



## INFORMATION ONLY COUNCIL REPORT

To: Paul Gipps, CAO

Date: May 10, 2022

From: Allen Fillion, Director of Engineering and Operations File No: 5330-20-57

Subject: **Road DCC Priorities, Pedestrian Improvement Program, and  
Infrastructure Levy / Active Transportation Recommended Projects List**

---

### EXECUTIVE SUMMARY

The purpose of this report is to:

1. Provide Council with an overview on the Pedestrian Improvement Program, Road DCC Program, and Active Transportation Projects;
2. Provide an update on Infrastructure Levy investment and recent construction activities;
3. Receive direction for the prioritization of future transportation investments related to all three programs.

The City of West Kelowna's Road Development Cost Charges (DCC) and Pedestrian Improvement Programs are initiatives implemented by the City to guide transportation investments and capital expenditures for future road, sidewalk, and active transportation improvements throughout the community.

Updated project lists were last provided to Council in December 2020, which took into account statistical data at the time, a third-party consultant review, and feedback from the public and City Council.

To provide Council with current information, ICBC Collision statistics were reviewed for recent data years (2016-2020); as were development projections, with both helping to inform the prioritized projects identified in this report.

In addition to the Road DCC and Pedestrian Programs, City Council introduced a one percent Infrastructure Levy through the 2021 budget process. The levy is primarily intended to accelerate priority road and active transportation projects.

## STRATEGIC AREA(S) OF FOCUS

Following City Council's identified Strategic Priorities, the City's Road DCC and Pedestrian Improvement programs as well as the Infrastructure Levy funding all support the objectives set out in Council's *Invest in Infrastructure* framework pillar.

## TRANSPORTATION MASTER PLAN

With the City's Transportation Master Plan (TMP) currently underway, it will be a vital resource and influence on the City's future transportation investments and prioritized decisions. The Road DCC Program and Pedestrian Improvement Program will require a subsequent review following completion of the TMP in fall 2022, which will be brought forward to a future Council meeting.

## OVERVIEW

### 1. PEDESTRIAN IMPROVEMENT PROGRAM

Continuing Council's mandate to prioritize pedestrian and bicycle infrastructure within close proximity to schools throughout the community, the Pedestrian Improvements Program project list remains unchanged from the previous update:

**Table 1 – Pedestrian Improvement Program - Project Priority List**

PEDESTRIAN IMPROVEMENT PROGRAM (Updated May 2, 2022)						
Street Name	From	To	Length (meters)	Estimated Value	Anticipated Completion	Nearest School/Amenity
Westlake Road	West Kelowna Rd	Pettman Road	1270	\$1,050,000	2022	Rose Valley Elementary
Old Okanagan HWY	Dobbin Road	Existing Sidewalk	364	\$808,500	2022	Johnson Bentley Aquatic Centre
Horizon Drive Phase 1	Olympus Way	Aurora Heights	332	\$759,546	2023	Rose Valley Elementary
Horizon Drive Phase 2	Aurora Heights	Covington Crescent	563	\$1,326,666	2023	Rose Valley Elementary
Horizon Drive Phase 3	Covington Crescent	Existing Sidewalk	211	\$512,121	2023	Rose Valley Elementary
Bartley Road	Pike Road	Ross Road	226	\$564,984	2024	Mt. Boucherie
Webber Road	Malcolm Road	Gorman Road	361	\$929,548	2025	Glenrosa Elementary
Shannon Ridge Drive***	Shannon Lake Road	Shannon Place	156	\$413,739	2026	Shannon Lake Elementary
Brentwood Road	Ponderosa Court	Alhambra Drive	205	\$560,007	2026	Hudson Rd Elementary
Brentwood Road	Ross Road	Ponderosa Court	388	\$1,091,712	2027	Hudson Rd Elementary / Mt. Bou.
Gates Road	Glenrosa Road	Helen Gorman Elem.	720	\$2,086,633	2028	Helen Gorman Elementary
Shannon Way***	Woodstock Dr.	Hihannaah Dr	389	\$1,196,018	2029	Shannon Lake Elementary
Webber Road	McRae Road	McBain Road	287	\$908,881	2030	Glenrosa Elementary

\*\*\*To be Completed using 1% Infrastructure Levy - date TBD

Shannon Ridge Drive and Shannon Way have been recognized as projects that will be completed utilizing the City's in-house capital works crew and utilizing funds saved and other funds from the Infrastructure Levy. This is a good example of how the additional funding from the levy can help to advance projects that were further out in the program.

Further analysis may identify additional projects that could be completed in-house which would ultimately accelerate the program schedule.

## 2. ROAD DCC PROGRAM

ICBC collision statistics were reviewed for recent data years (2016-2020) which provided a severity weighting for various intersections and road corridors throughout the community. With road safety being a key design input factor for proposed road improvements, the itemized list identified below remained largely unchanged from the previous update:

**Table 2 – Road DCC Program - Project Priority List**

ROAD DCC PROGRAM (Updated May 2, 2022)				
Street Name	From	To	Estimated Value	Anticipated Completion
Stevens Rd/Shannon Lake Rd/Bartley Rd Intersection	Shannon Lake Road	Stevens Road	\$5.5M	2022
Butt Rd/Old OK Hwy Intersection	Butt Road	Old OK Hwy	\$1.5M - \$2.5M	2022/23
Shannon Lake Rd	IR #9	Asquith Road	\$4.0M - \$5.0M	2023/24
Elliott Rd (Design only - Construction 2025)	Smith Creek Road	Reece Road	\$5.5M - \$6.5M	2023 (25)
Gellatly Rd South (Design only - Construction TBD)	Whitworth Road	4251 Gellatly Rd South	\$5.5M - \$6.5M	2024 (28)
Gosset Rd/Old OK Hwy Intersection	Gosset Road	Old OK Hwy	\$2.0M - \$3.0M	2026/27
Gellatly Rd (Boucherie Int., frontage improvements)	Boucherie Road	Carrington Road	\$3.0M - \$4.0M	2027/28

ICBC's data identified the intersection of Gossett Road and Old Okanagan Highway with the second highest intersection-related injuries and collision costs. Subsequently, this intersection was the lone amendment to the previous list provided with the December 2020 update. This is not surprising given the recent opening of Gossett Road between Brown Road and Elliot Road.

ICBC's collision data does not capture anticipated growth impacts on existing geometric design constraints. Furthermore, the stats received from ICBC are always a year behind. These constraints could worsen with increased development volume. As such, previously identified road segments along Elliott Road (Reece Rd to Smith Creek Rd) and on Gellatly Road South (Whitworth Rd to 4251 Gellatly Rd South) which contain challenging horizontal curves that will require property acquisition for realignment are recommended to commence design work ahead of anticipated construction dates in order to properly define what is needed and allow time for acquisitions.

## 3. ACTIVE TRANSPORTATION / INFRASTRUCTURE LEVY

In addition to the Pedestrian Improvement Program and the DCC Road Priorities Program and with Council's strategic priority of investing in infrastructure in mind, Council introduced an Infrastructure Levy through the 2021 budget process. The one percent infrastructure levy equates to approximately \$350K in additional revenue which translates into debt servicing for approximately \$1.8M in short term borrowing. This means an additional \$1.8M can be spent to advance infrastructure programs for each year that the

one percent infrastructure levy is collected. The levy is primarily intended to accelerate priority road and active transportation projects.

During 2022 budget deliberations staff presented the following table of proposed projects to Council:

**Table 3 – Infrastructure Levy Project List**

Item	Location	From/To	Length (m)	Type of Work	2022 Est(Prelim)	2021 Carry Forward	Notes
1	Whitworth Road	George Court to Pebble Beach	700	2.0 m Asphalt Multi-Use	\$ 225,000.00	\$ 100,000.00	Drainage Swale/Pits + Paint/Signage
2	Guidi Road	Avondale Place to Hudson Road	100	1.5 Concrete Sidewalk	\$ 60,000.00	\$ -	Xwalk + Light Upgrades
3	Shannon Ridge Dr	Shannon Way to Shannon Lake Rd	150	1.5 Concrete Sidewalk	\$ 75,000.00	\$ -	Retaining + Xwalks + Signage
4	Shannon Way	Woodstock Dr to Hihannah Dr	475	1.5 Concrete Sidewalk	\$ 240,000.00	\$ -	Retaining + Xwalks + Storm/Light Upgrades
5	Menu/Vector Storm	Menu Road to Vector Drive	300	Storm Easement Repair	\$ 150,000.00	\$ 150,000.00	Reestablish Over/Under Storm Route
	Boucherie Road	Ogden to Green Bay	2500	3.0 m Asphalt Multi-Use	\$1,300,000.00		
				TOTALS	\$2,050,000.00	\$ 250,000.00	
				Budget required	\$1,800,000.00		

Another initiative supported by Council during 2021 budget deliberations was the creation of a small in-house capital crew that could cost effectively complete smaller capital projects. Due to timelines required for hiring, purchasing equipment, and designing projects, 2022 is the first year the capital crew is at full force. The Whitworth Road project was recently completed by this crew, and they have now moved on to the Guidi Road project. Over the summer months while school is out, they will work on Shannon Ridge Drive and Shannon Way. The Menu Road drainage project will be constructed in the fall while the Boucherie Road multi use path is proposed to be completed by contractors in two phases over the next two years given the magnitude of the project.

#### MULTI-USE PATHWAY PROJECT: BOUCHERIE ROAD PORTION

It is important to note that all work affecting Boucherie Road traffic is proposed for 2023 to allow for a thorough traffic and communication plan to be developed. All work proposed for 2022 is within the vineyards and does not impact Boucherie Road traffic.

Boucherie Road is a major arterial road serving our community. As a popular route for locals and visitors, it includes several wineries, breweries and dining destinations. The road is well used by commuting residents whether by car, bike, e-bike, walking or other active transportation forms. Boucherie Road also has a significant amount of commercial vehicle traffic and as well is a busy transit route. With such varied uses, it is imperative that the safety of the public is prioritized. Creating a safe corridor for the users is a priority.

## RECOMMENDED DESIGN APPROACH

A considerable amount of engineering planning and design work has been completed in developing the recommended cross sections. Staff have reviewed several design options and the corresponding financial impacts to provide the most practical design. The design is considerably different for the two distinctly different sections. The two sections include:

Phase One - Gregory Road to Green Bay Road - vineyard work

Phase Two - Ogden Road to Gregory Road - plus the section of Boucherie Road adjacent to the Quail's Gate building and parking lot

### PHASE ONE - GREGORY ROAD TO GREEN BAY ROAD (vineyards only)

The Gregory Road to Green Bay Road section will have the multi-use path below the roadside and within the vineyards except for the section in front of the Quail's Gate building and parking lot. This section will be adjacent to the roadway and will be constructed in phase two as it will involve traffic disruptions.

Staff have engaged with both the ownership groups of the Hatch and Quails Gate wineries who to date support this active transportation safety initiative.

### PHASE TWO - OGDEN ROAD TO GREGORY ROAD (plus Quail's Gate frontage)

The Ogden Road to Gregory Road portion of the improvements is recommended to include curb, gutter, street lighting, a three-meter multi-use path and a drainage system on the lake side of the section with a bike lane added to the western side of the cross section. Furthermore, by utilizing a similar cross section to the Works and Services Bylaw requirements, Development Cost Charges can be utilized for the improvements

Another key design consideration for the Ogden to Gregory section is the alignment of Boucherie Road near the Montigny Road intersection. The curvature of the road does not meet standard practice for roadway design as it is too sharp of a turn.

## SCHEDULE AND TIMING

**Phase One** - Staff are proposing to advance the planning and construction during the summer of 2022. Staff will work closely with the wineries to plan the timing of this section of the upgrade and incorporate this into the tender documents. Staff intend to tender this section as soon as possible in spring 2022. Construction on these lower vineyard pieces is expected to be complete in 2022.

**Phase Two (Design 2022 with construction in 2023)** – It is proposed that detailed design, land negotiations and the creation of the tender documents are advanced during the summer of 2022. A thorough traffic management plan will need to be developed to

minimize the impacts to residents and tourists as road closures will be necessary. A thorough communications plan will also be developed in anticipation of the future work in 2023.

Funding for the Boucherie Road Multi-Use Pathway are provided in the table 4 below. Costs have been provided inclusive of a 15% contingency.

**Table 4 – Boucherie Road Multi-Use Pathway Project Costs**

<b>Phase One (2022) – Gregory Road to Green Bay Road (vineyards)</b>	
Infrastructure Levy	\$ 1,300,000
<b>Phase Two (2023) – Ogden Road to Gregory Road</b>	
DCC Funded	\$ 1,924,000
Infrastructure Levy	\$ 676,000
Total DCC Funded	\$ 1,924,000
Total Infrastructure Levy	\$ 1,976,000
<b>Total Project Costs 2022/23</b>	<b>\$ 3,900,000</b>

## FINANCIAL IMPLICATIONS

The Pedestrian Improvement Program is typically funded with \$1.2M per year from Capital Reserves and/or Gas Tax funding from the Federal government.

The Road DCC Program segments are funded from Development Cost Charges at a rate of 60.6% for rural arterial sections, 72.2% for urban arterials, and 73.9% for Wine Trail segments. Intersection improvements required to accommodate growth are funded from road DCC's at 80%. The additional funding required typically comes from Capital Reserves and/or Gas Tax funding from the Federal government.

These project values will have to be re-visited annually through the budget process as changes within the construction market can impact the proposed timelines. We have seen significant increases in the cost of construction over the last couple years. However, to manage these impacts the DCC Bylaw is currently being updated to bring DCC charges in line with current project costs. The DCC Bylaw will require frequent updates to ensure appropriate and fair DCC charges. Budget numbers will also be refined as designs are completed.

For the multi-use pathway, during budget deliberations staff proposed using \$1.3M from the Infrastructure Levy (1% translates into \$1.8M borrowing capacity) towards this project in 2022. These funds would cover this year's requirement. Funds required for 2023 work would be requested through the budget process this fall.

To further advance all these programs, alternative funding strategies, including short-term borrowing, will be discussed between staff on an ongoing basis. Any changes to the existing strategies must be supported by Council prior to proceeding.

**REVIEWED BY**

Allen Fillion, Director of Engineering & Operations

Shelley Schnitzler, Legislative Services Manager/Corporate Officer

**APPROVED FOR THE AGENDA BY**

Paul Gipps, CAO

Powerpoint: Yes ☒ No ☐

**Attachments:**

1. Pedestrian Program Projects East Map
2. Pedestrian Program Projects West Map
3. Road DCC Projects Map
4. Boucherie Multi-Use Trail Map