



Assessment Ride Report: Bark Park

Prepared by the Richmond/YVR Local Committee of HUB Cycling

2024-04-19

Executive Summary

- Following the Parks, Recreation and Cultural Services Committee Meeting on 2024-03-26 discussing safety improvements to Bark Park, Judith Hutson and other members of the Bark Park Richmond Facebook group reached out to HUB Cycling's Richmond/YVR Local Committee to meet and understand each other's concerns. Members of the committee (including people with dogs) then conducted an assessment ride on April 7 of bike routes in and around Bark Park.
- The South Dyke Trail between Bark Park and Garden City Rd is very narrow (<2m wide at many points). Unless this segment is widened to an appropriate standard, it cannot be considered a bidirectional multi-use path comfortable for all users.
 - Since Bark Park leads directly to this trail segment, any plan to improve safety in Bark Park that does not address this trail segment is at best incomplete.
- The ideal solution would be to physically separate people cycling and other park users in Bark Park, and widen the dyke trail between Bark Park and Garden City Rd. However, trail widening may be impractical due to cost and right-of-way constraints.
- Although there is insufficient space on the roads around Bark Park (No. 3, Finn, and Garden City Rds) for separated bike infrastructure, traffic volumes are likely low enough that the City can consider creating a shared neighbourhood bikeway along this route.
 - To make this alternate route suitable for people of all ages and abilities¹, the City must limit motor vehicle speeds to 30 km/hr and traffic volume to less than 1000 vehicles per day². There is already some traffic calming infrastructure (there are speed bumps on No. 3 Rd).
 - Making this route a neighbourhood bikeway may be more cost-effective than widening the South Dyke Trail between Bark Park and Garden City Rd.
 - Such an upgrade also represents one step towards making Bark Park more accessible by bike.
- Within Bark Park, several simple improvements such as better signage and barrier placement could be made to improve the experience for park visitors.

¹ National Association of City Transportation Officials: <u>Who is the "All Ages & Abilities" User</u>?

² British Columbia Active Transportation Design Guide (PDF, section D.2, Page 132)

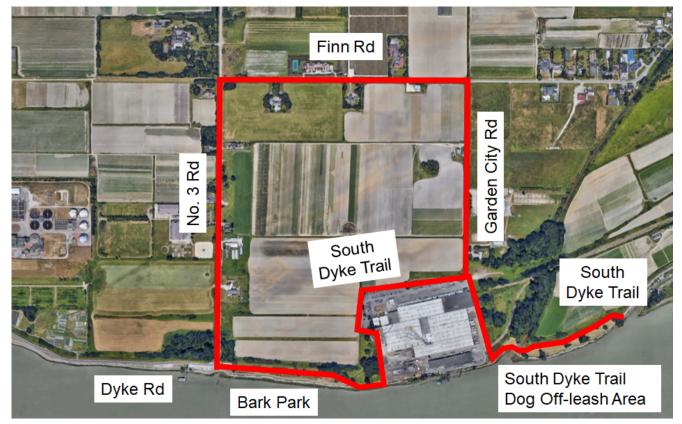
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Introduction and Context

On March 26, 2024, the Parks, Recreation and Cultural Services Committee met to discuss safety improvements in Bark Park, to improve separation between people cycling and dog owners. None of staff's proposals were accepted by council, and staff were instructed to explore other concepts. After the meeting, Judith Hutson, administrator of the Bark Park Richmond Facebook group, reached out to HUB Cycling's Richmond/YVR Local Committee and organized a meeting between dog owners and representatives from HUB to understand each other's concerns.

Members of HUB's Richmond Local Committee (including people with dogs) then conducted an assessment ride on April 7 of bike routes in and around Bark Park. In particular, we assessed the trail in Bark Park, the South Dyke Trail from Bark Park to the trail entrance at the South Dyke Trail Dog Off-leash Area, and the roads around Bark Park (No. 3, Finn, and Garden City Rds). This report details our observations, and includes more informed recommendations than those HUB provided during staff's initial stakeholder consultation.



Map of assessed routes, marked in red.

No. 3 Rd. Bark Park

From the west, people cycling currently can enter through the park either through the Dyke Trail (entrance A in below figure) or through the parking lot (entrance B).



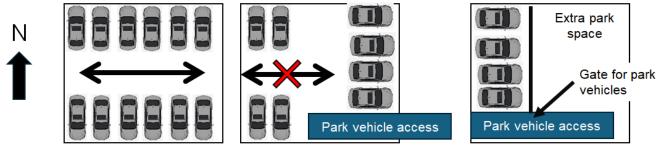
Satellite photo of Bark Park with entrances labelled.

People cycling on Dyke Rd often bike straight through the parking lot, likely because it is the direct route into the park and the layout of the parking lot naturally creates a corridor that directs people cycling along this route. However, such behaviour can be unsafe. The parking lot is heavily used, with people in cars often backing out with limited visibility. The straight-line nature of the parking lot also does little to indicate to people cycling that they should slow down.



View of parking lot facing east. The wide free space down the middle gives a false impression of a safe route free of conflicts.

It may be safer to guide people cycling to either enter the park through entrance A (located on the dyke) or to detour by turning onto No. 3 Rd. It may be possible to accomplish this by redesigning the parking lot layout, for example, so people can park their vehicles facing into the park. Investigation is necessary to determine if such concepts can feasibly achieve this goal while maintaining access for park vehicles.



Current layout

Examples of alternative layout

Conceptual alternative parking layouts. Entrance to the park is to the right, Dyke Rd/No. 3 Rd are to the left. Note how the alternative layouts block off the apparent route down the middle of the parking lot. This is not meant to be an exhaustive list of alternative parking layouts.

Although there is signage indicating that people cycling must take the north side trail, the signs are cluttered with information, with the icons small and difficult to notice while riding. An improved signage system would have only one or two large icons, indicating on which side the bikes are permitted, possibly with an additional sign with smaller icons and text providing more detailed information for people walking such as dog walkers.



Current signage at Bark Park. At a distance, the icons are not recognizable.



Closer view of existing signs. The signs are cluttered with text and small icons, making them difficult to understand at a glance.



Example of signage used in Vancouver on separated pedestrian and cycling facilities. Although this is a close-up view, the signs are clearly understandable even from far away. A similar uncluttered design could be used at Bark Park.

Due to the dyke raising, the view facing south from inside the park has been degraded since the water is no longer visible. Option A in staff's original proposal would have added fencing

along the south dyke, which may further degrade the view, and therefore may not be preferred by park visitors.



View facing south from within the park.

Although the water-filled temporary barriers are effectively slowing down people on bikes, they are not ideal as a long-term solution. Maze gates and similar obstructions generally pose accessibility issues (for example for wheelchair users); furthermore larger bikes (such as bikes with dog trailers) may have trouble getting past them. In a permanent solution, proper separation between people cycling and other park users should reduce conflict and eliminate or reduce the need for barriers in the cycling path to slow down bikes.

South Dyke Trail from Bark Park to Garden City Rd

This section of the South Dyke Trail goes around Crown Packaging. Because it is the only route that can be taken going east from Bark Park, safety improvements to Bark Park would be incomplete without considering this section of the trail as well.

There are several segments of this trail which are narrow (< 2m wide). According to Translink and HUB's "<u>Benchmarking the State of Cycling in Metro Vancouver</u>" report from 2019, appendix C, multi-use paths less than 2.7m wide are not considered "comfortable for most". Anecdotally, a HUB member walking dogs observed that when a group of people cycling approached, the space conflicts were very uncomfortable for everyone. Ideally, this trail should be widened for a more comfortable experience for all users; however right-of-way and cost constraints may make it infeasible to do so.

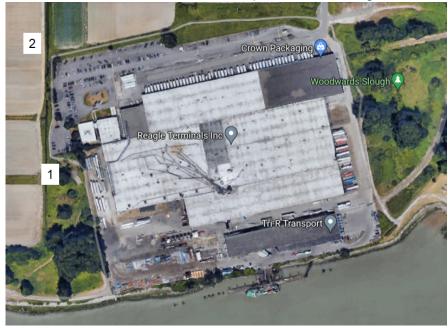


A particularly narrow section of the trail along the west side. The bike shown in the image is approximately 185 cm long and spans the width of the trail.



The narrow sections of the trail cause space conflicts whenever someone cycling passes another oncoming person walking or cycling.

There are two blind corners along the trail. Ideally, these should be addressed by increasing the corner radius and width of the path. However, if space constraints make this impractical, mirrors could be installed to reduce the risk of unexpected oncoming traffic.



Locations of blind corners.



Blind corner at location 1. Photo taken facing west; the trail turns north after this corner.

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Blind corner at location 2. Photo taken facing north; the trail turns east after this corner. This corner is somewhat better because one can see through the fence to the other side; however a mirror would still be helpful here.

Bark Park Road Detour Route (No. 3 Rd, Finn Rd, Garden City Rd)

This is the route proposed as option 6 at the Parks Committee meeting on March 26, 2024. This cycling route is not comfortable for people of all ages and abilities; however, it may be possible to make a few simple and inexpensive changes to reach this level, by converting it into a shared vehicle-bicycle facility similar to neighbourhood bike routes. It may be easier and less expensive to do this than to widen the trail around Crown Packaging. Furthermore, it is less critical that this route be direct, since this route is primarily recreational; commuters cycling between Steveston Village and Ironwood (and in the future, further on to Delta via the Hwy 99 Tunnel Replacement) are more likely to take the Steveston Hwy multi-use path, a more direct route. Although not on Richmond's Cycling Network Plan, this route is identified as a planned major greenway in Richmond's longer-term Official Community Plan.

According to <u>BC's Active Transportation Design Guide</u>, section D.2, a neighbourhood bike route should have vehicle speeds no more than 30 km/hr and less than 1000 (preferably less than 500) motor vehicles per day. Since the roads around Bark Park are quiet routes in a rural part of Richmond, it should be possible to achieve these traffic volume levels with appropriate traffic management. Reducing the speed limit from 50 km/hr to 30 km/hr only adds about one minute of travel time for each of the road segments along this route; furthermore No. 3 Rd already has speed bumps as traffic calming measures, so vehicle speeds are already limited.

To upgrade this route into a shared road facility, at a minimum additional signage and road markings such as sharrows must be added to indicate that this is a shared bike route. Furthermore, per BC's Active Transportation Design Guide, the painted yellow directional dividing line must be removed.

Since purely reducing the posted speed limit has a limited effect on actual traffic speeds, traffic calming may be necessary. Speed bumps are already present on No. 3 Rd; however there is no traffic calming infrastructure on Finn and Garden City Rds. It may be appropriate to install infrastructure like speed cushions along these segments.

Additional traffic diversion may be necessary, to stay within traffic volume guidelines. The Garden City Rd segment (south of Finn Rd) is expected to be particularly quiet, since it is a dead end. However, we observed higher traffic volumes along Finn Rd and No. 3 Rd; some study may be necessary to evaluate current traffic volumes and determine how best to divert traffic.



Existing speed bumps on No. 3 Rd.

If traffic diversion is necessary, one potential approach may be to convert parts of Dyke Rd just west of No. 3 Rd near Bark Park into a one-way road, repurposing the other lane as space for parallel parking. This tactic could be combined with the alternative parking lot layout for Bark Park to maintain the overall level of parking, while also potentially expanding Bark Park by reallocating parking lot space.



Example of a segment of Dyke Rd that can be made one-way. In this configuration, two-way access to the existing parking lots from both No. 3 Rd and Dyke Rd is maintained, while stopping vehicles from cutting through this area.

South Dyke Trail from Garden City Rd to South Dyke Trail Dog Off-leash Area

The South Dyke Trail continues east of Garden City Rd into another off-leash dog park (South Dyke Trail Dog Off-leash Area). We reviewed this section for comprehensiveness and to contrast this segment against the segment from Bark Park to Garden City Rd.

This segment of the trail is noticeably wider than the segment from Bark Park to Garden City Rd. Although the gravel section of the trail is not necessarily wider, there is often grass to either side of the trail increasing the effective width.



Segment of the trail just east of Garden City Rd, showing grass buffer space that makes it more comfortable to pass oncoming trail users.

The signage at the dog off-leash area is also simple and uncluttered, with single icons to indicate which route people cycling should use. The signage could be further improved with larger icons and having shorter text in a larger font; for example, the text for the dyke side could simply read "CYCLISTS ON DYKE DISMOUNT".



Signage at the fork between the cycling path (left) and the dyke (right) at the west end of the South Dyke Trail Off-leash Dog Area, facing east. Although the text on the sign is not legible, the icons still clearly indicate which side bikes are permitted.



Closer view of the signage. The icons could be replaced with a larger, simpler bike icon (without a rider), consistent with other signage in Richmond.

Summary of Recommendations

- Investigate if the trail between Bark Park and Garden City Rd can be widened.
- Consider upgrading No. 3, Finn, and Garden City Roads into a neighbourhood bikeway.
 - The speed limit would need to be limited to 30 km/hr, and traffic volumes would need to be limited to 1000 vehicles per day (preferably below 500 per day).
 - Road infrastructure changes include painting bike sharrows, removing the yellow directional dividing line, and adding traffic calming measures as necessary.
 - More wayfinding would be needed in the form of road markings and signage. Refer to Translink's <u>Wayfinding Guidelines for Utility Cycling in Metro Vancouver</u> (PDF, 122 pages) to ensure wayfinding signs are consistent with existing bikeway signage in Metro Vancouver.
 - Such a route should be given a name other than "Bark Park Detour" to avoid discouraging people cycling from taking this route.
- Consider changing the layout of the Bark Park parking lot to discourage bikes from riding through the parking lot.
 - Layout changes may reduce the amount of parking available; however the total amount of nearby parking can be maintained by coupling this change with making nearby parts of Dyke Rd one-way (as part of traffic diversion) and reallocating the other lane to parallel parking.
 - A parking layout change could also allow parking space to be reallocated to the park itself, letting the park expand west.
- Simplify the signage in Bark Park that directs which trail people cycling should use; the sign should only have a few larger icons and minimal text. Such signage can be augmented with more detailed rules similar to the signs currently in use.
- If more permanent barriers are planned in Bark Park, place them to direct people cycling onto designated cycling trails. Avoid installing barriers on the cycling path since larger bikes, such as bikes with dog trailers, will have difficulty getting through.
- Avoid fencing off waterfront view access in the park.
- Address blind corners along the trail between Bark Park and Garden City Rd, ideally with a larger corner radius and a wider trail, but as a last resort, by adding mirrors.

About HUB Cycling

HUB Cycling is a charitable not for profit organization that has spent over 25 years removing barriers to cycling in Metro Vancouver, while cultivating the health, environmental, and economic benefits that active transportation can bring. HUB has educated thousands of people, motivated thousands more, and championed improvements that <u>#UnGapTheMap</u> to create a connected cycling network. HUB Cycling's mission is to get more people cycling more often. HUB Cycling has over 3,000 members and more than 50,000 direct supporters. HUB Cycling has 10 volunteer committees across Metro Vancouver that encourage cycling for all ages and abilities (AAA) in municipalities across Metro Vancouver. For more information, visit bikehub.ca.