

Broadway Subway Project

Arbutus Station Information Session April 29, 2021



Purpose

- Share information about the method of construction and timing of the Broadway Subway Project near the future Arbutus Station
 - Safety for residents, businesses and visitors
 - Traffic, access, parking and construction information
 - Construction mitigation



Presentation Overview

- 1. Broadway at a Glance
- 2. Project Team and Partners
- 3. Our Commitments
- 4. Project Overview
- 5. Construction Sequence
- 6. Being a good neighbour
- 7. Questions and Comments



Broadway at a Glance

- More than 125,000 people living in the corridor
- Second largest employment centre in the province, with more than 105,000 jobs along the Broadway corridor
- 110,000 transit trips each day
- One of the busiest routes for goods movement in City of Vancouver
- Largest hospital (VGH) in Western Canada
- High-tech clusters drawing commuters for work and to centres for research, innovation and education



Project Team and Partners







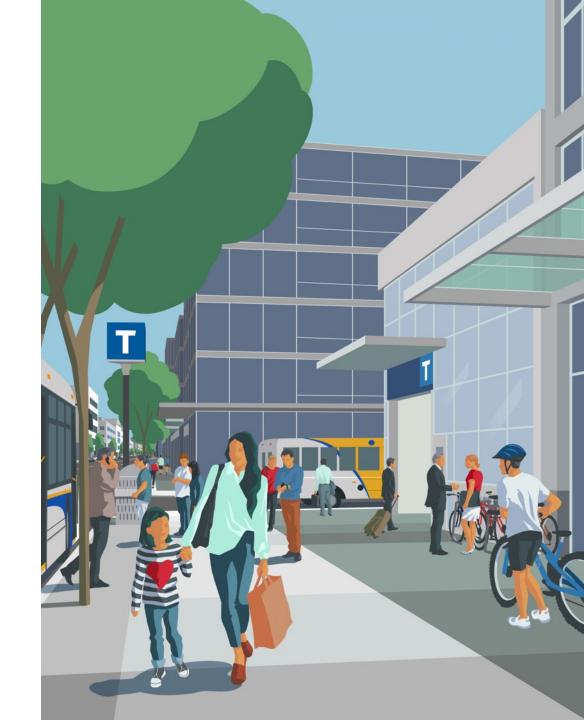








Our Commitments



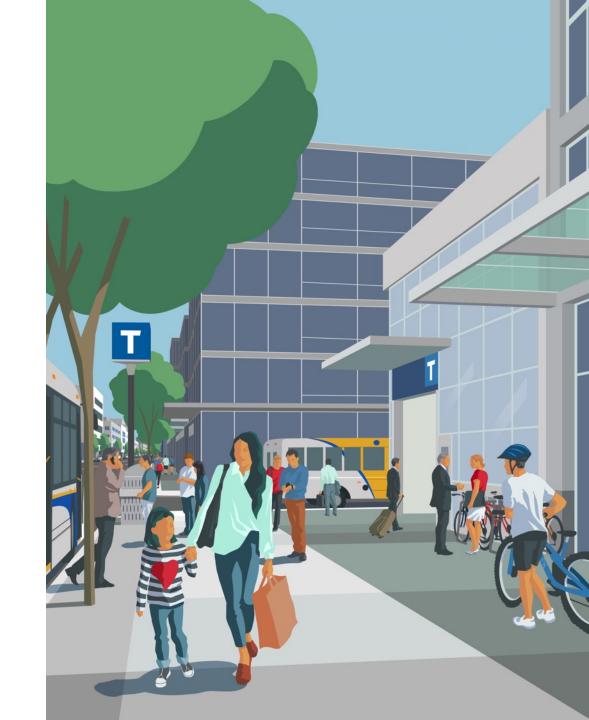
Our Commitments to You

- Safety: For public and for workers
- Mobility: Buses, vehicles, pedestrians, cyclists, emergency vehicles
- Access: Businesses, schools, residences, services
- Communicate transparently, clearly and consistently
- Provide regular updates and advanced notice of construction activities
- Mitigate construction impacts wherever possible
- Minimize transmission of dirt, dust, light, noise and vibration

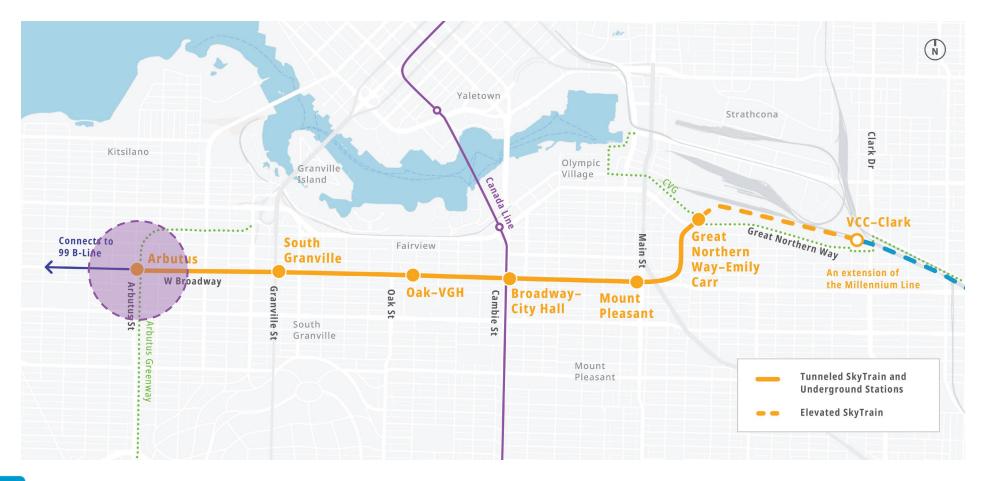




Project Overview



Alignment Overview: 6 New Stations





Family of Stations



Great Northern Way - Emily Carr



Oak - VGH



Mount Pleasant



South Granville



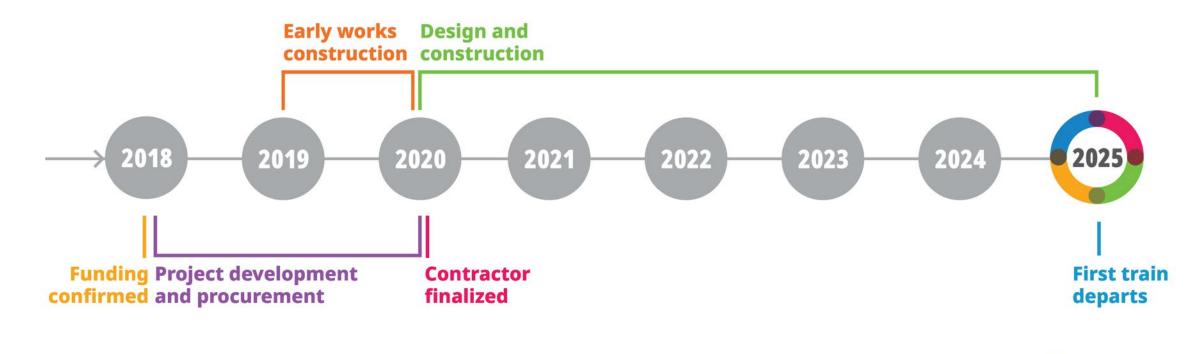
Broadway - City Hall



Arbutus



Project Overall Schedule



Ongoing communications and engagement



Arbutus Station





Artist's renderings of preliminary conceptual station design. Final streetscape and development will be subject to the City of Vancouver's Broadway Plan.

- Located at the northeast corner of Broadway and Arbutus Street and adjacent to the Arbutus Greenway
- Connect passengers with B-Line bus service between Arbutus and UBC as well as serve the people, schools, businesses, services and jobs in the area

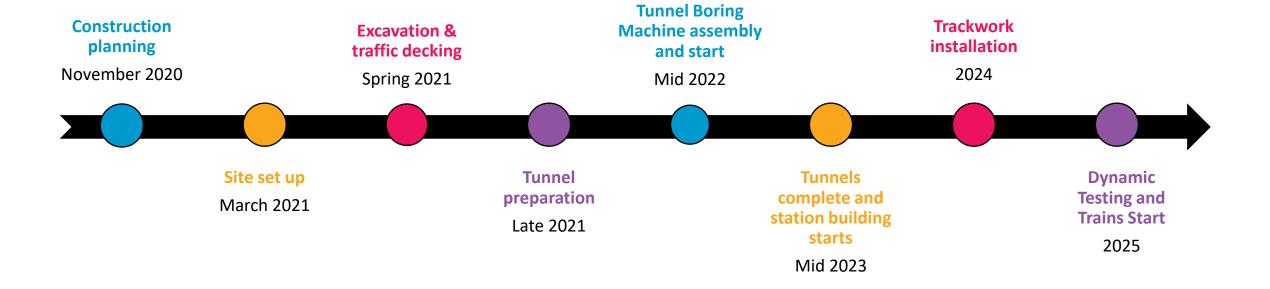




Construction Sequence



Construction Sequence





Innovative Engineering

Implement a solution to manage traffic and construction in one of the busiest corridors in North America during construction

- Maintain traffic access throughout construction
- Minimize disruption to businesses, residents and visitors
- Continue access to public transit
- Maintain pedestrian access to residences, businesses and services

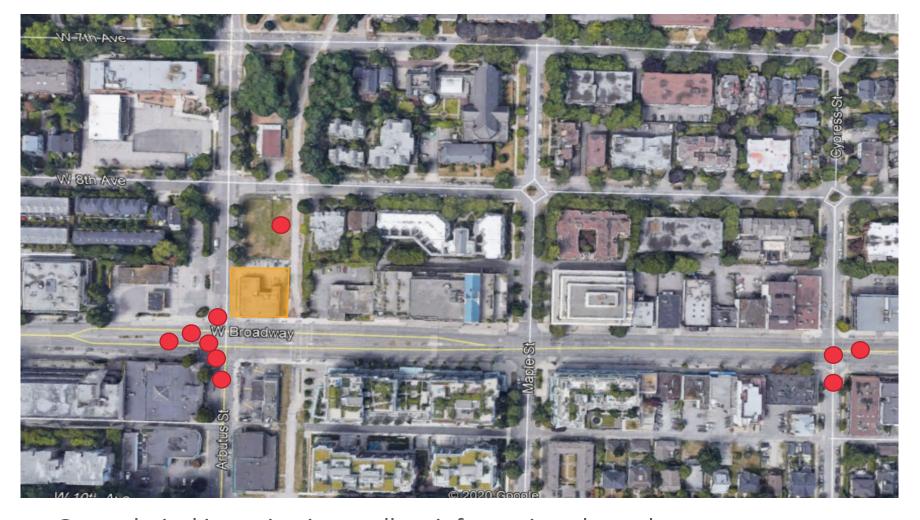


Demolition and Geotechnical Investigation

Legend:

Bore holes

Demolition Area

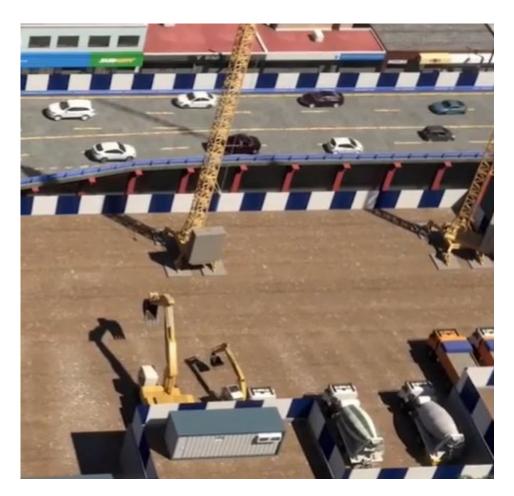


- Geotechnical investigations collect information about the ground conditions that help inform our construction plans
- To prepare the site of the future station, buildings were demolished in March



Maintaining Traffic Flow along Broadway

- 4 lanes of traffic will be maintained during construction at all locations
- Short-term lane closures for utility relocations
- Traffic signals modifications will be required at intersections to accommodate lane re-alignment





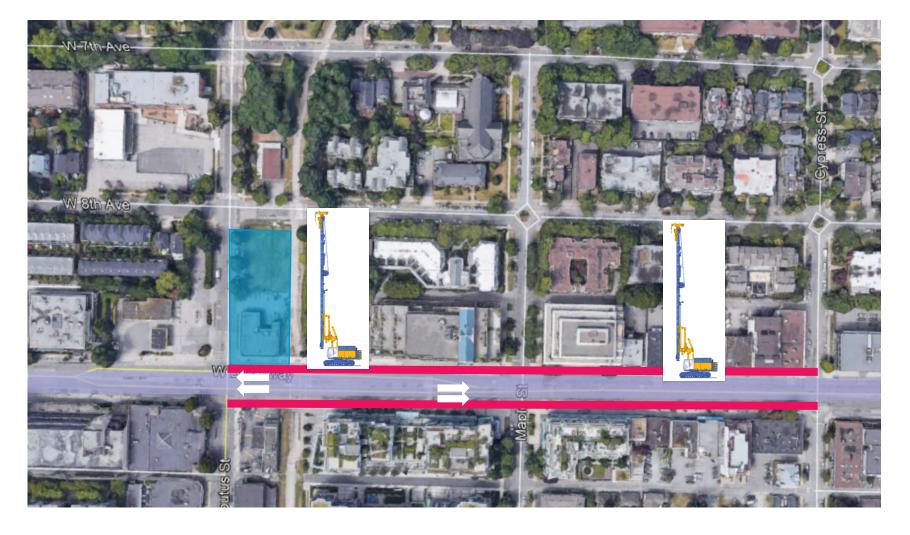
Drilling and Inserting ColumnsSpring/Summer 2021

Legend:

Traffic Deck Support System

Work Site

Open traffic flow



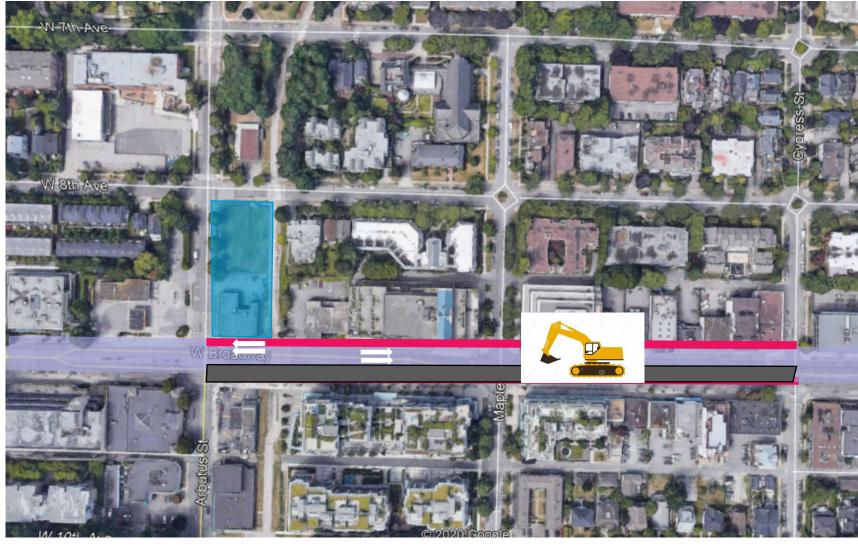
- Stage 1: Lanes closed to traffic on the south side of Broadway during drilling works on the south side
- Stage 2: Lanes closed to traffic on the north side of Broadway during drilling works on the north side



Excavation and Traffic Deck InstallationSummer 2021 – Spring 2022

Legend:

- Traffic deck support system
- Work Site
- Open traffic flow
- Temporary traffic deck being built



Stage 3: South side lanes closed to traffic during excavation and as the traffic deck is being built on the south side



Excavation and Traffic Deck Installation2022

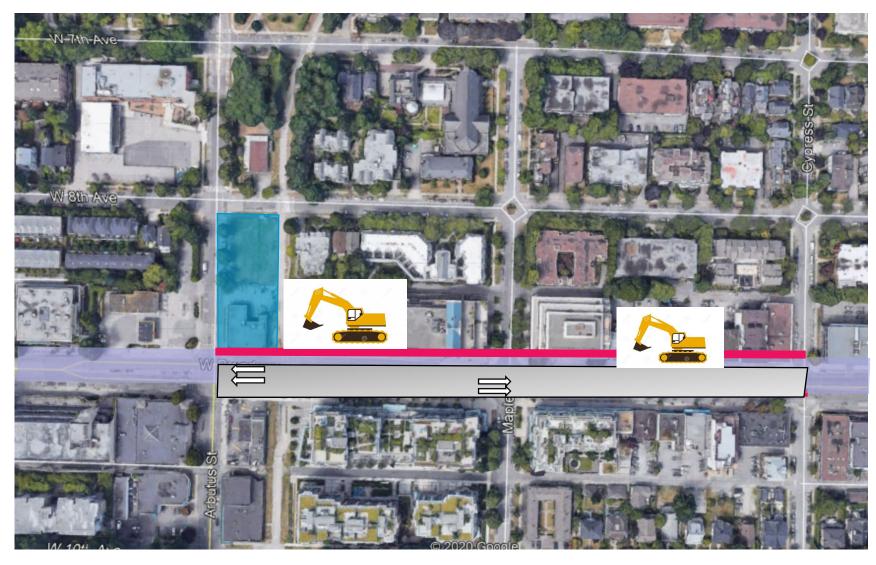
Legend:

Traffic deck support system



Open traffic flow

Temporary traffic deck open



Stage 4 and 5: Four lanes of traffic are open, two in each direction

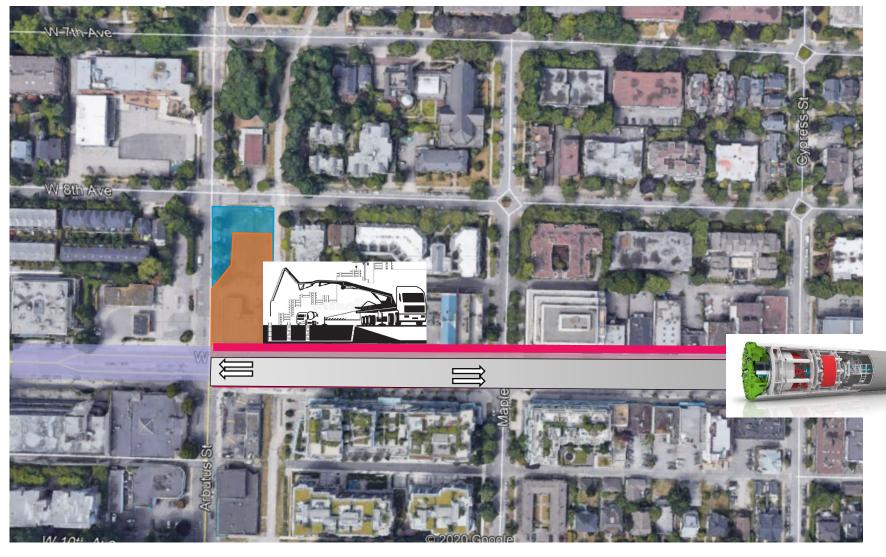
Underground excavation continues



Preparing for the Tunnel Work Spring/Summer 2023

Legend:

- Traffic Deck Support System
- Underground Project Work Area
- Work Site
- Open traffic flow
- Temporary traffic deck open
- Tunnel boring machine



- Pour concrete to prepare the tunnel for the tunnel boring machine 18 meters below street level
- Traffic flows smoothly above this work on the traffic deck



Construct Underground Station, Entrance and Bus Loop 2023 - 2024

Legend:

- Underground Project Work Area
- Future Station
- Bus Loop
- Open traffic flow
- TBM disassembly





- Construction of the above ground station begins
- Below ground station construction continues
- The Tunnel Boring Machine is disassembled near Cypress Street



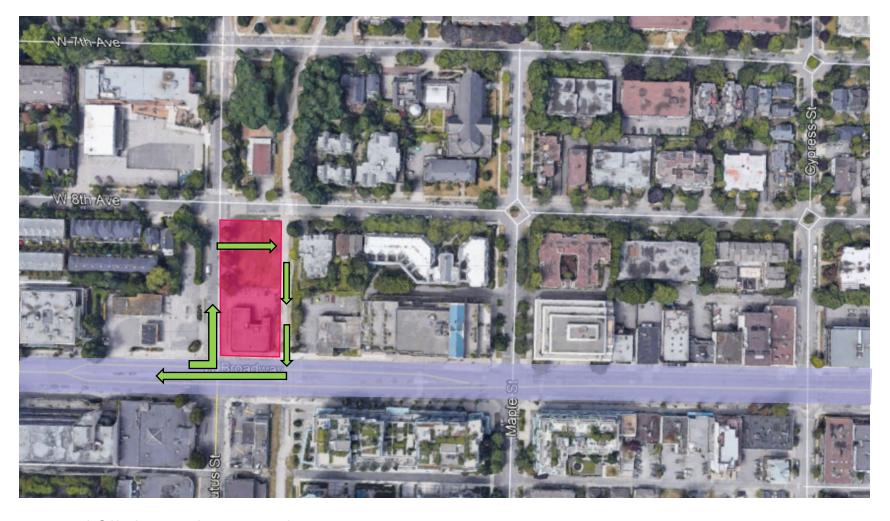
Restoration of the Surface 2024

Legend:

Completed station

Open traffic flow

⇒ Bus Loop movement



- Backfill the underground station
- Removal of the Traffic deck
- Repaving of road surface
- Detours removed and traffic returns to the new normal



Train Track Construction 2024



• Track construction works begin



- Dynamic train testing along the tracks
- Trains operational





Traffic



What to expect: Commuter Traffic

We are committed to mitigating impacts throughout construction

- 4 lanes of traffic will be maintained on Broadway during construction
- Short-term lane closures for utility relocation works
- Traffic signals modifications will be required at intersections to accommodate lane realignment
- School pick-up and drop-off locations will be maintained
- Bus access will be maintained



What to expect: Construction Traffic

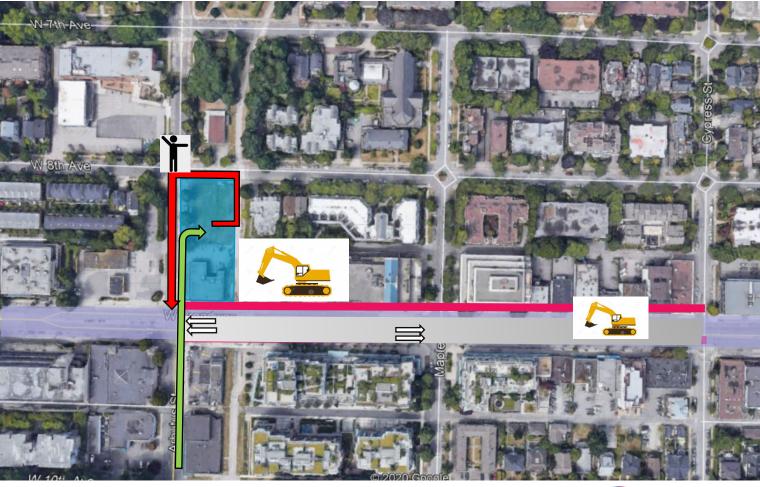
Truck Route

Legend:

- Traffic deck support system
- Work Site
- Temporary traffic deck being

built

- **⇒** Entry
- **→** Exit

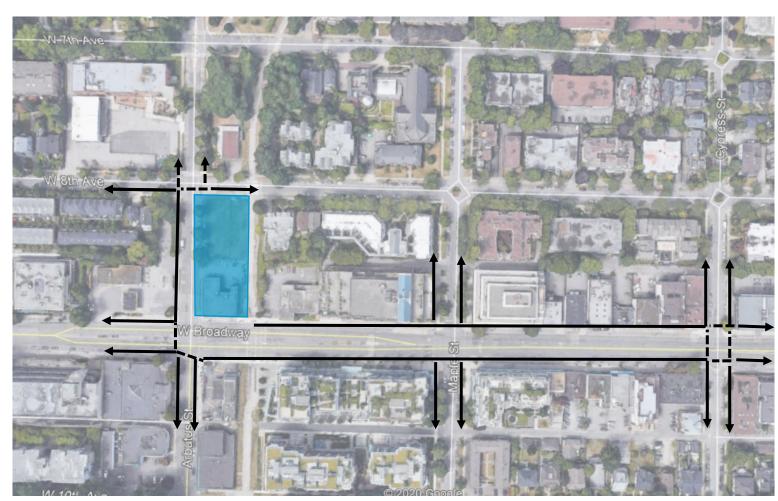


 Trucks will access the Arbutus site via existing truck routes along Arbutus and Broadway



What to expect: Pedestrians

- Sidewalks to be closed at the Arbutus Station site
- One crosswalk on the east side of the intersection
- Pedestrians will be detoured around the site with signage
- Flaggers will be available to direct pedestrians as required
- Wayfinding signs to inform pedestrians





What to expect: The Arbutus Greenway Detour

Starting later this Spring

- Preparation work begins to paint lines for the detour, construct safety barriers, send out notifications and install signage
- The Arbutus Greenway will be closed between 8th Avenue and 10th Avenue
- Cyclists will be detoured at West 6th and Cypress, to take Cypress Street to 10th Avenue to reconnect to the Arbutus Greenway
- The detour will be active until 2025





The Arbutus Greenway Detour: Safety Measures

The detour aims to safely maintain the Arbutus Greenway similar to the existing path with the following attributes:

- Two-way bike lane
- Centre line painted
- Separation between cyclists and motor vehicle traffic
- Illumination will be maintained







Mitigation Measures



Vibration Management

Project will adhere to guidelines related to vibration from construction activities

Activities that may result in some vibration include:

- Demolition of structures and pavement
- Shoring works for future station and tunnel
- Tunnel Boring
- Building the traffic deck



Noise Management

- Project will adhere to City of Vancouver noise bylaw levels
- Construction activities that generate the most noise will be carried out during core hours:

07:00 a.m. to 8:00 p.m. Monday-Saturday

09:00 a.m. to 8:00 p.m. Sunday/Statutory Holidays

In 2021, we expect minimal noise during the night



Dust Control

- Water spray to reduce generation of fugitive dust during dry seasons
- Sweep and clean paved surfaces to eliminate tracking of sand and dirt

Light Management

- Task-specific lighting will be used, large area lighting will be minimized
- Physical barriers (temporary sound walls and site hoardings) will limit light spills
- Existing street lighting conditions will be maintained for traffic





Being a good neighbour



Ongoing Communications

The Project will maximize predictability and manage disruption as much as possible

- Timely information about construction, traffic and parking
- Notifications by email, newsletter, website and direct contact
- Clear signage at point of construction activities
- Where possible, mitigate construction impacts and manage issues as they arise
- Maintain business visibility and help customers access shops and services



Business Advisory Signage

 Comprehensive, temporary wayfinding signage program

 Ensures access and visibility during construction











Parking Map





Connect with us





24/7 Construction Line: 1-844-815-6114



broadwaysubway@gov.bc.ca



broadwaysubway.ca



Community Office: 1212 West Broadway

778-572-3544



Questions and Comments

