



# City of Richmond

## Report to Committee

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**To:** Parks, Recreation and Cultural Services  
Committee

**From:** Serena Lusk  
General Manager, Community Services

**Re:** Garden City Lands Project Update

**Date:** February 14, 2018

**File:** 06-2345-20-GCIT1/Vol  
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### Staff Recommendation

That the staff report titled "Garden City Lands Project Update," dated February 14, 2018, from the General Manager, Community Services be received for information.

Serena Lusk  
General Manager, Community Services  
(604-233-3344)

Att. 3

<b>REPORT CONCURRENCE</b>	
<b>CONCURRENCE OF GENERAL MANAGER</b>	
<b>REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE</b>	<b>INITIALS:</b> 
<b>APPROVED BY CAO</b>	

## Staff Report

### Origin

In July 2016, Council received the report titled “Garden City Lands Park Development Plan,” providing Council an update of future construction and development activities on the Garden City Lands. Since then, the first phases of the Development Plan have been implemented.

The purpose of this report is to update Council on the works completed during the 2017 construction season and upcoming works planned for the 2018 construction season.

This report supports Council’s 2014-2018 Term Goal #2 A Vibrant, Active and Connected City:

*Continue the development and implementation of an excellent and accessible system of programs, services, and public spaces that reflect Richmond’s demographics, rich heritage, diverse needs, and unique opportunities, and that facilitate active, caring, and connected communities.*

2.3. *Outstanding places, programs and services that support active living, wellness and a sense of belonging.*

This report supports Council’s 2014-2018 Term Goal #3 A Well-Planned Community:

*Adhere to effective planning and growth management practices to maintain and enhance the livability, sustainability and desirability of our City and its neighbourhoods, and to ensure the results match the intentions of our policies and bylaws.*

3.1. *Growth and development that reflects the OCP, and related policies and bylaws.*

This report supports Council’s 2014-2018 Term Goal #4 Leadership in Sustainability:

*Continue advancement of the City’s sustainability framework and initiatives to improve the short and long term livability of our City, and that maintain Richmond’s position as a leader in sustainable programs, practices and innovations.*

4.2. *Innovative projects and initiatives to advance sustainability.*

This report supports Council’s 2014-2018 Term Goal #5 Partnerships and Collaboration:

*Continue development and utilization of collaborative approaches and partnerships with intergovernmental and other agencies to help meet the needs of the Richmond community.*

5.1. *Advancement of City priorities through strong intergovernmental relationships.*

This report supports Council's 2014-2018 Term Goal #6 Quality Infrastructure Networks:

*Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.*

*6.1. Safe and sustainable infrastructure.*

This report supports Council's 2014-2018 Term Goal #8 Supportive Economic Development Environment:

*Review, develop and implement plans, policies, programs and practices to increase business and visitor appeal and promote local economic growth and resiliency.*

*8.3. The City's agricultural and fisheries sectors are supported, remain viable and continue to be an important part of the City's character, livability, and economic development vision.*

## **Findings in Fact**

The City-owned Garden City Lands are approximately 55.2 hectares (136.5 acres), located on the eastern edge of Richmond City Centre. The Garden City Lands (the Lands) is a unique combination of agricultural and ecological functions resulting in what will be a singular agriculturally focused public space in Metro Vancouver. While the Lands is designated a city-wide park, because it is located in a high-density neighbourhood, it is envisioned to serve primarily as an agriculturally productive space within the local community. Several existing and planned greenway and pedestrian connections will also make the Lands a destination for many visitors city-wide and throughout Metro Vancouver.

In 2014, Council approved the Garden City Lands Legacy Landscape Plan as a framework for the future detailed planning and development of the Garden City Lands. In July, 2016, the Garden City Water and Ecological Resource Management Strategy and the Garden City Lands Park Development Plan were presented to Council. Based on these studies and direction from Council, staff are now implementing the Park Development Plan (Attachment 1).

## **Analysis**

### **2017 Construction Season Review**

A significant amount of work was completed in the past year on the Garden City Lands. Project related tasks completed in 2017 include:

- **Perimeter Trail Completed**: The 2.9 km long, twinned recreational multi-use trail construction was substantially completed. One side of the Garden City Road frontage was opened to public use this past fall prior to the Harvest Fest event.

- Seepage Barrier Completed: The compacted clay impermeable underground dam substantially surrounding the Bog was completed. Water levels in the Bog have risen and will be monitored as per a three year hydrological study.
- KPU Farm Field Established: Fill establishing the initial phase of the KPU Farm was placed and cover cropped. Peat soil amendments were imported for use on the field. A soil amendment and quality improvement plan was created with McTavish Consulting in coordination with the ALC for implementation in 2018 (Attachment 2).
- Agriculture Buffer Planting: In excess of 700 trees and 50,000 shrubs have been planted along the entire length of the perimeter trail, significant portions of The Rise and along the central Dike. Existing soils were amended with soil amendments sourced from both on and off the site.
- The Rise: This area of the site was graded, trail and agriculture buffer plantings installed and hydroseeded with grasses.
- Drainage Infrastructure and Pond: An irrigation storage pond was created adjacent to the KPU Farm. The pond has filled over the last few months and water levels are being currently monitored. Several drain basins and weir gate structures have been installed to regulate water levels in the Bog and in the western half of the site.
- Harvest Fest: The first Harvest Fest celebration of Richmond's agriculture heritage and active food scene was held in the fall. Over 5,000 visitors came to this Canada 150 agriculture and food event.
- Ongoing Site Monitoring: Studies documenting site hydrology, soil quality and environmental indicators are ongoing.

### 2018 Proposed Work Plan

There are a number of tasks which are planned to be completed in 2018. These planned tasks are subject to change due to unforeseen circumstances, weather and site conditions. Many of the proposed work plan items fall under either of the following categories:

1. Tasks related to existing ALC Approvals the City has received to date (KPU farm soil placement of soil and the installation of the perimeter trails); or,
2. Agriculture-related proposed works which align with existing ALC policies and therefore do not require formal ALC permission to proceed.

The proposed work plan for 2018 will be funded through previously approved capital budget requests.

The following proposed tasks may proceed under existing ALC Approvals:

- Public Access to the Perimeter Trails: Current ALC Approval allows for formal public access to only the perimeter of the site. Full public access will be provided in 2018 to the three remaining frontages. In anticipation of future construction activity occurring on the site over the next several years, staff propose to maintain one trail for construction vehicle access. Once construction is substantially completed on site, the final lift of granular material on the remaining lengths of trail will be installed. Trail construction follows recommended engineering standards in the design provided to the City.

Trail construction methods adhere to the conditions of the ALC Approval allowing for their installation.

- Soil Importation: Staff expect to complete the importation of soil material for the entire 8 ha (20 acre) KPU farm area in 2018. This activity was previously approved by the ALC in 2017. Soils will be imported from select sites and will follow the soil importation protocol established by McTavish Consulting on behalf of the City (Attachment 3). Following practices already in place since 2017, the process sourcing appropriate fill, testing and overseeing importation will be overseen by the City's Qualified Environmental Professional (QEP). These recommendations, protocols and processes were created in consultation with the ALC and the City's QEP (McTavish Resource Management and Hemmera). No contaminated material will be imported to the Lands. This plan has been shared and accepted by ALC staff and the KPU program. Following soil best management practices, cover crops will be applied to fill areas not slated for immediate active cultivation by KPU.

The following proposed tasks relate to aspects of the project which may proceed without formal ALC Approval:

- Agriculture Buffer Planting: As per the ALC Approval for the perimeter trails and in conformance with permitted agriculture related activities which do not require ALC approval to proceed, staff will continue to plant appropriate native and cultivated (for agricultural production) plant material throughout the site. Additionally, hydroseeding will occur to maximize coverage of cultivated soils in planting beds. Staff will focus on watering throughout the growing season to ensure, to the greatest extent possible, a high survival rate for the plant material already installed. Planting will cease in late winter and resume in early fall as per horticulture best management practices. Planting will also occur in the area where the Rise transitions down to the KPU farm fields will act as an agricultural buffer for beneficial insect habitat, limiting public access to the fields and address drainage control issues.
- The KPU Farm: Assisting the KPU program with launching their inaugural farming season on the currently filled portion of their Farm. This will include assisting the coordination for the importation and incorporation of soil amendments.

- Water Courses: Ongoing management of the site's drainage particularly in the vicinity of the KPU Farm. A network of drainage ditches and a formal canal constructed to expand water storage capacity. Subject to KPU's soil and water management strategy for their fields, drain tile may be also installed.
- Community Orchards: An orchard (to be managed by the KPU Farm School Program) will be planted at several locations on the Rise. The proposed park program for this area in the Park includes a large meadow and open lawn area for passive enjoyment of the vast open space including sitting, lying down, picnicking and kite flying.
- Environmental Monitoring: Ongoing hydrological study and environmental monitoring will continue throughout 2018 as part of the long term study of the site. Water levels in the Bog will be of particular significance as this will be first full season after the installation of the clay seepage barrier in 2017.

#### Coordination with the Agricultural Land Commission (ALC)

As per the ALC's approval of the perimeter trails, the ALC is supportive of the City's intention to showcase agricultural operations and finds the Garden City Lands project as an opportunity to increase awareness of surrounding farms and farm practices in Richmond. City staff are in regular contact with the ALC regarding currently approved work and addressing any questions as they arise; this includes:

- August 2017 meeting: City and ALC staff met to discuss the list of proposed improvements which would require ALC approval;
- Fall 2017: City staff finalized the list of required approvals and ALC staff approved the final list;
- February 2018: City staff met ALC staff to confirm previous discussions and direction received from ALC staff and review of potential farming activities which require approval and those which can proceed with notifications only; and
- Ongoing: City staff hold a monthly conference call with ALC staff to provide regular updates on current and planned activities, coordinating outstanding items and reviewing any issues pertaining to the Non-Farm Use Application.

Staff have provided the ALC information on the proposed work to amend the soil currently in place for the initial phase of the KPU Farm. Additionally, a soil management protocol has been created by McTavish Consulting and provided to and accepted by the ALC.

#### Agriculture Advisory Committee (AAC)

Staff provided a project update to the City's Agriculture Advisory Committee (AAC) on February 1, 2018. Staff received comments and input.

#### **Financial Impact**

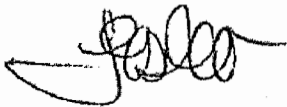
None.

February 14, 2018

- 7 -

## Conclusion

Steady progress has been made toward implementation of the Garden City Lands Park Development Plan, with construction well underway. The work is proceeding according to all applicable regulations, best practices and the recommendations of a range of expertise specific to this site and the unique combination of uses being developed for it.



Jamie Esko  
Manager, Parks Planning & Design  
(604-233-3341)



Alex Kurnicki  
Research Planner II  
(604-276-4099)

- Att. 1: GCL Park Development Plan (5747583)
- 2: McTavish memo for Amending the Soil on KPU Farm (5695383)
- 3: McTavish memo for Importing Soil (5695380)



**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 Trails

**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

Scale 1:1000

Garden City Lands: Park Development Plan





#300 – 15300 Croydon Drive  
Surrey BC  
V3S 0Z5

Date: December 19, 2017

Attn: Alex Kurnicki

From: Bruce McTavish PAG

Re: Garden City Lands Spring Soil Management Plan

The following document is based on discussions between the City of Richmond (CoR), Kwantlen Polytechnic University (KPU) and McTavish Resource & Management Consultants Ltd. (McTavish). The purpose of the memo is to document the planned spring activities on the filled area at the Garden City Lands.

The site was filled during the summer and fall of 2017 with soil that is predominantly sandy loam to loam. McTavish sampling and testing in 2017 indicated that: “The Garden City Lands soils meet the good to fair criteria for all parameters except organic matter and electrical conductivity (EC). The soils can be amended to meet the “good” criteria for each parameter of topsoil quality through the incorporation of peat or other organic matter into the soil profile. McTavish recommends well-decomposed peat (H5-H8 on the Van Post Scale for humification) to increase the organic matter of the soils to at least 3.5%.”

In the late fall of 2017 a cover crop of fall rye and clover was seeded. The fall rye has germinated and established prior to winter. The following steps will take place in the Spring of 2018:

- Till in the cover crop.
  - Incorporation of the cover crop will increase the organic matter of the coarse textured (sandy soil).
- Screen the peaty/organic soil that is on the site per McTavish memo of December 18, 2017.
  - Screening of the peat will remove all coarse debris (wood pieces) and the clumps of clay/silt mineral soil that are in the stockpiled peat. This will improve its attributes as a soil conditioner.
- Spread peat on the existing fill over the surface at ~300 m<sup>3</sup> per acre which will increase the organic matter in the existing fill to ~3.5% (McTavish memo September 19, 2017).
- Once the peat has been spread incorporate (cultivate) it into the existing mineral soil.
- Incorporate other organic soil conditioners such as manure and/or compost if available and incorporate into the existing fill.
- Test the site for soil fertility to determine fertilizer requirements.
- Plant forage grass/legume crop and grow for one season to increase organic matter and establish soil macropores.

McTavish will monitor the soil and report on its quality and make recommendations if further amendments are required.

On a small section of the property ~20% KPU will establish small scale plots as small individual farm units. On these areas a mixture of manure, peat, and other soil amendments/conditioner allowed by ALC will be incorporated into the fill to increase the organic matter content and improve the soil.



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Surrey BC  
V3S 0Z5

Date: December 19, 2017

Attn: Alex Kurnicki

From: Bruce McTavish

**Re: Source Soil Management**

This memo outlines the steps to take place when soil is sourced for transport and deposit at the Garden City project.

The soil for the Garden City must adhere to the ALC guidelines for soil and the BC Contaminated Site Regulations (BCCSR) – Schedule 4 for Agricultural Lands.

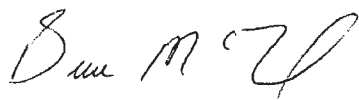
The owner or contractor of the source soil will need to provide a Phase 1 Environmental Assessment.

When a source of soil has been identified, the following steps will be taken:

- 1) On behalf of the City of Richmond, an Agrologist with expertise in soil science and soil handling will review available documentation including a Phase I Site Investigation (environmental assessment) report for the site from which the soil originates.
- 2) The Agrologist must visit the source site and evaluate the soil for suitability as fill on the Garden City lands, and report on whether and how conditions of the ALC for soil will be met. This evaluation starts with on site visual observations of the site and the soil. Based on the observations and review the Agrologist can:
  - a. Reject the soil
  - b. Approve the soil and then
  - c. Proceed with a soil investigation program, including sampling and sample analysis.
  - d. Ensure that soil meets the KPU specification attached to ALC decision 56119
- 3) The Agrologist must prepare a protocol for the soil handling before transportation of the soil to the Garden City Lands. The protocol will be site specific and include:
  - a. Supervision of soil handling
  - b. Separation and set aside of topsoil
  - c. Separate transport of topsoil and other soil to the Garden City property
  - d. Placement of soil and topsoil to mimic the original profile, and
  - e. Monitoring of stoniness
  - f. Monitoring of non-soil inclusions such as asphalt and concrete and procedures for removal of such items.

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The Agrologist may recommend that screening of the soil to remove inclusions takes place before transport of the soil to the Garden City property.



Bruce McTavish MSc MBA PAg RPBio  
Senior Agrologist

