

REPORT FOR ACTION

Eco-Roof Incentive Program application: 2 Fraser Avenue

Date: May 8, 2017

To: Planning and Growth Management Committee

From: Chief Corporate Officer

Wards: All

SUMMARY

Green roofs and cool roofs – known collectively as 'eco-roofs' – help make Toronto more resilient and better adapted to climate change. Eco-roofs reduce urban heat and its associated energy use. Green roofs also help manage storm water runoff, enhance biodiversity, improve air quality, and beautify our city.

In 2008, Toronto established the Eco-Roof Incentive Program, which encourages the installation of eco-roofs on existing buildings and some new buildings. In 2013, the program became completely self-sustaining drawing its funding from cash-in-lieu payments under the Green Roof Bylaw.

In December 2016, a new reporting requirement was adopted by City Council, stating that a staff report be submitted with a recommendation to the Planning and Growth Management Committee and City Council for applications for project funding greater than \$50,000 for cool roofs and \$100,000 for green roofs.

This report responds to this new reporting requirement for a green roof project greater than \$100,000 at 2 Fraser Avenue. Program staff have reviewed the application and have determined that the proposed green roof meets program eligibility criteria, and therefore recommended for funding support from the Eco-Roof Incentive Program.

Funding in the amount of \$100,000 has been pre-approved based on the authority delegated to staff when the Eco-Roof Incentive Program was adopted in 2008 (Part 3 of Council Decision PG20.8). City staff recommend Council authorize staff to approve funding up to the full size of the proposed green roof, which would be an additional \$70,800 for a total of \$170,800, based on the current green roof incentive of \$100 per square metre (m2) and the proposed green roof size of 1,708 m2.

RECOMMENDATIONS

The Chief Corporate Officer recommends that:

1. City Council approve Eco-Roof Incentive Program funding for a green roof at 2 Fraser Avenue of 1,708 square metres, in an amount up to \$70,800 above the pre-approved funding of \$100,000.

FINANCIAL IMPACT

The 2017 Council Approved Operating Budget for Facilities, Real Estate, Environment & Energy (FREE) includes funding of \$818,522 from the Eco-Roof Financial Assistance Reserve Fund (XR1723) dedicated to fund eco-roof projects to continue supporting this initiative. Additional funding of \$70,800 above the pre-approved funding of \$100,000 is requested by City Council to be directed from this reserve for the green roof project at 2 Fraser Avenue. The total cost of this initiative funded by the Eco-Roof Financial Assistance Reserve Fund is \$170,800.

The Eco-Roof Incentive Program is completely self-sustaining, with funding coming from cash-in-lieu paid to the City under the Green Roof Bylaw. Ongoing approval of projects through the program is subject to the availability of funds in the Eco-Roof Financial Assistance Reserve that receives cash-in-lieu contributions. As of May 1, 2017, there is \$2,320,177 in the Eco-Roof Financial Assistance Reserve.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

In 2008, City Council endorsed the terms of reference for the Eco-Roof Incentive Program which was officially launched in March 2009. Part 3 of this decision delegated authority to City staff to approve funds for cools roof projects to a maximum of \$50,000 per award and green roof projects to a maximum of \$100,000 per award. The decision document can be viewed here:

http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2008.PG20.8

On December 13, 14 and 15, 2016, City Council adopted revisions to the Terms and Conditions of the Eco-Roof Incentive Program, based on the results of a program review. At that same time, the Chair of the Planning and Growth Management Committee made a motion, which was adopted by City Council, adding the following: "Add the requirement that a staff report be submitted with recommendations to the Planning and Growth Management Committee and City Council for applications for project funding greater than \$50,000 for cool roofs and \$100,000 for green roofs." The decision document can be viewed here:

http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2016.PG16.4

Eco-Roof Incentive Program

The Eco-Roof Incentive Program, launched in 2009, encourages the installation of green roofs and cool roofs on buildings in Toronto. The program became completely self-sustaining in 2013 when Council directed that funds collected as cash-in-lieu of construction of a green roof be directed to the Eco-Roof Incentive Program.

Eligibility

The Program provides funds for green roof and cool roof projects on:

- Existing residential, industrial, commercial, and institutional buildings.
- New residential, industrial, commercial, and institutional buildings with a gross floor area of less than 2,000 m2.

In addition, green roof incentives are offered for the following projects:

 All new construction projects, by Toronto Public and Separate School Boards and organizations incorporated as not-for-profit corporations, of any size.

Incentives

Green roof incentive: \$100/m2 of green roof provided to a maximum of \$100,000.

Cool roof incentives: \$5/m2 for a cool roof with a new membrane or \$2/m2 for a cool roof coating over an existing roof to a maximum of \$50,000.

Council approval is required for funding requests in excess of the pre-approved maximum of \$50,000 for cool roofs and \$100,000 for green roofs.

Green Roof Coverage Requirements

A green roof will have minimum coverage of available roof space in accordance with the following chart:

Gross Floor Area* (Size of Building)	Minimum Coverage of Available Roof Space** (Size of Green Roof)
Less than 4,999 m ²	20%
5,000-9,999 m²	30%
10,000-14,999 m²	40%
15,000-19,999 m²	50%
20,000 m ² or greater	60%

- * Gross Floor Area The total area of each floor level of a building, above and below average grade, measured from the exterior of the main wall of each floor level, including voids at the level of each floor, such as an atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft, but excluding areas used for the purpose of parking or loading.
- ** Available Roof Space The total roof area minus areas designated for renewable energy, private terraces and residential outdoor amenity space.

Green Roof Construction Requirements

The green roof must be designed and constructed in conformance with the requirements of Toronto's Green Roof Construction Standard, which can be found in Article IV of the Green Roof Bylaw (Municipal Code Chapter 492, Green Roofs).

Approval Process

Applications are reviewed by Environment and Energy Division (EED) staff to ensure they adhere to the program criteria. When necessary, staff from City Planning, Toronto Water, and Toronto Building, are asked to make recommendations to the EED.

If approved by the Director of the EED, the applicant is required to construct the eco-roof and provide evidence of its completion prior to receiving any part of the grant. Evidence of completion includes a letter of declaration from the installer and photos of the completed roof.

Site inspections by City staff are also part of the verification process. City staff may also inspect a green roof at any time during its lifetime to ensure that it is being maintained properly.

More information about eligibility and the application process can be found at: www.toronto.ca/livegreen/ecoroofs.

2 Fraser Avenue - Green roof application greater than \$100,000

Background

On April 11, 2017, an application for a green roof at 2 Fraser Avenue was received (Reference #0417-03).

Program staff reviewed the application and determined that the proposed project met the program eligibility criteria for green roof projects.

The project was recommended for funding in the amount of \$100,000 based on the proposed plans for a green roof with an area of 1,708 square metres.

An approval letter was created on May 3, 2017 and provided to the registered property owner.

Application Details

	1		
Date submitted	April 11, 2017		
Reference Number	0417-03		
Roof address	2 Fraser Avenue, Toronto ON M6K 1Y6		
Ward	14		
Building Type	Industrial		
Building Status	Existing		
Existing Roof Type	Built-up felt and tar		
Slope	0-2 degrees		
Total Roof Area	7,131 m2		
Project Description	A green roof is being proposed at this property. The project is an adaptive reuse of an industrial building into office space for communications and broadcasting industries.		
Project Type	Green		
Green Roof Type	Semi-intensive		
Green Roof Area	1,708 m2		
Available Roof Space	5,592 m2		
Percent coverage	30.5%		
Plant Species	Wildflower Meadow Blend - Various meadow species that are suitable for luscious, biodiverse and colourful urban meadow applications. Consisting of a hardy mix of grasses and long-blooming wildflowers that are especially attractive to butterflies and beneficial pollinators for food and nesting.		
Growing Medium	Bio-Mix Eco-Blend - Lightweight, biologically populated, mix of organic and inorganic material that will support a wide variety of plant growth, retain and remediate stormwater runoff.		
Maintenance plan	Plan provided - watering, wedding, plant care and routine inspections.		

Supporting Documents

The following supporting documents for the green roof at 2 Fraser Avenue are provided:

- Appendix 1 is a before photo of the roof.
- Appendix 2 is a roof plan showing area to be retrofitted and size in m2.

Project Approval

The proposed green roof project at 2 Fraser Avenue meets the Eco-Roof Incentive Program criteria established for green roof projects. Based on the incentive rate of \$100/m2 for green roofs, the proposed green roof area of 1,708 m2, this project is eligible for funding in the amount of \$170,800. Since the project has already been pre-approved for \$100,000, this report seeks to provide additional funding in the amount of \$70,800, for a total of \$170,800.

Program Outlook

Since 2013, the Program has been completely self-sustaining due to funding from the cash-in-lieu policy of the Green Roof Bylaw. Ongoing approval of projects is subject to the availability of funds received from cash-in-lieu contributions and held in the Eco-Roof Financial Assistance Reserve Fund. As of May 1 2017, there is \$2,320,177 in the Eco-Roof Financial Assistance Reserve.

Forecasted cash-in-lieu payments from approved exemptions and variances from the Green Roof Bylaw are estimated at \$1,501,433. This is an estimated amount as proponents do not actually pay for their variance or exemption until they apply for their building permit, and may withdraw their request and install the required green roof. As part of the annual budget process, staff will report on the availability of funds.

Conclusion

The proposed green roof project at 2 Fraser Avenue meets program criteria and therefore is recommended for funding support from the Eco-Roof Incentive Program. The project has been pre-approved for \$100,000. This report seeks Council authority for staff to approve additional funding in the amount of \$70,800, for a total of \$170,800. Approving funding for the proposed green roof, will increase green roof space in the city and its associated benefits.

CONTACT

Jim Baxter, Director, Environment and Energy Division

Tel: 416-338-1295, Email: jbaxter2@toronto.ca

Annemarie Baynton, Senior Environmental Planner, Environment and Energy Division

Tel: 416-392-1848, Email: abaynto@toronto.ca

SIGNATURE

Josie Scioli Chief Corporate Officer

ATTACHMENTS

Appendix 1: Before photo of the roof at 2 Fraser Avenue

Appendix 2: Roof plan for 2 Fraser Avenue showing areas to be retrofitted and size

Appendix 1: Before photo of the roof at 2 Fraser Avenue



Appendix 2: Roof plan for 2 Fraser Avenue showing areas to be retrofitted and size



		AREA	%
	TOTAL ROOF	7131 m2	
	ROOF DECK	484 m2	
	SKYLIGHTS	280 m2	
	ROOFTOP UNITS, DUCTS, AND MAINTENANCE ACCESS	775 m2	
	TOTAL AVAILABLE ROOF (SUBTRACT DECK, SKYLIGHTS, AND ROOFTOP UNIT AREAS)	5592 m2	
+ + + + + + +	GREEN ROOF	1708 m2	30%
	ROOF HARD - HIGH ALBEDO (SUBTRACT ROOF DECK, SKYLIGHTS, AND GREEN ROOF)	4659 m2	100%