



# City of Richmond

## Report to Committee

**To:** Finance Committee

**Date:** December 1, 2021

**From:** Ivy Wong, CPA, CMA  
Acting Director, Finance

**File:** 03-0975-01/2021-Vol  
01

**Re:** Active Capital Projects Information - 3rd Quarter September 30, 2021

### Staff Recommendation

That the staff report titled, "Active Capital Projects Information – 3rd Quarter September 30, 2021", dated December 1, 2021 from the Acting Director, Finance be received for information.

Ivy Wong, CPA, CMA  
Acting Director, Finance  
(604-276-4046)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Arts, Culture & Heritage	<input checked="" type="checkbox"/>	 Acting GM, F&CS
Community Social Development	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Facility Services & Project Development	<input checked="" type="checkbox"/>	
Information Technology	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
RCMP	<input checked="" type="checkbox"/>	
Real Estate Services	<input checked="" type="checkbox"/>	
Recreation Services	<input checked="" type="checkbox"/>	
Roads & Construction	<input checked="" type="checkbox"/>	
Fleet & Environmental Programs	<input checked="" type="checkbox"/>	
Sewerage & Drainage	<input checked="" type="checkbox"/>	
Sustainability & District Energy	<input checked="" type="checkbox"/>	
Transportation	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	INITIALS: 	

## Staff Report

### Origin

Active Capital Project Information for the 3rd Quarter (ended September 30, 2021) is provided to the Finance Committee for information purposes. This report includes the approved 2021 Capital Budget and other previously approved capital projects.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

*Accountable, transparent, and responsible financial management that supports the needs of the community into the future.*

*5.2 Clear accountability through transparent budgeting practices and effective public communication.*

### Analysis

#### **SUMMARY OF ACTIVE CAPITAL PROJECTS**

Active capital projects represent construction, non-construction and acquisition (e.g. equipment and land) capital projects previously approved by Council. A capital project is considered active for the purpose of this report if the project falls within one of the following project completion stages:

- Planning and Design – includes projects that were previously approved and are undergoing design specifications, design approvals, or public consultation.
- Contract Award – this includes preparing and issuing a request for proposal, evaluating proposals received, and finalizing contract award agreements.
- Construction – includes build out of the approved design either by City workforce or under executed agreements.
- Functional Completion – certain projects are completed in phases that allow for portions of the project to be functionally complete while the next phase is initiated.
- Project Completion – may include fully functional assets that are in their final inspection and acceptance stage, assets that may still require minor deficiencies to be addressed, as-built drawings to be received, collection of external funding and fulfillment of audit requirements, where applicable.

Capital projects also include amounts set aside for land acquisition, public art, child care and affordable housing which are dependent upon external factors such as market conditions, availability and external partners. Therefore, these projects are presented to Council prior to final approval.

The approved 2021 Capital Budget of \$100.3M (excluding internal transfers and debt repayments) and other previously approved active capital projects are summarized by program in Table 1. The current balance committed to active capital projects is \$370.8M.

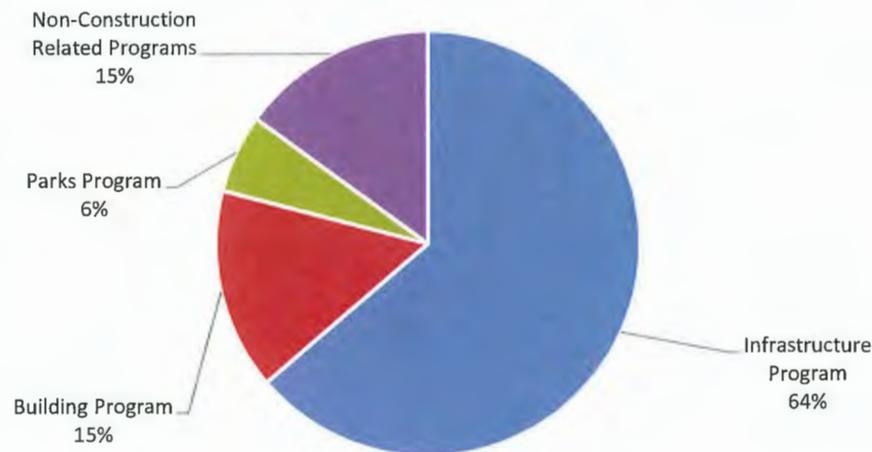
Table 1: Active Capital Projects by Program (in \$'000s)

Program	Plan Year	Budget	Actuals as at September 30, 2021	Expected Commitments / Work In Progress
Infrastructure Program	2021	\$47,454	\$3,901	\$43,553
	2020	68,550	26,214	42,336
	2019	33,015	19,538	13,477
	2018	80,105	61,249	18,856
	2017 & older	50,187	39,239	10,948
<b>Infrastructure Program Total</b>		<b>\$279,311</b>	<b>\$150,141</b>	<b>\$129,170</b>
Building Program	2021	11,440	396	11,044
	2020	19,493	3,587	15,906
	2019	20,713	8,268	12,445
	2018	50,607	18,157	32,450
	2017 & older	121,008	106,667	14,341
<b>Building Program Total</b>		<b>\$223,261</b>	<b>\$137,075</b>	<b>\$86,186</b>
Parks Program	2021	12,898	703	12,195
	2020	11,150	1,902	9,248
	2019	12,322	3,386	8,936
	2018	10,430	2,800	7,630
	2017 & older	30,456	21,730	8,726
<b>Parks Program Total</b>		<b>\$77,256</b>	<b>\$30,521</b>	<b>\$46,735</b>
<b>Construction Related Programs</b>		<b>\$579,828</b>	<b>\$317,737</b>	<b>\$262,091</b>
Affordable Housing Program	2021	650	-	650
	2020	400	28	372
	2019	425	-	425
	2018	400	-	400
	2017 & older	4,800	94	4,706
<b>Affordable Housing Program Total</b>		<b>\$6,675</b>	<b>\$122</b>	<b>\$6,553</b>
Child Care Program	2021	112	11	101
	2018	100	10	90
<b>Child Care Program Total</b>		<b>\$212</b>	<b>\$21</b>	<b>\$191</b>
Equipment Program	2021	7,704	1,269	6,435
	2020	5,470	1,840	3,630
	2019	14,386	4,072	10,314
	2018	8,333	6,356	1,977
	2017 & older	13,383	9,744	3,639
<b>Equipment Program Total</b>		<b>\$49,276</b>	<b>\$23,281</b>	<b>\$25,995</b>
Land Program	2021	10,000	-	10,000
	2020	10,000	1,760	8,240
	2019	10,000	-	10,000
	2018	10,000	-	10,000
	2017 & older	42,044	14,555	27,489
<b>Land Program Total</b>		<b>\$82,044</b>	<b>\$16,315</b>	<b>\$65,729</b>
Public Art Program	2021	185	120	65
	2020	745	493	252
	2019	563	144	419
	2018	725	203	522
	2017 & older	4,709	4,196	513
<b>Public Art Program Total</b>		<b>\$6,927</b>	<b>\$5,156</b>	<b>\$1,771</b>
Contingent External Contribution	2021	8,470	-	8,470
<b>Contingent External Contribution Total</b>		<b>\$8,470</b>	<b>\$-</b>	<b>\$8,470</b>
<b>Non-construction Related Programs</b>		<b>\$153,604</b>	<b>\$44,895</b>	<b>\$108,709</b>
<b>Grand Total</b>		<b>\$733,432</b>	<b>\$362,632</b>	<b>\$370,800</b>

An estimate of \$10M was included in the 2021 Capital Plan (2021-2025 Financial Plan Bylaw) for external grants or contributions that may be received throughout the year. Funding is transferred to the approved applicable projects only when funding is confirmed. As of September 30, 2021, \$1,530,000 was received and the budget for Contingent External Contribution was adjusted to \$8,470,000.

The following is an overview of the actual current year capital expenditures as at September 30, 2021.

**Figure 1 – Current Year Capital Expenditures as at September 30, 2021**



The following are capital projects with the highest current year capital expenditures (actuals on a cash-basis) as at September 30, 2021.

**Table 2: Capital projects expenditures (in \$'000s)**

Project Name	Current Year-to-Date Actuals
2016 Flood Protection Program (2016, 2020)	\$4,396
Advancement of Partial Funding for the Canada Line Capstan Station (2020)	3,013
Eckersley B Sanitary Pump Station (2020)	2,048
Animal Shelter Replacement (2018)	1,839
Annual Asphalt Re-Paving Program - Non-MRN (2020)	1,628
Watermain Replacement Upgrades Program (2020)	1,590
Burkeville Utility Improvements Drainage (2020)	1,402
Phoenix Net Loft Building Stabilization (2018, 2020)	1,221
Energy Management Projects (2017, 2018, 2020)	1,128
Closed Circuit Television for Signalized Intersections (2018)	1,071

### **GRANT APPLICATIONS**

During the third quarter, the City received approval for the Investing in Canada Infrastructure Program – COVID-19 Resilience Infrastructure Stream for the Thompson Community Centre and Hall Infrastructure Renewals approved for a maximum available funding of \$900,000.

The City is currently awaiting results for the following grant applications:

- Investing in Canada Infrastructure Program - Community, Culture and Recreation (CCR) Intake Phase 2 for the Minoru Place Activity Centre Conversion to Arts Centre for a maximum available funding of \$2,400,000
- National Disaster Mitigation Program (NDMP) for Mitigation Planning – the Steveston Island Preliminary Dike Design submission for a maximum available funding of \$500,000
- ICBC 2021 Road Improvement Program for 2021 ICBC - City of Richmond Road Improvement Program partnership. Funding will be determined at the point of grant approval

### **HIGHLIGHTS OF KEY CONSTRUCTION RELATED CAPITAL PROJECTS**

Information on key capital projects include the project budgets, transfers from other projects and budget amendments, actuals on a cash-basis, and remaining commitments as at September 30, 2021.

### **INFRASTRUCTURE**

The City's Infrastructure program includes construction for roads, lanes, street systems, public walkways and paths, street lighting, water distribution networks, sanitary sewer systems, and drainage and flood protection systems. Many of the active infrastructure projects are in the design and permitting stages. With the current Provincial and Federal regulatory framework, the design and approval process for many drainage projects (including pump stations and dike upgrades) can take between one to two years.

There are continued upgrades for pump stations, dikes and roads throughout the City along with infrastructure improvements in the Burkeville area, Steveston area and various other locations.

Table 3 provides the highlights for the key infrastructure capital projects.

**Table 3: Key Infrastructure Capital Projects (in \$'000s)**

Program	Project Name	Budget	Actuals as at September 30, 2021	Expected Commitments / Work In Progress
Drainage	Drainage Pump Station & Diking Upgrades including Provincial Grant (2016, 2020)	\$28,302	\$22,870	\$5,432
Drainage	Drainage Pump Station and Diking Upgrades – Federal Grant (2020, 2021)	9,516	232	9,284
Drainage & Sanitary	Burkeville Area Drainage and Utility Improvements - Phase 2 (2019, 2020)	3,369	2,820	549
Drainage	Laneway Drainage Upgrades (2020)	1,460	1,379	81
Road & Drainage	No. 4 Road Reconstruction and Box Culvert Repair (2018, 2020)	4,286	1,072	3,214
Road	Annual Asphalt Re-Paving Program - MRN and Non MRN (2020)	4,842	2,951	1,891
Sanitary	Eckersley B Sanitary Pump Station Replacement and Spires Utility Servicing (2020)	5,100	3,179	1,921
Sanitary	Steveston Laneway Sanitary Sewer Rehabilitation (2018, 2020, 2021)	5,439	1,908	3,531
Sanitary	Hamilton Sanitary Pump Station (2020)	2,800	1,617	1,183
Water	Watermain Replacement Program (2020)	5,793	5,011	782
<b>Total Key Infrastructure Capital Projects</b>		<b>\$70,907</b>	<b>\$43,039</b>	<b>\$27,868</b>

## BUILDING

The Building Program includes major building construction and renovation projects as well as minor facility upgrades. Table 4 provides the highlights for the key building capital projects.

**Table 4: Key Building Capital Projects (in \$'000s)**

Project Name	Budget	Actuals as at September 30, 2021	Expected Commitments / Work In Progress
Animal Shelter Replacement (2018)	\$8,000	\$2,125	\$5,875
Bowling Green Community Activity Centre (2018)	5,300	8	5,292
Phoenix Net Loft (2018, 2020)	19,440	1,687	17,753
Minoru Place Activity Centre (2019)	3,326	195	3,131
Richmond Ice Centre Infrastructure Renewals - Phase 1 (2020)	6,850	1,063	5,787
Richmond Courthouse (2019, 2020)	1,932	41	1,891
Community Safety Building (2020)	1,420	28	1,392
City Hall Infrastructure Replacement (2020, 2021)	4,270	116	4,154
Works Yard Improvements (2018, 2019)	4,222	947	3,275
Minoru Arenas (2019, 2021)	4,580	873	3,707
<b>Total Key Building Capital Projects</b>	<b>\$59,340</b>	<b>\$7,083</b>	<b>\$52,257</b>

Attachment 1 includes the Q3 2021 Construction Update on Engineering and Public Works Capital Projects as well as the project budget and the scheduled construction completion.

## PARKS

The Parks program includes the development and replacement of parks, trails, community garden and natural areas in Richmond. Key Parks capital projects are summarized below with the project highlights being included in Attachment 2.

**Table 5: Key Parks Capital Projects (in \$'000s)**

Project Name	Budget	Actuals as at September 30, 2021	Expected Commitments / Work In Progress
Alexandra Park (formerly West Cambie Park) (2016, 2019)	\$2,554	\$653	\$1,901
Aberdeen Park Phase 2 and 3 (2018, 2019)	2,050	241	1,809
Railway Granville Bike Park (2020)	270	259	11
Garden City Lands Phase 2 and 3 (2016-2018)	5,995	2,890	3,105
Riverport and Cook Community Gardens (2020)	180	146	34
Minoru Lakes Renewal (2018-2021)	10,060	464	9,596
Safety and Environmental Enhancements to Richmond High Turf Field Warranty Repair (2021)	448	443	5
King George Park Rugby Field Upgrades (2013-2015, 2019)	374	195	179
Lang Park Completion (2020)	250	63	187
Dog Park Upgrades (2021)	200	1	199
The Gardens Agricultural Park (2015)	1,100	592	508
London / Steveston Park Enhancements (2017, 2019-2020)	950	669	281
Hollybridge Pier/Middle Arm (2010, 2012, 2015)	2,350	1,932	418
South Arm Park Renewal (2021)	300	-	300
Playground Improvement & Replacement (2018, 2020-2021)	1,500	654	846
Parks Aging Infrastructure (2018-2021)	2,190	1,682	508
Parks General Development (2020-2021)	950	240	710
Parks Identity Signage Program (2020-2021)	200	110	90
<b>Total Key Parks Capital Projects</b>	<b>\$31,921</b>	<b>\$11,234</b>	<b>\$20,687</b>

## TRANSPORTATION

The key transportation capital project is highlighted below. Top 20 Collision Prone Intersections – Short-term Improvements (2020) implements short-term improvements determined through the Network Screening Study to enhance intersection safety at the identified intersections. To date, the project is substantially completed with minor work remaining at some locations for lighting upgrade to Light Emitting Diode (LED) and enlargement of signal heads. Long-term Improvements at two intersections are being advanced through separate capital projects. Table 6 provides the highlight for the key transportation capital project.

**Table 6: Key Transportation Capital Project (in \$'000s)**

Project Name	Budget	Actuals as at September 30, 2021	Expected Commitments / Work In Progress
Top 20 Collision Prone Intersections- Short-term Improvements (2020)	\$500	\$307	\$193
<b>Total Key Transportation Capital Project</b>	<b>\$500</b>	<b>\$307</b>	<b>\$193</b>

## CAPITAL PROJECTS COMPLETED IN THE QUARTER

The following active capital projects were closed in the third quarter. Any unspent funding will be returned to the original source (e.g. Reserve Fund) for distribution toward future projects.

**Table 7: Projects Closed in the Quarter Ended September 30, 2021 (in \$'000s)**

Project Name	Budget	Actuals as at September 30, 2021	Remaining Budget*
Enhanced Community Centre Police Office (2018)	\$6,170	\$5,908	\$262
Network Refresh for City Facilities (Phase 1 of 3) (2020)	575	564	11
South Arm Boiler Replacement and Domestic Water Repiping (2018)	540	528	12
East Richmond Drainage & Irrigation Upgrades (2018)	466	435	31
Public Art Program (2018)	399	321	78
Annual Hardware Refresh (2020, 2021)**	384	371	13
Property Management System (Amanda) Upgrade (2018)	375	373	2
Network Infrastructure Core Refresh (2018)	362	333	29
Public Works Minor Capital - Sanitation & Recycling (2020)	350	350	-
West Richmond Sidewalk Rehabilitation Program - Phase 1 (2020)	350	347	3
Drainage Pump Station Rehabilitation (2018)	300	300	-
Manhole and Inspection Chamber Replacement Program (2018)	250	227	23
Citywide Connector Walkways Rehabilitation Program (2020)	250	250	-

\* Unspent funds will be returned to the original source of funding

\*\* Budget for Annual Hardware Refresh includes \$363K approved in 2020 and a budget transfer of \$21K reported in the Amendments to the Consolidated 5 Year Financial Plan (2021-2025) Bylaw No. 10239

**Table 7: Projects Closed in the Quarter Ended September 30, 2021 (in \$'000s) - continued**

Project Name	Budget	Actuals as at September 30, 2021	Remaining Budget*
OpenText eDocs DM/RM (REDMS) Upgrade (2017)	178	161	17
Child Care - Administration (2020)	110	31	79
Child Care Projects - City-wide Non-Capital Grants (2021)***	4	-	4
<b>Total</b>	<b>\$11,063</b>	<b>\$10,499</b>	<b>\$564</b>

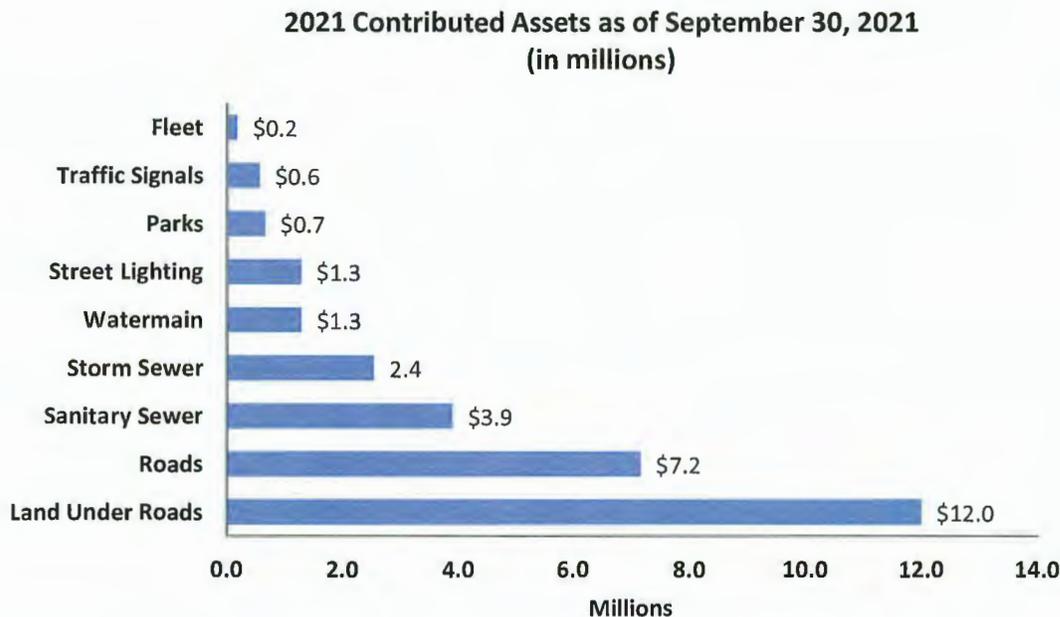
\* Unspent funds will be returned to the original source of funding

\*\*\* \$4K for Child Care Projects - City-wide Non-Capital Grants was approved by Council to support the 2021 Child Care Professional and Program Development Grants. In 2021, there were insufficient grant applications to award the grants.

**CONTRIBUTED ASSETS**

Included in the Consolidated 5 Year Financial Plan (2021-2025) Bylaw was an estimated \$61.5M for assets that are transferred to the City by developers and third parties. Under the Public Sector Accounting Standards, these are recorded as revenue at the fair market value at the time of contribution. Any variance between the budgeted and the actual contributed assets received will be included in the annual surplus reported on the financial statements. The following assets totalling \$29.6M have been recorded as of September 30, 2021:

**Figure 2 – Current Year-To-Date Contributed Assets as at September 30, 2021**



Included in Land Under Roads are the road extensions of:

- The lane on the Lansdowne Road to the No. 3 Road as part of the rezoning application for the property at 5671 No. 3 Road recorded at the fair market value of \$9.0M; and
- Lansdowne Road to the No. 3 Road as part of the rezoning application for the property at 5500 No. 3 Road recorded at the fair market value of \$1.5M.

**Financial Impact**

None.

**Conclusion**

This report provides information on active capital projects that were previously approved by Council. All previously approved active capital projects are currently within budget.



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JH:sx

- Att. 1: Q3 2021 Construction Update on Engineering and Public Works Capital Projects
- 2: Q3 2021 Construction Update on Parks Capital Projects

### **Q3 2021 Construction Update on Engineering and Public Works Capital Projects**

#### **Flood Protection**

##### Drainage Pump Station and Diking Upgrades – Provincial Grant

The City secured \$16.6 million from the Provincial Government under the Flood Protection Program. This project includes the upgrades of four drainage pump stations and diking upgrades. Construction for the South Dike upgrade (Gilbert Road to No. 3 Road), Horseshoe Slough drainage pump station, Shell Road North drainage pump station, and No. 7 Road South drainage pump station is substantially complete.

##### Drainage Pump Station and Diking Upgrades – Federal Grant

The City secured \$13.8 million from the Federal Government through the Disaster Mitigation and Adaptation Fund Grant to contribute towards the multi-year \$34.45M Flood Protection Program that are budgeted from 2020 to 2025. This project includes the upgrades of various drainage pump station and diking upgrades. The construction of the Steveston Highway and Gilbert Road drainage pump station and South Dike Upgrades from No. 3 Road to west of No. 4 Road is ongoing.

##### Burkeville Area Drainage, Watermain and Sanitary Sewer Upgrades

This project consists of upgrades to the City's storm sewer capacity. Aging watermain and sanitary sewers will also be upgraded at the same time to minimize ongoing disruption to residents and overall construction costs. This project will be performed in phases over 5 to 10 years. Phase 2 is ongoing with Phase 3 commencing in Q4 2021.

##### Laneway Drainage Upgrades

This project consists of upgrades to laneways in the Broadmoor area to reduce local flood risks by increasing the City's storm system capacity. Construction at Bates Road East laneway is complete, and construction at Reeder Road South laneway is ongoing.

#### **Roads**

##### No. 4 Road Reconstruction and Box Culvert Repair from Blundell Road to Granville Avenue

This project involves the reconstruction of the northbound lanes of No. 4 Road from Blundell Road to Granville Avenue. This section has undergone settlement over the years resulting in road surface deterioration. In addition, the joints in the drainage box culvert located on the west side of No. 4 Road are failing which will also be repaired through this project. Construction is ongoing.

##### Paving Program – Various Locations – City-Wide

The annual Paving Program works are ongoing. Locations completed include 11000 Block Railway Avenue, 10000 Block No. 4 Road, 8000 Block Lansdowne Road, 8000 Block Westminster Highway, 6000 Block Cooney Road, 11000 Block No. 3 Road, Alderbridge and Garden City Road, Bridgeport and No. 5 Road, and various spot repairs.

## **Sanitary Sewers**

### **Eckersley B Sanitary Pump Station**

This project includes the replacement of the existing sanitary pump station located at William Cook Elementary School and will connect to the existing sanitary system and recently completed Spires area upgrades. The project is substantially complete.

### **Steveston Sanitary Sewer**

This project includes the rehabilitation and upgrades to the City's sanitary sewer in the Steveston catchment. This project will be performed in phases over 5 to 10 year. Ongoing work includes pipe condition assessment and preliminary field investigation.

## **Water**

### **Watermain Replacement Program**

This project replaces and upsizes aging watermains at the end of their service life with PVC pipe, in line with the City's Ageing Infrastructure Replacement Strategy. This will minimize unplanned maintenance and improve fire protection. Construction in the Bridgeport/Simpson/Olafson area and Bates area is complete. Construction in the Chatsworth/Chelmsford area is complete.

### **Thompson Gate Pressure Reducing Valve (PRV) Station**

This project includes the construction of a new PRV station on Boundary Road and Thompson Gate to connect the neighbourhood's watermain system to Metro Vancouver's Annacis transmission main. Completion of the project is required to provide adequate flows to support upcoming development in the area. Construction is ongoing.

## **Buildings**

### **Animal Shelter**

The project scope includes upgrading the existing 4,580 sq. ft. facility and building a new 1,600 sq. ft. addition. This work will support the growing population of Richmond, while providing improved facilities, amenities and a high quality environment for animal care. Construction is well underway with completion anticipated in 2022. Following construction completion, transitioning the animals is anticipated to be complete in 2022.

### **Bowling Green Community Activity Centre**

The current Richmond Lawn Bowling Clubhouse was constructed in 1963 and is located in the northeast corner of Minoru Park. This facility will be demolished and replaced with a modern 4,900 sq. ft. single-storey facility in the same location. Design and tendering for construction services is now complete. Construction is anticipated for completion by Q1 2023.

#### City Centre Community Centre North

The developer driven amenity will feature an indoor activity track, gymnasium, multi-purpose rooms and Children's Exploratorium. The 33,000 sq. ft. project is currently under detailed design by the developer and it is anticipated to be under construction in 2022, with an estimated completion by the end of 2023.

#### Richmond Ice Centre- Phase 1

Existing aging equipment and infrastructure will be replaced with new and more efficient alternatives. Three new compressors will use less ammonia, have more efficient power consumption and improved control operation. The equipment and infrastructure replacements will minimize unplanned maintenance and improve life and safety for the users and operators. The compressors replacement and the other upgrades to the refrigeration plant is complete, whereas the design for the remainder of the work is ongoing, with construction scheduled to start in Q1 2022.

#### Child Care Centres

A combined total of approximately 40,300 sq. ft. have been designed and are under construction to accommodate about 120 children in various licensed child care programs. Funding was collected through both the Development Cost Charges and Community Amenities Charges. Design and construction, which is the responsibility of the developer, continue for the following:

- Seedlings Early Childhood Development Hub - Keltic Canada Development Co. Ltd. (construction completion anticipated by Q4 2021)
- Hummingbird Child Care - Aspac Development Ltd. (construction completion anticipated by Q1 2022)

#### Richmond Courthouse

The two-storey, 64,000 sq. ft. building was originally built in 1975 and currently houses spaces for the Attorney General Office, Richmond Community Corrections, Richmond Family Justice Centre and RCMP Community Services. Existing aging equipment will be replaced with new and more efficient alternatives. Existing infrastructure will be improved to enhance life and safety for the users and operators. Staff have procured the consulting team and contractor, with anticipated completion for the design in Q4 2021 and construction start in Q2 2022.

#### Community Safety Building

The heat pump system has reached the end of its life expectancy. This is the last phase of the heat pump replacement works, which will prevent service disruption and potential closure for this building. The design has been completed and construction is planned to start in Q4 2021.

#### City Hall Infrastructure Replacement

Multiple building components and mechanical equipment at City Hall will be replaced with modern energy efficient systems, with construction completion anticipated by Q3 2022. In addition, the replacement of the Council Chamber roof is anticipated to be complete in Q4 2022.

Works Yard Improvements

Buildings in general at the Works Yard have aged beyond their expected lifespan. In advance of a broader rebuilding program being finalised and funded, there are many building components within each of the active Works Yard facilities that require replacement in order to maintain operability. Design for this phase is complete and construction tendering is in progress. Construction is estimated to be complete by Q1 2022.

Minoru Arenas

Building infrastructure renewals and replacements include mechanical and electrical upgrades, life and safety equipment upgrades and architectural improvements of the mezzanine viewing area and change rooms. Construction has commenced and anticipated for completion in Q3 2022.

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
<b>INFRASTRUCTURE - ENGINEERING</b>				
<b>ROADS</b>				
1	Garden City Road Pedestrian and Cyclist Enhancements, Westminster Highway to Lansdowne Road (2019)	Garden City Pedestrian and Cyclist Enhancements - Westminster Highway to Lansdowne Road	\$1,000	Complete
2	Arterial Roadway Improvement Program (2019)	Railway Greenway intersections	\$950	Q4 2021
	Neighbourhood Walkway Program (2019)			
3	River Parkway Road Extension - Gilbert Road to Cambie Road (2018)	River Parkway Road Extension - Gilbert Road to Cambie Road	\$13,200	Complete
	Cambie Road Improvement, River Road to No. 3 Road (2018)			
	Leslie Road Improvement, River Parkway to approximately 150m to the east (2018)			
4	Street Light LED Upgrade Program (2020)	Year 4 - Continuation of LED replacement program	\$400	Q4 2021
5	Cambie Overpass Rehabilitation Project (2020)	Rehabilitation of the Cambie Overpass approach at Knight Street	\$1,355	Q4 2021

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
6	No. 4 Road Reconstruction from Blundell Road to Granville Ave (2018)	Granville Avenue to Blundell Road	\$4,286	Q4 2021
	Box Culvert Repair (2018)			
	Box Culvert Repair (2020)			
7	Bridge Rehabilitation Program (2018)	Various locations Citywide including West Dikes Bridge and Bird Road Bridge	\$590	Q2 2022
	Bridge Rehabilitation Program (2019)			
8	Annual Asphalt Re-Paving Program - MRN (2020)	Annual asphalt re-paving	\$1,554	Q4 2021
9	Annual Asphalt Re-Paving Program - Non-MRN (2020)	Annual asphalt re-paving	\$3,288	Q4 2021
10	Annual Asphalt Re-Paving Program - MRN (2021)	Annual asphalt re-paving	\$1,589	Q3 2022

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
11	Annual Asphalt Re-Paving Program - Non-MRN (2021)	Annual asphalt re-paving	\$3,344	Q3 2022
12	Arterial Roadway Improvement Program (2018)	River Road Sidewalk - No. 6 Road to Burdette Street, Sidewalk Upgrades - Lucas at No. 3 Road	\$350	Q3 2022
13	Active Transportation Improvement Program (2018)	Odlin Road Bike Route, Westminster Highway MUP - 14600 block to No. 7 Road, and Charles Street MUP - Sexsmith to Bridgeport Canada Line Station	\$2,000	Q4 2021
	Active Transportation Improvement Program (2019)			
14	Alderbridge Way Multi-Use Pathway, No. 4 Road to Shell Road (2018)	Alderbridge Way MUP - Shell Road to No. 4 Road	\$1,200	Q1 2022
15	Steveston Highway Multi-Use Pathway, Shell Road to Mortfield Gate (2019)	Steveston Highway MUP - Shell Road to Mortfield Gate	\$2,000	Q3 2022

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
16	Cambie Road/No. 5 Road- Intersection Improvements (2020)	Intersection safety improvements at Cambie Road and No. 5 Road	\$2,760	Q3 2022
17	Neighbourhood Walkway Program (2020)	Viking Way Sidewalk - Cambie Road to Bridgeport Road and Westminster Highway Walkway - Muir Drive to 22411 Westminster Highway	\$750	Q4 2022
18	Transit-Related Roadway Improvement Program (2020)	Various locations Citywide including Westminster Hwy at No. 8 Road, Railway Avenue at Linfield Gate, Railway Avenue at Lancing Road, and Railway Avenue at Maple Road	\$500	Q3 2022
<b>DRAINAGE</b>				
19	Heather Street Improvement (2019)	Neighbourhood improvement on Heather Street, from Francis Road to Dayton Avenue	\$1,757	Complete
20	Burkeville Utility Improvements Drainage (2020)	Burkeville Drainage Upgrades (Second phase of construction)	\$3,369	Q4 2021
	Burkeville Utility Improvements - Sanitary (2019)			

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
21	Watercourse Crossing Rehabilitation & Replacement (2020)	Replacement of a failed culvert crossing that serves City's tree nursery, KPU incubator farm and Richmond Food Security Society's Community Farmers	\$300	Complete
22	2016 Flood Protection (2016)	South dike upgrades - No. 3 Road to Gilbert Road, Horseshoe Slough Pump Station, No. 7 Road South Drainage Pump Station, Shell North Drainage Pump Station	\$28,302	Complete
23	South Dike Repair - Gilbert Road Area (2021)	South Dike Repair - Gilbert Road Area	\$500	Complete
24	East Richmond Drainage & Irrigation Upgrades (2018)	Canal stabilization and drainage and irrigation upgrades throughout Richmond including Cambie and No. 7 Culvert Replacement, Westminster Hwy Cross Culvert, 11000-12000 Block No. 3 Road, and 9000 block No. 6 Road	\$3,266	Complete
	Canal Stabilization (2020)			
	East Richmond Drainage & Irrigation Upgrades (2020)			
	Canal Stabilization and Drainage & Irrigation Upgrades (2021)			

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
25	Disaster Mitigation and Adaptation Fund Infrastructure Upgrades (2021)	Second phase of drainage pump station upgrades and perimeter dike raising design as per the awarded Disaster Mitigation and Adaptation Fund including dike upgrades from No. 3 Road to 400m west of No. 4 Road, and dike upgrades at No. 9 Road	\$5,000	Q4 2022
26	Laneway Drainage Upgrade (2020)	Laneway drainage upgrade in Greenlees Road east lane, Bates Road east lane, and Bates Road south lane.	\$1,460	Q4 2021
27	Storm Main Drainage Upgrade (2021)	Drainage improvements at the intersection of Gilbert Road	\$950	Q2 2022
28	Steveston Highway & No. 3 Road Pump Station Upgrade (2019)	Upgrade of the existing drainage pump station at Steveston Highway and No. 3 Road	\$2,439	Q2 2022
29	Burkeville Utility Improvements Drainage (2021)	Burkeville Drainage Upgrades (Third phase of construction)	\$2,026	Q3 2022
30	Disaster Mitigation and Adaptation Fund Infrastructure Upgrades (2020)	First phase of drainage pump station upgrades and perimeter dike raising design as per the awarded Disaster Mitigation and Adaptation Fund including upgrades at the existing drainage pump station at Steveston Highway and Gilbert Road	\$4,516	Q4 2022

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
31	Laneway Drainage Upgrade (2021)	Laneway drainage upgrade at Reeder Road south lane, and Railway Avenue East lane	\$800	Q4 2022
<b>SANITARY</b>				
32	Hamilton Area Sanitary Sewer and Pump Station (2020)	Sanitary Pump station located in Hamilton VLA Park	\$2,800	Q2 2022
33	Eckersley B Sanitary Pump Station (2020)	Eckersley B Sanitary Pump Station	\$5,100	Complete
34	Sanitary Sewer Tie-in and Restoration (2021)	Sanitary Sewer Tie-in and Restoration	\$150	Q2 2022
35	Steveston Gravity Sewer Replacement and Rehabilitation (2018)	Multi-year sanitary rehabilitation and upgrade program in the Steveston area	\$5,439	Q4 2022
	Steveston Gravity Sewer Replacement and Rehabilitation (2020)			
	Gravity Sewer Rehabilitation and Upgrades (2021)			

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
<b>WATER</b>				
36	Watermain Replacement Program (2019)	Watermain Replacement Program - McDonald Road Area, Colbeck Area, Palmberg Area and Gilhurst/Bates Area	\$5,395	Complete
37	Thompson Gate Pressure Reducing Valve Station (2020)	Water pressure reducing valve station to reduce Metro Vancouver's distribution pressure to local pressure to provide additional water service to the East Richmond area	\$1,500	Q2 2022
38	Watermain Replacement Upgrades Program (2020)	Watermain Replacement Program - No. 4 Rd, Chatsworth/Chelmsford Area, Bridgeport/Olafsen Area and Monteith Area	\$5,793	Q2 2022
39	Watermain Tie-in and Restoration (2021)	Watermain Tie-in and Restoration	\$200	Q2 2022
40	Water Metering Program (2021)	Upgrade touch pad meters to radio meters; volunteer multi-family dwelling meters	\$1,286	Q2 2022
41	Watermain Replacement Upgrades Program (2021)	Watermain Replacement Program - Danube/Minler Area, Nevis/Petts Area, Springfield Area, No. 3 Road, Terra Nova Park and Granville Avenue	\$6,196	Q4 2022

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
<b>BUILDINGS - PROJECT DEVELOPMENT</b>				
42	Minoru Arena System Renewals (2019)	Systems Renewal	\$3,300	Q4 2021
43	Community Safety Building - Mechanical Component Replacements and Associated Works (2020)	Components Replacement	\$1,420	Q4 2022
44	Works Yard Electrical Service Upgrade and EV Infrastructure (2020)	Electrical Upgrade and EV Infrastructure	\$1,688	Q3 2022
45	City Hall Upgrades and Repairs (2019)	Mechanical Upgrades and repairs	\$980	Q3 2022
46	Minoru Aquatics Centre Demolition (2021)	Demolition	\$2,700	Q4 2021
47	Minor Capital Buildings Project Development (2018)	62 projects (roof replacement, flooring, mechanical equipment, etc.)	\$4,334	Q4 2021
48	Works Yard Aging Mechanical and Building Envelope Infrastructure Replacement (2018)	Design of site wide infrastructure replacements	\$2,515	Q1 2022
49	Works Yard Mechanical Replacements (2019)	Mechanical Systems Replacement	\$1,707	Q1 2022

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
50	City Hall - Replacement of Mechanical, Life/Safety, and Envelope Components and Associated Works (2020)	Replacement Components	\$2,630	Q4 2022
51	Hamilton Community Centre - HVAC Replacement (2021)	HVAC Replacements	\$500	Q3 2022
52	Animal Shelter Replacement (2018)	Replacement	\$8,000	Q1 2022
53	Richmond Ice Centre Infrastructure Renewals - Phase 1 (2020)	Renewals	\$6,850	Q4 2022
54	City Hall Council Chamber Roof Replacement (2021)	Council Chamber Roof Replacement	\$1,640	Q4 2022
55	Watermania Aging Mechanical and Building Envelope Infrastructure Replacement Phase 2 (2019)	Mechanical and Envelope Replacement	\$1,341	Q4 2022

	<b>Project Name</b>	<b>Scope of Work</b>	<b>Capital Funding (x1000)</b>	<b>Scheduled Construction Completion</b>
56	Richmond Courthouse - Mechanical Components Replacements, Envelope Renewals, Electrical Replacements, Structural Renewals and Associated Works (2020)	Infrastructure Replacements	\$1,932	Q4 2022
	Richmond Courthouse - Mechanical Components Replacements, Envelope Renewals, Electrical Replacements, Structural Renewals and Associated Works (2019)			
57	Bowling Green Community Activity Centre (2018)	Replacement of Clubhouse	\$5,300	Q1 2023
58	Thompson Community Centre & Hall Infrastructure Renewals (2021)	Infrastructure Upgrades	\$900	Q1 2022
59	Minoru Arenas - Mechanical & Life Safety System Renewals (2021)	Mechanical and Life Safety Renewals	\$1,280	Q3 2022
60	West Richmond Community Centre - HVAC and Mechanical renewals (2021)	HVAC Renewals	\$1,330	Q4 2023

### **Q3 2021 Construction Update on Parks Capital Projects**

#### Alexandra Neighbourhood Park

Alexandra Neighbourhood Park is located in the newly established Alexandra neighbourhood, at the intersection of Odlin Road and May Drive. In March 2019, Council approved the re-naming of this park from West Cambie Park to Alexandra Neighbourhood Park. Request for Proposals (RFPs) for the work were issued in **Q2 2020**, and the construction contract was awarded in **Q2 2021**. Park construction is now underway, and expected to be completed in **Q4 2021**.

#### Aberdeen Neighbourhood Park – Phase 2

Aberdeen Neighbourhood Park is located at the intersection of Cambie Road and Hazelbridge Way. In July 2017, Council approved the naming of this new park from Cambie City Centre to Aberdeen Neighbourhood Park. The RFP for Phase 2 works was issued in Q3 2020. Purchasing staff identified a lead proponent, and cost savings opportunities were finalized with the prospective contractor and consultant team. The construction contract was awarded in **Q2 2021**. Park construction is now underway, and expected to be completed in **Q1 2022**.

#### Railway Granville Bike Park

This project is now substantially complete and open for public use and enjoyment. Public feedback has been positive and the park is well used on a daily basis. Two benches were recently installed along the Railway Greenway and line painting was completed to guide riders on the direction of travel, and identify the ride line rating in the park. Several trees within the bike park will be planted this fall.

#### Garden City Lands (GCL)

Staff will be proceeding with construction of the community gardens on the site with an expected commencement in early **Q4 2021**. An extensive contaminated sites testing program will be proceeding in **Q4 2021** once a Qualified Environmental Professional (QEP) has been engaged. Staff will be installing park benches along the Perimeter Recreational Trail in **Q4 2021** and additional native tree and shrub plantings in late **Q4 2021** through **Q1 2022** along the same trail. The scale and extent of this planting effort will be similar to what was successfully completed in 2018. The Perimeter Recreational Trail will remain open to residents to enjoy the site during this time.

#### City-wide Community Gardens

Several new community gardens are being planned for construction throughout the City in **Q3/Q4 2021**. A public consultation on community gardens took place during **Q3 2021** via the LetsTalkRichmond platform. Based on the feedback received from the community, staff will bring a report to Council in **Q4 2021** to provide more details and seek Council's direction on preferred locations for future community gardens.

### Minoru Lakes Renewal

Detailed design for the renewed Minoru Lakes District was completed and an RFP has been posted to market for a contractor to provide construction services. Public bidding shall continue into **Q4 2021** and a contract is expected to be awarded by end of **Q4 2021**. The project is on schedule for construction to start in 2022.

### Safety and Environmental Enhancements to Richmond High Turf Field Warranty

Replacement of the artificial turf field was completed in 2016, however due to product defects, the vendor will be replacing the synthetic turf under warranty at no cost to the City. Staff have identified opportunities to improve the safety, performance and play experience of the field. The construction of this project was completed in **Q3 2021**, and it is now open for public use.

### King George Park – Artificial Turf Field Replacement

Synthetic sports fields generally last 8 to 12 years depending on the usage and the maintenance of the fields. Installed in 2008, the King George field is at the end of its expected lifespan and is failing to meet minimum operating safety standards for shock attenuation (i.e., risk of injury). The RFP process has been completed and the contract has been awarded. This project is anticipated to start in **Q2 2022** as a result of scheduling demands from the user groups and delays with the availability of materials.

### King George Community Park – Gathering Area

The construction phases of the social gathering area was completed in **Q2 2021**. The new gathering area features a community stage, a large harvest table, and additional site furnishings reflective of public feedback gathered as part of the King George Community Park Master Plan. Remaining works are scheduled for **fall 2021**. These works include tree planting, native shrub planting in bioretention areas, and temporary irrigation for plant establishment.

### Lang Park Redevelopment Plan – Phase 3 Completion

The current construction phase of the Lang Park Redevelopment Plan includes an overhead shelter, table tennis tables and a community book exchange kiosk as part of the approved park program to address the needs of the community. The table tennis table installations and book exchange kiosk were completed in **Q1 2021**. Fabrication of the overhead shelter was completed in **Q3 2021** and installation on site is expected to be completed in **Q4 2021**.

### Dog Park Upgrades

The existing Steveston Dogs Off-Leash Area is slated to be upgraded in 2021. Upgrades are expected to include improved surfacing, play features, tree planting, site furnishings, and a drinking fountain. Detailed design is anticipated to begin in **Q4 2021**.

### The Gardens Agricultural Park

Rehabilitation of the existing park features has been completed, including pathways, a bridge, planting and site furnishings. The northern section of the park was previously closed off to the public for safety reasons, and has now been reopened following completion of pathway and landscape improvements. As the Province has recently announced the approval of the George Massey Crossing Project, staff will study its impact to the implementation of the approved park concept.

### London/Steveston Neighbourhood Park

London/Steveston Neighbourhood Park enhancements are being implemented in phases. The first phase was completed in 2018 and included greenway connections to No. 2 Road. The second phase, completed in 2019, included a pathway loop, trees, landforms, and stormwater detention ponds. The third phase of the project includes a playground, half-court basketball plaza and park shelter. Construction of the playground was completed in July 2020 and the half-court basketball plaza was completed in December 2020. The park shelter was installed in February 2021. The fourth and final phase of enhancements include an off-leash dog park. The off-leash area will include a variety of surface treatments, fencing, play elements, tree planting, and site furnishings. Detailed design is anticipated to begin in **Q4 2021**.

### Hollybridge Pier/Middle Arm

This project is the continuation of the Oval West waterfront development as part of the Middle Arm waterfront with a new public pier at the end of Hollybridge Way. The project has been halted as the City has received a final decision letter from the Ministry of Forest, Lands, Natural Resources Operations and Rural Development (FLNRORD), stating that the City's application to construct a public pier has been rejected. **Further consultation is required for the potential next steps to move the project forward with design revisions.**

### South Arm Community Park Renewal

South Arm Community Park Renewal includes enhanced trail connections, a plaza with park shelter, expanded picnic areas, new furnishings and shade trees. Detailed design is currently underway with the playground improvement project, with construction anticipated to start after playground construction is complete in 2022.

### Playground Improvement and Replacement

- South Arm Community Park Playground – The request for proposals will be issued to market in **Q4 2021**. Construction is expected to start in **spring 2022**.
- Talmey Neighbourhood School Park and Garnet Tot Lot Playgrounds – Construction on both playgrounds was completed in **Q2 2021**.
- Steveston Community Park Playground Renewal – A staff report on the Steveston Community Park Playground Next Steps received Council support in Q1 2021. Preparation for a request for proposals for detailed design and costing services is underway and targeted to be issued in **Q4 2021**.
- Odlin Park Playground – Procurement and detailed design has been completed. Construction is underway and on schedule for completion in **Q4 2021**.

- Burkeville Park Playground – The existing zip line was removed and replaced with a new product to meet current safety standards and guidelines. The new zip line is approximately 30 meters in length and features an at-grade track system. Existing park swings have also been removed due to stability concerns. New swings have been ordered and are on schedule for delivery and installation in **Q4 2021**.

#### Parks Aging Infrastructure

- Thompson Burnett Tennis Courts – In May 2021, repairs to cracks on the courts and resurfacing of play areas was completed.
- South Arm Park Basketball Courts – improvements were completed in **Q1 2021** through replacement of the existing basketball hoops and backboards. The installation of a new sport surfacing system on the courts was completed in **August 2021**.
- Gibbons Park – Installation of new storm drainage system on the baseball diamond field was completed in **October 2021**.
- No. 3 Road Pier – A conditional assessment of the pier was completed in **March 2021**. Minor repairs to the piled foundation is anticipated to start in **Q4 2021** pending availability of materials and securing a marine contractor.
- No. 2 Road Pier – A Structural Conditional Assessment was completed in August 2018. Phase 1 repairs to the pile foundation were completed in July 2020. Replacement of the perimeter rail fence was completed in November 2020. Planning for Phase 2 of the pile foundation replacement is now anticipated for 2022-2023. A capital submission will be submitted for consideration in the future year's budget process.

#### Parks General Development

- Thompson Burnett School Park – New pathway alignments were installed in **Q2 2021** to improve pedestrian circulation throughout the site.
- London Heritage Farm – The implementation of the Master Plan has started in Q2 2021 following Council approval of the plan in Q1 2021. Works started include upgrades to the irrigation system, a new lavender garden, and site preparation for further works scheduled for **Q4 2021**, including renovations to an existing chicken run and upgrades to a bee apiary.

#### Parks Identity Signage Program

This project consists of the design and fabrication of various Park and Open Space signage including wayfinding and identity signs. Completed sites for the signage include various neighbourhood park locations in the Thompson area, e.g., Brighthouse, Dover, Gibbons, Thompson, McCallan, Terra Nova School, Terra Nova South and Quilchena.

Fabrication and installation of new bases and signs is currently underway for Birch, Blundell, General Currie, Gilmore, Grauer, Katsura, McKay, Morris, Palmer, and Paulik. Additional works are also in progress for Garden City Park Arboretum interpretation signage upgrade.