

**STROUD TOWNSHIP
STORMWATER MANAGEMENT ORDINANCE**

ORDINANCE NO. 3-2023

[Adopted July 18, 2023]

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PART 1
GENERAL PROVISIONS

23-101. Short Title

This Chapter shall be known as may be cited as the “Stroud Township Stormwater Management Ordinance”

23-102. Statement of Findings.

1. The *Board of Supervisors* of the *Township* finds that:
 - A. Inadequate management of accelerated *stormwater runoff* resulting from development throughout a *watershed* increases *flood* flows and velocities, contributes to *erosion* and sedimentation, overtaxes the carrying capacity of existing *streams* and *storm sewers*, greatly increases the cost of public facilities to convey and manage *stormwater*, undermines *floodplain* management and *flood* reduction efforts in *upstream* and *downstream* communities, reduces *groundwater recharge*, and threatens public health and safety, and increases nonpoint source pollution of water resources.
 - B. A comprehensive program of *stormwater* management, including reasonable regulation of development and activities causing *accelerated erosion*, is fundamental to the public health, safety, welfare, and the protection of the people of the *Township* and all the people of the Commonwealth, their resources, and the environment.
 - C. *Stormwater* is an important water resource that provides *groundwater recharge* for water supplies and supports the *base flow* of *streams*.
 - D. The 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.
 - E. Federal and state regulations require certain municipalities to implement a program of *stormwater* controls. These municipalities are required to obtain a permit for *stormwater* discharges from their separate *storm sewer* systems under the National Pollutant Discharge Elimination System (NPDES) program.

23-103. Purpose.

1. The purpose of *this Chapter* is to promote the public health, safety, and welfare within the *Township* and its *watershed*, including the areas within the Brodhead-McMichaels Creek and

Cherry Creek Watersheds, by minimizing the harms and maximizing the benefits described in Section 101 of *this Chapter* through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve natural drainage systems.
- C. Manage *stormwater runoff* close to the source, reduce *runoff* volumes and mimic *pre-development* hydrology.
- D. Provide procedures and performance standards for *stormwater* planning and management.
- E. Maintain *groundwater recharge* to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and *erosion* of *stream* banks and *streambeds*.
- G. Provide proper operation and maintenance of all *stormwater BMPs* that are implemented within the municipality *Township*.
- H. Provide standards to meet NPDES permit requirements.

23-104. Statutory Authority.

The *Township* is empowered to regulate land use activities that affect *runoff*, by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended, and/or the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, The Stormwater Management Act.

23-105. Applicability.

1. All *regulated activities* and all activities that may affect *stormwater runoff* in all areas of the *Township*, including land development and *earth disturbance activity*, are subject to regulation by *this Chapter*.
2. *This Chapter* contains only the *stormwater* management performance standards and design criteria that are necessary or desirable from a *watershed-wide* perspective. Local *stormwater* management design criteria (e.g., *inlet* spacing and design, collection system design and details, *outlet* structure design, etc.) shall continue to be regulated by the applicable *Township Ordinances* and applicable State Regulations.

3. The provisions, regulations, limitations, and restrictions of *this Chapter* governing maintenance of storm water management facilities shall apply to all storm water management facilities existing on the date of *this Chapter* or installed after the date of *this Chapter* and shall apply to all persons responsible for maintenance of such storm water management facilities and all persons who own or occupy the land upon such storm water management facilities are located.
4. It shall be the responsibility of the developer and, if different, the landowner, to ensure that all contractors, agents, or other persons comply with all requirements of the Ordinance and with any approved *SWM Site Plan*.

23-106. Repealer.

Any other ordinance provision(s) or regulation of the Township inconsistent with any of the provisions of *this Chapter* is hereby repealed to the extent of the inconsistency only.

23-107. Severability.

In the event that a court of competent jurisdiction declares any section or provision of *this Chapter* invalid, such decision shall not affect the validity of any of the remaining provisions of *this Chapter*.

23-108. Compatibility with Other Ordinance Requirements.

Approvals issued and actions taken under *this Chapter* do not relieve the *Applicant* of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, law, regulation, or ordinance.

23-109. Erroneous Permit.

Any permit or authorization issued or approved based on false, misleading, or erroneous information provided by an *Applicant* is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the *Township* purporting to validate such a violation.

23-110. Waivers

1. If the *Board of Supervisors* determines that any requirement under *this Chapter* cannot be achieved for a particular *regulated activity*, the *Board of Supervisors* may, after an evaluation of alternatives, approve measures other than those in *this Chapter*, subject to Paragraphs 2 of this section.
2. Waivers or modifications of the requirements of *this Chapter* may be approved by the *Board of Supervisors* if enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that the modification will not be contrary to the public interest and that the purpose of the Ordinance is preserved. Cost or financial burden shall not be considered a hardship. Modification may be considered if an alternative standard or approach will provide equal

or better achievement of the purpose of the Ordinance. A request for modification shall be in writing and accompany the *SWM Site Plan* submission. The request shall provide the facts on which the request is based, the provision(s) of the Ordinance involved and the proposed modification.

PART 2
DEFINITIONS

23-201. Interpretation.

1. For the purposes of *this Chapter*, certain terms and words used herein shall be interpreted as follows:
 - A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
 - B. The word "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
 - C. The word "person" includes an individual, firm, association, organization, partnership, trust, company, corporation, unit of government, or any other similar entity.
 - D. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.
 - E. The words "used or occupied" include the words "intended, designed, maintained, or arranged to be used, occupied or maintained."
 - F. Terms not herein defined which are defined in the *MPC or Zoning Ordinance* shall have the meanings assigned in the *MPC or Zoning Ordinance*. Terms not defined in *this Chapter*, the *MPC* or the *Zoning Ordinance* shall have the meaning customarily assigned to them as found in the most recent edition of Webster's New World College Dictionary.

These definitions do not necessarily reflect the definitions contained in pertinent regulations or statutes and are intended for *this Chapter* only.

23-202. Definitions.

Accelerated Erosion - The removal of the surface of the land through the combined action of man's activity and the natural processes of a rate greater than would occur because of the natural process alone.

Act 167 - The Act of October 4, 1978, P.L. 864, No. 167, 32 P.S. §680.1 et seq., as amended, and as may be amended in the future.

Agricultural Activity - Activities associated with agriculture such as agricultural cultivation, agricultural operation, and heavy animal use areas. This includes the work of producing crops and raising livestock including tillage, plowing, disking, harrowing, pasturing and installation of conservation measures. For

purposes of regulation by *this Chapter* construction of new buildings or *impervious area* is not considered an *agricultural activity*.

Applicable Act 167 Plan - The Brodhead Creek and McMichael Creek Watershed Act 167 Plan.

Applicant - A landowner, developer, or other person who has filed an application to the *Township* for approval to engage in any *regulated activity* at a *development site* in the *Township*.

Artificial Watercourse - A man-made *stormwater conveyance facility* such as a *swale* or *ditch*. Re-aligned or reconstructed portions of natural *watercourses* or *watercourses* created indirectly by human activities such as filling in *wetlands* areas are not considered *artificial watercourses*.

Base Flow - The portion of *stream* flow that is sustained by ground water discharge.

Bioretention - The use of woody and herbaceous plants and soils to remove pollutants from *stormwater runoff*.

BMP (Best Management Practice) - Activities, facilities, designs, measures, or procedures used to manage *stormwater* impacts from *regulated activities*, to meet *state water quality requirements*, to promote *groundwater recharge*, and to otherwise meet the purposes of *this Chapter*. *Stormwater BMPs* are commonly grouped into one of two broad categories or measures: "structural" or Non-structural". In *this Chapter*, *non-structural BMPs* or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with *stormwater runoff*, whereas structural *BMPs* or measures are those that consist of a physical device or practice that is installed to capture and treat *stormwater runoff*. Structural *BMPs* include, but are not limited to, a wide variety of practices and devices, from large-scale *retention basins* and constructed *wetlands*, to small-scale underground treatment systems, *infiltration* facilities, filter strips, low impact design, *bioretention*, wet ponds, permeable paving, grassed *swales*, riparian or forested buffers, sand filters, *detention basins*, and manufactured devices. Structural *stormwater BMPs* are permanent appurtenances to the *development site*.

BMP Manual - The Pennsylvania Best Management Practices Manual (Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

Board of Supervisors - The governing body of the *Township*.

Chapter 102 - Chapter 102, Erosion and Sedimentation Control, of Title 25, Rules and Regulations of the *DEP*.

Chapter 105 - Chapter 105, Water Obstructions and Encroachments, of Title 25, Rules and Regulations of the *DEP*.

Chapter 106 - Chapter 106, Floodplain Management, of Title 25, Rules and Regulations of the *DEP*.

Chapter, This - Chapter 23 of the Township of Stroud Code of Ordinances.

Conservation District - The Monroe County Conservation District.

Culvert - A structure with appurtenant works, which carries water under or through an embankment or fill.

Dam - An artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or another fluid or semifluid, or a refuse bank, fill or structure for highway, railroad or other purposes which does or may impound water or another fluid or semifluid.

DEP - The Pennsylvania Department of Environmental Protection.

Design Storm - The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24-hours), used in the design and evaluation of *stormwater management facilities*. Also see Return Period.

Detention Basin - An impoundment structure designed to manage *stormwater runoff* by temporarily storing the *runoff* and releasing it at a predetermined rate.

Development Site (Site) - See Project Site.

Drainage Easement - A right granted by a grantor to a grantee, allowing the use of private land for *stormwater* management purposes.

Earth Disturbance Activity - A construction or other human activity which disturbs the surface of land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, agricultural plowing or tilling, timber harvesting activities, road maintenance activities involving subbase disturbance, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

Encroachment - A structure or activity that changes, expands, or diminishes the course, current or cross section of a *watercourse, floodway, or body of water*.

Erosion - The natural process by which the surface of the land is worn away by water, wind, or chemical action.

Erosion and Sediment Control Plan - A site specific plan that is designed to minimize accelerated *erosion* and sedimentation during construction.

Existing Conditions - The dominant land cover during the 5-year period immediately preceding a proposed *regulated activity*.

Flood - A temporary condition of partial or complete inundation of land areas from the overflow of *streams*, rivers, and other waters of this Commonwealth.

Floodplain - Any land area that have been or are expected to be inundated by flood waters in a 100-year flood or delineated by applicable FEMA Maps and studies as being a special flood hazard area.

Floodway - The channel of the *watercourse* and those portions of the adjoining *floodplains*, which are reasonably required to carry and discharge the 100-year frequency *flood*. Unless otherwise specified, the boundary of the *floodway* is as indicated on maps and *flood* insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency *floodway*, it is assumed - absent evidence to the contrary - that the *floodway* extends from the *stream* to 50 feet from the *top of streambank*.

Forest Management/Timber Operations - Planning and activities necessary for the management of forest land. These include conducting a timber inventory, and preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation and reforestation.

Freeboard - A vertical distance between the elevation of the design high-water and the top of a *dam*, levee, tank, basin, *swale*, or diversion berm. The space is required as a safety margin in a pond or basin.

Groundwater Recharge - Replenishment of existing natural underground water supplies without degrading groundwater quality.

Green Infrastructure - Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse *stormwater* on the site where it is generated.

HEC-HMS - The U.S. Army Corps of Engineers, Hydrologic Engineering Center (HEC) Hydrologic Modeling System (HMS) computer program.

High Tunnel - A structure which meets the following:

- (i) Is used for the production, processing, keeping, storing, sale or shelter of an agricultural commodity as defined in Section 2 of the Act of December 19, 1974 (P.L. 973, No. 319), known as the "Pennsylvania Farmland and Forest Land Assessment Act of 1974" of for the storage of agricultural equipment and supplies.
- (ii) Is constructed consistent with all of the following:
 - a. Has a metal, wood, or plastic frame.
 - b. When covered, has a plastic, woven textile, or other flexible covering.
 - c. Has a floor made of soil, crushed stone, matting, pavers or a floating concrete slab.

Hydrologic Regime - The hydrologic cycle or balance that sustains quality and quantity of storm water, baseflow, storage, and groundwater supplies under natural conditions.

Impervious Surface (Impervious Area) - For the purpose of Stormwater Management in accordance with this chapter *impervious surfaces* shall be considered a surface that prevents the percolation of water into the ground. *Impervious surfaces* (or areas) shall include but are not limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures, and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as *impervious areas* if they do not prevent *infiltration*.

Infiltration - For Stormwater to pass through the soil from the surface. The entrance of surface water into the soil, usually at the soil/air interface.

Inlet - The *upstream* end of any structure through which water may flow.

Karst - A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.

Low Impact Development (LID) - Site design approaches and small-scale *stormwater* management practices that promote the use of natural systems for *infiltration*, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store *runoff* close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses *stormwater* through a variety of small cost-effective landscape features located on-site.

Manning Equation - A method for calculation of velocity of flow (e.g., feet per second) and flow rate (e.g., cubic feet per second) in Open Channels based upon channel shape, roughness, depth of flow and slope. Open channel flow may occur in closed conduits so long as the flow is not under pressure.

MPC - The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended and reenacted, 53 P.S. §10101 et seq.

Non-structural BMPs - Methods of controlling *stormwater runoff* quantity and quality, such as innovative site planning, *impervious area* and grading reduction, protection of natural depression areas, temporary ponding on site and other techniques.

NRCS - USDA Natural Resource Conservation Service (previously SCS).

Open Channel - A drainage element in which *stormwater* flows within an open surface. Open Channels include, but shall not be limited to, natural and man-made drainage ways, *swales*, *streams*, ditches, canals, and *pipes* flowing partly full.

Outlet - Points of water disposal from a *stream*, river, lake, tidewater or artificial drain.

Peak Discharge - The maximum rate of *stormwater runoff* from a specific storm event.

PennDOT - The Pennsylvania Department of Transportation or any agency successor thereto.

Pervious area - Any area not defined as impervious.

Pipe - A *culvert*, closed conduit, or similar structure (including appurtenances) that conveys Stormwater.

Pre-development - Undeveloped/Natural Condition.

Project Site - The specific area of land where any *regulated activities* are proposed, planned, conducted or maintained in the *Township*.

PSRM - The Penn State Runoff Model (calibrated) - The computer-based hydrologic modeling technique adapted to the *applicable Act 167 Plan*. The model has been "calibrated" to reflect actual recorded flow values by adjoining key model input parameters.

Qualified Professional - Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by *this Chapter*.

Rational Method - A rainfall-*runoff* relation used to estimate peak flow.

Recharge - See Infiltration

Regulated Activities - Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect *stormwater runoff*. Regulated activities include but are not limited to: Land Developments; Subdivisions; Alterations of the natural *hydrologic regime*; Construction of new *impervious* or *pervious* surfaces; Construction of new buildings or additions to buildings; Diversions, piping or *encroachments* in *watercourses* or man-made channels; Construction of *stormwater BMPs*; *Stream* enhancement or restoration projects; Redevelopment of a *site* which will increase *runoff* or change a discharge point.

Regulated Earth Disturbance Activity - Activity involving earth disturbance subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

Release Rate - The percentage of *existing conditions* peak rate of *runoff* from a Development Site or *subarea* to which the post development peak rate of *runoff* must be reduced to protect downstream areas.

Retention Basin - A structure in which Stormwater is stored and not released during the storm event. Retention basins do not have an *outlet* other than *recharge*.

Return Period - The average interval, in years, within which a storm event of a given magnitude can be expected to recur. For example, the probability of a 25-year storm occurring in any one year is 0.04 (i.e., a 4% chance).

Riparian Buffer - An area of trees and/or shrubs located adjacent to *streams*, lakes, ponds and *wetlands*.

Runoff - Any part of precipitation that flows over the land surface.

Sediment - Soils or other materials transported by surface water as a product of *erosion*.

Site - See definition of *development site*.

Soil Cover Complex Method - A method of *runoff* computation developed by the *NRCS* that is based on relating soil type and land use/cover to a *runoff* parameter called Curve Number (CN).

State Water Quality Requirements - The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

Storage-Indication Method - A reservoir routing procedure based on solution of the continuity equation (inflow minus outflow equals the change in storage) with outflow defined as a function of storage volume and depth.

Storm Sewer - A system of *pipes* and/or *open channels* that convey intercepted *runoff* and stormwater from other sources but excludes domestic sewage and industrial wastes.

Stormwater - Drainage *runoff* from the surface of land resulting from precipitation or snow or ice melt.

Stormwater Conveyance Facility - A Stormwater Management Facility designed to transmit stormwater *runoff* and shall include channels, *swales*, *pipes*, conduits, *culverts*, *storm sewers*, etc.

Stormwater Management Facility - Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects *stormwater runoff* quality and quantity. Typical *stormwater* management facilities include, but are not limited to, detention and *retention basins*, *open channels*, *storm sewers*, *pipes*, and *infiltration* structures facilities.

SWM Site Plan (Stormwater Management Site Plan) - The plan prepared by the developer or his representative indicating how *stormwater runoff* will be managed at the *development site* in accordance with *this Chapter*. Stormwater Management Plan will be designated as *SWM Site Plan* throughout *this Chapter*.

Stream - A *watercourse*.

Subarea - The smallest drainage unit of a *watershed* for which *stormwater* management criteria have been established in the *applicable Act 167 Plan*.

Swale - A low lying stretch of land which gathers or carries surface water *runoff*.

SWM BMP - See definition of BMP

Timber Operations - See Forest Management.

Top of Streambank - First substantial break in slope between the edge of the bed of the *stream* and the surrounding terrain. The *top of streambank* can either be a natural or constructed (that is, a road or railroad grade) feature, lying generally parallel to the *watercourse*.

Township - Stroud Township, Monroe County, Pennsylvania.

Township Engineer - A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed or retained as the engineer for the *Township*.

Watercourse - A channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

Waters of the Commonwealth - Rivers, *streams*, creeks, rivulets, impoundments, ditches, *watercourses*, *storm sewers*, lakes, *dammed water*, *wetlands*, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

Watershed - Region or area drained by a river, *watercourse*, or other surface water of this Commonwealth.

Wetland - 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, fens, and similar areas and regulated as "wetlands" under federal and/or state regulations, whichever is more inclusive.

Zoning Ordinance - The Stroud Township *Zoning Ordinance*, as amended from time to time.

PART 3
STORMWATER MANAGEMENT STANDARDS

23-301. General Requirements.

1. For all *regulated activities*, unless preparation of an *SWM Site Plan* is specifically exempted in Section 23-302:
 - A. Preparation and implementation of an approved *SWM Site Plan* is required.
 - B. No *regulated activities* shall commence until the *Township* issues written approval of an *SWM Site Plan* which demonstrates compliance with the requirements of *this Chapter*.
2. The *SWM Site Plans* approved by the *Township*, in accordance with Section 406, shall be on the *project site* throughout the duration of the regulated activity.
3. The *Township* may approve measures for substantially meeting the state water quality requirements other than those in *this Chapter*, provided that they meet the minimum requirements of, and do not conflict with, state law including, but not limited to, the Clean Streams Law.
4. Where a *development site* is traversed by an existing *watercourse* (natural and artificial), a *drainage easement* shall be provided conforming to the line of such *watercourse*. Where a *riparian buffer* is required pursuant to Section 23-303, the *drainage easement* shall conform to the line of the *riparian buffer*. The terms of the easement shall conform to the *riparian buffer* requirements contained in Section 27-303 of *this Chapter*.
5. Any *stormwater management facility* regulated by *this Chapter* that would be located in or adjacent to *Waters of the Commonwealth* or *wetlands* shall be subject to approval by *DEP* through the Joint Permit Application process, or, where deemed appropriate by *DEP*, the General Permit process. When there is a question whether *wetlands* may be involved, it is the responsibility of the *Applicant* to show that the land in question cannot be classified as *wetlands*, otherwise approval to work in the area must be obtained from *DEP*.
6. Any *stormwater management facility* regulated by *this Chapter* that would be located on State highway rights-of-way shall be subject to approval by *PennDOT*.
7. All *stormwater* runoff, other than roof top runoff shall be treated for water quality prior to discharge to surface or groundwater.
8. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated and maintained during the regulated earth disturbance activities (e.g. during construction) to meet the purposes and requirements of *this Chapter* and to meet all requirements under Title 25 of the Pennsylvania Code and Clean Streams Law. Various BMPs and

their design standards are listed in the Erosion and Sediment Pollution Control Manual (E&S Manual), No. 363-2134-008, as amended and updated.

9. *Impervious areas:*
 - A. The measurement of *impervious areas* shall include all of the *impervious areas* in the total proposed development even if development is to take place in stages.
 - B. For development taking place in stages, the entire development plan must be used in determining conformance with *this Chapter*.
 - C. For projects that add *impervious area* to the parcel, the total *impervious area* on the parcel is subject to the requirements of *this Chapter*; except that the volume controls in Section 304 and the peak rate controls of Section 305 do not need to be retrofitted to existing *impervious areas* that are not being altered by the proposed *regulated activity*.
10. *Stormwater* flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification and authorization by the affected property owner(s). Such *stormwater* flows shall be subject to the requirements of *this Chapter*.
11. All *regulated activities* shall include such measures as necessary to:
 - A. Protect health, safety, and property.
 - B. Meet the water quality goals of *this Chapter* by implementing measures to:
 - 1) Minimize disturbance to *floodplains, wetlands, and wooded areas*.
 - 2) Maintain or extend *riparian buffers*.
 - 3) Avoid erosive flow conditions in natural flow pathways.
 - 4) Minimize thermal impacts to *Waters of the Commonwealth*.
 - 5) Disconnect *impervious surfaces* by directing *runoff* to *pervious areas*, wherever possible.
 - C. Incorporate methods described in the *BMP Manual*. If methods other than *green infrastructure* and *low impact development (LID)* methods are proposed to achieve the volume and rate controls required under *this Chapter*, the *SWM Site Plan* must include a detailed justification demonstrating that the use of *LID* and *green infrastructure* is not practicable.

12. The design of all facilities over *karst* shall include an evaluation of measures to minimize adverse effects.
13. *Infiltration BMPs* should be spread out, made as shallow as practicable, and located to maximize use of natural on-site *infiltration* features while still meeting the other requirements of *this Chapter*.
14. Normally dry, open top, storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 hours and not more than 72 hours from the end of the *design storm*.
15. The *design storm* rainfall amounts to be used in the analysis of peak rates of discharge should be obtained from the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland.
16. For all *regulated activities*, *stormwater* management *BMPs* shall be designed, implemented, operated, and maintained to meet the purposes and requirements of *this Chapter* and to meet all water quality requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law and the Stormwater Management Act.
17. Various *BMPs* and their design standards are listed in the *BMP Manual*.
18. *Stormwater conveyance facilities* must be able to convey, at a minimum, without damage to the drainage structure, adjacent properties or roadway, *runoff* from the 25-year *design storm*. *Stormwater conveyance facilities* may be required to convey larger *design storms* based on individual drainage/sub-drainage area characteristics as recommended by the *Township Engineer* and approved at the discretion of the *Board of Supervisors*. *Stormwater conveyance facilities* to or exiting from *stormwater management facilities* (i.e., *detention basins*) shall be designed to convey the design flow to or from that structure. Open channels must be able to convey at a minimum, without damage to the drainage structure or roadway, *runoff* from the 25-year *design storm* with a minimum 1.0 foot of *freeboard* measured below the lowest point along the top of the roadway.
19. The design of all *stormwater* management facilities shall incorporate sound engineering principles and practices. The *Township* reserves the right to disapprove any design that would result in the construction of or continuation of a *stormwater* problem area.
20. All wet basin designs shall incorporate biologic controls consistent with the West Nile Guidance found in Appendix E of the Act 167 Plan.

23-302. Exemptions.

1. The following exemptions apply:
 - A. Regulated activities that result in cumulative earth disturbance less than one acre less than 5,000 square feet of new *impervious surface* are exempt from the requirements in Section 23-304, Section 23-305 and Part 4 of *this Chapter*. These criteria shall apply to the total development even if the development is to take place in phases. The date of the adoption of the original Brodhead and McMichaels Creek Stormwater Management Ordinance shall be the starting point from which to consider tracts as “parent tracts” in which future subdivisions and respective *impervious area* computations shall be cumulatively considered. Impervious areas existing on the “parent tract” prior to adoption of the original ordinance shall not be considered in cumulative *impervious area* calculations for exemption purposes.
 - B. Agricultural activity is exempt from the *SWM Site Plan* preparation requirements of *this Chapter* provided the activities are performed according to the requirements of 25 Pa. Code *Chapter 102*.
 - C. Forest Management and *timber operations* are exempt from the *SWM Site Plan* requirements of *this Chapter* provided the activities are performed according to the requirements of 25 Pa. Code *Chapter 102*.
 - D. *High Tunnels* shall be exempt from the provisions of *this Chapter* if both of the following criteria are met:
 - (1) The *High Tunnel* or its flooring does not result in an *impervious area* exceeding 25% of all structures located on the owners total contiguous land area
 - (2) The *High Tunnel* meets one of the following:
 - (a) The *High Tunnel* is located at least 100 feet from any perennial *stream* or *watercourse*, public road or neighboring property line
 - (b) The *High Tunnel* is located at least 35 feet from any perennial *stream* or *watercourse*, public road or neighboring property line and is located on land with a slope not greater than 7%
 - (c) The *High Tunnel* is supported with a buffer or diversion system that does not directly drain into a *stream* or other *watercourse* managing storm water *runoff* in a manner consistent with requirements of *this Chapter* and the Act of April 18, 2018 P.L. 91, No. 15, and the Act of October 4, 1978 (P.L. 864, No. 167).
2. Exemptions from any provisions of *this Chapter* shall not relieve the *Applicant* from the requirements in Sections 23-301.9 through 23-301.20.

3. The *Township* may deny or revoke any exemption pursuant to this Section at any time for any project that the *Township* believes may pose a threat to public health, safety or the environment.

23-303. Riparian Buffers.

1. Riparian Buffer Establishment. In order to protect and improve water quality, riparian *buffers* are required adjacent to *streams, wetlands, lakes, and ponds*.

A. *Wetlands*

- (1) A 100-foot inner *riparian buffer* and 50-foot outer *riparian buffer* measured perpendicular to and horizontally from the edge of the delineated *wetland*, for a total distance of 150-feet, shall be maintained for all *wetlands*.
- (2) For purposes of establishing *riparian buffers, wetlands* shall be identified in accord with the 1987 U.S. Army Corps of Engineers Manual for Identifying and Delineating *Wetlands*, as may be amended, and properly flagged, surveyed, and plotted on the *SWM Site Plan*.
- (3) *Wetlands* in an *artificial watercourse* – *wetlands* contained within the banks of an *artificial watercourse* shall not be considered for *riparian buffer* delineation purposes.

- #### B. *Streams*. A 100-foot inner buffer and 50-foot outer buffer measured perpendicular to and horizontally from the *top of streambank* on both sides of any *stream*, for a total distance of 150-feet, shall be maintained on both sides of any *stream*.

- #### C. *Lakes and Ponds*. A 100-foot inner buffer measured perpendicular to and horizontally from the edge of any lake or pond shall be maintained. There is no outer buffer around lakes and ponds.

- #### D. Where resource buffers overlap, the more restrictive requirements shall apply.

2. Activities Prohibited/Permitted in a *Riparian Buffer*. No *earth disturbance, grading, filling, buildings, structures, new construction, or development* shall be permitted in the *riparian buffer* except for those activities specifically listed as permitted activities in this section. Septic drain fields and sewage disposal systems shall not be permitted within the *riparian buffer* and shall comply with setback requirements established under 25 Pa. Code Chapter 73.

- #### A. Activities Permitted in the Inner Buffer. The following activities shall be permitted in the inner buffer provided no buildings are involved and disturbance to the buffer is minimized to the greatest extent practicable: and for pond/lake buffer, provided the area of the buffer impacted by the permitted activities shall not exceed thirty-five (35%) percent of the cumulative buffer on the Property.

- (1) Public and private recreation trails for non-motorized use only. Trails shall be stable and unpaved and be designed to have the least impact on native plants species and other sensitive environmental features.
- (2) *Stormwater conveyance facilities* approved by the *Township*
- (3) Buffer maintenance and restoration
- (4) The correction of hazardous conditions
- (5) Disturbance activities requiring a *DEP* permit in conjunction with a *Township*-approved project
- (6) Fish hatcheries
- (7) Wildlife sanctuaries
- (8) Boat docks and boat launch sites constructed so as not to alter the *floodplain cross section*
- (9) Lake front views

B. Activities Permitted in the Outer Buffer. The following activities shall be permitted in the outer buffer provided no building are involved and no more than twenty (20%) percent of the cumulative outer buffer on the *project site* shall be altered by the activities:

- (1) Activities permitted in the inner buffer
- (2) Stormwater *BMP's* permitted by the *Township*
- (3) Roads constructed within two (2') feet of existing grade
- (4) Limited forestry activities that do not clear cut the buffer (e.g. selective regeneration harvest) in accord with a *forest management plan*
- (5) Improvements to an existing structure resulting in less than ten (10%) horizontal expansion of that structure
- (6) Agricultural activities
- (7) Plant nurseries
- (8) Parking lots constructed to existing grade

(9) Temporary fairs and carnivals

(10) Accessory uses for residential purposes

(11) Private sportsmen's club activities

(12) Athletic facilities

(13) Orchards

- C. Any permitted use within the *riparian buffer* shall be conducted in a manner that will maintain the extent of the 100-year *floodplain*, improve or maintain *stream* stability, and preserve and protect the ecological function of the *floodplain*.
- D. Waiver for Improvements to Existing Structures in Outer Buffers. The provisions of this Section 303.I do not require any changes or improvements to be made to lawfully existing structures in buffers. However, when any improvement to an existing structure is proposed which results in a ten (10%) or greater horizontal expansion of that structure, the improvement may only be permitted by the granting of a Waiver from the requirements of *this Chapter*. In considering a waiver application, the *Board of Supervisors* shall determine whether the *Applicant* has presented evidence of hardship in addition to the standards for Waivers set forth in Section 23-110 of *this Chapter*.
- E. Pre-existing Lots or Parcels/Development in Outer Buffers. In the case of legally pre-existing lots (approved prior to the effective date of *this Chapter*) where the useable area of a lot lies within an outer buffer area; the *Applicant* may apply for a Waiver from the *Board of Supervisors* in accordance with Section 23-110 of *this Chapter*. In considering a waiver application, the *Board of Supervisors* shall determine whether the *Applicant* has presented evidence of hardship in addition to the standards for Waivers set forth in Section 23-110 of *this Chapter*.

3. Minimum Management Requirements for Riparian Buffers

- A. Existing native vegetation shall be protected and maintained within the Riparian Buffer.
- B. Whenever practicable invasive vegetation shall be actively removed, and the Riparian Buffer shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the *site*.

4. The Riparian Buffer shall be enforceable by the *Township* and shall be recorded in the Monroe County Recorder of Deeds office, so that it shall run with the land and limit the use of the property located therein. The buffer shall allow for the continued private ownership and shall count toward the minimum lot area required by Zoning, unless otherwise specified in the *Township Zoning Ordinance*.

23-304. Volume Controls.

1. The *green infrastructure* and *low impact development* practices provided in the *BMP Manual* shall be utilized for all *regulated activities* wherever possible. Water volume controls shall be implemented using the Design Storm Method in Subsection A or the Simplified Method in Subsection B below. For *regulated activities* equal or less than one acre that do not require hydrologic routing to design the *stormwater* facilities, *this Chapter* establishes no preference for either methodology; therefore, the *Applicant* may select either methodology on the basis of economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology and other factors.
 - A. The Design Storm Method (CG-1 in the *BMP Manual*) is applicable to any size of *regulated activity*. This method requires detailed modeling based on site conditions.
 - (1) Do not increase the post-development total *runoff* volume for all storms equal to or less than the 2-year 24-hour duration precipitation.
 - (2) For modeling purposes:
 - (a) Existing non-forested *pervious* area must be considered meadow in good condition.
 - (b) A percentage of no less than 20% of existing *impervious area*, when present, shall be considered meadow in good condition in the model for *existing conditions*.
 - B. The *Simplified Method* (CG-2 in the *BMP Manual*) provided below is independent of site conditions and should be used if the Design Method is not followed. This method is not applicable to *regulated activities* greater than one acre or for projects that require hydrologic routing to design the *stormwater* facilities. For new *impervious surfaces*:
 - (1) Stormwater facilities shall capture at least two (2) inches of *runoff* from all new *impervious surfaces*.
 - (2) At least the first one inch of *runoff* from new *impervious surfaces* shall be permanently removed from the *runoff* flow, i.e., it shall not be released into the surface waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, an *infiltration*.
 - (3) Wherever possible, *infiltration* facilities should be designed to accommodate *infiltration* of the entire permanently removed *runoff*; however, in all cases at least the first 0.5 inch of the permanently removed *runoff* should be infiltrated.

23-305. Rate Controls.

- Proposed conditions rates of *runoff* from any Regulated Activity shall not exceed the peak *release rates of runoff* prior to development for the *design storms* as specified on the Brodhead-McMichaels Creek Stormwater Management District Watershed Map (Appendix D) and Table 23-305.1. Areas located outside of the Brodhead-McMichaels Creek Watershed are subject to the same requirements as if they were located in Stormwater Management District A.

TABLE 23-305.1 –Rate Control Requirements.

District	Proposed conditions 24-hour storm event	(reduce to)	Existing conditions 24-hour storm event
A	2-year		1-year
	5-year		5-year
	10-year		10-year
	25-year		25-year
	50-year		50-year
	100-year		100-year
B-1	2-year		1-year
	5-year		2-year
	10-year		5-year
	25-year		10-year
	50-year		25-year
	100-year		100-year
B-2	2-year		1-year
	5-year		2-year
	25-year		5-year
	50-year		10-year
	100-year		50-year
B-3	50-year		10-year
	100-year		50-year
	Due to the effect of the Leavitt Branch Dam, detention of storms less than the 50 year are not required in District B-3		
C	Provisional Direct Discharge District - <i>Development sites</i> which can discharge directly to the main channel or major tributaries or indirectly to the main channel through an existing <i>stormwater</i> drainage system (i.e., <i>storm sewer</i> or tributary) which meets the "Downstream Hydraulic Capacity Analysis" in Section 305.8 of <i>this Chapter</i> and is shown by the <i>qualified professional</i> to not cause a downstream problem, may allow an increase in flow as long as no downstream harm is demonstrated. However, <i>sites</i> in District C shall comply with the criteria for water quality; and volume control, Section 23-304 of <i>this Chapter</i> . If the proposed conditions <i>runoff</i> is intended to be conveyed by an existing <i>stormwater</i> drainage system to the main channel, assurance must be provided that		

	<p>such system has adequate capacity to convey the increased peak flows or will be provided with improvements to furnish the required capacity. When adequate capacity of the downstream system does not exist and will not be provided through improvements, the proposed conditions peak rate of <i>runoff</i> must be controlled to the <i>existing conditions</i> peak rate as required in District A provisions for the specified <i>design storms</i>.</p>
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3. District Boundaries - The boundaries of the Stormwater Management Districts are shown on an official map included in Appendix D of the Brodhead Creek and McMichael Creek Act 167 Stormwater Management Plan, available at the Monroe County Conservation District website. A copy of the official map at a reduced scale is included in Appendix D of *this Chapter*. The exact location of the Storm-water Management District boundaries as they apply to a given *development site* shall be determined by mapping the boundaries using the two-foot topographic contours (or most accurate data required) provided as part of the *SWM Site Plan*.

4. Sites Located in More Than One District - If a Development Site is located within two or more *stormwater* management district category *subareas*, the *peak discharge* rate from any *subarea* shall be the *existing conditions peak discharge* for that *subarea*. The calculated *peak discharges* shall apply regardless of whether the grading plan changes the drainage area by *subarea*. The *Board of Supervisors* may grant a Waiver if discharges from multiple *subareas* recombine in proximity to the Development Site. In this case, *peak discharge* in any direction may be a 100% *release rate* provided that the overall *site discharge* meets the weighted average *release rate*.

5. Off-Site Areas - Off-site areas that drain through a Development Site are not subject to *release rate* criteria when determining allowable peak *runoff* rates. However, on-site drainage facilities shall be designed to safely convey off-site flows through the Development Site.

6. Where the Development Site area differs significantly from the total Property area, only the proposed impact area utilizing *stormwater* management measures shall be subject to the Management District Criteria. In other words, unimpacted areas bypassing the *stormwater* management facilities would not be subject to the Management District Criteria.

7. "No Harm" Option - For any proposed *development site* not located in a provisional direct discharge district, the *Applicant* has the option of using a less restrictive *runoff* control (including no detention) if the *Applicant* can prove that "no harm" would be caused by discharging at a higher *runoff* rate than that specified by the *applicable Act 167 Plan*. The "no harm" option is used when an *Applicant* can prove that the proposed hydrographs can match existing hydrographs, or if it can be proved that the proposed conditions will not cause increases in peaks at all points downstream. Proof of "no harm" must be shown based upon the following "Downstream Impact Evaluation" which shall include a "downstream hydraulic capacity analysis" consistent with Section 305.8 of *this Chapter* to determine if adequate hydraulic capacity exists. The *Applicant* shall submit this evaluation of the impacts due to increased downstream *stormwater* flows in the *watershed* to the *Township*.
 - A. The Hydrologic Regime of the *site* must be maintained.

- B. The “Downstream Impact Evaluation” shall include hydrologic and hydraulic calculations necessary to determine the impact of hydrograph timing modifications due to the proposed development upon a dam, highway, structure, natural point of restricted *streamflow* or any *stream* channel section, established with the concurrence of the *Township*.
 - C. The evaluation shall continue downstream until the increase in flow diminishes due to additional flow from tributaries and/or *stream* attenuation.
 - D. The peak flow values to be used for downstream areas for the *design return period* storms (2, 5, 10, 25, 50, and 100-year) for the 24-hour storm event shall be the values from the calibrated models in the original Act 167 Plans for the Brodhead Creek Watershed and the McMichaels Creek Watershed.
 - E. Proposed *BMPs* which would generate increased peak flow rates at storm drainage problem areas would, by definition, be precluded from successful attempts to prove “no-harm”, except in conjunction with proposed capacity improvements for the problem areas consistent with Section 305.H.
 - F. A financial distress shall not constitute grounds for the *Township* to approve the use of the “no-harm” option.
 - G. Downstream capacity improvements may be provided as necessary to achieve the “no harm” option.
 - H. Any “no harm” justifications shall be submitted by the *Applicant* as part of the *SWM Site Plan* submission per Part 4 of *this Chapter*.
8. “Downstream Hydraulic Capacity Analysis” - Any downstream hydraulic capacity analysis conducted in accordance with *this Chapter* shall use the following criteria for determining adequacy for accepting increased peak flow rates:
- A. Existing natural or man-made channels or *swales* must be able to convey the increased *runoff* associated with a 2-year *return period* event within their banks at velocities consistent with protection of the channels from *erosion*. Acceptable velocities shall be based upon criteria included in the *DEP* Erosion and Sediment Pollution Control Program Manual.
 - B. Existing natural or man-made channels or *swales* must be able to convey increased 25-year *return period runoff* without creating any hazard to persons or property.

- C. Culverts, bridges, *storm sewers* or any other facilities which must pass or convey flows from the tributary area must be designed in accordance with *Chapter 105* (if applicable) and, at minimum, pass the increased 25-year *return period runoff*.
9. Hardship Option - The *applicable Act 167 Plan* and its standards and criteria are designed to maintain *existing conditions* peak flows and volumes throughout the *watershed* as the *watershed* becomes developed. There may be certain instances, however, where the standards and criteria established are too restrictive for a particular *Applicant*. The existing drainage network in some areas may be capable of safely transporting slight increases in flows without causing a problem or increasing flows elsewhere. If an *Applicant* cannot meet the Stormwater standards due to lot conditions or if conformance would become a hardship to an *Applicant*, the hardship option may be applied. A financial distress shall not constitute grounds for the *Township* to approve the use of the hardship option. The *Applicant* would have to plead its case to the *Board of Supervisors* with the final determination made by the *Township*. Any *Applicant's* pleading the "hardship option" will assume all liabilities that may arise due to exercising this option.

23-306. Calculation Methodology.

1. Stormwater *runoff* from all *development sites* shall be calculated using a generally accepted calculation technique that is based on the *NRCS soil cover complex method*. Table 23-306-1 summarizes acceptable computation methods and the method selected by the *qualified professional* shall be based on the individual limitations and suitability of each method for a particular *Development Site*. The *Township* may allow the use of the *Rational Method* and Modified Rational Method after consultation with the *Township Engineer* to estimate *peak discharges* from drainage areas less than one (1) acre and/or on a case-by-case basis.

TABLE 23-306-1 Acceptable Computation Methodologies for Stormwater Management Plans

METHOD	METHOD DEVELOPED BY	APPLICABILITY
TR-20	USDA NRCS	Applicable where use of full hydrology computer model is desirable or necessary
TR-55	USDA NRCS	Applicable for land development plans with limitations described in TR55
HEC-1 / HEC-HMS	US Army Corps of Engineer	Applicable where use of full hydrology computer model is desirable or necessary
PSRM	Penn State University	Applicable where use of a hydrologic computer model is desirable or necessary; simpler than TR-20 or HEC-1

<i>Modified Rational Method</i>	Method to be approved by the <i>Township Engineer</i> .	For drainage areas less than one acre and/or as approved by the <i>Township or Township Engineer</i>
<i>Rational Method</i>	Emil Kuichling	For collection and conveyance system design as approved by the <i>Township and/or Township Engineer</i>
Other Methods	Varies	Other computation methodologies approved by the <i>Township and/or Township Engineer</i>

2. All calculations using the *soil cover complex method* shall use the appropriate design rainfall depths for the various *return period* storms consistent with the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14 can be accessed at <http://hdsc.nws.noaa.gov/hdsc/pfds>. If a hydrologic computer model such as *PSRM* or *HEC-1* is used for *stormwater runoff* calculations, then the duration of rainfall shall be 24 hours. The SCS 'S' curve shown in Figure B-1 of Appendix B shall be used for the rainfall distribution.
3. All calculations using the *Rational Method*, or the *Modified Rational Method* shall use rainfall intensities consistent with appropriate times-of-concentration for overland flow and *return periods* from the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14 can be accessed at <http://hdsc.nws.noaa.gov/hdsc/pfds>.
4. Times-of-concentration for overland flow shall be calculated using the methodology presented in Chapter 3 of *Urban Hydrology for Small Watersheds*, *NRCS*, TR-55 (as amended or replaced from time to time by *NRCS*). Times-of-concentration for channel and *pipe* flow shall be computed using *Manning's equation*.
5. Runoff Curve Numbers (CN) for both existing and proposed conditions to be used in the *soil cover complex method* shall be obtained from Table B-2 in Appendix B. Due to limitations of the TR-55 methodology, a minimum weighted curve number (CN) of 40 shall be utilized in the calculations.
6. Runoff coefficients (c) for both existing and proposed conditions for use in the *Rational Method* or *Modified Rational Method* shall be obtained from Table B-3 in Appendix B.
7. The *qualified professional* shall consider that the *runoff* from the *Development Site* graded to the subsoil will not have the same *runoff* conditions as the *site* under *existing conditions*, even

after placement of topsoil or seeding. The *qualified professional* may adjust the proposed condition “CN” or “c” to better reflect proposed soil conditions.

8. Where uniform flow is anticipated, the *Manning equation* shall be used for hydraulic computations, and to determine the capacity of *open channels, pipes, and storm sewers*. Values for Manning’s roughness coefficient (n) shall be consistent with Table B-4 in Appendix B.
9. Outlet structures for Stormwater Management Facilities shall be designed to meet the performance standards of *this Chapter* using any generally accepted hydraulic analysis technique or method.
10. The design of any Stormwater detention facilities intended to meet the performance standards of *this Chapter* shall be verified by routing the *design storm* hydrograph through these facilities using the *Storage-Indication Method*. The *design storm* hydrograph shall be computed using a generally accepted calculation technique that is based on the *NRCS Soil Cover Complex Method*. The *Township* may approve the use of any generally accepted full hydrograph approximation technique that shall use a total *runoff* volume that is consistent with the volume from a method that produces a full hydrograph.

PART 4
SWM SITE PLAN REQUIREMENTS

23-401. SWM Site Plan Contents.

1. All *SWM Site Plan* materials shall be submitted to the *Township* in a format that is clear, concise, legible, neat, and well organized; otherwise, the *SWM Site Plan* shall not be accepted for review and shall be returned to the *Applicant*. The following items shall be included in the *SWM Site Plan*:
 - A. Written Description. A written description of the following information shall be submitted:
 - (1) General description of the project and the overall *stormwater* management concept for the project designed in accordance with Section 302.
 - (2) General description of permanent Stormwater management techniques, including construction specifications of the materials to be used for Stormwater Management Facilities.
 - (3) Complete hydrologic, hydraulic, and structural computations for all *stormwater management facilities* and assumptions and criteria used in the design of the *stormwater management facilities*.
 - (4) A determination of site conditions in accordance with the *BMP Manual*. A detailed site evaluation shall be completed for projects proposed in areas of carbonate geology or *karst* topography, and other environmentally sensitive areas, such as Brownfields.
 - (5) Stormwater *runoff* design computations and documentation as specified in *this Chapter*, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of *this Chapter*, including the recommendations and general requirements in Section 301 of *this Chapter*.
 - (6) The effect of the project (in terms of *runoff* volumes and peak flows) on adjacent properties and on any existing municipal *stormwater* collection system that may receive *runoff* from the *development site*.
 - (7) Expected project time schedule.
 - (8) Development stages (project phases) if so proposed.

- (9) An operation and maintenance (O&M) plan for all existing and proposed physical *stormwater management facilities*. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.
 - (10) A justification must be included if *BMPs* other than *green infrastructure* methods and LID practices are proposed to achieve the volume, rate, and water quality controls under *this Chapter*.
 - (11) Provisions for permanent access and/or maintenance easements for all physical *SWM BMPs*, such as ponds and *infiltration* structures, as necessary to implement the Operation and Maintenance (O&M) Plan.
- B. Maps. Map(s) of the project area shall be submitted on 24-inch x 36-inch sheets and/or shall be prepared in a form that meets the requirements for recording at the Offices of the Recorder of Deeds of Monroe County. The contents of the map(s) shall include, but not be limited to:
- (1) A location map at a scale of 1" = 2000' or less showing the location of the project relative to highways, municipalities, or other identifiable landmarks.
 - (2) The name of the development, the name and address of the *Applicant*, the address of the property, and the name and address of the individual or firm preparing the *SWM Site Plan*.
 - (3) The date of submission.
 - (4) A graphic and written scale of one (1) inch equals no more than fifty (50) feet; for tracts of twenty (20) acres or more, the scale shall be one (1) inch equals no more than one hundred (100) feet.
 - (5) A north arrow, with a notation of whether it is true or magnetic.
 - (6) The boundaries of the total Property and, if different, Development Site boundary and size with distances marked to the nearest foot and bearings to the nearest degree.
 - (7) Names, numbers and rights-of-way widths of adjoining roads.
 - (8) Locations of existing *streams*, lakes, ponds, *wetlands* or other Waters of this Commonwealth within the Development Site.
 - (9) Locations of wooded areas and tree masses, buildings and structures, rock outcrops, paved areas, sidewalks, *culverts*, *storm sewers*, *swales*, utilities, and all other significant man-made features.

- (10) The locations of existing and proposed on-lot wastewater facilities and water supply wells.
- (11) *Floodplain and floodway boundaries, riparian buffers, existing drainage courses, areas of natural vegetation to be preserved, the total extent of the upstream area draining through the site, and Pre- and post-development drainage areas,*
- (12) Existing and proposed contours at intervals of two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.
- (13) The locations of all existing and proposed utilities, sanitary sewers, and water lines within fifty (50) feet of property lines.
- (14) The location(s) of any wellhead protection zones.
- (15) Soil names, boundaries, hydrologic group, and limitations.
- (16) Limits of Earth Disturbance, including the type and amount of *impervious area* that would be added.
- (17) Proposed structures, roads, paved areas, *impervious surfaces*, buildings and other land cover.
- (18) Existing and proposed land use(s).
- (19) A key map showing all existing man-made features beyond the Development Site boundary that would be affected by the project.
- (20) Location of all Open Channels.
- (21) Overland drainage patterns and *swales*.
- (22) The location of all Erosion and Sediment Control Facilities.
- (23) The location of permanent access and/or maintenance easements for all physical *SWM BMPs*.
- (24) Plans, profiles, and details of all *SWM BMPs*, including, but not limited to drainage structures, *pipes, open channels, and swales*.
- (25) A note on the plan indicating the location and responsibility for maintenance of *stormwater management facilities* that would be located off-site.

(26) A statement, signed by the *Applicant*, acknowledging that any revision to the approved *SWM Site Plan* must be approved by the *Township* and that a revised Erosion and Sediment Control Plan must be submitted to the Conservation District for a determination of adequacy.

(27) The following signature block for the *qualified professional*.

I, [qualified professional], on this date, [date of signature], hereby certify that the *SWM Site Plan* meets all design standards and criteria of the [name of applicable Act 167 Plan] and Stroud Township Stormwater Management Ordinance."

(28) Isolation distances from wells, buildings, septic systems, as noted in the Pennsylvania Stormwater Best Management Practices (BMP) Manual.

C. Supplemental Information.

(1) A soil *erosion and sediment control plan*, where applicable, and letter of adequacy from the Conservation District.

(2) A Declaration of Adequacy and Highway Occupancy Permit from the *PennDOT* District Office when utilization of a *PennDOT* storm drainage system is proposed.

(3) *Wetland* Delineation Report and/or a Jurisdictional Determination from the US Army Corps of Engineers.

(4) For any activities that require an NPDES Permit for Stormwater Discharges from Construction Activities, or a *DEP* Joint Permit Application, a *PennDOT* Highway Occupancy Permit, or any other permit under applicable state or federal regulations, or are regulated under *Chapter 105* or *Chapter 106*, the proof of application for said permit(s) or approvals shall be submitted.

23- 402. Plan Submission.

1. The *Applicant* shall submit a complete Drainage Plan application, with all required plans and supplemental materials, as specified in *this Chapter*. No application is complete without the required fee. The application shall be coordinated with the state and federal permit process and the SALDO review process.

A. For those Regulated Activities which require SALDO approval, the *SWM Site Plan* shall be submitted by the *Applicant* as part of the Preliminary Plan submission.

B. Three (3) copies of the *SWM Site Plan* shall be submitted along with the required application fee.

- C. Any submissions found incomplete shall not be accepted for review and shall be returned to the *Applicant* with a notification in writing of the specific manner in which the submission is incomplete.
- D. Complete applications shall be distributed as follows:
 - (1) Two (2) copies to the *Township*.
 - (2) Two (2) copies to the *Conservation District*.
 - (3) One (1) copy to the *Township Engineer*.
 - (4) One (1) copy to the Monroe County Planning Commission.

23-403. Plan Review.

1. The *Township* shall review the *SWM Site Plan* for consistency with the provisions of *this Chapter*.
2. The *Township* shall notify the *Applicant* in writing within 45 days whether the *SWM Site Plan* is approved, approved with conditions or disapproved. If the *SWM Site Plan* involves a Subdivision and Land Development Plan, the notification shall occur within the time period allowed by the Municipalities Planning Code (90 days) unless the time requirement is waived in writing by the *Applicant*. If a longer notification period is provided by other statute, regulation, or ordinance, the *Applicant* will be so notified by the *Township*.
3. The *Township* shall not unconditionally approve a *SWM Site Plan* until the *Applicant* presents evidence that the *Conservation District* has found the Erosion and Sediment Control Plan adequate to meet the requirements of *Chapter 102*.
4. If the *Township* disapproves the *SWM Site Plan*, the *Township* shall state the reasons for the disapproval in the written notice. If the *Township* approves the *SWM Site Plan* with conditions, the *Township* shall state the conditions in the written notice.

23-404. Modification of *SWM Site Plans*.

Any modification to an approved *SWM Site Plan* that involves a change in Stormwater Management *BMPs* or techniques, or that involves the relocation or re-design of Stormwater Management *BMPs*, or that is necessary because soil or other conditions are not as stated on the *SWM Site Plan*, as determined by the *Township*, shall require a resubmission of the modified *SWM Site Plan* in accordance with this Article.

23-405. Resubmission of Disapproved SWM Site Plans.

A disapproved *SWM Site Plan* may be resubmitted, with the revisions addressing the *Township's* concerns, to the *Township* in accordance with this Article. All applicable fees shall accompany a resubmission of a disapproved *SWM Site Plan*.

23-406. Authorization to Construct and Term of Validity.

The *Township's* approval of an *SWM Site Plan* authorizes the *regulated activities* contained in the *SWM Site Plan* for a maximum term of validity of five (5) years following the date of approval. The *Township* may specify a term of validity shorter than five (5) years in the approval for any specific *SWM Site Plan*. If work shown on an approved *SWM Site Plan* is not completed according to Section 23-407 within the term of validity, then the *Township* may consider the *SWM Site Plan* disapproved and may revoke any and all permits.

23-407. As-Built Plans, Completion Certificate, and Final Inspection.

1. The developer shall be responsible for providing as-built plans of all *SWM BMPs* included in the approved *SWM Site Plan*. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the *Township*.
2. The as-built plan shall include a certification signed by a *qualified professional* verifying that all permanent *stormwater BMPs* have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent *stormwater BMPs* must also be submitted, at the central location of the *BMPs*. If any licensed *qualified professionals* contributed to the construction plans, then a licensed *qualified professional* must sign the completion certificate.
3. After receipt of the completion certification by the *Township*, the *Township* may conduct a final inspection.

PART 5
OPERATION AND MAINTENANCE

23-501. Responsibilities of Developers and Landowners

1. The *Township* shall make the final determination on the continuing maintenance responsibilities prior to final approval of the *SWM Site Plan*. The *Township* may require a dedication of such facilities as part of the requirements for approval of the *SWM Site Plan*. Such a requirement is not an indication that the *Township* will accept the facilities. The *Township* reserves the right to accept or reject the ownership and operating responsibility for any portion of the *stormwater* management *BMPs*.
2. Facilities, areas, or structures used as *SWM BMPs* shall be enumerated as permanent real estate appurtenances unless approved to be changed in the future by the Board of Supervisors and recorded as deed restrictions or conservation easements that run with the land.
3. The Operation and Maintenance Plan shall be recorded as a restrictive deed covenant that runs with the land.
4. The *Township* may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

23-502. Operation and Maintenance Agreements

1. Prior to final approval of the *SWM Site Plan*, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix A) covering all *stormwater BMPs* which are to be privately owned.
 - A. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O& M Agreement.
 - B. The owner shall convey to the *Township* conservation easements to assure access for periodic inspections by the *Township* and maintenance, as necessary.
 - C. The owner shall keep on file with the *Township* the name, address and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the *Township* within ten (10) working days of the change.
2. The owner is responsible for operation and maintenance of the *stormwater BMPs*. If the owner fails to adhere to the O&M Agreement, the *Township* may perform the services required and charge the owner the appropriate fees. Nonpayment of fees may result in a lien against the property.

23-503. Maintenance of Stormwater Management Facilities Accepted by the *Township*.

Where the *Board of Supervisors* accepts dedication of all or some of the Stormwater Management Facilities following completion, the *Board of Supervisors* shall require the posting of financial security to secure the structural integrity of said facilities as well as the functioning of said facilities in accordance with the design and specifications as depicted on the approved Stormwater Management plan. The term of the financial security shall be 18 months from the date of acceptance of dedication, and the amount of financial security shall be 15% of the actual cost of installation of said improvements. The financial security shall be of the same type required in Article V with regard to installation of Stormwater Management Facilities.

23-504. Right of Entry onto Private Property.

Upon presentation of proper credentials, duly authorized representatives of the *Township* may enter, at reasonable times, upon any property, within the *Township*, to investigate or ascertain the condition of the subject property in regard to any aspect regulated by *this Chapter*.

**PART 6
FEES AND EXPENSES**

23-601. SWM Site Plan Review and Inspection Fee.

1. The *Board of Supervisors* shall establish fees by ordinance for resolution to defray plan review and construction inspection costs incurred by the *Township*. All application fees shall be paid by the *Applicant* at the time of Drainage Plan submission.
2. The *Applicant* shall reimburse the *Township* for all legal and engineering fees incurred in the review of the Drainage Plan or permit application and supporting documents, review of agreements for maintenance of Stormwater Management Facilities, review of Easement agreements, and inspection of Stormwater Management Facilities. If required by applicable ordinance or resolution, the *Applicant* shall deposit the estimated review and inspection fees with the *Township* at the time of application.
3. In the event that *Applicant* disputes the amount of such review fees, the *Applicant* shall, within ten (10) days of the date of an invoice for the review or inspection fees, notify the *Township* in writing that such fees are disputed, in which case the *Township* shall not delay or disapprove a Drainage Plan or permit application due to the *Applicant's* request over disputed fees.
4. In the event the *Township* and the *Applicant* cannot agree on the amount of review and/or inspection fees which are reasonable and necessary, then the *Applicant* and the *Township* shall follow the procedure for dispute resolution set forth in *MPC* Section 503.

Section 23-602. Expenses Covered by Fees.

The fees required by *this Chapter* shall at a minimum cover:

1. Administrative costs.
2. The review of the Drainage Plan by the *Township* and the *Township Engineer*.
3. Attendance at meetings.
4. Site inspections during construction and upon completion of construction.
5. Any additional work required to enforce any permit provisions regulated by *this Chapter*, correct violations, and assure proper completion of stipulated remedial actions.

PART 7

PROHIBITIONS

Section 23-701. Prohibited Discharges and Connections.

1. Any drain or conveyance, whether on the surface or subsurface, that allows any non-*stormwater* discharge including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the surface waters of this Commonwealth is prohibited.
2. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this Commonwealth, which are not composed entirely of *stormwater*, except as provided in Paragraph C below and except discharges authorized under a state of federal permit.
3. The following discharges are authorized unless they are determined to be significant contributors to pollution of a regulated small MS4 or to the waters of this Commonwealth:
 - A. Discharges or flows from firefighting activities.
 - B. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
 - C. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and *wetlands*.
 - D. Diverted *stream* flows and springs.
 - E. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
 - F. Non-contaminated HVAC condensation and water from geothermal systems.
 - G. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
 - H. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.
4. In the event that the *Township* or *DEP* determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this Commonwealth, the *Township* or *DEP* will notify the responsible person(s) to cease the discharge.

23-702. Roof Drains and Sump Pumps.

1. Roof drains and sump pumps shall discharge to *infiltration* or vegetative *BMPs*, designed to accommodate that flow, wherever feasible. Only non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps shall be discharged from the sump pumps.

23-703. Alteration of SWM BMPs.

No person shall modify, remove, fill, landscape, or alter any *SWM BMPs*, facilities, areas, or structures that were installed as a requirement of *this Chapter* without the written approval of the *Township*.

**PART 8
ENFORCEMENT AND PENALTIES**

Section 23-801. Right-of-Entry.

Upon presentation of proper credentials, the *Township* or its designated agent may enter at reasonable times upon any property within the *Township* to inspect the condition of the *stormwater* structures and facilities in regard to any aspect regulated by *this Chapter*.

Section 23-802. Inspection.

1. The landowner or the owner's designee (including the *Township* for dedicated and owned facilities) shall inspect *SWM BMP's*, facilities and/or structures installed under *this Chapter* annually and during or immediately after cessation of a 10-year or greater storm, at a minimum, to ensure the *BMPs*, facilities and/or structures continue to function as intended:
2. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the *BMP*, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the *Township* within 30 days following completion of the inspection.

Section 23-803. Enforcement.

1. It shall be unlawful for a person to undertake any *regulated activity* except as provided in an approved *SWM Site Plan*, unless specifically exempted in Section 23-302 of *this Chapter*.
2. It shall be unlawful to violate Section 23-703 of *this Chapter*.
3. Inspections regarding compliance with the *SWM Site Plan* are a responsibility of the *Township*.

Section 23-804. Suspension and Revocation.

1. Any approval or permit issued by the *Township* pursuant to *this Chapter* may be suspended or revoked for:
 - A. Non-compliance with or failure to implement any provision of the approved *SWM Site Plan* or O&M Agreement.
 - B. A violation of any provision of *this Chapter* or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.

- C. The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
2. A suspended approval may be reinstated by the *Township* when:
 - A. The *Township* has inspected and approved the corrections to the violations that caused the suspension.
 - B. The *Township* is satisfied that the violation has been corrected.
 3. An approval that has been revoked by the *Township* cannot be reinstated. The *Applicant* may apply for a new approval under the provisions of *this Chapter*.
 4. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the *Township* may provide a limited time period for the owner to correct the violation. In these cases, the *Township* will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the *Township* may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of *this Chapter*.

23-805. Penalties and Remedies for Violation.

1. Anyone violating the provisions of *this Chapter* shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than \$1000.00 for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative
2. In addition, the *Township* may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of *this Chapter*. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

Section 23-806. *Township* Liability.

Except as specifically provided by the Act 167, the making of any administrative decision by the *Township* or any of its officials or employees shall not constitute a representation, guarantee or warranty of any kind by the *Township* of the practicability or safety of any proposed structure or use with respect to damage from Erosion, Sedimentation, Storm Water *Runoff*, Flood, or any other matter, and shall create no liability upon or give rise to any cause of action against the *Township* and its officials and employees. The *Board of Supervisors*, by enacting *this Chapter*, does not waive or limit any immunity granted to the *Township* and its officials and employees by the Governmental Immunity Act

of October 5, 1980, P.L. 693, No. 142, as amended, 42 Pa. C.S. §8541 et seq., and does not assume any liabilities or obligations.

Section 23-807. Appeals.

1. Any person aggrieved by any action of the Township, relevant to the provisions of this Chapter, may appeal to the Board of Supervisors within 30 days of that action.
2. Any person aggrieved by any decision of the *Board of Supervisors, relevant to the provisions of this Chapter*, may appeal to Monroe County Court of Common Pleas within 30 days of that decision.

Section 23-808. Effective Date.

This Chapter shall become effective following its enactment by the *Board of Supervisors* of Stroud Township, Monroe County, Pennsylvania, as provided by law.

ORDAINED AND ENACTED by the *Board of Supervisors* of the Township of Stroud this 18TH day of JULY, 2023.

TOWNSHIP OF STROUD



CHRISTINE A. WILKINS, Chair

(TOWNSHIP SEAL)



JENNIFER SHUKAITIS, Vice Chair



EDWARD C. CRAMER, Supervisor

APPENDIX A

**OPERATION AND MAINTENANCE (O&M) AGREEMENT
STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (SWM BMPs)**

THIS AGREEMENT made and entered into this day of _____, 20____, by and between _____ with offices located at _____ (hereinafter the "Landowner"), and STROUD TOWNSHIP, Monroe County, Pennsylvania, a second class township duly organized under the laws of the Commonwealth of Pennsylvania, with its municipal offices located at 1211 North Fifth Street, Stroudsburg, PA 18360 (hereinafter referred to as the "Township").

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Monroe County, Pennsylvania, Record Book _____, Page _____, in the Office of the Recorder of Deeds in and for Monroe County, Pennsylvania, and as shown on the plan for _____, prepared by _____ Drawing or Project No. _____ dated _____, 20____, last revised _____, 20____ (hereinafter referred to as the "Property")

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Township (hereinafter referred to as the "O&M Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Township, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Township, and the Landowner, his successors and assigns, agree that health, safety, and welfare of the residents of the Township and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

WHEREAS, the Township requires, through the implementation of the *SWM Site Plan*, that SWM BMPs as required by said *SWM Site Plan* and the Township Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors and assigns.

NOW THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the *SWM Site Plan*.

2. The Landowner shall operate and maintain the *BMPs* as shown on the *SWM Site Plan* in good working order in accordance with the specific operation and maintenance requirements noted in the O&M Plan and shall provide a written inspection and maintenance report to the *Township* annually.

3. The Landowner hereby grants permission to the *Township*, its authorized agents and employees, to enter upon the Property, at reasonable times and upon presentation of proper credentials, to inspect the *BMPs* whenever necessary. Whenever possible, the *Township* shall notify the Landowner prior to entering the property.

4. In the event the Landowner fails to operate and maintain the *BMPs* per Paragraph 2, the *Township* or its representatives may enter the Property and take whatever action is deemed necessary to maintain said *BMP(s)*. It is expressly understood and agreed that the *Township* is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the *Township*.

5. In the event that the *Township*, pursuant to this Agreement, performs work of any nature, or expends funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the *Township* for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the *Township*.

6. The intent and purpose of this Agreement is to ensure the proper maintenance of the on-site *BMPs* by the Landowner; provided, however, that this Agreement shall not be deemed to create any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.

7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the *Township* from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence or maintenance of the *BMP(s)* by the Landowner or *Township*.

8. The *Township* intends, but is not obligated, to inspect the *BMPs* at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Monroe County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

WITNESS the following signatures and seals:

For the Township:

Attest: _____
(Assistant) Secretary

By: _____
(Vice) Chairman *Board of Supervisors*

[TOWNSHIP SEAL]

For the Landowner:

(Individual or Husband and Wife Landowner*)

Witness:

(SEAL)
(Signature of Individual)

(SEAL)
(Signature of Spouse)

*If individual is married, both spouses must sign regardless of whether property is titled in the name of one spouse or both spouses

(Partnership Landowner **)

(Name of Partnership)

Witness

By: _____
Partner

By: _____
Partner

By: _____
Partner

**All partners must execute this Agreement. Additional signature lines should be attached if necessary.

(Corporation Landowner)

Attest: By: _____
(Assistant) Secretary

(Name of Corporation)

(Vice) President

[CORPORATE SEAL]

(Limited Liability Company Landowner***)

Witnesses:

(Name of Limited Liability Company)

Member

By: _____

Member

By: _____

Member

By: _____

***All members must sign.

[TOWNSHIP ACKNOWLEDGMENT]

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONROE

)
) SS:
)

On this _____ day of _____, 20 ____, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____, who acknowledged himself/herself to be (Vice) Chairman of the *Board of Supervisors of Stroud Township, Monroe County, Pennsylvania*, and that he/she, as such officer, being authorized to do so, executed the foregoing Storm Water Management Agreement and Declaration of Easement for the purposes therein contained by signing the name of such *Township* by himself/herself as such officer. IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

[PARTNERSHIP ACKNOWLEDGMENT]

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF MONROE)SS:
)

On this _____ day of _____, 20____, before me, a notary public, the undersigned officer, personally appeared _____, who

_____ who acknowledged themselves to be all of the partners of _____, a general partnership, and that they, as such partners, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the partnership by themselves as such partners.

IN WITNESS WHEREOF, I have hereunto set my hand and notarial seal.

Notary Public

My commission expires:

[CORPORATE LANDOWNER ACKNOWLEDGMENT]

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF MONROE) SS:
)

On this _____ day of _____, 20____, before me, a notary public, the undersigned officer, personally appeared _____, who _____ acknowledged himself/herself to be the _____ of _____, a corporation, and that as such officer, being authorized to do so, acknowledged the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself/herself as _____.

IN WITNESS WHEREOF, I have hereunto set my hand and notarial seal.

Notary Public

My commission expires:

[LIMITED LIABILITY COMPANY LANDOWNER ACKNOWLEDGMENT]

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF MONROE) SS:
)

On this _____ day of _____, 20____, before me, the undersigned officer, personally appeared _____ who acknowledged themselves to be all of the members of _____, a _____ limited liability company, and that they as such members, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of said limited liability company by themselves as such members.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires:

JOINER BY MORTGAGEE

_____ ("Mortgagee") as holder of a certain mortgage on the within-described Premises, which mortgage, in the amount of \$_____, is dated _____, _____, and is recorded or is about to be recorded in the Recorder of Deeds Office in and for Monroe County, Pennsylvania, as well as any other mortgages which Mortgagee may now or hereafter hold on the Premises (all such mortgages hereinafter collectively referred to as the "Mortgages"), joins in, consents to, and expressly approves the grant of easements and other rights and privileges described in the attached Storm Water Management Agreement and Declaration of Easement (the "Agreement").

The Mortgagee, for itself, its successors and assigns (which shall include any assignee of the Mortgages and any purchaser of the Premises at a sale in foreclosure of the Mortgages or otherwise), hereby covenants and agrees that the rights and privileges herein granted with respect to the Premises shall not be terminated or disturbed by reason of any foreclosure or other action which may be instituted by the Mortgagee, its successors and assigns, as a result of any default under the Mortgages or the debt instruments that such Mortgages secure. Mortgagee by consenting to the Agreement shall not by virtue of its interest as Mortgagee be deemed to have undertaken any of the obligations of the Grantor under the Agreement, including but not limited to construction, maintenance, inspection or indemnification.

IN WITNESS WHEREOF, Mortgagee hereby joins in the execution of the Agreement as of this day ___ of _____ 20 ____.

(Name of Mortgagee)

By: _____

ATTEST: _____
[SEAL]

(MORTGAGEE ACKNOWLEDGMENT)

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF MONROE) SS:
)

On this, the ____ day of _____, 20 ___, before me, a Notary Public, the undersigned officer, personally appeared _____, who acknowledged _____ self to be the _____ of _____, a corporation, and that as such officer being authorized to do so, acknowledged the foregoing instrument for the purpose therein contained by signing the name of the Bank by _____ self as _____.

IN WITNESS WHEREOF, I have hereunto set my hand and notarial seal.

Notary Public

My Commission Expires:

CONSENT AND JOINDER OF HOMEOWNERS' ASSOCIATION

The undersigned hereby consents to and joins in the attached Storm Water Management Agreement and Declaration of Easement (the "Agreement"). The undersigned shall maintain all storm water management facilities in accordance with the terms and provisions of the Agreement and in accordance with any separate Declaration of Restrictions. The undersigned specifically agrees that the Township shall have the rights referred to in Paragraph 7 of the Agreement.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound, hereby consents to and joins in the Agreement.

(Name of Homeowner's Association or similar entity)

Attest: _____
(Assistant) Secretary

By: _____
(Vice) President

[SEAL]

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF MONROE)SS:
)

On this _____ day of _____, 20____ before me, a Notary Public, the undersigned officer, personally appeared _____, who acknowledged _____ a self to be the _____ of _____, a nonprofit corporation, and that as such officer, being authorized to do so, acknowledged the foregoing instrument for the purposes therein contained by signing the name of the corporation by _____ self as _____.

Notary Public

My commission expires:

REPRESENTATION AND WARRANTY CONCERNING MORTGAGES AFFECTING PROPOSED DEVELOPMENT

I (We), _____ the undersigned, intending to be legally bound, represent and warrant to Stroud Township that there are not presently nor will there be prior to the recording of the Storm Water Management Agreement and Declaration of Easement Agreement any mortgages affecting the property which is being developed in accordance with the subdivision and/or land development plan titled _____ prepared by _____, drawing or project number _____, dated _____, last revised _____.

The undersigned understand(s) and agree(s) that Stroud Township will rely upon this statement when releasing the aforementioned subdivision and/or land development plan for recording.

Date

Signature

Signature

Signature

Signature

**STROUD TOWNSHIP
MONROE COUNTY, PENNSYLVANIA**

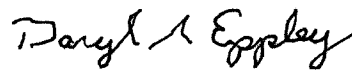
ORDINANCE NO. 3 OF 2023

STORMWATER MANAGEMENT ORDINANCE

CERTIFICATION

I hereby certify that the attached Ordinance is a true and correct copy of an Ordinance enacted by the Board of Supervisors of Stroud Township, Monroe County, Pennsylvania, on the 18th day of July, 2023.

(TOWNSHIP SEAL)



DARYL A. EPPLEY, Township Manager
Stroud Township
1211 North Fifth Street
Stroudsburg, PA 18360

