

STORMWATER MANAGEMENT

221 Attachment 2

Township of West Manheim

**Appendix B**  
**Disconnected Impervious Area (DIA)**

**B.1. Rooftop Disconnection**

When rooftop downspouts are directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the rooftop may qualify as completely or partially DIA and a portion of the impervious rooftop area may be excluded from the calculation of total impervious area.

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

- The contributing area of rooftop to each disconnected discharge is 500 square feet or less; and
- The soil, in proximity of the roof water discharge area, is not designated as hydrologic soil group “D” or equivalent; and
- The overland flow path from roof water discharge area has a positive slope of 5% or less.

For designs that meet these requirements, the portion of the roof that may be considered disconnected depends on the length of the overland path as designated in Table B.1.

<b>Length of Pervious Flow Path* (feet)</b>	<b>Roof Area Treated as Disconnected (% of contributing area)</b>
0 to 14	0
15 to 29	20
30 to 44	40
45 to 59	60
60 to 74	80
75 or more	100

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

**B.2. Pavement Disconnection**

When pavement runoff is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the contributing pavement area may qualify as a DIA that may be excluded from the calculation of total impervious area. This applies generally

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only to small or narrow pavement structures such as driveways and narrow pathways through otherwise pervious areas (e.g., a walkway or bike path through a park).

Pavement is disconnected if the pavement, or area adjacent to the pavement, meets the requirements below:

- The contributing flow path over impervious area is not more than 75 feet; and
- The length of overland flow is greater than or equal to the contributing length; and
- The soil is not designated as hydrologic soil group “D” or equivalent; and
- The slope of the contributing impervious area is 5% or less; and
- The slope of the overland flow path is 5% or less.

If the discharge is concentrated at one or more discrete points, no more than 1,000 square feet may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. For non-concentrated discharges along the edge of the pavement, this requirement is waived; however, there must be a provision for the establishment of vegetation along the pavement edge and temporary stabilization of the area until vegetation becomes stabilized.

## REFERENCE

Philadelphia Water Department. 2006. Stormwater Management Guidance Manual.  
Section 4.2.2: Integrated Site Design. Philadelphia, PA.