

# ST. GEORGE RAINWAY

## Executive Summary

### About the St. George Rainway

St. George Rainway will deliver core utility services of rainwater management in the neighbourhood. Road space will be reallocated to green rainwater infrastructure (GRI), urban nature, public space improvements and sustainable transportation. The project is guided by 4 principles:



#### Nature

*Let nature lead the design*



#### Mobility

*Design for all ages and all abilities*



#### Community

*Focus on function and accessibility*



#### Learning

*Integrate formal and informal learning*



Example of green rainwater infrastructure and active transportation improvements at 53<sup>rd</sup> Avenue and Prince Edward Street, Vancouver.

### Location



### What is a Rainway?

A multi-block series of GRI designed to acknowledge a historic stream. The green rainwater infrastructure collects and cleans rainwater from surrounding areas such as streets, sidewalks, and laneways to honour the lost stream.

### Objectives

#### Green Rainwater Infrastructure (GRI)

- Use GRI to reduce combined sewer overflows, decrease pressure on the pipe system, and treat runoff pollution in accordance with the City of Vancouver's targets and regulatory requirements.
- Design the Rainway to create visual and educational connections to the historic creek.
- Incorporate elements and opportunities for placemaking, artistic expression, education, and informal play into the project design.

#### Transportation

- Make cycling safe, convenient, comfortable and fun for **All Ages and Abilities (AAA)**, including families with children, seniors, and new riders.
- Improve comfort and accessibility for people walking or rolling.
- Accommodate the loading and access needs of adjacent businesses.
- Reallocate road space for GRI
- Ensure adjacent residents can continue to park within a reasonable walking distance of home.



# ST. GEORGE RAINWAY

## Background | Policy Context

These are the primary City policies and strategies guiding the development of the St. George Rainway.

### The Rain City Strategy

Strategy goals and objectives:

#### Water quality:

- Improve and protect Vancouver's water quality.
- Increase total green area that treats urban rainwater runoff.

#### Climate resilience:

- Increase Vancouver's resilience through sustainable water management.

#### Livability:

- Enhance Vancouver's livability by improving natural and urban ecosystems.
- Mitigate urban heat island effect.

#### Performance target:

- Capture and clean a minimum of 90% of Vancouver's average annual rainfall volume.



### Climate Emergency Action Plan

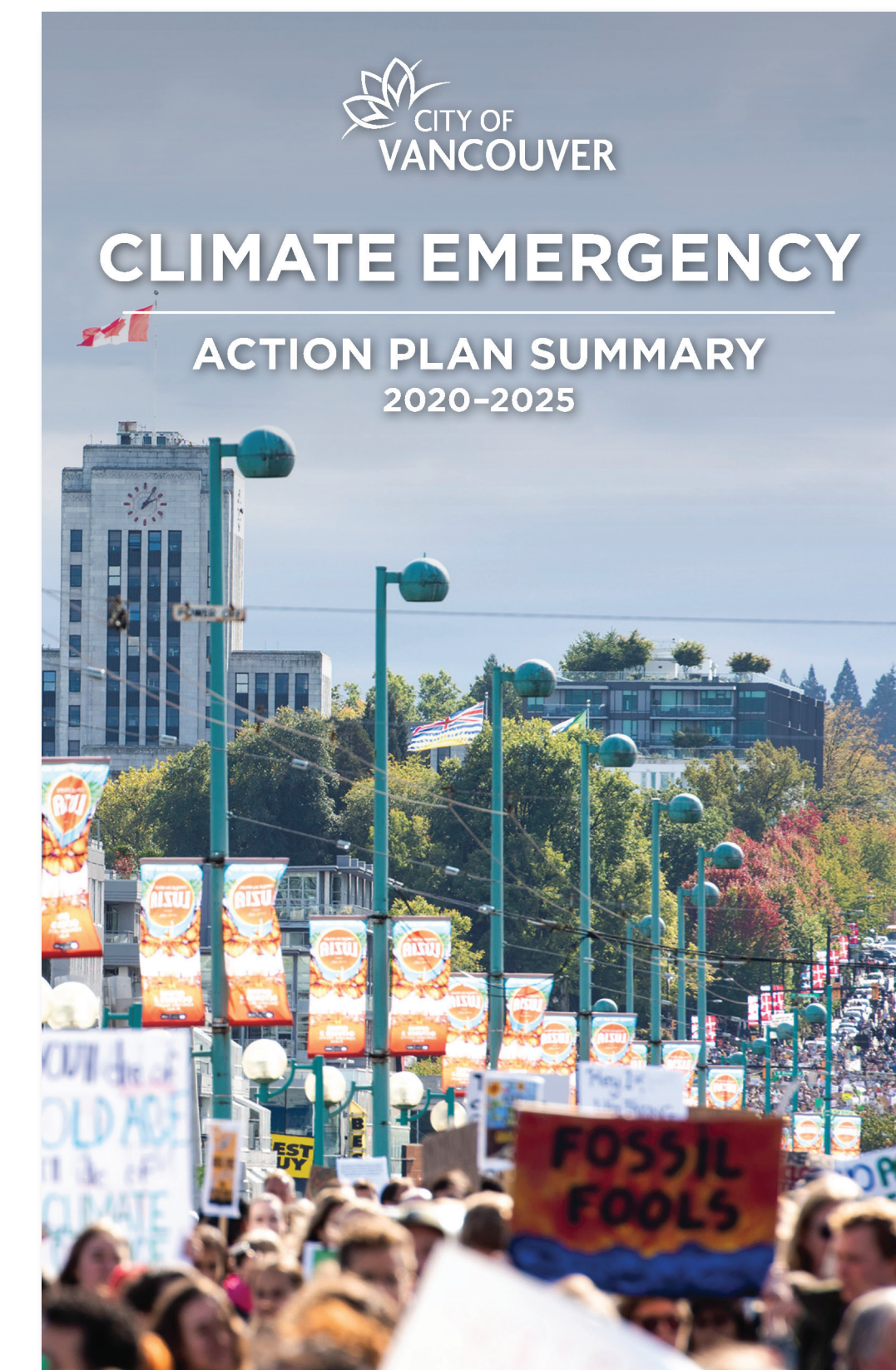
Targets relevant to this project:

#### Carbon sequestration:

- Remove and sequester at least 1 million tonnes of CO<sub>2</sub> by 2060.

#### Sustainable transportation:

- 90% of people will live within an easy walk/roll of their daily needs.
- 2/3 of all trips will be by active transportation and transit.



### Transportation 2040

Policy Directions:

#### Walking (with or without mobility aid):

- Make walking safe, convenient, comfortable, and delightful.
- Ensure streets and sidewalks support a vibrant public life and encourage a walking culture, healthy lifestyles and social connectedness.

#### Public space:

- Streets and sidewalks are not just spaces to move through, but places to be.

#### Cycling:

- Make cycling safe, convenient, comfortable, and fun for people of all ages and abilities.



The St. George Rainway is a part of the City's [Capital Plan \(2019-2022\)](#) and will also support the following City of Vancouver & Park Board strategies & motions:

#### Rainwater Management

- [Integrated Rainwater Management Plan](#)
- [Council Motion - Accelerate Combined Sewer Overflow Mitigation](#)

#### Environment & People

- [Climate Change Adaptation Strategy](#)
- [Van Play](#)
- [Urban Forest Strategy](#)
- [Biodiversity Strategy](#)
- [Healthy City Strategy](#)
- [Mount Pleasant Community Plan](#)

#### Streets & Transportation

- [Complete Streets Policy Framework](#)
- [5 Year Cycling Map](#)
- [Council Motion - 11% Road Space Reallocation for people-focused public space](#)



# ST. GEORGE RAINWAY

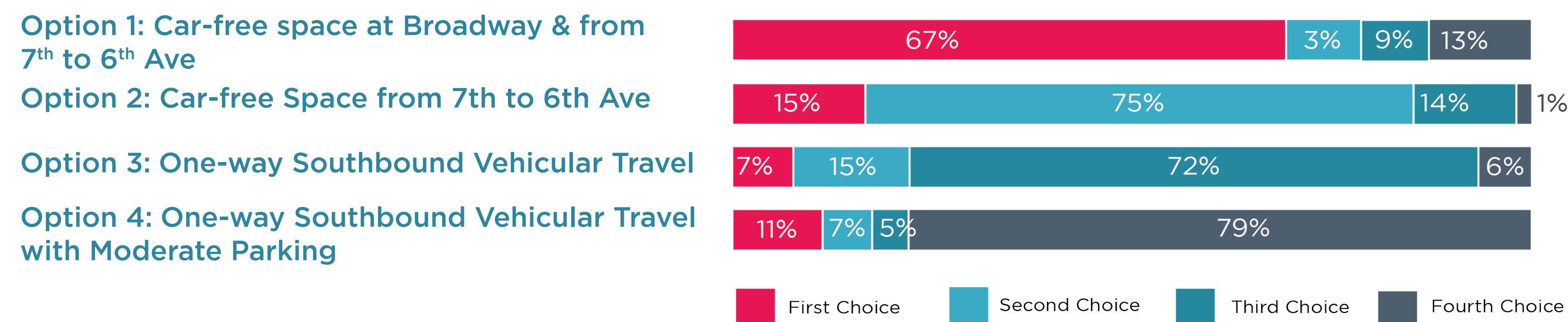
## Background | Phase 3 Engagement Summary

### What we heard

In our third phase of public engagement, we asked you to rank your preferred four street layout options and three concepts for the Green Rainwater Infrastructure for St. George Rainway.

### Street layout options

4 street layout options were presented for the street layout of St. George, from Broadway to 5th Ave, which were ranked as follows:

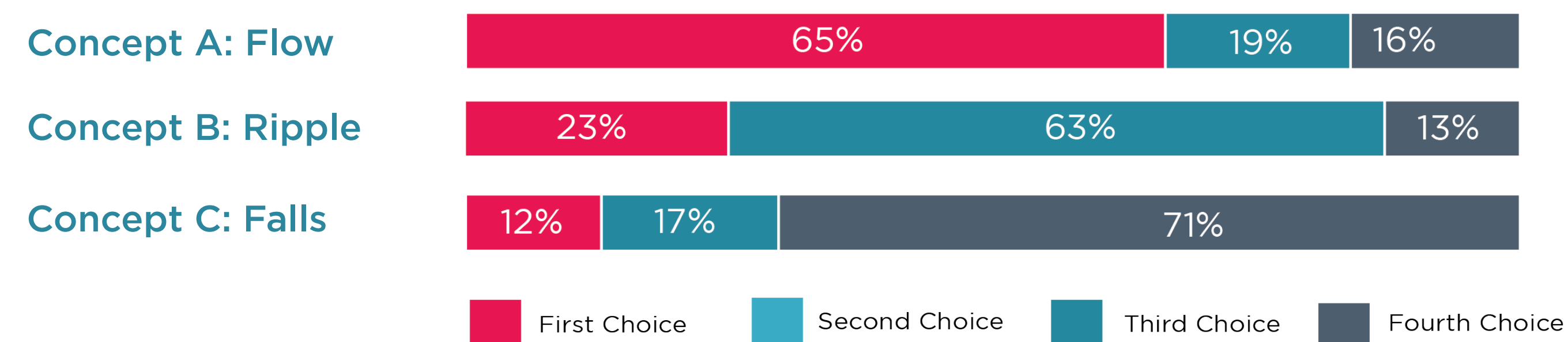


Of the presented options for the street layout, the top ranked was:

**Option 1: Car-free space at Broadway and from 7<sup>th</sup> to 6<sup>th</sup> Ave**

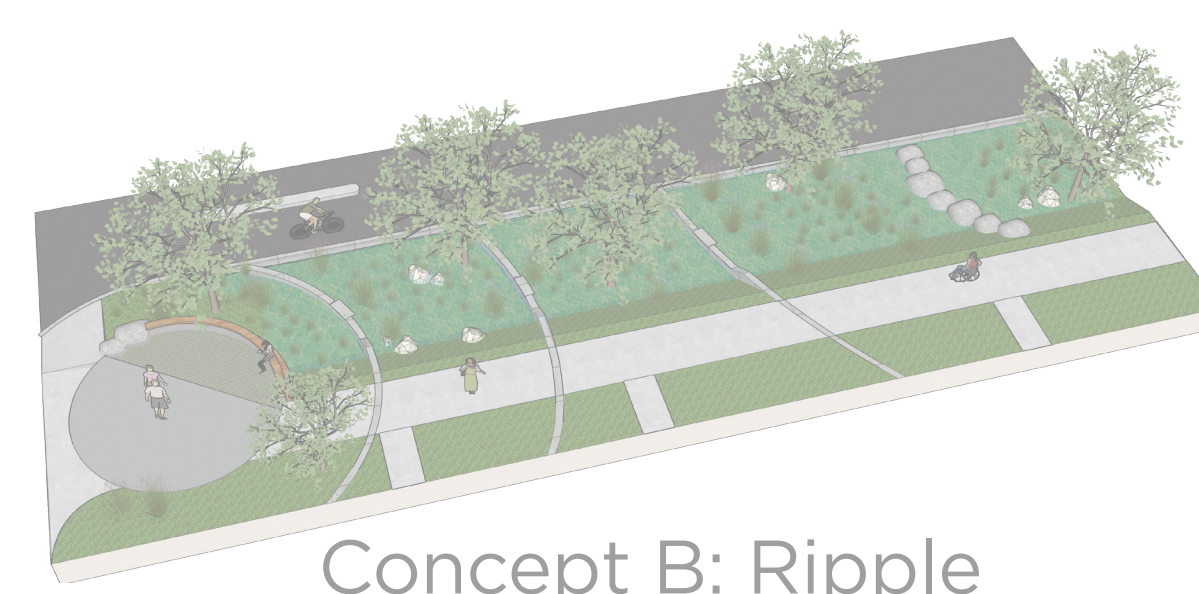
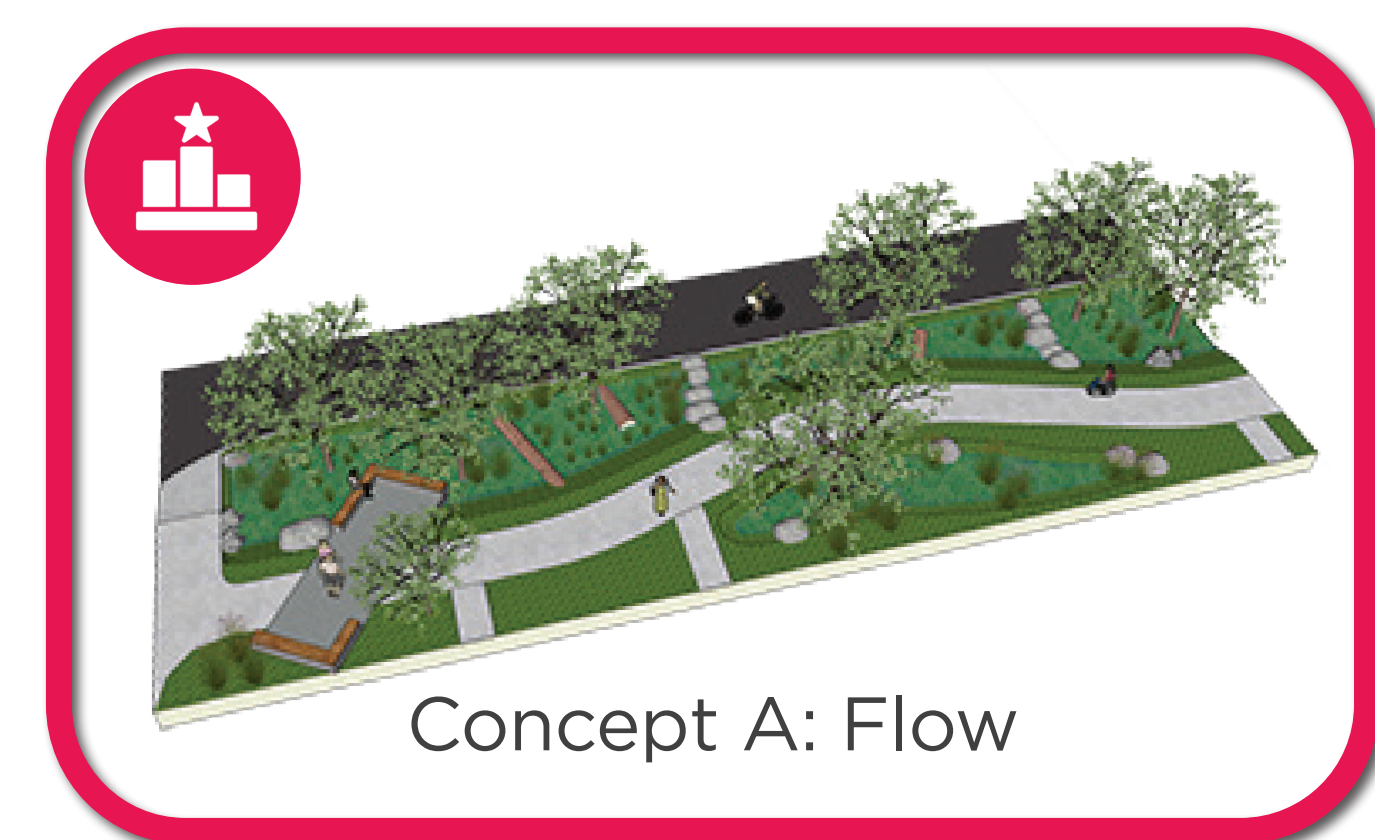
### GRI concept design

The rankings for the three Green Rainwater Infrastructure concepts are::



The top ranked Green Rainwater Infrastructure concept was:

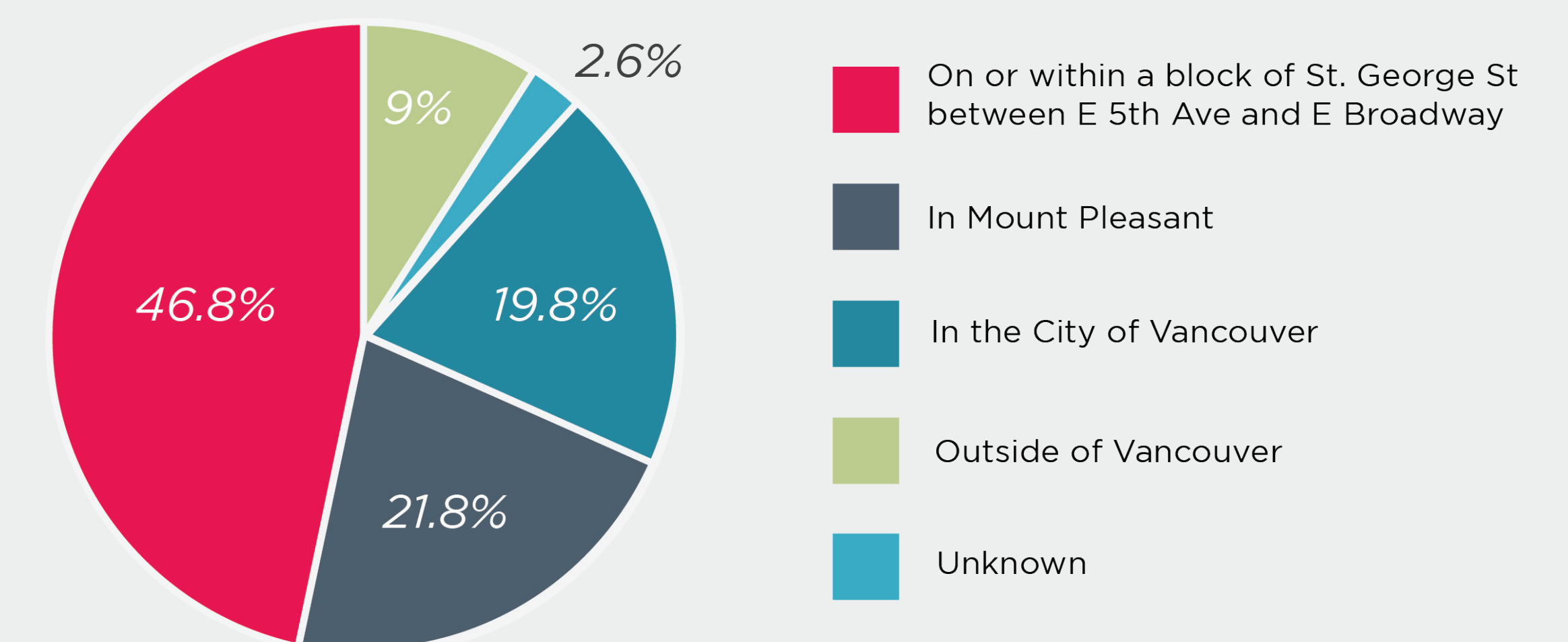
**Concept A: Flow**



### Who we heard from

Over two thirds of the feedback we received in this phase came from locals who would be affected by the project, with 46.8% of survey responses coming from people who live within a block of the project, and an additional 21.8% coming from residents of the wider Mount Pleasant neighbourhood.

Where survey respondents live



### From the community

The rankings were consistent between residents of St. George Street and overall survey respondents, for both the street layout options and the Green Rainwater Infrastructure options. Children and youth also agreed, ranking the GRI options the same way as the adult survey respondents.

This consistency shows a high level of agreement between the various user groups for the Rainway, with children, adults, and neighbours all preferring the Option 1: Car-free space at Broadway and from 7<sup>th</sup> to 6<sup>th</sup> Ave and Concept A: Flow



# ST. GEORGE RAINWAY

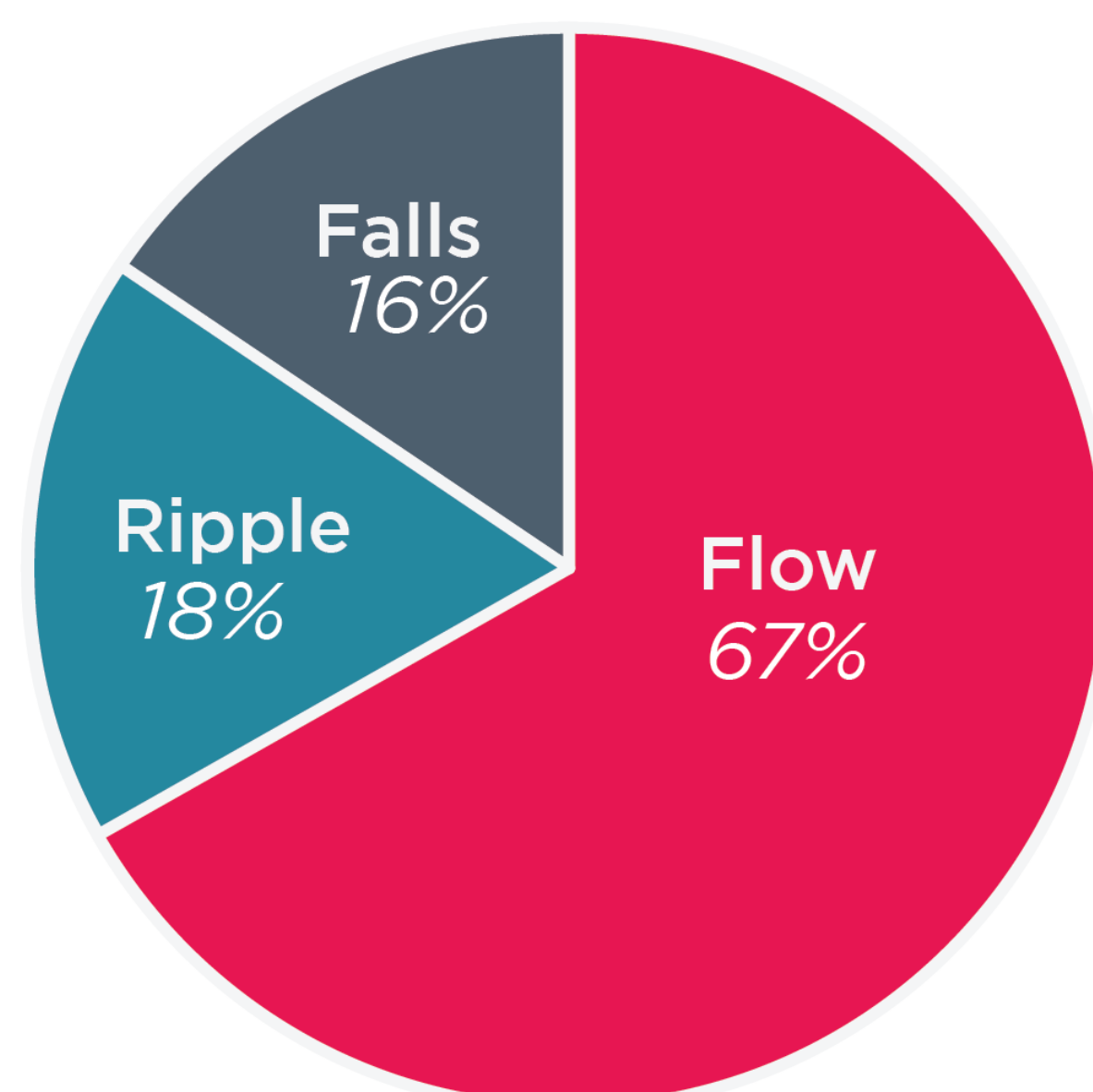
## Background | Youth Engagement

### What we heard from local youth

We asked the kids of the neighbourhood to tell us what they would like to see in the St. George Rainway. We talked to 67 kids at Mount Pleasant Elementary, Florence Nightingale Elementary, and 3 different Brownies and Cub Scouts groups.

Here's what you told us!

Your favourite design for the Rainway was Flow, which was the adults favourite too. The final design is based on Flow, with some changes inspired by the suggestions we got from you and the rest of the neighbourhood.



Favourite GRI design for youth

You had a lot of great suggestions for how to design the Rainway, and we're doing our best to include as much as we can.

"[My favourite part of my collage is] the person in the wheelchair, it represents that everyone deserves to be treated equally and safely."

"We love seeing how much you care about your neighbours, and we're working with some experts to make sure everyone can enjoy the Rainway safely."

"I do not want to see pollution because that would just defeat the purpose!"

"We totally agree! We are hoping to include plenty of garbage cans to help reduce litter, and the rain gardens will clean the water and air to help get rid of pollution in the neighbourhood."

"It could be really cool to see no cars at all in one area and it would improve the air around us too!"

"The Rainway is going to have two areas with no cars, including one right next to Mount Pleasant school!"

"I would like more colour and life."

"Wonderful! We really hope the final design will help bring the colour and life you're looking for. If you have any feedback on how we could do better, ask an adult to help you fill out the survey on our website."

### Student collages

You made collages that showed us what you thought the Rainway could look like. They were full of plants, animals, art, and people enjoying the space. Check out examples of each other's beautiful work!





# ST. GEORGE RAINWAY

## Background | What is Bioretention?

### How does a Rainway work?

The Rainway is inspired by nature and designed to mimic natural water cycles and ecosystem functions.

- 1** Beavers, nature's engineers, have taught us that dams are a good way to slow down the flow of water. The Rainway will use human made **check dams** to slow the flow of rainwater and give it time to clean, cool and absorb.
- 2** Inspired by the headwaters of a stream, **inlets** are areas where rainwater enters into the Rainway.
- 3** Layers of **gravel and rock** underground provide additional storage for rainwater as it slowly re-joins the groundwater system. Providing underground storage helps to prevent flooding and pooling of water above ground.
- 4** **Soils** are natural water filters, removing rainwater pollutants and helping to store it in the ground. Soils also store carbon and are home to billions of organisms that support biodiversity and ecosystem services.

- 5** **Plants** help to collect and filter pollutants found in rainwater. They also provide added benefits of urban cooling, carbon sequestration, and food and habitat for wildlife.
- 6** **Trees** act as natural air conditioning by evaporating rainwater off their leaves to create cooler air temperatures.





# ST. GEORGE RAINWAY

## Design | Final Concept Design

### Design of the St. George Rainway at a glance



#### Green Rainwater Infrastructure (GRI) on the road's east side

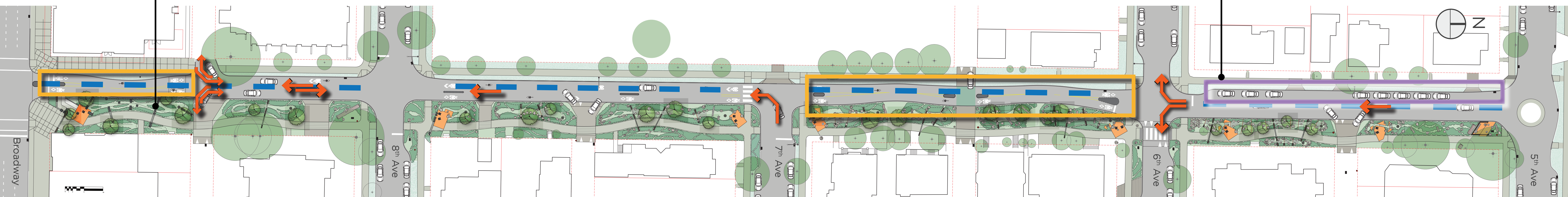
- A series of meandering rain gardens along the east side of St George Street will manage rainwater in planted areas and provide opportunities for gathering and reflection.

| Components                  | Description  |
|-----------------------------|--|
| <b>Small Seatings Areas</b> | Angular plazas and small grass picnic areas                  |
| <b>Check Dams</b>           | Boulders and corten steel dams to slow the flow of rainwater |
| <b>Rain Garden Edge</b>     | Gentle slopes on both sides                                  |
| <b>Sidewalk</b>             | 2m meandering sidewalk on east side of St. George Street     |



#### On-street parking retained on the west side of St. George Street between 6<sup>th</sup> and 5<sup>th</sup> Ave only

- The majority of on-street parking has been reallocated to provide space for the development of the Rainway, public space improvements, and one-way traffic.



#### Legend

- Vehicular Traffic**
- AAA Bike Route, two-way bicycle travel**
- On-street Parking**



#### Car-free Space at Broadway, and from 7<sup>th</sup> to 6<sup>th</sup> Avenue

- Expanded room for GRI, urban nature, community gathering, plaza opportunity, and outdoor learning.
- To add new green space on St. George Street through a closure to motor vehicles.



#### Active Transportation (walking/rolling and cycling)

- Improved sidewalks and pedestrian ramps at all intersections
- Two-way local street bikeway suitable for All Ages and Abilities (AAA) from Broadway to 5<sup>th</sup> Ave



#### Vehicle traffic converted to one-way southbound

- One-way southbound traffic reduces motor vehicle volumes to provide a comfortable environment for people walking and cycling while maintaining residential and emergency vehicle access
- Two-way vehicular traffic between 8<sup>th</sup> Ave and the lane south of Broadway to maintain residential and commercial access.



# ST. GEORGE RAINWAY

## Design | Final Concept Design

### Block 1: Broadway to 8<sup>th</sup> Ave

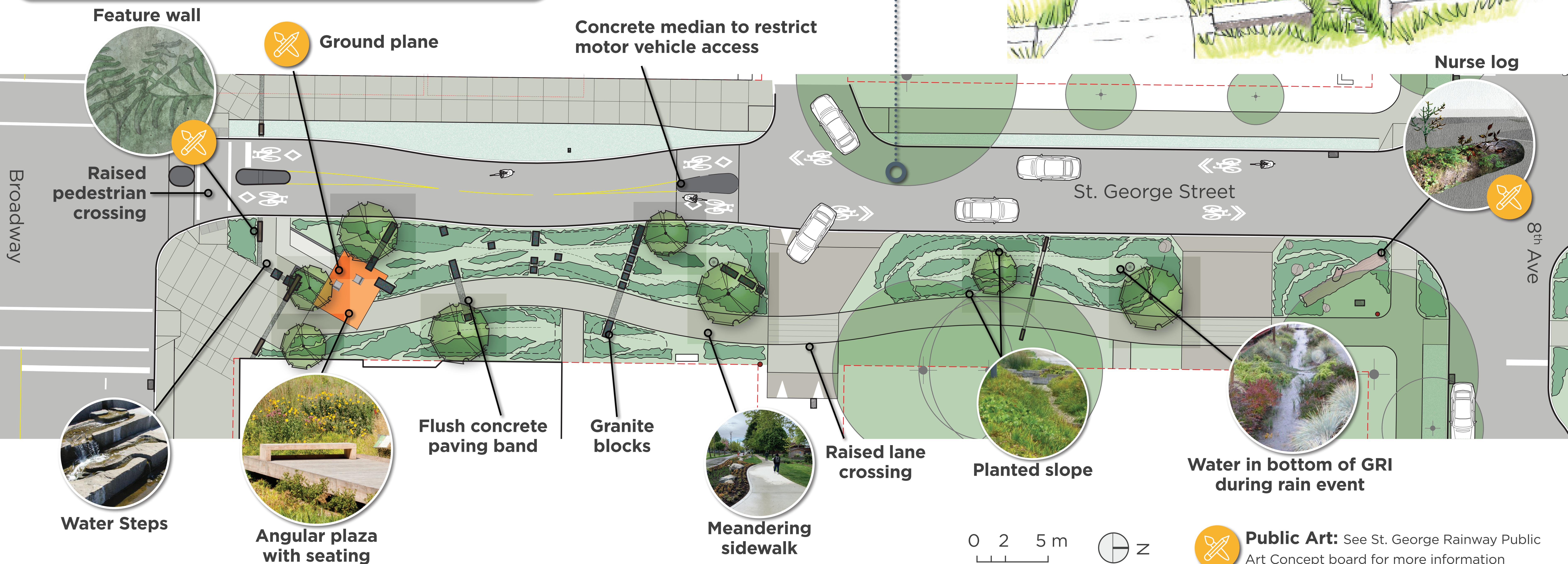
#### CAR-FREE SPACE (Broadway - Lane)

- Public realm enhancements
- Closed to vehicle traffic; emergency vehicle access maintained
- On-street parking removed
- Two-way raised bike path, added green space
- Road space converted to manage rainwater with Green Rainwater Infrastructure (GRI)

#### LANE TO 8<sup>TH</sup> AVE

- Road space converted to GRI
- On-street parking removed between Broadway and 6<sup>th</sup> Ave
- Two-way local street bikeway
- Two-way vehicle traffic (8<sup>th</sup> Ave- lane)

Proposed concept design of intersection of Broadway and St. George Street looking south towards Broadway





# ST. GEORGE RAINWAY

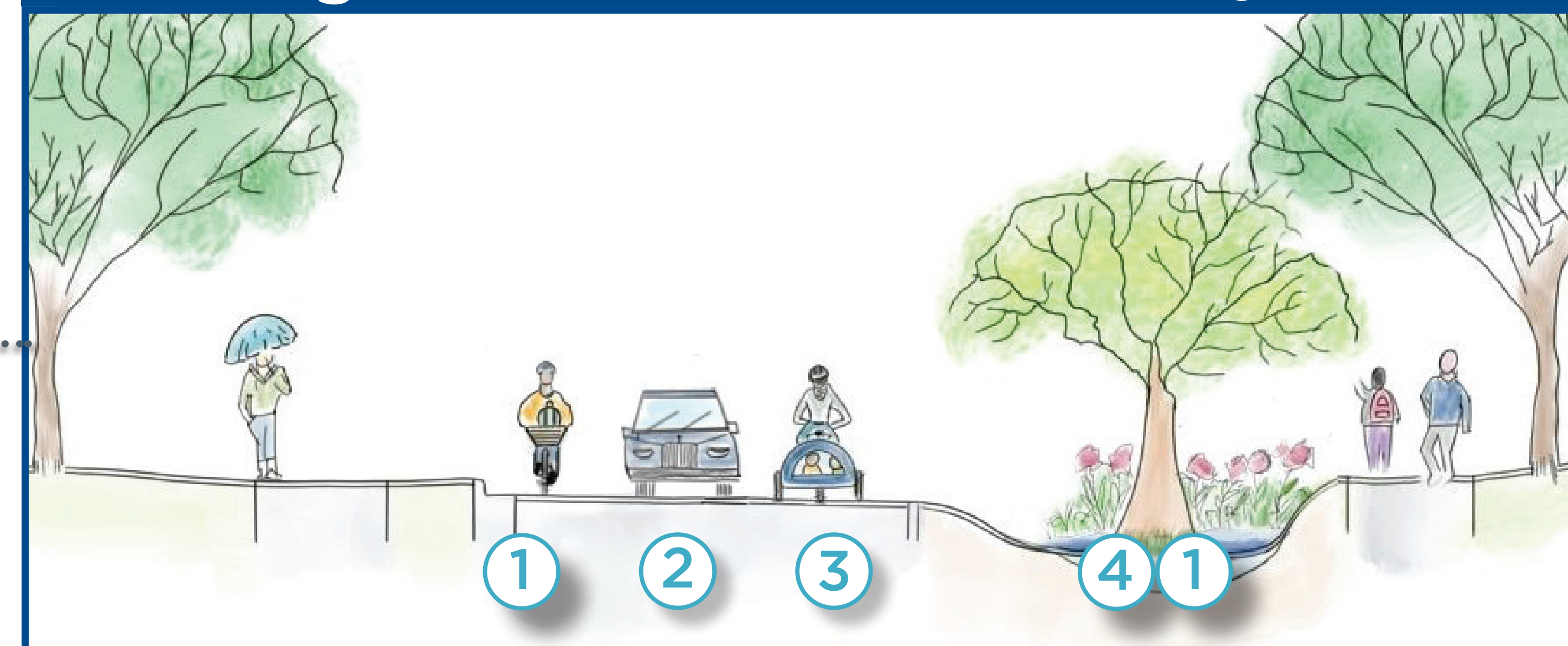
## Design | Final Concept Design

### Block 2: 8<sup>th</sup> Ave to 7<sup>th</sup> Ave

#### ONE WAY SOUTHBOUND (8<sup>TH</sup> AVE TO 7<sup>TH</sup> AVE)

- ① On-street parking removed between Broadway and 6<sup>th</sup> Ave
- ② One-way vehicle traffic southbound
- ③ Two-way local street bikeway
- ④ Road space converted to Green Rainwater Infrastructure (GRI)
- Traffic circle at 8<sup>th</sup> Ave removed and replaced with curb bulge and two-way stop for east and westbound traffic (favouring the proposed bike route)

#### St George St: 8<sup>th</sup> Ave to 7<sup>th</sup> Ave (looking north)





# ST. GEORGE RAINWAY

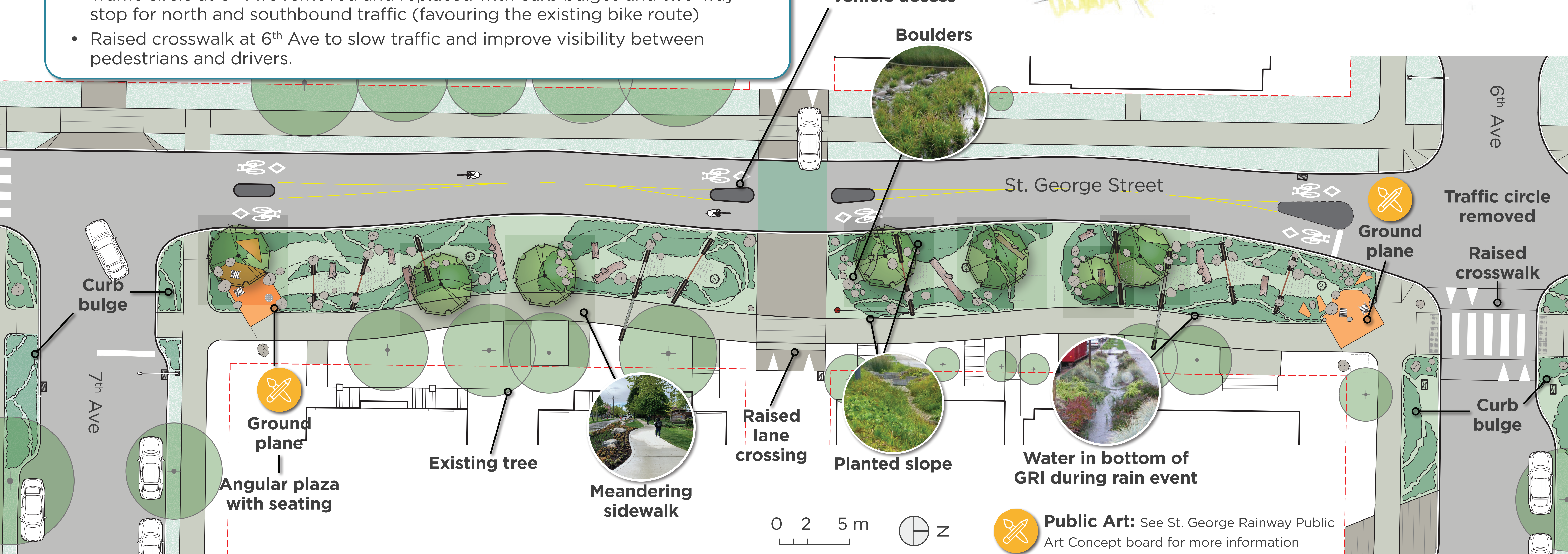
## Design | Final Concept Design

### Block 3: 7<sup>th</sup> Ave to 6<sup>th</sup> Ave

#### CAR FREE SPACE (7<sup>TH</sup> AVE TO 6<sup>TH</sup> AVE)

- Road space converted to Green Rainwater Infrastructure (GRI)
- Car-free Space (7<sup>th</sup> - 6<sup>th</sup> Ave)
  - Outdoor-learning area, added green space
  - Closed to vehicle traffic; emergency vehicle access maintained
  - Vehicle access through laneway maintained
- On-street parking removed between Broadway and 6<sup>th</sup> Ave
- Two-way local bike path
- Traffic circle at 6<sup>th</sup> Ave removed and replaced with curb bulges and two-way stop for north and southbound traffic (favouring the existing bike route)
- Raised crosswalk at 6<sup>th</sup> Ave to slow traffic and improve visibility between pedestrians and drivers.

Proposed concept design of intersection of 7<sup>th</sup> ave and St. George Street looking north



**Public Art:** See St. George Rainway Public Art Concept board for more information



## Design | Final Concept Design

## Block 4: 6<sup>th</sup> Ave to 5<sup>th</sup> Ave

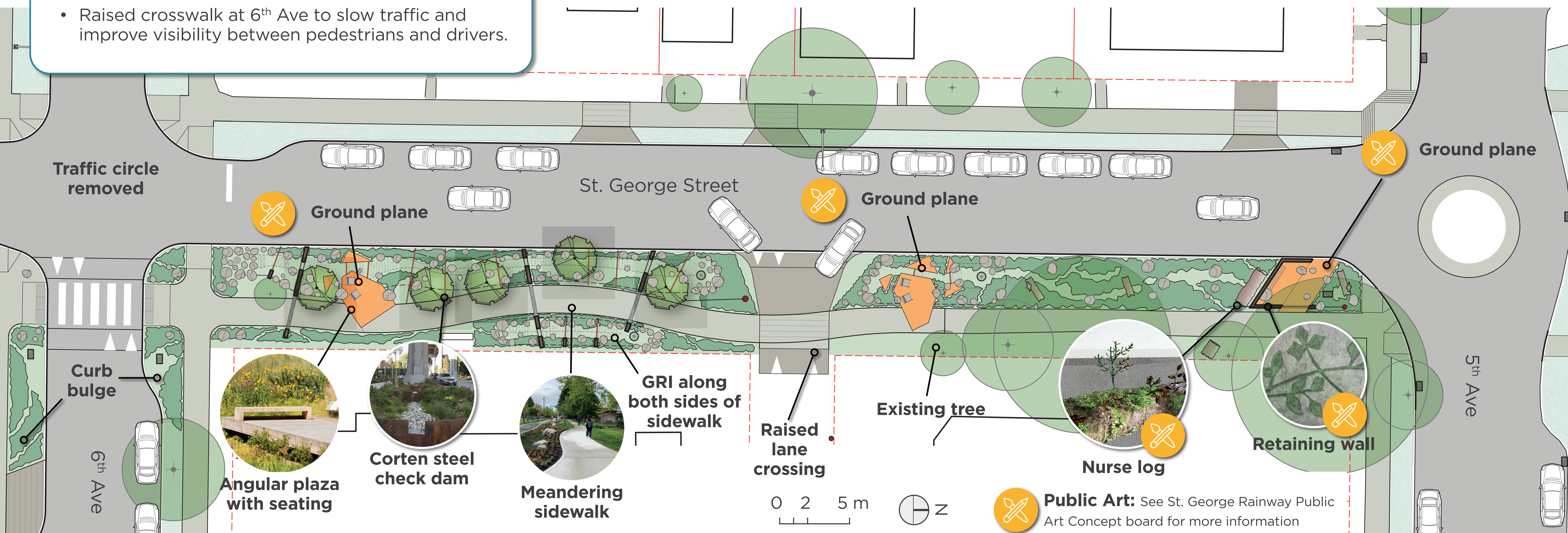
## ONE-WAY SOUTHBOUND WITH PARKING

- Road space converted to Green Rainwater Infrastructure (GRI)
- One-way vehicle traffic southbound
- On-street parking **removed** from east side of street
- On-street parking **retained** on west side of street
- Traffic circle at 6<sup>th</sup> Ave removed and replaced with curb bulges and two-way stop for north and southbound traffic (favouring the existing bike route)
- Raised crosswalk at 6<sup>th</sup> Ave to slow traffic and improve visibility between pedestrians and drivers.

Proposed concept design of St. George St looking south from the laneway between 6<sup>th</sup> and 5<sup>th</sup> Ave I



Proposed concept design of intersection at St. George Street and 5<sup>th</sup> Ave  
looking south





# ST. GEORGE RAINWAY

## Design | What you need to know

**St. George Rainway** is a green rainwater infrastructure and active transportation project that re-imagines the street based on the principles of nature, mobility, community, and learning.

**Rain gardens** along the east side of St. George Street capture and clean rainwater, while also re-creating many natural ecological functions, including urban cooling, habitat creation, and biodiversity.

**Native plants** will be used whenever possible to meet the pollutant removal, biodiversity, climate resilience, and year round visual interest goals.

**Utility clearance requirements** for underground utilities such as gas, drinking water, sewer, and electrical means that rainwater can only be managed on the east side of the street. These clearances also prevent trees from being planted in the front boulevard on the west side of the street, as roots could break pipes.

**An accessible pedestrian environment** will be created that meets the needs of a wide range of site users. The sidewalk will have a minimum sidewalk width of 1.8 meters, and surface materials will be selected to ensure a smooth path with minimal bumps and vibration for those using mobility assist devices such as wheelchairs. The staff team will also be consulting the City's People with Disabilities Advisory Committee and following design principles from the Canadian National Institute of the Blind to make the Rainway as inclusive, accessible and welcoming as we can.

**Accessible seating** along the Rainway will support a comfortable experience for those with mobility impairments who cannot walk long distances without a break. City of Vancouver's Accessible Street Design Guideline recommends areas for rest every 50 meters. To meet accessibility goals and respect the desire of the community to keep St. George Street a quiet community street, rest areas will be small to limit the number of people who can gather in them, and will be kept at a minimum 6 meters distance away from residences.

**Community safety** is an important consideration in the Rainway design. While the Rainway will have places to sit in nature near the rain gardens, it will not include secluded spots where people could hide, and vegetation will be kept low to ensure clear visibility and sight lines. Pedestrian scale lighting will also be introduced to support community safety.

**Improved safety, comfort, and accessibility** for people of all ages and abilities to walk, roll, and cycle is a priority. It will be achieved by reducing vehicle volumes and speeds and minimizing conflicts at intersections. Design features include:

- Converting sections of St. George Street to one-way southbound or closed to motor vehicles to lower vehicle traffic.
- Curb bulges at intersections to shorten crossing distance for pedestrians, slow turning vehicles, and improve visibility between all road users.
- Raised crossings at laneways and driveways to eliminate the need for curb ramps and notify to drivers that they are to yield to pedestrians.
- Raised crosswalk at 6<sup>th</sup> Ave to slow traffic and improve visibility between drivers, and pedestrians.

**Traffic circles** at 8<sup>th</sup> Ave and 6<sup>th</sup> Ave will be replaced with planted curb bulges, and two-way stop signs. Removing the traffic circles will provide space for curb ramps, improve pedestrian accessibility, improve visibility, and shorten the crossing distance while adding green space to the neighbourhood. Before removing the traffic circles, City staff will contact the traffic circle volunteer gardeners and work with them to save as many plants as possible.

**Emergency vehicle access** will be maintained on all streets, including car-free spaces. City staff have worked with Vancouver Fire and Rescue Services to ensure the design does not impact their operating requirements. The entrances to the car-free areas will have low concrete medians to discourage vehicle access while accommodating emergency vehicles onto the bike paths. Careful consideration has also gone into the placement of vertical elements such as furniture, landscaping, and signs to accommodate service providers.

**Access to residences, businesses, driveways, and lanes** will remain. Two-way vehicle traffic will be maintained in all lanes, including the lane south of 6<sup>th</sup> Ave. Two-way vehicle traffic will be maintained between 8<sup>th</sup> Ave and the lane south of 8<sup>th</sup> Ave to provide access for residents and businesses.

**Parking** will be retained the west side of the street between 6<sup>th</sup> Ave and 5<sup>th</sup> Ave only. We heard from the community that space for parking was the lowest priority for use of street space. The Rainway will re-allocate space previously used for parking towards rainwater management and sustainable transportation.



# ST. GEORGE RAINWAY

## Design details | Public Art Concept

### Engineering Artist-in-Residence (2020-2023)

Holly Schmidt is a visual artist known for artworks that explore the diversity of human relationships with the natural world.

Schmidt's exhibitions, public works and residencies include Vegetal Encounters with the UBC Outdoor Art Program, Tillwith the Santa Fe Art Institute, and Quiescence with the Burrard Art Foundation.



*Scan here for more information on the Engineering Artist in Residence program*

Schmidt is grateful to live and work in Vancouver, Canada, the unceded territories of the xʷməəkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish) and səliłwətał (Tsleil-Waututh) Nations.

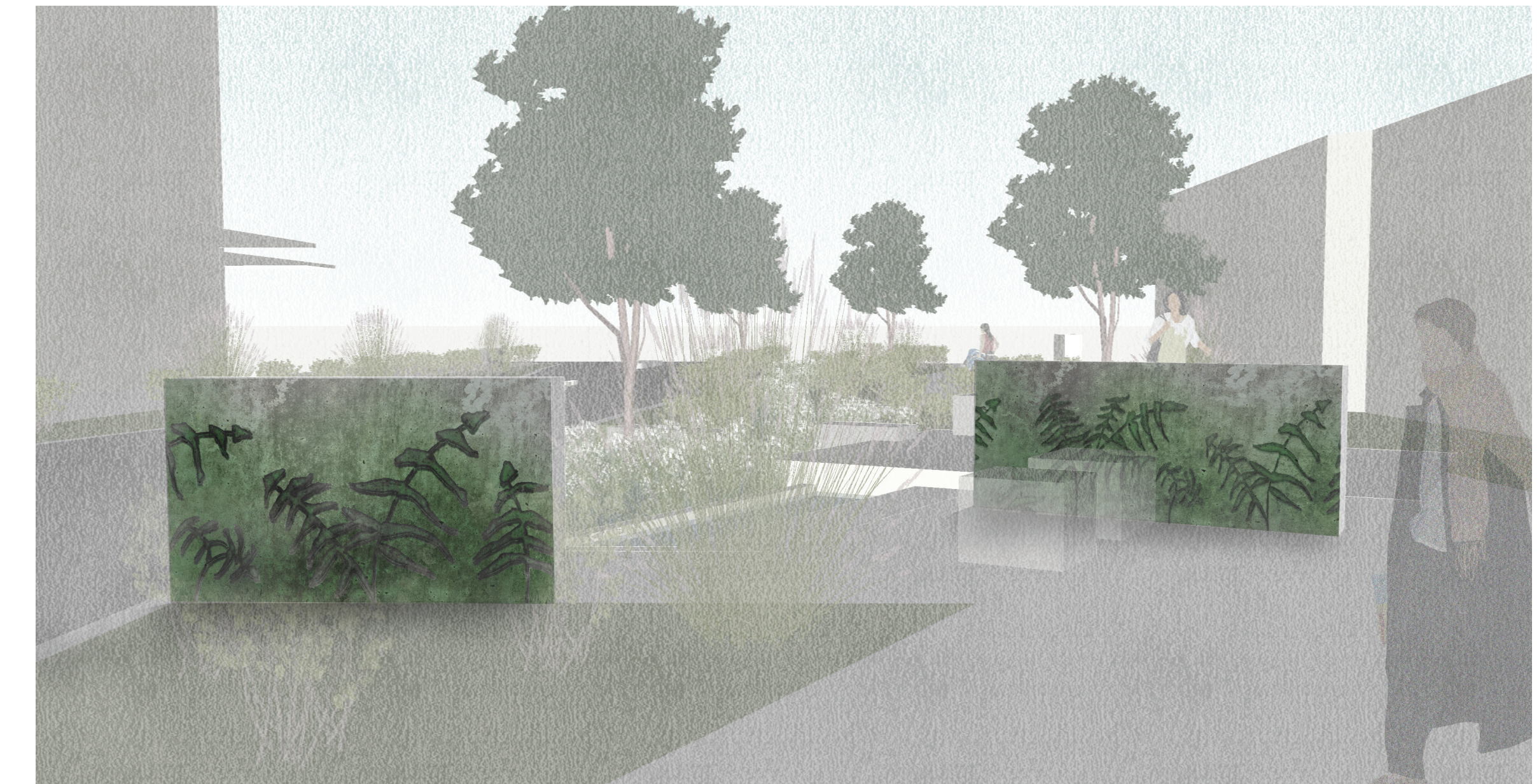
### St. George Rainway public art

Schmidt draws upon the historical ecology of the coastal western hemlock forest as inspiration for the creation of integrated elements of public art throughout the Rainway, including:

- Feature walls and retaining walls
- Nurse logs
- Gathering spaces and ground planes

#### Feature Walls and Retaining Walls

Inset patterns based on coastal plants and mosses will appear on the concrete feature walls and retaining walls. These patterns based on plants such as bracken, salal and trailing blackberry appear like shadows from the past while pointing to the future ecological resurgence of the rainway. Over time, mosses and algae will grow in the crevices of the patterns indicating the health of this ecosystem.



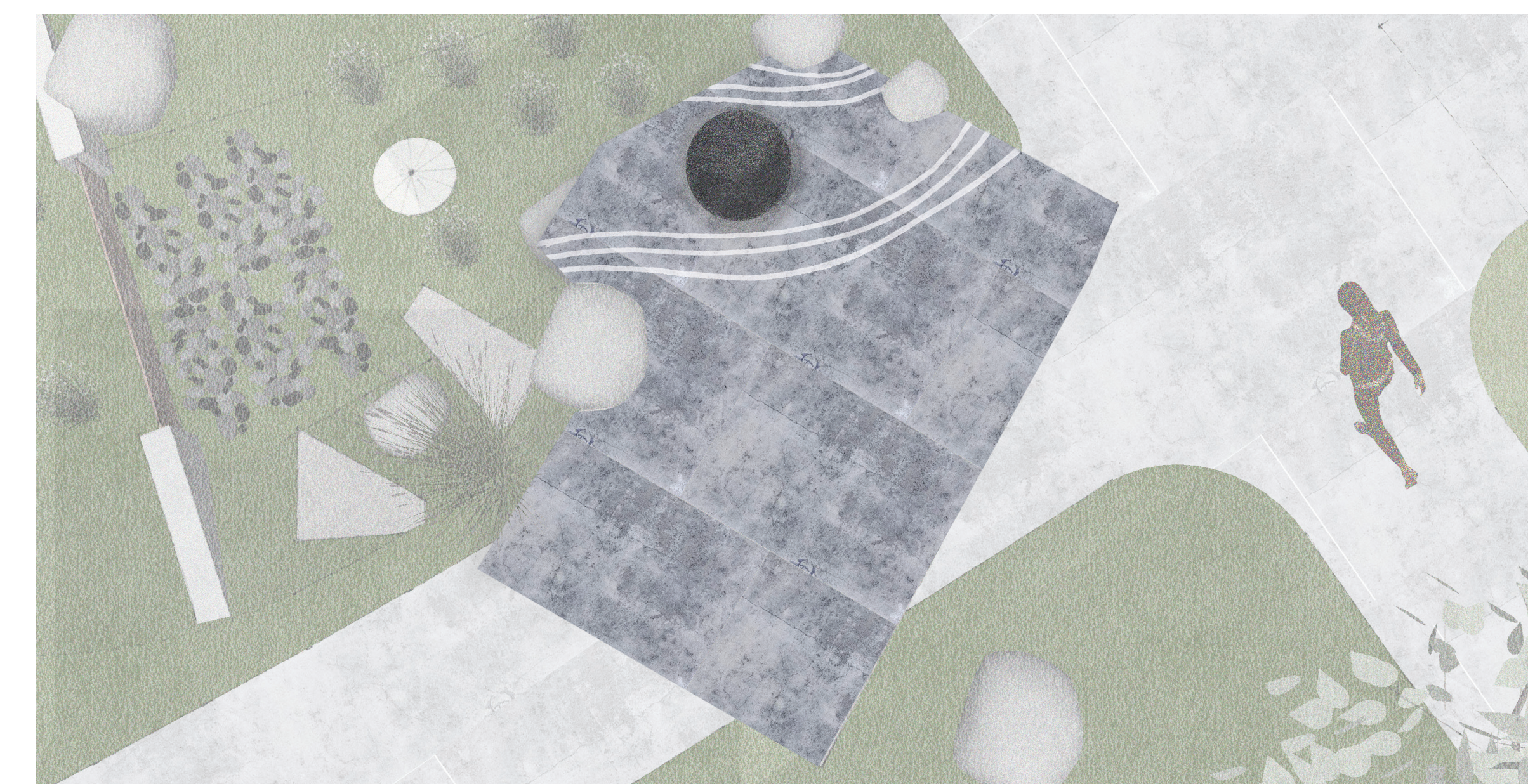
#### Nurse Log

Two nurse logs will be placed in the Rainway. These fallen trees decay slowly overtime creating an ecological niche for mosses, plants, trees, insects and animals. As a nursery for the growth and regeneration of forests they represent care and interconnection in community.



#### Gathering Spaces & Ground Planes

A series of gathering spaces is visually connected through water patterns that reference the historic creek and the choreography of water as it moves down the hill. There are moments of pooling, swirling, rushing and splashing represented through lines that flow around the seating.





# ST. GEORGE RAINWAY

## Design Details | Tree Planting

### Trees for Green Rainwater Infrastructure

The City's tree canopy is a critical part of the urban infrastructure. Trees absorb carbon dioxide, mitigate the urban heat island effect, provide air filtration, support urban biodiversity and provide urban rainwater management.

St. George Rainway provides the opportunity to add many trees with increased soil volume to St. George Street. Additional soil volume will help support a healthy tree canopy. To achieve these outcomes, trees planted within bioretention practices should tolerate a high pollutant load and a variety of soil moisture conditions.

### Trees selection for the Rainway

To ensure a healthy urban forest and the safety of residents, the following are requirements for trees planted in Vancouver's right-of-way.

- tolerant of local growing conditions
- maintain sightlines for vehicular and cyclist traffic
- have adequate soil space to reach its natural form at maturity
- are not prone to branch failure or tree fall
- are not susceptible to pests
- are not possessing significant nuisance problems (large nuts, allergenic properties)
- do not requiring excessive maintenance
- meet required utility offsets

### Tree replacement and retention

There are currently **54** trees along St. George Street, in the street-right of way.

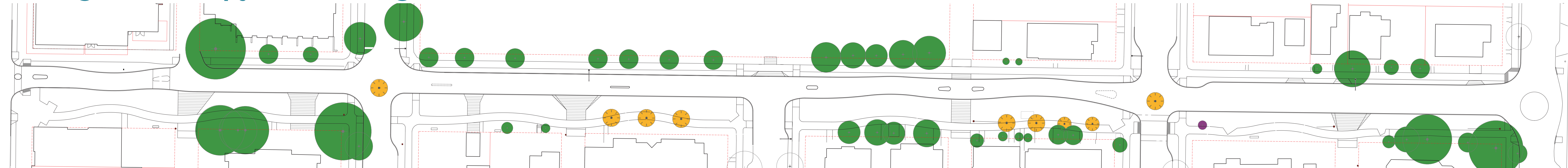
**10** trees are located within the traffic circles and proposed Rainway footprint. Of these, **9** smaller trees have been identified for removal and will be replaced with similar sized trees with a larger soil volume and **1** notable tree will be retained.

**19** new trees are proposed for the Rainway on the east side of the street. No new trees will be added to the west side of the street, due to water main set back requirements.

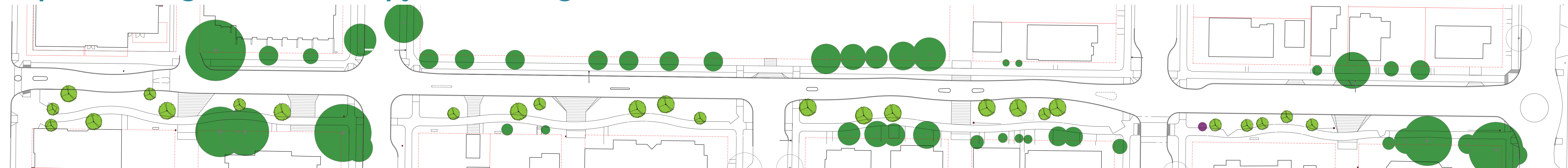
#### LEGEND

- Existing Tree
- Tree identified for Removal
- Proposed Tree

### Existing Tree Canopy on St. George Street



### Proposed Changes to Tree Canopy on St. George Street





# ST. GEORGE RAINWAY

## Design Details | Vehicle Access and Parking

### Parking supply

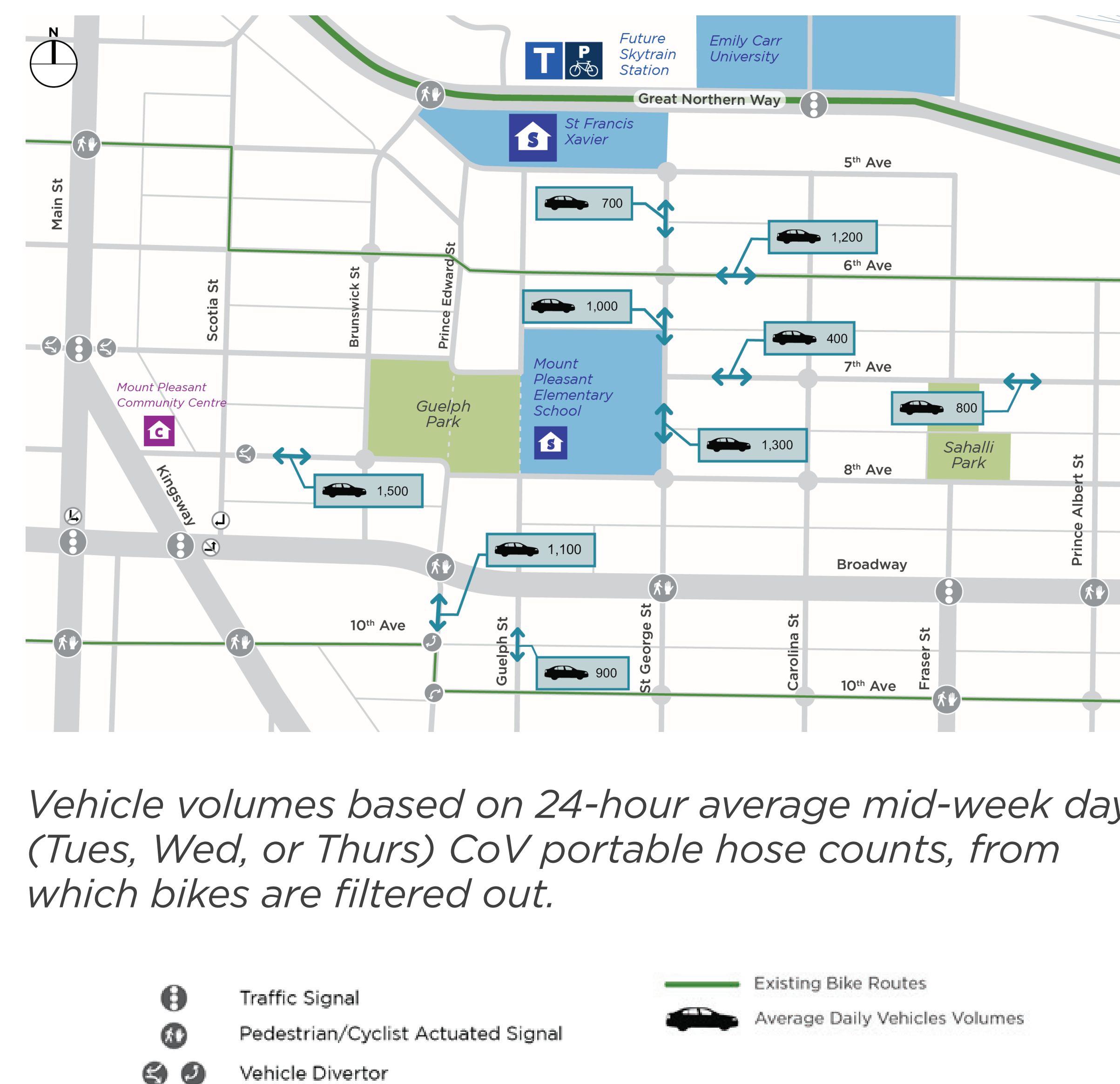
Space for car parking and car movement ranked as the lowest priorities in both Phase 1 and 2 surveys. Parking spaces on St. George Street have the lowest occupancy rate when compared to adjoining streets. Currently, the majority of on-street parking spaces in this area are unregulated, allowing any car to park on most streets for extended periods of time. This can cause issues for neighbourhood residents who cannot find parking close to home.

Parking will be retained on 6<sup>th</sup> Ave and 5<sup>th</sup> Ave on the west side of the street only. The Rainway will re-allocate space previously used for parking towards rainwater management and sustainable transportation.



### Motor vehicle volumes

Currently, there are high volumes of motor vehicle traffic on this stretch of St. George Street, reducing safety and accessibility for cyclists of All Ages and Abilities (AAA). High volumes of vehicular traffic are particularly concerning since a majority of the local students from Mount Pleasant Elementary walk to/from school (only 30% of them are driven).



Vehicle volumes based on 24-hour average mid-week day (Tues, Wed, or Thurs) CoV portable hose counts, from which bikes are filtered out.

### Access and circulation

Sections of St. George Street will be converted to one-way southbound or closed to motor vehicle traffic to lower vehicle volumes and prevent vehicle shortcutting while maintaining access to the neighborhood. Bicycles would continue to travel in both directions and share the road with motor vehicles.

Two-way vehicle traffic will be maintained in all lanes, including the lane south of 6<sup>th</sup> Ave.

Two-way vehicle traffic will be maintained between 8<sup>th</sup> Ave and the lane south of 8<sup>th</sup> Ave to provide access for residents and businesses.





# ST. GEORGE RAINWAY

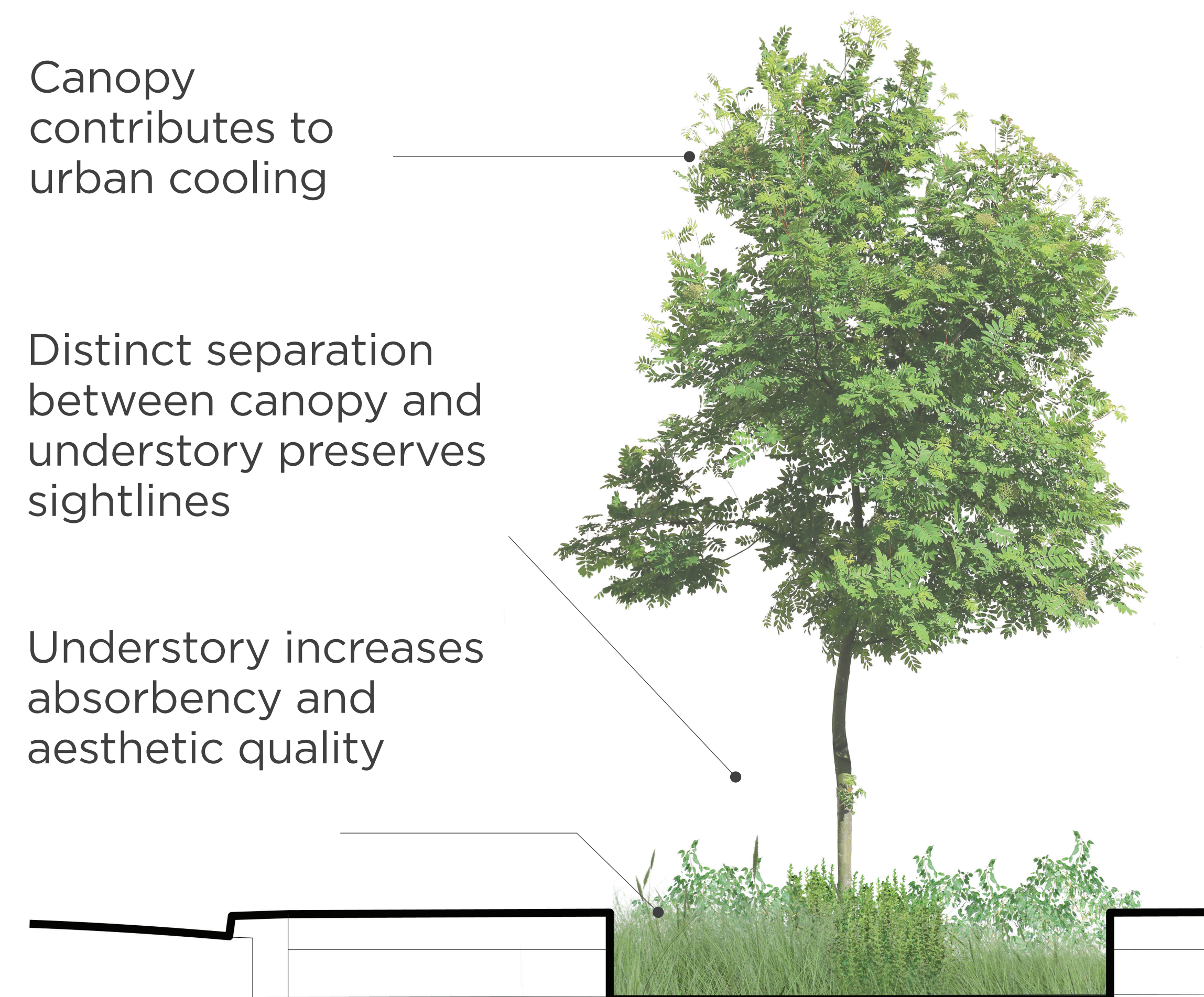
## Design Details | Planting & Biodiversity

### Plant communities

The plant community design approach seeks to leverage the framework of natural plant communities, a group of plants that occur together and share similarities in growing conditions. By emulating the structural elements and growing conditions of natural plant communities, we can design dynamic landscapes that include natural processes, like plant succession and competition, which are more resilient in the face of climate change.

There are two primary green rainwater infrastructure (GRI) plant communities that we can leverage for the St. George Rainway planting concept:

#### Woodland



#### Grassland

Pollinators flock to native flowers that change throughout the seasons

Structural grasses and forbs planted in the centre

Opportunistic, self-seeding flowers

Groundcover species take the place of mulch



### Planting strategies

Informed by our engagement work, we've developed a list of planting strategies to inform our planting design concept. These include:



Prioritize **native plants** that are part of the **historical ecology**



Use an **informal planting design** strategy



Select plants for **all seasons**



Use adaptive plants to **extend the bloom season**



Maximize **tree canopy**



Leverage **GRI superstars** to handle a high pollutant load



# ST. GEORGE RAINWAY

## Next Steps | Maintenance & Stewardship

### Maintenance

The Rainway will be primarily maintained by the City of Vancouver. Trained landscape professionals will complete routine maintenance including:

- Weeding and litter removal
- Pruning to ensure plants to do not exceed 2 m in height
- Removal of sediment from inlets

### Designing with maintenance in mind

The St. George Rainway design will focus on emulating, to the extent possible, natural plant communities such as woodlands and grasslands. Designing with these natural processes in mind will help the Rainway to be more of a self-sustaining ecosystem, requiring less maintenance than a typical manicured landscape.



Example of low maintenance green rainwater infrastructure at 53<sup>rd</sup> Ave and Prince Edward Street, Vancouver.

### Future opportunities for community involvement in the Rainway

Once the Rainway is completed, there are a number of opportunities to activate the space to promote community and ongoing learning.



**Join the Green Streets Program:** The Rainway will be eligible for the City's Green Streets Program, a volunteer gardening program. Green Streets gardeners help street gardens around the city grow to their full potential by providing year-round care.



**Make an outdoor street mural:** Through the City's Mural Support Program, community groups can receive both in-kind and financial support to enhance the public realm by creating a street mural.



**Organize a Neighbourhood Clean-up Party:** Work with the City to organize a clean-up event on St. George Street to help reduce pollution litter in stormwater runoff and contribute to a safe, vibrant neighbourhood.



**Participate in Citizen Science monitoring:** Join the iNaturalist St. George Rainway Biodiversity project and report on the types of birds, insects, mammals and plants you observe along the Rainway

- **Add mini-community libraries, pollinator boxes, or other small art projects:** Apply for a Neighbourhood Small Grant with your idea on how to foster connection, wellbeing and inclusion along the Rainway.
- **Encourage hands-on learning for Students:** With the Rainway just outside their door, students of Mount Pleasant Elementary can use the space as an outdoor classroom to support learning in a variety of subjects, from science to art.



### Stay in Touch



Get project updates and learn about upcoming opportunities along the Rainway by signing up for the St. George Rainway mailing list.



# ST. GEORGE RAINWAY

## Next Steps | Project Timeline & Future Improvements

### Phase 1 project timeline

- 1 **Public Engagement 1: Values and Vision**  
Fall 2020
- 2 **Public Advisory Committee Establishment**  
March/April 2021
- 3 **Public Engagement 2: Co-design for co-benefits**  
June 2021
- 4 **Public Engagement 3: Initial Concept Design**  
Fall 2021/Winter 2022
- 5 **Public Engagement 4: Preferred Concept Design**  
Spring 2022  
Community reviews and gives feedback on the preferred concept design.
- 6 **City Staff Develop Detailed Design**  
Spring-Fall 2022  
The City completes a detailed design of the St. George Rainway.
- 7 **Ready for Construction**  
2023  
The St. George Rainway is ready for the construction

### St. George Rainway - Phase 2 and 3



Note: detailed alignment of future bike routes is subject to change

The St. George Rainway Phase 1, from 5<sup>th</sup> Ave to Broadway, is scheduled to start construction in 2023. The city is currently exploring opportunities to extend the Rainway along St. George Street to Kingsway Ave. This work will be done as part of two additional phases, Phase 2: Broadway to 12<sup>th</sup> Ave and Phase 3: 12<sup>th</sup> Ave to Kingsway.

The next two phases of the St. George Rainway will help establish St. George Street as major walking and cycling corridor, that will deliver important rainwater management and drainage functions, promote active transportation, and bring exciting co-benefits to even more of the neighbourhood.

| Legend |                                    |
|--------|------------------------------------|
|        | Existing Bike Route                |
|        | Proposed Local Street Bikeway      |
|        | Proposed Vehicle Closure           |
|        | Future Bike Routes (Conceptual)*   |
|        | Proposed One-way Vehicle Traffic   |
|        | Two-way Vehicle Traffic Maintained |