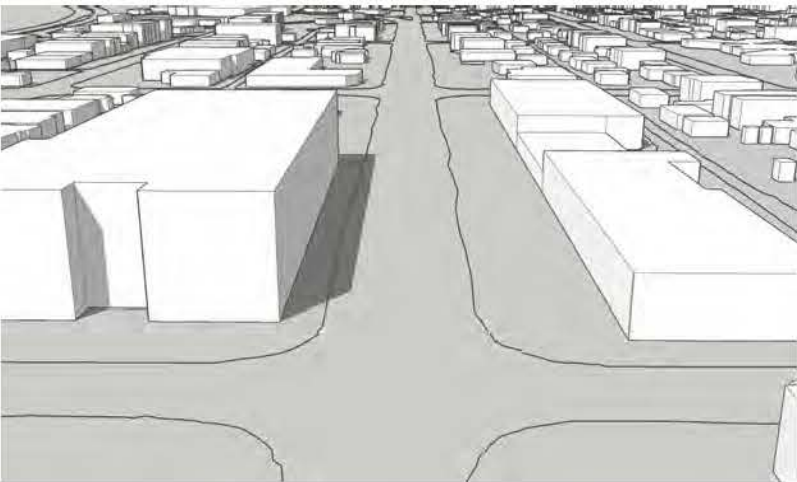
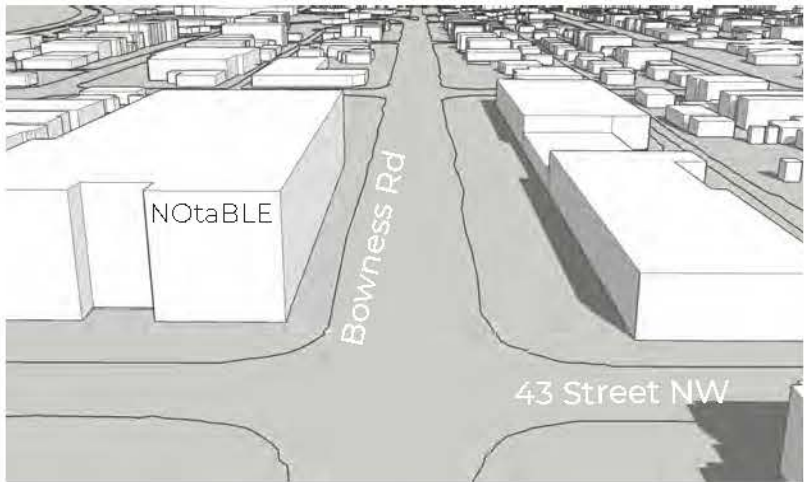
Shadow studies are important to analyze the impact of built form on the public realm. This is especially important in Winter cities like Calgary. Areas of heavy shadow can create extra cold conditions in the Winter. By analyzing the extent of shadows, buildings can be adjusted to minimize these impacts, or extra measures can be taken. Shadow studies often use days with unique sun patterns such as the solstice. For our purposes we use days that are more reflective of a typical Spring or Winter day.

9 am

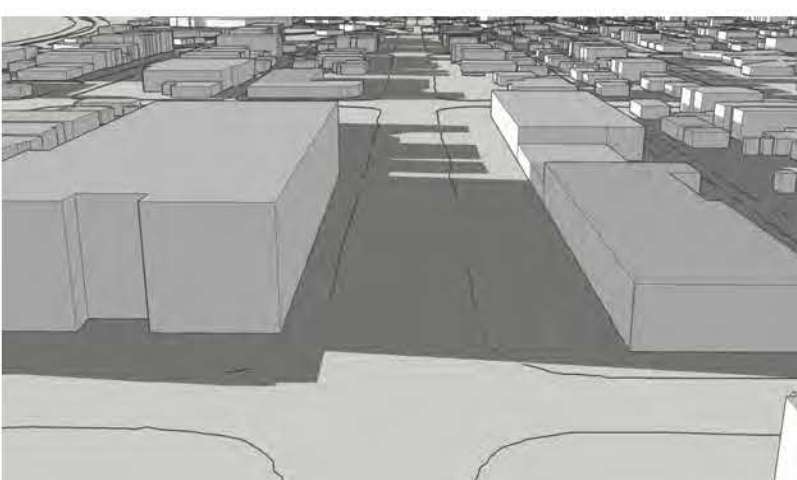
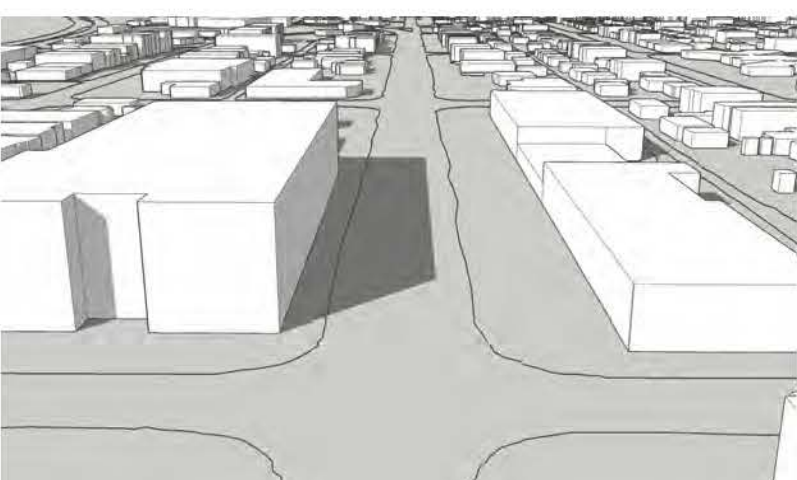
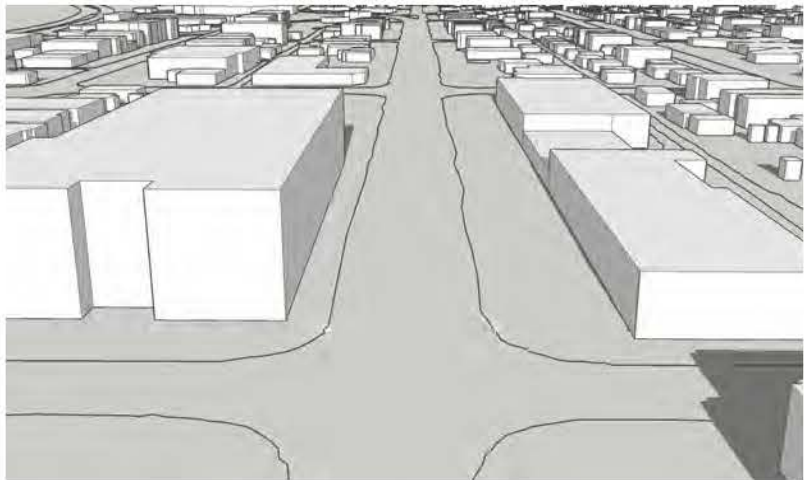
12 pm

4 pm

March 21



November 21



3.7 OPEN SPACE



Playgrounds



Bow River Pathway



Local Parks



Community Garden



Schoolyards



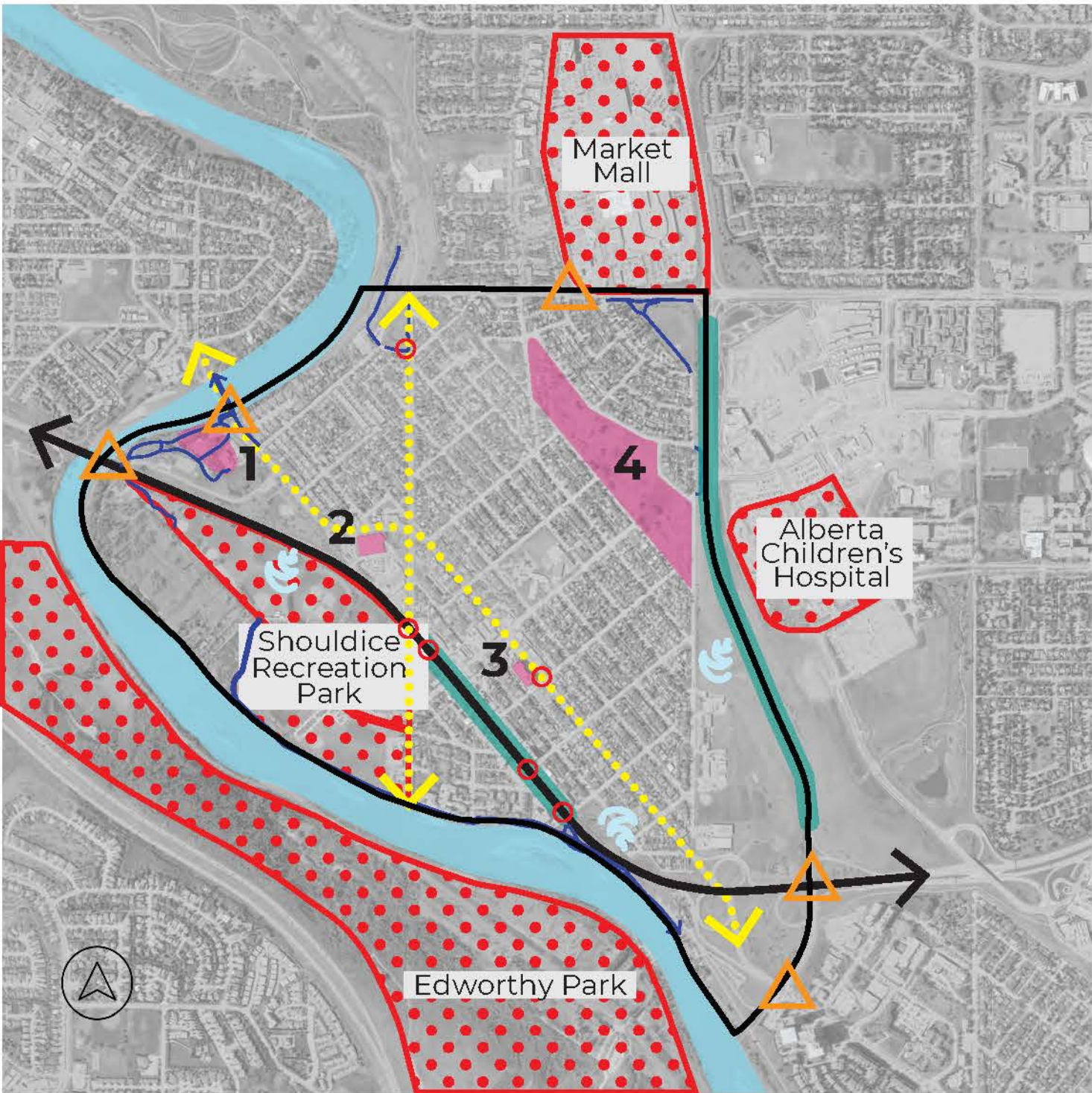
Shouldice Park




3.8 FUNCTIONAL ANALYSIS

When analyzing the functionality of Montgomery in its current state, it is clear that the neighbourhood presents many opportunities but must also overcome several constraints. The community is currently divided by a major highway which has had significant impacts on the functioning of Montgomery. Firstly, the intersection of vehicular, and pedestrian traffic is troublesome, and often uncomfortable. Also, residents on opposite sides of the highway are not only physically separated, but also identify differently to their community. The highway facilitates a lot of traffic into and out of Calgary, making it very busy, and bringing “highway” commercial uses along the corridor, such as gas stations, hotels, and car rental kiosks. These types of activities, which accommodate the passer-by over the Montgomery resident, complicate the functionality of the community. Significant regional destinations also bring traffic through the community.

Montgomery has 4 major community gateways, via 16 Avenue, Bowness Road, and 32 Avenue NW. These entrances are not always clear, and can lead to confusion or misidentification of the Montgomery community as part of Bowness. The community boundaries of the Bow River and Shaganappi Trail are clear and concrete. The opportunities and constraints of this community will be explored further in the next section, *What We Heard*.



An aerial map of a city, likely San Francisco, showing a river (the San Francisco River) winding through the urban landscape. The map is in grayscale and serves as a background for the slide.

4.0

WHAT WE HEARD

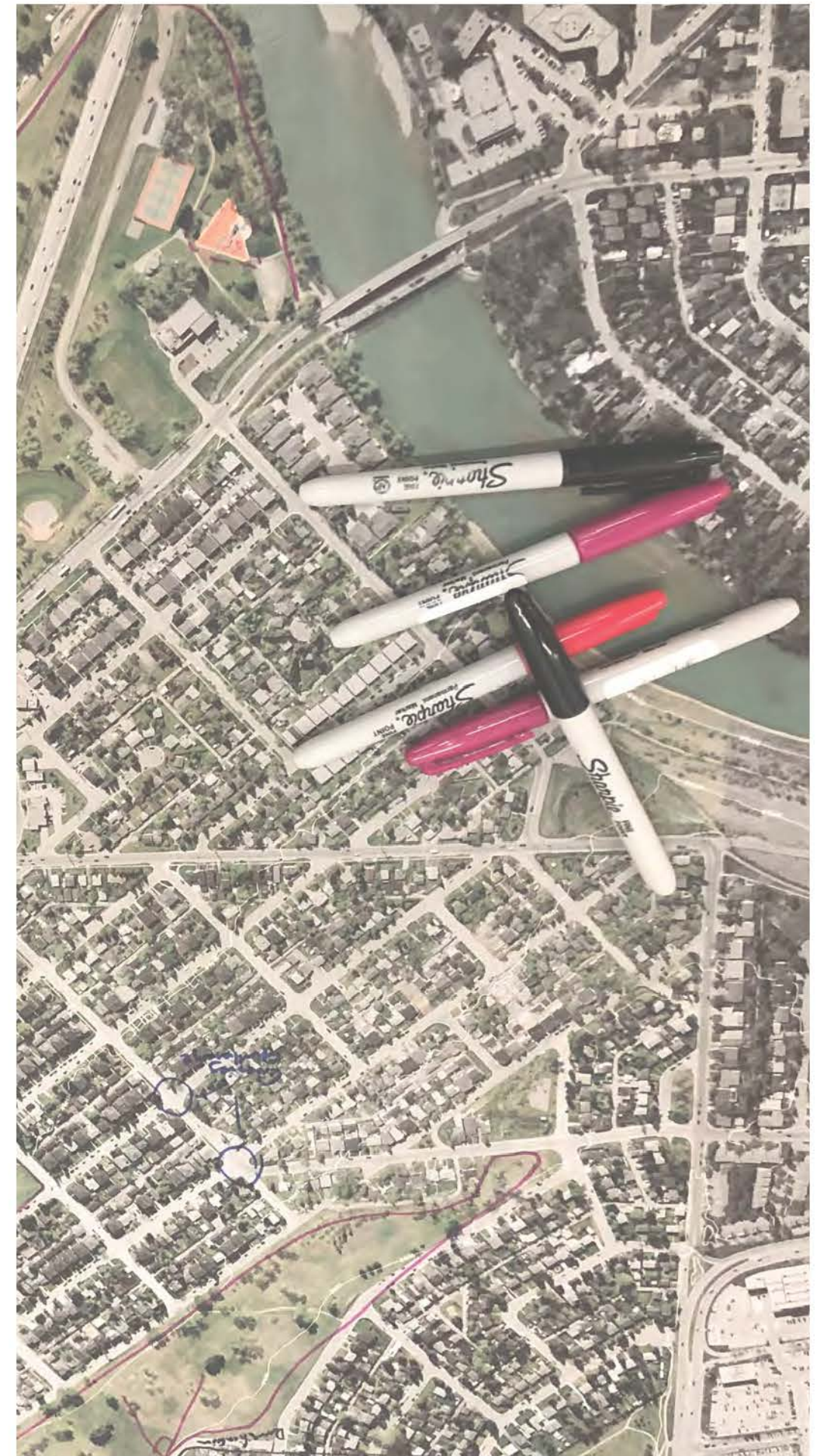
4.1 COMMUNITY WORKSHOP

A major component of this project is the engagement with community members and stakeholders. On February 29th we held a public workshop at the Montgomery Community Centre. We put up posters with our analysis results and sticky notes for community feedback. We also had a large community model showing the current density of Montgomery. Community members were asked to sit with us at tables around a large Montgomery Map. We asked a series of questions, and asked residents to write and illustrate the map with markers. Key topics included:

- Infill and densification
- Transit
- Walking and cycling
- Driving and parking
- Traffic Calming
- Housing typologies
- Commercial land use
- Special places
- Laneway housing and secondary suites
- Open spaces
- Streetscape improvements

Topics were broken into two main categories; 1) today's challenges, and 2) future opportunities. At each table we discussed each category for 35 minutes with a 15 minute report back. The experience brought to light several important issues and opportunities which are represented in the final report.

A second engagement session was planned to reveal our final plans to community members. However, due to the Covid-19 Pandemic, and restrictions for gathering this event had to be canceled. We hope to have an opportunity to share our work with the community at some point in the near future if the social distancing conditions are lifted.



4.2 FEEDBACK



MOBILITY

1. 16 Avenue NW
 - Concerns with walking, safety, and fast speeds
 - Unsafe conditions at 43 Street, 46 Street, and Home Road crossings
 - Opportunity for densification
 - Issues of crime
2. Home Road
 - Fast speeds
 - Limited visibility
 - Unsafe conditions at Bowness Road and 52 Street crossings
 - Poor walking conditions
 - Concerns about increased traffic
3. Bowness Road
 - Opportunity for infill between 42 and 47 Street NW
 - Poor walking conditions
 - Poor public realm around NOtaBLE
 - Not enough transit
4. 17 Avenue NW
 - Lost yards and tree canopy as a result of infill development
 - Needs traffic calming interventions

OPEN SPACES

1. Shouldice Terrace Park
 - Historical Significance not clear
2. Safeway & Town Square
 - Opportunity for redevelopment
 - Town Square underutilized
3. Montalban Park
 - Steep slopes
 - No sidewalk along park or E/W pathway makes park inaccessible for strollers

LAND USE

- New infill development "cookie-cutter" and lacking variety
- Limited growth along 16 Avenue
- New housing forms are not affordable
- Desire opportunities for aging in place
- Affordable Housing is nearing end of life-cycle



4.3 COMMUNITY WISH LIST

Based on our engagement with Montgomery residents, we identified the following wishlist:

- Safe pedestrian realm along main streets
- Extensive pathways and connections within and between open spaces
- More housing options and range of affordability
- Increased tree canopy
- More comprehensive transit network
- Traffic calming
- Thoughtful densification along 16 Avenue and Bowness Road
- Walkable and safe pedestrian realm
- Clear connection to Montgomery's rich history
- A town square that is used for community gathering





5.0

DESIGN
GUIDELINES
&
INTERVENTIONS



5.1

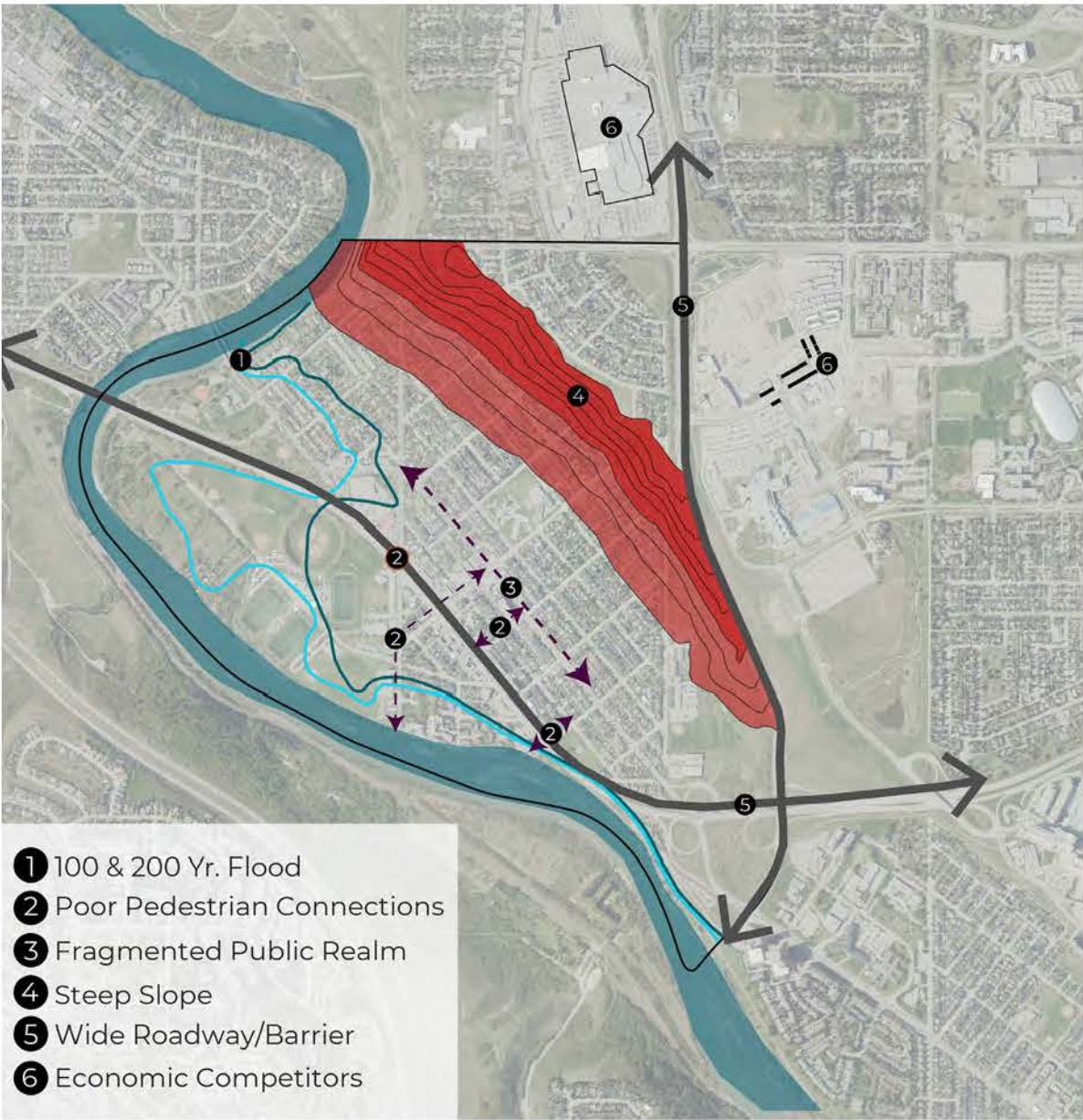
COMMUNITY GROWTH & DEVELOPMENT

5.1 COMMUNITY GROWTH & DEVELOPMENT

CURRENT OPPORTUNITIES



CURRENT CHALLENGES

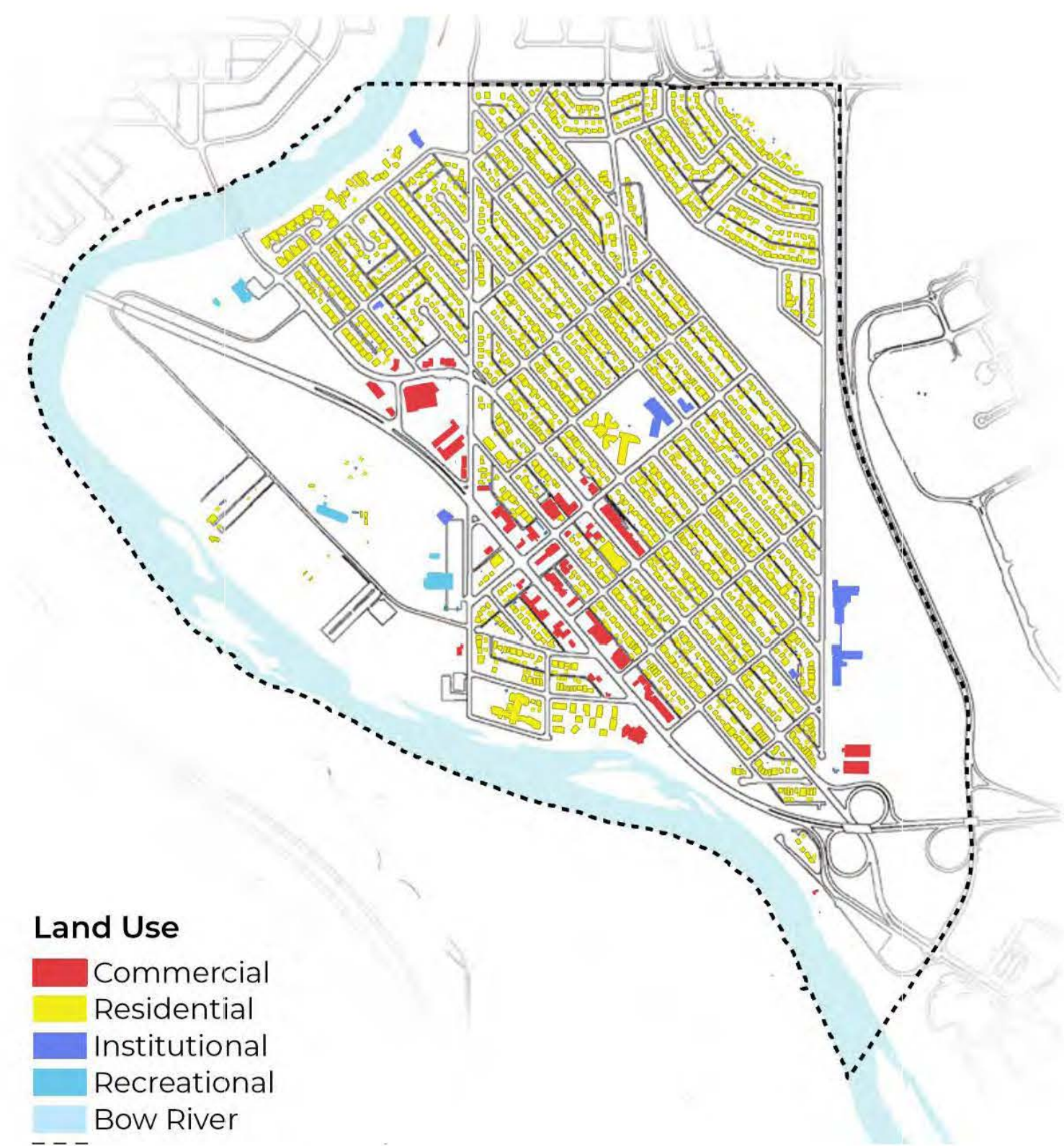


The project commenced with the ADAPT team carrying out a thorough analysis of the Montgomery community and surrounding area. The basis for the final design interventions were the opportunities and challenges identified in the maps to the left, along with the communities feedback. This led the team to develop three core values to guide their design interventions.

- 1| Sustainable Growth
The final design interventions address sustainable growth by focusing density in strategic areas and creating spaces that are adaptable through changing seasons and over time.
- 2| Diversity
The final design interventions address diversity by proposing zoning changes and land use amendments that allow for a diversity of uses and housing typologies. Along with the development of a diversity of amenity spaces.
- 3| Connectivity
The final design interventions address connectivity by improving the public realm through the development of pedestrian and cycle friendly corridors, which connect people to places.



CURRENT LAND USE



OVERVIEW

The map to the left was created by the ADAPT team during the analysis phase, using Google Earth street views. It is important to note, that this map differs from a typical zoning map because it is more accurate in representing what is actually on the ground today. As is visible in the map, the most prominent land use in the Montgomery community is residential followed by commercial.

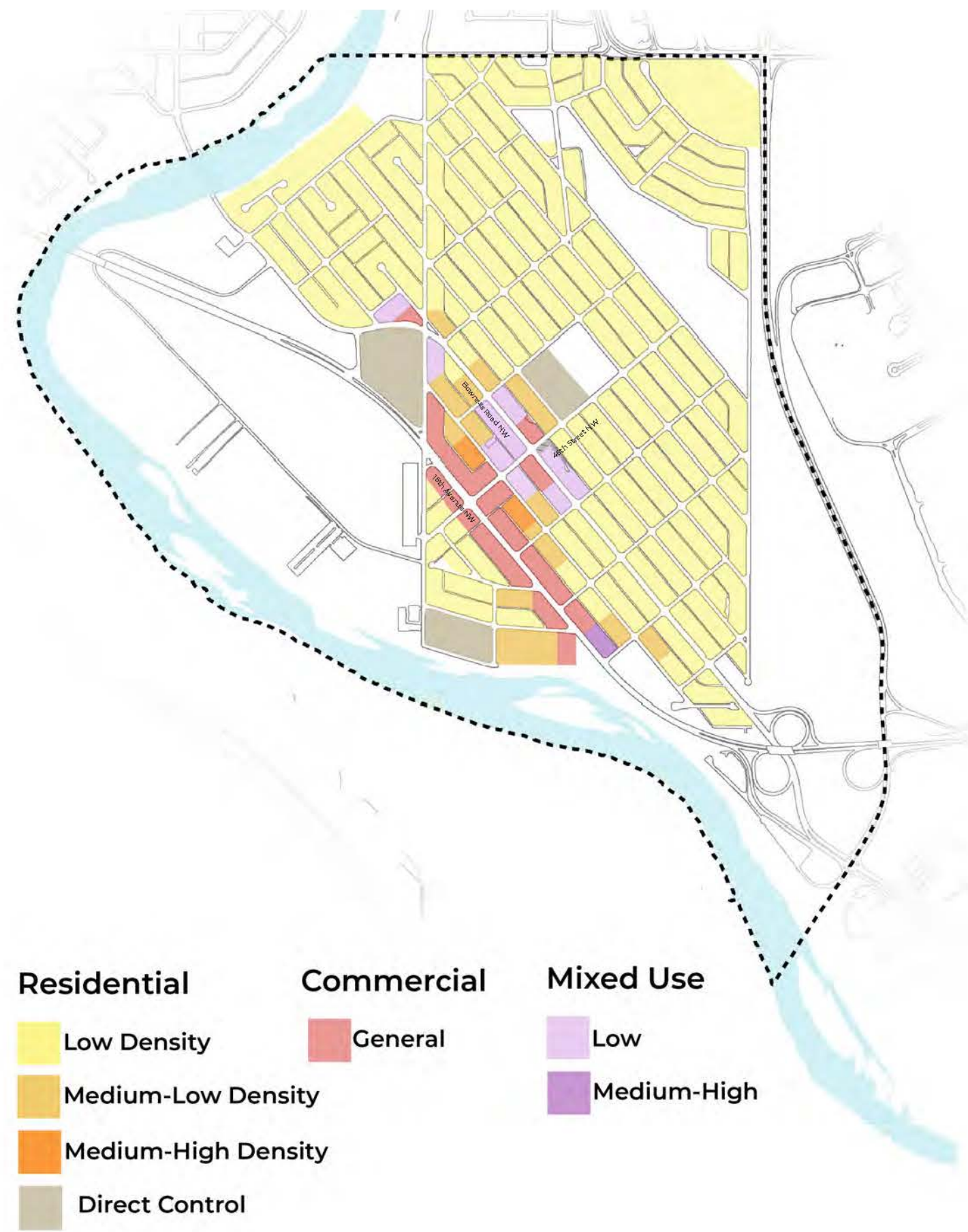
Initial build out of Montgomery began in the early 1900’s with approximately sixty homes built by 1947. This community started to be developed because at the time, the area was not a part of Calgary and land was much cheaper then in the city. Montgomery was annexed by the City of Calgary on August 15, 1963, as it needed more infrastructure to support the growing population. The community valued their small town charm and mountain views. Today we see a community that is still predominantly composed of low-density residential, but is no longer keeping up with present day demands. The community has lost its once “small town charm” due to many of the buildings coming to the end of their life-cycle and aging infrastructure.

The community says they have started to see a lot of redevelopment in Montgomery and it’s not that they are against it, but they do feel that most of the densification should occur along the main streets, Bowness Road & 16th Avenue NW. They also reported that a lot of the fourplexes and duplexes going in are very “cookie cutter” and do not preserve the neighbourhood character. The community hopes for a wider variety of housing typologies that demand a higher quality design. They also reported that some of the current infill designs are not indicative of an inviting public realm and that they value things like front porches, which create a neighborly community feel. Concerns on affordable housing in the community and aging in place were also brought to the teams attention during engagement sessions.

The fact that Montgomery is in close proximity to a regional destination, Market Mall and the developing University District, which will bring a lot of housing to the area, makes competition a concern. However, the fact that Montgomery is the gateway community into the city and also home to a regional athletic park, ensure there is an opportunity for the community to support a vibrant and active core, so long as, there is an increase in density to support this mixed use/commercial core. These two elements, an active/vibrant core and increasing density are two of the primary land use goals of this strategic redevelopment plan.



PROPOSED LAND USE



VISION FOR 2042

One of the City of Calgary’s development goals is to limit suburban greenfield developments by striving to house 50% of population growth into developed communities within Calgary. The Municipal Development Plan outlines the importance of neighbourhood redevelopment in achieving sustainable growth by taking advantage of existing infrastructure, amenities, schools and parks. Sensitive densification and redevelopment of existing low-density residential communities can provide a variety of housing choices, which also helps to provide more affordable housing options. Neighbourhoods go through life-cycles and therefore, in order to ensure viability of a neighbourhood it must undergo redevelopment at different stages in order to ensure it’s meeting the present day demands of its residents and the surrounding area.

The vision for Montgomery is to respond to their current redevelopment pressures and create a vibrant and active core for the community by being strategic with densification. Densification will be focused around 16th Avenue NW, 46 Street NW & Bowness Road NW. This density will help support an active commercial area and gentle densification throughout the community will allow for more housing diversity and affordability.

The following section will outline the land use strategies being implemented to achieve these desired outcomes. The sections will also address important policy implications and design guidelines that will further support these outcomes, and promote positive change.

OBJECTIVES

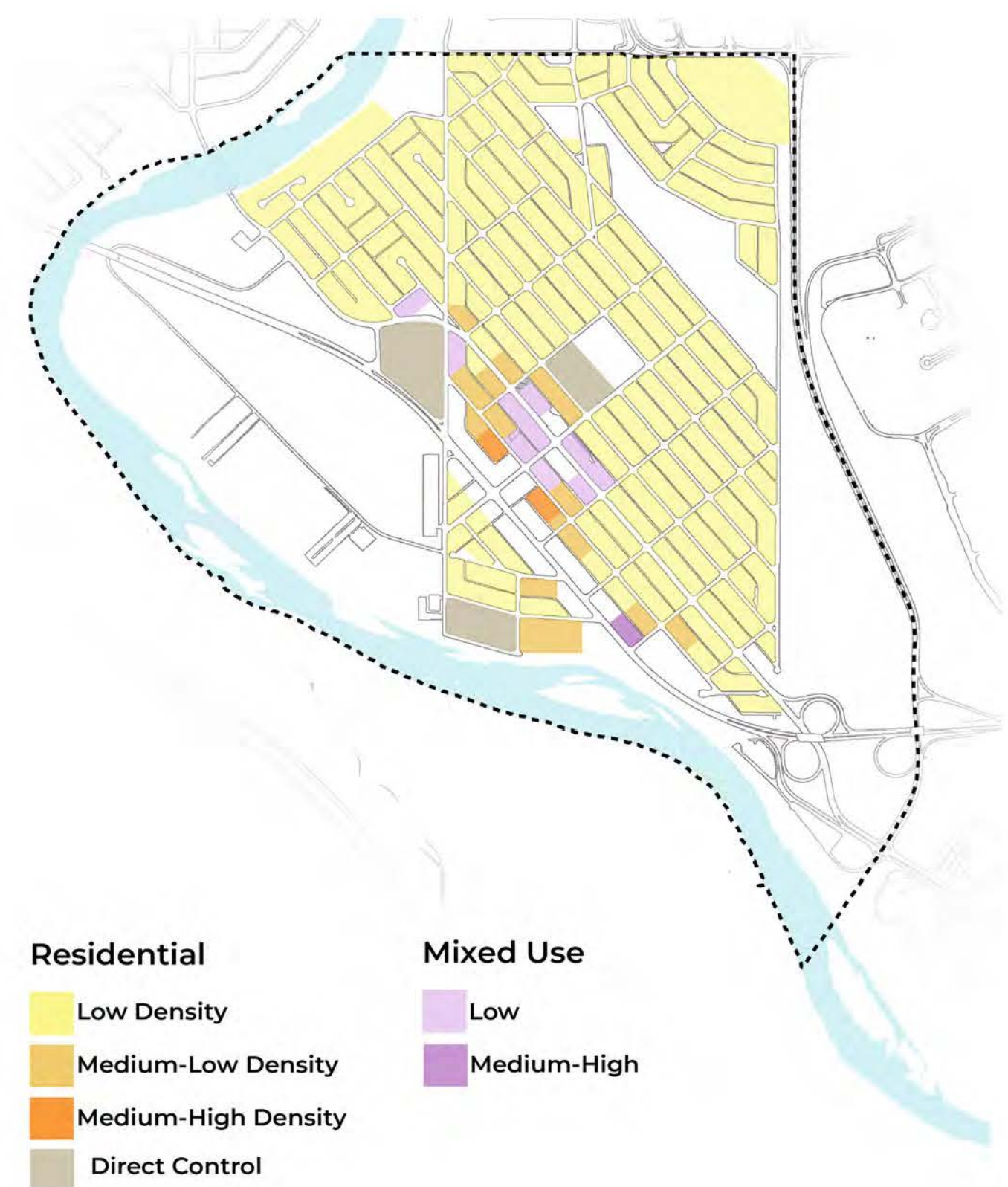
1. To create a vibrant mixed-use and commercial core for Montgomery, around 16th Avenue, 46th Street and Bowness Road NW.
2. To encourage growth and change by offering a greater range of housing choices
3. To offer an attractive, engaging, accessible and comfortable public realm
4. To create a community that meets present day demands and that is adaptable to meet demands of future generations

POLICY

- Building design should be of high quality and prioritize detail
- A street wall must be created along Bowness Road and 16th Avenue NW
- Buildings with the tallest height should be placed nearest 16th Avenue NW
- Building design along 16th Avenue and Bowness Road NW should prioritize public realm
- Parking must be located at the rear or underground along Bowness and 16th Avenue to ensure a high-quality pedestrian-oriented area
- New developments over 9 meters must perform shadow studies to assess, whether or not there will be an impact on surrounding properties and if so, how it might be mitigated through building design
- Buildings over 10 meters should incorporate stepbacks into their design to create massing similar to adjacent properties



RESIDENTIAL LAND USE



OVERVIEW

Today we see many of the original single-detached homes still making up the majority of the community's housing stock. Thirty-five percent of the current housing stock was built in 1960 or before, which means many of these single-detached dwellings are requiring repairs and nearing the end of their life-cycle. Another issue with this housing typology is that, it is no longer meeting demands being created by overall changing demographics. The values of millenials are significantly impacting housing and retail demands. This generation values experience over material goods and are very conscientious of the environment. There is no longer the same demand for large single-detached homes and the once idealistic "white picket fence" mentality. This is because millennials are not having the same size families, they are looking to have less of an ecological footprint and want more maintenance free living, so they can travel. This coupled with the location of Montgomery being in close proximity to downtown, the University of Calgary, Foothills campus and Market Mall, all put strong redevelopment pressures on the community.

The vision for Montgomery is to respond to these redevelopment pressures and create a vibrant and active core for the community. This will be accomplished by being strategic with densification. Densification will be focused along 16th Avenue NW., 46th Street NW and Bowness Road NW. Densification will follow a gradient of building heights with the highest occurring along 16th Avenue and tapering off into the community. The majority of building heights in our proposed residential land use plan, do not exceed 4 storeys. This accurately responds to community feedback, as they indicated that they are okay with densification along the main streets and that they would rather see more medium density buildings over high-density towers. Design guidelines on buildings will also ensure that adjacent housing is respected, along with neighbourhood character.

The overall aim of the proposed residential land uses, is to develop a strategic plan that allows the neighbourhood to be responsive to growth patterns of the community and city as a whole, while also providing its current residents with an exciting new neighbourhood node, which will offer a lot of amenity and make the neighbourhood an exciting place to be.



LOW DENSITY RESIDENTIAL

OVERVIEW

The large amount of single family housing in Montgomery provides a significant opportunity for residential infill and intensification. Low density residential will remain as the dominant land use in the Montgomery community; however, it is recommended that all low-density residential displayed in the map to the right, include the Residential - Contextual One/ Two Dwelling District (R-C2) along with R-C1 and R-C1s. The ADAPT team feels semi-detached homes and duplexes fit seamlessly into the low-density fabric because of their ability to be designed with a very similar size, look and feel to that of a single-detached home. Including secondary suites, laneway units, semi-detached homes and duplexes in all of the low-density residential areas, will allow for a diversity of housing options, which in return, also provides more affordable options for those wanting to live in a neighbourhood that provides them with access to jobs, schools and amenities. This land use identifies with the “Neighbourhood Housing Local” outlined in Calgary’s Guidebook for Great Communities and should align with those outlined policies, along with the policy outlined for each land use district in the Land Use Bylaw.

OBJECTIVES

- 1. Increase density while ensuring neighbourhood character is retained
- 2. Diversify low-density housing options

POLICY

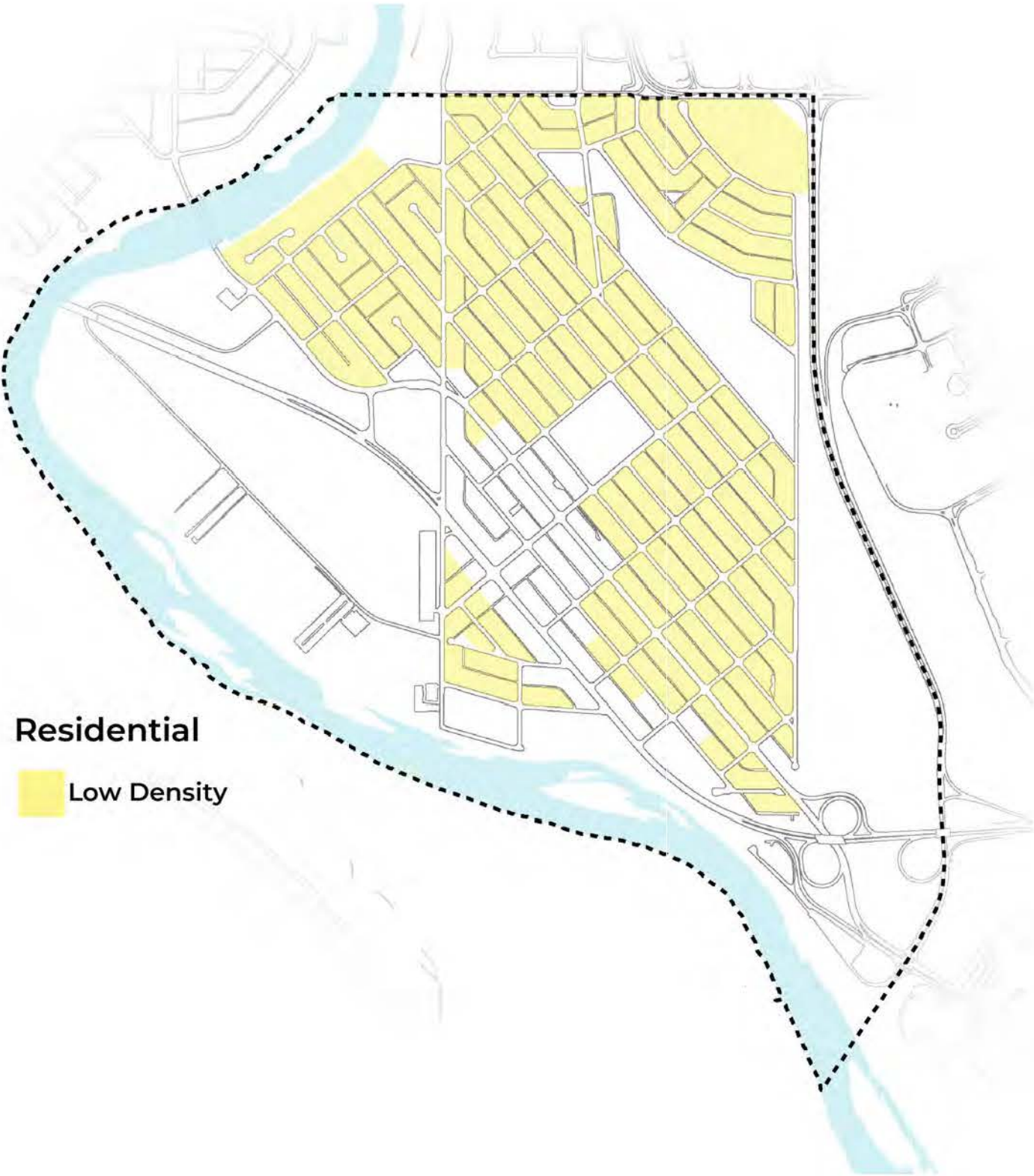
- Low density development, which includes the R-C1, R-C1s and R-C2 districts are permitted in all areas shown in the map to the right.
- Low density areas are not permitted to be rezoned

HEIGHT 1-2 storeys (3-6m)

ALLOWABLE TYPOLOGIES

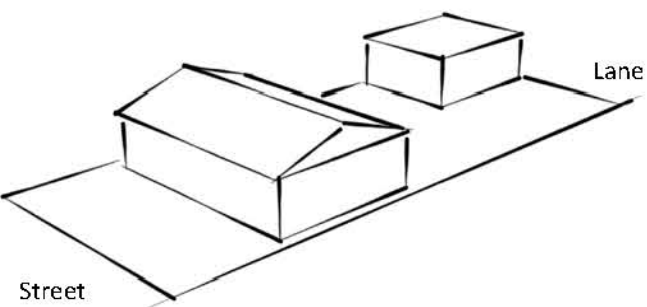
Typology	Possible Land Use District
Single Detached Home	R-C1
Secondary Suite	R-C1s
Laneway Unit	R-C1s
Semi-Detached & Duplexes	R-C2

DENSITY It is anticipated that this land use will contribute approximately 656 units by 2042.



LOW DENSITY RESIDENTIAL

SINGLE-DETACHED HOMES (R-C1)



MODERN



TRADITIONAL

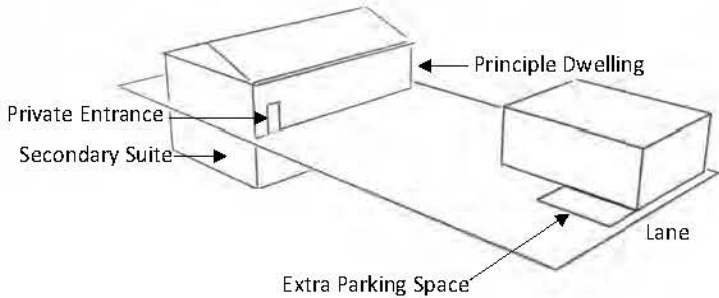
INTENT

Allow for single-detached infill developments to support families still wanting this housing option

POLICIES

- A variety of architectural styles are permitted (traditional or modern), so long as the design is of high quality and prioritizes detail.
- All developments must have front yard landscaping, that contributes to an attractive public realm
- Where there is a laneway, no front garages or parking pads are permitted, all parking must be at the rear

SECONDARY SUITES (R-C1s)



FRONT ENTRY



REAR ENTRY

INTENT

Utilize existing infrastructure to provide an affordable housing option for renters, while also providing financial benefit for the home owner. Increases neighbourhood density without altering current housing forms

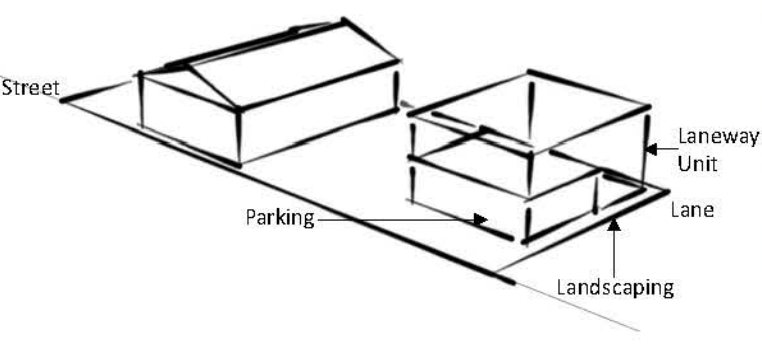
POLICIES

- Secondary suites are permitted in both the R-C1 and R-C2 Districts
- Secondary suites shall have their own seperate entrance
- One additional parking space must be provided for the suite



LOW DENSITY RESIDENTIAL

LANEWAY UNITS (R-C1s)



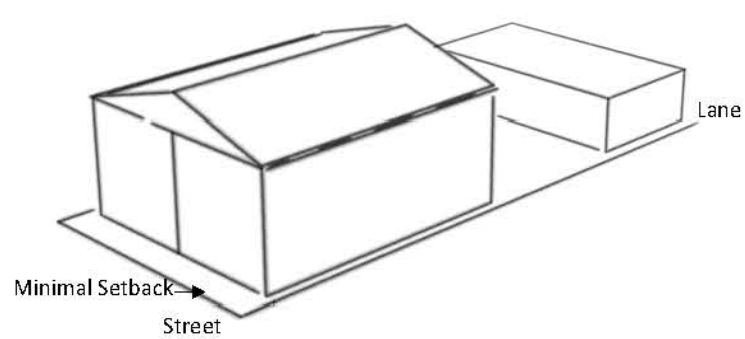
INTENT

Provides a housing option for a diverse group of people, without altering neighbourhood character.

POLICIES

- Laneway units are permitted on any R-C1 lots with a laneway
- Laneway units must be of high quality design and respect privacy of neighbouring properties
- The unit must not be taller than the primary dwelling and must provide some at grade living space
- One additional parking space must be provided for the laneway unit
- A landscaped setback is required to face the laneway
- Existing trees/vegetation must be retained where possible and at least one new tree planted as part of the landscaping

SEMI-DETACHED/DUPLEXES (R-C2)



INTENT

Provides a more affordable ground oriented housing option for families and those wanting to downsize, while still maintaining neighbourhood character

POLICIES

- A variety of architectural styles are permitted (traditional or modern), so long as the design is of high quality and prioritizes detail
- All developments must have front yard landscaping that contribute to an attractive public realm
- Existing trees/vegetation must be retained where possible



MEDIUM-LOW DENSITY RESIDENTIAL

OVERVIEW

Medium-low density residential will be composed of townhouses, fourplexes, rowhouses and 3-4 storey apartment buildings. The ADAPT team feels that, these housing typologies help to support the development of a vibrant neighbourhood core. These forms also present a good option to help with the densification gradient from higher building heights to low-density residential. Community feedback indicated their major concern with this land use to be, a lack of architectural style and parking concerns. The proposed plan will outline additional guidelines to try and mitigate these issues.

This land use identifies with the “Neighbourhood Housing Minor” outlined in Calgary’s Guidebook for Great Communities and should align with those outlined guidelines, along with the policy outlined for each land use district in the Land Use Bylaw.

OBJECTIVES

- 1. Ensure a seamless density transition from higher building heights to low-density residential.
- 2.This land use should help to support the commercial uses and help to activate the community node between 16th Avenue, 46th Street & Bowness Road NW.
- 3. Provide a diversity of medium-low density housing types.
- 4. Ensure building design respects neighbouring land uses and character

POLICY

- Medium-low density residential districts are not permitted to be rezoned
- 3-4 storey apartment buildings should be placed closest to the community node and 16th Avenue

HEIGHT 2-4 storeys (6-12m)

ALLOWABLE TYPOLOGIES

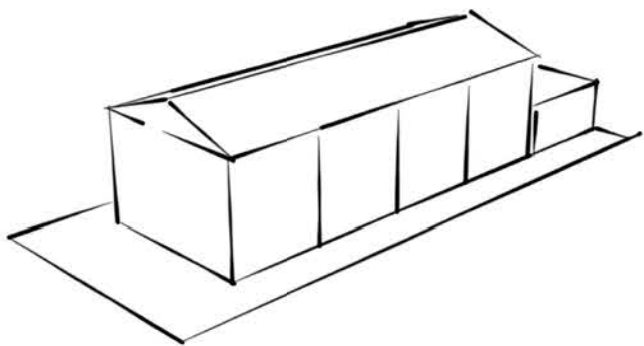
Typology	Possible Land Use District
Townhouses & Fourplexes	M-CG
Rowhouses	M-G
3-4 Storey Apartment Buildings	M-C1

DENSITY It is anticipated that this land use will contribute approximately **272** units by 2042.



MEDIUM-LOW DENSITY RESIDENTIAL

TOWNHOUSES, FOURPLEXES & ROWHOUSES (M-CG/(M-G)



ROWHOUSES



FOURPLEX

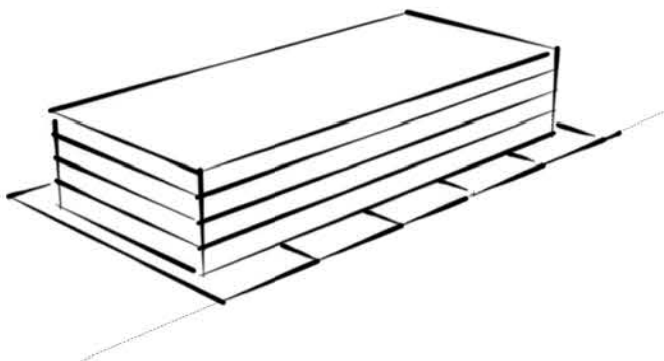
INTENT

Provides more affordable ground oriented housing options for families and those wanting to downsize,

POLICIES

- A variety of architectural styles must be used in order to maintain character and avoid “cookie cutter” like designs
- All units should have their own at grade amenity space
- Areas facing the streets must be landscaped to contribute to an attractive public realm
- Existing trees/vegetation should be retained where possible and where trees are removed, new ones must be planted
- One parking stall per unit must be offered in the form of a rear garage or parking pad

3-4 Storey Apartment Building (M-C1)



MODERN



TRADITIONAL

INTENT

Provides a mix of housing options suitable for a range of income levels and lifestyles.

POLICIES

- A variety of architectural styles must be used in order to maintain character and avoid “cookie cutter” like designs
- Areas facing the streets must be landscaped to contribute to an attractive public realm
- There must be hard landscaping around the building to ensure accessibility
- There must also be soft landscaping near the building to contribute to an attractive public realm
- Parking must be at the rear of the building or underground to contribute to the neighbourhoods pedestrian-oriented design



MEDIUM-HIGH DENSITY RESIDENTIAL

OVERVIEW

Medium-high density residential has been strategically placed in only one location, as seen on the map to the right. This density is intended to function as a buffer between the taller buildings along 16th Avenue and the lower building heights moving into the neighbourhood, with the intention of creating a densification gradient. This land use will also help to provide a consumer base, workforce and housing near the commercial corridor along 16th Avenue NW and the community node along 46th Street and Bowness Road NW.

This land use identifies with the “Neighbourhood Housing Major” outlined in Calgary’s Guidebook for Great Communities and should align with those outlined guidelines, along with the policy outlined for this land use district in the Land Use Bylaw.

OBJECTIVES

- 1. Ensure there is enough density to support and activate the commercial corridor along 16th Avenue NW and mixed-use/commercial node along 46th Street and Bowness Road NW.
- 2. Ensure there is a density gradient from 16th Avenue NW into the neighbourhood

POLICY

- Medium-high density residential is only permitted adjacent to 16th Avenue NW
- Design elements must be incorporated that help the building to match surrounding building massing

HEIGHT 4-6 storeys (12-18m)

ALLOWABLE TYPOLOGIES

Typology	Possible Land Use District
4-6 Storey Apartment Buildings	M-C2

DENSITY It is anticipated that this land use will contribute approximately **176** units by 2042.



MEDIUM-HIGH DENSITY RESIDENTIAL

4-6 Storey Apartment Building (M-C2)

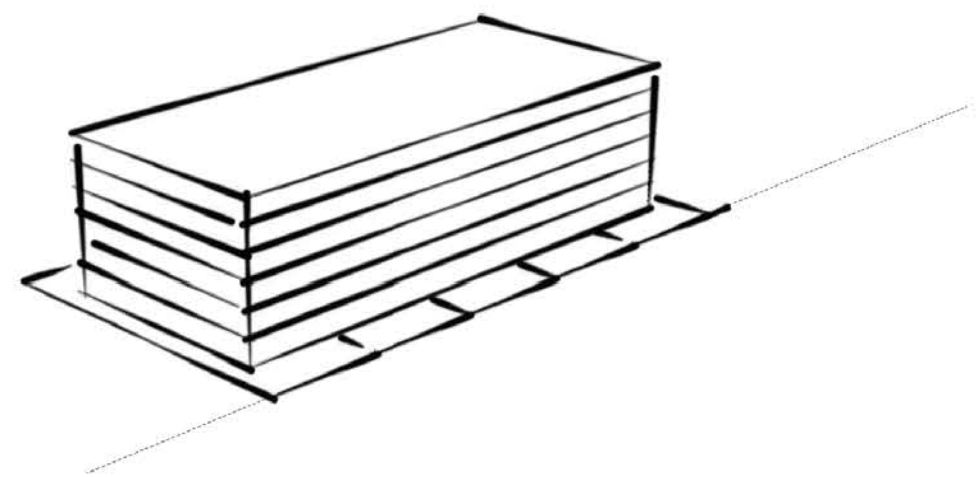
INTENT

To provide a mix of housing options suitable for a range of income levels and lifestyles. A housing option that is in close proximity to transit and commercial/mixed-use areas, which provide an array of public services and amenities.

POLICIES

- Building design must include elements such as stepbacks and use of colour to create massing similar to adjacent properties
- Building design must provide some form of high quality public space
- Parking must be concealed at the rear of the building
- Design must take into account existing trees and vegetation
- Design must incorporate trees and landscapping in order to contribute to a high quality pedestrian realm

6 Storey - Massing



Retrieved from <https://www.vancouvernewcondos.com/properties/regan-west-marcon>
Regan West - Coquitlam, Canada
Marcon



Retrieved from <https://www.cbc.ca/news/ottawa/ottawa-the-eddy-1.4811111>
The Eddy - Ottawa, Canada
Christopher Simmonds Architecture



AFFORDABLE HOUSING



OVERVIEW

The City of Calgary has outlined in many of its documents, the goal to provide inclusive and equitable housing options in all of their communities. Montgomery community feedback did indicate a need for more affordable housing and a significant upgrade to their current affordable housing site along the Bow River. Although other strategies being proposed in this redevelopment plan will help to provide affordable housing, this specific site can be for a developer who is committed to purpose built rental. Affordable housing is essential in meeting Calgary's goals of equity and diversity.



CURRENT

Montgomery's current purpose built affordable housing is located on the South side of the community along the Bow River. The City of Calgary has not had a budget for the maintenance of these buildings therefore, they have become quite run down and the area has become undesirable and does not blend in with the rest of the community.



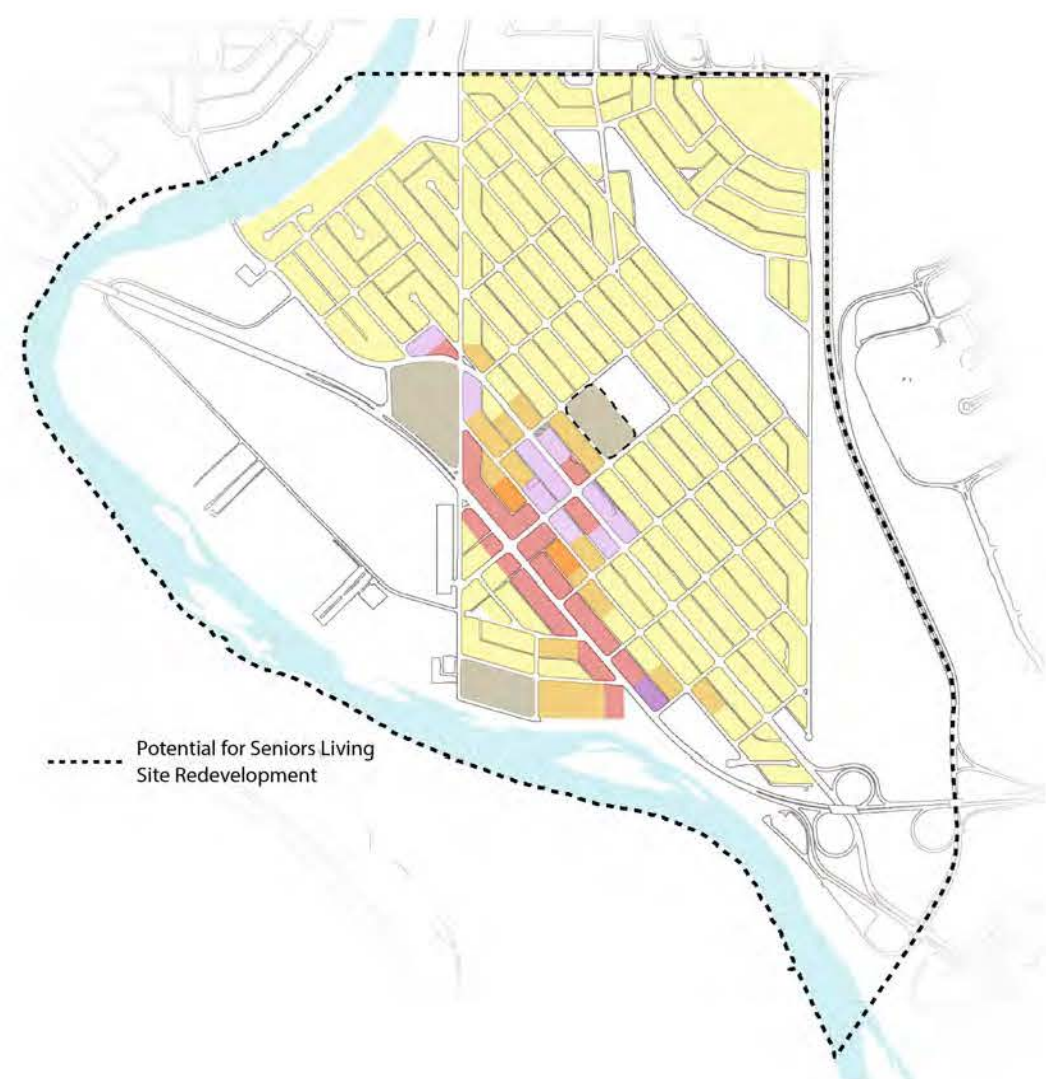
POTENTIAL

The goals of this site should be:

- to create buildings that seamlessly blend in with the rest of the neighbourhood
- to provide amenity space for each individual suite, but also a communal amenity space
- the design should contribute to an attractive public realm
- the landscaping design should strongly compliment the Bow River and pathway system, creating an inviting public realm



SENIORS HOUSING



OVERVIEW

Census data indicates that a large portion of the population is aging, therefore, it is important to consider seniors housing in order to create inclusive communities and provide the option for seniors to be able to age in place. Current research supports the importance of integrating seniors into our communities, as this provides benefits for both the young and old. Montgomery residents reported that they value their seniors population and keep them very involved in many community initiatives and events. This led the ADAPT team to ensure seniors housing was addressed as part of their strategic redevelopment plan.



CURRENT

Montgomery currently has seniors housing on the South side of the community along the Bow River, which is a great location in terms of seniors having access to the beautiful Bow River and pathway system, as research indicates how important it is to seniors health to be active on a regular basis. However, this location is not in close walking distance to other services and amenities and the other seniors housing site outlined on this map is.



POTENTIAL

The other location presently home to seniors housing is in the middle of the neighbourhood, offering a much better location in terms of seniors being able to walk to the neighbourhood node along Bowness Road for various services and amenities. The ADAPT team envisions redevelopment of this site into something more of a medium density and similar design to what's being built at University District, where an independent seniors living facility is being connected to an assisted living facility using a plus 30. This type of design would allow for an enjoyable social life and provide the opportunity to age in place.



MIXED USE - LOW

OVERVIEW

The City of Calgary’s Municipal Development Plan indicates that, the majority of density should be placed along main streets, transit streets, or major connector streets. The MDP states that intensification of developed areas should be focused around specific nodes and corridors, as this helps to respect neighbourhood character. Development of these nodes and corridors, provides destinations where people can come together to socialize and also have access to services and retail amenities. The mixed-use low designation we are proposing has a maximum height of 13.5m (that includes a 4.5m meter active ground floor). This height is being used to create a sense of enclosure and a sense of place on Bowness Road and 46th Street NW. It is intended that these buildings will serve the individuals living in the buildings, the Montgomery neighbourhood, and surrounding communities. This land use identifies with the “Neighbourhood Housing Minor & Neighbourhood Commercial Minor” outlined in Calgary’s Guidebook for Great Communities and should align with those outlined guidelines, along with the policy outlined for this land use district in the Land Use Bylaw.

OBJECTIVES

- 1. Create a mixed use node on Bowness Road and 46 Street NW
- 2. Create a high quality environment that provides services and amenities through a comfortable, accesible and engaging pedestrian realm
- 3. Offer a more compact retail experience
- 4. Develop an area that acts as a strong social function for the community

POLICY

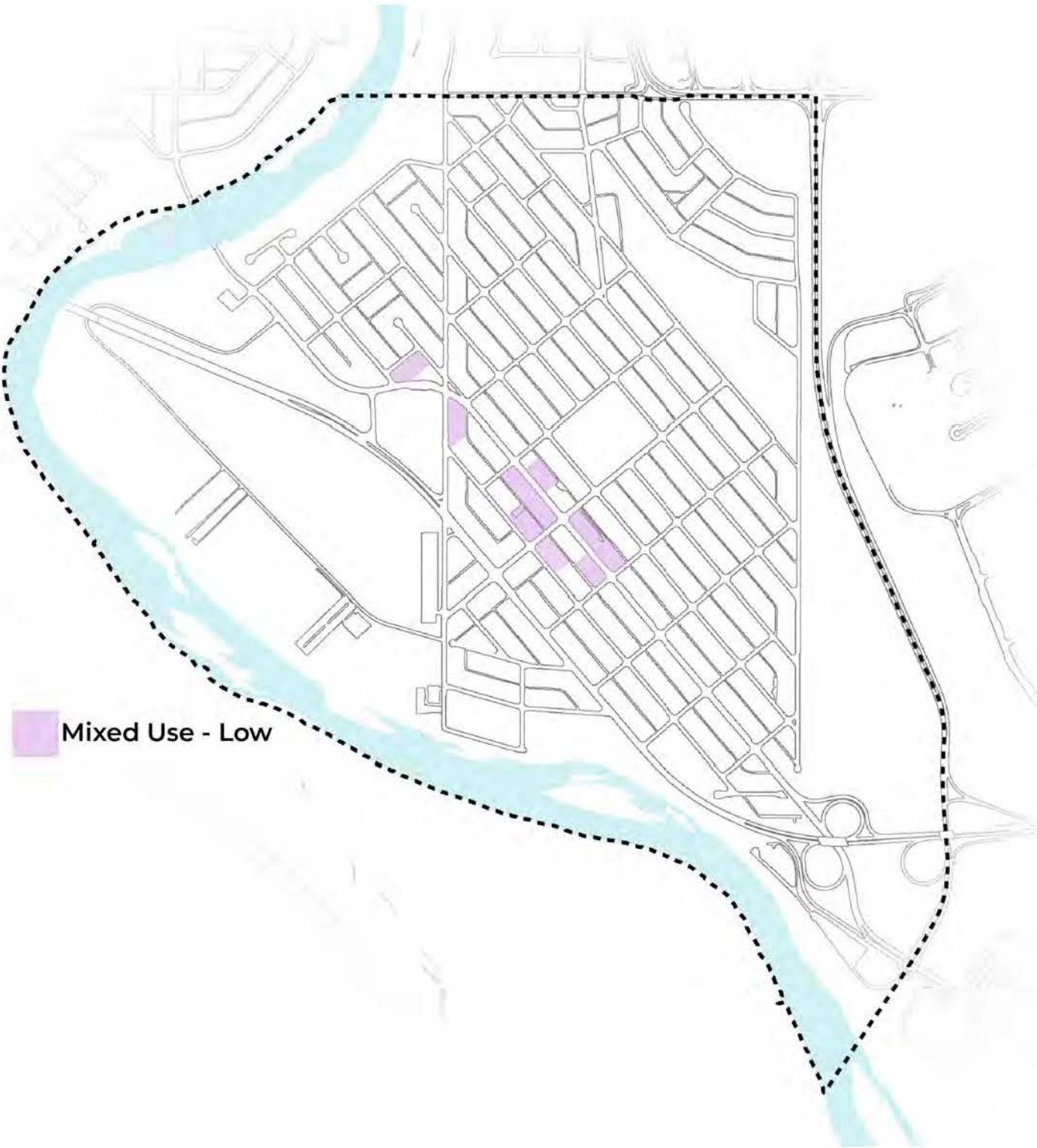
-the “Active Frontage” modifier from Calgary’s Guidebook for Great Communities must be applied to both sides of Bowness Road from 45th Street NW to 47th Street NW

HEIGHT 2-4 storeys (7.5-13.5m)

ALLOWABLE TYPOLOGIES

Typology	Possible Land Use District
2-4 Storey Mixed Use Building	MU-2

DENSITY It is anticipated that this land use will contribute approximately **378** units by 2042.



MIXED USE - LOW



BEFORE



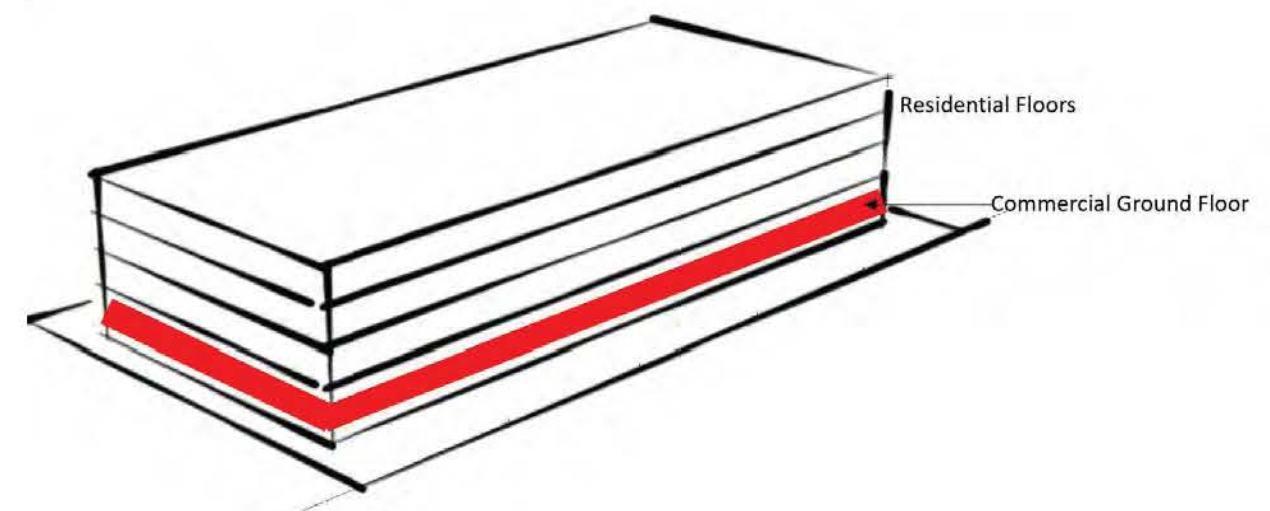
AFTER

These before and after images show potential for a mixed use-low building at the corner of Bowness Road & 47 Street NW. You can see the design is of high quality, respects neighbourhood character and offers a comfortable and accessible pedestrian-oriented environment.

POLICIES

- Buildings must be located in such a way to create a defined and continuous pedestrian oriented and permeable street wall with active uses at street level
- The street wall can be broken at times to provide pedestrian connections or small plaza spaces, so long as, they are of a high quality design and significantly enhance the public realm
- Building design must differentiate residential floors from the active ground level street wall, using stepbacks or other architectural design elements
- Design must be detail oriented to provide a high quality pedestrian environment (facade treatments, landscaping and street furniture)
- Parking must be at the rear of a building or concealed to ensure a pedestrian-oriented street
- Buildings must respect adjacent land uses by using design elements such as, stepbacks, different roof lines etc., to ensure massing and character matches that of the adjacent land uses
- Corner buildings should act as a gateway feature by using different architectural elements
- Street trees and landscaping is required to enhance the public realm
- No automobile uses are permitted

Unique to mixed use-low is that, street level commercial uses must be smaller scale boutique retail shops, restaurants, or coffee shops with residential located above.



MIXED USE - MEDIUM-HIGH

OVERVIEW

As discussed in the mixed use-low section, density should be focused in nodes and along corridors to create destinations within a neighbourhood and community. The mixed-use medium-high designation we are proposing is strategically being place along the commercial corridor because its max building height of 20 meters is in align with the max allowable height along the 16th Avenue main street. This land use would not belong in other areas of the community.

This land use identifies with the “Neighbourhood Commercial Major” & “Neighbourhood Housing Major” outlined in Calgary’s Guidebook for Great Communities and should align with those outlined guidelines, along with the policy outlined for this land use district in the Land Use Bylaw.

OBJECTIVES

- 1.Contribute to an active and vibrant commercial corridor along 16th Avenue NW
- 2.Create a high quality environment that provides a range of amenities, services and employment
- 3.Contribute to a high quality pedestrian realm that is accessible, comfortable and engaging

POLICIY

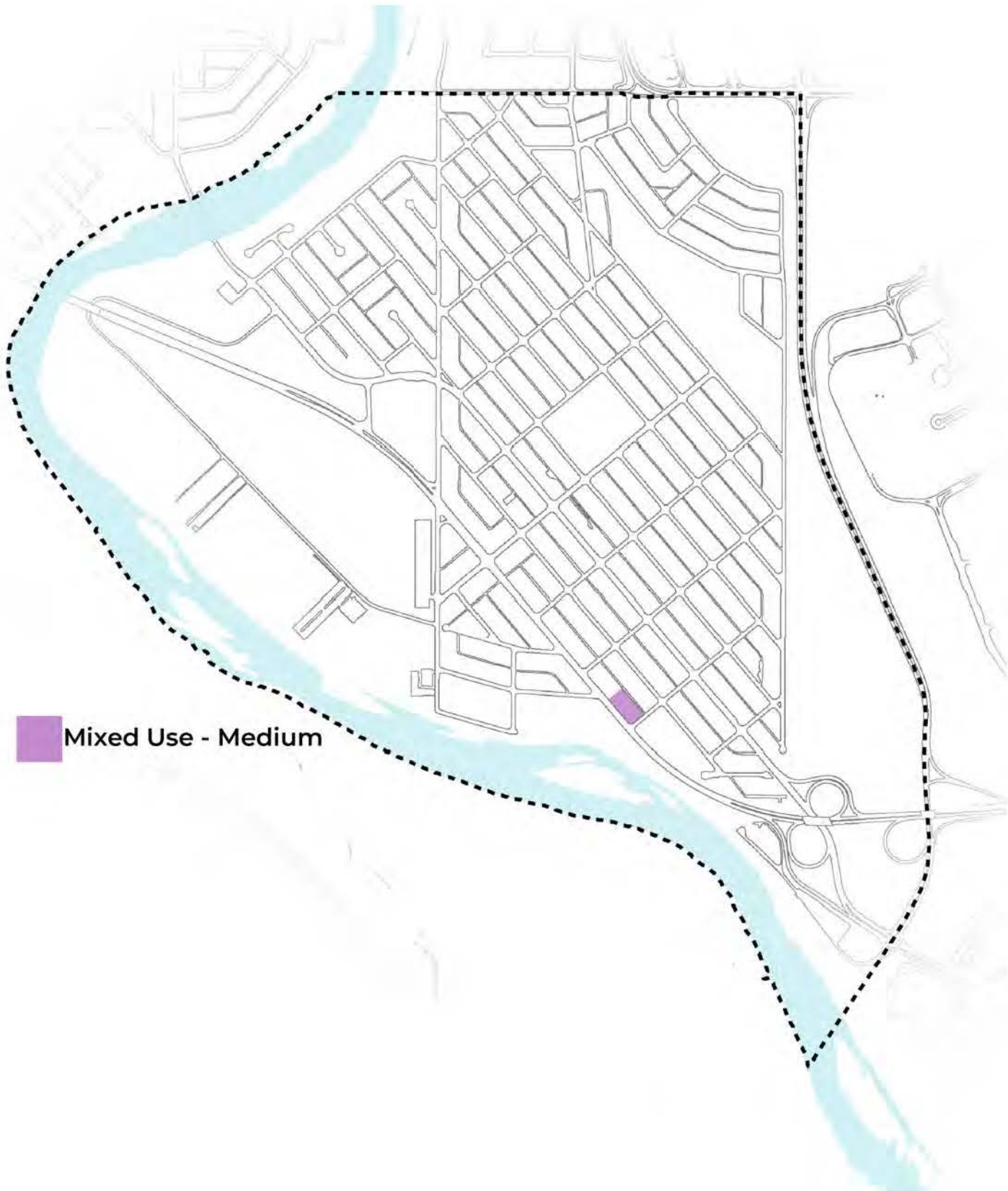
-the “Active Frontage” modifier from Calgary’s Guidebook for Great Communities should be applied to this land use designation

HEIGHT 4-6 storeys (13.2-19.8m)

ALLOWABLE TYPOLOGIES

Typology	Possible Land Use District
4-6 Storey Mixed Use Building	MU-2

DENSITY It is anticipated that this land use will contribute approximately 69 units by 2042.



MIXED USE - MEDIUM-HIGH



BEFORE



AFTER

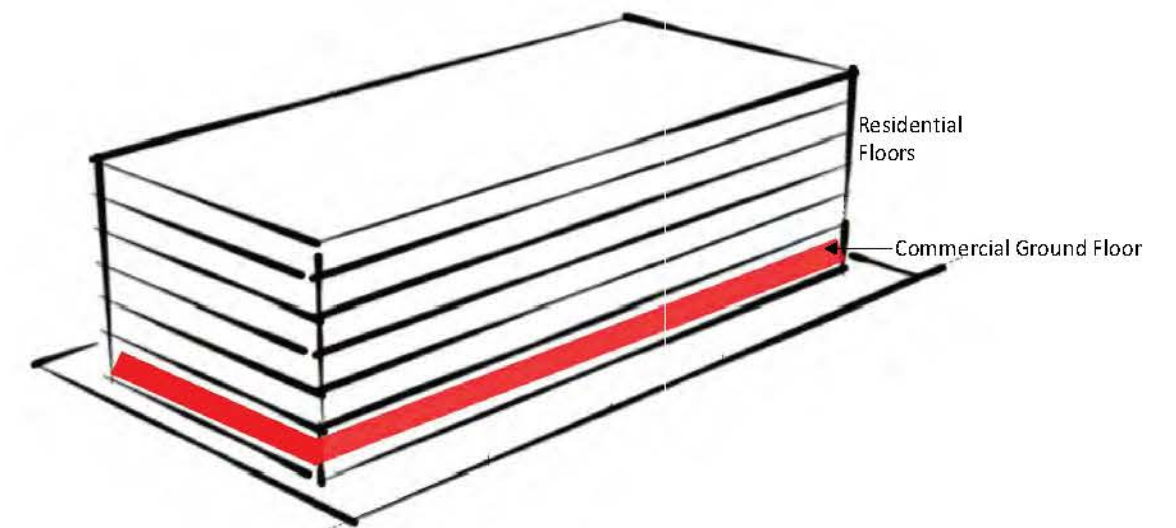
A mixed use medium-high density building placed on the corner across from George Gell Park and at the entrance to the community from the East would act as a gateway feature, as well as, provide the “eyes on the street” concept for the park. The active ground floor would also be a prime location for amenities tailored to users of the Bow River pathway system and the park.

POLICIES

*Mixed-use medium-high policies align with the medium-low policies outlined below:

- Buildings must be located in such a way to create a defined and continuous pedestrian oriented and permeable street wall with active uses at street level
- The street wall can be broken at times to provide pedestrian connections or small plaza spaces, so long as, they are of a high quality design and significantly enhance the public realm
- Building design must differentiate residential floors from the active ground level street wall, using stepbacks or other architectural design elements
- Parking must be at the rear of a building or concealed to ensure a pedestrian-oriented street
- Buildings must respect adjacent land uses by using design elements such as, stepbacks, different roof lines etc., to ensure massing and character matches that of the adjacent land uses
- Corner buildings should act as a gateway feature by using different architectural elements
- Every new development is required to contribute street trees and landscaping to enhance the public realm

*Automobile uses must be limited and only have access from a street or lane, the building must still contribute to a permeable, aesthetically pleasing and pedestrian-oriented street wall



COMMERCIAL LAND USE

OVERVIEW

The community identified many issues with the current commercial uses in Montgomery, indicating that many of the uses are automobile oriented or housed in buildings that are nearing the end of their life-cycle and do not contribute to a comfortable or inviting public realm. It is important that the densification this plan is proposing, is supported by amenity improvements and the goal is to create destinations that provide a high quality, vibrant, accessible and comfortable environment for people to access services and amenities. This land use identifies with the “Neighbourhood Commercial Minor & Major” outlined in Calgary’s Guidebook for Great Communities and should align with those outlined guidelines, along with the policy outlined for these land use district in the Land Use Bylaw.

OBJECTIVES

- 1. Ensure commercial uses at the entrances to the community create a visually engaging and welcoming gateway
- 2. Create destination rich main streets, that will attract not only Montgomery and nearby neighbourhoods, but regional visitors as well

POLICIY

-the “Active Frontage” modifier from Calgary’s Guidebook for Great Communities should be applied to this land use designation

HEIGHT Varies (Max 20m)

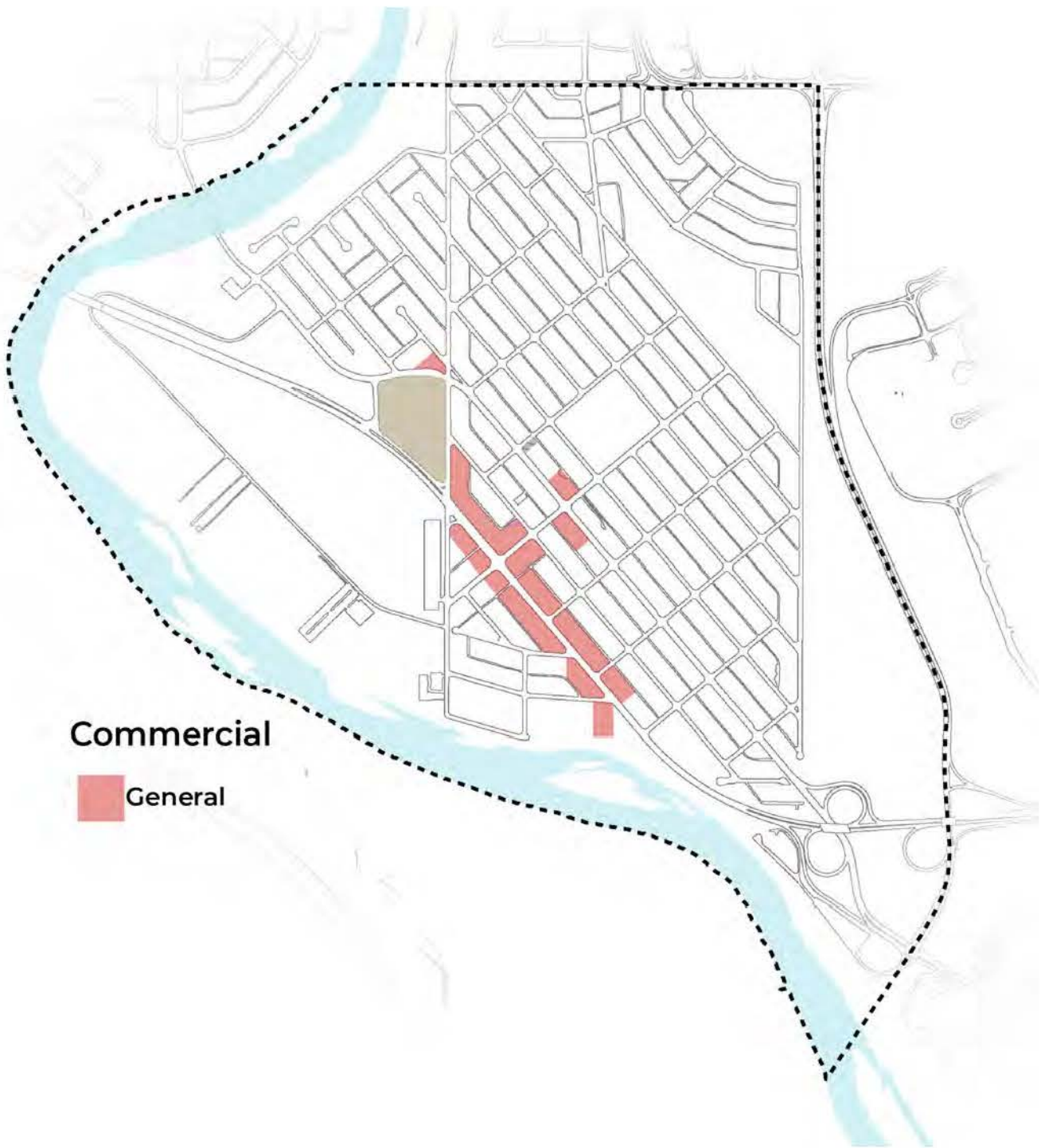
ALLOWABLE TYPOLOGIES - BOWNESS ROAD NW.

Typology	Possible Land Use District
Commercial - Community District	C-C1
Commercial - Community 2	C-C2

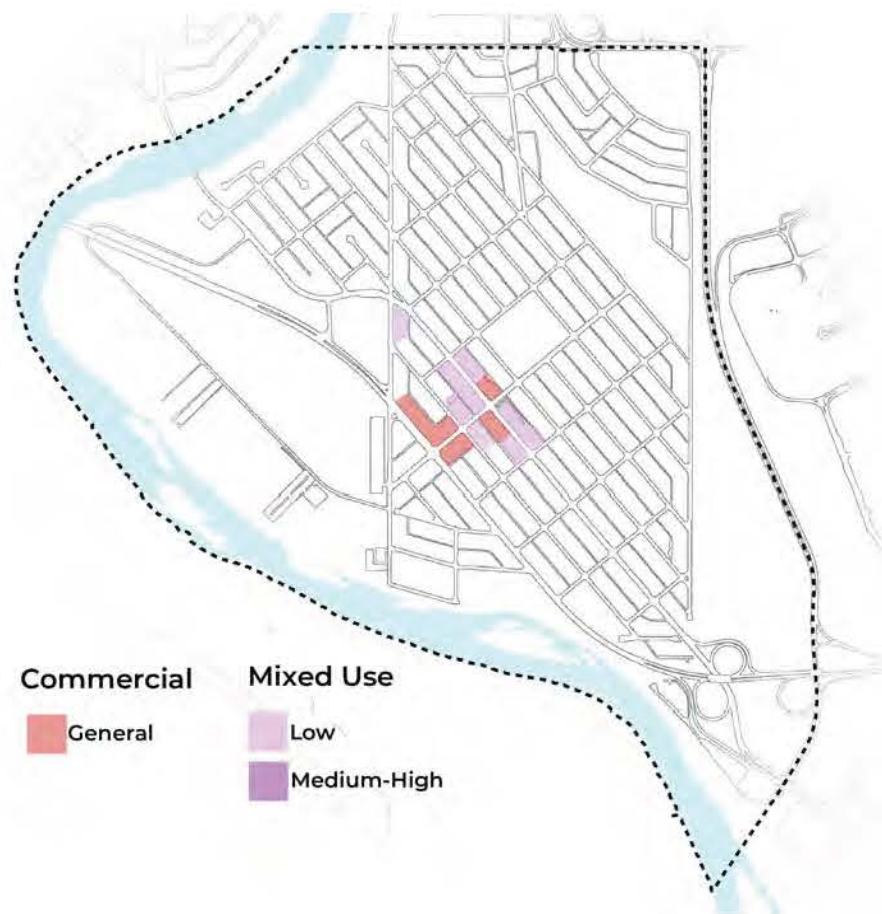
ALLOWABLE TYPOLOGIES - 16TH AVENUE NW.

Typology	Possible Land Use District
Commercial - Corridor 2 District	C-COR2
Commercial - Office District	C-O

*This redevelopment plan does not include commercial land use into its projected housing numbers, as it proposes 16th Avenue to be a primarily commercial corridor, however, if there were a need for more housing, the commercial/residential buildings should only be permitted on street corners intersecting with 16th Avenue from 45th Street to Home Road NW



COMMERCIAL/MIXED USE BOWNESS ROAD & 46TH STREET NW



OVERVIEW

Bowness Road commercial uses no longer support Montgomery residents and do not offer a pleasant main street experience. Building setbacks along Bowness Road do not support a pedestrian-oriented environment and the street lacks a sense of place and vibrancy. This plan intends for the commercial uses along Bowness Road and 46th Street NW to be smaller scale boutique retail shops, restaurants, or coffee shops, with offices located above. The intent is to create a neighbourhood node that serves as a vibrant community gathering space with a comfortable, engaging and accessible public realm. It is important for 46th Street to be a part of this node, as it is an important connection between the main streets. This mixed use/commercial node should be a destination for Montgomery residents, as well as, surrounding communities.

OBJECTIVES

*Should align with objectives identified in the mixed use-low section and:

1. Attract new commercial business that compliment Montgomery's small town character and benefit the Montgomery neighbourhood
2. Uses should support the major commercial street along 16th Avenue
2. Create a visually appealing, engaging and accessible pedestrian oriented street
3. Create a street wall of active frontages and ground level destinations
4. Provide inviting public spaces for people to gather

POLICY

Policy aligns with those outlined under Mixed Use-Low



BEFORE



AFTER



DENSIFICATION OF BOWNESS ROAD

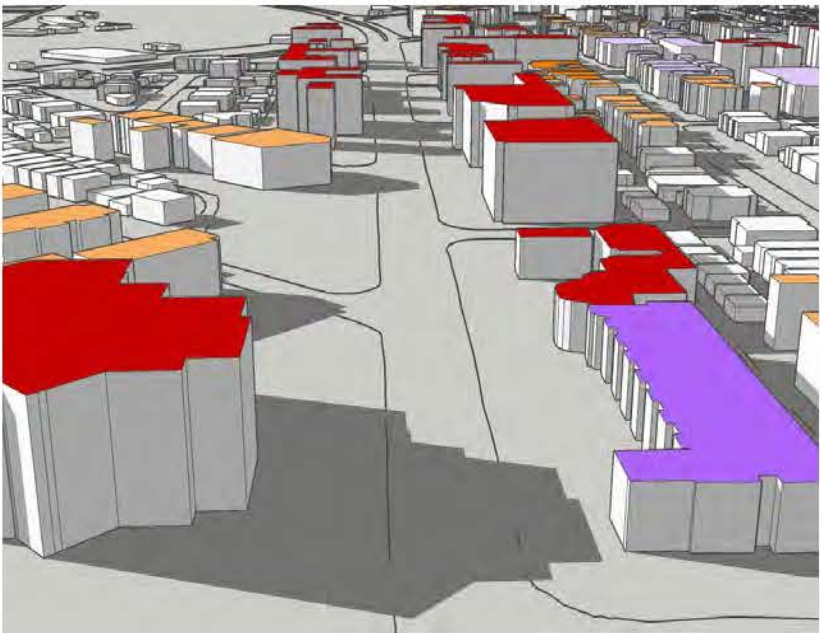
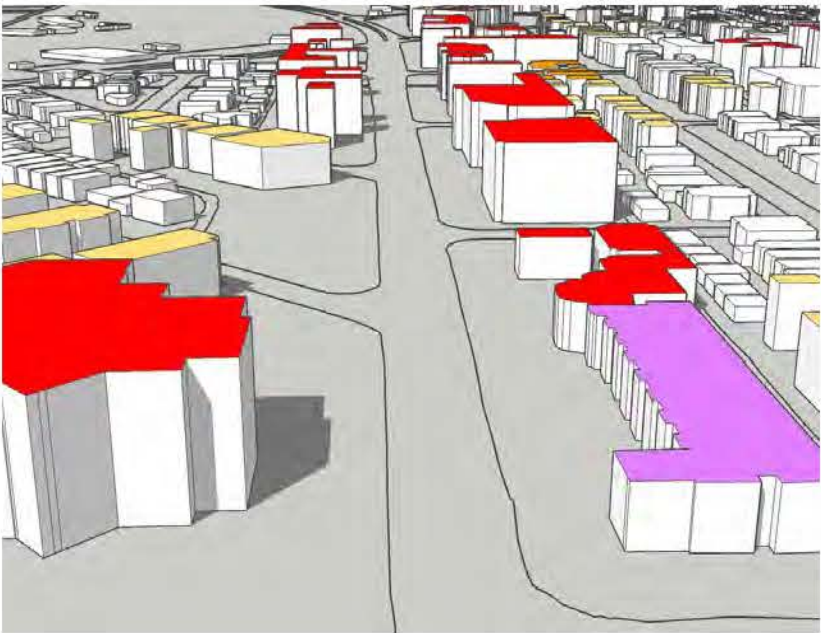
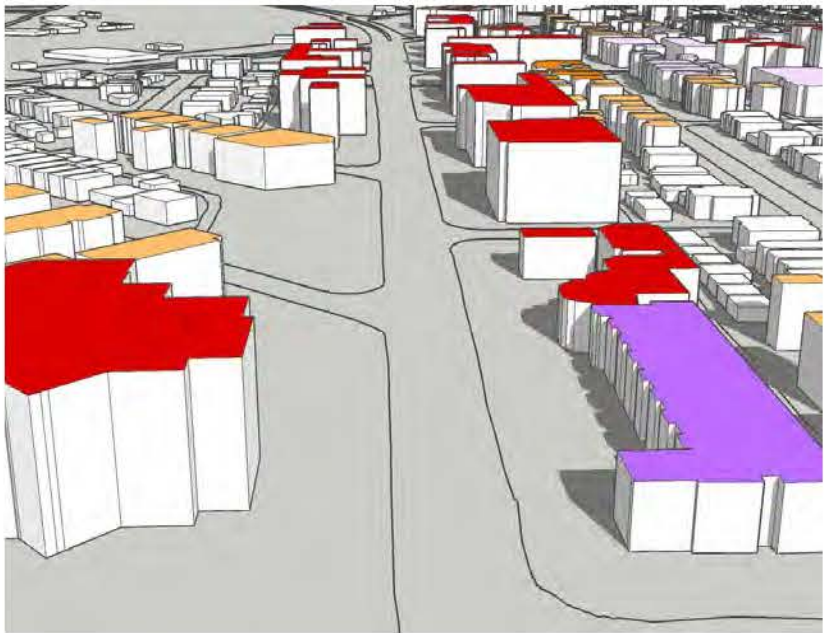
SHADOW STUDY

9:00AM

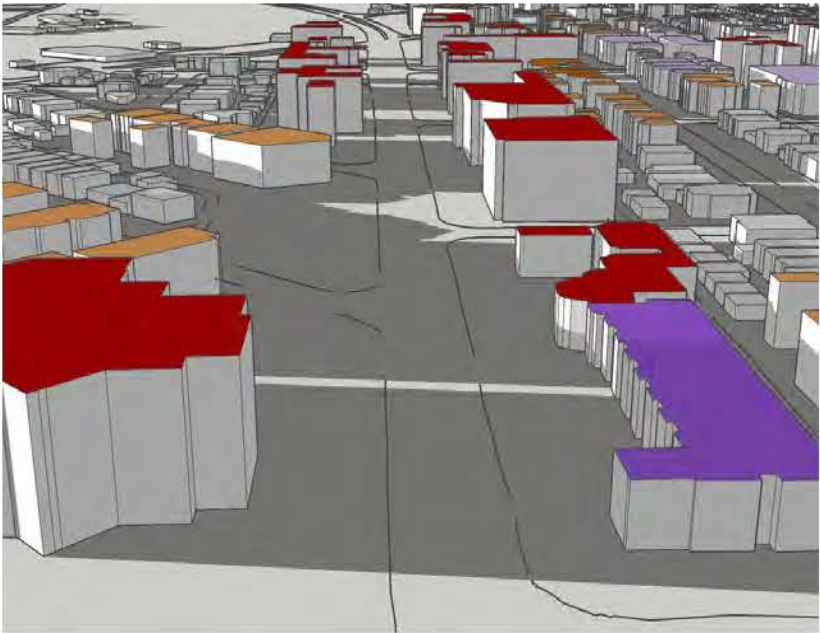
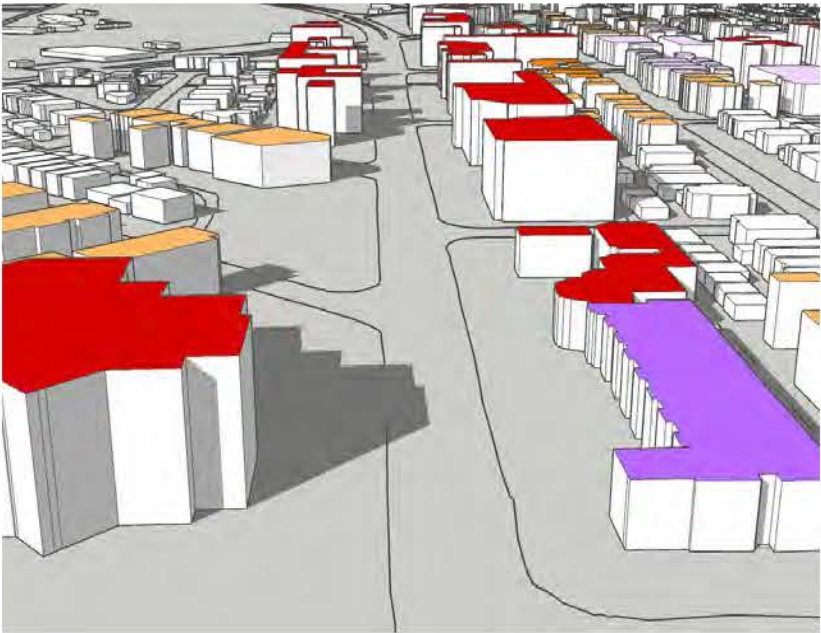
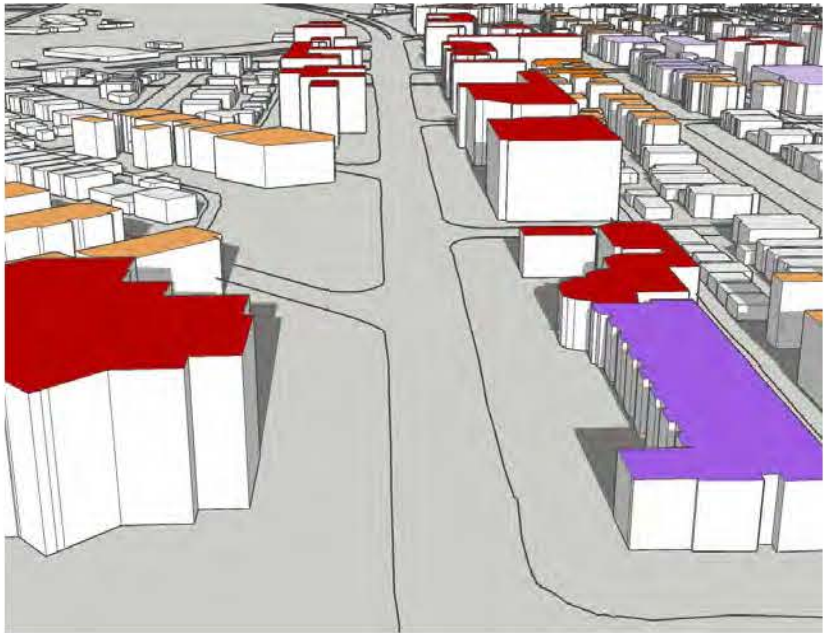
12:00PM

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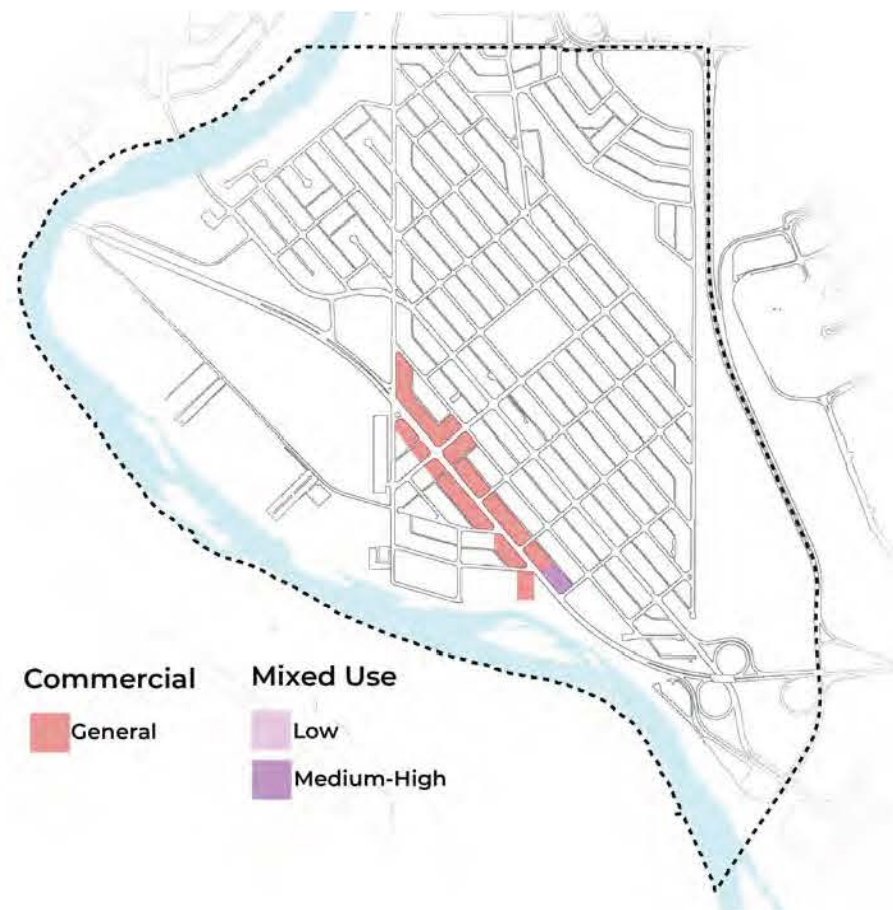
MARCH 21st



NOVEMBER 21st



COMMERCIAL/MIXED USE - 16TH AVENUE NW



OVERVIEW

The commercial uses along 16th Avenue are mostly auto-mobile oriented and the buildings are at the end of their life-cycle. Infrastructure is aging and it does not present as a safe or enjoyable pedestrian-oriented street. The uses intended for 16th Avenue are uses that will contribute to Montgomery being a gateway into the city and will be designed in a way that ensures a high quality pedestrian-oriented environment. Uses are also intended to serve regional visitors to the Shouldice Athletic Park and even possibly those to Canada Olympic Park, offering places to stay, dine, shop and socialize. This corridor is also intended to house mostly offices on the upper floors, providing opportunities to house a range of employment sectors.

OBJECTIVES

*Should align with objectives identified in the mixed use medium-high section and:

1. Create a vibrant and destination rich main street that reflects being a gateway to Calgary
2. Attract new commercial business that compliment Montgomery, but also serve as regional destinations
3. Shift uses from auto-mobile oriented to pedestrian-oriented
4. Provide opportunities to house a variety of employment sectors

POLICY

Policy aligns with those outlined under Mixed Use Medium-High



BEFORE



AFTER



DENSIFICATION OF 16TH AVENUE NW

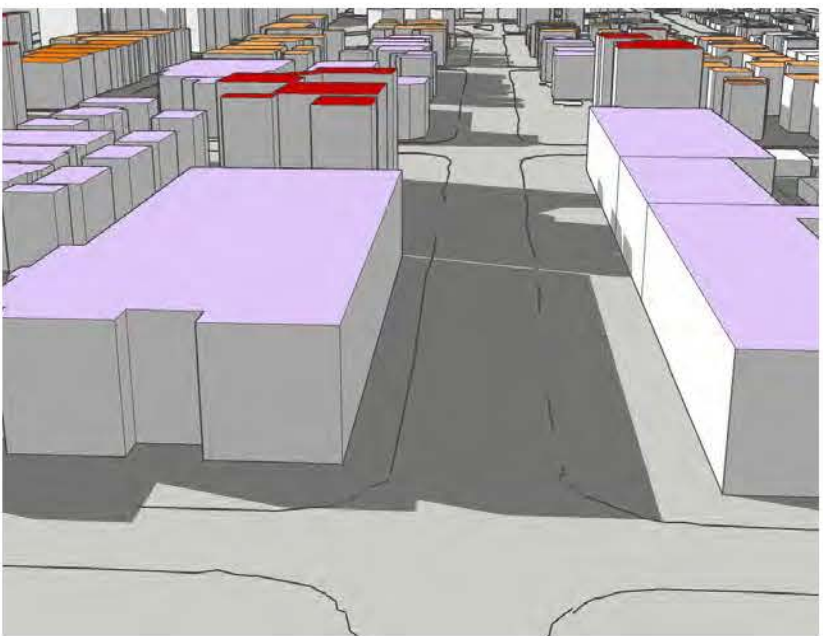
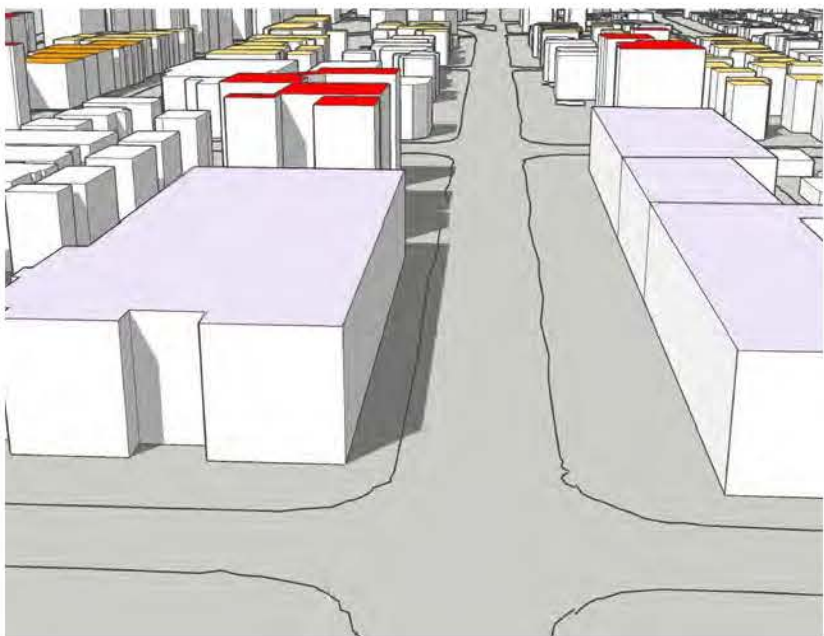
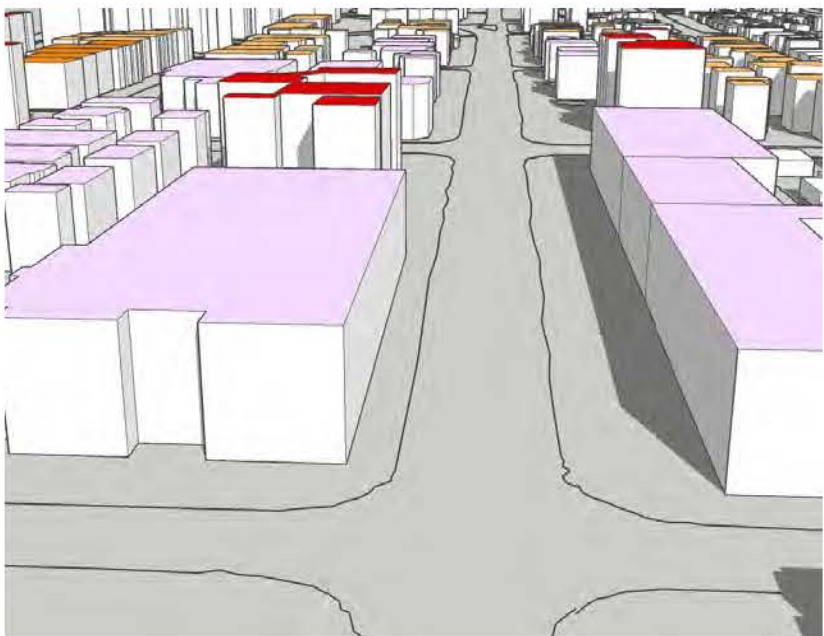
SHADOW STUDY

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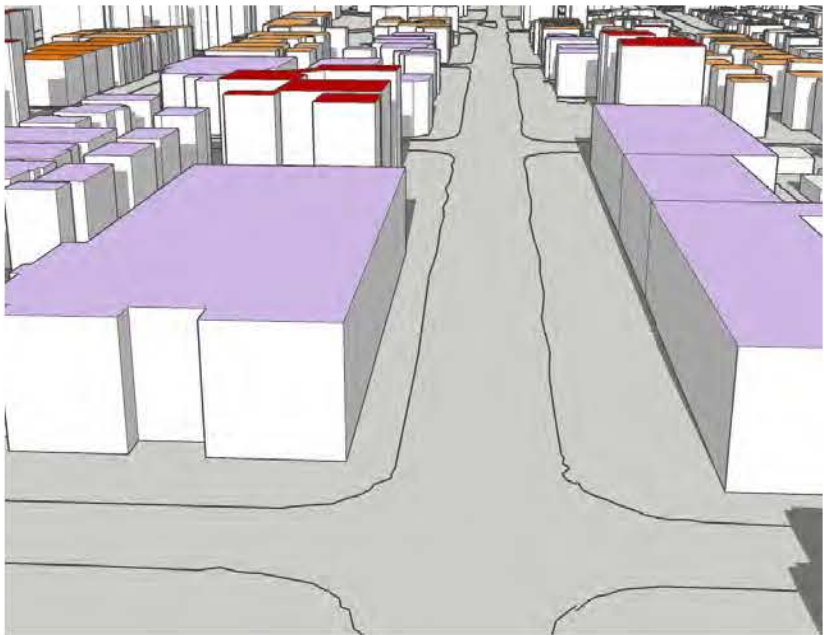
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MARCH 21st



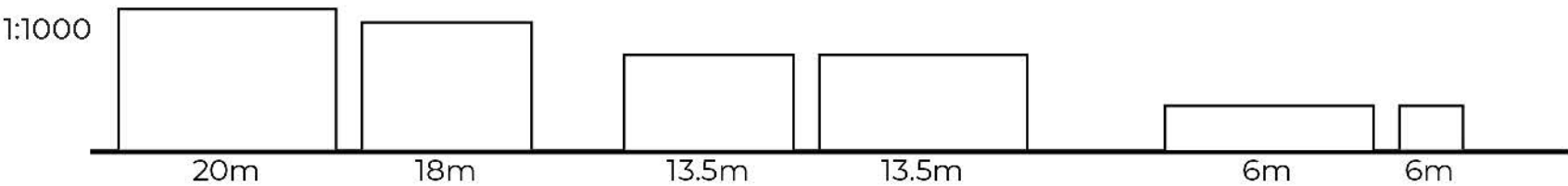
NOVEMBER 21st



PROPOSED DENSITY



DENSITY GRADIENT (BASED ON MAX ALLOWABLE HEIGHTS)



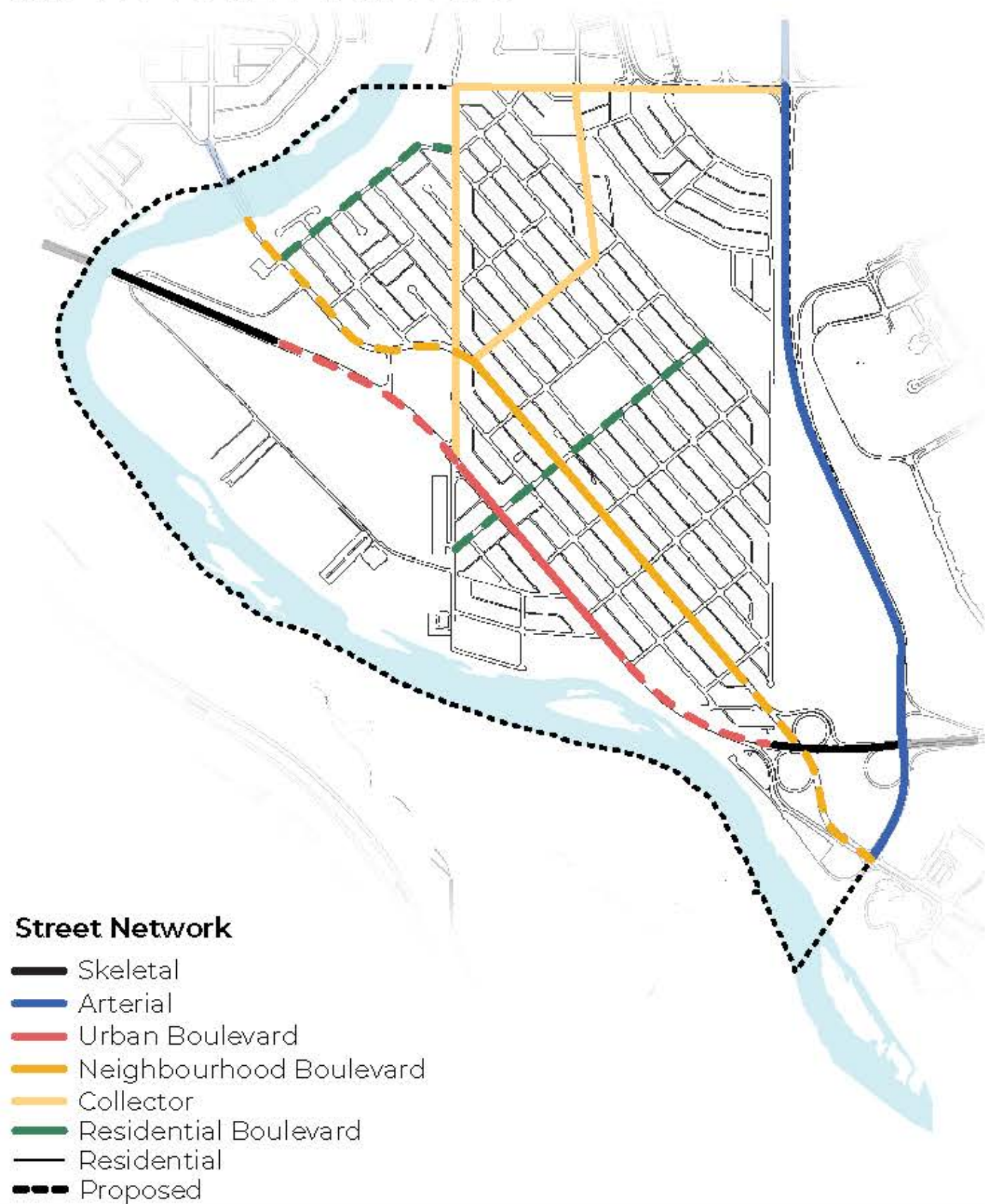


5.2

MOBLITY

STREET NETWORK

STREET NETWORK MAP



OVERVIEW

The City of Calgary transportation decisions place the priority for moving people, as follows:

1. Walking
2. Cycling
3. Transit
4. Carpooling
5. Automobiles

Throughout Montgomery, however, the priority has been placed on the vehicle, thus creating a lack of diversity in streets. This prioritization on automobile movement has created several challenges for the context of the street, the adjacent land use, sustainable modes of travel, and overall street experience for pedestrians and cyclist. Therefore, a complete streets approach has been implemented to balance streets as both a link and a place to shift towards a street network that offers a wider range of viable transportation choices.

The proposed street network looks to extend the Urban Boulevard and Neighbourhood Boulevard along 16 Ave NW and Bowness Rd, respectively. Additionally, the proposal looks to establish two new residential boulevards along 46 St NW and 52 St NW to provide several key connections and improve overall functionality for all modes of transportation.

OBJECTIVES

1. A network of streets that aligns with land use directions and ensures efficient movement of all modes
2. A network of streets that provides travel options that are safe for users of all ages and abilities
3. A network of streets that are vibrant and attractive places

POLICY

- Street design shall be implemented by type, location, and design parameters according to the proposed street network map
- Priority on public realm improvements shall implemented according to the proposed street network map
- Street shall be designed by considering the context, right-of-way, and land use
- Intersections and crossings shall be designed to accommodate the safety needs of all users
- Street design shall incorporate or maintain natural green infrastructure
- Traffic shall be managed to improve safety and neighbourhood livability
- Parking shall be managed in all neighbourhoods

The following section will provide and introduce each intervention proposed along with their design considerations and policies to achieve the desired outcome.



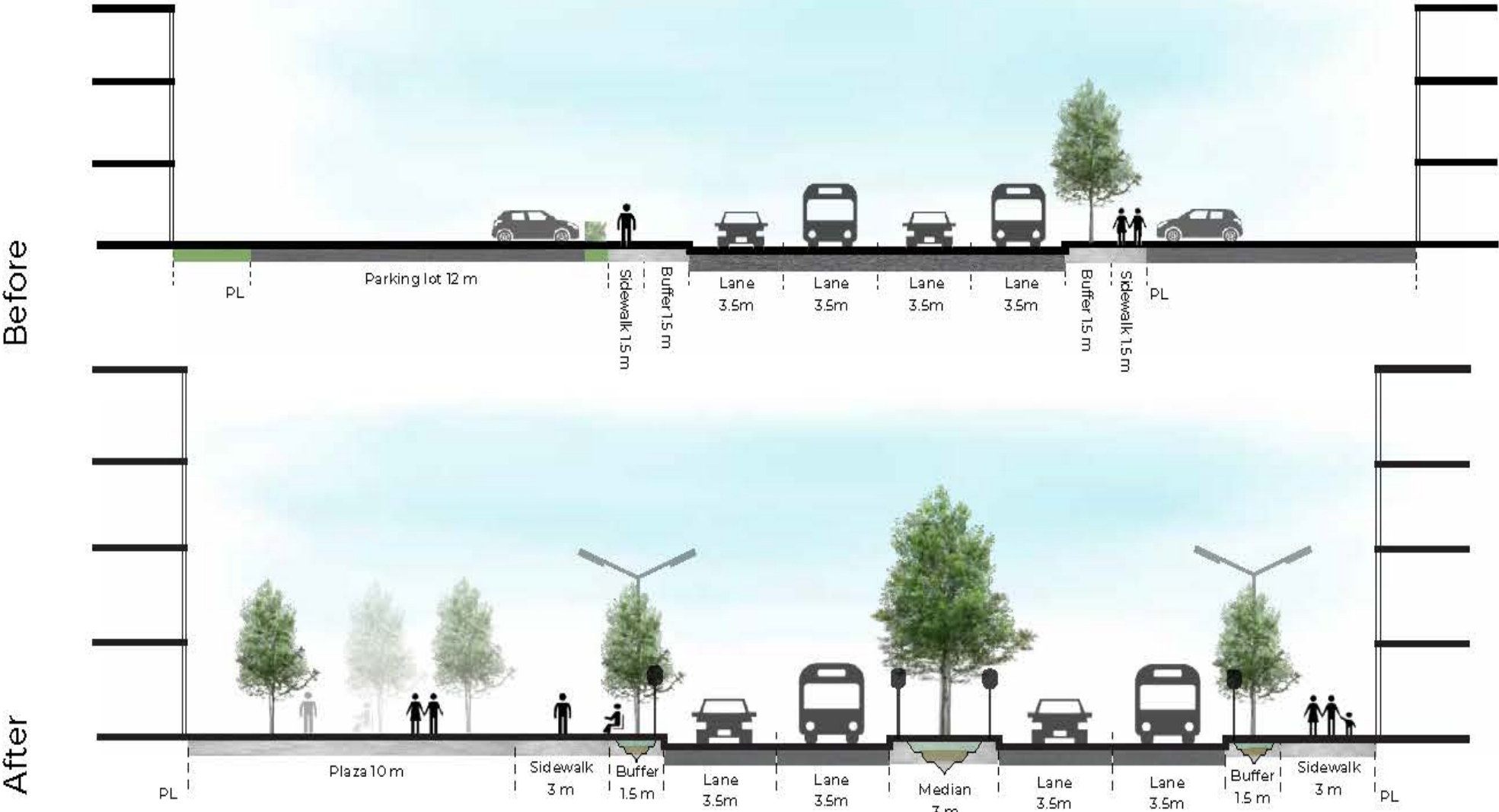
STREET NETWORK | 16 AVE NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



CONDITIONS

SECTION (A - A1)



OVERVIEW

16 Ave NW, or Hwy 1, is a major thoroughfare; not only for the community, but also for the City of Calgary. 16 Ave NW is an important street as it serves approximately 35,000 vehicles per day, provides a corridor for goods movement, and acts as a regional/ local commercial attraction. However, its importance to the city as a major thoroughfare and goods movement corridor comes with set of issues for the community of Montgomery. These issues were exposed through our analysis and public engagement process. For Montgomery, the road acts as a barrier and divides the community from north to south. This barrier does not create a pleasant welcoming experience of Montgomery and is difficult for the residents to cross. Therefore, a new design is proposed for of the street, intersections, and crossings to alleviate these issues.

DESIGN CONSIDERATIONS

This section of 16 Ave NW has an extremely large right-of-way, which provides a great opportunity to better support the commercial land use by improving safety and the overall street experience, while maintaining its functionality.

Improvements:

- Larger sidewalks
- Green infrastructure
- Seating
- Plaza space
- Median
- Crosswalk lighting



STREET NETWORK | 16 AVE NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 16 Ave NW & Home Rd



B 16 Ave NW & 43 St NW (Option #1)



DESIGN CONSIDERATIONS

16 Ave NW and Home Rd Overview

16 Ave NW and Home Rd is a crucial junction and the busiest intersection in Montgomery. It is the first intersection coming east into the city and provides access to Shouldice Park and Montgomery. However, through our analysis and public engagement, the intersection demonstrated that it lacks the ability to balance its multifunctionality. Traffic builds from all sides of the intersection and it is a long and unpleasant crossing for pedestrians and cyclist.

Improvements:

- Roundabout to improve traffic flow and act as traffic calming measure
- Pedestrian and cyclist tunnels to provide a safe and unique crossing

16 Ave NW & 43 St NW Overview

The traffic lights at 16 Ave NW and 43 St NW are the first pedestrian-controlled lights entering Montgomery from the East. This is a critical crossing for many pedestrians and cyclist trying to catch a bus on the south side of 16 Ave NW, or, to connect with the Regional Pathway or the Bow River. Throughout our analysis and public engagement; however, we discovered the crossing length is long and cars tend to be speeding in this area – creating uneasiness for pedestrian and cyclist.

Due to its importance for connectivity and its sever safety concerns, three options are proposed for this section.

Improvements (Option #1):

- Crosswalk lighting
- Median for protection and to provide a resting area

PRECEDENTS

1 Roundabout



Source: <https://www.pinterest.ca/pin/776589529482190019/>

2 Pedestrian Underpass



Source: <https://www.archdaily.com/780990/cuyperspas-sage-bentham-crouwel-architects>

3 Placemaking



Source: <https://hypebeast.com/2015/11/time-and-space-herman-kuijers-illuminated-passages-in-the-netherlands>

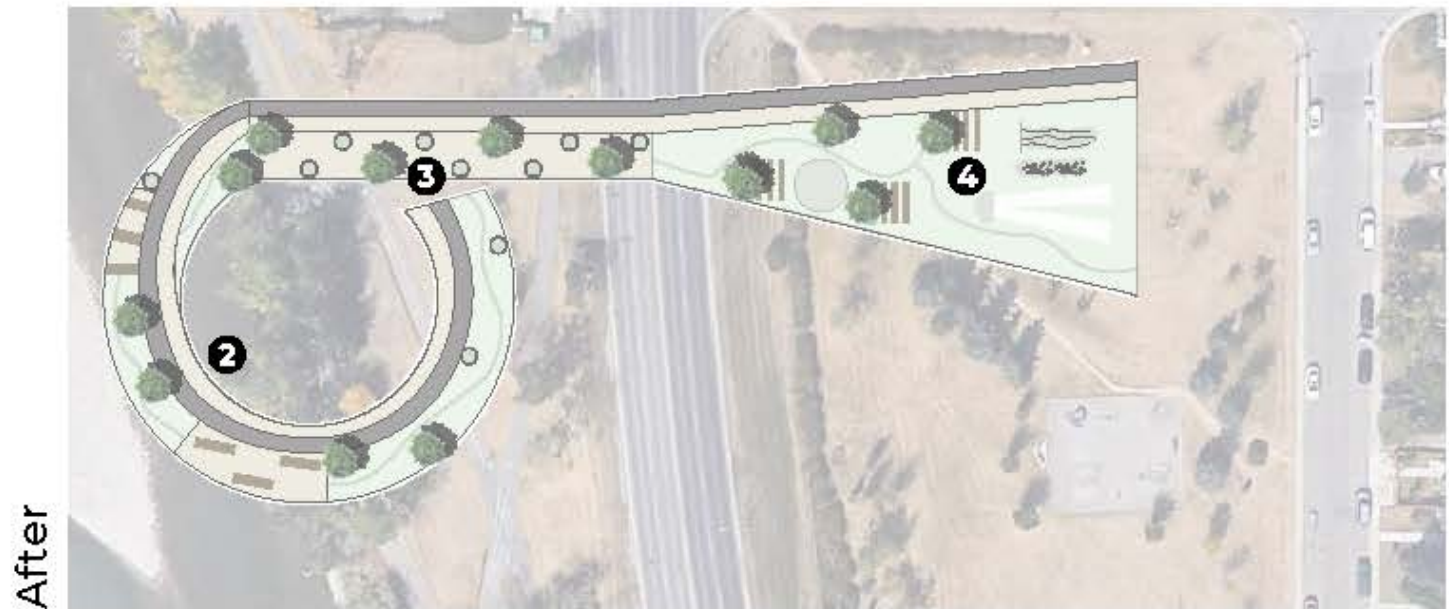
STREET NETWORK | 16 AVE NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 16 Ave NW & 43 St NW (Option #2)



B 16 Ave NW & 43 St NW (Option #3)



DESIGN CONSIDERATIONS

Improvements (Option #2):

- Unique underground tunnel
- Fully separated pedestrian and cyclist tunnel
- Placemaking opportunities

Improvements (Option #3):

- Multifunctional Sky park
- Fully separated pedestrian and cyclist crossing
- Playground opportunities
- Gateway feature
- Identity structure
- Opportunity to reconnect with nature

PRECEDENTS

1 Pedestrian Median



Source: <https://www.pinterest.ca/pin/7765889529482190019/>

2 Cycling Movement



Source: https://www.archdaily.com/522669/bicycle-snake-dissing-weitling-architecture/s3b-35336c07a80eb1000277_bicycle-snake-dissing-weitling-architecture_dsc_s739-jpg/

3 Pedestrian Movement



Source: <https://www.dezeen.com/2017/05/22/mvrdy-seoul-2017-conversion-overpass-highway-road-park-garden-high-line-seoul-south-korea/>

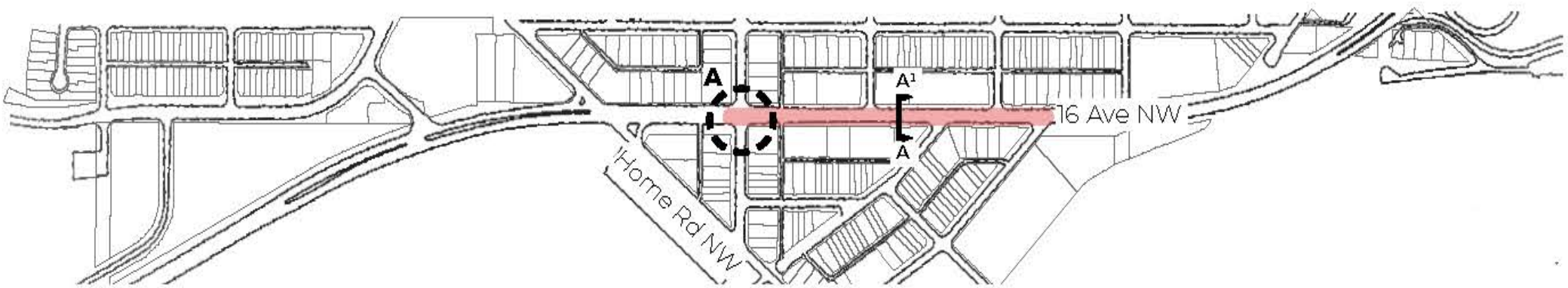
4 Playground



Source: <https://worldlandscapearchitecture.com/2011-project-review-april-june/>

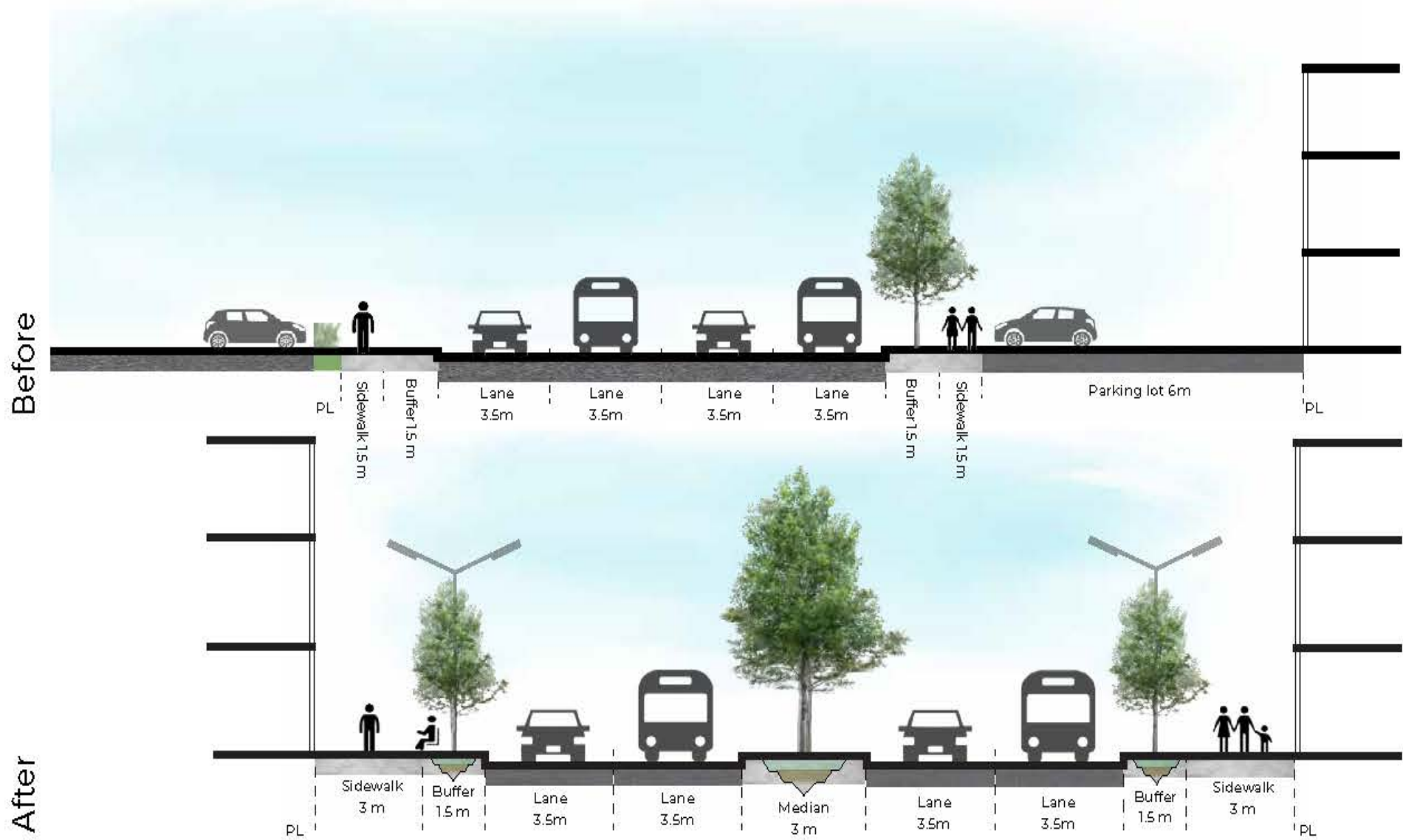
STREET NETWORK | 16 AVE NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



CONDITIONS

SECTIONS (A - A¹)



OVERVIEW

16 Ave is a crucial thoroughfare that serves high volumes of traffic and is a dedicated goods movement corridor. However, through this portion of 16 Ave NW, there is a much narrower right-of-way but still the same issues – acting as a barrier, unpleasant street experience, and difficult to cross. Therefore, careful consideration was needed for the new design to ensure these issues were address.

Improvements:

- Street trees
- Green infrastructure
- Larger sidewalks
- Seating
- Median
- Crosswalk lighting



STREET NETWORK | 16 AVE NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 16 Ave NW & 46 St NW (Option #1)



B 16 Ave NW & 46 St NW (Option #2)



DESIGN CONSIDERATIONS

16 Ave NW and 46 St NW

16 Ave NW and 46 St NW is a crucial intersection in order to support the vibrancy of the commercial district and create strong connection along the residential boulevard from Shouldice Park, through the Central Plaza, to Montalban Park. However, as discovered through our analysis and engagement session, this crossing was inconvenient, long, and uncomfortable. Therefore, to ensure these concerns are addressed, two new design options are provided.

Improvements (Option #1):

- Crosswalk lighting
- Median
- Bike lane

Improvements (Option #2):

- Crosswalk light
- Median
- Underground pedestrian and cyclist tunnel

PRECEDENTS

1 Bike Lane



Source: https://twitter.com/Dale_Bracewell/status/1030111734902616064/photo/1

2 Median



Source: <https://archinect.com/plant/project/pottery-road-bicycle-and-pedestrian-crossing>

3 Tunnel



Source: <https://www.archdaily.com/780990/cuyperpassage-bentham-crouvel-architects>

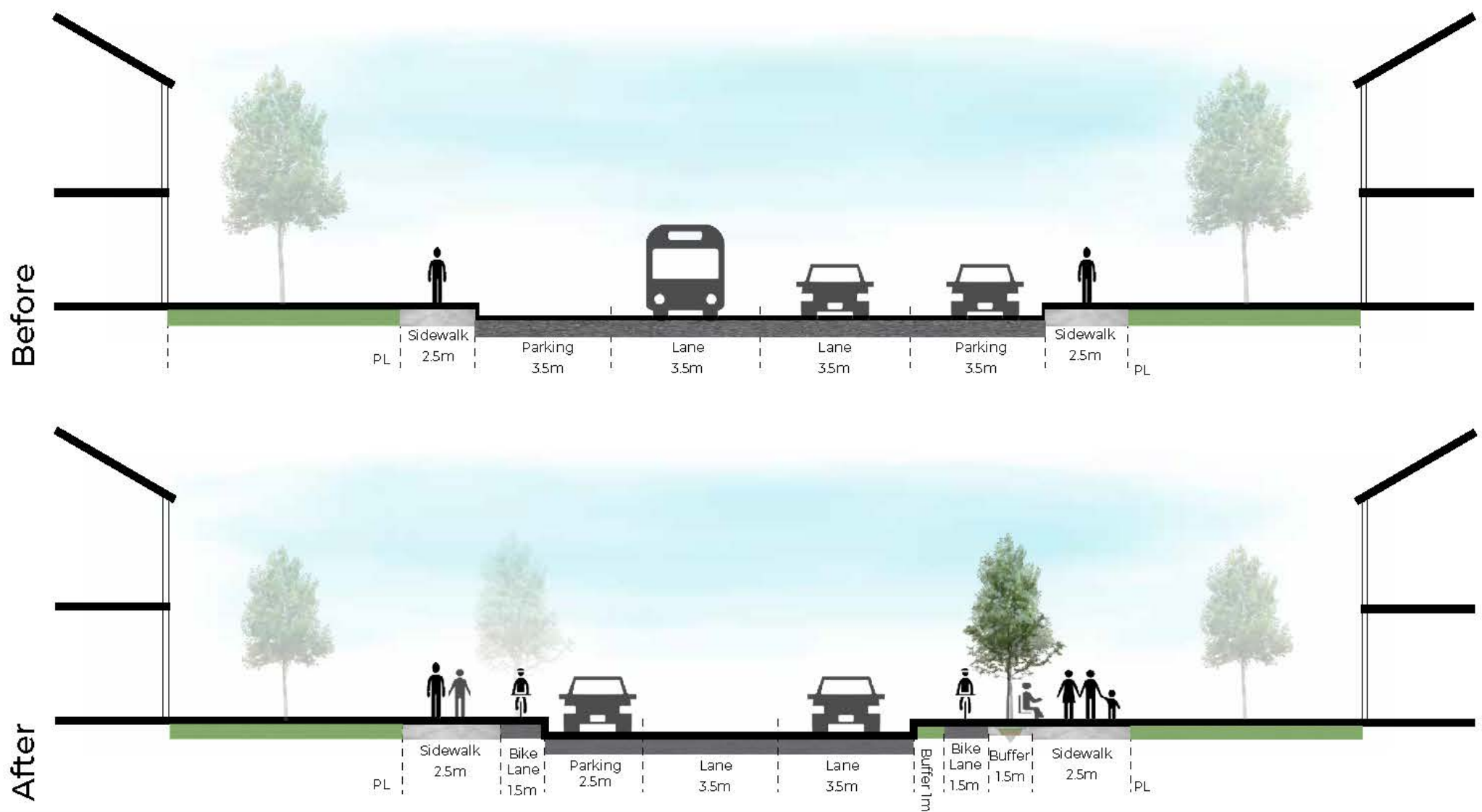
STREET NETWORK | BOWNESS RD IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



CONDITIONS

SECTIONS (A - A¹)



OVERVIEW

Bowness Rd is an important street for Montgomery as it serves approximately 15, 000 vehicles per day. Bowness is also a main street for the community, connecting its community hub and unique sites to the surrounding communities of Parkdale and Bowness. The issues with Bowness Rd; however, stem from its width to volume ratio. These issues lead to speeding problems, discomfort while crossing the street, and an overall unpleasant experience for its users. In order to address these concerns, careful considerations were made throughout the new design to slow traffic, protect its users, and improve the overall experience.

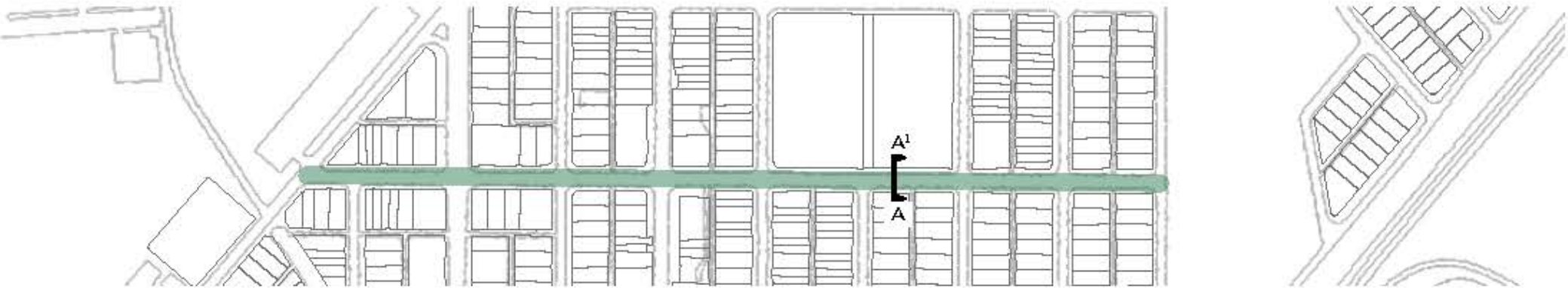
Improvements:

- Parking inlets to maintain parking
- Buffers
- Green infrastructure
- Protected bike lanes
- Street trees
- Wider sidewalks



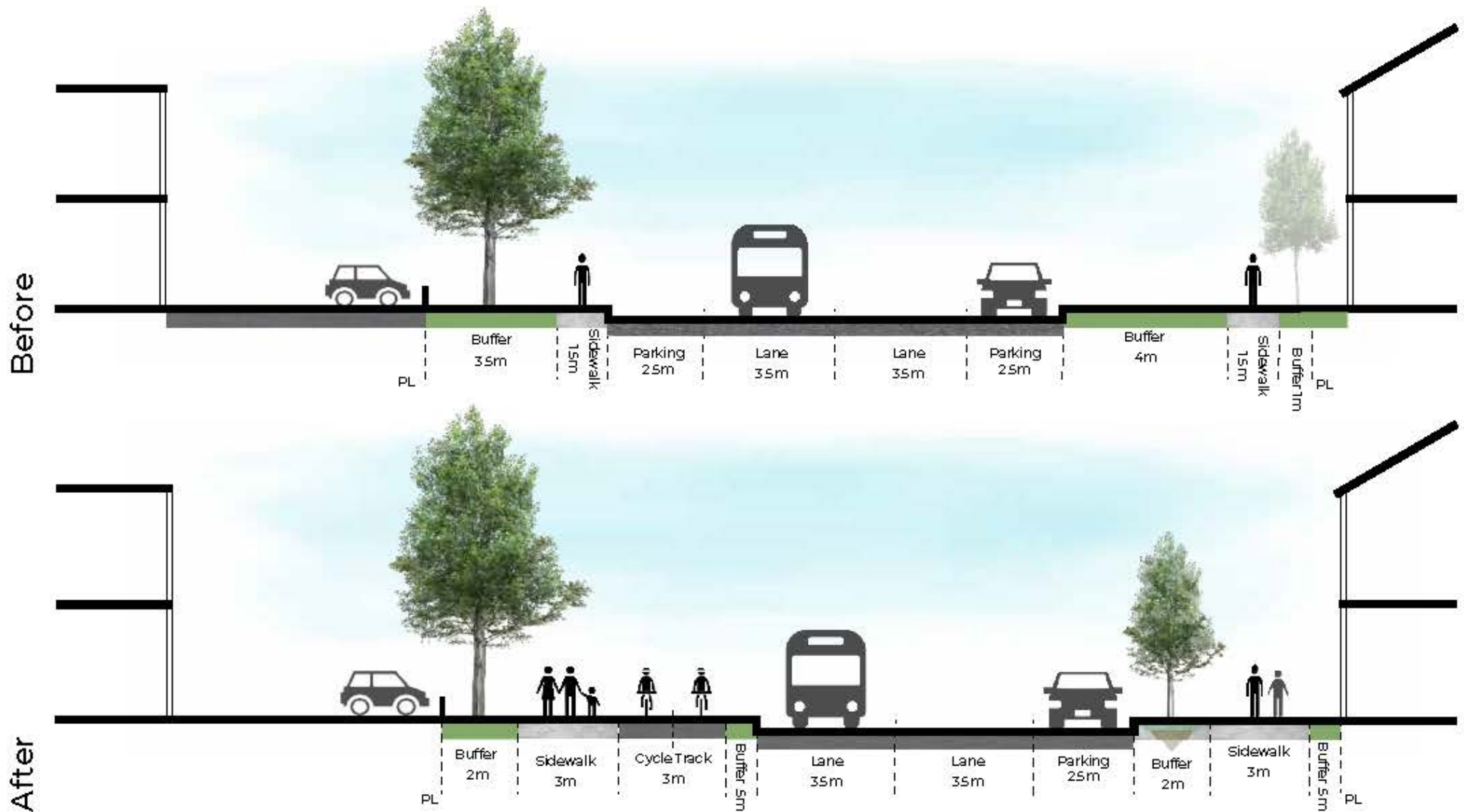
STREET NETWORK | 46 ST NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



CONDITIONS

SECTIONS (A - A')



OVERVIEW

46 St NW is a crucial North-South street for Montgomery as it serves and connects several key destinations, such as Montalban Park, Summit Kids School, Central Plaza, commercial district, and Shouldice Park. The issues associated with 46 St NW are its dedication to the vehicle, unpleasant street experience, and undesirable intersection crossings at Bowness Rd and 16 Ave NW. Therefore, to ensure that each issue is addressed, several elements are included in the new design to provide more transportation options, improve safety, and enhance the street experience.

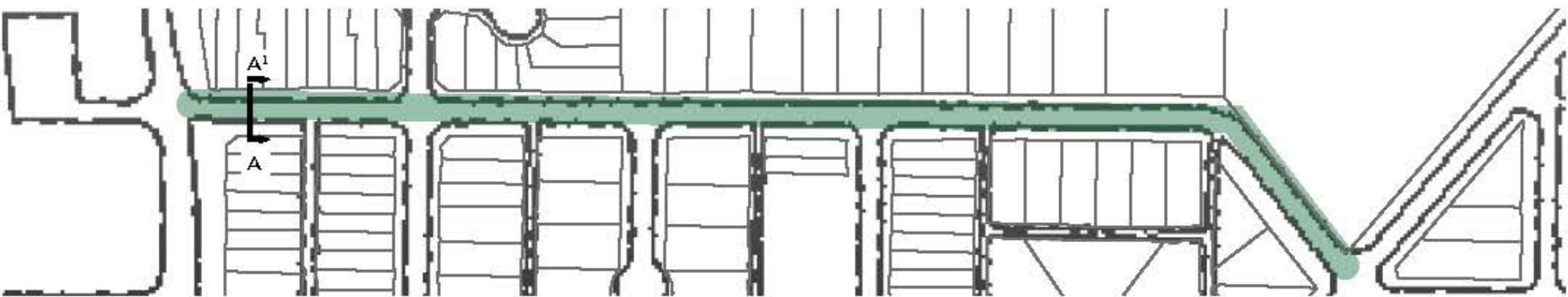
Improvements:

- Parking inlet to maintain parking
- Green infrastructure
- Street trees
- Wider sidewalks
- Cycle track for all ages and abilities
- Buffers



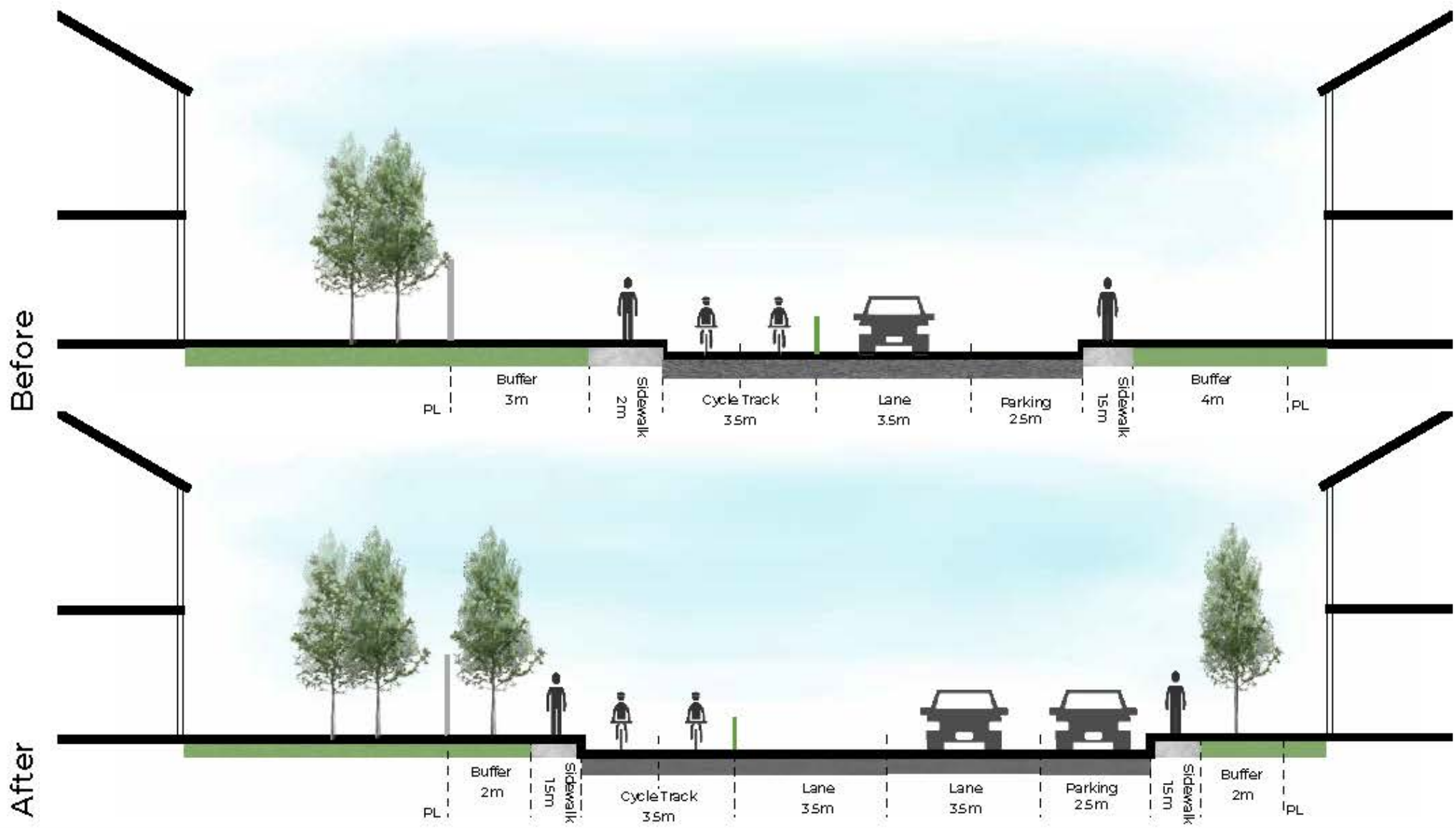
STREET NETWORK | 52 ST NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



CONDITIONS

SECTIONS (A - A¹)



OVERVIEW

52 St NW is a critical cycling street for Montgomery and acts as a connector for the Regional Pathway and to the northern portion of the community. The issue with 52 St NW is the one-way aspect of this road. This makes it intimidating for contraflow cyclist, increases vehicle speeds, and creates confusion for drivers. In order to alleviate these concerns, the street will be returned to a two-way street to improve the balance of the right-of-way, reduce speeds, and increase pedestrian and cyclist safety.

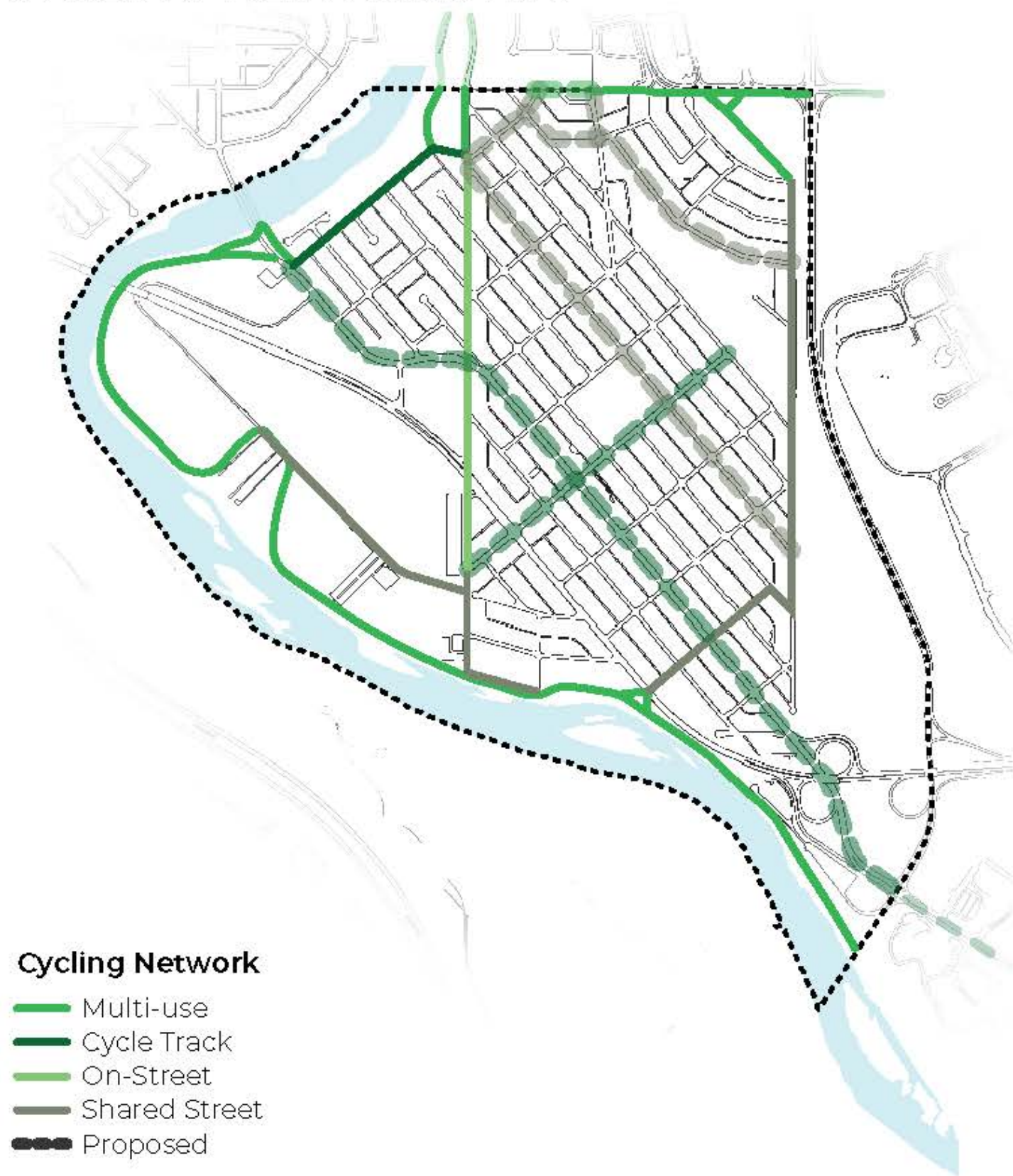
Improvements:

- Street trees
- Parking inlets
- Two-way street



CYCLING NETWORK

CYCLING NETWORK MAP



OVERVIEW

As the City of Calgary looks to shift their priorities to pedestrians and cyclists, the community of Montgomery is well-positioned to make this shift. The community already boasts double the percentage of cyclists compared to other Calgary communities, and is well positioned with the Regional Pathway that passes through the community. If pedestrian and cycling facilities were upgraded, built in the strategic locations, and created for all ages and abilities, the community of Montgomery would see improved connectivity resulting in a higher numbers of people choosing to cycle or walk to their destinations.

The newly proposed cycling and pedestrian network provides more options, improved connectivity, and a better overall street experience. This will be achieved through newly created cycle tracks along Bowness Rd and 46 St NW; the addition of the shared street lanes along 21 Ave NW, upper 52 St NW, and Montalban Dr; and the extension of the multi-use track along 32 Ave NW down to 52 St NW.

OBJECTIVES

1. A cycling and pedestrian network that is connected regionally and locally to major destinations
2. A cycling and pedestrian network that provides travel options that are safe for users of all ages and abilities
3. A cycling and pedestrian network that is effective, vibrant, and attractive

POLICY

- Cycling and pedestrian design shall be implemented by type, location, and design parameters according to the proposed cycling and pedestrian network map
- Design shall consider the context, right-of-way, and adjacent land use
- Cycling, pedestrian, intersections, and crossings facilities shall be designed to accommodate the safety needs of all users
- Cycling and pedestrian facilities shall incorporate or maintain green infrastructure
- Cycling and pedestrian facilities shall be consistently designed and connect to places people want to go

The following section will provide and introduce each intervention proposed for the cycling and pedestrian network along with their design considerations to achieve the desired outcome.



CYCLING NETWORK | BOWNESS RD IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



OVERVIEW

Bowness Rd is an important street for Montgomery as it serves approximately 15, 000 vehicles per day and is also a main street for the community connecting with its community hub and unique sites, and to the surrounding communities of Parkdale and Bowness. The issues with Bowness Rd; however, stem from its width to volume ratio – leading to speeding problems, discomfort while crossing the street, and overall unpleasant experience. In order to address these concerns, careful considerations were made throughout the new design to slow traffic, protect its users, and improve the overall experience.

Improvements:

- Parking inlets to maintain parking
- Buffers
- Green infrastructure
- Protected bike lanes
- Street trees
- Wider sidewalks

CONDITIONS

PERSPECTIVES

After



Before



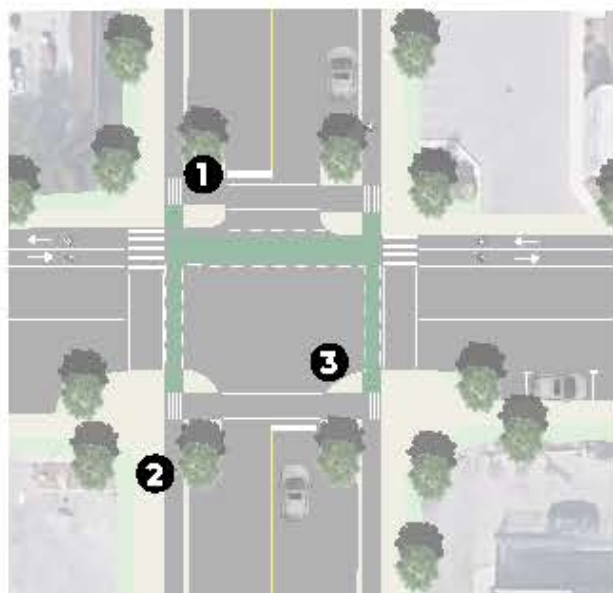
PLANVIEW



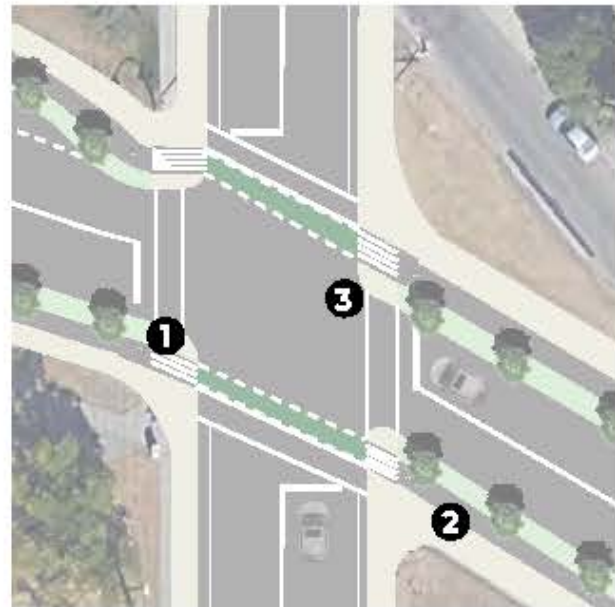
CYCLING NETWORK | BOWNESS RD IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A Bowness Rd & 46 St NW



B Bowness Rd & Home Rd



DESIGN CONSIDERATIONS

Bowness Rd & 46 St NW

Bowness Rd and 46 St NW is a crucial intersection in order to support the vibrancy of the central plaza and create safe and efficient crossings for all modes of transportation. Therefore, several safety elements are included to ensure a more enjoyable and accessible intersection for all ages and ability.

Bowness Rd & Home Rd

Bowness Rd and Home Rd is a key intersection for two important local streets and for the unique site and transit station. Both roads accommodate higher volume of traffic, therefore, the new design incorporates safety measures to create a safer and more enjoyable crossing experience for all its users.

Improvements:

- Protected bike lanes
- Pedestrian refuge facilities
- Island corner infrastructure
- Street trees
- Curb extensions

PRECEDENTS

1 Pedestrian Refuge



Source: https://twitter.com/Dale_Bracewell/status/1030111734902616064/photo/1

2 Protected Bike Lanes



Source: <https://bikeportland.org/2019/02/19/biking-through-vancouver-bcs-protected-intersection-298729>

3 Corner Island Protection

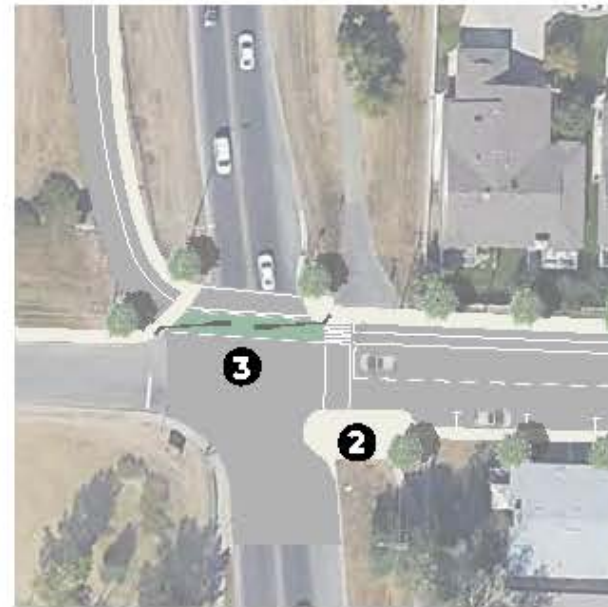


Source: <https://altaplanning.com/projects/200-west-cycle-track-design-and-protected-intersection/>

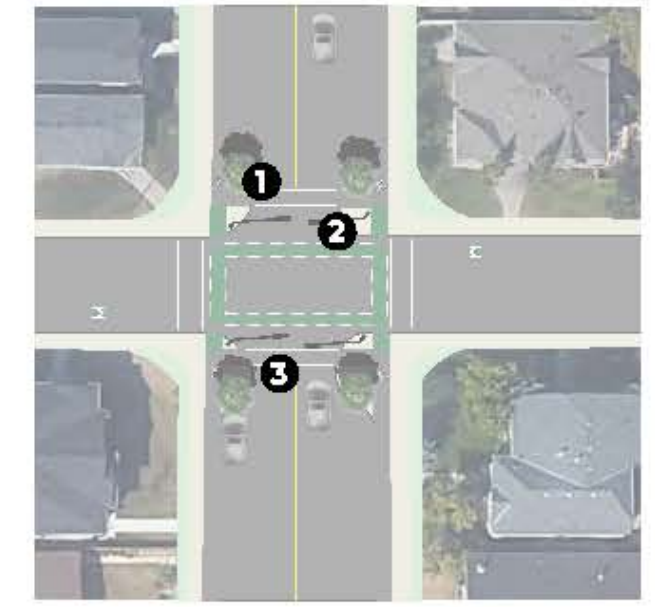
CYCLING NETWORK | BOWNESS RD IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS

C Bowness Rd & 52 St NW



D Bowness Rd & 43 St NW



DESIGN CONSIDERATIONS

Bowness Rd & 52 St NW

Bowness Rd and 52 St NW is an important crossing for Montgomery and for the Regional Pathway. The crossing is a main connector for the continuation of the Regional Pathway and connects the community to several Shouldice Park amenities. In order to ensure convenient and safe crossing, several new design elements are provided.

Bowness Rd & 43 St NW

Bowness Rd and 43 St NW is a key intersection for those entering the community off the Regional Pathway. 43 St NW offers a shared street facility; however, crossing Bowness Rd can be challenging due to width of the road and vehicle speeds. Therefore, several new safety elements are included in the new design.

Improvements:

- Bike paint
- Crossing lights
- Curb extensions
- Pedestrian refuge facilities
- Corner island infrastructure

PRECEDENTS

1 Pedestrian Refuge



Source: https://twitter.com/Dale_Bracewell/status/1030111734902616064/photo/1

2 Curb Extensions



Source: <http://www.street-plans.com/jc-walks-pedestrian-enhancement-plan-jersey-city-nj/>

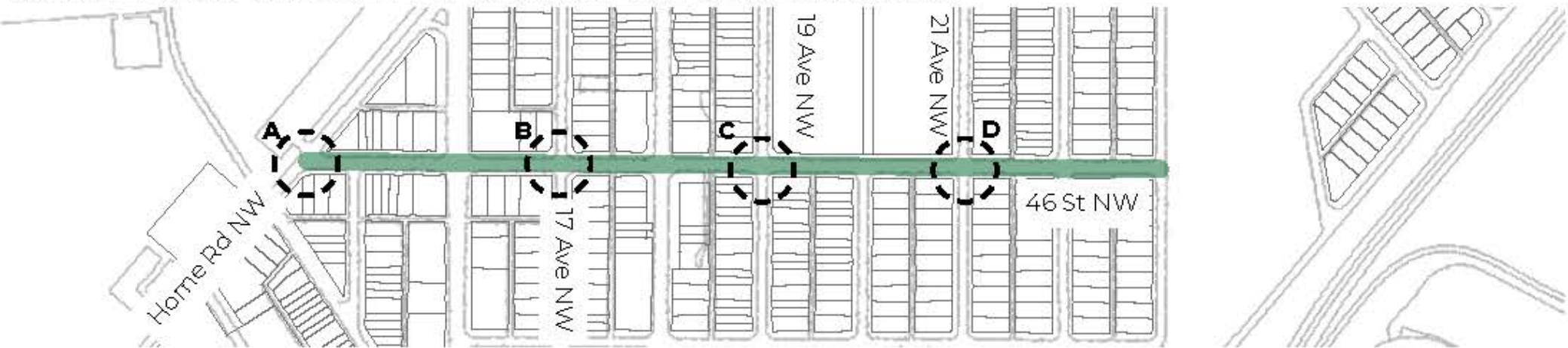
3 Bike Paint



Source: <https://alta planning.com/projects/200-west-cycle-track-design-and-protected-intersection/>

CYCLING NETWORK | 46 ST NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



OVERVIEW

46 St NW is a crucial North-South street for Montgomery as it serves and connects several key destinations, such as Montalban Park, Summit Kids School, Silvera Seniors Living, Central Plaza, commercial district, and Shouldice Park. The street, however, lends itself to only the vehicle making the street experience unpleasant and unsafe for other modes of transportation. To create and connect the major destinations along this street several elements are included in the new design to provide more transportation options, improve safety, and enhance the street experience.

Improvements:

- Protected cycle track
- Wider sidewalks
- Street trees
- Bike paint
- Curb extensions
- Pedestrian refuge facilities

CONDITIONS

PERSPECTIVES



PLANVIEW



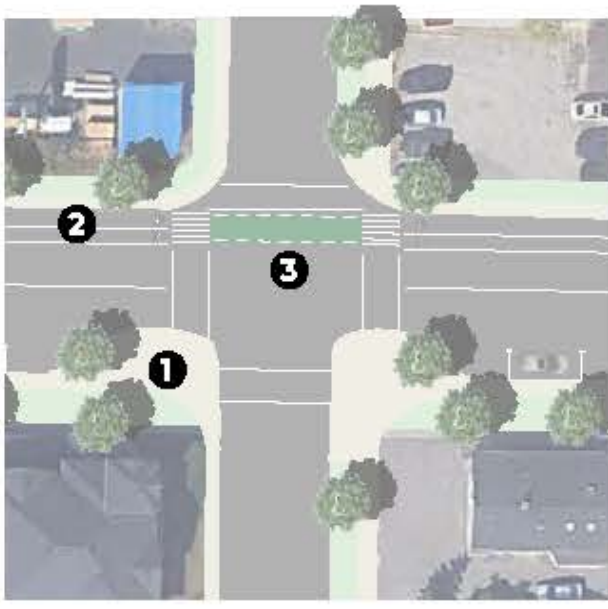
CYCLING NETWORK | 46 ST NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 46 St NW & Home Rd



B 46 St NW & 17 Ave



DESIGN CONSIDERATIONS

46 St NW & Home Rd

46 St NW and Home Rd is an important crossing due to large volumes of traffic entering and leaving Shouldice Park. This can make crossing to connect with the shared bike facility along Home Rd challenging. Therefore, several elements are proposed to increase awareness for drivers and safety for cyclist and pedestrians.

46 St NW & 17 Ave NW

46 St NW and 17 Ave NW is a key intersection between the commercial district and the Central Plaza. In order to ensure safety, comfortability, and vibrancy several new design measures were added to the improve this intersection.

Improvements:

- Wider sidewalks
- Curb Extensions
- Bike Paint
- Street trees

PRECEDENTS

1 Curb Extensions



Source: <http://www.street-plans.com/mjc-walks-pedestrian-enhancement-plan-jersey-city-nj/>

2 Protected Cycle Track



Source: <https://www.elmers.com/business/how-buffered-bike-lanes-offer-additional-safety-value-to-cyclists/>

3 Bike Paint

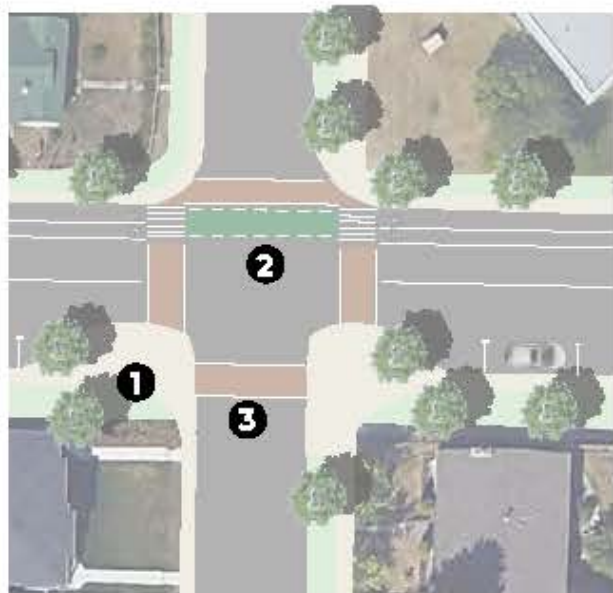


Source: <https://www.citynews1130.com/2019/06/22/province-millions-bike-lanes/>

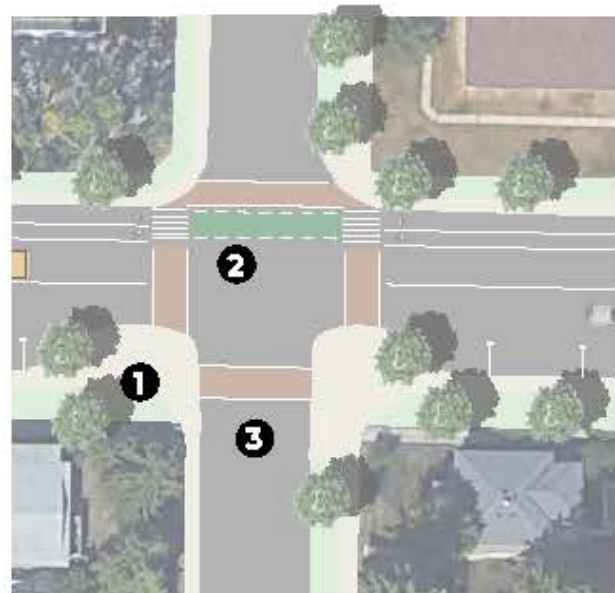
CYCLING NETWORK | 46 ST NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

C 46 St NW & 19 Ave NW



D 46 St NW & 21 Ave NW



DESIGN CONSIDERATIONS

46 St NW & 19 Ave NW

46 St NW and 19 Ave NW is an important intersection being adjacent to Silvera Senior Homes and is along the block of Summit Kids School. In order to provide safe and accessible crossing for the main users of this intersection (kids and seniors) – several safety elements are included.

46 St NW & 21 Ave NW

46 St NW and 21 Ave NW is a key intersection for the Summit Kids School. All at once, large volumes of vehicles and kids arrive and use this intersection. Therefore, several new design elements are proposed in order to manage the safety, improve traffic, and increase driver's awareness.

Improvements:

- Curb extensions
- Crosswalk materiality change
- Protected cycle track
- Bike Paint
- Street trees

PRECEDENTS

1 Curb Extensions



Source: <http://www.street-plans.com/mjc-walks-pedestrian-enhancement-plan-jersey-city-nj/>

2 Protected Cycle Track



Source: <https://www.elmers.com/business/how-buffered-bike-lanes-offer-additional-safety-value-to-cyclists/>

3 Crosswalk Material



Source: <http://www.landscape.ca/projects/rue-charlene/>

CYCLING NETWORK | 32 AVE NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



Overview

32 Ave NW is a critical street within Montgomery that provides access to surrounding communities and acts as a cut through for those want to access Market Mall, the University of Calgary, or out of the city to the West. 32 Ave NW also provides a multi-use trail that abruptly ends at 48 St NW and fails to connect to any other cycling infrastructure in Montgomery. Therefore, in order to make great use of this well protect cycling facility, we propose to extend the multi-use trail to connect with the shared street facility on 52 St NW.

Improvements

- Connection to Montgomery Cycling Network
- Protect multi-use trail

CONDITIONS

PERSPECTIVES

After



Before



PLANVIEW



CYCLING NETWORK | 32 AVE NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 32 Ave NW & Sheldon Pl NW



B 32 Ave NW & 48 St NW



DESIGN CONSIDERATIONS

32 Ave NW & Sheldon Pl NW

32 Ave NW and Sheldon Pl NW crossing is crucial section to provide safety elements in order to maintain flow of cyclist and pedestrians. Although Sheldon Pl NW is a small residential road, safety elements are provided due to the higher volume of traffic along 32 Ave NW.

32 Ave NW & 48 St NW

32 Ave NW and 48 St NW is an important intersection due to the crossing of the multi-use trail and the high volume of cut through traffic using 48 St NW. Therefore, in order to ensure safety for the users of the multi-use trail several safety elements are included in the new design.

Improvements:

- Curb Extensions
- Protected multi-use trail
- Green paint
- Pedestrian refuge facilities
- Island corner infrastructure

PRECEDENTS

1 Curb Extensions



Source: <http://www.street-plans.com/jc-walks-pedestrian-enhancement-plan-jersey-city-nj/>

2 Protected Bike Lanes



Source: <https://bikeportland.org/2019/02/19/biking-through-vancouver-bcs-protected-intersection-293729>

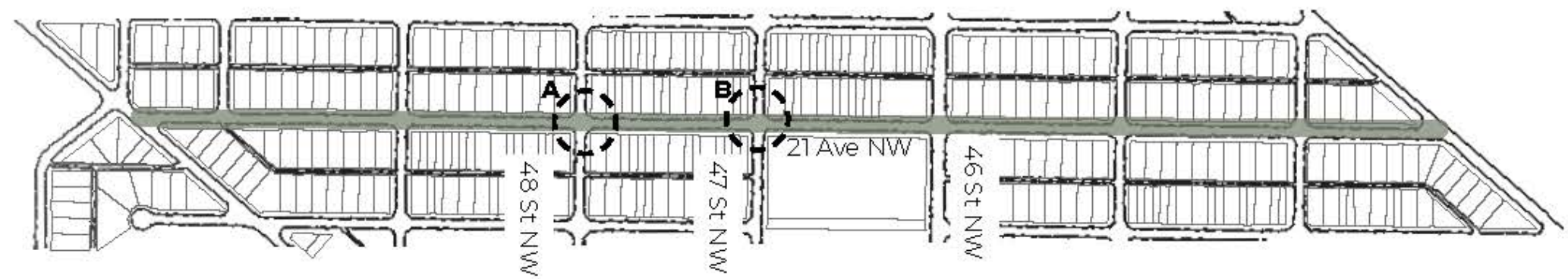
3 Bike Paint



Source: <https://www.citynews1130.com/2019/06/22/province-millions-bike-lanes/>

CYCLING NETWORK | 21 AVE NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



OVERVIEW

21 Ave NW is an important East-West residential road that connects to 52 St NW cycle track, Regional Pathway, Summit Kids School, Montgomery Hill, and the High School. However, the connectivity of 21 Ave NW is challenged by challenging intersections along Home Rd NW and 48 St NW. Therefore, in order to create seamless travel along this residential street, several new design elements are included to increase safety, slow vehicle speeds, and increase visibility.

Improvements:

- Bike Signs
- Sharrows
- Bike Paints
- Medians for pedestrians
- Curb extensions

CONDITIONS

PERSPECTIVES



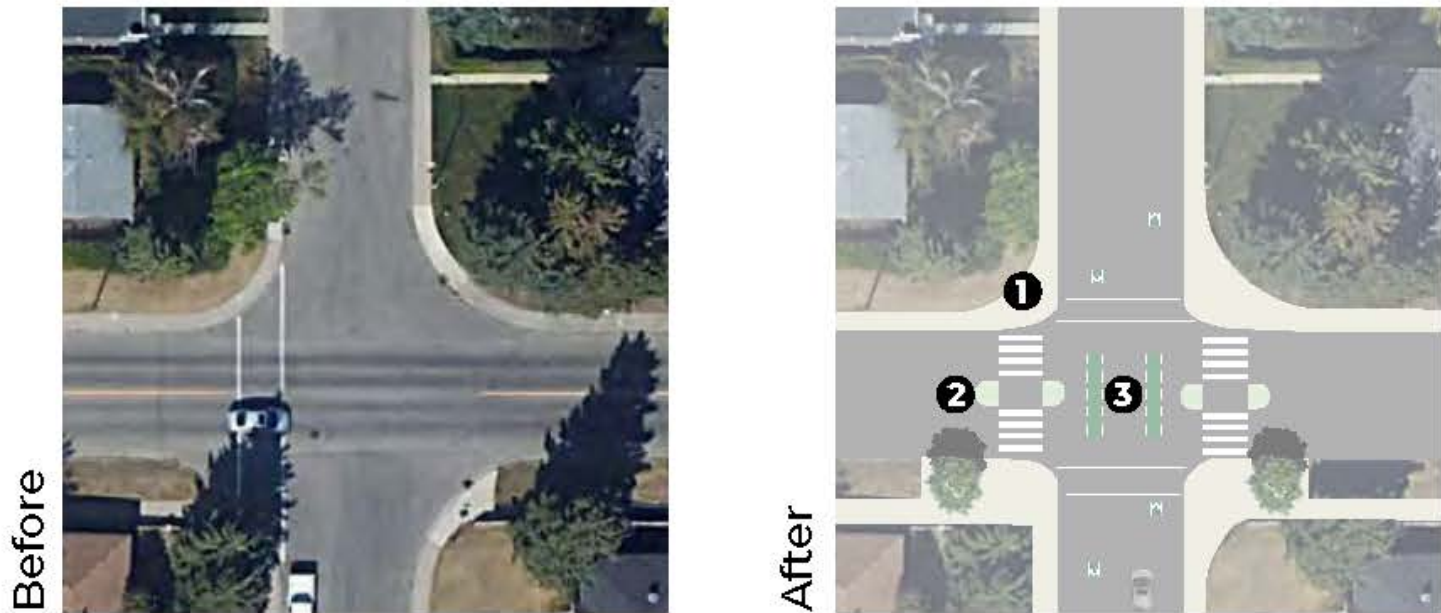
PLANVIEW



CYCLING NETWORK | 21 AVE NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 21 Ave NW & 48 St NW



B 21 Ave NW & 47 St NW



DESIGN CONSIDERATIONS

21 Ave NW & 48 St NW

21 Ave NW and 48 St NW is a key intersection to ensure safe and comfortability travelling along 21 Ave NW. Due to larger volumes of cut through traffic along 48 St NW, vehicle speeds and volumes makes this intersection uncomfortable for its users. Several new safety elements have been included in the new design in order to increase safety, slow vehicles down, and increase visibility.

21 Ave NW & 47 St NW

21 Ave NW and 47 St NW intersection is a busy intersection during school drop offs and pickups. Due to large influxes of vehicles and kids walking to school, width of crossing for pedestrians and vehicle speed make this intersection uncomfortable for its users. Therefore, in order to establish a comfortable intersection to navigate for all its users, several new design elements are included to increase safety, slow vehicles, and increase visibility.

Improvements:

- Curb extensions
- Pedestrian medians
- Bike paint
- Sharrows

PRECEDENTS

1 Curb Extensions



Source: <https://www.fhwa.dot.gov/planning/bss/>

2 Pedestrian Median



Source: <https://archinect.com/plant/project/pottery-road-bicycle-and-pedestrian-crossing>

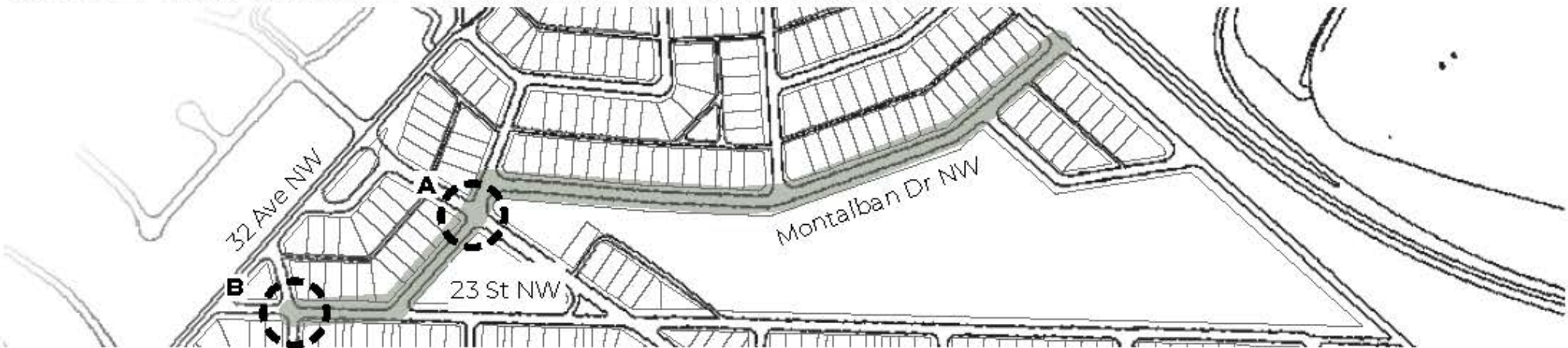
3 Bike Paint



Source: <https://www.citynews1130.com/2019/06/22/province-millions-bike-lanes/>

CYCLING NETWORK | MONTALBAN DR IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



OVERVIEW

Montalban Drive NW has a low volume of traffic, however, serves the community with amazing views of COP, the Rocky Mountains, and of the Montgomery itself. Other than providing a scenic cycling route, Montalban Drive NW will serve as a connector from Mackay Rd NW to 52 St NW and eventually be a strong connection with University District. Due to its lower volume of traffic, small interventions are needed to ensure safety to its users.

Improvements

- Sharrows
- Bike paint
- Bike signs

CONDITIONS

PERSPECTIVES

After



Before



PLANVIEW



CYCLING NETWORK | MONTALBAN DR IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A Montalban Dr & 48 St NW



B 23 Ave NW & 52 St NW



DESIGN CONSIDERATIONS

Montalban Dr & 48 St NW

Montalban Dr and 48 St NW is a unique intersection that requires careful consideration due to large volume of cut through traffic using 48 St NW. In order to protect cyclist and pedestrians, new safety elements are provided to slow vehicles down and increase visibility.

23 Ave NW & 52 St NW

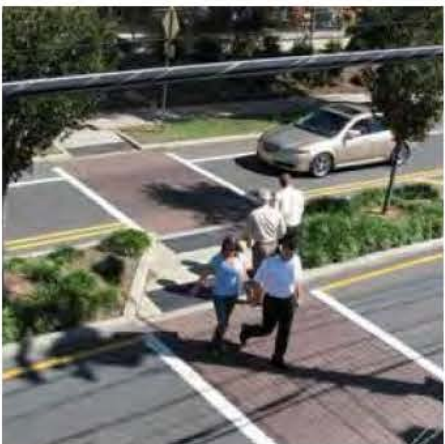
23 Ave NW and 52 St NW intersection is currently closed to vehicles to on the southern portion of 52 St NW. This is a great opportunity to provide a shared street facility and open 52 St NW but also provide protection to those coming down from the multi-use trail on 32 Ave NW and crossing 52 St NW.

Improvements:

- Medians
- Pedestrian refuge facilities
- Curb extensions
- Bike median infrastructure
- Sharrows
- Bike paint
- Bike route signs

PRECEDENTS

1 Pedestrian Median



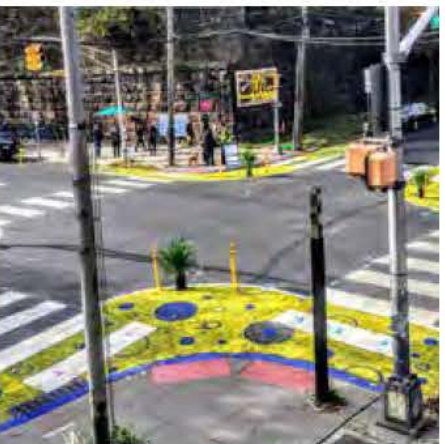
Source: <https://archinect.com/plant/project/pottery-road-bicycle-and-pedestrian-crossing>

2 Painted Bike Lane



Source: <https://www.1mens.com/business/how-buffered-bike-lanes-offer-additional-safety-value-to-cyclists/>

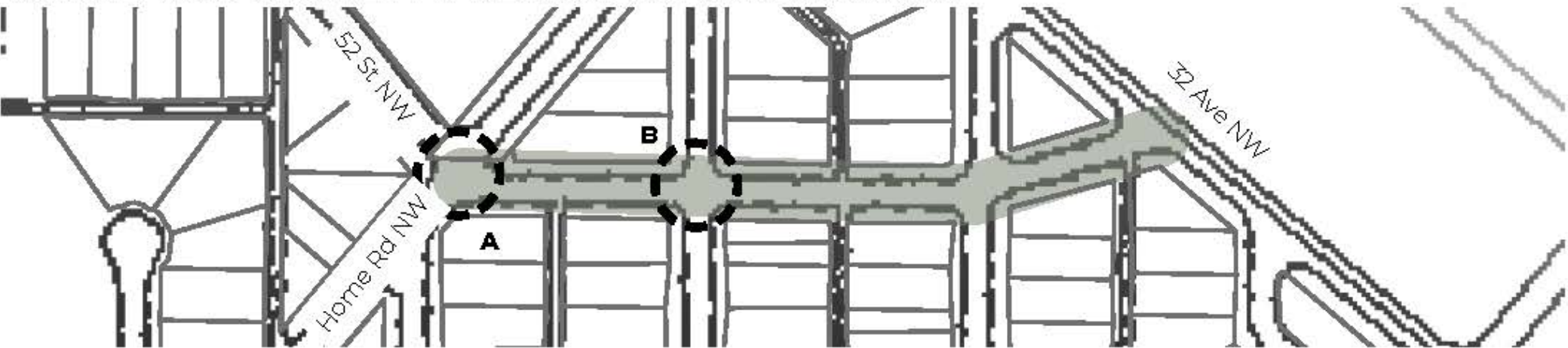
3 Curb Extensions



Source: <http://www.street-plans.com/jc-walks-pedestrian-enhancement-plan-jersey-city-nj/>

CYCLING NETWORK | 52 ST NW IMPROVEMENTS

CORRIDOR OVERVIEW & DESIGN CONSIDERATIONS



OVERVIEW

The upper portion of 52 St NW has low traffic volumes and is closed to vehicle access at 23 Ave NW. The bottom portion of 52 St NW has a cycle track but fails to connect with the upper portion of Montgomery. Therefore, a shared street facility is proposed in order to provide a strong connection from the cycle track on 52 St NW to the multi-use trail on 32 Ave NW.

Improvements:

- Sharrows
- Bike Paint
- Bike route signs
- Bike median infrastructure

CONDITIONS

PERSPECTIVES

After



Before



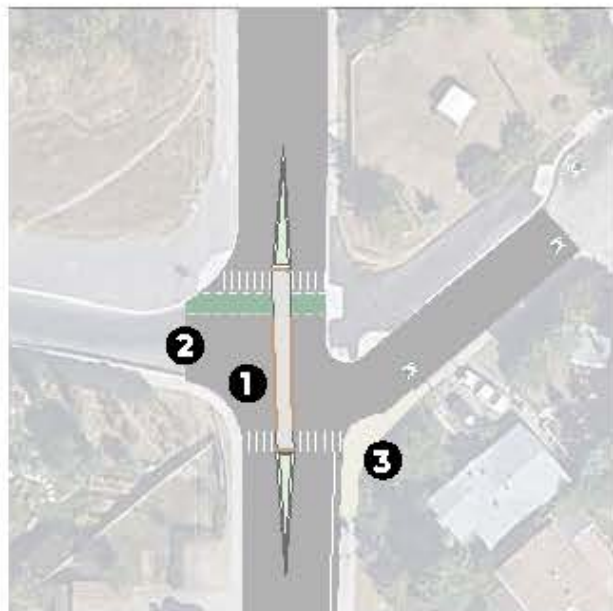
PLANVIEW



CYCLING NETWORK | 52 ST NW IMPROVEMENTS

INTERSECTION OVERVIEW & DESIGN CONSIDERATIONS

A 52 ST NW & HOME RD



B 52 ST NW & 22 AVE NW



DESIGN CONSIDERATIONS

52 St NW & Home Rd

The crossing at 52 St NW and Home Rd is crucial as it provides connections to shared street facilities of 52 St NW and 21 Ave NW. However, for this crossing there are safety concerns of vehicle speeds. To alleviate this concerns, several new safety elements have been added to the new design proposed.

52 St NW & 22 Ave NW

The crossing at 52 St NW and 22 Ave NW is an important spot for cyclist to catch their breath as they must climb the last steep portion of 52 St NW. Therefore, a comfortable crossing is needed to ensure a short rest is achieved. Several safety elements are included to ensure crossing at comfortable speeds can be achieved by cyclist or pedestrians.

Improvements:

- Bike signs
- Sharrows
- Bike paint
- Bike median infrastructure

PRECEDENTS

1 Bike Infrastructure



Source: <https://architect.com/plant/project/pottery-road-bicycle-and-pedestrian-crossing>

2 Bike Paint



Source: <https://bikeportland.org/2019/02/19/biking-through-vancouver-bcs-protected-intersection-293729>

3 Curb Extensions



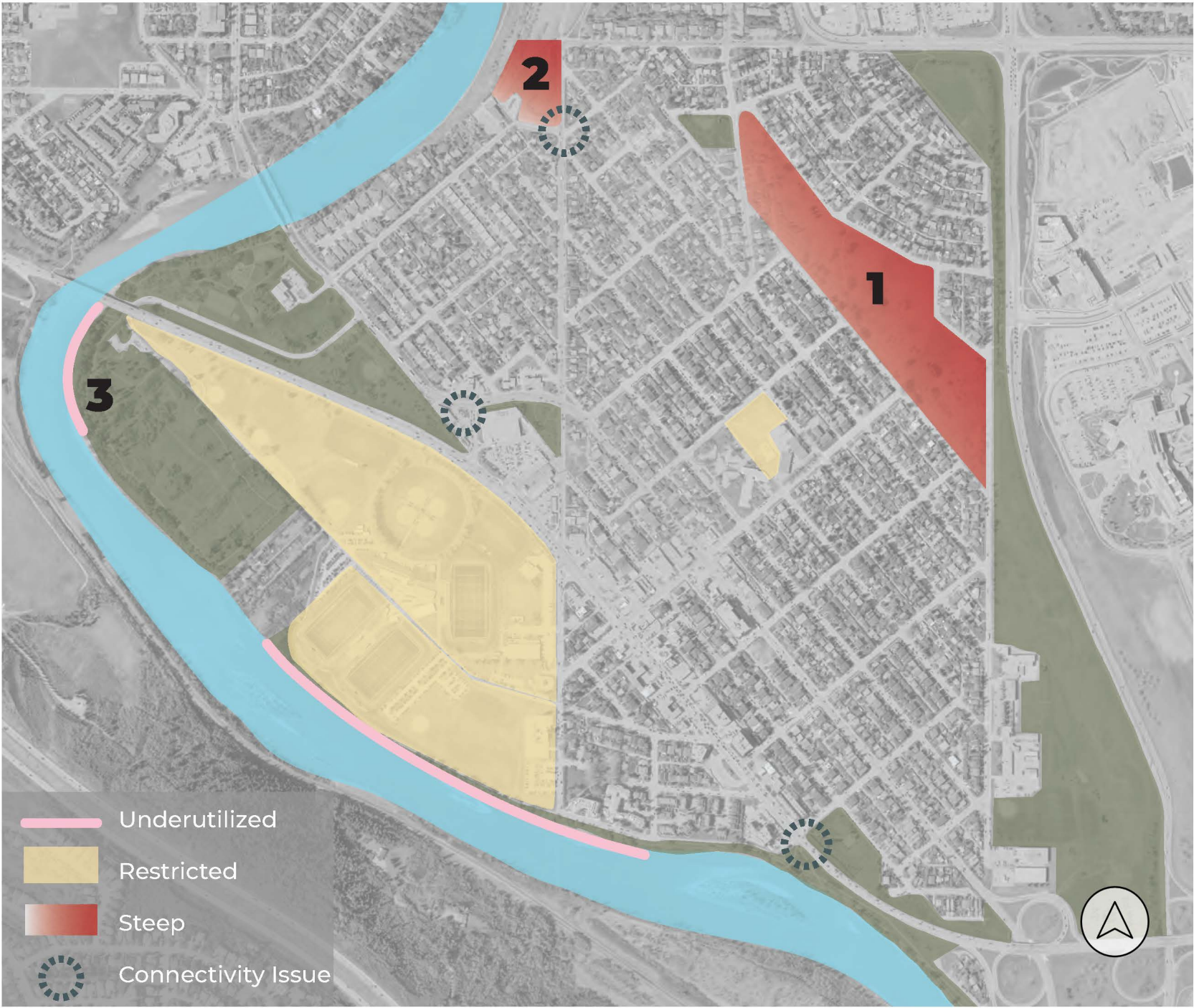
Source: <http://www.street-plans.com/jc-walks-pedestrian-enhancement-plan-jersey-city-nj/>



5.3 OPEN SPACES

OPEN SPACE & THE PUBLIC REALM

CURRENT ANALYSIS



Montgomery’s open space network faces challenges due to its difficult topography, creating steep slopes that limit mobility, and development. From a glance, Montgomery would appear to have a large amount of green spaces. However, a large portion of this space is privately owned, and not accessible to the public. The school, and Shouldice Park athletic fields are only utilized during certain times of day, and are restricted to particular uses. The City of Calgary aims for 10% of local park space per community, and Montgomery only has 5.8%.

The Bow River hugs this community along the South and West side. Despite this unique opportunity, the riverfront spaces appear to be underutilized. Pathway systems promote movement within parks, but major roadways and dangerous crossings limit connectivity, and pedestrian movement between open spaces.

This report will recommend two large-scale, community-wide strategies: 1) wayfinding, and 2) street tree planting. The goal of these strategies is to increase connectivity and movement within the community.

- Small-scale, site-specific interventions will take place in three key park spaces:
- 1) Montalban Park
 - 2) The historic Shouldice House site
 - 3) Riverfront access point along off-leash dog area

The following section will outline each strategic intervention, and the desired outcomes. Design guidelines, and policy implications will be introduced to further support these outcomes, and promote positive change.





OPEN SPACE KEY OBJECTIVES

1. Increase connectivity between open spaces
2. Highlight historic significance and unique community features
3. Minimize the impact of slopes to make parks more accessible
4. Facilitate activities for all seasons
5. Maximize Bow River frontage
6. Create a green network promoting movement within the community

SITE 1: MONTALBAN PARK

OVERVIEW

Montalban Park is a local park, located in the Northeast corner of Montgomery. The park is designated as an off-leash area. Currently there is one path existing cutting from North to South in the center of the park. The park is characterized by a significant slope from North to South. The linearity of the park presents an opportunity for connection to other open spaces, including the Montgomery Community Garden in the East, and University District in the West.

DESIGN CONSIDERATIONS

For Montalban Park we propose the introduction of more comprehensive pathway system to help issues of mobility due to the steep slope. The path system is based on topography, minimizing the slope, and desire lines as seen by worn grass patterns. The paths will be asphalt, matching the materiality of the existing path. This will also help to hold the ground and minimize erosion along the steep slope. To maximize the opportunity for connectivity, we propose a crosswalk, and gate connection to the Community Garden.



<https://www.minnpost.com/cityscape/2014/02/its-time-get-moving-outdoor-playgrounds-senior-set/>

DOG PARK INFRASTRUCTURE



<http://bestfountainideas.com/dog-drinking-fountain/dog-park-drinking-fountains/>

PEDESTRIAN INFRASTRUCTURE



<http://custompark.com/furnishings/park-benches.php>



<https://www.cbc.ca/news/Canada/Calgary/bear-proof-garbage-bins-made-in-lethbridge-1.4542351>

E/W PATHWAY



SEASONAL PROGRAMMING

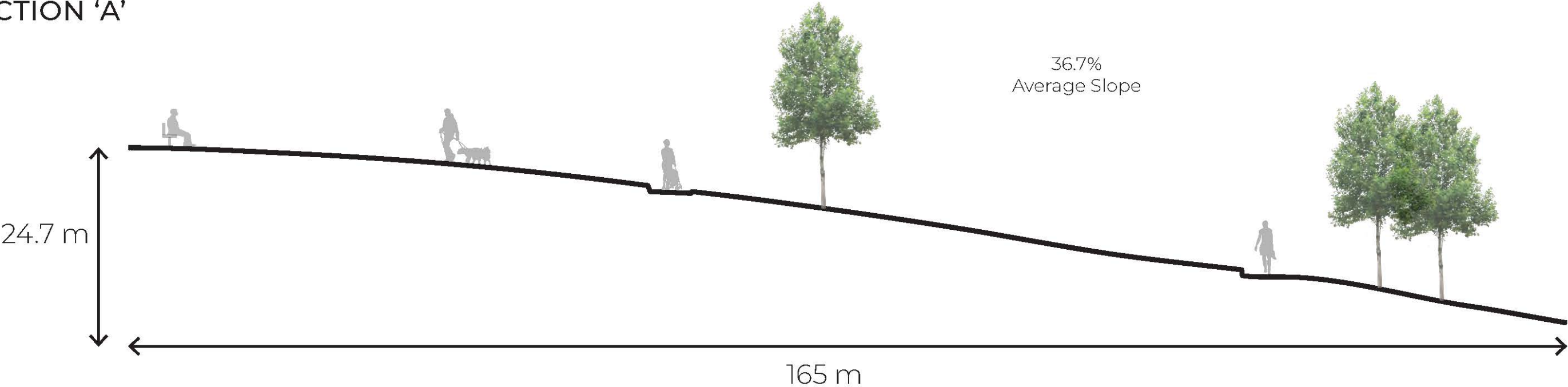


<https://calgaryhomes.ca/blog/calgarys-best-toboggan-runs.html>



<https://outsider.ie/lifestyle/easy-backyard-activities/>

SECTION 'A'



SITE 2: SHOULDICE TERRACE PARK

We propose to call this park Terrace Park, paying homage to the original community name - Shouldice Terrace.

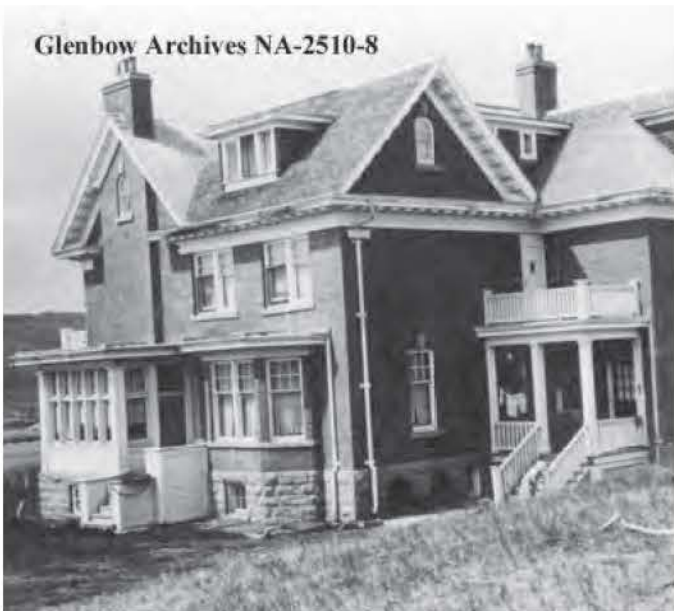


OVERVIEW

We propose to call this park Shouldice Terrace Park, paying homage to the original community name - Shouldice Terrace. The Shouldice Family played a significant role in Montgomery's history, their family home was located in this area. This Park is fortunate to border the Bow River and its high elevation offers great views towards the John Hextall Bridge. Calgary's regional pathway system runs through the park bringing many commuters, and travelers through the site. Home Road runs along the East side of the park. This steep road often has fast moving traffic, and problematic road sharing between vehicles and cyclists.

DESIGN CONSIDERATIONS

The focal point of this site will be an open pavilion constructed to highlight the historical significance of this park. The pavilion will take inspiration from the original Shouldice House, pictured below. The hope for this intervention is that it will draw people to linger within the site, not just moving through it. The Pavilion could be used as a public barbecue and gathering area. To access the pavilion we propose increased path connections along desire lines apparent by worn grass patterns. Planting along the East side will help create a buffer between the park and Home Road traffic. The current gravel parking lot does not offer any added value to the site. By paving the lot and adding some plantings, it creates the opportunity for seasonal parking lot interventions, using planters, tables, seating, or even a stage for live entertainment.



PAVILION PRECEDENTS



Backyard BBQ Pavilion - Emmitsburg, Maryland
https://www.washingtonpost.com/lifestyle/magazine/country-house-or-city-house-theres-a-way-to-extend-living-space-outdoors/2015/06/23/900b4f5a-0006-11e5-805c-c3f407e5a9e9_story.html



Historic Pavilion - Gordon Island, Ontario
<https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=10048>

LOCAL PARK SPACE POLICIES

Local Parks Shall...

- Be flexible and support a wide range of recreational activity
- Provide opportunities for activities in all seasons
- Be connected, and accessible by active transport
- Align with community identity, and foster social cohesion between community members
- Use hardy, native species for planting
- Be connected to other open spaces via pedestrian and cyclist routes
- Be marked using clear signage, that reinforces the space as a part of Montgomery
- Accommodate local community gatherings, and events
- Utilize safety measures such as street lighting
- Provide sufficient opportunities for proper disposal of garbage or recyclables

The designation of 'local parks' refers to publicly owned open space that can be accessed by all people, at all times. This includes Montalban Park (1), George Gell Park (2), Shouldice Terrace Park (3), Montgomery Town Square (4), and a few other unnamed parks.



Local Parks in Montgomery

SITE 3: RIVERFRONT ACCESS



OVERVIEW

One of the most distinct features of Montgomery is its amount of riverfront access. The community is wrapped in a blanket that is the Bow River. Compared to other communities with the kind of access, Montgomery has had less flood damage due to the topography. The River creates many opportunities for recreation, and adds value to the community. It would be beneficial for the community to utilize the full potential of their riverfront access. To help with this goal we propose a possible riverfront intervention, along with policies to guide future development along the Bow.

DESIGN CONSIDERATIONS

We propose a natural pool area along the slow moving banks of the Bow River. This is envisioned to be a cross between Calgary's existing shallow swimming areas, and natural hot springs like Lussier Springs in BC. The Bow River is by no means a hot spring, but is a glacier fed river, this means the intervention will be used in the Summer months when the still waters will be heated by the sun, but remain cool enough to refresh people on hot days. The pools will be constructed similarly to the hot springs using natural river rocks to keep down costs, and risks that come with the unpredictability of the river.

THE INTERVENTION:



PRECEDENTS



Lussier Hot Springs, British Columbia

<https://www.flickr.com/photos/robertdownie/32340593778>



Edworthy Park, Calgary

<http://blog.buzzbishop.com/Calgary/best-beaches-in-calgary/>

ABOUT THE BOW:

During the Summer months the flow rate increases within a range of 70-400 m³/s.

The waters along the inner curve in Montgomery will move slower.

The average water temperature in July is 19.1 degrees Celsius, this is about 5 degrees cooler than your average lap pool.

Water levels peak in the Summer time. In 2018 they peaked in June at just over 1.6 meters.

(<https://wateroffice.ec.gc.ca/>)

RIVERFRONT POLICIES

Riverfront Spaces Shall...

- Maximize access to the River
- Maximize views to the River
- Utilize best practices for stormwater and erosion control
- Utilize flood resistant infrastructure and plan for 100 year flood potential
- Enhance pedestrian pathways and linkages
- Not contribute sedimentation or pollution to the river
- Provide accessible spaces for people of all mobility
- Promote year-round activities and attractions
- Optimize usage of the river

Riverfront Development Shall...

- Promote land uses that will increase pedestrian traffic and add value to the riverfront
- Include entrance or orientation towards the river
- Remain conscious of river wildlife and their habitat
- Provide sufficient lighting for safe pedestrian environments



WAYFINDING

OVERVIEW

The Montgomery Community faces challenges with community identity. Proximity to Bowness, and the fact that one of their main streets is called 'Bowness Road' often creates misunderstanding. The physical division created by 16 Avenue also creates a social division between residents on either side. In hopes to improve connectivity and strengthen the identity of Montgomery, we propose the introduction of a comprehensive, and cohesive wayfinding intervention.

DESIGN CONSIDERATIONS

This intervention will promote pedestrian movement within Montgomery, and between local park spaces. A cohesive signage design will reinforce the community identity and make it known when one is entering or exiting the community. Signs will be used to illustrate proposed routes, possible destinations, and can include historical/environmental facts. By increasing pedestrian movement in the community we hope to bridge the gaps created by some major roadways, and reconnect all people of Montgomery in solidarity.



Wayfinding at Nose Hill Park - Calgary



Rotary Greenway Sign - Montgomery

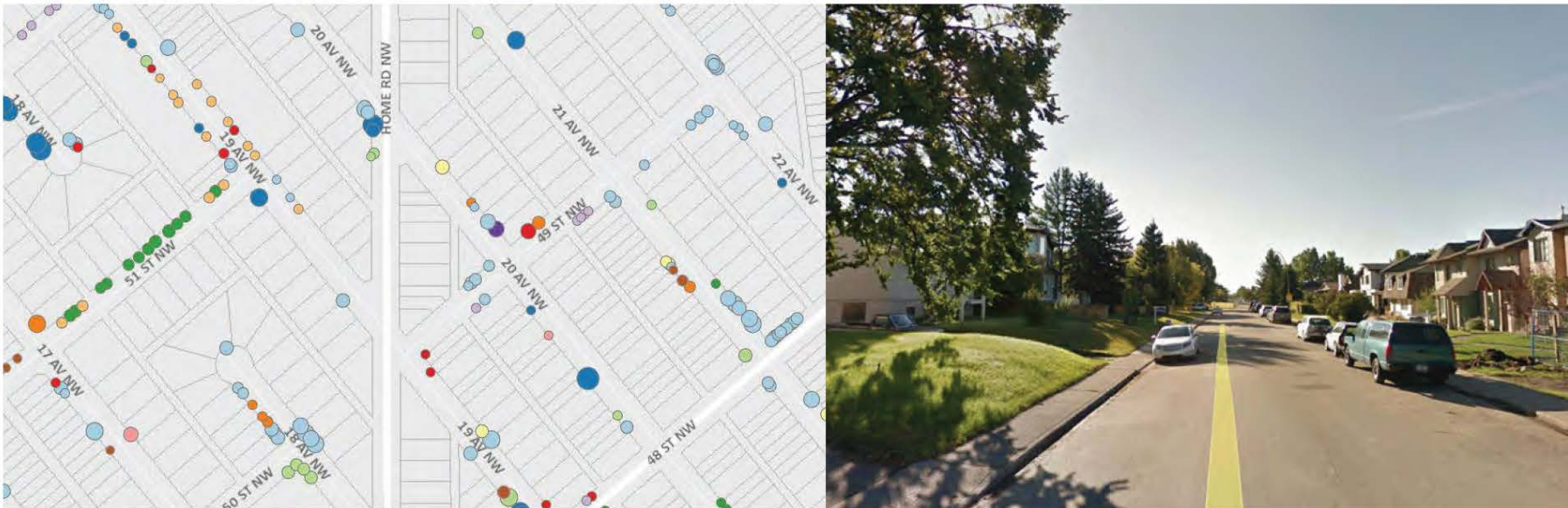


STREET TREE PLANTING

OVERVIEW

During our time in Montgomery it was observed that the street tree coverage could be improved. This was also an issue mentioned by residents during our engagement process. This observation was confirmed by data gathered from the City of Calgary. When compared to Sunnyside, another historic Calgary community, Montgomery has 1,000 less street trees per km squared. The maps and images below illustrate the scarcity of trees in Montgomery. We propose to increase these numbers drastically, to create a more appealing pedestrian environment, and to facilitate the creation of a green network. (Image Source: <https://maps.calgary.ca/TreeSchedule/>)

Montgomery - 1,212 trees per km2



Sunnyside - 2,212 trees per km2



Empty Tree Well Along 16 Ave



BEFORE

AFTER

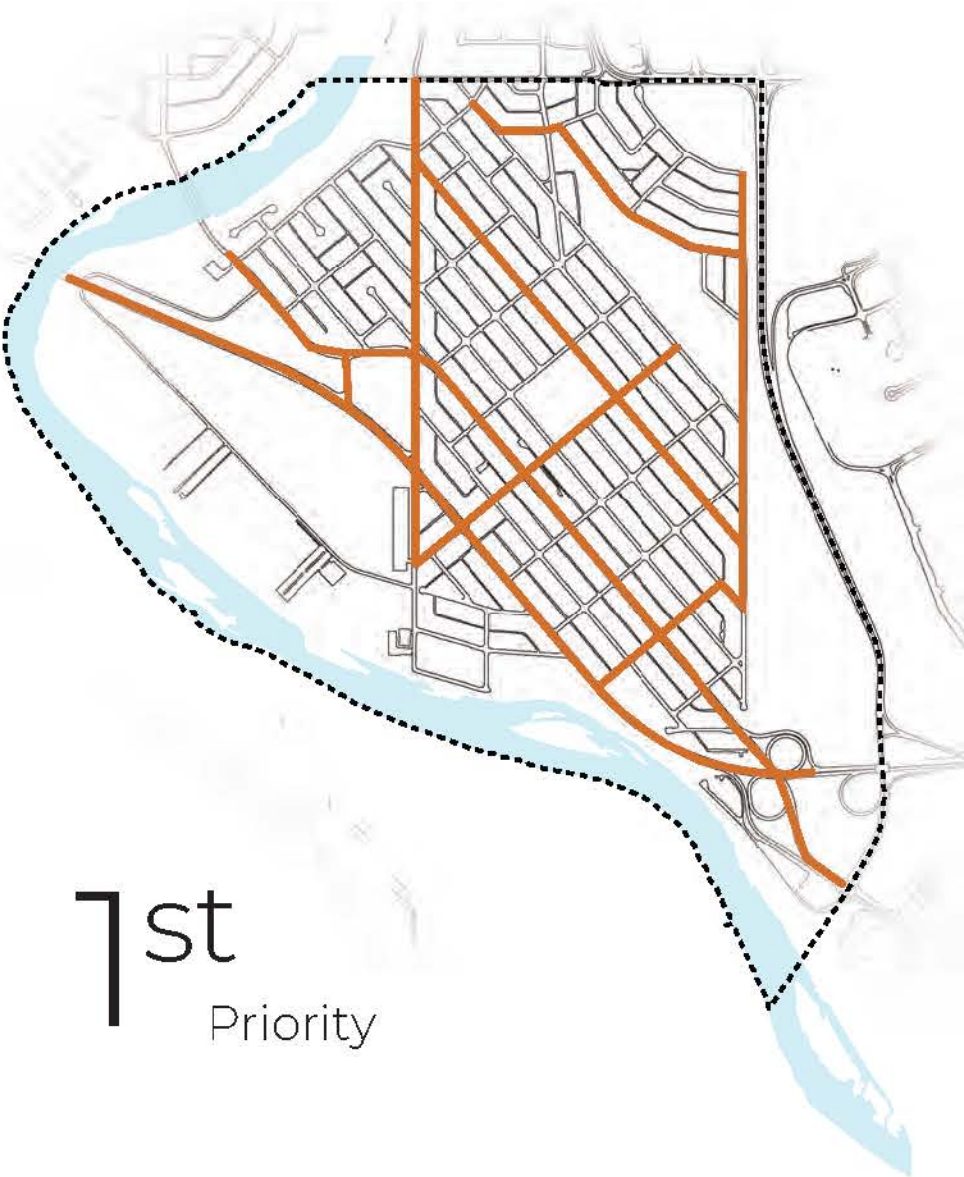
GOALS:

1. Increase street tree cover to match Sunnyside (2,212 per km2) by 2050
2. Increase street appeal for pedestrian and cyclists
3. Fill empty tree wells
4. Provide break from wind, snow, and sound
5. Create a green network between open spaces
6. Provide an enjoyable environment along main streets and commercial corridors
7. Create more habitat for urban wildlife
8. Create value for the community, and landowners



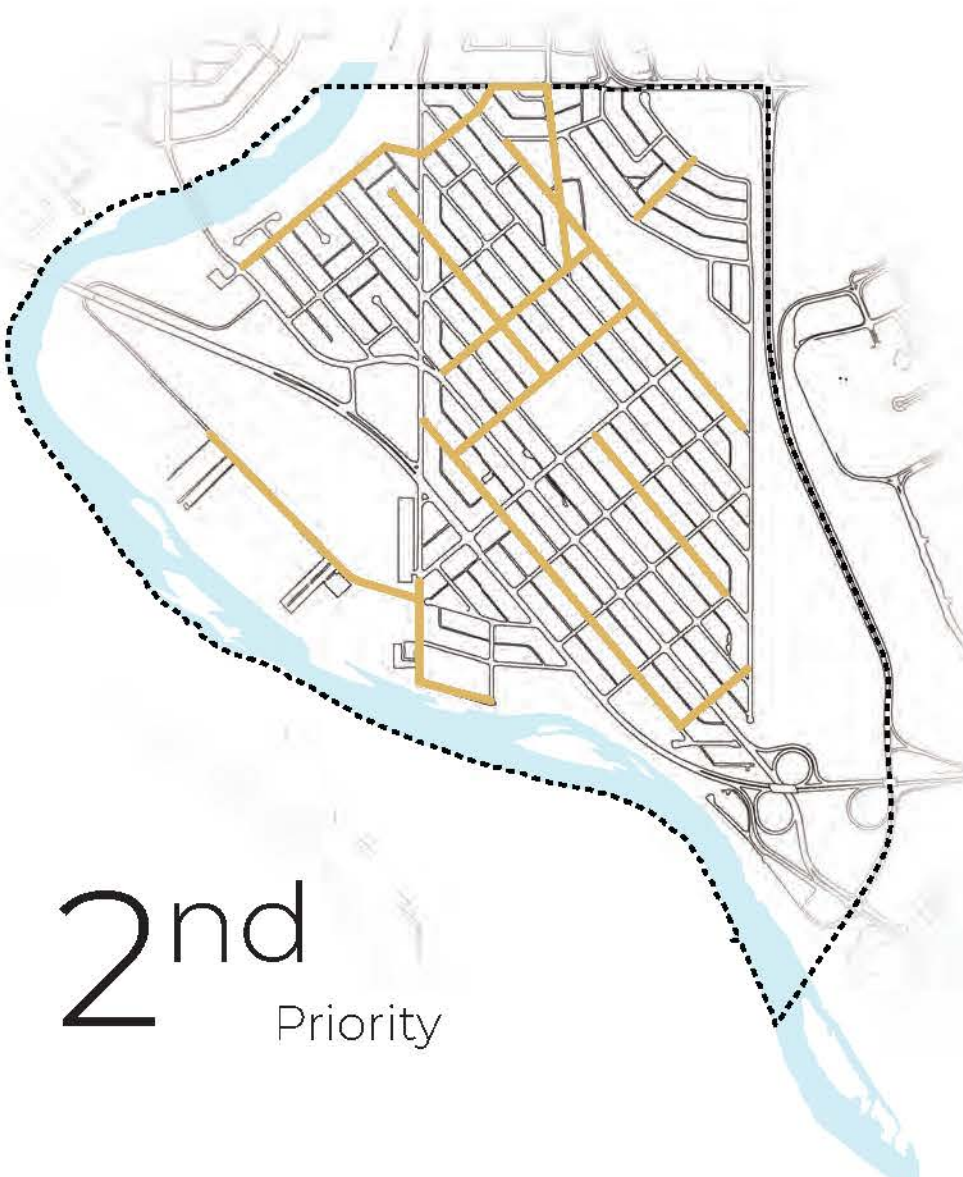
PLANTING STRATEGY:

We propose a three phase planting strategy based on planting priority. Each street is designated as either first, second or third priority.



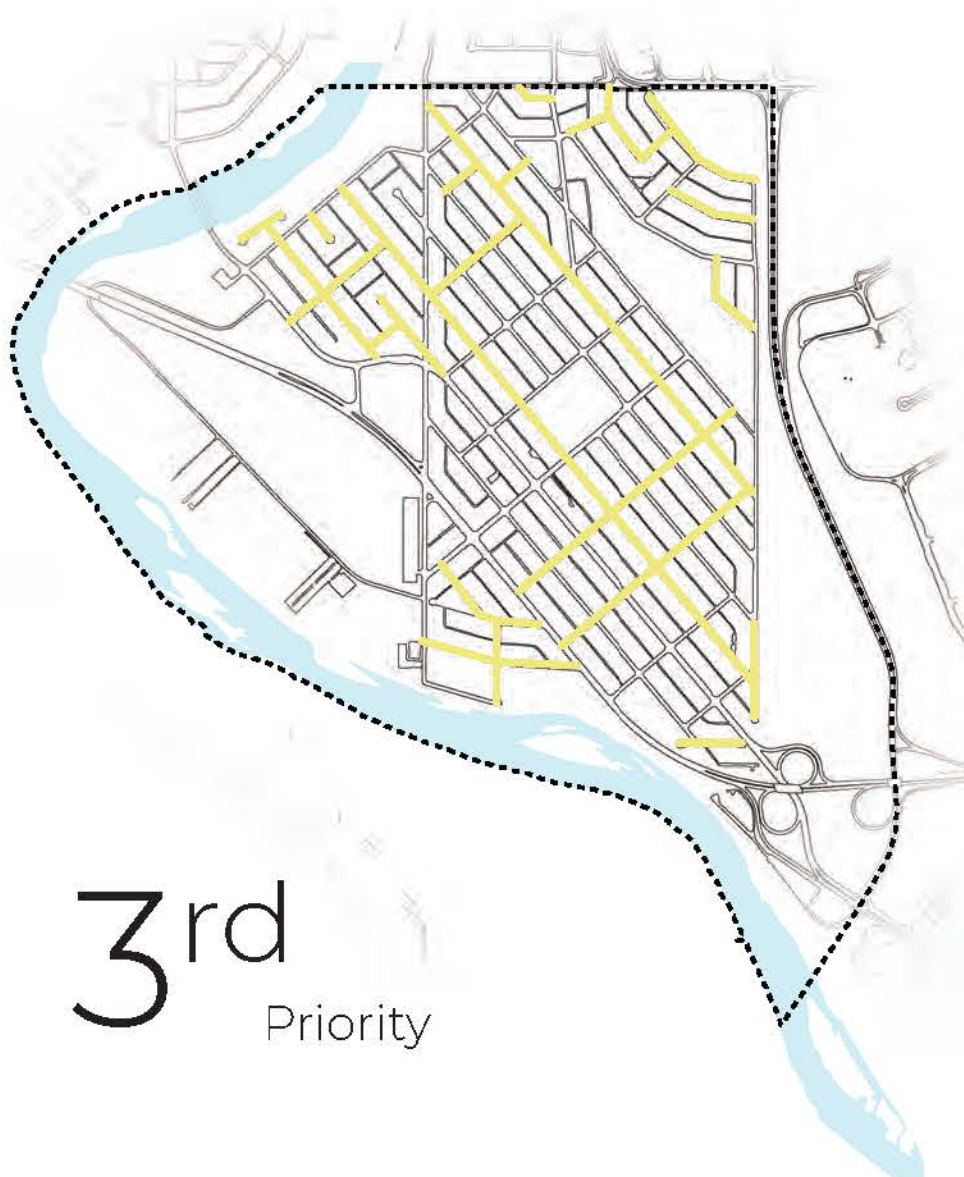
1st
Priority

Top priority streets are those which are high traffic pedestrian, or cycling routes, and those that connect open spaces. These streets should be targeted first for street planting as they play a significant role in the functionality of the community.



2nd
Priority

The second priority streets are based on those which are seen to have less tree cover based on data gathered from the City, and our own observation. These are residential streets, many of which have lost trees as parcels become redeveloped.



3rd
Priority

The third priority group is made of residential streets that are lower traffic, and have an existing tree canopy which is considered sufficient at this time. The goal is for planting to happen on all streets, and as the other streets become more green, the need for trees on these streets will increase.



PLANTING PALETTE:



Green Ash

- Fast growing
- Hardy
- 18 m tall
- 12 m spread



Elm

- Fast growing
- Provides shade
- 25 m tall
- 12 m spread



Brandon Elm

- Grows fast
- 15 m tall mature
- 6 m spread



Bur Oak

- Slow growing
- Tolerant
- 14 m tall
- Withstands Chinook



Balsam Poplar

- Grows fast
- 25 m tall mature
- Native to Alberta



Laurel Leaf Willow

- Supports wildlife
- Wind/Snow break
- Fast growing
- 13 m tall, 13 m spread



Dropmore Linden

- Grows slow
- 10 m tall mature
- Attracts Pollinators



Swedish Columnar Aspen

- Provides wind, snow, and sound breaks
- Good for privacy screen
- 12 m tall, 2 m spread

Based on City of Calgary's "Top Tree Species for Calgary" (2018)

POLICIES

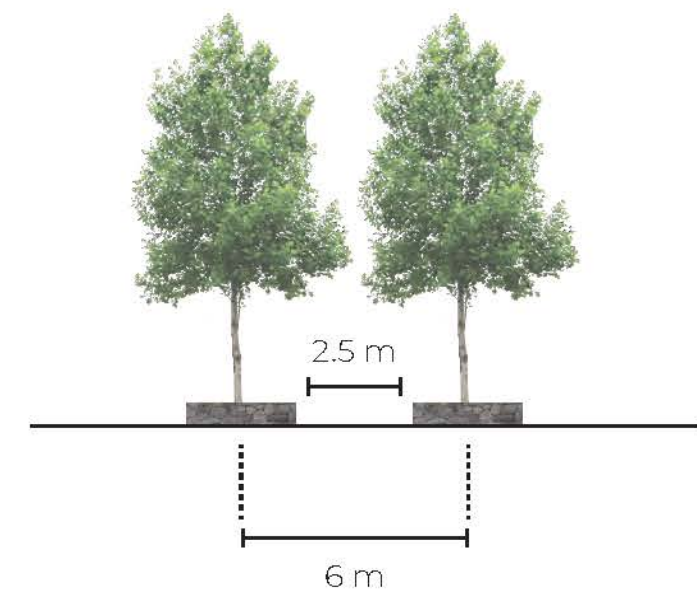
- Street Trees Shall...
- Be species which are known to endure our harsh Winters
 - Be planted 6 m apart
 - Be planted according to priority strategy
 - Be planted in uniform tree wells
 - Be upkept as needed

Setback & Spacing Guidelines

SETBACK	Poplar & Willow Trees	Other Deciduous Trees	Coniferous Trees
From buildings and hard surfaces	6 m	2.5 m	1/2 max spread
From private property	10 m	2.5 m	1/2 max spread
From sports fields	10 m	1/2 max spread with 3 m buffer	1/2 max spread with 3 m buffer
TREE SPACING	1/2 max spread or 6 m (whatever is less)		

The edge of tree wells are to be 2.5 m away from each other

Adapted from Standard Specifications for Landscape Construction, City of Calgary (2012)



1:200



OTHER OPEN SPACE POLICIES

Regional Park Space Policies

Regional Parks Shall...

- Work to maximize activity year-round at diverse times of day
- Include safety measures such as lighting, and proper storage of park equipment
- Work with the community to integrate regional, and privately owned spaces to best serve Montgomery

Shouldice Recreation Park is the key regional park space in Montgomery.

Undesignated Open Space Policies

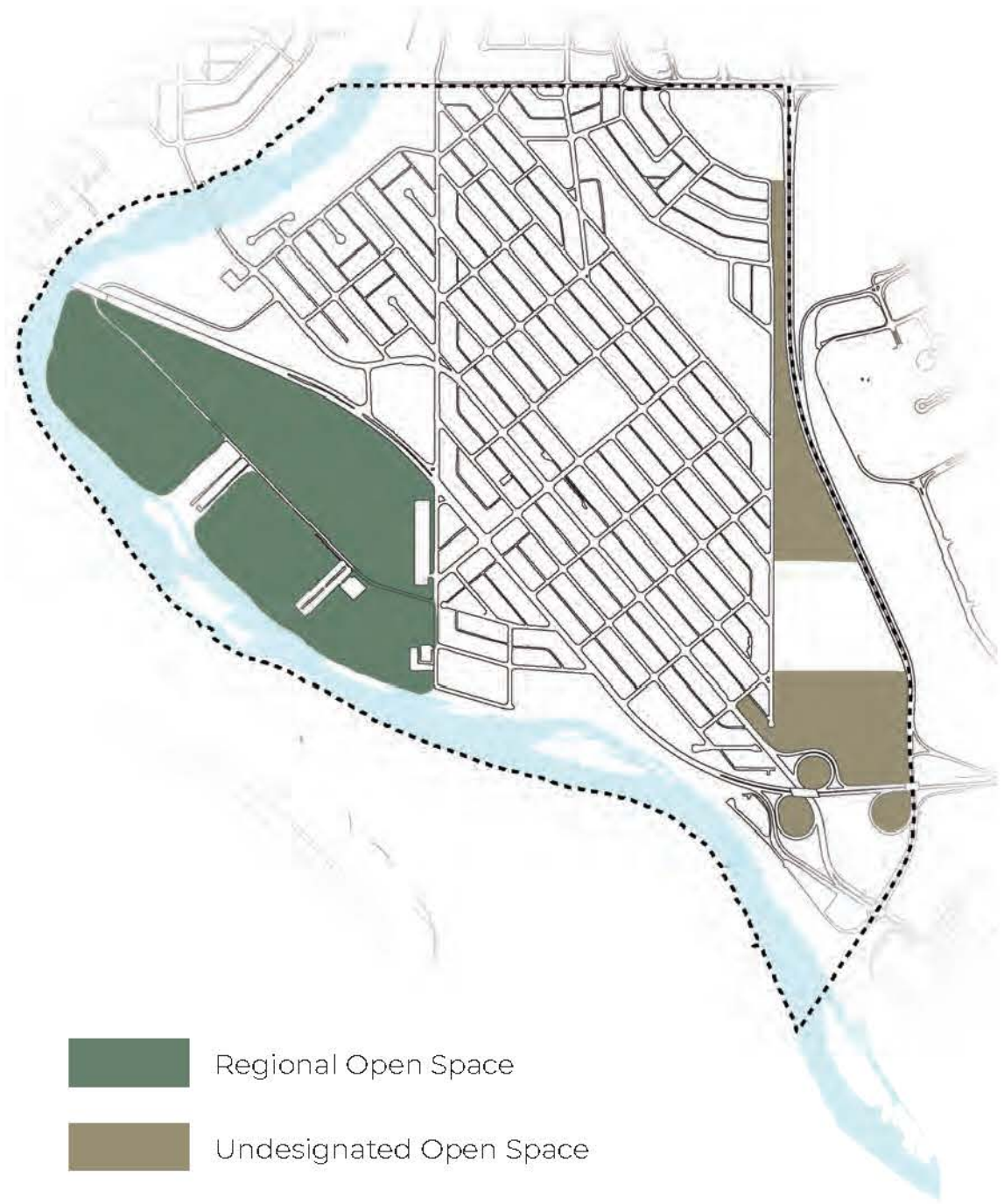
Undesignated Open Spaces Shall...

- Minimize use of mowers, and fertilizer
- Consider planting of native species that attract pollinators to create pollination corridors

The adjacent map does not illustrate all examples of undesignated open space as many of these spaces are very small. Despite their size, they still pose opportunities, and should be considered. Some examples of these undesignated spaces include...



Montgomery Medians



OPEN SPACE IN THE WINTER CITY

1. All parks shall be designed to minimize the impact of prevailing winds, and to maximize the hours of sunlight
2. Use colour where possible to liven the winterscape
3. Incorporate programming and activities for Winter months
4. Design to minimize pooling water from snowmelt
5. Invest in street infrastructure as it is worn down in winter months
6. Create opportunities for micro-climates
7. Prioritize snow clearance on pedestrian pathways
8. Choose tree and plant species that are known to endure cold Winters and Chinook winds

WINTER IMPACT ON PUBLIC INFRASTRUCTURE



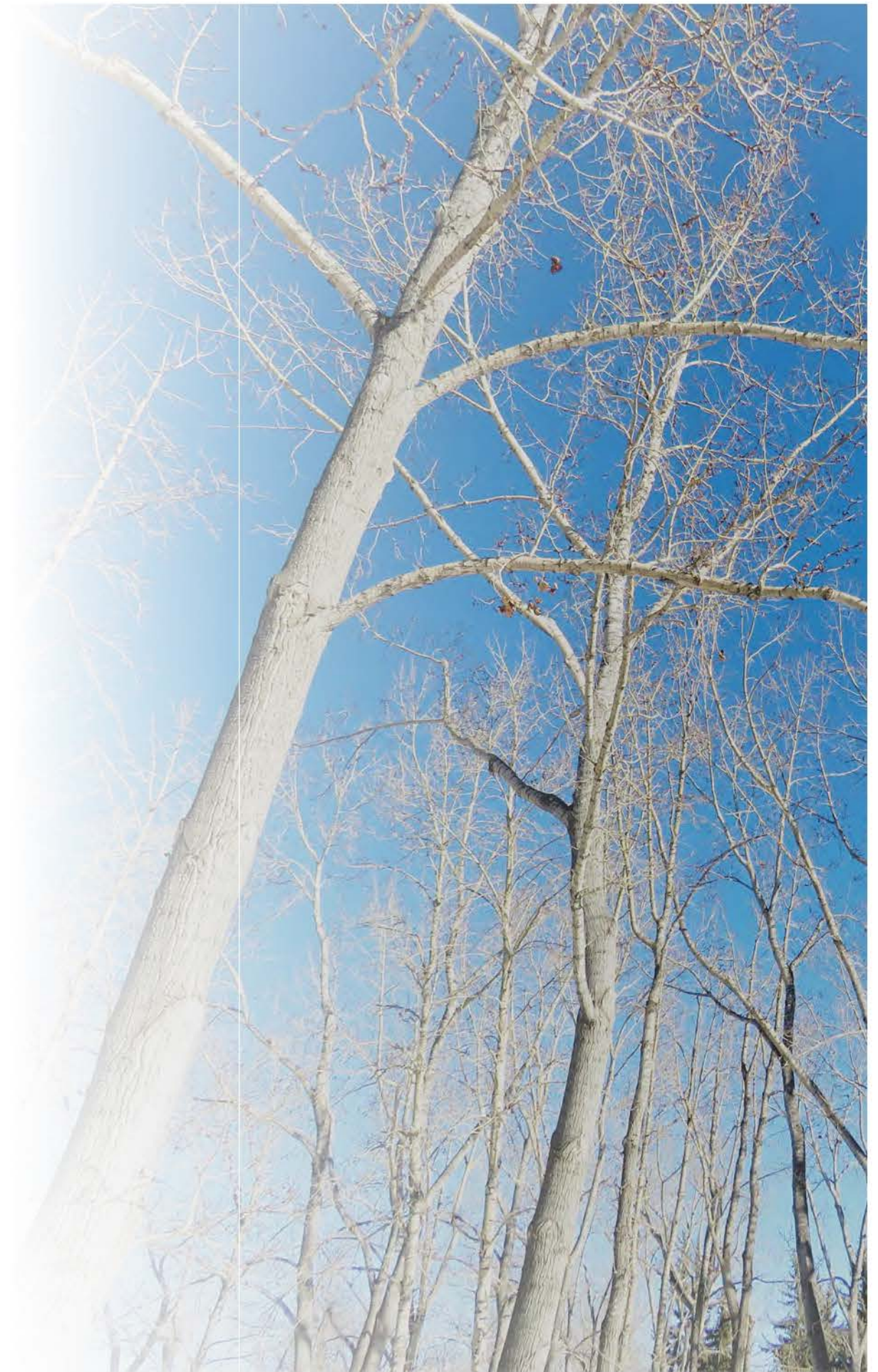
Long periods of cold and wet climate creates rust and degradation of infrastructure



Asphalt becomes broken down from salt and gravel build up in Winter. This creates dangerous walking conditions.



Winter winds creates a need for additional public infrastructure such as this bus shelter. These elements are important in promoting use of public transit methods



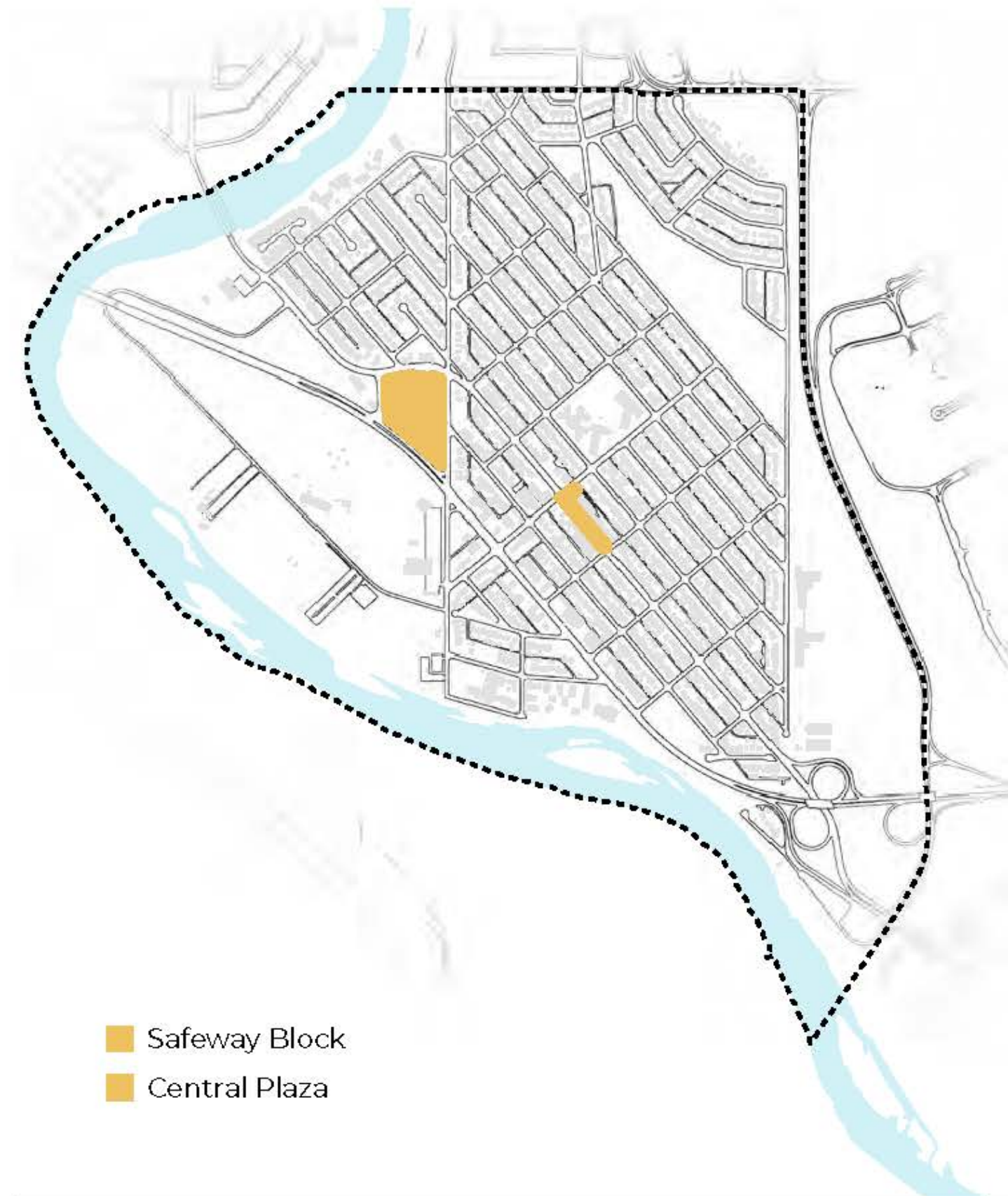


5.4

UNIQUE SITES

UNIQUE SITES

SITE LOCATIONS



- Safeway Block
- Central Plaza

OVERVIEW

Montgomery includes several large unique sites that provide a wonderful opportunity for the community. However, both the Safeway Block and Central Plaza, are challenged by poor existing conditions – large swaths of parking, poor accessibility for all modes of transportation, unattractive public realm, unengaging commercial frontages, and limited outdoor space.

In order to re-imagine these unique sites, it will require site-specific policy direction to appropriately respond to the existing uses, unique characteristics, site size, and local context. Both sites provide an opportunity to deliver a diverse set of housing options, several local amenities, and increase neighbourhood vibrancy – helping to shape a complete community.

Objectives

1. Provide a mix of housing
2. Reinforce neighbourhood identity
3. Provide retail and active frontages
4. Improve public realm
5. Provide open space

Policies

- Emphasize mixed-use buildings for the majority of the sites to enhance vibrancy and neighbourhood identity
- Integrate public spaces for people to gather and socialize to create a sense of place
- Integrate public open space within Safeway Block with winter design considerations
- Ensure frontage improvements strengthen neighbourhood integration and provide an enhanced public realm
- Integrate and improve walking, cycling, and transit connections through the site

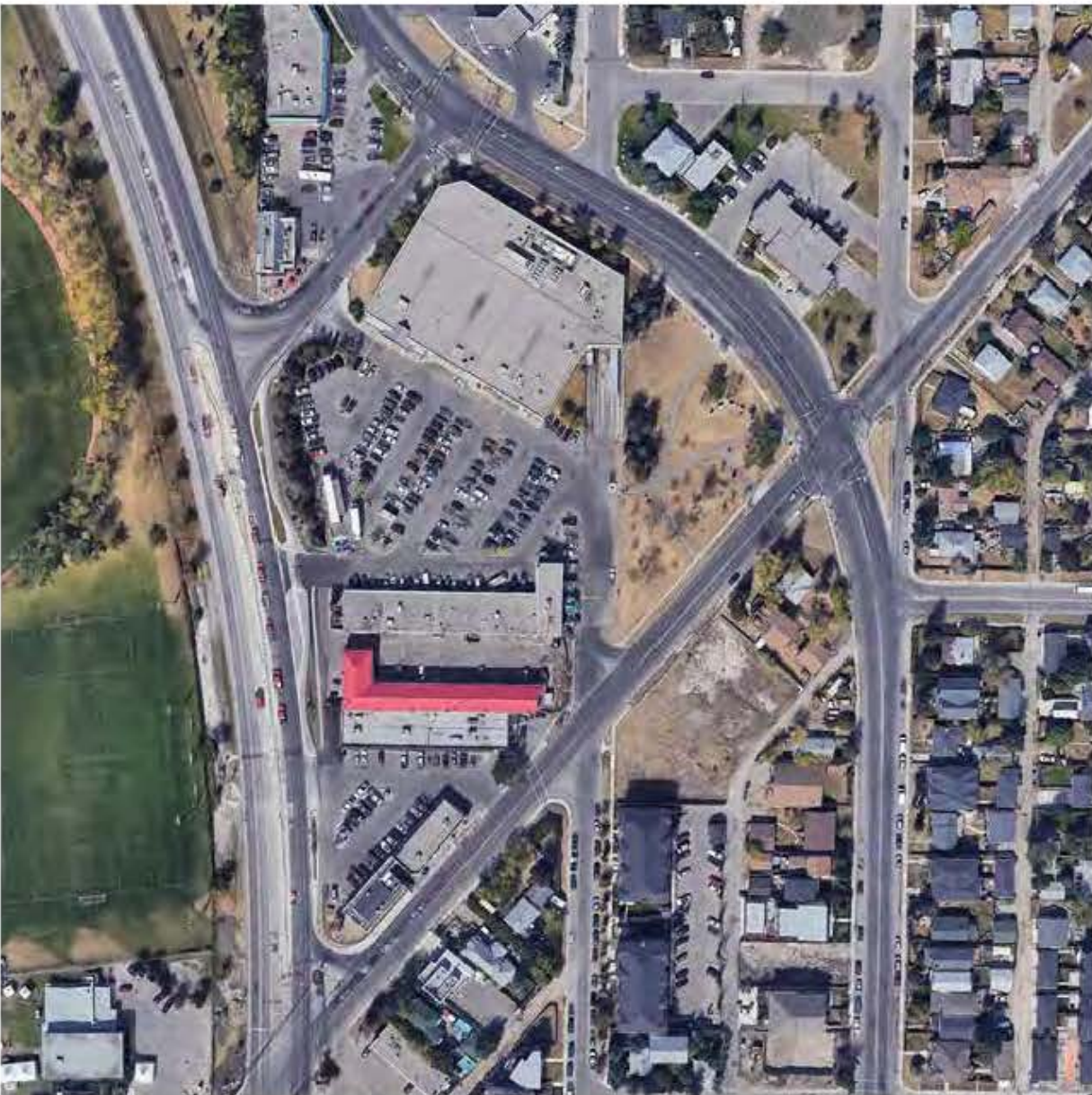
The following section will provide proposed site graphics for illustrative purposes only and are intended to provide high level direction on site organization and expected building forms.



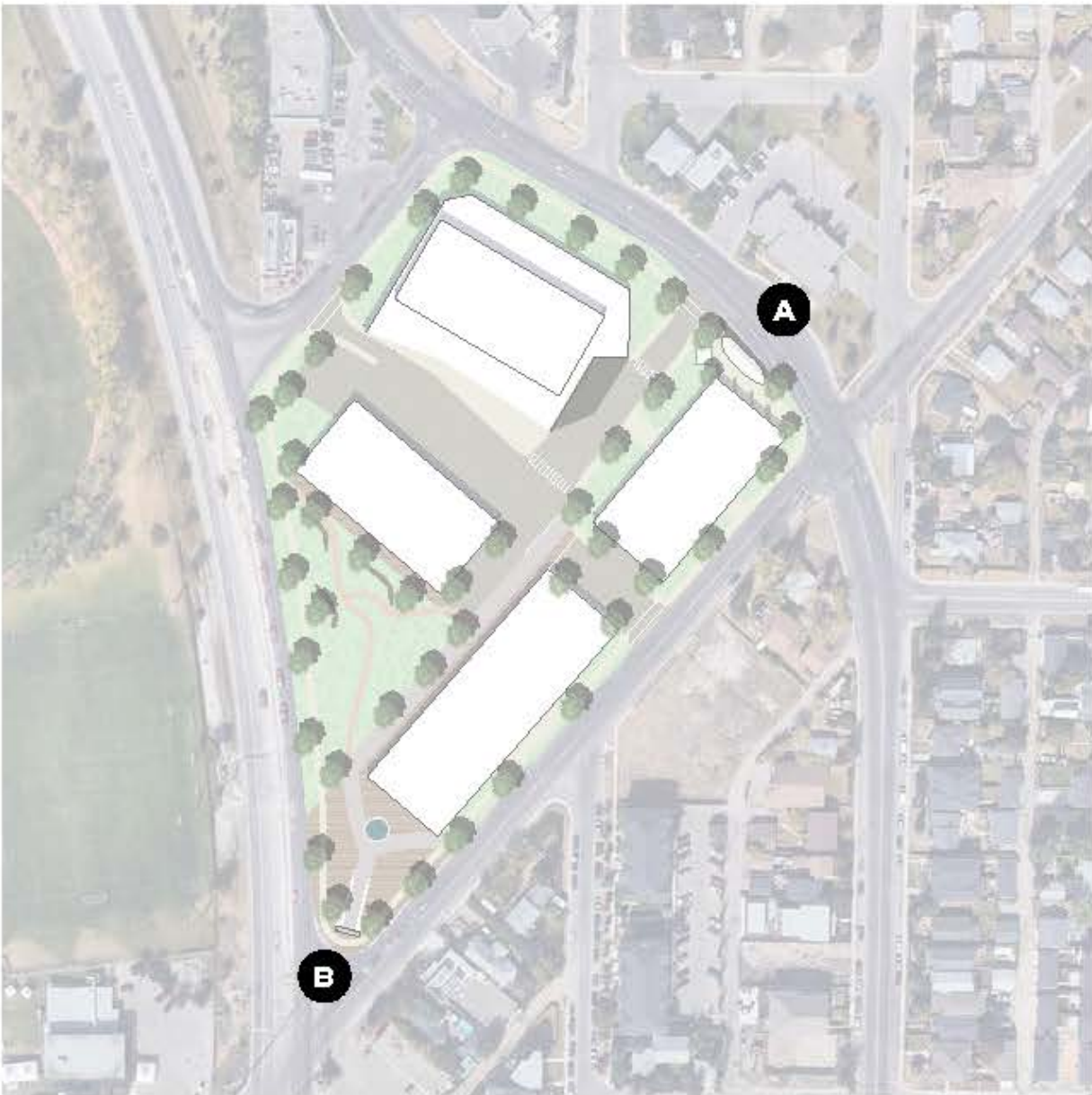
SAFEWAY BLOCK | SITE IMPROVEMENTS

SITE OVERVIEW & DESIGN CONSIDERATIONS

BEFORE



AFTER



DESIGN CONSIDERATIONS

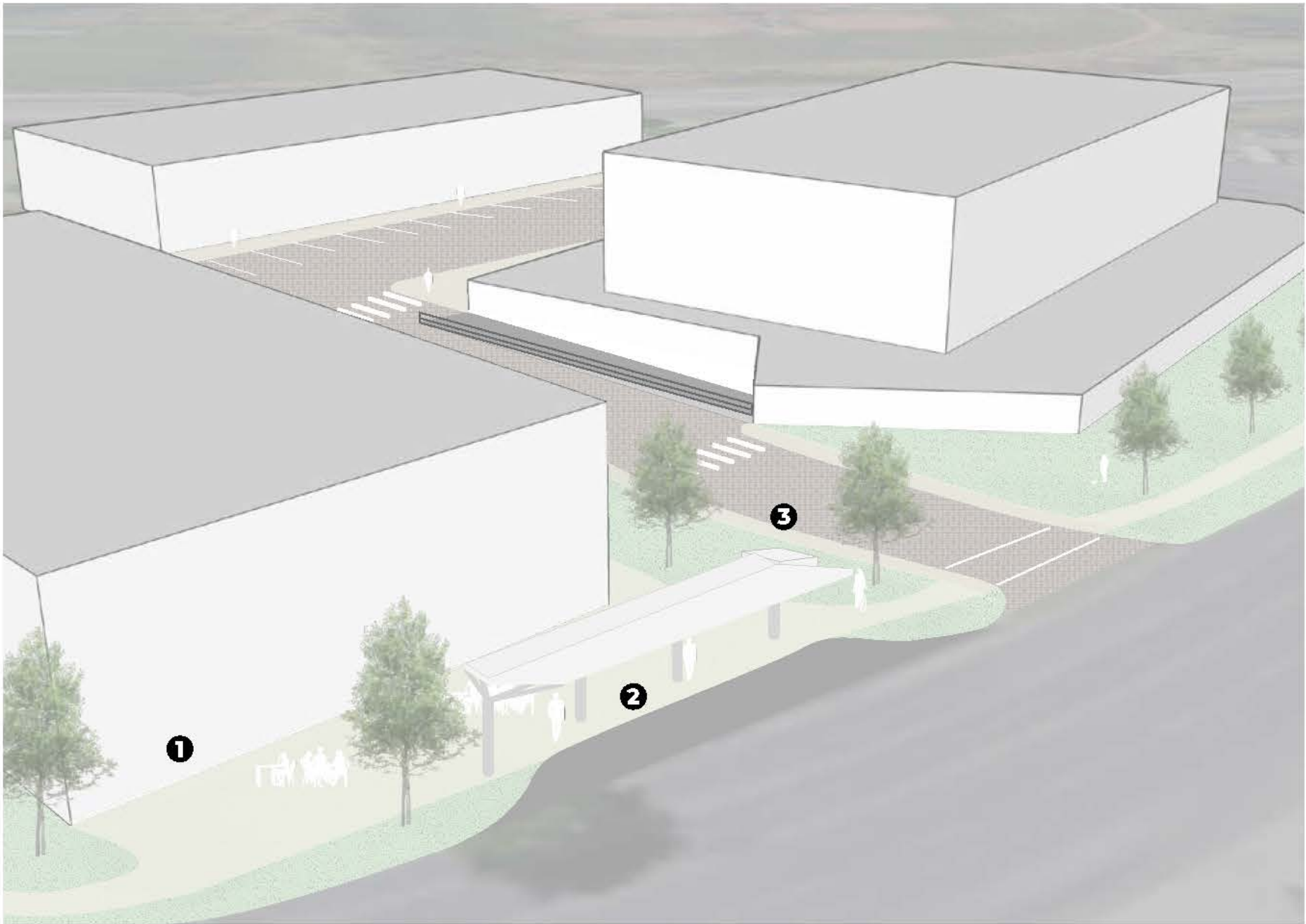
For the Safeway Block – the big moves are to provide a variety of housing (approximately 100 new units), additional vehicle access, strategic park relocation, retail and commercial frontages, upgraded transit station, and improved public realm.



SAFEWAY BLOCK | SITE IMPROVEMENTS

SITE GRAPHICS

A TRANSIT STATION



DESIGN CONSIDERATIONS

- Create a more welcoming entry into the site, this can be accomplished by providing active frontages and seating tied into the bus shelter.
- Create a more enjoyable transit experience, this can be accomplished by providing a bus shelter and bike storage for winter comfort and for those who need to make their final connection.

PRECEDENTS



Source: <https://www.theguardian.com/travel/2020/feb/08/10-of-the-coolest-neighbourhoods-in-europe-paris-berlin-rome>

Active frontages and seating provide a welcoming entry into the site (Brussels, Belgium).



Source: <https://www.to-experts.com/en/projects/detail-view-references/pvc-coated-polyester-membrane-roof/>

Bus shelter provides comfort in the winter months and a more pleasant transit experience. (Augsburg, Germany).



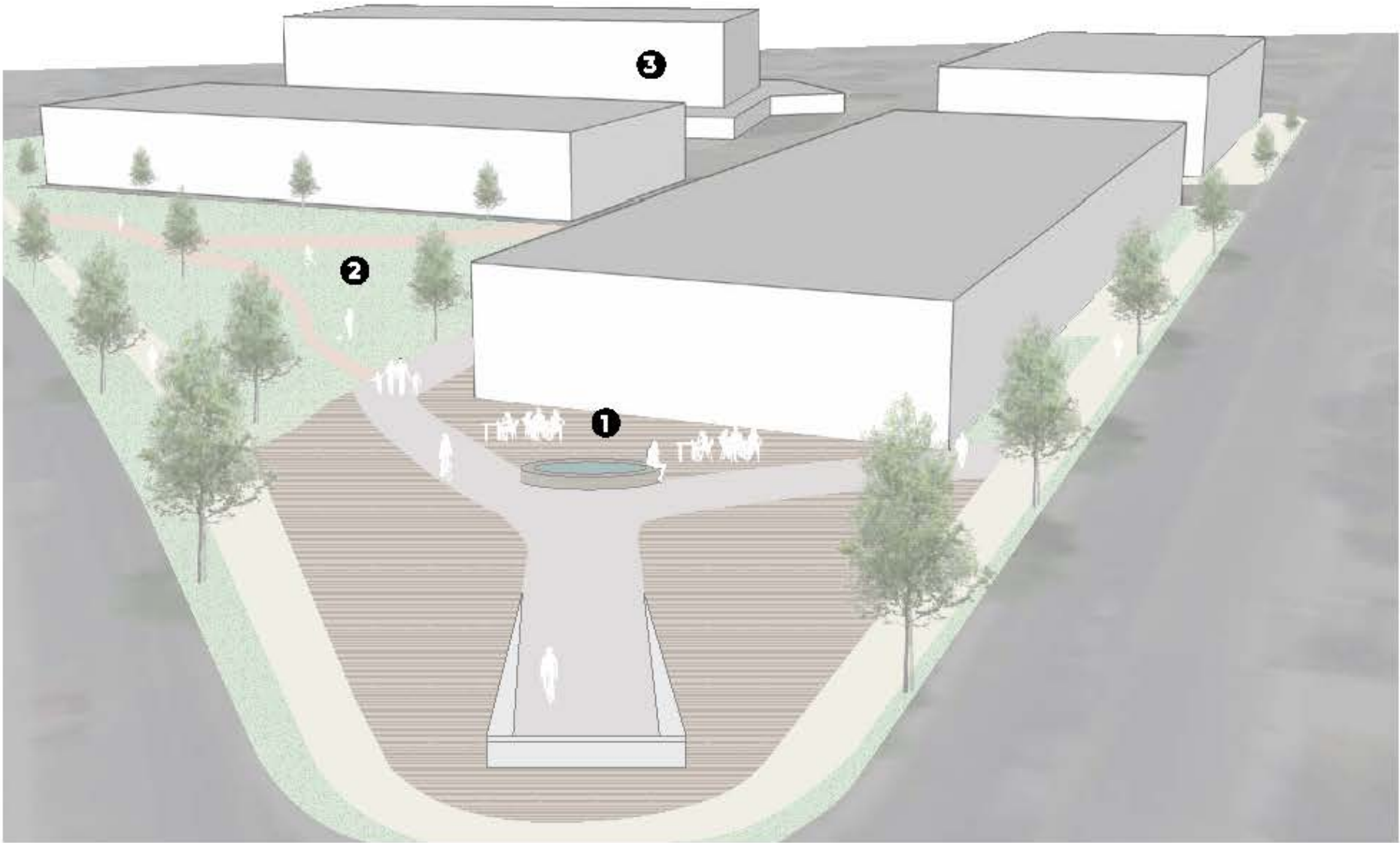
Source: <https://www.broxap.com/the-stirling-cycle-hub.html>

Bike storage provides a safe and more complete transportation station for those making their final connections. (Stirling, Scotland)

SAFEWAY BLOCK | SITE IMPROVEMENTS

SITE GRAPHICS

B PLAZA ENTRY



PRECEDENTS



Plaza with active edges creates an enjoyable environment entering the site (Warsaw, POL).



Newly located park has amazing sun exposure and wind protection creating year long opportunities (Vancouver, BC).



Mixed use developments creating a pedestrian friendly environment (Vancouver, BC).

Source: https://www.spacelist.ca/listings/192788/bc/vancouver-to-lease/retail/2328-cambie-2328-cambie_street

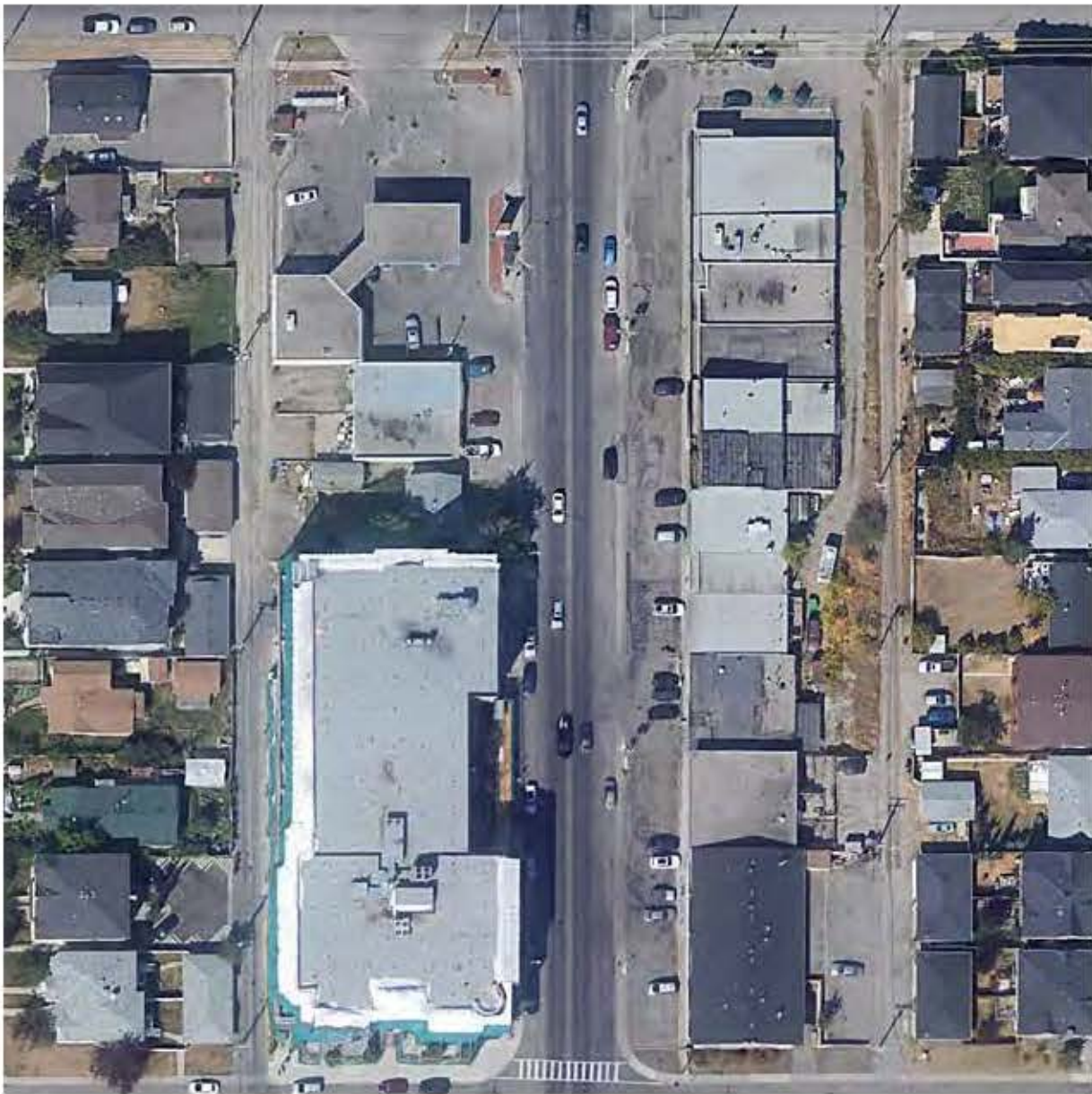
DESIGN CONSIDERATIONS

- Emphasis should be on creating an inviting entry into the site, this can be accomplished by providing an engaging plaza with active frontages
- Provide park that provides good sun exposure and is protected by North-westerly winter winds
- Provide mixed-use buildings to accommodate a variety of housing and to support public spaces

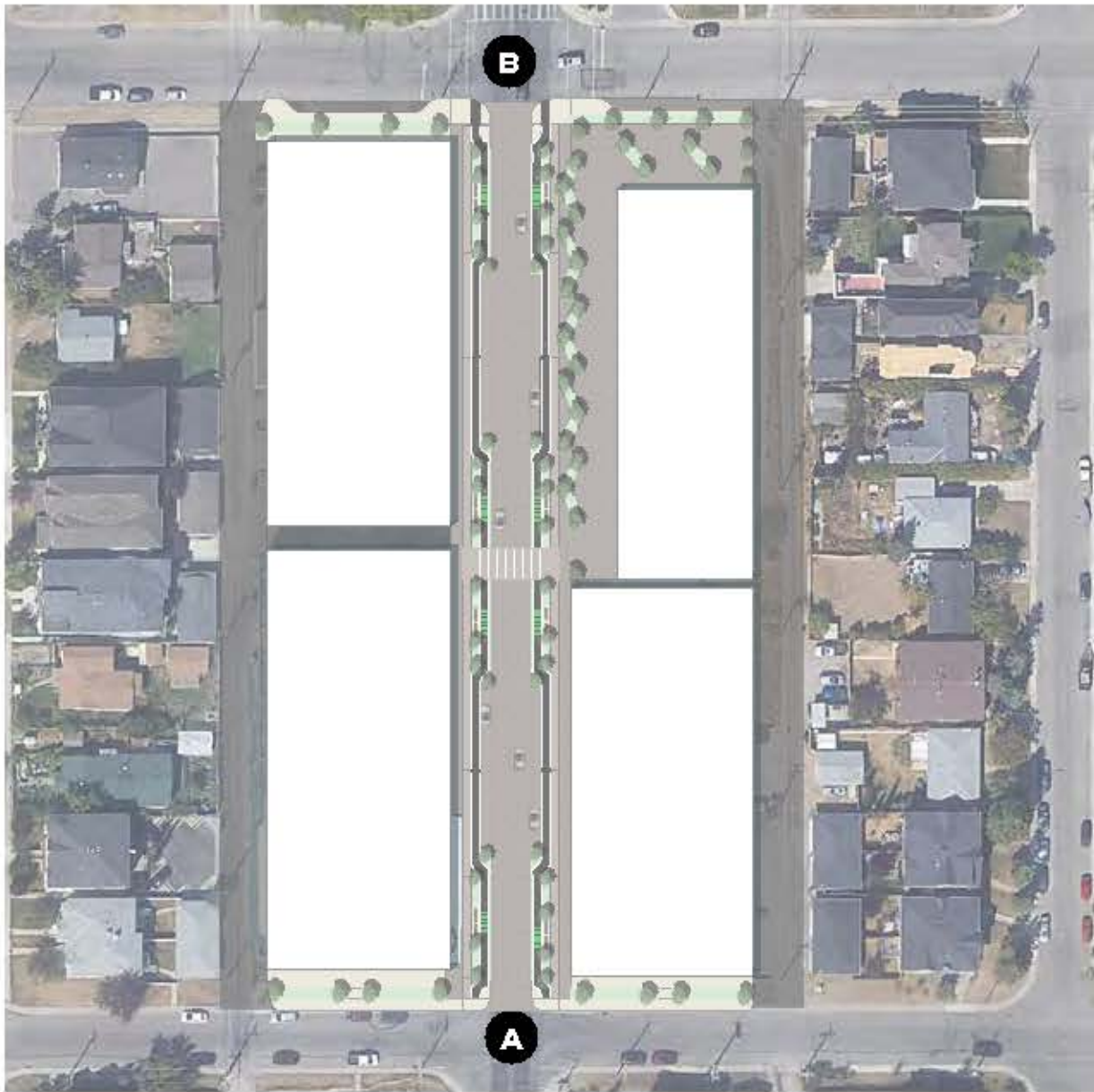
CENTRAL PLAZA | SITE IMPROVEMENTS

SITE OVERVIEW & DESIGN CONSIDERATIONS

BEFORE



AFTER



DESIGN CONSIDERATIONS

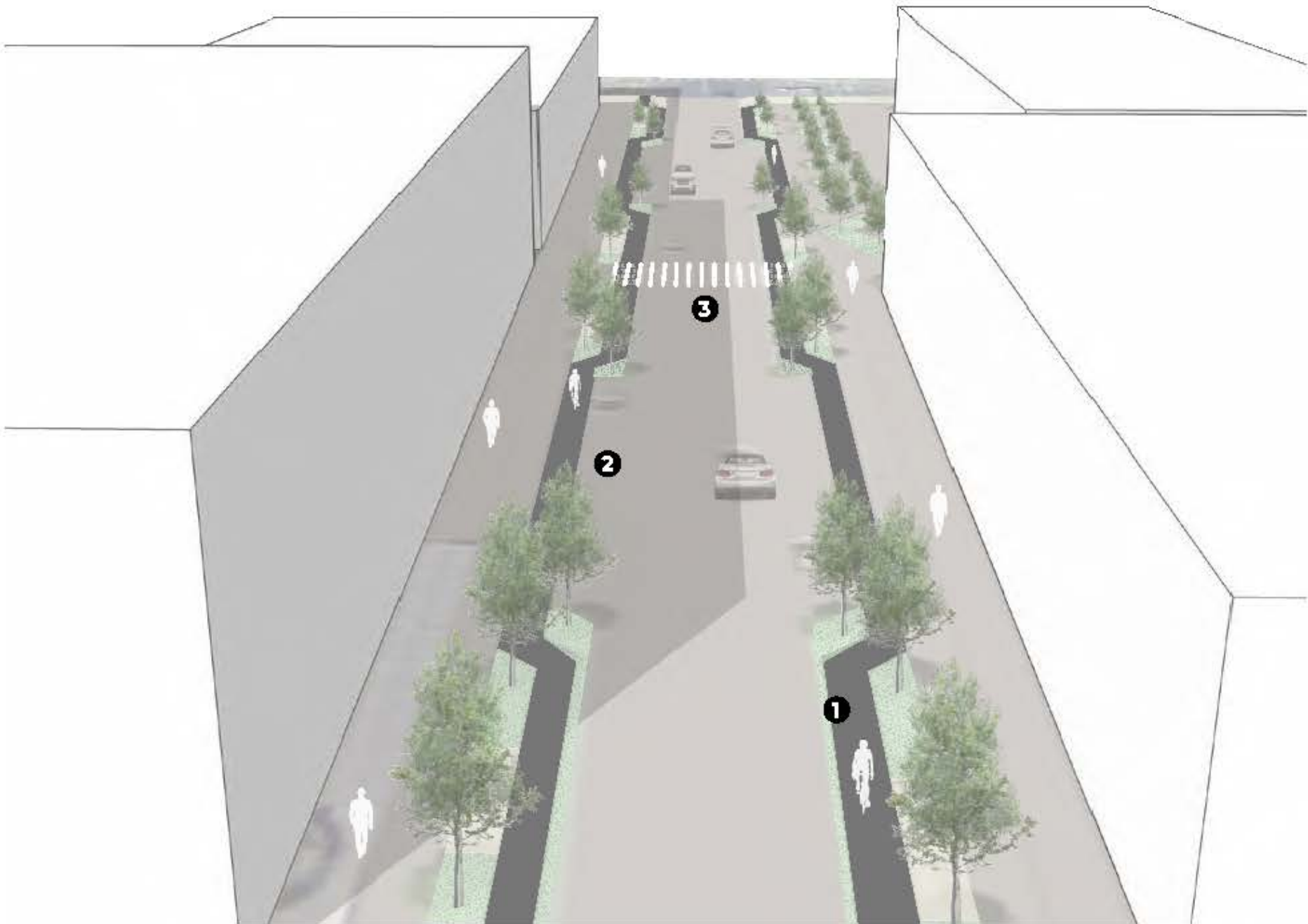
For the Central Plaza – the big moves are to provide parking inlets, a linear plaza, a variety of housing, retail and commercial frontages, the same use of materiality for the road and sidewalks, and an improved public realm.



CENTRAL PLAZA | SITE IMPROVEMENTS

SITE GRAPHICS

A STREET EXPERIENCE



DESIGN CONSIDERATIONS

- Provide parking inlets to accommodate space for all other modes of transportation
- Traffic calming measures should be implemented, such as same materiality across entire block
- Street trees, seating, and active frontages should be provided to create an attractive and engaging street

PRECEDENTS



Source: <https://www.lickr.com/photos/deep-root/36610334574/inalbum-72137686573287750/>

Single bike lane allows for wider sidewalks, street trees, and bioswales (Seattle, U.S.).



Source: <http://peopleforbikes.org/blog/tech-talk-19-beautiful-ways-to-protect-bike-lanes-photos/>

Parking inlets maintain parking spots and room for other transportation options (Sydney, Australia).



Source: <https://archinect.com/news/gallery/26844712/6/european-prize-for-urban-public-space-2012-announces-joint-winners>

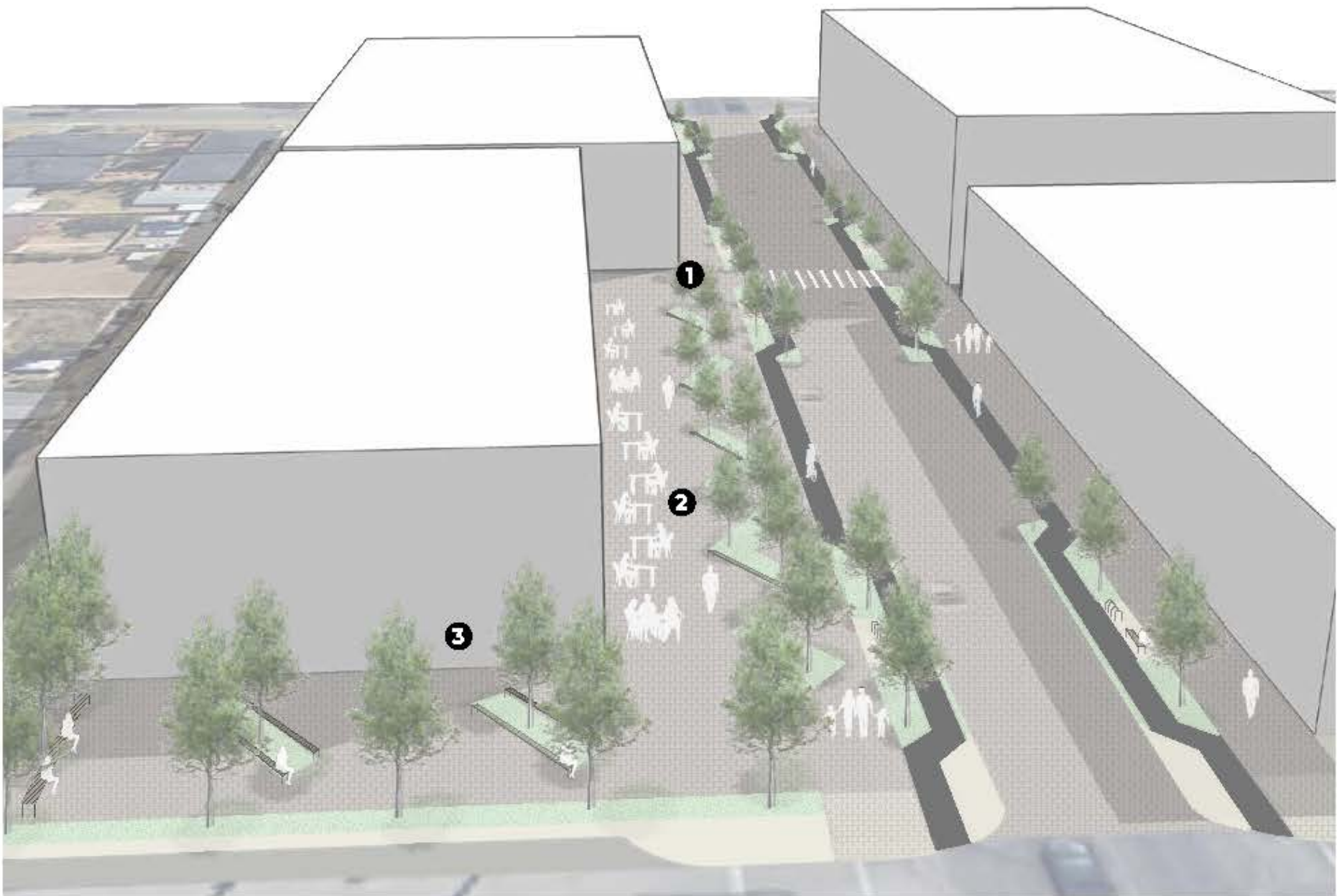
Pedestrian friendly material across the entire street to alter the balance of the right-of-way in traffic (London, UK)



CENTRAL PLAZA | SITE IMPROVEMENTS

SITE GRAPHICS

B LINEAR PLAZA



DESIGN CONSIDERATIONS

- Provide street trees and seating that acts as a barrier and an oasis for users to reconnect with nature
- Provide a linear open space for patios that takes advantage of the good sun exposure
- Provide active frontages and seating in order to create an attractive and engaging environment

PRECEDENTS



Source: <https://dac.dk/en/knowledgebase/architecture/vester-voldgade-2/>

Street trees and good sun exposure creates comfortable and pleasant microclimate all year round.
(Copenhagen, DNK)



Source: <https://www.pinterest.ca/pin/347692033710762960/>

Linear open space provides opportunity for patios that are well sheltered and attractive
(Buenos Aires, Argentina).



Source: <https://www.theguardian.com/travel/2020/feb/08/10-of-the-coolest-neighbourhoods-in-europe-paris-berlin-rome>

Active frontages and seating to allow people to linger or stay
(Brussels, Belgium).

An aerial photograph of a city, likely San Francisco, showing a winding river, dense urban development, and several sports fields. The image is in grayscale and serves as a background for the text.

6.0

MOVING FORWARD



Moving forward our hope is for the Montgomery Community to use this document in support of their community vision, to offer innovative and exciting ideas, and to spark exciting plans for the future. We believe in the potential for Montgomery to grow in a way that supports existing residents, while welcoming new-comers. This opportunity to work with the Community Association and other planning professionals has enriched our education and will be carried with us moving forward. Although these unprecedented times made for an unusual ending to the project, we hope to share our vision with the broader Montgomery community when it is safe to do so. We look forward to watching Montgomery grow. Thank you to our steering committee, Professor Francisco Alaniz Uribe, and to all community members for the insightful feedback.

A handwritten signature in black ink that reads "Laarmeneau".

Lauren Armeneau

A handwritten signature in black ink that appears to read "Bryce Devereaux".

Bryce Devereaux

A handwritten signature in black ink that appears to read "Bryana Parahoniak".

Bryana Parahoniak



An aerial photograph of a city, likely San Francisco, showing a winding river, dense urban development, and several large sports fields or stadiums. The image is in grayscale and serves as a background for the slide.

7.0

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