

DATE: February 10, 2017

FILE: 8550-03

TO: Chair and members
Integrated regional transportation select committee

FROM: Debra Oakman, CPA, CMA
Chief Administrative Officer

RE: Comox Road – multi-use path update

Purpose

The purpose of this report is to bring updated information regarding the Comox Road project to the committee reflective of the discussions at the February 2, 2017 integrated regional transportation select committee (IRTSC) meeting.

Policy analysis

At the scheduled February 2, 2017 meeting of the IRTSC, a staff report (Appendix 'A') and presentation regarding the development of a multi-use path along the upland side of Comox Road was discussed. As there weren't enough committee members in attendance to form a quorum, the recommendation in the report could not be tabled. To reflect the discussion at this meeting, this report includes some updated information and a revised recommendation for the committee's consideration.

Executive summary

In light of the committee's concerns regarding the option of a multi-use path along the upland side of Comox Road and the information currently available to adequately assess the feasibility of this option, the current path forward for this project will be to keep all available options for a separated multi-use path on the table. The complexity of the project and a strong desire to create a true showcase project for this vital active transportation link suggest that a longer-term approach that isn't driven by completing an application for an anticipated grant funding deadline may be required.

To assist the committee with their assessment of active transportation infrastructure options for Comox Road, staff have developed a strengths, weaknesses, opportunities and threats (SWOT) analysis for the project attached to this report as appendix 'B'. This analysis presents an overview of the various factors that could impact the advancement of the project.

In terms of next steps for the project, engagement with stakeholders, including the Town of Comox, City of Courtenay and K'ómoks First Nation, seeking their participation in development of the project is required. Staff are also developing a scope of work to seek the services of a third party consultant to develop and deliver a local active transportation workshop for the Comox Road project. This workshop would work with technical staff from local stakeholders on their interests and concerns regarding the project, present case studies from other communities and prepare an implementation plan for the project. Results of the workshop would be presented to the IRTSC and to respective boards and councils.

Recommendation from the chief administrative officer:

THAT the concept of a multi-use path along Comox Road be presented in a letter from the integrated regional transportation select committee chair to K’ómoks First Nation, the Town of Comox and the City of Courtenay and include a request to appear as a delegation at K’ómoks First Nation, Town of Comox and City of Courtenay council meetings to describe the benefits of the project.

Respectfully:

D. Oakman

Debra Oakman, CPA, CMA
Chief Administrative Officer

Prepared by:

V. Van Tongeren

Vince Van Tongeren, B. Sc
Policy and Sustainability
analyst

Concurrence:

Michael Zbarsky, B.Sc. AScT
Manager of Transit and
Sustainability

Concurrence:

T. Ian Smith

T. Ian Smith, MCE
General Manager of
Community Services

Attachments: Appendix A – “January 27, 2017 report to IRTSC, Comox Road – multi-use path option”
Appendix B – “SWOT analysis of Comox Road MUP project”

DATE: January 27, 2017

FILE: 8550-03

TO: Chair and members
 Integrated regional transportation select committee

FROM: Debra Oakman, CPA, CMA
 Chief Administrative Officer

RE: Comox Road – multi-use path option

Purpose

The purpose of this report is to present to the integrated regional transportation select committee (IRTSC) a strategy for developing a multi-use path alongside Comox Road.

Policy analysis

The rural Comox Valley official community plan, Bylaw No. 337, 2014 includes the following policy statements related to cycling and pedestrian infrastructure:

Policy 23(7): Work with MOTI and neighboring municipalities of Courtenay, Cumberland and Comox to achieve network improvements including greenways, separated bikeways and off road greenway improvements to provide for active transportation options.

Policy 23(8): In cooperation with MOTI, encourage installation of cycling facilities in the order of priority noted in the transportation road network plan.

The Comox Valley Transportation Road Network Plan, 2014 states:

Objective 2: Increase opportunities for rural residents to walk, bicycle, and use public transit and increase the proportion of trips made by non-vehicle modes.

Objective 6: Provide for coordinated transportation infrastructure and services within the Electoral Areas and between adjacent jurisdictions.

5.2.1 Roadside Greenway Improvements: Comox Rd is listed as a priority.

BC on the Move is the Ministry of Transportation and Infrastructure's (MOTI) ten year transportation plan drafted in March of 2015. One of the priorities listed in the plan is to provide more transportation choices by investing in walking and cycling infrastructure and specifically mentions partnering with communities to build new bike lanes and trails throughout BC.

The document refers to investing in cycling and pedestrian infrastructure including separated bike paths and wider shoulders to 'promote safety and comfort for those travelling by bike' (BC on the Move, page 40). Survey responses that guided the document revealed that 72 per cent of respondents said enhancing cycling infrastructure and improving transportation choices were important. Key Priority 6: Investing in cycling

Executive summary

In follow up to the discussion at the December 1, 2016 meeting of the IRTSC regarding options for active transportation infrastructure along Comox Road, this report presents further information on development of a multi-use path (MUP) along the upland side of Comox Road. Much of the success of this project in attracting ridership and resulting mode-shift from single occupancy vehicles is

contingent on how well the proposed path connects to existing and planned cycling and pedestrian infrastructure in the Town of Comox and the City of Courtenay. Based on recent multi-use path construction projects on Vancouver Island, the cost to construct an upland MUP along the 3.5km length of Comox Road between Glacier View Drive in Comox and the 17th Street bridge in Courtenay could be in excess of \$1.5 million. A successful BikeBC application for this project would bring the net local cost to about \$780,000.

Recommendation from the chief administrative officer:

THAT the concept of a multi-use path along Comox Road be presented in a letter from the integrated regional transportation select committee chair to K'ómoks First Nation, the Town of Comox and the City of Courtenay and include a request to appear as a delegation at the Town of Comox, City of Courtenay and K'ómoks First Nation council meetings to describe the benefits of the project.

Respectfully:

D. Oakman

Debra Oakman, CPA, CMA
Chief Administrative Officer

Background/current situation

At the December 1, 2016 meeting of the IRTSC, background information on the work done to date for the Comox Road project, as well as options for a separated multi-use path were presented and discussed by the committee. Given the level of interest expressed in the multi-use path concept over the buffered shoulder bikeway concept, this report will lay out a preferred strategy for pursuit of a separated 4m width multi-use path project along Comox Road, between the 17th Street bridge in Courtenay and Glacier View Drive in the Town of Comox.

The MUP concept presents a number of advantages over the buffered shoulder bikeway concept. One of the primary advantages is the high degree of separation a MUP would provide between path users and vehicle traffic on the roadway. Separation is one critical factor in creating infrastructure that appeals to a broad range of the “interested by concerned” portion of the population, enabling greater mode-shift from single-occupancy vehicle travel. It also provides the greatest degree of safety.

Given the multiple constraints on the southwest (water) side of the roadway, a multi-use path along the northeast (upland) side of the roadway is felt by staff to be a feasible option. A pathway on this side of the road could enable the use of the existing Farmview Road right-of-way to completely separate the upland MUP from Comox Road for 500m of the approximately 3.5km distance between the 17th Street bridge and the Town of Comox.

The cross section of the multi-use path would be similar to the Roadside Greenway Option 1 as described in the 2014 Transportation Road Network Plan, and shown below in Figure 1 for reference. To accommodate growth in cycling and pedestrian traffic volumes, the proposed width for the Comox Road MUP is 4 metres.



FIGURE 1 - ROADSIDE GREENWAY OPTION 1 - SEPARATED PATHWAY (TRNP 2014)

The success of attracting ridership to the multi-use path would be contingent on how well connected it is to existing cycling and pedestrian infrastructure on each end of the proposed project. In the City of Courtenay, the path would ultimately connect to the Courtenay Riverway trail on the west bank of the Courtenay River, and in the Town of Comox, the path would connect to existing sidewalks and bicycle lanes, and low traffic volume residential streets near Glacier View Drive.

The buffered shoulder bikeway concept is an alternative that could be brought forward for future consideration. Buffered shoulder bikeways along each side of the electoral area B portion only of Comox Road would connect reasonably well to existing shoulders and bike lanes in the adjacent municipal areas, and still enhance the appeal of this route to a smaller portion of the “interested by concerned” population. Pursuit of the buffered shoulder bikeway concept will require MOTI support of this treatment; requiring further engagement with MOTI. Figure 2 below illustrates a sample cross-section of buffered shoulder bikeways. The width of the buffered separation area could be between 0.5m and 1.2m.



FIGURE 2 - EXAMPLE BUFFERED SHOULDER BIKEWAY CROSS-SECTION

In terms of attracting ridership amongst the “interested but concerned” demographic, a separated multi-use path option would expand the appeal of this route to a much greater degree than the buffered shoulder bikeway option. Table 1 below summarizes advantages and disadvantages of each infrastructure option.

TABLE 1 - COMPARISON OF SEPARATED MULTI-USE PATH AND BUFFERED SHOULDER BIKEWAY

	Advantages	Disadvantages
Separated multi-use path	<ul style="list-style-type: none"> • Dedicated, protected space for cyclists, pedestrians, etc = safest option • Captures a greater portion of “interested but concerned”, thus enhancing mode-shift • Used in other MOTI jurisdictions = easier approval process • Would not have to be built to MoTI vehicular construction standards • High profile project that builds support for further investment in active transportation network • Stronger recreational benefits 	<ul style="list-style-type: none"> • Wider footprint on one side of the existing road may not fit within ROW in some areas • Higher construction cost • Awkward connections to existing bike lanes and shoulders.
Buffered shoulder bikeway	<ul style="list-style-type: none"> • Increased distance between cyclists and motorists compared to existing conditions • Provides space for cyclists to overtake other cyclists • Lower construction cost • Smoother transition to existing bike lanes and shoulder bikeways 	<ul style="list-style-type: none"> • Users not protected as much from vehicles • Captures significantly fewer “interested but concerned” than separate multi-use path • Creates large contiguous asphalt surface • Additional paved area on estuary side of road may have negative ecological impacts • Requires more paved surface than the separated MUP • Would need to be constructed to MoTI TAC standards • Unfamiliar to MOTI = difficult approval process

In order to complete a BikeBC application for the next anticipated funding call in fall 2017, the timeline of activities presented to the committee in December 2016 has been updated to reflect the information presented in this report. Table 2 below includes a list of key activities and target completion dates.

TABLE 2 – ANTICIPATED BIKEBC APPLICATION KEY ACTIVITIES AND TIMELINES

Description	Timing
Report to IRTSC on multi-use path and buffered shoulder bikeway options	February 2017
Letter from IRTSC to K'omoks First Nation, Town of Comox and City of Courtenay requesting participation in development of multi-use path concept	February 2017
Active transportation workshop & presentations to municipal councils and CVRD board	March 2017
Report on results of municipal outreach to IRTSC, including recommendation to proceed with multi-use path design	April 6, 2017
Initiate engagement with MOTI regarding design approach & considerations for project permit approval by MOTI	Spring 2017
Consultant survey & design work (as necessary)	Spring-summer 2017
Bicycle traffic counts	Summer 2017
Develop refined cost estimates	Summer 2017
Public consultation	Summer 2017
Permitting for phase 1 of project (ie MOTI, archaeology)	Summer-fall 2017
Estimated opening of 2017 Bike BC funding call	October 2017
Recommendations to appropriate jurisdictions re: proceeding with project and confirming local funding sources (e.g. CWF funding for CVRD electoral area share of project costs)	November 2017
BikeBC grant application	November 2017
Estimated 2017 BikeBC grant application deadline	December 15, 2017

Options

Staff have identified the following options for the committee's consideration:

1. Proceed with development of a multi-use path along the upland side of Comox Road, and that a letter be sent from the IRTSC board chair to the Town of Comox and City of Courtenay seeking their participation in development of the project and support for future connections to existing infrastructure in their jurisdictions.
2. Proceed with development of a buffered shoulder bikeway along Comox Road.
3. Not proceed with planning active transportation improvements along Comox Road at this time, and direct staff to further investigate supportive governance structures.

Staff are recommending option 1 at this time.

Financial factors

To develop a planning level cost estimate for construction of a multi-use path along Comox Road, cost information from similar BC municipal cycling projects was obtained. A cost estimate of \$450 per lineal meter of trail brings the total cost of the multi-use path project to over \$1.5 million, not including contingency or intersection and bridge enhancements at 17th Street. A 25 per cent contingency brings the cost estimate for the multi-use path option to almost \$2 million.

Costs for the buffered shoulder bikeway option are estimated at \$225 per meter, which will expand the existing asphalt surface along each shoulder by approximately 1 meter to accommodate the extra width required by the buffered separation area. Total cost of the buffered shoulder bikeway option would be almost \$800,000, not including contingency. These figures are in alignment with preliminary cost analysis completed during development of the buffered shoulder bikeway option in

2016. A 25 per cent contingency brings the total cost estimate for the buffered shoulder bikeway option to almost \$1 million.

Table 3 below outlines estimated project costs for each option by jurisdiction.

TABLE 3 - SUMMARY OF ESTIMATED COSTS FOR TWO DESIGN OPTIONS (INCLUDING 25 PER CENT CONTINGENCY)

Jurisdiction	Trail length (m)	Separated multi-use path (4m width)			Buffered shoulder bikeway		
		Total cost estimate	Bike BC contribution	Net municipal share	Total cost estimate	Bike BC contribution	Net municipal share
CVRD	2,400	\$1,296,000	\$648,000	\$648,000	\$648,000	\$324,000	\$324,000
Comox	300	\$162,000	\$81,000	\$81,000	\$81,000	\$40,500	\$40,500
Courtenay	800	\$432,000	\$216,000	\$216,000	\$216,000	\$108,000	\$108,000
TOTALS:	3,500	\$1,890,000	\$945,000	\$945,000	\$945,000	\$472,500	\$472,500

At this point in time, available funding for the design work is limited to approximately \$10,000. Development of either option will require additional funding for design work. Funding for construction of the project has not been secured. In a March 2016 report to the Comox Valley Regional District (CVRD) electoral area services committee ([link](#)), community works funding was identified as a potential funding source for the CVRD portion of the project.

Legal factors

Construction of a multi-use path or buffered shoulder bikeway along Comox Road will require permits from MOTI. Ongoing maintenance of a multi-use path would be the responsibility of the CVRD; likely through the parks and greenways service. Ongoing maintenance of a buffered shoulder bikeway would be determined as part of MOTI's permit approval process. Construction of either option would also involve discussions with the K'ómoks First Nation as the trail or bikeway would pass alongside their territorial lands.

Regional growth strategy implications

Infrastructure that improves transportation choices is key to meeting multiple goals and objectives of the [regional growth strategy](#). Specific policy areas that the Comox Road project would advance include:

- Goal 2: Ecosystems, natural areas and parks: protect, steward and enhance the natural environment and ecological connections and systems;
- Goal 3: Local economic development: Achieve sustainable, resilient and dynamic economic that supports businesses and entrepreneurship;
- Goal 4: Transportation: Develop accessible, efficient, affordable and connected multi-modal transportation network;
- Goal 5: Infrastructure: Provide affordable, effective and efficient infrastructure that conserves land, water and energy resourced;
- Goal 7: Public health and safety: Support a high quality of life through the protection and enhancement of community health, safety and well-being; and
- Goal 8: Climate change: Minimize regional greenhouse gas emissions and plan for adaptation.

Intergovernmental factors

The proposed Comox Road project requires significant interaction between the CVRD and the provincial government. The road network in the rural CVRD is the jurisdiction of MOTI, and approval from MOTI will be required in order for the project to proceed. Staff discussions with MOTI regarding a separated multi-use path along Comox Road have been favourable, as separated multi-use paths are a relatively common treatment used in other MOTI road right of ways on Vancouver Island. CVRD would attain tenure for the construction of the project through a permit to construct works within the provincial public highway right of way.

The proposed Comox Road project connects the Town of Comox and the City of Courtenay. This report recommends that a letter be sent to each municipality to review the proposed project in the context of connection to existing or planned infrastructure and request their participation in development of the project within their jurisdictions.

The proposed project along Comox Road traverses K'ómoks First Nation's (KFN) IR1. A seat on the IRTSC is reserved for a representative from KFN and this report recommends a letter be sent to KFN inviting their participation in development of the project. This proposed project could provide significant benefits to the KFN.

Interdepartmental involvement

Work on the Comox Road project has been led by sustainability and parks staff within the community services branch, with significant interaction and discussion of these projects occurring with staff in other departments, including:

- Financial services, in relation to the use of community works funds for the CVRD's 50 per cent share of project costs.
- Engineering services, in relation to the tidal gates underneath Comox Road and the existing sewer forcemain along Comox Road.
- Planning services, in relation to the MOTI RGS implementation agreement.

Citizen/public relations

CVRD staff have met with representatives of the Comox Valley Cycling Coalition, who are supportive of the Comox Road project. Should the project move beyond the planning stage, outreach to residents along the route would be a significant component of consultation efforts prior to construction. A communications plan that focuses on minimizing disruption to traffic during the construction phase will be developed as part of the overall project plans.

Prepared by:

V. Van Tongeren

Vince Van Tongeren, B. Sc
Policy and Sustainability
analyst

Concurrence:

M. Zbarsky

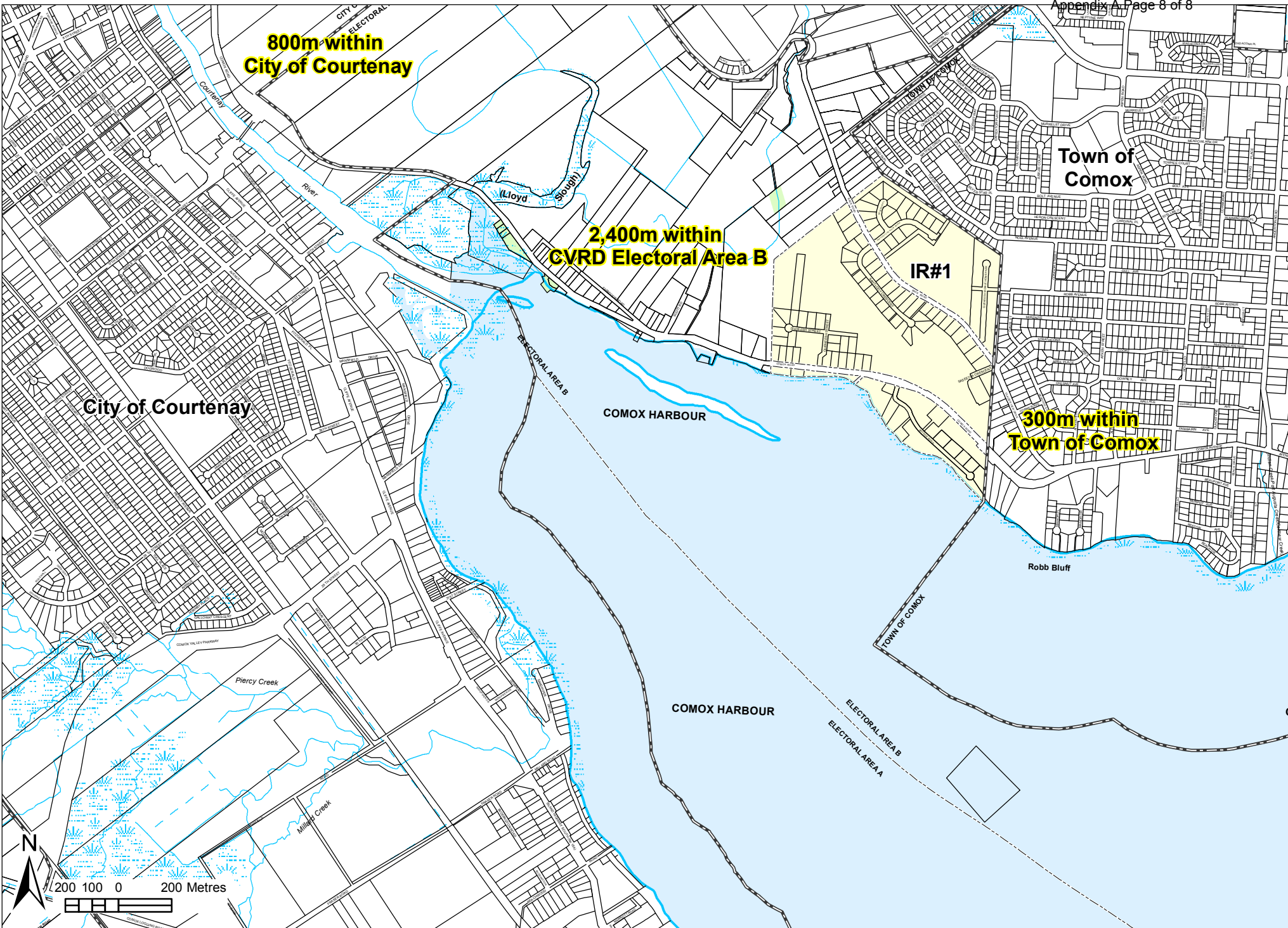
Michael Zbarsky, B.Sc. AScT
Manager of Transit and
Sustainability

Concurrence:

T. Ian Smith

T. Ian Smith, MCE
General Manager of
Community Services

Attachments: Appendix A – “Map of proposed Comox Road Multi-Use Path route”



Comox Road (Dyke Road) active transportation proposal

SWOT analysis

The following summarized the strengths, weaknesses, opportunities and threats or challenges for a proposed Comox Road multi-use path project. This path project is envisioned to be constructed within the Comox Road dedication which lies within the jurisdictional boundaries of the Ministry of Transportation and Infrastructure (MoTI), the City of Courtenay and the Town of Comox. Comox Road also passes through the K'ómoks First Nation (KFN).

Strengths:

- Comox Road is a significant existing direct transportation link between
 - Comox and Courtenay
 - K'ómoks First Nation and the adjacent communities of Comox and Courtenay
- Provides an additional transportation choice for Comox Valley residents and visitors, both for commuters and recreational users
- Promotes modal transportation shift away from single occupancy vehicles towards active transportation
- Comox Road is currently used by dedicated active transportation commuters
 - Builds upon existing usage patterns
- Increases pedestrian and cyclist safety compared to existing conditions
- Comox Road is listed as a priority roadside greenway project for the region
- As Comox Road is only a two lane road, there should be enough space within the road dedication for pathway construction

Weaknesses:

- Limited width within MoTI road dedication
 - May be inhibited by current location of the roadway within the road dedication
 - Comox Road lane widths are currently below MOTI standards in some areas
- Difficult to explore path options outside of the road dedication if additional space is desired
 - Private property
 - KFN
 - ALR
 - Estuary
- Some challenging terrain for path construction outside of the current road footprint (within road dedication). May require costly engineering solutions.
 - Ecologically sensitive estuary on the water side
 - ALR lands on the east side of Dyke road
 - Comox hill
 - Flood relief infrastructure crossing under Comox Road
- Comox Road is a busy road with volumes of 15,000+ vehicles a day
- Vehicular traffic on Comox Road tends to travel at speeds beyond the posted 50km/h

- Comox Road is located on a dyke and adjacent to an ecologically sensitive landscape
- Steep grade on Comox hill
- Proximity of private properties to the travelled lane of Comox Road
- Flood relief infrastructure under Comox Road from the estuary into the adjacent ALR lands
- Road crossings may be difficult given the travel speeds and traffic volume
 - Results in challenging access to estuary and regional parks
- Linkages to existing communities may be difficult
 - Comox – hill and existing sidewalk and cycling infrastructure
 - Previous sidewalk located near glacier view road was removed due to safety concerns
 - Courtenay – 17th street bridge intersection and bridge deck

Opportunities:

- Ability to create a seamless active transportation connection between
 - Downtown cores of Comox and Courtenay
 - K'ómoks First Nation to Comox and Courtenay (currently isolated)
- Ability to connect to existing active transportation infrastructure
 - Courtenay Riverway trail
 - Sidewalks and bicycle lanes along Comox Road in Comox
- Potential for a safe dedicated and separated space for active transportation
- Potential to improve and calm traffic in Comox by introducing a traffic circle at Glacier view road intersection to transition bike lanes.
- Potential to attract more ‘interested but concerned’ cyclists
 - More mode shift to active transportation could result in reduced vehicle traffic volumes along this route
- Possibility for future connections outside of project confines
 - Possibility to extend path to the 5th street bridge in Courtenay
 - Possibility to extend path to connect to waterfront trail in Comox
- Ability for partnerships on a high profile coordinated regional transportation infrastructure project involving multiple jurisdictions and agencies
- Builds upon the Ministry of Transportation and Infrastructure’s ‘BC on the Move’ document that outlines a provincial commitment to invest in walking and cycling infrastructure
- Eligibility for Bike BC grant could fund 50% of project costs
- A successful project could drive further support and investment for active transportation projects in the region given the high profile nature of the location
- Ability to incorporate the Farmview Road dedication into the proposal – taking 500m of the 3.5km total distance off Comox Road
- The estuary is a key regional public amenity and regional parks currently exist along this section of Comox Road
- Future of old Field sawmill site along Comox Road could add additional recreational amenities

- Ministry of Transportation and Infrastructure may have future plans to upgrade the 17th street/ Comox Road intersection
- Current pedestrian road crossing at KFN

Threats/Challenges:

- Requires a commitment to a singular vision from a number of different public entities including:
 - City of Courtenay
 - City of Comox
 - Ministry of Transportation and Infrastructure
 - CVRD
 - K'ómoks First Nation
- Requires funding contributions from a variety of jurisdictions
 - City of Courtenay
 - City of Comox
 - Comox Valley Regional District
 - Ministry of Transportation and Infrastructure
 - External funding agencies
- Public buy-in for investment required to support modal shift philosophy
- Ministry of Transportation and Infrastructure's planned Comox Road improvements without consideration of path options may constrict path options
- Ministry of Transportation and Infrastructure does not have clear guidelines related to cycling and pedestrian infrastructure within the road dedication
- Possible future sea level rise

Recommendations:

- A fully accessible 4m wide separated multi-use path that runs from the 17th Street bridge on Comox Road in Courtenay to Glacier View Road in Comox.
 - Eventual direct connection to downtown cores of Comox and Courtenay
 - Feasibility of 2m separated paths on each side of the road to be assessed during stakeholder engagement and design process.
- Technical workshop to develop partnerships on pathway funding/design/construction, involving
 - CVRD
 - City of Courtenay
 - Town of Comox
 - Ministry of Transportation and Infrastructure
 - KFN
 - Estuary protection groups