



February 14, 2016

Wayne Turner, Landscape Design Technician

Lisa Parker, Parks and Greenways Planner

City of North Vancouver

141 West 14th Street

North Vancouver

**Re: East Keith Road and Grand Boulevard Green Necklace and Associated Cycling Infrastructure Improvements**

Dear Wayne and Lisa,

HUB North Shore is excited to support the advancement of the East Keith Road and Grand Boulevard Green Necklace and associated cycling infrastructure improvements. We have reviewed the updated designs and thank you for the opportunity to comment on them to improve the safety and experience for all users.

**Grand Boulevard Section**

We are very excited to see the off street, one-way, protected bike paths along the edges of Grand Boulevard Park. They would be a huge step forward in terms of promoting cycling as a viable transportation option and a real showcase for people not familiar with good cycling facilities. These AAA facilities are the best way to encourage people to cycle for transportation. They would be the longest continuous protected bike paths in the City to date.



We understand there may be opposition to paving cycling facilities in the park. While we are sensitive to maintaining green space and park lands, cycling for transportation reduces greenhouse gas emissions and traffic noise, as well as, easing road congestion.

#### **Intersection Treatments - Curves**

We are concerned about the proposed curves in the bike paths intended to slow cyclists before arriving at intersections. Similar to bollards, curves present a distraction. At crossings, cyclists should pay attention only to cross traffic, without the distraction of non-linear paths. Clear pavement markings, signage and good sightlines are the safest and best way to alert cyclists to street crossings.

#### **Intersection Treatments – Separate Markings for People Cycling and People Walking**

We recommend actively managing how path users cross all the Grand Boulevard side streets. We are concerned about how people on bikes, and people walking – in particular with dogs - will mix at the intersections at 9<sup>th</sup>, 11<sup>th</sup>, 13<sup>th</sup>, and so forth. Marking parallel paths clearly to indicate where each mode should cross is one way to address this. People walking and biking need to focus on looking out for cars, not each other.

The photo below from the Stanley Park causeway shows green paint and elephant feet on the bike crossing in combination with a zebra crossing for pedestrians, clearly indicating to path users which side is safe for them. Further, no bollards are used at the crossing, improving safety and reducing the risk of crashes, falls and injuries.



**Photo: Street crossing on northbound Stanley Park Causeway path**

### **Intersection Treatments – Raised Pedestrian and Cyclist Crossings**

Raised pedestrian and cyclist crossings at 9<sup>th</sup>, 11<sup>th</sup>, etc. would make the crossings more visible to drivers, facilitate crossings for the elderly and disabled, and at the same time slow traffic speeds. Raised pedestrian and cyclist crossings across side streets are standard design in the Netherlands. The raised design is also used to protect pedestrians as vehicles enter Pacific Centre on the northeast corner of Howe Street and Robson.

### **Intersection Treatments – Signs and Pavement Markings at Entry to Separated Paths**

The Grand Boulevard intersection designs at Keith Road and 19<sup>th</sup> Street will work well with cycling wayfinding signage and improved pavement markings. The crossover to the east and west side of Grand Boulevard may not be intuitive and people riding bicycles will need to be directed to the correct side of Grand Boulevard to encourage the proper use of the one-way separated paths.

### **East Keith Road Section**

#### **Painted Line Cycling Facility**

We recognize the balance the City is trying to achieve to maintain on-street vehicle parking by providing a painted line cycling facility on Keith Road as well as a multi-



use path. We remain very supportive of the reduced width vehicle travel lanes, which should help reduce traffic speeds and improve safety for all users of this corridor. We suggest the buffer striping for the on-street painted bike lane should be moved next to the parked cars instead of along the moving traffic. The proposed design works well on a street without parking, but on East Keith it would be better to protect cyclists from parked car doors.

### Multi-Use Path Crossing Treatments

We recommend that all crossings for people riding bicycles be marked green, in addition to the standard elephant's feet markings for pedestrians. Where multi-use paths cross streets, they are often marked in green to make drivers more aware that cyclists use the path. You can see this in the treatment along the Central Valley Greenway in Vancouver and in Richmond near YVR Airport.



**Photo: Central Valley Greenway crossings at Great Northern Way, Vancouver**

We discourage the use of bollards at crossings. Research shows they present a further distraction for people on bikes already watching for vehicles, pedestrian



path users and their pets. Bollards are also a serious crash and injury hazard for cyclists.<sup>1</sup>

Research shows that multi-use paths are not particularly safe for cyclists<sup>2</sup>. However, we appreciate the compromise being sought by the City, so in cases where multi-use paths are built, studies and best practices from Dutch cycling infrastructure design show that they can be safer by making them straight to improve sightlines and by avoiding obstacles like bollards and street furniture.

Thank-you for the opportunity to provide feedback to these designs. We are pleased to support the City in its ongoing efforts to improve conditions for all road and public space users. The Green Necklace is a fantastic addition to the public realm that will encourage people to use active forms of transportation. If you have any questions about the above recommendations, please contact the HUB North Shore Committee.

Sincerely,

Tony Valente,

Chair, HUB-North Shore Committee

CC:

Mayor and Council, City of North Vancouver

The Integrated Transportation Committee, City of North Vancouver

Dragana Mitic, Transportation Manager, City of North Vancouver

Doug Pope, City Engineer, City of North Vancouver

Grand Boulevard Ridgeway Residents Association

North Shore Safe Routes Advocates

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<sup>1</sup> <http://www.biomedcentral.com/content/pdf/1471-2458-14-1205.pdf>

<sup>2</sup> <http://bmjopen.bmj.com/content/5/1/e006654.full.pdf+html>