

**TOWNSHIP OF STILLWATER  
SUSSEX COUNTY, NEW JERSEY**

**ORDINANCE NO. 2023-28**

**AN ORDINANCE AMENDING ORDINANCE 2021-03 OF THE TOWNSHIP OF STILLWATER, SUSSEX COUNTY, NEW JERSEY AMENDING AND MODIFYING CHAPTER 240 “LAND DEVELOPMENT”, ARTICLE II “INTERPRETATION; DEFINITIONS”, SECTION 4 “DEFINITIONS”, AND ARTICLE VII “SITE IMPROVEMENT STANDARDS FOR RESIDENTIAL AND NONRESIDENTIAL DEVELOPMENT”, SECTION 89 “STORMWATER MANAGEMENT”, OF THE TOWNSHIP OF STILLWATER**

**WHEREAS**, the Township of Stillwater (the “Township”) regulates the control and discharge of stormwater through the use of stormwater best management practices and nonstructural stormwater management strategies; and

**WHEREAS**, on March 2, 2020, the New Jersey Department of Environmental Protection (“NJDEP” or the “Department”) adopted amended stormwater management rules at N.J.A.C. 7:8-1, et seq. (the “Amended Rules”), which require municipalities to revise their stormwater control Ordinances in accordance with the Amended Rules.

**WHEREAS**, in July 2023 the Department of Environmental Protection amended the Inland Flood Protection Rule which requires municipalities to revise their stormwater control Ordinance in accordance with the Amended Inland Flood Protection Rule; and

**NOW, THEREFORE, BE IT ORDAINED** by the Township Committee of the Township of Stillwater, Sussex County, New Jersey, as follows:

Section C. “Applicability” is hereby amended to include:

3. An application required by ordinance pursuant to (b)1 above that has been submitted prior to October 17, 2023 shall be subject to the stormwater management requirements in effect on October 16, 2023.
4. An application required by ordinance for approval pursuant to (b)1 above that has been submitted on or after March 2, 2021, but prior to October 17, 2023, shall be subject to the stormwater management requirements in effect on October 16, 2023.

5. Notwithstanding any rule to the contrary, a major development for any public roadway or railroad project conducted by a public transportation entity that has determined a preferred alternative or reached an equivalent milestone before July 17, 2023, shall be subject to the stormwater management requirements in effect prior to July 17, 2023.

“Definitions” of Section II of Chapter 240 “Land Development” of the Township of Stillwater is hereby amended to include, as follows:

"Public roadway or railroad" means a pathway for use by motor vehicles or trains that is intended for public use and is constructed by, or on behalf of, a public transportation entity. A public roadway or railroad does not include a roadway or railroad constructed as part of a private development, regardless of whether the roadway or railroad is ultimately to be dedicated to and/or maintained by a governmental entity.

“Public transportation entity” means a Federal, State, county, or municipal government, an independent State authority, or a statutorily authorized public-private partnership program pursuant to P.L. 2018, c. 90 (N.J.S.A. 40A:11-52 et seq.), that performs a public roadway or railroad project that includes new construction, expansion, reconstruction, or improvement of a public roadway or railroad.

Section IV- “Stormwater Management Requirements for Major Development” is amended as follows:

E. Repeal: [https://njstormwater.org/bmp\\_manual2.htm](https://njstormwater.org/bmp_manual2.htm) and replace with <https://dep.nj.gov/stormwater/bmp-manual/>.

P-2(ii) Repeal in its entirety and replace with:

- ii. Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the projected 2-year storm, as defined and determined pursuant to Section V.D of this ordinance, is infiltrated.

P-4(i) Repeal in its entirety and replace with:

- i. Stormwater from areas of high pollutant loading. High pollutant loading areas are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied, areas where pesticides are loaded/unloaded or stored; areas where hazardous materials are expected to be present in greater than “reportable quantities” as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department approved remedial action work plan approved pursuant to the Administrative

Requirements for the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, or Department landfill closure plan and areas; and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and

R-2 (i), (ii) and (iii) Repeal in its entirety and replace with:

- i. Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the current and projected 2-, 10-, and 100-year storm events, as defined and determined in Section V.C and D, respectively, of this ordinance, do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;
- ii. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the current and projected 2-, 10-, and 100-year storm events, as defined and determined pursuant to Section V.C and D, respectively, of this ordinance, and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;
- iii. Design stormwater management measures so that the post-construction peak runoff rates for the current and projected 2-, 10-, and 100-year storm events, as defined and determined in Section V.C and D, respectively, of this ordinance, are 50, 75 and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed; or

Section V. Calculation of Stormwater Runoff and Groundwater Recharge

Section A (1) and A(2) are repealed in their entirety and replaced with:

- A. The design engineer shall calculate runoff using the following method:

The USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in Chapters 7, 9, 10, 15 and 16 *Part 630, Hydrology National Engineering Handbook*, incorporated herein by reference as amended and supplemented. This methodology is additionally described in *Technical Release 55 - Urban Hydrology for Small Watersheds (TR-55)*, dated June 1986, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the Natural Resources Conservation Service website at:

<https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21422>

or at United States Department of Agriculture Natural Resources Conservation Service, New Jersey State Office.

- B. For the purpose of calculating numbers and groundwater recharge, there is a presumption that the pre-construction condition of a site or portion thereof is a wooded land use with good hydrologic condition. The term applies to the NRCS methodology above at Section V.A.1. number or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five years without interruption prior to the time of application. If more than one land cover has existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations. In addition, there is the presumption that the site is in good hydrologic condition (if the land use type is pasture, lawn, or park), with good cover (if the land use type is woods), or with good hydrologic condition and conservation treatment (if the land use type is cultivation).

Add Section C (1) and C (2) , Table 5 as follows:

- C. The precipitation depths of the current two-, 10-, and 100-year storm events shall be determined by multiplying the values determined in accordance with items 1 and 2 below:
1. Administration (NOAA), National Weather Service's Atlas 14 Point Precipitation Frequency Estimates: NJ, in accordance with the location(s) of the drainage area(s) of the site. This data is available at:  
  
[https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\\_map\\_cont.html?bkmrk=nj](https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=nj); and
  2. The applicant shall utilize Table 5: Current Precipitation Adjustment Factors below, which sets forth the applicable multiplier for the drainage area(s) of the site, in accordance with the county or counties where the drainage area(s) of the site is located. Where the major development lies in more than one county, the precipitation values shall be adjusted according to the percentage of the drainage area in each county. Alternately, separate rainfall totals can be developed for each county using the values in the table below.

**Table 5: Current Precipitation Adjustment Factors**

County	Current Precipitation Adjustment Factors		
	2-year Design Storm	10-year Design Storm	100-year Design Storm
Atlantic	1.01	1.02	1.03
Bergen	1.01	1.03	1.06
Burlington	0.99	1.01	1.04
Camden	1.03	1.04	1.05
Cape May	1.03	1.03	1.04
Cumberland	1.03	1.03	1.01
Essex	1.01	1.03	1.06
Gloucester	1.05	1.06	1.06
Hudson	1.03	1.05	1.09
Hunterdon	1.02	1.05	1.13
Mercer	1.01	1.02	1.04
Middlesex	1.00	1.01	1.03
Monmouth	1.00	1.01	1.02
Morris	1.01	1.03	1.06
Ocean	1.00	1.01	1.03
Passaic	1.00	1.02	1.05
Salem	1.02	1.03	1.03
Somerset	1.00	1.03	1.09
Sussex	1.03	1.04	1.07
Union	1.01	1.03	1.06
Warren	1.02	1.07	1.15

Add Section D and Table 6 as follows:

- D. Table 6: Future Precipitation Change Factors provided below sets forth the change factors to be used in determining the projected two-, 10-, and 100-year storm events for use in this chapter, which are organized alphabetically by county. The precipitation depth of the projected two-, 10-, and 100-year storm events of a site shall be determined by multiplying the precipitation depth of the two-, 10-, and 100-year storm events determined from the National Weather Service’s Atlas 14 Point Precipitation Frequency Estimates pursuant to (c)1 above, by the change factor in the table below, in accordance with the county or counties where the drainage area(s) of the site is located. Where the major development and/or its drainage area lies in more than one

county, the precipitation values shall be adjusted according to the percentage of the drainage area in each county. Alternately, separate rainfall totals can be developed for each county using the values in the table below.

*NOTE: The municipality may instead wish to abbreviate this table along with the text in Item D above to reflect only the relevant information, depending on the location of the municipality. The future precipitation change factors added to the ordinance shall be those found in N.J.A.C. 7:8-5.7(d) as Table 5-6.*

**Table 6: Future Precipitation Change Factors**

	Future Precipitation Change Factors		
	2-year Design Storm	10-year Design Storm	10-year Design Storm
Atlantic	1.22	1.24	1.39
Bergen	1.20	1.23	1.37
Burlington	1.17	1.18	1.32
Camden	1.18	1.22	1.39
Cape May	1.21	1.24	1.32
Cumberland	1.20	1.21	1.39
Essex	1.19	1.22	1.33
Gloucester	1.19	1.23	1.41
Hudson	1.19	1.19	1.23
Hunterdon	1.19	1.23	1.42
Mercer	1.16	1.17	1.36
Middlesex	1.19	1.21	1.33
Monmouth	1.19	1.19	1.26
Morris	1.23	1.28	1.46
Ocean	1.18	1.19	1.24
Passaic	1.21	1.27	1.50
Salem	1.20	1.23	1.32
Somerset	1.19	1.24	1.48
Sussex	1.24	1.29	1.50
Union	1.20	1.23	1.35
Warren	1.20	1.25	1.37

Section VI. Sources for Technical Guidance:

Repeal Section A website link and replace with: <https://dep.nj.gov/stormwater/bmp-manual/>.

Repeal Section A (1) website link and replace with: <https://dep.nj.gov/stormwater/bmp-manual/>.

Repeal Section B in its entirety and replace with:

A. Submissions required for review by the Department should be mailed to:

The Division of Watershed Protection and Restoration, New Jersey Department of Environmental Protection, Mail Code 501-02A, PO Box 420, Trenton, New Jersey 08625-0420.

Section VIII. Safety Standards for Stormwater Management Basins

- i. Repeal Section 2 (ii) and replace with: The overflow grate spacing shall be no greater than two inches across the smallest dimension

Section X. Maintenance and Repair.

- 8. Repeal current website link and replace with:

<https://dep.nj.gov/stormwater/maintenance-guidance/>.

Section XIII. Effective Date:

This Ordinance shall take effect immediately upon its final passage, approval and publication as provided by law.

All of Which is Adopted this 17<sup>th</sup> day of October, 2023, by the Township Committee of Stillwater Township.

TOWNSHIP COMMITTEE

OF STILLWATER TOWNSHIP

ATTEST:

\_\_\_\_\_  
Lynda Knott, Township Clerk

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Lisa Chamblings, Mayor

DATED: Introduced: October 3, 2023  
Adopted: October 17, 2023