ORDINANCE NO. 2025-04 TOWNSHIP OF EAST WINDSOR COUNTY OF MERCER

AN ORDINANCE AMENDING AND SUPPLEMENTING CHAPTER 22-10A, "STORMWATER CONTROL", OF THE REVISED GENERAL ORDINANCES OF THE TOWNSHIP OF EAST WINDSOR

WHEREAS, the Township of East Windsor has a Tier A Municipal Stormwater General Permit issued by the New Jersey Department of Environmental Protection (NJDEP) which authorizes the discharge of stormwater from municipal separate storm sewer systems (MS4).

WHEREAS, the NJDEP has revised the Tier A Municipal Stormwater General Permit requirements regarding stormwater regulations, in order to establish the minimum standards and expectations to minimize pollution caused by stormwater and to restore, enhance and maintain the integrity of State Open Waters; and

WHEREAS, the Township is required to update Section 22-10A, "Stormwater Control" of the Revised General Ordinances of the Townto incorporate NJDEP's regulatory revisions

NOW THEREFORE, BE IT ORDAINED by the Township Council of the Township of East Windsor as follows:

- Section 1. Section 22-10A, "Stormwater Control" of the Revised General Ordinances of the Township of East Windsor is amended as follows [new language is underlined and deleted language is indicated by strikeout]:
 - 1. Section 22-10A.1.c. "Applicability," is amended and supplemented as follows
 - 1. This section shall be applicable to the following major developments to all site plans and subdivisions for the following major developments that require preliminary or final site plan or subdivision review:
 - (a) Non-residential major developments; and
 - (b) Aspects of residential major developments that are not preempted by the Residential Site Improvement Standards at N.J.A.C. 5:21.
 - 3. An application required by ordinance pursuant to C.1 above that has been submitted prior to the effective date of Ordinance No. 2025-04 shall be subject to the stormwater management requirements in effect on the day prior to the effective date of Ordinance No. 2025-04.
 - 4. <u>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</u>

- 17, 2023, shall be subject to the stormwater management requirements in effect prior to July 17, 2023.
- 2. Section 22-10A.5. "Calculation of Stormwater Runoff and Groundwater Recharge" is amended and supplemented as follows:
 - a. Stormwater runoff shall be calculated in accordance with the following:
 - 1. The design engineer shall calculate runoff using one of the following methods:
 - (a) 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://www.nrcs.usda.gov/Internet/FSEDOCUMENTS/stelprdb1044171.pdf

https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/new-jersey

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

(b) The Rational Method for peak flow and the Modified Rational Method for hydrograph computations. The rational and modified rational methods are described in "Appendix A-9 Modified Rational Method" in the Standards for Soil Erosion and Sediment Control in New Jersey, January 2014. This document is available from the State Soil Conservation Committee or any of the Soil Conservation Districts listed at N.J.A.C. 2:90-1.3(a)3. The location, address, and telephone number for each Soil Conservation District is available from the State Soil Conservation Committee, PO Box 330, Trenton, New Jersey 08625. The document is also available at:

http://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf.

2. For the purpose of calculating runoff coefficients 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 "runoff coefficient" applies to both the NRCS methodology above at § 22-10A.5.A1(a) and the Rational and Modified Rational Methods at § 22-10A.5a1(b). A runoff coefficient 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 have 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).

- 2. For the purpose of calculating curve 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 "curve number" applies to the NRCS methodology above at Section 22-10A.5.a(1). A curve 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).
- c. The precipitation depths of the current two-year, 10-year, and 100-year storm events shall be determined by multiplying the values determined in accordance with items 1 and 2 below:
 - 1. The applicant shall utilize the National Oceanographic and Atmospheric 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; 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

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

d. Table 6: Future Precipitation Change Factors provided below sets forth the change factors to be used in determining the projected two-year, 10-year, and

100-year storm events for use in this chapter, which are organized alphabetically by county. The precipitation depth of the projected two-year, 10-year, and 100-year storm events of a site shall be determined by multiplying the precipitation depth of the two-year, 10-year, 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.

Table 6: Future Precipitation Change Factors

	Future Precipitation Change Factors		
	2-year	<u>10-year</u>	<u>100-year</u>
	Design Storm	Design Storm	Design Storm
<u>Atlantic</u>	1.22	<u>1.24</u>	<u>1.39</u>
<u>Bergen</u>	1.20	<u>1.23</u>	<u>1.37</u>
Burlington	<u>1.17</u>	1.18	1.32
<u>Camden</u>	1.18	1.22	<u>1.39</u>
Cape May	<u>1.21</u>	<u>1.24</u>	<u>1.32</u>
Cumberland	<u>1.20</u>	<u>1.21</u>	<u>1.39</u>
<u>Essex</u>	<u>1.19</u>	1.22	<u>1.33</u>
Gloucester	<u>1.19</u>	1.23	<u>1.41</u>
<u>Hudson</u>	<u>1.19</u>	<u>1.19</u>	<u>1.23</u>
<u>Hunterdon</u>	<u>1.19</u>	1.23	<u>1.42</u>
<u>Mercer</u>	<u>1.16</u>	<u>1.17</u>	<u>1.36</u>
Middlesex	<u>1.19</u>	<u>1.21</u>	<u>1.33</u>
<u>Monmouth</u>	<u>1.19</u>	<u>1.19</u>	<u>1.26</u>
<u>Morris</u>	1.23	1.28	<u>1.46</u>
<u>Ocean</u>	<u>1.18</u>	<u>1.19</u>	<u>1.24</u>
<u>Passaic</u>	<u>1.21</u>	1.27	<u>1.50</u>
<u>Salem</u>	1.20	1.23	1.32
Somerset	<u>1.19</u>	1.24	1.48
Sussex	<u>1.24</u>	<u>1.29</u>	<u>1.50</u>
<u>Union</u>	1.20	1.23	<u>1.35</u>

<u>Warren</u>	1.20	1.25	1.37
---------------	------	------	------

- 3. Section 22-10A.6. *Sources for Technical Guidance* is amended and supplemented as follows:
- **a.** Technical guidance for stormwater management measures can be found in the documents listed below, which are available to download from the Department's website at: http://www.nj.gov/dep/stormwater/bmp manual2.htm.
- 1. Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended and supplemented. Information is provided on stormwater management measures such as, but not limited to, those listed in Tables 1, 2, and 3.
- **2.** Additional maintenance guidance is available on the Department's website at: https://www.njstormwater.org/maintenance guidance.htm.
- **b.** Submissions required for review by the Department should be mailed to:

 The Division of Water Quality, New Jersey Department of Environmental Protection,

 Mail Code 401 02B, PO Box 420, Trenton, New Jersey 08625 0420.
- a. Technical guidance for stormwater management measures can be found in the documents listed at paragraphs 1 and 2 below, which are available from Maps and Publications, New Jersey Department of Environmental Protection, 428 East State Street, P.O. Box 420, Trenton, New Jersey, 08625; telephone (609) 777-1038.
 - 1. Guidelines for stormwater management measures are contained in the New Jersey
 Stormwater Best Management Practices Manual, as amended. Information is
 provided on stormwater management measures such as: bioretention systems,
 constructed stormwater wetlands, dry wells, extended detention basins, infiltration
 structures, manufactured treatment devices, pervious paving, sand filters, vegetative
 filter strips, and wet ponds.
 - 2. The New Jersey Department of Environmental Protection Stormwater Management Facilities Maintenance Manual, as amended.
- b. Additional technical guidance for stormwater management measures can be obtained from the following:
 - The "Standards for Soil Erosion and Sediment Control in New Jersey" promulgated by the State Soil Conservation Committee and incorporated into N.J.A.C. 2:90.
 Copies of these standards may be obtained by contacting the State Soil Conservation Committee or any of the Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey 08625; (609) 292-5540;
 - 2. The Rutgers Cooperative Extension Service, (732) 932-9306; and

3. The Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey, 08625, (609) 292-5540.

<u>Section 2. Repealer.</u> All ordinances or parts of ordinances inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency.

<u>Section 3. Severability.</u> If any section, subsection, clause or phrase of this Ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the remaining portions of this Ordinance.

<u>Section 4. Effective Date</u>. This Ordinance shall take effect 20 days after final passage and publication according to law.

ATTEST:	
ALLISON QUIGLEY	JANICE S. MIRONOV
Municipal Clerk	Mayor
Introduced:	
Adopted:	
Effective:	