TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY

ORDINANCE #24-1722

AN ORDINANCE AMENDING CHAPTER 16, "LAND DEVELOPMENT," OF THE CODE OF THE TOWNSHIP OF MONTGOMERY (1984), COUNTY OF SOMERSET, STATE OF NEW JERSEY, UPDATING AND AMENDING THE REQUIREMENTS FOR STORMWATER MANAGEMENT FOR DEVELOPMENT WITHIN THE TOWNSHIP

WHEREAS, the Township of Montgomery ("Township") is an established leader in the protection and preservation of our natural resources; and

WHEREAS, the Township recognizes that minimizing stormwater impacts from development within the municipality advances public health, safety and welfare and benefits the entire community; and

WHEREAS, Section 16-5.2 of the Code of the Township of Montgomery, 1984 (the "Code"), entitled "Stormwater Management and Grading," was originally enacted in 1985, and as amended, has established the stormwater management requirements and controls for development within the Township; and

WHEREAS, on March 2, 2020, the New Jersey Department of Environmental Protection ("NJDEP") adopted amendments to the Stormwater Management Rules, N.J.A.C. 7-8, that required the use of decentralized green infrastructure practices and incorporates changes to best management practices ("BMPs"), which led to the adoption of Ordinance 20-1646 by the Township Committee on December 17, 2020; and

WHEREAS on July 17, 2023, NJDEP adopted further amendments to the Stormwater Management rules that now require analysis and design using current and projected rainfall data; and

WHEREAS, the new NJDEP rules require local municipalities to revise their existing stormwater management ordinances by July 17, 2024 to meet the new rainfall standards and requirements; and

WHEREAS, the community has experienced more frequent and severe storms that have increased flooding and flood damage which threatens public health, safety, and welfare, and the Township Committee has supported the ability to adopt more stringent stormwater regulations by Resolution 22-6-70 adopted on February 17, 2022; and

WHEREAS, the new rules provide flexibility to municipalities to meet or impose stricter requirements than are found in the new rules for certain kinds of projects and a stronger stormwater ordinance supports the Township's ongoing sustainability and resiliency efforts; and

WHEREAS, the Township has, in consultation with its staff and professionals, the Montgomery Township Environmental Commission, and local conservation groups, created new local stormwater management requirements that are fair, practical and in the best interests of the public.

NOW, THEREFORE, BE IT ORDAINED by the Township Committee of the Township of Montgomery in Somerset County, New Jersey, as follows:

Section 1. Section 16-4.2 "MR Mountain Residential, R-5 Single Family Residential, R-2 Single Family Residential, R-1 Single Family Residential, R Single Family Residential" amended. Section 16-4.2.d of the Code, captioned "Area and yard requirements for uses within the MR, R-5, R-2, R-1 and R Districts," is amended to delete existing FN [13] and replace it with a new FN [13] to read as follows:

[13] An additional four (4%) percent lot coverage is permitted on a lot less than two (2) acres in area for a private residential in-ground swimming pool, including all buildings, structures and equipment appurtenant thereto, provided that stormwater management best management practices (BMPs) are constructed and maintained on the lot to address **Stormwater Quantity impacts for Minor Developments, or** Stormwater Quantity, Quality, and/or Groundwater Recharge impacts **for Major Developments, in accordance with 16-5.2**. The specific BMP designs shall be subject to the review and approval of the Township Engineer. BMPs shall be installed prior to the construction of the additional lot coverage unless otherwise approved by the Township Engineer. In any case, the BMPs shall be constructed prior to issuance of a Certificate of Approval or Certificate of Occupancy for the proposed development. Easements or deed restrictions to insure the BMPs are retained and maintained may be required. Additionally, the fencing around the pool shall have its finished side facing adjacent properties, and, if opaque, landscaping shall be provided and maintained on the outside of the fenced area as approved by the Township Landscape Architect.

Section 2. Section 16-5.2 "Stormwater Management and Grading" replaced. Section 16-5.2 of the Code, entitled "Stormwater Management and Grading", shall be amended to read as follows [additions in **bold underline**; deletions in strikeout]:

§ 16-5.2 Stormwater Management and Grading.

a. Policy Statement. Flood control, Groundwater Recharge, and pollutant reduction shall be accomplished 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 is to establish minimum stormwater management requirements and controls for all development, as it applies herein. This subsection also establishes grading requirements for all development.

c. Applicability.

1. Stormwater Quantity and Groundwater Recharge Standards listed herein shall be applicable to "Major Developments" that:

(a) Meet the land disturbance criteria defined under "Major Development"; and/or

(b) Require major or minor site plan approval; and/or

(c) Are major or minor subdivisions that require preliminary or final site plan approval; and/or

(d) Are aspects of residential Major Developments that are not preempted by the Residential Site Improvements Standards ("RSIS") at N.J.A.C. 5:21; and/or

(e) Are nonresidential (commercial development); and/or

(f) Require municipal zoning, building, ~~or~~ construction permits**, or other municipal permits**.

2. In addition to Stormwater Quantity and Groundwater Recharge Standards, Stormwater Quality Standards listed herein shall be applicable to Major Developments that:

(a) Meet the regulated impervious surface and/or regulated motor vehicle surface criteria defined under "Major Development"; and/or

(b) Are aspects of residential Major Developments that are not preempted by the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21; and/or

(c) Require major or minor site plan approval; and/or

(d) Are major or minor subdivisions that require preliminary or final site plan approval; and/or

(e) Are nonresidential (commercial development); and/or

(f) Require municipal zoning, building, ~~or~~ construction permits**, or other municipal permits**.

3. Stormwater Quantity Standards shall be applicable to "Minor Developments."

4. **An application required by this Section pursuant to § 16-5.2(c)1, § 16-5.2(c)2, or § 16-5.2(c)3, that has been submitted prior to April 18, 2024 completely with the information required in 16-5.2r, and has not expired, lapsed, been denied, or otherwise voided, shall be subject to the stormwater management requirements in effect at the time the application was submitted to the Township. All other applications are subject to the provisions adopted by the Township on April 18, 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.**

6. **Fees listed under "Engineering Permits" in 16-9.1a shall be paid by the applicant for the Township Engineer's, or their designee's, review of Minor Development or Major Development applications. Fees will be assessed during review of municipal zoning, building, construction, or other municipal permits. Where Minor Development or Major Development stormwater review is performed as part of a Board application that requires review escrow, the escrow account established in 16-9.2 shall be used. The application charge is a flat fee and is nonrefundable. The escrow account is established to cover the costs of professional services, including but not limited to engineering, planning, legal and other expenses connected with the review of the submitted materials.**

d. Exemptions. The following linear development projects are exempt from the Groundwater Recharge, stormwater Runoff Quantity, and Stormwater Runoff Quality requirements of this Subsection:

    1. The construction of an underground utility line provided that the disturbed areas are **restored and** 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.

e. Compatibility with Other Permit, Ordinance, or Outside Agency Requirements.

    1. Development approvals issued pursuant to this subsection 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 subsection shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare. The minimum requirements are based on:

        (a) Latest amendment of N.J.A.C. 7:8 Stormwater Management;

        (b) Latest updated NJ Stormwater Best Management Practices Manual;

        (c) Residential Site Improvement Standards of N.J.A.C. 5:21.

    2. This subsection 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 subsection imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, the more restrictive provision(s) or higher standard(s) shall control.

f. Definitions. Unless specifically defined below, words or phrases used in this subsection shall be interpreted so as to give them the meaning they have in common usage and to give this subsection its most reasonable application. The definitions below are applicable to this section of the Land Development Ordinance.

BOARD – shall mean the Montgomery Township Zoning Board of Adjustment or the Montgomery Township Planning Board.

COMMUNITY STORMWATER MANAGEMENT FACILITY – shall mean 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 and serves multiple lots.

COMPACTION – shall mean the increase in soil bulk density.

CONTRIBUTORY DRAINAGE AREA – shall mean the area from which stormwater runoff drains to a stormwater management measure, not including the area of the stormwater management measure itself.

CORE – shall mean a pedestrian-oriented area of commercial and civic uses serving the surrounding municipality, generally including housing and access to public transportation.

COUNTY REVIEW AGENCY – shall mean the Somerset County Planning Board, or any other agency designated by the Somerset County Board of County Commissioners ~~(currently known as the Somerset County Board of Chosen Freeholders~~) to review municipal stormwater management plans and implementing ordinance(s).

CRITICAL AREAS – see Sections 16-3.3 and 16-6.4.

DEPARTMENT – when used by itself shall mean the New Jersey Department of Environmental Protection.

DESIGN ENGINEER – shall mean 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.

DESIGN PERMEABILITY – shall mean the tested permeability rate with a factor of safety of two applied to it (for example, if the field tested permeability rate of the soils is 10 inches per hour, the design rate would be five inches per hour).

DESIGNATED CENTER – shall mean a State Development and Redevelopment Plan Center as designated by the State Planning Commission such as urban, regional, town, village, or hamlet.

DEVELOPMENT – shall mean:

1. 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, by any person, for which permission is required under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq.

2. In the case of development of agricultural lands, development means: any activity that requires a State permit, any activity reviewed by the County Agriculture Development Board (CADB) and the State Agriculture 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 – shall mean the placement or reconstruction of lot coverage, impervious surface or motor vehicle surface, or exposure and/or movement of soil or bedrock, any activity involving clearing, cutting, removing vegetation, grading, transporting, storing or filling of land, development, and any other activity which causes land to be exposed to the danger of erosion. Milling and repaving, and pavement recycling (such as full depth reclamation) is not considered disturbance for the purposes of this definition.

DRAINAGE AREA – shall mean a geographic area within which stormwater, sediments, or dissolved materials drain to a particular receiving water body or to a particular point along a receiving water body.

ENVIRONMENTALLY CONSTRAINED AREA – shall mean 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.

EROSION – shall mean the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

GREEN INFRASTRUCTURE – shall mean 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.

GROUNDWATER – shall mean water below the land surface in a zone of saturation.

GROUNDWATER MOUNDING ANALYSIS – shall mean an analysis performed to demonstrate that the groundwater below a stormwater infiltration basin will not rise up and encroach upon the unsaturated zone and break the surface of the ground at the infiltration area or downslope, thereby creating an overland flow situation or drainage problem. ModFlow® or any groundwater mounding analysis program may be used as long as the input parameters and the method of analysis consider all of the significant hydraulic conditions of the site.

HUC 14 or HYDROLOGIC UNIT CODE 14 – shall mean 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 – shall mean a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water. Impervious surfaces include roofs and asphalt, all surfaced parking areas, driveways and walkways, pools, decks, patios, all required parking areas which are permitted to remain unsurfaced and all gravel driveways and walkways.

INFILTRATION – shall mean the process by which water seeps into the soil, typically from precipitation.

LEAD PLANNING AGENCY – shall mean 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.

LOT COVERAGE – shall mean the square footage or other area measurement by which all buildings and impervious surfaces cover a lot as measured in a horizontal plane to the limits of the impervious area(s). Impervious surfaces shall be included in the computation of lot coverage.

LOW IMPACT DEVELOPMENT (LID) – shall mean a stormwater management measure, strategy or combination of strategies to reduce the negative stormwater runoff impacts through such practices as minimizing site disturbance, preserving natural site features, reducing impervious cover, disconnecting impervious cover, flattening slopes, utilizing native vegetation, minimizing turf grass lawns, maintaining natural drainage features, maintaining natural drainage characteristics, controlling stormwater runoff closer to the source, and controlling stormwater pollutants closer to the source. The term "nonstructural best management measure" has the same meaning as "low impact development."

MAJOR DEVELOPMENT – shall mean any development, redevelopment, or series of developments that are part of a common plan of development, redevelopment, or sale (for example, phased residential development) that collectively or individually meet or result in:

1. The disturbance of one (1) or more acres of land since February 2, 2004 or the disturbance of one-half (1/2) or more acres of land on or after March 2, 2021; and/or

2. The creation of one quarter (1/4) acre or more of “regulated impervious surface” since February 2, 2004 and before March 2, 2021; and/or

3. The creation of 5,000 SF or more of “regulated impervious surface” since March 2, 2021; and/or

4. The creation of 5,000 SF or more of “regulated motor vehicle surface” since March 2, 2021; and/or

5. The creation of “regulated impervious surfaces” and “regulated motor vehicle surfaces” that have a combined total area of 5,000 SF or more since March 2, 2021. The same surface shall not be counted twice when determining if the combination area equals 5,000 SF or more.

The applicant shall bear the burden to demonstrate that all prior development, singularly or in the aggregate, since February 2, 2004 or March 2, 2021 (as applicable) do not result in the project being considered a Major Development if the applicant believes an application should be considered a Minor Development.

The general intention is to include projects undertaken on contiguous or formerly contiguous lands that are within the same and adjoining watershed areas, when applicable. The definition of Major Development listed herein is not intended to include cumulative activities for distinctly different projects undertaken at various and separate locations throughout Montgomery Township.

MINOR DEVELOPMENT – shall mean all development other than Major Development that:

1. Requires a "c" variance pursuant to N.J.S.A. 40:55D-70c to exceed the maximum lot coverage permitted within the Zoning District; and/or

2. Requires a "d" variance pursuant to N.J.S.A. 40:55D-70d to exceed the maximum lot coverage permitted within the Zoning District; and/or

3. Are subject to the provisions of S**ubs**ection 16-4.2d [13].

MITIGATION — Shall mean acts necessary to compensate for conditions that may result from development where the applicant has demonstrated the inability of strict compliance to the stormwater management regulations and an exception from strict compliance is granted by the Board.

MOTOR VEHICLE – shall mean 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 rail or tracks.

MOTOR VEHICLE SURFACE – shall mean any pervious or impervious surface that is intended to be use**d** 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.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) – shall mean a conveyance or system of conveyances owned or operated by a municipality that carries stormwater that ultimately discharges to waters of the state. The MS4 includes pipes, curbs, gutters, ditches, manmade channels, storm drains, catch basins, municipal streets, basins or roads with drainage systems that are not combined sewers and are not part of a publicly owned treatment works.

MUNICIPALITY – shall mean Montgomery Township.

NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICE (BMP) MANUAL OR BMP MANUAL – shall mean 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 and guidance 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, in accordance with these Stormwater Management requirements 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 to the satisfaction of the Township Engineer.

NODE – shall mean an area designated by the State Planning Commission concentrating facilities and activities which are not organized in a compact form.

NONSTRUCTURAL BEST MANAGEMENT MEASURE (BMP) – See "Low Impact Development (LID)"

NUTRIENT – shall mean a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the development of organisms.

PERMEABILITY – shall mean the rate at which water moves through a saturated unit area of soil or rock material at a hydraulic gradient of one, determined in accordance with the soil testing criteria of the BMP manual. Additional information on the BMP manual allowable testing procedures can be found in N.J.A.C. 7:9A-6.

POLLUTANT – shall mean 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, groundwaters or surface waters of the State, or to a domestic treatment works. "Pollutant" includes both hazardous and nonhazardous pollutants.

PUBLIC ROADWAY OR RAILROAD – shall mean 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 – shall mean 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 – shall mean the amount of water from precipitation that infiltrates into the ground and is not evapotranspired.

REDEVELOPMENT – shall mean any development of a previously developed area.

REGULATED IMPERVIOUS SURFACE – shall mean any of the following, alone or in combination:

1. A net increase of impervious surface; and/or

2. The total area of impervious surface collected by a new stormwater conveyance system (for the purpose of this definition, a "new stormwater conveyance system" is a stormwater conveyance system that is constructed where one did not exist immediately prior to its construction or an existing system for which a new discharge location is created); and/or

3. The total area of impervious surface proposed to be newly collected by an existing stormwater conveyance system; and/or

4. The total area of impervious surface collected by an existing stormwater conveyance system where the capacity of that conveyance system is increased.

REGULATED MOTOR VEHICLE SURFACE – shall mean any of the following:

1. A new increase in motor vehicle surface; and/or

2. The total 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, where the water quality treatment will be modified or removed.

SEDIMENT – shall mean solid material, mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water or gravity as a product of erosion.

SEASONAL HIGH WATER TABLE – shall mean the upper limit of the shallowest zone of saturation which occurs in the soil, identified as prescribed in N.J.A.C. 7:9A-5.8.

SF – shall mean square feet.

SITE – shall mean the lot or lots upon which development is to occur or has occurred.

SOIL – shall mean all unconsolidated mineral and organic material of any origin.

STATE PLAN POLICY MAP – shall mean the geographic application of the State Development and Redevelopment Plan's goals and statewide policies, and the official map of these goals and policies.

STORMWATER – shall mean water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, or is captured by separate storm sewers or other drainage facilities, or conveyed by snow removal equipment.

STORMWATER MANAGEMENT FACILITY or STORMWATER FACILITY – shall mean Stormwater Management BMP or Stormwater Management Measure

STORMWATER MANAGEMENT BMP – shall mean all BMPs approved by the NJDEP, outlined in the BMP Manual, or other stormwater management measure, device, or facility approved by the Township Engineer. In general, it can be an excavation, embankment, or filter vault and related areas designed to detain, retain, and/or treat stormwater runoff. A stormwater management basin BMP may either be normally dry (that is, an extended detention basin or an infiltration basin), retain water in a permanent pool (a retention basin or wet pond), be planted mainly with wetland vegetation (bioretention systems or constructed stormwater wetlands), or approved Manufactured Treatment Devices ([MTD], such as a filter vault).

STORMWATER MANAGEMENT MEASURE – shall mean any structural or nonstructural strategy, practice, technology, process, program, or other method intended to control or reduce stormwater runoff and associated pollutants, or to induce or control the infiltration or Groundwater Recharge of stormwater or to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.

STORMWATER RUNOFF – shall mean water flow on the surface of the ground or in storm sewers, resulting from precipitation.

STORMWATER MANAGEMENT PLANNING AGENCY – shall mean a public body authorized by legislation to prepare stormwater management plans.

STORMWATER MANAGEMENT PLANNING AREA – shall mean the geographic area for which a stormwater management planning agency is authorized to prepare stormwater management plans, or a specific portion of that area identified in a stormwater management plan prepared by that agency.

SUBSECTION – shall mean § 16-5.2.

WATER CONTROL STRUCTURE – shall mean a structure within, or adjacent to, a water, which intentionally or coincidentally alters the hydraulic capacity, the flood elevation resulting from the two-, 10-, or 100-year storm, flood hazard area limit, and/or floodway limit of the water. Examples of a water control structure may include a bridge, culvert, dam, embankment, ford (if above grade), retaining wall, and weir. This may also be referred to as an “Outlet Control Structure”.

WATERS OF THE STATE – shall mean the ocean and its estuaries, all springs, streams, wetlands, and bodies of surface or groundwater, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

WETLANDS OR WETLAND – shall mean an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

g. Stormwater Management Measures Requirements.

1. All stormwater management design plans shall be prepared by a state licensed professional engineer or as otherwise permitted in accordance with N.J.A.C. 13-40-7.3.

2. The methods for computing stormwater runoff rates, volumes, Groundwater Recharge, permeability and rates; stormwater pollutant removal criteria; low impact development techniques; soil testing criteria; guidance, design requirements, drain down time, BMP separation from seasonal high groundwater table, BMP design information, and other related provisions shall be done in accordance with the BMP Manual and as outlined herein.

3. Stormwater management measures for development and redevelopment shall be designed to provide erosion control, Groundwater Recharge, Stormwater Runoff Quantity control, and Stormwater Runoff Quality treatment as follows:

    (a) The minimum standards for erosion control are those established under the Soil and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules at N.J.A.C. 2:90.

    (b) The minimum standards for Groundwater Recharge, Stormwater Quality and Stormwater Runoff Quantity shall be met by incorporating Green Infrastructure.

4. The standards in this subsection apply only to new development and redevelopment and are intended to minimize the impact of stormwater runoff on water quality and water Quantity in receiving water bodies and maintain Groundwater Recharge. The standards do not apply to new Major Development and redevelopment to the extent that alternative design and performance standards are applicable under a regional stormwater management plan or Water Quality Management Plan adopted in accordance with Department rules.

5. General design standards for structural stormwater management measures are as follows:

    (a) 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).

    (b) Stormwater management measures shall be designed to minimize maintenance, facilitate maintenance and repairs, and ensure proper functioning.

        (1) 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.

(2) For elevations higher than the Water Quality Design Storm, the parallel bars at the outlet structure shall be spaced no greater than 1/3 the width of the diameter of the orifice or 1/3 the width of the weir, with a minimum spacing between bars of one inch and a maximum spacing between bars of six inches.

(3) In addition, the design of trash racks must comply with the Safety Standards herein.

(c) 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.

(d) Stormwater BMPs shall be designed to meet the minimum Safety Standards herein.

(e) At the intake to the outlet from the stormwater BMP, the orifice size shall be a minimum of two and one-half (2.5") inches in diameter.

6. Stormwater BMPs shall be designed in a manner that complements and mimics the existing natural landscape, which may include establishment of landscaping in and around the basin that utilizes only native plants.

7. If there is more than one on-site drainage area, the Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity Standards shall apply to each drainage area. However, if the runoff from the drainage areas converge on site and it can be demonstrated that no adverse environmental impact would occur from complying with any one or more individual stormwater standards herein, then a weighted average of the results achieved for that individual standard can be applied across the affected drainage areas.

8. Emergency spillways, where required, shall be designed to safely convey the calculated basin inflow resulting from a 100-year frequency storm. The minimum elevation of the top of the basin berm shall be 1 foot or greater than the water surface elevation in the basin when runoff from the 100-year frequency storm passes over the emergency spillway. Potential settlement shall be considered in this design. In those cases where the construction of an emergency spillway is not physically possible, and the stormwater management basin is not equipped with an outlet structure that is designed to function as the principal spillway, the basin shall be designed to store the volume of runoff generated by back-to-back 100-year frequency design storms.

9. Infiltration BMPs should incorporate a mechanism to enable the basin to be drawn down by non-mechanical means for emergencies and maintenance.

10. The development shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of a development.

11. 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).

h. Sources for Technical Guidance:

1. The BMP Manual technical guidance and standards can be found on the Department's website**, subject to change,** at:
~~https://njstormwater.org/bmp_manual2.htm~~
https://dep.nj.gov/stormwater/bmp-manual/

2. Technical Release 55 - Urban Hydrology for Small Watersheds (TR-55), dated June 1986, is available from the Natural Resources Conservation Service website at: https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21422

3. Additional maintenance guidance is available on the Department's website**, subject to change,** at:
~~https://www.njstormwater.org/maintenance_guidance.htm~~.
https://dep.nj.gov/stormwater/maintenance-guidance/

4. Submissions required for review by the Department should be mailed to: The Division of ~~Water Quality~~ **Watershed Protection and Restoration**, New Jersey Department of Environmental Protection, Mail Code ~~401-02B~~ **501-02A**, PO Box 420, Trenton, New Jersey 08625-0420.

5. Standards for Soil Erosion and Sediment Control in New Jersey, which may be amended from time to time. 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 available at: https://www.nj.gov/agriculture/divisions/anr/nrc/njerosion.html.

6. The Rutgers Cooperative Extension Service phone at (732) 932-9306.

i. Data Tables.

1. Tables 1 through 3 below summarize the ability of stormwater BMPs identified and described in the BMP Manual to satisfy the Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality and Stormwater Runoff Quantity Standards herein. When designed in accordance with the most current version of the BMP 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, subject to change, at: https://dep.nj.gov/stormwater/bmp-manual/**

2. Where the BMP tables in the NJ Stormwater Management Rule are different due to updates or amendments with the tables in this Subsection, the BMP Tables in the Stormwater Management rule at N.J.A.C. 7:8-5.2(f) shall take precedence. The most current table at the time of application shall be utilized for design purposes.

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)] 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)] No[(c)]	2[(b)] 1[(c)]
Small-Scale Bioretention Basin[(a)]	80 or 90	Yes	Yes[(b)] No[(c)]	2[(b)] 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 are found after 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)] No[(c)]	2[(b)] 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 are found after 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 in Table 4.

(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;
(h) manufactured treatment devices that do not meet the definition of Green Infrastructure;

Table 4
Green Infrastructure BMP Maximum Contributory Drainage Areas

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

Table 5: NJDEP 1.25 inch/2 hour Stormwater Quality Design Storm
Cumulative and Incremental Rainfall Distributions
[source: BMP Manual]

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

Table 6: Pollutant Removal Rates for BMPs[1]

Best Management Practice	Stormwater Runoff Quality TSS Removal Rate (percent)	Total Phosphorus Removal Rate (percent)	Total Nitrogen Removal Rate (percent)
Bioretention Systems	90	60	30
Constructed Stormwater Wetland	90	50	30
Extended Detention Basin	40 – 60 (detention time & volume dependent)	20	20
Infiltration Basin	80	60	50
Manufactured Treatment Device	As certified by NJDEP		
Porous Paving or Permeable Pavers with Storage Bed	80	60	50
Sand Filter	80	50	35
Vegetative Filter Strip*	60 (turf grass) 70 (native grasses, meadow, & planted woods) 80 (indigenous woods)	30	30
Wet Pond / Retention Basin	50 – 90 (detention time & volume dependent)	50	30

* For filter strips with multiple vegetated covers, the final TSS removal rate should be based upon a weighted average of the adopted rates shown in this Table, based upon the relative flow lengths through each cover type.

[1]Source: 7:8 and BMP Manual Chapter 4.

Table 7: Minimum Required Separation Distances for Infiltration BMPs from Various Components

Component	Minimum Horizontal Distance between Component and BMP
Property Line	10 feet
Building w/Slab	
Pool	20 feet
Building w/Basement	25 feet
Surface Basin	
Well or Suction Line	50 feet
Septic Disposal Field, Including Reserve Field	
Seepage Pit	
Cesspool	

j. Low Impact Development ("LID") Techniques.

1. The Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity Standards in this Subsection shall incorporate nonstructural stormwater management (low impact development) strategies to the maximum extent possible. The applicant shall utilize the BMP Manual Low Impact Development Checklist to demonstrate how and which of the following strategies have been incorporated into the design:

   (a) Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss;

   (b) Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces;

   (c) Maximize the protection of natural drainage features and vegetation;

   (d) Minimize the decrease in the time of concentration from preconstruction to post-construction. "Time of concentration" is defined as the time it takes for runoff to travel from the hydraulically most distant point of the watershed to the point of interest within a watershed;

(e) Minimize land disturbance including clearing and grading;

(f) Minimize soil compaction;

(g) Provide low-maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides;

(h) Provide vegetated open-channel conveyance systems discharging into and through stable vegetated areas;

(i) Provide other source controls to prevent or minimize the use or exposure of pollutants at the site, in order to prevent or minimize the release of those pollutants into stormwater runoff. Such source controls include, but are not limited to:

(1) Site design features that help to prevent accumulation of trash and debris in drainage systems;

(2) Site design features that help to prevent discharge of trash and debris from drainage systems;

(3) Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments; and

(4) When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules.

2. Any land area used as a low impact development stormwater management measure shall be **deed restricted and** dedicated to Montgomery Township in the form of a ~~conservation easement, as a conservation deed restriction on the lot,~~ **stormwater easement or deed restriction,** or subject to an approved equivalent restriction that ensures that the measure is maintained in perpetuity **for the benefit of the Township**. The legal document is subject to review and approval by the Township Engineer, Township Attorney, Open Space Coordinator, and Township Committee (when applicable). The applicant must provide proof of recording the approved instrument with the County Clerk's office prior to the Township Engineer's final approval of a subdivision, site plan, or issuance of any permit.

k. 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, the design engineer shall utilize Green Infrastructure BMPs identified in Table 1 and/or an alternative stormwater management measure approved as specified herein. The Green

Infrastructure BMPs in Table 4 are subject to the maximum contributory drainage area limitations.

3. To satisfy the Stormwater Runoff Quantity Standards, the design engineer shall utilize BMPs from Table 1 or from Table 2 and/or an alternative stormwater management measure approved as specified herein.

4. If a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance is granted by the Township from the requirements of this subsection, then BMPs from Table 1, 2, or 3, and/or an approved alternative stormwater management measure may be used to meet the Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity Standards.

5. For storm sewer improvement projects undertaken by a government agency or public utility, 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 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, unless the project is granted a waiver from strict compliance as specified herein.

l. Groundwater Recharge Standards. The minimum design and performance standards for Groundwater Recharge are as follows:

1. The design engineer shall, using the assumptions and factors under "Calculation of Stormwater Runoff and Groundwater Recharge" in this Subsection, either:

(a) Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100% of the average annual preconstruction Groundwater Recharge volume for the site; or

(b) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the **projected** two-year storm, **as defined and determined pursuant to Section 16-5.2o4 of this ordinance,** is infiltrated.

2. The following types of stormwater shall not be recharged:

(a) 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 and 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

(b) 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.

(c) ~~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 and other subsurface structures within the zone of influence of the groundwater mound, or interference with the proper functioning of the stormwater management measure itself.~~

3. **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 and other subsurface structures within the zone of influence of the groundwater mound, or interference with the proper functioning of the stormwater management measure itself.**

m. Stormwater Runoff Quality Standards.

1. These are the minimum design and performance standards to control Stormwater Runoff Quality impacts of applicable developments defined herein.

2. Stormwater management runoff quality 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 (80%) TSS removal of the anticipated load from the developed site, expressed as an annual average, shall be achieved for the stormwater runoff from the net increase in regulated impervious surface and motor vehicle surface.

(b) For redevelopment of existing impervious surfaces with regulated motor vehicle surface, the minimum required TSS removal rate is the greater of the TSS removal rate of the existing stormwater treatment system or 50% TSS removal rate.

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 Pollution 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 development requiring Stormwater Runoff Water Quality treatment shall comply with the above TSS reduction requirements, unless the development is itself subject to a NJPDES permit with a numeric effluent limitation for TSS or the NJPDES permit to which the development is subject exempts the development from a numeric effluent limitation for TSS.

4. The NJDEP 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 5 herein.

5. If more than one BMP in series is necessary to achieve the required 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. If there is more than one on-site drainage area, the TSS removal rate shall apply to each drainage area. However, if the runoff from the drainage areas converge on site and it can be demonstrated that no adverse environmental impact would occur from complying with the TSS removal standards, then a weighted average of the results achieved across the affected drainage areas can be used.

7. Runoff quality 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, nonstructural strategies and structural measures that optimize nutrient removal while still achieving the Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity performance standards. The runoff quality calculations for nutrient removal rates shall follow the BMP Manual or Table 6 herein.

8. Manufactured treatment devices may be used to meet the water quality requirements of this Subsection provided the pollutant removal rates are certified by the Department. Manufactured treatment devices that do not meet the definition of Green Infrastructure may be used only if a variance in accordance with N.J.A.C. 7:8-4.6 is granted, a waiver from strict compliance in accordance with this Subsection is granted, or an alternative stormwater management measure is approved by the Township Engineer and if applicable, the Board, to meet the Runoff Quality Standards.

9. 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.

10. The Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-4.1(c)1 establish 300-foot riparian zones along designated 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, as shown on the USGS Quadrangle Maps or in the County Soil Surveys, within the associated HUC14 drainage area. These areas shall be established for the protection of water quality, aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, and exceptional fisheries significance of those established Category One waters. Major Development shall not be undertaken 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.

11. These Stormwater Runoff Quality standards do not apply to the construction of one individual single-family dwelling that is not part of a larger development or subdivision that has received preliminary or final subdivision / site plan approval prior to December 3, 2018, and that the motor vehicle surfaces are designed and constructed with permeable surfaces or materials, for example, permeable pavers or pervious pavement, which is recognized as a stormwater BMP.

n. Stormwater Runoff Quantity Standards.

1. These are the minimum design and performance standards to control the Stormwater Runoff Quantity impacts of applicable developments defined herein.

2. In order to control Stormwater Runoff Quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations under "Calculation of Stormwater Runoff and Groundwater Recharge", 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 pursuant to Subsections 16-5.2o3 and 16-5.2o4, respectively,** do not exceed, at any point in time, the preconstruction runoff hydrographs for the same storm events; or

(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 Subsections 16-5.2o3 and 16-5.2o4, respectively,** 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; or

(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 Subsections 16-5.2o3 and 16-5.2o4, respectively,** are 50%, 75% and 80%, 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.

3. The Stormwater Runoff Quantity standards shall be applied at the site's boundary to each abutting lot, roadway, watercourse, receiving storm sewer system.

o. Calculation of Stormwater Runoff and Groundwater Recharge:

1. Stormwater Runoff shall be calculated in accordance with the following:

(a) The design engineer shall calculate runoff using ~~one of the following methods~~**the following method**:

(1) 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**, subject to change,** at: ~~https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf~~ **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.** ~~220 Davison Avenue, Somerset, New Jersey 08873; or~~

(2) ~~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 current Standards for Soil Erosion and Sediment Control in New Jersey, which may be amended from time to time. 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 available at: https://www.nj.gov/agriculture/divisions/anr/nrc/njerosion.html~~

(b) For the purpose of calculating ~~runoff coefficients~~ **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 (e.g. HSG B). The term ~~"runoff coefficient"~~ **"curve number"** applies to ~~both~~ the NRCS methodology **above**. ~~and the Rational and Modified Rational Methods. A runoff coefficient~~ **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) 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.

(d) 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.

(e) 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.

(f) The design engineer shall follow the BMP Manual guidance and requirements for the Calculation of Stormwater Runoff and Groundwater Recharge.

(g) In calculating stormwater runoff, the design engineer shall use most restrictive 24-hour rainfall depth data ~~or rainfall frequency data (IDF curves), appropriate for the methodology choses,~~ from the National Oceanic and Atmospheric Administration (NOAA) precipitation data servers for the site location.

2. 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**, subject to change,** 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.

3. **The precipitation depths of the current two-, ten-, and 100-year storm events shall be determined by multiplying the values determined in accordance with items 16-5.2o3(a) and 16-5.2o3(b) below:**

   (a) 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 the NOAA website, subject to change, at:

   https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=nj; and

   (b) Current Precipitation Adjustment Factors shall be used in determining the current two-, ten-, and 100-year storm events. The current precipitation depths shall be determined by respectively multiplying the two-, ten-, and 100-year storm event precipitation depths from the 16-5.2o3(a) by the Current Precipitation Adjustment Factors of the County in which the site is located. Somerset County's two-, ten-, and 100-year design storm Current Precipitation Adjustment Factors are 1.00, 1.03, and 1.09, respectively.

4. **The precipitation depths of the projected two-, ten-, and 100-year storm events shall be determined by multiplying the values determined in accordance with items 16-5.2o3(a) above and 16-5.2o4(a) below:**

   (a) Future Precipitation Change Factors shall be used in determining the projected future two-, ten-, and 100-year storm events. The projected precipitation depths shall be determined by respectively multiplying the two-, ten-, and 100-year storm event precipitation depths from 16-5.2o3(a) by the Future Precipitation Change Factors of the County in which the site is located. Somerset County's two-year, 10-year, and 100-year design storm Future Precipitation Change Factors are 1.19, 1.24, and 1.48, respectively.

5. **The Current Precipitation Adjustment Factors and Future Precipitation Change Factors listed herein are the applicable multipliers for drainage area(s) within Somerset County as of July 2023. The multipliers listed herein may be periodically changed by NJDEP so the applicant shall use the most up-to-date multipliers listed in the N.J.A.C. 7:8 and the BMP Manual. In cases where the 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 Current Precipitation Adjustment Factors and Future Precipitation Change Factors listed in the BMP Manual.

p. Solids and Floatable Materials Control Standards. Site design features to prevent discharge of trash and debris from drainage systems shall comply with the following standards to control passage of solid and floatable materials through storm drain inlets. For purposes of this paragraph, "solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids.

1. Design engineers shall use one of the following grates whenever they use a grate in pavement or another ground surface to collect stormwater from that surface into a storm drain or surface water body under that grate:

   (a) The New Jersey Department of Transportation (NJDOT) bicycle safe grate, which is described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines; or

   (b) A different grate may be approved, if each individual clear space in that grate has an area of no more than 7.0 square inches or is no greater than 0.5 inch across the smallest dimension.

   Examples of grates subject to this standard include grates in grate inlets, the grate portion (non-curb-opening portion) of combination inlets, grates on storm sewer manholes, ditch grates, trench grates, and grates of spacer bars in slotted drains. Examples of ground surfaces include surfaces of roads (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels, and stormwater basin floors used to collect stormwater from the surface into a storm drain or surface water body.

   (c) For curb-opening inlets, including curb-opening inlets in combination inlets, the clear space in that curb opening, or each individual clear space if the curb opening has two or more clear spaces, shall have an area of no more than seven (7.0) square inches, or be no greater than two (2.0) inches across the smallest dimension.

2. Exemptions to these solid and floatable material standards, while noting that these exemptions do not authorize any infringement of requirements in the Residential Site Improvement Standards (RSIS) for bicycle safe grates in new residential development (N.J.A.C. 5:21-4.18(b)2 and 7.4(b)1), are as follows:

   (a) Where each individual clear space in the curb opening in existing curb-opening inlet does not have an area of more than nine (9.0) square inches;

   (b) Where the Township Engineer agrees that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets;

(1) Where flows from the Water Quality Design Storm as specified in N.J.A.C. 7:8 and herein are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:

(2) A rectangular space four and five-eighths (4.625) inches long and one and one-half (1.5) inches wide (this option does not apply for outfall netting facilities); or

(3) A bar screen having a bar spacing of 0.5 inches.

(c) Where flows are conveyed through a trash rack that has parallel bars with one-inch (1 inch) spacing between the bars, to the elevation of the Water Quality Design Storm as specified in N.J.A.C. 7:8 or herein; or

(d) Where the New Jersey Department of Environmental Protection determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet this standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

3. All drainage inlet grates and curb opening pieces in redevelopment, reconstruction areas, or as otherwise outlined in § 11-4.5 shall be upgraded to meet these solid and floatable material standards. If the inlet cannot support the grate upgrade or is deteriorated beyond repair, the inlet shall be replaced.

q. Safety Standards for Stormwater Management Basins:

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

2. These provisions may be imposed if the Township Engineer determined an existing stormwater management BMP needs to be retrofitted to meet one or more of the safety standards herein for trash racks, overflow grates, and escape provisions at outlet structures.

3. Requirements for Trash Racks, Overflow Grates and Escape Provisions:

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

(b) 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.

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

(d) The design engineer should consider shapes and location of trash racks that are lower maintenance and do not impact the functionality of the outlet structure. For example, vertical trash racks or small trash racks in the immediate vicinity of an orifice or weir tend to become obstructed. Sloped trash racks are shown:

4. 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.

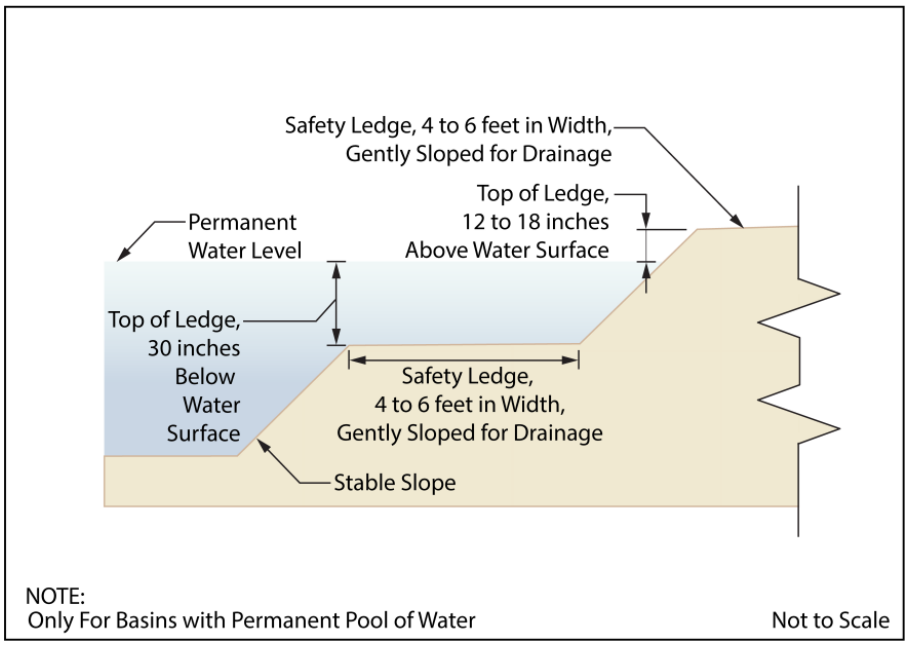
   (b) The overflow grate spacing shall be no ~~less~~ **greater** than two inches across the smallest dimension.

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

5. Stormwater management BMPs shall include escape provisions as follows:

   (a) If a stormwater BMP has an outlet structure, escape provisions shall be incorporated in or on the structure. Escape provisions include the permanent installation of ladders, steps, rungs, or other features that provide easily accessible means of egress from stormwater management BMPs. With the prior approval from the Township Engineer, a freestanding outlet structure may be exempted from this requirement.

   (b) Safety ledges shall be constructed on the slopes of all new stormwater management BMPs having a permanent pool of water deeper than 2.5 feet. Safety ledges shall be comprised of two steps. Each step shall be 4 feet to 6 feet in width. One step shall be located approximately 2.5 feet below the permanent water surface, and the second step shall be located 1 to 1.5 feet above the permanent water surface. See illustration below:



(c) In new stormwater BMPs, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than three horizontal to one vertical (3H:1V).

6. Requirements for Access and Restricted Access.

(a) An access road capable of supporting a light-duty maintenance vehicle should be specified for every surface basin.

(b) A fence with lockable gate(s), wide enough for a maintenance vehicle, should be specified around the perimeter for every surface basin which is expected to have ponded water deeper than 18 inches. Fences shall conform to Subsection §16-5.3.

7. Variance or Exemption from Safety Standards. A variance or exemption from the safety standards for stormwater BMPs may be requested if demonstrated that the variance or exemption will not constitute a threat to public safety.

r. Requirements for a Site Development Stormwater Plan.

1. Submission of Site Development Stormwater Plan.

(a) Whenever an applicant seeks approval of a development subject to this Subsection, the applicant shall submit all of the required components listed below as part of the submission of the applicant's application for development approval. These required components are in addition to any other non-stormwater related information required under Montgomery Township's Land Development Ordinance.

(b) The applicant shall demonstrate that the project meets the standards set forth in this Subsection.

(c) The applicant shall submit electronic copies and sufficient hard copies of the materials for review listed below.

2. Site Development Stormwater Plan Approval. The applicant's Site Development project shall be reviewed as a part of the development plan review process by the Zoning Board of Adjustment, Planning Board, Township Engineer **or their qualified designee**, and/or other official from whom approval is required. When applicable, the Board or official shall consult the Township Engineer or the Board's consultant professional engineer to determine if all of the checklist requirements have been satisfied and to determine if the project meets the standards set forth in this subsection. **In lieu of review by the Township Engineer, Montgomery Township reserves the right to engage a professional engineer to review the stormwater plan and required information at the developer's cost. Time spent by the Township Engineer or the Township's consultant professional engineer shall be charged to the developer's escrow account established in accordance with Subsection 16-9.1a.**

3. Required Items for Submission of the Site Development Stormwater Plan. The submission shall include, but not be limited to, the following:

(a) Topographic Base Map – The reviewing engineer may require upstream tributary drainage system information, as necessary. It is recommended that the topographic base map of the site be submitted which extends a minimum of 200 feet beyond the limits of the proposed development, at a scale of 1 inch equals 200 feet or greater, showing 1-foot contour intervals. The map, as appropriate, may indicate the following: existing surface water drainage, steep slopes, soils, critical soils, erodible soils, perennial or intermittent streams that drain into or upstream of the Category One waters, wetlands and 100-year flood plains along with their appropriate buffer strips, Township Stream Corridor and appropriate buffers, marshlands and other wetlands, pervious or vegetative surfaces, existing man-made structures, roads, bearings and distances of property lines, and significant natural and man-made features not otherwise shown.

(b) Environmental Site Analysis – A written and graphic description of the natural and man-made features of the site and its surroundings should be submitted. The description shall include a discussion of soil conditions, slopes, wetlands, waterways and vegetation on the site. Particular attention should be given to unique, unusual, or environmentally critical areas or sensitive features and to those that provide particular opportunities or constraints for development.

(c) The geology and hydrogeology information from the Natural Resources Conservation Service maps and Township soil maps shall be provided, with particular attention to the Evaluation of Groundwater Resources of Sourland Mountain Region of Central New Jersey dated November 19, 2004 prepared by Matthew J. Mulhall, P.G., of M2 Associates and Peter M. Demicco, P.G. of Demicco and Associates, as amended.

(d) A recharge map shall be provided, showing locations where recharge is possible on the site.

(e) Project Description and Site Plan(s) – A map (or maps) at the scale of the topographical base map shall be provided indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural facilities for stormwater management, including Green Infrastructure, and sediment control, and other permanent structures. The map(s) shall also clearly show areas where alterations will occur in the natural terrain and cover, including lawns and other landscaping, and seasonal high groundwater elevations. A written description of the site plan and justification of proposed changes in natural conditions shall also be provided.

(f) Land Use Planning and Source Control Plan – This plan shall provide a demonstration of how the goals and standards herein are being met. The focus of this plan shall be to describe how the site is being developed to meet the objectives of Green Infrastructure inclusion and controlling the Groundwater Recharge, Stormwater Quality and Stormwater Quantity of this section by land management and source controls where possible.

(g) Stormwater Management Facilities Map – A map illustrated of the same scale as the topographic base map, shall include the total area to be disturbed, paved or built upon, proposed surface contours at 1 foot intervals, land area to be occupied by the stormwater management facilities and the type of vegetation thereon, details of the proposed plan to control and dispose of stormwater, soil boring/test pit locations, and existing contours; details of all stormwater management facility designs, including a cross-section of each facility, during and after construction, including discharge provisions, discharge capacity for each outlet at different levels of detention and emergency spillway provisions with maximum discharge capacity of each spillway; a grading plan showing existing and proposed contours, elevations for inverts, grates, rims, and all utility information.

(h) Calculations and Soils Report.

(1) A written description explaining the findings of the report as outlined below. The description shall include at a minimum an introduction to the project, explanation of existing conditions, describe the proposed project, testing methods and pre-development investigation findings, summary of existing and proposed stormwater analysis, and conclusions. This report shall be in accordance with Appendix E of the NJ BMP Manual.

(2) Comprehensive hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified herein. This shall include but is not limited to routings, hydrographs, stage-storage calculations, erosion control calculations (e.g. conduit outlet protection), time of concentration calculations, drain time calculations, storm sewer capacity analysis for proposed systems and existing systems when required, floodway analysis, spillway assessment, TSS removal calculations, Groundwater Recharge spreadsheet, BMP Manual low impact development checklist, and as otherwise required to demonstrate compliance with this Subsection.

(3) When the proposed stormwater management control measures depend on the hydrologic properties of soils or require certain separation from the seasonal high water table, then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil test pit profiles. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soils present at the location of the control measure, and shall be in accordance with Appendix E of the BMP Manual.

(i) Drainage area maps for existing and proposed conditions.

(j) ~~MS4 Major Development Basin Summary Form, Attachment D, when applicable. See https://www.nj.gov/dep/dwq/pdf/Tier_A/Tier_A_Attachment_D_Major_Development_Summary_Fill_In.pdf.~~
MS4 Major Development Project List, forms, attachments, and any other information required by the NJDEP and Township Engineer for the completion of the Municipal Stormwater Regulation Program (MSRP) Annual Report. Forms may be found on the NJDEP website, subject to change, at:
https://dep.nj.gov/njpdes-stormwater/municipal-stormwater-regulation-program/tier_a/#templates-and-forms

(k) Maintenance and Repair Plan. The design and planning of the stormwater management facilities shall meet the maintenance requirements herein. A Maintenance and Repair plan shall be included with the Site Development submission and shall be in accordance with Chapter 8 of the NJ BMP Manual and with the requirements of this subsection.

(l) Waiver from Submission Requirements. The municipal official or Board reviewing an application under this these stormwater requirements may, in consultation with the Township Engineer, waive submission of or reduce the requirements of any of the Submission of Site Development Stormwater Plan requirements listed herein when it can be demonstrated that the information requested is impossible to obtain or it would create a hardship on the applicant to obtain and its absence will not materially affect the review process.

s. Maintenance and Repair.

1. All Minor Development and Major Development projects requiring stormwater management shall comply with these requirements.

2. The design engineer shall prepare an operation, maintenance, and repair plan (often referred to as Operations and Maintenance Manual or O&M Manual) for the stormwater management facilities incorporated into the design of a development project. The maintenance plan shall contain all of the following:

(a) Specific preventative maintenance tasks, maintenance schedules for each stormwater facility (no task shall exceed 1 year in frequency), inspection guidance, repairs and replacement of components, required permits, erosion control, vegetation management, as well any tasks specific to the type of BMP needed to maintain the functional parameters (storage volume, infiltration rates, inflow/outflow capacity, etc.); and

(b) Cost estimates, including estimated costs of routine inspections, maintenance (e.g**.,** sediment, debris, trash removal), costs to repair structures, costs to replace structures, estimated life span of various components for cost planning, labor, equipment, materials, and other information related to perpetual upkeep of the stormwater facility; and

(c) The name, address, and telephone number, and any other relevant contact information of the persons responsible for preventative and corrective maintenance (including replacement) and any persons to which the stormwater facilities will be dedicated. If the responsible maintenance party is different than the owner, the owner's information shall be included as well; and

(d) Facility location including block and lot numbers, and coordinates; and

(e) Accurate and comprehensive drawings of the site's stormwater management measures and applicable details; and

(f) Copies of the inspection log forms and maintenance reporting sheets.

(g) Additional guidance can be found in the BMP Manual or on the Department's website.

3. If the party responsible for maintenance identified is not a Montgomery Township or another public agency, the maintenance plan and any future revisions of the maintenance plan, shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken following approval by the Township Engineer and Township Attorney.

4. Any conditions hereinafter under Maintenance and Repair apply to stormwater facilities not owned or operated by Montgomery Township, hereinafter "privately owned".

5. The party responsible for maintenance of privately owned stormwater facilities, regardless whether the stormwater facility existed before or are created after the adoption of this Subsection, shall perform all of the following requirements:

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

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

(c) Shall submit inspection and maintenance logs to the Township by December 31 annually for any stormwater measure or BMP in accordance with the NJ Pollutant Discharge Elimination System requirements of N.J.A.C. 7:14A; and

6. In the event that a privately owned stormwater management facility becomes a danger to public safety or public health, is in need of maintenance or repair, and/or is not functioning properly in the opinion of the Township Engineer, the Township Engineer shall so notify the responsible party in writing. Upon receipt of that notice, the responsible party shall have fourteen (14) days to effectuate maintenance and repair of the facility in a manner that is approved by the Township Engineer. In the case of an emergency where repairs and/or remediation must take place sooner, the Township Engineer may specify a shorter timeframe. The Township Engineer may also extend the time allowed for effecting maintenance and repair for good cause.

   (a) If the responsible party fails or refuses to perform such maintenance and repair, Montgomery Township may immediately proceed to do so with its own forces and equipment, and/or through contractors. The Township Engineer will decide whether it can be corrected easily up to, and including, placing the stormwater facility back to its as-designed condition.

   (b) The costs and expenses of such maintenance and repair by Montgomery Township shall be billed to the responsible person or owner. Nonpayment of such bill may result in a lien on the property.

   (c) If the stormwater facility continues to malfunction, the responsible party will be notified in writing and be given a reasonable timeframe in which to submit a plan to bring the basin into compliance to the original design. If the original design is not available, the responsible party should hire a professional engineer to redesign the basin to meet current standards. The basin shall then be corrected and monitored at the cost of the responsible party.

7. Stormwater management facilities cannot be removed or modified without Township Engineer and if applicable, Board approval. This requirement does not apply to maintenance work.

8. Nothing in this subsection shall preclude Montgomery Township from requiring the posting of guarantees in accordance with N.J.S.A. 40:55D-53 and Section 16-9.2.

t. Ownership of Stormwater Management Facilities.

1. For stormwater facilities not dedicated to or not accepted by Montgomery Township:

   (a) If the Maintenance Plan identifies a party 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 party's or entity's agreement to assume this responsibility, or of the owner's obligation to dedicate a stormwater management facility to such party. Evidence of dedication shall be provided to the Township Engineer.

(b) Responsibility for maintenance of community stormwater management facilities 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.

(c) Responsibility for maintenance of individual stormwater management facilities may be assigned or transferred to the owner or tenant of an individual property in a residential development or project under certain circumstances. This applies to projects under the provisions of 16.4.2d[13], and can be employed to applicable projects in the Subsection if all of the following are met:

(1) The individual stormwater facilities shall be situated and fully contained on the residential lot; and

(2) The stormwater facilities are only designed to handle runoff from a structure or improvement on the residential lot where the facility will be; and

(3) These facilities shall not control runoff from a public street; and

(4) The maintenance of the individual stormwater management facilities on residential lots are to remain as the lot owners' responsibility. Ownership or maintenance may not be transferred to Montgomery Township.

(5) The area of the stormwater facility shall be recorded on the deed in metes and bounds. The maintenance obligation shall be recorded as a deed restriction.

(6) No such facility shall be modified or eliminated following issuance of the initial certificate of occupancy unless the Township of Montgomery permits such modification or elimination by adoption of an ordinance.

(7) Any existing community stormwater management facility where maintenance or ownership was transferred to an individual residential property owner or required by agreement in accordance with the rules permitted at that time shall remain the responsibility of the owner.

2. Stormwater management facilities for nonresidential (commercial) developments. Whenever a stormwater management facility is required for a nonresidential development, the stormwater management facility shall be a part of an individual lot owned and maintained by the property owner, or in the case of a business park or other similar complex, part of the common **property** ~~open space~~ owned by a business association. Provisions for long term maintenance of the facility shall be established. No responsibility, maintenance or otherwise, shall be transferred to the Township.

3. Stormwater management facilities for multi-family (e.g. apartments or townhouses) developments. Whenever a stormwater management facility is required for a development approval for a multi-family building, the stormwater management facility shall be a part of the individual lot owned and maintained by the property owner of the development consisting of rental units or a part of the common **property** ~~open space~~ owned by a homeowners' association of a development of for-sale units, and provisions for long term maintenance of the stormwater facility shall be established. No responsibility, maintenance or otherwise, shall be transferred to the Township.

4. Stormwater management facilities for conventional, nonclustered development of single-family detached dwellings.

    (a) Whenever a stormwater management facility is required in connection with a development approval for any conventional, nonclustered development of single-family detached dwellings, the stormwater facility shall be owned and maintained by a homeowners' association unless it is not reasonably feasible to establish a homeowners' association.

    (b) When it is not reasonably feasible to establish a homeowners' association, the stormwater management facilities shall be constructed, under the following conditions, subject to review by the Township Engineer, as well as approval by the Township Committee:

        (1) A separate lot shall be created for the stormwater basin or management facility and dedicated to the Township. The Township shall not take ownership of or be responsible for the maintenance of any stormwater management facilities on private property; and

        (2) The developer shall deposit a cash fee with Montgomery Township in an amount reasonably determined by the Township Engineer and approved by the Township Committee to be sufficient to complete routine maintenance for 100 years after the stormwater facility is accepted by the Township and to replace structural components during the 100-year time period; and

        (3) The cash fee shall ensure that all stormwater management measures required under this subsection will be maintained in accordance with the design specifications required and established herein. The calculation of the fee may consider the cost estimates in the Maintenance and Repair Plan. The plan shall include an estimate of the present value of the cost to inspect, maintain and repair the stormwater management facilities in accordance with the plan for the useful life of those measure(s); and

        (4) The calculation of the cash fee also shall consider the costs associated with the reconstruction of stormwater management measures that are reasonably anticipated to be subject to long term failure after an agreed number of years, depending on the type of measure(s) that might need to be reconstructed. The amount shall be based on the future value of the measure(s) being reconstructed; and

(5) This up-front cash fee shall be placed in a dedicated account and expended by Montgomery Township for the sole purpose of conducting inspection, maintenance and repair activities for all stormwater management facilities required under the approval and accepted by the Township. Such funds shall not be used for maintenance of any lands or improvements other than stormwater management facilities.

u. Deed Records and Dedications.

1. Any stormwater management measure authorized under the municipal stormwater management plan or this Chapter and any revisions thereof shall be reflected in a deed notice recorded in the Somerset County Clerk's office. A form of deed notice shall be submitted to the Township Engineer and Township Attorney 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 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 include the maintenance plan also required to be recorded upon the deed. Furthermore, access easements shall be provided to Montgomery Township to provide the Township the right, but not obligation, to access the facility. Prior to signing the site plan, subdivision plan, or approving a permit, 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 a complete electronic or original recorded copy of the document.

2. A stormwater management measure approved under the municipal stormwater management plan or ordinance may be altered or replaced with the approval of the Township Engineer, if the Township Engineer determines that the proposed alteration or replacement meets the design and performance standards pursuant to this subsection 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 Township Attorney and Township Engineer for review and approval, and subsequently recorded with the Somerset County Clerk's office. The instrument shall contain a description and location of the stormwater management measure, as well as include the maintenance plan, as noted above. Prior to signing the site plan, subdivision plan, or approving a permit, proof that the required information has been recorded on the deed in the form of a complete electronic or original recorded copy of the document shall be provided.

3. The approving board may require dedication of easements or deed restrictions along drainage ways, natural water courses, steep slopes and other unique botanical, **environmental,** historical, geological and paleontological areas located therein or adjacent to a proposed development. The easement or deed restriction shall be indicated on the plan and shall be marked on the land by concrete monuments at angle points and or property corners at sufficient locations to enable the dedicated area to be surveyed. In such cases, the approving Board shall consult with the Township Planner, Township Engineer, and the Open Space Coordinator in determining the required shape and size of the easement. The easement or deed restriction shall be in a form

approved by the approving Board's Attorney and shall include provisions assuring the following:

(a) Preservation of the channel and flood plain of the watercourse, including the right to clean, de-snag and all such work necessary to maintain the shape, slope and water flow of the watercourse.

(b) Prohibition of any removal of trees and other cleaning and grading not directly related to the preservation of the channel of a watercourse.

(c) Grant of a right to the Township to install and maintain any drainage facilities necessary for the health and safety of the public, if applicable.

(d) Right-of-entry to the Township to install and maintain any drainage facilities therein, if applicable.

v. Alternative Stormwater Measures or Methodology. Alternative stormwater management measures, alternative TSS removal rate, and/or alternative method to calculate 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 satisfaction of the Township Engineer. Alternative stormwater management measures may be proposed to satisfy the Green Infrastructure Standards only if the measures meet the definition of Green Infrastructure. Alternative stormwater management measures that function in a similar manner to a Green Infrastructure BMP are subject to the contributory drainage area limitation specified in Table 4 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 in Table 4 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 is granted by the Zoning Board of Adjustment or Planning Board, and Township Engineer.

w. Variance or Exemption from Stormwater Design and Performance Standards.

1. In order to grant a variance or exemption from the stormwater management measures set forth herein, the applicant shall include a mitigation plan that identifies what measures are necessary, potential mitigation projects, and/or criteria to evaluate mitigation projects that can be used to offset the deficit created by granting a variance in accordance with the requirements that follow.

2. A variance or exemption shall not be granted due to conditions created by the applicant. If the applicant can comply with the requirements of this Subsection and Stormwater Management Plan through reduction of the size of the project, the hardship shall be deemed to be self-imposed and a condition created by the applicant, thereby negating any entitlement to variance relief or an exemption from the requirements of this Subsection.

3. A variance or exemption may be granted from the design and performance standards for stormwater management measures set forth herein and from the Stormwater Management Plan, provided the municipal plan includes a mitigation plan and the following conditions are met:

    (a) The applicant demonstrates that it is technically impracticable to meet any one or more of the design and performance standards on-site. For the purposes of this analysis, technical impracticability exists only when the design and performance standard cannot be met for engineering, environmental, or safety reasons. A variance shall apply to an individual drainage area and design and performance standard and shall not apply to an entire site or project, unless an applicant provides the required analysis for each drainage area within the site and each design and performance standard;

    (b) The applicant demonstrates that the proposed design achieves the maximum possible compliance with the design and performance standards on-site; and

    (c) A mitigation project in accordance with the following is implemented:

        (1) The mitigation project may be selected from the municipal mitigation plan or may be proposed by the applicant, provided it meets the criteria in the municipal mitigation plan, if available and practical.

        (2) The mitigation project shall be approved no later than preliminary or final site plan approval of the development.

        (3) The mitigation project shall be located in the same HUC 14 as the area of the development subject to the variance.

        (4) The mitigation project shall be constructed prior to, or concurrently with, the development.

        (5) The mitigation project shall comply with the Green Infrastructure standards herein.

        (6) If the variance or exemption that resulted in the mitigation project being required is from the Green Infrastructure standards, then the mitigation project must use Green Infrastructure BMPs in Table 1, and/or an approved alternative stormwater management measure that meets the definition of Green Infrastructure to manage an equivalent or greater area of impervious surface and an equivalent or greater area of motor vehicle surface as the area of the development subject to the variance. Grass swales and vegetative filter strips may only be used in the mitigation project if the proposed project additionally includes a Green Infrastructure BMP other than a grass swale or vegetative filter strip. The Green Infrastructure used in the mitigation project must be sized to manage the Water Quality Design Storm, at a minimum, and is subject to the applicable contributory drainage area limitation specified herein.

(d) A variance or exemption from the Groundwater Recharge Standards at N.J.A.C. 7:8-5.4 may be granted if one of the following is met:

(1) The average annual Groundwater Recharge provided by the mitigation project must equal or exceed the average annual Groundwater Recharge deficit resulting from granting the variance for the development; or

(2) Runoff infiltrated during the two-year storm from the mitigation project must equal or exceed the deficit resulting from granting the variance from the required infiltration of the increase in runoff volume from pre-construction to post construction from the development.

(e) A variance or exemption from the Stormwater Runoff Quality Standards may be granted if the following are met:

(1) The total drainage area of motor vehicle surface managed by the mitigation project(s) must equal or exceed the drainage area of the area of the development subject to the variance and must provide sufficient TSS removal to equal or exceed the deficit resulting from granting the variance for the development; and

(2) The mitigation project must remove nutrients to the maximum extent feasible.

(f) A variance or exemption from the Stormwater Runoff Quantity Standards may be granted if the following are met:

(1) The applicant demonstrates, through hydrologic and hydraulic analysis, including the effects of the mitigation project, that the variance will not result in increased flooding damage below each point of discharge of the development;

(2) The mitigation project discharges to the same watercourse and is located upstream of the development subject to the variance; and

(3) The mitigation project provides the peak flow rate attenuation requirements herein for an equivalent or greater area than the area of the development subject to the variance. For the purposes of this demonstration, equivalent includes both size of the area and percentage of impervious surface and/or motor vehicle surface.

(g) The applicant or the entity assuming maintenance responsibility for the associated development shall be responsible for preventive and corrective maintenance (including replacement) of the mitigation project and shall be identified as such in the maintenance plan.

4. The applicant shall be responsible for locating an appropriate site for mitigation of the performance section for which the waiver is sought. Mitigation may occur on municipal property or on a private property as the appropriate rights are secured from the property owner.

5. Any approved variance shall be submitted by Montgomery Township to the County review agency and the Department, by way of a written report describing the variance, as well as the required mitigation, within 30 days of the approval.

x. Waivers. A waiver from strict compliance from the Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity Standards may be requested 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; and

2. The applicant demonstrates through an alternative analysis, that through the use of stormwater management measures and BMPs, the option selected complies with the Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity Standards of this Subsection to the maximum extent practicable; and

3. The applicant demonstrates that, in order to meet the Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity Standards of this Subsection, 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 the above paragraph within the upstream drainage area of the receiving stream that would provide additional opportunities to mitigate the Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity Standards that were not achievable on site.

y. Final Completion and Certification.

1. Nothing herein shall reduce or eliminate the developer's obligation to adequately construct all stormwater management facilities. Adequate guarantees shall be posted to assure the good and **professional,** workmanlike installation of such stormwater maintenance facilities pursuant to N.J.S.A. 40:55D-53 and Subsection 16-9.2.

2. The Township Engineer shall not approve any stormwater management facilities unless and until the developer's engineers shall have submitted to the Township Engineer as-built drawings prepared by a professional licensed surveyor, certified by a professional engineer that the said facilities were constructed in accordance with the approved plans, and deemed acceptable. Provide as-built stormwater calculations if requested.

   In lieu of review by the Township Engineer, Montgomery Township reserves the right to engage a professional engineer to review the as-built information at the developer’s cost.

3. The Township Engineer may also require post-construction testing of the facility before it is put into operation. Field tests shall be conducted according to the BMP Manual in order to verify the facility functions properly. The results of all field permeability tests shall be certified by a professional engineer and transmitted to the Township Engineer. If the results of the post-development field permeability tests fail to achieve, for example, the BMP Manual minimum required design permeability rates when utilizing the required factor of safety, the BMP shall be renovated and retested until such minimum required design permeability rates are achieved or a redesign is approved, built, and tested.

4. Any corrections or remedial actions deemed by the Township Engineer to be necessary to comply with the standards established by this subsection, comply with the approved plans, and/or any reasons of public health or safety shall be completed by the applicant, developer, or responsible party. As-built surveys and calculations shall be amended when necessary.

5. The Township Engineer may require the developer to clean and provide video of underground stormwater measures and BMPs improvements. Any repair work required is subject to further visual or video inspection.

6. During a period of maintenance immediately following the release of performance guarantees, it shall continue to be the developer's obligation, together with the surety, to adequately maintain the stormwater management facilities. Only after the expiration of maintenance guarantees shall any funds be utilized for maintenance of stormwater management facilities. This applies to facilities accepted by Montgomery Township.

z. Grading.

1. Lots shall be graded to secure proper drainage away from the buildings. Additionally, grading shall be provided in a manner which will prevent the collection of stormwater in pools or other unauthorized concentrations of flow and, to the greatest extent possible, water shall not flow across adjacent property lines. No areas of concentrated flow via gutters, channels, swales and/or pipe discharge shall be directed across driveways or sidewalks, or into public rights-of-way.

2. A proposed grading plan shall accompany the final subdivision or site plan and shall not be a scale less than 1-inch equals 30 feet. The final subdivision or site plan grading sheets shall show the same information as required on the preliminary plan with the addition that the individual lot grading shall be shown as follows:

   Final grades shall be shown for each lot corner, all high and low points and breaks in grade, finished floor elevation of structures, finished grade of septic systems, if applicable, and at the corners of tentative structure locations. If the use of drainage swales is intended, the elevation of these swales shall be shown. The minimum grade of disturbed areas shall be 1.5%.

3. Grading and finished floor elevations shall be adjusted for the house model selected, located within the building envelope and final architectural plans conforming to applicable codes. Final information shall be submitted to the Township as part of the building permit application for each lot.

4. Each individual lot's grading plan shall be submitted with the building permit application. The grading plan shall identify the International Building Code grading requirements. In all cases, the grade shall pitch away from the buildings at not less than 1 inch in 12 inches for a distance of 8 feet. Where cross lot drainage is reasonably unavoidable and contradicts the requirements above, the building permit application shall include a grading plan which defines the proposed final grading of all abutting lots affecting the lot for which the permit application is being made. Individual lot grading plans shall include at a minimum:

    (a) The extent of proposed filling, cutting or regrading of the land; and

    (b) Existing and proposed contours with intervals of 1 foot where slopes are less than 2% in grade and/or lots are less than 1/2 acre in size or intervals of 2 feet where slopes are more than 2% and/or lots are greater than 1/2 acre in size. All contour information shall refer to a known datum. Existing contours shall be shown as a dashed line; finished grades shall be shown as a solid line; and

    (c) Spot elevations at dwelling and/or accessory structure(s) corners, driveway, first floor, garage floor and basement floor elevations, lot corners, center line of street, edge of pavement and any other locations as necessary; and

    (d) The existing surface drainage pattern shall include but not be limited to swales, ditches, brooks or other drainage patterns, and how it affects the subject property. Any proposed changes in the existing surface drainage pattern which will result from the construction of the structure proposed for the subject property shall be shown;

    (e) The proposed location of roof leader drains and sump pump discharge pipe outlet;

    (f) The location of any retaining walls with top and bottom of wall elevations. Plans, profiles, cross-sections, and details of all retaining walls showing the height of wall, the elevation at the top and bottom of each wall, the materials to be used, a profile and cross-section of the wall, any proposed plantings, any safety barriers, calculations of anticipated earth and hydrostatic pressures and surcharges, and calculations detailing the wall design shall be provided unless such documents were reviewed and approved as part of a subdivision or site plan application. All plans, details, and calculations shall be prepared, signed, and sealed by a licensed professional engineer.

5. Prior to construction of foundation walls, an as-built survey of the horizontal and vertical location of the foundation footing prepared by a licensed land surveyor shall be submitted to the Zoning Officer and Township Engineer for review and approval.

6. As a condition precedent to the issuance of certificates of occupancy, the developer shall submit an as-built grading plan prepared by a licensed land surveyor to the Township that also bears an engineer's certification that the as-built conditions, including lot grading, complies with the approved final design and soil erosion control plans. The as-built shall include any pertinent information requested by the Township Engineer, traditionally including but not limited to site features, grading, limits of clearing, and pertinent information about the property.

7. In order to conform to the requirements of N.J.A.C. 4:24-49 and when applicable, the Township Engineer shall not recommend a temporary or unconditional certificate of occupancy for a project if the Soil Conservation District has not issued a conditional or final compliance certificate for measures to control soil erosion and sedimentation.

aa. Design of Runoff Collection System.

1. For storm sewer design, a 10-year to 25-year storm frequency should be considered the minimum design storms. The design engineer shall design facilities in accordance with the provisions of N.J.A.C. 5:21-7.2(c)5.i through 5.iv.

2. The design of the stormwater runoff collection system shall conform to N.J.A.C. 5:21-7.3 except as follows:

(a) High density polyethylene pipe (HDPE) shall not be used in rights-of-way to be dedicated to Montgomery Township, for driveway culverts, or in locations that do not have adequate cover.

(b) Inlet or manhole spacing shall not exceed 400 feet unless otherwise approved by the Township Engineer.

(c) Manhole frames and covers shall be of American-made cast iron conforming to ASTM Specification A-48 Class 30 and be suitable for H-20 loading capacity. All manhole covers in remote areas or areas subject to flooding may require a locking device. "MONTGOMERY TOWNSHIP STORM SEWER" shall be cast integrally in the cover.

(d) All discharge pipes shall terminate with a precast or cast-in-place concrete headwall with or without wingwalls as conditions require. In normal circumstances, a cast-in-place concrete headwall is preferred. Use of other types shall be justified by the designer and approved by the Township Engineer.

(e) Headwalls and endwalls shall extend a minimum of 25 feet from all roadways unless there is an existing natural barrier (trees, shrubs, berms) or a guardrail installed. When such conditions exist, the headwall or endwall may be placed at the right-of-way line or at a minimum distance of 10 feet from the edge of the roadway, whichever is greater.

bb. Penalties. Any person(s) who erects, constructs, alters, repairs, converts, maintains, or uses any building, structure or land in violation of this Subsection shall be subject to the penalties stipulated in Subsection §16-10.6 of this Chapter.

Section 3. Section 16-5.8 "Off-Street Parking, Loading Areas and Driveways" amended. Section 16-5.8.c.2(c) is referenced in 16-5.2 however, shall remain unchanged:

(c) Pervious materials may be used for stormwater management purposes (see Subsection 16-5.2), where practicable and subject to the Board Engineer's approval.

Section 4. Section 16-6.4 "Critical Areas" amended. Section 16-6.4.d.6(e)(10) is referenced in 16-5.2 however, shall remain unchanged:

> (10) Stormwater Management Best Management Practices (BMPs) in accordance with Subsection 16-5.2; and

Section 5. Section 16-6.4 "Critical Areas" amended. Section 16-6.4.e.3(d) is referenced in 16-5.2 however, shall remain unchanged:

> (d) The provisions of Subsection 16-5.2 shall be adequately addressed to the satisfaction of the Board and specifically the provisions of Subsection 16-5.2s of this chapter.

Section 6. Section 16-8.3 "Submission of Minor Subdivision Plats and Minor Site Plans" amended. Section 16-8.3.b.20 is referenced in 16-5.2 however, shall remain unchanged:

> 20. If the project meets the stormwater management applicability requirements of subsection 16-5.2c, the application submission shall include, but is not limited to, the items listed in 16-5.2r and as otherwise required by the Township Engineer.

Section 7. Section 16-8.3 "Submission of Minor Subdivision Plats and Minor Site Plans" amended. Section 16-8.3 references 16-5.2 however, shall remain unchanged.

Section 8. Section 16-8.4 "Submission of Preliminary Major Subdivision Plats and Preliminary Major Site Plans" amended. Section 16-8.4.b.28 references 16-5.2 however, shall remain unchanged:

> 28. If the project meets the stormwater management applicability requirements of subsection 16-5.2c, the application submission shall include, but is not limited to, the items listed in 16-5.2r and as otherwise required by the Township Engineer.

Section 9. Section 16-8.5 "Submission of Final Major Subdivision Plats and Final Major Site Plans" amended. Section 16-8.5.b.5(e) references 16-5.2 however, shall remain unchanged:

> (e) Final grading plans shall conform to Subsection 16-5.2z.

Section 10. Section 16-9.1 "Fees" amended. The application charge and escrow account table in Section 16-9.1a, shall be amended to add the following after row 18 [additions in **bold underline**; deletions in strikeout]:

			Application Charge	Plus	Escrow Account
19.	**Engineering permits and reviews**				
	(a)	**Major Developments***	**$800 for initial submission and one re-review**		**$2500 minimum****
		Minor Developments*	**$250 for initial submission and one re-review**		**$800 minimum****

	(b)	**Soil Disturbance and Hauling**	**$100 (See Chapter 14)**		
	(c)	**Street / Right-of-Way Opening**	**See Chapter 11**		
	(d)	**Flood Hazard Search Certificate**	**$25 (see 16-6.4d11.(c))**		
	(e)	**Floodplain Permit**	**reserved**		
	(f)	**Tree Permit**	**See Chapter 14***		
	(g)	**Address changes**	**$150 per unit**		
		***not required for Board applications as an escrow account is already required. ** for complex projects that exceed an initial review time of 2 hours, and require more than one re-review, the Township Engineer may require the applicant to post funds to an escrow account to cover administrative and consultant review costs. The amount will be determined by the Township Engineer based on an estimated hourly review time. The maximum requested amount shall not exceed $5,000.00. The applicant shall replenish the account if there are insufficient funds to cover the reviews. Inspection fees or escrow may be required pursuant to 16-9.2 prior to issuance of any municipal permits.**			

Section 11. Section 16-9.1 "Fees" amended. Paragraph b shall be deleted in its entirety and replaced with a new paragraph b to read as follows:

(b) The application charge is a flat fee to cover administrative expenses and is nonrefundable. The escrow account is established to cover the cost of professional services including but not limited to engineering, planning, legal, traffic and other expenses associated with the review of the submitted materials. For Township employees, the hourly rate shall be 200% of the employee's base salary which shall be established by ordinance Sums not utilized in the review process shall be returned to the applicant. If additional sums are deemed necessary, the applicant shall be notified of the required additional amount and shall add such sum to the escrow within 15 days.

Section 12. Chapter 16, Attachment 1 "Checklist" replaced. Chapter 16, Attachment 1 (checklists for land development applications) shall be deleted in its entirety and replaced with a new Attachment 1, a copy of which is attached to this Ordinance as Exhibit A and made a part hereof as if set forth fully herein.

Section 13. Repealer. All ordinances and resolutions or parts thereof, inconsistent with this ordinance are hereby repealed.

Section 14. Severability. If any section, paragraph, subsection, clause or provision of this ordinance shall be adjudged by a court of competent jurisdiction to be invalid, such adjudication shall apply only to the section, paragraph, subsection, clause or provision so adjudged and remainder of this ordinance shall be valid and enforceable.

Section 15. Effective Date. This ordinance shall take effect upon final adoption and publication in accordance with law.

ATTEST:

TOWNSHIP OF MONTGOMERY
COUNTY OF SOMERSET

_____

Lisa Fania, RMC
Township Clerk

_____

Neena Singh
Mayor

NOTICE OF PENDING ORDINANCE

PLEASE TAKE NOTICE that the foregoing ordinance was introduced and passed on first reading by the Township Committee of the Township of Montgomery, County of Somerset, New Jersey at a meeting held on April 4, 2024 and the same was then ordered to be published according to law with a public hearing and a vote scheduled for the meeting of April 18, 2024 beginning at 7:00 p.m. at the Municipal Building, 100 Community Drive, Skillman, NJ at which time all interested persons will be heard. Copies of the ordinance can be obtained, without cost, by any member of the general public at the Municipal Clerk's office between the hours of 8:00 a.m. and 4:30 p.m.

_____

Lisa Fania, Township Clerk

EXHIBIT A

Chapter 16, Attachment 1
[Pursuant to Section 11 of this Ordinance]