



# Swan Lake Park

## Parks Operations and Parks Refresh Draft Plan

November 2, 2020

Operations Department



# Agenda

- Background/Purpose Parks Refresh Plan
- Citywide park improvement/refresh criteria
- Parks service level standards Citywide
- Parks capital lifecycle replacements Citywide
- Swan Lake Park/Laura and Alf Weaver Park
  - Current Amenities
  - Outcomes of public and third party consultation
- Park Refresh Plan – Initiatives
- Parks Refresh Timelines
- Next Steps



## Background/Purpose – Parks Refresh Plan

At the June 23<sup>rd</sup>, 2020 Council meeting, Environmental Services staff presented the Swan Lake Water Quality Improvement Program.

Council asked staff to report back:

- In Fall of 2020 on additional options relating to vegetation, tree planting and strobe lights with regard to geese control, and report back in fall of 2020 with recommendations (Phase 1);
- In 2021, on an overall water quality (with service levels) and a park improvement program (Parks Refresh Plan) that will be sustainable (Phase 2);
- To General Committee through the Markham Sub-Committee with the participation of Friends of Swan Lake;

**The purpose of this meeting is to obtain feedback from the Friends of Swan Lake on a Park Refresh Plan prior to developing both Capital and Operating budget requests for Capital for consideration in the 2021/22 budget cycle.**



## Citywide Park Improvement/Refresh Criteria

- Citywide park improvements are intended to enhance missing or resident group desired amenities in existing parks to make the park more relevant to users, subject to yearly budget approvals and maximum spending limits.
- Citywide park improvements include pollinator, tree and wetland garden plantings, benches, games tables and where not present small shade structures subject to yearly budget approvals and maximum spending limits.
- Citywide park improvements are considered to be “light touches” and do not include large scale projects. Parks operating budgets cover the needs of over 200 parks in all 8 wards. New initiatives and changes in all parks are subject to available funds.
- Citywide park improvements do not include regular maintenance activities such as pathway repairs, horticultural garden renovations, enhanced grass maintenance or lifecycle related replacements.



## Parks Service Level Standards Citywide

Parks grass cutting per Council approved service level of 12-14 day cycle Citywide. Includes cutting parks, pathway allowances, City boulevards, facilities, naturalized area perimeters.

Waste receptacle servicing varies by location and park use and type of container. Litter and debris pick-up year round is the second most time consuming task for Operations staff next to grass cutting in summer months of operation.







## Parks Service Level Standards Citywide

Parks pathway resurfacing is a yearly Citywide program which addresses trip edges greater than 2.0cm meeting Provincial Legislation O.Reg. 239/02. Minimum Maintenance Standards. Replacements are based on yearly condition assessments in all parks and priority rated subject to approved budgets.



Horticultural bed rejuvenation is yearly Citywide program to address overgrown beds no longer performing as intended and replace with low maintenance options using pollinators where possible. Priority rated subject to approved budgets.





## Parks Capital Lifecycle Replacements

Playground structures along with the site specific safety surfaces are replaced based on condition assessment and CSA compliance. Similar assets include splash pads and exercise equipment.



Parks assets are refurbished or replaced based on condition assessment. Assets included are gazebos, stairs, sports field lighting, fences, court surfacing, gates and bollards, City furniture and fountains.







# Swan Lake Park/Laura and Alf Weaver Park







## Swan Lake Park/Laura & Alf Weaver Park

- Swan Lake was formed through quarrying activities performed in the 1970s and 1980s and has been developed in sections related to residential development over the last 15+ years.
- Laura and Alf Weaver Park was completed in 2018 following public consultation adding an additional playground, tennis courts and skate spot literally across the road from Swan Lake Park.  
The area on the west side of Swan Lake was completed in 2019.
- The section of the park from Williamson Road to the Amica site was previously a naturalized area until development in 2019. The City conducted a comprehensive pruning, removal and clean-up in the spring of 2020 to address the change in use.
- Plantings in the naturalized area on the north side occurred in the summer of 2020 adding to previous pollinator plantings.



## Swan Lake Park/Laura & Alf Weaver Park Combined Amenities

	Swan Lake Park	Laura and Alf Weaver Park
<b>Total area:</b>	5.6 hectares	1.6 hectares
<b>Total pathways:</b>	2250m	750m
<b>Splash Pad:</b>	1	
<b>Play Structures:</b>	1	1
<b>Benches:</b>	24	16
<b>Gazeebos:</b>	1	1
<b>Observation Dock:</b>	1	
<b>Bridges:</b>	3	



## Public Consultation Swan Lake Park/Laura and Alf Weaver Park

Public consultation for Laura & Alf Weaver Park took place on March 29, 2016 which included feedback on the newest section of Swan Lake Park. The meeting had the following outcomes.

- Residents felt the southeast corner of Swan Lake Park should be naturalized
- Residents were in favor of a playground for Laura and Alf Weaver Park and requested a rubberized surface the same as Swan Lake Park
- Residents were in favor of tennis courts provided that they were located close to Williamson Road citing parking concerns
- Residents were in favor of a skateboard facility and basketball courts. It was noted that basketball was supported at local schools
- Residents requested buffers on north and south sides of park to act as wildlife corridors between this park and Swan Lake Park.





## Third Party Consultation - TRCA

- Successful shoreline improvement projects provided by the Toronto and Region Conservation Authority (TRCA) for review. Design consultation project for Swan Lake shoreline improvements will be submitted to Council in 2021 seeking approval for consideration in 2022. Design stage will include invasive plant reduction and replacement strategy. Shoreline improvement construction projects dependent upon design outcomes and subject to future budget approvals.
- Consultation to investigate the introduction of fish species will be part of the water quality assessment exercise and not part of the Park Refresh program.





## Parks Refresh Plan - Initiatives

- 1. Pollinator Plantings** – add to existing naturalized areas and create new sites to plant and naturalize.
- 2. Rain Garden** – plant the bio swale on Williamson Road with plant materials suited to wet areas as a demonstration garden
- 3. Understory Plantings** – introduce new native species of trees on the periphery of the woodlots and in naturalized areas
- 4. Invasive Species Strategy** – treatment (Hypena moth) and removal of Dog Strangling Vine. Address Black locust close to walkways to reduce risk from thorns. Understand the long term strategy to address removal of Manitoba Maple and Black Locust understanding that they comprise valuable canopy.
- 5. Shoreline Improvements** – engage the TRCA for the design stage of modifications to establish options to consider.
- 6. Education and Outreach Opportunities** – signage, aimed at education and engagement. Community group events (once allowable) for planting and maintenance opportunities



## Initiatives 1&2 – Pollinator and Rain Garden



### Overview of Options

- Additional pollinator plantings in northeast area, new area on west side of pond  
Newly created Rain Garden in swale along Williamson Road

### Cost

\$3.0K to \$4.0K over 2 years to be funded through Parks Renaissance and Parks Horticulture budgets subject to approval

### PROS

- Pollinator and Rain Gardens:
  - create habitat for birds, insects and small mammals
  - support healthy ecosystems that clean air, stabilize soils, manage ground water and protect from severe weather
  - provide colour and natural beauty

### CONS

- Pollinator and Rain Gardens:
  - are not widely understood and can appear to be areas which are simply neglected rather than places that are providing homes for insects and birds.
  - are not interactive and can be damaged by human interaction, sometimes rain gardens can be fenced to provide a clear delineation.

*Staff Recommend this option for implementation in 2021 subject to budget approval.*





## Initiative 3 – Understory/New Plantings



### Overview of Option

- Introduce favorable tree and shrub species well in advance of decline or removal of existing trees
- Mitigate canopy loss to a lesser degree through restorative plantings which are proactive

### Cost

\$1.0K over 2 years to be funded through Trees for Tomorrow budgets subject to approval.

### PROS

- Generally use smaller container grown stock with higher survivability, while also planting whips in select areas to compete with certain species seed beds
- Select species to add to diversity, ecosystem support and habitat creation.

### CONS

- May be damaged when removing existing large trees

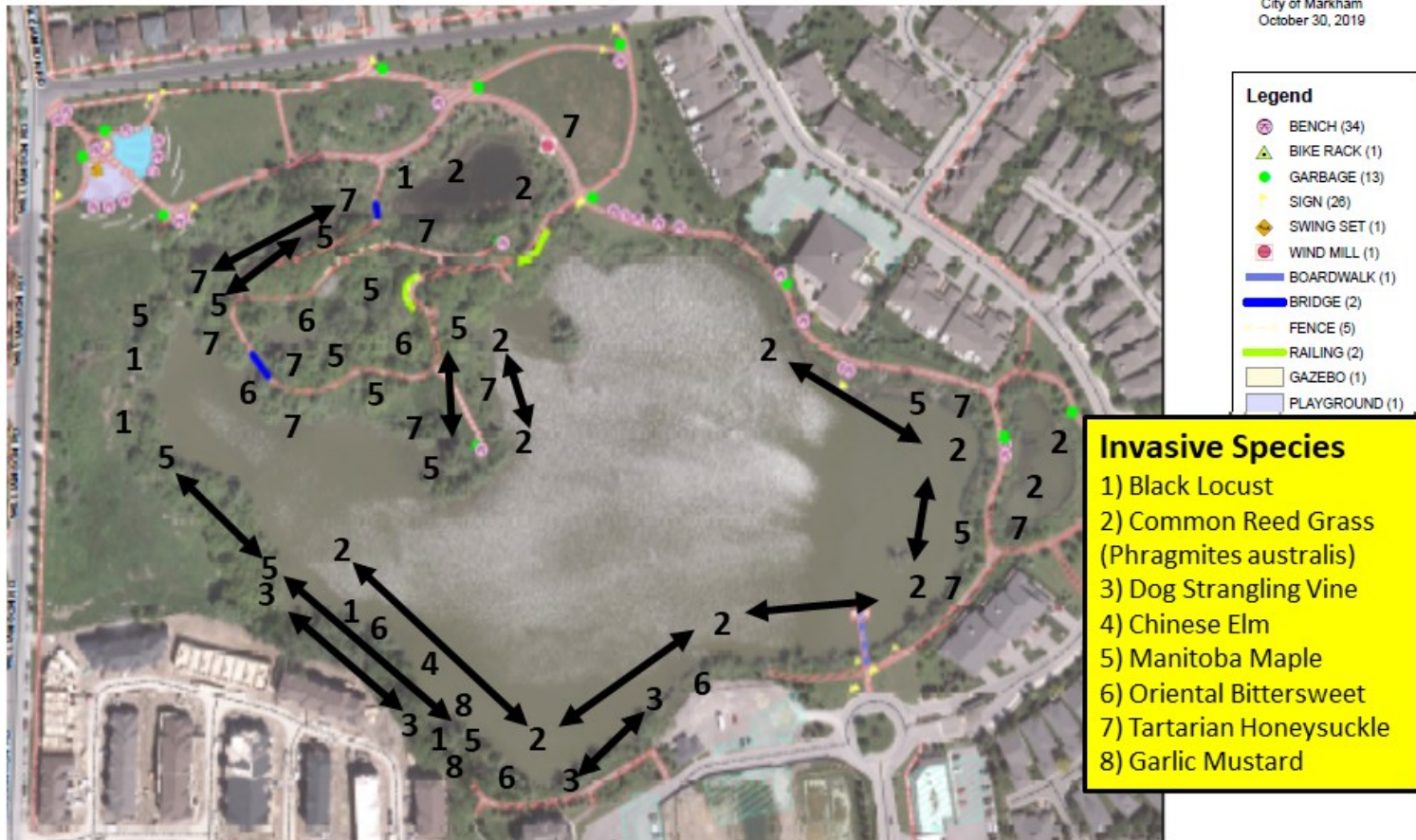
*Staff recommend this option for 2021 implementation subject to budget approval.*



# Invasive Species – Friends of Swan Lake Map

## Invasive Species in Swan Lake Park – June 2020

Working Map of Park Features  
Around Swan Lake  
City of Markham  
October 30, 2019





## Initiative 4 – Invasive Species



### Overview of Option

- Identify species and degree of impact to prioritize removal strategy
- Long term strategy subject to shoreline improvement design plan (common reed grass)
- Use biocontrol agent Hypena moth for control of dog strangling vine
- Reduce contact with black locust trees

### Cost

\$2.5K over 2 years to be funded through Parks Operations operating budgets subject to approval.

### PROS

- Promotes growth of more productive species without restrictions
- Reduces the spread of plants to non infected areas
- Generally considered to be environmentally friendly

### CONS

- Is not 100% effective and requires continued efforts
- Not always practical due to location
- Invasive species may be identified as technically invasive but also serve an urban environmental purpose
- This would be an ongoing initiative

*Staff recommend further review commencing 2021 subject to budget approval.*





## Initiative 5 – Shoreline Improvements



Summer 2011

### Overview of Option

- Improve the current vegetation in areas around the lake subject to design construction costs
- Requires multi-year implementation 2022-2023 (pending budget approval) with proposed works to align with water quality initiative

### Cost

\$35K design consultation 2022, construction costs/timing pending design outcome 2022-2023 subject to budget approvals.

### PROS

- Proven to be a long term, effective solution in reducing resident geese populations by City, TRCA and Canadian Wildlife Service
- Environmental-friendly and non-intrusive – may attract a larger variety of wild bird species
- To be designed to enhance and not detract from the user experience of the park/lake

### CONS

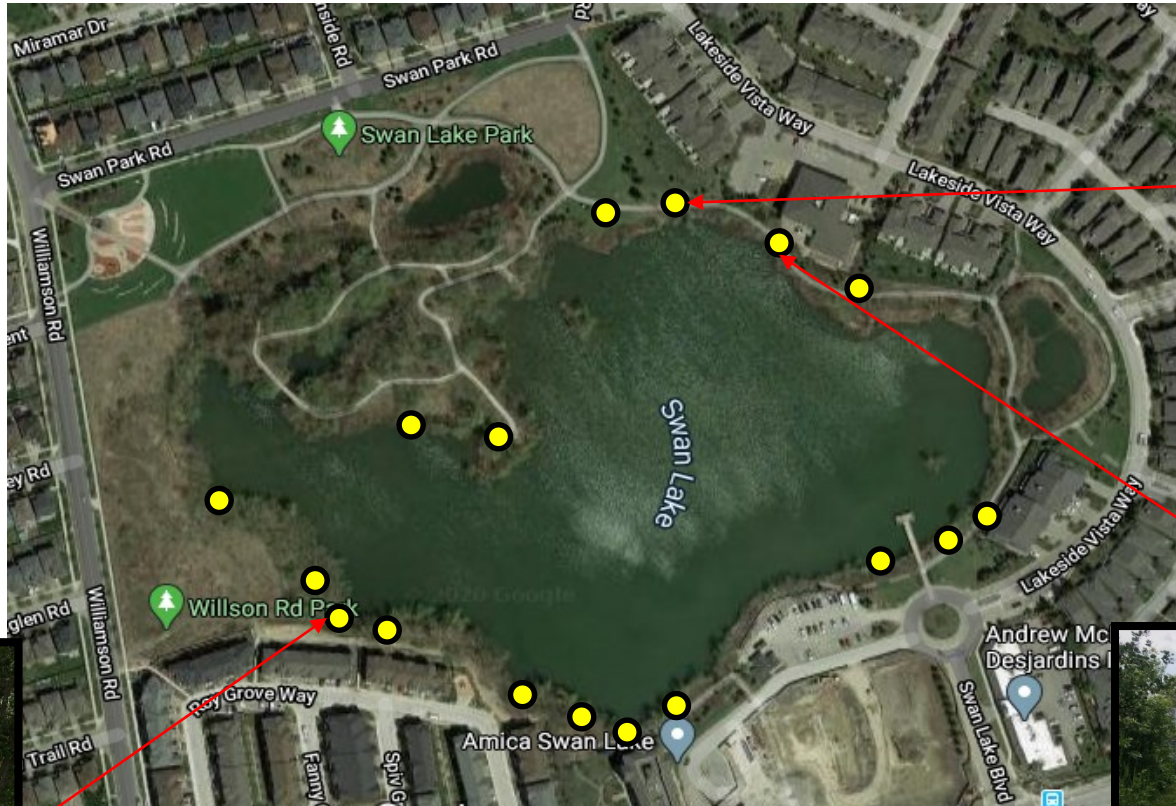
- Could not be implemented in the short term
- Has no significant impact on migratory geese
- May increase the number of geese in surrounding parks/open spaces

*Staff Recommend  
TRCA design  
consultation 2022  
subject to budget  
approval*



# Potential Shoreline Improvement Opportunities

## Access Points from Land to Water



- Locations where no barrier between lake and geese feeding areas are present







## Initiative 6- Education and Outreach

### Overview of Option

- Multi-language or pictorial signage can be provided to provide more information to the public to increase understanding of natural habitats
- Promote understanding of species diversity
- Provide resource links for further information ie. TRCA, MNR
- Engagement with community groups

### Cost

\$1.5K over 2 years to be funded through Parks Operating budgets subject to budget approval.



### PROS

- Low cost option that can be implemented immediately
- Recommended by TRCA

### CONS

- n/a

*Staff recommend for further review in 2021 subject to budget approvals*





## Summary – Parks Refresh Initiatives - Swan Lake Park

Option #	Title	Evaluation	Cost
#1	Pollinator Plantings	Capacity in existing and newly identified areas to add valuable green infrastructure	\$1.0K – \$1.5K 2021 \$0.5K - \$0.75K 2022
#2	Wetland Garden	Swale area on Williamson Road is an ideal location	\$2.0K - \$2.5K 2022
#3	Understory/New Plantings	Can be a yearly program commencing in 2021	\$0.5K 2021 \$0.5K 2022
#4	Invasive Species	Species evaluation required for long term strategy	\$1.0K 2021 \$1.5K 2022
#5	Habitat Modifications	Requires design consultation before plan consideration	\$35K design plan consultation TRCA 2022
#6	Education and Outreach	Lots of opportunity for outdoor education	\$0.75K 2021 \$0.75k 2022



# Questions?