

# F.4 Disconnected Impervious Cover

### F.4.1 Rooftop Disconnection

1. Verify that any proposed rooftop disconnection is clearly labeled on the plan. [Section 3.4.1]
2. Verify that the contributing area of rooftop to each disconnected discharge is 500 square feet or less. [Section 3.1.5]
3. Verify that the soil of the pervious area is not designated as a hydrologic soil group “D” or equivalent. [Section 3.1.5]
4. Verify that the overland flow path of the pervious area has a slope of 5% or less. [Section 3.1.5]
5. Verify the percentage of roof area being disconnected based on the flow length over pervious area. Refer to Table 3.1-2 of the Manual for appropriate DCIA reductions. [Section 3.1.5]
6. Verify consistency between the rooftop disconnection information provided on the plans and that which is provided on the PWD Stormwater Plan Review Online Technical Worksheet.

### F.4.2 Pavement Disconnection

1. Verify that any proposed pavement disconnection is clearly labeled on the plan. [Section 3.4.1]
2. Verify that the contributing flow path over the impervious surface is no more than 75 feet. [Section 3.1.5]
3. Verify that the length and width of overland flow over pervious areas is greater than, or equal to, the length and width of the contributing flow path over impervious pavement. [Section 3.1.5]
4. Verify that the overland flow is non-concentrated sheet flow over a vegetated area (flow through a swale is not eligible for pavement disconnection credit). [Section 3.1.5]
5. Verify that the soil of the pervious area is not designated as a hydrologic soil group “D” or equivalent. [Section 3.1.5]
6. Verify that the contributing impervious area has a slope of 5% or less. [Section 3.1.5]
7. Verify that the overland flow path of the pervious area has a slope of 5% or less. [Section 3.1.5]
8. If discharge is concentrated at one or more discrete points, verify that no more than 1,000 square feet discharges to any one point. In addition, an erosion control measure, such as a gravel strip, is required for concentrated discharges. Erosion control measures are not required for non-concentrated discharges along the entire edge of pavement; however, there must be provisions for the establishment of vegetation along the pavement edge and temporary stabilization of the area until vegetation becomes established. [Section 3.1.5]
9. Verify consistency between the pavement disconnection information provided on the plans and that which is provided on the PWD Stormwater Plan Review Online Technical Worksheet.

## F.4.3 Tree Disconnection Credit

### 1. Existing Tree Disconnection Credit

- a. Verify that any existing tree proposed to be used for disconnection is clearly labeled on the plan as such. [Section 3.4.1]
- b. Verify that the species of the existing trees proposed to be used for disconnection credit are provided and are not any of the invasive species included in **Appendix I** [water.phila.gov/development/stormwater-plan-review/manual/appendices/i-plant-lists/](https://water.phila.gov/development/stormwater-plan-review/manual/appendices/i-plant-lists/). [Section 3.1.5]
- c. Verify that the caliper sizes of the existing trees proposed to be used for disconnection credit are provided and at least four-inch caliper. [Section 3.1.5]
- d. Verify that the canopies of existing trees proposed to be used for disconnection credit are field measured. Alternatively, verify that an annotated aerial photo clearly showing the existing tree canopy limits is provided. [Section 3.1.5]
- e. Verify that only impervious area located directly under the canopy area of any existing tree proposed to be used for disconnection credit is being considered disconnected. [Section 3.1.5]
- f. Verify that overlapping existing tree canopy area is not counted twice toward disconnection credit. [Section 3.1.5]
- g. Verify that the DCIA reduction credit for both new and existing trees is no greater than 25% of the total ground-level impervious area, unless the width of the impervious area is less than ten feet. Up to 100% of narrow impervious areas (e.g., sidewalks and trails) may be disconnected through the application of tree credits. [Section 3.1.5]
- h. Verify consistency between the existing tree disconnection credit information provided on the plans and that which is provided on the PWD Stormwater Plan Review Online Technical Worksheet.
- i. Verify that the existing trees proposed to be used for disconnection credit are located outside of the public right-of-way. [Section 3.1.5]

### 2. New Tree Disconnection Credit

- a. Verify that any new tree proposed to be used for disconnection is clearly labeled on the plan as such. [Section 3.4.1]
- b. Verify that the proposed species of the new trees are provided and found on **Table I-1** [water.phila.gov/development/stormwater-plan-review/manual/appendices/i-plant-lists/#Table\\_I.1](https://water.phila.gov/development/stormwater-plan-review/manual/appendices/i-plant-lists/#Table_I.1), the recommended and native non-invasive plant list, in **Appendix I** [water.phila.gov/development/stormwater-plan-review/manual/appendices/i-plant-lists/](https://water.phila.gov/development/stormwater-plan-review/manual/appendices/i-plant-lists/). [Section 3.1.5]
- c. Verify that the new trees are proposed to be planted within ten feet of ground-level impervious area, within the limits of earth disturbance, and outside of the public right-of-way. [Section 3.1.5]
- d. Verify that the caliper sizes of new deciduous trees are provided and at least two-inch caliper. [Section 3.1.5]
- e. Verify that the heights of new evergreen trees are provided and at least six feet tall. [Section 3.1.5]
- f. Verify that the 100-square foot DCIA reduction is being applied to the impervious area adjacent to the tree. [Section 3.1.5]
- g. Verify that overlapping 100-square foot DCIA reduction areas corresponding to adjacent new trees are not being counted twice toward disconnection credit. [Section 3.1.5]

- h. Verify that the DCIA reduction credit for both new and existing trees is no greater than 25% of the total ground-level impervious area, unless the width of the impervious area is less than ten feet. Up to 100% of narrow impervious areas (e.g., sidewalks and trails) may be disconnected through the application of tree credits. [Section 3.1.5]
- i. Verify consistency between the new tree disconnection credit information provided on the plans and that which is provided on the PWD Stormwater Plan Review Online Technical Worksheet.

#### **F.4.4 Green Roof**

1. Verify that the green roof design meets all applicable Design Guidance Checklist standards noted in Appendix F.9, Green Roofs.
2. Verify consistency between the green roof disconnection area information provided on the plans and that which is provided on the PWD Stormwater Plan Review Online Technical Worksheet.

#### **F.4.5 Porous Pavement**

1. Verify that the porous pavement design meets all applicable Design Guidance Checklist standards noted in Appendix F.8, Porous Pavement.
2. Verify consistency between the porous pavement disconnection area information provided on the plans and that which is provided on the PWD Stormwater Plan Review Online Technical Worksheet.