

**Report to:** Environmental Issues Committee  
**Report date:** April 18, 2014  
**Subject:** Markham Trees for Tomorrow Fund, Funding Recommendations - Spring 2014  
**Prepared by:** Nory Takata, Parks Planner – Operations Department  
Community and Fire Services Commission, Ext. 3226

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### **Recommending:**

1. That the funding application from LEAF (Local Enhancement and Appreciation of Forests) for \$30,000 to support LEAF's Backyard Tree Planting Program be approved; (**Appendix 1A,B & C**)
2. That the funding application from Evergreen for \$30,000, for their 'Get Dirty': Community Greening Initiative, be approved; (**Appendix 2**)
3. That the funding application from 10,000 Trees for the Rouge for \$30,000, for their 25<sup>th</sup> Annual Wildlife Habitat Restoration Project, be approved; (**Appendix 3**)
4. That the total amount of \$90,000 be funded from the 2014 Markham Trees for Tomorrow Capital Project account #700-101-5399-14214;
5. That funding from the Trees for Tomorrow program for the next 7 years (2015 to 2021) at \$0.12M/year totalling \$0.8M be committed as a funding source to partially offset the December 2013 ice storm response and recovery costs;
6. That staff be authorized and directed to do all things necessary to give effect to these recommendations.

### **Discussion:**

The purpose of this report to the Environmental Issues Committee is to provide funding recommendations for the 2014 Spring funding cycle of Markham's Trees for Tomorrow Fund. While very different in focus and execution, each of the three tree planting initiatives includes community engagement and public education as key elements in their project plans. Community engagement, in turn, is a decisive factor on which the successful achievement of the Trees for Tomorrow Program's broad range of objectives is predicated.

Put simply, most of the broad objectives of the Trees for Tomorrow Program including increasing the percentage of tree canopy, native biodiversity and ecosystem function of Markham's Urban Forest would not be possible without the full support of the community. Community engagement at this scale is one of this program's main buttresses to support the program's ongoing success and a good gauge of the level of public awareness about the significant social, economic and environmental benefits that reward the combined efforts contributed in support of this program.

The significant, fundamental role that community engagement must continue to play in the successful management of all of our natural assets at the local level is quite clear. No better proof of this assertion can be found than one of the most current and industry accepted model templates used for the drafting of municipal Urban Forest Management Plans. In this model, **Community Framework**, the net product of all tree related community engagement activity, comprises one of three main pillars of successful urban forest management, as depicted in the following excerpt from a peer reviewed article published in the Journal of Arboriculture and Urban Forestry:

**The success of urban forest management is frequently predicated upon achieving absolute canopy cover targets. This two-dimensional view of the urban forest does not provide a comprehensive assessment of urban forest stewardship in a community and does not account for an area's potential to support a forest canopy. A comprehensive set of performance-based criteria and indicators concerning the community's vegetation resource, community framework ... provides a more useful tool for the evaluation of urban forest management success and strategic management planning. (Kenney et al, 2011)**

As recommended, the combined total for the three funding applications represents a total commitment of \$90,000 from the Trees for Tomorrow Fund to support projects with a combined value in excess of \$206,300 plus \$87,161 worth of in-kind services upon completion. Furthermore, 900 volunteer hours (conservatively estimated) have not been included in the projects values. Collectively, these tree planting initiatives demonstrate the great success of the Trees for Tomorrow Program that extends well beyond exceeding ambitious tree planting targets and represent a return on investment towards a sustainable future that is seldom achieved.

## **Project Summary**

### **1. LEAF: Backyard Tree Planting Program – requesting \$30,000 (Appendices: 1A, B & C)**

LEAF is a well known and highly regarded non-profit organization whose subsidized Backyard Tree Planting Program is a high quality, full service tree planting program. Beyond the significant cost savings, the homeowner consultation with one of LEAF's certified arborist ensures that the species selected is well suited to the site conditions and even considers energy savings, which affirms LEAF's commitment to live up to their credo of 'improving our urban forest one tree at a time'.

As the rate of ash tree loss due to the Emerald Ash Borer continues to rise, this residential tree planting program will help homeowners replace privately owned ash trees at a reasonable cost. All homeowners are provided with a reference guide booklet about essential tree care and maintenance to help ensure the long term health and performance of their tree.

LEAF's annual Markham Tree Tours and Tree Tenders Volunteer Workshops serve both to promote their Backyard Tree Planting Program as well as to help increase the level of awareness, appreciation and engagement of the community in support of our efforts to enhance Markham's Urban Forest. Through the wide range of benefits and ecological services provided by the urban

forest, LEAF's role as one of Markham's key partners in the Trees for Tomorrow Program takes on even greater significance.

Deliverables include:

- 165 household consultations to ensure residents select 'the right tree for the right place'
- Provide education on tree care 'best practices' and benefits of the urban forest
- Plant 280 native trees; 230 native shrubs and deliver 5 native garden kits
- Organise and conduct Markham tree tours
- Offer Tree Tenders Workshop to Markham residents; support other Markham events

LEAF's application includes a detailed program description (including project management team) and budget for review. Total project cost is \$92,000 and the amount requested from the Trees for Tomorrow Fund is \$30,000.

The requested funding of \$30,000 from the Markham Trees for Tomorrow Fund would be allocated as follows:

• Office Coordination	\$ 6,000
• Yard Consultations	\$ 7,500
• Plant Materials	\$ 8,300
• <u>Planting</u>	<u>\$ 8,200</u>
<b>Total</b>	<b>\$30,000</b>

***Recommendation: that the funding application from LEAF for \$30,000 to continue to offer the Backyard Tree Planting Program and related Urban Forest educational activities in 2014 be approved.***

## **2. Evergreen: Get Dirty-Community Greening Initiative, requesting \$30,000 (Appendix 2)**

Now entering the 6<sup>th</sup> year as a partner with Markham's Trees for Tomorrow Program, Evergreen has helped to build and sustain volunteer participation with Trees for Tomorrow Community Planting Events, while helping to organize, increase volunteer base and stewardship opportunities that have contributed greatly to the early establishment and survival rates of newly planted trees. Moreover, Evergreen has helped to augment the level of invasive species removal that currently afflict and threaten to reduce the native biodiversity of our parks and natural areas.

Deliverables include:

- Plant 675 native trees and shrubs, along with a minimum of 250 native wildflowers
- Organize and support 8 to 10 Volunteer Stewardship Events
- Support all aspects of 4 or more Community Planting Events
- Continue to incorporate and expand educational component of all volunteer activities

The plantings and events will take place at Austin Drive Park, Berczy Park, German Mills Settlers Park, Feiheller Park and the south-west ponds located at the termination of Denison Street, east of Markham Road. A detailed program description and budget are included for review (Appendix 2). Total project cost is \$53,000 and the amount requested from the Trees for Tomorrow Fund is \$30,000.

The requested funding of \$30,000 from the Markham Trees for Tomorrow Fund would be allocated as follows:

• Native trees and shrubs	\$13,500
• Volunteer refreshments	\$ 800
• Volunteer tools	\$ 1,120
• Transportation	\$ 2,360
• <u>Project Coordination</u>	<u>\$12,220</u>
<b>Total</b>	<b>\$30,000</b>

***Recommendation: that the funding application from Evergreen for \$30,000 to continue with the Markham Get Dirty: Community Greening Initiative for 2014 be approved.***

### **3. 10,000 Trees for the Rouge: 25<sup>th</sup> Annual Habitat Restoration Project, requesting \$30,000 (Appendix 3)**

10,000 Trees for the Rouge's 25<sup>th</sup> Annual Habitat Restoration Project will help to restore woodland habitat, increase tree canopy and native species biodiversity within the Rouge Watershed at the south east section of Milne Dam Conservation lands. This planting will help to restore approximately 5 acres of woodland habitat, increase tree canopy and enhance native species biodiversity through the planting of 5,500 native trees and shrubs. This annual tree planting event attracts over 2,000 volunteer participants in a given year, the value of which is not adequately measured by monetising.

Deliverables include:

- Increase areas of significant woodlands, biodiversity and connect forest fragments;
- Offset tree canopy loss due to Emerald Ash Borer in Milne Park lands
- Displace alien species / non-native vegetation
- Engage more than 2,000 community volunteers; enrich volunteer experience with education

A detailed project description and budget are appended for review. The total project cost is \$61,300 plus \$87,161 worth of in-kind services and the amount requested from the Trees for Tomorrow Fund is \$30,000.

Requested funding of \$30,000 from the Markham Trees for Tomorrow Fund would be allocated as follows:

• Native Trees and Shrubs	\$17,550
• Supplies, planting equipment & tools	\$ 6,625
• Follow up monitoring, maintenance and infill planting	\$ 1,450

• <u>Event support, promotion and safety measures</u>	<u>\$ 4,375</u>
<b>Total</b>	<b>\$30,000</b>

***Recommendation: that the funding application from 10,000 Trees for the Rouge for \$30,000 to conduct their 25<sup>th</sup> Annual Habitat Restoration Planting Project be approved.***

The following chart shows the recommended expenditures from the 2014 Markham Trees for Tomorrow capital budget (account 700-101-5399-14214):

<b>Markham Trees for Tomorrow Funding 2014</b>	
<b><i>Markham Trees for Tomorrow Funding 2014 Approved Budget</i></b>	<b>\$120,000</b>
<b><i>Spring Funding Recommendations for 2014</i></b>	
LEAF – Backyard Tree Planting Program	\$30,000
Evergreen – Markham ‘Get Dirty’: Community Greening Initiative	\$30,000
10,000 Trees for the Rouge – 25 <sup>th</sup> Annual Habitat Restoration Project	\$30,000
<b>Total</b>	<b>\$90,000</b>
<b>Markham Trees for Tomorrow: Funds Remaining</b>	<b>\$30,000</b>

***\*Funds remaining will support community tree planting projects and Trees for Tomorrow events in the Fall***

Note that as communicated to Council on January 14, 2014 through the Ice Storm – December 2013 presentation, funding from the Trees for Tomorrow program for the next 7 years (2015 to 2021) at \$0.12M/year totalling \$0.8M will be committed as a funding source for the December 2013 ice storm response and recovery.

- Appendix 1 (A, B&C) – LEAF Backyard Tree Planting Program
- Appendix 2 – Evergreen 2014 Community Greening Initiative
- Appendix 3 – 10,000 Trees for the Rouge: 25<sup>th</sup> Annual Habitat Restoration Project





101 Town Centre Boulevard,  
Markham, Ontario, L3R 9W3

# Markham Trees for Tomorrow Fund

## Applicant's Guide and Application Form

### What is the Markham Trees for Tomorrow Fund (MTTF)?

Trees provide substantial environmental, social and economic benefits to our community. In addition to providing measurable improvements to air quality and reduction of atmospheric carbon, trees help to prevent soil erosion, reduce energy consumption and provide habitat for wildlife. With the Markham Trees for Tomorrow program, more than 90,000 trees will be planted by 2014. This fund provides grants for tree planting projects to an upset limit of \$30,000.

### Who Can Apply?

- Markham Community Groups'
- Non Governmental Organizations
- Public Agencies

All plantings must be on publicly owned and accessible lands in the City of Markham.

### What are the Program's Requirements?

Applications will be considered by the Environmental Issues Committee for recommendation to General Committee and Council.

All applications must:

- involve the active participation of community volunteers
- identify other sources of funding raised by the applicant

All applications must include:

- **detailed site plan** prepared by a landscape architect or certified forester, describing existing site conditions, any necessary site preparation prior to planting and how the site is to be accessed before, during and after the planting
- **detailed planting plan** prepared by a landscape architect or certified forester, including: species list, planting specifications and cost estimate; and briefly state the rationale behind species selection, planting densities and distribution within the context of the planting site; start and end date for the project
- **detailed event planning logistics** such as: locations of pathways; staging areas for the temporary placement of trees, mulch and other supplies; parking and traffic control requirements
- **written commitment** to monitor and provide follow up maintenance to ensure long term success for the project

### What are the Funding Criteria for an Application?

- applicants can request a maximum of \$30,000 from the MTTF per project per year for projects that will be completed within that same one-year time frame (12 months from issuance of cheque)
- only materials and equipment costs (not consulting services) are eligible for funding from the MTTF
- any groups that received funding for projects which have not been completed to the satisfaction of the City are not eligible for future funding
- funding will not be granted where projects have been commenced.

### When are the application deadlines?

Applications must be submitted by February 14, 2014 for Spring funding.

### How Do I apply?

- Step 1 Contact the Parks Planner** about your proposed project and to request an application form. (Telephone: 905-477-7000 ext. 3226 e-mail: [ntakata@markham.ca](mailto:ntakata@markham.ca))
- Step 2 Complete the Application Form.** Please ensure that it is legible and signed.
- Step 3 Prepare required supporting information**, such as illustrations and maps and attach them to the application form. In the event the Registered Owner of the lands is an entity other than the City of Markham, a letter must accompany the application stating that: the Owner consents to this application; acknowledges that the proposed project complies with all its applicable policies and requirements; and, that the writer has the authority to give its consent. Sufficient and complete information must be provided with the application for the Environmental Issues Committee to make a decision.
- Step 4 Submit your application to the Parks Planner, Operations, City of Markham, 101 Town Centre Boulevard, Markham, Ontario, L3R 9W3.**

### Application Checklist

Please ensure that your application is complete. Are the following included in your submission?

- A complete and signed application form, including all budget and funding details
- All supporting documentation such as a detailed site plan, species list, planting specifications etc.
- Consent letter from registered owner, if applicable

### What will happen next?

The Environmental Issues Committee will review all applications taking into account the established objectives and criteria described above. They may choose to grant the right to the applicant to present their proposal, if requested. They will determine which projects should be funded and how they should be funded (in a single payment or in phases) and make a recommendation to General Committee and Council.

### How will I be notified?

An acknowledgement will be sent upon receipt of an application. If your project is approved for funding, you will be contacted. If your application is not approved, you will be informed in writing.

### What happens after the Project is completed?

Upon completion of the project and no later than 12 months from delivery of the funding, you are required to submit your project report. Include a project summary and photos so we can review and promote your project, together with the completed consent forms permitting use of your photographs by the City (copy attached).

### What does a Project Report Contain?

- accounting of how all funding has been spent
- original copies of paid invoices
- photographs for review and promotion of the project
- completed consent form for use of photographs

A project format will be provided to assist you in preparing the report.

# Application Form

For Office Use Only - Project No.:

## Group Information

Name	LEAF – Local Enhancement & Appreciation of Forests		
Address	Artscape Wychwood Barns, 601 Christie St, Suite 253, Toronto, ON M6G 4C7		
Phone	416-413-9244	Fax	416-413-1073
Email	info@yourleaf.org	Website Address	www.yourleaf.org
Charitable/Non-Profit Organization registration # (if applicable) <b>86953 6805 RT0001</b>	Our Group has a bank account in the name of our organization <b>Yes</b>		

Briefly describe what your group does:

LEAF is a not-for-profit organization dedicated to the protection and improvement of our urban forest. Since 1996, LEAF has actively engaged residents in urban forest stewardship through planting, education and training. We envision a city that is healthier because every citizen cares for the urban forest. To accomplish this, we have set a mission to raise public awareness, foster a sense of ownership, engage diverse communities, provide educational tools and resources and facilitate urban forest stewardship in York Region and Toronto. LEAF's key programs available to City of Markham residents include the following:

**Subsidized Full Service Backyard Tree Planting Program** – This program provides hands-on assistance to residents who want to plant a tree in their backyard. LEAF staff help property owners select appropriate native species and planting locations, in addition to providing extensive education and tree care information in order to encourage proper stewardship. Program participants pay a portion of the cost (approximately \$150-220 per tree) which includes a 45 minute on-site consultation with a LEAF arborist, a 5 to 10 foot tall tree and full planting service. Property owners agree to provide tree care as instructed. A variety of native shrubs, as well as Native Garden Kits and Edible Garden Kits are also available for purchase.

**Tree Tours** – LEAF's Tree Tours are guided walking tours that highlight trees of interest in a neighbourhood and may also incorporate history, culture or personal stories.

**Tree Tenders Training** – This multi-day course is designed for individuals who want to gain tree-related knowledge and skills. Each session provides basic arboriculture training which includes a combination of indoor and outdoor instruction. The final day of the course includes a group tree planting, putting the knowledge learned to practice.

**LEAF also attends many community events each year in order to reach out to various communities, and offers workshops and presentations to a wide array of audiences.**



Project Manager		Additional Contact	
Name	Melissa Williams	Name	Janet McKay
Title	Acting Program Manager	Title	Executive Director
Phone (work)	416-413-9244 ext. 11	Phone (work)	416-413-9244 ext. 17
Phone (home)	647-832-5935	Phone (home)	647-883-5777
Email	melissa@yourleaf.org	Email	janet@yourleaf.org
Project Summary			
Title		Backyard Tree Planting Program	
Location of Project		City of Markham – residential properties	
Name of Registered Owner of the Lands		Various	
Address of Registered Owner of the Lands		Various	
Contact Name for Registered Owner of the Lands			
Phone # Registered Owner of the Lands		Duration (months, maximum 12 months)	12 months
Request for	Spring Funding <u>X</u>	Fall Funding <u>X</u>	Either <u>    </u>
Start Date of Project	March 2014	End Date	December 2014

Please provide a detailed description of your project in the following space. Please attach additional pages if necessary to fully explain your project. This description should include:

- ❖ Description of the Project Team
- ❖ Project overview and detailed project plan (include work plan with timelines; detailed site and planting plans; monitoring and follow up maintenance schedules)
- ❖ Identify and where possible quantify the environmental benefits associated with the project
- ❖ Who will maintain and monitor the project after completion? (please provide contact information)
- ❖ How will you promote the MTTF fund with this project?
- ❖ Describe other funding sources/in kind support
- ❖ Will there be an educational sign component? If so, please describe

**Please see attached document.**

Please also provide a cost summary including (please use attached budget forms on pages 4 and 5 to this application to provide details of the costs)

Total Project Cost	<b>\$92000</b>	Amount requested from the MTTF	<b>\$30000</b>
Amount from other sources	<b>\$62000</b>	In- Kind support hours	

## BUDGET FORM – HUMAN RESOURCES

# BUDGET FORM

**APPLICANT'S SIGNATURE**

## BUDGET FORM – HUMAN RESOURCES (Volunteers)

[illegible]



**Other Expenses**

(e.g. Printing Brochures)	100	0.50	50.00	25.00	25.00
<b>Total</b>					

**How did you organization hear about the MTTF? (Please check one)**

City Website	_____	Newspaper advertisement	_____	Word of mouth	_____	Other	<u><b>X</b></u>
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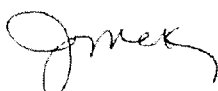
Upon completion of this Project please submit your project report, as well as original invoices, photos and records to Parks Planner, Operations, City of Markham, 101 Town Centre Boulevard, Markham, Ontario, L3R 9W3. Telephone 905-477-700 ext.3226 Fax 905-940-1550. Photos may be posted on the City's website.

# Applicant's Signature

I hereby make application for funding from the Markham Trees for Tomorrow Fund, declaring that all information contained herein is true and correct and acknowledging that the City of Markham will assess this application based upon the information contained in this application.

If approved for funding I further acknowledge and agree:

1. to comply with all relevant policies and secure all permits required for this project and acknowledge that the City bears no responsibility or has any liability in any manner with respect to this project.
2. that the City reserves the right to review communications and communication materials to be presented to the public to ensure compliance with City policies, including the City's Communication Standards.
3. to promote the Markham Trees for Tomorrow Fund on any communication materials, or signage associated with this project and will provide a detailed report on the project outlining how the funds were used to support the project upon completion of the project and no later than 1 year from receipt of the funding.
4. to allow the City of Markham to use the project name and any images associated with the project to promote the Markham Trees for Tomorrow Program.
5. to return all unspent funds to the City of Markham upon completion of the project.
6. that there shall be no personal benefit directly, or indirectly, from this funding and I will notify the City of any conflict of interest situation should it arise in carrying out of the project.
7. permit the City of Markham to claim ownership of all carbon credits and other measurable ecological services resulting from the project.

Signature  Title Executive Director

Printed Name Janet McKay Date February 4, 2014

*In the event the Registered Owner of the lands is an entity other than the City of Markham, a letter must accompany the application stating that: the Owner consents to this application; acknowledges that the proposed project complies to all its applicable policies and requirements; and, that the writer has the authority to give its consent.*

*Submission of this application form does not guarantee approval of your application.*

*Personal information contained herein is subject to the Municipal Freedom of Information Act and the Personal Protection and Electronic Documents Act. The information collected may be used for promotional purposes. Completion of this form constitutes consent by the applicant to these terms and uses.*

OFFICE USE ONLY					
Date Application Received			New Applicant?	Yes	No
Approved/Not Approved	Yes	No			
Acknowledgement Letter Sent?	Yes	No	Date Sent		
Letter of Approval or Rejection Sent?	Yes	No	Date Sent		
Final Report Received?	Yes	No	Date Received		
Photos Received?	Yes	No	Date Received		
Consent for Photographs received	Yes	No	Photos posted on website?	Yes	No

# Markham Trees for Tomorrow Fund

## Photo Consent and Release Form

I, \_\_\_\_\_ hereby permit and authorize the  
(Print in full – first, middle initial & last name)  
City of Markham (the "City") to take my photograph/image.

I acknowledge and agree that the City may publish or use the image for any City purposes by any means whatsoever including, but not limited to electronic or digital means. I acknowledge that the Town may not be able to control the distribution or use of the image by other than Town representatives.

I agree that this Consent and Release is given in perpetuity and for no consideration, credit, acknowledgment or financial recompense, now and in the future.

I hereby hold the City harmless for any claims, actions, debts, damages, injuries or losses that may arise or be incurred as a result of the taking, use, publication or distribution of the image and I agree to indemnify the City against any third party claims, actions, damages, injuries or losses brought or assessed against or incurred by the Town for the use of the image(s).

Contact Information					
Signature		Date			
Address					
City		Province		Postal Code	
Telephone			Email		
City of Markham:					
City Representative		Date			

## **LEAF's Backyard Tree Planting Program MTFT Fund Application 2014**

### **1) Project Plan and Overview**

Trees planted in urban environments offer numerous environmental, economic, social and psychological benefits to city residents such as improved air and water quality, increased carbon sequestration, energy savings, habitat enhancement, noise reduction and even increased property values. In 2011, the City of Markham set a goal to reach 30% town-wide tree canopy and vegetation coverage by at least 2025, as per the city's Greenprint Sustainability Plan. According to an urban forest study recently undertaken in York Region, Markham presently demonstrates 18% canopy cover. Taking these statistics into account, and keeping in mind that experts suggest 35-40% canopy coverage is ideal for urban areas, there is certainly room for canopy growth within the City of Markham.

Although the City is still working towards these goals that were set in 2011, Markham has recently been facing some serious and urgent threats to the growth potential of its urban forest: the Emerald Ash Borer (EAB), an invasive insect from Asia, is expected to attack and kill the estimated 2,800,000 mature ash trees growing in the York Region within the next 10-15 years, and the December 2013 ice storm has left Markham mourning the loss of some 10,000 trees (according to a York Region news report quoting city council).

In response to these threats, the City has developed an EAB Management Plan which includes strategies for treatment or removal and replacement of ash trees on public land and an Urban Tree Canopy Recovery Plan which includes strategies for damaged tree and stump removals and replacement tree planting on public land. As both of these plans address public property only, ash or other damaged trees located on private property are the responsibility of individual homeowners.

In conjunction with this, the York Region forestry study suggests that private, residential property presents the best opportunities for planting new trees and shrubs in Markham:

"The residential low land use currently supports the greatest existing tree canopy in all three municipal study areas (Richmond Hill, Vaughan and Markham). Assuming that agricultural lands are deemed unsuitable for tree establishment, the greatest opportunity to establish additional tree cover in all three municipal study areas is found in the residential low land use category. This result indicates that homeowners and tenants in southern York Region are the most important and influential stewards of the urban forest." (York Region Urban Forest Study, Draft Summary Report, February 2012).

Taking this into account, LEAF's Backyard Tree Planting Program offers residents of Markham a convenient, accessible and affordable way to obtain new trees, shrubs and perennials for

their yard. Through our program, homeowners purchase native species which will help to both beautify their yards and enhance Markham's overall urban canopy coverage. Since the goal of the program is to ensure the right tree gets planted in the right place, we take into account site conditions such as light and soil, so as to help ensure the establishment of large-growing native trees whose dense canopies can provide maximum environmental benefits like air and water quality improvement, heat island and noise reduction and climate change mitigation.

Furthermore, LEAF has been working towards increasing the percentage of trees, shrubs and perennials we offer that are grown from locally sourced seed. By doing so, we are able to provide our participants with genetically appropriate stock, which make for hardier species able to withstand the harsh conditions of urban environments and provide maximum benefits.

The aims and objectives of our Backyard Tree Planting Program are achieved through the following four steps:

- 1) Online pre-visit questionnaire to ensure that the property owner qualifies for the program, has adequate space to plant, has realistic expectations and is committed to long term tree/shrub care
- 2) On-site consultation with property owner and LEAF arborist to determine appropriate species and planting locations (taking into consideration sunlight, soil type, space, conflicts, future changes to the yard, neighbouring properties and homeowner preferences). In addition to developing a site plan, consultations present an opportunity to provide homeowners information on EAB, inform ash tree owners of their options for treatment and/or removal and emphasize the importance of replacing or salvaging and using wood for trees already lost
- 3) Planting by LEAF professionals in the spring or fall
- 4) Follow up questionnaire to assess participant satisfaction and/or follow-up visit to assess tree/shrub health

In addition to tree planting, the program also aims to inform and educate homeowners about how to properly care for their trees and what they can do to respond to threats to their trees, such as EAB and storm damage. We provide residents with tips and resources for proper tree care and maintenance for newly planted trees and shrubs and help them prepare to make informed decisions about treating, removing and/or replacing ash trees or other damaged trees on their property. Through this education, our participants are encouraged to take an active role with regards to stewardship in the urban forest which makes it easier for them to take part in replanting Markham's urban forest.

With financial support from both York Region and the City of Markham, LEAF has offered residents of Markham trees, shrubs, Native Garden Kits and Edible Garden Kits through its Backyard Tree Planting Program since 2008. Throughout this time, we have reached 317 homeowners and conducted 285 yard consultations in the City, which has resulted in the



planting of 497 trees, 364 shrubs, 7 Native Garden Kits (which include shrubs, perennials, mulch and garden design plans) and 5 Edible Garden Kits (which include a selection of fruit and/or nut-bearing trees and shrubs). In addition, 100 per cent of Markham participants who completed our post-planting survey in 2013 indicated that they would recommend our Backyard Tree Planting Program to others. They also rated our overall staff courtesy and knowledge of trees and tree care as excellent, and found our program convenient to participate in.

Based on this positive feedback and due to an anticipated increase in demand resulting from ash and storm damaged tree losses, we expect that there will continue to be significant interest in LEAF's programs in Markham in 2014. We are confident that the perpetuation of this project will produce even more satisfied participants, who recognize the importance of caring for their trees and shrubs for years to come, resulting in a lasting benefit to the community.

## **2) Project Objectives:**

- Involve 165 households
- Conduct 165 yard consultations with Markham homeowners to determine the "right tree for the right place"
- Deliver educational messages to 165 households on the importance of proper tree care and the environmental benefits of the urban forest
- Plant 280 native trees
- Plant 230 native shrubs
- Deliver 5 Native Garden Kits
- Conduct 50 on-site health assessment evaluations of LEAF-planted trees and shrubs in Markham backyards
- Profile 5 past-participants including interviews and photos
- Provide a tree planting and care guide to all participating households
- Provide locations (by ward) and species for all trees/shrubs planted
- Provide testimonials, photographs and other information to promote the project

In addition to planting trees, LEAF will offer Markham residents many exciting opportunities to learn about and help protect and improve their urban forest in 2014:

- 1) This year, LEAF plans to host a Tree Tour in Markham that focuses on habitat. Tree tours are guided walking tours that highlight trees of interest in different neighbourhoods in which the tours take place and may also incorporate education on various issues such as the Emerald Ash Borer. Tree tours are a good way for residents of Markham to learn about current issues revolving around their urban forest and ways to help protect and enhance it. There will also be additional Tree Tours held within other York Region municipalities that Markham residents are welcome to attend.

- 2) Also, in the spring of 2014 LEAF will be holding a Tree Tenders Volunteer Training Program in the Town of Richmond Hill, which will be available to all Markham residents interested in gaining tree-related knowledge and hands on skills. Tree Tenders is a multi-day course developed to provide people with basic arboriculture training through a combination of indoor and outdoor instruction and practical, hands-on activities.
- 3) LEAF is also planning to attend a number of community outreach events in Markham, through which we can promote our planting and education programs and our partnership with the City's Trees for Tomorrow Fund.

### 3) Proposed 2014 Project Timeline

<b>Throughout</b>	Project promotion; project evaluation, monitoring and verification
<b>January – February</b>	Update website and iPad (virtual siting binder) with profiles for new native species offered; order nursery stock for spring planting season; plan and prepare for upcoming planting season
<b>March-December</b>	Respond to program inquiries; process pre-planting questionnaires for new participants; schedule and carry out consultations in backyards with homeowners; process orders for trees, shrubs and kits; send out spring, summer and fall BYTP newsletters to all current and past participants with seasonal tree care tips and information about new product offerings
<b>April – June</b>	Devise efficient planting routes; make notification calls to participants informing them of planting date; carry out delivery/planting
<b>June - August</b>	Send out participant feedback surveys; order nursery stock for fall planting season; schedule and carry out follow up visits of previous plantings to evaluate tree health and provide personalized care and stewardship tips for homeowners
<b>September- November</b>	Devise efficient planting routes; make notification calls to participants informing them of planting date; carry out delivery/planting
<b>November</b>	Send out participant feedback surveys
<b>December</b>	Final project report and evaluation

### 4) Project Team

Janet McKay, *Executive Director*- Overall project direction  
 Melissa Williams, *Acting Program Manager*- Project management and development  
 Brenna Anstett, *Residential Planting Programs Coordinator*- Client communications, scheduling, project coordination

TBD, *Residential Planting Programs Assistant*- Client communications, order processing  
TBD, *Field Operations Coordinator*- Site consultations and follow-up health assessment visits, education and field supervisor  
Matthew Higginson, *Marketing and Communications Coordinator*- Promotions, Marketing and Design

## **5) Educational Sign Component**

We will display temporary lawn signs in front yards of participants' homes following their consultation. These signs are an easy way for participants to promote LEAF's planting program in their neighbourhood. The signs read, "We're planting a tree in our backyard...Get yours today!" and direct individuals to LEAF's website to find out more about the Backyard Tree Planting Program and our partners. Signs are then picked up from the participants at the time of planting in the spring or fall.

## **6) Environmental Benefits of Project**

Since its incorporation as a Town in 1971, Markham has experienced significant growth and development. At present, the City of Markham is considered one of the fastest growing municipalities in Ontario covering 212 square kilometres of land and housing more than 330,000 people (according to the City's website). With an increase in population and development comes an increase in human impact on the natural environment, including the air, land, water and wildlife. Byproducts of urbanization such as heat, combustion, chemical and physical pollution, construction and development, waste disposal and runoff can all negatively impact the health of our natural environment and that of residents living in populated urban areas. In response to these negative impacts, our urban forest can help to reduce the harmful effects (and associated costs) of city living.

The City of Markham is working to become a recognized leader in environmental standards by implementing policies such as those outlined in the city's 2011 Greenprint Sustainability Plan. LEAF's Backyard Tree Planting Program supports a number of the priorities outlined in the Plan and encourages the enhancement and protection of Markham's urban forest by helping residents plant the right tree in the right place, and therefore maximizing on the associated environmental benefits. These benefits, according to a recent study undertaken in York Region (York Region Urban Forest Study, Draft Summary Report, February 2012) are as follows:

### **1) Air Pollution Removal:**

The urban forest can improve air quality through the interception of particulate matter and the absorption of air pollutants such as carbon monoxide, nitrogen oxides, ground level ozone and sulphur dioxide. Approximately 830 tonnes of air pollution are removed by trees

and shrubs in Markham, Richmond Hill and Vaughan each year, and the value of this service is approximately \$7.2 million annually. Therefore, increasing the percentage of tree and shrub cover across the City of Markham can create overall air quality improvement, enhance the physical and mental health of residents and result in substantial savings in health care expenditures and damage repairs to city architecture as a result of poor air quality.

## **2) Carbon Sequestration and Storage:**

Urban trees and shrubs can play a critical role in mitigating the effects of climate change and improving local air quality in two major ways: (1) they can act as carbon sinks by sequestering (absorbing) carbon and storing it as woody biomass and (2) they are able to reduce or avoid carbon emissions, if planted strategically, by cooling ambient air and allowing urban residents to minimize their annual heating and cooling. There is a positive relationship between a tree's size and species type and the amount of carbon it is able to sequester or avoid over time, so it is vital that the trees we plant have the best possible chance of reaching maturity, and that large, healthy trees in the urban landscape are protected, so as to increase the overall volume of carbon sequestered/avoided by Markham's urban forest.

In a given year, the urban forest in Markham accounts for 226,382 tonnes of total carbon storage, 10,644 kilograms of carbon storage per hectare, 9,089 tonnes of net annual carbon sequestration and 345 kilograms of annual carbon sequestration per hectare. By planting strategically on residents' private properties, we can help to increase Markham's annual carbon storage from trees.

## **3) Energy Conservation Savings:**

Planting deciduous trees can help homeowners save energy in the summer by shading homes and air conditioners and planting evergreen trees can provide protection from cold winds and keep homes warm in the winter. Strategically planting trees has been shown to play an important role in reducing energy consumption (especially during peak demand times), and in turn, lowering emissions from power plants and minimizing energy costs for residents.

Through planting trees, the City of Markham avoids the production of 8,100 tonnes of carbon by power plants which results in an annual residential energy expenditure savings of \$2,092,700. This total includes savings for natural gas expenditures (\$1,441,000), electricity expenditures (\$576,000) and carbon avoided (\$75,700).

## **4) Stormwater Management:**

During high-intensity storm events, the flow of large volumes of water often exceeds the capacity of municipal infrastructure resulting in soil erosion, runoff, property damage and the degradation of local water quality and aquatic habitat. Urban trees and shrubs can play a significant role in helping to manage this stormwater flow by intercepting rainfall and facilitating infiltration rather than runoff. This would take some of the stress off municipal infrastructure that would otherwise combine storm and sewer overflows, leading to untreated water entering our local rivers and lakes.

An i-Tree Hydro model simulation showed that a loss of existing tree cover in the West Don watershed (11%) would increase total streamflow by 1% and a loss of existing tree cover in the Upper Rouge watershed (27%) would increase total streamflow by 2.9%. With this in mind, an increase in canopy cover in Markham can help to ensure better stormwater management so as to mitigate the effects of development and human activities on the hydrologic cycle.

#### **5) Increase Biodiversity:**

As rapid development takes place, wildlife species are often removed from urban landscapes completely. Construction activities have the ability to destroy wildlife habitats and feeding areas resulting in the reduction of insect and animal populations, and in turn, decreasing biodiversity. Planting native tree, shrub and perennial species on private properties in Markham can help increase biodiversity by creating safe, protected environments that support butterflies, birds, bees or other small animals.

### **7) Ongoing Maintenance and Monitoring Following Project Completion**

In order to ensure that trees planted through our program have the best chance at reaching maturity so as to provide maximum benefits to urban residents, we work with our participants to provide their trees with ongoing care, maintenance and monitoring. In doing so, we can ensure that these new additions to Markham's growing canopy get the care they need to survive and thrive for years to come. This is accomplished by the following:

**1) Asking participants to contribute to a portion of the cost for their tree and to make a commitment to caring for it.** Our program is offered to the residents of Markham at a subsidized rate, rather than free of charge. The reason for this is that we believe a financial contribution will provide homeowners with an incentive to commit to providing ongoing care to their tree.

**2) Incorporating tree care education as a vital part of our planting program.** LEAF strives to ensure that each of our participants become knowledgeable and enthusiastic tree stewards by emphasizing proper tree care and maintenance methods through one-on-one education, beginning with the pre-visit questionnaire to sign up for the program and continuing through the time of planting. At the site consultation, we provide homeowners with a package of printed materials and we deliver an additional care guide emphasizing the dos and don'ts of watering, mulching, staking, fertilizing and pruning when we return to plant their tree. Furthermore, we send out a biannual client newsletter to present and past participants in order to provide ongoing support and additional information and resources on tree care and maintenance.

**3) Providing ongoing support for participants.** In addition to the support we provide prior to and at the time of planting, we also let our participants know that we are available to answer any questions or concerns they have about their trees and shrubs in future years. LEAF

regularly offers presentations, workshops and events to provide further education for interested individuals and our website contains a section dedicated to client resources, providing homeowners with general tree care tips and fact sheets, educational videos and a link to our request for arborist advice form. If needed, LEAF staff will also perform special site visits in order to provide our participants with the highest quality service.

**4) Offering a five-year maintenance package for LEAF-planted trees at an affordable price.**

In 2013, we developed a maintenance package for our Backyard Tree Planting Program participants. This optional service helps ensure that the trees we plant get off to the best possible start in life so that they can continue to grow into large, healthy trees and provide maximum benefits to homeowners and to the community. This package includes a yearly application of mulch, tree health assessments and minor pruning as needed. Furthermore, in year three, four or five of the program, we will conduct structural pruning in order to ensure a strong growing structure and a healthy future.

**5) Conducting follow-up visits of past tree plantings to confirm ongoing high quality tree selection and planting practices, sound tree health and high survival rates.** Each summer, we conduct follow-up visits at randomly selected homes for past LEAF-planted trees. Our arborists conduct tree health evaluations using indicators developed by Dr. Andy Kenney at the University of Toronto, and we use the information gathered during these visits for ongoing monitoring, evaluation and improvement of our planting programs. Prior to these visits we secure permission to enter homeowner properties and upon completion, we share the results of our assessment with the homeowners, along with personalized advice for their tree(s) and/or shrub(s).

## **8) Measureable Benefits**

We are committed to continuously monitoring and evaluating the various aspects of our program in order to track both our short and long-term successes. Some of the indicators of success we use include:

- Number of trees and shrubs planted tracked through participant database
- Satisfaction of participants and success of educational messaging measured through post planting questionnaires/interviews
- Survival rates and health assessments of trees planted measured through follow up site visits

In order to measure and maintain our successes, we use a variety of tools to monitor, evaluate and improve how we run our program. First, we will maintain a participant database in which we store detailed information including the number and species of trees, shrubs and garden/edible kits delivered/planted, site conditions, planting conditions, tree health when planted, tree health several years after planting, homeowner satisfaction and

homeowner engagement in tree care. We will use this information to evaluate the success of our program which will in turn, allow us to ensure high quality customer service, tree selection, planting practices and educational messaging.

Second, we will gather pertinent information from our participants through our pre- and post-planting questionnaires that will enable us to monitor any awareness and behavior changes resulting from participation in our Backyard Tree Planting Program. By obtaining information from homeowners, we will be able to track their motivations for planting, understanding of energy savings provided by strategically planted trees, understanding of the need to support green infrastructure, engagement and willingness to care for trees planted on private and public property. By keeping track of this data, we are able to adapt our program in a way that will meet the needs and demands of our participants, but also fulfill their overall expectations of what we have to offer.

## **9) Promotion of MTFT Fund**

Without the support of our funding partners, LEAF would not be able to offer its programs to their fullest potential. Therefore, in order to maintain the strong relationships we have with our funders, LEAF is committed to ensuring these partnerships are mutually beneficial. We will recognize all supporting partners in publications and communication materials. In addition, we will seek media coverage in order to recognize Markham's contribution to the success of our program.

Specific recognition will include:

- Acknowledgement in LEAF's annual report
- Acknowledgement in the LEAF e-newsletter which currently reaches about 4400 individuals
- Recognition on LEAF's web site which receives over 60,000 unique visits per year
- Logo recognition on LEAF print material distributed at all events, workshops and to Backyard Tree Planting Program participants
- Recognition in press interviews whenever possible
- Social media mentions through Facebook and twitter (shared and mentioned where applicable - joint events, tree tours, relevant program highlights, news etc.)
- Invitation to and recognition at special LEAF events including our annual celebration
- Recognition at LEAF annual general meeting
- Use of LEAF name and logo in the City of Markham promotional/educational materials (terms and conditions to be negotiated)
- Articles and other written/photographic content as requested by the City of Markham (terms and conditions to be negotiated)

## **10) Other Funding Sources/In-Kind Support**

Other funding sources include:

York Region - \$15,000

Ontario Power Generation - \$10,000

Project Revenue (program participant fees) - \$37,000

In-kind - \$9,000

See attached budget for details.



Proposed Budget - LEAF's Backyard Tree Planting Program - Markham 2014

Item	MTFT	York Region	Ontario Power Generation	Client Fees (project revenue)	Total Cash	In-kind
Project Management - hiring, training and management of staff, project planning, partnership development, communications, promotions, media, financial management, progress reports to LEAF Board and funders		4900	4900		9800	
Office coordination (responding to inquiries, registration, consultation bookings, route planning, order and payment processing, planting notification calls, planting scheduling, ongoing client communication, database management, record keeping and status reports)	6000	5400	600		12000	
Yard consultations with property owners	6500	4700		1800	13000	
Planting	6700			6700	13400	
Follow-up/data collection, analysis and reporting			2500		2500	
IT systems and web improvements			1000	1500	2500	
Communications/printing/advertising			1000	3000	4000	
Equipment costs				800	800	
Plant materials (with taxes, delivery)	8300			8400	16700	
Transportation (site consultations)	1000			1000	2000	
Transportation (planting)	1500			2000	3500	
Tree storage space (in kind)						4000
Educational materials				2200	2200	
Promotions (in kind from partners)						5000
Office rent				4800	4800	
Insurance				1200	1200	
Bookkeeping				3000	3000	
Office expenses (phones, printer cartridges, etc)				600	600	
<b>Totals</b>	<b>30000</b>	<b>15000</b>	<b>10000</b>	<b>37000</b>	<b>92000</b>	<b>9000</b>

\$328 - average per-tree cost to deliver program

\$196 - per tree subsidy

\$132 - average per tree cost to homeowners  
280 trees

165 homes

average 1.7 trees and 1.4 shrubs per home





Nory Takata  
Parks Planner  
Operations Department  
Town of Markham  
101 Town Centre Boulevard  
Markham, ON L3R 9W3

February 13, 2014

Dear Nory,

On behalf of Evergreen and the communities we serve, I would like to thank you and the City of Markham for your ongoing support of our community greening initiatives. We would like to respectfully submit this request of \$30,000.00 to the *Markham Trees for Tomorrow* fund. I appreciate you taking the time to review our application.

Markham's support since 2008 has helped us engage over 2,700 community volunteers in public plantings and stewardship events resulting in a combined total of 9,562 native trees, shrubs and wildflowers added to natural landscapes across the city. The funding that we are currently requesting will help to support our 2014 greening initiatives throughout Markham, which will provide diverse individuals with hands-on opportunities that help to restore nature in their own communities.

Please find enclosed our completed application with the workplan/timeline and maps attached. Should you have any questions, please do not hesitate to contact me at 416-596-1495 x 249 or at [sarndt@evergreen.ca](mailto:sarndt@evergreen.ca).

Thank you, Nory.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sue Arndt".

Sue Arndt  
Senior Manager, Program Director



101 Town Centre Boulevard,  
Markham, Ontario, L3R 9W3

## Markham Trees for Tomorrow Fund Applicant's Guide and Application Form

### What is the Markham Trees for Tomorrow Fund (MTTF)?

Trees provide substantial environmental, social and economic benefits to our community. In addition to providing measurable improvements to air quality and reduction of atmospheric carbon, trees help to prevent soil erosion, reduce energy consumption and provide habitat for wildlife. With the Markham Trees for Tomorrow program, more than 90,000 trees will be planted by 2014. This fund provides grants for tree planting projects to an upset limit of \$30,000.

### Who Can Apply?

- Markham Community Groups
- Non Governmental Organizations
- Public Agencies

All plantings must be on publicly owned and accessible lands in the City of Markham.

### What are the Program's Requirements?

Applications will be considered by the Environmental Issues Committee for recommendation to General Committee and Council.

All applications must:

- involve the active participation of community volunteers
- identify other sources of funding raised by the applicant

All applications must include:

- detailed site plan prepared by a landscape architect or certified forester, describing existing site conditions, any necessary site preparation prior to planting and how the site is to be accessed before, during and after the planting
- detailed planting plan prepared by a landscape architect or certified forester, including: species list, planting specifications and cost estimate; and briefly state the rationale behind species selection, planting densities and distribution within the context of the planting site; start and end date for the project
- detailed event planning logistics such as: locations of pathways; staging areas for the temporary placement of trees, mulch and other supplies; parking and traffic control requirements
- written commitment to monitor and provide follow up maintenance to ensure long term success for the project

### What are the Funding Criteria for an Application?

- applicants can request a maximum of \$30,000 from the MTTF per project per year for projects that will be completed within that same one-year time frame (12 months from issuance of cheque)
- only materials and equipment costs (not consulting services) are eligible for funding from the MTTF
- any groups that received funding for projects which have not been completed to the satisfaction of the City are not eligible for future funding
- funding will not be granted where projects have been commenced.

### When are the application deadlines?

Applications must be submitted by February 14, 2014 for Spring funding.

### How Do I apply?

- Step 1 **Contact the Parks Planner** about your proposed project and to request an application form. (Telephone: 905-477-7000 ext. 3226 e-mail: [ntakata@markham.ca](mailto:ntakata@markham.ca))
- Step 2 **Complete the Application Form.** Please ensure that it is legible and signed.
- Step 3 **Prepare required supporting information**, such as illustrations and maps and attach them to the application form. In the event the Registered Owner of the lands is an entity other than the City of Markham, a letter must accompany the application stating that: the Owner consents to this application; acknowledges that the proposed project complies with all its applicable policies and requirements; and, that the writer has the authority to give its consent. Sufficient and complete information must be provided with the application for the Environmental Issues Committee to make a decision.
- Step 4 **Submit your application to the Parks Planner, Operations, City of Markham, 101 Town Centre Boulevard, Markham, Ontario, L3R 9W3.**

### Application Checklist

Please ensure that your application is complete. Are the following included in your submission?

- A complete and signed application form, including all budget and funding details
- All supporting documentation such as a detailed site plan, species list, planting specifications etc.
- Consent letter from registered owner, if applicable

### What will happen next?

The Environmental Issues Committee will review all applications taking into account the established objectives and criteria described above. They may choose to grant the right to the applicant to present their proposal, if requested. They will determine which projects should be funded and how they should be funded (in a single payment or in phases) and make a recommendation to General Committee and Council.

### How will I be notified?

An acknowledgement will be sent upon receipt of an application. If your project is approved for funding, you will be contacted. If your application is not approved, you will be informed in writing.

### What happens after the Project is completed?

Upon completion of the project and no later than 12 months from delivery of the funding, you are required to submit your project report. Include a project summary and photos so we can review and promote your project, together with the completed consent forms permitting use of your photographs by the City (copy attached).

### What does a Project Report Contain?

- accounting of how all funding has been spent
- original copies of paid invoices
- photographs for review and promotion of the project
- completed consent form for use of photographs

A project format will be provided to assist you in preparing the report

# Application Form

For Office Use Only - Project No.:

Group Information			
Name	Evergreen		
Address	Centre for Green Cities, Suite 300, Evergreen Brick Works, 550 Bayview Avenue, Toronto, ON, M4W 3X8		
Phone	416-596-1495 x 360	Fax	416-596-1443
Email	jkelly@evergreen.ca	Website Address	www.evergreen.ca
Charitable/Non Profit Organization registration # (if applicable)	Our Group has a bank account in the name of our organization		
BN 131815763 RR0001	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
<p>Briefly describe what your group does:</p> <p>Evergreen is a national charity that inspires action to green cities. Through our core programs: <b>Greenspace</b> (restoring and revitalizing public landscapes); <b>Children</b> (providing children with nature-focused playing and learning opportunities); <b>Food</b> (supporting a local, healthy and sustainable food system); and <b>CityWorks</b> (inspiring green design technologies and innovation in the built environment), we provide individuals with the practical tools and knowledge needed to improve the health of our communities.</p> <p>Our <b>Greenspace</b> program is a national service that works with communities across the country to conserve natural and cultural landscapes, restore degraded environments, and protect open spaces for recreation, education and enjoyment. What started as a small urban tree-planting initiative in 1991 has grown into a national program that supports and encourages the protection, restoration and stewardship of Canada's public lands.</p> <p>If approved, funds from the <i>Markham Trees for Tomorrow</i> grant will be used to support and expand our existing community program within the City. Since 2008, in partnership with the City of Markham, Evergreen has engaged more than 2,700 volunteers in community greening initiatives, which has resulted in 6,220 native trees and shrubs and 3,340 wildflowers planted in parks throughout the municipality. Furthermore, volunteers have made a significant effort to control the spread of herbaceous invasive species (notably Garlic Mustard, Dog Strangling Vine, Canada Thistle and European Buckthorn) within city parks, resulting in healthier ecosystems that allow for greater species diversity.</p>			
Project Manager		Additional Contact	
Name	Jill Kelly	Name	Sue Arndt
Title	Project Manager, York Region	Title	Program Director
Phone (work)	416-596-1495 x 360	Phone (work)	416-596-1495 x 249
Phone (cell)	416-899-5439	Phone (cell)	416-455-4526
Email	jkelly@evergreen.ca	Email	sarndt@evergreen.ca
Project Summary			
Title	Markham Get Dirty: Community Greening Initiative		
Location of Project	City of Markham		
Name of Registered Owner of the Lands	City of Markham		
Address of Registered Owner of the Lands	101 Town Centre Boulevard, Markham, ON, L3R 9W3		
Contact Name for Registered Owner of the Lands	Nory Takata, Parks Planner, City of Markham		
Phone # Registered Owner of the Lands	905-477-7000	Duration (months, maximum 12 months)	8
Request for	Spring Funding <input checked="" type="checkbox"/>	Fall Funding <input checked="" type="checkbox"/>	Either <input type="checkbox"/>
Start Date of Project	April 1, 2014	End Date	December 31, 2014

Please provide a detailed description of your project in the following space. Please attach additional pages if necessary to fully explain your project. This description should include:

- ❖ Description of the Project Team
- ❖ Project overview and detailed project plan (include work plan with timelines; detailed site and planting plans; monitoring and follow up maintenance schedules)
- ❖ Identify and where possible quantify the environmental benefits associated with the project
- ❖ Who will maintain and monitor the project after completion? (please provide contact information)
- ❖ How will you promote the MTTF fund with this project?
- ❖ Describe other funding sources/in kind support
- ❖ Will there be an educational sign component? If so, please describe

#### **Project Objective:**

Through our *Get Dirty: Community Greening Initiative*, we intend to provide demonstrable, widespread and lasting environmental benefits to the community by addressing a number of environmental issues affecting the City of Markham. Specifically, our program will increase the urban tree canopy, enhance local biodiversity within parks and open-spaces, create vibrant wildlife habitat, and mitigate impacts from herbaceous invasive species. By engaging individuals in hands-on restoration and stewardship activities we will not only improve the health of the local environment, we will also educate and strengthen the ecological literacy of diverse communities within the City of Markham. Furthermore, the native trees, shrubs and wildflowers planted as a result of this program will benefit the natural environment, improve the vitality of the community at large, reduce maintenance costs, and contribute to climate change mitigation measures, all of which are objectives outlined in Markham's 2011 Greenprint Sustainability Plan.

#### **Project Overview:**

The presence of accessible and vibrant green space influences the health and quality of life in our communities. Public open spaces are areas for recreation, food growing and community building. In the midst of rapid urban intensification, sustaining a connection with nature is of vital importance if we are to move towards a sustainable future. Building on the momentum of the past 5 years, Evergreen will continue to engage diverse individuals through hands-on naturalization projects in parks and open spaces across the municipality. Growing steadily since 2008, our program offerings have more than doubled in order to meet the demands for public and stakeholder participation within the City. In 2014, we plan to sustain this level of profile and further promote the social, cultural, and economic benefits associated with conserving our natural systems.

Building on past successes, Evergreen aims to work directly with community, social service and cultural groups, such as *Mahamevnawa Youth Toronto*, *Centre for Information & Community Services*, *Heritage Lions Club*, and *3rd Unionville Scouts*, as well as local schools (*Father Michael McGiveney Catholic Academy* and *Cedarwood Public School*), in delivering restoration plantings and stewardship events in a number of parks throughout the City of Markham. We will collaborate with City staff and Toronto and Region Conservation Authority (as needed) to develop concise restoration plans that will see a minimum of **250 wildflowers** and up to **675 native trees and shrubs** planted in open spaces throughout the City. Plans for the spring and fall include community planting events at Austin Drive Park, Berczy Park, German Mills Settlers Park, Fierheller Park and the MOEE Stormwater Retention Ponds located at the termination of Denison Street, east of Markham Road. As in previous years, education will be a prominent component of our programming – with educational tutorials and interactive activities being offered to community members participating at our events. Our 2014 workplan/timeline, as well as relevant planting location maps are included in this application as an attachment.

The environmental benefits of our *Community Greening Initiative* include:

-Enhancing local biodiversity and creating wildlife habitat through the planting of 675 native trees and shrubs and 250 wildflowers.

-Increasing the urban tree canopy by planting native trees and shrubs that will in-fill in areas impacted by the 2013 Ice Storm and invasive Emerald Ash Borer.

- Controlling the spread of herbaceous invasive species. Selective invasive species removal and restoration encourages greater native species diversity, resulting in healthy ecosystems that provide an abundance of habitat.

- Improving water quality, reduce soil erosion and mitigate flooding. Impermeable surfaces in our cities, such as concrete and asphalt, prevent rain water from draining into soil and waterways. Our streets act as tributaries washing particulates, pesticides, heavy metals and other pollutants into our sewers and stormwater management ponds. By planting a minimum of 675 trees and shrubs, especially in areas surrounding our river systems, we will promote soil-based water filtration, reduce urban run-off; and help establish 'natural' erosion and flood control measures.

-Improving air quality. Trees and shrubs help to clean the air by trapping and retaining airborne pollutants such as carbon monoxide, sulfur dioxide, and nitrogen dioxide. Reports have shown that 85% of harmful pollutants can be filtered out of the air in areas that host an appropriate mix of trees and shrubs (Bolund and Hunhammar, 1999).

-Counteracting 'urban heat island effect' and climate change. Trees provide the highest cooling effect in comparison to other mitigation efforts. University of Manchester studies revealed that a mere 10% increase in the amount of green space maintained in an urban centre reduced surface air temperatures by as much as 4°C. Furthermore, healthy forests play an important role in mitigating the effects of climate change by absorbing and storing significant amounts of carbon dioxide and other harmful pollutants on an annual basis.

Evergreen realizes that tree planting alone is not enough. To create healthier, more sustainable cities, a greater sense of ecological literacy must be promoted amongst Canadians. Realizing this, the primary goal of our *Community Greening Initiative* will be to promote environmental awareness amongst the diverse community of Markham. We will strive towards strengthening our existing community partnerships while seeking new opportunities that will allow us to connect and engage individuals of all ages and cultures.

#### **Sustainability Plan:**

To promote the health and growth of the stock that we plant, Evergreen will engage volunteers in **8 to 10 public stewardship events** and up to **4 monitoring events** throughout the year. Monitoring data will be collected to assess the overall health of our community plantings and will help guide our future restoration initiatives. During these maintenance and monitoring events, program participants will be educated first-hand on the environmental pressures faced by the majority of our urban green spaces, notably invasive species, habitat loss, water pollution and climate change and will work collectively to improve the health and quality of our natural systems. After the 2014 project is complete, Evergreen will continue to work with City staff and raise supplemental funds to support on-going stewardship initiatives. Also, funds from a portion of this grant will assist in long-term capital investments such as equipment and supply costs that will support our continued work in Markham. Additionally, drawing from our own diverse volunteer base, we will encourage other active students and community groups to participate in our stewardship activities at specific sites when required. Evergreen estimates that an average of 3-5 years of regular stewardship/maintenance is required to ensure that community planted stock reaches a level of maturity where it will require little care in order to survive. Seasonal maintenance and long-term stewardship activities will be assessed and managed by the York Region Project Manager.

#### **Project Team:**

**Jill Kelly**, Project Manager, York Region

The day-to-day management and coordination of the *Community Greening Initiative* will be conducted by Jill Kelly. As project manager, Jill will:

- Work with municipal and institutional partners to assess and establish suitable restoration/stewardship sites;
- Develop a detailed workplan for the 2014 season;
- Plan, organize and execute restoration, stewardship, and monitoring events throughout the municipality;
- Develop educational/interpretive programs and outreach content;

- Promote the program by networking with members of the community, social/cultural groups, local schools and corporations; and
- Manage project administrations and communications.

Jill joined Evergreen's Greenspace team in the fall of 2010. With a background in Environmental and Resource Studies, she previously worked as a project manager for a private environmental consulting firm based out of Markham. In her current role, Jill oversees the hands-on restoration and stewardship initiatives throughout York Region.

**Lorraine Chung, Project Coordinator, York Region**

On-the-ground program support will be conducted by the Project Coordinator. Specifically, Lorraine will:

- Assist with the facilitation of community restoration and stewardship events;
- Manage, coordinate and educate volunteers at all community events;
- Assist with the development of communication and promotional materials (i.e. event flyers, blogs, etc.);
- Outreach/network and engage local residents, community groups, corporations and schools;
- Perform program related administrative duties (health and safety reports, statistical data collection, etc.).

**Sue Arndt, Program Director**

The overarching management of the 2014 program will be undertaken by Sue Arndt. With a background in environmental restoration, biological science and community engagement, Sue brings a range of experience and expertise to the program. She will oversee the following:

- The strategic direction and development of program partnerships;
- Program budgeting and reporting; and
- Identification of potential funders and preparation of additional funding proposals, as required.

**Promotion/Recognition:**

Through our efforts we hope to foster a strong connection between local residents and Markham's **Trees for Tomorrow** Program. Upon funding, Evergreen will recognize the City's support through:

- *City of Markham Trees for Tomorrow* logo placement on all event signage, including flyers and banners (if applicable) during the 2014 season;
- *City of Markham Trees for Tomorrow* logo placement on all published material during the 2014 season (including blog posts and update reports);
- Blog posts and other social media tools;
- City of Markham acknowledgement in Evergreen's 2014 Annual Report; and
- Scheduled public events posted on Evergreen's online event calendar.

**Additional Funding Sources/In-kind Support:**

- HSBC and Purina (Evergreen HR)
- Environment Canada (materials, equipment, rentals)
- TRCA (in-kind program support and site preparation)
- Community Volunteers (in-kind)
- City of Markham (in-kind HR support and mulch)
- Evergreen (in-kind overhead, administration and communication)



Please also provide a cost summary including (please use attached budget forms on pages 4 and 5 to this application to provide details of the costs)

Total Project Cost	<b>\$53,000</b>	Amount requested from the MTTF	<b>\$30,000</b>
Amount from other sources	<b>\$23,000</b>	In- Kind support hours	<b>900</b>

## BUDGET FORM – HUMAN RESOURCES (Volunteers)

[illegible]

## BUDGET FORM

Materials, Supplies and Equipment	Cost			MTFT	Other
	# of units	Unit Cost \$	Total Cost \$		
Native Trees and Shrubs (stock, delivery, rodent guards, mulch mats etc.)	675	\$20	\$13,500	\$13,500	-
Native Wildflowers (stock, delivery)	250	\$6	\$1,500	-	\$1,500
Volunteer Refreshments	16	\$50	\$800	\$800	-
Volunteer Gloves	450	\$5	\$2,250	-	\$2,250
Shovels	40	\$20	\$800	\$800	-
Trowels	20	\$10	\$200	\$200	-
Buckets	24	\$5	\$120	\$120	-
Rental van	8	\$350	\$2,800	\$1,400	\$1,400
Transportation/Mileage (stewardship events, meetings, site visits)	16	\$60	\$960	\$960	-
Stewardship & Monitoring Tools (pruners, secateurs, weeders, spades)	20	\$15	\$300	-	\$300
Stewardship Supplies (yard waste bags, plastic bags, clip boards etc.)	500	\$2	\$1,000	-	\$1,000
Health and Safety (supplies, kits, pylons)	1	\$250	\$250	-	\$250

### Other Expenses

Project Coordination (event planning/delivery, site visits, volunteer management, outreach)	48 days	\$350/day	\$16,800	\$12,220	\$4,580
Project Management	12 days	\$400/day	\$4,800	-	\$4,800
Communications (flyers, design, blogs, social media)	8 days	\$400/day	\$3,200	-	\$3,200
Overhead and Administration			\$3,720	-	\$3,720
<b>Total</b>			\$53,000	\$30,000	\$23,000

### How did you organization hear about the MTTF? (Please check one)

City Website ☐ Newspaper advertisement ☐ Word of mouth ☒ Other ☐

Upon completion of this Project please submit your project report, as well as original invoices, photos and records to Parks Planner, Operations, City of Markham, 101 Town Centre Boulevard, Markham, Ontario, L3R 9W3. Telephone 905-477-700 ext.3226 Fax 905-940-1550. Photos may be posted on the City's website.

## Applicant's Signature

I hereby make application for funding from the Markham Trees for Tomorrow Fund, declaring that all information contained herein is true and correct and acknowledging that the City of Markham will assess this application based upon the information contained in this application.

If approved for funding I further acknowledge and agree:

1. to comply with all relevant policies and secure all permits required for this project and acknowledge that the City bears no responsibility or has any liability in any manner with respect to this project.
2. that the City reserves the right to review communications and communication materials to be presented to the public to ensure compliance with City policies, including the City's Communication Standards.
3. to promote the Markham Trees for Tomorrow Fund on any communication materials, or signage associated with this project and will provide a detailed report on the project outlining how the funds were used to support the project upon completion of the project and no later than 1 year from receipt of the funding.
4. to allow the City of Markham to use the project name and any images associated with the project to promote the Markham Trees for Tomorrow Program.
5. to return all unspent funds to the City of Markham upon completion of the project.
6. that there shall be no personal benefit directly, or indirectly, from this funding and I will notify the City of any conflict of interest situation should it arise in carrying out of the project.
7. permit the City of Markham to claim ownership of all carbon credits and other measurable ecological services resulting from the project.

Signature

Title



Program Director

Printed Name

Date

Sue Arndt

February 14, 2014

*In the event the Registered Owner of the lands is an entity other than the City of Markham, a letter must accompany the application stating that: the Owner consents to this application; acknowledges that the proposed project complies to all its applicable policies and requirements; and, that the writer has the authority to give its consent.*

*Submission of this application form does not guarantee approval of your application. Personal information contained herein is subject to the Municipal Freedom of Information Act and the Personal Protection and Electronic Documents Act. The information collected may be used for promotional purposes.*

OFFICE USE ONLY				
Date Application Received			New Applicant?	Yes No
Approved/Not Approved	Yes	No		
Acknowledgement Letter Sent?	Yes	No	Date Sent	
Letter of Approval or Rejection Sent?	Yes	No	Date Sent	
Final Report Received?	Yes	No	Date Received	
Photos Received?	Yes	No	Date Received	
Consent for Photographs received	Yes	No	Photos posted on website?	Yes No

*Completion of this form constitutes consent by the applicant to these terms and uses.*

# Markham Trees for Tomorrow Fund

## Photo Consent and Release Form

I, \_\_\_\_\_Jill M. Kelly\_\_\_\_\_ hereby permit and authorize the *(Print in full – first, middle initial & last name)*  
City of Markham (the "City") to take my photograph/image.

I acknowledge and agree that the City may publish or use the image for any City purposes by any means whatsoever including, but not limited to electronic or digital means. I acknowledge that the Town may not be able to control the distribution or use of the image by other than Town representatives.

I agree that this Consent and Release is given in perpetuity and for no consideration, credit, acknowledgment or financial recompense, now and in the future.

I hereby hold the City harmless for any claims, actions, debts, damages, injuries or losses that may arise or be incurred as a result of the taking, use, publication or distribution of the image and I agree to indemnify the City against any third party claims, actions, damages, injuries or losses brought or assessed against or incurred by the Town for the use of the image(s).

Contact Information					
Signature	Jill Kelly	Date	February 13, 2014		
Address	Centre for Green Cities, Suite 300, Evergreen Brick Works, 550 Bayview Avenue				
City	Toronto	Province	ON	Postal Code	M4W 3X8
Telephone	416-596-1495 x 360		Email	jkelly@evergreen.ca	
<b>City of Markham:</b>					
City Representative		Date			

### **Attachment Checklist**

Attachment 1: 2014 Workplan/Timeline

Attachment 2: Key Maps and 2014 Planting Plans (courtesy of the TRCA)

Attachment 3: Photo Highlights – 2013 *Trees for Tomorrow* Program

**Attachment 1:  
2014 Workplan and Timeline**

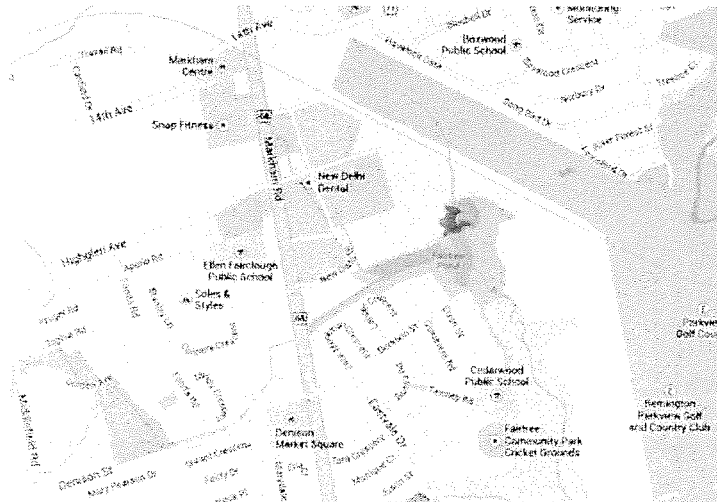
<b>TIME FRAME</b>	<b>ACTIVITIES</b>
Spring 2014	<ul style="list-style-type: none"> <li>-Coordinate with community and program partners to finalize program details (March)</li> <li>-Outreach within the greater community to promote the program and recruit new volunteers (March-April)</li> <li>-Facilitate community restoration planting events and stewardship and monitoring initiatives (May-June)</li> </ul>
Summer 2014	<ul style="list-style-type: none"> <li>-Coordinate and lead stewardship and monitoring events in designated parks (June-August)</li> <li>-Outreach within the community to promote the program to recruit volunteers for fall plantings (August)</li> </ul>
Fall 2014	<ul style="list-style-type: none"> <li>-Facilitate community restoration planting events and stewardship and monitoring initiatives (September-November)</li> </ul>
Winter 2014/15	<ul style="list-style-type: none"> <li>-Prepare and provide program activity report to the City of Markham (December)</li> <li>-Secure additional funding sources to supplement our community programs in Markham (January-February)</li> <li>-Collaborate with City staff and the Toronto and Region Conservation Authority to finalize community restoration and program plans for 2015 (February-March)</li> </ul>

## Attachment 2: Key Maps and 2014 Planting Plans



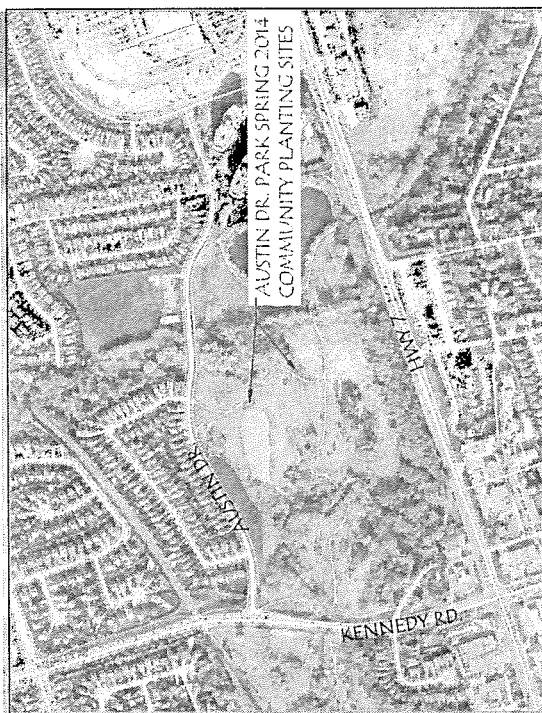
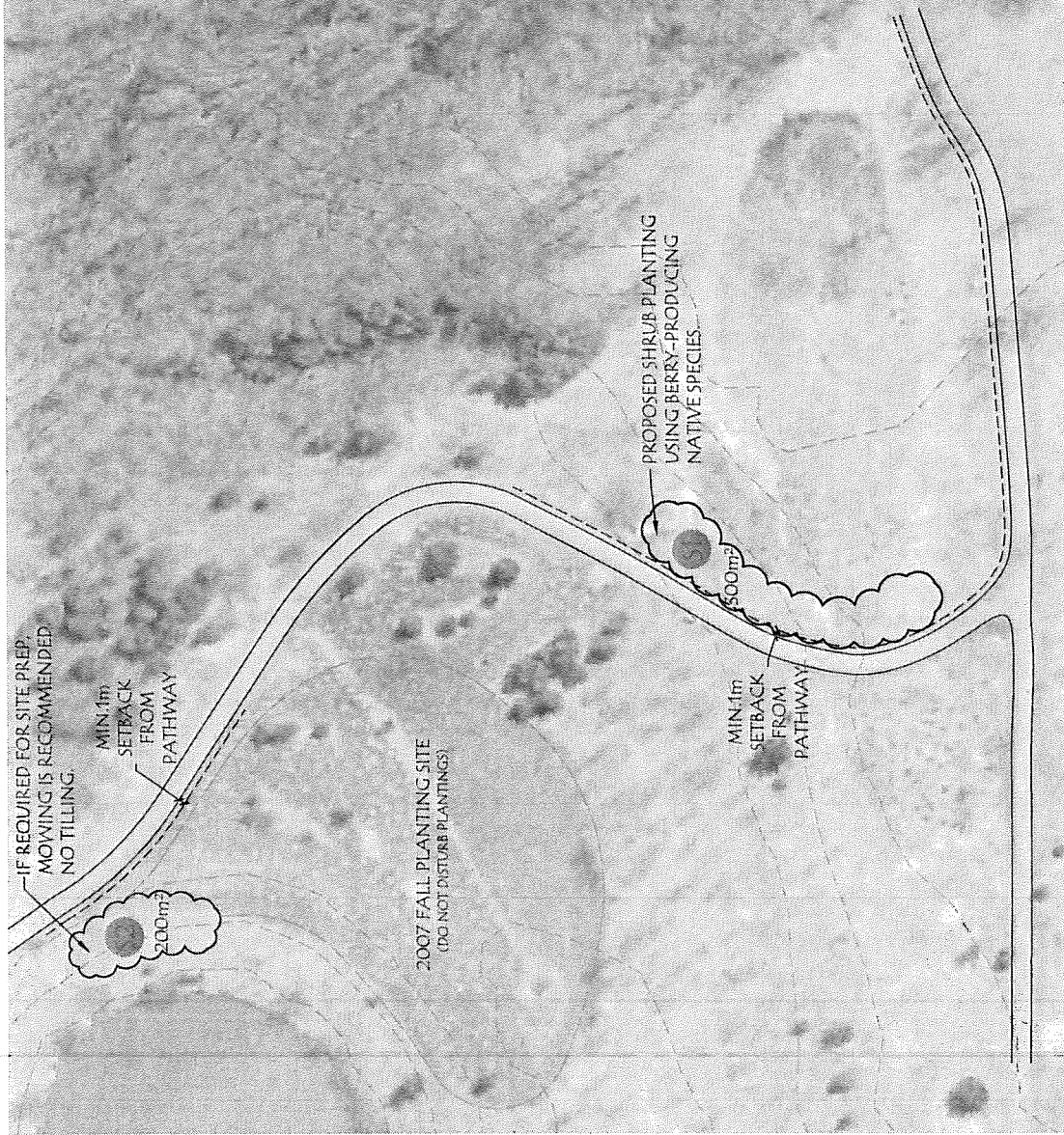
**Austin Drive Park**

Restoration Planting Events with *Markham Heritage Lions Club* and General Public




**MOEE Stormwater Retention Ponds (Fairtree Pond)**

Restoration Planting with local School Group (*Cedarwood Public School*) and Community



## PLANTING LIST

Common Name	Botanical Name	Size/Condition	SI		Total
			SI (30.0m <sup>2</sup> )	SI (200m <sup>2</sup> )	
SHRUB					
Sourcery	<i>Amelanchier</i>	2G POT	20	50	70
Gray Dogwood	<i>Cornus racemosa</i>	2G POT	50		50
Alt. Leaf Dogwood	<i>Cornus alternifolia</i>	2G POT		50	50
Ragwort Sumac	<i>Rhus typhina</i>	2G POT	20		20
American Hazel	<i>Corylus americana</i>	2G POT	20		20
Buck Honeyuckle	<i>Dicella leonisa</i>	2G POT	20		20
Flowering Raspberry	<i>Rubus odoratus</i>	2G POT	20		20

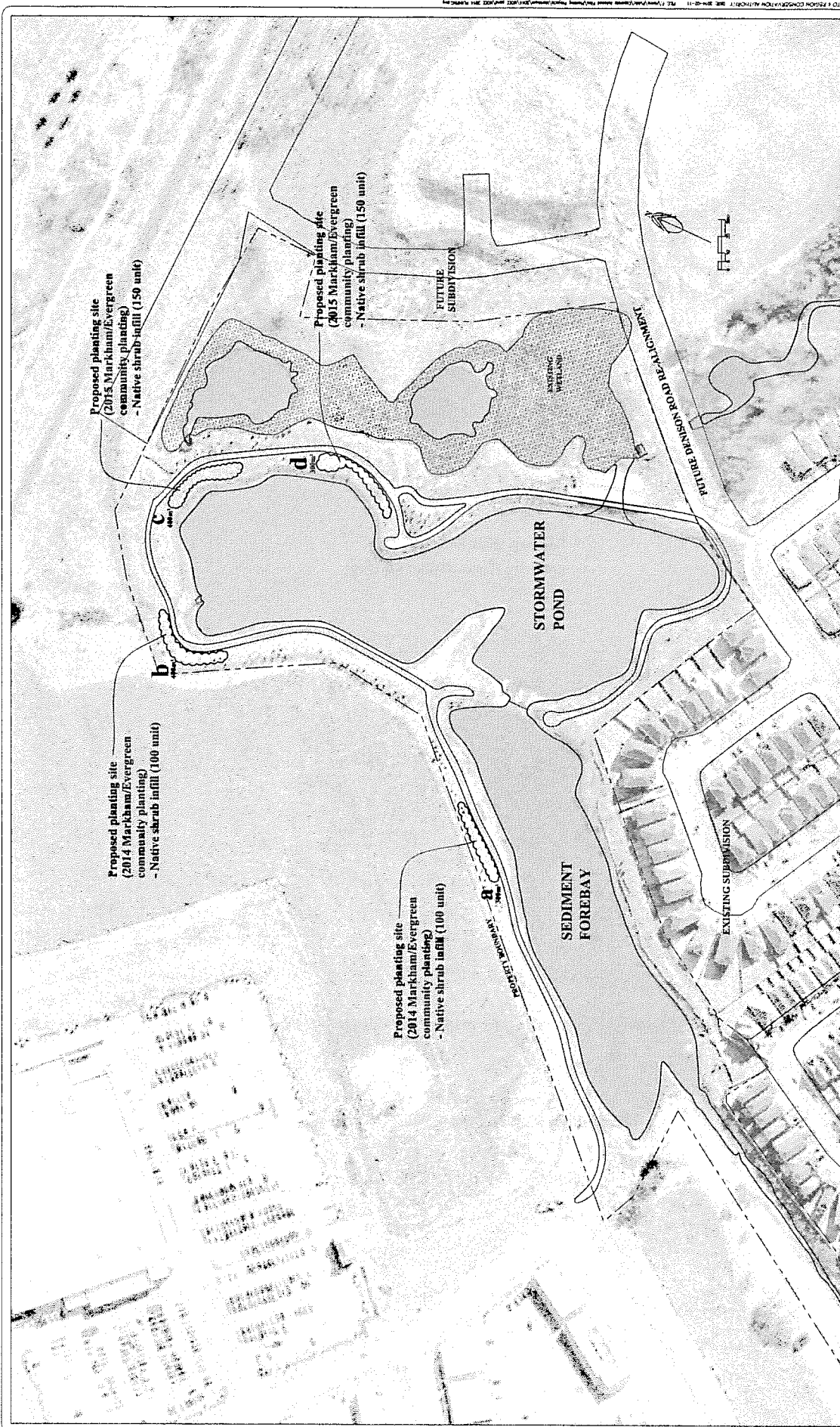
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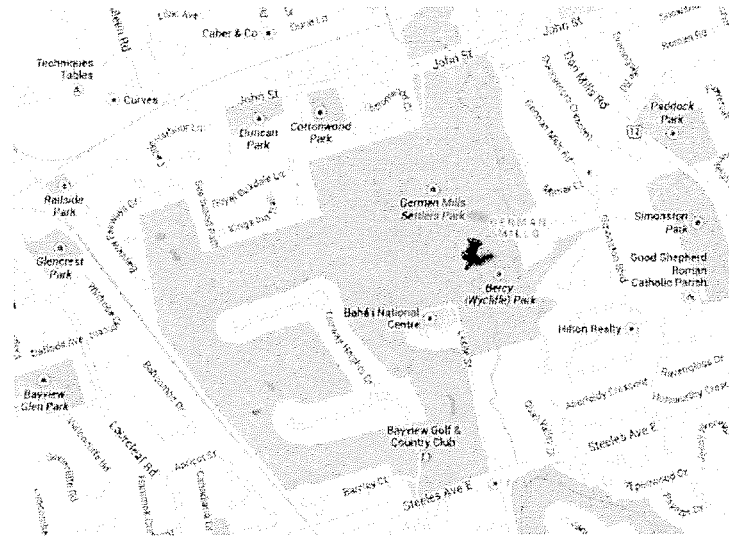
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COMMUNITY PLANTINGM. AUSTIN DR. PARK CC  
4

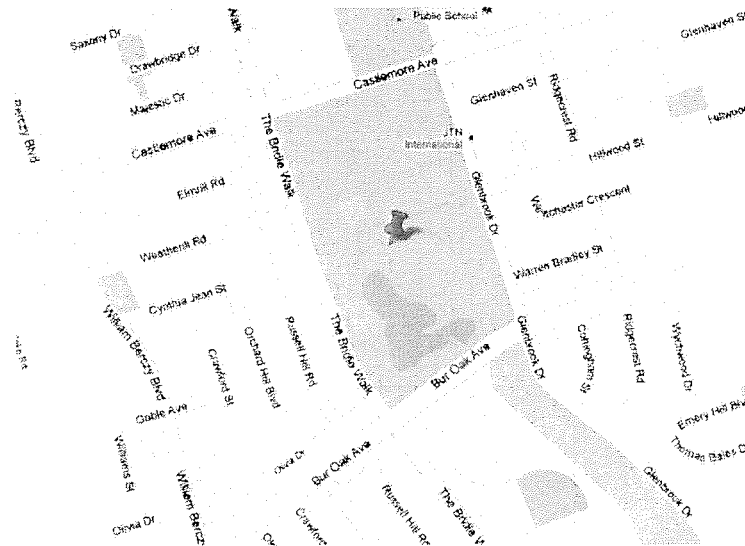
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MARKHA  
SPRING 201



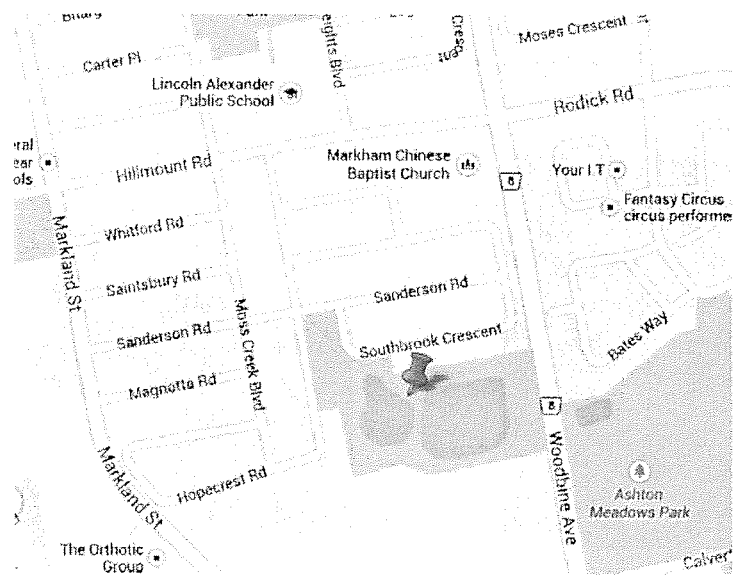
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**German Mills Settlers Park**  
Community Restoration Planting

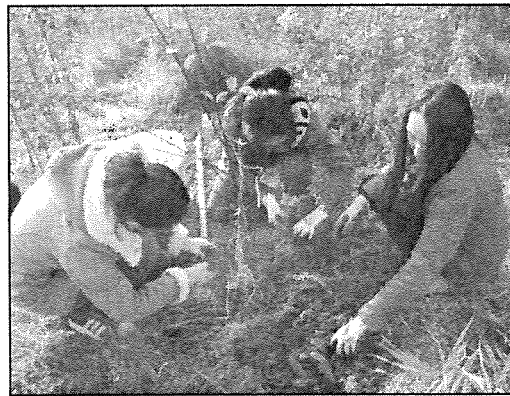


**Berczy Park**  
Community Planting and Stewardship Events



**Fierheller Park**  
**Community Planting and Stewardship Events**

**Attachment 3:**  
**Photo Highlights – 2013 *Trees for Tomorrow* Program**



# Application Form

For Office Use Only - Project No.:

Group Information			
Name	10,000 Trees for the Rouge		
Address	13, Dolan Drive, Palgrave, Ontario, L7E0E1		
Phone	905-880-9116	Fax	N/A
Email	Cpc42@rogers.com	Website Address	www.10000trees.com
Charitable/Non Profit Organization registration # (if applicable)	Our Group has a bank account in the name of our organization		
12981 4729 RR0001	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Briefly describe what your group does:

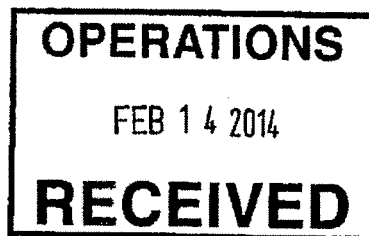
The mandate of 10,000 trees for the Rouge is the creation of wildlife habitat through the planting of native trees and shrubs.

10,000 Trees for the Rouge has been planting native trees and shrubs in the Rouge watershed for the past 24 years, many of those plantings occurring in Markham.

The group, which is all volunteer, donates their time and efforts to restoring natural habitats to a high level of ecological function. The main planting event is held in late April, and attracts public participation of over 2000 community members, as well as media and political attention. Smaller plantings are carried out in the Fall, and consist primarily of maintenance plantings.

Monitoring and maintenance of plantings continues through the growing season, and all sites are monitored until our Registered Forester declares that the planting is in a "free to grow" stage. Maintenance of past plantings is part of our system, but the amount of maintenance is entirely dependent on funding.

To date, our group has been responsible for planting approx. 173,000 native trees and shrubs, helping to restore some 171 acres back to natural habitat.



Project Manager		Additional Contact	
Name	Colin Creasey	Name	Marshall Buchanan
Title	Chairman	Title	Registered Professional Forester
Phone (work)	N/A	Phone (work)	613-649-2190
Phone (home)	905-880-9116	Phone (home)	613-649-2190
Email	cpc42@rogers.com	Email	moonlightcrofters@gmail.com

Project Summary			
Title	25 <sup>th</sup> . Annual Wildlife Habitat restoration project		
Location of Project	SE corner of Milne Park, City of Markham		
Name of Registered Owner of the Lands	City of Markham		
Address of Registered Owner of the Lands	101, Town Centre Blvd., Markham, ON.		
Contact Name for Registered Owner of the Lands	Nory Takata		
Phone # 905 477-7000- ext 3226		Duration (months, maximum 12 months)	7
Request for	Spring Funding \$30,000	Fall Funding	Either
Start Date of Project	April 1 <sup>st</sup> , 2014	End Date	October 31 <sup>st</sup> , 2014

Please provide a detailed description of your project in the following space. Please attach additional pages if necessary to fully explain your project.

**Project Team** - is composed of dedicated volunteers who represent a wide range of occupations, teacher, scout leader, landscape worker, business people, engineer, web designer, arborist, and a registered forester. Most have over 10 years, and some over 20 years, of experience in implementing these kinds of projects.

**Public Relations Committee; Sponsors, and politicians** at all levels, are invited to attend the event, and take part in the ceremonial tree planting. All the local media, print, radio, and television, are contacted approx. one month prior to the event, and again the week of the event. We often give interviews to the local media, where there is an opportunity to recognize the city of Markham, TRCA, and the Rouge Park.

**Volunteer Committee;** A flyer for the event is designed and posted on-line, and mailed out to approx. 900 planting volunteers on our mailing list. We are in the process of establishing a web base for our volunteers, so that we can go paperless in the future. The flyer is also sent to church groups, scouting groups, and schools, and is posted in local community centres and libraries.

**Fundraising Committee;** Searches to find new funding sponsors, both monetary and in kind, and prepares fundraising applications and final reports.

**Landscape Committee;** Works with our forester on the design of the site. Once species are selected, then tenders with detailed tree specifications are sent to suppliers. The committee is responsible for organizing the stock on site, and ensuring that the trees and shrubs are distributed to the correct planting locations. Planting managers are trained in advance on proper tree planting techniques, and on planting day, they lead groups of volunteers to specific areas, and then both instruct the volunteers, and oversee the plantings.

**Site Preparation Committee;** Ensures that equipment and services are on site. Equipment, (shovels, buckets, signs, tents, water pumps, hoses, tree guards, tables etc.) are purchased as necessary, and kept in working order. Safety services are looked after. St. John Ambulance is contacted, and police are hired to direct traffic. Portable washrooms are arranged, as well as a free lunch for the volunteers. At the end of the day, the committee is responsible for the clean up of the site.

**Work Plan** See Work Plan - Table 4

**Site Plan** Site Plan including Map and Species List (pages 8 – 10)

**Environmental benefits;** The trees that we plant will clean the air, and filter run-off water before it enters our rivers. By increasing forest cover, we will be encouraging the return of forest interior dwelling wildlife that has been extirpated from the area. This biodiversity will increase as the forest matures.

**Maintenance;** This is under the direction of our forester, Marshall Buchanan. His contact information is on the lead sheet.

**Promotion of MTF;** This will be done through our flyer, (see under "Volunteer Committee", above), our site sign, and through photos taken on planting day being posted on their website. The local papers, and sometimes larger daily papers, often run articles and pictures of our event. Our own website also carries pictures and information, and acknowledges the support of Markham Trees for Tomorrow Fund.

**Funding sources;** See Source Contributions - Table 3

**Educational signage;** Posters are used on site to instruct in proper tree planting. This reinforces the hands-on instruction provided by our trained planting managers. As well, a sign in each area indicates what plant species are being planted there.

Please also provide a cost summary including (please use attached budget forms on pages 4 and 5 to this application to provide details of the costs)

Total Project Cost	<b>\$148,461</b>	Amount requested from the MTF	<b>\$30,000</b>
Amount from other sources	<b>\$118,461</b>	In- Kind support hours	<b>6329</b>

**How did you organization hear about the MTF? (Please check one)**

City Website ☐ Newspaper advertisement ☐ Word of mouth ☐ Other ☒ X

Upon completion of this Project please submit your project report, as well as original invoices, photos and records to Parks Planner, Operations, City of Markham, 101 Town Centre Boulevard, Markham, Ontario, L3R 9W3. Telephone 905-477-700 ext.3226 Fax 905-940-1550. Photos may be posted on the City's website.

**BUDGET FORM – Table 1**

Materials, Supplies and Equipment	Cost			MTTF	Other
	# of units	Unit Cost \$	Total Cost \$		
Toilets/Washstands	3 + 2		900	400	500
Truck rental	1	600	600	250	350
Buses for volunteers	8	350	2700	1300	1400
Stakes	100	2.50	250	100	150
Water and irrigation supplies			600	300	300
Peat moss	25	15	375	175	200
Habitat structures	12	180	2160	1000	1160
Shovels	50	15	750	350	400
Tree guards	2500	1	2500	1400	1100
Rope, and flagging tape	3 + 10	40 + 3	150		150
Deer fencing, 10m. squares	5	700	3500	2000	1500
Site preparation and cover crop			1350	600	750
Equipment rental			1000	350	650
Trees	4000	6.00	24000	13000	11000
Shrubs	1500	2.50	3750	2050	1700
Maintenance contractor	1	2500	2500	1250	1250
Replacement trees	500	10	5000	2500	2500
Regeneration report	1	900	900	200	700
Temporary site signs			300	100	200
Food for BBQ lunch			2000	800	1200

**Other Expenses**

(e.g. Printing Brochures)	100	0.50	50.00	25.00	25.00
D & O insurance	1	925	925	225	700
Fundraising	50	40	2000	500	1500
Police	2	375	750	350	400
St. John Ambulance	1	250	250	100	150
Database/website	1	300	300	100	200
Flyer, stamps, photocopying, developing			1800	600	1200
<b>Total</b>			61310	30000	31310

# **BUDGET FORM – HUMAN RESOURCES (Volunteers) Table 2**

Service	Details		In- Kind Value (in hours worked)
	Number of People	Estimated Time for Each	
(e.g. Volunteer planters)	10	10	100
Executive meetings	10	20	200
Training planting managers	25	2	50
Volunteers to plant trees	2000	2.5	5000
Volunteers to mulch trees	100	3	300
Accounting	1	24	24
Fundraising	4	40	160
Food preparation	8	10	80
Site preparation	35	10	350
Road and tree signs	5	4	20
Forestry consultant	1	65	65
Database/website management	2	40	80
<b>Total</b>			<b>6329</b>



### SOURCE CONTRIBUTIONS – TABLE 3

Sponsor	Purpose	Cash Donation	In-kind
Town of Markham	Maintenance, Site Preparation, Irrigation Supplies, Picnic Tables, Pylons and Refuse Pick-up, Mulch	\$ 30,000.00	\$ 7,500.00
Trees for Life	Plant materials, Tree Guards	\$ 6,800.00	\$ -
TD FEF	Plant material, toilets and washstands	\$10,000	\$ -
Thompson Reuters	Buses, Truck rental, Fundraising (Funding Confirmed)	\$ 5,000.00	\$ -
Dow Chemical	Insurance, Website, Police & Ambulance Services	\$ 3,000.00	\$ -
MPCA	Plant material	\$500	
Milliken Mills Lions	Tree Stakes, Shovels, Flyer Printing	\$ 1,000.00	\$ -
10,000 Trees Volunteers	Administration, Fundraising, Tree ordering, Site Staking, Heeling in Trees, Tree Planting, Mulching	\$	\$ 67,361.00
Toronto Region Conservation Auth.	Administrative support, Technical support, plant materials.	\$ 5,000.00	\$ 3,000.00
Symbiotic	Site Surveys, Mapping, Fundraising, Accounting & Ecological Planning	\$	\$ 4,000.00
6 <sup>th</sup> Pickering Amberlea Venturers	Install snags, Site Staking, Unload trees	\$	\$ 1,580.00
Agincourt Rotary	Food & Beverage Service, Barbecues	\$	\$ 1,420.00
Metro Toronto Zoo	Storage Space		\$ 1,300.00
John Johnson Landscaping	2 ATV's & Trailers	\$	\$ 1,000.00
	<b>Sub-totals</b>	<b>\$ 61,300.00</b> <b>Cash</b>	<b>\$ 87,161.00</b> <b>In-kind</b>

<b>Work Plan – Table 4</b>	
<b>April - October</b>	<b>Work Plan</b>
<b>Project Start April 1st 2014</b>	<ul style="list-style-type: none"> <li>• Erect snags and distribute coarse woody debris on site</li> </ul>
<b>Mid -April</b>	<ul style="list-style-type: none"> <li>• Cultivate site and sow cover crop of low growing white clover to suppress weeds, improve site fertility and provide forage for bees</li> </ul>
	<ul style="list-style-type: none"> <li>• Install temporary fencing to protect trees from deer browsing</li> </ul>
<b>April 26th</b>	<ul style="list-style-type: none"> <li>• Receive trees, distribute, and heel in place</li> </ul>
	<ul style="list-style-type: none"> <li>• Instruct planting managers on site layout and planting methods</li> </ul>
<b>Planting Day April 27th, 2014</b>	<ul style="list-style-type: none"> <li>• Supervise and coordinate volunteers to get trees and shrubs planted</li> </ul>
	<ul style="list-style-type: none"> <li>• Install tree guards to reduce damage from meadow voles</li> </ul>
	<ul style="list-style-type: none"> <li>• Mulch trees with wood chips</li> </ul>
	<ul style="list-style-type: none"> <li>• Fertilize trees in protected areas to reduce transplant shock</li> </ul>
	<ul style="list-style-type: none"> <li>• Photograph site</li> </ul>
<b>May</b>	<ul style="list-style-type: none"> <li>• Monitor trees &amp; shrubs to verify initial viability, that buds flushed and leaves emerged (i.e. trees were alive)</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor for insect herbivory (caterpillars etc.)</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor site for wildlife use</li> </ul>
<b>June</b>	<ul style="list-style-type: none"> <li>• Mulch trees again to ensure they are protected from summer drought conditions</li> </ul>
	<ul style="list-style-type: none"> <li>• Complete fertilizing and water if necessary</li> </ul>
	<ul style="list-style-type: none"> <li>• Photograph site</li> </ul>
<b>July - August</b>	<ul style="list-style-type: none"> <li>• Conduct regeneration survey</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor site for wildlife use</li> </ul>
	<ul style="list-style-type: none"> <li>• Photograph site</li> </ul>
<b>September - October</b>	<ul style="list-style-type: none"> <li>• Replant areas where survival was poor</li> </ul>



# Forest Succession 2014 Species List 10,000 TREES FOR THE ROUGE

Common Name	Latin name	Total per Species	Grand Total
Coniferous Trees (41%)			2,250
Eastern white cedar	<i>Thuja occidentalis</i>	150	
White Spruce	<i>Picea glauca</i>	700	
Tamarack	<i>Larix laricina</i>	350	
Eastern red cedar	<i>Juniperus virginiana</i>	550	
White pine	<i>Pinus strobus</i>	700	
Deciduous Trees (32%)			1,750
Cottonwood	<i>Populus deltoides</i>	500	
Aspen, largetooth	<i>Populus grandidentata</i>	500	
Basswood	<i>Tilia americana</i>	150	
Red maple	<i>Acer rubra</i>	175	
Sugar maple	<i>Acer saccharum</i>	200	
Bur Oak	<i>Quercus macrocarpa</i>	150	
Bitternut Hickory	<i>Carya cordiformis</i>	50	
Black walnut	<i>Juglans nigra</i>	25	
Shrubs (27%)			1,500
Sumac	<i>Rhus typhina</i>	400	
Chokecherry	<i>Prunus virginiana</i>	300	
Hawthorn	<i>Crategeus crus-galli</i>	250	
Serviceberry	<i>Amelancier laevis or canadensis</i>	250	
Nannyberry	<i>Viburnum lentago</i>	100	
Grey dogwood	<i>Comus racemosa</i>	100	
Red Osier Dogwood	<i>Comus stolonifera</i>	100	
Total			5,500

## Design Notes

- Buffer composed of white spruce along border with 407
- Trails drawn by TRCA are kept and serve as site boundaries to help define areas planted in different years
- Trails do not lead to public works yard or go near residential boundaries
- Trails should be mowed twice to maintain site access and keep site visitors from wandering into the restoration areas where vandalism may occur
- Pioneering trees such as largetooth aspen, white cedar and white pine are prescribed to create the general forest environment.
- Shrubs are used extensively since they are early successional woody species which form thickets in meadows and quickly enhance habitat diversity
- Long term biodiversity is addressed by planting oak, maple, basswood and hickory in nucleations or nodes
- Hardwood species such as oak and maple, which struggle against grass and weed competition are concentrated in nodes where tending efforts such as mulching, watering or fertilizing can be focused.
- Hardwood nodes are protected from deer by a small fence (about 10 metre square) which encourages deer to walk around the perimeter of the enclosure, rather than jumping into it

## Applicant's Signature

I hereby make application for funding from the Markham Trees for Tomorrow Fund, declaring that all information contained herein is true and correct and acknowledging that the City of Markham will assess this application based upon the information contained in this application.

If approved for funding I further acknowledge and agree:

1. to comply with all relevant policies and secure all permits required for this project and acknowledge that the City bears no responsibility or has any liability in any manner with respect to this project.
2. that the City reserves the right to review communications and communication materials to be presented to the public to ensure compliance with City policies, including the City's Communication Standards.
3. to promote the Markham Trees for Tomorrow Fund on any communication materials, or signage associated with this project and will provide a detailed report on the project outlining how the funds were used to support the project upon completion of the project and no later than 1 year from receipt of the funding.
4. to allow the City of Markham to use the project name and any images associated with the project to promote the Markham Trees for Tomorrow Program.
5. to return all unspent funds to the City of Markham upon completion of the project.
6. that there shall be no personal benefit directly, or indirectly, from this funding and I will notify the City of any conflict of interest situation should it arise in carrying out of the project.
7. permit the City of Markham to claim ownership of all carbon credits and other measurable ecological services resulting from the project.

Signature



Title

Chairman

Printed Name

Colin P Creasey

Date

10<sup>th</sup>. February 2014

*In the event the Registered Owner of the lands is an entity other than the City of Markham, a letter must accompany the application stating that: the Owner consents to this application; acknowledges that the proposed project complies to all its applicable policies and requirements; and, that the writer has the authority to give its consent.*

*Submission of this application form does not guarantee approval of your application.*

*Personal information contained herein is subject to the Municipal Freedom of Information Act and the Personal Protection and Electronic Documents Act. The information collected may be used for promotional purposes. Completion of this form constitutes consent by the applicant to these terms and uses.*

OFFICE USE ONLY				
Date Application Received			New Applicant?	Yes No
Approved/Not Approved	Yes	No		
Acknowledgement Letter Sent?	Yes	No	Date Sent	
Letter of Approval or Rejection Sent?	Yes	No	Date Sent	
Final Report Received?	Yes	No	Date Received	
Photos Received?	Yes	No	Date Received	
Consent for Photographs received	Yes	No	Photos posted on website?	Yes No

# Markham Trees for Tomorrow Fund


## Photo Consent and Release Form

I, Colin P Creasey hereby permit and authorize the *(Print in full – first, middle initial & last name)* City of Markham (the "City") to take my photograph/image.

I acknowledge and agree that the City may publish or use the image for any City purposes by any means whatsoever including, but not limited to electronic or digital means. I acknowledge that the Town may not be able to control the distribution or use of the image by other than Town representatives.

I agree that this Consent and Release is given in perpetuity and for no consideration, credit, acknowledgment or financial recompense, now and in the future.

I hereby hold the City harmless for any claims, actions, debts, damages, injuries or losses that may arise or be incurred as a result of the taking, use, publication or distribution of the image and I agree to indemnify the City against any third party claims, actions, damages, injuries or losses brought or assessed against or incurred by the Town for the use of the image(s).

Contact Information					
Signature			Date	10th. February 2014	
Address	13, Dolan Drive				
City	Palgrave	Province	ON	Postal Code	L7E 0E1
Telephone	905-880-9116		Email	cpc42@rogers.com	
City of Markham:					
City Representative		Date			

