

SUMMARY: DRAFT REVISIONS TO CHAPTER 37 (STORMWATER MANAGEMENT) OF THE MADISON GENERAL ORDINANCES

What are the existing stormwater requirements?

New development is currently required to meet the following:

- 1) Peak Detention - detain the 1-, 2-, 5-, 10-, and 100-year storm events such that the post development peak discharge rates (CFS – cubic feet per second) match the predevelopment peaks for each listed storm
- 2) Total Suspended Solids Control - reduce 80% of the TSS coming off the site in a post development condition
- 3) Infiltration – infiltrate 90% of the predevelopment average annual infiltration
- 4) Oil & Grease Control – treat the first ½” of parking lot or drive-through runoff with a capture device
- 5) Safely convey water downstream in an events exceeding the 100-year storm event

Redevelopment is currently required to meet the following:

- 1) Treat new parking areas to remove 60% TSS
- 2) Treat new parking to remove oil & grease from the first ½” of runoff

What is being proposed:

New development is proposed to be required to meet the following: (changes in red).

- 1) Peak Detention - detain the 1-, 2-, 5-, 10-, 100- and 200- year storm events such that the post development peak discharge rates (CFS – cubic feet per second) match the predevelopment peaks for each listed storm.
- 2) Total Suspended Solids Control - reduce 80% of the TSS coming off the site in a post development condition.
- 3) Infiltration – infiltrate 90% of the predevelopment average annual infiltration
- 4) Oil & Grease Control – treat the first ½” of parking lot or drive-through runoff with a capture device.
- 5) Safe Overflow - route the 100- and 500-year storm events through the development. Runoff from the 100-year event must stay in the Right of Way, while runoff from the 500-year may encroach on private property but cannot flood a structure. Elevations of key buildings will be set above the routed 500-year water elevation.

Redevelopment is proposed to be required to meet the following: (changes in red).

- 1) Treat new parking to remove 60% TSS
- 2) Treat new parking to remove oil & grease from the first ½” of runoff
- 3) If the proposed site has an impervious area (hard surface) that exceeds 80% of the existing site impervious area then:

- a. Reduce the 10-year storm event peak discharge rate by 15% compared to existing conditions
- b. Reduce the 10-year storm event site runoff volume by 5% compared to existing conditions
- c. Reductions shall be completed using green infrastructure that captures at least the first 0.5" of rain over the total site impervious area. Additional green or non-green BMPs may be used for volumes beyond the first 0.5" of rainfall if needed to comply with other requirements of this ordinance.

4) The following guidance shall be used in interpreting this code:

- a. An intensive green roof with a media depth of 12" or more shall be considered pervious for the purpose of meeting the lot coverage described above and to result in no runoff during a 10-year design storm. This reduction may be used to offset volumes and rates for the remainder of the site. For storms exceeding the 10-year event the roof shall be considered to have a CN of 68.
- b. An extensive green roof with media depth of a minimum of 4" shall be considered to be pervious for the purpose of meeting the lot coverage described above. The runoff CN for this type of feature shall be considered to be a 76.
- c. Pervious pavement designed to comply with the Wisconsin WDNR's guidance for post construction stormwater practices shall be considered to be pervious for the purposes of meeting the percent lot coverage described above. The runoff CN for this type of feature shall be considered to be a 74.
- d. Green Infrastructure includes, but is not limited to, the following practices: rainwater harvesting/reuse, rain gardens, bioretention systems, infiltration basins, planters that are connected to roof drainage, bioswales, permeable pavement, green roofs, and rain barrels.

Regardless of how or what Green Infrastructure features are used to meet the above requirements, they shall require the recording of a maintenance agreement for the features against the appropriate parcel.