

COMMUNITY DESIGN INTERVENTIONS

GLENDALE | ROSSCARROCK | WESTGATE



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EXECUTIVE SUMMARY

The neighbourhoods of Glendale, Westgate, and Rosscarrock are three well established communities located in Southwest Calgary. The three neighbourhoods form a desirable community, offering proximity to Downtown Calgary, mass transit stations, numerous parks, and an agreeable character. As such, it is probable that the community will experience significant urban transformation over the next ten years. What is missing, however, is a guiding document for the community that defines what kind of development and transformation is most appropriate. This document aims to fill that gap, by providing design interventions and recommendations in the following areas: parks & open space, land use, and mobility. All interventions, recommendations and policies are the product of data analysis and community feedback received during a community workshop event that was hosted by students in early March, 2019. Ultimately, the intent of the document is to provide a framework, as well as policies that will help guide the future development of the community. Although this document is academic in nature, it should be considered as a reasonable foundation for a future Area Redevelopment Plan for the community.

INTRODUCTION

TMC Planning Group was tasked in responding to the communities of Glendale, Rosscarrock, and Westgate (Hereafter referred to as GRW) for a proposal to undertake Design and Policy Recommendations (Hereafter referred to as DPR) to guide future development in the area. TMC recognizes that the GRW DPR Project is about creating a more current land use/urban design concept plan that addresses the needs of the community and provides a framework for assessing future development. This concept plan is a nonstatutory academic document that aims to provide the GRW Neighbourhood with common recommendations for future development as well as a common vision.

LEGAL FRAMEWORK

The final document created by this project will be a land use/urban design concept. This document is not statutory in nature; however, its findings may form the basis for a future City of Calgary Area Redevelopment Plan.

As such the final document must abide by the Province of Alberta's *Municipal Government Act* (2010) as well as the *Legislative Framework for Regional and Municipal Planning, Subdivision and Development Control* (2012); it will also adhere to the *City of Calgary's Municipal Development Plan* (2009).

The final document will not abide by the following City of Calgary documents but will give consideration to the *Land Use Bylaw* (2007), the *Westbrook Village Area Redevelopment Plan Bylaw* (2009) and the *Developed Areas Guidebook*.

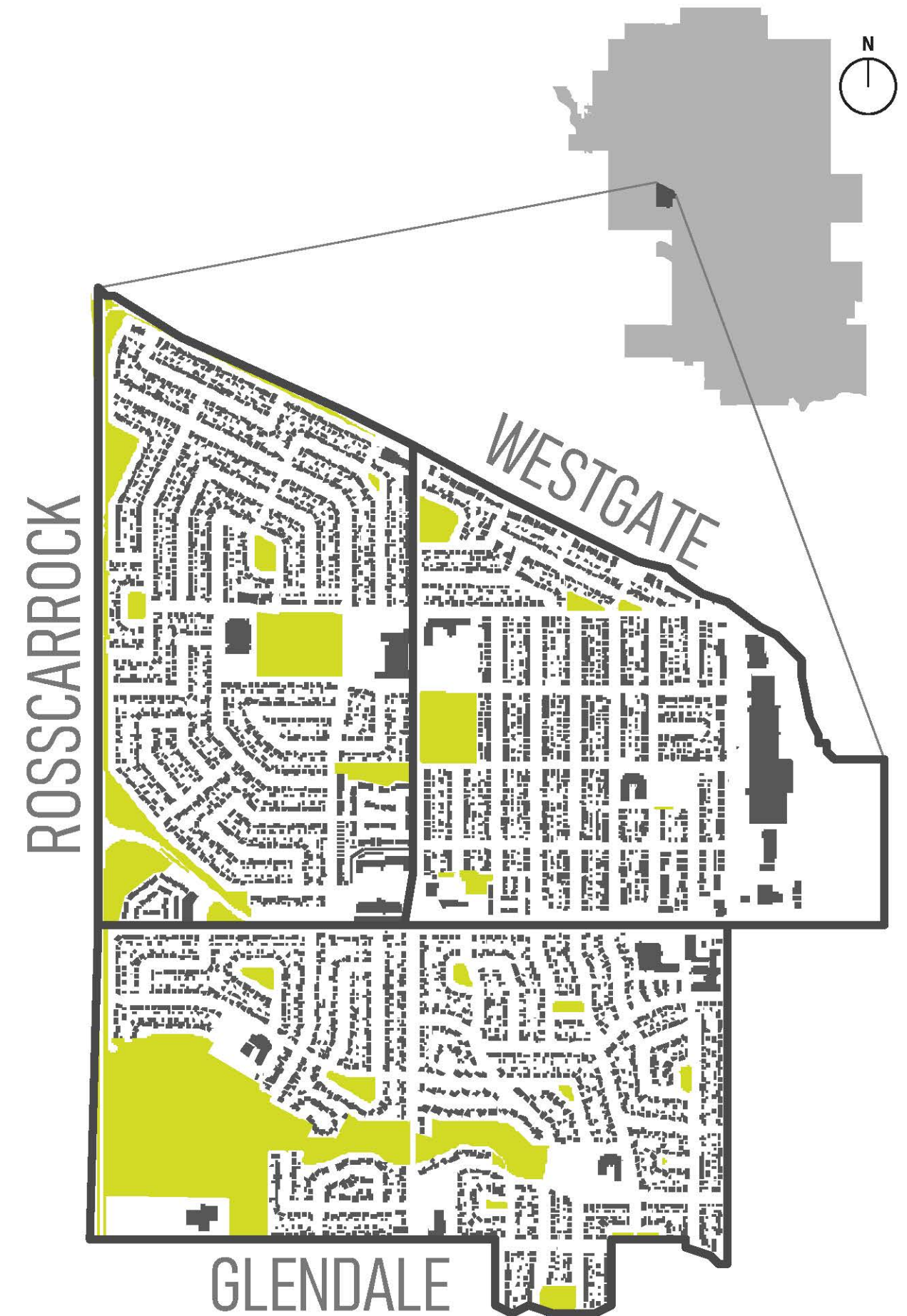


PROJECT UNDERSTANDING

The neighborhoods of Glendale, Rosscarrock and Westgate (GRW) are located approximately six kilometres West of Downtown Calgary. Together, the 3 neighbourhoods consist of approximately 9400 residents (2014). The neighborhoods predominantly consist of 1950s era suburbs, most of which are populated by single family homes. The exception to this is Rosscarrock, which contains a large mall and a greater proportion of attached housing than Glendale and Westgate. All 3 neighbourhoods are well connected to Downtown Calgary by two LRT stations and significant road infrastructure.

Due to the area's close proximity and connection to Downtown, the neighbourhoods are susceptible to significant transformation from future development. This is compounded by the fact that the area does not currently have an Area Redevelopment Plan. The only exception to this is the Eastern border of Rosscarrock and the Northeast corner of Glendale, both of which are within the Westbrook Village Area Redevelopment Plan (Bylaw 22P2009, 2009).

GRW is in need of a current land use/urban design concept plan that addresses the needs of the community as a whole, which are addressed in this document.



OUR TEAM

TMC (**T**hompson, **M**ubanga, **C**hapa) Planning and Design group members are Master of Planning candidates at the University of Calgary. This document is the product of their final capstone project of a two year Master of Planning program within the University's School of Architecture, Planning and Landscape.



JEFF THOMPSON



LOWANI MUBANGA



LETICIA CHAPA

PLANNING AND DESIGN OBJECTIVES

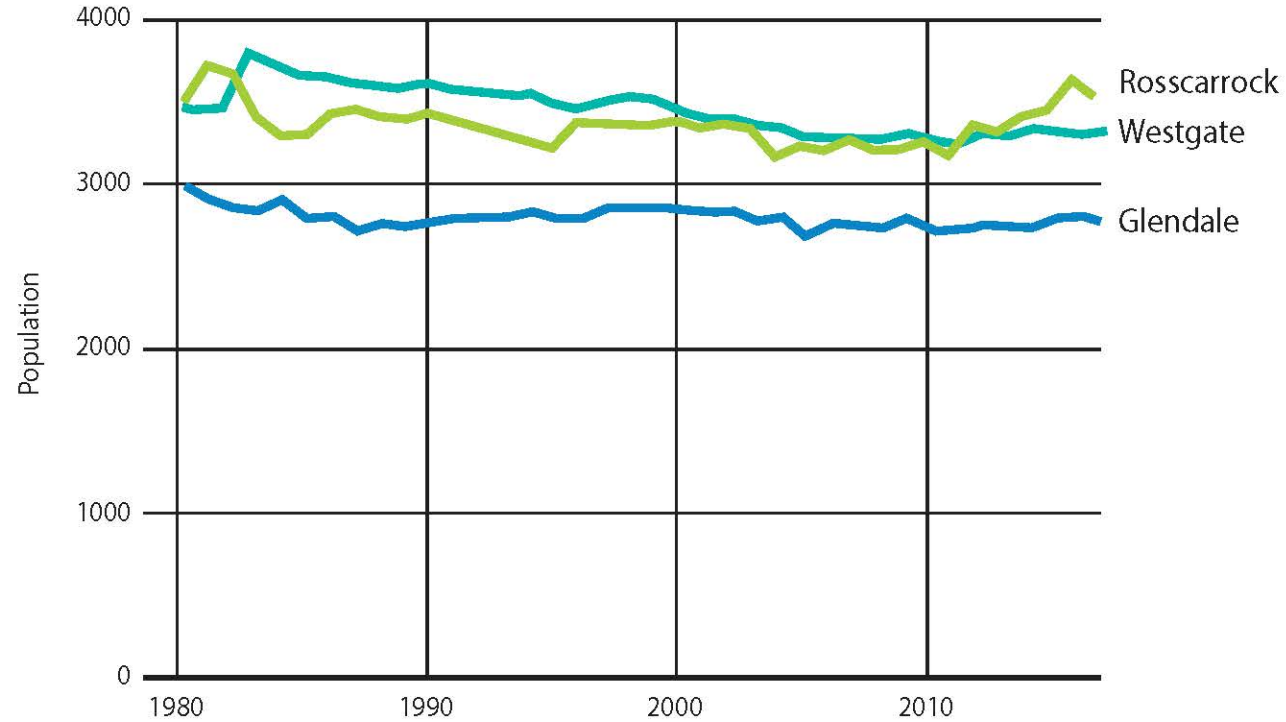
Based on preliminary assessments of the area, TMC Planning has identified the following objectives that will be addressed in the GRW Neighborhood Design Project:

- 1.** Maintain the character, identity, and heritage of each individual neighborhood and the community as a whole.
- 2.** Create a common development vision.
- 3.** Enhance pedestrian mobility, connectivity and safety.
- 4.** Enhance open spaces and connections to open spaces.
- 5.** Create new guidelines and criteria for redevelopment.
- 6.** Create impact and implementation guidelines for residential redevelopment.
- 7.** Create guidelines for redevelopment near rapid transit stations.
- 8.** Create guidelines that address traffic and parking concerns, specifically in areas nearer rapid transit stations.

01 ANALYSIS

Household Income, 2011- 2016: Community Wide

Combine Demographic Change in Glendale, Rosscarrock, Westgate, 2011- 2016



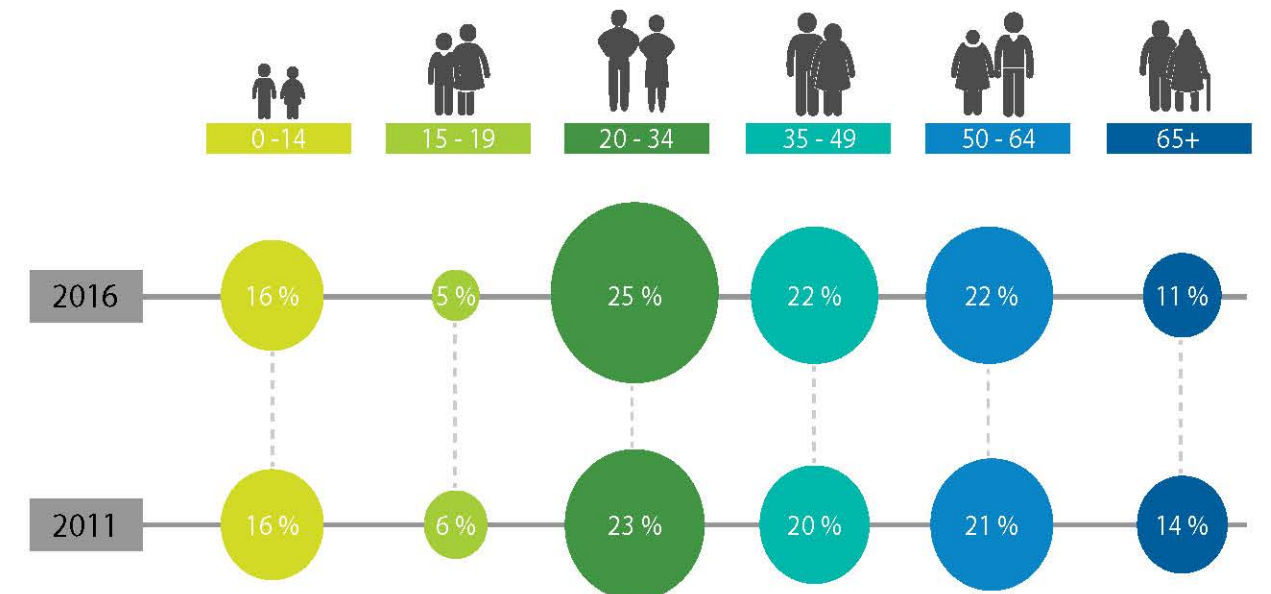
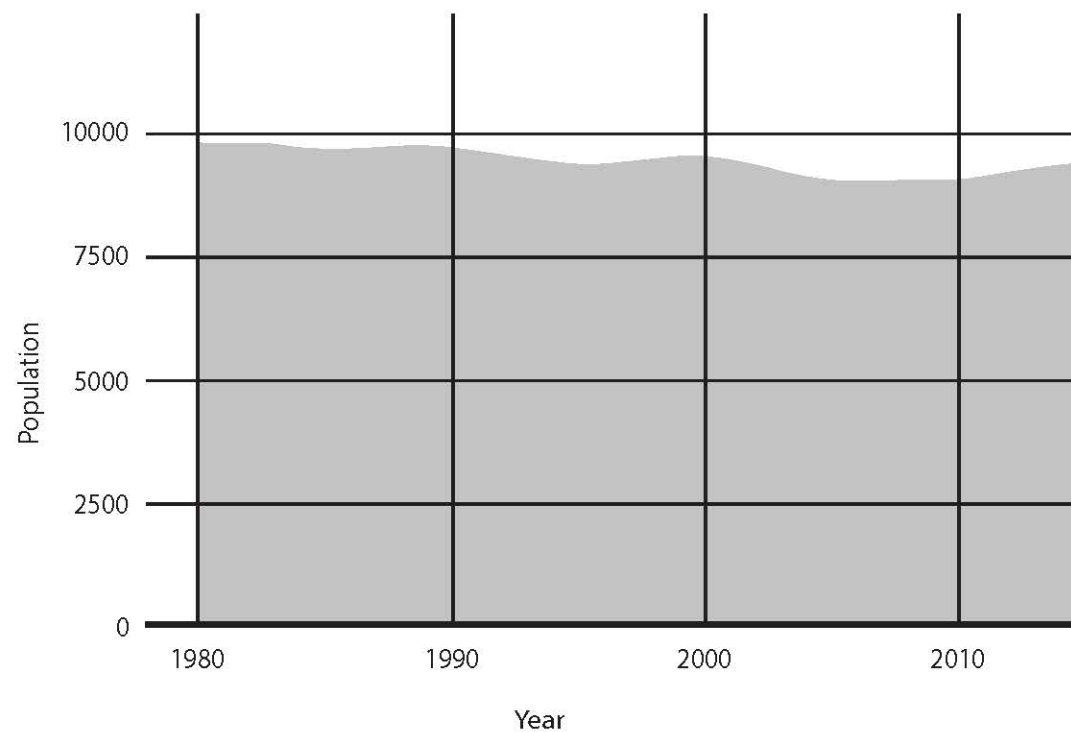
POPULATION STATISTICS

Combined Demographic Change in Glendale, Rosscarrock, Westgate, 2011- 2016

Relatively stable population, growth limited other than 20 - 34 year old category. No growth in 0 - 14 year olds; decrease in 15 - 19 year olds (loss of ~105 individuals over five year period).

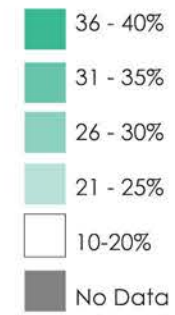
Glendale, Rosscarrock, Westgate Population (1968 -2017)

Total Community Population (1968 -2017)

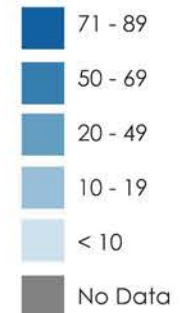


DEMO GRAP HICS

**TRANSIT
TO WORK**
2016 (%)

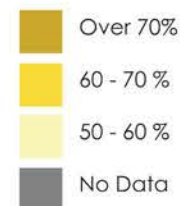


**PEOPLE PER
HECTARE**
(2016 CENSUS)



**COMMUTE DURATION
OVER 30 MINS**

58% of Calgary
Takes 30 minutes or
less to commute to work

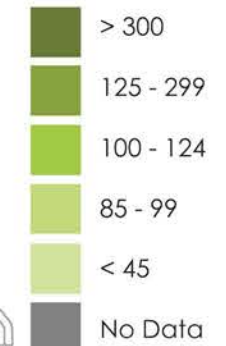


**CHANGE IN
HOUSEHOLD
SIZE**
(2011 - 2016)

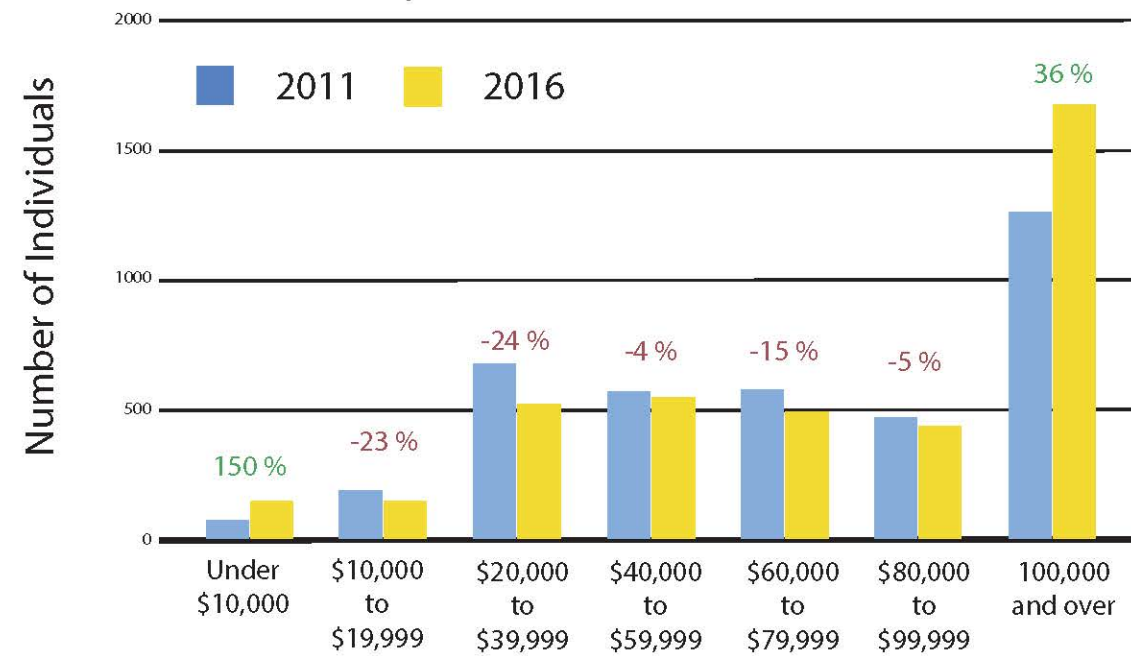


CHILD COUNT

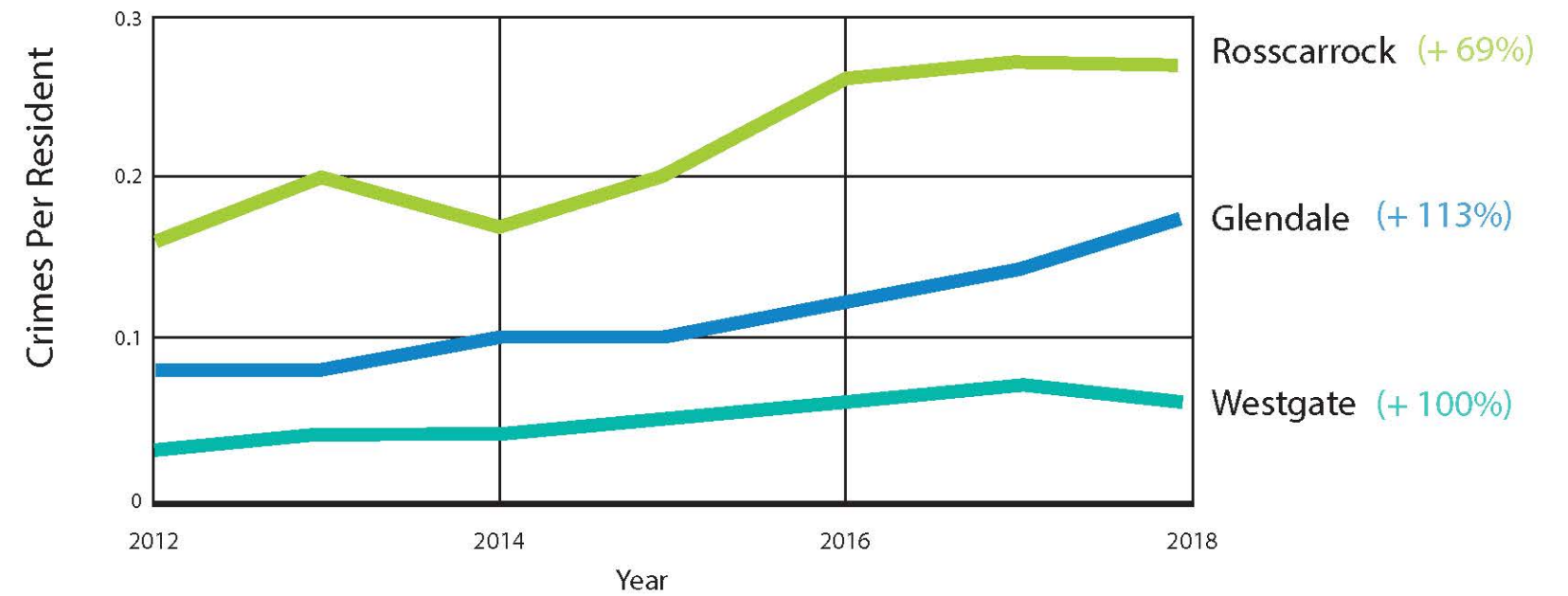
Number of
Residents
Aged <14
(2016 Census)



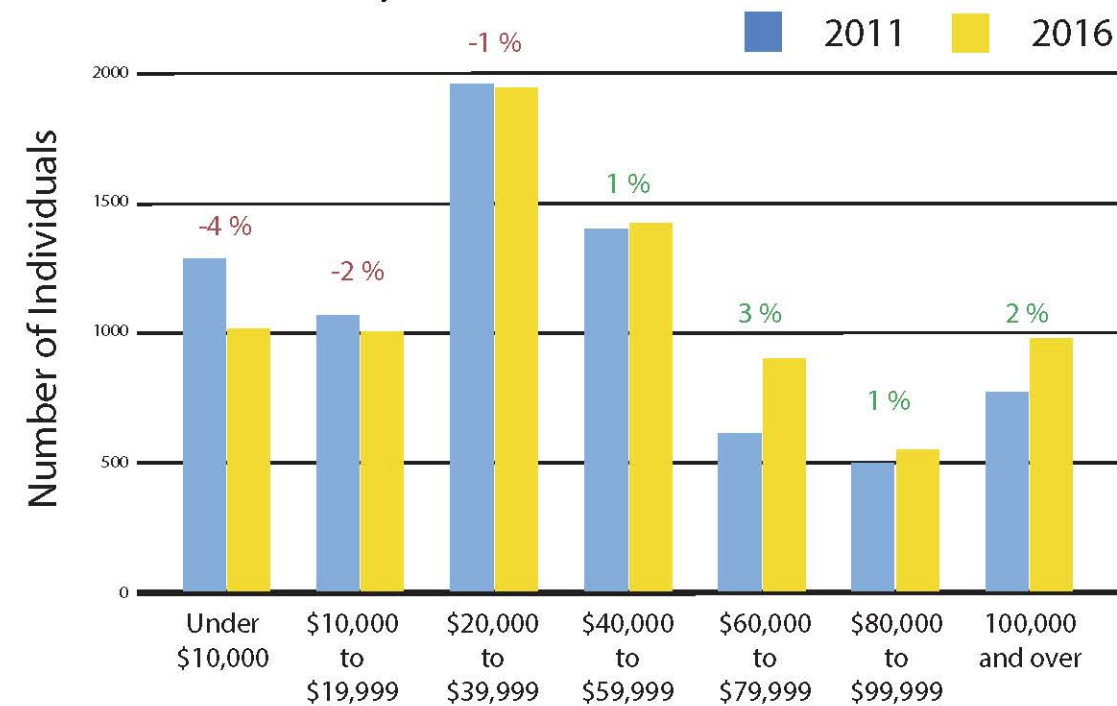
Household Income, 2011- 2016: Community Wide



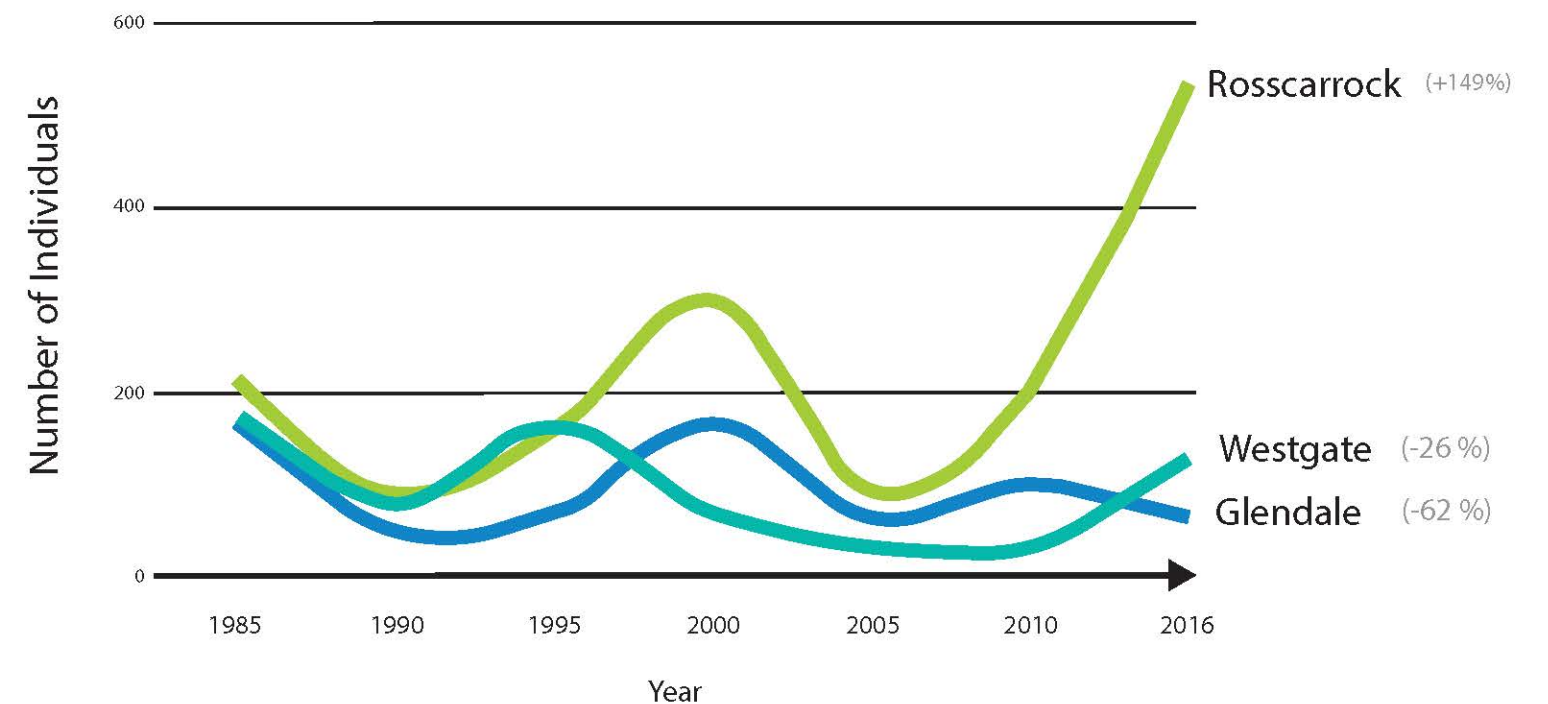
Crime Per Resident, 2012 - 2018



Individual Income, 2011- 2016: Community Wide



Immigrant Population: 1985 - 2016

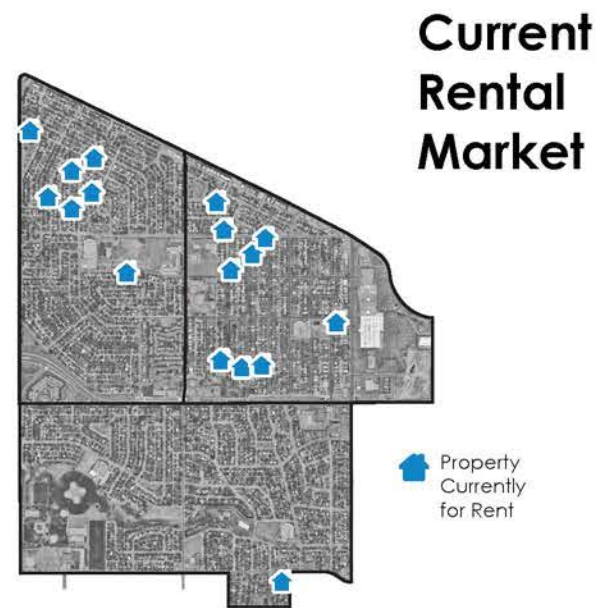


HOUSING STATISTICS

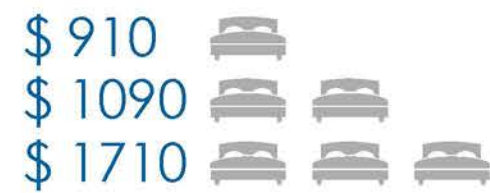
REAL ESTATE TRENDS: 2011 - 2016



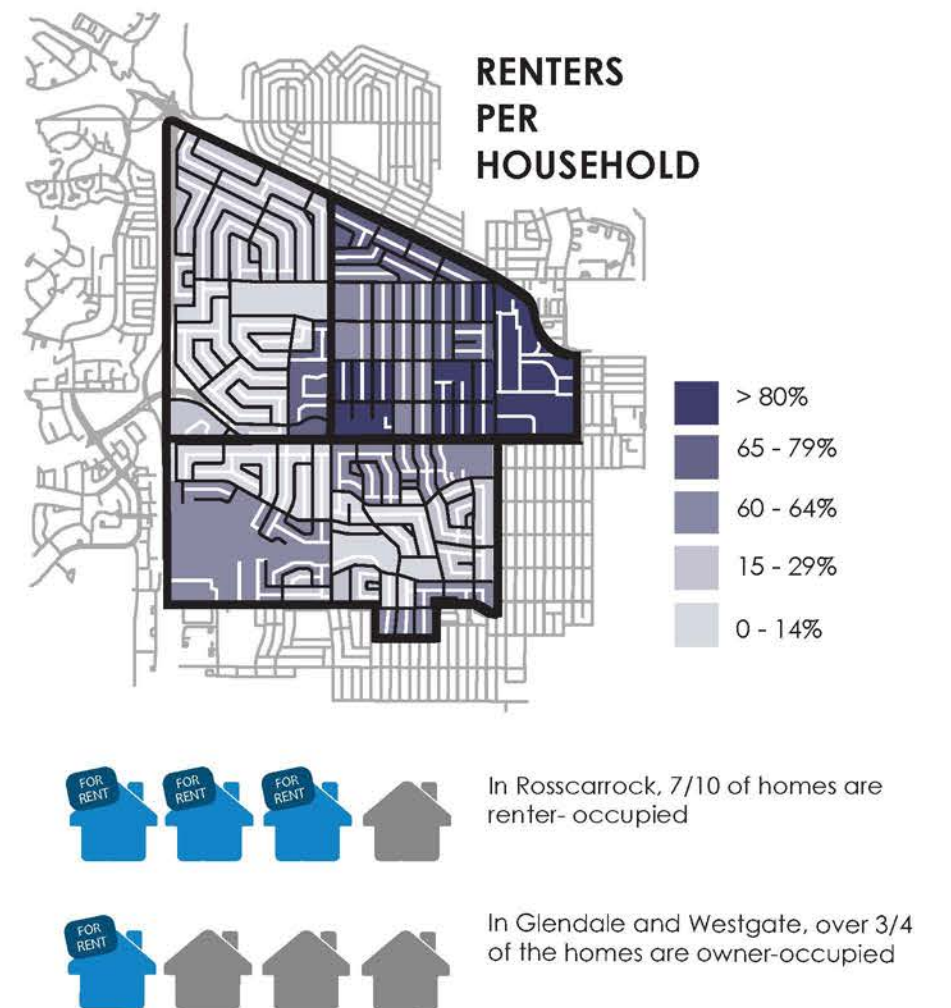
Average Dwelling Value Increase, 2011 - 2016



Current (2019)
Average Rent by Bedroom, Community Wide

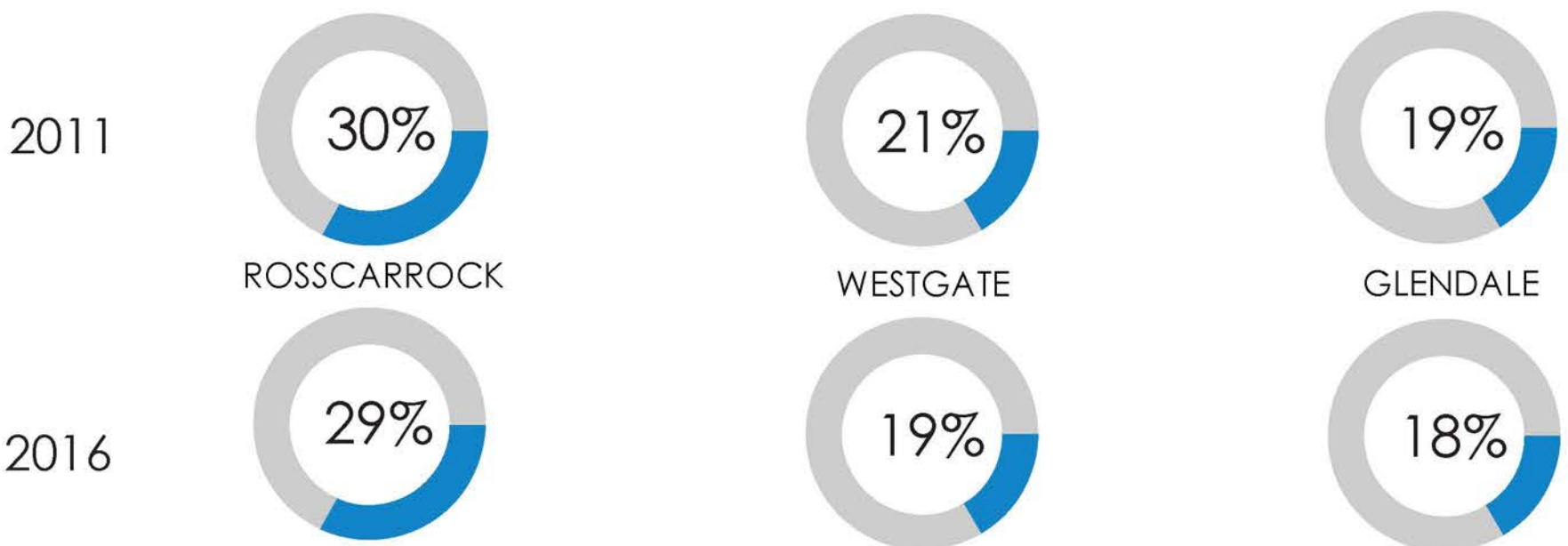


Figures from Rentfaster.ca, as of January 31, 2019. Community Wide is Glendale, Rosscarrock, Westgate



Affordability

Proportion of community spending 30% or more of household income on shelter costs.



RENTAL MARKET STATISTICS

Rental Price Trends: 2011 - 2016

Tenure:

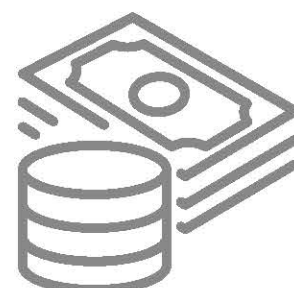
ROSSCARROCK
Increase of 18 %

GLENDALE
Increase of 14 %

WESTGATE
Increase of 5 %



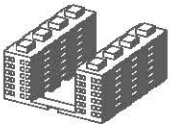


This represents a community wide average rental price increase of 12%. Which is an average increase of approximately \$136



Housing Stock

2011 - 2016

Year	Single Detached 		Semi Detached 		Attached 	
	2011	2016	2011	2016	2011	2016
Glendale	85%	84%	5%	7%	10%	9%
Rosscarrock	18%	14%	46%	31%	20%	21%
Westgate	68%	65%	20%	21%	12%	10%

Rosscarrock has the lowest proportion of single detached stock between the three communities. Overall trends are relatively stable between 2011 and 2016.

Housing Tenure

2011 - 2016

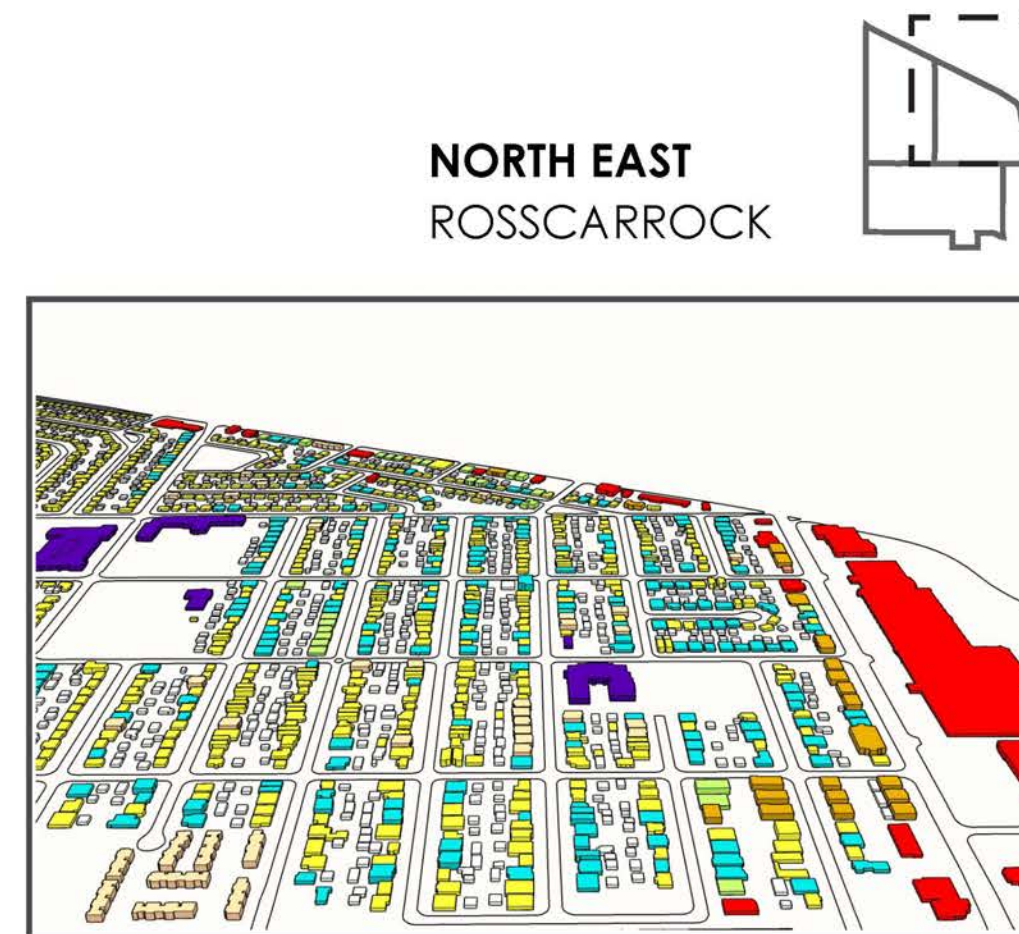
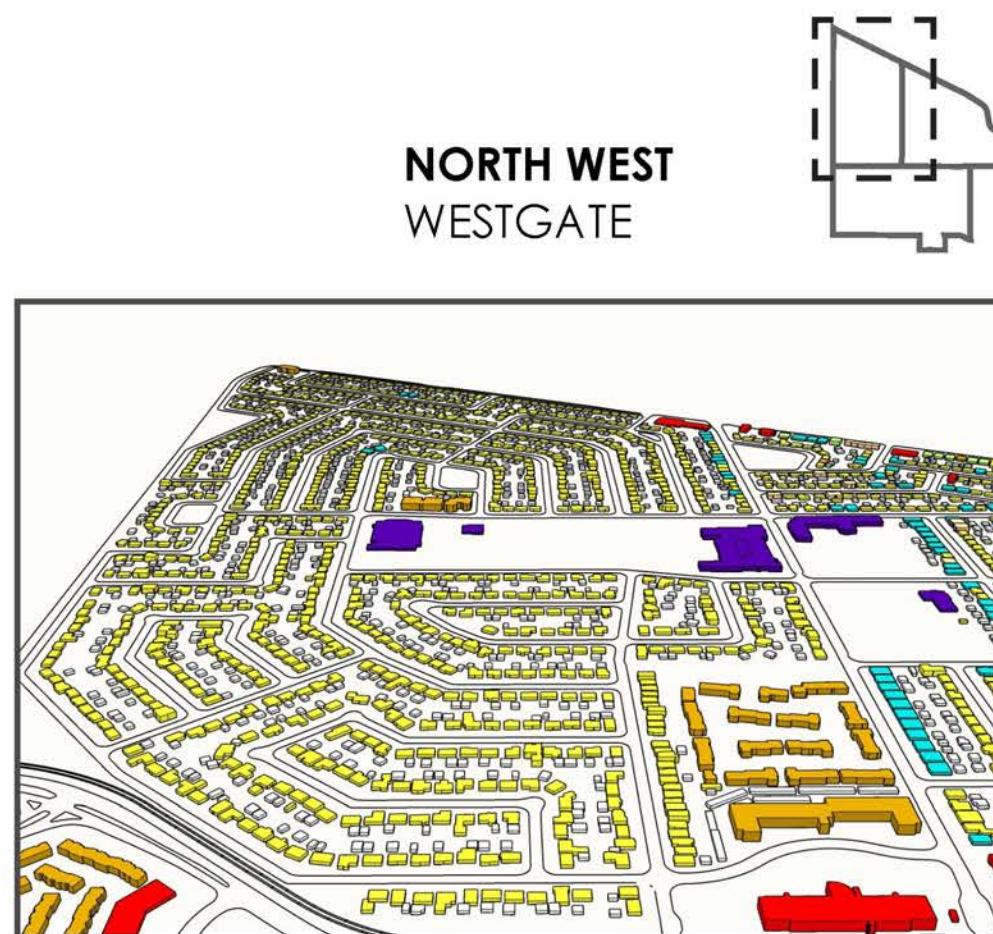
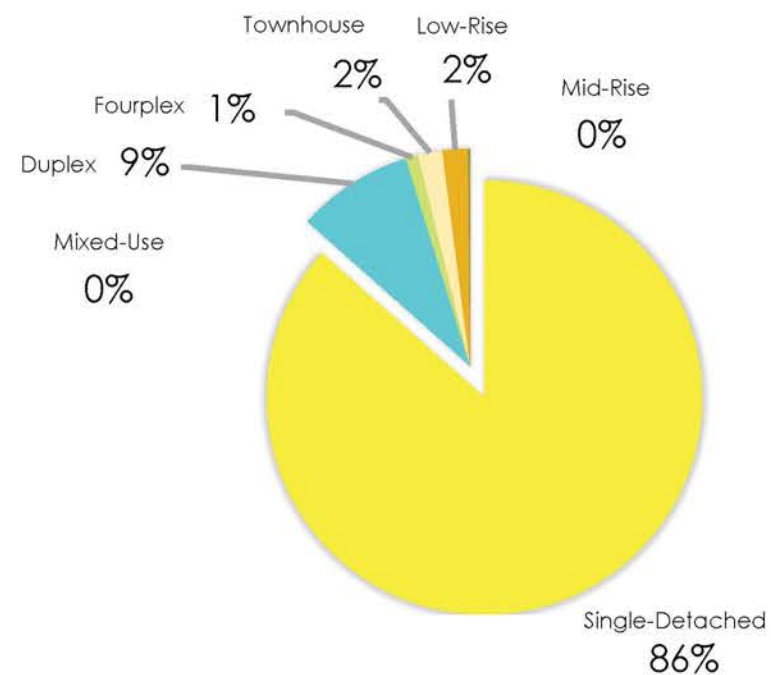
	2011	2016
Owner	62%	58%
Renter	38%	42%

Housing tenure community wide has been relatively stable from 2011 to 2016.

CURRENT LAND USE



- Mixed Use
- LRT Building
- Arena
- Commercial
- Institution
- High Density Residential
- Medium Density Residential
- Low Density Residential
- Green Space



MOBILITY

BICYCLE NETWORK

-  Bike Lane
-  Rotary/Mattamy Greenway



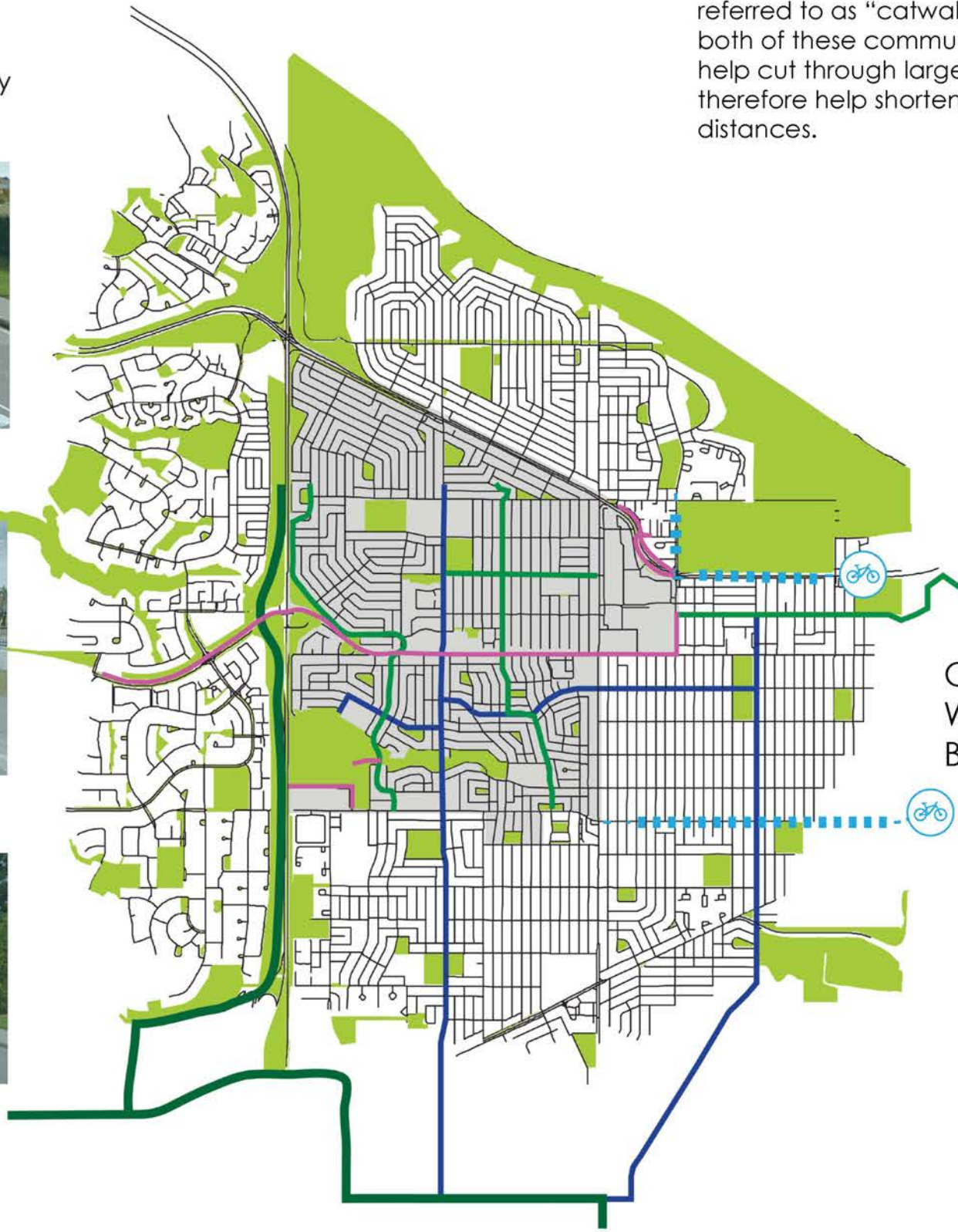
Neighbourhood Greenway on 13th



Pathway on 17th Ave

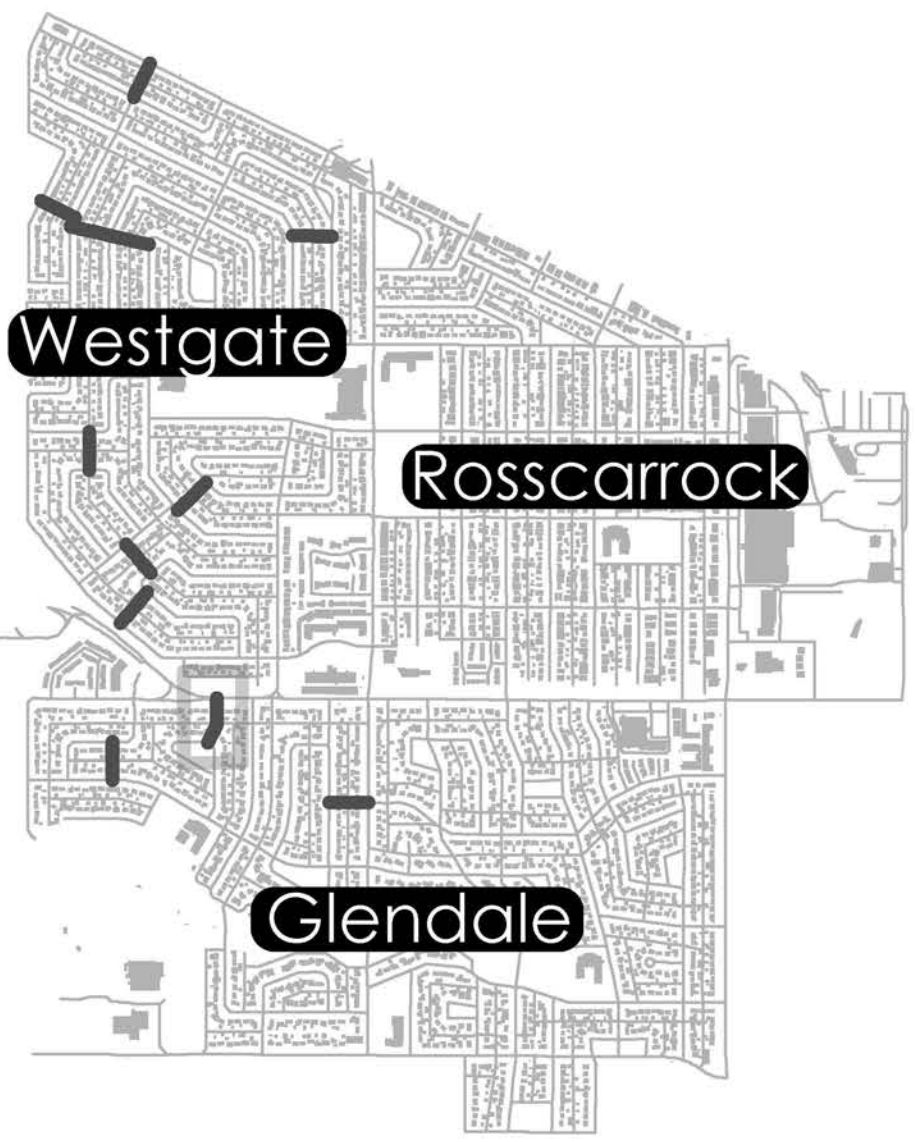


Signed Bike Route on 45th Ave



ENGINEERED PATHWAYS

Due to the curvilinear structure of blocks in Westgate and Glendale, engineered pathways - colloquially referred to as “catwalks” exist within both of these communities to help cut through large blocks and therefore help shorten walking distances.

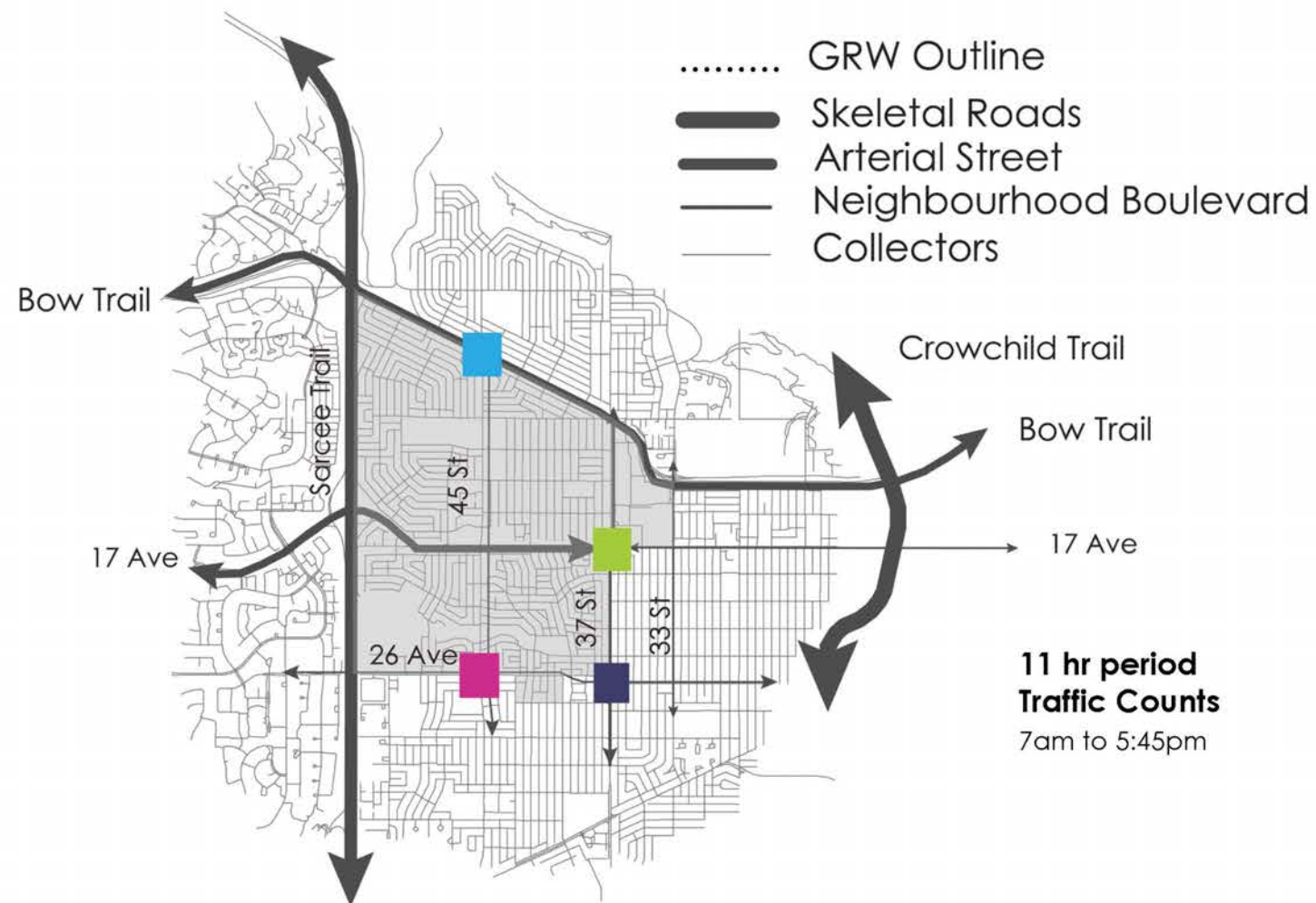


Comparing Walkable Blocks

Portland	Rosscarrock	Westgate
200 x 200 ft	600 x 300 ft	1,400 x 260 ft



VEHICULAR HIERARCHY







	Intersection 1	Intersection 2	Intersection 3	Intersection 4
	17,457	11,535	4,396	19,200
	557	450	228	287
	18	153	169	76

Ped accidents 1996-2012

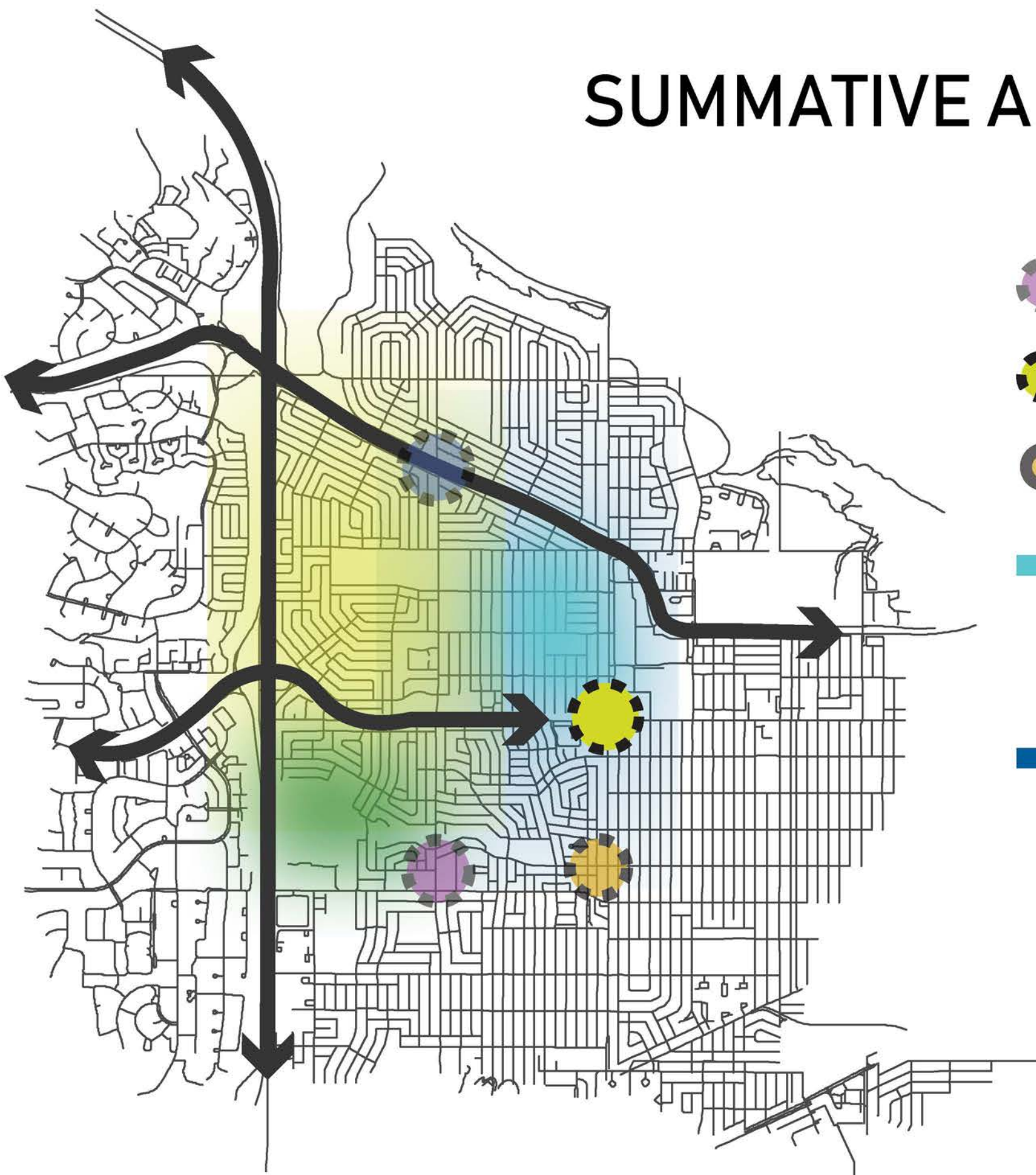


Intersection 1	Intersection 2	Intersection 3	Intersection 4
24 accidents 3 major injuries 17 minor injuries 1 death 3 no major injuries	6 accidents 2 major injuries 4 minor injuries	no data	2 minor injuries

SUMMATIVE ANALYSIS

-  Intersection with **Highest Vehicular Use**
-  **Street Network Barriers**
Select streets pose constraints for non-automotive movement
-  **Engineered Pathways**
Opportunities to enhance experience and usage of pathways
-  **Higher Child Counts**
Opportunities to service youth and parents accordingly

-  Intersection with **Highest Bike Use**
-  **Highest Pedestrian Activity + Accidents**
-  Intersection with **High Counts of Pedestrian and Bike Use**
-  **Lowest Commute Times**
Opportunity to assess transportation in this area in order to better service additional areas
-  **Highest Density + Highest Proportion of Renters**



02 PUBLIC ENGAGEMENT

PUBLIC ENGAGEMENT: COMMUNITY WORKSHOP

Students hosted a community workshop event on Saturday March 2, 2019 at the Glendale Community Association Hall. The purpose of the workshop was to identify challenges and opportunities in the community. The information gathered during the workshop ultimately helped guide the formulation of all the design interventions listed in this document.

At the event, residents were asked to sit in groups, and were led through a series of questions by one student facilitator and one student note taker (see questions, right). Residents were also invited to draw on maps to show where key issues or opportunities were located. The event lasted approximately 3 hours and approximately 60 to 70 residents provided input at the event.



Residents were asked the following questions:

Challenges and Issues:

- What are the main issues today with current infill and densification practices?
- What are the main issues with future densification along the main corridors (17th, 37th 45th)?
- Do you feel 45th is a main corridor? If so what enhancements does it need?
- Where do you catch transit? What are your main concerns with transit?
- What are your main concerns with driving and parking?
- Are there streets that would benefit from traffic calming?
- What types of housing types are missing in the community?
- Where do you get your groceries? What kinds of commercial land uses do you think are missing in the community?
- Any other challenges?

Future Possibilities and Opportunities:

- What are the special places in the neighborhood?
- Where do you walk/bike? Where would you like to walk/bike? What are your main concerns for walking and cycling?
- What are the outside resources / amenities the community should connect to?
- What areas do you consider appropriate for infill and sensible development?
- Do you see an opportunity for more creative housing types? Are you supportive of laneway housing and secondary suites? What issues would need to be addressed for these to be a successful addition to your community?
- What kinds of improvements would you like to see to the parks and open spaces?
- What kind of streetscape improvements do you think are necessary and where?
- Any other opportunities?

The community workshop produced a variety of perspectives; however, the following areas in the community were generally identified as follows:

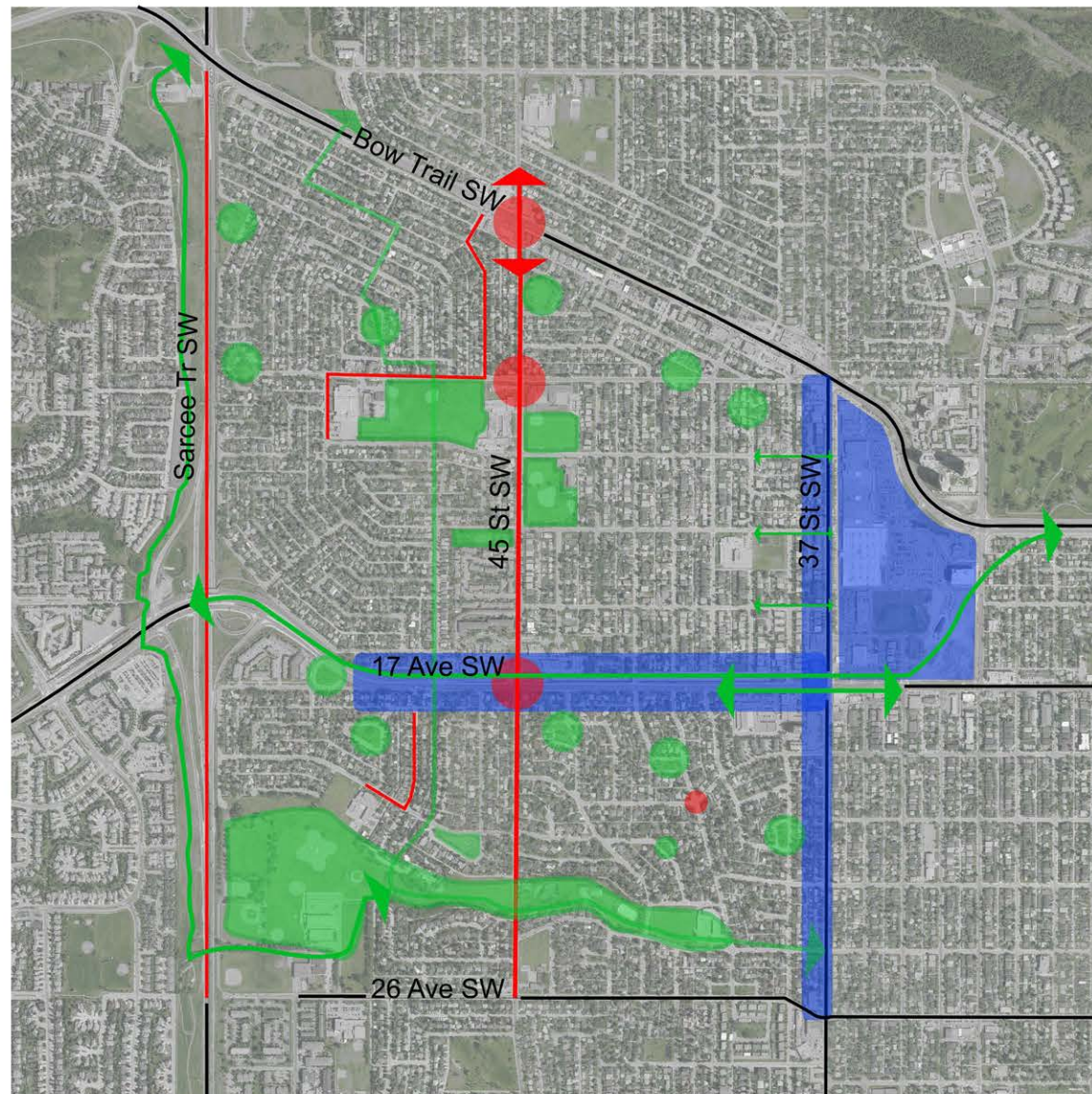
Challenges and Issues Identified by Residents:

- Densification may lead to traffic issues and crime.
- High density towers (residential) are not an acceptable form of development anywhere within the community.
- Public spaces and streets need to be made more attractive.
- At present, there is limited bike connectivity in the community.
- Walking infrastructure (sidewalks, intersections, catwalks, pathways) need to be improved.
- Local transit options, especially bus routes are limited within community.

Opportunities and Assets Identified by Residents:

Opportunities and Assets

- Overall, it was made clear that the existing character of the community should not change.
- Laneway housing may be an appropriate form of housing within the community.
- Future development should be located along main corridors of 17 Ave SW and 37 St SW as well as areas adjacent to LRT Stations, as long as it is compatible to the existing neighborhoods.
- Parks (and other open spaces) are highly valued throughout the community they just need improvements to make them more interesting and usable.
- Desire to have small retail and other commercial uses within the community.



- Area of opportunity / asset.
- Area of challenge / issue.
- Area of potential densification.

*More community feedback can be found under Appendix A, which has a comprehensive list of responses to the questions asked at the community workshop.

03 PARKS + OPEN SPACES

PARKS AND OPEN SPACE



What we Heard

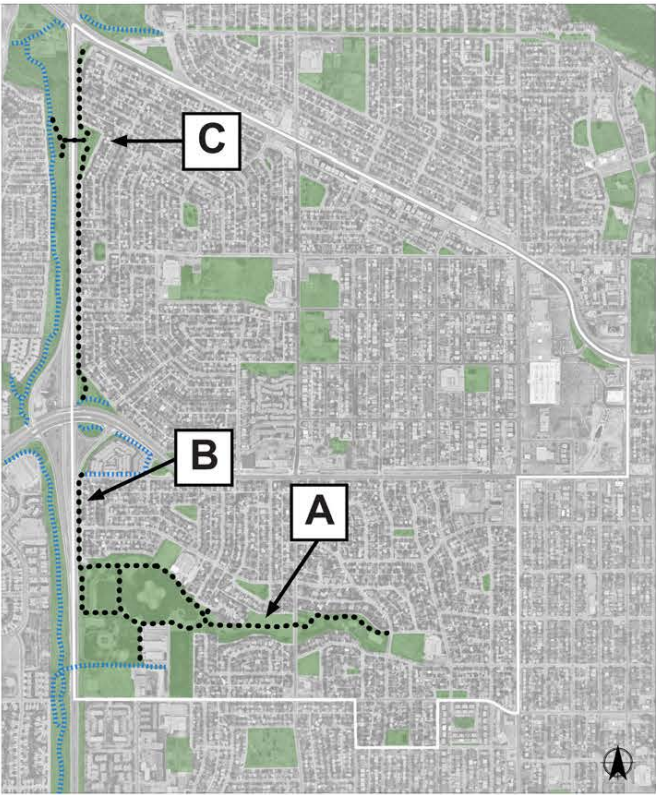
During the community workshop, parks and open space were widely considered special places in the community. Residents stated that parks, no matter how small, have a positive influence in the community. The one complaint was that parks and opens spaces lack amenities and interesting features.

What we are doing

Based on the feedback, we propose to activate parks and open spaces by implementing following features:

- 1 Multiuse Park Pathway
- 2 Multiuse Park
- 3 Pocket Park Improvements

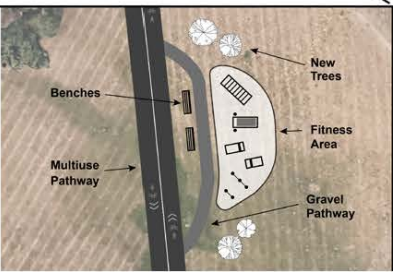
1 Multiuse Park Pathway



The Multiuse Park Pathway will connect the Glendale Community Association to Edworthy Park. The Pathway will be paved and marked; it will be designed to accommodate bikers and walkers.

- Multiuse Park Pathway
- ||||| Existing Sidewalk / Pathway
- Parks and Open Space
- A Pathway Features
- B Incorporation of Pathway into Street
- C Pedestrian Bridge

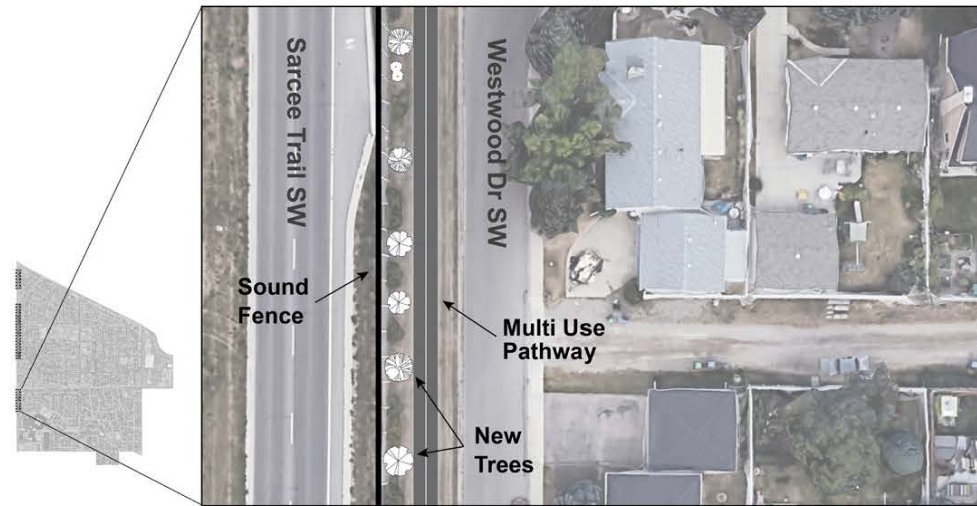
A Pathway Features



The Pathway will feature fitness stops at to be determined distances. The stops will allow users to rest or use various outdoor exercise equipment (see right).

B Incorporation of Pathway into Street

The Multiuse Pathway will be incorporated into the West sides of the following streets: Westwood Dr. SW, Winston Dr SW, Glasgow Dr SW. A rendering of the how the Pathway would look incorporated into Westwood Drive is shown below.



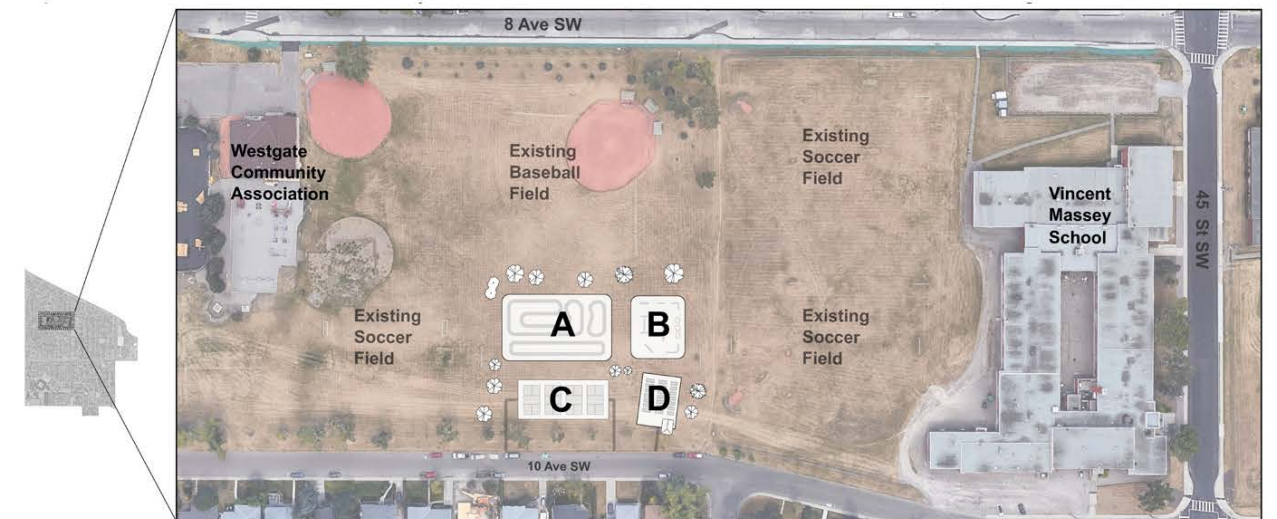
C Pedestrian Bridge

To ensure community connection outside the community, the Multiuse Pathway will be connected to the green way West of Sarcee by pedestrian bridge.



2 Multiuse Park

Based on community feedback it was noted that most of the large open spaces in the community are single use (usually occupied by soccer fields). We therefore propose converting a portion of the open space West of Vincent Massey School (in Westgate) into a multiuse area that will introduce the following four activities into the community: (A) dirt pump track, (B) bike obstacle course, (C) eight pickle ball courts, and (D) community gardens.



A - Bike Pumptrack



B - Bike Obstacle Course



C - Pickleball Courts



D - Community Garden




PARKS AND OPEN SPACE

3 Pocket Park Improvements


Pocket parks were identified as positive areas throughout the community; however, residents suggested that many of the pocket parks are underutilized and offer few features (some do not even have benches). We therefore suggest improving pocket parks by implementing a combination of the following strategies to each of the pocket parks.

Improvement Strategies:


1.




Signage
2.




Seating
3.




New Plantings
4.




Pathway / Sidewalk
5.



Natural Playground
6.



Community Garden
7.



Dog Park

Location of Pocket Parks in Community



Allocated Strategies

Pocket parks will be allocated the following strategies. Example site plans of parks "G" and "I" are shown below.

Park	Strategies
A	→ 1, 2.
B	→ 2, 4, 5.
C	→ 2.
D	→ 1, 2, 4.
E	→ 2, 6.
F	→ 2.
G	→ 1, 2, 3, 4, 5.
H	→ 2, 4, 7.
I	→ 2, 3, 4, 6.
J	→ 5.
K	→ 2.
L	→ 2.
M	→ 2, 4.
N	→ 2, 4.
O	→ 2, 4.
P	→ 2.
Q	→ 2, 4, 5.
R	→ 2, 4.

Example Improvement:

Pocket Park "G" will receive strategies 1, 2, 3, 4, and 5; meaning it will receive signage, seating (new benches), new trees, a pathway, and a natural playground.

Example: Pocket Park G



Natural Playground



Example Improvement:

Pocket Park "I" will receive strategies 2, 3, 4, and 6; meaning it will receive seating, new trees, sidewalks, and a community garden.

Example: Pocket Park I



Community Garden



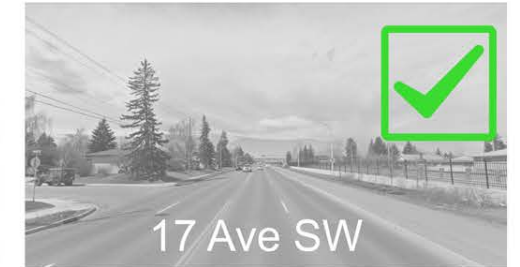
04 LANDUSE

LAND USE

What we Heard

When it comes to land use, participants at the community workshop suggested the following items:

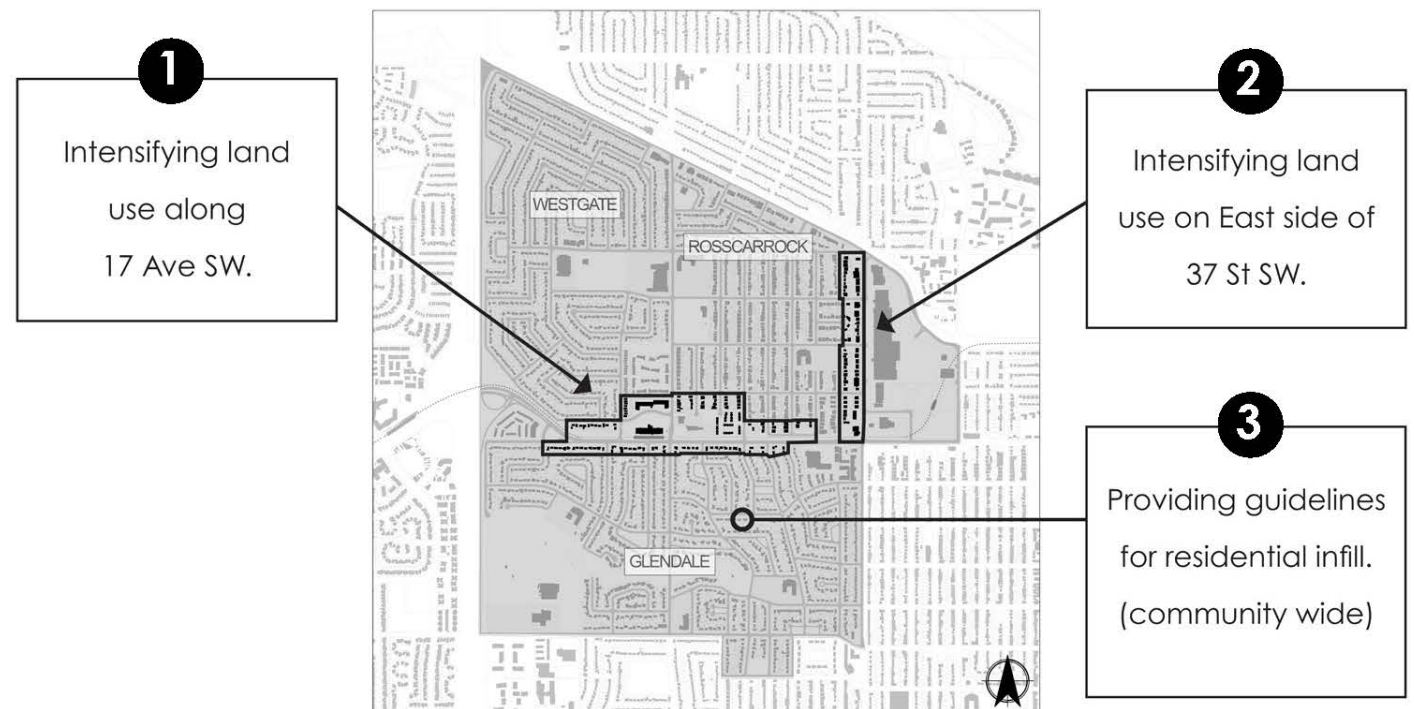
1. The existing low density character of the community is important and must be maintained.
2. High rise structures are not an appropriate form of development in the community.
3. The most sensible location for future development is along 17 Ave SW and 37 St SW. Any future development at these locations should be compatible with adjacent properties.



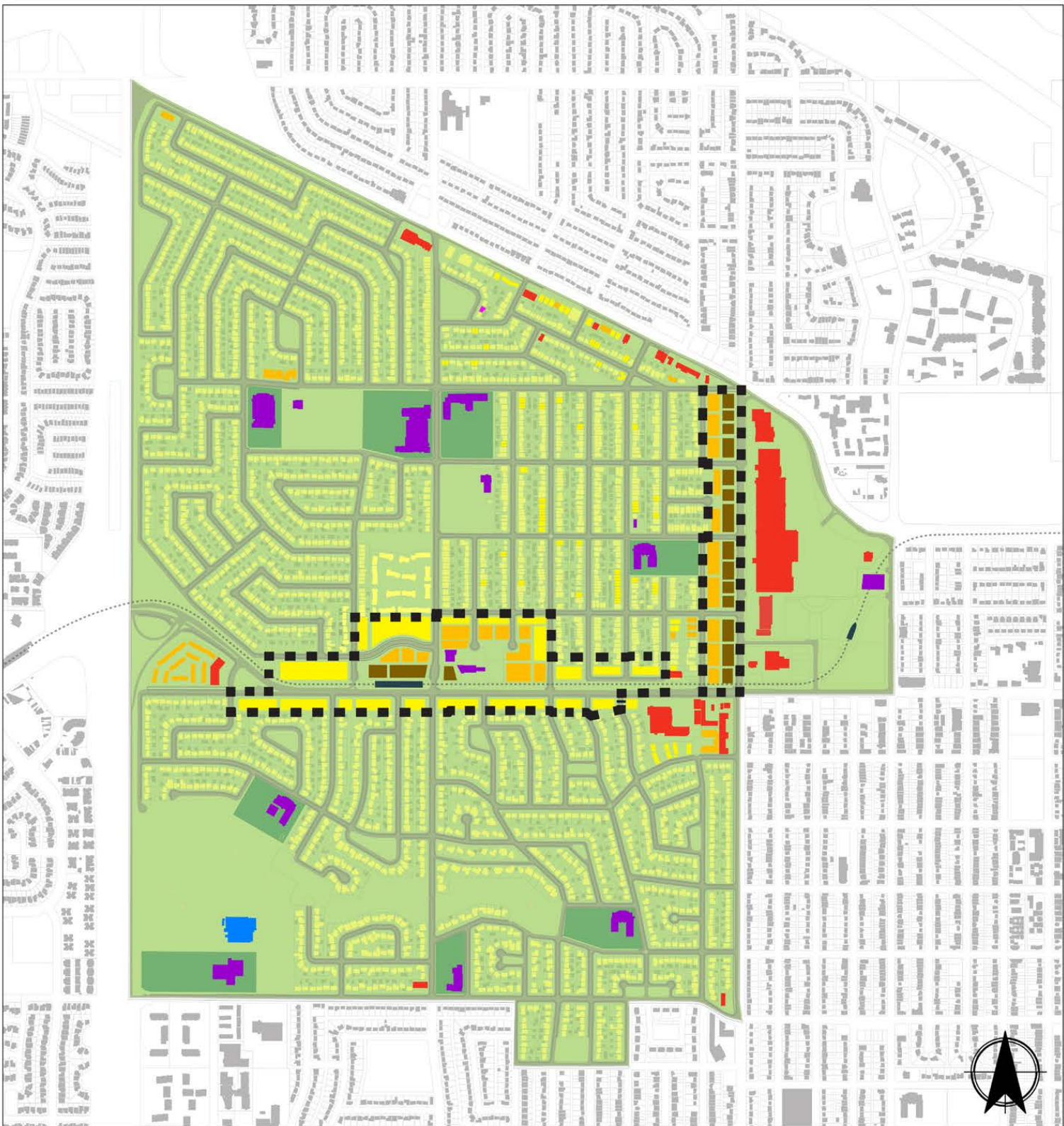
What we are doing

Based on the feedback, we propose the following land use interventions:

- 1 Intensifying land use along 17 Ave SW
- 2 Intensifying land use along 37 St SW
- 3 Creating new residential infill guidelines that will be applied to the entire community, within areas currently zoned RC-1 (low density residential).



New Community Zoning Map



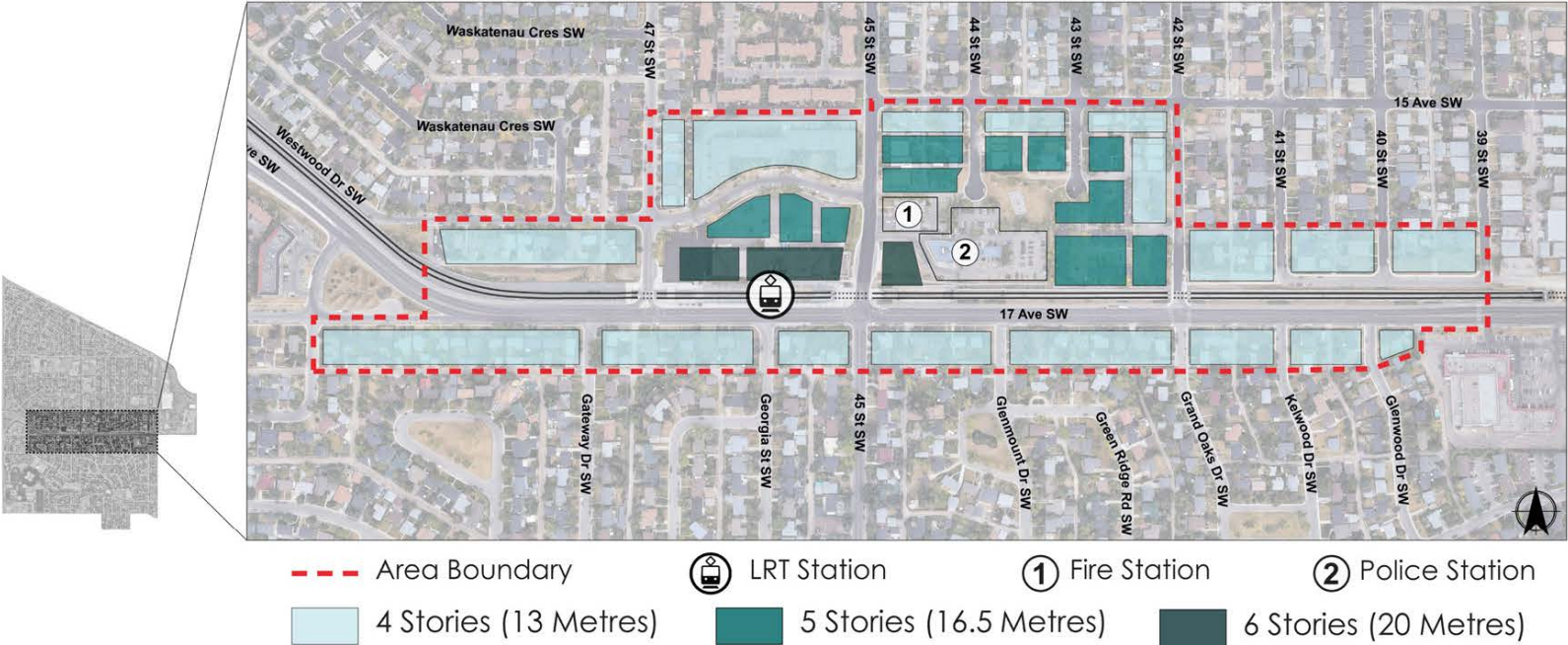
- Mixed Use
- LRT Station
- Arena
- Commercial
- Institutional
- Parks / Open Space
- Residential - Existing Low Density
- Proposed Area of Density Increase
- Residential - Moderate Density (6 Stories)
- Residential - Medium Density (5 Stories)
- Residential - Low Density (4 Stories)

LAND USE

1 Intensifying Land Use along 17 Ave SW

17th Ave SW was identified as an area that would be suitable for future densification, as long as future development does not exceed 6 stories in height. We therefore suggest that the current zoning along 17th Ave SW (mostly RC-1, which permits residential structures up to 10 metres tall) change to zoning that would gradually permit multi unit residential buildings up to 6 stories (20 metres) in height (see below). Buildings 6 stories in height would only be permitted on properties North of the LRT station.

Plan Area



Cross Section of New Land Use on 17 Ave SW



Massing Render of 17th Ave SW

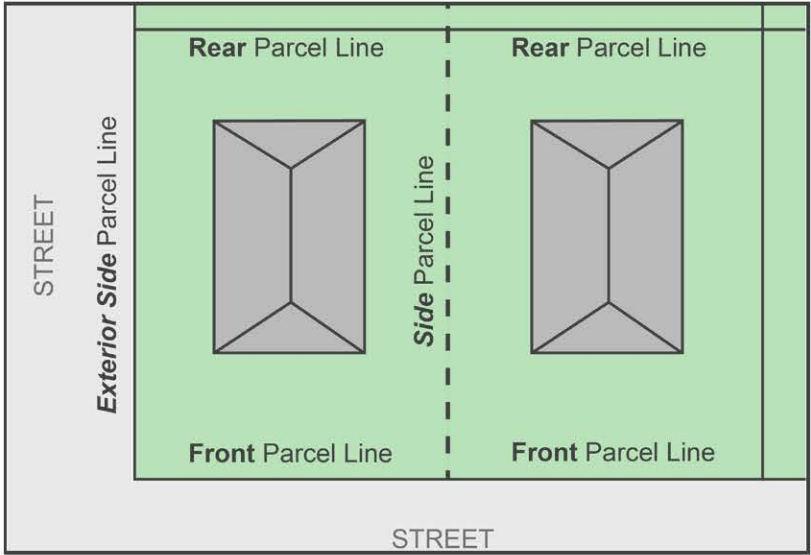


With new zoning, development on 17th Ave SW could go from the current form, left, to potentially the form on the right



Policy for Intensifying Land Use along 17 Ave SW — 4 Story Multi Unit Residential Zone

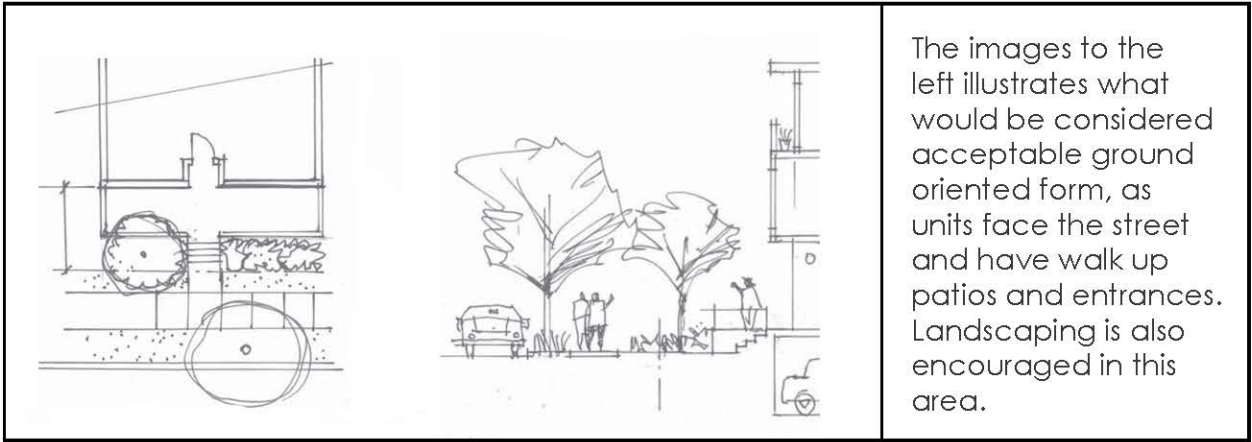
- 1) **Location**
The following policy applies to all the areas designated as 4 stories along the 17th Ave SW plan area (see previous page under plan area diagram).
- 2) **Purpose**
To permit a range of ground-orientated attached residential housing types. Acceptable housing types include townhouses, row houses, and apartment.
- 3) **Principal Uses**
(a) Multi-unit residential building, including townhouses, row houses and apartment buildings.
- 4) **Discretionary Use**
(a) Duplex
(b) Triplex
(c) Live Work Units in properties that have private access to the unit.
(d) Temporary Residential Sales Centre
- 5) **Maximum Building Height**
No building or structure shall exceed a height of 13 metres (42.66 feet), as measured from average building grades to the tallest point of the structure, excluding antenna, maintenance shafts or similar.
- 6) **Minimum Setbacks**
Setbacks are defined in the following diagram:



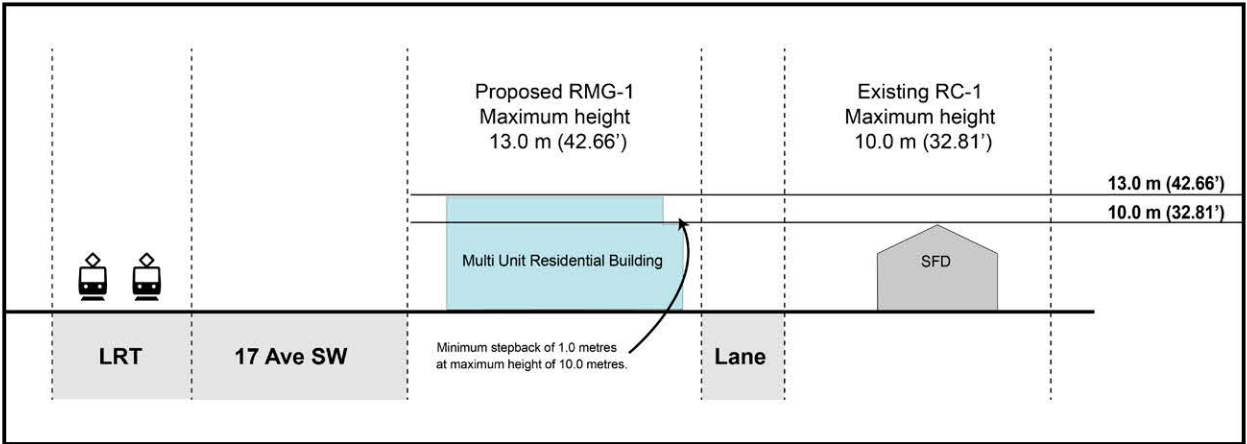
Setbacks for this property is as follows:

- (a) front parcel line: 3.5 metres
- (b) rear parcel line: 1.0 metres
- (c) interior parcel line: 1.0 metres
- (d) exterior parcel line: 3.0 metres

- 7) **Parking Requirements**
(a) Off street parking is required and must be access via laneways. Parking and access to parking is prohibited on 17 Ave SW.
(b) Underground parking shall be permitted.
(c) Required off-street parking spaces: 1.5 per dwelling unit.
- 8) **Contextually Appropriate**
(a) All structures and units shall be ground orientated towards 17 Ave SW. Ground oriented means that units shall have walk up entrances or similar.



- (b)Stepbacks shall be required for facades that face areas currently zoned R-C1. A minimum stepback of 1.0 metres is required at a maximum height of 10 metres (see diagram below). This stepback requirement breaks up the structure and makes it more compatible with the existing neighborhood.

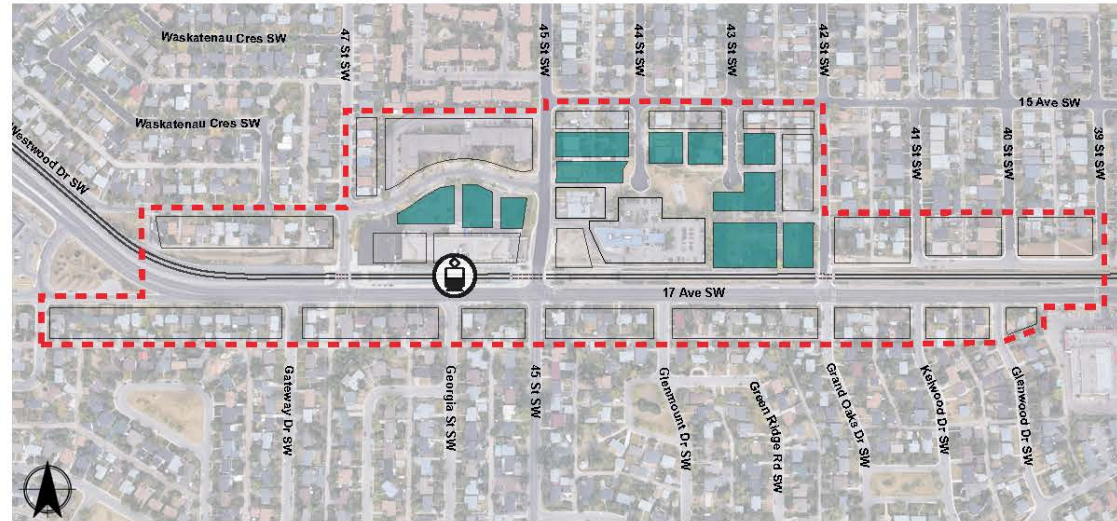


- (c) Rooftop patios and similar amenity areas are not permitted, as they would affect the privacy of single family homes on adjacent lots.

Policy for Intensifying Land Use along 17 Ave SW — 5 Story Multi Unit Residential Zone

1) Location

The following policy applies to all the areas designated as 5 stories along the 17th Ave SW plan area. This includes all the areas marked in dark green in the map below:



2) Purpose

To permit a range of ground-orientated attached residential housing types. Acceptable housing types include townhouses and apartments.

3) Principal Uses

(a) Multi-unit residential building, including townhouses, row houses and apartment buildings.

4) Discretionary Use

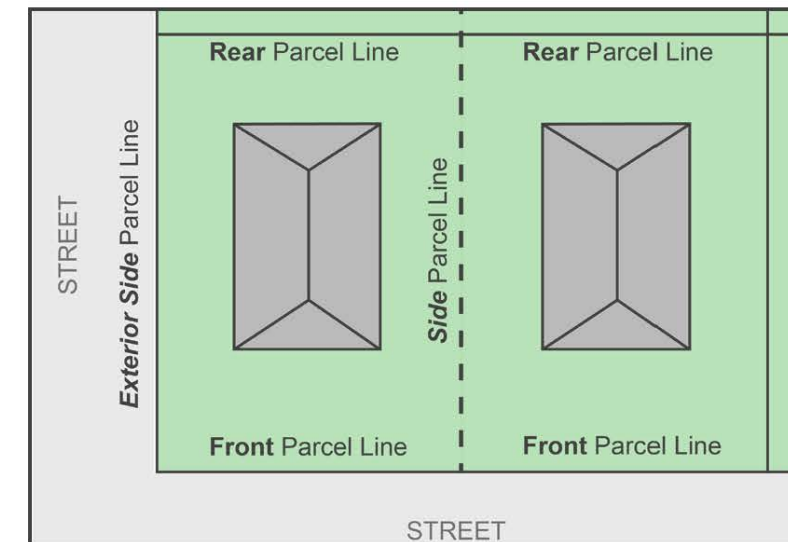
(a) Live Work Units in properties that have private access to the unit.
(b) Temporary Residential Sales Centre

5) Maximum Building Height

No building or structure shall exceed a height of 16.5 metres (54.14 feet), as measured from average building grades to the tallest point of the structure, excluding antenna, maintenance shafts or similar.

6) Minimum Setbacks

Setbacks are defined in the following diagram:



Setbacks for this property is as follows:

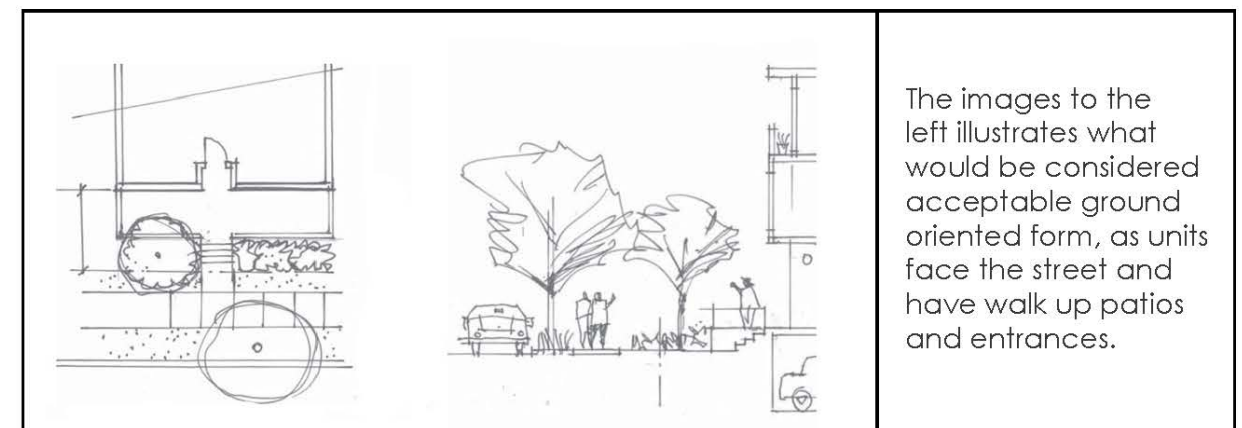
- (a) front parcel line: 3.0 metres
- (b) rear parcel line: 1.5 metres
- (c) interior parcel line: 1.5 metres
- (d) exterior parcel line: 2.5 metres

7) Parking Requirements

- (a) Off street parking is required as is underground parking.
(b) Required off-street parking spaces: 1.5 per dwelling unit.

8) Contextually Appropriate

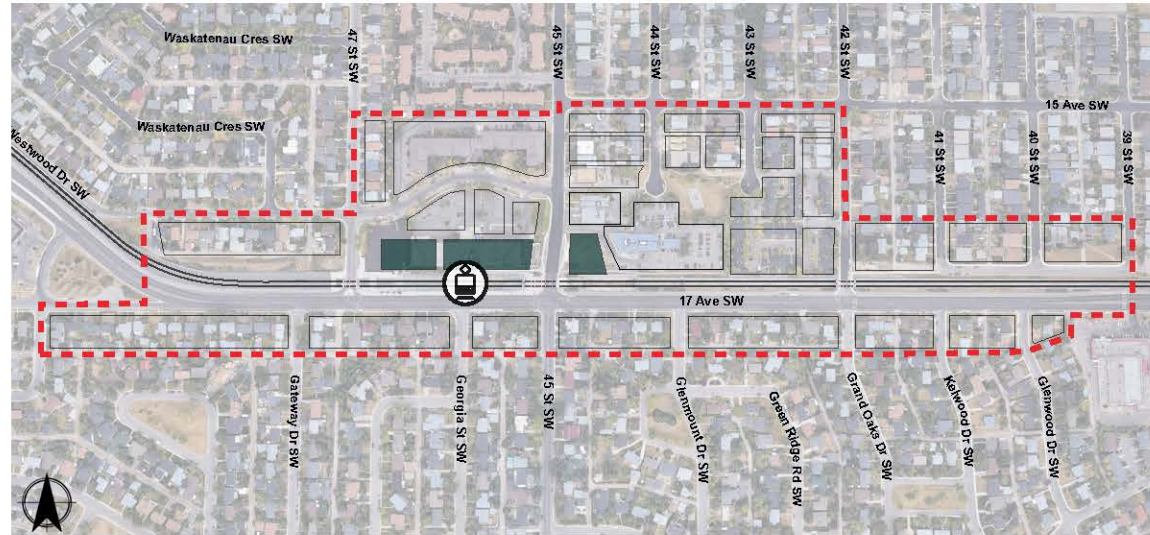
- (a) All structures and units should be ground orientated. Ground orientated means that units on the ground floor should have walk up entrances or similar.



Policy for Intensifying Land Use along 17 Ave SW — 6 Story Mixed Use Multi Unit Residential Zone

1) Location

The following policy applies to all the areas designated as 6 stories along the 17th Ave SW plan area. This includes all the areas marked in dark green in the map below:



2) Purpose

To permit mixed use multi unit residential buildings.

3) Principal Uses

(a) Multi-unit residential building, such as apartment buildings. Commercial uses are permitted on ground floors only.

4) Discretionary Use

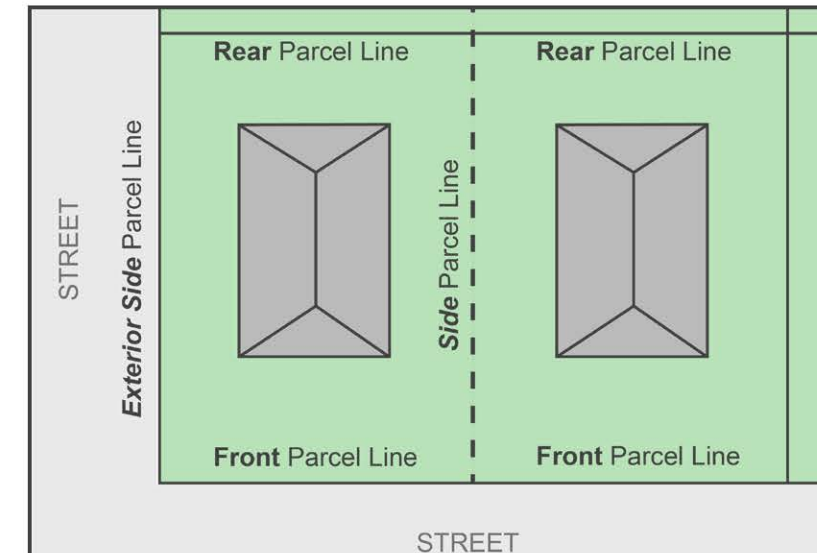
- (a) Temporary Residential Sales Centre
- (b) Live work unit
- (c) Assisted living facility

5) Maximum Building Height

No building or structure shall exceed a height of 20 metres (65.62 feet), as measured from average building grades to the tallest point of the structure, excluding antenna, maintenance shafts or similar.

6) Minimum Setbacks

Setbacks are defined in the following diagram:



Setbacks for this property is as follows:

- (a) front parcel line: 3.0 metres
- (b) rear parcel line: 1.5 metres
- (c) interior parcel line: 1.5 metres
- (d) exterior parcel line: 2.0 metres

7) Parking Requirements

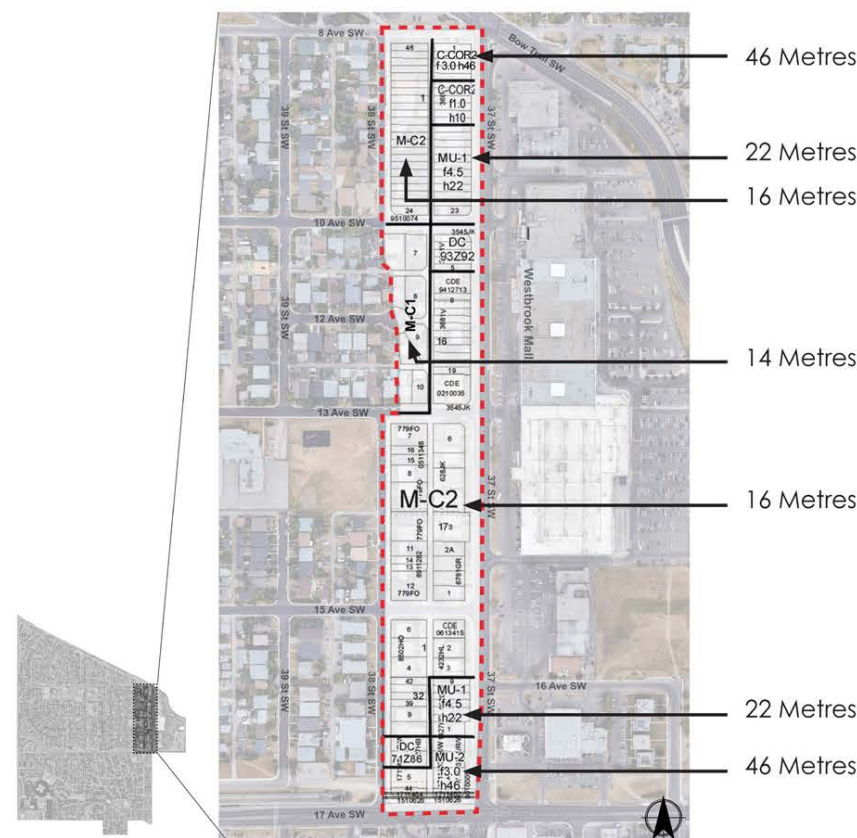
- (a) Underground parking shall be required.
- (b) Required off-street parking spaces: 1.0 per dwelling unit.

LAND USE

2 Intensifying Land Use along 37 St SW

Residents also identified 37 St SW as an area that would be acceptable for densification. Most of the properties that front the West side of 37th St SW are currently zoned multi residential (M-C2) which permits a maximum building height of 16 metres. This plan proposes increasing the maximum height on properties fronting 37 St SW to 20 metres (6 Stories); parcels fronting 38 St SW will be permitted a maximum height of 16.5 metres (5 Stories). These new height requirements will appropriately step down new developments to the existing homes which are predominately 3 story multi residential buildings (13 metres in height).

Current Zoning and Max Heights



Plan Area



- Area Boundary
- 6 Stories (20 Metres)
- 5 Stories (16.5 Metres)

Cross Section of New Land Use on 37 St SW



Massing Rendering of 37 St SW

With new zoning, development on 37th St SW could go from the current form, right, to potentially the landscape on the far right.

Before Zoning Change



After Zoning Change



Policy for Intensifying Land Use along 37 St SW — 5 Story Multi Unit Residential Zone

1) Location

The following policy applies to all the areas designated as 5 stories along the 37 St SW plan area. This includes all the areas marked in dark green in the map below:



2) Purpose

To permit a range of ground-orientated attached residential housing types. Acceptable housing types include townhouses and apartments.

3) Principal Uses

(a) Multi-unit residential building, including townhouses, row houses and apartment buildings.

4) Discretionary Use

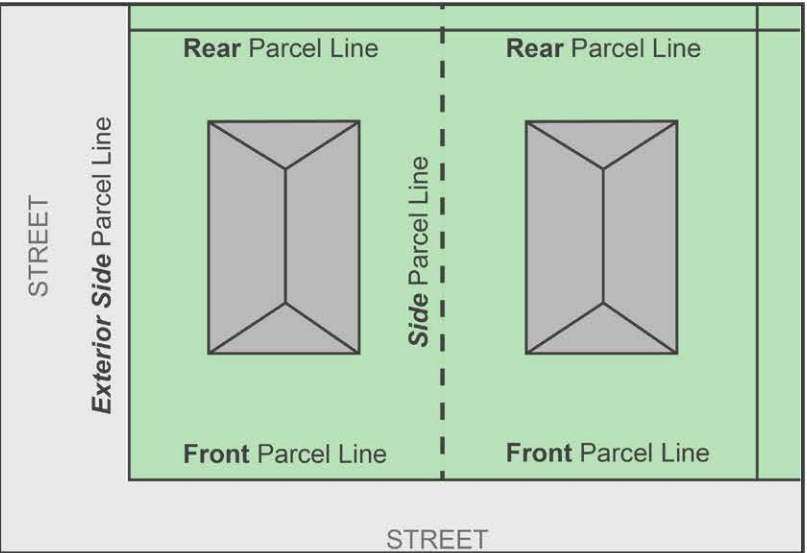
(a) Live Work Units in properties that have private access to the unit.
(b) Temporary Residential Sales Centre

5) Maximum Building Height

No building or structure shall exceed a height of 16.5 metres (54.14 feet), as measured from average building grades to the tallest point of the structure, excluding antenna, maintenance shafts or similar.

6) Minimum Setbacks

Setbacks are defined in the following diagram:



Setbacks for this property is as follows:

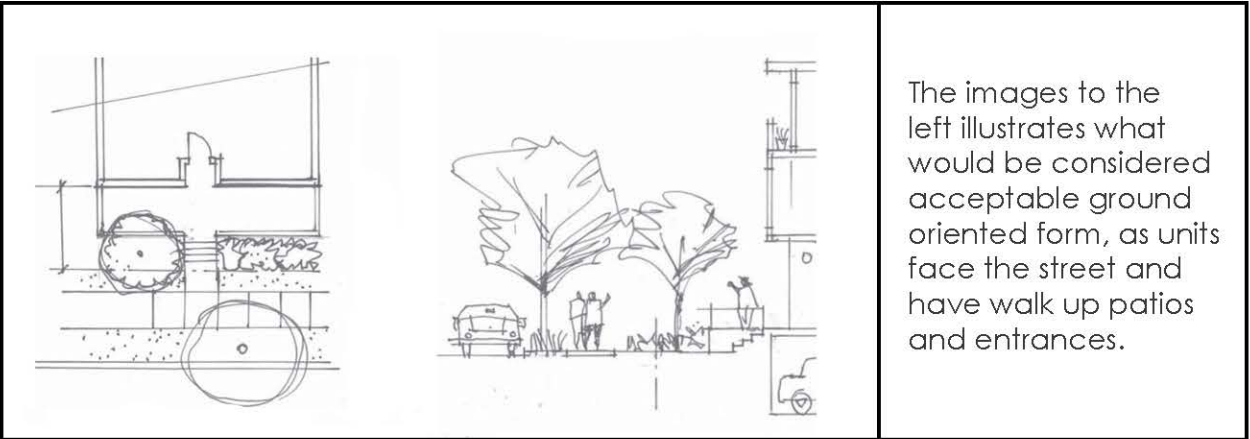
- (a) front parcel line: 3.0 metres
- (b) rear parcel line: 1.5 metres
- (c) interior parcel line: 1.5 metres
- (d) exterior parcel line: 2.0 metres

7) Parking Requirements

- (a) Off street parking is required as is underground parking.
- (b) Required off-street parking spaces: 1.5 per dwelling unit.

8) Contextually Appropriate

- (a) All structures and units should be ground orientated. Ground oriented means that units on the ground floor should have walk up entrances or similar.



Policy for Intensifying Land Use along 37 St SW — 6 Story Mixed Use Multi Unit Residential Zone

1) **Location**

The following policy applies to all the areas designated as 6 stories along the 17th Ave SW plan area. This includes all the areas marked in dark green in the map below:



2) **Purpose**

To permit mixed use multi unit residential buildings.

3) **Principal Uses**

(a) Multi-unit residential building, such as apartment buildings. Commercial uses are encouraged and shall be located on the ground floor of structures.

4) **Discretionary Use**

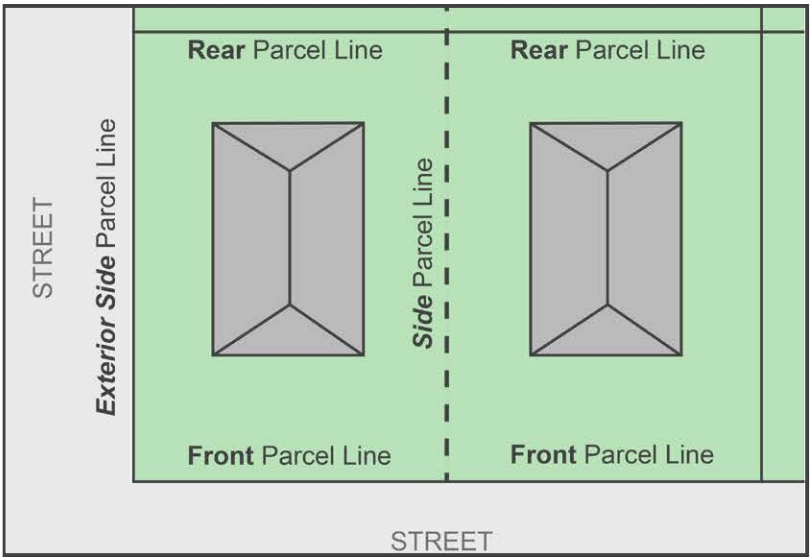
- (a) Temporary Residential Sales Centre
- (b) Live work unit
- (c) Assisted living facility
- (d) Hotel

5) **Maximum Building Height**

No building or structure shall exceed a height of 20 metres (65.62 feet), as measured from average building grades to the tallest point of the structure, excluding antenna, maintenance shafts or similar.

6) **Minimum Setbacks**

Setbacks are defined in the following diagram:



Setbacks for this property is as follows:

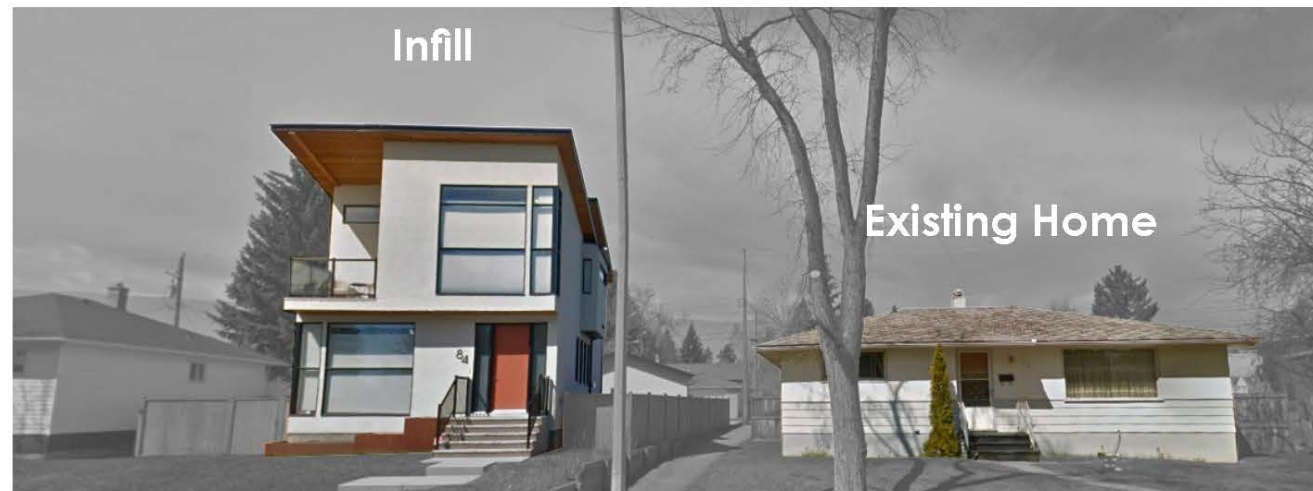
- (a) front parcel line: 2.5 metres
- (b) rear parcel line: 1.5 metres
- (c) interior parcel line: 1.5 metres
- (d) exterior parcel line: 2.5 metres

7) **Parking Requirements**

- (a) Underground parking shall be required.
- (b) Required off-street parking spaces: 1.5 per dwelling unit.

LAND USE

3 New Residential Infill Guidelines



During the community workshop, residents stated that current residential infill practices can be harmful to the existing character of the community. This is because new infills tend to build to the maximum allowable footprint and height, which can be disruptive to neighboring properties that are occupied by single story homes. We therefore suggest new residential infill guidelines that protect the character of the community.

Current Examples of Infill within Community

Current infill practices often remove front landscaping and mature trees, which is detrimental to the community. New guidelines will encourage infill development to maintain trees and place garages at the rear of the property.



- ☒ Front facing garages.
- ☒ No landscaping
- ☒ No new trees planted



- ☒ Garage facing laneway
- ☒ New trees planted

New Residential Infill Guidelines:

The new guidelines are designed to encourage compatibility with existing homes and protect trees on private property. The guidelines are as follows:

1. Where a property can be reasonably accessed by laneway, no front facing garage should be allowed.
2. Trees located on private property should be protected during construction of the infill.
3. If a tree that is located in the front yard is removed, it should be replaced by a similar (or climate suitable) species at a ratio of 1:2; meaning, if one tree is removed, two trees must be planted to replace the one.
4. The main entrance of the infill should be welcoming and orientated directly towards the street.
5. Infills should be compatible with adjacent homes. Compatibility may be achieved by a variety of methods, including (but not limited to): possessing a similar roof line, facade, landscaping, or character.

Example of Infill that follows new guidelines:



05 LANEWAYS

CONCERNS

WHAT WE HEARD FROM OUR OPEN HOUSE



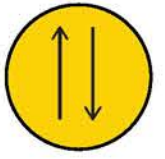
1. Privacy



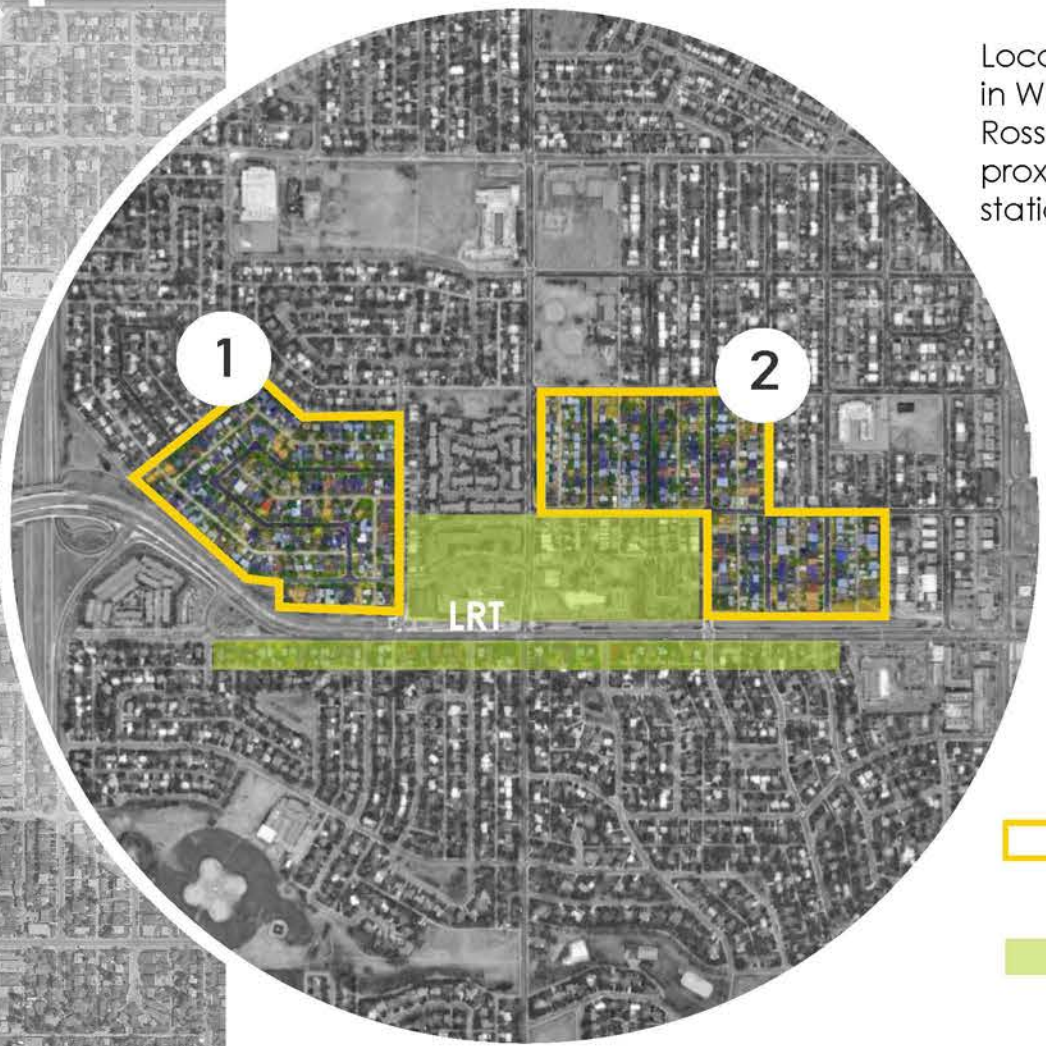
2. Shadowing



3. Respecting Existing Densities



4. Increased Laneway Traffic



Location proposal in Westgate and Rosscarrock in close proximity to LRT station

— Roads

— Laneways

- - - LRT

Permitted For Laneway Housing

Developable

With the intent of providing housing choice and flexibility to meet the needs of current and future residents, our proposal includes the adoption of Laneway Housing in two key and strategic locations. At close proximity to the existing LRT station, Laneway Housing would taper the edges of proposed intensification and therefore housing densification along 17th Ave. Providing LWH in these areas would create a zone of transitional densification from the developable area proposed. While close to the LRT, LWH could circumvent issues surrounding secondary suite parking and increased laneway traffic through the passive encouragement of active and or transit oriented mobility due to the proximity of any LWH to the C-Train and bus servicing along 17th Ave.

WHY INCORPORATE LANEWAY HOUSING?

- Provide rental accommodation that helps homeowners pay down their mortgages.
- First homes for small families or young tenants.
- Downsizing places for baby boomers not keen on condos but determined to stay close to the communities where they raised their children. (Aging in place)
- Laneway housing helps build neighbourhood density without mid/high rises. They are also seen as an alternative to large out-of-scale infill developments.
- They can also improve neglected and unsightly laneways, replacing derelict laneways with secondary streets.
- Multi-generational home where parents and their children can live together.
- Flexibility of operating a small business.

GUIDELINES

1. “Eyes on the street”: Maintains windows facing the laneway.
2. Minimizes overlook and loss of privacy on adjacent properties.
3. Respects existing building heights.
4. Suite shall have entrance separate from garage door on the same level.
5. Laneway and garden suites shall incorporate a palette of high quality materials.
6. Balconies should face laneway or flanking street.
7. Pedestrian scaled lighting that does not spill over to neighboring properties yet makes the lane feel safe and welcoming.
8. Laneway home and or secondary unit must maintain a distance of 3m from the primary dwelling allowing for an amenity area.
9. Additional unit shall be setback a minimum of 2m from the laneway, allowing for front facing landscaping and vegetation.

Through the basis of community feedback at the forefront of our design thinking, we have developed a list of design guidelines and measures seeking to address the concerns raised during our community engagement session.

With the noted guidelines, property owners have the ability to design laneway housing that is both small and discrete in nature, allowing for a better fit and integration of secondary units into the community without jeopardizing the existing character.

SMALL DISCRETE DESIGNS

A Canadian pioneer in encouraging Laneway housing, Vancouver provides the most comprehensive and applicable guidelines to LWH. Although lots in Vancouver tend to be smaller than those measured in Glendale, Westgate and Rosscarrock, they provide a precedent as to what small, discrete housing massing could look like in Calgary.

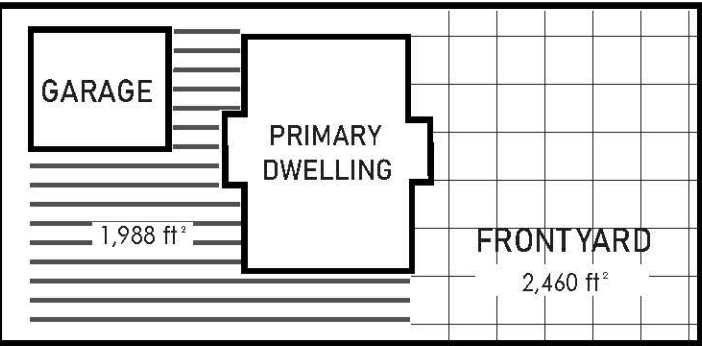


VANCOUVER

ARRANGEMENT CATALOUGE

Front Yard Green/Shared Space LWH =
Laneway Housing

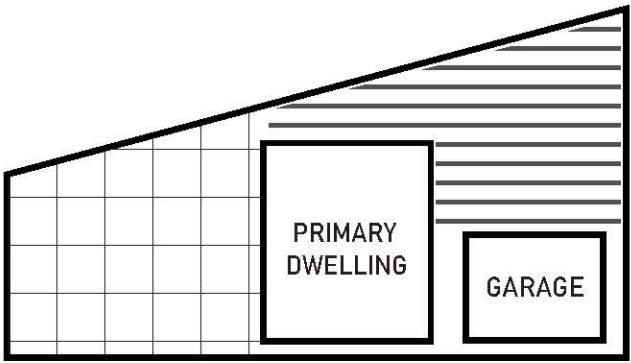
Existing Lot Arrangement



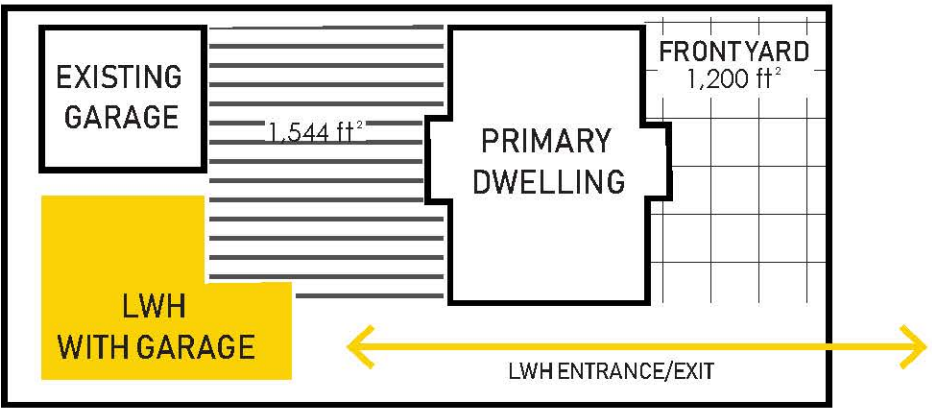
WHY REDUCE THE FRONTYARD?

Residents shared that larger front yards required **more maintenance** effort and are largely **underutilized spaces**.

Existing Angular Lot Arrangement

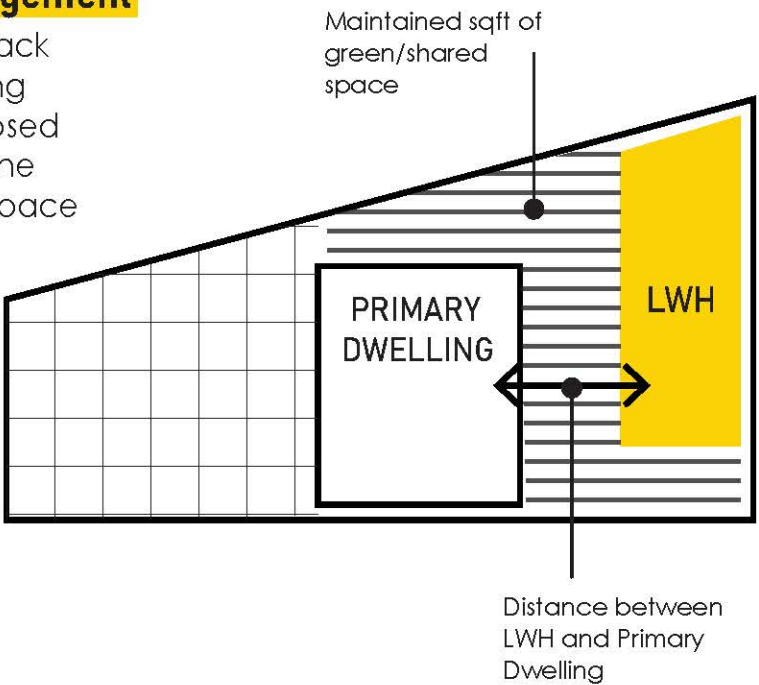


Adjusted Property Line Setback

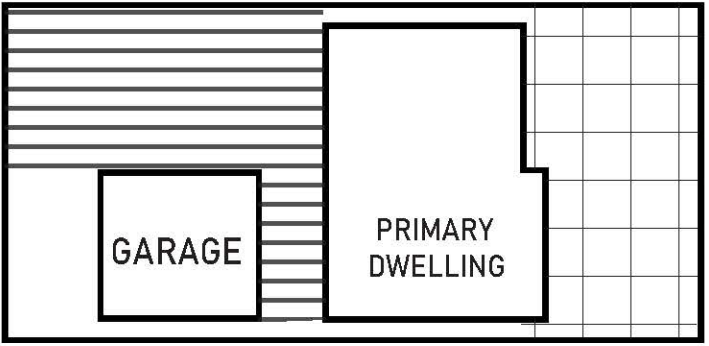


Proposed Arrangement

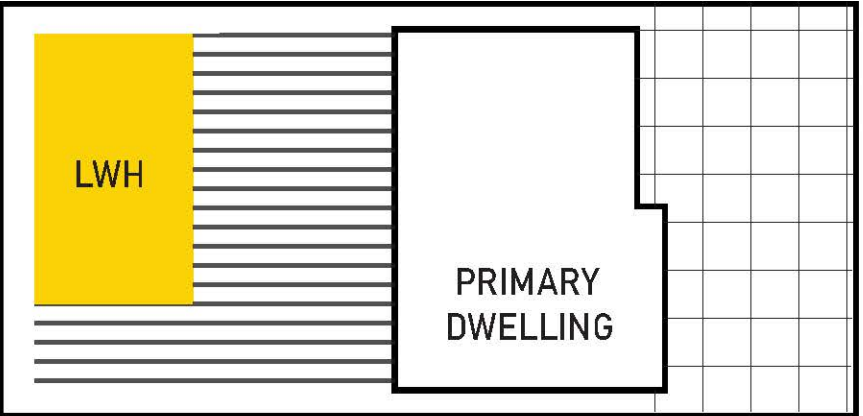
Assuming the setback stays as is, a housing style can be proposed which fits a guideline for green/shared space



Predominant Existing Lot Arrangement

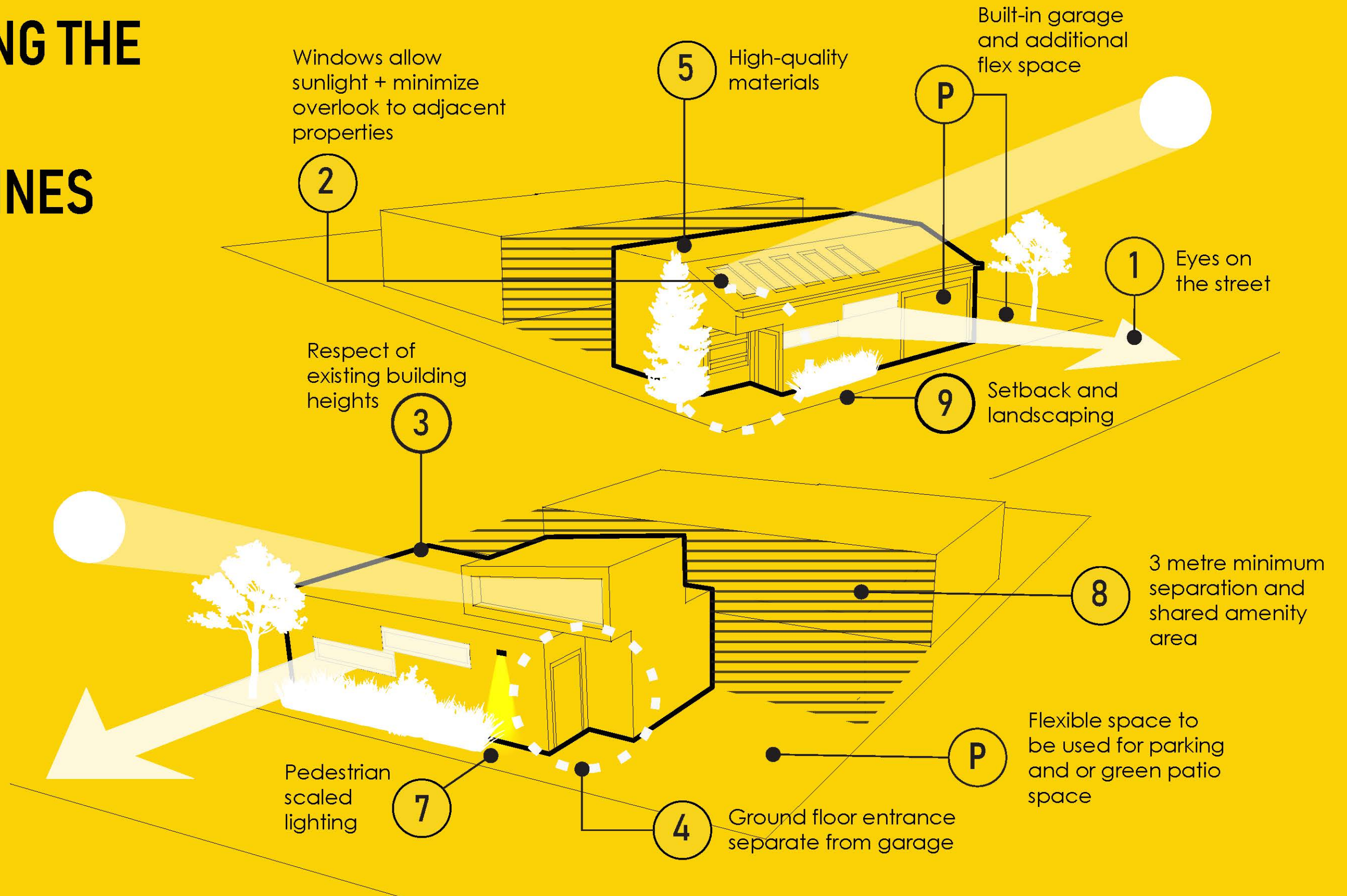


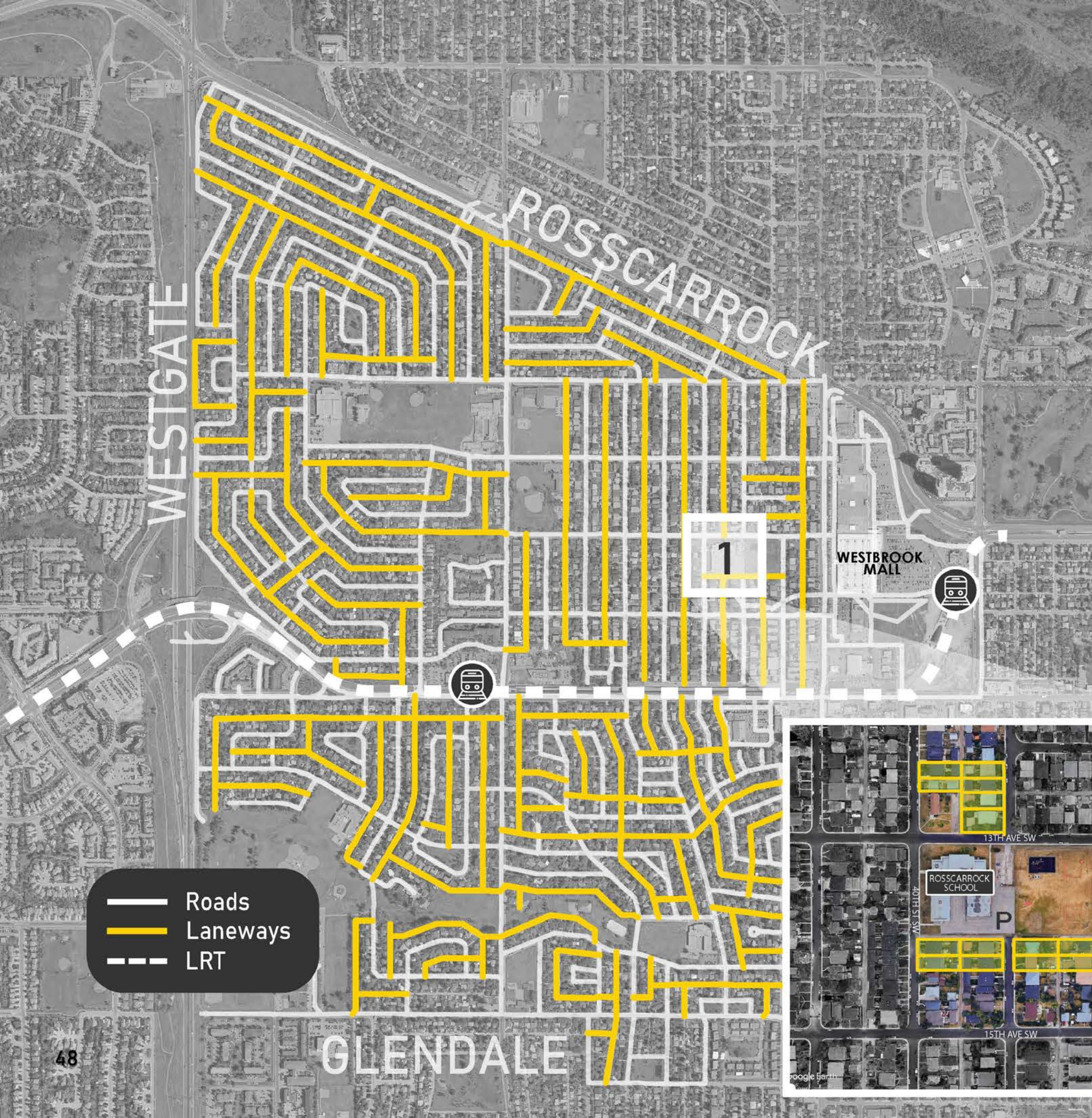
Proposed LWH Assuming Primary Dwelling Remains As Is



APPLYING THE DESIGN GUIDELINES

See page 44





CONCERNS

WHAT WE HEARD FROM OUR OPEN HOUSE

POTENTIAL SCHOOL CLOSURE

Strong inclination by residents to keep the **communal aspect** of the school alive.

RETAIL

“ There aren't any coffee shops - I'd like a butcher and a flower shop!

There are long periods of vacancy on the ground floors of mixed-use buildings because **developers don't understand local retail and commercial needs.** ”

Micro-Retail as a Tool for:

- Laneway Animation
- Social Entrepreneurship
- Localized Services + Products
- Increasing Public Space and adding retail density while preserving the neighbourhood character

Desire to incorporate local businesses that are small and family owned by entrepreneurs who understand the neighbourhood and the localized needs.



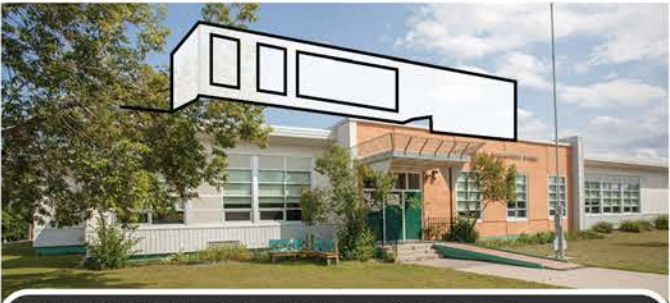
 Permitted Lots for Retail Start Ups

TEMPORARY URBANISM AND MICRO RETAIL



Temporary Urbanism: Temporary changes to a built environment intended to activate underutilized spaces with the use of temporary pop-up retail, activities and programming.

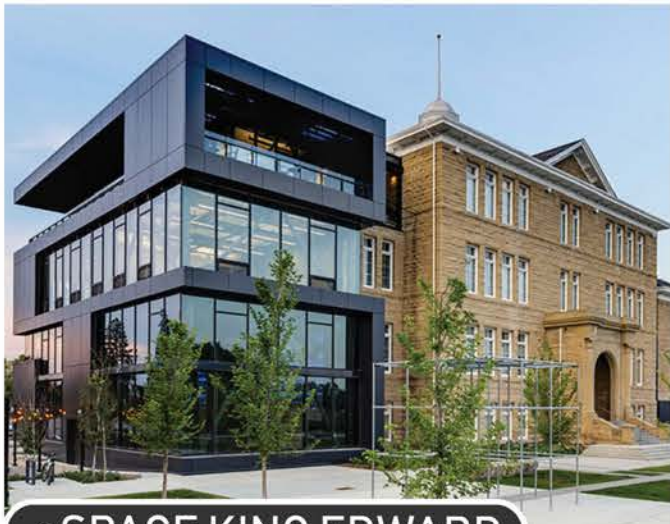
Micro-Retail: Shift from large impersonal shops to smaller locally owned and demographically targeted stores focusing on a specialized selection of products.



ROSSCARROCK SCHOOL



OFF ☐ ON



cSPACE KING EDWARD



OFF ☐ ON

In addressing community concerns regarding the lack of local small scale commercial environments as well as the potential concern of the Rosscarrock school closure, we propose a two-fold approach which sees activation and continual communal gathering spaces. We envision Rosscarrock School to remain an active communal hub, providing creative, collaborative and communal spaces just as the cSpace in Marda Loop does for the Calgary community. Our vision is to not only activate the school building itself, but the site in its entirety through the temporary programming of pop-up markets and festivals.

We see this temporal activity as a catalyst for laneway animation by turning “on” the laneway through micro-retail opportunities during the “on” times of programming that would exist in the current open space.

ADAPTIVE REUSE
AS A CATALYST
FOR FLEXIBLE
URBAN PLANNING



small scale retail + services in laneway

OFF ☐ ON

We envision micro-retail to encompass both goods and services - anything from a gourmet ice cream shop to accounting services! These small business ventures are proposed to operate within the property line of a laneway home, considering a two metre set-back of the business venture from the actual laneway road. The ideal size of a micro-retail space is considered no larger than an existing garage.

Our proposal seeks to use micro-retail as a form of increasing public space - helping to turn forgotten, dull laneways into time-based dynamic secondary streets facilitating shared spaces.

Within our precedent research are two examples from Toronto - as laneways exist at a similar scale to Calgary - where staff at the Laneway Project are actively working with BIA's and stakeholders to initiate a community driven laneway animation proposal centered around micro-retail ventures.

Places to meet, play, shop, create + interact



TORONTO

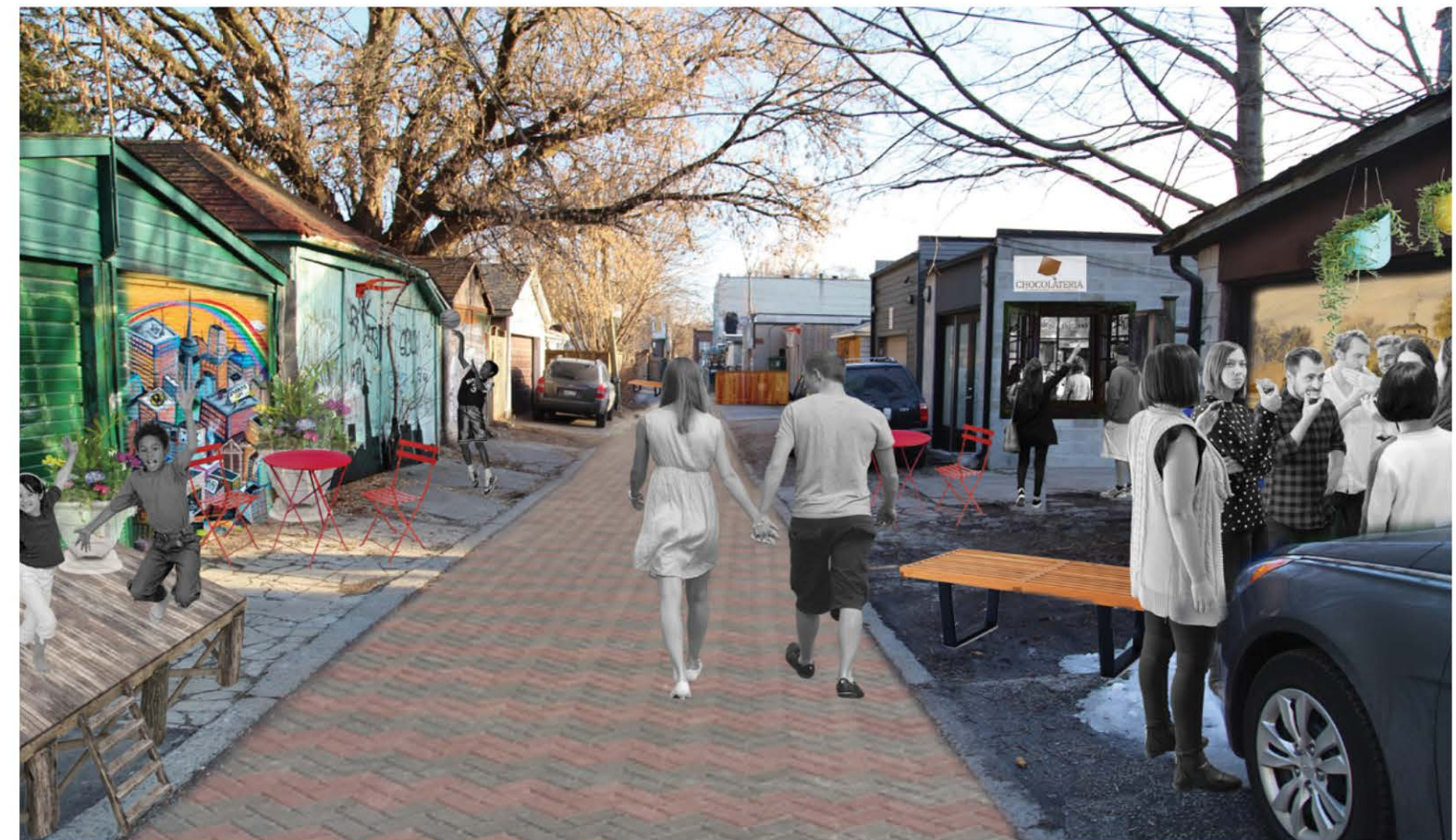


CALGARY



Brisbane's Vibrant Laneways Program lead to liquor license policy changes to support the establishment of small bars.

BRISBANE



TORONTO



CONCERNS

WHAT WE HEARD FROM OUR OPEN HOUSE

- i Pathways require **maintenance**
- snow clearing + overgrown vegetation
- ii Chicanes pose **accessibility issues**
for strollers, trolleys, wheelchairs
and electric scooters
- iii Catwalks are **dark** because they
are unlit - creating **safety** issues due
to poor visibility and unclear sight
lines
- iv Catwalks are **dull, uninteresting** and
boring spaces, making residents not
want to use them

CURRENT CONDITIONS



CATWALKS

Our project involves the re-imagination of the community's engineered walkways, colloquially referred to as "catwalks": pathways that cut-through the curvilinear blocks of Glendale and Westgate. Initially designed to better facilitate pedestrian flow - shortening walking distances by cutting through a large block, these pieces of infrastructure have fallen into a state of disrepair and consequent underutilization.

Our vision for these eleven connections is to apply a standardized set of strategies of which include maintenance during the summer and winter, traffic calming, lighting, signage and safety measures. In effort of attracting active use and enhancing the human experience, we propose to insert a curated palette of themed uses centered around play, creation, learning, resting and growing, all of which lead to micro place-making spaces allowing the user to identify, not only with the catwalks but the community at large.

THEMED DESIGN AND EXPERIENCES

(A) PLAY



TORONTO



VANCOUVER



SEATTLE


(B) CREATE



Murals deter tagging
TORONTO

Michelle Cavanagh
@Cimelle

@SustainableYYC I purposely take a longer route home, just to walk through this amazing Catwalk.



CATWALKING



CALGARY

(C) LEARN



CALGARY



MONTREAL

(E) REST



CALGARY

(D) GROW



Edible Landscape
CALGARY



CALGARY

(F) IDENTIFY



TORONTO

Place-making strategy by naming a laneway

Introduction of lighting into catwalk
CALGARY

Strategies for improving ALL Catwalks

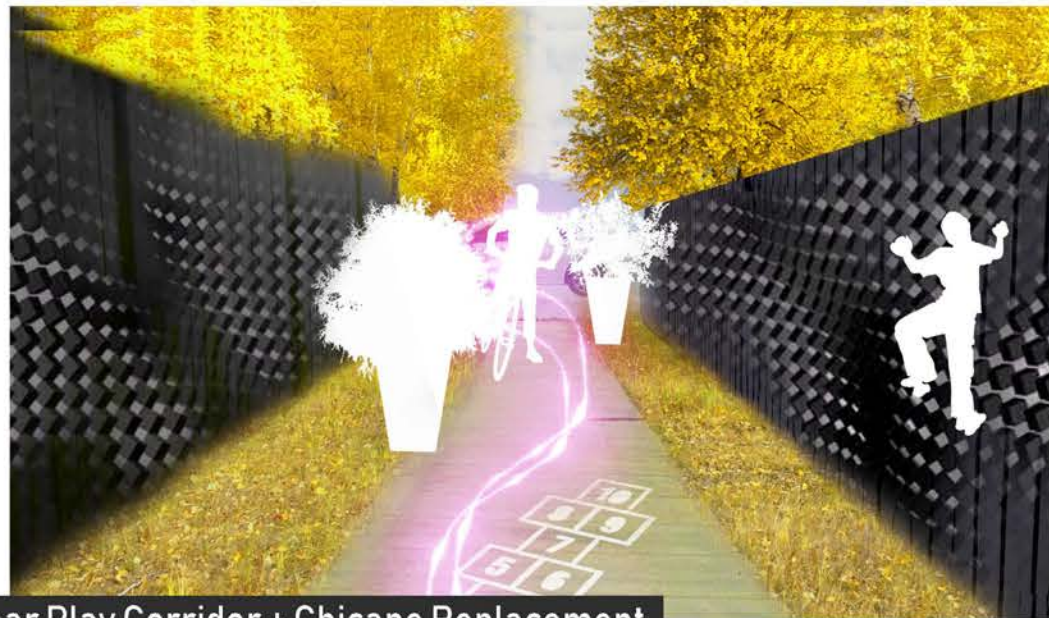
- S** Standard features for every catwalk
-  MAINTENANCE
-  TRAFFIC CALMING
-  LIGHTING
-  SIGNAGE
-  SAFETY MEASURES



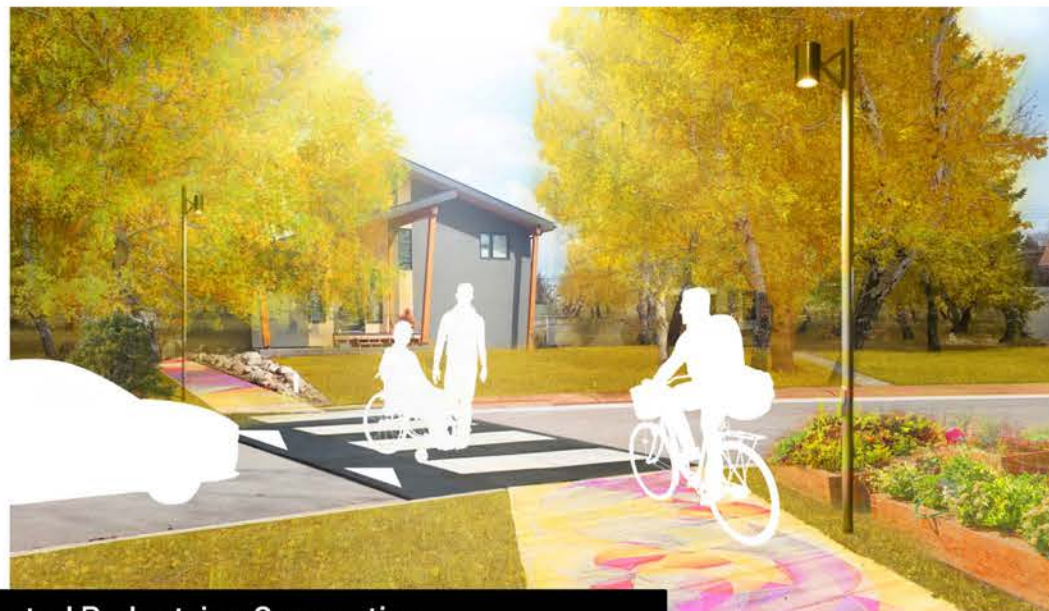
UNLOCKING THE POTENTIAL OF CATWALKS FOR ACTIVE USE

1. B + F
2. C + R + B + F
3. B + F
4. D + F
5. A + F
6. C + F
7. D + E + F
8. D + F
9. E + F
10. A + F
11. C + F

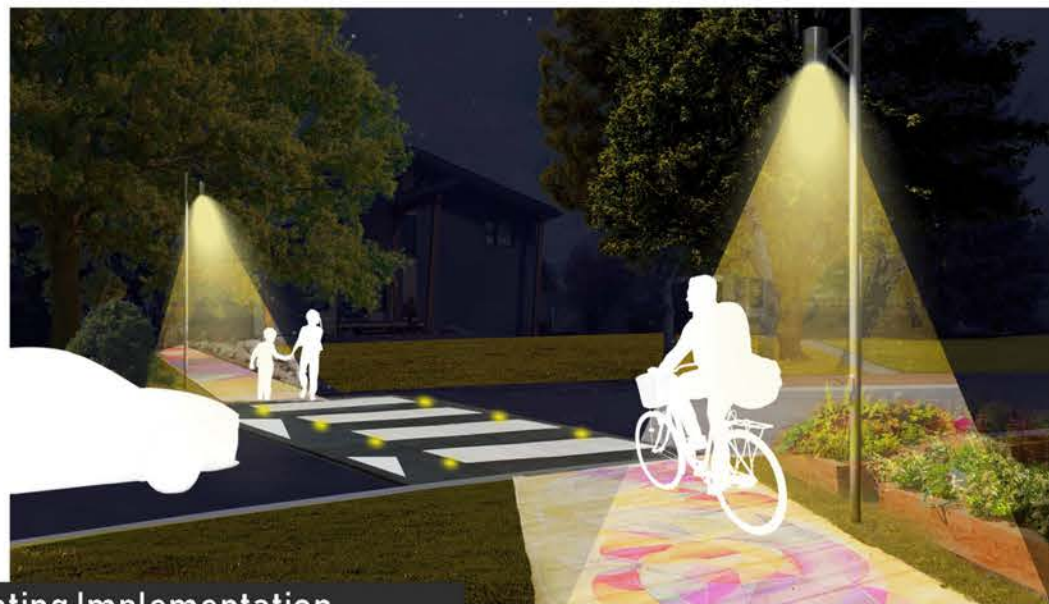
53



Linear Play Corridor + Chicane Replacement



Elevated Pedestrian Connection



Lighting Implementation

DESIGN INTERVENTIONS APPLIED

In efforts of providing a more equitable space, we have proposed the removal of chicanes, which dependent on location, can pose accessibility restrictions for strollers, wheelchairs, buggies and scooters. In continuing to offer a safety measure for cyclists and pedestrians, we propose the use of planters, which would pose visibility obstructions at eye level for the user and thus force them to slow down and briefly dismount the bicycle before entering the laneway.

In recognizing that catwalks are part of a larger connected network which facilitate active use, we have placed the pedestrian at the forefront of our design thinking. In ensuring the pedestrian comes first, we have proposed table top crossings along streets at the terminus and initiating points of catwalks with the intent of elevating the pedestrian above all other modes of movement.

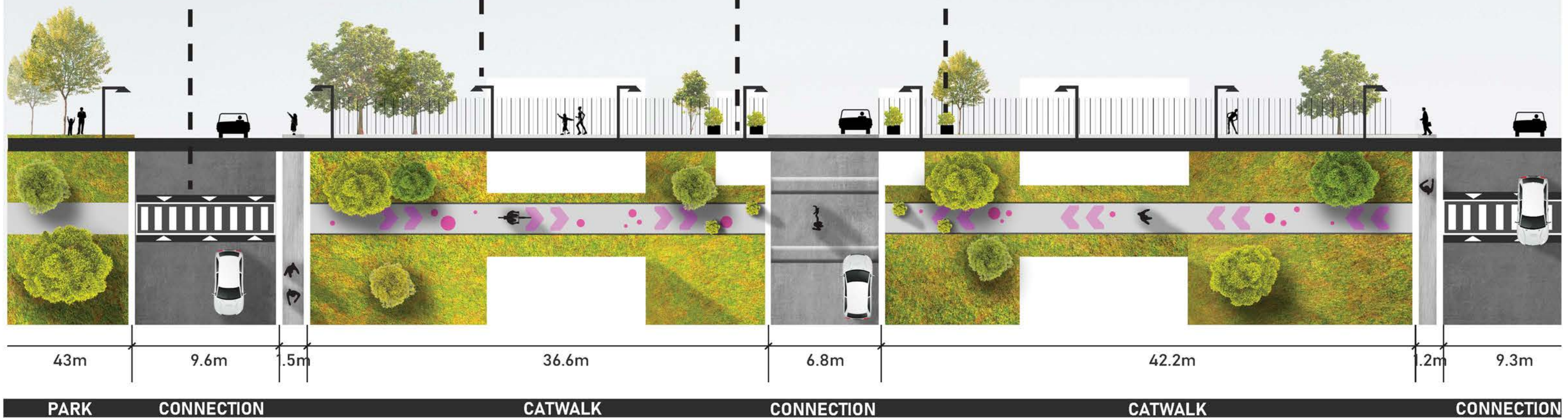
To encourage activity at all times, we are proposing to implement lighting within catwalk connections - ensuring visibility and safety. The lighting fixtures proposed are intended to be directional, posing no spillage or discomfort onto adjacent properties.

TRAFFIC CALMING
Installation of speed tables to elevate the pedestrian - protecting users as well as providing a continuous connection to the catwalk system

LIGHTING
Installation of lighting to improve visibility and increase perceptions of safety

EQUITY
Removal of chicanes to improve accessibility for wheelchairs, strollers, trolleys and electric scooters

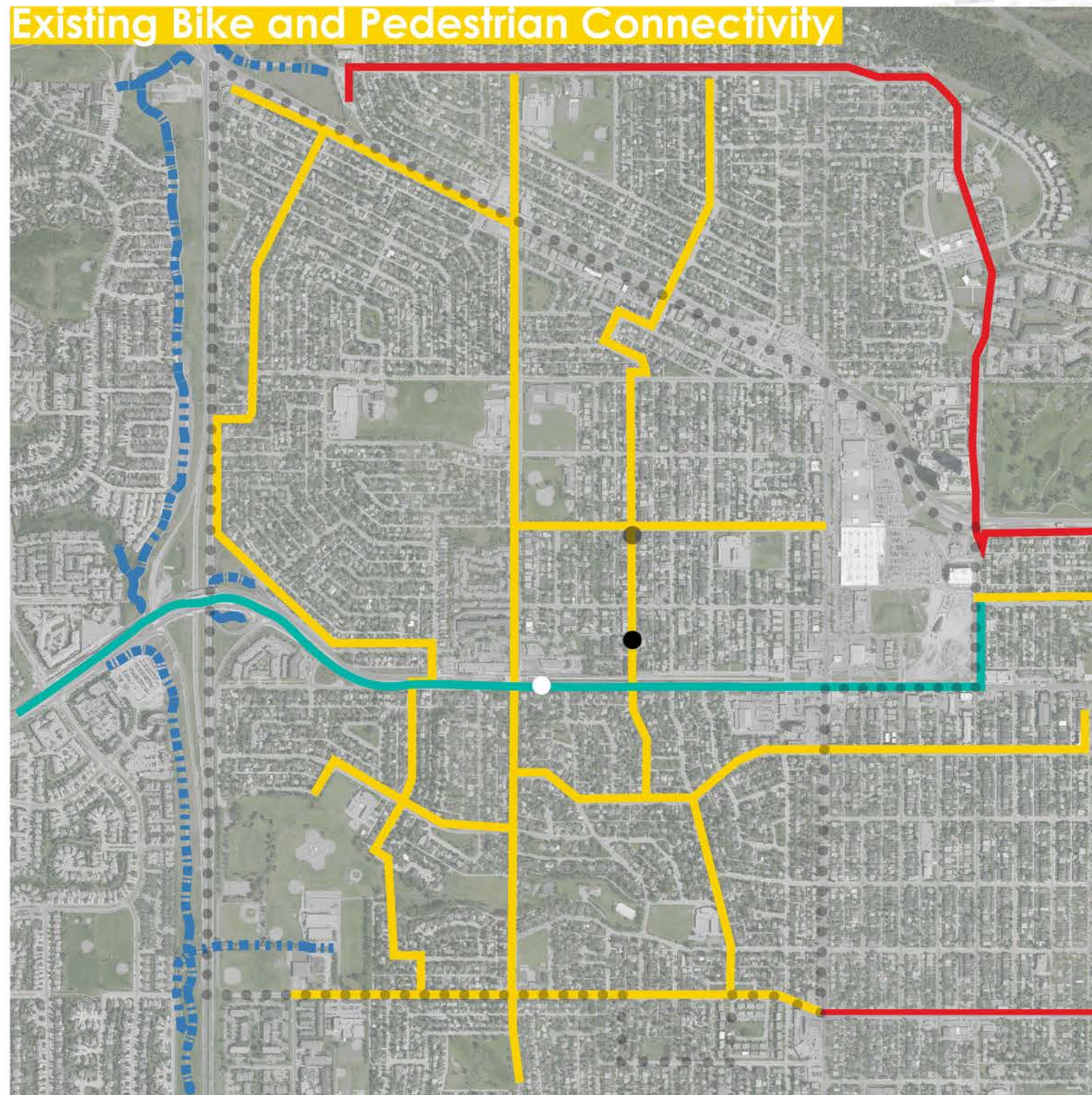
SAFETY MEASURES
Installation of planter boxes to slow users yet facilitate accessibility



06 MOBILITY

MOBILITY

Existing Bike and Pedestrian Connectivity



- Rotary/Mattamuy Greenway Path
- Signed Bike Route
- Regional Pathway
- Bike Lanes
- Study Area

FROM OUR ANALYSIS



Neighbourhood Greenway on 13 Ave



Regional Pathway on 17 Ave



Signe Bike Route on 45 St

Uninspiring Streetscapes

Generally the public realm is dull and lacks trees, street furniture and adequate signage to identify bike routes and regional pathways as well as speed limits.

Narrow Pedestrian Pathways

Pedestrian pathways range in width from 1m to about 1.3m which according to the complete streets guidebook should be a minimum of 1.5m for residential streets and wider for busier streets.

Absence of Bike Lanes/Cycle Tracks

There is a lack of safe right of ways for cyclists hence the low number of people cycling to places in the neighbourhood compared to those walking.

Insufficient Street Trees

The GRW area has approximately 3 trees per acre meaning for every 7 lots there are 3 trees in total. There is a general need for more street trees.

WHAT WE HEARD FROM OUR OPEN HOUSE

- i Lack of bus service in parts of the neighbourhood to provide first and last mile trips
- ii Need for north-south, east-west bike lanes/ pedestrian pathways
- iii Improve streetscape and walkability especially on 17th Avenue which is unkempt and not a pleasant place to walk

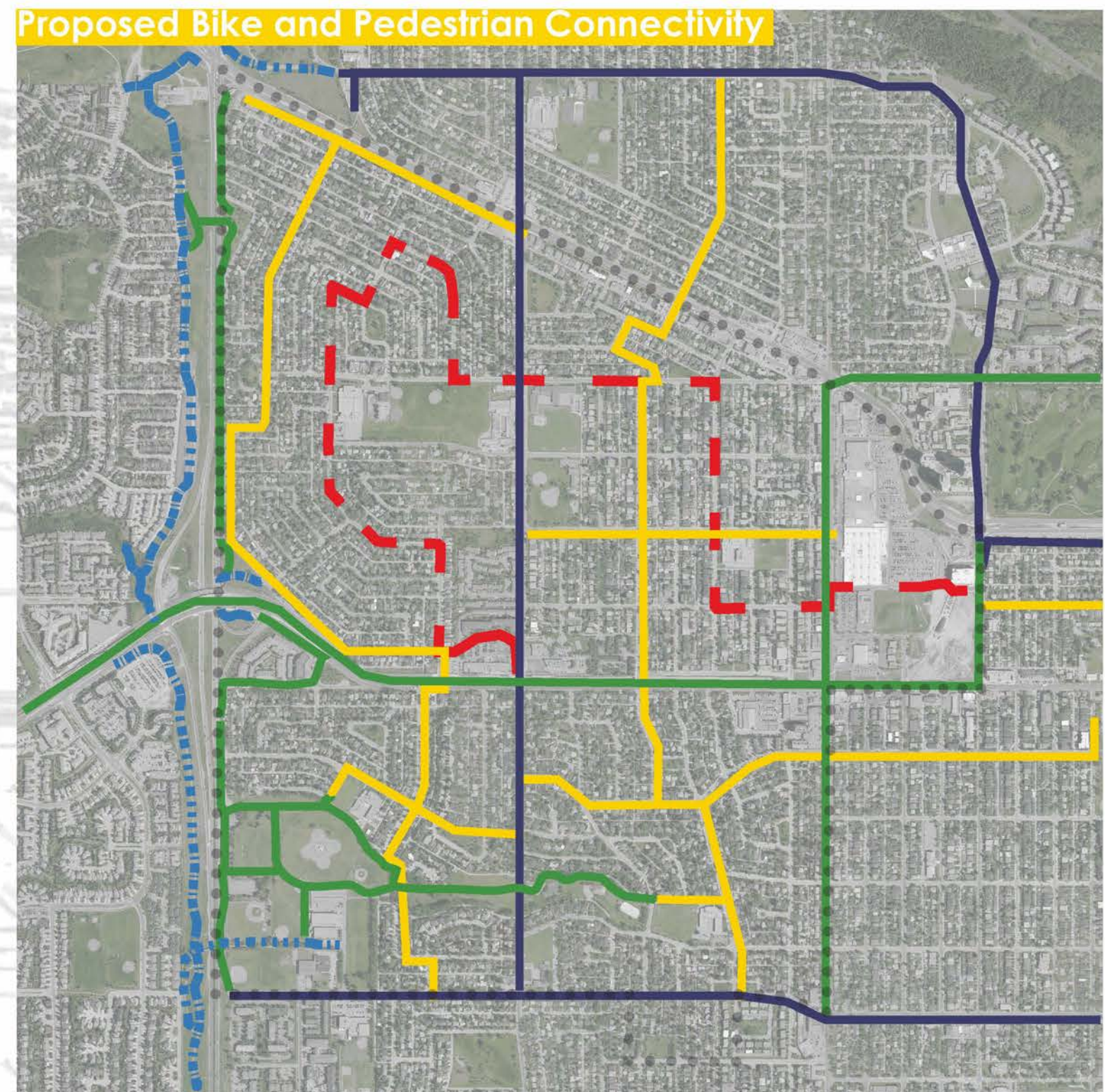
VISION: A Safe, Multi-Modal and Walkable District

Our vision for the Glendale, Rosscarrock and Westgate area (Hereafter referred to as GRW) is to be a place where walking, cycling, taking the train, the bus or autonomous shuttle will be prioritized over the car, making GRW a safe place for pedestrians and cyclists. We envision a place with a people-first mobility focus with an improved public realm that will adorn the neighbourhood and make it a unique place.

CONCEPT

To achieve our mobility vision we put together our analysis, feedback from our open house as well as feedback from our steering committee to develop a proposal for mobility and connectivity.

Bike and Pedestrian Connectivity

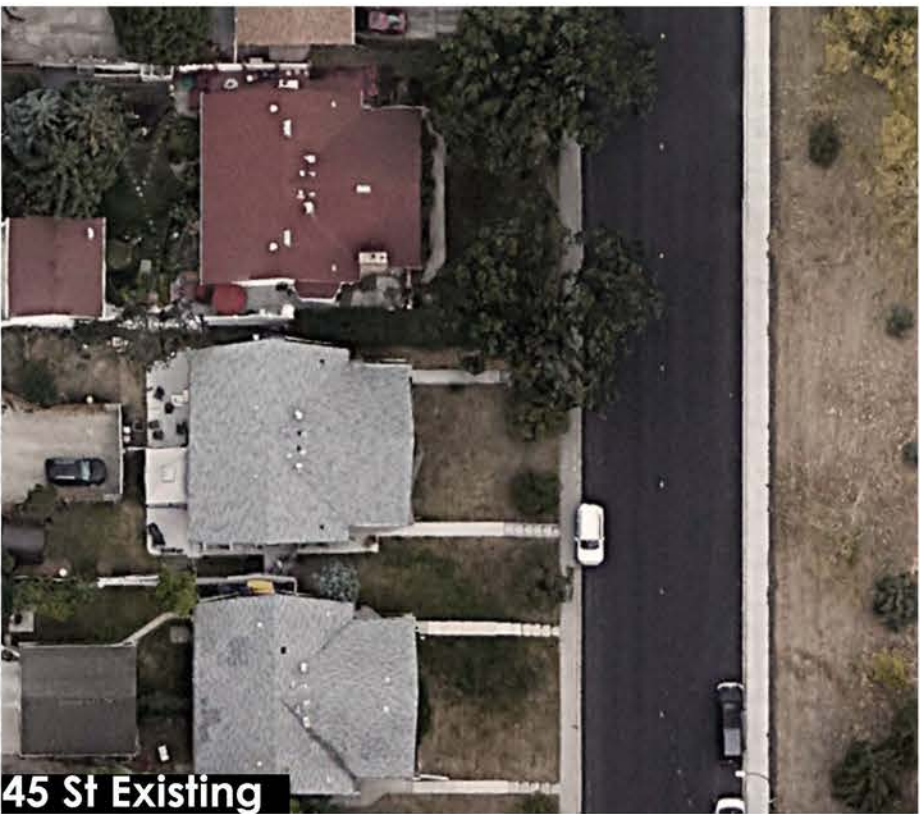
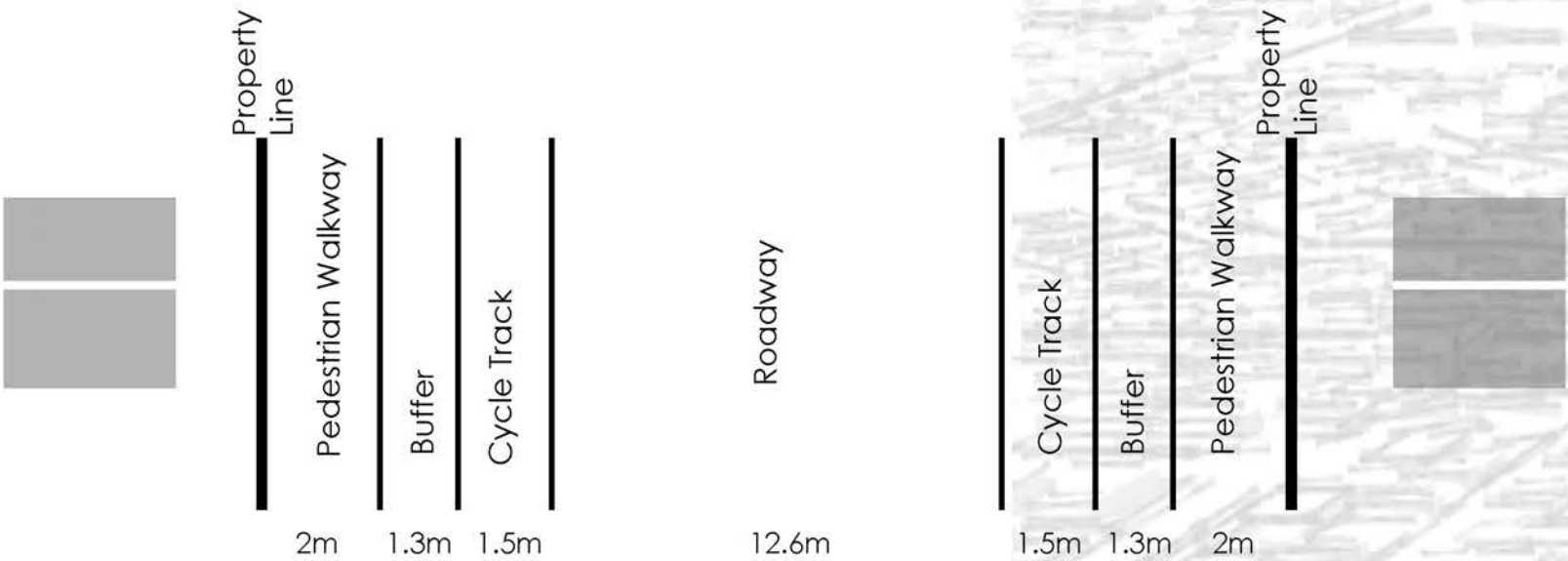


- Autonomous Shuttle Route
- Shared Pathway Route
- Bike Lanes

DESIGN GUIDELINES

45 St and 26 Ave Cycle Tracks and Pedestrian Walkways

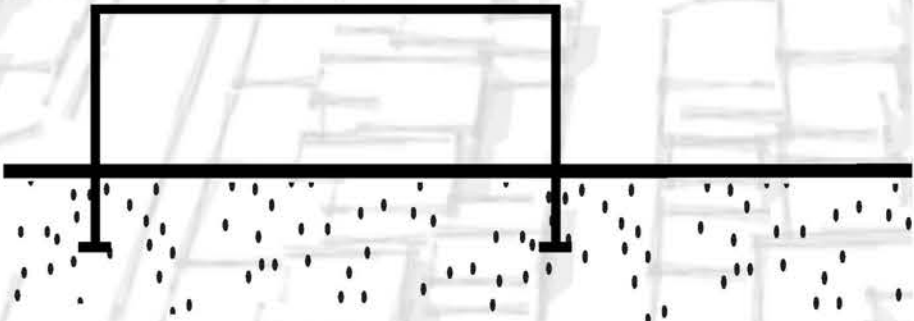
- Pedestrian Pathways are to start right at property line as shown below and are to be 2 metres wide as recommended by complete streets guidelines.



- Cycle tracks are to be at the same level as the pedestrian walkway and are to be a minimum of 1.5 metres as recommended by NACTO (National Association of City Transportation).
- Moving Traffic lanes must be slightly reduced in width to 3.3 metres and parking lanes to 3 metres as is acceptable according to City of Calgary's Complete Streets Guidelines and NACTO.
- Trees are to be planted in the buffer space half the maximum canopy spread apart depending on the species. So if Tree X has a maximum spread of 30 metres at maturity, the next tree should be planted 15 metres away (City of Calgary).

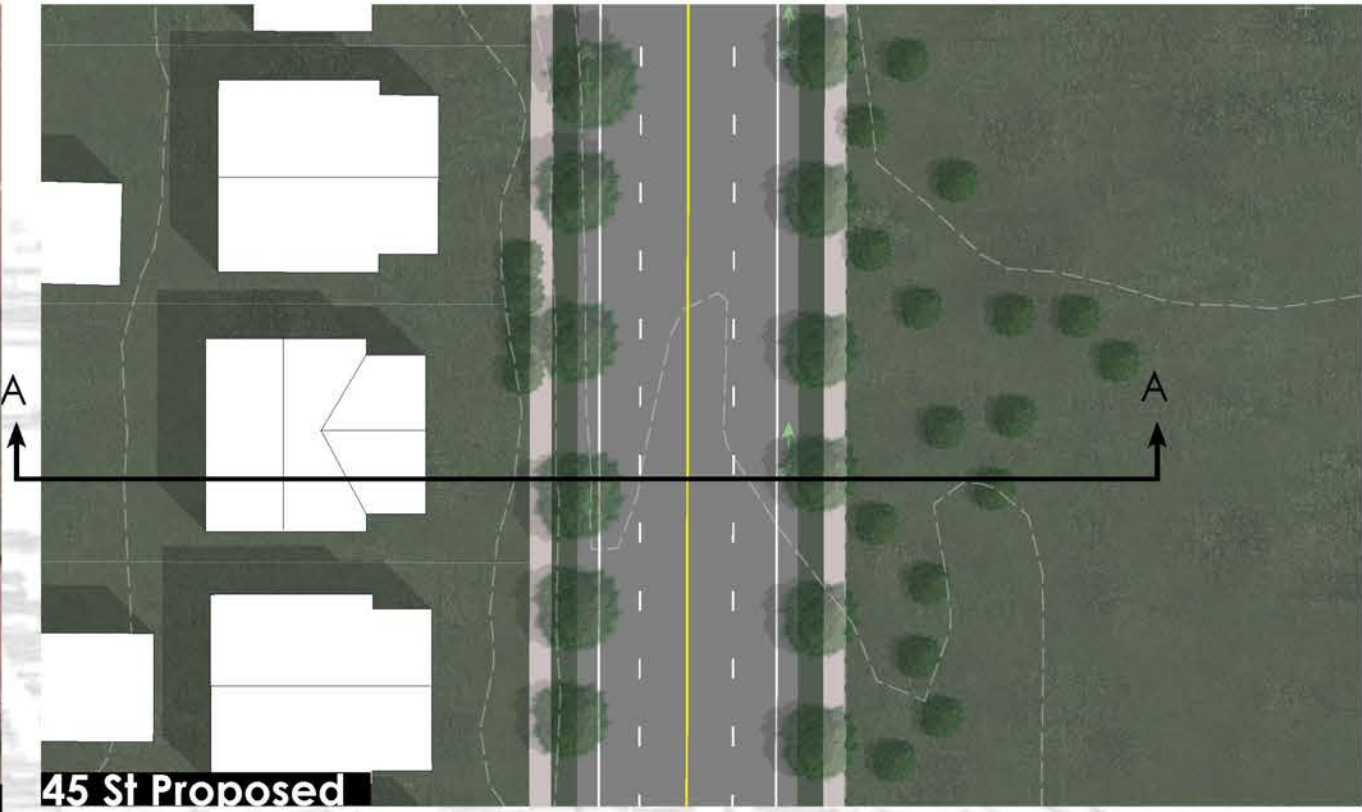
STRATEGIES

- i Bike lanes on direct route streets and proposed shared pathways
- ii Widened pedestrian walkways, plants trees, install planters, benches, garbage cans





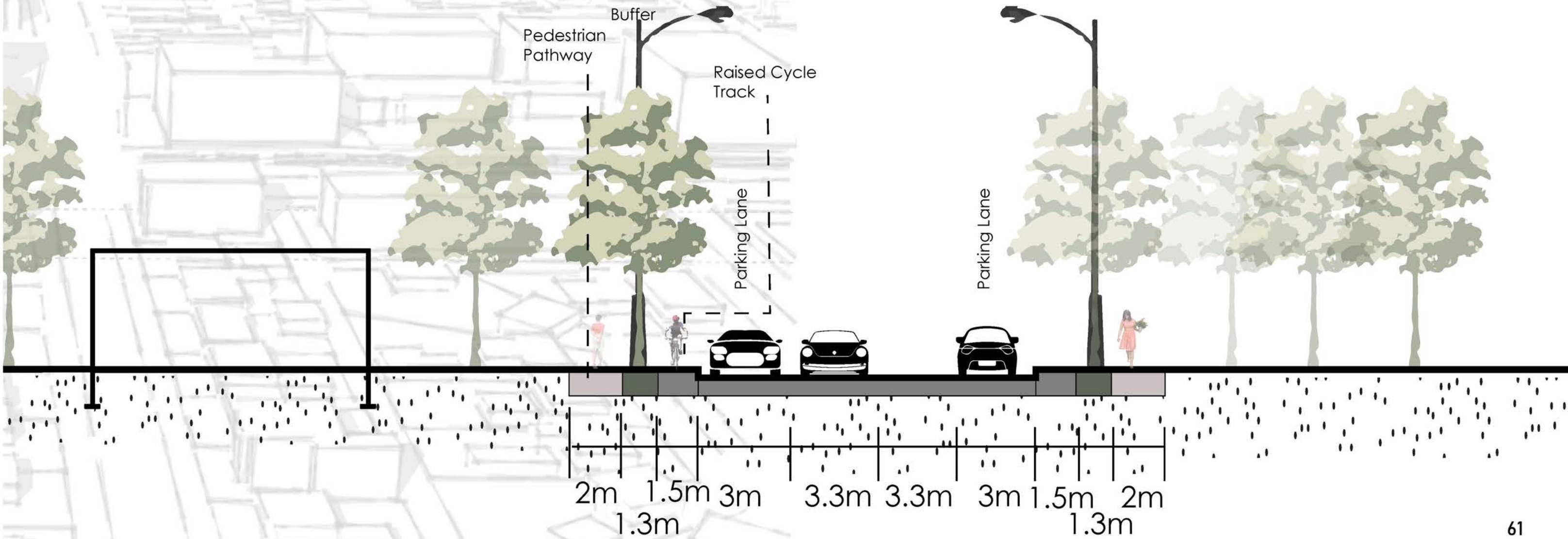
Credit: Google maps



45 St Proposed



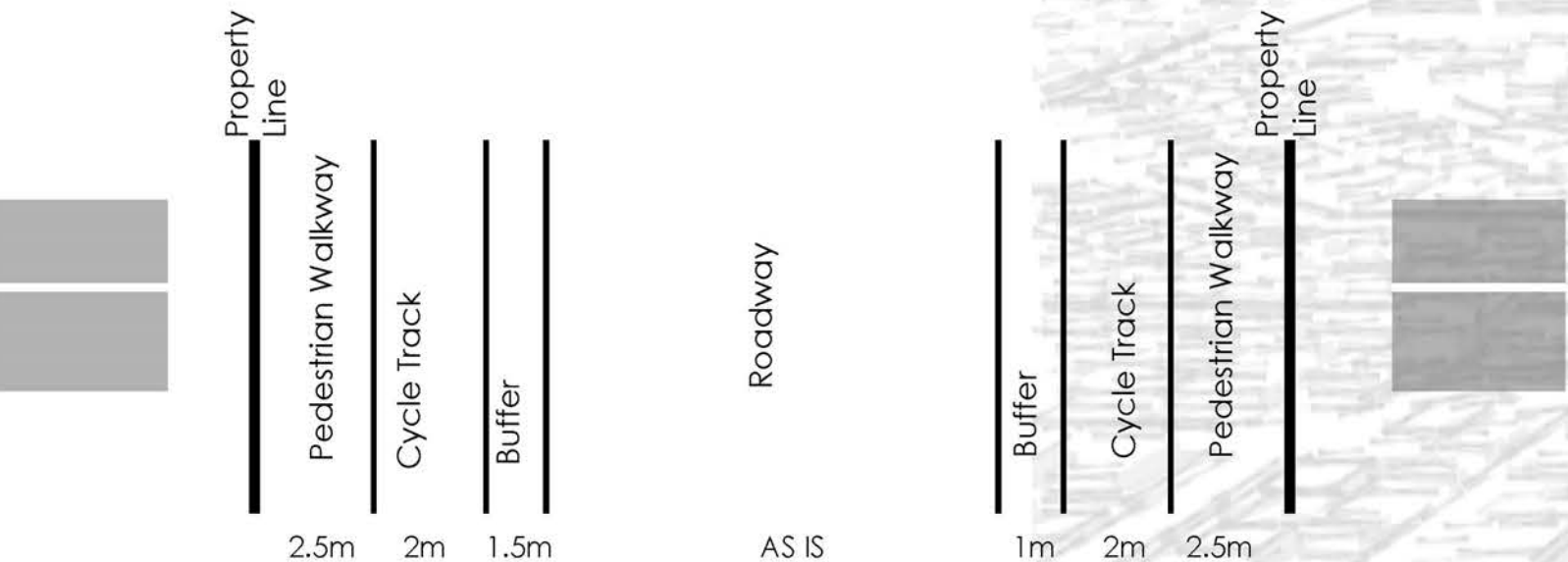
45 St Rendering



DESIGN GUIDELINES

17 Ave Shared Pathways

- Pedestrian Pathways are to start right at property line as shown below and are to be 2.5 metres wide or 2 metres wide where space is limited as is recommended by complete streets guidelines for busier roads. 17 ave and 37 St being Arterial and Neighbourhood Boulevards, respectively.

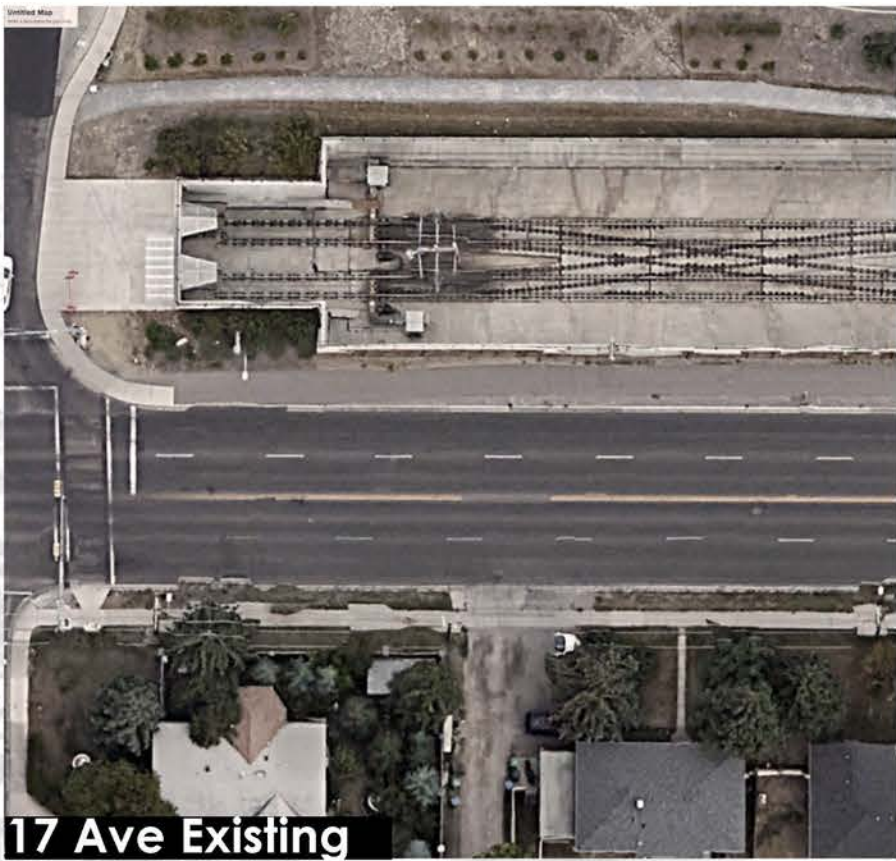


- Cycle tracks and pedestrian pathways are to be on a shared path with paint lines separating them. Cycle tracks must be 2 metres wide where space permits as recommended by NACTO (National Association of City Transportation) and the Complete Streets Guidelines.

- Moving Traffic lanes will remain as is. There is generally enough room between the curb and property lines, therefore there is no need to reduce the lane widths.

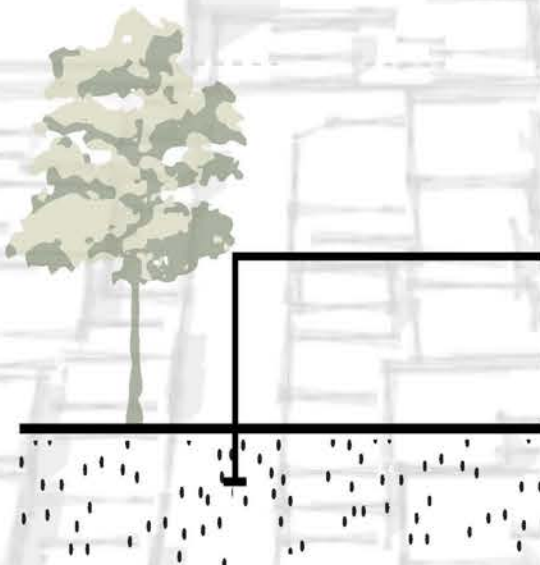
- Trees are to be planted in the buffer space half the maximum canopy spread apart depending on the species. So if Tree X has a maximum spread of 30 metres at maturity, the next tree should be planted 15 metres away (City of Calgary).

- There will be no trees on the south side of 17 Ave because of the utility poles. Instead, Planters will be installed on south side of 17 Ave to shield pedestrians from traffic as well to improve the aesthetic of pathway.



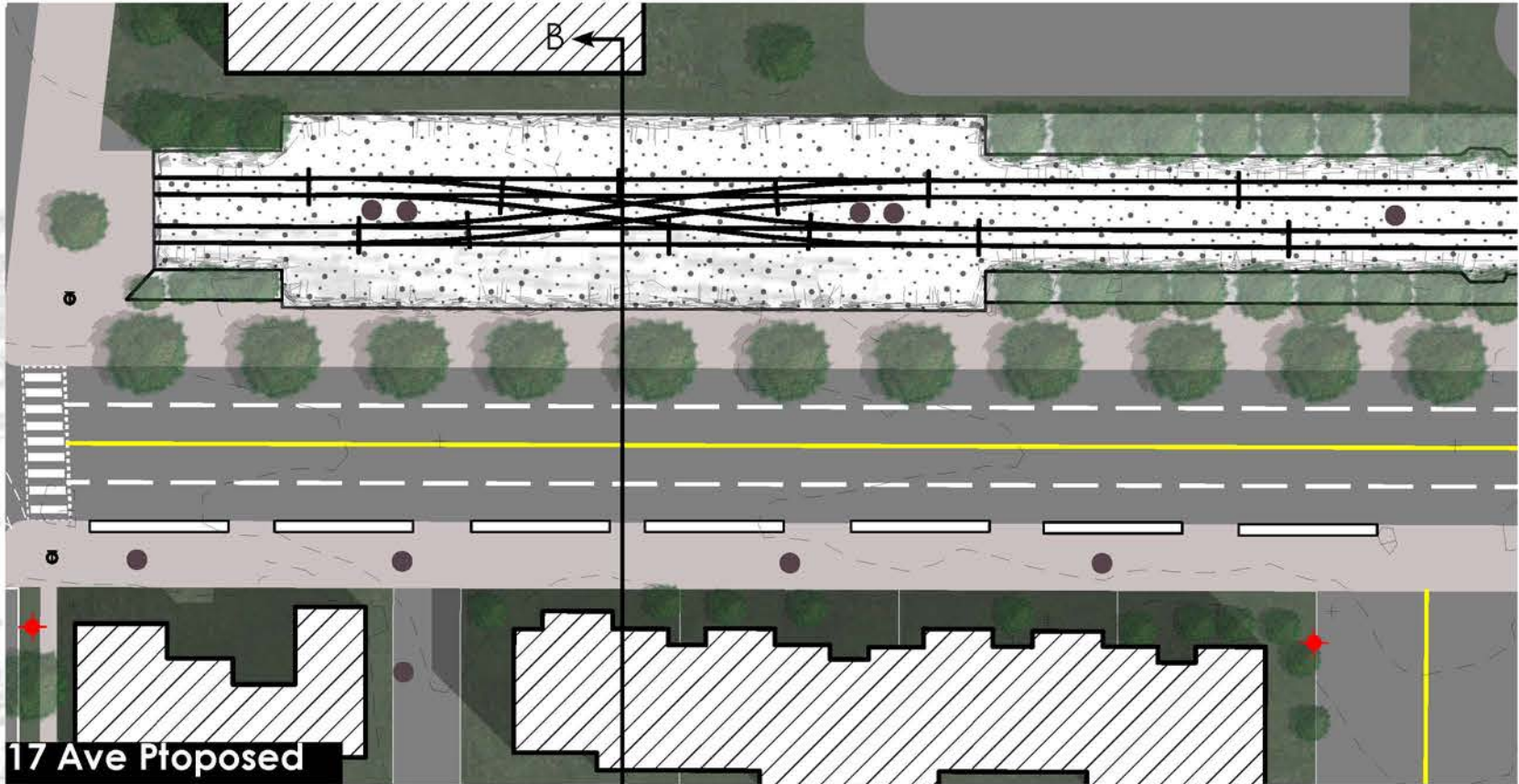
STRATEGIES

- i Bike lanes on direct route streets and proposed shared pathways
- ii Widened pedestrian walkways, plants trees, install planters, benches, garbage cans





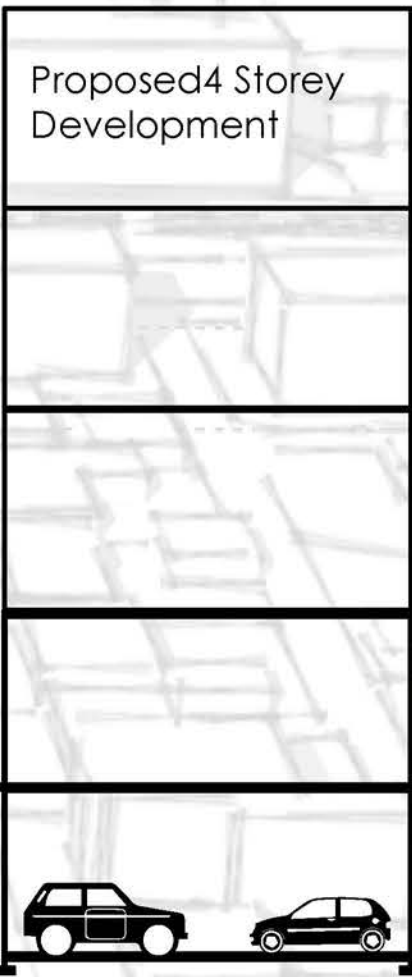
Credit: Google maps



17 Ave Proposed



Facing West



Proposed 4 Storey Development

Utility Pole

Shared Pathway

Planter

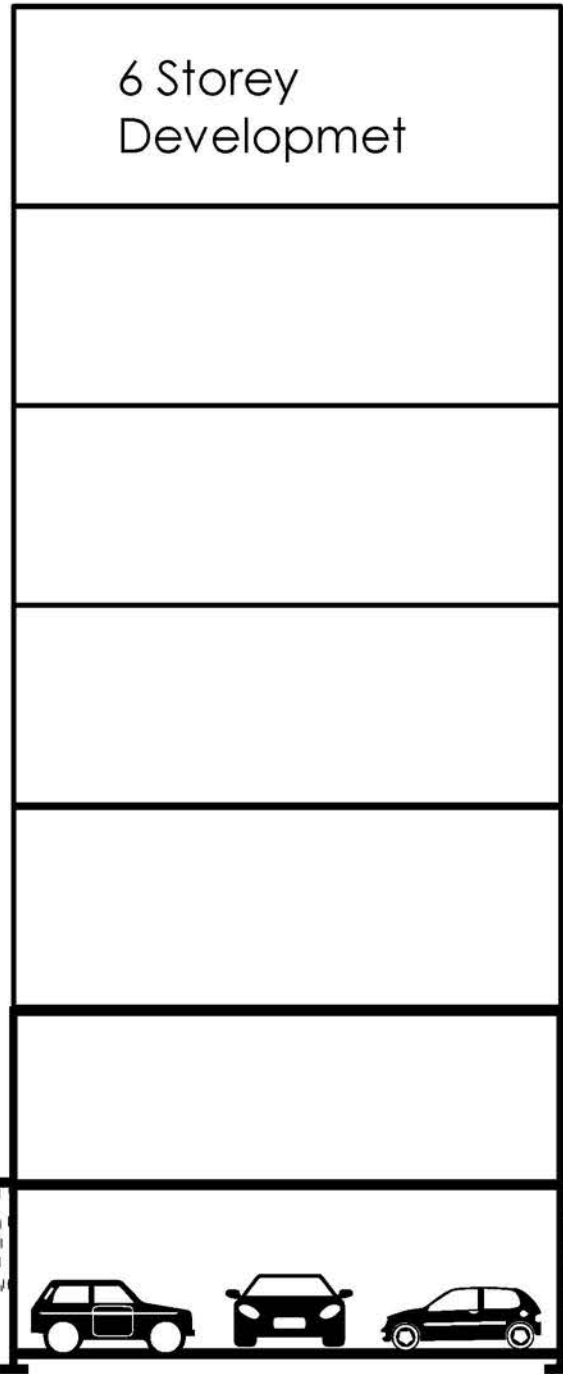
Utility Pole

C-Train

6m

14m

4.3m

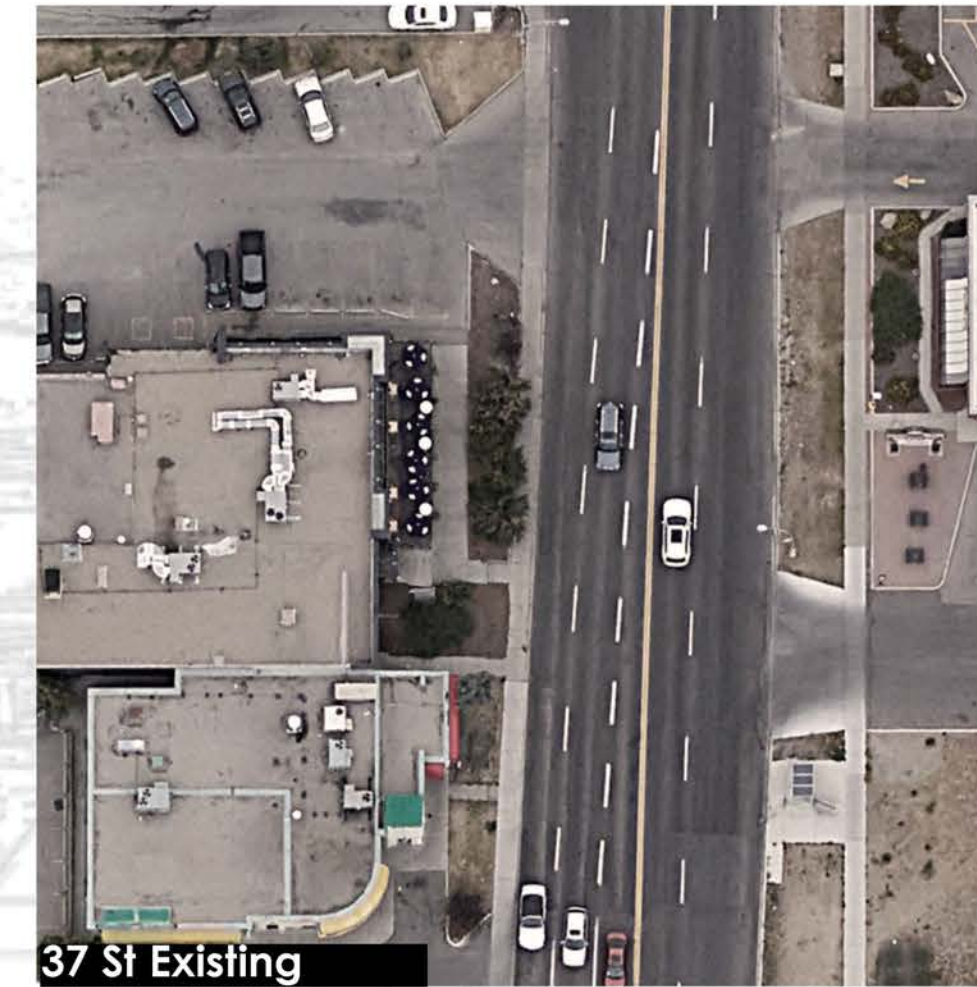
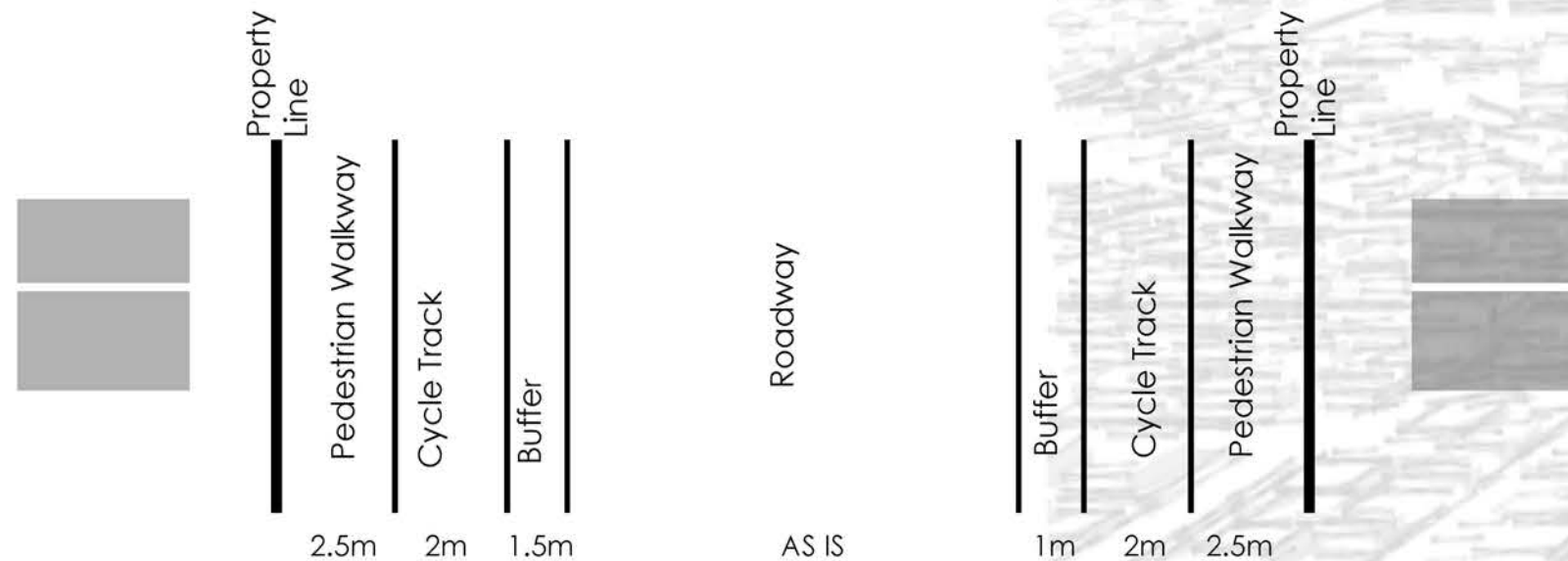


6 Storey Development

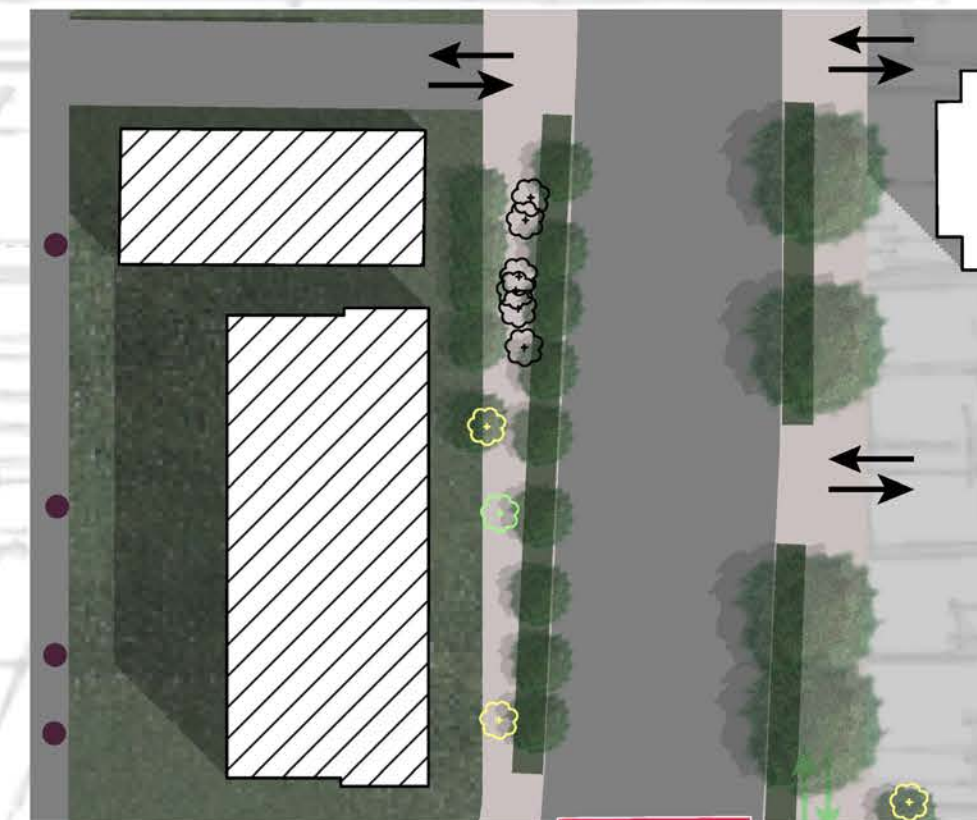
DESIGN GUIDELINES

37 Ave Shared Pathways

- Pedestrian Pathways are to start right at property line as shown below and are to be 2.5 metres wide or 2 metres wide where space is limited as is recommended by the Complete Streets Guidelines for busier streets, 37 St being a Neighbourhood Boulevard.



- Cycle tracks and pedestrian pathways are to be on a shared path with paint lines separating them. Cycle tracks must be 2 metres wide where space permits and minimum 1.5 metres where there is no room as recommended by NACTO (National Association of City Transportation) and the Complete Streets Guidelines. The shared path north of 17 Ave on the east side of 37 St shall have a two-way cycle track as space is limited on the west side of the street.
- Moving Traffic lanes will remain as is. There is generally enough room between the curb and property lines, therefore there is no need to reduce the lane widths.
- Trees are to be planted in the buffer space half the maximum canopy spread apart depending on the species. So if Tree X has a maximum spread of 30 metres at maturity, the next tree should be planted 15 metres away (City of Calgary).
- Planters will be installed where space permits to shield pedestrians from traffic as well to improve the aesthetic of the pathways.





Credit: Google maps

STRATEGIES

- i Autonomous shuttle to provide first and last mile trip which is less expensive to operate and makes sense in low rider-ship areas
- ii Bike lanes on direct route streets and proposed shared pathways
- iii Widened pedestrian walkways, plants trees, install planters, benches, garbage cans

An Autonomous shuttle shall provide service to areas of the GRW site which have insufficient public bus service as well as those too far from the LRT stations. The shuttle will run from one LRT station to the other. The shuttle is the first ever fully autonomous electric vehicle to provide servicing in the confluence district in Lyon, France. We believe this shuttle would be appropriate in providing the first and last trip to the LRT stations as well as provide alternate mobility services for older adults. The shuttle is 2 metres wide, 4 metres long and 2.11 metres high. It is compact and safe enough to travel in the proposed pedestrian pathways if traffic on the proposed route is heavy.

Autonomous shuttle route



4km Route

Will take roughly 7 minutes without traffic

Top speed 45km/h

15 passengers at a time

4 stand, 11 sit



The NAVLY shuttle.
Credit: Jean-Philippe Ksiazek /Afp/Getty

▲ LRT Stations



The NAVLY shuttle.
Credit: Jean-Philippe Ksiazek /Afp/Getty

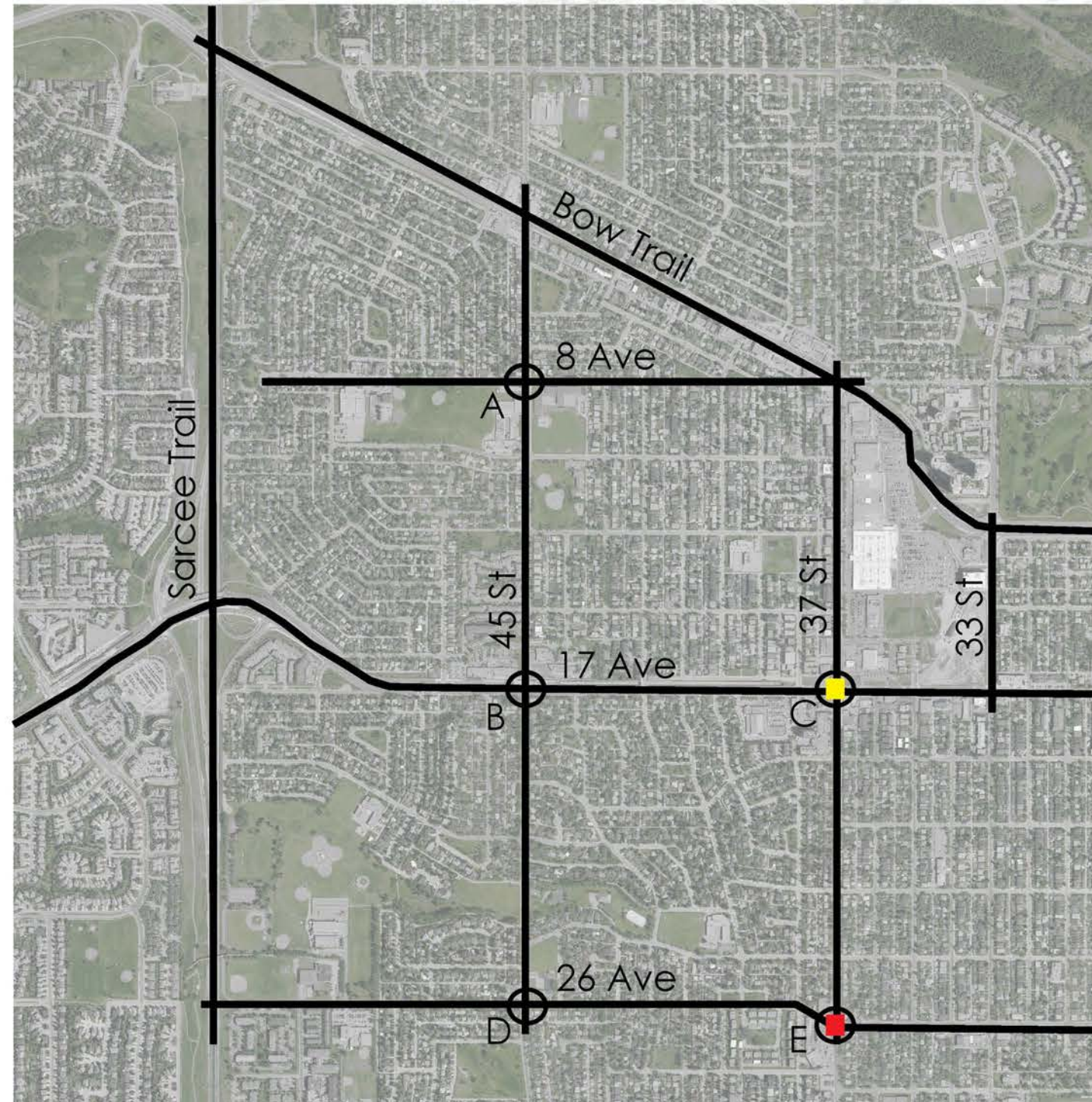
Intersections And Traffic Calming

WHAT WE HEARD FROM OUR OPEN HOUSE

- i Intersections are unsafe for pedestrians and cyclists, can use improvements- Intersections A, B, D
- ii Motorists do not follow speed limits on 45th Street or slow down at certain intersections

STRATEGIES

- i Widen sidewalks to give pedestrian more space
- ii Raised pedestrian crosswalk, Install flashing lights
- iii Use trees and planters as buffers
- iv Use trees to create an “edge effect”. Trees planted on either side of a street create an implied wall condition which makes motorists perceive a lane to be narrower, hence slowing down
- v Improved signage, street markings, bike signals



FROM OUR ANALYSIS

PEDESTRIAN ACCIDENTS 1996-2012

■ Intersection C
24 accidents
3 major injuries
17 minor injuries
1 death
3 no injuries

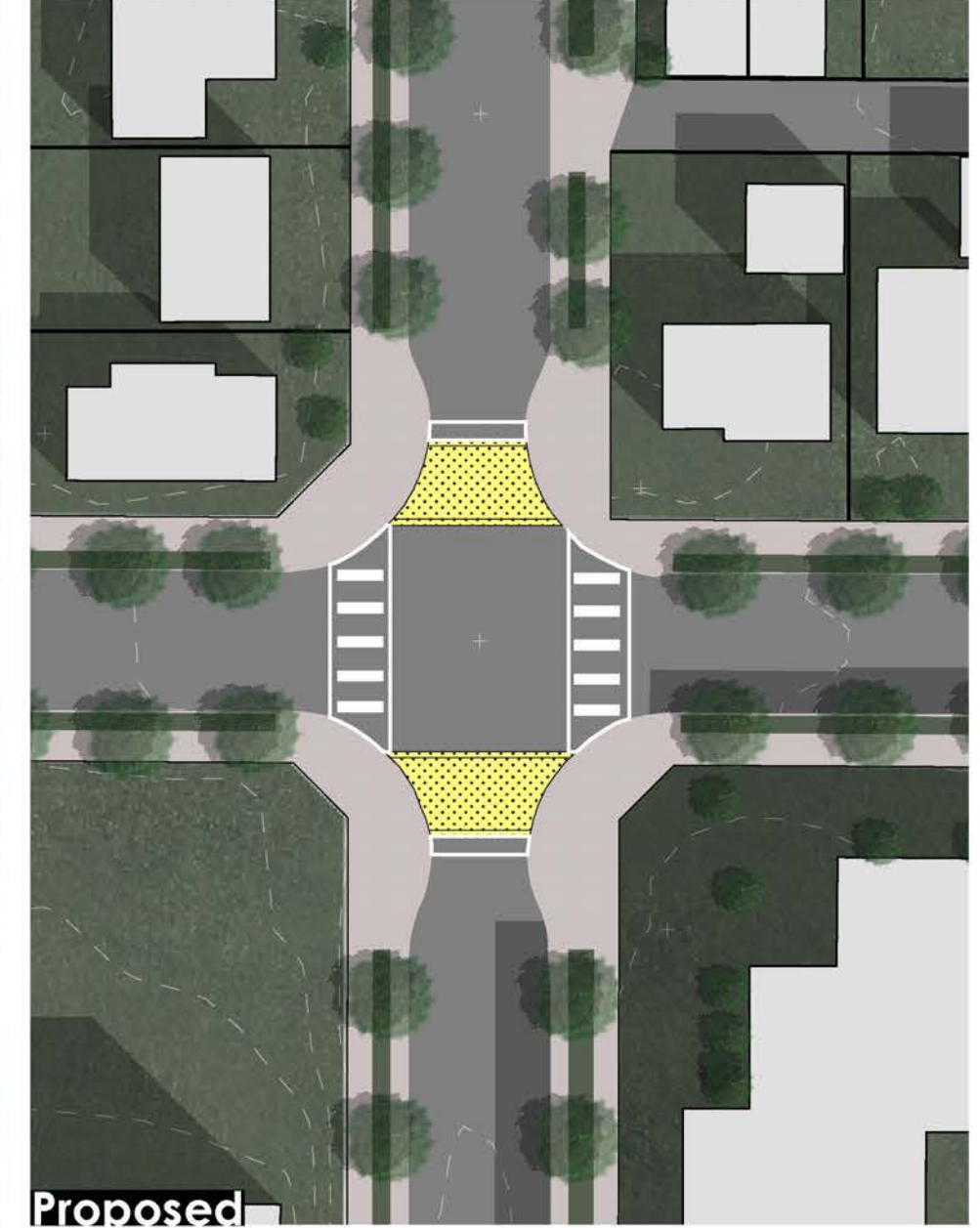
■ Intersection E
6 accidents
2 major injuries
4 minor injuries

Intersection C had the highest vehicle-pedestrian accidents between the period of 1996 and 2012 according to City of Calgary documents. Intersection C is where an arterial street (17 Ave) meets a neighbourhood boulevard (37 St) and is unsafe for pedestrians due to the high volume of traffic.

DESIGN GUIDELINES

Intersection A - 45 St and 8 Ave

- The pedestrian pathways around intersections are to be widened from curb to property line so that there is more room for pedestrians. The current pedestrian pathways are very narrow and put pedestrians in danger of collisions with motorists.
- Install raised crosswalks and extend the curbs to connect sidewalks on either side as well as act as a traffic calming measure as there are many playground zones and schools along 45 St. The extended curbs narrow the roadway to force motorists to slow down.
- Install pedestrian activated crosswalk lights that will alert motorists when a pedestrian is crossing the intersection. These crosswalk lights have been known to be successful across the city as they have helped reduced the number of collisions between motorists and pedestrians.
- Crosswalks and lanes are to be painted and be visible at all times. There should be clear signage alerting motorists about presence of pedestrians at the intersection.
- Trees are to be planted close to intersections to act as buffers between motorists and pedestrians as well as to act as traffic calming measures via the edge effect which creates the perception of narrower lanes, forcing motorists to slow down.
- Speed limit signs are to be installed on in the centre of the street as is done on Paul Anka Drive in Ottawa. This makes the sign visible for motorists to see and has been successful in Ottawa.



07 APPENDIX + REFERENCES

Appendix A: Feedback from Community Workshop

The following is a list of the responses gathered from residents at the community workshop held at the Glendale Community Association Hall on Saturday, March 2, 2019.

Challenges and Issues:

What are the main issues today with current infill and densification practices?

- There should be no development (duplex nor mid rise) in Westgate.
- Illegal suites are an issue, and need to be reported.
- Not an obligation that a 10+ story building needs to be built beside the LRT station.
- High density not acceptable in Westgate / Glendale as it will affect the character of community and have other negative impacts.
- Densification has other potential problems: such as access to the street, congestion.
- Clusters of housing might be an acceptable form.
- Not interested in Ad Hoc, spot zoning.
- No need for apartments inside of community that is already SFD.

What are the main issues with future densification along the main corridors (17th, 37th 45th)?

- Densification leads to parking and traffic concerns.
- It is difficult to get in and out of the community at certain times of the day.
- School zones and pick up areas are exceedingly busy, especially at pick up times.
- 45th can be very busy and parking is often limited
- Four way stops near schools tend to slow down traffic and lead to congestion.
- It is understood that future development along 17th will not be SFD.

Do you feel 45th is a main corridor? If so what enhancements does it need?

- Residents felt that 45 is not a main corridor and adding densification here would lead to greater traffic woes.

Where do you catch transit? What are your main concerns with transit?

- Bus routes within the community need to be improved.
- LRT is a nice form of transit and offers easy access to downtown.
- Walking is OK, but crossing large roads (such as Bow Trail and Sarcee) is not pleasant.

What are your main concerns with driving and parking?

- When 17th is busy (and other roads) drivers often cut through the neighborhood and speed unnecessarily.
- Speed bumps do not really work - firetrucks, plows, noise concern (slowing down and speeding up).
- Schools are traffic magnets.

Are there streets that would benefit from traffic calming?

- Yes, two streets near Schools that offer a shortcut for parents picking up children need street calming - as the parents often speed.
- The most common streets identified for traffic calming were: Warwick Drive SW and Gateway Drive SW.

What types of housing types are missing in the community?

- Some form of tiny housing or laneway housing could be considered. Laneway housing would help residents age in place.
- Laneway housing or similar would need to take into consideration: height, viewsheds affected, losing privacy in backyard.
- Cluster housing could be acceptable in certain areas.
- Large scale developments are not acceptable as they negatively affect adjacent properties.
- Co-op, shelter, non market housing could be an option. Affordable housing stock is needed. This housing also needs access to transit.

Appendix A: Feedback from Community Workshop (continued)

Challenges and Issues: (continued)

Where do you get your groceries? What kinds of commercial land uses do you think are missing in the community?

- Safeway, Coop, and Superstore were listed (within 10 minute drive).
- Coffee shops are great, but not more 24 hr coffee shops.

Any other challenges?

- It would nice to activate some of the parks, with minor improvements. Improvements could include green houses, benches, picnic tables, signage and new trees (or other plants). A dog specific park is needed in the community.

Future Possibilities and Opportunities:

What are the special places in the neighborhood?

- Overall the community is great; it offers proximity to Downtown and easy access to the mountains. The existing single family character of the community is great.
- Pocket parks - good use.
- Edworthy Park
- School Yards / athletic parks.
- Community associations (and surrounding grounds).
- The Hub
- Howie's Pizza
- Shaganappi Grocery
- Sunterra Market

Where do you walk/bike? Where would you like to walk/bike? What are your main concerns for walking and cycling?

- Many of the current bike lanes are not protected (just signage). Also, some bike lanes end at areas that require you to cycle on busy roads.
- Needs to be a bike connection that goes from North of community all the way to the Glenmore Reservoir.
- It is nice to cross Bow and be at Edworthy Park.

- The pathway and green areas immediately West of Sarcee are nice to use, but need to be more connected to this community.

What are the outside resources / amenities the community should connect to?

- Edworthy Park, Shaganappi Point Golf Course,
- Green pathway on West side of Sarcee
- Optimist Athletic Park

What areas do you consider appropriate for infill and sensible development?

- The area along the LRT line is appropriate for this, however development should not be more than 4-5 stories.
- Densification along major corridors is more acceptable (17th and 37th).
- Densification on the edges is actually beneficial for the neighborhoods, as it helps cut the noise from busier streets.
- The community is not really interested in development along 45th - too many parking issues / traffic.
- Issue of some properties in the community that have driveways and laneways - this is awkward and wastes space.
- New infill that is semi attached has broad implications for parking as the property becomes more dense and has more vehicles.
- New infill can be obtrusive and not compatible with existing SFDs, which are mostly one storey ranchers.

Do you see an opportunity for more creative housing types? Are you supportive of laneway housing and secondary suites? What issues would need to be addressed for these to be a successful addition to your community?

- Laneway housing and granny suites could be considered.
- Laneway housing is of interest but height and crowding are the big issues. Laneway housing should only be occupied by owners. Rentals bring on potential parking issues.

Appendix A: Feedback from Community Workshop (continued)

Future Possibilities and Opportunities: (continued)

What kinds of improvements would you like to see to the parks and open spaces?

- Many of the pocket parks are single use, and lack benches/picnic tables, community gardens or playgrounds. That being said, the parks are great in the community, even if they are not programmed or multi purpose - this community loves its parks, even the small ones.
- Green is good for aesthetics, providing space for kids and dogs.
- Perhaps a fitness park could be an idea for the community.

What kind of streetscape improvements do you think are necessary and where?

- The addition of trees and greenspace along major streets would be beneficial, however any new trees or plants would need to be salt resistant.

Any other opportunities?

- Redevelopment is really needed for the blank area around Westbrook station.
- Safe and secure bike storage is needed at LRT stations.
- Coffee bar / cafe would be nice at 45th LRT station.
- Walking infrastructure needs to be better.
- Parking area at the Westbrook LRT could be considered.
- Dog specific parks are needed.

REFERENCES

Answer Plane. (n.d.). Natural Playground Ideas For Backyards. Retrieved from <https://www.answerplane.com/natural-playground-ideas-backyard/>

Berger-Schauer, C., & Berger-Schauer, C. (2017, December 11). 5 Bike Infrastructure Solutions to Make Cycling Easier. Retrieved from <https://www.bikecitizens.net/bike-infrastructure-even-more-cycle-comfort/>

CCBG Laneway Master Plan (2016, February). The Laneway Project. Retrieved from <https://static1.squarespace.com/static/5420dd38e4b0968055cfdb19/t/56b5012e4c2f852cb-f6778e2/1454702898306/CCBG+Master+Plan+FINAL+Feb+2016.pdf>

Cityscape Residential. (2015, December 9). Springhurst area to get 261-apartment complex. Retrieved from <http://cityscaperesidential.com/springhurst-area-to-get-261-apartment-complex/>

City of Calgary Complete Streets (2011, October 26). Retrieved from <http://www.calgary.ca/Transportation/TP/Pages/Planning/Calgary-Transportation-Plan/Complete-Streets.aspx>

City of North Vancouver. (2014). Moodyville: East 3rd Street Area: Development Permit Area Guidelines. Retrieved from <https://cnv.org/-/media/city-of-north-vancouver/documents/official-community-plan/moodyville-development-guidelines.pdf>

City of Toronto: Changing Lanes – Laneway Suite Guidelines (2018, February). Retrieved from <http://www.summerhilltoronto.ca/assets/uploads/ChangingLanesGuidelines-DRAFTHandoutFEB262018.pdf>

City of Vancouver Land Use and Development Policies and Guidelines: Laneway House (LWH) Guidelines (2013, July 9). City of Vancouver. Retrieved from <https://vancouver.ca/files/cov/L007-vancouver-laneway-house-guidelines-2013.pdf>

City of Westminster, Colorado. (n.d.). Windmill Community Garden. Retrieved from <https://www.cityofwestminster.us/ParksRecreation/Parks,TrailsOpenSpace/CommunityGardens>

CMG. (n.d.). City Slickers West Oakland Farm Park. Retrieved from <https://www.cmgsite.com/project/west-oakland-urban-farm-and-park/>

County of Fairfax, Virginia. (2016, November 3). Lofts at Reston Station to Bring More Housing Near Wiehle-Reston East Station. Retrieved from <https://www.fairfaxcounty.gov/news2/lofts-at-reston-station-to-bring-more-housing-near-wiehle-reston-east-station/>

Creating Laneways People Love (n.d.). The Laneway Project. Retrieved from <http://www.obiaaconference.com/UploadedFiles/MP2%20-%20Laneways%20Untapped%20Potential.pdf>

Dalton Enterprises Inc. (2017, May 15). New Pickleball Surface System. Retrieved from <http://daltoncoatings.com/about-us/news?id=564212/new-pickleball-surface-system>

Diseno Interior. (n.d.). Berlin Mitte Leipziger Strasse Komplex. Retrieved from <https://disenointerior.club/KDV-DisenoInterior/apartamentos-berlin-mitte-plan-hacia-embellecer-domicilio/>

Family Adventures in the Canadian Rockies. (2015, July 23). An Inside Look at WinSport Bike Camps at Canada Olympic Park. Retrieved from <http://www.rockiesfamilyadventures.com/2015/07/an-inside-look-at-winsport-mountain.html>

Ib + a Architecture. (2019). 377 2nd Street. Retrieved from <http://www.ibadesign.com/work/377-2nd-street>

Ink, S. (2015, July 24). Streets. Retrieved from <https://nacto.org/publication/urban-street-design-guide/streets/>

Islas, J. (2016, December 26). Downtown Santa Monica to Get Pedestrian Scrambles at 11 Intersections. Retrieved from <http://www.santamonicanext.org/2016/02/downtown-santa-monica-to-get-pedestrian-scrambles-at-11-intersections/>

JTH Lighting Alliance. (n.d.) I-235 Pedestrian Bridge. Retrieved from <https://www.jthlighting.com/project/i-235-pedestrian-bridge>

Urbanize Los Angeles. (2017, September 14). Van Nuys Development to Break Ground in Early 2018. Retrieved from <https://urbanize.la/post/van-nuys-development-break-ground-early-2018>

Laneway Housing How-To-Guide (2016, November). City of Vancouver. Retrieved from <https://vancouver.ca/files/cov/laneway-housing-guide-2018.pdf>

Lumion Official Forum. (2017, April 11). Weinstein A + U: 6 Story Apartment Building. Retrieved from <https://forum.lumion.com/gallery/6-story-modern-apartment-bldg/?PHPSESSID=6cc06c3b7dc6b34fa6959d456fdf6e9f>

North Jersey Record. (2019, January 29). Northern Valley Greenway rail trail meeting cancelled. Retrieved from <https://www.northjersey.com/story/news/bergen/2019/01/29/northern-valley-greenway-rail-trail-meeting-cancelled/2710311002/>

Seeking out the city's latest micro-hoods (2018, July 03). Post City Toronto. Retrieved from <https://www.postcity.com/Eat-Shop-Do/Shop/July-2018/Seeking-out-the-citys-latest-micro-hoods/>

Velo Solutions. (n.d.). Asphalt Pump Track. Retrieved from <http://webuildparks.com/velosolutions/>