**CITY OF PASSAIC**
**ORDINANCE NO.__2456-24_____**

**ORDINANCE AMENDING CITY CODE OF THE CITY OF PASSAIC, CHAPTER 258A "STORMWATER CONTROL"**

**WHEREAS**, N.J.S.A. 40:48-2 provides in relevant part that a municipality may make and enforce such ordinances, rules and regulations not contrary to the laws of this state or of the United States as it may deem necessary and proper for the good government, order and protection of persons and property, and for the preservation of the public health, safety and welfare of the municipality and its inhabitants; and

**WHEREAS**, the City of Passaic regulates the control and discharge of stormwater through the use of stormwater best management practices and nonstructural stormwater management strategies; and

**WHEREAS**, the New Jersey Department of Environmental Protection ("NJDEP" or the "Department") has adopted amended stormwater management regulations and requires municipalities to revise their stormwater control ordinances in accordance with the regulations; and

**WHEREAS**, the City Code of the City of Passaic, Chapter 258A, "Stormwater Control" sets forth the rules and regulations governing the control of stormwater within the City of Passaic; and

**WHEREAS**, in the interest of the promotion of the general welfare, health and safety, the City Code of the City of Passaic, Chapter 258A "Stormwater Control" shall be amended as set forth below.

**NOW, THEREFORE, BE IT ORDAINED** by the City Council of the City of Passaic, that Chapter 258A, "Stormwater Control" § 258A-1 through § 258A-13 is hereby amended as follows:

**§ 258A-1 THROUGH § 258A-11 shall be amended as reflected herein with the new text being underlined and the deletions being reflected in the crossed-out text.**

**SECTION I**

**§ 258A-1: Scope and Purpose**

A. Policy Statement

Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure Best Management Practices (GI BMPs) and nonstructural stormwater management strategies. GI BMPs and low impact development (LID) should be utilized to meet the goal of maintaining natural hydrology to reduce stormwater runoff volume, reduce erosion, encourage infiltration and groundwater recharge, and reduce pollution. GI BMPs and LID should be developed based upon physical site conditions and the origin, nature and the anticipated quantity, or amount, of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.

B. Purpose

The purpose of this ordinance is to establish minimum stormwater management requirements and controls for "major development," as defined below in § 258A-2.

C. Applicability

1. This ordinance shall be applicable to the following major developments:

a. Non-residential major developments; and

b. Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.

2. This ordinance shall also be applicable to all major developments undertaken by the City of Passaic.

3. An application required by ordinance pursuant to C.1 above that has been submitted prior to August 6, 2024, shall be subject to the stormwater management requirements in effect on August 5, 2024 .

4. An application required by ordinance for approval pursuant to C.1 above that has been submitted on or after March 2, 2021, but prior to August 6, 2024- shall be subject to the stormwater management requirements in effect on August 5, 2024

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.

D. Compatibility with Other Permit and Ordinance Requirements

1. Development approvals issued pursuant to this ordinance are to be considered an integral part of development approvals and do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance. In their interpretation and application, the provisions of this ordinance shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare.

2. This ordinance is not intended to interfere with, abrogate, or annul any other ordinances, rule or regulation, statute, or other provision of law except that, where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, the more restrictive provisions or higher standards shall control.

**§ 258A-2: Definitions**

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory. The definitions below are the same as or based on the corresponding definitions in the Stormwater Management Rules at N.J.A.C. 7:8-1.2.

"CAFRA Centers, Cores or Nodes" means those areas with boundaries incorporated by reference or revised by the Department in accordance with N.J.A.C. 7:7-13.16.

"CAFRA Planning Map" means the map used by the Department to identify the location of Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes. The CAFRA Planning Map is available on the Department's Geographic Information System (GIS).

"Community Basin" means an infiltration system, sand filter designed to infiltrate, standard constructed wetland, or wet pond, established in accordance with N.J.A.C. 7:8-4.2(c)14, that is designed and constructed in accordance with the New Jersey Stormwater Best Management Practices Manual, or an alternate design, approved in accordance with N.J.A.C. 7:8-5.2(g), for an infiltration system, sand filter designed to infiltrate, standard constructed wetland, or wet pond and that complies with the requirements of this chapter.

"Compaction" means the increase in soil bulk density.

"Contributory drainage area" means the area from which stormwater runoff drains to a stormwater management measure, not including the area of the stormwater management measure itself.

"Core" means a pedestrian-oriented area of commercial and civic uses serving the surrounding municipality, generally including housing and access to public transportation.

"County review agency" means an agency designated by the County Commissioners to review municipal stormwater management plans and implementing ordinance(s). The county review agency may either be:

1. A county planning agency or
2. A county water resource association created under N.J.S.A 58:16A-55.5, if the ordinance or resolution delegates authority to approve, conditionally approve, or disapprove municipal stormwater management plans and implementing ordinances.

"Department" means the Department of Environmental Protection.

"Designated Center" means a State Development and Redevelopment Plan Center as designated by the State Planning Commission such as urban, regional, town, village, or hamlet.

"Design engineer" means a person professionally qualified and duly licensed in New Jersey to perform engineering services that may include, but not necessarily be limited to, development of project requirements, creation and development of project design and preparation of drawings and specifications.

"Development" means the division of a parcel of land into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or structure, any mining excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, for which permission is required under the Municipal Land Use Law, N.J.S.A. 40:55D-1 *et seq.* In the case of development of agricultural land, development means: any activity that requires a State permit, any activity reviewed by the County Agricultural Board (CAB) and the State Agricultural Development Committee (SADC), and municipal review of any activity not exempted by the Right to Farm Act, N.J.S.A 4:1C-1 et seq.

"Disturbance" means the placement or reconstruction of impervious surface or motor vehicle surface, or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Milling and repaving is not considered disturbance for the purposes of this definition.

"Drainage area" means a geographic area within which stormwater, sediments, or dissolved materials drain to a particular receiving waterbody or to a particular point along a receiving waterbody.

"Environmentally constrained area" means the following areas where the physical alteration of the land is in some way restricted, either through regulation, easement, deed restriction or ownership such as: wetlands, floodplains, threatened and endangered species sites or designated habitats, and parks and preserves. Habitats of endangered or threatened species are identified using the Department's Landscape Project as approved by the Department's Endangered and Nongame Species Program.

"Environmentally critical area" means an area or feature which is of significant environmental value, including but not limited to: stream corridors, natural heritage priority sites, habitats of endangered or threatened species, large areas of contiguous open space or upland forest, steep slopes, and well head protection and groundwater recharge areas. Habitats of endangered or threatened species are identified using the Department's Landscape Project as approved by the Department's Endangered and Nongame Species Program.

"Empowerment Neighborhoods" means neighborhoods designated by the Urban Coordinating Council "in consultation and conjunction with" the New Jersey Redevelopment Authority pursuant to N.J.S.A 55:19-69.

"Erosion" means the detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

"Green infrastructure" means a stormwater management measure that manages stormwater close to its source by:

1. Treating stormwater runoff through infiltration into subsoil;
2. Treating stormwater runoff through filtration by vegetation or soil; or
3. Storing stormwater runoff for reuse.

"HUC 14" or "hydrologic unit code 14" means an area within which water drains to a particular receiving surface water body, also known as a subwatershed, which is identified by a 14-digit hydrologic unit boundary designation, delineated within New Jersey by the United States Geological Survey.

"Impervious surface" means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

"Infiltration" is the process by which water seeps into the soil from precipitation.

"Lead planning agency" means one or more public entities having stormwater management planning authority designated by the regional stormwater management planning committee pursuant to N.J.A.C. 7:8-3.2, that serves as the primary representative of the committee.

"Major development" means an individual "development," as well as multiple developments that individually or collectively result in:

A. The disturbance of one or more acres of land since February 2, 2004;
B. The creation of one-quarter acre or more of "regulated impervious surface" since February 2, 2004;
C. The creation of one-quarter acre or more of "regulated motor vehicle surface" since March 2, 2021; or
D. A combination of B and C above that totals an area of one-quarter acre or more. The same surface shall not be counted twice when determining if the combination area equals one-quarter acre or more.

Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of paragraphs 1, 2, 3, or 4 above. Projects undertaken by any government agency that otherwise meet the definition of "major development" but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered "major development."

"Motor vehicle" means land vehicles propelled other than by muscular power, such as automobiles, motorcycles, autocycles, and low speed vehicles. For the purposes of this definition, motor vehicle does not include farm equipment, snowmobiles, all-terrain vehicles, motorized wheelchairs, go-carts, gas buggies, golf carts, ski-slope grooming machines, or vehicles that run only on rails or tracks.

"Motor vehicle surface" means any pervious or impervious surface that is intended to be used by "motor vehicles" and/or aircraft, and is directly exposed to precipitation including, but not limited to, driveways, parking areas, parking garages, roads, racetracks, and runways.

"Municipality" means any city, borough, town, township, or village.

"New Jersey Stormwater Best Management Practices (BMP) Manual" or "BMP Manual" means the manual maintained by the Department providing, in part, design specifications, removal rates, calculation methods, and soil testing procedures approved by the Department as being capable of contributing to the achievement of the stormwater management standards specified in this chapter. The BMP Manual is periodically amended by the Department as necessary to provide design specifications on additional best management practices and new information on already included practices reflecting the best available current information regarding

the particular practice and the Department's determination as to the ability of that best management practice to contribute to compliance with the standards contained in this chapter. Alternative stormwater management measures, removal rates, or calculation methods may be utilized, subject to any limitations specified in this chapter, provided the design engineer demonstrates to the municipality, in accordance with § 258A-4.F. of this ordinance and N.J.A.C. 7:8-5.2(g), that the proposed measure and its design will contribute to achievement of the design and performance standards established by this chapter.

"Node" means an area designated by the State Planning Commission concentrating facilities and activities which are not organized in a compact form.

"Nutrient" means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the development of organisms.

"Person" means any individual, corporation, company, partnership, firm, association, political subdivision of this State and any state, interstate or Federal agency.

"Pollutant" means any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological materials, medical wastes, radioactive substance (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§ 2011 *et seq.*)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, agricultural, and construction waste or runoff, or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a domestic treatment works. "Pollutant" includes both hazardous and nonhazardous pollutants.

**"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.**

"Recharge" means the amount of water from precipitation that infiltrates into the ground and is not evapotranspired.

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**§ 258A-4: Stormwater Management Requirements for Major Development**

A. The development shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of a major development in accordance with § 258A-10.

B. Stormwater management measures shall avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Department's Landscape Project or Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly *Helonias bullata* (swamp pink) and/or *Clemmys muhlnebergi* (bog turtle).

C. The following linear development projects are exempt from the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of § 258A-4. P, Q and R:

   1. The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;

2. The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
3. The construction of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material.

D. A waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of § 258A-4.O, P, Q and R may be obtained for the enlargement of an existing public roadway or railroad; or the construction or enlargement of a public pedestrian access, provided that the following conditions are met:

1. The applicant demonstrates that there is a public need for the project that cannot be accomplished by any other means;

2. The applicant demonstrates through an alternatives analysis, that through the use of stormwater management measures, the option selected complies with the requirements of § 258A-4.O, P, Q and R to the maximum extent practicable;

3. The applicant demonstrates that, in order to meet the requirements of § 258A-4.O, P, Q and R, existing structures currently in use, such as homes and buildings, would need to be condemned; and

4. The applicant demonstrates that it does not own or have other rights to areas, including the potential to obtain through condemnation lands not falling under § 258A-4.D.3 above within the upstream drainage area of the receiving stream, that would provide additional opportunities to mitigate the requirements of § 258A-4.O, P, Q and R that were not achievable onsite.

E. Tables 1 through 3 below summarize the ability of stormwater best management practices identified and described in the New Jersey Stormwater Best Management Practices Manual to satisfy the green infrastructure, groundwater recharge, stormwater runoff quality and stormwater runoff quantity standards specified in § 258A-4.O, P, Q and R. When designed in accordance with the most current version of the New Jersey Stormwater Best Management Practices Manual, the stormwater management measures found at N.J.A.C. 7:8-5.2 (f) Tables 5-1, 5-2 and 5-3 and listed below in Tables 1, 2 and 3 are presumed to be capable of providing stormwater controls for the design and performance standards as outlined in the tables below. Upon amendments of the New Jersey Stormwater Best Management Practices to reflect additions or deletions of BMPs meeting these standards, or changes in the presumed performance of BMPs designed in accordance with the New Jersey Stormwater BMP Manual, the Department shall publish in the New Jersey Registers a notice of administrative change revising the applicable table. The most current version of the BMP Manual can be found on the Department's website at:

**https://dep.nj.gov/stormwater/bmp-manual/**

F. Where the BMP tables in the NJ Stormwater Management Rule are different due to updates or amendments with the tables in this ordinance the BMP Tables in the Stormwater Management rule at N.J.A.C. 7:8-5.2(f) shall take precedence.

**Table 1**
**Green Infrastructure BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity**

| Best Management Practice | Stormwater Runoff Quality TSS Removal Rate (percent) | Stormwater Runoff Quantity | Groundwater Recharge | Minimum Separation from Seasonal High Water Table (feet) |
|---|---|---|---|---|
| Cistern | 0 | Yes | No | -- |
| Dry Well[a] | 0 | No | Yes | 2 |
| Grass Swale | 50 or less | No | No | 2[e]<br>1[f] |
| Green Roof | 0 | Yes | No | -- |
| Manufactured Treatment Device[a] [g] | 50 or 80 | No | No | Dependent upon the device |
| Pervious Paving System[a] | 80 | Yes | Yes[b]<br>No[c] | 2[b]<br>1[c] |
| Small-Scale Bioretention Basin[a] | 80 or 90 | Yes | Yes[b]<br>No[c] | 2[b]<br>1[c] |
| Small-Scale Infiltration Basin[a] | 80 | Yes | Yes | 2 |
| Small-Scale Sand Filter | 80 | Yes | Yes | 2 |
| Vegetative Filter Strip | 60-80 | No | No | -- |

*(Notes corresponding to annotations [a] through [g] are found under Table 3)*

**Table 2**
**Green Infrastructure BMPs for Stormwater Runoff Quantity (or for Groundwater Recharge and/or Stormwater Runoff Quality with a Waiver or Variance from N.J.A.C. 7:8-5.3)**

| Best Management Practice | Stormwater Runoff Quality TSS Removal Rate (percent) | Stormwater Runoff Quantity | Groundwater Recharge | Minimum Separation from Seasonal High Water Table (feet) |
|---|---|---|---|---|
| Bioretention System | 80 or 90 | Yes | Yes[(b)]<br>No[(c)] | 2[(b)]<br>1[(c)] |
| Infiltration Basin | 80 | Yes | Yes | 2 |
| Sand Filter[(b)] | 80 | Yes | Yes | 2 |
| Standard Constructed Wetland | 90 | Yes | No | N/A |
| Wet Pond[(d)] | 50-90 | Yes | No | N/A |

*(Notes corresponding to annotations [(b)] through [(d)] are found under Table 3)*

**Table 3**
**BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity only with a Waiver or Variance from N.J.A.C. 7:8-5.3**

| Best Management Practice | Stormwater Runoff Quality TSS Removal Rate (percent) | Stormwater Runoff Quantity | Groundwater Recharge | Minimum Separation from Seasonal High Water Table (feet) |
|---|---|---|---|---|
| Blue Roof | 0 | Yes | No | N/A |
| Extended Detention Basin | 40-60 | Yes | No | 1 |
| Manufactured Treatment Device[(h)] | 50 or 80 | No | No | Dependent upon the device |
| Sand Filter[(c)] | 80 | Yes | No | 1 |
| Subsurface Gravel Wetland | 90 | No | No | 1 |
| Wet Pond | 50-90 | Yes | No | N/A |

Notes to Tables 1, 2, and 3:

(a) subject to the applicable contributory drainage area limitation specified at § 258A-4.O.2;
(b) designed to infiltrate into the subsoil;
(c) designed with underdrains;
(d) designed to maintain at least a 10-foot-wide area of native vegetation along at least 50 percent of the shoreline and to include a stormwater runoff retention component designed to capture stormwater runoff for beneficial reuse, such as irrigation;
(e) designed with a slope of less than two percent;
(f) designed with a slope of equal to or greater than two percent;
(g) manufactured treatment devices that meet the definition of green infrastructure at § 258A-2;
(h) manufactured treatment devices that do not meet the definition of green infrastructure at § 258A-2.

G. An alternative stormwater management measure, alternative removal rate, and/or alternative method to calculate the removal rate may be used if the design engineer demonstrates the capability of the proposed alternative stormwater management measure and/or the validity of the alternative rate or method to the municipality. A copy of any approved alternative stormwater management measure, alternative removal rate, and/or alternative method to calculate the removal rate shall be provided to the Department in accordance with § 258A-6.B. Alternative stormwater management measures may be used to satisfy the requirements at § 258A-4.O only if the measures meet the definition of green infrastructure at § 258A-2. Alternative stormwater management measures that function in a similar manner to a BMP listed at Section O.2 are subject to the contributory drainage area limitation specified at Section O.2 for that similarly functioning BMP. Alternative stormwater management measures approved in accordance with this subsection that do not function in a similar manner to any BMP listed at Section O.2 shall have a contributory drainage area less than or equal to 2.5 acres, except for alternative stormwater management measures that function similarly to cisterns, grass swales, green roofs, standard constructed wetlands, vegetative filter strips, and wet ponds, which are not subject to a contributory drainage area limitation. Alternative measures that function similarly to standard constructed wetlands or wet ponds shall not be used for compliance with the stormwater runoff quality standard unless a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with § 258A-4.D is granted from § 258A-4.O.

H. Whenever the stormwater management design includes one or more BMPs that will infiltrate stormwater into subsoil, the design engineer shall assess the hydraulic impact on the groundwater table and design the site, so as to avoid adverse hydraulic impacts. Potential adverse hydraulic impacts include, but are not limited to, exacerbating a naturally or seasonally high water table, so as to cause surficial ponding, flooding of basements, or interference with the proper operation of subsurface sewage disposal systems or other subsurface structures within the zone of influence of the groundwater mound, or interference with the proper functioning of the stormwater management measure itself.

I. Design standards for stormwater management measures are as follows:

1. Stormwater management measures shall be designed to take into account the existing site conditions, including, but not limited to, environmentally critical areas; wetlands; flood-prone areas; slopes; depth to seasonal high water table; soil type, permeability, and texture; drainage area and drainage patterns; and the presence of solution-prone carbonate rocks (limestone);

2. Stormwater management measures shall be designed to minimize maintenance, facilitate maintenance and repairs, and ensure proper functioning. Trash racks shall be installed at the intake to the outlet structure, as appropriate, and shall have parallel bars with one-inch spacing between the bars to the elevation of the water quality design storm. For elevations higher than the water quality design storm, the parallel bars at the outlet structure shall be spaced no greater than one-third the width of the diameter of the orifice or one-third the width of the weir, with a minimum spacing between bars of one inch and a maximum spacing between bars of six inches. In addition, the design of trash racks must comply with the requirements of § 258A-8.C;

3. Stormwater management measures shall be designed, constructed, and installed to be strong, durable, and corrosion resistant. Measures that are consistent with the relevant portions of the Residential Site Improvement Standards at N.J.A.C. 5:21-7.3, 7.4, and 7.5 shall be deemed to meet this requirement;

4. Stormwater management BMPs shall be designed to meet the minimum safety standards for stormwater management BMPs at § 258A-8; and

5. The size of the orifice at the intake to the outlet from the stormwater management BMP shall be a minimum of two and one-half inches in diameter.

J. Manufactured treatment devices may be used to meet the requirements of this subchapter, provided the pollutant removal rates are verified by the New Jersey Corporation for Advanced Technology and certified by the Department. Manufactured

treatment devices that do not meet the definition of green infrastructure at § 258A-2 may be used only under the circumstances described at § 258A-4.O.4.

K. Any application for a new agricultural development that meets the definition of major development at § 258A-2 shall be submitted to the Soil Conservation District for review and approval in accordance with the requirements at § 258A-4.O, P, Q and R and any applicable Soil Conservation District guidelines for stormwater runoff quantity and erosion control. For purposes of this subsection, "agricultural development" means land uses normally associated with the production of food, fiber, and livestock for sale. Such uses do not include the development of land for the processing or sale of food and the manufacture of agriculturally related products.

L. If there is more than one drainage area, the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at § 258A-4.P, Q and R shall be met in each drainage area, unless the runoff from the drainage areas converge onsite and no adverse environmental impact would occur as a result of compliance with any one or more of the individual standards being determined utilizing a weighted average of the results achieved for that individual standard across the affected drainage areas.

M. Any stormwater management measure authorized under the municipal stormwater management plan or ordinance shall be reflected in a deed notice recorded in the Passaic County Clerk's Office located at: 401 Grand Street # 130, Paterson, NJ 07505. A form of deed notice shall be submitted to the municipality for approval prior to filing. The deed notice shall contain a description of the stormwater management measure(s) used to meet the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at § 258A-4.O, P, Q and R and shall identify the location of the stormwater management measure(s) in NAD 1983 State Plane New Jersey FIPS 2900 US Feet or Latitude and Longitude in decimal degrees. The deed notice shall also reference the maintenance plan required to be recorded upon the deed pursuant to § 258A-10.B.5. Prior to the commencement of construction, proof that the above required deed notice has been filed shall be submitted to the municipality. Proof that the required information has been recorded on the deed shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof of recordation provided by the recording office. However, if the initial proof provided to the municipality is not a copy of the complete recorded document, a copy of the complete recorded document shall be provided to the municipality within 180 calendar days of the authorization granted by the municipality.

N. A stormwater management measure approved under the municipal stormwater management plan or ordinance may be altered or replaced with the approval of the municipality, if the municipality determines that the proposed alteration or replacement meets the design and performance standards pursuant to § 258A-4 of this ordinance and provides the same level of stormwater management as the previously approved stormwater management measure that is being altered or replaced. If an alteration or replacement is approved, a revised deed notice shall be submitted to the municipality for approval and subsequently recorded with the Office of the Clerk of the County of Passaic and shall contain a description and location of the stormwater management measure, as well as reference to the maintenance plan, in accordance with M above. Prior to the commencement of construction, proof that the above required deed notice has been filed shall be submitted to the municipality in accordance with M above.

O. Green Infrastructure Standards

1. This subsection specifies the types of green infrastructure BMPs that may be used to satisfy the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards.

2. To satisfy the groundwater recharge and stormwater runoff quality standards at § 258A-4.P and Q, the design engineer shall utilize green infrastructure BMPs identified in Table 1 at § 258A-4.F. and/or an alternative stormwater management measure approved in accordance with § 258A-4.G. The following green infrastructure BMPs are subject to the following maximum contributory drainage area limitations:

| Best Management Practice | Maximum Contributory Drainage Area |
|---|---|
| Dry Well | 1 acre |
| Manufactured Treatment Device | 2.5 acres |
| Pervious Pavement Systems | Area of additional inflow cannot exceed three times the area occupied by the BMP |
| Small-scale Bioretention Systems | 2.5 acres |
| Small-scale Infiltration Basin | 2.5 acres |
| Small-scale Sand Filter | 2.5 acres |

3. To satisfy the stormwater runoff quantity standards at § 258A-4.R, the design engineer shall utilize BMPs from Table 1 or from Table 2 and/or an alternative stormwater management measure approved in accordance with § 258A-4.G.

4. If a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with § 258A-4.D is granted from the requirements of this subsection, then BMPs from Table 1, 2, or 3, and/or an alternative stormwater management measure approved in accordance with § 258A-4.G may be used to meet the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at § 258A-4.P, Q and R.

5. For separate or combined storm sewer improvement projects, such as sewer separation, undertaken by a government agency or public utility (for example, a sewerage company), the requirements of this subsection shall only apply to areas owned in fee simple by the government agency or utility, and areas within a right-of-way or easement held or controlled by the government agency or utility; the entity shall not be required to obtain additional property or property rights to fully satisfy the requirements of this subsection. Regardless of the amount of area of a separate or combined storm sewer improvement project subject to the green infrastructure requirements of this subsection, each project shall fully comply with the applicable groundwater recharge, stormwater runoff quality control, and stormwater runoff quantity standards at § 258A-4.P, Q and R, unless the project is granted a waiver from strict compliance in accordance with § 258A-4.D.

P. Groundwater Recharge Standards

1. This subsection contains the minimum design and performance standards for groundwater recharge as follows:
   (a) The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at § 258A-5, either:

[1] Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or

[2] 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 §258A-5.D of this ordinance**, is infiltrated.

(b) This groundwater recharge requirement does not apply to projects within the "urban redevelopment area," or to projects subject to 4 below.

(c) The following types of stormwater shall not be recharged:

1. 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

2. Industrial stormwater exposed to "source material." "Source material" means any material(s) or machinery, located at an industrial facility, that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels, and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.

Q. Stormwater Runoff Quality Standards

(1) This subsection contains the minimum design and performance standards to control stormwater runoff quality impacts of major development. Stormwater runoff quality standards are applicable when the major development results in an increase of one-quarter acre or more of regulated motor vehicle surface.

(2) Stormwater management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm as follows:

(a ) Eighty percent TSS removal of the anticipated load, expressed as an annual average shall be achieved for the stormwater runoff from the net increase of motor vehicle surface.

(b) If the surface is considered regulated motor vehicle surface because the water quality treatment for an area of motor vehicle surface that is currently receiving water quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant is to be modified or removed, the project shall maintain or increase the existing TSS removal of the anticipated load expressed as an annual average.

(3) The requirement to reduce TSS does not apply to any stormwater runoff in a discharge regulated under a numeric effluent limitation for TSS imposed under the New Jersey Pollutant Discharge Elimination System (NJPDES) rules, N.J.A.C. 7:14A, or in a discharge specifically exempt under a NJPDES permit from this requirement. Every major development, including any that discharge into a combined sewer system, shall comply with 2 above, unless the major development is itself subject to a NJPDES permit with a numeric effluent limitation for TSS or the NJPDES permit to which the major development is subject exempts the development from a numeric effluent limitation for TSS.

(4) The water quality design storm is 1.25 inches of rainfall in two hours. Water quality calculations shall take into account the distribution of rain from the water quality design storm, as reflected in Table 4, below. The calculation of the volume of runoff may take into account the implementation of stormwater management measures.

## Table 4 - Water Quality Design Storm Distribution

| Time (Minutes) | Cumulative Rainfall (Inches) | Time (Minutes) | Cumulative Rainfall (Inches) | Time (Minutes) | Cumulative Rainfall (Inches) |
|---|---|---|---|---|---|
| 1 | 0.00166 | 41 | 0.1728 | 81 | 1.0906 |
| 2 | 0.00332 | 42 | 0.1796 | 82 | 1.0972 |
| 3 | 0.00498 | 43 | 0.1864 | 83 | 1.1038 |
| 4 | 0.00664 | 44 | 0.1932 | 84 | 1.1104 |
| 5 | 0.00830 | 45 | 0.2000 | 85 | 1.1170 |
| 6 | 0.00996 | 46 | 0.2117 | 86 | 1.1236 |
| 7 | 0.01162 | 47 | 0.2233 | 87 | 1.1302 |
| 8 | 0.01328 | 48 | 0.2350 | 88 | 1.1368 |
| 9 | 0.01494 | 49 | 0.2466 | 89 | 1.1434 |
| 10 | 0.01660 | 50 | 0.2583 | 90 | 1.1500 |
| 11 | 0.01828 | 51 | 0.2783 | 91 | 1.1550 |
| 12 | 0.01996 | 52 | 0.2983 | 92 | 1.1600 |
| 13 | 0.02164 | 53 | 0.3183 | 93 | 1.1650 |
| 14 | 0.02332 | 54 | 0.3383 | 94 | 1.1700 |
| 15 | 0.02500 | 55 | 0.3583 | 95 | 1.1750 |
| 16 | 0.03000 | 56 | 0.4116 | 96 | 1.1800 |
| 17 | 0.03500 | 57 | 0.4650 | 97 | 1.1850 |
| 18 | 0.04000 | 58 | 0.5183 | 98 | 1.1900 |
| 19 | 0.04500 | 59 | 0.5717 | 99 | 1.1950 |
| 20 | 0.05000 | 60 | 0.6250 | 100 | 1.2000 |
| 21 | 0.05500 | 61 | 0.6783 | 101 | 1.2050 |
| 22 | 0.06000 | 62 | 0.7317 | 102 | 1.2100 |
| 23 | 0.06500 | 63 | 0.7850 | 103 | 1.2150 |
| 24 | 0.07000 | 64 | 0.8384 | 104 | 1.2200 |
| 25 | 0.07500 | 65 | 0.8917 | 105 | 1.2250 |
| 26 | 0.08000 | 66 | 0.9117 | 106 | 1.2267 |
| 27 | 0.08500 | 67 | 0.9317 | 107 | 1.2284 |
| 28 | 0.09000 | 68 | 0.9517 | 108 | 1.2300 |
| 29 | 0.09500 | 69 | 0.9717 | 109 | 1.2317 |
| 30 | 0.10000 | 70 | 0.9917 | 110 | 1.2334 |
| 31 | 0.10660 | 71 | 1.0034 | 111 | 1.2351 |
| 32 | 0.11320 | 72 | 1.0150 | 112 | 1.2367 |
| 33 | 0.11980 | 73 | 1.0267 | 113 | 1.2384 |
| 34 | 0.12640 | 74 | 1.0383 | 114 | 1.2400 |
| 35 | 0.13300 | 75 | 1.0500 | 115 | 1.2417 |
| 36 | 0.13960 | 76 | 1.0568 | 116 | 1.2434 |
| 37 | 0.14620 | 77 | 1.0636 | 117 | 1.2450 |
| 38 | 0.15280 | 78 | 1.0704 | 118 | 1.2467 |
| 39 | 0.15940 | 79 | 1.0772 | 119 | 1.2483 |
| 40 | 0.16600 | 80 | 1.0840 | 120 | 1.2500 |

(5) If more than one BMP in series is necessary to achieve the required 80 percent TSS reduction for a site, the applicant shall utilize the following formula to calculate TSS reduction:

$$R = A + B - (A \times B) / 100,$$

Where

*R* = total TSS Percent Load Removal from application of both BMPs, and
A = the TSS Percent Removal Rate applicable to the first BMP
B = the TSS Percent Removal Rate applicable to the second BMP.

(6) Stormwater management measures shall also be designed to reduce, to the maximum extent feasible, the post-construction nutrient load of the anticipated load from the developed site in stormwater runoff generated from the water quality design storm. In achieving reduction of nutrients to the maximum extent feasible, the design of the site shall include green infrastructure BMPs that optimize nutrient removal while still achieving the performance standards in § 258A-4.P, Q and R.

(7) In accordance with the definition of FW1 at N.J.A.C. 7:9B-1.4, stormwater management measures shall be designed to prevent any increase in stormwater runoff to waters classified as FW1.

(8) The Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-4.1(c)1 establish 300-foot riparian zones along Category One waters, as designated in the Surface Water Quality Standards at N.J.A.C. 7:9B, and certain upstream tributaries to Category One waters. A person shall not undertake a major development that is located within or discharges into a 300-foot riparian zone without prior authorization from the Department under N.J.A.C. 7:13.

(9) Pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.2(j)3.i, runoff from the water quality design storm that is discharged within a 300-foot riparian zone shall be treated in accordance with this subsection to reduce the post-construction load of total suspended solids by 95 percent of the anticipated load from the developed site, expressed as an annual average.

(10) This stormwater runoff quality standards do not apply to the construction of one individual single-family dwelling, provided that it is not part of a larger development or subdivision that has received preliminary or final site plan approval prior to December 3, 2018, and that the motor vehicle surfaces are made of permeable material(s) such as gravel, dirt, and/or shells.

R. Stormwater runoff quantity standards

1. This subsection contains the minimum design and performance standards to control stormwater runoff quantity impacts of major development.

2. In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at § 258A-5, complete one of the following:

(a) 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 §258A-5.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;

(b) 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 §258A-5.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;

(c) 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 pursuant to Section §258A-5.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

(d) In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with 2.i, ii and iii above is required unless the design engineer demonstrates through hydrologic and hydraulic analysis that the increased volume, change in timing, or increased rate of the stormwater runoff, or any combination of the three will not result in additional flood damage below the point of discharge of the major development. No analysis is required if the stormwater is discharged directly into any ocean, bay, inlet, or the reach of

any watercourse between its confluence with an ocean, bay, or inlet and downstream of the first water control structure.

3. The stormwater runoff quantity standards shall be applied at the site's boundary to each abutting lot, roadway, watercourse, or receiving storm sewer system.

**§ 258A-5: Calculation of stormwater runoff and groundwater recharge**

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://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) 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 coefficient~~ **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 ~~runoff coefficient~~ "curve number" applies to ~~both~~ the NRCS methodology above at § 258A-5.A.1.i ~~. and the Rational and Modified Rational Methods at Section V.A.1.ii~~. A ~~runoff coefficient~~ 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 ~~have~~ **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).

3. In computing pre-construction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce pre-construction stormwater runoff rates and volumes.

4. In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS

*Technical Release 55 – Urban Hydrology for Small Watersheds* or other methods may be employed.

5. If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.

B. Groundwater recharge may be calculated in accordance with the following: The New Jersey Geological Survey Report **GSR-32, A Method for Evaluating Groundwater-Recharge Areas in New Jersey**, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the New Jersey Stormwater Best Management Practices Manual; at the New Jersey Geological Survey website at:

https://www.nj.gov/dep/njgs/pricelst/gsreport/gsr32.pdf

or at New Jersey Geological and Water Survey, 29 Arctic Parkway, PO Box 420 Mail Code 29-01, Trenton, New Jersey 08625-0420.

**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. **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 (new)**

| 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 |

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.

**Table 6: Future Precipitation Change Factors (new)**

| County | Current Precipitation Adjustment Factors | | |
|---|---|---|---|
| | 2-year Design Storm | 10-year Design Storm | 100-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 |

**§ 258A-7: Sources for technical guidance**

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:

**https://dep.nj.gov/stormwater/bmp-manual/.**

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://dep.nj.gov/stormwater/maintenance-guidance/.**

B. 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.**

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**§ 258A-9: Safety standards for stormwater management basins**

A. This section sets forth requirements to protect public safety through the proper design and operation of stormwater management BMPs. This section applies to any new stormwater management BMP.

B. The provisions of this section are not intended to preempt more stringent municipal or county safety requirements for new or existing stormwater management BMPs. Municipal and county stormwater management plans and ordinances may, pursuant to their authority, require existing stormwater management BMPs to be retrofitted to meet one or more of the safety standards in § 258A-8.C.1, § 258A-8.C.2, and § 258A-8.C.3 for trash racks, overflow grates, and escape provisions at outlet structures.

C. Requirements for Trash Racks, Overflow Grates and Escape Provisions

1. A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the Stormwater management BMP to ensure proper functioning of the BMP outlets in accordance with the following:

   (a) The trash rack shall have parallel bars, with no greater than six-inch spacing between the bars;

   (b) The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure;

   (c) The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack; and

   (d)The trash rack shall be constructed of rigid, durable, and corrosion resistant material and designed to withstand a perpendicular live loading of 300 pounds per square foot.

2. An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:

**(a)** The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.

**(b)** The overflow grate spacing shall be no ~~less~~ **greater** than two inches across the smallest dimension

**(c)** The overflow grate shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 pounds per square foot.

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**§ 258A-11: Maintenance and Repair**

A. Applicability

Projects subject to review as in § 258A-1.C of this ordinance shall comply with the requirements of § 258A-10.B and § 258A-10.C.

B. General Maintenance

1. The design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development.

2. The maintenance plan shall contain specific preventative maintenance tasks and schedules; cost estimates, including estimated cost of sediment, debris, or trash removal; and the name, address, and telephone number of the person or persons responsible for preventative and corrective maintenance (including replacement). The plan shall contain information on BMP location, design, ownership, maintenance tasks and frequencies, and other details as specified in Chapter 8 of the NJ BMP Manual, as well as the tasks specific to the type of BMP, as described in the applicable chapter containing design specifics.

3. If the maintenance plan identifies a person other than the property owner (for example, a developer, a public agency or homeowners' association) as having the responsibility for maintenance, the plan shall include documentation of such person's or entity's agreement to assume this responsibility, or of the owner's obligation to dedicate a stormwater management facility to such person under an applicable ordinance or regulation.

4. Responsibility for maintenance shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project. The individual property owner may be assigned incidental tasks, such as weeding

of a green infrastructure BMP, provided the individual agrees to assume these tasks; however, the individual cannot be legally responsible for all of the maintenance required.

5. If the party responsible for maintenance identified under § 258A-10.B.3 above is not a public agency, the maintenance plan and any future revisions based on § 258A-10.B.7 below shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken.

6. Preventative and corrective maintenance shall be performed to maintain the functional parameters (storage volume, infiltration rates, inflow/outflow capacity, etc.). of the stormwater management measure, including, but not limited to, repairs or replacement to the structure; removal of sediment, debris, or trash; restoration of eroded areas; snow and ice removal; fence repair or replacement; restoration of vegetation; and repair or replacement of non-vegetated linings.

7. The party responsible for maintenance identified under § 258A-10.B.3 above shall perform all of the following requirements:

   (a ) maintain a detailed log of all preventative and corrective maintenance for the structural stormwater management measures incorporated into the design of the development, including a record of all inspections and copies of all maintenance-related work orders;

   (b) evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed; and

   (c) retain and make available, upon request by any public entity with administrative, health, environmental, or safety authority over the site, the maintenance plan and the documentation required by § 258A-10.B.6 and B.7 above.

8. The requirements of § 258A-10.B.3 and B.4 do not apply to stormwater management facilities that are dedicated to and accepted by the municipality or another governmental agency, subject to all applicable municipal stormwater general permit conditions, as issued by the Department.

   **https://dep.nj.gov/stormwater/maintenance-guidance/.**

9. In the event that the stormwater management facility becomes a danger to public safety or public health, or if it is in need of maintenance or repair, the municipality shall notify the responsible person in writing. Upon receipt of that notice, the responsible person shall have fourteen (14) days to effect maintenance and repair of the facility in a manner that is approved by the municipal engineer or his designee. The municipality, in its discretion, may extend the time allowed for effecting maintenance and repair for good cause. If the responsible person fails or refuses to perform such maintenance and repair, the municipality or County may immediately proceed to do so and shall bill the cost thereof to the responsible person. Nonpayment of such bill may result in a lien on the property.

C. Nothing in this subsection shall preclude the municipality in which the major development is located from requiring the posting of a performance or maintenance guarantee in accordance with N.J.S.A. 40:55D-53.

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ALL OF WHICH IS ADOPTED THIS ___ DAY OF JULY, 2024, BY THE CITY COUNCIL OF THE CITY OF PASSAIC.

**SECTION II**

If any section or provision of this ordinance shall be invalid in any court the same shall not affect the other sections or provisions of this ordinance except so far as the section or provision so declared invalid shall be inseparable from the remainder or any portion thereof.

**SECTION III**

All ordinances or parts of ordinances to inconsistent herewith are hereby repealed to the extent of such inconsistency.

**SECTION IV**

This ordinance shall take effect upon publication as provided by law.

INTRODUCED BY COUNCILPERSON: **Maritza Colon – Montanez**

SECONDED BY COUNCILPERSON: **Terrence Love**

| Record of Council Vote on Final Passage | Aye | Nay | Abstain | Absent |
|---|---|---|---|---|
| COLON-MONTANEZ, M. | X | | | |
| GARCIA, J. | | | | X |
| LOVE, T. | X | | | |
| MELO, T. | X | | | |
| MUNK, C. | X | | | |
| SCHWARTZ, D. | X | | | |
| SCHAER, G. | X | | | |

Adoption of first reading at a meeting of the Council of the City of Passaic, NJ on **July 16, 2024**

Adopted on the second and final reading after the hearing on **August 6, 2024**.

APPROVED: _____ 8/6/2024

Hector C. Lora, Mayor — Date

Gary Schaer, Council President — Weatherly Frias, City Clerk