

Inspection Ride Report for the 47a Avenue/River Road West Cycling Route

by Kathy Bossort, February 21, 2015

Introduction

This report describes inspection rides for 47a Avenue and River Road West, the east-west connector from Ladner to Delta Municipality's western border at Roberts Bank. (See Map 1 for outline of route marked in red)

Distances to destinations within Ladner, and from Ladner into the countryside, are short enough to travel comfortably by foot and bicycle. The 47a Avenue/River Road West corridor is the convenient, and in some cases, only route to use going east/west in Ladner and along the Fraser River. Bicycling in this corridor has the potential to become a more popular and, for many kinds of trips, the preferred means of transportation, but concerns for safety need to be addressed. 47a Avenue does not have on street bike lanes and River Road West no shoulders, leaving cyclists vulnerable to traffic. Motorists on the other hand find cyclists on the narrow roads an obstruction and hazard.

47a Avenue is the link between Ladner Trunk Road and its westerly extension River Road West. 47a Avenue, originally a broad residential street, was redesigned in 1980 to bypass Ladner's commercial core to the north. At its eastern end, where it merges with Ladner Trunk Road, is a major intersection and the bridge over Chilukthan Slough. Traffic on 47a Avenue includes:

- through traffic west to residential and industrial areas, farms, and recreational opportunities,
- through traffic east (across the bridge) to two shopping centres and services on Ladner Trunk Road, and access to Highways 10 and 17a,
- through traffic turning south on Arthur Drive, and
- vehicles turning from or crossing the avenue to access the downtown core to the north and residential areas, schools, library, community centres and other services to the south.

47a Avenue narrows as it becomes River Road West near the corner of 46a Street. The residential then rural road parallels the Fraser River dyke throughout its length. It serves:

- the neighborhood of Port Guichon,
- an industrial and commercial strip,
- marinas and houseboat communities,
- the farming area in west Delta and Westham Island, and
- popular recreational destinations such as the fine park at Wellington Point, the dyke trail at Brunswick Point, farm markets on Westham Island, and the Reifel Bird Sanctuary.

47a Avenue from Ladner Trunk Road at Chilukthan Slough Bridge to 51st Street

Chilukthan Slough bridge is one of three bridges crossing the slough, which is a barrier to east/west travel in Ladner. On the west side of the bridge is a major intersection that sorts traffic merging from the bridge on Ladner Trunk Road with Arthur Drive, 47a Avenue, and Elliott Street. The combination of bridge and intersection constitutes a challenge for quickly and efficiently moving traffic through Ladner. For cyclists the bridge and intersection combination is a significant barrier.



Photo 1: Intersection at Ladner Trunk Road and 47a Avenue, looking north up Elliott Street; 47a Avenue on left, bridge on right (not in picture). Note dismounted cyclist using crosswalk, and lack of markings and symbols for bike lanes.

- The bridge has four motor vehicle lanes and two pedestrian walkways. There are no bike lanes or room on the road for cyclists other than to mix in with vehicle traffic traveling at speed.

- The bridge sidewalk is narrow and cannot be shared by cyclists and pedestrians. Dismounted cyclists and motorized wheelchairs aggravate crowding on the sidewalk. Lack of a barrier between sidewalk and road on the bridge makes crowding not only inconvenient but a danger for falling into traffic.

- The intersection at Ladner Trunk Road and 47a Avenue was upgraded in 2013/14, but provided no specific safety benefits for cyclists. Concerned cyclists dismount and cross as pedestrians.



•Between 51st Street and the intersection, the generous two lane width of 47a Street is divided into four narrow lanes to accommodate a right and left turning lane on 47a. In Ladner, the pinching out of cycling space or bike lanes commonly occurs in the block approaching a main intersection in order to create more motor vehicle lanes. (see Photo 2)

Photo 2: 47a Avenue approaching the intersection and bridge at Ladner Trunk Road, looking east on 47a Avenue from 51st Street.

47a Avenue from 51st Street to 46a Street

47a Avenue is the main east/west route through the western half of Ladner, linking Ladner Trunk Road to River Road West. New residential construction is occurring on both sides of the road, part of the ongoing densification of Ladner residential areas. Traffic using the road is steady and moderate, but can be heavy at certain times of the day. A significant part of its busyness is traffic entering or crossing the road from side streets.

Photo 3: 47a Avenue looking west
from Delta Street



47a Avenue is a broad, straight, paved road with two lanes for traffic.

- speed limit 50kph for cars and 30kph for trucks (speeding is an issue).

- parking on both sides of avenue, the parking lane denoted by landscaped projections at some intersections. (see photo 3 at the left of the photo)

- sidewalks border both sides of the avenue for most of its length (exception is between 47a Street and 46a Street on the north side).

- controlled or painted pedestrian crosswalks on 47a Avenue are available at 51st Street (painted lines with pedestrian activated flashing light signal), Delta Street (painted lines with overhead light), 47a Street (painted lines), and 46a Street (painted lines). Garry Street and 48b Street do not have crosswalks.



Photo 4: Crosswalk at 47a Avenue and 51st Street intersection, looking west on 47a Avenue



Photo 5: Construction of townhouse developments on the north side of 47a Avenue (looking east on 47a Avenue from 48b Street).

Problems for cyclists on 47a Avenue:

- no painted on street bike lanes, bike symbols, or bike route signs.
- space for cyclists between moving and parked vehicles is minimal, leaving cyclists vulnerable to “dooring” and to being uncomfortably close to traffic.
- motor vehicles turning left across traffic may not register oncoming cyclists.
- sight lines for cyclists, pedestrians, motor wheelchairs, and others crossing 47a Avenue obscured by parked vehicles
- projections that help pedestrians see around parked vehicles before crossing the street force cyclists into traffic. Cutting through the projections (using ramps) bring cyclists into conflict with pedestrians and confuses motor vehicle drivers
- improvements on 47a Avenue ideally should be linked to the planning and development of a comprehensive and continuous network of cycling routes. Improvements on 47a Avenue still leaves cyclists to face difficulties on Ladner Trunk Road, the Chilukthan slough bridge and on River Road West.

Opportunities and suggested solutions

- Two large townhouse developments are being constructed on 47a Avenue in 2015 (See photo 5). The municipality often sees development as an opportunity to upgrade public amenities, such as adding trees, sidewalks and bike lanes. Densification and accompanying increases in traffic and parking congestion can be balanced by building for alternative modes of transportation.
- Cycling safety and convenience on 47a Avenue can be improved by constructing on street bike lanes. Designated bike lanes move cyclists away from traffic and provide space for motorists to safely pass cyclists.
- Given its already generous width, the avenue can accommodate bike lanes if parking is allowed on only one side of the avenue, such as is done on Westminster Avenue.
- Painted bike lanes and bike symbols make cyclists more visible to motorists, especially those turning left across traffic.
- Visually narrowing the avenue to two lanes moving, one lane parking, and two bike lanes improves lines of sight for crossing traffic, the attractiveness of the avenue, and could lower motor vehicle speeds.

River Road West from 46a Street to Mike's Marina

47a Avenue merges into River Road West near the corner of 46a Street. From 46a Street to 41b Street, River Road West passes through the neighborhood of Port Guichon, an interesting older community, once separate from Ladner. Residences line both sides of the road. From 41b Street, River Road West becomes more rural in character. On its dyke side the road is lined by a fish processing plant, marinas, and houseboat communities; on its south side by farms and rural acreages.



- The road is narrow without shoulders, and is squeezed between the Fraser River dyke and ditch on its north side and residential properties to its south.

- There is no sidewalk bordering the road (except in a short section). Walking this route is generally done off the road on top of the dyke.

- Slow cyclists may also use the dyke trail, but the uneven gravel path is not used by road bikes. The dyke trail is narrow in places and has a variety of obstructions, mainly parked cars, making it a challenge for cyclists and walkers to share.

- Numerous driveways enter River Road West in this section.

Photo 6: River Road West in Port Guichon, looking west and showing dyke on right.



•Speed limit is 50 kph for cars and 30 kph for heavy trucks. Speeding is obviously an issue. (See solar powered speed sign in photo 8 below)



Photos 7 & 8: River Road West, looking west (left) and east (right).

- Traffic is light to moderate and is intermittent, varying with time of day and use by visitors to the area. (These photos were taken on a rainy Sunday.) Commercial trucks use the road to access greenhouses, farms, fish processing plants and other small industries located on the road.
- Road edges are uneven and eroding and are encroached upon by grass, ditch water and dirt debris. To avoid hazards cyclists may seem to motorists to maneuver erratically.
- The straight road gives good sight lines. As motor vehicles must cross into the oncoming lane as they overtake cyclists, it is helpful to see ahead.



Photo 9: Cyclist on River Road West between 41b and 40th Streets, looking east. Note that cyclist is riding on the best part of the pavement and not at the deteriorating edge.

River Road West corner at S. M. Products and Wellington Point

In this section River Road West becomes more hazardous for cyclists due to a convergence of problems:

- The dyke path ends at S.M. Products where a fence prevents further use of the dyke by the public. Slow cyclists and walkers are forced down to the road.
- Several hazards converge in this section:
 - A deep ditch borders the south side of the road, and
 - the dyke wall, shallow ditch and narrow grass verge closes in on the north side.

- There is a right angle corner,
- deteriorating pavement edges,
- speeding,
- noise,
- the presence of heavy trucks, and
- narrow lanes that are just wide enough for vehicles with no margin or shoulder for cyclists to get out of traffic.
- Overtaking vehicles cross into the opposing lane to get round cyclists and walkers.
- The visual narrowing of the road and diminished lines of sight create uncertainty and less ability to anticipate others' actions.

River Road West is not designated a bike route (in any category) on the Translink cycling map. The 2004 Delta Routes map (below) shows a “community” bike route, but has a warning label at Wellington Point: “narrow/trucks”.



For cyclists using River Road West the crux section is at the Wellington Point curve, one that deters many from using this route.



Photo 10: The dyke path ends here. The fence at S.M. Products blocks the public from using the top of the dyke to access Wellington Point Park.

Photo is taken from the west end of Mike's Marina, and looks west on River Road West towards Wellington Point.



Photo 11: Two walkers decide to “run the gauntlet” to reach their goal, Wellington Point Park.

Note that there is little option but to walk on the paved road in the narrow vehicle lane. Further on the walkers moved to the other side of the road to face traffic. However, the margin is very narrow between the paved road and the steep ditch on that side, again forcing the walkers into the road.



Photos 12 & 13a: Walker (left) and cyclist (right above) on River Road West at curve near Wellington Point Park. Note how motor vehicle moves into oncoming lane as it overtakes pedestrian. Pedestrians on the road are hazards for both motor vehicles and cyclists.

Above photos are looking east on River Road West from Wellington Point Park with S.M. Products' fence and buildings in the background. Note that curve in road obstructs line of sight. The speed limit is reduced to 40 kph to compensate.



Photo 13b (left): Traffic in Wellington Point corner, looking northwest towards park.

Note grass margin & shallow ditch on right where a proposed boardwalk or paved path could be built (see p. 24 in summary)



I visited this corner several times for this report. It was very informative talking to people who do walk or ride in this corner.

A walker that I talked to noted that he would not ride his bicycle on this section, believing that as a walker he can hear motor vehicles coming from behind, and more easily and quickly get out of the way than a cyclist. He also noted that he regularly walks to Wellington Point Park, taking the attitude that it is what it is (the road that is).

Photo 14: This is the most scary situation I observed and photographed (so far). Two cyclists, each with a child on the back, have cycled around the corner. (The truck has pulled into the oncoming lane to pass them.) Just prior to this scene, I had approached the corner from the east (Ladner) in my car, noting oncoming traffic and the cyclists. A car overtaking both cyclists (the first cyclist being in the corner then) did not pause and wait behind the cyclists but moved into my lane, causing me to brake and veer onto the grass margin. I quickly stopped at the park entrance to take the photo. The cyclists have stayed the course, but one assumes with white knuckles, unless they are entirely unaware of the risk just taken or hazard created.



Photos 15a, 15b & 16: Wellington Point Park is a lovely park with wonderful views of river and farmland that should be more convenient and safe to cycle and walk to from Ladner.

River Road West from Wellington Point Park entrance to 34th Street

River Road West parallels Wellington Point Park west to an S curve where it again follows the dyke and Fraser River (see map on page 2). The road is bordered by several small industries, businesses and marinas on the river side and farms and rural acreages on its south side.

- Road remains narrow with no shoulders.
- S curve in road obscures lines of sight. Large trucks especially crowd narrow lanes on curves.
- Road edges are deteriorating and pavement shows wear.
- The road is bordered by dirt, gravel and grass margins of variable widths. Parked vehicles narrow the road at Canoe Pass Marina, just west of Westham Island Road (see photo 19).
- Traffic is moderate and intermittent, but includes heavy trucks, from Wellington Point to Westham Island Road and bridge. Much of the remaining traffic turns off River Road to access Westham Island.
- Three roads intersect River Road West in this section: Westham Island Road, Kettle Road (dead end road), and 34th Street. The T-intersection with Westham Road is somewhat obscured by dyke shoulders. 34th Street is often used by Tsawwassen cyclists to access Westham Island Road (see 41b Street cycle assessment report).
- There is no dyke trail for public use in this section.



Photo 17: Truck traveling west on River Road West, just past Wellington Point Park's entrance.

The wide gravel margin is not used by road bikes, but may give respite to slow cyclists on bikes with fat tires going west. The other side of the road falls steeply away to a ditch.



Photo 18: River Road West in S curve. Businesses and small industries line the road from Wellington Point Park to Westham Island Road and the Canoe Pass Marina and houseboat community.

Cyclists need to be aware of vehicles emerging from the many driveways on River Road West, and motor vehicles of cyclists on road.

The eroding road edges and potholes pose serious hazards for cyclists.



Photo 19: Cars parked along River Road West at Canoe Pass Marina crowd the road and passing traffic. “Dooring” is an added hazard for cyclists.



Photo 20: Westham Island Road intersects River Road West on the left of the photo, between the driveway going over the dyke and the back of the large white sign. (Photo is looking east on River Road West from Canoe Pass Marina.)

The intersection is somewhat obscured by dyke shoulders and the large sign on its east side. Note the cyclist inching out into River Road to turn left across traffic.

River Road West from 34th Street to Brunswick Point

River Road West west of 34th Street opens into farmland. The road ends at Brunswick Point.

- The road and motor vehicle lanes become progressively narrower, particularly after the vehicle turn around at 30b Street, a dead end street. (Large trucks are warned not to proceed further because there are no other turn arounds ahead.)
- Road edges are deteriorating as well as pavement in general.
- The road is bordered by dirt, gravel and grass margins of various widths.
- Traffic is light. Heavy trucks rarely use this section of the road.
- The dyke trail begins again at 34th Street and merges into the Brunswick Point (Roberts Bank) trail.



Photo 21: Fraser River dyke and trail with River Road West on its right, looking east towards dyke trailhead. (Public access on dyke trail starts in front of brown building; 34th Street intersection is to right center of photo.)

Westham Island bridge is in the background at left.



Photo 22: Cyclist on mountain bike, and walkers (and dogs) share the dyke trail. River Road West is on the left, Fraser River at right, and Brunswick Point in distance at right.

The trail is broad and easily shared by walkers and slow cyclists. Although River Road now has light traffic, the dyke gives the best views and cyclists often opt to use the dyke. (Cyclists on road bikes use the road).



Photo 23: River Road West looking west from 34th Street intersection, with entrance to dyke parking in foreground.

Parking for people using the dyke trail is provided at 34th Street (on the dyke), to the west of the Wilson family business at 2917 (on the dyke), and at Brunswick Point (at road end).

Photo 23 (right): River Road West, looking east, near 2917 River Road West. The dyke trail is interrupted at the Wilson family buildings on the dyke (no trespassing). The walkers in the photo will use River Road to bypass buildings and return to the trail a short distance down the road.

River Road West is narrower (yellow lane divider has been abandoned). Road edges are eroding and are encroached by grass. But traffic is light.



Photo 24 (left): At last, peace and quiet!

Brunswick Point (Roberts Bank) dyke trail

The dyke trail at Brunswick Point starts at the west end of River Road West. The trail follows the top of the dyke, which borders Roberts Bank as far as the railway tracks at Deltaport causeway. Cyclists and walkers then return to Brunswick Point. (The dyke trail is marked in yellow on Map 1 located on page 2 of this report.) Ideally cyclists access Brunswick Point trail by cycling from Ladner or Tsawwassen, this section being a pleasant destination for their ride. As previously noted however, many “interested but concerned” bicycle riders have left their bikes at home and traveled here by car, not willing to venture on earlier sections of River Road West.



Photos 25 & 26: (Left) Parking area at end of River Road West, often used to capacity on weekends. (Right) The trailhead for Brunswick Point (Roberts Bank) dyke trail.



Photos 27 & 28 (above): Views from Brunswick Point (Roberts Bank) dyke trail: a 360 degree panorama of mountains, sea, sky and farmland. The trail is particularly popular with bird watchers as Roberts Bank is an important way station for migrating birds.

Photo 29 (left): The dyke trail ends at the railway tracks at Deltaport causeway. Posted no trespassing signs, if not prudence, should discourage cyclists from attempting to cross here or at 27b Street. The 2004 Delta Routes map does show the trail crossing the tracks - perhaps a less busy time for the port.

Summary of problems for cyclists on River Road West

Problems have been noted in the section descriptions above for River Road West. In summary they are:

- Cyclists have no to little separation from motor vehicle traffic. Because of narrow motor vehicle lanes with no shoulders, cyclists ride in traffic.
- Motorists overtaking cyclists must pass by crossing into opposing lane.
- Traffic, though intermittent, can be heavy at times during the week. Heavy trucks make cyclists particularly vulnerable.
- Deteriorating road edges and potholes are hazards.
- No signage about cyclists on the road.
- No alternate routes for road bicyclists. Slow cyclists on fat tire bicycles can use the dyke path between 46a Street and Mike's Marina, and west of 34th Street.

Opportunities and suggested solutions

A. Wellington Point (River Road West between Mike's Marina and Wellington Point Park)

1. This is the most dangerous section of River Road West for cyclists and walkers. As a priority, provision should to be made to get walkers off and away from the road. The same provision could benefit slow cyclists on fat tire bikes who share routes with walkers. Options are available for meeting both needs:
 - Ideally an extension of public access on the dyke top is the solution. S.M. Products may be able to move its fence and trailers back from the dyke top to allow the public to use the dyke trail from Mike's Marina to Wellington Point Park. It is understood that public access to dykes is not a given. However Lion's Gate Fisheries and Mike's Marina, as well as other residents on the dyke, accommodate walkers and cyclists.
 - If the above option is not an option then it may be possible to build a boardwalk (with nonslip surface), or a paved path, between the road and the dyke shoulder, and over the shallow drainage ditch at the dyke's base. The narrow grass margin, which is often wet and muddy, widens towards the park, making this a more doable option. (see photos on p. 13 and photo 13b)
 - Motorists would still need to share the road with road cyclists and cyclists traveling east, but there would be somewhat fewer conflicts.

2. The addition of signage in this section is badly needed: Signs to warn motorists that cyclists (and walkers) are on the road, to warn cyclists to be cautious, and to give advice such as speed limit, no passing in corner, or ride in single file.
3. Conflict with motorists is particularly high in this section, creating potential for accidents. Limiting or discouraging cyclist's use of the road is an option, although not a progressive one. This could be done by not designating River Road West as a bike route on cycling maps. If shown on a cycling map (because it is obviously a route that people will brave to get to popular destinations), the map could give lots of warnings, graphically and/or in words. The question arises whether it is appropriate to deliberately limit cyclist use of River Road West, for example, to certain times of the day or week. In fact many cyclists do that of their own accord, and, as noted, may not use the route at all because of concerns.
4. Monitoring traffic on the road, and conflicts between cyclists and motorists, particularly in this section, should be undertaken by the municipality to assess the real potential for harm. A survey of present and potential route users (walkers and cyclists) would be useful for assessing concerns and potential increase in route use.

B. Spot improvements on River Road West

The goal of spot improvements is to make sharing motor vehicle lanes with cyclists as safe as possible, and to decrease hazards on the road. The following spot improvements are suggested:

- Repair potholes and deteriorating pavement edges, followed by ongoing frequent maintenance to keep margins free of debris and encroaching grass.
- Provide signage warning motorists about cyclists and to caution cyclists.
- Provide or create attractive alternative routes where possible in the short term. As noted alternatives are limited. Improving public use of the dyke top by removing fence barriers and obstacles is one doable option. Building a path around the barrier created by S.M. Products is a priority as noted above.
- Monitoring traffic and conflicts between cyclists and motorists, as noted above.

C. "Long Term" solutions

The long term solution is to separate cyclists from motor vehicles, using on street bike lanes or greenways, and to create a consistent, convenient and safe cycling network. These solutions take more planning, resources and commitment.

- Extend and regularize public use of the dyke top trail from Ladner to Brunswick Point.

- Repave, and where possible, realign and widen River Road West. This road is undoubtedly due for major repairs in the coming years. At that time opportunities can be taken to improve the road for cyclist use.
- Integrate cycling with revitalization of Ladner Harbour front, creating a cycle path from Deas Island to Brunswick Point.
- Given the possibility that River Road West can never be a bike friendly route, identify a greenway route for cyclists and walkers from Ladner to Westham Island Road (the dyke top seems the best route, but possibilities may exist for going through farmland to the south of River Road West).