#### RAIN GARDEN COST-SHARE PROGRAM

Thank you for your interest in the Village's Rain Garden Cost-Share Program. The program requirements are authorized by "An Ordinance Providing for Ecological Cost-Share Programs in the Village of Riverwoods" and are subject to such ordinance, as from time to time amended. Attached you will find the Application and Work/Contractor Specifications. Note: an Ecological Consultation and/or visit with the Village Engineer is required prior to applying for the Rain Garden Program. **Please read all requirements carefully before submitting your completed application.** The Rain Garden Program is a cost-share reimbursement program. The Village's funding limit is 50% up to a maximum Village share of \$4,000. There is a \$200 non-refundable application fee. Note: rain garden installation requires detailed plans and installation guidelines. Therefore, the Village will not reimburse an applicant who performs the work themselves rather than hiring a qualified designer and/or contractor.

The intent of the Rain Garden Program is to encourage and provide an incentive for applicants to install rain gardens on private property to "micro-manage" stormwater runoff as close to the source (like downspouts, driveways, sump pumps discharges) as possible. A rain garden is a shallow depression that is planted with deep-rooted native plants. It functions by capturing, filtering, and infiltrating stormwater runoff into the ground thereby reducing the flows to nearby streams and other drainageways.

To be eligible to participate in the program, the applicant must first hire a qualified designer to create a Construction/Landscape Plan then certify that they will comply with all requirements set forth in this packet for the type of work that will be performed on the property. The property owner is responsible for property locations and staking their property lines if necessary. The Owner or Contractor (depending on who is installing the rain garden) is responsible calling J.U.L.I.E.

After the application is approved by the Village Ecologist and Village Engineer, the applicant will receive a permit from the Village to proceed with the work as proposed in the Application. Once the work is completed, notify the Village and the Village Ecologist and/or Village Engineer will conduct a site visit to verify the work has been completed per the approved Application and Construction/Landscape Plan. After the work has been reviewed and approved by the Village Ecologist the reimbursement request is then forwarded to the Village Board for approval. Reimbursement can be expected in 1 to 3 months following the approval of work.

### **Checklist for Rain Garden Program:**

	Conduct the required Ecological Consultation and/or Village Engineer site visit (to generally locate proposed rain garden location(s)).	
2.	Receive permit from Village then select a qualified designer to create a Construction/Landscape Plan.	
3.	Apply for Rain Garden Program by completing the attached Application and submitting the Construction/Landscape Plan. The Application form is attached but can also be obtained from Village Hall or by downloading from the Village Website.	
4.	Following approval of the Application and Construction/Landscape Plan, hire a qualified contractor to perform installation. Note: call J.U.L.I.E. to locate potential utilities prior to performing work.	
5.	Submit a copy of the paid contractor invoice to the Village Hall and request a final inspection by the Village Ecologist and/or Village Engineer. Village staff will inspect the work, plant survivability, review the contractor invoice, and contact the applicant, if necessary, for clarification and approve the payment of reimbursement from the Village. The Village Board will then approve the reimbursement payment to the applicant. Reimbursement by the Village can be expected approximately 1 to 3 months after approval of work.	

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## Rain Garden Construction/Landscape Plan Requirements:

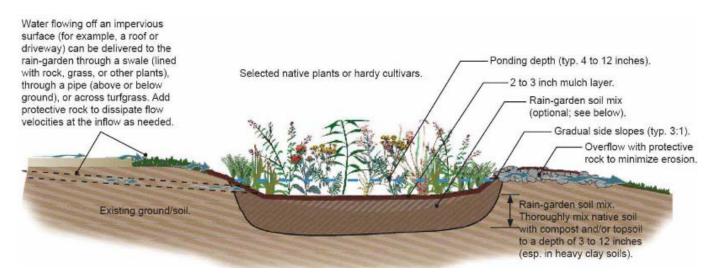
The Application must be accompanied by a Construction/Landscape Plan that addresses the following criteria:

- 1. Installation in an upland (non-wetland) location near the runoff source(s).
- 2. Dimensions of proposed installation.
- 3. Typical cross section for construction.
- 4. Plan view of landscaping using native plants.
- 5. Access routes for construction.
- 6. Protection of exiting trees.
- 7. Location/disposal of excavated soil.
- 8. Source (supplier) and composition of engineered soil mix.

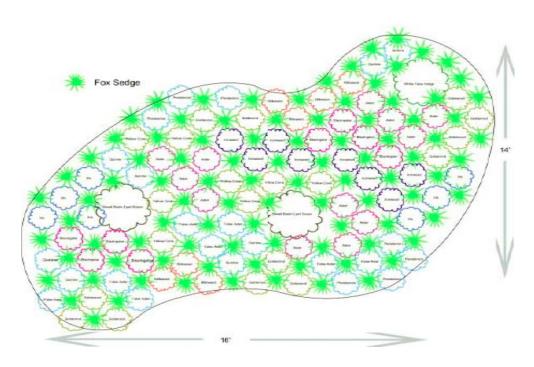
#### RAIN GARDEN DESIGN AND INSTALLATION GUIDELINES

- \*The guidelines below demonstrate one of many ways to construct a rain garden. Alternatives can be proposed but must be pre-approved by the Village Ecologist & Village Engineer.
- 1. Any proposed rain garden with a drainage benefit using native plantings can be eligible for a Village cost-share.
- 2. Rain gardens are typically between 100 and 300 square feet in size. To be most effective, rain gardens should be installed in upland areas outside of wetlands and floodplains. Although use of native plants can enhance existing wetlands and improve water quality, rain gardens should be sited to capture runoff <u>before</u> it reaches other drainage or wet areas.
- 3. Rain gardens must be sited at least 10 feet away from any building.
- 4. The rain garden should be excavated to a depth of 18-24 inches below existing grade, with the excavated material used to build up the perimeter of the garden to hold runoff. 3-13 inches of clean, screened compost should be tilled into the bottom of the excavation to make a planting bed.
- 5. The rain garden must then be planted with native vegetation which grow deep roots and help infiltrate water into the ground. Plant selection is critical to success. Native plant material will thrive best in full sun or part sun with moist to wet conditions. Rain gardens located in full shade are not recommended. Plants should be spaced approximately 2 feet on centers for best results. The Village has attached (below) a list of approved native plants suitable to full sun or part sun and moist to wet conditions.
- 6. A conceptual rain garden construction cross section (side view) and plan view (top view) of native vegetation landscaping are included below.
- 7. The rain garden should have a means to allow excess water to flow out without causing damage. This can be accomplished by leaving one edge low and installing landscape stone to allow overflow without erosion

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Example Cross Section provided by midwesternplants.org



Example Plan View provided by UW Extension

# VILLAGE APPROVED RAIN GARDEN PLANTS, TREES, & SHRUBS

Scientific name	Common Name	Sun & Moisture	Spacing					
Grasses & Sedges:								
Calamagrostis canadensis	densis Blue joint grass Sun & Moist to Wet		2.0' O.C.					
Carex bromoides	Brome-like sedge	e-like sedge Part Shade & Moist to Wet						
Carex comosa	Bristly sedge	Sun & Moist to Wet	2.5' O.C.					
Carex grayi	Common bur sedge	Part Sun & Moist to Wet	2.5' O.C.					
Carex lupulina	Common hop sedge	Part Sun & Moist to Wet	2.5' O.C.					
Carex muskingumensis	Palm sedge	Part Sun & Moist to Wet	2.5' O.C.					
Carex stipata	Common fox sedge	Sun & Moist to Wet	2.5' O.C.					
Carex vulpinoidea	Brown fox sedge	Sun & Moist to Wet	2.5' O.C.					
Glyceria striata	Fowl mana grass	Part Sun & Moist to Wet	2.0' O.C.					
Spartina pectinata	Prairie cord grass	Sun & Moist to Wet	2.5' O.C.					
Forbs (Flowers):								
Acorus calamus	Sweet flag	Sun & Wet	2.0' O.C.					
Asclepias incarnata	Swamp milkweed Sun & Moist to Wet		2.0' O.C.					
Caltha palustris	Marsh marigold	Part Sun & Wet	2.0' O.C.					
Eryngium yuccifolium	Rattlesnake master	Sun & Moist	2.0' O.C.					
Helenium autumnale	Sneezeweed	Sun & Moist to Wet	2.0' O.C.					
Eupatorium maculatum	m maculatum		2.0' O.C.					
Iris virginiana	Blue flag iris	Sun/Part Sun & Moist to Wet	2.0' O.C.					
Liatris spicata	Marsh blazing star	Sun & Moist	1.5' O.C.					
Lobelia cardinalis	Cardinal flower	Sun/Part Sun & Moist	1.5' O.C.					
Lobelia siphilitica	Great blue lobelia	Sun/Part Sun & Moist	1.5' O.C.					
Penstemon digitalis	alis Foxglove beard tongue Sun/Part Sun & Moist		2.0' O.C.					
Physostegia virginiana	False dragonhead	Sun & Moist	2.0' O.C.					
Pycnanthemum virginianum	Common mountain mint	Sun & Moist	2.0' O.C.					
Rudbeckia subtomentosa	a subtomentosa Sweet black-eyed Susan Sun & Moist		2.0' O.C.					
Solidago riddellii	go riddellii Riddell's goldenrod Sun & Moist		1.5' O.C.					
Zizia aurea	Golden Alexanders	Sun/Part Sun & Moist	2.0' O.C.					
Trees:								
Quercus bicolor	Swamp white oak	Sun & Moist	30 ft					
Quercus palustris	Pin oak	Sun & Moist	30 ft					
Celtis occidentalis	Hackberry	Sun & Moist	30 ft					
Shrubs:								
Cornus stolonifera	Red osier dogwood	Sun & Moist	6 ft					
llex verticillata	Winterberry holly	Sun/Part Sun & Moist	4 ft					
Lindera benzoin	Spicebush	Sun/Part Sun & Moist	6 ft					
Euonymus atropurpureus	Eastern wahoo	Sun/Part Sun & Moist	6 ft					

#### RAIN GARDEN MAINTENANCE RECOMMENDATIONS

- 1. Water new plants as necessary to provide approximately one inch of rainfall or water per week for the first growing season. Once the plants are established, watering may only be necessary during long drought periods.
- 2. Hand pull weeds as needed during the first three growing seasons. By the third growing season, the native plants should be mature enough that that weeding may only need to be done once per growing season.
- 3. After each growing season, the stems and seed heads can be left for winter interest, wildlife cover, and bird food. In early spring (mid March- mid April), the last year's growth can be cut back and removed. Leaf litter can also be removed at this time.
- 4. Maintain a spaded edge around the garden if a more formal look is preferred.
- 5. Check for erosion and scour on the surrounding berm and discharge area and repair with additional rock if needed.
- 6. Any pipes such as a sump pump or downspout that discharges to the rain garden should be checked periodically for debris that may block flow; remove debris as necessary.
- 7. Chemicals for de-icing in the winter (i.e. salt) should <u>not</u> be used on any portion of the property that drains to the rain garden. Salt exposure could result in significant plant loss.
- 8. Fertilizers (i.e. nitrogen and phosphorus) should <u>not</u> be applied to rain garden plants. Native plants often become tall and weak if fertilized.

Rain Garden Cost-Share Program Application									
Owner's Name:	Owner's Telephone:		it Number Fee Issue \$200 Date						
Owner's Address:		Comments:							
Contractor's Name:	Contractor's Telephone:								
Contractor's Address:									
Contractor's e-mail:									
Contact Person (normal hours and emergend	;y):								
Attach copy of Contractor's Certificate of	Insurance.								
Description of Planned Work  Provide a brief description of proposed work and attach Construction/Landscape Plan									
Col	ntractor Contract & Applic	ant Reimbursemen	nt						
1) Total amount of contract			\$						
2) Total amount of Village reiml	oursement requested (50% l	limit \$4,000)	mit \$4,000) \$						
3) Attach copy of executed con-	tract								
	r Statement of Certification								
I, owner of the property shown on the d hereby state that I am familiar with the certify that all work will be completed in Contractor Specifications.	Construction/Landscape Plan and	For Village Use Appro	oved by Village:						
Owner Signature:	Date:	Village Ecologist Permit S	Sign Off Signature:	Date:					
		Village Ecologist Final Ins	spection Sign Off Signature	Date:					
		Village Engineer Permit S	Sign Off Signature:	Date:					
		Village Engineer Final Ins	spection Sign Off Signature	Date:					
Owner Printed Name:		Village Ecologist Printed	Name:	•					
		Village Engineer Printed	Name:						