City of Columbus, Ohio Dept. of Public Utilities

Stormwater Drainage Manual Draft 2020

Summary of Changes

- Applicability section has been re-presented in a tabular format. Exemptions and conditions that had been detailed in others parts of the manual were removed and brought forward to be consolidated in the new table.
- Definitions have been updated:
 - o Impervious surface now includes gravel parking lots and artificial turf surfaces.
 - Clarity has been provided on how and for how long pre-development conditions are established for purposes of designing redevelopment projects.
 - Commercial activity areas has been more clearly defined to match established practice.
 - The term "post-construction stormwater control practice" or "SCP" is now consistently used throughout the manual where previous references to best management practices, post-construction BMPs, water quality BMPs, stormwater control facilities, and other related terms had been used.
- The formulas used to establish the size of stream corridor protection zones have been aligned with those used by Ohio EPA.
- Specific requirements have been established regarding the delineation of stream corridor protection zones. Standard details are provided (to be separate from but referenced by the manual).
- In Section 2, several changes have been made to align design requirements with the current standard of practice. Adjustments to the upper limit of length of sheet flow and the range of drainage areas for which the CN method may be used were made.
 - The tables for runoff coefficients and curve numbers were revised to include values for the aforementioned gravel areas.
 - The sections on spread design have been significantly re-worked with intent to provide updated design requirements and clarity to designers on when these calculations are needed.
 - For pipe flows, the calculation of individual minor losses has been replaced by an adjustment to the standard friction coefficient.

- The section on stormwater controls was substantially modified in an attempt to streamline the manual and more closely align with statewide regulations. Additional practices have been added, but for many the specific design information was removed and replaced with references to the Ohio Rainwater and Land Development Manual, including current revisions.
 - A new section for the design of a constructed wetland that is also green infrastructure has been added.
 - The sub-section on underground detention has been expanded to include detailed design requirements.
 - o A new section on blue roofs has been added.
- Various requirements pertaining to stormwater control practices have been added:
 - A surety is now required for projects that include either or both a temporary sediment settling pond/trap or post-construction stormwater control practice.
 - o As-built surveys and engineer certification are required.
 - Easements for purposes of maintenance are now required.
 - o A signed maintenance agreement is now required.
- The form and content of the stormwater pollution prevention plans, when required, have been detailed to facilitate compliance with Ohio EPA regulations.