



Public Works Department, Engineering Division

121 5th Ave N
Edmonds, WA 98020

Checklist 14: Downspout Dispersion BMPs

Per ECDC 18.30, all Category 1 projects must comply with Minimum Requirements No. 1 through No. 5, and all Category 2 projects must comply with Minimum Requirements No. 1 through No. 9. Downspout dispersion may be used to help meet Minimum Requirement Nos. 5 and 7, provided that the following requirements are met. See also Addendum Checklists 1 through 3 for submittal requirements, and Addendum Appendix A for infeasibility criteria that apply to Minimum Requirement No. 5 specifically.

Downspout dispersion shall be designed in accordance with the Department of Ecology's Stormwater Management Manual for Western Washington (SWMMWW), ECDC 18.30, and the requirements in the Addendum. The City of Edmonds developed the following checklist to aid project proponents and plan reviewers in complying with the applicable SWMMWW requirements for this BMP. In addition, City-specific requirements (i.e., requirements presented in ECDC 18.30, the Addendum, or other City requirements that are not included in the SWMMWW) are also included in the checklist.

This checklist reflects most, but not necessarily all, of the items that shall be documented by the project proponent, for review by the Engineering Division. It is intended to be used as an aid for developers and plan reviewers by providing a foundation for clear and consistent BMP design in the City of Edmonds. However, all items may not be applicable to every project, and all items of concern to this office may not be covered on this checklist.

Applicant:

Application #:

<p>Within each blank cell, enter comment codes as follows:</p> <p>C = Complete R = Revise (i.e., make corrections)</p> <p>N/A = Not Applicable M = Missing (i.e., please include)</p> <p>IC = Incomplete</p>	
	<p>MODELING AND SIZING</p> <p>(SWMMWW Volume III, Section 3.1.2)</p>
1	<p>If roof runoff is dispersed according to the requirements of this section on lots greater than 22,000 square feet, and the vegetative flow path that is 50 feet or longer (for splashblocks) through undisturbed native landscape or lawn/landscape area that meets BMP T5.13: Post-Construction Soil Quality and Depth requirements, the roof area may be modeled as landscape. If the available vegetated flow path is 25 to 50 feet, use of a dispersion trench allows modeling the roof as 50 percent impervious/50 percent landscape.</p>
	<p>SETBACKS</p> <p>(Addendum Appendix A)</p>
2*	<p>The downspout dispersion area is not within the North Edmonds Earth Subsidence and Landslide Hazard Area (ESLHA).</p>
3*	<p>The downspout dispersion area is not within the buffer of the ESLHA (minimum buffer equal to the height of the steep slope or 50 feet, whichever is greater) unless a geotechnical assessment and soils report is prepared addressing the potential impact of the proposed system.</p>
4*	<p>The downspout dispersion area is at least 5 feet from any property lines and easements.</p>
5*	<p>For sites with on-site or adjacent septic systems, the discharge point is at least 30 feet upgradient, or 10 feet downgradient, of the drainfield primary and reserve areas (per WAC 246-272A-0210). This requirement can be modified by the City if site topography will clearly prohibit flows from intersecting the drainfield or where site conditions (soil permeability, distance between systems, etc.) indicate that this is unnecessary.</p>
6*	<p>The downspout dispersion area is not within the buffer of a Category 1 or Category 2 wetland.</p>
7*	<p>The downspout dispersion area is not within the buffer of a Category 3 or Category 4 wetland, except for the outer 25 percent of the buffer.</p>
	<p>DESIGN CRITERIA</p> <p>(SWMMWW Volume III, Section 3.1.2)</p>
8	<p>The dispersion of runoff does not create flooding or erosion impacts.</p>
9*	<p>Flow path is undisturbed native landscape, or well-established lawn, landscape, or groundcover over soil.</p>
10	<p>Some natural resource protection areas and critical area buffers may be counted towards flow path lengths if they are permanently protected from modification through a covenant or easement, or a tract dedicated by the proposed project.</p>
11*	<p>Dispersion flow paths are sufficiently spaced to prevent overlap of flows in the flow path areas.</p>
12*	<p>Dispersion flow paths are at least 50 feet in length between the outlet of the trench and any slope greater than 15 percent (unless a geotechnical assessment and soils report is prepared addressing the potential impact of the proposed system).</p>

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Dispersion Trench Design Criteria	
13*	Dispersion trench meets the general design criteria above.
14*	Dispersion trench is designed as shown in City of Edmonds Standard Details.
15*	Each downspout dispersion trench has a separate flow path.
16*	Flow path is at least 25 feet in length between the outlet of the trench and the downstream property line or any structure, stream, wetland, or impervious surface.
17*	If the trench serves ≤ 700 square feet of roof area, the trench is 10 foot by 2 foot wide and gravel.
18*	If the trench serves > 700 square feet of roof area, a notched grade headboard is included.
19*	If the trench serves > 700 square feet of roof area, the trench is at least 10 feet in length per each 700 square feet of roof area (up to a maximum of 50 feet in length).
20*	Trench is at least 1.5 feet in depth.
21*	If the trench serves > 700 square feet of roof area, a type 1 catch basin or equivalent structure is provided upstream of the trench.
22*	Trench aggregate material consists of washed drain rock conforming to WSDOT Spec. 9-03.12(5) Gravel Backfill for Dry Wells.
23*	A 4-inch diameter perforated underdrain pipe is 6 inches below the surface of the trench.
Splashblock Design Criteria	
24*	Splashblock meets the general design criteria above.
25*	Splashblocks are designed as shown in City of Edmonds Standard Detail.
26*	Flow path is at least 50 feet in length from the downspout to the downstream property line or any structure, stream, wetland, or other impervious surface.
27*	Less than or equal to 700 square feet of roof area drains to each splashblock.
28*	Splashblock or pad of drain rock (2 feet wide by 3 feet long by 6 inches deep) is placed at each downspout discharge point. Drain rock conforms to WSDOT Spec. 9-03.12(5) Gravel Backfill for Dry Wells.
CONSTRUCTION CRITERIA INCLUDED IN THE SWPPP (Addendum, Section 6.1)	
29*	The dispersion area is clearly identified (e.g., using flagging or high visibility fencing) and protected prior to construction.
30	A soil and vegetation management plan is provided showing areas to be protected and restoration methods for disturbed areas.
31*	Construction SWPPP sheets outline construction sequencing that will protect the dispersion area during construction.
32*	General (i.e., non-BMP-specific) construction SWPPP BMPs and protection techniques are implemented as applicable. The upslope of construction areas are stabilized and overland flow distances are minimized.

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33*	Machinery is operated outside of dispersion area during construction.
34*	Construction site flow directed away from the dispersion area using applicable Construction SWPPP BMPs (e.g., temporary diversion swales).
35*	The soil is scarified along the dispersion flow path if disturbed during construction.
36*	Dispersion area excavated to final grade only after all disturbed areas in the upgradient project drainage area have been permanently stabilized.
37*	If the flow path area is disturbed during construction, the area is restored to meet the BMP T5.13: Post-Construction Soil Quality and Depth (Addendum Checklist 7) requirements and a dense cover of lawn, landscape, or groundcover is established.
	INSPECTION CRITERIA
38	The dispersion system meets applicable siting, design, and construction criteria (see * notations in applicable rows).

Reviewer: _____

Review Date: _____

Reviewer Phone #: _____

Reviewer Comments: