

STORMWATER EXEMPTION/SMALL PROJECT APPLICATION

Property Owner's Name: _____

Address of Property: _____

Parcel ID #: _____

Email Address: _____

Parcel ID #: _____

STORMWATER PROJECT TYPES:

SWM Plan Requirement	New Impervious Area ^A	Disturbed Area ^B	Next Steps
Exempt	Up to 1000 ft ² or 5% of the gross lot area, whichever is less	Less than 1 acre	Submit Worksheet A and Level 1 Site Sketch Plan
Small Project	1000 ft ² to ≤ 2,500 ft ²	Less than 1 acre	Submit Level 2 Site Plan, Including Worksheets A,B,&C and BMP Details ^C .
SWM Site Plan Required	If Exempt and Small Project criteria are not met, or if improvements are associated with a Land Development and/or Subdivision Plan	Less than 1 acre	Consult a Qualified Person

^A New Impervious Area must be cumulatively calculated, starting on June 7, 2014.

^B The above table is only applicable to projects with disturbed areas of less than one (1) acre. Any projects that propose more than one (1) acre of disturbed area are subject to E&S and NPDES Permit requirements and will require a Formal Stormwater Management Plan.

^C BMP Details can be found in the Guide to Choosing BMPs on file at the Township office.

Acknowledgement - I declare that I am the property owner, or representative of the owner, and that the information provided is accurate to the best of my knowledge. I understand that stormwater may not adversely affect adjacent properties or be directed onto another property without written permission. I also understand that false information may result in a stop work order or revocation of any associated permits. Township representatives are also granted reasonable access to the property for review and / or inspection of this project as necessary.

Signature: _____

Date: _____

STORMWATER MANAGEMENT WORKSHEET A

Step 1: Determine the amount of new impervious area created by the proposed project. This includes any new surface areas that prevent infiltration of stormwater into the ground. New stone and gravel areas are considered impervious. Impervious areas existing before June 7, 2014 are not included in this calculation. Use additional sheets if necessary.

Calculate new impervious area by completing this table.

Surface	Length (ft)	x	Width (ft)	=	Impervious Area (ft ²)
Buildings/Structures:					
1.		x		=	
2.					
3.					
4.					
Driveway		x		=	
Parking Areas		x		=	
Patios/ walkways		x		=	
Other		x		=	
Total Proposed Impervious Surface Area (Sum of all impervious areas)					

- If the total new impervious surface area is up to 1000 ft² or 5% of the gross lot area, whichever is less, the project is exempt from the requirement to submit a Small Project or SWM Plan for approval. Complete Step 1 and sign Owner Acknowledgement and file this sheet with the Township.
- If project **does not exceed 2,500 ft²** of impervious area, and is not associated with a subdivision or land development, complete steps 1, 2 and 3.

Estimated Project Disturbed Area (Square Feet or Acres): _____

STORMWATER MANAGEMENT WORKSHEET B

Step 2: Determine Disconnected Impervious Area (DIA). All or part of proposed impervious surfaces may qualify as Disconnected Impervious Area if runoff is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration. The volume of stormwater that needs to be managed could be reduced through DIA.

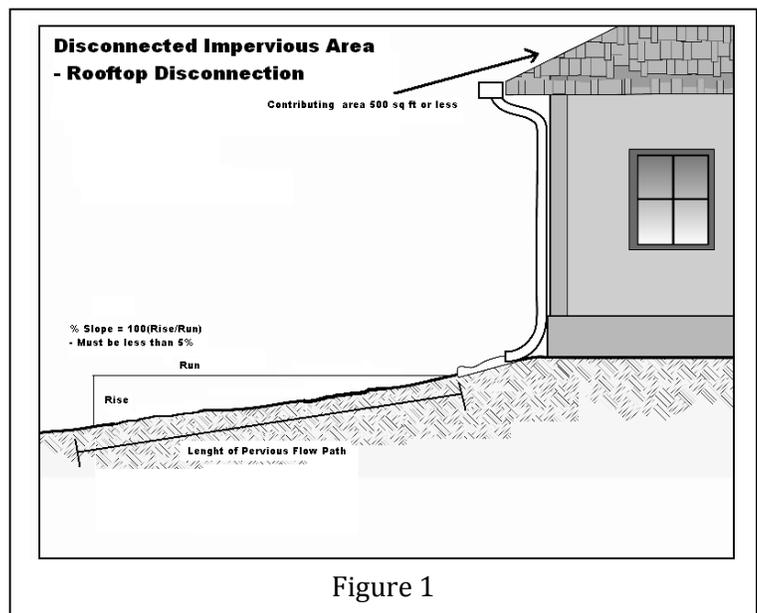
When impervious surface areas like rooftops and paved areas are directed to a pervious areas like grass that allows for infiltration, filtration, and increased time of concentration, the impervious surface areas may qualify to be treated as Disconnected Impervious Area (DIAs). There are two types of DIAs. Rooftop Disconnection for buildings and Paved Disconnection for paved surfaces such as driveways, walkways, and gravel areas.

Rooftop Disconnection: A rooftop is considered to be disconnected or partially disconnected if it meets the requirements listed below:

- Determine contributing area of the roof to each disconnected discharge (downspout). If it's 500 ft² or less, continue to b). If it's greater than 500 ft², the area does not qualify as DIA.
- Determine the length of down slope pervious flow path available for each disconnected discharge. See Figure 1 below.
- Determine the % slope of the pervious flow path, % slope = (rise/ run) x 100. Must be 5% or less.
- Soils are not classified as hydrologic soil group "D".
- The receiving pervious area shall not include another person's property.
- See the Partial Rooftop Disconnection table below to determine the Credit Factor that can be applied to the rooftop area. If the available length of the flow path is equal to or greater than 75 ft, the discharge qualifies as entirely disconnected.

Partial Rooftop Disconnection	
Length of Pervious Flow Path (ft)	DIA Credit Factor
75 or more	0
60 – 74	0.2
45 – 59	0.4
30 – 44	0.6
15 – 29	0.8
0 - 14	1.0

Pervious flow path must be at least 15 feet from any impervious surface



STORMWATER MANAGEMENT WORKSHEET B

Paved Disconnection Criteria:

Paved surfaces (driveways, walkways, etc.) and gravel can be considered disconnected if it meets the criteria listed below:

- a) Runoff does not flow over impervious area for more than 75 feet.
- b) The length of overland flow is greater than or equal to the contributing flow path.
- c) The slope of the contributing impervious areas is 5% or less.
- d) Soils are not classified as hydrologic soil group "D".
- e) The receiving pervious area shall not include another person's property.
- f) If discharge is concentrated at one or more discrete points, no more than 1,000 ft² may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. Non-concentrated discharges along the entire edge of paved surface must include provisions for the establishment of vegetation along the paved edge and temporary stabilization of the area until the vegetation is established.

If these criteria can be met, the DIA Credit Factor = 0 for the paved surface area. If the criteria is NOT met the DIA Credit Factor = 1 for the paved surface area.

Using the calculation from Step 1, complete the table below. This will determine the impervious area that may be excluded from the area that needs to be managed through stormwater BMP's. If the total impervious area to be managed = 0, the area can be considered entirely disconnected.

Surface	Proposed Impervious Area	x	DIA Credit Factor	=	Impervious Area (ft ²) to be Managed
Buildings (area to each downspout)		x		=	
Driveway		x		=	
Parking Areas		x		=	
Patios/ walkways		x		=	
Other		x		=	
Total Proposed Impervious Surface Area to be managed (Sum of all impervious areas)					

**If Total Proposed Impervious Surface Area to be managed if greater than 0, continue to Step 3.*

STORMWATER MANAGEMENT WORKSHEET C

Step 3: Calculate the volume of stormwater runoff created by proposed impervious surfaces.

Impervious Area (ft ²) to be Managed (Sum of Step 2)	X	1.0 in/12 in = 0.083	=	Amount of Stormwater to be Managed (ft ³) (Required Volume)
	X	0.083	=	

Step 4: Select BMPs and size according to the volume of stormwater that needs to be managed. The Guide to Choosing Stormwater BMPs, includes details and sizing calculations for specific techniques. The table below should be used only when a Small Project Site Plan is appropriate. Other BMPs may be utilized if selected out of the Guide to Choosing Stormwater BMPs, provided calculations are provided to show that the required volume has been met.

Proposed BMP	Length (Feet)		Width (Feet)		Depth (Feet)		Void Ratio		Volume (ft ³) (from step 2)
Infiltration Bed		x		x		x	0.4	=	
Infiltration Berm		x		x		x	1.0	=	
Rain Garden		x		x		x	1.0	=	
Rain Barrel	Gallons			x	Cubic Feet Per Gallon			=	
					0.134				
Total Volume Credit (Sum of Volumes above)								=	
Required Volume (Calculated above in Step 3)								=	
Surplus Volume (Total Volume – Required Volume)								=	

If an area greater than 5,000 square feet of earth is disturbed, an erosion and sedimentation (E&S) control plan must be prepared and kept on site during construction activities. If an area greater than 1.0 acres is disturbed during the project, an E&S and NPDES Permit will be required to be obtained from the Lancaster County Conservation District.

SITE SKETCH PLAN REQUIREMENTS

SITE SKETCH PLAN REQUIREMENTS – LEVEL 1 AND LEVEL 2

The Lancaster County GIS website can provide assistance to applicants in obtaining property maps of existing features and property lines. A Site Sketch Plan depicting the key features of the site must be drawn or depicted to show the information required for Levels 1 and 2 Site Sketch Plans.

A Site Sketch Plan depicting the key features of the site must be drawn or depicted to show the following:

LEVEL 1 SITE SKETCH PLAN REQUIREMENTS:

- 1) Property boundary, address, and name of landowner.
- 2) Location of all existing and proposed structures (house, shed, addition, etc.) and any proposed downspouts. Include the dimensions of proposed structures and distance to property lines.
- 3) Site conditions and land covers (grassed areas, agricultural fields, direction of slope and stormwater flow on the property).
- 4) All existing and proposed driveways and impervious areas, including dimensions of proposed areas (stone and gravel driveways are considered impervious).
- 5) Natural features such as floodplains, streams, wetlands, tree lines and other vegetation on the property and within 50 feet of the property line for lots smaller than 5 acres.
- 6) Utility lines, sewer or water service location, or wells and on-site septic systems.
- 7) Any easements, rights-of-ways within property boundaries and their associated sizes.

LEVEL 2 SITE SKETCH PLAN REQUIREMENTS (INCLUDING ALL LEVEL 1 REQUIREMENTS):

A Level 2 Site Plan depicts the existing conditions of a property and the location of proposed impervious surfaces. Depicting the relationship between the proposed activities and distances to things like property lines, streams, and vegetated areas will help determine if the stormwater runoff created by the proposed project can be managed naturally within the property or if additional best management practices (BMPs) are needed to accommodate the stormwater runoff. The Level 2 Site Sketch Plan includes the requirements for a Level 1 Plan, plus the following:

- 8) Distance from proposed improvements to property line.
- 9) Approximate slopes of overland stormwater flow paths.
- 10) Distance from proposed structures or improvements along the stormwater flow path to any stream or wooded area.
- 11) Any other pertinent information that may be significant to the project site (existing drainage ways, steep slopes, etc.).
- 12) Soil boundaries and types for the project area [may be obtained from PA Soil Map (soilmap.psu.edu) or NRCS Web Soil Survey (websoilsurvey.nrcs.usda.gov)].

ADDITIONAL BMP REQUIREMENTS:

The following additional information shall be provided when BMPs are required:

- 13) Any proposed tree or shrub plantings and species.
- 14) Location, size, and depth of proposed stormwater BMPs.
- 15) Details of proposed stormwater BMPs, including materials to be used.

OWNER ACKNOWLEDGEMENT

- Development activities shall begin only after East Hempfield Township approves the plan.
- The installed BMPs will not adversely affect any property, septic systems, or drinking water wells on this or any other property.
- If a stormwater management alternative to the approved Small Project Site Plan is used, the applicant will submit a revised plan to East Hempfield Township for approval. If a site requires a more complex system or if problems arise, the applicant may need the assistance of a Qualified Person.
- The applicant acknowledges that the proposed stormwater management BMPs will be a permanent fixture of the property that cannot be altered or removed without approval by the Township.

I (we) _____, hereby acknowledge the above statements and agree to assume full responsibility for the implementation, construction, operation, and maintenance of the proposed stormwater management facilities. Furthermore, I (we) also acknowledge that the steps, assumptions, and guidelines provided in this Small Project Application & Stormwater Worksheet(s)) will be adhered to.

Signature: _____

Date: _____

Signature: _____

Date: _____