



Governance and Priorities Committee Report

For the Meeting of January 21, 2016

To: Governance and Priorities Committee **Date:** January 14, 2016

From: Katie Hamilton, Director, Citizen Engagement and Strategic Planning
Fraser Work, Director, Engineering and Public Works

Subject: Update on Pandora Avenue Two-Way Protected Bike Lane

RECOMMENDATION

That Council receive this update on the two-way Pandora Avenue protected bike lane.

EXECUTIVE SUMMARY

This report provides Council with an update on the detailed design of the 1.2 kilometre, two-way bicycle lane on Pandora Avenue between Store Street and Cook Street, which will be the first fully protected bike facility in the City of Victoria. The Pandora Avenue bike lane project has reached 60% design maturity, and final detailed design will be completed by March 2016.

Based on the 60% design, the final design of a two-way bike lane, using bollard and paint separation is now estimated at \$2.09 million, slightly higher than the original estimate of \$2.06 million (Class D, with a 25% contingency). Further cost savings will be sought through the final design phase. Appendix B includes the current designs.

Based on the current design, expected parking space loss has been reduced from the original estimate of 44 spots to 32 parking spots. Further consultation will focus on liaising with affected residents, business owners, customers and cyclists, and there are a few specific properties where further consultation and refinement is required. Upon completion of final design, a presentation to Council will include mitigation strategies for impacts to related traffic, parking and sidewalk changes.

A Request for Proposals/tender documents and implementation plan will be developed, leading to construction commencing in April. Final designs will be shared with Council in March 2016.

In addition to the protected lanes on Pandora Avenue, a traditional painted marked bike lane will be introduced on Johnson Street starting in April, as approved by Council in July of 2015.

BACKGROUND

On July 2, 2015, the Governance and Priorities Committee received the results of public consultation on a proposed bike facility on Pandora Avenue, including two design options and requested Council approval on the design option for a two-way protected bike lane. Council approved the following motions:

1. That Council endorse the design and construction of a two-way fully protected bike lane with traffic signal changes on Pandora Avenue, and marked bike lanes on Johnson Street.
2. That physical separation used in the design be primarily parked vehicles and bollards, with enhanced separation (concrete islands) used at bus zones, mid-block crosswalks, and at the approach to intersections where parking is not permitted.

Since July, the following progress has been achieved and next steps are outlined in the table below.

| Progress to Date | 2015 |
|---|-------------------|
| Public engagement commenced on three design options | May |
| Council received results of public consultation and directed staff to proceed with detailed design of a two-way bicycle facility on Pandora Avenue, including construction starting in the spring of 2016 | July |
| Advertisement of RFP to undertake detailed design work | Aug |
| Retained external consultants to undertake detailed design of Pandora Avenue bike facility | Sep |
| External consultants undertook an assessment of design options and impacts | Oct-Nov |
| Staff received 60% detailed design options and cost estimates from external consultants. Designs are under further review and refinement | Dec |
| Next Steps | 2016 |
| Consultants to finalize full detailed design, with on-going staff assessment | Jan/Feb |
| Staff to develop implementation and mitigation strategies and communications plans | Feb |
| Tender /advertise construction; start public communications | Mar-Apr |
| Construction (~4-6 months. Schedule driven by electrical signalling modifications) | June – Sep to Nov |
| Project close | Dec |

The design of the two-way bicycle facility, as directed by Council, is to be physically separated by parked vehicles with separation treatments including bollards and paint, as well as dedicated signals. Some landscaped medians will also provide for separation treatments. The initial Class D cost estimates (presented in July 2015) for the approved two way bike lane was \$2,060,000. Current estimates for the bike lane are very close to the original estimate provided by staff and approximately \$30,000 over the original design.

Detailed Design Status

The final design for the bicycle facility is required to deliver a safe and attractive experience for a broad range of age groups, skill levels and mobility options (i.e. bikes, skateboards, roller blades, scooters, etc.). The Pandora Avenue two-way bike facility will have an optimal width of 3.5 metres for the cycle track, with a minimum 1.0 metre physical buffer between either moving traffic or parked vehicles.

An assessment of Pandora Avenue dimensions and safety design requirements determined that a 3.5 metre wide bicycle facility provides the appropriate safety separation clearances for anticipated user volumes. These dimensions accommodate standard 3.0 metre wide traffic lanes, consistent with other traffic corridors in the City. Certain bicycle facility sections will be reduced to 3.0 metres wide, to minimize impacts to existing road, sidewalk, intersection and parking infrastructure (see figure 1 for general layout). Although three trees in the 600 block of Pandora will need to be removed, all will be replaced in alternate locations, resulting in a net zero of tree removal. There could be a net increase in trees in the downtown hub as landscaping opportunities

will exist in a few locations where available space can accommodate transportation clearances and a buffer width of 1.5 metres or more (see figure 2).



Figure 1: Bollards and Parking Buffer

The type of bollards to be installed is currently being assessed. Through the Biketoria project, various options for bollards are being prepared by the consultants, and will be considered for the Pandora Avenue bike lane to ensure consistency in treatments across the larger network.



Figure 2: Landscaping and Parking Buffer

Impacts and Mitigation

- **Loss of Parking:** A total of 32 parking spaces will be removed. This is 25% lower than the original estimate of 44 spaces, and less than a 1% reduction of the parking spaces downtown. No significant impact is expected.
- **BC Transit:** Two of the five bus stops (existing zones at Vancouver Street and at Quadra Street) are proposed to be consolidated to reduce the number of potential conflict points between bike riders and transit users. BC Transit is supportive of this consolidation plan.
- **Sidewalk Redesign:** Narrowing of the sidewalk is required at the transit stop on the 700 block of Pandora Avenue, to accommodate the additional infrastructure and integration of bike paths with the space required for transit embarkation/disembarkation (see Figure 3). The width of the sidewalks at the bus zone will be maintained at no less than 2.8 metres. Additional space required for bus zones in the 900 and 1000 block of Pandora Avenue will reduce the existing

boulevard, and will not impact the existing sidewalks. The changes in sidewalk design is within appropriate guidelines for sidewalk widths.

- Additional design work and examination of options /trade-offs is required for specific zones, as part of ongoing liaison with key stakeholder groups (i.e. Swans Hotel, MacPherson Playhouse etc) is required. Further information dissemination on changes to Transit users will also be undertaken.

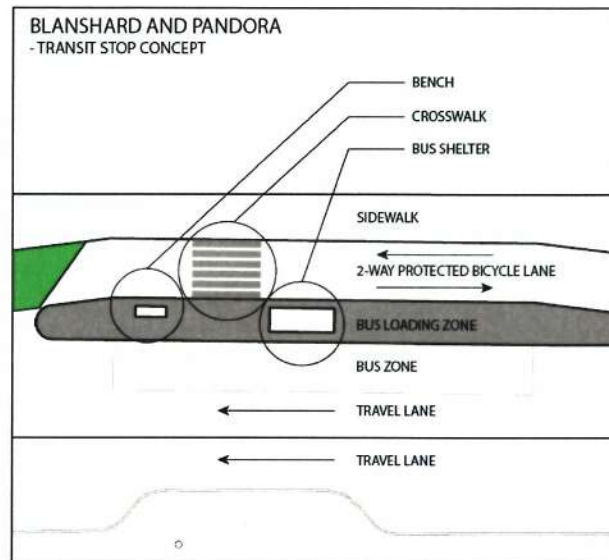


Figure 3: Transit Stop Concept

FINANCIAL IMPACT

The final design of a two-way protected bike lane using bollard and paint separation, with limited median separation with landscaping is currently \$2.09 million. The estimated construction costs for this project as presented to Council in July of 2015 was \$2.06 million, which includes a 25% contingency (Class D). The \$190,000 cost for retaining the external consulting firm to undertake detailed design for Pandora Avenue is being funded from the \$500,000 allocated to consultant fees of the \$7.75 million gas tax funding for the bike network initiative. As this is a gas-tax funded initiative, external contractors must be utilised to complete construction.

There is some potential for external funding sources, such as Bike BC, which are currently being investigated in hopes to further reduce City costs for this, and future projects.

NEXT STEPS

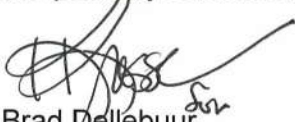
Transportation Design: The external consultants will complete their contractual commitments at the final detailed design by March 2016, including construction drawings. The on-going design process will finalize the detail, and trade-offs for the consideration of physical lane characteristics, loading zones, landscaping, specific tree removals/additions, intersection layout, electrical infrastructure and traffic signal design and phasing. During this time, staff will prepare tender documents and implementation plans. Construction is estimated to begin in June 2016 and be completed by the end of the year. Construction timelines will be governed mainly by underground electrical and signal works, which may be coordinated in such a way to gain overall timeline efficiencies. All opportunities to reduce construction duration and to minimize disruption are currently being explored.

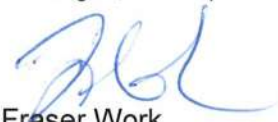
Public Engagement/Communications: Given the high level of public engagement that has occurred

to date, the focus of the Pandora Avenue bike lane will be on communications and information sharing with residents, road users (motorists, cyclists, and transit riders), businesses owners and customers. Information will be provided on upcoming changes that are expected impacts (traffic signal changes, parking removal, lane removal, etc.) as well as expected short term delays and disruptions during the construction period. Communications will include website and social media updates, construction and road closure advisories, an open house and service change notices at BC Transit stops. Although most property concerns raised earlier have been addressed in the refined design, further consultation with specific property owners will continue, specifically as it relates to loading areas and driveway accesses.

Next Presentation: Staff will present final design proposal to Council in the March of 2016.

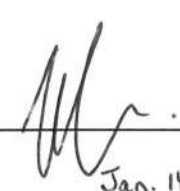
Respectfully submitted,


Brad Dellebuur
Manager, Transportation


Fraser Work
Director, Engineering and Public Works


Katie Hamilton
Director, Citizen Engagement and Strategic Planning

Report accepted and recommended by the City Manager: _____

Date:  Jan. 14, 2016

List of Attachments

Appendix A – Excerpt from 2 Jul 2015 Governance and Priorities Committee meeting
Appendix B – 60% Design Drawings