



City of Richmond

Report to Committee

To: General Purposes Committee

Date: November 18, 2020

From: Todd Gross
Director, Parks Services

File: 06-2345-20-GCIT1/Vol
01

Re: **Federation of Canadian Municipalities' Green Municipal Fund Application – City of Richmond Garden City Lands Soil Management and Remediation Study**

Staff Recommendation

1. That the Garden City Lands Contaminated Soils Management and Remediation Study proposed within the staff report titled “Federation of Canadian Municipalities’ Green Municipal Fund Application – City of Richmond Garden City Lands Soil Management and Remediation Study” dated November 18, 2020, from the Director, Park Services, be endorsed and a funding application to conduct the study be prepared and submitted to the Federation of Canadian Municipalities’ Green Municipal Fund; and
2. That the Chief Administrative Officer and General Manager, Community Services, be authorized to enter into funding agreements with the Federation of Canadian Municipalities should the project be approved for funding and that the Consolidated 5 Year Financial Plan (2021-2025) be amended accordingly.

Todd Gross
Director, Parks Services
(604-247-4942)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Intergovernmental Relations & Protocol Unit	<input checked="" type="checkbox"/>	
Finance Department	<input checked="" type="checkbox"/>	
Sustainability	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

At the Parks, Recreation and Cultural Services Committee meeting held on November 26, 2019, staff received the following referral:

That Parks staff consider composting and soil remediation for the Garden City Lands at the Garden City Lands, and no compost from other facilities unless guaranteed of organic quality and free of contaminants.

The purpose of this report is to update Council on staff's efforts to further investigate remediation of the existing soil in the area identified for farming on agricultural fields on the Garden City Lands (the "Lands"). Staff will respond to the other aspects of the referral relating to composting at a later date.

This report supports Council's Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

Environmentally conscious decision-making that demonstrates leadership in implementing innovative, sustainable practices and supports the City's unique biodiversity and island ecology.

2.2 Policies and practices support Richmond's sustainability goals.

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.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.

Background

Multiple soil and groundwater investigations have been conducted at the Lands since 2001 and identified metals and hydrocarbon concentrations in soil that exceed applicable Provincial contaminated sites standards. The presence of contaminated material can be traced to past historical activities on the site.

The Garden City Lands Development Plan (the "Plan") (Attachment 1) includes approximately 16 ha (40 acres) of agricultural fields on the western half of the site. To date, the first phase consists of 2.6 ha (6.4 acres) of leased land to Kwantlen Polytechnic University (KPU) which was constructed in 2017. Imported soil was placed on the site which serves to cap the underlying contaminated parent material and provide an uncontaminated rooting zone for the field crops. KPU is presently in the final year of the three year organic certification process.

The Plan indicates an approximately 8 ha (20 acres) area on the southwest corner of the Lands which is envisioned to support future soil-based agricultural activities including community gardens, intensively managed incubator farm plots and demonstration gardens including fruit tree orchards. All future farming practices will be managed according to organic farming best practices as is currently demonstrated by KPU on their leased farm area. Due to the contamination on the site, the proposed activities can only proceed after a study investigates and delineates the extent of contamination. A study is required to guide the City's efforts to manage the existing contamination in the soil.

Analysis

Soil Management and Remediation Study

To guide the implementation of the Plan, the proposed Soil Management and Remediation Study will look at techniques to manage existing site contamination and determine the recommended soil and groundwater remediation strategy which will permit farming to proceed. It will provide staff an in-depth report on the distribution and concentrations of site contamination, evaluate various remediation options and inform the risk assessment. The study will also evaluate the environmental impacts (including greenhouse gas emission calculations) and financial viability of the chosen remedial option in comparison to traditional remediation options such as the excavation and off-site disposal of contaminated soils or the capping of impacted areas with uncontaminated imported soil (as previously implemented on the KPU farm area).

No site remediation will be conducted as part of this study; this study will only recommend the most viable remediation option(s) for implementation.

The Lands are in the Agricultural Land Reserve (ALR) and all activities, including the implementation of a soil remediation plan will require the City to gain Agricultural Land Commission (ALC) approval through the Non-Farm Use (NFU) Application process. Per the standard NFU Application process, Council will be required to approve the Application before it is forwarded to the ALC.

Federation of Canadian Municipalities' Green Municipal Fund

Staff propose to make an application to the Federation of Canadian Municipalities' Green Municipal Fund to assist in funding a Garden City Lands Soil Management and Remediation Study.

Financial Impact

The Federation of Canadian Municipalities' Green Municipal Fund, is a matching contribution grant, funding up to 50 percent of eligible costs, to a maximum of \$175,000.

It is anticipated that the study work program will take approximately three years to complete, and cost \$450,000 (see Table 1 below). Staff propose applying for the maximum available funding of \$175,000, based on the amount required to complete the Soil Management and Remediation Study and if approved by Council, that the Consolidated 5 Year Financial Plan (2021-2025) be amended accordingly.

The City will contribute matching funds from the existing 2016 Capital Budget that was approved by Council. The approved capital project has sufficient funding for the City's portion of this initiative.

Table 1. Study Project Budget

Budget Source – City of Richmond	
Garden City Lands Soil Management and Remediation Study	\$220,000
Staff Time (City Costs)	\$55,000
Total City Budget	\$275,000
Budget Source - Federation of Canadian Municipalities' Green Municipal Fund (FCM)	
FCM's Green Municipal Fund 50% Match for Project Cost	\$175,000
Total FCM Budget	\$175,000
Total Project Budget	\$450,000

Conclusion

Staff plan to begin the Garden City Lands Soil Management and Remediation Study in 2021. Staff is requesting that Council endorse a submission to the Federation of Canadian Municipalities' Green Municipal Fund, to obtain funding up to \$175,000 to support the Study. This project will aim to investigate the extent of contamination at the site and identify the best method to manage the contamination.

The actual management of contaminated material and remediation of the site will be part of a separate work-plan and remediation program. Once completed, the City plans to update the Human Health and Ecological Risk Assessment which provides a profile of the site's existing level of contamination and relative safety for human activity and the environment. Furthermore, the City will apply for a Ministry of Environment and Climate Change Strategy Land Remediation Section Certificate of Compliance. These documents will confirm the Lands have been remediated to the applicable Provincial standards governing contaminated sites and specifically, confirm agricultural production to may safely proceed on the remaining portions of the Lands designated for farming.



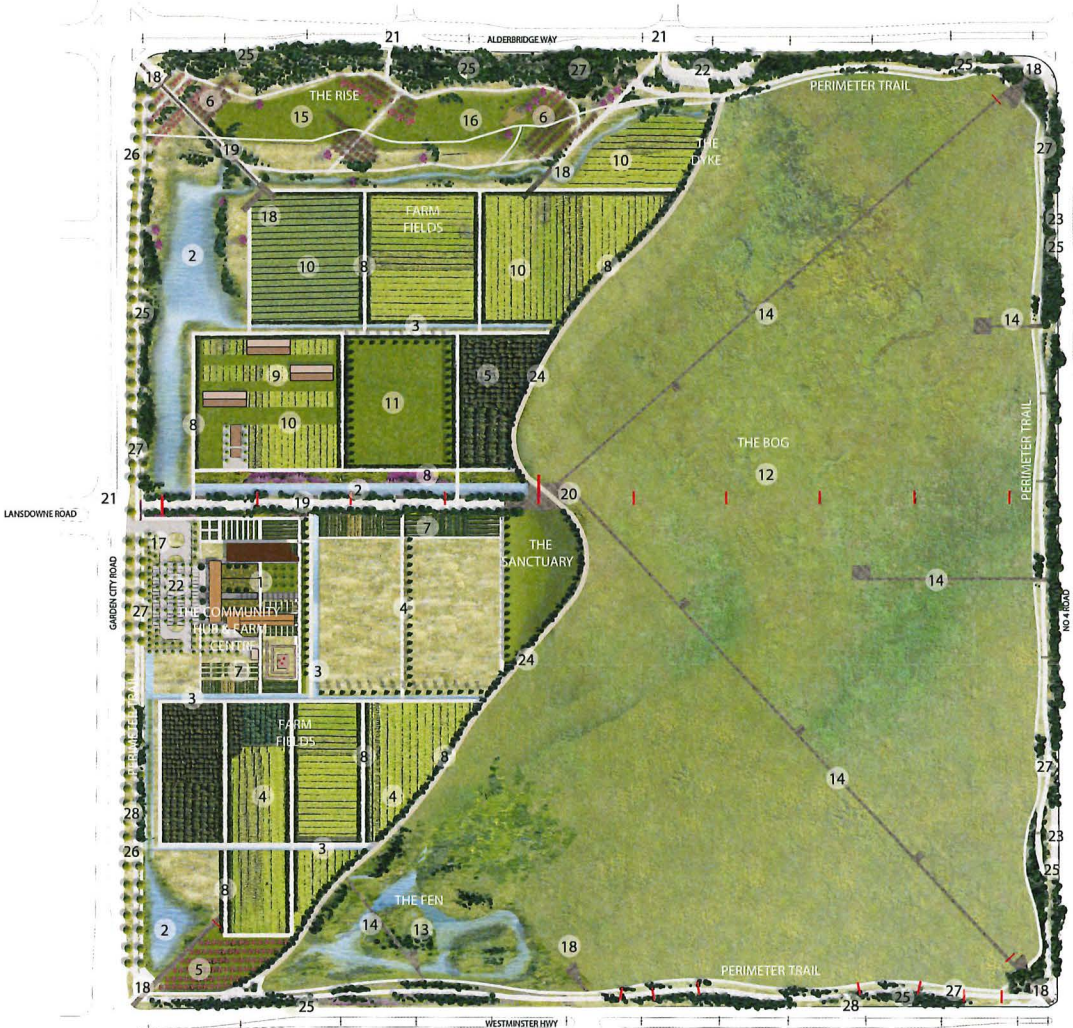
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Research Planner 2
(604-276-4099)



Jason Chan
Manager, Parks Planning, Design and Construction
(604-233-3341)

Att. 1: Garden City Lands Development Plan

Garden City Lands Development Plan



LEGEND

- THE AGRICULTURAL LANDS**
- 1 Multi-Functional Building and Parking
 - 2 Rainwater Storage for Agricultural Irrigation
 - 3 Farm Drainage Ditch
 - 4 Agricultural Fields
 - 5 Orchard
 - 6 Demonstration Orchard
 - 7 Community Gardens
 - 8 Hedgerows & Beetle Banks
 - 9 Sliding High Tunnels
 - 10 Farm Fields
 - 11 Soil Amendment Trials
- THE BOG**
- 12 Bog Conservation Area
 - 13 The Fen
 - 14 Boardwalk with Rest Points
- THE RISE**
- 15 Meadow / Informal Recreation
 - 16 Children's Play
- THE NODES**
- 17 Garden City Lands Main Entrance
 - 18 Entry Node
 - 19 Entry Allée
 - 20 Viewing Platform
 - 21 Crosswalk
 - 22 Parking Lot with Accessible Stalls
 - 23 Parallel Parking with Accessible Stalls
- THE DYKE**
- 24 Multi-use Path with Farm Access
- THE PERIMETER TRAILS**
- 25 Native Forest Plantings
 - 26 Street Trees
 - 27 Perimeter Trails - Separated Paths
 - 28 Rain Garden