



Residential Stormwater Credit Application

Who can apply?

Residential and non-residential property owners can apply for stormwater credits.

Residential:

Use the residential application if you own the following types of property:

- single detached homes;
- semi-detached homes;
- townhomes;
- condominiums;
- duplex, triplex, four-plex and five-plex homes.

How to apply?

- 1. Apply online:** register for the Tax and Utility e-Billing service at www.kitchener.ca/ebilling. You will need the most recent copy of your Kitchener Utilities bill. For more information about the e-billing service and instructions on how to register, visit www.kitchener.ca/onlinebilling. Complete the online form using:
 - a. a copy of your utility bill, and
 - b. the measurements of the best management practices you use to manage stormwater or the volume of water stored.
- 2. Complete the PDF form below:** complete the form below using the following information:
 - a. a copy of your utility bill, and
 - b. the measurements of the best management practices you use to manage stormwater or the volume of water stored.

Email the completed form to stormwaterutility@kitchener.ca or, mail the form to Kitchener Operations Facility:

Sanitary & Stormwater Utilities
Kitchener Operations Facility
131 Goodrich Drive Kitchener, ON
N2C 2E8

Non-residential:

Please apply using the non-residential application if you own the following types of property:

- industrial;
- commercial;
- retail;
- institutional;
- multi-residential buildings with more than five dwelling units.

How to apply?

We encourage you to visit our website at www.kitchener.ca/stormwatercredits for additional information. Do not hesitate to contact staff if you have any remaining questions at stormwaterutility@kitchener.ca or (519) 741-2200 ext. 7355.

Section 1 - Account Information

 <p>Finance and Corporate Services, Revenue Division City Hall, 200 King St W, PO Box 91113 Kitchener ON N2G 4R6 Telephone: 519-741-2450 TTY: 1-866-969-9994 Fax: 519-741-2751 Website: www.kitchener.ca</p>	<p>Your Account Summary</p>		SEQ-ID: XXXX-XXXXXXX
	<p>Account Number: XXXXXXXXX</p> <p>Balance Forward: 319.60</p> <p>Gas & Water Charges: 230.83</p> <p>Stormwater Rate Charges: 5.67</p> <p>Water Heater Rental Charges: 12.27</p> <p>Total Due: 568.37</p>	<p>Issue Date: Mar 29, 2012</p> <p>Utility bills are due when issued. If the bill is not paid, a late payment charge of 2% will be added after Apr 16, 2012.</p>	
<p>UTILITY BILL</p> <p>LAST NAME, FIRST NAME - NAME/COMPANY</p> <p>1-100 SAMPLE ST KITCHENER ON N2G 4R6</p>			

1. Please enter your nine-digit utility account number as it appears on your bill: _____
2. Please enter your name exactly as it appears on your bill: _____
3. Please enter your SEQ ID exactly as it appears on your bill: _____
4. Contact phone number: _____
5. Email address: _____
6. Address for which the stormwater credit applies: _____

Section 2 - Approved Best Management Practices (BMP)

7. When did you install the stormwater BMP (eg. rain barrel) on the property for which you are applying to receive credits? (mm/dd/yyyy): _____
8. Check all the stormwater BMPs that you use to control runoff from your property.

Do you have rain barrels on your property? Yes No

How many rain barrels do you have on your property? 1 to 4 5 or more

What is the volume of water your rain barrels are designed to accommodate? _____

Minimum 200 litres. A typical rain barrel holds 200 litres. If you need help calculating the volume for irregularly sized or oversized barrels, see appendix A.

Do you have a cistern on your property? Yes No

What is the volume of water your cistern is designed to accommodate? _____

Minimum 200 litres. If you need help calculating the volume of your cistern, see appendix A.

Do you have an infiltration gallery on your property? Yes No

Who installed your infiltration gallery? Homebuilder Homeowner/Contractor

The following measurements are not required if the infiltration gallery was installed by the homebuilder. If your infiltration gallery was installed by the homeowner or a contractor, please provide the measurements of infiltration gallery (in metres; if installed by the home builder, you do not need to provide measurements):

Length: _____ Width: _____ Depth: _____

If you need help calculating this information, see appendix A.

Do you have a rain garden on your property? Yes No

Rain gardens differ from conventional gardens in that they primarily serve a drainage purpose. To have a rain garden your downspout must be connected to the rain garden. The garden must also be designed to hold water back from the street using either a dug out lowered area, or a small hill (berm) to block the flow of water leaving the garden.

My rain garden collects water from the: Driveway Downspout
Measurements of rain garden (in metres) Length: _____ Width: _____
If you need help calculating this information, see appendix A. Depth of bio-retention media: _____
Depth of gravel base (if applicable): _____

Do you have permeable pavers on your property? Yes No

Permeable pavers differ from traditional interlocking brick in that they have larger spacing between the pavers and use a loose stone base containing no sand around and below the pavers. Permeable pavers contain at least 0.3m (1 ft) of stone base/subbase beneath the paver stones to store stormwater.

Measurements of driveway or patio (in metres) Length: _____ Width: _____
If you need help calculating this information, see appendix A. Depth of gravel base: _____
Depth of sub-base (if applicable): _____

Before submitting your application, please ensure you read the terms and conditions. By submitting this signed form, you acknowledge that the information provided is true and permits the city to perform limited arranged inspections of the property to determine the eligibility of the Best Management Practices.

Signature: _____

Why are we collecting this information?

Any personal information collected herein, is collected for the administration for the stormwater management program pursuant to the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) and may be used by various divisions of The City of Kitchener under Sections 31 and 32 of MFIPPA. Your contact information required in case city staff need to clarify information collected on your credit application in order to process it. Where personal information provided on this application is inconsistent with existing city records, it may be used to update our internal records and could be used for various enforcement purposes. For any inquiries about the collection, use or disclosure of your personal information contained on this form please contact:

Phone:
Sanitary & Stormwater Utilities
519-741-2200 ext. 7355

TTY:
TTY is a telephone system for deaf and hard-of-hearing callers
1-866-969-9994

Email:
stormwaterutility@kitchener.ca

Mail:
Sanitary & Stormwater Utilities
Kitchener Operations Facility
131 Goodrich Drive Kitchener, ON
N2C 2E8

Where did you hear about the stormwater credit program? Check as many as apply.

Utility bill insert	<input type="checkbox"/>	Ad in Kitchener Post	<input type="checkbox"/>	Ad in Kitchener Citizen	<input type="checkbox"/>
Facebook	<input type="checkbox"/>	Direct mail	<input type="checkbox"/>	Twitter	<input type="checkbox"/>
Through a friend	<input type="checkbox"/>	Newspaper	<input type="checkbox"/>	Website	<input type="checkbox"/>
REEP/RAIN	<input type="checkbox"/>	Other: _____	<input type="checkbox"/>		

TERMS AND CONDITIONS

Residential property owners with single detached homes or multi-residential buildings with up to five units per building may qualify for rate credits when the Applicant can demonstrate that the property owned by the Applicant (the "Property") contains impervious areas that are directed to approved, or in accordance with, stormwater quantity and/or quality Best Management Practices ("BMP"). The BMP must provide the City with a cost savings that the City otherwise would incur as part of their efforts to manage stormwater.

Restrictions

1. No public or private property shall be eligible to receive credits for any condition or activity unrelated to the reduction of the City's cost of providing stormwater management services, as determined by the City of Kitchener;
2. Credits will not apply to fees attributable to new development or redevelopment projects;
3. Any stormwater BMP off site or within a permanent easement maintained by the City shall not be eligible for a credit; and,
4. Credits shall only be given to the registered owner of the Property.

Conditions and Requirements

1. The Applicant shall complete a stormwater credit registration form (the "Form"). The Form may be printed or electronic, and may be submitted with supporting documentation (if required) by mail, fax or over the internet;
2. A signed Form shall constitute authority for the City to perform limited announced inspections of the Property to determine the eligibility of the on-site stormwater BMPs, and the accuracy of the credit calculation. The inspection shall be limited to stormwater BMPs and other elements described in the registration. The City shall schedule the inspections at a date and time that is mutually acceptable to both parties. The City will offer the Applicant at least one (1) opportunity to reschedule to a mutually agreeable date and time;
3. Credits will only be applied if requirements in this schedule are met, including but not limited to: completion of ongoing maintenance and guaranteed right-of-entry for inspections, on an annual basis, as at the discretion of the City of Kitchener;
4. Unless otherwise obligated by law, the City shall limit the use of the Form or other registration documents to activities required to administer stormwater credits;
5. Credits will be assigned up to a maximum of 45% of the assessed stormwater rate;
6. Credits will be defined as percent (%) reductions to the City's stormwater portion of the utility bill;
7. Any BMP must comply with all applicable municipal, provincial and federal standards and guidelines;

8. As long as the BMP is functioning as approved and as demonstrated by City inspections, the credit will be applied to the stormwater portion of the utility bill. If the approved BMP is not functioning as approved or is terminated for any reason whatsoever, the reduction will be cancelled and the rate will be returned to the baseline calculation. In the circumstance that a BMP is no longer functioning as approved, the Applicant shall reimburse the City the entire amount of the credit received in respect of the Property since the last inspection by the City. Once the credit reduction has been cancelled, a customer may not reapply for a credit for a period of 12 months and only upon the deficiency being rectified as determined by the City inspection;
9. Only stormwater management practices that serve the property described on the form shall be credited toward that property's bill. The Applicant cannot transfer credit eligibility from the property to another property owned by the applicant. Similarly, the credit eligibility of a property does not transfer from the applicant to a new owner of the property, without a separate form completed on behalf of the new owner of the property;
10. All stormwater quantity control BMPs must be a municipality accepted practice. Accepted stormwater storage practices include:
 1. Infiltration galleries
 2. Storage devices (e.g. cisterns, rain barrels)
 3. Landscaping techniques (e.g. rain gardens, permeable pavers, depressed areas to collect rainwater)
 4. Combination of first three techniques

Appendix A

HOW TO CALCULATE YOUR VOLUME OF STORMWATER

This section contains all the information you should need to calculate the water volume for each of the approved stormwater Best Management Practices (BMPs).



Rain Barrel and Cisterns

A typical rain barrel (similar to the ones purchased or received from the Region of Waterloo or other home and garden stores) can hold 200 litres (L) of stormwater. In general, rain barrels can range from 150-300 litres in size. Cisterns generally hold between 350-5,200 litres of water.

If you aren't sure the size of your rain barrel or cistern, you can calculate the volume of water it can store using the information below:

STEPS TO CALCULATE THE VOLUME OF A CYLINDER SHAPED RAIN BARREL OR CISTERN

1. Measure the radius in metres (m). The radius is a distance measured from the edge of the circle to the centre point. Example: 0.305 metres.
2. Multiply that number by itself. Example: $0.305 \times 0.305 = 0.093$ square metres.
3. Multiply that number by 3.1416 to find the base area in square metres. Example: $0.093 \times 3.1416 = 0.292$ square metres.
4. Measure the height in metres. Example: 0.75 metres.
5. Multiply the base area by the height to find the volume in cubic metres. Example: $0.292 \times 0.75 = 0.219$ cubic metres.
6. Multiply the volume in cubic metres (m³) by 1000 (1 cubic metre of water is equal to 1000 litres) to find the volume in litres (L). Example $0.219 \times 1000 = 219$ litres (L).

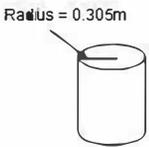
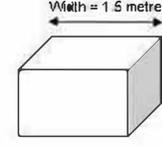
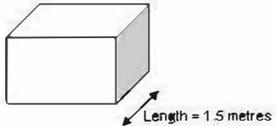
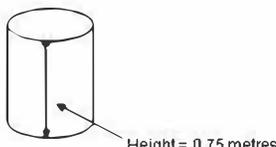
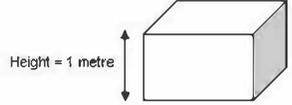
In this example, the rain barrel or cistern can hold 219 litres of water.

STEPS TO CALCULATE THE VOLUME OF A RECTANGLE SHAPED RAIN BARREL OR CISTERN

1. Measure the width of the rainwater tank in metres (m). Example: 1.5 metres.
2. Measure the length of the rainwater tank in metres (m). Example: 1.5 metres.
3. Multiply those two numbers to find the base area in square metres. Example: $1.5 \times 1.5 = 2.25$ square metres.
4. Measure the height in metres. Example: 1 metre.
5. Multiply the base area by the height to find the volume in cubic metres. Example $2.25 \times 1 = 2.25$ cubic metres.
6. Multiply the volume in cubic metres (m³) by 1000 (1 cubic metre of water is equal to 1000 litres) to find the volume in litres (L). Example $2.25 \times 1000 = 2250$ litres (L).

In this example, the rain barrel or cistern can hold 2250 litres of water.

View the diagram below for more details.

Steps to Calculate the Volume of a Cylinder Shaped Rain Barrel or Cistern	Steps to Calculate the Volume of a Rectangular Shaped Rain Barrel or Cistern
<p>1. Measure the radius in metres (m). The radius is a distance measured from the edge of the circle to the centre point.</p> <p>Radius = 0.305m</p> 	<p>1. Measure the width of the rainwater tank in metres (m).</p> <p>Width = 1.5 metres</p> 
<p>2. Multiply that number by itself. i.e. $0.305\text{m} \times 0.305\text{m} = 0.093$ square metres (m^2)</p>	<p>2. Measure the length of the rainwater tank in metres (m).</p>  <p>Length = 1.5 metres</p>
<p>3. Multiply that number by 3.1416 to find the base area in square metres (m^2). i.e. $0.093\text{ m}^2 \times 3.1416 = 0.292$ square metres (m^2)</p>	<p>3. Multiply those two measurements to find the base area in square metres (m^2). i.e. $1.5\text{m} \times 1.5\text{m} = 2.25$ square metres (m^2)</p>
<p>4. Measure the height in metres (m).</p>  <p>Height = 0.75 metres</p>	<p>4. Measure the height in metres (m).</p>  <p>Height = 1 metre</p>
<p>5. Multiply the base area by the height to find the volume in cubic metres (m^3). i.e. $0.292\text{ m}^2 \times 0.75\text{ m} = 0.219$ cubic metres (m^3)</p>	<p>5. Multiply the base area by the height to find the volume in cubic metres (m^3). i.e. $2.25\text{ m}^2 \times 1\text{ m} = 2.25$ cubic metres (m^3)</p>
<p>6. Multiply the volume in cubic metres (m^3) by 1000 (1 cubic metre of water is equal to 1000 litres) to find the volume in litres (L). i.e. $0.219\text{ m}^3 \times 1000\text{ (L/m}^3\text{)} = 219$ Litres (L)</p> <p>In this example, the rain barrel or cistern can hold 219 litres of water.</p>	<p>6. Multiply the volume in cubic metres (m^3) by 1000 (1 cubic metre of water is equal to 1000 litres) to find the volume in litres (L). i.e. $2.25\text{ m}^3 \times 1000\text{ (L/m}^3\text{)} = 2250$ Litres (L)</p> <p>In this example, the rain barrel or cistern can hold 2250 litres of water.</p>

Infiltration Gallery

An infiltration gallery is a dug out area, located near a house and connected to the downspout. Infiltration galleries are filled with gravel or similar material that temporarily holds water, allowing it to soak slowly into the ground instead of running off into the storm sewer (see figure 1). When filling out the application you will need to know the length, width and depth dimensions of the infiltration gallery (see figure 2).

Figure 1

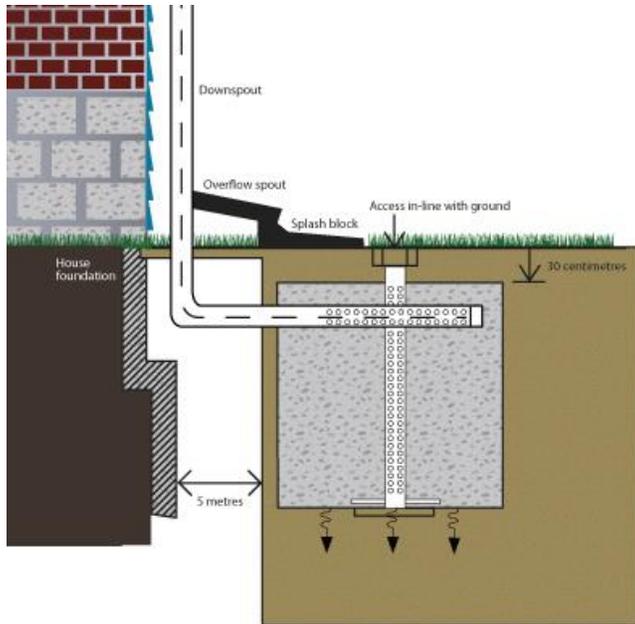
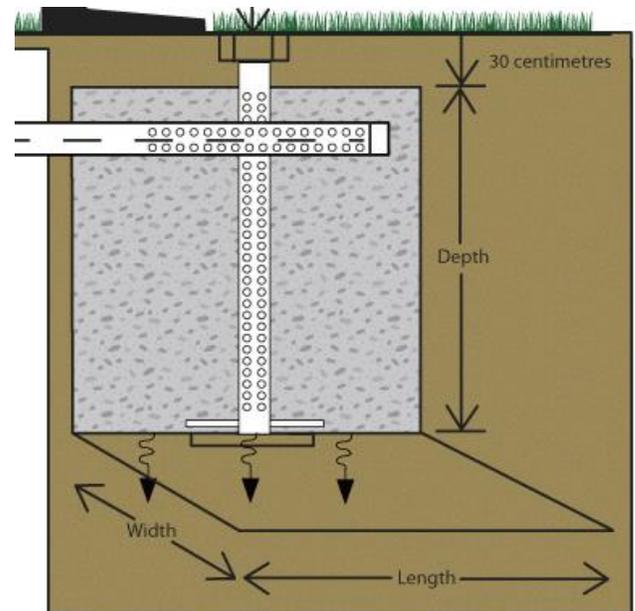


Figure 2

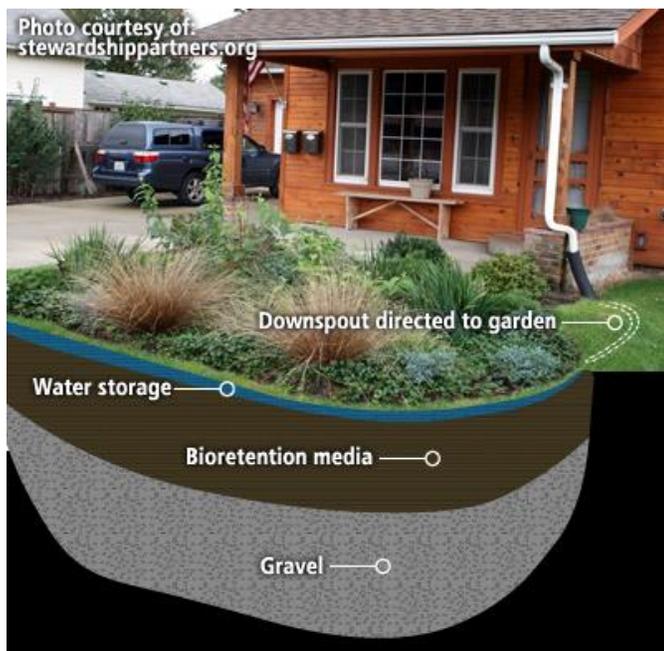


If you do not know the dimensions of your infiltration gallery, because it was installed at the time the house was constructed, select “installed by homebuilder” on the application. If you do not know the dimensions of your infiltration gallery for any other reason please call 519-741-2200 ext. 7355 to leave a message to discuss your application with city staff.

Rain Gardens

Rain gardens are specifically designed gardens constructed to receive, filter, and absorb water runoff into the ground. **Rain gardens differ from conventional gardens as they primarily serve a drainage purpose.** These gardens are located so they are in line with where the water drains from the downspout of the home, and where rain water drains from the property. They have a specially designed base similar to an infiltration gallery that allows water to be slowly absorbed into the ground. Rainwater enters the rain garden from either an underground connection from your home's downspout(s) or from an overland drainage feature leading from your downspout(s). Rain gardens also have a special soil mixture that holds more water than normal garden soil. This soil mixture is called "bioretention media" and is comprised of mostly sand, but also contains soil and compost. Within the rain garden, rainwater slowly absorbs into the ground below and gradually makes its way down to the water table where it is known as groundwater. (see figure 3).

Figure 3



Note:

Gardens that lack a below or above ground connection between the downspout(s) and the garden do not qualify for stormwater credits. The garden must also be designed to hold water back from the street using either a dug out lowered area or a berm to hold the water back. Your installation may be subject to City of Kitchener inspection and approval.

When filling out the application you will need to know the length and width dimensions of the rain garden and also the depth of the bioretention media and of the underlying gravel layer.

If your rain garden is complex in shape e.g. shaped as an oval, circular area etc. simply approximate the area as a square or as a rectangle and provide the distance from one edge of garden to the other edge along the length and width dimensions as illustrated in figure 4.

Figure 4



After entering the length and width of the rain garden into the form you must also enter the depth of the bioretention media beneath the rain garden and to enter the depth of the gravel layer located beneath the bioretention media. Typically, the bioretention media ranges in depth from 0.35m to 1m and the gravel layer, if present, is typically about 0.3m deep. If you do not know the depth dimensions enter 0.35 meters depth for bioretention media and 0.0 meters depth for the gravel layer.

Permeable Pavers

Permeable pavers are an alternative to traditional pavement or paving stones designed in a way that allows rainwater to drain between the paver stones into an under-layer of gravel.

Permeable pavers are designed in a way that allows rainwater to drain between the paver stones into an under-layer of gravel. **The difference between traditional paving stones and permeable pavers is (1) a slightly larger spacing between stones and (2) rather than a fine sand mix between the stones, a looser gravel mix is used that allows water to be absorbed rather than running off the hard surface.** Permeable paving features a layer of concrete pavers separated by joints filled with small stones. Water enters joints between solid concrete pavers and flows through an "open-graded" base, i.e. crushed stone layers with no small or fine particles. The void spaces among the crushed stones store water and infiltrate it back into the soil. The stones in the joints provide 100% surface permeability and the base filters stormwater and reduces pollutants (see figure 5).

Note:

Patio stone driveways or other systems that lack spacing between the stones and a loose gravel base beneath do not qualify for stormwater credits. Your installation may be subject to City of Kitchener inspection and approval. When filling out the application you will need to know the length and width dimensions of the driveway or patio area and also the depth of the gravel base and the depth of the gravel sub base layer if present.

If your driveway or patio area is complex in shape simply approximate the area as a square or as a rectangle and provide the distance from one edge to the other along the length and width dimensions as illustrated in figure 6.

Figure 5

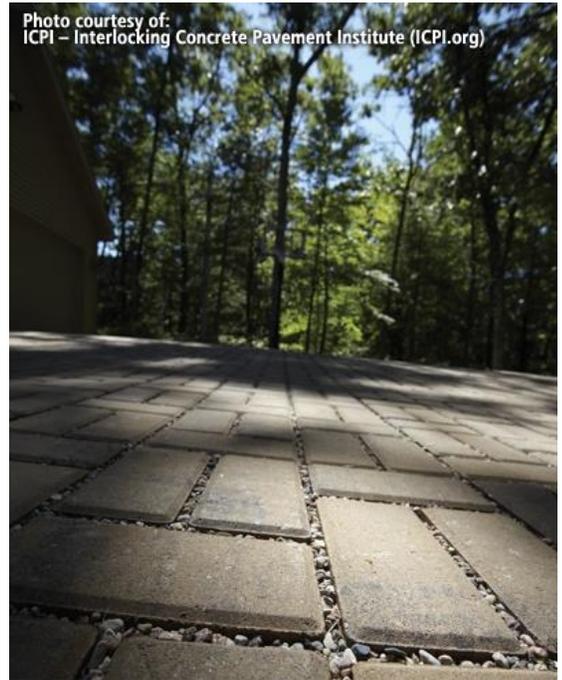
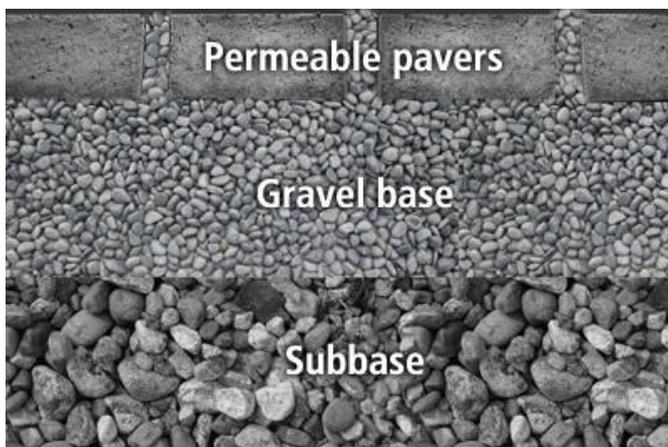


Figure 6



After entering the length and width of the permeable pavers into the form you must also enter the depth of the gravel base layer beneath the pavers and to enter the depth of the gravel sub base layer located beneath the gravel base (if present). Typically, the gravel layer ranges in depth from 0.3m to 0.6m and the gravel sub base layer, if present, is typically about 0.3m deep. If you do not know the depth dimensions. enter 0.3 meters' depth for gravel base layer and enter 0.0 meters' depth for the gravel sub-base layer.

Appendix B

FAQ Sheet: Stormwater Credit Applications



1. What are stormwater credits?

In March 2012, council approved the stormwater credit policy. These incentives are provided to property owners who install Best Management Practices (BMP) that reduce their individual contributions of stormwater runoff and pollutant loading to the municipal stormwater system. Applications to apply for stormwater credits were made available to the public on October 1, 2012. If approved, credits will be applied to the stormwater portion of your regular utility bill within 60 days from your application date.

2. What is a BMP?

Best Management Practices are industry accepted standard practices to control the quantity and quality of stormwater runoff leaving any particular property.

For residential properties some examples include rain barrels, cisterns, infiltration galleries, rain gardens and permeable pavers. For additional BMP details and how to measure them please visit www.kitchener.ca/stormwatercredits.

3. Who is eligible to receive stormwater credits?

Stormwater credits are available to all residential and non-residential property owners that currently receive a stormwater charge on their regular utility bill. Both residential and non-residential property owners are eligible for a maximum 45% credit on the stormwater portion of their utility bill. Residential credits are simply based on the volume of stormwater diverted.

Residential Credit Types

Credit Type	Volume Captured	Examples	Credit
Basic Residential Credit	200 – 800 L	1-4 rain barrels small cistern	20%
Normal Residential Credit	801 – 3200 L	large cistern combination of cisterns and rain barrels	30%
Enhanced Residential Credit	3201 L or more	large cistern infiltration gallery	45%

4. How do I apply to receive credits?

To receive stormwater credits there are two methods to apply. For residential properties an online application has been developed and can be found at the following location www.kitchener.ca/stormwatercredits. Although we encourage the easy to use online application form customers may also print the application from our website

or request to be mailed a hard copy version that can be filled out by hand. Currently there is no online application form for non-residential property owners.

5. How does the city ensure the stormwater credit program is run in a fair and equitable way for all applicants?

A completed application gives authority for the City of Kitchener to perform limited inspections of the property to determine the eligibility of the on-site stormwater BMPs, and the accuracy of the credit calculation. The inspection shall be limited to stormwater BMPs and other elements described in the application. The city shall schedule the inspections at a date and time that is mutually acceptable to both parties. The city will offer the applicant at least one (1) opportunity to reschedule to a mutually agreeable date and time. If a site inspection reveals that reported BMPs are not in place, functional and maintained then any credits that have been issued will be cancelled and the customer will be required to reimburse the amount of any credit received to date. Additionally, a one-year probationary period where the applicant cannot reapply for stormwater credits will be applied to the utility account.