



Engineering & Operations

OPERATING BUDGET:

\$3,991,500

CAPITAL BUDGET:

\$6,286,400

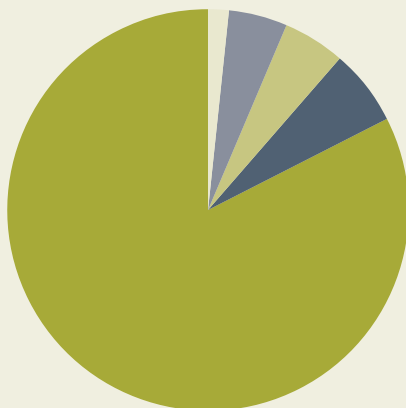
STAFFING COMPLEMENT:

34.1 FTE (Full-time equivalent)

SUPPORTS STRATEGIC FOCUS AREAS:

Community Spirit and Wellbeing, Transportation & Infrastructure Initiatives, Corporate Excellence

DEPARTMENT'S SHARE OF CITY BUDGET



- Engineering 1.8%
- Parks 4.7%
- Facilities 4.9%
- Operations 6.3%
- Remaining City Budget 82.4%

SOURCE: CITY OF PITT MEADOWS FINANCE DEPARTMENT

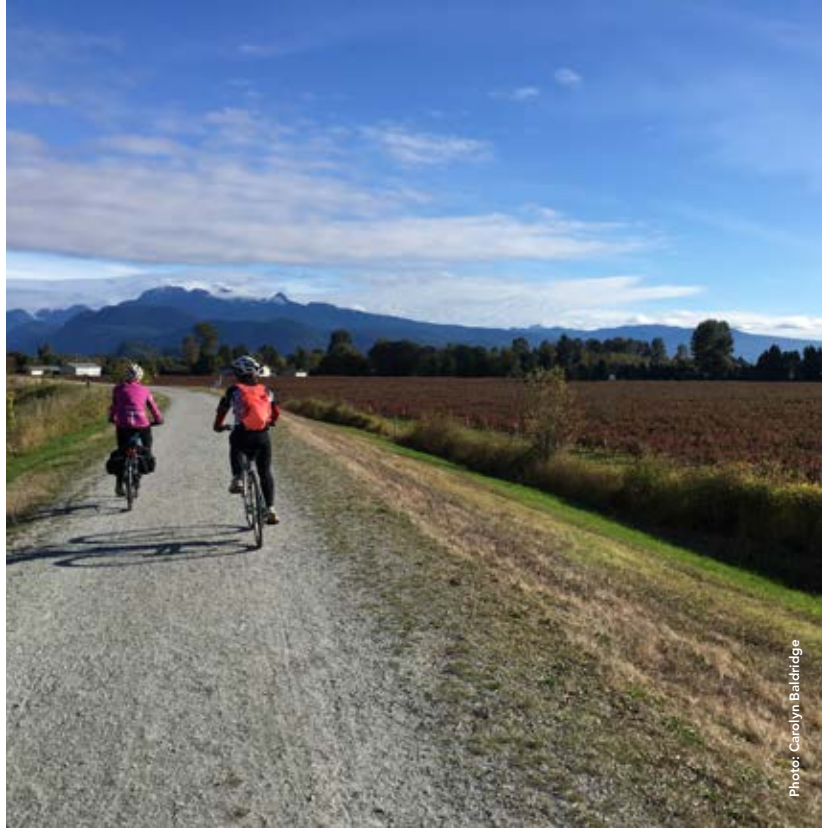


Photo: Carolyn Baldrige

The Engineering and Operations Department provides and maintains essential municipal services and infrastructure, including the transportation network, City buildings, parks and trails, fleet, sewer and water systems.

DIVISIONS:

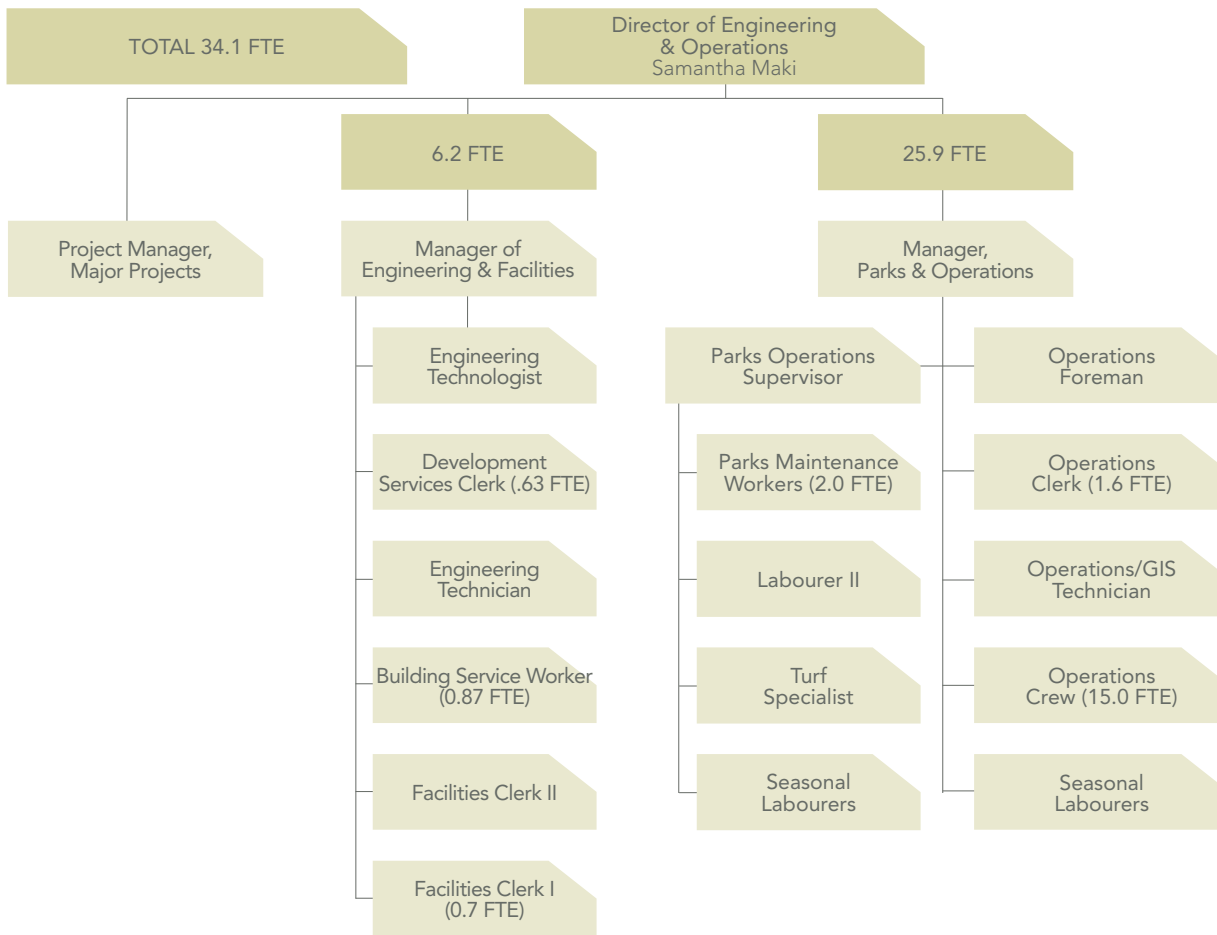
- Engineering
- Operations (Public Works)
- Parks
- Facilities

ON A DAILY BASIS WE:

- Plan and manage City infrastructure projects, including repair, renewal and replacement.
- Operate and maintain the City's transportation network, including: roads, bridges and sidewalks.
- Review engineering aspects of development applications.
- Provide water, sewer and drainage services.
- Oversee dike maintenance and flood mitigation measures.
- Maintain fleet and equipment infrastructure.
- Oversee the maintenance and repair of City facilities, and
- Maintain the City's parks, sports fields, trails and open spaces.



STAFFING COMPLEMENT



DEFERRED PROJECTS

As a result of priorities that emerged throughout the year, the following 2019 business plan initiatives were deferred:

Engineering

- **Ladner Road Bridge Replacement.** Design completed and tender commenced in 2019 and construction deferred to 2020.
- **Kennedy Road Paving Rehabilitation.** Work to be completed as part of Kennedy Road Overpass project, therefore City paving project cancelled.
- **Old Dewdney Trunk Road.** Repaving deferred to 2020 due to higher than anticipated construction costs.
- **McMyn Forcemain Extension.** Following preliminary design, project cancelled due to unfeasible connection to CP rail pump station.
- **Bonson Road Lift Station – Motor Control Centre.** Lifecycle replacement deferred to 2020 to include minor

additional scope of work and addition of necessary budget.

- **Harris Road Banner Structural Replacement.** Cancelled due to further review of structure and determination that replacement was not required.
- **Harris Road Additional Banner Structure.** Cancelled due to higher than anticipated costs and feasibility of installation south of the tracks. Additional banner to be reviewed once the Harris Road Underpass project design has been finalized.



Operations

- **Drainage Condition Assessment.** Project deferred until grant funding opportunities arise.
- **Works Yard Office Expansion.** Scope assembled and quotes requested from consultants in order to review the existing layout and recommend options for improved space planning and/or renovations. Study expected to start in 2020 and implementation to follow.

Facilities

- **Cottonwood Park Septic Tank Replacement.** Design

completed and contractor retained, but construction of septic field deferred to 2020 due to other priorities.

Parks

- **Shoreline Park Redesign.** Will be considered during the Parks, Recreation, Arts and Culture Master Plan process that will occur in 2020.

**ENGINEERING
KEY INITIATIVES 2020**

STRATEGIC PRIORITY	INITIATIVE	TARGET
Transportation and Infrastructure Investments and Preparedness	Pitt Polder Pump Station Replacement. Complete Pitt Polder Pump Station replacement and associated dike works.	Q2
Transportation and Infrastructure Infrastructure and Investments	Capital Works — Repaving. Repaving of the following locations: <ul style="list-style-type: none"> • Old Dewdney Trunk Road from McKechnie Rd to Hale Rd. • Harris Rd between the two Old Dewdney Trunk Roads; and • Harris Rd. south of Hammond Road to the base of the hill near the Airport trail. 	Q3
Transportation and Infrastructure Investments	Lougheed PRV Replacement. Replacement of existing PRV station.	Q3
Transportation and Infrastructure Investments	Bonson Road Lift Station. Lifecycle replacement of lift station and installation of new generator.	Q3
Transportation and Infrastructure Investments	Ladner Road Bridge Replacement. Removal of the existing wood bridge and replacement with a new concrete bridge.	Q4
Transportation and Infrastructure Active Transportation	Active Transportation. Implementation of recommendations from the Active Transportation Advisory Committee to improve pedestrian and cyclist transportation within the community.	Q4
Transportation and Infrastructure Improved Transportation	Traffic Calming Engagement and Implementation. Detailed design and implementation of traffic calming improvements at: <ul style="list-style-type: none"> • 124th Ave/Harris Rd. • Traffic Operations Safety Review at 122nd Ave/Harris Rd and McMyn Ave from 191 St. to Harris Rd. • 124th Ave/192A Ave. • 192A Ave/Park Rd. 	Q4



ENGINEERING CONT'D

KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Transportation and Infrastructure Investments	Capital Works – Water. Replacement of existing water mains at the following locations: <ul style="list-style-type: none"> • Park Rd. service connection transfer between 193 St. and Bonson Road. • Bonson Road from Park Rd. to the rail crossing. • 300m at 116A. • 193A and 193 St. • 80m at 192A, and • 192B and 116B. 	Q4
Transportation and Infrastructure Infrastructure	Fire Hall Replacement. Detailed design and start of construction of the new Fire Hall building and temporary relocation of the Fire Department.	Q4
Transportation and Infrastructure Improved Transportation & Active Transportation	Road and Rail Improvements. Ongoing planning, design and community engagement of the Harris Rd Underpass and Kennedy Rd Overpass project.	Q4
Transportation and Infrastructure Improved Transportation	Traffic Improvements Along Lougheed Corridor. Ongoing planning and feasibility of transportation improvements along Lougheed Highway with the Ministry of Transportation and Infrastructure.	Q4

OPERATIONS

KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Transportation and Infrastructure Preparedness	NDMP Detailed Flood Mitigation Plan. Completion of detailed flood mitigation plan to establish a pro-active approach that will minimize the impacts to people, infrastructure and the environment.	Q2
Transportation and Infrastructure Infrastructure and Investments	Inflow and Infiltration Monitoring. To align with Metro Vancouver's I&I action plan, monitor the amount of inflow and infiltration in the City's sewer system.	Q2
Transportation and Infrastructure Investments and Preparedness	Fenton Pump Replacement. Replacement of two pumps at the end of their service life at the Fenton Pump Station and application for associated grant funding.	Q3
Transportation and Infrastructure Infrastructure	Integrated Stormwater Management Plan Monitoring. To align with Metro Vancouver's initiatives, monitoring of the City's storm system and associated reporting.	Q3



OPERATIONS CONT'D
KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Corporate Excellence Responsive	Policy Review. Review and modification of operational policies including: <ul style="list-style-type: none"> • Garbage and Recycling Storage Space, • Snow and Ice, • Dike Bench, and • Temporary Use of Dikes. 	Q3
Transportation and Infrastructure Investments	Ditch and Slough Cleaning. Ongoing cleaning cycle balanced against immediate needs and weather conditions.	Q3
Transportation and Infrastructure Infrastructure and Investments	Sewer Pipe Rehabilitation. Sewer pipe relining to extend the life of the City's sewer system.	Q4

FACILITIES
KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Transportation and Infrastructure Investments	Facilities Equipment Replacement. Replacement of electrical and mechanical equipment throughout 20 facility buildings that are reaching the end of their service life.	Q3
Transportation and Infrastructure Investments	Arena Building and Equipment Maintenance. Ongoing repairs and maintenance of the arena, including replacement of the chiller and sand base in Volkswagen rink. Puck board upgrades, painting, shower/change room upgrades and flooring.	Q4
Transportation and Infrastructure Investments	Recreation Facility Maintenance. Ongoing repairs and maintenance of City buildings and annual shutdowns at Heritage Hall, South Bonson Community Centre and the Pitt Meadows Family Recreation Centre.	Q4

PARKS
KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Community Spirit and Wellbeing Natural Environment	Tree Preservation Policy Review. Review and update existing tree preservation policy.	Q2
Transportation and Infrastructure Investments	Pitt Meadows Athletic Park Sports Field Renovation. Targeted repair of turf condition and drainage at sports fields 3 and 4.	Q3



PARKS CONT'D

KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Community Spirit and Wellbeing Natural Environment	Tree Replacement Program. Completion of the City's tree replacement policy and start of implementation.	Q3
Transportation and Infrastructure Investments	Parks Infrastructure. Ongoing replacement and upgrades of minor parks infrastructure, including playground equipment and amenities.	Q4
Community Spirit and Wellbeing Natural Environment	Horticulture Strategic Plan. Ongoing review and plan of civic spaces.	Q4

CROSS DEPARTMENTAL COLLABORATION, PARKS

KEY INITIATIVES 2020

STRATEGIC PRIORITY	INITIATIVE	TARGET
Community Spirit and Wellbeing – Pride and Spirit	Parks, Recreation, Arts and Culture Master Plan. Develop a master plan that reviews existing conditions, identifies gaps and needs and prioritizes recommendations of the City's Parks, Recreation, Arts and Cultural services/ programs.	Q4



PROPOSED OPERATING BUDGET

	2019 ADOPTED BUDGET	2020 PROPOSED BUDGET	PROPOSED CHANGES FOR 2020		2021 PROPOSED BUDGET	2022 PROPOSED BUDGET	2023 PROPOSED BUDGET	2024 PROPOSED BUDGET
Revenue								
Engineering	\$(34,500)	\$(25,300)	\$9,200	26.7%	\$(25,800)	\$(25,800)	\$(25,800)	\$(25,800)
Facilities	(335,200)	(343,700)	(8,500)	-2.5%	(348,100)	(368,400)	(385,200)	(395,200)
Operations Administration & Equipment	(261,500)	(246,700)	14,800	5.7%	(251,300)	(255,800)	(260,400)	(265,000)
Transportation	(75,500)	(69,100)	6,400	8.5%	(70,800)	(72,500)	(74,200)	(75,900)
Diking Maintenance	(150,100)	(150,000)	100	0.1%	(150,000)	(150,000)	(150,000)	(150,000)
Parks	(71,200)	(72,200)	(1,000)	-1.4%	(72,200)	(72,200)	(72,200)	(72,200)
	(928,000)	(907,000)	21,000	2.3%	(918,200)	(944,700)	(967,800)	(984,100)
Expenses								
Engineering	396,600	422,300	25,700	6.5%	433,100	444,700	452,100	461,300
Facilities	1,422,300	1,445,900	23,600	1.7%	1,484,300	1,523,900	1,556,400	1,586,300
Operations Administration & Equipment	533,600	509,000	(24,600)	-4.6%	533,400	556,200	579,400	602,200
Transportation	992,400	1,037,300	44,900	4.5%	1,051,600	1,066,100	1,080,700	1,097,400
Diking Maintenance	346,200	346,800	600	0.2%	348,800	350,900	353,100	355,300
Parks	1,121,000	1,137,200	16,200	1.4%	1,160,400	1,184,800	1,209,100	1,232,900
	4,812,100	4,898,500	86,400	1.8%	5,011,600	5,126,600	5,230,800	5,335,400
Net Operating Expenses	\$3,884,100	\$3,991,500	\$107,400	2.8%	\$4,093,400	\$4,181,900	\$4,263,000	\$4,351,300

KEY BUDGET CHANGES FOR 2020:	
Revenues	
UBCM Commercial Vehicle License Program Cancelled	5,000
Expenses	
Salary and benefits	73,900
Administration Charges to Utilities	(43,900)
Repairs and Maintenance - Facilities	2,900
Telephone and Communication Equipment	2,100
Property Insurance	2,400
Hydro & Natural Gas	(3,100)
Equipment and Fleet	20,500
Street Lights, Amenities, Road Maintenance	41,100
Dike Maintenance	600
Other	5,900
Change in Net Operating Expenses	\$107,400



PROPOSED CAPITAL BUDGET

PROJECT #	PROJECT NAME	PRIORITY	2020	2021	2022	2023	2024	TOTAL
Eng & Ops - Facilities								
13-AR-100	Arena Building & Equipment 120005	2	\$205,000	\$215,000	225,000	235,000	\$245,000	\$1,125,000
13-FA-069	Recreation Facility Maint (various accts) 990028	3	155,000	155,000	155,000	160,000	160,000	785,000
15-FA-083	City Facilities - Lifecycle Maint 150004	3	135,000	135,000	135,000	140,000	140,000	685,000
16-FA-092	City Facilities-Indoor Air Quality Survey 160023	3	3,000	-	5,000	-	5,000	13,000
17-FA-099N	City Facilities - Fire Safety Plans 170031	2	-	12,000	-	-	-	12,000
17-FA-100	City Facilities - Hazardous Materials Survey 170013	2	-	6,000	-	-	-	6,000
19-FA-005	Rec Center Roof Replacement 190056	3	-	-	-	875,000	-	875,000
19-FA-006	Facilities Elec & Mech Equip Replacement 190055	3	40,000	40,000	40,000	45,000	45,000	210,000
Eng & Ops - Facilities Total			\$538,000	\$563,000	\$560,000	\$1,455,000	\$595,000	\$3,711,000
Eng & Ops - Fleet & Equipment								
15-FE-048	2006 Bobcat Replacement M068 180045	3	-	\$150,000	-	-	-	\$150,000
15-FE-052	Pickup Repl 2010 1/2 Ton M178 180046	3	-	50,000	-	-	-	50,000
15-FE-056	Ton Pickup Repl 2010 1/2 Ton M150 180049	3	-	50,000	-	-	-	50,000
15-FE-061	Ride On Roller(Repl M290) 180052	3	-	70,000	-	-	-	70,000
15-FE-062	Trailtech Trailer (Repl M306) 180053	3	-	20,000	-	-	-	20,000
15-FE-066	2010 Service Van Replacement M179 180055	3	-	-	150,000	-	-	150,000
15-FE-067	'16 Tractor Replacement MF-051 (M082) 180056	3	-	-	280,000	-	-	280,000
16-FE-059	2013 Backhoe Replacement M072	3	-	-	-	-	\$180,000	180,000
18-FE-074	2011 Tandem Dump Truck M157 190061	2	-	-	-	\$225,000	-	225,000
18-FE-075	Front Mount Plow M158 190062	2	-	-	-	25,000	-	25,000
18-FE-076	Underbody Plow M159 190063	2	-	-	-	20,000	-	20,000
18-FE-077	Slide in Sander M160 190064	2	-	-	-	25,000	-	25,000



PROJECT #	PROJECT NAME	PRIORITY	2020	2021	2022	2023	2024	TOTAL
Eng & Ops - Fleet & Equipment Cont'd								
18-FE-078	Anti Icing System M401 190065	2	-	-	-	\$35,000	-	\$35,000
18-FE-079	Sewer Service Truck	1	-	-	-	-	125,000	125,000
18-FE-080	Crewcab Dump Truck M182	2	-	-	-	-	125,000	125,000
18-FE-081	Trailer Genset M303 190066	2	-	-	-	55,000	-	55,000
18-FE-091	3/4 Ton Service Truck M181 190040	2	-	-	-	65,000	-	65,000
Eng & Ops - Fleet & Equipment Total			\$ -	\$340,000	\$430,000	\$450,000	\$430,000	\$1,650,000
Eng & Ops - Transp/Eng								
09-IT-039	Aerial Photo Renewal 090029	3	-	\$11,000	-	-	\$12,000	\$23,000
09-TR-001	Misc Road Asset Rehab 130001	3	60,000	60,000	60,000	60,000	60,000	300,000
09-TR-002	Misc Roads - Improvements 990013	3	10,000	10,000	10,000	10,000	10,000	50,000
09-TR-024	Hammond Rd Overlay Bonson to Katzie 080004	3	-	-	-	-	360,000	360,000
09-TR-028	Active Transportation 080012	3	100,000	100,000	100,000	100,000	100,000	500,000
09-TR-062	Various Bridge Maintenance 090025	3	20,000	-	20,000	-	20,000	60,000
12-TR-099	Sidewalk Repair 120026	1	20,000	20,000	20,000	20,000	20,000	100,000
15-TR-035	McKechnie Rd Repave-ODT to Connecting 040010	2	-	900,000	-	-	-	900,000
15-TR-086	Middleton Rd Repave 180039	3	-	-	-	358,000	-	358,000
15-TR-096	Advent Road Mill & Pave 180040	3	-	-	-	133,000	-	\$133,000
15-TR-097	Park Road Repave 180041	3	-	-	-	-	362,900	362,900
16-TR-111	Harris Road Paving (urban area) 180042	3	-	-	-	-	887,000	887,000
16-TR-115	Pavement Management 120018	3	-	-	75,000	-	-	75,000
16-TR-116	Neaves Road Pavement Repair 060005	2	25,000	-	720,000	-	200,000	945,000
16-TR-117	Neaves Rd Bike Lanes 160012	4	-	-	350,000	-	350,000	700,000
16-TR-118	Harris Rd Between 2 Dewdneys 180044	3	150,000	-	-	-	-	150,000
18-TR-001	Traffic Calming Engagement & Implementation 180007	3	85,000	50,000	50,000	50,000	50,000	285,000



PROJECT #	PROJECT NAME	PRIORITY	2020	2021	2022	2023	2024	TOTAL
18-TR-003	ODTR - Sharpe to Neaves - 3 phases 180008	2	\$350,000	-	-	-	-	\$350,000
19-TR-001	Hammond Road Paving (Harris to Blakley) 190028	3	-	443,000	-	-	-	443,000
19-TR-002	5-Year Bridge Inspection 190029	1	-	-	-	-	\$40,000	40,000
19-TR-004	Woolridge Pavement Rehab.	3	-	-	-	-	1,086,400	1,086,400
19-TR-007	188 Street South of Advent Rd 190031	3	-	-	-	220,000	-	220,000
19-TR-016	DCC MJT2 - Harris Road (Hammond to Airport) 190033	3	589,500	-	1,210,500	-	-	1,800,000
19-TR-021	DCC MNT1 - McMyn Rd Sidewalk 190034	3	40,500	-	-	-	-	40,500
19-TR-022	DCC MNT2 - 19089 Advent Rd Sidewalk 190035	3	-	21,900	-	-	-	21,900
19-TR-024	DCC MNT4 & MNT5 - Fraser Way Ped/Parking 190036	3	-	-	1,078,500	-	-	1,078,500
19-TR-026	DCC MNT7 - 191 St Sidewalk South of McMyn 190037	3	59,400	-	-	-	-	59,400
19-TR-032	DCC MJT23 - Airport Way at Baynes Road 190038	3	-	-	-	140,000	-	140,000
19-TR-033	DCC MJT24 - Fraser Dike Road Extension 190039	3	-	1,572,000	-	-	-	1,572,000
20-TR-002	Street Light LED Program (DP)	3	60,000	60,000	60,000	60,000	60,000	300,000
20-TR-003	New 193rd Multi-Use Path-50%-TransLink-25% BikeBC- (DP)	n/a	-	1,900,000	-	-	-	1,900,000
20-TR-005	Airport Way Multi-Use Path - Targeted Improvements	3	-	75,000	-	-	-	75,000
Eng & Ops - Transp/Eng Total			\$1,569,400	\$5,222,900	\$3,754,000	\$1,151,000	\$3,618,300	\$15,315,600
Eng & Ops - Utility - Diking								
09-DK-001	Dike Topping & Misc Repairs 090028	3	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
Eng & Ops - Utility - Diking Total			\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000



PROJECT #	PROJECT NAME	PRIORITY	2020	2021	2022	2023	2024	TOTAL
Eng & Ops - Utility - Drainage								
09-DS-001	Storm Misc. Repairs 090027	3	\$40,000	40,000	\$40,000	\$20,000	\$20,000	\$160,000
09-DS-012	All Pumpstations- Refurbish/Repair 990071	3	20,000	20,000	20,000	20,000	20,000	100,000
09-DS-015	Culvert Replacements 070002	2	100,000	144,000	100,000	150,000	100,000	594,000
09-DS-024	Pitt Polder Pump Stn- Area 4 010011	2	730,000	-	-	-	-	730,000
11-DS-038	Trash Rack Systems 110017	3	-	-	-	635,000	765,000	1,400,000
13-DS-036	Major Slough Cleaning 130009	2	100,000	-	-	-	-	100,000
15-DS-019	Drainage Pump Repl- Kennedy A3 990073	3	-	-	900,000	450,000	-	1,350,000
15-DS-022	Drng Pump Lifecycle Repl - FentonArea2 180072	3	750,000	350,000	-	-	-	1,100,000
16-DS-044	Integ Strm Wtr Mgmt Pln (ISMP) Monitoring 160036	3	17,000	-	-	17,000	-	34,000
18-DS-005	DCC ST7 - Fraser Way Storm System 190047	4	-	289,700	-	-	-	289,700
19-DS-001	Drainage Scada Replacement 190048	n/a	20,000	-	-	-	-	20,000
19-DS-009	DCC ST10 - Baynes P/S Upgrade 190050	3	-	-	840,000	-	-	840,000
Eng & Ops - Utility - Drainage Total			\$1,777,000	\$843,700	\$1,900,000	\$1,292,000	\$905,000	\$6,717,700
Eng & Ops - Utility - Sewer								
09-SS-001	Sewer Misc. Repairs 990084	3	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
09-SS-023	Sewer Pipe Rehabilitation 090016	2	300,000	-	300,000	-	300,000	900,000
10-SS-024	SCADA Upgrades 100014	3	10,000	10,000	10,000	10,000	10,000	50,000
18-SS-037	Hammond SLS Pump Replacement 190046	3	-	-	-	40,000	-	40,000
19-SS-002	MCC - Bonson Road Lift Station 190009	3	130,000	-	-	-	-	130,000
20-SS-001	Inflow & Infiltration (I&I) Monitoring	2	50,000	-	-	-	-	50,000
Eng & Ops - Utility - Sewer Total			\$505,000	\$25,000	\$325,000	\$65,000	\$325,000	\$1,245,000



PROJECT #	PROJECT NAME	PRIORITY	2020	2021	2022	2023	2024	TOTAL
Eng & Ops - Utility - Water								
09-WS-001	Various Water Rehab 990077	3	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000
15-WS-047	AC Rep. - 117 Ave 180057	3	-	380,000	-	-	-	380,000
15-WS-048	AC Rep. - 194A, 194B, 195A 180058	3	-	-	450,000	-	-	450,000
15-WS-054	AC Rep. - 195B St, 119A Ave, 120B Ave 180060	3	-	-	-	684,000	-	684,000
15-WS-065	AC Rep. - 115A Ave, 197A St, 197B St 180062	3	-	-	-	596,400	-	596,400
15-WS-067	Park Road Water Service Transfers 180063	4	250,000	-	-	-	-	250,000
15-WS-076	CI Rep. - Bonson Rd (North) 180064	3	425,000	-	-	-	-	425,000
16-WS-079	AC Rep. - 188A St, 188B St, 119B Ave 180065	3	-	-	595,000	-	-	595,000
16-WS-080	AC Rep. - 120 Ave, 120B Ave, 189A St 190067	3	-	-	-	445,000	-	445,000
16-WS-081	AC Rep. - 189B St, 120B Ave, 190 St	3	-	-	-	-	580,000	580,000
17-WS-084	AC Rep. - 116A, 193A, 193 190068	3	350,000	-	-	-	-	350,000
18-WS-002	CI Rep. - Bonson Rd (South) & 117A 190069	3	-	-	-	658,000	-	658,000
18-WS-003	Scada Improvements 190070	3	20,000	-	-	-	-	20,000
19-WS-005	AC Rep. - 192A St, 192B St., 116B Ave 190042	3	430,000	-	-	-	-	430,000
19-WS-006	AC Rep. - 196A, 116B Ave 190043	3	-	-	384,000	-	-	384,000
19-WS-007	AC Rep. - 116A Ave, 114B Ave, 198 St 190044	3	-	-	564,000	-	-	564,000
19-WS-014	DCC W4 - Fraser Dike Road Main Extension 190045	3	-	300,000	-	-	-	300,000
Eng & Ops - Utility - Water Total			\$1,505,000	\$710,000	\$2,023,000	\$2,413,400	\$610,000	\$7,261,400



Eng & Ops - Parks								
10-PK-003	Parks Infrastructure 990031	3	\$150,000	\$150,000	\$150,000	\$155,000	\$155,000	\$760,000
10-PK-033	Harris Park Sports Field S Reno 990033	3	-	450,000	-	-	-	450,000
14-PK-074	Parks - Minor Capital - User Grps 150026	3	17,000	19,000	19,000	19,000	21,000	95,000
15-PK-049	PM Athletic Sports Field Reno. 090006	3	100,000	400,000	-	-	-	500,000
15-PK-055	Sport Field Renovation - N Bonson Park 190071	3	-	-	-	410,000	-	410,000
15-PK-059	Community Garden - Additional MAF 000008	4	-	-	175,000	-	-	175,000
16-FA-079	Harris Park - power upgrade 180075	3	-	70,000	-	-	-	70,000
17-PK-074	Parks and Recreation Master Plan 170034	2	30,000	-	-	-	-	30,000
17-PK-088	PMSS Turf Field Surface Replmnt 180078	2	-	700,000	-	-	-	700,000
18-ES-006	Expanded Waste Stream Bins180079	2	5,000	5,000	5,000	-	-	15,000
18-PK-091	Park Playground Upgr/ Replmnt 180081	1	-	105,000	-	110,000	-	215,000
18-PK-093	Tree Replacement Program 180002	2	30,000	32,000	32,000	32,000	34,000	160,000
Eng & Ops - Parks Total			\$332,000	\$1,931,000	\$381,000	\$726,000	\$210,000	\$3,580,000



Decision Package: Part-time Maintenance Mechanic I

ROLE DESCRIPTION:

Permanent, Part-Time; 20 hours/week; CUPE

DEPARTMENT/DIVISION:

Engineering and Operations

SUBMITTED BY:

Samantha Maki, Director of Engineering & Operations

ESTIMATED OPERATING COST:

One-time: \$3,000
Ongoing: \$52,900

EXECUTIVE SUMMARY

The City's fleet continues to grow and the required maintenance and repairs exceed the workload of one mechanic.

In 2015, the City started operating its own Parks and Recreation services, after many years under a joint-service model with Maple Ridge. This change required the City to start acquiring new Parks fleet and equipment. With the additional fleet, new requirements from the inspection program, unexpected issues, expiring of warranty periods, extreme wear during the winter season and ongoing repairs/maintenance, an additional resource would allow the fleet services to better meet expectations and help prevent unnecessary repair work.

BACKGROUND/DISCUSSION

Currently, the City has 105 units distributed among the Operations (73), Fire (9) and Parks (23) fleet and equipment. The Parks units have been added to the fleet inventory over the last 3 years, since the joint Parks and Recreation model with Maple Ridge ended. 39 of the units are on a four month service rotation and 16 vehicles are currently a part of the mandatory CVIP inspection program (fire trucks, operation vehicles, trailers, etc.). New inspection requirements will cause seven more units to be added to the inspection list. Equipment modifications are frequently required, but often delayed due to higher priority work.

In preparation for the winter season, the winter fleet is commissioned and any necessary repairs are completed to ensure the City is ready to undertake winter operations (brining, salting, snow removal, etc.). Winter operations are particularly hard on the equipment, which creates more maintenance/repair items. Any delay in maintenance/repairs would impact the safety of our roads and sidewalks.

Time to address unexpected maintenance/repair items is not currently allotted for and when an issue arises, scheduled work is often re-prioritized/deferred to minimize the impact on staff and associated operations.

Up to this point, much of the newer equipment has been covered under the warranty period and provided some relief to the mechanic. Many of the warranty periods end in 2019 and additional efforts to maintain/repair that equipment is expected.

Some specialty work, currently budgeted for would still be required, however with an additional resource the overall cost to contract out would be reduced.

RECOMMENDATION

THAT Council:

- A. Review and approve a new permanent, part-time mechanic position for an annual \$52,900 to assist with maintaining the City's growing fleet and associated equipment, specifically during the winter season to ensure safety of our community; AND
- B. Review and approve a one-time operational cost of \$3,000 to set-up the new employee; OR
- C. Other.



FINANCIAL IMPLICATIONS

COSTS	ONE-TIME		ONGOING	
	CAPITAL	OPERATIONAL	CAPITAL	OPERATIONAL
Base Salary				\$42,600
Employee Health and Other Benefits				\$10,300
Employee Set-up (including computer, phone, supplies etc.)		\$3,000		
Total Costs:		\$3,000		\$52,900

ALTERNATIVES

Alternatively, our current mechanic will continue to maintain and re-prioritize work on the City’s fleet as needed, but maintenance and repairs of certain vehicles will need to be contracted out at a higher hourly rate more often and some of the annual scheduled/preventative maintenance work will need to be deferred.

It may be challenging to obtain a mechanic for only part-time work and if the recruitment team is unsuccessful, the additional funds would be used to cover the overages of contracting some work out.



Decision Package: Street Light LED Program

DEPARTMENT/DIVISION:

Engineering and Operations

SUBMITTED BY:

Samantha Maki, Director of
Engineering & Operations

ESTIMATED CAPITAL COST:

Ongoing: \$60,000

RECOMMENDATION

THAT Council:

- A. Review and approve an annual Street Light LED Program for \$60,000 funded from the General Transportation Reserve for replacing the City's street lights with new LED lights, which are more energy efficient, require less maintenance and last significantly longer; OR
- B. Other.

EXECUTIVE SUMMARY

A Street Light LED Program is recommended in order to replace all the existing High Pressure Sodium (HPS) street lights with energy efficient, Light-Emitting Diode (LED) lights.

The new LED lights have a higher upfront cost, but last up to four times longer, and require less energy and maintenance. With annual savings in energy and maintenance costs, the program will cover the upfront cost over time.

Many municipalities have undertaken this type of initiative including Surrey, Victoria, Kelowna and Vancouver.

BACKGROUND/DISCUSSION

The City owns approximately 1030 street lights. 136 street lights have already been converted to LED. Currently, when an existing light fails or requires significant repair, it is replaced with an LED light. This replacement program is quite slow and only allows for replacement of a few lights per year.

Although the upfront unit cost for LED lights is more than double the HGL lights, LEDs typically last four times longer, require less maintenance and use less energy. Street lights account for a significant portion of the City's electricity bills and with new LEDs, the operational costs (energy and maintenance) will decrease and the savings will eventually cover the upfront cost.

General benefits of using LEDs are outlined below:

- The lights don't burn out or fail, but instead they slowly dim over time.
- They generate less heat and use considerably less energy than high pressure sodium lights; they are more sustainable.
- Decreased operating and maintenance costs (less components, more robust).
- Longer lifespan (100,000 hrs) of 15-20 years as opposed to five years with HPS.
- Higher quality lighting, which improves clarity, focus, visibility, safety and security, and
- Focused and directional, which reduces amount of wasted light/pollution.

This aligns with Council's strategic plan by proactively planning for the replacement of our infrastructure and ensuring the long-term viability and sustainability. This also aligns with the City's Subdivision and Development Servicing Bylaw No.2266, which requires all new developments to install LED street lights.



FINANCIAL IMPLICATIONS

COSTS	ONE-TIME		ONGOING	
	CAPITAL	OPERATIONAL	CAPITAL	OPERATIONAL
Equipment (Approx. 100 lights per year)			\$50,000	
Installation (Each year)			\$10,000	
Total Costs Each Year:			\$60,000	
Total Cost (9 years):			\$540,000	

Special Remarks: Grant funding will be explored in order to minimize impacts on the City’s reserves. In previous years, there were multiple grant opportunities to fund capital projects that support energy efficiency (BC Hydro Power Smart Rebate Program, Provincial Clean Energy Leadership Program). Future funding opportunities are not yet known, but will be explored annually. If grant funding is acquired, the program could be implemented faster without an additional burden on the City’s reserves.

ALTERNATIVES

Alternatively, the program could be implemented over a long period of time in order to have less of an impact on the City’s reserves.

Ideally, the program would be implemented over a period shorter than the nine years proposed (2020-2028); however, the reserve balances cannot accommodate a faster timeline.



Decision Package: 193rd Street Multi-Use Path

DEPARTMENT/DIVISION:

Engineering and Operations

SUBMITTED BY:

Samantha Maki, Director of
Engineering & Operations

ESTIMATED CAPITAL COST:

One time: \$1,900,000

Ongoing: \$4,000

EXECUTIVE SUMMARY

The Active Transportation Advisory Committee recommends installing a multi-use path along 193rd Street, which would provide safer transportation for pedestrians and cyclists as an alternative to the heavy traffic along Harris Road and connect into the City's bike network. The existing roadway along 193rd Street is rather wide and could accommodate the multi-use path. Funding for the majority of the project is available through TransLink's Walking Infrastructure to Transit (WITT) and Bicycle Infrastructure Capital Cost Sharing (BICCS) programs. Funding is also available through BikeBC and it can be combined with our funding programs.

RECOMMENDATION

THAT Council:

- A. Review and approve the 193rd Multi-Use Path for \$1,900,000 funded by TransLink Grants (\$1,425,000), Provincial Grants (\$237,500) and the Transportation General Reserve (\$237,500); AND
- B. Approve an annual budget of \$4,000 for ongoing maintenance of the multi-use path; OR
- C. Other.

BACKGROUND/DISCUSSION

In 2018, the Active Transportation Advisory Committee recommended installation of an asphalt path adjacent to the existing sidewalk along 193rd Street to separate modes of transportation and promote safe, sustainable transportation for pedestrians and cyclists.

The conceptual design was completed in 2019 and is currently under review. Originally, staff anticipated a bike path being added alongside the existing sidewalk; however, that would not meet today's standard for a multi-use path. Instead, a 'complete street' would be implemented by narrowing the roadway and creating a 3.9m wide multi-use path (Refer to Figure 1). The scope of work would extend down both sides of the street from 122A Avenue near the Fire Hall/West Coast Express to 119 Avenue (Refer to Figure 2). Shared roadway markings would be added along 119 Avenue in order to connect the path to Harris Road and Blakely Road. As part of the project, a raised intersection at Ford Road and 193 Street would be explored. In order to be eligible to the funding programs, specific criteria must be achieved through design, which generally include proximity to urban centre, comfort (all ages or most), safety, connectivity and amenities.

The proposed multi-use path would not be impacted by the pending Harris Road underpass project and connectivity to Harris Road would be further explored as part of the detailed design.

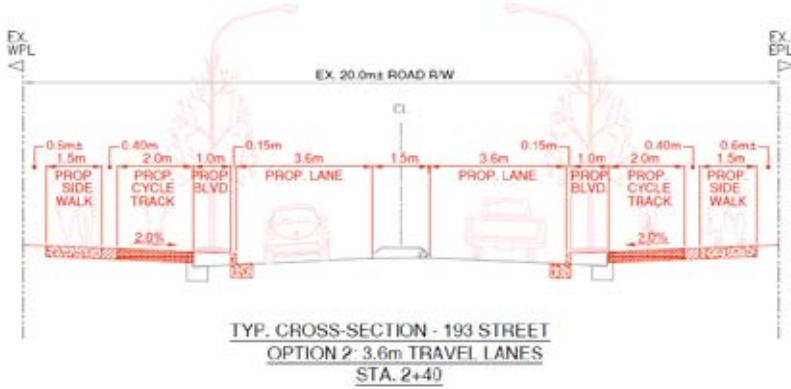


FIGURE 1 – COMPLETE STREET CROSS-SECTION



FIGURE 2 – MULTI-USE PATH AT 122A AVENUE

Staff did consider the condition of the existing paving and water main in the area. Sections of the roadway are not currently planned for replacement, but should be repaved within the next 5 years. The existing water main does not need replacement within the foreseeable future. The proposed concept would eliminate parking on the east end of 122A Avenue, which would affect the neighboring businesses and residents. The boulevard in front of the residential area on 122A Avenue would also be impacted. For this reason, engagement with those directly impacted would be conducted prior to implementation.

This aligns with Council’s Active Transportation strategic goal to encourage a livable and healthy community through the promotion of active modes of transportation.

FINANCIAL IMPLICATIONS

COSTS	ONE-TIME		ONGOING	
	CAPITAL	OPERATIONAL	CAPITAL	OPERATIONAL
Construction	\$1,750,000			
Consulting	\$150,000			
Maintenance				\$1,500
Total Costs:	\$1,900,000			\$1,500

Special Remarks: Grant funding from TransLink’s WITTs and BICCSs programs and BikeBC could cover up to \$1,662,500.

ALTERNATIVES

The scope of work could be reduced or postponed to future years; however, funding for multi-use paths is available annually through TransLink and the City could take advantage of this funding opportunity to improve access within the community in 2021.

