

Berkeley County, West Virginia

2023

Stormwater Ordinance

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ARTICLE I GENERAL PROVISIONS**A. STATUTORY AUTHORITY**

- (1) Short Title
 - (a) This Ordinance shall be known and may be cited as the “Stormwater Management and Sediment and Erosion Control Ordinance of Berkeley County”, as amended 2023, and hereinafter referred to as the “Ordinance”.
 - (b) All permits that are issued or materially amended after the date of passage will be required to be compliant with the Ordinance as amended.
- (2) The provisions of this Ordinance are enacted pursuant to West Virginia Code:
 - Chapter 7, County Commissions Generally
 - Chapter 8A, Land Use Planning, Article 4, Subdivision and Land Disturbance Ordinance
 - Chapter 16, Public Health, Article 13, Sewage Works and Stormwater Works
 - Chapter 16, Public Service Districts, Article 13A
- (3) The provisions of this Ordinance are also enacted pursuant to the Requirements of the November 17, 2021 Consent Decree reached between the United States Environmental Protection Agency, the West Virginia Department of Environmental Protection, the Berkeley County Public Service Sewer District and the Berkeley County Public Service Stormwater District entered into to ensure future compliance with the Clean Water Act 33 U.S.C §1251 et seq.

B. STATEMENT OF FINDINGS

The Berkeley County Council finds that:

1. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases runoff volumes, flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines floodplain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases nonpoint source pollution of water resources.
2. A comprehensive program of stormwater management (SWM), including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Berkeley County, their resources, and the environment.
3. Stormwater is an important water resource that provides groundwater recharge for water supplies and supports the base flow of streams.
4. The reasonable use of green infrastructure and low impact development (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to: 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and use precipitation near where it falls to earth. Green

infrastructure practices and LID contribute to the restoration or maintenance of pre-development hydrology.

5. Federal and state regulations require Berkeley County to implement a program of stormwater controls and to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES) program.

C. PURPOSE AND OBJECTIVES

This Ordinance has the following purposes:

- (1) To protect, maintain, and enhance the environment of Berkeley County and the public health, safety, and general welfare of the citizens of Berkeley County by ensuring the implementation of the following minimum control measures ("MCM"):
 - (I) Public education and outreach
 - (II) Public involvement and participation
 - (III) Illicit discharge detection and elimination
 - (IV) Controlling runoff from construction sites
 - (V) Controlling runoff from new development and redevelopment
 - (VI) Requiring pollution prevention & good housekeeping for public facilities including wastewater treatment facilities, potable water treatment facilities, parks and recreation areas, and maintenance garages.
- (2) To comply with the West Virginia DEP-administered National Pollutant Discharge Elimination System (NPDES) stormwater permit program and applicable regulations (40 CFR, §122.26) for stormwater discharges to waters of the State.
- (3) To comply with the EPA's Total Maximum Daily Loads (TMDLs) Water Quality Standards established for the Potomac River Basin
- (4) To comply with the West Virginia Water Pollution Control Act, West Virginia Code, Chapter 22, Article 11.
- (5) Authorize Berkeley County Public Service Storm Water District to obtain an NPDES MS4 permit from the WV DEP to operate and MS4 program.
- (6) Comply with parameters set forth in the Consent Decree with the United States of America, the State of West Virginia, the Berkeley County Public Service Sewer District, and the Berkeley County Public Service Stormwater District. Attached as Appendix A "Compliance Requirement (H) of the Consent Decree with the United States of America, the State of West Virginia, the Berkeley County Public Service Sewer District, and the Berkeley County Public Service Stormwater District" and Appendix B: MS4 Manual Requirements.

D. ADMINISTERING ENTITY

- (1) Pursuant to West Virginia Code § 8A-4-1, *et seq.*, § 8A-5-1, *et seq.*, and § 16-13A-1, *et seq.*, any county or sanitary district or public service district in the State of West Virginia is hereby authorized and empowered to own, acquire, construct, equip,

operate, and maintain within and/or without the corporate limits of such municipal corporation a stormwater system, stormwater works, and stormwater management program as defined herein.

- (2) The Berkeley County Public Service Stormwater District shall exercise authority for administering the provisions of this Ordinance unless such authority is specifically given to another entity or retained by the County Council.

(3) Responsibilities

a. Berkeley County Public Service Stormwater District shall have the authority to;

- i. Inspect and enforce SWM and MS4 systems, materials, and facilities during construction for compliance with approved plans;
- ii. Inspect and enforce operating SWM and MS4 systems and facilities in accordance with the approved plans;
- iii. Inspect and enforce sediment and erosion control implementation for land disturbance activities greater than 5,000 sq. ft. to ensure compliance with *West Virginia Erosion & Sediment Control Best Management Practices Manual*;
- iv. Identify and rank waterways and hotspots within each watershed based on water quality in Berkeley County;
- v. Test and monitor water quality of streams and outfalls;
- vi. Identify areas and opportunities within each watershed where potential off-site SWM mitigation efforts may be achieved or where Capital Projects may be accomplished based on current fiscal budget;
- vii. Create a GIS SWM facility map for Berkeley County;
- viii. Own, acquire, construct, equip, operate, and maintain stormwater collection and control systems, pumping stations, lines, etc., throughout Berkeley County.
- ix. Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.
- x. Enter into and enforce stormwater maintenance agreements and easements.
- xi. Research and test water quality.
- xii. Identify hotspots, illicit discharges and stormwater problem areas, and put forth plans to remediate problem areas.
- xiii. Identify and prevent non-stormwater discharges to storm drain systems.
- xiv. Reduce pollutants in stormwater discharges.
- xv. Control stormwater runoff by ensuring compliance with design, construction and maintenance criteria for permanent and temporary stormwater facilities.

- xvi. Maintain and improve stormwater collection systems in order to protect and improve water quality in the receiving streams.
 - xvii. Educate the community about stormwater and what they can do to keep Berkeley County clean.
 - xviii. Educate contractors, builders, developers, engineers, architects, etc.
 - xix. Coordinate with stakeholders to inform the public and host community events that aid in water quality improvement and stormwater quantity reduction such as:
 - Storm clean up
 - Rain barrel workshops
 - Tree planting / reforestation
 - Creating riparian buffers
 - Stream and basin clean-up
 - Highway clean-up
 - Storm drain stenciling and marking "Only Rain in the Storm Drain"
 - Reduction of impervious areas
 - xx. Create and maintain natural stream buffers and filter areas as part of the stream conservation program to enhance stream and waterway quality.
 - xxi. Provide for incentives, such as stormwater fee rebates to landowners to capture more or treat more stormwater on site or to reduce impervious area, such as rain water harvesting and reuse, pervious pavement/pavers.
 - xxii. Create and administer a system for offsite SWM and Fee-in-lieu-of for sites that cannot meet the minimum BMPs or controls for SWM.
 - xxiii. Enforce minimum control measures at land disturbance sites, and ensure activity complies with the stormwater management and sediment control plans approved by the Berkeley County Engineer.
 - xxiv. Apply the West Virginia Best Management Practices standards to ensure quality of stormwater discharged and stormwater contaminants are within regulatory limits.
 - xxv. Enforce all approved plans and plats for stormwater management in proposed residential and nonresidential developments and land disturbance activities.
 - xxvi. Regulate and prohibit discharges into stormwater facilities of sanitary, industrial waste, commercial sewage, or waters that have otherwise been contaminated.
 - xxvii. Perform any other activity required under state or federal law.
- b. The Berkeley County Engineer shall have the authority to;
- i. Review and approve of all SWM Plans, Details, Calculations and Reports, including revisions, modifications, or plan changes; and review and

- approve of all SWM facility as-built surveys and SWM report certifications, or modifications; and
 - ii. Establish, reduce, and release of all sureties for SWM Facilities with Berkeley County Council approval; and
 - iii. Review and approve of all SWM Maintenance Agreements; and
 - iv. Implement and design capital improvement projects for SWM; and
 - v. Review and approve of all offsite SWM facility waivers or fee-in-lieu waiver requests
- c. The Berkeley County Planner shall have the authority to;
- i. Review and approve of all stormwater easement plats.

E. APPLICABILITY

- (1) The full effect of this Ordinance shall be applicable to all Urbanized Area set forth by the US Census Bureau, and all land within the county east of a continuous line running with and along the peak or crest of North Mountain from the intersection of that line with the West Virginia and Maryland state boundary to the intersection with West Virginia and Virginia state boundary excluding the City of Martinsburg. This area is referred to as the MS4 service area. At the discretion of the County Council, additional geographic areas may be added by resolution. The areas outside of the MS4 service area jurisdiction are not subject to the water quality criteria set forth herein, but must still comply with water quantity criteria herein. Furthermore, areas outside of the MS4 are still subject to all state and federal law pertaining to stormwater management. All property within the MS4 service area is subject to the Stormwater Management Fee.
- (2) This ordinance applies to any new development or redevelopment that meets one or more of the following criteria:
- (a) New development or redevelopment that involves:
 - (i) land disturbance activities of one acre or more; or
 - (ii) Creates 5,000 square feet of impervious cover **and** the impervious cover is:
 - a) 40% or more of any one parcel, **or**
 - b) In a hotspot area that has known stormwater issues such as flooding or stormwater pollution.
 - (b) Land disturbance activities that are smaller than the minimum applicability criteria set forth in item subsection (a) above that are part of a larger common plan of development, which cumulatively meet the criteria set forth in subsection (a), even though multiple, separate, and distinct land disturbance activities may take place at different times on different schedules.
- (3) Compatibility with Other Permits and Ordinance Requirements:

- (a) Compliance with the requirements herein does not create any exclusion to permitting requirements from the WVDEP, WVDNR, the U.S. Army Corps of Engineers, or any other agency or reviewing body that has jurisdiction over any land disturbance or SWM.
- (b) Whenever this Ordinance imposes a conflicting restriction regarding stormwater regulation, the provisions of the more restrictive ordinance shall control.
- (4) The following land disturbance activities are exempt from this Ordinance:
 - (a) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
 - (b) Any introduction of pollutants from non-point-source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, and forest lands in accordance with 40 C.F.R. § 122.3(e) and W. Va. C.S.R § 47-10-3.2.b.4. This exception does not include discharges from concentrated animal feeding operations, concentrated aquatic animal production facilities, or point sources such as construction activity.
 - (c) Logging activity by licensed loggers that is regulated by the West Virginia Division of Forestry.
 - (d) Repairs to any Stormwater Management Facility.

F. ILLICIT DISCHARGES

This ordinance prohibits non-stormwater illegal discharges or dumping into the municipal storm sewer system. It is prohibited to establish, use, maintain or continue the use of illicit connections to the municipal stormwater system. This ordinance further prohibits non-stormwater illegal discharges or dumping into private systems that discharge, infiltrate or by any other means is conveyed into ground water, ponds, wetlands, basins, waterways or any other facility or feature that does not capture such waste in an impermeable container to be properly disposed of to prevent the introduction of pollutants into the environment.

(1) Authorized Non-Stormwater Discharges:

- a) The following categories of non-stormwater discharge are authorized under this section unless they are identified as a significant source of pollutants to waters of the state.
 - Diverted stream flows,
 - Rising ground waters,
 - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
 - Uncontaminated pumped groundwater,
 - Foundation drains,
 - Retaining wall/structure drains,
 - Air conditioning condensation,
 - Irrigation water from agricultural sources,

- Springs,
 - Water from basement or crawl space sump pumps,
 - Footing drains,
 - Flows from riparian habitats and wetlands,
 - Non-stormwater discharges covered by another NPDES permit,
 - Discharges or flows from firefighting activities
- (2) Prohibited Non-Stormwater Discharges:
- a) This Ordinance prohibits the following categories of non-stormwater discharges:
- (1) Discharges from potable or non-potable water sources, including but not limited to; hyper-chlorinated water line flushing, pipeline hydrostatic test water and other water discharges with a potential to violate water quality standards. For planned discharges to the storm sewer system, the discharge shall be de-chlorinated to a concentration of 0.1ppm or less, pH adjusted, if necessary, and controlled by volume and velocity to prevent re-suspension of sediments in the storm sewer system.

G. SEVERABILITY

If any section, clause, sentence, part, or provision hereof shall be held to be invalid, or unconstitutional, by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, clauses, sentences, parts, or provisions of this Ordinance.

H. INCORPORATION BY REFERENCE

- (1) For the purposes of this Ordinance, Berkeley County has adopted by reference the following published standards:
1. USDA NRCS Conservation Practice Standard 378 as amended.
 2. USDA NRCS National Engineering Handbook as amended.
 3. West Virginia Stormwater Management and Design Guidance Manual as amended.
 4. Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed" version 2.0 as amended.
 5. West Virginia Division of Highways Drainage Manual, 3rd ed. (Charleston, WV: West Virginia Department of Transportation, Division of Highways, Engineering Division, Hydraulic and Drainage Unit as amended.
 6. West Virginia Erosion & Sediment Control Best Management Practices Manual, as amended.
 7. WV/NPDES General Water Pollution Control Permit WV0115924 Small Municipal Storm Sewer System (January 2019) or current renewal permit.
- (2) All applicable land disturbance shall be consistent with the regulations and design standards established in the listed published standards.

ARTICLE II DEFINITIONS

As-Built - Drawings submitted by a licensed engineer or professional land surveyor that details on a Conforming Set, the actual construction performed during the project, including changes necessitated

by construction change documents, change orders, field or design changes, component relocations required for coordination, rerouting of distribution systems, etc., and that show the exact dimensions and locations, both horizontal and vertical, of work completed under the approved plans.

Berkeley County Public Service Storm Water District - The entity that holds and is responsible for compliance with the WV DEP MS4 NPDES Permit applicable to Berkeley County.

Berkeley County Engineer - The engineer carrying out the duties and responsibilities under the Berkeley County Subdivision Regulations, including the County Engineer, engineering staff of the County Engineer, or engineering staff of the Planning Commission.

Best Management Practice (BMP) - Structural or nonstructural practice that is designed to minimize the impacts of changes in land use on surface and groundwater systems. Structural BMP refers to basins or facilities engineered for the purpose of reducing the pollutant load in stormwater runoff, such as bioretention, constructed stormwater wetlands, etc. Nonstructural BMP refers to land use or development practices that are determined to be effective in minimizing the impact on receiving stream systems, such as preservation of open space and stream buffers, disconnection of impervious surfaces, etc.

Bioretention Basin - Water quality BMP engineered to filter the water quality volume through an engineered planting bed, consisting of a vegetated surface layer (vegetation, mulch, ground cover), planting soil, and sand bed (optional), and into the in-situ material; also called rain gardens.

Common Plan of Development – A contiguous construction project where multiple separate and distinct construction activities may be taking place at different times on different schedules but under one plan. The “plan” is broadly defined as any announcement or piece of documentation or physical demarcation indicating construction activities may occur on a specific plot; included in this definition are most subdivisions.

Construction Activity - clearing, grading, excavation, disturbance, or filling of land. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of the site.

Design Storm - A selected rainfall hyetograph of specified amount, intensity, duration, and frequency that is used as a basis for design.

Detention - The temporary impoundment or holding of stormwater runoff.

Detention Basin - A stormwater management facility that temporarily impounds runoff and discharges it through a hydraulic outlet structure to a downstream conveyance system. While a certain amount of outflow may also occur via infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and therefore are not considered in the facility’s design. Since an extended detention basin impounds runoff only temporarily, it is normally dry during non-rainfall periods.

Development - See “Land Development.”

Diameter at Breast Height (DBH) - The standard method of expressing the diameter of the trunk of a standing tree.

EPA - U.S. Environmental Protection Agency.

Erosion - The wearing away of the land surface by running water, wind, ice, or other geological agents.

Erosion and Sediment Control Plan - A site-specific plan identifying Best Management Practices or ways in which accelerated erosion and sediment pollution will be minimized.

Forest/Preserved Open Space – Land that will remain undisturbed or that will be restored to a hydrologically functional state for example.

Frequency (Design Storm Frequency) - The recurrence interval of storm events having the same duration and volume. The frequency of a specified design storm can be expressed either in terms of exceedance Probability or Return Period.

Exceedance Probability - The probability that an event having a specified volume and duration will be exceeded in one (1) time period, usually assumed to be one (1) year. If a storm has a 1% chance of occurring in any given year, then it has an Exceedance Probability of 0.01.

Return Period - The average length of time between events having the same volume and duration. If a storm has a 1% chance of occurring in any given year, then it has a Return Period of 100 years.

Grading – See “Land Disturbance Activity.”

Impervious Cover shall include: surfaces composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to, roofs, buildings, decks, patios, pool, sheds, existing ponds, streets, parking areas, and any concrete, asphalt, compacted gravel surface, or compacted subgrade and compacted in-situ soils.

Infiltration - The downward entry of water into soil.

Karst Terrain - A type of topography that forms as a result of solutional weathering of limestone, dolostone, and/or gypsum. Karst is characterized by soils of highly variable thickness, bedrock exposure, caves, sinkholes, sinking streams, large springs, and rapid groundwater movement.

Land Development - The development of one or more lots, tracts, or parcels of land by any means and for any purpose. Exclusions only apply with appropriate supporting documentation.

Land Disturbance (Grading) Activity - Any land change that may result in soil erosion from water or wind or the movement of sediments into state waters or onto lands in the State of West Virginia, including but not limited to clearing, grading, excavating, transporting, and filling of land. In this and other Berkeley County ordinances, Land Disturbance Activity and Grading are interchangeable.

Low Impact Development (LID) - Hydrologically functional site design with pollution prevention measures to reduce impacts and compensate for development impacts on hydrology and water quality.

Managed Turf - is grassed soil that no longer functions in its natural hydrological state due to disturbance, compaction or excessive management. Land disturbed and/or graded for eventual use as managed turf includes: 1) Portions of residential yards that are graded or disturbed, including yard areas, septic fields, residential utility connections; 2) Roadway rights-of-way that will be mowed and maintained as turf; 3) Turf areas intended to be mowed and maintained as turf within residential, commercial, industrial, and institutional settings.

Municipal Separate Storm Sewer System (MS4) - An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) with the following characteristics:

- (1) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created or pursuant to state law), including special districts under state law such as a sewer district, flood control district, or drainage district, or similar

entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the Clean Water Act that discharges into waters of the United States

- (2) Designed or used for collecting or conveying stormwater
- (3) Not a combined sewer
- (4) Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2

NPDES Permit (Construction and Storm Water Management Generated) - The National Pollutant Discharge Elimination System Permit, part of the Federal Clean Water Act, 33 U.S.C. 1251, et seq. and West Virginia Code Chapter 22, Articles 11 and 12. This permit is administered by the West Virginia Department of Environmental Protection and is required when land disturbance from grading, excavating or construction exceeds the acreage specified under state law.

Nonpoint Source Pollution - Contaminants such as sediment, nitrogen and phosphorous, hydrocarbons, heavy metals, and toxins whose sources cannot be pinpointed but rather are washed from the land surface in a diffuse manner by stormwater runoff.

NRCS - Natural Resources Conservation Service

Parcel - A piece of land which can be owned, sold, and developed. Parcels have legal descriptions which not only describe their boundaries but also contain information concerning rights and interests.

Peak Discharge - The maximum rate of flow associated with a given rainfall event or channel.

Perennial Stream - A stream identified by well-defined banks and natural channels with continuously flowing water most years. They are usually shown on a USGS topographic map as a solid blue line.

Permittee – Individual or entity that has been issued permits for stormwater discharges, or for the construction, alteration, extension, repair of stormwater facilities, or land disturbance activity by the local jurisdiction having authority.

Post-development - Refers to conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land.

Pre-development - Refers to the conditions that exist at the time that plans for the Land Development of a tract of land are approved by the plan approval authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted establishes the Pre-development conditions.

Professional Engineer - An engineer who is licensed by the State of West Virginia to offer professional services directly to the public.

Quality Control – LID and BMP practices designed to reduce eroded soil and other pollutants, such as metals, fertilizers, pesticides, oils and grease, which accumulate on impervious surfaces, and are flushed off by the early stages of runoff. This involves capturing and treating the first 1-inch of runoff from a site to reduce a bulk of these pollutants from entering into receiving waterways. By capturing and treating the first 1-inch of runoff, up to 90% of pollutants that are washed off of the land can be removed from the storm water before entering the drainage system.

Quantity Control - Deals with utilizing traditional stormwater management processes, conveyance systems, LIDs, and BMPs, to capture and detain relatively infrequent, severe runoff events, such as the 2, 10, 25, or 100 year frequency storm.

Redevelopment - Any construction, alteration, or improvement on an existing development.

Retention - Permanent storage of stormwater.

Retention Basin - A stormwater management facility that includes a permanent impoundment, or normal pool of water, for the purpose of enhancing water quality and therefore is normally wet, even during non-rainfall periods. Storm runoff inflows may be temporarily stored above this permanent impoundment for the purpose of reducing flooding or stream channel erosion.

Riparian Zone- The land and vegetation within and directly adjacent to all surface water bodies including, but not limited to lakes, ponds, reservoirs, perennial and intermittent streams, up to and including their point of origin.

Runoff - The portion of precipitation, snow melt, or irrigation water that runs off the land into surface waters.

Runoff Coefficient - The fraction of total rainfall that appears as runoff; represented as "C" in the Rational Method formula.

Runoff Reduction - The runoff reduction approach that seeks to maintain the same predevelopment runoff volume delivered to a body of water after a site is developed.

Sand Filter - A contained bed of sand that acts to filter the first flush of runoff. The runoff is then collected beneath the sand bed and conveyed to an adequate discharge point or infiltrated into the in-situ soils.

Severe Slopes - Slopes that are greater than 1 ½' horizontal to 1' vertical.

Silt Fence - A temporary linear sediment barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow runoff.

Site - The parcel of land being developed, or a designated planning area in which a land development project is located.

Sinkhole or Sink - A depression in the land surface formed by solution or collapse of the earth below that directs surface runoff into the subsurface or to an underground drainage flow. For the purpose of this Ordinance, the dimension of a sinkhole or sink shall include the last closed contour line based on a 2-foot contour interval, as shown on the Initial Plat.

Stabilization - All disturbed areas covered by permanent protection such as pavement, pervious pavement, compacted gravel, buildings, waterways (riprap, concrete, grass, or pipe), a healthy, vigorous stand of grass or native vegetation that uniformly covers more than 70% of the ground, stable outlet channels with velocity dissipation which directs site runoff to a natural watercourse, and any other structure or material.

Stormwater Hotspot - An area where the land use or activities are considered to generate runoff with concentrations of pollutants in excess of those typically found in stormwater.

Stormwater Management Facility - A device that controls stormwater runoff and changes the characteristics of that runoff, including but not limited to the quantity and quality, the period of release, or the velocity of flow.

Stormwater Management Plan - A document containing material for describing existing and proposed site conditions, how runoff characteristics will be affected by a land development project and methods for complying with the requirements of the local program or chapter.

Stormwater Pollution Prevention Plan (SWPPP) - The erosion and sediment control plan and the post development plan required in the NPDES General Permit.

Stream - Any waters of the US or State or blue lined watercourse found of the USGS Quad Maps or as determined by the appropriate agency (USFWS or WVDEP) in certain circumstances.

Stream Buffers - The zones of variable width that are located along both sides of a stream and are designed to provide a protective natural area along a stream corridor.

Structure - Anything constructed, the use of which requires permanent location on the ground or which is attached to something having a permanent location on the ground.

Surety - A written instrument with a clause binding an applicant to pay a certain penalty (or portion thereof) to the County Council conditioned, however, with a statement that the payment of the penalty may be avoided upon satisfactory construction and completion of improvements required within a Land Development Plan. A surety is secured by a bond, cash in escrow, or by a letter of credit that is satisfactory to the Planning Commission and Berkeley County Council.

Total Maximum Daily Load (TMDL) - A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

Underground Injection Control (UIC) Permit - A permit issued by West Virginia Department of Environmental Protection that regulates the subsurface emplacement of fluids.

Watercourse - A stream of water, river, brook, creek, or channel or ditch for water whether natural or man-made.

Water Quality Standards - State-adopted and EPA-approved ambient standards for water bodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses.

Watershed - A defined land area drained by a river, stream, or drainage way, or system of connecting rivers, streams, or drainage ways such that all surface water within the area flows through a single outlet.

Wetlands: Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas regulated by the US Army Corps of Engineers.

WVDEP - West Virginia Department of Environmental Protection

WVDNR - West Virginia Department of Natural Resources

ARTICLE III STORMWATER MANAGEMENT PROGRAM PROCEDURES AND REQUIREMENTS

A. LAND DISTURBANCE (GRADING) PERMIT REQUIREMENT

- (1) Any entity proposing to perform any land disturbance activity pursuant to the applicability standards outlined under Article I of this Ordinance shall submit to the Berkeley County Engineer an application for a land disturbance (grading) permit as set forth in the Berkeley County Subdivision Ordinance.
- (2) No application for a land disturbance permit shall be approved until a review and approval has been granted for the final Erosion and Sediment Control Plan (or

agreement in lieu of), Stormwater Management Plan and Maintenance requirements (or agreement in lieu of).

- (3) No owner or developer shall receive a land disturbance permit without first meeting the requirements of this Ordinance and the Berkeley County Subdivision Ordinance prior to commencing the proposed activity.
- (4) No land disturbance permit shall be issued until a plan has been approved by the Berkeley County Planning Commission.

B. STORMWATER MANAGEMENT CONCEPT PLAN

- (1) Prior to submission of any Stormwater Management Plan or Land Disturbance Permit Application, the applicant shall submit a Stormwater Management Concept Plan as part of a Major Plan submission, as set forth in the Berkeley County Subdivision Ordinance.
- (2) The applicant shall request a consultation meeting with Berkeley County Engineer to discuss BMP and post-development stormwater management. Berkeley County Engineer shall schedule the meeting within 15 business days following the applicant's request.
- (3) The Stormwater Management Concept Plan shall include at a minimum the following information:
 - (a) Existing Conditions Plan and a Proposed Site Plan
 - i. Contour lines and any streams found on U.S. Geological Survey (USGS) topographic mapping
 - ii. Soils, riparian buffer zones, managed turf and vegetative boundaries
 - iii. Roads, buildings, parking areas, and other impervious cover
 - (b) Natural Features Plan(s) (with existing and proposed features)
 - i. Floodplains, rock outcrops, Karst features, large tree canopy
 - ii. Natural drainage areas and wetlands
 - iii. Threatened and/or endangered species
 - iv. Any required setbacks (existing septic areas, wells)
 - (c) Stormwater Management System Plan
 - i. Graphic illustration of the proposed post-development stormwater facilities and/or nonstructural practices
 - ii. Conveyance system and flow paths including downstream flood hazard areas
 - iii. Relationship to upstream and downstream properties and drainage
 - iv. Bridge and/or culvert crossings
 - v. Approximate location of stormwater inlets and outlets

C. EROSION CONTROL AND SEDIMENT PLANS

- (1) Any owner or developer engaged in clearing, grading, and excavating activities that disturb one acre or more, including smaller sites in a larger common plan of development or sale, are required to provide sediment and erosion control measures

to prevent sediment laden discharges from leaving the area of construction activity or entering a waterway. Land disturbance in excess of one acre will require the preparation and implementation of sediment and erosion control plan, obtain a West Virginia NPDES General Water Pollution Control Permit for their stormwater discharges, and conduct Stormwater Pollution Prevention Plan (SWPPP) (Pre-Construction) meeting with WVDEP, Berkeley County Public Service Storm Water District, Engineer of Record, and the Contractor prior to the start of land disturbing activities.

(2) Review and Approval of Erosion and Sediment Control Plans

- (a) No changes shall be made in the contour of the land and no grading, excavating, removal or destruction of topsoil, trees, or other vegetative cover shall be commenced until an erosion and sediment control plan for stabilizing disturbed areas has been reviewed and approved by the Berkeley County Engineer.
- (b) The applicant shall submit Erosion and Sediment Control Plans and any supporting computations to the Berkeley County Engineer for review and approval. The Erosion and Sediment Control Plans shall contain sufficient information and notes to describe how soil erosion and off-site sedimentation will be prevented. The plan shall serve as a basis for all subsequent grading and stabilization.
- (c) All plans must meet the requirements of the West Virginia Department of Environmental Protection's Construction Stormwater NPDES regulations, as applicable and the *West Virginia Erosion & Sediment Control Best Management Practices Manual*. In the event of conflict between this Ordinance and WVDEP requirements, the stricter shall prevail.
- (f) In approving the Erosion and Sediment Control Plans, the Berkeley County Engineer may impose such conditions thereto as may be deemed necessary to ensure compliance with the provisions of this Ordinance, the standards of the *West Virginia Erosion & Sediment Control Best Management Practices Manual*, and the preservation of public health, safety, and the environment.

(3) Contents of Erosion and Sediment Control Plans

- (a) The plans shall include sufficient information to evaluate the potential impacts of the proposed grading on water resources and the effectiveness and acceptability of measures proposed to minimize soil erosion and prevent off-site sedimentation.
- (b) The approved Erosion and Sediment Control Plans shall be submitted as a part of the Land Disturbance Permit application and as part of the plan submission package for approval by the Berkeley County Planning Commission. The Erosion and Sediment Control Plans shall include, at a minimum, the following information:

A plan at an appropriate scale indicating at least:

(i) Name, address, and telephone number of:

- 1) The owner of the property where the grading is proposed;
- 2) The developer;
- 3) The applicant;

- 4) The person responsible for the preparation of the plan.
- (ii) North arrow and graphic scale based on North American Datum 1983
- (iii) The existing and proposed topography based on North American Vertical Datum of 1988 a minimum of 150 ft. from the parcel boundary. Including all manmade structures and natural features.
- (iv) The proposed grading and earth disturbance including:
 - 1) Surface area involved;
 - 2) Limits of disturbance including limitation of mass clearing and grading whenever possible;
 - 3) Limits of areas where bedrock is to be removed by blasting or hydraulic hammer whenever possible;
 - 4) Total estimated cut and fill volumes; and
 - 5) Separate defined phasing plans showing various stages of construction that may be required based on the plan and schedule of construction.
- (v) Storm drainage provisions, including:
 - 1) Velocities and quantities of the Q2, Q10, Q25 and Q100 flow at outfalls; and
 - 2) Site conditions around points of all surface water discharge from the site;
- (vi) Erosion and sediment control provisions to minimize erosion and prevent off-site sedimentation including:
 - 1) Provisions to preserve topsoil and limit disturbance;
 - 2) Details of grading practices;
 - 3) Design details for structural controls;
 - 4) Details to prevent the site infiltration soil from contamination by sediments during construction;
 - 5) Details to minimize and control dust; and
 - 6) Details to minimize and control track-out of soil onto a public way
- (vii) Details of temporary and permanent stabilization measures including placement of the following statements on the plan:
 - A. Inspection of all erosion and sediment control BMPs within disturbed areas at least once every four calendar days and within 24 hours after any precipitation event greater than 0.25 inches per 24 hour period.
 - A. Repairs or maintenance to BMPs shall be performed within 24 hour. However, permittees must implement alternate BMPs prior to storm events while awaiting repair of the primary enhanced BMP.
 - B. Temporary seeding and mulching within 4 days when areas will not be re-disturbed for more than 14 days.

- C. Permanent seeding and mulching within 4 days of reaching final grade.
 - D. Final stabilization within 4 days after construction has been complete.
- (viii) Computations as may be necessary to show adequate sizing of erosion and sediment control measures.
- (ix) Details of all required NPDES inspections.
- (c) Temporary and permanent seeding specifications, including:
 - (i) Type of seed (mixture) and application rate;
 - (ii) Type of lime and fertilizer and the associated application rates;
 - (iii) Type of mulching, application rate and type of anchoring.
- (d) Sequence of construction describing the relationship between the implementation and maintenance of controls, including permanent and temporary stabilization and the various stages or phases of land disturbance and construction including the installation or conversion of sediment control structures into SWM facilities or MS4 BMP treatment facilities. Any changes or revisions to the sequence of construction must be approved by the Berkeley County Engineer prior to proceeding with construction. The sequence of construction shall, at a minimum, include a schedule and timeframe for the following:
 - (i) Contact West Virginia Miss Utility at 800-245-4848 at least three working days prior to beginning work. Locate all utilities.
 - (ii) Contact WVDEP at 304-822-7266 and Berkeley County Public Service Stormwater District at 304-263-8566 at least three working days prior to beginning work.
 - (iii) Clearing and grubbing as necessary for the installation of perimeter controls
 - (iv) Construction and stabilization of perimeter controls
 - (v) Remaining clearing and grubbing within installed perimeter controls
 - (vi) Road grading
 - (vii) Grading for the remainder of the site;
 - (viii) Utility installation and connections to existing structures
 - (ix) Construction of buildings, roads, and other construction
 - (x) Final grading, landscaping, and stabilization
 - (xi) Installation of stormwater management and MS4 BMP measures

Approval of Berkeley County Public Service Stormwater District prior to removal of sediment controls.
- (e) A statement placed on the plan indicating that;
 - A. On all sites with disturbed areas in excess of one acre, approval by WVDEP shall be requested upon completion of installation of the perimeter erosion and sediment controls, but before proceeding with any other land disturbance or grading.
 - B. Approval shall be requested of WVDEP upon final stabilization of all sites with disturbed areas in excess of one acre before removal of controls.

- C. Approval by the Berkeley County Public Service Stormwater District shall be requested upon completion of installation of the perimeter erosion and sediment controls, but before proceeding with any other land disturbance or grading.
 - D. Approval shall be requested of Berkeley County Public Service Stormwater District upon final stabilization of all sites before removal of controls.
 - E. Certification by the owner or developer that any clearing, grading, construction, or development, or all of these, will be done pursuant to the approved plan and that responsible personnel involved in the construction shall be made aware of such requirements and have a copy of the approved plan and permits at the construction site.
- (4) Modifications to an Erosion and Sediment Control Plan.
- (a) The Berkeley County Engineer may request modifications to an approved plan, request additional items, or cause new plans to be submitted as a result of field inspections revealing the approved plans do not provide adequate protection. Modifications may also be requested by the owner or developer due to unforeseen field conditions. Modifications must be approved by WVDEP and the Berkeley County Engineer.

D. STORMWATER MANAGEMENT PLAN REQUIREMENTS

- (1) All applicants as noted in Article I.D. shall submit a complete Stormwater Management Plan and report to the Berkeley County Engineer for review and approval. Each plan and report submittal shall include the minimum content specified in this Section of the ordinance and meet the minimum stormwater design requirements contained in Article V of this Ordinance.
- (2) The Berkeley County Engineer shall perform a comprehensive review of the applicant's Stormwater Management Plan.
- (3) All Stormwater Management Plans shall be appropriately sealed and signed by a West Virginia Licensed Professional Engineer in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with West Virginia Code Chapter 30, Professions and Occupations, and attendant regulations certifying that the plan meets all submittal requirements outlined in this Ordinance and is consistent with good engineering practice.
- (4) The Stormwater Management plan shall be accompanied by a report that includes sufficient information to evaluate the environmental characteristics of affected areas, the potential impacts of the proposed development on water resources, and the effectiveness and acceptability of measures proposed for managing stormwater runoff.
- (5) The owner shall certify on the drawings that all clearing, grading, drainage, construction, and development shall be conducted in strict accordance with the approved plan.
- (6) The Stormwater Management Plan shall include the following:

- (a) Name, address, and telephone number of all entities and persons having a legal interest in the property
- (b) Tax reference number and parcel number of the property or properties affected, including all adjacent properties.
- (c) Existing and proposed lot lines, buildings, roads, and parking areas
- (d) Existing and proposed drainage areas, including areas necessary to determine downstream analysis for proposed stormwater management facilities
- (e) Existing and proposed utilities, easements, and structural stormwater management and sediment control facilities
- (f) Proposed land use with tabulation of the percentage of surface area to be adapted to various uses
- (g) Clearing and grading limit boundaries
- (h) A 1" = 200' topographical base map of the site, which extends a minimum of 150 feet beyond the limits of the proposed development
- (i) Existing surface water drainage including streams, ponds, culverts, ditches, drainage patterns, and wetlands
- (j) Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the Design Storms (2, 10, 100-year frequencies or as requested). Such calculations shall include the following:
 - i. Description of the Design Storm Frequency, intensity, and duration
 - ii. Time of concentration
 - iii. Soil Curve Numbers (CNs) or Runoff Coefficients
 - iv. Peak Runoff rates and total Runoff volumes for each drainage area.
 - v. Infiltration rates, where applicable
 - vii. Culvert and/or channel capacities
 - viii. Flow velocities
 - ix. Data on the increase in rate and volume of runoff for the specified Design Storms
 - x. Documentation of sources for all computation methods and field test results
 - xi. All profiles shall include flow tabulations for each conduit between structures to include, flow, velocity, manning's coefficient, and the hydraulic grade line.
 - xii. Inlet capacities and gutter flows shall be in accordance with the *West Virginia Division of Highways Drainage Manual*.
 - xiii. All culverts and storm drains shall be designed in accordance with the *West Virginia Division of Highways Drainage Manual*.
- (k) A written or graphic inventory of the natural resources at the site and surrounding area including, forest cover, wetlands, and other native vegetative areas, as it exists prior to the commencement of the project and a description of the Watershed and its relation to the project site

- (l) Environmentally sensitive features (e.g., wetlands, 100-year floodplains, severe slopes, Karst Terrain, threatened and/or endangered species, etc.) that provide particular opportunities or constraints for development
- (m) A stable access route, including rights-of-way and easements, to all SWM features a minimum of 20 ft. in width.
- (n) All necessary construction specifications, including manufacturer details and specifications;
- (o) SWM shall meet all requirements of NRCS-378 pond design criteria and all appropriate sections of the National Engineering Handbook, USAD, Natural Resource Conservation Service.
- (p) Analysis of the impacts of stormwater flows downstream. Flooding, stream channel erosion, and existing culverts shall be analyzed at the direction of the Berkeley County Engineer. Additional storage or controls may be placed on the proposed development to ensure safe conveyance of discharges offsite.
- (q) A sequence of construction;
- (r) A plan, profile, and section views through the centerline of each SWM feature showing existing and proposed grades and all pertinent features at accurate elevations including all hydraulic information;
- (s) Geotechnical properties of soils, for earthen dam embankments, liners, cut-off trenches, and seepage control shall be provided in a soils report or on the drawings detailing specifications and placement methods for all in-situ and borrow material.
- (t) Infiltration testing results performed in accordance Appendix B of the *West Virginia Management and Design Guidance Manual and Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed," version 2.0.*
- (u) Outlet protection information as it applies to the selected method of energy dissipation including: dimensions, depth, geotextile, and stone sizing including flow, velocity, spread, and tail water depth;
- (v) The maintenance access easement shall have a maximum slope of 15% and shall have a minimum unobstructed drive path having a width of 12 feet, appropriately stabilized to withstand maintenance equipment and vehicles (gravel or other all-weather surface). The maintenance access shall extend to the forebay, riser, and outlet of any pond, and to the extent feasible, be designed to allow vehicles to turn around. All slopes to and within any pond embankment shall not exceed 3:1.
- (w) A safety bench extending 10 feet outward from the permanent pool edge to the toe of any pond side slope be provided. The maximum cross-slope of the access bench should be 6%. Access benches are not needed when pond side slopes are 4:1 or flatter, or pool areas less than four ft. in depth.
- (x) Landscaping for all SWM facilities shall be in accordance with Appendix F of the *West Virginia Management and Design Guidance Manual.*

- (y) Wellhead Protection
 - i. Reduce potential groundwater contamination in wellhead protection areas by preventing infiltration of runoff from areas that require a Special Pollution Permit, or provide pretreatment of this runoff for the target pollutants that may discharge from the land use.
 - ii. Wellhead protection may require liner for type "A" and "B" soils.
 - iii. A minimum of two (2) to four (4) feet separation distance of the pond from water table shall be provided.
- (z) Any other information required by the Berkeley County Engineer.

E. MAINTENANCE REQUIREMENTS

- (1) The design and planning of all stormwater management facilities shall include detailed maintenance procedures to ensure their continued function. These maintenance procedures shall be included in the stormwater management plans and must identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance procedures and the need for revisions or additional maintenance procedures shall be included.
- (2) The applicant must ensure access to all stormwater management facilities at the site for the purpose of inspection and repair by securing all maintenance easements needed on a permanent basis by conveying these easements to the Berkeley County Council and the Berkeley County Public Service Storm Water District. These easements shall be recorded and run with the land.
- (3) All maintenance, inspections, and cleaning of stormwater management facilities shall be the responsibility of the property owner, Property/Homeowners Association, and unit owners within a Property/Homeowner's Association. The responsible parties shall be specified in the recorded maintenance agreement.
- (4) Berkeley County Public Service Storm Water District shall ensure that preventative maintenance is performed by reviewing all inspection reports and conducting inspections on stormwater management systems at its discretion.
- (5) Berkeley County Public Service Storm Water District shall provide forms for the conduct of such inspections.
- (6) Inspection and maintenance agreement
 - (a) Prior to the approval of any Land Disturbance (Grading) Permit for which stormwater management is required, the Berkeley County Engineer shall require the applicant and owner to execute an Inspection and Maintenance Agreement binding on all subsequent owners of land served by a private Stormwater Management Facility. (see Appendix C) Reference to this agreement shall be noted on plats and plans and a copy provided for recordation at the Office of the Clerk of the Berkeley County Council.
 - (b) Inspections conducted according to the schedule in Table 1 of this Article, performed on stormwater management facilities to ensure that the facility is

maintained in proper working condition to meet design standards. The applicant or owner is responsible for costs associated with these inspections. Inspection reports are to be submitted to Berkeley County Public Service Storm Water District, within 30 days of the inspection.

- (c) The Inspection and Maintenance Agreement shall be reviewed and approved by the Berkeley County Engineer or an authorized representative prior to approval of the Land Disturbance (Grading) Permit.
- (8) Inspection and maintenance of stormwater facilities
 - (a) The owner and/or party responsible for the maintenance of stormwater management facilities constructed pursuant to this Ordinance shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans.
 - (b) A maintenance schedule shall be developed for the life of any Stormwater Management Facility. This maintenance schedule shall be printed on the approved Stormwater Management Plan. All stormwater maintenance schedules must be adhered to by the owner, Property/Homeowners Association or other responsible entity and included on the deed, Inspection and Maintenance Agreement, plans, offer of sale of real property, and purchase agreement.
 - (c) The party responsible for the maintenance of the stormwater management system shall provide written records of all maintenance and repairs within 30 days of work completion, to the Berkeley County Public Service Storm Water District or an authorized representative.
 - (d) Berkeley County Public Service Storm Water District or an authorized representative shall ensure that preventative maintenance is performed by reviewing all inspection reports for all stormwater management systems. Inspections shall occur according to the following schedule:

TABLE 1

Stormwater Facility Inspection Schedule

1. After the first year of operation
2. Once every year after the first year of operation
3. After any structural maintenance or maintenance in response to a violation takes place (within 30 days)
4. Within 30 days after a 3-inch rainfall within a 24-hour period storm event (2-year, 24-hour storm event)
5. As requested by Berkeley County Public Service Storm Water District or an authorized representative in response to complaints or other notice of possible violations.

- (9) Inspection report requirements (see Appendix E).

- (10) Any homeowners' or business owners' association or property owner, either individual or in concert with others who are responsible for stormwater facility maintenance, must include in their recorded declaration or charter acknowledgement that it cannot dissolve without another entity accepting maintenance responsibility for stormwater facilities. If no other entity accepts responsibility then all property owners who now or in the future possess properties which utilize the stormwater facilities cited in the declaration or charter, shall be jointly and severally liable for compliance with the ordinance in order to be compliant with the stormwater management ordinance. If maintenance and/or inspections are required at Berkeley County Public Service Storm Water District or an authorized representative's expense, the property owners will be charged equally by Berkeley County Public Service Storm Water District or an authorized representative for the cost of such activities.
- (11) Any and all applicable inspection and maintenance requirements under NPDES regulations shall be adhered to.
- (12) All current Stormwater Maintenance Easements held by the County Council of Berkeley County, shall hereafter be enforced by the Berkeley County Public Service Stormwater District. The Berkeley County Public Service Stormwater District is hereby given all authority to inspect, maintain, and repair any stormwater management system where Berkeley County Council currently holds a stormwater maintenance easement.

F. PERMIT APPROVAL PROCEDURE

In order to obtain the Land Disturbance (Grading) Permit approval, all components of the Erosion and Sediment Control Plan, Stormwater Management Plan, and WVDOH permit must be approved in accordance with the Berkeley County Subdivision Ordinance.

ARTICLE IV MODIFICATIONS OF REQUIREMENTS

A. REQUEST FOR MODIFICATION

- (1) This Article is intended to provide a procedure to achieve the water quality and quantity objectives of this Ordinance while providing reasonable flexibility for difficult site conditions and innovative site design approaches.
- (2) The provisions of this Ordinance are the minimum requirements for the protection of the public's health, safety, and welfare, and should be strictly adhered to. Written requests for modifications of these requirements should be granted only where an alternative standard can be demonstrated to provide equal or better results.
- (3) All requests for modifications must be submitted as a plan change in accordance with the Berkeley County Subdivision Ordinance.

B. REQUEST FOR WAIVER OF SITE PLAN

The development of an engineered site plan may be waived by the Berkeley County Engineer if the property owner signs an agreement to follow standard erosion and sediment controls and stormwater management requirements and standards (Residential Permeable Berm template), or other BMPs as determined by the Berkeley County Engineer to achieve the goals and

protection in this Ordinance. Such a waiver shall be based on the review, consideration, and decision of the Berkeley County Engineer. This waiver may only be applied obtained for the development or redevelopment of a single family residence on a single lot with less than one acre of land disturbance.

ARTICLE V STORMWATER MANAGEMENT DESIGN CRITERIA

A. DESIGN MANUAL AUTHORITIES

1. USDA NRCS Conservation Practice Standard 378 as amended.
2. USDA NRCS National Engineering Handbook as amended.
3. West Virginia Stormwater Management and Design Guidance Manual as amended.
4. Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed," version 2.0 as amended.
5. West Virginia Division of Highways Drainage Manual, 3rd ed. (Charleston, WV: West Virginia Department of Transportation, Division of Highways, Engineering Division, Hydraulic and Drainage Unit as amended.
6. West Virginia Erosion & Sediment Control Best Management Practices Manual, as amended.
7. WV/NPDES General Water Pollution Control Permit WV0115924 Small Municipal Storm Sewer System (January 2019) or current renewal permit.
8. Berkeley County Subdivision Ordinance

B. GENERAL REQUIREMENTS

- (1) All applicants shall design stormwater management facilities to achieve post-development hydrologic conditions that are consistent with pre-development conditions and to improve runoff conditions for redevelopment through the use of LID practices or BMPs cited in documents identified in the design manuals referenced herein.
- (2) The site shall maintain, as closely as possible, the pre-development infiltration processes and rates by implementing infiltration close to the source of runoff.
- (3) Structural and nonstructural stormwater management practices that promote or otherwise make best possible use of on-site infiltration shall be considered first.
- (4) Infiltration areas shall be designed to encourage broad and even infiltration patterns similar to what existed in pre-development conditions.
- (5) Above-ground infiltration facilities shall be as shallow as possible while still complying with this Ordinance.
- (6) Site hydrology and natural infiltration patterns shall guide site design, construction, and vegetation decisions.
- (7) Site design shall implement runoff reduction techniques to reduce the amount of stormwater that must be collected, conveyed, and treated by stormwater management facilities including buffers.

- (8) Any project that discharges or proposes to discharge to any surface water or groundwater that is used as a source of drinking water must comply with all applicable requirements relating to source water protection.
- (9) The recharge volume shall be in accordance with the soil types of the site and the *West Virginia Stormwater Management and Design Guidance Manual* or any documents referenced therein.
- (10) Stormwater shall be infiltrated and/or discharged within the same drainage area of the stream receiving the Runoff prior to development.
- (11) The Berkeley County Engineer may require more than the general requirements specified in the Ordinance if hydrologic or topographic conditions warrant or if flooding, stream channel erosion, or water quality problems exist downstream from a proposed project due to the unique characteristics of the receiving area. Modifications to the minimum controls of the site being developed can be made to keep the existing runoff conditions to reduce or maintain the current flooding, stream erosion, or water quality issues downstream.

C. STORMWATER QUANTITY CRITERIA

- (a) For all land development and redevelopment projects, the post-development peak discharge rate shall not exceed the pre-development peak discharge rate for the 2-year and 10-year storm events.
- (b) The channel protection storage volume (Cpv) shall be the 1-year storm event where the 24-hour rainfall depth shall be 2.5 inches.
- (c) The overbank flood protection volume (Qp) shall be the 10-year storm event. The overbank flood protection volume (Qp) shall be the 10-year post-development peak discharge being discharged at the 10-year predevelopment peak rate.
- (d) The extreme flood volume (Qf) shall be the 100-year storm event. This is the storm event which a structure must be capable of passing safely.
- (e) Areas mapped in flood hazard zones (Inwood, Pikeside, etc.) as determined by the County Engineer shall be required to detain the 10-year event storm with zero discharge. If this is not feasible then the entire 10-year event volume shall be stored and the 10-year event peak discharge shall be released at less than the 2-year event pre-development peak discharge rate. In Addition, the 25-year storm shall be evaluated to ensure that the post development peak discharge is less than the 25-year pre-development peak discharge.
- (f) A hydrologic analysis for calculating the water shed runoff for both the pre-development and post-development conditions shall be provided and based on the 24-hour rainfall event. This may be done using the NRCS methodologies (i.e., TR-20 & TR-55, etc.) that takes into consideration the ground cover, time of concentration, area of the watershed, and the 24-hour rainfall amount and rainfall distribution for the region; or the modified

calculation method provided in Appendix E of the West Virginia Stormwater Management and Design Guidance Manual to help prevent overestimations under the TR-20 and TR-55 methods; or any other acceptable methodology in the public domain and approved by the Berkeley County Engineer.

- (g) Wooded sites shall use a ground cover of woodland in good condition. Portions of a Site having more than one (1) viable tree of a DBH of six (6) inches per 1,500 square feet shall be considered wooded where such trees existed within three (3) years of application.
- (h) Non-structural quantity control and conveyance methods should be utilized whenever possible.
- (i) The applicant must demonstrate that adequate downstream conveyance facilities are present and that the discharges do not impact property adversely from the pre-development condition.
- (j) Peak flows shall be attenuated to prevent high runoff rates and subsequent flooding of the receiving stream. Karst reduction factors shall be applied in accordance with Table 2 below from the current version of the Chesapeake Stormwater Network Technical Bulletin No.1:

Table 2

MINIMUM ADJUSTMENT OF PREDEVELOPMENT RUNOFF FOR KARST GEOGRAPHY			
% Karst	Storm Frequency (Year)		
	2	10	100
100	0.33	0.43	0.50
90	0.34	0.46	0.56
80	0.38	0.51	0.62
70	0.47	0.58	0.68
60	0.55	0.66	0.74
50	0.64	0.73	0.80
40	0.73	0.80	0.85
30	0.82	0.86	0.89
20	0.91	0.92	0.93
10	1.00	0.98	0.97
0	1.00	1.00	1.00

- (k) Figures for determining the rainfall amounts for the Design Storms shall be obtained from the National Oceanic and Atmospheric Administration (NOAA) point precipitation frequency estimates. The NOAA site for these estimates is provided in Table 3 below:

Table 3

Rainfall for 24-hour Storm Duration

Average Recurrence Interval (Years)	PDS-based precipitation frequency estimates with 90% confidence intervals (inches)*
1	2.38 (2.19-2.57)
2	2.85 (2.64-3.09)
5	3.55 (3.27-3.84)
10	4.12 (3.80-4.45)
25	4.96 (4.54-5.34)
50	5.67 (5.16-6.10)
100	6.43 (5.82-6.91)
Source: NOAA Atlas 14, Volume 2, Version 3	
Station Name: MARTINSBURG FAA AP (Site ID: 46-5707)	
Type II synthetic storm distribution must be used.	
Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).	
*The numbers in parenthesis represents the upper and lower bounds of the 90% confidence interval.	

D. STORMWATER QUALITY CRITERIA

1. Stormwater management measures shall capture and treat the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. Runoff reduction can be achieved through a combination of Low Impact Development (LID) practices and Best Management Practices (BMPs). This one inch of rainfall must be 100% retained and managed with no discharge to surface water. This can be achieved through on site utilization of practices that alone or combined will capture the first one inch of rainfall runoff volume. Extended filtration practices that are designed to capture and retain up to one inch of rainfall may discharge volume in excess of the first inch through an under drain system.
2. LID is a stormwater management method that is modeled after nature. LID is unique to each site and uses both structural and nonstructural practices to control runoff close to where it falls. LID is recommended as the standard stormwater management practice.
 - a. The use of LID and BMPs in conjunction with traditional stormwater management shall control stormwater runoff at the source and more closely approximate pre-development runoff conditions.
 - b. LID practices include among others:
 - i. Impervious surface reduction
 - ii. Green roofs and Rooftop gardens
 - iii. Rooftop disconnection
 - iv. Rain barrels, rain tanks, and cisterns
 - v. Rain gardens and bioretention
 - vi. Vegetated swales, grass channels, buffers, and strips
 - vii. Tree preservation, and reforestation
 - viii. Permeable pavers, and porous concrete / pavement
 - ix. Sidewalk storage
 - x. Soil amendments
 - xi. And other practices that alone or combined will capture the first one inch of rainfall runoff volume.

- c. LID stormwater management plans developed consistent with the requirements of this subsection shall satisfy the water quality and quantity performance criteria of this ordinance.
 - d. The design criteria, hydrologic analysis, and computational procedures for LID stormwater management design plans shall be those of the latest edition of the West Virginia Stormwater Management and Design Guidance Manual or any documents referenced therein.
 - e. LID stormwater management design plans shall not conflict with existing state or local laws, ordinances, regulations, or policies.
 - f. Stormwater from parking lots may be infiltrated into the groundwater, provided that they do not meet the definition of a Class V well with regard to stormwater. A list of stormwater BMPs that are considered Class V wells is found at the following link: [http://www.dep.wv.gov/WWE/Programs/stormwater/MS4/permits/Documents/ClassV_Well_IdentificationGuide\[1\].pdf](http://www.dep.wv.gov/WWE/Programs/stormwater/MS4/permits/Documents/ClassV_Well_IdentificationGuide[1].pdf)
 - g. If the BMP is considered a Class V well, an Underground Injection Control Permit (UIC Permit) will be required from the DEP.
3. Some developments will meet incentive criteria and thus receive a reduction in the amount of stormwater that must be managed. If a site meets any of the following criteria, a reduction may be applied.
 - a. A reduction of 0.2 inches from the one inch runoff volume reduction standard may be applied to the following types of development:
 - i. Redevelopment
 - ii. Brownfield redevelopment
 - iii. High density (>7 units per acre)
 - iv. Vertical density (floor to area ratio of 2 or > 18 units per acre)
 - v. Mixed use and transit oriented development (with ½ mile of transit)
 - b. Reductions may not exceed 0.75 inches. That means sites meeting four or more of the incentives will be required to manage on-site a minimum of 0.25 inches. It is at the discretion of the Berkeley County Engineer to allow incentives.
4. Stormwater quantity control, including conveyance, should provide for stormwater quality control. If stormwater quantity control does not provide for stormwater quality control, then a BMP shall be utilized prior to the runoff entering the quantity control facility.
5. Stormwater quality control facilities shall reduce solids, sediment, nutrients, and other pollutants from the stormwater. This shall be presumed to occur when each of the following criteria is met:
 - a. The facility or facilities are sized to capture the volume of the first one inch of water at the site.
 - b. The facility is designed per the requirements and engineering calculations in the latest edition of the West Virginia Stormwater Management and Design Guidance Manual or any documents referenced therein.
 - c. The facility is constructed in accordance with all approved plans and permits.
 - d. The facility is maintained per an approved Inspection and Maintenance Agreement.
 - e. Pollutant removal through utilization of BMPs can be estimated based on the spreadsheet provided through the West Virginia Department of Environmental Protection.
 - f. Where a stormwater management system discharges into a water body with an approved TMDL, and the TMDL contains requirements for control of pollutants from the MS4 stormwater discharges, then the Stormwater Management Plan must include BMPs specifically targeted to achieve the waste load allocations prescribed by the TMDL.

- g. Total Dissolved Solid (TDS) control standards shall be achieved through NPDES Regulations, in any, as prescribed in the NPDES Permit.
- 6. Water quality improvements shall be achieved in conjunction with or as part of infiltration design.
- 7. Infiltration of runoff shall be as close to the source of runoff as possible via infiltration testing and analysis of infiltration rates. Preference shall be given to a combination of surface and subsurface infiltration measures.
- 8. Stormwater discharges from land uses or activities with a high potential for pollutant loadings (Stormwater Hotspots) identified in Table 2, require the use of specific filtering or bioretention BMPs prior to infiltration. Stormwater control from these hotspots shall be controlled by the following:
 - a. Stormwater Pollution Prevention Plan (SWPPP) - The SWPPP outlines pollution prevention and treatment practices that will be implemented to minimize polluted discharges from the Site. All SWPPPs shall be prepared following the guidelines in the West Virginia NPDES General Permit regulations even if an NPDES permit is not required. The SWPPP shall be required in addition to a Stormwater Management Plan as required in Article III.A.(2).
 - b. Restricted Infiltration - A minimum of 50% of the total water quality volume must be treated by a filtering practice prior to any infiltration. Portions of the site that are not associated with the hotspot generating area should be diverted away and treated by an acceptable stormwater BMP.
 - c. Infiltration Prohibited - In these cases, an alternative stormwater practice such as closed bioretention, sand filters, or constructed wetland must be used to filter the entire water quality volume before it reaches surface or groundwater.

Table 4

Potential Stormwater Hotspot Operation	SWPPP Required	Restricted Infiltration	Infiltration Prohibited
Facilities with NPDES industrial permits	Yes	O	O
Public works yard	Yes		!
Auto and metal recyclers/scrap yards	Yes		!
Petroleum storage facilities	Yes		!
Highway maintenance facilities	Yes		!
Wastewater, solid waste, composting facilities, dumpster & generator pads	Yes		!
Industrial machinery and equipment	Yes	!	
Trucks and trailers	Yes	!	
Aircraft maintenance areas	Yes		!
Fleet storage areas	Yes		!
Parking lots (40 or more parking spaces)	Yes	!	

Gas stations	Yes		!
Highways (2,500 ADT)	Yes	!	
Construction business (paving, heavy equipment storage and maintenance)	Yes	!	
Retail/wholesale vehicle/equipment dealers	Yes	!	
Convenience stores/fast food restaurants	Yes	!	
Vehicle maintenance facilities	Yes		!
Car washes (unless discharged to sanitary sewer)	Yes		!
Nurseries and garden centers	Yes	!	
Golf courses	Yes	!	

9. Natural wetlands shall not be used to meet minimum requirements. When used at the end of an outfall pipe, the velocity shall not exceed two (2) feet per second for the two (2)-year storm event and it shall be demonstrated that the discharge will not create erosion.
10. Stormwater quality management practices shall be designed to capture and treat the first 1 inch of stormwater runoff except where described otherwise in Article V, D(1)(b) where specific types of development may permit reduced capture quantities.
11. Stormwater quality improvement shall be provided for on-site drainage areas not otherwise addressed by infiltration practices.
12. Infiltration methods should be designed to infiltrate all of the stored volume within 48 hours of the storm event.
13. All inflows to an infiltration area shall utilize conveyance methods which reduce sediment or be treated to prevent the discharge of sediment into the infiltration practice.
14. During Site construction, the infiltration area shall be protected from compaction, storage of fill, or construction materials. Where sediment transport in the stormwater runoff is anticipated to reach the infiltration system, appropriate permanent measures to prevent or collect sediment shall be installed prior to discharge to the infiltration system.
15. If a high water table or other constraints exist, the following hierarchy should be followed in order of preference:
 - a. BMPs that capture and infiltrate or permanently retain on-site the total volume of the first 1.5-inches
 - b. BMPs that capture and infiltrate or permanently retain on-site the total volume of the first 1.5-inches
 - c. Infiltration practices shall be designed that capture and infiltrate at least the volume of the first 0.5 inches of runoff from all impervious areas. If the volume of runoff is greater than the volume to be infiltrated or retained, the difference should be treated by an acceptable BMP. If in Karst terrain, there shall be a 2' vertical separation from the bottom of the BMP to the water table and a 3' vertical separation from the bottom of the BMP to Lithic Bedrock

E. SOIL STUDIES AND KARST TERRAIN REQUIREMENTS

1. Karst Terrain Considerations
 - a. Developers and designers shall minimize the amount of Impervious Cover created at the Site to reduce the volume and velocity of stormwater Runoff generated.
 - b. Developers and designers shall place a high priority on preserving as much of the length of natural Karst swales present on the Site to increase Infiltration and accommodate flows from major storm events.
 - c. Developers and designers should consider small-scale LID practices as prescribed in the latest version of the Chesapeake Stormwater Network Technical Bulletin No. 1, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed."
 - d. An underground injection control permit is not required for stormwater management ponds unless there is a sinkhole in the pond or if the discharge from the pond discharges into a sinkhole. Liners are not required in all ponds, but a liner may be required by the WVDEP or the Berkeley County Engineer.
 - e. Infiltration into Karst Terrain is limited unless it is determined that the possibility for subsidence and sinkholes is minimal as determined by a professional geologist or professional engineer. Concentrated flows, points of discharge, and/or ponding are discouraged in these areas.
 - f. Peak flows shall be attenuated to prevent high runoff rates and subsequent flooding of the receiving stream.
2. Soil infiltration testing shall be completed for all developments or redevelopments that are proposing to utilize infiltration methods for stormwater management. Soil infiltration testing shall be performed to determine the rate at which stormwater will permeate into the ground, thus preventing stormwater runoff.
3. Soil infiltration testing shall be performed at a depth of 3' below the bottom of the proposed infiltration area in accordance with Appendix B of the *WV Stormwater Management and Design Guidance Manual* and the *Chesapeake Stormwater Network Technical Manual No. 1*.
4. The location and method of soil infiltration testing should be determined using the following tests for use in determining soil infiltration rates. Other tests may be allowed at the discretion of the Berkeley County Engineer. The Geotechnical Report shall include a detailed description of the test method and published source references:
 - a. Tube Permeameter Method (ASTM D 2434);
 - b. Double-Ring Infiltrometer (ASTM D 3385);
 - c. Basin flooding test for bedrock (refer to Section 5 of this Appendix);
 - d. Percolation Test (64CSR47 - §64-47-6.6.3); or
 - e. Other constant head permeability tests that utilize in-situ conditions and accompanied by a recognized published source reference. In accordance with Appendix B of the *WV Stormwater Management and Design Guidance Manual*.
5. In regions underlain by Karst Terrain, a preliminary site investigation regarding site-specific conditions shall be completed. If necessary, the preliminary site investigation shall be followed by a detailed site investigation.
 - a. The preliminary site investigation(s) shall be completed as noted in the latest version of the *Chesapeake Stormwater Network Technical Bulletin No. 1*, "Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed," and Appendix B of the *WV Stormwater Management and Design Guidance Manual*.
 - b. All necessary site investigations as noted in the above-referenced documents shall be completed by a qualified professional engineer or geologist, licensed by the State of West Virginia and experienced in working in Karst Terrain.

F. LANDSCAPING

1. The applicant must present a landscaping plan as part of the Stormwater Management Plan in accordance with Appendix F, WV Stormwater Management and Design guidance Manual, describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater facilities.
2. The landscaping plan must describe who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved and maintained.
3. This plan must be prepared by a qualified individual familiar with the selection of emergent and upland vegetation appropriate for the selected BMP and the conditions plants are exposed to by the BMP operation.
4. Landscaping shall be required in and around all constructed stormwater management BMPs with a minimum surface area of 1,000-SF.
5. Woody vegetation shall not be planted on the embankment or allowed to grow within 15 feet of the toe of the embankment and 24 feet from the principal spillway structure.

G. RIPARIAN BUFFERS

See Section 402.5.5 Stream Buffers of the Berkeley County Subdivision Ordinance

ARTICLE VI CONSTRUCTION INSPECTION**A. INSPECTIONS DURING CONSTRUCTION**

- (1) Periodic inspections of the stormwater management facilities during construction shall be conducted by Berkeley County Public Service Storm Water District to ensure that work is being conducted in accordance with the sediment and erosion control plan or the Stormwater Management Plan. Construction inspections shall utilize the approved Stormwater Management or Sediment Control Plan to establish whether the construction is in compliance.
- (2) All inspections shall be documented by a written report and include each of the following
 - (a) The date of the inspection
 - (b) The project location
 - (c) A statement regarding compliance with the approved plans
 - (d) Documentation of any variations from the approved plans
 - (e) Any other variations or violations regarding the on-site conditions as compared to the approved plans
- (3) The applicant shall be notified in writing of any violations and the required corrective actions.
- (4) For enforcement purposes, Berkeley County Public Service Storm Water District may utilize any combination of the following:
 - (a) A notice of violation that specifies that specifies what needs done to come into compliance.
 - (b) A stop-work order if compliance is not met.

- (c) A civil action or criminal prosecution may be brought against any person in violation of this Ordinance.

B. POST-CONSTRUCTION INSPECTIONS

- (1) Upon completion of a project the applicant is required to certify that the completed project is in accordance with the approved Stormwater Management Plan.
- (2) All applicants shall submit "As-Built" plans, Engineer's SWM Certification, and a checklist as required by the Berkeley County Subdivision Ordinance to the Berkeley County Engineer.
- (3) Berkeley County Public Service Stormwater District shall periodically inspect all post-construction stormwater management facilities to ensure compliance with the stormwater management plans.

ARTICLE VII ENFORCEMENT AND PENALTIES**A. GENERAL PROCEDURES**

Any failure to comply with the requirements of this Ordinance or the requirements of an approved Stormwater Management Plan or permit may be subject to the enforcement actions outlined in this article. Any such action or inaction that is continuous with respect to time is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. Any such action or inaction that is deemed to be an imminent or substantial risk to human health or the environment may result in issuance of a stop work order in accordance with Section C and requiring immediate cessation of work until the matter is resolved. The imposition of any of the penalties described below shall not prevent such equitable relief.

B. VIOLATIONS

- (1) When a person or persons has failed to comply with the terms and conditions of an approved Land Disturbance (Grading) Permit, or the provisions of this Ordinance, Berkeley County Public Service Storm Water District shall issue a written notice of violation and may also issue a Stop-Work Order pursuant to Article VII Section C., to the applicant or responsible party. Method of service shall be satisfied by either hand delivery of notice upon the applicant or responsible party, or by sending notice to applicant or responsible party via first class mail to the address provided within permit documents or obtained from records available to Berkeley County Public Service Storm Water District.
- (2) When a person or persons is engaged in an activity covered by this Ordinance without having Land Disturbance (Grading) Permit approval for such, a Stop-Work Order shall issue and a notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.
- (3) A Notice of Violation shall contain the following information:
 - (a) The name and address of the landowner or the person responsible for the activity

- (b) The physical address, parcel identifier, and location of the activity and a description of the activity
- (c) A statement that explains the violation
- (d) A written statement explaining how to bring the action or inaction into compliance with the approved Land Disturbance Permit, Stormwater Management Plan, or the Ordinance, and the deadline for compliance.
- (e) Penalty or penalties that may be assessed.
- (f) A statement that the determination of violation may be appealed through a 2 step process.
 - (i) An appeal may be submitted to Berkeley County Public Service Storm Water District within twenty (20) days of the Notice of Violation issuance.
 - (ii) If, upon Berkeley County Public Service Storm Water District review the issue remains unresolved the appeal will be presented to the Berkeley County Circuit Court.

C. STOP-WORK ORDERS

- 1) Berkeley County Public Service Storm Water District may issue a stop-work order that shall be posted visibly on the property, and a copy thereof served on the applicant or other responsible person. The stop-work order shall remain in effect either until the applicant has cured the violation or violations described therein or the Berkeley County Public Service Storm Water District Board has lifted the Stop-Work Order following a hearing.
- 2) If the violation is deemed by the Berkeley County Public Service Storm Water District representative to be an imminent and substantial endangerment to human health or the environment, the representative may implement the Stop-Work Order upon issuance through service to any representative of the operator present on site.
 - (a) Upon receipt of a Stop-Work Order that resulted in immediate cessation of work, the recipient may appeal the Order to the Berkeley County Public Service Storm Water District.
 - (b) within 5 (five) business days of filing the appeal, the Berkeley County Public Service Storm Water District shall convene a hearing at which the appellant shall be afforded the opportunity to present evidence to lift the Stop-Work Order.
- 3) The stop-work order may be modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.
- 4) Any individual(s) that continue working at the subject property after a stop-work order is issued, except for the performance of authorized remedial measures, may be charged and may be arrested by the Berkeley County Sheriff's Department for maintaining a public nuisance. In addition, notice of the violation shall be submitted to the owner and the applicable licensing board, in any.

- 5) Anyone who removes or tampers with the posted stop-work order shall be charged and may be arrested by the Berkeley County Sheriff's Department for destruction of property.
- 6) Stop-work orders may be removed by Berkeley County Public Service Storm Water District once overall compliance is demonstrated.

D. DISAPPROVAL OF SUBSEQUENT PERMITS

As long as a violation of this Ordinance continues and remains uncorrected, Berkeley County may withhold or disapprove any request for permit or development approval or authorization required by this Ordinance, the Subdivision and Land Development Ordinance, or a building code regulation for the land on which the violation occurs and any other permits under Berkeley County Council's jurisdiction.

E. HOLDS ON USE AND OCCUPANCY PERMITS

Berkeley County may refuse to issue any use and occupancy (U&O) permit for the building, tenant area, or other improvements constructed or being constructed on the Site and served by the stormwater practices in question until the applicant has cured the violations described therein.

F. SUSPENSION, REVOCATION, OR MODIFICATION OF PERMIT

The Berkeley County Engineer may suspend or revoke the permit authorizing the Land Development project. A suspended or revoked permit may be reinstated after the applicant or other responsible person has cured the violations described therein.

G. CIVIL AND CRIMINAL PENALTIES

Any person violating the provisions of this Ordinance or any of the requirements thereof, shall be found guilty of a misdemeanor and prosecuted in accordance with state and local laws, to include but not limited to the following:

- (1) When found guilty of a misdemeanor and upon conviction thereof, shall be subject to a fine of not less than five hundred dollars (\$500.00) nor more than five thousand (\$5,000.00) for each and every violation with costs imposed in the discretion of the court.
- (2) Each day that the violation continues shall be a separate offense.
- (3) In addition to other remedies described herein, Berkeley County Public Service Storm Water District, or the Berkeley County Engineer, may seek injunctive relief or other appropriate action or proceedings at law or equity for the enforcement of this Ordinance or to correct violations of this Ordinance.

H. PROCEDURES

- (1) When a violation of this Ordinance occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint shall state fully the alleged violation and the basis thereof, and shall be filed with Berkeley County Public

Service Storm Water District, which shall record the complaint. Berkeley County Public Service Storm Water District shall subsequently investigate the complaint. If Berkeley County Public Service Storm Water District determines that a violation should be prosecuted, it shall submit its findings to the Prosecuting Attorney of Berkeley County.

APPENDIX

A. COMPLIANCE REQUIREMENT (H) OF THE CONSENT DECREE WITH THE UNITED STATES OF AMERICA, THE STATE OF WEST VIRGINIA, THE BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT, AND THE BERKELEY COUNTY PUBLIC SERVICE STORMWATER DISTRICT

H. Berkeley MS4 Program

66. No later than three months after the Effective Date, the Storm Water District shall submit to EPA a summary of the amounts necessary to fully fund the Berkeley MS4 Program. This summary shall include, at a minimum: (a) yearly total cost to operate the Berkeley MS4 Program; (b) yearly costs of each employee position; (c) yearly costs of implementing and maintaining GIS maps; (d) yearly costs of equipment expenses such as trucks, gas, meters, tools, and software; (e) costs of any planned or necessary infrastructure projects related to MS4; and (f) any other relevant costs.

67. No later than six months after the Effective Date, the Storm Water District shall conduct stormwater monitoring at a minimum of one representative outfall in accordance with all requirements of the MS4 Permit.

68. No later than one year after the Effective Date, the Storm Water District shall develop an MS4 Manual in accordance with the requirements of Appendix D and submit the Manual to EPA for approval.

B. MS4 MANUAL REQUIREMENTS FROM THE CONSENT DECREE WITH THE UNITED STATES OF AMERICA, THE STATE OF WEST VIRGINIA, THE BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT, AND THE BERKELEY COUNTY PUBLIC SERVICE STORMWATER DISTRICT

MS4 MANUAL REQUIREMENTS

1. No later than one year from the Effective Date, the Storm Water District shall develop and submit to EPA for approval an MS4 Manual. The MS4 Manual shall detail general programmatic requirements and include plans for implementing each MCM identified in the MS4 Permit, along with milestones appropriate for each MCM and a schedule for implementation of each milestone. The Manual must provide for complete implementation of the Berkeley MS4 Program within five years of the Effective Date. Any changes to the Manual after its approval by EPA must also be submitted to EPA for approval.

2. Each plan for compliance with an MCM shall include: (a) a list of all personnel required to implement the MCM; (b) the responsibilities and duties of each personnel responsible for implementing the MCM; and (c) an identification of the topics and frequency of required training under the MS4 Training Program identified in Paragraph 69 of the Consent Decree for each personnel responsible for implementing the MCM.

3. In addition, the following requirements apply:

a. The plan for complying with MCM 1 (Public Education and Outreach) of the MS4 Permit shall include:

i. A list of all individuals and entities that have potential to affect stormwater quality (the “Target Audiences”). For each Target Audience, identify the size of the audience, pollutants of concern, and the location(s) of facility(s) if applicable. At a minimum, the following Target Audiences shall be listed:

1. Residents;
2. Engineers, contractors, developers, review staff, and land use planners;
3. Businesses;
4. Industries that have stormwater permits or that have the potential to affect stormwater discharges;
5. Elected officials, policy makers, and County planning staff;
6. Homeowners, landscapers, and property managers; and
7. The Storm Water District’s staff, employees, and contractors.

ii. Identification of an education and outreach strategy for each Target Audience identified in the plan for complying with MCM 1, including a description of the rationale for why the identified education and outreach strategy is applicable to the Target Audience. For any pollutants of concern identified, the strategy must document how the education and outreach strategy will address the pollutants with the Target Audience. As part of the education and outreach strategy, the Storm Water District shall have a method of evaluating the effectiveness of the Storm Water District’s education and outreach strategy for each targeted audience;

iii. Procedures for maintaining a separate electronic file with documentation summarizing feedback received as a result of the public education and outreach efforts conducted by the Storm Water District in accordance with the requirements of the MS4 Permit; and

iv. Procedures for retaining all records of public education and public outreach activities conducted in accordance with the requirements of the MS4 Permit.

b. The plan for complying with MCM 2 (Public Involvement and Participation) of the MS4 Permit shall include the following:

- i. A link on the Storm Water District's website to the MS4 Manual and contact information for the appropriate personnel so that the public can request further information regarding the Manual;
- ii. Information on the Storm Water District's website identifying how the public can participate in stormwater management in accordance with the requirements of MCM 1 of the MS4 Permit. This information shall also include contact information for the requisite personnel to allow the public to inquire further as to how they may participate in stormwater management;
- iii. An online form for submitting comments and a process for consideration of public comments on the Storm Water District's Stormwater Management Plan or its MS4 Manual; and
- iv. A method of communication for informing the public about upcoming public participation opportunities in accordance with the requirements of the MS4 Permit.

c. The plan for complying with MCM 3 (Illicit Discharge Detection and Elimination ("IDDE")) of the MS4 Permit shall include the following:

- i. Map(s) of the Storm Water District's storm sewer system in accordance with the requirements of the MS4 Permit, along with a detailed plan for developing an electronic map showing:
 1. Priority areas likely to have illicit discharges;
 2. Evaluation of land uses associated with business/industrial activities;
 3. Previous complaint locations;
 4. Evaluation of the storage of large quantities of materials that could result in spills; and
 5. Any other information required under the MS4 Permit.
- ii. A strategy to maximize reduction of pollutants of concern to 303(d) or TMDL receiving waters and a strategy to correlate data from field assessments to 303(d) or TMDL receiving waters in accordance with the requirements of the MS4 Permit;
- iii. Procedures for IDDE inspections and screenings in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances;
- iv. A response procedure for illicit discharges found by or reported to the Storm Water District, including:
 1. A procedure for investigating any information suggesting illicit discharges within 15 Days. Under this requirement, the Storm Water District shall identify the source of the discharge, connections, nature and volume of the discharge, and party responsible for the discharge, if known;

2. A procedure for containing illicit discharges; and

3. A procedure for enforcement against illicit discharges, including escalating enforcement procedures, in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances;

v. A procedure for responding to, identifying, and eliminating illicit connections, including the prioritization of illicit connections that pose an imminent threat to water quality, in accordance with the requirements of the MS4 Permit;

vi. A process for annually reviewing IDDE ordinances or regulatory mechanisms and providing necessary revisions to the Berkeley County Council for review and ratification;

vii. An electronic system for documenting IDDE calls received and follow-up actions taken to eliminate pollution; and

viii. Implementation of an electronic calendar. The calendar will be updated yearly with tentative dates of activities, as well as regularly with all of the following information:

1. dates of annually reviewing IDDE ordinances;

2. dates of submittal of proposed IDDE ordinance changes to Berkeley County Council for review and ratification;

3. inspections of priority outfalls;

4. dry weather screenings;

5. field assessment of at least two water bodies and one every year thereafter; and

6. investigations of any information suggesting pollution, to be scheduled within fifteen Days of receipt of information.

d. The plan for complying with MCM 4 (Controlling Runoff from Construction Sites) of the MS4

Permit shall include the following:

i. A process for annually reviewing and proposing updates to relevant Berkeley County Council Ordinances or regulatory mechanisms that address stormwater runoff from construction sites in accordance with the requirements of the MS4 Permit;

ii. A process to train construction site operators on how to prepare a stormwater pollution prevention plan. The Storm Water District shall also provide the operators with a sample stormwater prevention plan that the operators can utilize to develop their own plan;

iii. An annual process to review and address any repeated noncompliance identified at construction sites with development of training materials or procedures to ensure further non-compliance is reduced in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances;

iv. An application process to track construction sites and document sediment and erosion control measures as required under the MS4 Permit;

v. A process for plan review and site inspections. This shall include:

1. A process for plan review of construction sites;

2. Identification of priority sites for inspections and enforcement, including the prioritization of inspections of projects located in sewersheds that discharge to 303(d) or TMDL waters; and

3. Procedures for inspecting permitted sites during construction to verify proper installation and maintenance of erosion and sediment controls. Also include copies of inspection checklists or inspection templates if used;

vi. . Enforcement strategy to respond to issues of non-compliance in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances;

vii. 2An electronic system of storing all records related to construction activities, including inspection reports, warning letters, and enforcement documentation in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances; and

viii. Implementation of an electronic calendar. The calendar will be updated yearly with tentative dates of activities, as well as regularly with all of the following information:

1. dates of annually reviewing ordinances;

2. dates of submittal of proposed ordinance revisions to the Berkeley County Council for review and ratification;

3. coordination of plan review of construction sites;

4. inspections of permitted sites during construction;

5. an annual process to review any repeated non-compliance identified at construction sites in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances; and

6. an annual summary of inspections and enforcement activities for construction activities noted herein.

e. The plan for complying with MCM 5 (Controlling Runoff from New Development and

Redevelopment) shall include the following:

i. Procedures for project review and approval, inspection, and enforcement in accordance with the requirements of the MS4 Permit. This shall include:

1. A plan for reviewing all new and redevelopment projects to control stormwater discharge rates, volumes, velocities, durations, and temperatures;

2. A maintenance agreement and maintenance plan for all development projects subject to long term stormwater controls. For privately-owned stormwater structures, procedures for maintaining copies of the maintenance agreements and maintenance plans that ensure privately-owned stormwater structures are properly maintained in accordance with the requirements of the MS4 Permit;
 3. A process for reviewing, on an annual basis, whether property owners or operators have provided verification of maintenance for approved stormwater management practices;
 4. An electronic tracking system for stormwater management practices at new development and redevelopment projects, in accordance with the requirements of the MS4 Permit;
 5. Procedures for maintaining copies of inspection reports of stormwater BMPs, in accordance with the requirements of the MS4 Permit; and
 6. An enforcement and response plan to ensure stormwater BMPs are properly maintained in accordance with the requirements of the MS4 Permit and any additional requirements under applicable Berkeley County Council Ordinances;
- ii. A strategy to incorporate watershed protection elements into new development and redevelopment projects in accordance with the requirements of the MS4 Permit. As part of this strategy, the Storm Water District will develop resources that can be provided to new development and redevelopment owners/operators. The strategy shall include:
1. A process to annually review watershed protection elements as detailed in the MS4 Permit. As part of this process, the Storm Water District shall also include a process for how it intends to present the need for inclusion of those elements in the local ordinances and/or regulations to ensure enforcement of these elements on new development and redevelopment sites to the Berkeley County Council;
 2. A list of goals to incorporate, implement, assess, and enforce watershed protection elements in the MS4 Permit and how it intends to complete said goals during the term of the MS4 Permit;
 3. A plan to include site and neighborhood design elements in tandem with watershed protection elements, in accordance with the requirements of the MS4 Permit; and
 4. A strategy for reducing impervious surfaces, in accordance with the requirements of the MS4 Permit;
- iii. Identification of “Hot Spots,” in accordance with the requirements of the MS4 Permit;
- iv. For any redevelopment projects for existing public streets or parking lots, evaluate the need for runoff reduction BMPs to ensure 100% runoff reduction requirements, and, if no BMPs will be implemented, provide justification for not using BMPs for these projects in the annual report;
- v. A plan to address projects that cannot meet 100% of the runoff reduction requirements at their site and must implement alternative approaches, in accordance with the requirements of the MS4 Permit. This shall include:

1. a process for requesting justification for alternative approaches;
2. an inventory of appropriate mitigation projects; and
3. if payment in lieu of projects is submitted, include an inventory of payments made in the annual report; and

vi. Implementation of an electronic calendar. The calendar will be updated yearly with tentative dates of activities, as well as regularly with all of the following information:

1. annual review of watershed protection elements;
2. dates of submittal of proposed changes to the watershed protection elements to the Berkeley County Council for review and ratification in applicable ordinances;
3. annual review of implementation, assessment, and enforcement of watershed protection elements;
4. annual review and update of Hot Spots;
5. inspections of all stormwater BMPs; and
6. an annual summary of development and redevelopment projects.

f. The plan for complying with MCM 6 (Pollution Prevention & Good Housekeeping for Municipal Operations) of the MS4 Permit shall include the following:

- i. A list of all municipal facilities, including wastewater treatment facilities, potable drinking water facilities, municipal fleet operations, maintenance garages, parks and recreation areas, street and infrastructure maintenance operations, and grounds maintenance operations within the Storm Water District's jurisdiction. As part of the list, if a separate entity performs operations that contribute to the completion of activities to meet permit requirements, include those facilities;
- ii. Maintenance procedures for all municipal facilities, to be kept onsite, that help protect physical, chemical, and biological integrity of receiving streams;
- iii. A schedule of no less than once per calendar year for performing inspections at municipal facilities, and procedures for keeping records of inspections;
- iv. A list of policies and procedures the Storm Water District will utilize to reduce the discharge of pollutants in stormwater runoff from all lands owned or maintained by the Storm Water District, in accordance with the requirements of the MS4;
- v. A list of industrial facilities under the Storm Water District's control;
- vi. A list of industrial facilities not covered under another WV/NPDES Permit, with locations of the types of activities and potential pollution sources;

- vii. A benchmark monitoring plan for stormwater discharged from facilities or locations of municipal industrial activities, in accordance with all requirements of the MS4 Permit;
- viii. A list of industrial materials or activities that are asserted as “No Exposure”;
- ix. A procedure for collection samples for storm events resulting in a discharge that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable storm event (greater than 0.1 inch rainfall) in accordance with the requirements of the MS4 Permit; and
- x. Implementation of an electronic calendar. The calendar will be updated yearly with tentative dates of activities, as well as regularly with the dates of inspections of all good housekeeping and maintenance facilities to determine if maintenance standards are being met.

4. The Storm Water District shall submit Annual MS4 Reports to EPA and WVDEP. The Annual MS4 Report shall meet all reporting requirements of the MS4 Permit. The Storm Water District shall include a section in the Annual MS4 Report describing in detail how the MS4 Manual was implemented during the year covered by the Annual MS4 Report. Each MCM shall have a separate narrative with accompanying documentation. The Annual MS4 Reports required by this Paragraph shall be submitted with one of the semi-annual reports required by Paragraph 71 of the Consent Decree.

C. STORMWATER MANAGEMENT MAINTENANCE AGREEMENT

**BERKELEY COUNTY STORM WATER MANAGEMENT
MAINTENANCE AGREEMENT**

NOW, THEREFORE, in consideration of the benefit received and to be received by

_____, the Covenanter, its successors and assigns, as a result of Site Plan approval by Berkeley County and the undersigned MS4 Permit Holder, the Covenanter hereby covenants and agrees with Berkeley County and the MS4 Permit Holder as follows:

1. At its sole expense, the Covenanter, its successors and assigns, shall construct and perpetually maintain the Storm Water Management Facility and System, constructed at its property identified as (District, Map, Parcel Number and/or Street Address), in strict accordance with the Site Plan and any amendments thereto which have received approval as contemplated above, so as to assure the Quantity and Quality results required by Ordinance and Act.

2. At its sole expense, the Covenanter, its successors and assigns, shall make such changes or modifications to such Facility and System as may be determined to be reasonably necessary by Berkeley County and the MS4 Permit Holder to ensure that the Facility and System is properly maintained and continues to operate as originally designed and approved.

3. At reasonable times and in a reasonable manner as provided in Article VI of the Ordinance, Berkeley County and the MS4 Permit Holder, their agents, employees and contractors, shall have the right of ingress and egress over such Property and the right to inspect the Facility and System in order to ensure that the Facility and System is being properly maintained, is continuing to perform in an adequate manner and is in compliance with the Act, the Ordinance and Site Plan and any amendments thereto approved by Berkeley County and the MS4 Permit Holder.

4. Should the Covenanter, its successors and/or assigns, fail to correct any defects in the Facility and System within the time specified in a written notice from Berkeley County and/or the MS4 Permit Holder that the Covenanter, its successors and assigns has/have failed to maintain the Facility and System in accordance with the approved design standards and/or the Site Plan and in accordance with the law and applicable regulations of the Act and the Ordinance, Berkeley County and/or the MS4 Permit Holder may pursue such remedies as provided by law, including, but not limited to, such civil and criminal remedies as are set forth in Article VII of the Ordinance.

5. The Covenanter, its successors and assigns, shall indemnify, hold harmless, and defend Berkeley County and the MS4 Permit Holder from and against any and all claims, demands,

suits, liabilities, losses, damages, and payments, including reasonable attorney fees claimed or made against Berkeley County and the MS4 Permit Holder that are alleged or proven to result or arise from the Covenanter's, its successors,' and/or assigns', construction, operations, or maintenance of the Facility and System.

6. This Agreement and the covenants and agreements contained herein shall run with the title to the land, and whenever the Property shall be held, sold, conveyed or otherwise transferred, it shall be subject to the covenants, stipulations, agreements, and provisions of this Agreement which shall apply to, bind, and be obligatory upon the Covenanter hereto, its successors, and assigns, and shall bind all present and subsequent owners of the Property described herein.

Initially, the Covenanter is solely responsible for the performance of the obligations required hereunder and, to the extent permitted under applicable law, the payment of any and all fees, fines, and penalties associated with such performance or failure to perform under this Agreement. Notwithstanding any provisions of this Agreement to the contrary, upon the recordation of a deed or other instrument of sale, transfer, or other conveyance of title to the Property, or any portion thereof (a "Transfer"), to a third party (the "Transferee"), the Covenanter shall be released from all of its obligations and responsibilities under this Agreement accruing after the date of such Transfer to the extent such obligations and responsibilities are applicable to that portion of the Property included in such Transfer, but such release shall be expressly conditioned upon the Transferee assuming such obligations and responsibilities by recorded written agreement for the benefit of Berkeley County and the MS4 Permit Holder. Such written agreement may be included in the Transfer deed or instrument, provided that the Transferee joins in the execution of such deed or instrument. A certified copy of such deed, instrument or agreement shall be provided to Berkeley County and the MS4 Permit Holder. The provisions of the preceding three sentences shall be applicable to the original Covenanter and any successor Transferee who has assumed the obligations and responsibilities of the Covenanter under this Agreement as provided above. **PROVIDED, THAT,** nothing herein shall be construed so as to relieve the Covenanter and/or its/his/her Surety from contractual obligations through performance bonds, letters of credit, and/or cash surety arrangements which guaranty to Berkeley County, its Planning Commission and/or Engineering Department and/or to the MS4 Permit Holder satisfactory performance of the approved Plans and Plats related hereto.

7. Nothing herein shall be construed to prohibit a transfer by the Covenanter to subsequent owners and assigns.

8. The provisions of this Agreement shall be severable and if any phrase, clause,

sentence or provision is declared unconstitutional, or the applicability thereof to the Covenant, its successors and assigns, is held invalid, the remainder of this Covenant shall not be affected thereby.

9. _____, the Noteholder, being the holder of a note or notes secured by a lien on the Property through a Deed of Trust dated _____, from _____ to _____ and _____, Trustees, either of whom may act, recorded in the land records of the Office of the Clerk of the County Council of Berkeley County, West Virginia, in Deed Book _____, at page _____, joins in the execution of this Agreement only for the purpose of evidencing its consent to the provisions hereof and to direct the Trustee(s) to execute same for subordination purposes. At the direction of the Noteholder, the Trustee(s) joins herein to subordinate the lien of the Deed of Trust, and the Noteholder and the Trustee(s) hereby acknowledge and agree that the lien of the Deed of Trust is hereby subordinated to this Agreement, the covenants created or set forth herein and all of the rights of Berkeley County and the MS4 Permit Holder hereunder. **PROVIDED, THAT**, the Noteholder shall not be considered as a Transferee for purposes of assumption of obligations of the Covenant, its successors and assigns but, rather, as a conduit of title from the Covenant to a purchaser or purchasers of the whole property, **UNLESS**, such Noteholder and/or its Trustee(s) shall sell an individual lot or lots to a third party or third parties, in which case the Noteholder and/or its Trustee(s) shall make such sales only pursuant to the terms of the approved Plans and Plats applicable to the subject property. Should the Noteholder decline to evidence its consent through signature of this Agreement, the Agreement shall remain in full force and effect with regard to the Covenant, its successors and assigns, MS4 Permit Holder, and Berkeley County.

10. This Agreement shall be recorded in the Office of the Clerk of the County Council of Berkeley County.

11. In the event that Berkeley County shall determine at its sole discretion at any future time that the Facility and System is no longer required, then at the request of the Covenant, its successors and/or assigns, Berkeley County shall execute a release of this Agreement which the Covenant, its successors and/or assigns, shall record in the Clerk's Office, at its/their expense.

12. This Agreement shall be deemed to be a West Virginia contract and shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the State of West Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this Agreement shall be deemed to have been delivered and accepted by the parties in the

State of West Virginia.

13. Any and all suits for any claims or for any and every breach or dispute arising out of this Agreement shall be maintained in the appropriate court of competent jurisdiction in Berkeley County, West Virginia.

14. This Agreement shall not be modified except by written instrument executed by the parties hereto at the time of modification, and no modification shall be effective until recorded in the Clerk's Office.

IN WITNESS WHEREOF, the Covenanter, Noteholder, if any, Berkeley County, and the MS4 Permit Holder have executed this Agreement as of the date first set forth above.

(Covenanter/Owner's Printed Name)

(Signature and Title of Authorized Signatory)

STATE OF _____,
COUNTY OF _____
TO WIT:

On, the ____ day of _____, 20____, before me _____,
(Notary Public)
personally appeared, _____ who represented to me that he/she has full
(Printed Name of Signatory)
authority to sign on behalf of the Covenanter/Owner and did append signature above made
in my presence.

Witness my hand and official seal:

My Commission expires: _____

(Notary Public Signature) (SEAL)

(Printed Name of Noteholder, if any)

(Signature and Title of Authorized Signatory)

STATE OF _____,
COUNTY OF _____
TO WIT:

On, the _____ day of _____, 20____, before me _____,
(Notary Public)
personally appeared, _____ who represented to me that he/she has full
(Printed Name of Signatory)
authority to sign on behalf of the Covenanter/Owner and did append signature above made
in my presence.

Witness my hand and official seal:

My Commission expires: _____

(Notary Public Signature) (SEAL)

(Printed Name of MS4 Permit Holder)

(Signature and Title of Authorized Signatory)

STATE OF _____,
COUNTY OF _____
TO WIT:

On, the _____ day of _____, 20____, before me _____,
(Notary Public)
personally appeared, _____ who represented to me that he/she has full
(Printed Name of Signatory)
authority to sign on behalf of the Covenanter/Owner and did append signature above made
in my presence.

Witness my hand and official seal:

My Commission expires: _____

(Notary Public Signature) (SEAL)

BERKELEY COUNTY COUNCIL

President

STATE OF _____,
COUNTY OF _____
TO WIT:

On, the _____ day of _____, 20____, before me _____,
(Notary Public)
personally appeared, _____ who represented to me that he/she has full
(Printed Name of Signatory)
authority to sign on behalf of the Covenanter/Owner and did append signature above made
in my presence.

Witness my hand and official seal:

My Commission expires: _____

(Notary Public Signature)

(SEAL)

Rev: 5/19/17, 10/2/17
IT: 5/26/17, 10/2/17, 1/2/20, 2/28/20, 12/14/22

D. STORMWATER DEED OF EASEMENT

After recording please return to:
Berkeley County Council, Suite 201
400 W. Stephen Street
Martinsburg, WV 25401

STORMWATER DEED OF EASEMENT

THIS DEED OF EASEMENT is made this _____ day of _____, _____, by and between _____, party of the first part and hereinafter referred to as Grantor, and **BERKELEY COUNTY COUNCIL and BERKELEY COUNTY PUBLIC SERVICE STORMWATER DISTRICT**, parties of the second part and hereinafter referred to as Grantees.

WITNESS:

WHEREAS, the Grantor is owner of that certain real property (hereinafter the "Property") located in Berkeley County, West Virginia, more particularly described as follows:

That certain real property shown and designated and labeled as "_____" to be dedicated to the Grantees as a stormwater and drainage easement shown on the plat drawn by _____, dated _____, titled _____, and recorded in Plat Cabinet _____, Slide _____ (hereinafter, the "Easement" and the "Plat") within the land records of Berkeley County. Reference is made to the Plat for a more particular description of the easement conveyed herein.

WHEREAS, the Property is described further as a portion of that certain lot or parcel of land situated in Berkeley County, West Virginia, more specifically described and recorded in the County Clerk of Berkeley County land records in Deed Book _____, page _____, hereinafter called the "Property";

WHEREAS, the Grantor is required by the Berkeley County Stormwater Management Ordinance to ensure all access to all stormwater management facilities at the site for the purpose of inspection and repair by securing all the maintenance easements needed on a permanent basis and transferring these easements to the Berkeley County Council and the Berkeley County Public Service Stormwater District. These easements shall be recorded and will remain in effect even with the subsequent transfer of title to the property.

WHEREAS, prior to the recording of this Deed of Easement, the Grantor is required by the Berkeley County Stormwater Management Ordinance to enter into and record within the land records of Berkeley County an Inspection and Maintenance Agreement in the form attached hereto (hereinafter "Maintenance Agreement") with the Berkeley County Council and Berkeley County Public Service Stormwater District prior to the issuance of a Land Disturbance (Grading) Permit that references the aforesaid Plat and this Deed of Easement to ensure that Grantor will have required inspections conducted and that stormwater facilities are maintained in proper working conditions to meet design standards and other conditions contained with the Maintenance Agreement and the Berkeley County Stormwater Ordinance, as amended.

WHEREAS, it is the desire and intent of the Grantor to dedicate, grant and convey an easement in accordance with this Deed of Dedication and Easement.

NOW THEREFORE, in consideration of the promises and TEN DOLLARS (\$10.00), cash paid in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the Grantor does hereby GRANT, CONVEY, and DEDICATE to the Grantee, its successors and assigns, with General Warranty a perpetual easement as shown on the Plat referenced above and referred to herein as the Easement.

The Easement shall be subject to the following:

1. Right of ingress and egress. The Grantee and its authorized agents and employees shall have the right and easement of ingress and egress over the Easement to perform all acts to which the parties have agreed it may perform under the attached Maintenance Agreement. The Maintenance Agreement provides in part that the Grantor gives permission to the Grantee, including its authorized agents and employees, to enter upon the Property and to inspect the stormwater management/BMP facilities whenever the Grantee deems necessary; and, the Maintenance Agreement also provides in part that, in the event the Grantor, its successors and assigns, fails to maintain the stormwater management/BMP facilities in good condition acceptable to the Grantees,

the Grantees may enter upon the Property and take whatever steps necessary to repair or otherwise maintain the facilities and to otherwise correct deficiencies.

The Maintenance Agreement may only be amended by written agreement and consent by both parties. An amended Maintenance Agreement shall be recorded within the land records of the Berkeley County Clerk.

2. Ownership of the facilities. The stormwater management/BMP facilities required to be constructed and maintained by the Grantor under the ordinances, regulations and Maintenance Agreement shall be and remain the property of the Grantor. This Deed of Easement shall not be construed to be an assumption of ownership or control by the Grantees over the stormwater management/ BMP facilities subject to the Maintenance Agreement.

3. No obligation on Grantees to inspect or maintain. This Deed of Easement shall not be construed as imposing an obligation on the Grantees to repair or otherwise maintain the stormwater management/BMP facilities subject to the Maintenance Agreement.

4. Grantees' right to assign. The Grantees shall have the right to assign this Easement as its interests, law and/or regulatory licenses and permits may require.

5. Binding effect. The Easement and the rights and obligations established herein shall run with the land in perpetuity, and shall be binding upon the Grantor, the Grantees, and their successors and assigns. All references herein to the "Grantor" and the "Grantee" include their respective successors and assigns. All references to the "Grantees," when exercising any right or obligation herein, includes the Grantees' officers, employees and agents.

6. Termination of Easement. If the Grantor, or its successors or assigns, desires to alter or vacate a portion or all of the easement(s), the Easement may be adjusted accordingly if the County Engineer certifies in writing that the proposed modifications meet the requirements of the Berkeley County Stormwater Management Ordinance, as the

regulations may be amended in the future. In addition to meeting these requirements, the Grantor shall mitigate for any loss of nutrient credit reductions, if any, provided in the stormwater calculations for the Property described in the Maintenance Agreement as a result of such alteration or vacation. Upon termination of any portion of the Easement(s), any residue of the Easement shall remain subject to this Deed of Dedication and Easement. The termination of any portion of the Easement(s) shall be recorded, at the sole expense of the Grantor, in the land records of the Berkeley County Clerk.

7. Acceptance. The Grantees accept the conveyance of this property pursuant to West Virginia Code §§ 7-3-5 and 16-13-1.

[Signature Pages to follow]

WITNESS the following signatures.

GRANTOR:

Name: _____
Title: _____

STATE OF _____;

COUNTY OF _____;

The foregoing instrument was acknowledged before me this ____ day of _____, 2020 by _____ (Name), _____ (Title) of _____.

Notary Public: _____

My Commission Expires: _____

[SEAL]

GRANTEES:

COUNTY OF BERKELEY, WEST VIRGINIA

Council President

STATE OF WEST VIRGINIA

COUNTY OF BERKELEY

The foregoing instrument was acknowledged before me this ____ day of _____, 2020 by _____, County Council President on behalf of the Berkeley County Council, Berkeley County, West Virginia, Grantee.

Notary Public: _____

My Commission Expires: _____

[SEAL]

STATE OF _____,

COUNTY OF _____

TO WIT: On, the ____ day of _____, 20____, before me, _____, (Notary Public) Personally appeared, _____ who represented to me that he/she has full (Printed Name of Signatory) authority to sign on behalf of the Berkeley County Public Service Stormwater District, and did append the signature above made in my presence. Witness my hand and official seal:

My Commission Expires: _____ (SEAL) (Notary Public Signature)

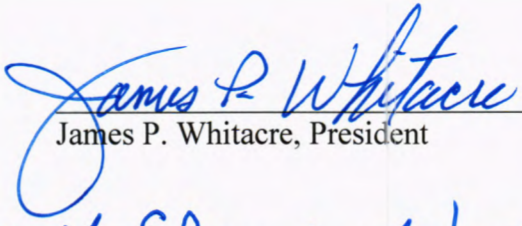
E. STORMWATER FACILITY INSPECTION REPORT

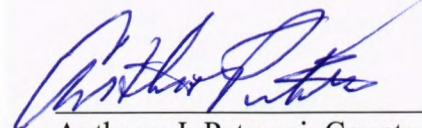
Stormwater Facility Inspection Report				
Address of facility:			Date of Inspection:	
Associated Business or Property Owner's Name:				
Company Conducting Inspection:				
Name of Inspector:				
	Condition			
	-Substandard- Requires replacement or significant repairs	-Fair- Minor structural maintenance required	-Satisfactory- Minor debris removal and/or weeding recommended	-Good- No action or considerations to be taken
Vegetation or filter media				
Fences or other safety devices				
Spillways, valves, or other control structures				
Embankments, slopes, and safety benches				
Reservoir or treatment areas				
Inlet and outlet channels or structures				
Underground drainage				
Forebay areas				
Sand Filters				
Swales and conveyance systems				
Permeable pavements				
Signage				
Other				

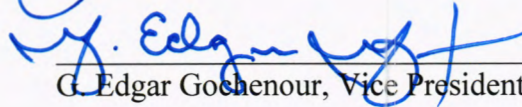
Stormwater Ordinance to become effective July 1, 2023.

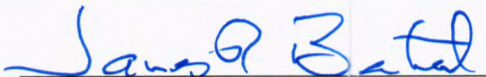
Adopted this 4th day of May, 2023.

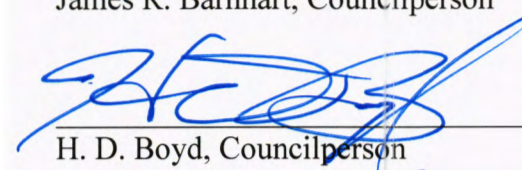
Attested:

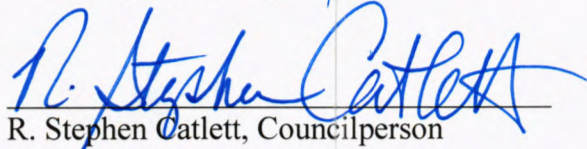

James P. Whitacre, President


Anthony J. Petrucci, County Clerk


G. Edgar Gochenour, Vice President


James R. Barnhart, Councilperson


H. D. Boyd, Councilperson


R. Stephen Catlett, Councilperson