



CITY OF OAK PARK

Department of Technical & Planning Services

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Storm Water Rate Reduction Credits

Credits for Residential and Commercial Properties – Permit Fee \$30

All credits shown are the yearly credit. This credit will be shown on your quarterly or monthly bill and will be divided accordingly. Your billing cycle will be the same as the cycle you are currently on.

Rain Barrel credit \$50 per year- Installing rain barrels would collect the runoff from rooftops and prevent a portion of it from entering the sewer system.

- Collected rain water should be used for irrigation and watering plants.
- Rain barrels must collect 50% of the runoff coming from the roof of the primary structure.
- They must be a minimum of 35 gallons in size and multiple may be required to meet the 50% requirement.
- They must be properly maintained and the water used on a regular basis for plant watering and other uses.
- If not properly used and maintained the credit will be subject for review.
- The owner must also submit a plan for the location and maintenance/usage of the rain barrel along with the permit application.

Rain Gardens credit \$60 per year - Rain gardens, planted with specially selected native vegetation to capture storm water runoff from rooftops and paved areas. Captured runoff percolates into the soils and is used by the plants. The geometry of rain gardens allows for surface water to be held for a period of time as well. Appropriate plant selection is based on soil type as well as the sunlight for the area it will be planted. To qualify for a Rain Garden or Bio-Swale credit, the following requirements must be met.

- At least 50% of the runoff from the roof area must be absorbed.
- The surface area must be at least 100 square feet and a ratio of less than 5:1 impervious area to rain garden area
- Due to the nature of the soil in the City of Oak Park it is recommended that 18 to 24 inches of soil be replaced with a soil mixture of 50% sand, 30% compost and 20% topsoil.
- There must be vegetation to help absorb rainwater.

- A set of plans must be submitted with the permit application showing the location at least 15 feet from the building along with a maintenance plan showing how the homeowner is going to maintain the area after installation.

The Southeast Michigan Council of Governments (SEMCOG) has resources regarding Rain Garden Design. <https://www.semco.org/land>

Cistern credit \$100 per year- Cisterns can be located above or below ground. While cisterns are similar to rain barrels in function, they are generally more sophisticated in operation, possibly with filtering/treatment of inflow, pumped outlet, flushing mechanism, level sensors or other controls, and bypass piping. To qualify for a Cistern credit, the following requirements must be met.

- The cistern must be 55 gallons in size and retain at least 50% of runoff from the primary structure.
- This may need to increase dependent upon the size of the structure. The cistern must be watertight, equipped with screens, seals or other appurtenances to prevent mosquitos from entering or algae growth.
- Drawings showing the proposed roof area to be collected, the location at least 10 feet away from the building and a schedule of maintenance must accompany the permit application.
- Plumbing and electric permits may be required from the Building Department.

Infiltration Trench and Dry Wells credit \$100 per year - Infiltration trenches and dry wells capture storm water runoff from rooftops and paved areas. Captured runoff infiltrates into the soils, thereby reducing the amount that enters the sewer system. Dry wells and infiltration trenches are buried, perforated structures or pipes surrounded by high porosity stone encapsulated by filter fabric. These features rely solely on the infiltration capacity of the soils, and may not be appropriate in areas with poorly draining soils or shallow water table. To qualify for an Infiltration Trench or Dry Well credit, the following requirements must be met.

- 50% of the runoff from the primary structure must be collected.
- Dry wells must be at least 3 feet deep and possibly deeper depending on the type of soil.
- Infiltration trenches can vary in size but the ratio of the area of the impervious area being collected to the area of the trench must not exceed 5:1.
- Dry wells must accommodate 55 gallons of runoff. Wells and trenches must be lined with filter fabric and backfilled up to 6 to 12 inches from final grade with porous stone having at least 40% porosity.
- Test results must accommodate all stone placement.
- A plan showing the location at least 15 feet from the foundation of the building along with a schedule of maintenance must come with the permit application.

Pervious Pavement credit \$10 per 100 square feet per year - Pervious pavement with infiltration beds captures storm water runoff from rooftops and paved areas. Captured runoff infiltrates into the soils, thereby reducing the amount that enters the sewer system. Pervious pavement examples include asphalt, concrete, pavers, or reinforced grass/gravel. These features rely solely on the infiltration capacity of the soils, and may not be appropriate in areas with poorly draining soils or shallow water table. To qualify for the credit, the following requirements must be met.

- The pervious pavement being placed must replace previously existing impervious area.
- The credit is only for every 100 square feet of placement and no partial credits will be given.
- Due to the nature of the soils in Oak Park, porous stone base must be installed 6 inches thick, and may need to be installed 12 to 36 inches to provide adequate pavement strength for vehicular traffic and temporary storage volume to promote infiltration.
- The porous stone base must come with test results showing the porosity of the stone being greater than 40%.
- The owner must consider the following maintenance schedule to maintain its effectiveness. Pavement vacuuming twice per year in the spring and fall to clean out the pavement pores. Maintain all greenbelt areas adjacent to the pavement. Immediately clean pavement if dirt is deposited. Re-seeding of grass pavers where bare spots appear.
- Whenever the property owner applies for renewal of a pervious pavement credit, proof of past maintenance must be shown in order for the extension to be granted. Proof examples are receipts and test results.
- A plan with the location of the area being shown 10 feet or greater from buildings with basements or foundations as well as the proposed maintenance schedule must be submitted with the plans.

SEMCOG has more resources available regarding pervious pavement:

<https://www.semco.org/land>

Credits for Commercial Properties Only – Permit Fee Subject to Size of Project

Bio-Swales credit \$40 per 400 square feet of impervious runoff collected per year - Bio-swales, are surface depressions planted with specially selected native vegetation to capture storm water runoff from rooftops and paved areas. Captured runoff percolates into the soils and is used by the plants. The geometry of bio-swales allows for surface water to be held for a period of time as well. Appropriate plant selection is based on soil type as well as the sunlight for the area it will be planted. To qualify for a Bio-Swale credit, the following requirements must be met.

- At least 400 square feet of the impervious runoff area must be absorbed.
- The credit may increase dependent upon the size of the bio-swale and the area of runoff that is collected.
- The surface area must be at least 100 square feet and a ratio of less than 4:1 impervious area to bio-swale area.
- The depth must be at least 3 inches for a bio-swale and have a maximum depth of 12 inches.
- A percolation test must be performed at the conclusion of the installation.
- Due to the nature of the soil in the City of Oak Park it is recommended that 18 to 24 inches of soil be replaced with a soil mixture of 50% sand, 30% compost and 20% topsoil.
- There must be vegetation to help absorb rainwater.
- A set of plans must be submitted with the permit application showing the location at least 15 feet from the building along with a maintenance plan showing how the homeowner is going to maintain the area after installation.

Green Infrastructure Building Improvements - A building permit must be pulled and all improvements must comply with the Michigan Building Code. <https://www.semcog.org/land>

Detention Ponds (100% of storm water remains on property, no outlet or runoff) – A Land Improvement Permit must be pulled and all improvements must comply with Engineering requirements with test results provided. All detention ponds must be designed to capture the results of a 10 year rain event. The whole property need not be collected but a reduction will only be given for the area collected.

Ideas for items that may lower costs for storm water can be found in the LID Manual provided by SEMCOG. <https://www.semcog.org/land>

Permit Application for Credits can be found here:
<https://bit.ly/2BPdmMm>

