

ST. GEORGE RAINWAY

Executive Summary

About the St. George Rainway

The City of Vancouver is developing conceptual plans for a Rainway along St. George Street between Broadway and 5th Avenue. The St. George Rainway will deliver core utility services of rainwater management in the neighbourhood using green rainwater infrastructure. A portion of the existing road space will be reallocated to green rainwater infrastructure, urban nature, public space improvements, and active transportation modes.

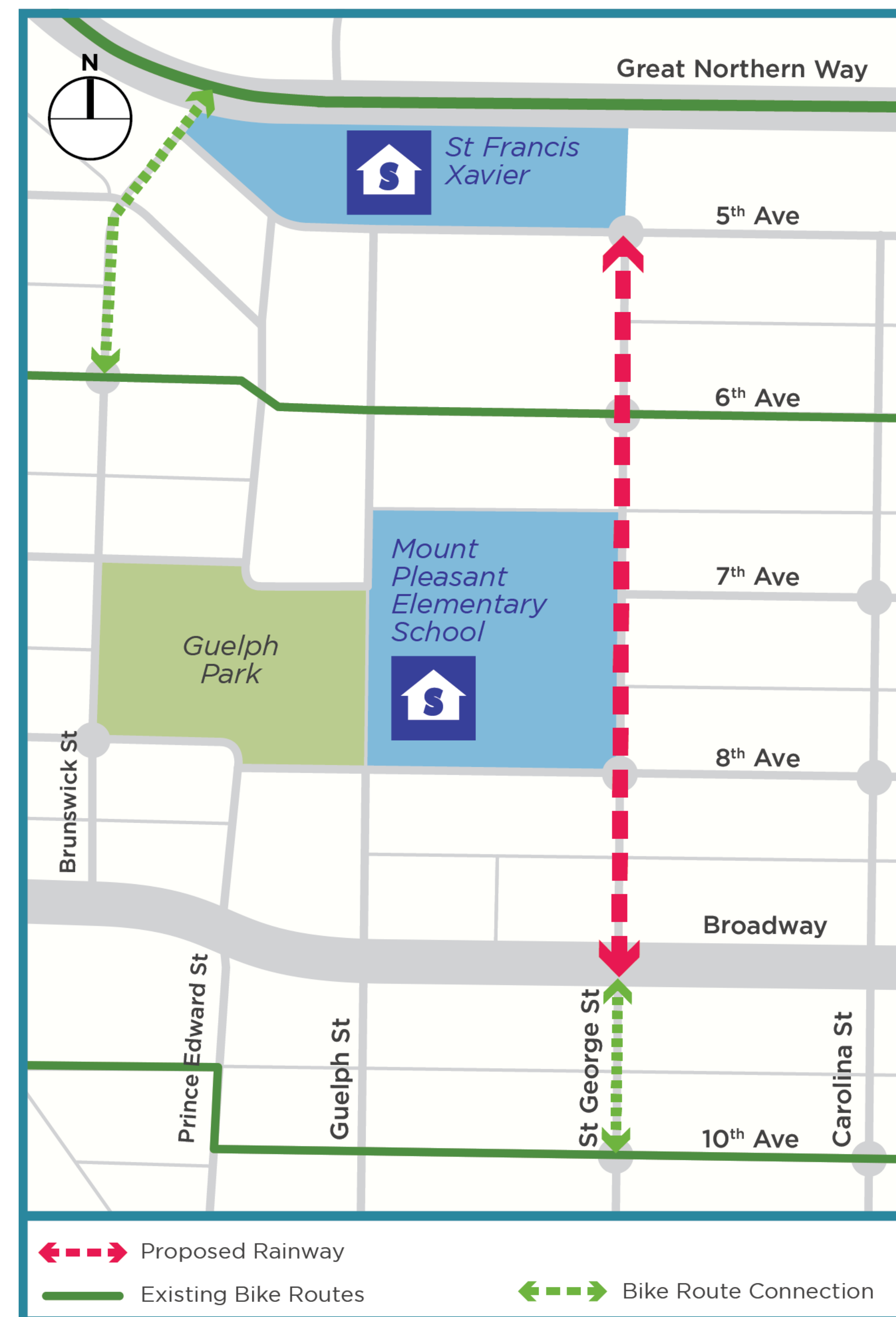
Green rainwater infrastructure is a cost-effective way to:

- ✓ Reduce flooding
- ✓ Treat pollutants from roadways
- ✓ Reduce combined sewer overflows into local waterways
- ✓ Enhance climate resiliency
- ✓ Cool the neighbourhood during summer heat
- ✓ Increase biodiversity



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

Location



What is a Rainway?

A multi-block series of green rainwater infrastructure 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

- Use green rainwater infrastructure 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 green rainwater infrastructure.
- Ensure adjacent residents can continue to park within a reasonable walking distance of home.

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Project Timeline



Public Engagement 1: Values and Vision

Fall 2020

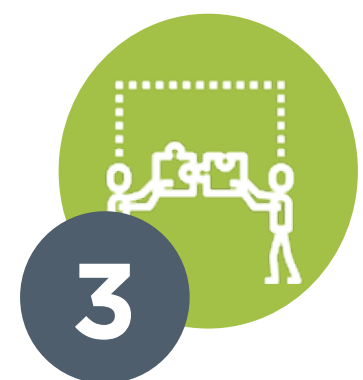
Community shares their values as well as opportunities and concerns about the project.



Public Advisory Committee Establishment

March/April 2021

Establish an 8-10 member committee to advise on project development and engagement.



Public Engagement 2: Co-design for co-benefits

June 2021

Community shares design ideas for the Rainway.



Public Engagement 3: Initial Concept Design

Fall 2021/Winter 2022

Community gives feedback on initial concept designs.



Public Engagement 4: Preferred Concept Design

Spring 2022

Community reviews and gives feedback on the preferred concept design.



City Staff Develop Detailed Design

Spring-Fall 2022

The City completes a detailed design of the St. George Rainway.



Ready for Construction

2023
The St. George Rainway is ready for the construction phase.

How your input is being reflected

Two previous rounds of public engagement have been conducted that have shaped the conceptual designs being shared in this phase of engagement. [Phase 1: Vision and Values](#) was an opportunity for the community to tell us what is most important to them. In Phase 2, we worked together to [co-design the co-benefits](#) you would like to see along the Rainway.

4 principles have emerged which are guiding the Rainway design and are reflected in the street layout and green rainwater infrastructure concepts being shared in this third phase of engagement.



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

To review the results of previous public engagement visit shapeyourcity.ca/st-george-rainway

What We Heard in Previous Engagement

We heard in the first two phases of engagement that the highest priorities for the St. George Rainway include urban nature and active transportation. While these elements have been prioritized in the concept design, they are balanced with the need to accommodate the existing and proposed vehicular circulation and parking needs.

Top three space priorities by percentage from survey 1 (fall 2020) and survey 2 (spring 2021).



Space for urban nature



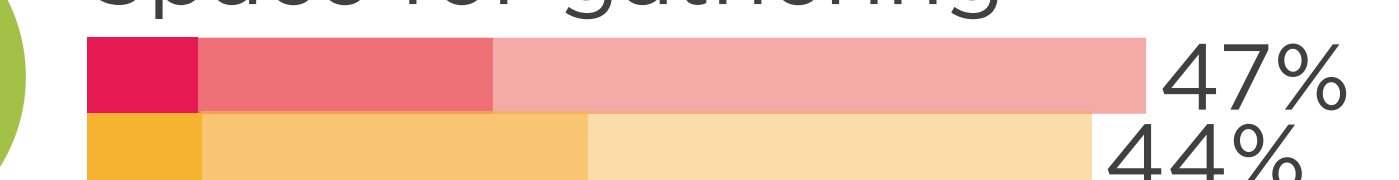
Space for walking and cycling



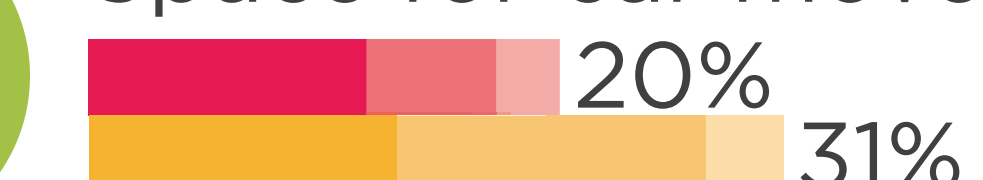
Space for rainwater management



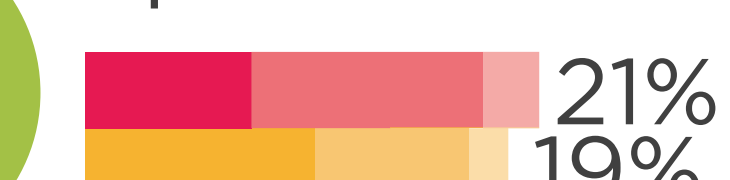
Space for gathering



Space for car movement



Space for car parking



Legend

First Priority
Second Priority
Third Priority

Connect & learn more

St. George Rainway on Shape Your City
[Rain City Strategy](#)

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Design of the St. George Rainway at a Glance

The image below is a high level concept of what is being proposed for the St. George Rainway. The following pages provide 'Street Layout Options' and 'Green Rainwater Infrastructure Design Concepts' that can be applied to this base layer shown below. We will ask you to rank these 'Street Layout Options' and 'Green Rainwater Infrastructure Design Concepts' in the survey, and provide comments on the overall design of the Rainway.



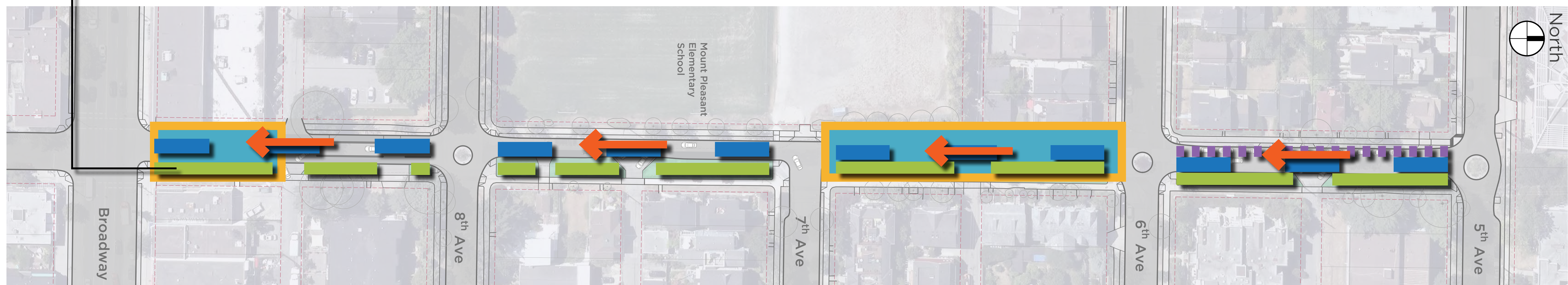
Green Rainwater Infrastructure (GRI) on the road's east side

- Space from the existing roadway, including the on-street parking from the east side of St. George Street, is reallocated for GRI to manage urban rainwater runoff.
- Three *GRI Design Concepts* are being presented for you to choose from, each have a unique look and feel.
- A plaza and small seating areas are included in each of the *GRI Design Concepts*.
- All *GRI Design Concepts* will drain surface water within 24-hours of a rain event.





On-street parking removed, except on the west side of St. George Street between 6th and 5th Avenue

- On-street parking from the east side of St. George Street has been reallocated for GRI in all options.
- One of the four *Street Layout Options* that we are asking you about includes retaining more of the existing on-street parking along St. George Street than what is shown below.



Legend

-  **Green Rainwater Infrastructure (GRI):** The three *GRI Design Concepts* along the East side of the street.
-  **Vehicular Traffic, one-way southbound:** Two of the four *Street Layout Options* include car-free space.
-  **AAA Bike Route, two-way travel:** All four *Street Layout Options* are rated for All Ages and Abilities.
-  **On-street Parking:** One of the four *Street Layout Options* maintains more of the existing on-street parking.



POTENTIAL Car-free Space

- Expanded room for GRI, Urban Nature, Community Gathering, Plaza Opportunity and Outdoor Learning.
- Two of the four *Street Layout Options* include car-free space, and therefore would interrupt vehicular travel.



Active Transportation (walking/rolling and cycling)

- All four *Street Layout Options* include two-way bike travel suitable for All Ages and Abilities (AAA); however, the *Street Layout Options* vary in how much of the road is shared with motor vehicles.
- All four *Street Layout Options* include improved sidewalks and pedestrian ramps at all intersections.



Vehicle traffic converted to one-way southbound

- Access maintained for residences, businesses, lanes, driveways and emergency vehicles.
- Two of the four *Street Layout Options* include converting parts of St. George Street to car-free space.

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Phase 3 Engagement: Design Concepts

The City would like your thoughts on several design concepts for the St. George Rainway. These options are categorized into two groups:

- **Street Layout**
- **Green Rainwater Infrastructure**

These concepts are based on the ideas and feedback shared by the community, and take into consideration the project history, as well as feasibility, regulations, and other underground utility constraints.

Almost any street layout option can be paired with any green rainwater infrastructure concept. The exception is Option 4: Parking Priority, which cannot be paired with Concept A: Flow.

Step 1: Rank the street layout options

The street layout options present different ways for how the St. George Rainway can balance space for cars, active transportation (biking, walking, rolling), urban nature, and community.



Step 2: Select your preferred green rainwater infrastructure concept

The street layouts can be paired with one of the three proposed green rainwater infrastructure design concepts that will help to manage rainwater and improve the streetscape.

