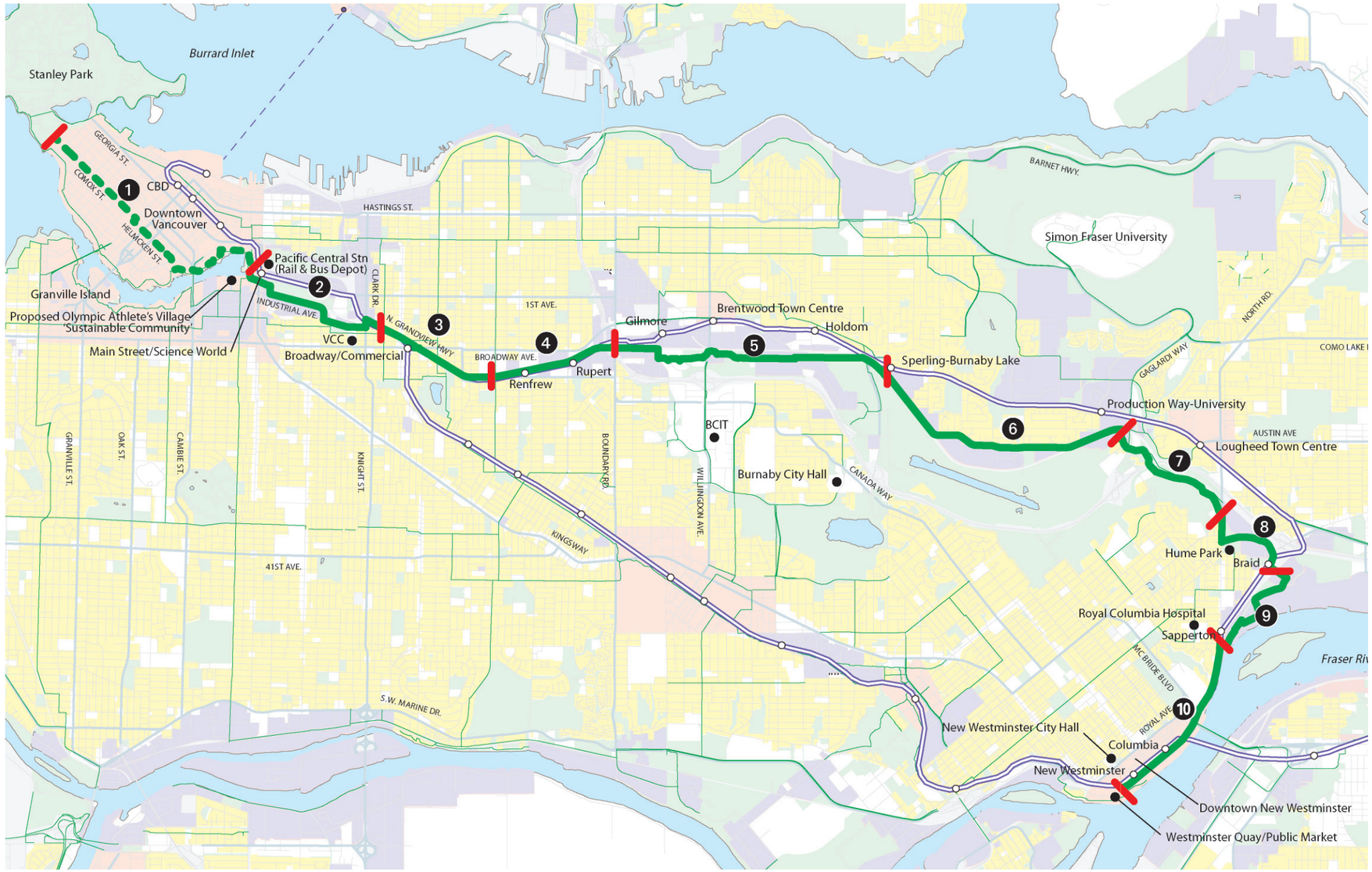
*Figure 5.2. Map of Central Valley Greenway Route.*




Central Valley Greenway
Future Greenway Expansion
Major Road Network
Existing Bike Routes
SkyTrain
SkyTrain Station
Park/Greenspace
Residential
Commercial/Mixed Use
Industrial

*Vancouver*

1. Helmcken/Comox Extension
2. False Creek Flats
3. Grandview Corridor
4. Rupert/Renfrew Rail Corridor

*Burnaby*

5. Still Creek
6. Winston Street
7. Brunette River

*New Westminster*

8. Hume Park
9. Braid Industrial Way
10. Columbia Street

### *Neighbourhood Orientation*

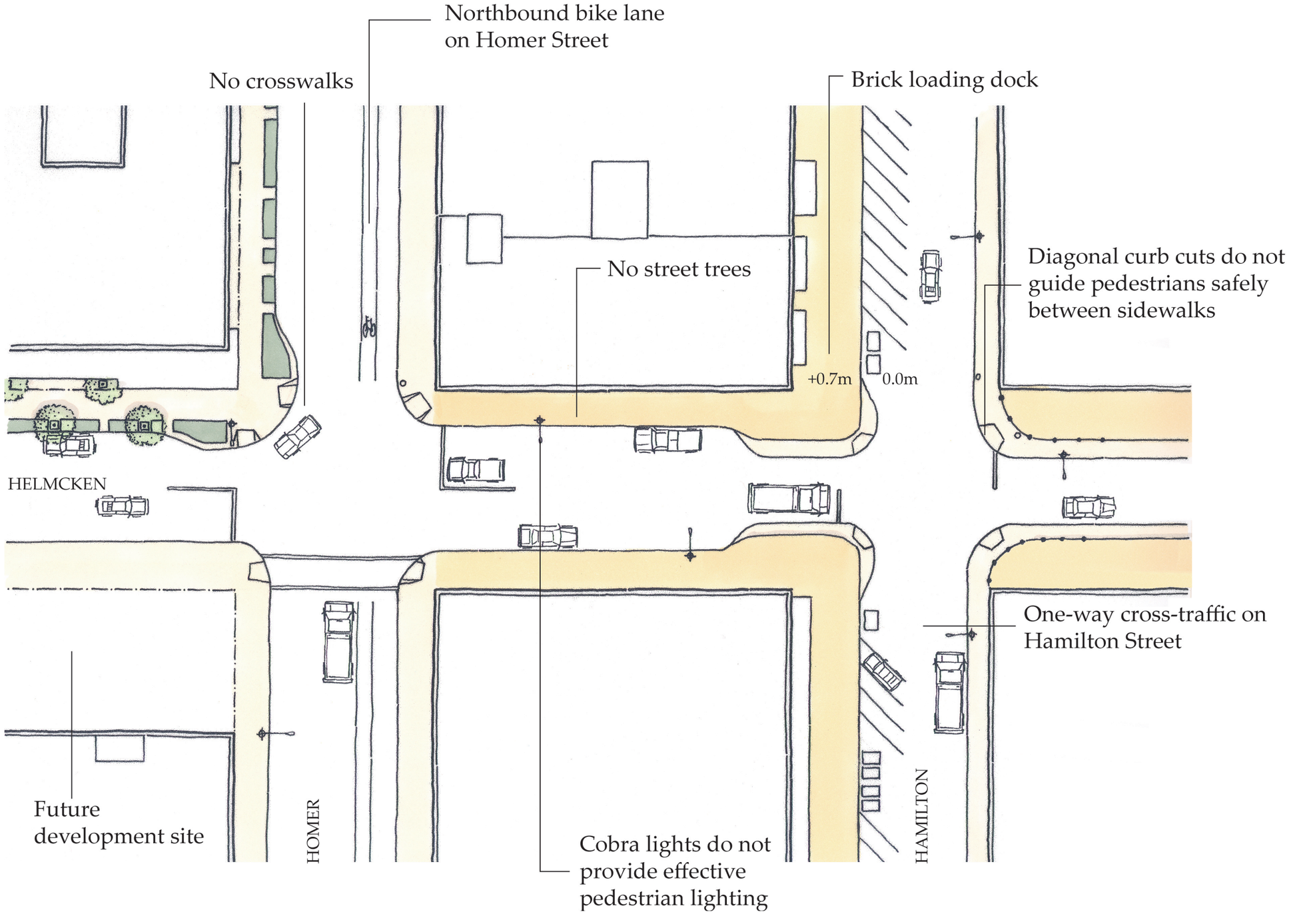
The study area is located on the Burrard Peninsula on generally low-traffic streets, which bisect the downtown in a northwest-southeast direction. On the downtown peninsula, the streets are not oriented according to the cardinal directions, but angled 45 degrees west of the north-south axis. All the blocks in the study area east of Burrard Street run north to south, while all those west of Burrard run west to east. Thus all blocks west of Burrard have their long sides facing Comox Street, while all those east of Burrard have their short sides facing Helmcken. This alignment differentiates two different areas of the greenway's route. Most blocks along the entire route have maintained their historic service lanes, which provide additional parking, service access, and open space to residents and business owners. While the greenway traces a straight path across the entire downtown peninsula, to understand the site and context of the route, this report recognizes that there are three distinct neighbourhood areas that the greenway transects, each with unique conditions that will affect the conceptual design (Figure 5.3).

#### *Yaletown*

Yaletown was once part of False Creek and was later filled-in with material excavated for the Grandview Cut in the 1910s to create land for a large rail yard. As recently as the 1970s, Yaletown was a transportation, warehouse, and industrial hub tied to the railroads. Today, False Creek's north side and adjacent neighbourhoods off Pacific Boulevard have been transformed into a vibrant commercial, retail, and residential site. The growing Yaletown neighbourhood reflects this area's changing history through a mix of renovated commercial warehouses, new residential high-rise and low-rise lofts, cafes, shops, hotels, and community spaces.

#### *Downtown South*

Primarily considered part of the Central Business District (CBD), Downtown South is a growing residential area that is also undergoing a surge of redevelopment. While older commercial properties appear somewhat grittier in nature, the newer residential developments are reinventing this area. Many of these developments consider themselves part of the Yaletown neighbourhood, particularly those nearest to its historic edge (at Homer). For the purposes of this project, the Downtown South and Yaletown areas will be considered together.


Northbound bike lane
on Homer Street
No crosswalks
Brick loading dock
No street trees
+0.7m
0.0m
Diagonal curb cuts do not
guide pedestrians safely
between sidewalks
HELMCKEN
One-way cross-traffic on
Hamilton Street
Future
development site
HOMER
HAMILTON
Cobra lights do not
provide effective
pedestrian lighting
0
5
10
meters

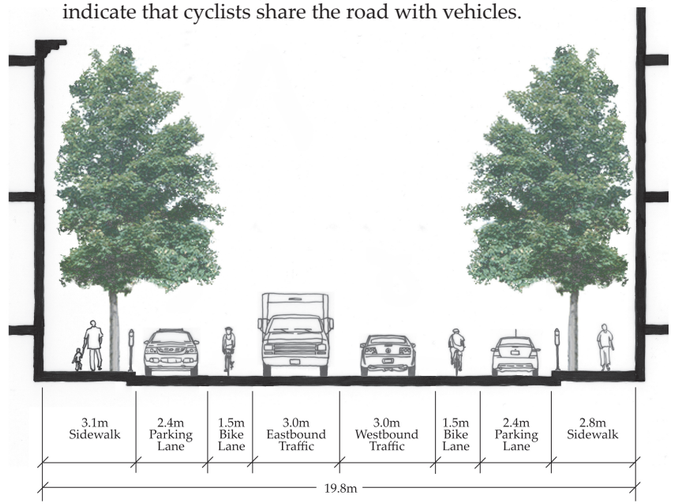
## *HELMCKEN - ALTERNATIVE A: GREENING THE EXISTING*

### *Physical Description*

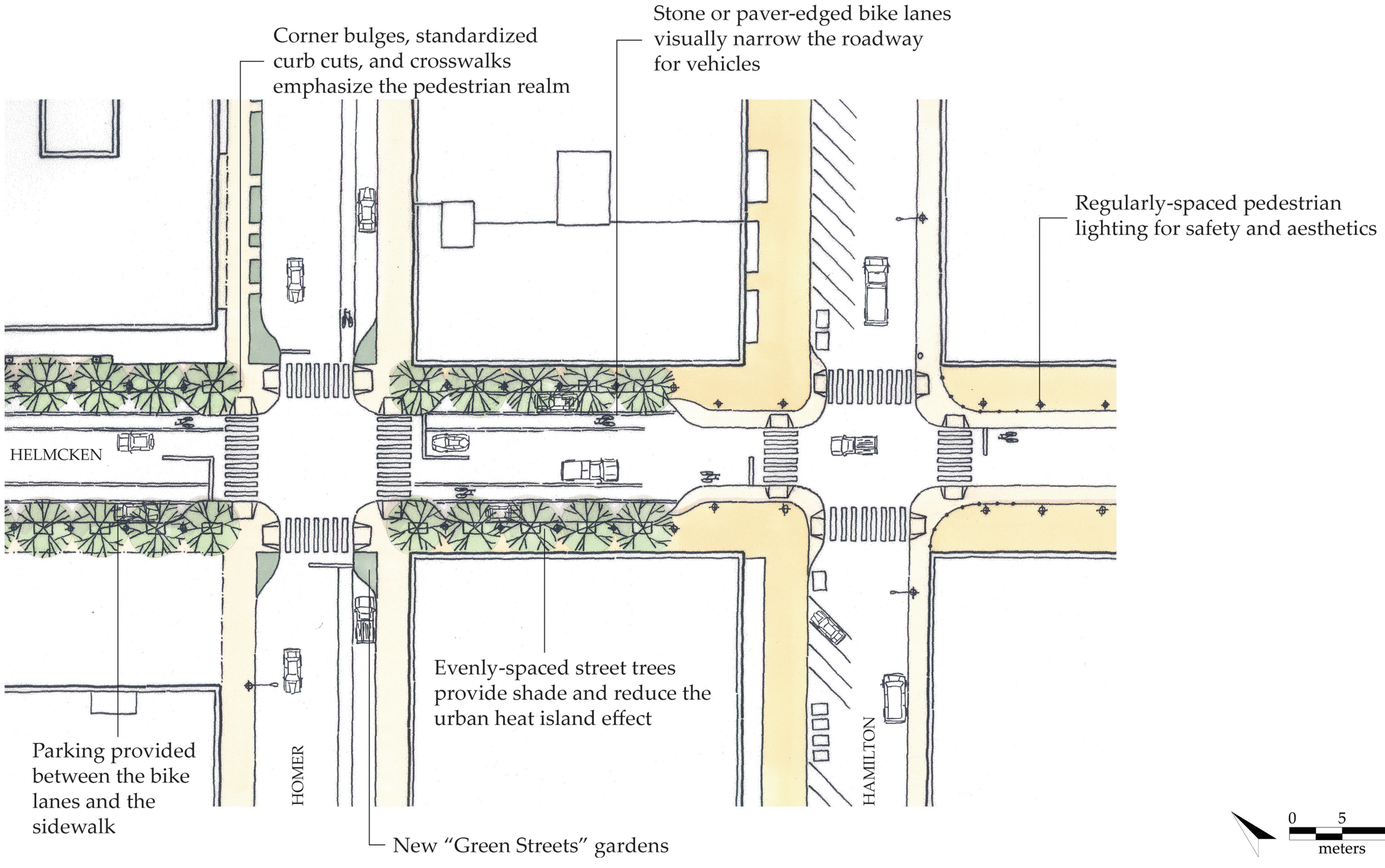
Alternative A proposes the addition of street trees and striped bike lanes along Helmcken. This pragmatic option offers aesthetic improvements to the streetscape and carves a piece of the right-of-way for cyclists. The restrained design is influenced by the Vancouver greenway model. Using painted striping or a flush stone, bike lanes help visually narrow the roadway and slows traffic. Street tree species and spacing are regularized for linear continuity, as is pedestrian lighting.

### *Technical Details*

Street tree planting begins to the north (left) of the loading dock extensions at Hamilton. Trees are planted every 6 metres with pedestrian lighting placed in between the trees. A cyclist-activated traffic signal at Homer is proposed. Zebra-striped crosswalks and regularized curb cuts emphasize and punctuate the pedestrian realm. Corner bulges are proposed both on Helmcken and on cross-streets. Metered parking for eight cars is maintained. The sidewalk width is narrowed by 0.7 metres on each side of the street to accommodate the addition of two 1.5 metre bike lanes. Granite blocks set in sand are used to stripe the bike lanes and is flush with the asphalt. From Hamilton Street to the south (right), bike stencils and other vertical signage indicate that cyclists share the road with vehicles.




*Typical conditions for Alternative A adds a splash of green with street trees.*


Corner bulges, standardized curb cuts, and crosswalks emphasize the pedestrian realm
Stone or paver-edged bike lanes visually narrow the roadway for vehicles
Regularly-spaced pedestrian lighting for safety and aesthetics
HELMCKEN
HOMER
HAMILTON
Parking provided between the bike lanes and the sidewalk
Evenly-spaced street trees provide shade and reduce the urban heat island effect
New "Green Streets" gardens
0
5
10
meters

***Place***

Helmcken's Alternative A contributes to sense of place through the materials used. The inset granite bike lane striping is an example. Granite was used historically in building construction in the area. Cost has limited its use in more recent years, though used sparingly, it could create a unique bike route in Vancouver. This would contribute to the greenway's image and suggests an authentic condition.

***Great Streets***

Corner bulges, zebra-striped crosswalks, and visible bike lanes increase pedestrian and cyclist safety by effectively slowing vehicular traffic. Deciduous street trees offer shade in the summer to both the sidewalk and also to the adjacent buildings. The tree canopy is continuous and regularized to provide enclosure of the pedestrian realm and the whole street once the trees mature. The addition of street trees also allows for rainwater interception and perhaps stormwater drainage, if infiltration curbs are used. Placement of benches, bike racks, and other street furniture between the trees provide a place to stop and rest and perhaps meet with a friend.

***Ecoliteracy***

Along the cement wall of the loading docks, public murals can be painted to highlight environmental issues and what the community is doing to address them. Or the walls could be used to literally tell the stories of the natural landscape. Reusing street furniture or constructing new pieces from recycled materials would help utilize existing resources and could be an inexpensive option for outfitting the greenway with amenities. Local artists and industrial designers could be engaged to design and implement these details.

Brick or stamped asphalt crosswalks reflect building character of the neighbourhood

Two rows of street trees provide shade and visual drama

Bike lane is protected by 1.2m treed median

Bollards are moved out to sidewalk edge to visually narrow the roadway and protect pedestrians

HELMCKEN

HOMER

HAMILTON

Off-set double-allee of street trees allows room for canopy growth

Bikes share the road east of Hamilton Street

Parking is eliminated on the greenway

0 5 10
meters

***Place***

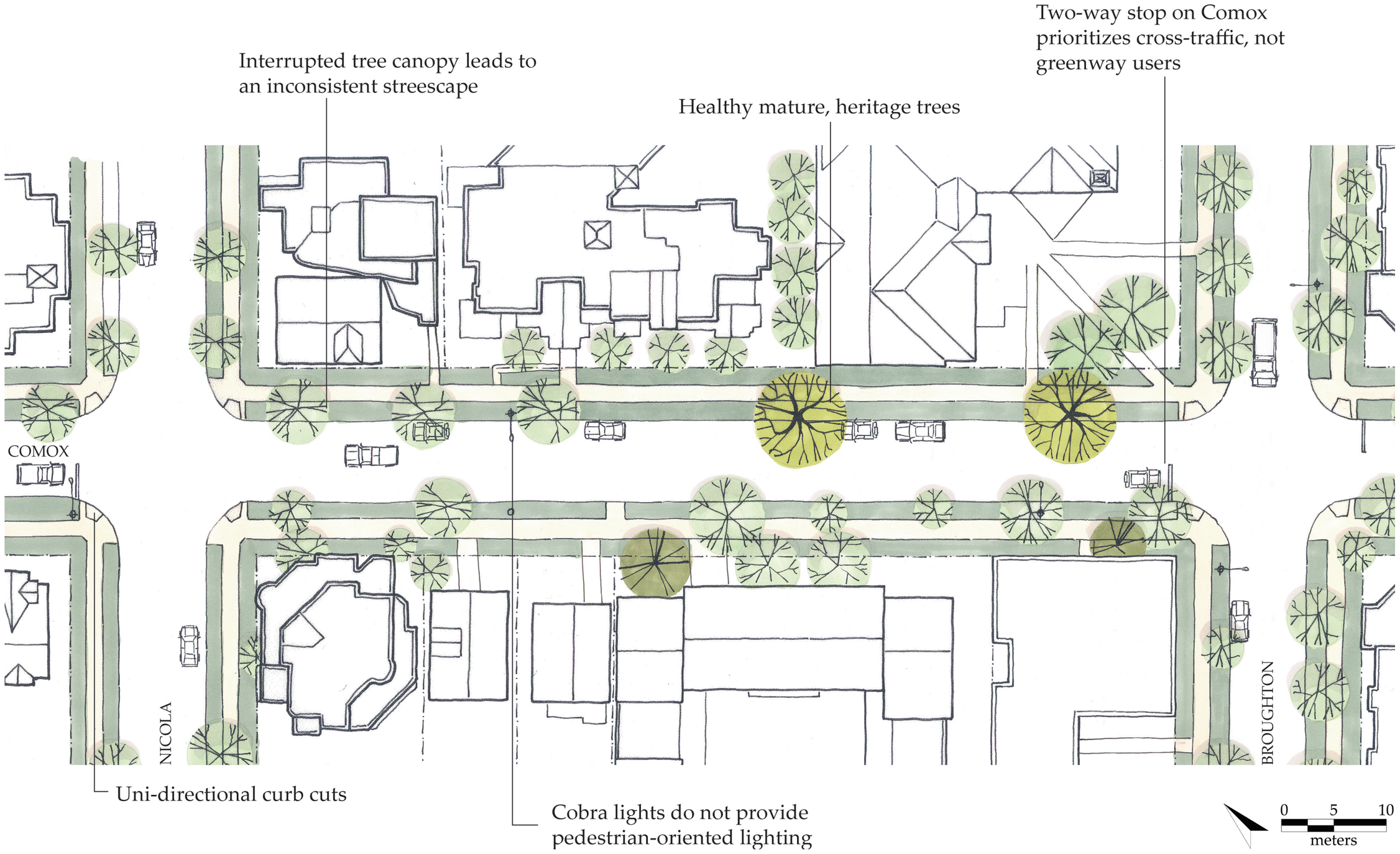
The sensory experience can be heightened significantly with this option. The visual experience is triggered by the double-allee of trees and the olfactory sense by planting a fragrant tree. Sense of place is reinforced by the creation of a streetscape that distinguishes the greenway from any other route in the city; a visitor would always know what street they were on if they were walking down Helmcken.

***Great Streets***

Both pedestrian and cyclist protection from vehicular traffic is emphasized by the bike boulevard. By stripping the street of parking, cyclists can be programmatically prioritized over motorized vehicles. Sunlight can filter through the tree branches in the winter and provide shade in summer, contributing to user comfort and street aesthetics. The urban heat island effect could be minimized by the addition of the street trees, as well. The views up or down the treed boulevard can contrast with neighbouring streets and provide a sense of mystery waiting to be discovered.

***Ecoliteracy***

This option considers the area's topography, particularly if a user was at the top of Helmcken at Burrard Street looking downhill towards Yaletown. It creates a tunnel view block-by-block with a significant break in the tree canopy at historic Yaletown. This option is an example of how provision of an interesting journey can encourage new patterns and habits. Imagine that the double-allee of trees become the focus of a new festival that celebrates the urban natural environment. Or imagine the trees strung with lights for the holidays and winter season. In addition, this option promotes the development of Vancouver's "urban forest."


Interrupted tree canopy leads to an inconsistent streescape
Healthy mature, heritage trees
Two-way stop on Comox prioritizes cross-traffic, not greenway users
COMOX
NICOLA
BROUGHTON
Uni-directional curb cuts
Cobra lights do not provide pedestrian-oriented lighting
0
5
10
meters

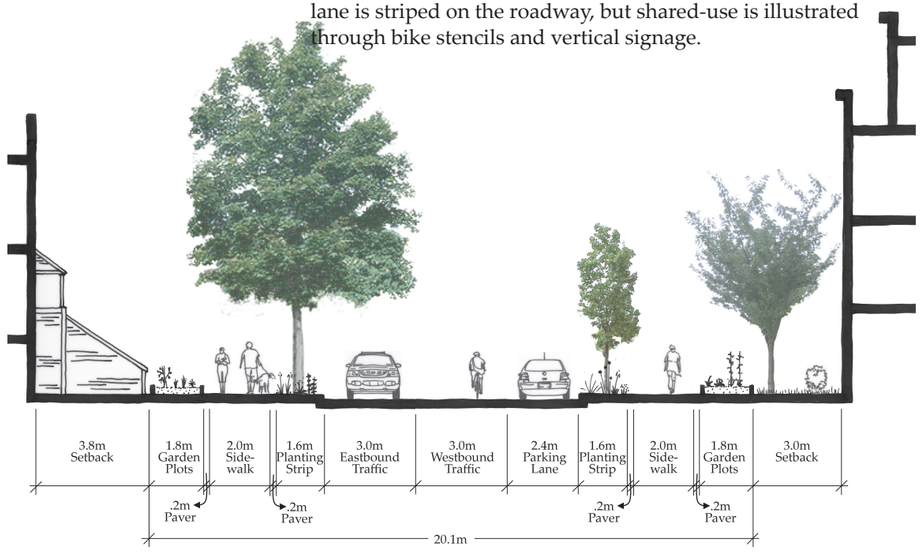
## *COMOX - ALTERNATIVE A: THE AGRARIAN GREENWAY*

### *Physical Description*

Raised beds of community garden plots characterize Alternative A for Comox. Community gathering places are created for informal meetings and celebration of the edible landscape. Large 2-metre by 2-metre pavers inset with fruit and vegetable designs reinforce the concept. Partnerships with the church, adjacent schools, and other community services, as well as residential neighbours, could be established to provide a place for garden tenders to store tools and other materials.

### *Technical Details*

Vegetable garden plots are typically 1.5 metres wide by 4 metres long for a standard plot size of 60 square metres. Compost bins and storage cupboards are provided in shadier places. The planting strip between the sidewalk and the street is also used as flower gardening space. Flowering fruit trees are interspersed with existing heritage trees, among other larger trees, reinforcing the agrarian concept. Two mid-block bulges and table-style speed bumps eliminate two parking spaces for a total of 12 parking spaces for residents. They also allow easy pedestrian crossing and connection across the street. No dedicated bike lane is striped on the roadway, but shared-use is illustrated through bike stencils and vertical signage.




*Typical street section of the agrarian greenway, illustrating the mix of fruit and heritage trees.*

Garden plots are 5.5m² and allow community to participate in greenway maintenance

A mix of fruit trees and heritage trees reinforce the agrarian theme and punctuate the streetscape

Two parking spaces are lost for mid-block bulges

Corner bulges, standardized curb cuts, and crosswalks emphasize the pedestrian realm

Bikes share the road with cars

Speed tables slow traffic and enable easy pedestrian crossing

Small plazas with places to sit can help form community through informal interaction

0 5 10
meters

***Place***

Olfactory senses can be stimulated along the agrarian greenway through the use of flowering fruit trees and gardens. The spirit of place could be evoked through the use of old railroad ties to construct the planting beds, reflecting the settlement of the West End by CPR families. In this option, the community is granted legitimate ownership of the greenway through garden tending. Stringing community garden plots along the greenway through the West End may also reinforce Vancouver's image as a "City of Gardens."

***Great Streets***

The social function of the street is refreshed through the mid-block plazas, which break the monotony of the streetscape and allow for the development of community. These places may provide seating and gathering space, and the speed tables allow people to move easily across the street to chat with neighbours and fellow gardeners. The plazas, garden spaces, and raised mid-block crossings are designed as a series of contrasting dimensions and are intended to intrigue the user's sense of discovery and drama. Simply, planted street edges can provide an aesthetically pleasing environment for residents and visitors.

***Ecoliteracy***

Ecoliteracy programs and partnerships with adjacent schools could help engage students in an urban ecology curriculum. Stewardship of the greenway could be spearheaded by the schools, teaching children about sustainability principles through practice. The fruit and vegetable pavers could be designed by area schoolchildren and created with the assistance of a local artist. The pavers would add a bit of whimsy and even functional play, if the children designed them as a life-sized board game.

Rain garden reduces stormwater runoff and provides interest

Realigned roadway calms traffic and makes room for nature

Raised intersections to slow cross-traffic

COMOX

NICOLA

BROUGHTON

Bikes share the road with cars

Parking spaces surfaced with decomposed granite for drainage

Corner bulges prioritize pedestrians

0 5 10
meters

***Place***

The regional *genius loci* can be evoked in this option through the planting of a palette of native plants and trees. Cedar street furniture would recognize the harvesting of these trees and contribute to a sense of place. Imagine a bench carved from the trunk of a large redcedar, showing its growth rings. The organic meandering of the roadway could provide users with a genuine experience and is more than just a path to get from place to place; it could become a place in and of itself. It could become the preferred route of pedestrians and recreational cyclists because its continual transformations and encounters enchant users.

***Great Streets***

Traffic calming can be achieved through the realignment of the street. The shared nature of the woonerf suggests that cars are guests in pedestrian space. It is similar to the traditional village form of the street. This condition is very different than what Vancouver drivers are accustomed to, which may slow vehicular speed and make drivers more aware of their surroundings. Slower vehicular speeds can prioritize pedestrians and cyclists who use the roadway. Serial vision is considered in this option as sight lines are continually interrupted and changing due to the non-linear nature of the street and pathways. In this way, interplay, intricacy, mystery, and discovery are linked together along a path.

***Ecoliteracy***

This option makes room in the right-of-way for stormwater management. Loose stone gutters, planted swales, and other permeable materials allow for natural drainage. Restoration of the natural hydrologic cycle is a central concept of this plan. Signage that literally translates or traces ecological phenomena can help teach users about their impacts on the urban landscape. Less-designed spaces allow for informal community adoption and planting of the greenway, like gorilla gardening.