



Public Works Department, Engineering Division

121 5th Ave N
Edmonds, WA 98020

Checklist 9: Concentrated Flow Dispersion BMP

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. Concentrated flow 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.

Concentrated flow 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 #:

Within each blank cell, enter comment codes as follows:	
C = Complete	R = Revise (i.e., make corrections)
N/A = Not Applicable	M = Missing (i.e., please include)
IC = Incomplete	
MODELING AND SIZING (SWMMWW Volume V, Section 5.3.1)	
1	Where concentrated flow dispersion is used to disperse runoff into an undisturbed native landscape area or an area that meets the requirements of BMP T5.13 Post-Construction Soil Quality and Depth (see Addendum Checklist 7), and the vegetated flow path is at least 50 feet, the impervious area is modeled as landscape area. If the available vegetated flow path is 25 to 50 feet, and a dispersion trench is used, the impervious area is modeled as 50 percent impervious/50 percent landscape.
SETBACKS (Addendum Appendix A)	
2*	The concentrated flow dispersion area is not within the North Edmonds Earth Subsidence and Landslide Hazard Area (ESLHA).
3*	The concentrated flow 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.
4*	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.
5*	The concentrated flow dispersion area is not within the buffer of a Category 1 or Category 2 wetland.
6*	The concentrated flow dispersion area is not within the buffer of a Category 3 or Category 4 wetland, except for the outer 25 percent of the buffer.
DESIGN CRITERIA (SWMMWW Volume V, Section 5.3.1 and Volume III, Section 3.1.2)	
7	The dispersion of runoff does not create flooding or erosion impacts.
8*	Flow path is undisturbed native landscape, or well-established lawn, landscape, or groundcover over soil.
9	Some natural resource protection areas and critical area buffers may count towards flow path lengths if they are permanently protected from modification through a covenant or easement, or a tract dedicated by the proposed project.
10*	Concentrated flow dispersion is designed as shown in City of Edmonds Standard Detail.
11*	A slotted drain, diagonal berm, or similar measure is provided to direct flow from the impervious surface to the concentrated flow dispersion device (i.e., rock pad or dispersion trench).
12*	If used, slotted drains are located a minimum of 25 feet from the right-of-way if the contributing area slopes towards the street.
13*	If used, slotted drains must be perpendicular the direction of surface flow to intercept and convey runoff to concentrated flow dispersion devices.

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14*	If used, berms are 6 inches wide and 2 to 4 inches high.
15*	Berms or drains are placed such that a maximum of 700 square feet of impervious area drains to each concentrated flow dispersion device.
16*	Berms are diagonal to the direction of surface flow to intercept and convey runoff to the concentrated flow dispersion device.
17*	A pad of drainage rock (2 feet wide by 3 feet long by 6 inches deep) or a dispersion trench (per BMP T5.10B: Downspout Dispersion and Addendum Checklist 14) is included at each discharge point as the dispersion device. Drainage rock conforms to WSDOT Spec. 9-03.12(5) Gravel Backfill for Dry Wells.
18*	Each concentrated flow dispersion device has a separate flow path.
19*	If either concentrated flow dispersion device is used, a minimum vegetated flow path of 50 feet between the discharge point and a slope greater than 15 percent is provided (unless a geotechnical assessment and soils report is prepared addressing the potential impact of the proposed system).
20*	If a rock pad is used, a minimum vegetated flow path of 50 feet between the discharge point and the downstream property line or any structure, stream, lake, wetland, or other impervious surface is provided.
21*	If a dispersion trench is used, a minimum vegetated flow path of 25 feet between the discharge point and the downstream property line, structure, stream, lake, wetland, or other impervious surface is provided.
	CONSTRUCTION CRITERIA INCLUDED IN THE SWPPP (Addendum, Section 6.1)
22*	The dispersion area is clearly identified (e.g., using flagging or high visibility fencing) and protected prior to construction.
23	A soil and vegetation management plan is provided showing areas to be protected and restoration methods for disturbed areas.
24*	Construction SWPPP sheets outline construction sequencing that will protect the dispersion area during construction.
25*	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.
26*	Machinery is operated outside of dispersion area during construction.
27*	Construction site flow is directed away from the dispersion area using applicable Construction SWPPP BMPs (e.g., temporary diversion swales).
28*	The soil was scarified along the dispersion flow path if disturbed during construction.
29*	Dispersion area excavated to final grade only after all disturbed areas in the upgradient project drainage area have been permanently stabilized.
30*	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.

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INSPECTION CRITERIA	
31	The dispersion system meets applicable siting, design, and construction criteria (see * notations in applicable rows).

Reviewer: _____

Review Date: _____

Reviewer Phone #: _____

Reviewer Comments: