

REVISED STORMWATER GUIDEBOOK COMMENTS

COMMENT 1:

Section 2.2 Water Quality Treatment Volume, indicates an additional stormwater treatment volume for sites located in the AWDZ. This additional volume is calculated based on subtracting the stormwater retention volume (SWR_v) from the water quality treatment volume (WQT_v). This seems to be a roundabout way to reach the desired treatment volume goal. If you're going to add the additional flow of the 1.7 inch storm to either of the stormwater retention volumes, it seems to me that you are still just designing to retain the 1.7 inch storm. So, instead of requiring a different calculation, why not simply require all major development activities in the AWDZ to meet a 1.7 inch storm retention requirement for both retention and water quality volumes?

COMMENT 2:

Section 2.4-2(b) As this is an analysis of downstream conditions prior to construction of stormwater outfall areas, I'm not sure how one takes digital pictures of the outfall. Do you mean pictures of the proposed outfall location, or example pictures of a "proposed" outfall?

COMMENT 3:

Section 2.4-2(f) States that the acceptable methodologies and models are specified within this Guidebook, but doesn't say where in the Guidebook. I suggest you reference the appendix or actual location in the Guidebook where these are located (Section 2.6).

COMMENT 4:

Section 2.4-2(g) (second sentence) "approximate extend of the overland" Did you mean approximate **extent** of the overland?

COMMENT 5:

Section 2.4 Hydrologic and Hydraulic (H&H) Analysis: (2) as with comment 3 above, I suggest you reference the appendix or actual location in the Guidebook where these are located (Section 2.6).

COMMENT 6:

Section 3.1 Green Roofs. While you mention the ability of green roofs to capture a portion of rainfall for evaporation and uptake by the plants, you do not mention the important benefit of stormwater filtering that also occurs via green roofs, particularly the intensive green roof variation. This can have a substantial impact on TSS removal from stormwater runoff.

COMMENT 7:

Section 3.1.6 (bullet 3). A flood test is not practical on sloped roof systems.

COMMENT 8:

Section 3.4.4 Permeable Pavement Design Criteria. This section states that a permeable pavement design that incorporates infiltration must do so within a 48-hour period. Both the bioretention and stormwater filtering designs allow for system infiltration within a 72 hour period. I don't see why there should be a difference between the infiltration periods for the various systems.

COMMENT 9:

The Permeable Pavement Installation description does not detail when the sub-grade infiltration test should be conducted.

COMMENT 10:

Bioretention Filter Media. The discussion on the make-up of the filter media seems to be a bit of overkill. I realize that much of this consists only of recommendations, but it seems to be extremely involved beyond what most site developers (or even commercial media producers) will comprehend. Obviously, the desired goal is to have a filter media (or growth media) that promotes both water infiltration and plant growth. It should be somewhat easy for site developers or material producers to develop in order to keep the cost down.

COMMENT 11:

Table 4.1 BMP Selection Based on Regulatory Goals

The table details certain practices and whether they may be used to meet certain regulatory goals. The table indicates that many of the practices are not suitable for meeting Qp_2/Qp_{15} , but the sectional discussions indicate that they can be used (ie., rainwater harvesting, residential rain gardens) if properly sized.

COMMENT 12:

Eligibility Requirements for Stormwater Retention Credits.

Although there is some discussion that non-regulated sites that install stormwater BMPs may be eligible for SRCs, there is little discussion about how non-major regulated projects can obtain SRCs as described in Section 531 of the Revised Rule which appears specifically targeted to single family residential units and other small retrofit projects.

531.15 At the Director's discretion and to allow for the aggregation of SRCs, the Department may approve a SWMP that proposes aggregation of retention from small sites under a common design and that:

- (a) Would not otherwise trigger a stormwater management performance requirement in this chapter;
- (b) Proposes the use of a common design for multiple installations of a BMP;

- (c) Specifies well-defined technical criteria for location and placement of each BMP;
- (d) Specifies details for how multiple installations will be constructed, operated, and maintained;
- (e) Contains requirements for inspection by the Department or a Department-approved third party;
- (f) Demonstrates the technical capacity to locate, design, install, and maintain each BMP; and
- (g) Demonstrates that the requirements of this chapter will be met.

I think that some mention of reduced requirements for non-major regulated projects should be included in the Guidebook, particularly as a means to encourage retrofit projects within the District.

Ross Pickford
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