

**A Proposal to Convert the Brighton Avenue People Priority Greenway into a Shared  
Street with a Comfort Zone Pedestrian Walkway**

**January 15, 2019**

**Submitted by:**

**Brighton Avenue People Priority Greenway Project Group**

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## 1. City of Victoria Greenways Plan

City Council adopted the City of Victoria Greenways Plan in August of 2003 following substantial community input and buy-in. The purpose of the plan is to establish a policy framework to guide the development of a Greenway system throughout the city. The 50-year vision is to provide a “superb, human scaled, people-friendly environment so that pedestrians, cyclists and other non-motorized users will be rewarded with a safe, enjoyable and engaging experience as they use the Greenways.”<sup>1</sup>

The goal is a human-powered transportation network that provides a wide variety of benefits<sup>2</sup>:

- Economic. The presence of Greenways increasing the value of nearby properties.
- Environmental. Provision for alternative modes of transportation resulting in a reduction of motorized vehicles.
- Social/community. Common meeting areas to talk, rest and develop closer ties with neighbours.
- Connectivity. Attempts to provide connections to greenways and pedestrian and cycling trails in adjacent municipalities.
- Recreational. Cycling, walking, running, skateboarding and roller blading to name a few.<sup>3</sup>

The plan establishes three categories of Greenways, one being a People Priority Greenway (PPG). A PPG would be located on traffic-calmed secondary collector and local roads and designed for pedestrians, bicycles and other non-motorized rolling traffic and motor vehicles.

Upon adoption, the plan became part of the City’s regulatory framework. The implementation of the plan called for a staff position dedicated to developing long-term strategies and policies, as well as securing alternate resources to ensure the development of the plan. Neighbourhoods would play an important role in implementation with the City, as it formed partnerships with neighbourhood groups to develop Greenways.

## 2. Greenways Plan Implementation

Since its adoption in 2003 little has been done in the way of implementation other than several references in the OCP of 2012. This was due in part to the absence of dedicated resources and construction level guidelines and standards for Greenways. On December 13<sup>th</sup> Council passed a motion to include in the city’s strategic plan: “Review the Subdivision and Development Services Bylaw, the Greenways Plan and associated city policies and bylaws, to allow for alternate design treatments for shared streets on identified greenways.”

This motion was triggered in part by public reaction to planned construction on two designated PPGs – Kings Rd. in Oaklands and Brighton Ave in Gonzales. Two neighbourhood groups took issue with the proposed projects, both of which involved the installation of sidewalks on existing sidewalk-free blocks. It is unsurprising that opposition arose on these streets as many “low-volume residential streets, especially in older cities, may have narrow or nonexistent sidewalks ... and operate as *de*

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<sup>1</sup> City of Victoria Greenways Plan, 2003. Pg. 2

<sup>2</sup> Ibid pg 3

<sup>3</sup> Ibid. pg.4

*facto* shared spaces in which children play and people walk and cycle, sharing the street with drivers.”<sup>4</sup> Although the alternatives suggested by the two groups are different, they both raise the issue of what is meant by a shared, people priority greenway under the City’s Greenways Plan.

### 3. The Shared Street of a PPG

Implicit in the description of the PPG is the intent for pedestrians, runners, non-motorized rolling users and those with assistive devices to share the street with motorized users travelling at a suitable speed. It’s impossible to imagine all of the possible Greenway recreational activities being carried out single file on a 1 ½ metre wide sidewalk while intermittently dodging the residential parking only sign posts; or to envision a child, rolling alone on a scooter because the parents restricted to the sidewalk; or a wheelchair user wanting to avoid the driveway dips being, instead, forced to endure the challenging navigation of the sidewalk. Our understanding of a PPG is that people, rolling or not, have priority on the shared street of a PPG.

In support of this understanding we can cite various sections of the Greenways Plan, the OCP and most recently Council’s motion referencing “alternate design treatments for shared streets on identified greenways” for inclusion in the City’s Strategic Plan. However, in support of a segregated street, with pedestrians restricted to conventional curbed sidewalks, others, including City staff, can also cite the Greenways Plan, the City’s Strategic Plan, alternative sections of the OCP as well as the Pedestrian Master Plan and Official Community Plans.

For example, the *Transportation Association of Canada’s (TAC) Geometric Design Guide for Canadian Roads* used by the City’s Transportation Department in implementing the Pedestrian Master Plan (PMP), makes a very clear distinction between the street, for the cars, and the “pedestrian realm”, segregated from the street. At the same time the TAC manual suggests “a shared roadway with parking on both sides on a local road presents a comfortable environment for users” with pedestrians being “accommodated on the new sidewalk”. The new sidewalk refers to the installation of two blocks of conventional curbed sidewalks on the Brighton Ave PPG between Davie and Clare St. “..as Brighton Ave. was highlighted in the 2008 PMP as a high priority area for the installation of a sidewalk to support the City’s goal of walking”<sup>5</sup>.

The same understanding underpinned the more recent proposal to install sidewalks on the remaining two blocks of the Brighton PPG between Clare and Richmond with similar references to the PMP, the Greenways Plan, and the City’s Strategic Plan and Official Community Plans in support of completing “...a Multi-Modal and Active Transportation Network.”<sup>6</sup>

Contributing to these contrasting interpretations of the “shared” street of a PPG is the wide variety of PPGs identified in the Greenways Plan. They include dual sidewalk roads such as Rockland and Simcoe, single sidewalk blocks such as on Brighton and side-walk free roads such as Kings Road, blocks of Brighton and a block of Maddison Avenue.

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<sup>4</sup> Global Designing Cities Initiative, Residential shared streets <https://globaldesigningcities.org/publication/global-street-design-guide/streets/shared-streets/residential-shared-streets/>

<sup>5</sup> Correspondence from staff

<sup>6</sup> Correspondence from staff

Our immediate concern is that the “segregated” interpretation of a shared street will continue the destruction of side-walk free designated PPGs until official shared PPG street-specific construction guidelines and standards are established. These extremely scarce roads, now being lost under the implementation of various plans, are the very roads that have the greatest potential to most fully realize the Greenways vision of a “superb, human scaled, people-friendly environment” with users “being rewarded with a safe, enjoyable and engaging experience”.

In an effort to ‘prime the pump’ in the development of these guidelines, we offer up the following view of a shared street followed by a site-specific alternative plan for the currently sidewalk-free PPG on Brighton Avenue from Clare to Richmond. We hope that this approach may support the work toward an alternative wide-surface walkway concept such as under development for the Oaklands Rise Woonerf Pilot. We also hope that the work on their initiative will support ours and that in the future these two projects will inform relevant projects such as PPGs, People Only Greenways, bicycle routes, etc.

#### 4. Features of a Shared Street

According to the FHWA “The defining feature of a shared street is a shared zone where pedestrians, bicyclists, and motor vehicles can safely interact in the same space.”<sup>7</sup> Similar to the Greenways Plan vision of a “a safe, enjoyable and engaging experience” the Global Designing Cities Initiative calls for designing “...streets to balance the needs of diverse users in order to shape an enticing environment that ensures access, safety, comfort, and enjoyment for everyone”.<sup>8</sup> Within the context of a Greenways Plan PPG, in addition to cars, diverse users would include non-motorized rolling traffic (i.e. bicycles, strollers, scooters, skateboarders, rollerbladers, wheelchairs) along with walkers and runners.

The U.S. Department of Transportation Federal Highway Administration states that this mixing in the same space is accompanied by a design that:

- **Distinguishes it from conventional streets** through gateway treatments, traffic calming measures, detectable changes in surface texture and colour, and other design elements<sup>9</sup>
- **Encourages low motor vehicle speeds.** Low motor vehicle speeds increase pedestrian comfort and improve safety for all users by decreasing the likelihood and severity of crashes (Jurewicz, Sobhani, Woolley, Dutschke, & Corben 2016). Shared streets are generally designed to produce motor vehicle operating speeds between 5 and 15 mph.(8-24 KPH)
- **Encourages low motor vehicle volumes.** Low motor vehicle volumes combine with low motor vehicle speeds to increase pedestrian comfort and reduce the potential for crashes. In commercial areas, the low speed environment on a shared street often results in lower volumes of motor vehicles, because drivers tend to avoid the street and take alternative routes unless their destination is located on the shared street.

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<sup>7</sup> The Federal Highway Administration (FHWA)

[https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/accessible\\_shared\\_streets/](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/accessible_shared_streets/) pg. 20

<sup>8</sup> Global Designing Cities Initiative

<sup>9</sup> FHWA pg 15

- **Lacks design elements that suggest motor vehicle priority and segregate modes.** Such elements include vertical curbs, signs, many pavement markings, traffic controls and other conventional street elements.
  - **Includes design elements that suggest pedestrian priority and the function of the street as a place for social, economic, and cultural exchange.** Such elements include gathering areas, seating and site furnishings, lighting, art, and special plantings.<sup>10</sup>

Design guidelines from the Global Designing Cities Initiative include:

- By removing the formal distinctions between spaces dedicated to pedestrians, cyclists, and motorized vehicles, the street is shared by everyone, with each user becoming increasingly aware and respectful of the others
- While designs vary based on local context and culture, curbs are removed and the materials and space allocation indicate that vehicles are guests.
- Shared streets provide pedestrians the right-of way.

Design guidelines from the National Association of City Transportation Officials (NACTO) include:

- “Conversions” from separated to shared streets “...necessitate a conscious redesign rather than the addition of regulatory signage only”
- In some cases a modified YIELD TO PEDESTRIANS sign may be added to reinforce the conversion in early stages. Shared streets should generally be designed to operate intuitively as shared spaces without the need for signage. Signage serves to educate the public in the early stages of a conversion.<sup>11</sup>

And, last but not least, an important design guideline from a local Canadian source -- Oaklands Rise Woonerf Pilot Glossary (pg. 16)

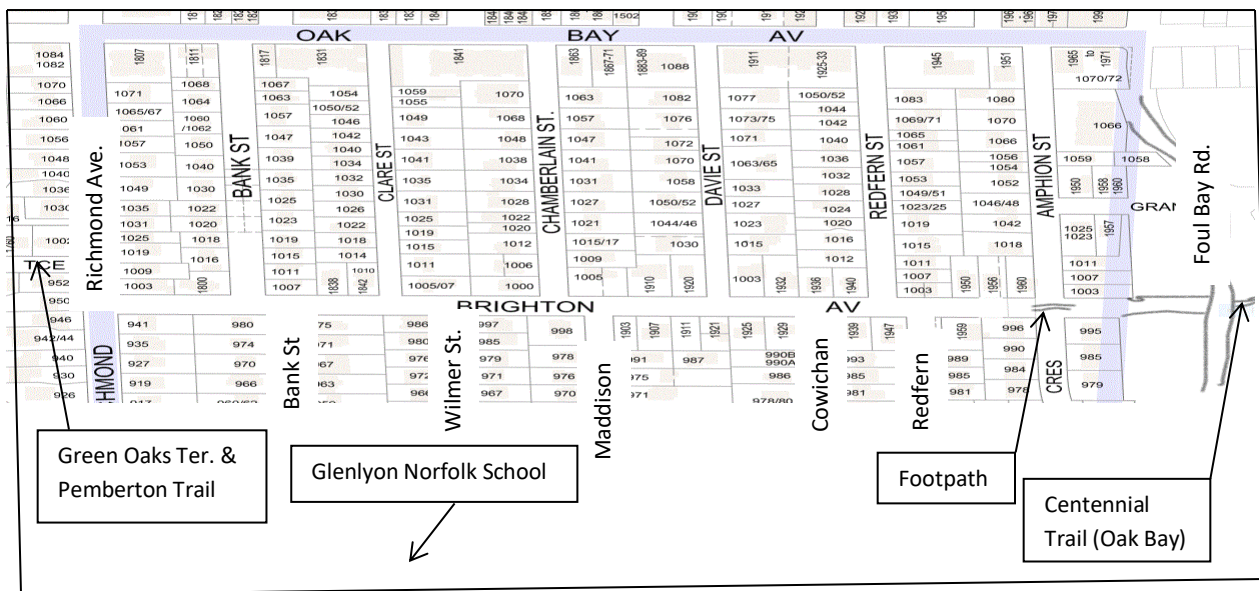
- **Lighter, Quicker, Cheaper (LQC)** : affordable, human-scale, and near-term transformations of the built environment; citizen-led and place-focused projects of variable scope; opportunities to test concepts through shorter term, less engineered interventions as relatively lesser cost alterations to public space. For example, some initial boulevard plantings through donations and maintained by volunteers followed by cement planting beds, or localised street art elements followed by civic program street art to augment community selections.

<sup>10</sup> FHWA pg. 2

<sup>11</sup> <https://nacto.org/publication/urban-street-design-guide/streets/residential-shared-street/>

## 5. Background of the Brighton Ave. People Priority Greenway

The Brighton Ave. PPG runs from Richmond Ave 6 blocks and dead-ends east of Redfern. (Fig. 1)



**Fig.1 Brighton Ave. PPG**

Here it transitions into a foot path through a Gary Oak Meadow (Fig. 2) onto a final block of Brighton to Foul Bay Road. From here it continues east to the Centennial Trail (Fig. 3) in Oak Bay which continues down to Windsor Park and the ocean.



**Fig 2: Footpath through Gary Oak Meadow**



**Fig. 3 Entrance to Centennial Trail @ Foul Bay**

At Richmond it continues west as the Pemberton Trail, an urban trail running through historic Rockland, linking south Oak Bay with downtown Victoria and formally adopted as part of the Greenways Plan in November '04 or '05. As is evident in Fig.1, the Brighton PPG serves the Greenways Plan's "connectivity" function by connecting greenways to greenways and pedestrian and cycling trails in adjacent municipalities and neighbourhoods.

Until last year the Brighton Avenue PPG had four sidewalk-free blocks. Despite some residents' objections, two blocks of conventional sidewalk, curb and gutter were installed on the north side between Davie and Clare. We asked Council for a hiatus on the remaining two blocks to allow us time

to develop an alternative design and have been back and forth with Transportation Department staff since June.

We have since offered, and have been asked, to submit for Council's review:

- research of other jurisdictions to formulate succinct guidelines along with supportive design elements and standards.
- provide a visual and photographic 'vocabulary' primarily using elements from within Victoria to illustrate their adaptation to Brighton.
- with feedback from staff, produce a site-specific draft scenario for their consideration and further community input.
- an end result of a pilot plan, appended to the Greenways Plan, for the 2 blocks of Brighton from Richmond to Clare.

A famous urbanologist, possibly Jane Jacobs, wrote that a great city is characterized by 3 qualities -- diversity, density and delight. The freedom to comfortably dog walk, jog, roller blade, walk and talk two or three abreast, skate board and so on, *on* the street has delighted the users of what is locally known as the Brighton Ave walk for decades. This now partially sidewalk free and "de facto shared space" provides a walkable community feeling in the area and attracts users from several nearby neighbourhoods who frequent the Brighton PPG as a destination of choice.

Even more so prior to the recent sidewalk installation from Clare to Davie, Brighton has an accessible, safe, beautiful "pedestrian first" neighbourhood ambiance that preserved a unique, almost rural, walkability. Indeed, upon completion of the sidewalk installation one of the construction workers commented, with understandable pride, to a smiling but disappointed neighbour, "Yep, what you had here before was nothing but a country lane. Now you're part of the city".

Must it be inevitable that neighbourhoods be turned into city transportation corridors to get people out of the way so cars can get somewhere else? It is not. As the City densifies, protecting such a zone as Brighton builds a legacy for the future. Let's not lose the incredible opportunity that it represents, starting with the immediate two blocks, to be developed into a six-block long community asset that will delight users for the years to come.

## 6. Design Considerations

The draft designs to date, by both City staff and the project group, produced the same outcome — a separated hard surface pedestrian walkway. However, neither was sufficiently informed by the three high-level design considerations of the Greenways Plan and the shared street sections of resources such as the National Association of City Transportation Officials (NATCO), CROW (2009) Road Safety Manual (CROW), U.S. Department of Transportation's Federal Highway Administration (FHWA) publications and the Global Designing Cities Initiative:

**Systems perspective** The Greenways is first and foremost a system requiring a systems perspective for the design of any section. The design of the two blocks from Clare to Richmond needs to be considered within this larger system. The appropriate larger system frame is the six block section of the Brighton PPG from the west side of Richmond to Amphion



where it continues as a pedestrian/bicycle path. It's this six block frame that makes clear the immediately relevant system dynamics in operation and the myriad ways in which the various design elements could fit together in an overall design to best meet the needs of all users.

**Speed** Another key consideration is that "...low motor vehicle speeds and volumes are essential in the shared street environment".<sup>12</sup> Without this feature, it is impossible to reward users with a safe, enjoyable and engaging experience as they use the Greenways. As drivers tend to avoid a low speed street and take alternative routes, unless their destination is located on or just off the shared road, the initial consideration of any design treatment must be its contribution to producing low motor vehicle operating speed. "Designers should strive to make the requisite behaviours of this speed for drivers implicit through the design of the street itself... so that over time, the street is shared by everyone, with each user becoming increasingly aware and respectful of the others"<sup>13</sup>.

**Conversion to a shared street** Inherent in the process of conversion to a shared road is implementation in stages over time. Experimentation, impact of limited resources, temporary design treatments, learning by designers and, in particular, education of and learning by drivers are all part of this conversion process. There will likely be an initial learning curve for many drivers using a shared street for the first time but, as with all driving-related knowledge, they will rapidly become comfortable with subsequent use. The number of first-time users will rapidly diminish and the regular users will quickly learn the requisite driver behaviours of a shared street (i.e. being a guest, not having priority, etc.). Ideally, those drivers wanting to use the road to transit quickly will soon learn to use the through-traffic routes of Oak Bay Avenue to the north or Quamichan to the south. And as driver awareness results in a corresponding decrease in speed and volume on the shared street, many of the pedestrians who initially restricted themselves to the comfort zone walkway will learn to feel comfortable on and enjoy the PPG.

## 7. PPG Design Components, Guidelines and Application to Brighton Ave.

Just as none of the draft designs produced to date were adequately informed by the three high level design considerations (above), they were also insufficiently informed by the six design components (i-vi) and accompanying guidelines (below) noted in the same publications.

Guidelines include both direct footnoted citations from relevant sources and those, un-footnoted, which are implicit and/or logically follow from these publications.

The following application to the Brighton PPG of these shared street design components and guidelines form the basis of our site specific draft scenario for staff's consideration and further community input. A few requested actions are included.

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<sup>12</sup>FHWA pg, 17

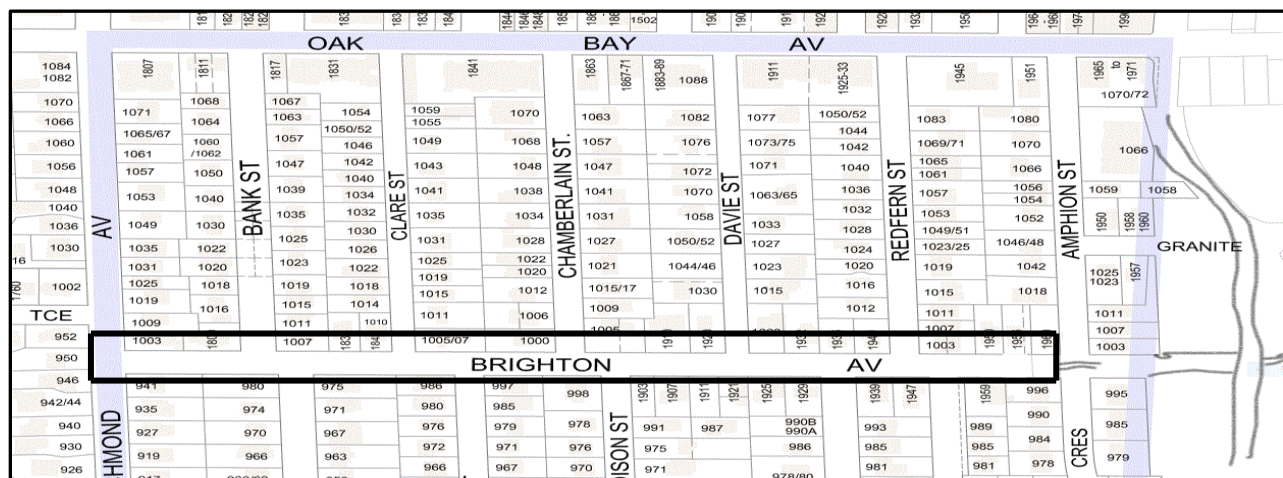
<sup>13</sup>FHWA

**i) Context** The design of shared streets should respond to the context in which they are situated. This includes where the shared street is located, adjacent land uses, the characteristics of nearby and intersecting conventional streets, available right-of-way and other factors will influence how the shared street is designed.<sup>14</sup>

### **Design Guidelines & Application to the Brighton PPG**

#### **Establish current PPG project area and relevant systems frame**

- The immediate project area runs from the west side of Richmond at the planned new X-walk and along Brighton to the NE corner of Clare St. The relevant systems frame extends down Brighton from the west side of Richmond to the pathway near Amphion. (Fig. 4)



**Fig. 4 Systems frame of six blocks**

#### **Document characteristics of intersecting conventional streets**

- All intersecting conventional streets have stop signs and therefore an entry speed onto the Brighton PPG of 1 KPH. If the Gateway at Richmond is appropriately treated than all motorized traffic will enter the Brighton PPG at well under the anticipated minimum of 8 KPH on a shared street.
- Intersecting streets vary in width with Chamberlain the narrowest. Clare and Bank St carry most of the of Glenlyon Norfolk School (GNS) traffic. Clare St. is, to date, Victoria's only officially signed shared street, although no changes have been made to the allocation of the right of way to give this effect. (Fig. 5)

<sup>14</sup> FHWA pg. 15



**Fig. 5** Shared Road sign on Clare at Brighton

Document traffic volume, speed and patterns

- A Feb 13 to 20<sup>th</sup> 2018 traffic study between Richmond and Clare showed that the 85<sup>th</sup> percentile speed was 33.1 km/h (i.e. 85% of drivers at or below 33.1 KPH) with a legal speed limit of 50 KPH. Total number of vehicles recorded in both directions over the seven-day period was 6502.
- **Requested action:** Conduct a traffic study at the east end between Cowichan and Davie, and mid-PPG (eg. between Wilmer and Maddison) to help document patterns (e.g. confirm/disconfirm informal observations that much through-traffic enters the PPG from Cowichan and continues through to Richmond vs south Redfern traffic which mainly continues up Redfern to Oak Bay Ave.) This will help establish a baseline of traffic volume, speed and patterns for comparison, as design elements are installed re: past and potential future effectiveness

Within the overall PPG area, determine the most effective treatments to reduce speed and volume, over time, as a shared street

- In light of the systems nature of the Brighton PPG, optimize whatever is done in the immediate two block project area with design treatments *outside* in the larger six block area.

Assess impact of nearby development

An increased use of the Brighton Ave. PPG is anticipated:

- The growing densification of the planned Oak Bay Ave Large Urban Village (LUV) 1 block north
- Spillover from the planned bike lane for Oak Bay Ave. (e.g. the potential of an All Ages and Abilities (AAA) Cycling Masterplan route on Brighton between Chamberlain and Davie, the OCP calls for giving consideration to bicycle boulevard treatments in People Priority Greenways and People Only Greenways”(7.19)
- The possibility of Richmond Ave designated as a north-south connector to Oak Bay Ave and north under the Cycling Masterplan with many east bound cyclists electing to use Brighton rather than Oak Bay.
- Victorians discover and appreciate alternatives to North America’s car-centric transportation system (e.g. Pemberton Trail, Greenways PPGs, Centennial Trail)

Inventory technical infrastructure (e.g. utility poles, curbs, driveways, available right of way, surface and buried infrastructure) for consideration in best placement of design components, elements,

and/or treatments

**NOTE: Outstanding**

Inventory natural and resident installed assets (e.g. shrubs, trees, rockery, grassed areas, gardens, fences etc. ) for consideration in best placement of design components, elements, and/or treatments

South side of Brighton boulevard.

Adjacent to 941 Richmond: 2 Mahonia (aka Oregon grape) bushes

Adjacent to 975 Bank St: 2 chestnut trees

Adjacent to 980 Bank St. 1 flowering Japanese plum

Adjacent to 986 Wilmer St

North side of Brighton

Adjacent to 1003 Richmond: 1 flowering Japanese cherry, 1 Flowering Japanese plum

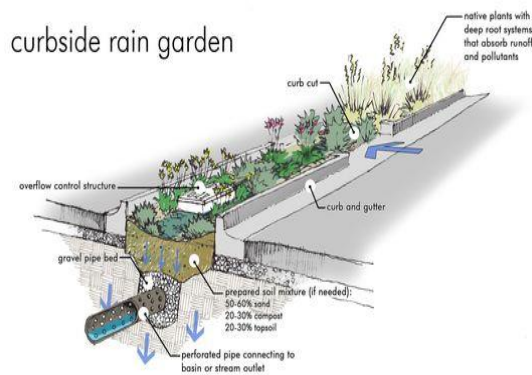
Adjacent to 1800 Bank: 1 Japanese maple, elevated rock garden, row of coniferous bushes

Adjacent to 1007 Bank: 3 mature trees

Adjacent to 1842 Clare: extension of fenced yard enclosure

Survey topography and assess anticipated drainage requirements

- North side Brighton adjacent to 1800 Brighton boulevard height rises.
- Install bioswale in wet area near driveway for 986 Wilmer St. (Fig.6 ) Bioswale serves as an east buffer/barrier of on-street parking spot. (Fig. 7)



**Fig. 6** Bioswale illustration

**Fig. 7** Illustration of parking spot ended by a bioswale

Assess characteristics of nearby streets

- Richmond speed limit of 40 KPH and possibility of becoming official north south connector in bike lane master plan. Oak Bay bike lane implications
- The nearby through (i.e. Richmond to Foul Bay) streets of Oak Bay Ave. ( 1 block north) and Quamichan (1 block south) could accommodate any through-traffic from Brighton

**ii) Gateway** A gateway is “..a physical or geometric landmark that delineates a change in community context or street topography or serves as a *de facto* entrance to a greenway..., alerting users to the change in character and behavioural expectations.”<sup>15</sup> A “...gateway signals to pedestrians, cyclists and motor vehicle drivers that they [are] entering an environment where pedestrians [have] greater priority and could be expected at any point in the shared zone”.<sup>16</sup>

### **Design Guidelines & Application to the Brighton PPG @ Richmond**

Gateway treatments should slow motor vehicle traffic through changes in surfacing, raised crossings and vertical elements that physically narrow the space as well as the field of vision for drivers, etc.<sup>17</sup>

A gateway clearly indicates that beyond it lies an area with a different character and a lower speed limit ..... with design elements that signify entrance to a distinct area (glossary pg 2)

Traffic count between Richmond and Bank suggests that of the 10 entrances to the PPG it is the most used and so provides the opportunity to reduce the speed of the most cars through a multi-element and significant gateway treatment including:

- Install a narrowed driveway entrance onto Brighton (Fig. 8)



**Fig. 8.** Driveway entrance off Fairfield Rd. onto Lilian and Wildwood

- Insert rock triangle just beyond east edge of driveway (Fig. 9 )

<sup>15</sup> “Pedestrian Safety Guide and Countermeasure Selection System CROW and Ede, 2009. Road Safety Manual..”).

<sup>16</sup> FHWA pg 15

<sup>17</sup> FHWA pg 26





**Fig. 9** Rock insert on Jutland Rd. PPG

- Pedestrian entrances onto PPG from Richmond sidewalk, north and south, indicated by painted sign on street (e.g PEDESTRIAN PRIORITY SHARED STREET)
- As much as possible, obscure entrance to and first part of comfort zone walkway (pg from motorists to reinforce their entry into a “distinct area” (i.e. “Hhhmm..., no sidewalk, I should expect pedestrians on roadway”))
- Relocate 2 existing shrubs to north side of utility pole #1 and continue a vegetation screen down to beginning of parking stalls (Fig. 10 )



**Fig. 10** Mahonia bushes (a.k.a.) Oregon grape to be relocated

- Introduce rear entry diagonal parking stalls as close to the gateway as possible to supplement gateway impact.
- Install 1-2 benches on both sides of Brighton as close as possible to the gateway (See Fig. 11)
- Install smallish concrete planter on North side to help narrow driveway entrance (see Fig. 12)

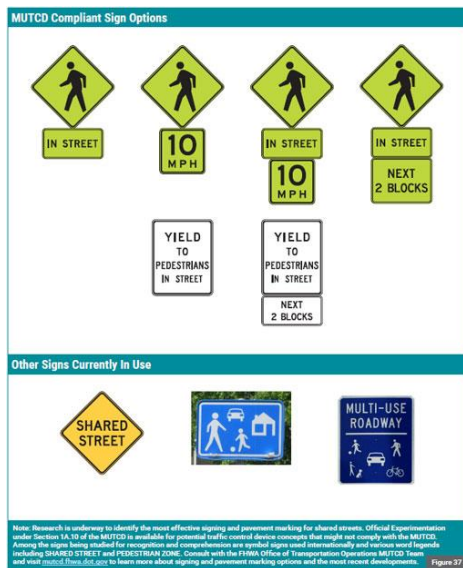


**Fig. 11** Benches on Rockland PPG between Ave. Quadra and Vancouver



**Fig. 12** Planter on Amphion near Oak Bay

- Consider temporary and/or permanent use of signs at gateway entrance (Fig. 13 )
- Take advantage of elevation and entering car drivers being able to see (obstructed) PPG shared zone (e.g. install table top entry to supplement slowing impact of driveway ) (fig. 14)



**Fig.13** Sign options (FHWA pg. 32)



**Fig. 14** Photo of table top

iii) **On Street Parking:** If motor vehicle parking is provided on a shared street, its location and design needs to be carefully considered<sup>18</sup>

**Design Guidelines & Application to the Brighton PPG**

**On-street parking may be used to help define the shared zone as distinct from the comfort zone.**<sup>19</sup>

- Install 2-4 rear entry angled parking spaces as close as possible to the gateway on the south side. (Fig 15) To provide traffic calming in the absence of any parked cars, physically delineate outside edge of the 1<sup>st</sup> and last space by low planters, bike lock ups, etc.. Install vertical element on the north end of 1<sup>st</sup> space, closest to driveway ramp, to help physically narrow the space as well as the field of vision for drivers entering the street. (Fig 16 illustrates pressed metal dog. Vertical element could be similar construction but of a pedestrian



**Fig.15** Diagonal parking stall on Broughton **Fig. 16** Potential parking stall delineators

- Install 1-2 additional defined rear entry angled parking spaces on north side closer to Bank St. The 2 parking areas would allow for a mild chicane effect as cars enter of Richmond
- Face the cut outs into the bank with rock (Fig.17)

<sup>18</sup> FHWA pg 17

<sup>19</sup> FHWA pg 21.





Fig. 17 Rock facing on Foul Bay Rd. @ Brighton

**iv) PPG Shared Zone:** In concert with defined gateway treatments ...shared zones should reinforce the shared nature of the street by being visually distinct”<sup>20</sup> It’s a PPG shared zone that provides the opportunity to realize the “social/community benefits” cited in the Greenways Plan. These include common meeting areas to talk, rest and develop closer ties with neighbours; encouragement to be involved in maintenance of their local section; and, greater neighbor co-operation and sense of community<sup>21</sup>.

### **Design Guidelines & Application to the Brighton PPG**

Visually and physically narrow the street to slow traffic speeds.

- Similar to Leighton at Davie (Fig. 18 ), Install pinchpoint at S/W corner of Wilmer and Brighton using existing curb material. (see Fig 19) Opposite hydrant so no loss of parking space on other side



**Fig. 18** Pinch point on Leighton @ Davie



**Fig. 19** Potential pinch point on Brighton @ Wilmer

- Initial boulevard plantings, for above and below pinch points, could be “infrastructure light” through donations and maintained by volunteers.
- Install pinchpoints in front of 1907 Brighton (between Maddison and Cowichan) (Fig 20) and in front of 1932 Brighton (between Davie and Redfern). (Fig. 21). Both opposite driveways

<sup>20</sup> FHWA pg, 21

<sup>21</sup> City of Victoria Greenways Plan pg.



**Fig. 20** 1907 Brighton



**Fig. 21** 1932 Brighton

- **Requested Action:** Although these treatments are not within the project zone budget of Clare to Richmond, consider allocating 3-5% of that budget to incorporate them into the project. They have potential to significantly reduce the speed of east-end entry (e.g. Redfern and/or Cowichan) through-traffic to the PPG project zone beginning at Clare. This reduced speed enhances the potential impact of the various PPG shared zone design treatments.
- The initial pinch point should be at Wilmer. Its cost would be relatively low through the use of existing curb material. Its impact would be high as it would reinforce traffic calming at the designated pedestrian X-ing from the comfort zone walkway to the north side sidewalk.

Over time and as resources permit, install design treatments and elements that convert the Brighton PPG shared zone, to the greatest degree possible, into a Childstreet, Home Zone, Living Street, and/or Self-explaining Road.

- Street furniture (Fig 22)



**Fig. 22** Street furniture chairs in front of 632

- Install small sitting bench on north side of large rock adjacent to backyard of 975 Bank and/or use as play area for children (see Fig 23)



**Fig. 23** Rock for potential sitting bench and play area

**v) Intersecting Conventional Streets** The offset nature of intersecting streets forces all cars to travel east west on the PPG even if for a short time.

**Design Guidelines & Application to the Brighton PPG**

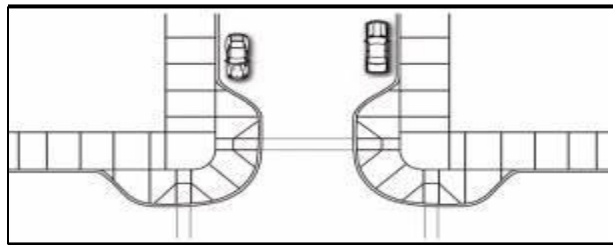
**Take advantage of and reinforce the extremely low entry speed onto the PPG.**

- Install small, temporary signs on stop signs at all intersections alerting drivers to the PPG and the requirement to yield to people on the shared street (Fig 24)



**Fig. 24** Temporary sign on stop sign pole @ Brighton

- Install permanent curb extensions at busy intersections (e.g. southbound and northbound traffic on Clare and Bank to and from GNS (Fig 25)



**Fig. 25** Curb extension illustration

- Consider insertion of rock insert at Redfern (south side) entrance or Cowichan if warranted by traffic count. (Fig. 26)





**Fig. 26** Rock insert on Jutland Rd. PPG

**vi) Pedestrian Comfort Zone** Irrespective of traffic calming and significantly reduced motorized traffic speed and volume, not all pedestrians will feel comfortable on a shared street. A pedestrian comfort zone, parallel to but well buffered and distanced from the shared street, provides a pedestrian only walkway for these users.

**NOTE:** Although the primary focus of the current project is a separated walkway, the application of comfort zone guidelines to Brighton was left to last to help ensure that its location and design would be driven by the larger context of the Greenways Plan’s shared street PPG and Council’s recent strategic plan motion regarding alternate design treatments for shared streets on identified greenways.

*In addition to specific comfort zone guidelines (below), walkway location should primarily be determined by evaluation of topography, technical assets, and natural and resident and/or city installed assets in Context (above 7-i)*

- Install a pedestrian comfort zone walkway on the south side of Brighton:
  - Minimizes permanent removal and/or relocation of natural and resident or city installed assets
  - Maximizes use of utility poles, existing vegetation and on street parking to buffer users from motorized traffic
  - Maximizes width of buffer zone
  - Minimizes loss of actively used driveway space



**Fig 27 (FHWA Pg 22)**

Pedestrian comfort zones should be continuous, clearly defined, straight, direct and without barriers  
22

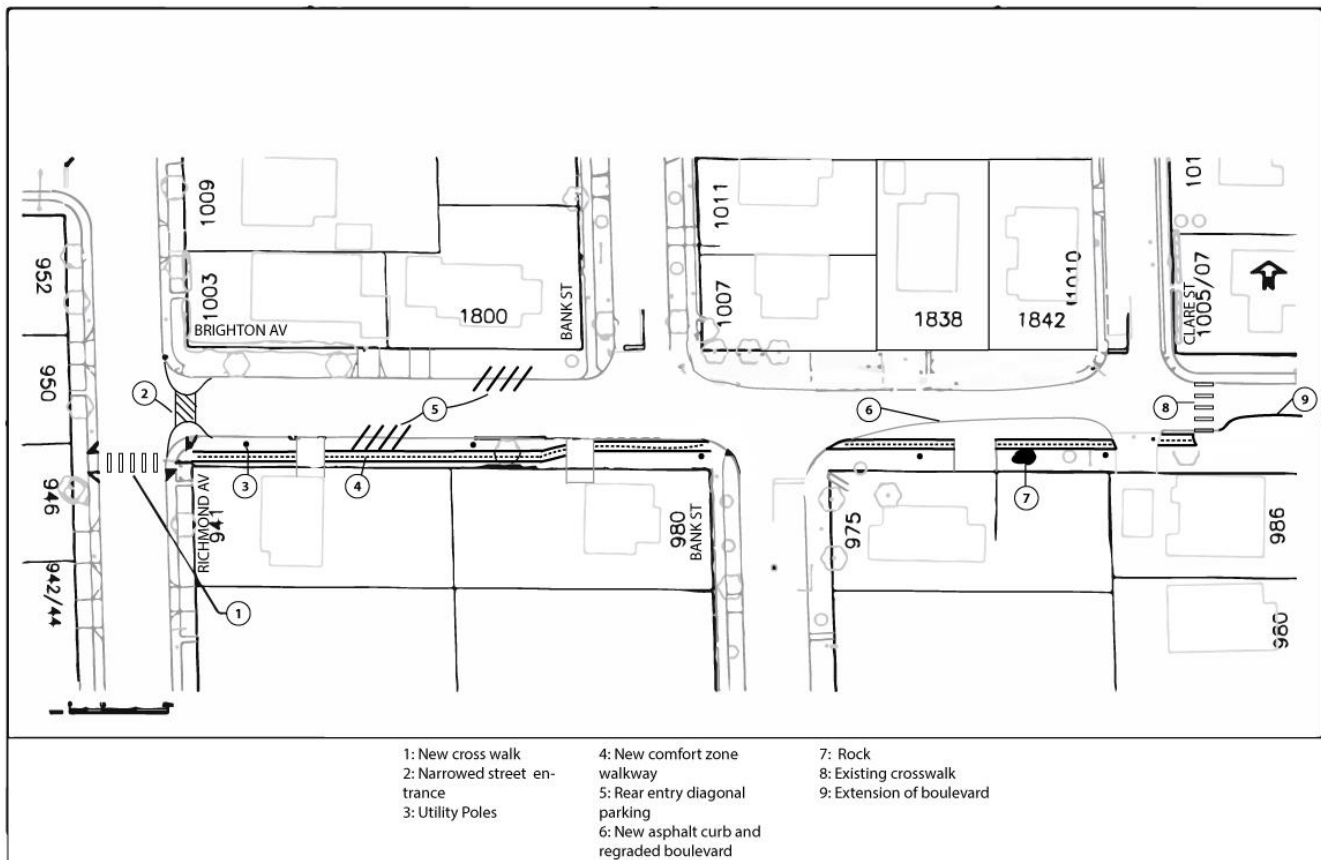
**Note:** In keeping with comfort zone design guidelines, an attempt was made to keep it as straight and as distanced and buffered from the shared street as possible. Allowances that were made for trees and topography may be determined as unnecessary by professional arborists, engineers, planners, etc.

Link comfort zones directly with designated crossings which should be located at the entry/exit points of the shared street<sup>23</sup> (Fig. 27 )

- Begin comfort zone walkway zone at existing sidewalk termination on south side of Richmond at Brighton and aligned with new X-walk to provide straight and direct access for east bound users from west side of Richmond
- Provide continuous 1.5 metre walkway from Richmond
- Clearly define for users with painted sign on walkway entrance and/or sign at its entry point
- Continue walkway to existing speed bump just east of Clare and use speed bump as designated crossing to north side sidewalk. (Fig 28)

<sup>22</sup> FHWA pg 22

<sup>23</sup> FHWA pg.24



**Fig 28** Pedestrian comfort zone walkway parallel to Brighton Ave. Shared Street PPG\*

\*Note: Not quite to scale

1. X- walk provides straight and direct access to entrance of comfort zone walkway
2. Gateway. Narrowed driveway entrance and possible table top
- 3 Relocate 2 bushes to north side of first utility pole to supplements gateway entrance treatment. Preserve existing plant/vegetation on north side on utility pole (see Fig. 10)
- 4 Position 1.5 metre (standard sidewalk width) walkway as close to fence (property line) as possible past parking stalls and the one tree to accommodate parking stalls and reinforce the gateway's signal that beyond it lies an area with a different character and a lower speed limit (i.e. initial absence of noticeable pedestrian walkway by drivers)
- 5 Install 2-4 rear entry parking stalls to allow better visibility when exiting. Front edge intrudes into road approximately 2 - 2.5 metres and rear edge butts up against walkway. Consider facing any parking stall or walkway "cut outs" from earth with rock. (See Fig. 17) To provide traffic calming in the absence of any parked cars, physically define outside edge of the 1st and last space by low planters, bike lock ups, etc. Install vertical element on the north end of 1st space (see Fig. 16), closest to driveway ramp, to help physically narrow the space as well as the field of vision for drivers entering the street

Install 2-3 parking stalls further down on north side closer to Bank with similar physical delineation of outside edges. The combination of north and south side stalls will produce mild chicane effect close to the gateway. Diagonal parking could also be considered for the north side of Brighton between Bank and Clare

Road width at this point is 9.14 metres as per City of Victoria Drawing: Title: Proposed Alternate Concept  
Project: Brighton Avenue Date: 2018-10-11

6 New asphalt curb and regraded boulevard. Road width at this point is 7.5 metres as per City of Victoria Drawing: Title: Proposed Alternate Concept Project: Brighton Avenue Date: 2018-10-11

7 Install small sitting bench on north side of rock and/or play area for children. (see Fig. 23)

8 Extend walkway a very short distance on east side of driveway to connect with speed bump. Not currently an existing X-walk but could use existing speed bump as “official” x-walk to north side sidewalk. This section of the walkway would be “protected” from east bound traffic by the new asphalt curb (see 6) and cars angling north to pass through the single lane pinch point. Accordingly, this short section could be constructed of asphalt on top of the existing asphalt to the speed bump. .

9 Extend corner garden out as a pinch point narrowing roadway to 14.5 feet (as on Leighton Ave.) See (Fig. 18 and Fig 19)

## 8. Next Steps

In sections 1- 7 we have, as requested:

- researched other jurisdictions and formulated succinct guidelines along with supportive design elements and standards.
- provided a visual and photographic ‘vocabulary’ primarily using elements from within Victoria to illustrate their adaptation to Brighton.
- provided a site-specific draft scenario for staff consideration and further community input.

The next steps are to meet and receive feedback from staff and then, for us or them, to render a second draft that could go out for further community input.

We have made clear the decision required by Council and staff before any further community input. Will the two block Brighton Ave. project continue as it was initially presented (i.e. a “sidewalk upgrade”) or, as we have proposed, the start of the formal conversion of the 6 blocks of the Brighton Ave. PPG into a shared street with the initial project being a south side pedestrian comfort zone walkway Richmond to Clare?

If it is the latter, the shared street literature makes it clear that the foundation of a successful conversion ensures traffic speed and volume support a shared zone where pedestrians, bicyclists, and



motor vehicles can safely interact in the same space. On Brighton the foundation for this outcome is an official reduction of the speed limit to 15 KPH and notice to motorists that pedestrians and non-motorized rolling traffic have priority and cars must yield to them. This directive would be in keeping with Council's motion regarding a review of the Greenways Plan and associated city policies and bylaws to allow for alternate design treatments for shared streets on identified greenways and can be reinforced and supplemented with a variety of traffic calming measures.

Without this bylaw foundation the Brighton Ave. PPG will end up like Victoria's only officially signed shared street to date – Clare St. (see Fig 5 pg. 11). As no Council directed changes were made regarding speed and right of way, the above-mentioned "shared zone" of safe interaction never materialized, despite a variety of formal and informal traffic calming treatments. It is a shared road in name only with pedestrians choosing to restrict themselves to the sidewalk because of the speed of the cars. The FHWA cites a similar case where motor vehicle speed was not sufficiently reduced and so pedestrians avoided the shared zone.<sup>24</sup> We need to learn from this one block experiment on Clare and not make the same mistake on the six blocks of the Brighton Ave. PPG.

## 8. Glossary<sup>25</sup>

**Bump-Out:** a curb extension used to narrow the street and widen sidewalk areas at intersections, often in place of on-street parking, thereby narrowing the pedestrian crossing distance over a right-of-way.

**Chicane:** a horizontal diversion of traffic that can be gentle or more restrictive depending on the design; alternating, off-set mid-block curb extensions or islands that narrow the roadway and require vehicles to follow a curving, S-shaped path to slow speeds and increase safety; a serpentine curve in a road, added by design rather than dictated by geography, and implemented using plantings, benches, parking and other amenities; may involve "choker" and other design choices to achieve the desired effect.

**Childstreet2:** a perspective on urban public space in which roads in residential areas used for recreation and playing as well as local mobility needs. In principle, children (worldwide) have lost freedom of movement outdoors, caused to a large extent by the increase in motorized traffic. The ability of children to move around freely is of critical importance for physical and mental health development, an issue to which a future-oriented society attaches great importance and so places emphatic conditions on the layout of urban public spaces and on traffic in particular; an integrated approach is advocated, aimed at design, education and enforcement.

**Comfort Zone:** a psychological state in which things feel familiar to a person and they are at ease and in control of their environment, experiencing low levels of anxiety and stress.

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<sup>24</sup> FHWA pg 17

<sup>25</sup> Selected terms from the Oaklands Rise Woonerf Pilot Glossary

**Gateway:** a physical or geometric landmark that delineates a change in community context or street topography or serves as a de facto entrance to a greenway or woonerf, alerting users to the change in character and behavioural expectations; signals a change in environment from a higher speed arterial or collector road to a lower speed residential or commercial district; clearly indicates that beyond it lies an area with a different character and a lower speed limit<sup>7</sup>.

**Gateway Features or Treatment:** design elements that signify entrance to/egress from a distinct area, usually a place where a new character or sense of identity should be acknowledged; such a gateway can be achieved through details of the built form, through landscaping, or signage; a gateway clearly indicates that beyond it lies an area with a different character and a lower speed limit. Gateway features are intended to trigger and guide changes in user behaviour in accord with the established context (e.g. increased pedestrian usage; slower traffic speeds, etc.).

**Home Zone :** a residential areas in which street space is shared between pedestrians, cyclists and motorists; the traditional distinction between the carriageway and footways is removed and the street as a whole becomes an extension of the local community's living space; see Woonerf.

**Lighter, Quicker, Cheaper (LQC) :** affordable, human-scale, a 8 nd near-term transformations of the built environment; citizen-led and place-focused projects of variable scope; opportunities to test concepts through shorter term, less engineered interventions as relatively lesser cost alterations to public space.

**Living Street:** a street designed primarily with the interests of pedestrians, children and nonvehicular users in mind as a social space where people can meet and children can play legally and safely; roads remain available for use by cyclists and motor vehicles, however their design aims to reduce both the speed and dominance of motorised transport. This is often achieved using the shared space approach, with greatly reduced demarcations between vehicle traffic and pedestrians. Vehicle parking may also be restricted to designated bays to optimise the use of space. The Living Street is a social space rather than a route for vehicles to get from point A to point B; see also, Woonerf.

**Place-making:** an activity to create “place”, preserving or protecting a public space to achieve benefits in community health and safety; a living space, strengthening the connection between people and the places they share, paying attention to the physical, cultural and social identities that define a place; “place” my be used to designate a zone for such purposes. A key element in the CPTED (Crime Prevention through Environmental Design); 12 principles are including in the City of Victoria Official Community Plan<sup>11</sup>

**Self-explaining Roads (SER) :** a concept in which t 12 he driver is encouraged to naturally adopt behaviour consistent with design and function of roads, each distinctive relative to purpose; the built environment effectively provides a "label" for the particular type of road to reduce need for separate traffic control devices such as additional traffic signs to regulate traffic behaviour; such an approach uses simplicity and consistency of design to reduce driver stress and driver error and is already used for the highest road classes (motorways).

**Shared Roadway** : a roadway upon which a bicycle lane is not designated and which may be legally used by bicycles regardless of whether such facility is specifically designated as a bikeway .

**Shared Street:** a common space to be shared by pedestrians, bicyclists, and low-speed motor vehicles. These are usually narrowed streets without curbs and sidewalks. Plantings, street furniture, and other obstacles are placed so as to discourage and inhibit through-traffic movements and encourage slow vehicular speed.

**Shared Space:** an urban design approach which seeks to minimise the segregation of pedestrians and vehicles. This is done by removing features such as curbs, road surface markings, traffic signs, and traffic lights

**Speed Table:** a term used to describe a very long and broad speed hump, or a flat-topped speed hump; may be combined with curb extensions where parking exists; raises the entire wheelbase of a vehicle to reduce its traffic speed; provides both a visual and physical characteristics to communicate requirement for change in driving behaviour. Speed tables are flat-topped, with a height of 3–3.5 inches and a length of 22 feet. Also known as “silent policemen”, speed tables can be used to designate the entrance and exit from a zone

**Street Furniture:** accessories and amenities placed for pedestrian convenience and use including elements such as benches or other seating, trash receptacles, drinking fountains, planters, kiosks, clocks, newspaper dispensers, art installations, exercise and playground equipment.

**Traffic Calming** a range of measures commonly used on residential streets to reduce the impact of vehicular traffic on street users including residents, pedestrians and cyclists by slowing traffic to improve safety. May include the use of signage, different paving surfaces, roundabouts, speed bumps, perceived and actual narrowing of streets/roads. Visual cues include bringing buildings closer to streets, landscaping and street furniture.

**Woonerf:** streets featuring human-centred design principles and improved safety for pedestrians and cyclists; vehicles are guests and travel at the speed of pedestrians; a place to play, socialize and engage in the community on a street or square where human-centred design principles enable cars, pedestrians, cyclists, and other local users to coexist without traditional safety infrastructure to guide them.

Also sometimes called a "shared street," a woonerf is generally free of traffic lights, stop signs, curbs, painted lines, and the like. Users have equal access to the road and vehicles proceed “at the pace of people” (about 6-12 km/h when people are on the road) as enforced by design including the use of public amenities such as plants, art, playground equipment, street furniture; curving roads, etc. as suited to context; see also: shared streets.