

Water Capital Plan (2022-2023)

PROJECT	RATIONALE / DESCRIPTION	2022			2023		
		Pipe Length (m)	Resource (INT / EXT)	Estimated Budget (CAD \$)	Pipe Length (m)	Resource (INT / EXT)	Estimated Budget (CAD \$)

WATER RENEWAL PROJECTS

Victoria Ave (Granite to Brighton)	1994 - 100mm CI. Water quality issues and significant tuberculation reported by Public Works, restricting Fire flows. Water main replacement. There is also an abandoned pipe between Brighton and Windsor which is sealed with 100yr old valves. Needs to be properly cut and capped - health and safety risk.	130 m	PW	\$234,000			
Lincoln Loop	1948 - 100mm CI. Final watermain utility segment on the Lincoln/Heron loop prior to road paving. All other utility work has been completed. Water main replacement.	220 m	PW	\$308,000			
Runnymede	100 mm AC main needs to be replaced concurrent with other utilities	63 m		\$100,800			
Cadboro Bay Road	Old 200 mm steel water main from Uplands to Estevan, extensive leak history	Eng		\$40,000			
Exeter	550 m of 1954 150 mm cast iron, seems to have extensive break history, no valves. Concerns about rock and archaeology.	550 m	PW	\$920,000			
Hampshire Package Design	Design of assorted projects to decommission the 300 mm on Hampshire - includes McNeill, Lafayette, and Hampshire (about 1500 m total)	Eng		\$80,000	550 m	PW	\$770,000
Oliver (Central to Windsor)	Replacing an old 100 mm main, part of what is needed to decommission the old 300 mm on Hampshire	Eng		\$50,000	500 m	PW	\$750,000
Water Spot Repairs	Capital replacement of valves and hydrants			\$250,000			
Management Reserve	Program level contingency			\$300,000		\$50,000	\$50,000
		963 m		\$2,282,800	1050 m	\$50,000	\$1,570,000

Storm Drainage Capital Plan (2022-2023)

PROJECT	RATIONALE / DESCRIPTION	2022			2023		
		Pipe Length (m)	Resource (INT / EXT)	Estimated Budget (CAD \$)	Pipe Length (m)	Resource (INT / EXT)	Estimated Budget (CAD \$)

STORM MAIN RENEWAL PROJECTS

Estevan Outfall Replacement	Estevan SD Modelling reports both 1960's outfalls are currently undersized and should be increased to twin 600mm. Overflow likely in existing conditions. Survey / Design / Permitting 2022, construction 2023. Archeological and Environmental Consultant required.	Design	ENG	\$50,000	250 m	EXT	\$575,000
Estevan Storm Upgrade	Poor quality pipes on both sides of Estevan from Musgrave to the outfall. Neither has adequate capacity.	Design	ENG	\$50,000	700 m	EXT	\$1,000,000
Dalhousie Storm Upgrade	One block of Dalhousie between Cadboro Bay Road and Hampshire has extremely poor quality drain pipes that will be opportunistically replaced concurrent with Dalhousie Sanitary	186 m	EXT	\$260,400			
Hampshire Storm Upgrade - Design	Poor quality storm drainage between Windsor and Brighton - approximately 250 m - needs to be dealt with prior to replacing water main	Design		\$50,000			
Hampshire Storm Upgrade - Construct	Poor quality storm drainage between Windsor and Brighton - approximately 250 m - needs to be dealt with prior to replacing water main	195 m	PW	\$300,000			
Runnymede Avenue (Mountjoy to McNeill)	No storm drain on this road, required upgrades concurrent with a subdivision at 2031 Runnymede	80 m	PW	\$112,000			
2022 Design Projects	Shelf ready projects for future construction when funds are available.	Design	ENG	\$100,000			
2023 Design and 2024 Build	Shelf ready projects for future construction when funds are available.						\$200,000
Sandowne Rear lot Easement (Henderson to Eastdowne)	1960 200mm SS and 1950 200mm SD located in narrow easement between rear lots. Numerous sewer back ups (annually) and insurance claims. High maintenance costs, root cutting, and flushing. Limited access. Structural damage of pipe may limit lining options so may have to pipe burst as an option. Could also be capacity issues to be modelled. Some areas have low flow and no option to line. Replace manholes.	Design	ENG	\$50,000			
CIPP Lining	No lining proposed for 2021 or 2022	N/A	ENG	\$0	N/A	ENG	\$0
Spot Repairs/Capital Fixes	On-Going Capital Allowance for identified spot repairs from CCTV program review.	N/A	PW	\$200,000	N/A	PW	\$50,000
Management Reserve	Program level contingency	N/A	ENG	\$50,000	N/A	ENG	\$50,000
		461 m		\$1,222,400	950 m		\$1,875,000

Sanitary Sewer Capital Plan (2022-2023)

PROJECT	RATIONALE / DESCRIPTION	2022			2023		
		Pipe Length (m)	Resource (INT / EXT)	Estimated Budget (CAD \$)	Pipe Length (m)	Resource (INT / EXT)	Estimated Budget (CAD \$)
Sanitary Sewer Master Plan							
Windsor Road (St. Patrick to Transit)	1915 200 mm vit clay main, to be constructed in two phases. Phase 1 delivered in 2021, phase 2 to be delivered in 2022.	312 m	Contract	\$436,800			
Dalhousie Street (Eastdowne to Cadboro Bay Rd)	1940 200mm vit clay main. No CCTV or condition data available - not lined. Eastdowne SS Modelling reports this main has capacity concerns under existing PWWF conditions. Recommended upsizing from 200mm --> 300mm PVC due to low grades and low friction. This section is the Outfall of the Eastdowne Catchment.	252 m	Contract	\$352,800			
Dalhousie Street (Cadboro Bay to Musgrave)	1912 250mm AC & 1936 300mm AC. No CCTV or condition data available. Eastdowne SS Modelling reports this main has capacity concerns under existing PWWF conditions and is a Phase 1 recommended project. Recommended upsizing from 250mm --> 375mm PVC due to low grades and low friction. This section is the Outfall of the Eastdowne Catchment.				428 m	Contract	\$599,200
Runnymede Avenue (Mountjoy to McNeill)	Low quality existing sanitary sewer running underneath a house, required upgrades concurrent with a subdivision at 2031 Runnymede	82 m	PW	\$164,000			
Future Design	Design some projects in 2022 to be built in 2023 and beyond			\$100,000	500 m	Contract	\$700,000
Future Design	Design some projects in 2023 to be built in 2024						\$270,000
Design of replacements for KGT and Radcliffe Pump Stations	Both pump stations are in very poor condition, Class D estimates from the SSMP were on the order of \$400,000 for each. Need total rebuilds - new kiosks, new pumps, etc.			\$50,000			\$600,000
Pump Replacements	Capital replacements of failing pumps (Not whole stations, just pumps)			\$40,000			
CIPP Lining	On-Going Capital Allowance for CIPP lining project (smaller program of work)						
Spot Repairs	On-Going Capital Allowance for identified spot repairs from CCTV program review.			\$50,000			\$50,000
Management Reserve	Program level contingency			\$50,000			\$50,000
		646 m		\$1,243,600	928 m		\$2,269,200

Transportation Capital Plan (2022-2023)

PROJECT	RATIONALE / DESCRIPTION	2022			2023		
		Project Phase	Resource (INT / EXT)	Estimated Budget (CAD \$)	Project Phase	Resource (INT / EXT)	Estimated Budget (CAD \$)

TRANSPORTATION SAFETY

Correction of Deficiencies from ICBC Pavement Marking and Sign Review	Approximately 500 deficient signs/pavement markings identified by ICBC study. Plan to put some money to addressing them		PW	\$25,000			
Intersection Upgrade (Foul Bay and Cadboro Bay)	93 crashes 2015-2019 per ICBC. Highest crash location in Oak Bay. In 2021, coordinate with City of Victoria project approaching intersection. Traffic signal upgrades expected. Tentatively estimated construction costs \$200k in 2021.	Const	Contract	\$200,000			
Intersection Upgrade (Windsor and Newport)	4 Crashes 2015-2019 per ICBC But not fully based on crash data. Driven by goal to address resident and neighbourhood concerns and make improvements even in areas where the incidents are relatively low. Study indicated curb bulges/extensions on all 4 corners to visually and physically narrow the roadway, creating safer and shorter crossings.				Const	PW	\$270,000
Intersection Upgrade (Windsor and Beach)	3 Crashes 2015-2019 per ICBC. Proposed one way out for Goodwin Street. Consolidate and optimize crosswalks and sidewalk locations. - Need to do some community consultation on what exactly they want	Consult/Design	ENG (RD)	\$25,000	CONST	Contract	\$100,000
Intersection Upgrade (Estevan and Musgrave)	6 Crashes 2015-2019 per ICBC. Add bike parking, better align north sidewalk. Need to do some community consultation on hwat exactly they want.	Consult/Design	ENG	\$25,000			
Traffic Devices	Supply and install new speed flasher and traffic counter (Foul Bay replacement, new on Cadboro Bay Rd)						
Traffic and Parking Master Plan	Establish current level of service across the District and determine priorities and future projects.				Study	ENG	\$40,000
Bus Shelters	Foundation construction for bus shelters in partnership with BC Transit and trash bin. Shelter is free. Locations TBD on an annual basis.	N/A	PW	\$15,000	N/A	PW	\$15,000
Sidewalk Program	Annual Sidewalk Program (to be informed by sidewalk master plan). Didn't do any sidewalk in 2021, intend to do twice the required amount in 2022 as a result	500 m	PW	\$200,000	250 m	PW	\$100,000
				\$490,000			\$525,000

ACTIVE TRANSPORTATION

Pedestrian and Sidewalk Master Plan	Determine levels of service, define requirements for and gaps in sidewalks, determine sidewalk condition, and establish priority areas and projects.	Study	ENG	\$30,000			
Curb Drops	Convert inaccessible curb drops into proper wheelchair ramps		PW	\$90,000			
McNeill Corridor	Detailed design of changes to McNeill Ave as per Watt Engineering study	Consult/Design	ENG	\$50,000			
Management Reserve	Program level contingency			\$30,000			\$30,000
				\$200,000			