

STORMWATER MANAGEMENT

166 Attachment 4

Township of Girard

Appendix D Small Project Stormwater Management Application

Per the Girard Township's Act 167 Stormwater Management Ordinance, a stormwater management plan is required whenever more than 2,500 square feet of impervious surface or non-exempt single family homes are proposed. Impervious surfaces are areas that prevent the infiltration of water into the ground and shall include, but not be limited to, roofs, patios, garages, storage sheds and similar structures, and any new streets or sidewalks.

<i>To Calculate Impervious Surface Please Complete This Table</i>					
Surface Type	Length (feet)	X	Width (feet)	=	Proposed Impervious Area
Building (area per downspout)		X		=	
		X		=	
		X		=	
Driveway		X		=	
		X		=	
		X		=	
Parking areas		X		=	
		X		=	
		X		=	
Patios/walks		X		=	
		X		=	
		X		=	
Other		X		=	
		X		=	
		X		=	
Total Impervious Surface Area to be managed (sum of all areas)					

If the Total Impervious Surface Area is LESS THAN 2,500 square feet, please read, acknowledge and sign below.
 If the Total Impervious Surface Area EXCEEDS 2,500 square feet, complete the remainder of the Application.

Based Upon the information you have provided a *Stormwater Management Plan IS NOT required* for this regulated activity. Girard Township may request additional information and/or SWM for any reason.

Property Owner Acknowledges that submission of inaccurate information may result in a stop work order or permit revocation. Acknowledgement of such is by signature below. I declare that I am the owner or owner's legal representative. I further acknowledge that the information provided is accurate and employees of the Girard Township are granted access to the above described property for review and inspection as may be required.

_____ Owner Date: _____

GIRARD CODE

CREDITS

Credit 1: DISCONNECTION OF IMPERVIOUS AREA

When runoff from impervious areas is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, all or parts of the impervious areas may qualify as Disconnected Impervious Area (DIA). Using the criteria below, determine the portion of the impervious area that can be excluded from the calculation of total impervious area.

Criteria: An impervious area is considered to be completely or partially disconnected if it meets the requirements listed below

- Rooftop area draining to a downspout is ≤ 500 square feet
- Paved area draining to a discharge is $\leq 1,000$ square feet
- Flow path of paved impervious area is not more than 75 feet
- Soil at discharge is not designated as hydrologic soil group "D"
- Flow path at discharge area has a positive slope of $\leq 5\%$
- Gravel strip or other spreading device is required at paved discharges.

Length of Pervious Flow Path from Discharge Point* (feet)	DIA Credit Factor
0 to 14	1.0
15 to 29	0.8
30 to 44	0.6
45 to 59	0.4
60 to 74	0.2
75 or more	0

* Flow path cannot include impervious surfaces and must be at least 15 feet from any impervious surfaces.

<i>Calculate DIA Credit and Required Capture Volume</i>									
Surface Type	Proposed Impervious Area (from previous sheet)	X	DIA Credit Factor	=	Impervious Area to be Managed	÷	6	=	Required Capture Volume (feet ³)
Building (area per downspout)		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
Driveway		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
Parking areas		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
Patios/walks		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
Other		x		=		÷	6	=	
		x		=		÷	6	=	
		x		=		÷	6	=	
Total Req'd Capture Volume									

STORMWATER MANAGEMENT

Credit 2: TREE PLANTING

Perhaps the best BMP is a tree as they intercept rainfall, increase evapotranspiration and increase time of concentration. A portion of the required capture volume can be reduced provided the criteria are met.

CREDITS

Deciduous Trees	Evergreen Trees
6 feet ³ per tree planted	10 feet ³ per tree planted

Criteria

To receive credit for planting trees, the following must be met:

- Trees must be native species (see below), minimum two inches caliper and six feet tall (minimum).
- Trees shall be adequately protected during construction.
- Trees shall be maintained until redevelopment occurs.
- No more than 25% of the runoff volume can be mitigated through the use of trees.
- Dead trees shall be replaced within 6 months.
- Non-native species are not applicable.

	Req'd Capture Volume (feet³)
	Tree Planting Credit (feet³)
	Capture Volume to be managed (feet³)

Sizing of BMP

	How much of the Volume will you manage with a Rain Garden?
	How much of the Volume will you manage with a Sump or Trench?
	Capture Volume to be managed (feet³)

Enter the volumes into the **Small Project SWM Plan Worksheet** on the next sheet.

Native Species Trees (Common Name)

- | | |
|---|---|
| <ul style="list-style-type: none"> • Blackgum • Cucumber magnolia • Hophornbeam • Maple, (sugar, red or silver) • Pine, (pitch or eastern white) • Ironwood • Hickory, sweet pignut or shag-bark • Sycamore, American • Cotton-wood, eastern • Aspen, big-tooth or quaking • Cherry, black | <ul style="list-style-type: none"> • Oak, (white, swamp white, scarlet, pin, red, black) • Dogwood (silky or red osier) • Tuliptree • Willow, black • Chokeberry (red or black) • Basswood, American • Serviceberry, (downy or shadbush) • Elderberry • Witch hazel • Mountain laurel |
|---|---|

