

## Chapter 82

### STORMWATER MANAGEMENT

#### ARTICLE I

##### Ligonier Township Stormwater Management Ordinance

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[HISTORY: Adopted by the Board of Supervisors of the Township of Ligonier 5-12-2020 by Ord. No. 1-2020. This repealed and replaced in its entirety the former Stormwater Management Chapter, which had been adopted 3-5-2020 by Ord. No. 02-OR-04. Amendments noted where applicable.]

*General references: Sewers – see Chapter 76      Land Use and Development – See Ch. 106*

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#### ARTICLE I

##### **Ligonier Township Stormwater Management Ordinance [Adopted 5-12-2020 by Ord. No. 1-2020]**

#### **§ 82-1. Purpose.**

The purpose of this Ordinance is to enact rules, regulations, and procedures to manage and control in geographic areas within the jurisdiction of Ligonier Township in a manner consistent with the Westmoreland County Act 167 Stormwater Management Plan as adopted by Westmoreland County, Pennsylvania.

A. *Short Title.* This Article, Chapter, and Ordinance shall be known and may be cited as the “Ligonier Township Stormwater Management Ordinance”

B. *Findings.* The Board of Supervisors of Ligonier Township finds that:

1. Stormwater runoff from lands modified by human activities threatens public health and safety by causing decreased infiltration of rainwater and increased runoff flows and velocities, which overtax the carrying capacity of existing streams and storm sewers,

causes property damage and risk to public safety, and greatly increases the cost to the public to manage stormwater.

2. Inadequate planning and management of accelerated stormwater runoff resulting from land development and redevelopment throughout a watershed can also harm surface water resources by changing the natural hydrologic patterns, accelerating stream flows (which increase scour and erosion of stream-beds and stream-banks thereby elevating sedimentation), destroying aquatic habitat and elevating aquatic pollutant concentrations and loadings such as sediments, nutrients, heavy metals and pathogens. Groundwater resources are also impacted through loss of recharge.

3. Ligonier Township is located in the Loyalhanna Creek Watershed(s) and as such will endeavor to cooperate with other municipalities located in the watershed(s) to address issues of stormwater management, water quality, pollution and flooding.

4. Non-stormwater discharges to municipal separate storm sewer systems can contribute to pollution of waters of the Commonwealth in the Ligonier Township.

5. Stormwater can be an important water resource by providing groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.

6. Public education on the control of pollution of stormwater is an essential component in successfully managing stormwater.

7. A comprehensive program of stormwater management, including reasonable regulation of land development and redevelopment causing loss of natural infiltration, is fundamental to the public health, safety, welfare, and the protection of the people of the Municipality and all the people of the Commonwealth, their resources, and the environment.

8. The use of open space conservation, green infrastructure, low impact development (LID), and riparian buffers 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, LID, and riparian buffers contribute to the restoration or maintenance of pre-development hydrology.

9. Stormwater structures are considered vital infrastructure and can pose a significant hazard. Outlets and waterways which carry stormwater shall be maintained free of obstructions to allow for non-restricted flow of stormwater to avoid impoundment of water.

10. Occupancy and modification of floodplains shall be avoided wherever there is a practicable alternative to reduce long and short term adverse impacts in order to reduce the risk of flood loss, minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains.

11. 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 municipal separate storm sewer systems (MS4) under the National Pollutant Discharge Elimination System (NPDES).

12. The Westmoreland Conservation District (WCD) is a recognized regulatory agency with authority in the county and this municipality to regulate erosion and sediment controls and stormwater management related to land development activities. Because

WCD's authority crosses municipal boundaries they are enabled to oversee environmental issues for the general benefit of all county residents.

13. The Westmoreland County Integrated Water Resources Plan (2018) addresses all water resources and provides a decision-making tool for development and redevelopment with respect to those resources including stormwater and its management. Refer to [www.paiwrp.com](http://www.paiwrp.com) and [www.westmorelandstormwater.org](http://www.westmorelandstormwater.org).

C. *Purpose.* The purpose of this Article is to promote health, safety, and welfare within the Municipality and its watersheds by minimizing the harms and maximizing the benefits described in this Section of this Article, through provisions designed to:

1. Manage stormwater runoff impacts at their source by regulating activities that cause the problems, reduce runoff volumes and mimic natural hydrology.
2. Maintain existing flows and quality of streams and watercourses.
3. Prevent scour and erosion of streambanks and streambeds.
4. Utilize and preserve the existing natural drainage systems as much as possible.
5. Restore and preserve the natural and beneficial values served by streamside and waterbody floodplains.
6. Focus on infiltration of stormwater, to maintain groundwater recharge, to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
7. Promote stormwater runoff prevention and emphasize infiltration and evapotranspiration through the protection and conservation of natural resource systems and the use of non-structural BMPs and other creative methods of improving water quality and managing stormwater runoff.
8. Promote the use of green infrastructure in development and redevelopment where it can also improve stormwater management within the broader watershed in which the project is located.
9. Meet legal water quality requirements under state law, including regulations at 25 Pa.Code, Chapter 93.4a, to protect and maintain "existing uses" and maintain the level of water quality to support those uses in all streams, and to protect and maintain water quality in "special protection" streams.
10. Provide review procedures and performance standards for stormwater planning and management.
11. Provide for proper operations and maintenance of all permanent stormwater management BMPs that are implemented in the Municipality.
12. Provide a mechanism to identify controls necessary to meet the NPDES permit requirements, and to encourage infrastructure improvements that lead to separation of storm sewer systems from sanitary sewer systems.

D. *Statutory Authority.*

1. The Municipality is empowered to regulate land use activities that affect stormwater runoff by the authority of the Stormwater Management Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, and the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended.
2. Act 167 requires a Municipality to "adopt or amend, and shall implement such ordinances and regulations, including zoning, subdivision and development, building code, and erosion and sedimentation ordinances, as are necessary to regulate

development within the Municipality in a manner consistent with the applicable watershed stormwater plan and the provisions of this act”. The applicable watershed stormwater plan to Ligonier Township is the Westmoreland County Integrated Water Resources Plan 2020.

E. *Applicability.*

1. All regulated activities as defined by this article are subject to regulation by this Article.
2. This Article applies to any land development or regulated earth disturbance activities within the Municipality, and all stormwater runoff entering into the municipality's separate or combined storm sewer system from lands within the boundaries of the municipality.
3. Earth disturbance activities and associated stormwater management controls are also regulated under existing State law and implementing regulations. This Article shall operate in coordination with those parallel requirements; the requirements of this Article shall be no less restrictive in meeting the purposes of this Article than State law.

F. *Repealer.* Any other ordinance provision(s) or regulation of the municipality inconsistent with any of the provisions of this Article is hereby repealed to the extent of the inconsistency only.<sup>1</sup>

G. *Severability.* If any word, phrase, section, sentence, clause or part of this Article is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, invalidity or illegality by a court of competent jurisdiction, shall not affect or impair any of the remaining words, phrases, sections, sentences, clauses or parts of this Article. It is hereby declared to be the intent of the Board of Supervisors of Ligonier Township that this Article would have been adopted had such unconstitutional, illegal or invalid word, phrase, section, sentence, clause or part thereof not been included herein.

H. *Compatibility with Other Requirements.*

1. Approvals issued and actions taken under this Article do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance. To the extent that this Article imposes more rigorous or stringent requirements for stormwater management, the specific requirements contained in this Article shall be followed.
2. Conflicting provisions in other municipality ordinances or regulations shall be construed to retain the requirements of this Article addressing state water quality requirements.

I. *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 Municipality purporting to validate such a violation.

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<sup>1</sup> This section repeals the former Chapter 96: Stormwater Management of the Township Code, which had been adopted 3-5-2020 by Ord. No. 02-OR-04

J. *Prohibitions.* Shall be consistent with PAG-13 NPDES General Permit for stormwater discharges from MS4 communities and as listed here.

1. Prohibited discharges

- a. No person in the Municipality shall introduce, permit or allow, or cause to introduce, permit or allow, stormwater discharges into the municipality separate storm sewer system which are not composed entirely of stormwater, except as permitted by this Article, or
  - i. as provided in paragraph b below, or
  - ii. discharges as authorized under a State or Federal permit
- b. Permissible discharges, based on a finding by the municipality that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are recommended to be discharged safely to a vegetated area or infiltration BMP, but can also be discharged to a storm sewer system, include but are not limited to:
  - i. Discharges from firefighting activities.
  - ii. Potable water sources including dechlorinated water line and fire hydrant flushings.
  - iii. Non-contaminated irrigation drainage from agricultural practices.
  - iv. Routine external building washdown (which does not use detergents or other compounds).
  - v. Non-contaminated Air conditioning condensate.
  - vi. Water from individual residential car, boat or other residential vehicle washing that does not use detergents or other compounds.
  - vii. Springs.
  - viii. Non-contaminated Water from basement or crawl space sump pumps.
  - ix. Non-contaminated water from foundation or from footing drains.
  - x. Flows from riparian habitats and wetlands.
  - xi. Lawn watering.
  - xii. Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used.
  - xiii. Splash pad (recreational spray patio with no standing water) discharges.
  - xiv. Non-contaminated groundwater.
- c. In the event that the municipality determines that any of the discharges identified in paragraph b. above significantly contributes to pollution of waters of the Commonwealth, or is so notified by DEP, the municipality will notify the landowner and/or the responsible person to cease the discharge.
- d. Upon notice provided by the municipality under paragraph c. above, the discharger will have three days as determined by the municipality, to cease the discharge consistent with the degree of pollution caused by the discharge.
- e. Nothing in this Section shall affect, limit or alleviate a discharger's responsibilities under State or Federal law.

2. Prohibited connections. The following sources, activities or connections are prohibited, except as provided in subsection 1. a. and b. above:

- a. Any drain or conveyance, whether on the surface or subsurface, which allows any non-storm water discharge including but not limited to, sewage, process wastewater and wash water, to enter the separate storm sewer system, and any connections to the storm drain system from indoor drains and sinks.
  - b. Any drain or conveyance connected from a commercial, industrial or other non-residential land use to the separate storm sewer system which has not been documented in plans, maps, or equivalent records, and approved by the Municipality.
  - c. Drains carrying stormwater or groundwater shall not be connected to or discharge to any public or private sanitary sewer system or facility.
3. Prohibited activities:
- a. A landowner may not alter the natural flow of surface water on his property by concentrating it in an artificial channel and discharging it upon lower land of his neighbor even though no more water is thereby collected than would naturally have flowed upon the neighbor's land in a diffused [shallow broad path or sheet flow] condition.
  - b. A landowner may not alter any BMPs, facilities or structures that were installed under the ordinance without written approval of the municipality.
4. Roof Drains and Sump Pumps
- a. Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible.

*K. Liability Disclaimer:*

1. Neither the granting of any approval under the stormwater management provisions of this Article, nor the compliance with the provisions of this Article, or with any condition imposed by any public body of the Municipality or by a Ligonier Township official, employee or consultant hereunder, shall relieve any person from any responsibility for damage to person or property resulting therefrom, or as otherwise imposed by law, nor impose any liability upon the municipality for damages to persons or property.
2. The granting of a permit which includes any stormwater management does not constitute a representation, guarantee or warranty of any kind by the municipality or WCD, or by an official or employee thereof, of the practicability or safety of any structure, use or other plan proposed and shall create no liability upon or cause of action against such public body, official or employee for any damage that may result pursuant thereto.

**§ 82-2. Definitions.**

Unless specifically defined in this Section, all technical terms in this Article shall be as defined in the provisions of Pa Code Title 25 Environmental Protection, Pennsylvania Department of Environmental Protection (PADEP) Erosion and Sediment Pollution Control Program Manual (PADEP E & S Manual, Latest Ed.), and PADEP Best Management Practices Manual (PADEP BMP Manual, Latest Ed.).

The following definitions shall apply specifically to this Article:

A. *Act 167*– the Stormwater Management Act, Act of October 4, 1978, P. L. 864, No. 167, as amended by the Act of May 24, 1984, No. 63, 32 P.S. §§680.1 et seq. The Municipality is empowered to regulate land use activities that affect runoff and surface and groundwater quality and quantity by the authority of the Act, the “Storm Water Management Act.”

B. *Accelerated erosion* – the removal of the surface of the land through the combined action of human activities and the natural processes at a rate greater than would occur because of the natural process alone.

C. *Agricultural Activity* – Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops and raising livestock including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops, or pasturing and raising of livestock and installation of Conservation Practices. Except for high tunnels that are exempt pursuant to the provisions of Act 15 of 2018, construction of new buildings or impervious areas is not considered an agricultural activity.

D. *Alteration* – As applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; the changing of surface conditions by causing the surface to be more or less impervious; or, earth disturbance.

E. *Applicant* – A landowner, developer or other person who has filed an application for approval of Drainage Plan under Section 84-5 of this Article.

F. *Animal Concentration (heavy use) Areas* – A barnyard, feedlot, loafing area, exercise lots, or other similar animal confinement areas that will not maintain a growing crop, or where deposited manure nitrogen is in excess of crop needs, but excluding areas managed as pastures or other cropland, and pasture access ways, if they do not cause direct flow of nutrients to surface water or groundwater.

G. *BMP (best management practice)* – activities, facilities, designs, measures or procedures used to manage stormwater impacts from regulated development activities, to meet State water quality requirements, to promote groundwater recharge and to otherwise meet the purposes of this Article. BMPs include, but are not limited to, infiltration, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, forested buffers, sand filters and detention basins.

H. *Building Permit* – A permit or other approval issued by the Municipality for construction and/or earth disturbance.

I. *Channel* – a perceptible natural or artificial waterway which periodically or continuously contains moving water or which forms a connecting link between two bodies of water. It has a definite bed and banks which confine the water.

J. *Chapter 102* – Title 25 Pa Code Chapter 102 Erosion and Sedimentation Control.

K. *Chapter 105* – Title 25 Pa Code Chapter 105 Dam Safety and Waterway Management.

L. *Combined sewer system* – A sewer system designed to serve as both sanitary sewer and storm sewer.

M. *CSO, Combined sewer overflow* – An intermittent flow or other untreated discharge from a municipal combined sewer system (including domestic, industrial and commercial wastewater and stormwater) which results from a flow in excess of the dry weather carrying capacity of the system.

N. *Conservation District* – the Westmoreland Conservation District (WCD), as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.

O. *Conservation Plan* – A plan written by an NRCS or SCS certified planner that identifies Conservation Practices and includes site specific BMPs for agricultural plowing or tilling activities and Animal Concentration Areas.

P. *Conservation Practices* – Practices installed on agricultural lands to improve farmland, soil and/or water quality which have been identified in a current Conservation Plan.

Q. *Conveyance*:

1. Any structure that carries a flow.
2. The ability of a pipe, culvert, swale or similar facility to carry the peak flow from the design storm.

R. *Culvert* – a closed conduit for the free passage of surface drainage under a highway, railroad, canal or other embankment.

S. *DEP* – the Pennsylvania Department of Environmental Protection.

T. *Demonstrated equivalency* – A stormwater management project on an alternative site(s) within the same watershed as the proposed development that will provide equal or better achievement of the purpose of the Article and will not substantially or permanently impair the appropriate use or development of adjacent property. Examples include streambank stabilization, creation or enhancement of riparian buffers, removal of existing impervious surfaces and establishment of ‘green’ easements, installation of stormwater management and water quality facilities, etc.

U. *Design criteria*:

1. Engineering guidelines specifying construction details and materials.
2. Objectives, results or limits which must be met by a facility, structure or process in performance of its intended functions.

V. *Design storm* – see “storm frequency.”



W. *Detention* – the slowing, dampening or attenuating of runoff flows entering the natural drainage pattern or storm drainage system by temporarily holding water on a surface area in a detention basin or within the drainage system.

X. *Detention basin* – a pond, basin, reservoir or underground system constructed to impound or retard surface runoff temporarily.

Y. *Developer* – a person that seeks to undertake or undertakes the activities associated with changes in land use or seeks to undertake or undertakes any regulated earth disturbance activities at a project site in the [Municipality]. The term “developer” includes, but is not limited to, the term subdivider, owner and builder, even though the person involved in successive stages of a project may change or vary.

Z. *Development* – an “earth disturbance activity,” as herein defined and any activity, construction, alteration, change in land use or practice that affects stormwater runoff characteristics. The term also includes redevelopment.

AA. *Development Site / Project Site* – The entire property(ies), tract(s), or parcel(s) on which the Land Development or Earth Disturbance activity is to take place.

BB. *Discharge* – the flow or rate of flow from a canal, conduit, channel or other hydraulic structure.

CC. *Disturbed Area* – A land area where an earth disturbance activity is occurring or has occurred.

DD. *Domestic Gardening and Landscaping* – alteration, improvement, or modification for the purpose of planting or tending any non-invasive plant species for the purpose of consumption or beautification of land. Beautification of land may include flora and fauna, water features, and impervious surfaces. Impervious surfaces shall not exceed 500 SF of land coverage.

EE. *Drainage* – in general, the removal of surface water from a given area commonly applied to surface water and ground water.

FF. *Drainage area* – any of the following activities:

1. The area of a drainage basin or watershed, expressed in acres, square miles or other unit of area (also called “catchment area,” “watershed,” “river basin”).
2. The area served by a sewer system receiving storm and surface water, or by a watercourse.

GG. *Earth disturbance activity* – a construction or other human activity which disturbs the surface of the land including, but not limited to, clearing and grubbing, grading, excavations, embankments, road maintenance, land development, building construction, oil and gas activities, well drilling, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

HH. *Encroachment* – any structure or activity which in any manner changes, expands or diminishes, the course, current or cross-section of any watercourse, floodway or body of water.

II. *Erosion* – the process by which land, including channels, is worn away by water, wind, or chemical action.

JJ. *Erosion control* – the application of measures to reduce erosion of land surfaces.

KK. *Erosion and sediment control plan* – a plan for a project site which identifies BMPs to minimize accelerated erosion and sedimentation of land.

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

MM. *FEMA* – Federal Emergency Management Agency.

NN. *Floodplain* – Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area. Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).

OO. *Floodway* – The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the 100-year 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 floodway, it is assumed--absent evidence to the contrary--that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

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

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

RR. *Ground cover* – materials and/or vegetation covering the ground surface.

SS. *Ground water* – subsurface water occupying the saturation zone, from which wells and springs are fed.

TT. *Groundwater recharge* – replenishment of existing natural underground water supplies.

UU. *High Tunnel* – A structure which meets the following:

1. 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 Forestland Assessment Act of 1974, or for the storage of agricultural equipment and supplies.
2. Is constructed consistent with all of the following:
  - a. Has metal, wood or plastic frame
  - b. When covered, has plastic, woven textile or other flexible covering
  - c. Has a floor made of soil, crushed stone, matting, pavers or a floating concrete slab

VV. *Hot spots* - Areas where land use or activities generate highly contaminated runoff, with concentrations of pollutants that are higher than those typically found in stormwater (e.g., vehicle salvage yards and recycling facilities, vehicle fueling stations, fleet storage areas, vehicle equipment and cleaning facilities, vehicle service and maintenance facilities, and certain industrial/commercial activity areas).

WW. *Hydrologic Soil Group (HSG)* – Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less permeable as the HSG varies from A to D (NRCS1,2).

XX. *Impervious surface* – a surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs, additional indoor living spaces, patios, garages, storage sheds, and similar structures; and any new streets or sidewalks. Decks, parking areas, gravel areas, and driveway areas are counted as impervious areas if they directly prevent infiltration.

YY. *Infiltration* – any of the following activities:

1. The flow or movement of water through the interstices or pores of a soil or other porous medium.
2. The absorption of liquid by the soil.

ZZ. *Land development* – any of the following activities:

1. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:
  - a. A group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure.
  - b. The division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.

2. A subdivision of land.

AAA. *Land disturbance* – any activity involving the changing, grading, transportation, fill and any other activity which causes land to be exposed to the danger of erosion.

BBB. *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.

CCC. *Maintenance* – the upkeep necessary for efficient operation of physical properties.

DDD. *MS4* (municipal separate storm sewer system) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

EEE. *Municipalities Planning Code* – Act 247 of 1968, as amended by Act 170 of 1988, 53 P.S. §10101 et seq.

FFF. *Municipality* – *Ligonier Township*, Westmoreland County, Pennsylvania.

GGG. *Native Vegetation* – Plant species that have historically grown in Pennsylvania and are not invasive species, controlled plants or noxious weeds as defined by PA DCNR, or PA Department of Agriculture.

HHH. *Natural stormwater runoff regime* – a watershed where natural surface configurations, runoff characteristics and defined drainage conveyances have attained the conditions of equilibrium.

III. *NPDES* – National Pollutant Discharge Elimination System, the Federal government's system for issuance of permits under the Clean Water Act, which is delegated to DEP in Pennsylvania.

JJJ. *NRCS* – Natural Resources Conservation Service (previously Soil Conservation Service).

KKK. *Outfall* – “point source” as described in 40 CFR §122.2 at the point where the Ligonier Township storm sewer system discharges to surface waters of the Commonwealth. Also, the point, location or structure where drainage discharges from a sewer, drain or other conduit as well as the conduit leading to the ultimate discharge point.

LLL. *Outlet control structure* – the means of controlling the relationship between the head water elevation and the discharge, placed at the outlet or downstream end of any structure through which water may flow.

MMM. *Overland flooding* – flooding that occurs for a variety of reasons all stemming from excessive stormwater runoff including too much rain in too little time, added impervious development, change in land use, malfunction or clogging of existing stormwater systems.

NNN. *Peak discharge* – The maximum rate of stormwater runoff from a specific storm event.

OOO. *Peak flow* – maximum flow.

PPP. *Pervious Area* – Any material or surface that allows water to pass through at a rate equal to or greater than natural ground cover.

QQQ. *Pennsylvania DEP* – Pennsylvania Department of Environmental Protection.

RRR. *Performance standard* – a standard which establishes an end result or outcome which is to be achieved but does not prescribe specific means for achieving it.

SSS. *Person* – an individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties. Whenever used in any section prescribing or imposing a penalty, the term “person” shall include the members of a partnership, the officers, members, servants and agents of an association, officers, agents and servants of a corporation, and the officers of a municipality or county, but shall exclude any department, board, bureau or agency of the Commonwealth.

TTT. *Point source* – any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, or conduit from which stormwater is or may be discharged, as defined in State regulations at 25 Pa.Code §92.1.

UUU. *Post-Development Condition* – The condition of a land development site after completion of construction established by the subdivision or land development plans and termination of requirements for implementation of the associated and approved Erosion and Sedimentation Plan.

VVV. *Qualified Professional* – Any person licensed by the Pennsylvania Department of State or otherwise qualified under Pennsylvania law to perform the work required by this Article.

WWW. *Record drawings* – Drawings showing the stormwater management system of a site as built, created after the completion of construction and intended for use as a permanent record of the stormwater management system.

XXX. *Redevelopment* – earth disturbance activities on land which has previously been disturbed or developed.

YYY. *Regulated development activity* – Any earth disturbance activities or any activities that involve the change of land cover, alteration or development of land in a manner that may affect stormwater runoff as listed in the Regulated Development Activity table. This includes earth disturbance on any portion of, part, or during any stage of, a larger common plan of development. With regard to road maintenance activities the term only includes activities involving [1 acre] or more of earth disturbance. Refer to the Regulated Development Activity Table in Article III of this article.

ZZZ. *Regulated Impervious Area* – The measured area of impervious surface required to be accounted for, considered, and used in the calculations for control and management of stormwater runoff.

AAAA. *Release Rate* – The percentage of existing conditions peak rate of runoff from a site or subarea to which the proposed conditions peak rate of runoff must be reduced to protect downstream areas.

BBBB. *Release rate percentage* – the watershed factor determined by comparing the maximum rate of runoff from a subbasin to the contributing rate of runoff to the watershed peak rate at specific points of interest.

CCCC. *Resource extraction* – any activity that involves withdrawing materials from the natural environment.

DDDD. *Retention basin* – a pond, basin, usually enclosed by artificial dikes, that is used to retard stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate.

EEEE. *Retention Volume/Removed Runoff* – The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or immediately after a storm event.

FFFF. *Return period* – the average interval in years over which an event of a given magnitude can be expected to recur.

GGGG. *Riparian Buffer* – A permanent area of native vegetation including herbaceous material, shrubs and/or trees located adjacent to streams, lakes, ponds and wetlands.

HHHH. *Road maintenance* – earth disturbance activities within the existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities.

III. *Runoff* – that part of precipitation which flows over the land.

JJJJ. *Runoff characteristics* – the surface components of any watershed which affect the rate, amount and direction of stormwater runoff. These may include, but are not limited to, vegetation, soils, slopes and manmade landscape alterations.

KKKK. *SALDO* – Subdivision and land development ordinance

LLLL. *Sediment* – mineral or organic solid material that is being transported or has been moved from its site of origin by air, water or ice and has come to rest.

MMMM. *Sedimentation* – the process by which mineral or organic matter is accumulated or deposited by moving water, wind or gravity.

NNNN. *Separate storm sewer system* – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) primarily used for collecting and conveying stormwater runoff. Refer to MS4.

OOOO. *Small project* – Regulated development activities that, measured on a cumulative basis from 5 years prior to the application, create additional impervious areas of more than 1,000 square feet and less than 10,000 square feet.

PPPP. *State water quality requirements* – as defined under State regulations– protection of designated and existing uses (See 25 Pa.Code, Chapters 93 and 96)–including:

1. Each stream segment in Pennsylvania has a “designated use,” such as “cold water fishery” or “potable water supply,” which are listed in 25 Pa.Code, Chapter 93. These uses must be protected and maintained, under State regulations.
2. “Existing uses” are those attained as of November 1975, regardless whether they have been designated in 25 Pa.Code, Chapter 93. Regulated earth disturbance activities must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in special protection streams.
3. Water quality involves the chemical, biological and physical characteristics of surface water bodies. After regulated earth disturbance activities are complete, these characteristics can be impacted by addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or rates as a result of changes in land surface area from those activities. Therefore, permanent discharges to surface waters must be managed to protect the stream bank, streambed and structural integrity of the waterway, to prevent these impacts.

QQQQ. *Storage facility* – Any surface or sub-surface facility that stores stormwater runoff, see “detention basin” and “retention basin.”

RRRR. *Storm frequency* – the average interval in years over which a storm event of a given precipitation volume can be expected to occur. 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 systems. Also see Return Period.

SSSS. *Storm sewer* – a sewer that carries intercepted surface runoff, street water and other drainage but excludes domestic sewage and industrial waste.

TTTT. *Stormwater* – drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

UUUU. *Stormwater collection systems* – natural or manmade structures that collect and transport stormwater through or from a drainage area to the point of final outlet including, but not limited to, any of the following conduits and appurtenant features, canals, channels, ditches, streams, culverts, streets and pumping stations.

VVVV. *Stormwater management facility* – a constructed measure for detention, retention, infiltration and water quality treatment of stormwater runoff.

WWWW. *Stormwater management plan* – the plan for managing stormwater runoff rate, volume and water quality as required by the Stormwater Management Act, 32 P.S. §680.1 et seq.

XXXX. *Stormwater Management Performance District* – an area designated by the Watershed Stormwater Performance District Map which includes standards for stormwater rate, volume and water quality. Refer to Appendix A.

YYYY. *Subdivision* – As defined in The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended.

ZZZZ. *Subwatershed* – The watershed of a tributary to Loyalhanna Creek.

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

BBBBB. *USDA* – United States Department of Agriculture.

CCCCC. *Watercourse* – a channel or conveyance of surface water, such as a run, stream or creek, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

DDDDD. *Waters of the Commonwealth* – any and all 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 water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

EEEE. *Watershed* – the entire region or area drained by a river or other body of water whether natural or artificial. A “designated watershed” is an area delineated by the Pennsylvania DEP and approved by the Environmental Quality Board for which Counties are required to develop watershed stormwater management plans.

FFFF. *Watershed stormwater management plan* – the plan for managing stormwater runoff throughout a designated watershed as required by the Pennsylvania Stormwater Management Act (Act 167), 32 P.S. §680.1 et seq.

GGGG. *Wetland* – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

### **§ 82-3. Applicability.**

This article governs all Land Development within Ligonier Township.

### **§ 82-4. Stormwater Management Requirements.**

#### **A. General Requirements.**

1. *Stormwater runoff* – Stormwater runoff must be managed in a manner which prevents injury to human health, the environment, safety, or other property. The measures and regulations contained in this Article are intended to ensure that the maximum rate and volume of storm water runoff following Land Development is no greater than immediately prior thereto.
2. *Water Quality* – Stormwater runoff must be managed in a manner that protects and complies with the Water Quality Requirements for waters of the Commonwealth.
3. No Land Development or earth disturbance activity within the Municipality’s corporate boundaries shall be done without a written permit or exemption from the Municipality.
4. Prior to the commencement of any earth disturbance activity, the applicant shall be required to obtain the appropriate and applicable erosion and sedimentation pollution control plan approval, NPDES Permit, and any other permit as necessary.

#### **B. Regulated Impervious Areas.**

1. All Land Development shall be required to control stormwater runoff for the Project Site in a manner consistent with this Article. The Stormwater Management Plan shall require the management of the increase, decrease, or alteration in stormwater runoff generated from additional, created, and existing impervious surfaces. The Regulated Impervious Area shall be used to determine the amount of stormwater runoff to be

managed by this Article. Regulated Impervious Area shall be calculated in accordance with Section § 82-4(B)(2).

2. Regulated Impervious Area Calculation and Determination

1. All new Impervious Surface shall be considered Regulated Impervious Area.
2. Twenty percent (20%) of the total existing Impervious Surface shall be considered Regulated Impervious Area.
3. Land Development that proposes to reduce the amount of existing Impervious Surface shall be required to consider twenty percent (20%) of the total resultant (net) Impervious Surface area (existing and/or proposed) as Regulated Impervious Area.
4. The Regulated Impervious Area resulting from calculations and measurements under Section § 84-2 shall be utilized in all applicable stormwater runoff calculations.

C. *Exemptions.* A Stormwater Management Plan exemption does not relieve the Developer/Applicant from any other applicable ordinance, regulation, approval, or permit. The following activities do not require the prior submission of a Stormwater Management Plan to the Municipality:

1. Subdivision
2. Agricultural Activities completed in accordance with state applicable regulations.
3. Forest management operations completed in accordance with applicable state regulations.
4. Land Development activities with a Regulated Impervious Area of less than one thousand square feet (1,000 S.F.).
5. Maintenance and Roadway Maintenance that does not increase Regulated Impervious Area.
6. Domestic gardening and landscaping.
7. Utility Construction that replaces the land cover type in-kind.
8. Small Projects as defined in Section § 82-2.

D. Stormwater Management Requirements.

1. Land Development activities shall meet or exceed the following stormwater management requirements based on the measure of Regulated Impervious Area.

a. Regulated Impervious Area – 10,001 S.F. to 43,560 S.F. (1 Acre)

i. Rate.

(a) Post -Development Rate shall equal 80% of the Pre-Development Rate for the following design storms.

- (1) 2-year
- (2) 10-year
- (3) 25-year
- (4) 50-year
- (5) 100-year

ii. Volume

(a) Infiltrate or retain on site 2” of stormwater runoff generated by or originating from the Regulated Impervious Area

b. Regulated Impervious Area – Greater than 43,560 S.F. (1 Acre)

i. Rate.

(a) Post -Development Rate shall equal 80% of the Pre-Development Rate for the following design storms.

- (1) 2-year
- (2) 10-year
- (3) 25-year
- (4) 50-year
- (5) 100-year

ii. Volume

(a) Provide volume control equal to the greater of the following two (2) volume calculations.

- (1) Infiltrate or retain on-site the net increase of stormwater runoff from the 2-year, 24-hour storm.

E. Small Project Requirements and Applications.

1. Small Projects shall be required to meet or exceed the provisions set forth in this Section, complete and submit to the Municipality the Small Project Application Form, pay the appropriate fees as noted in the Small Project Application Form, and contact the Municipality for inspection of any and all BMPs installed.
2. Small Projects include any Land Development that involves Regulated Impervious Area equal to or greater than 1,000 S.F. and equal to or less than 10,000 S.F.
3. Small Projects shall meet the following:
  - a. Provide BMPs to capture 1" of stormwater runoff generated by or originating from the Regulated Impervious Area.
  - b. Infiltrate or retain on-site 0.5" of stormwater runoff generated by or originating from the Regulated Impervious Area.
  - c. Connect or direct BMP discharge piping to public storm sewer system, when applicable or required by the Municipality.
4. Small Projects Applicants shall submit two (2) counterparts of the completed Small Projects Application and appropriate fees to the Municipality. Approval of the Small Project will be evidenced by the Municipality's approval and countersigning of both counterparts of submitted applications. One (1) counterpart will remain on file at the Municipality office and the other will be returned to the Applicant.

F. BMP Dewatering.

1. All BMPs shall be designed to dewater and return to their full design capacity between 24 to 72 hours after a storm event through the use of infiltration and/or evapotranspiration.
2. A managed release may be utilized to achieve dewatering requirements when infiltration and evapotranspiration are not feasible. Managed releases must be in compliance with PA DEP's Managed Release Concept guidelines.

G. Off-site Stormwater Management

1. The Developer or Applicant may request the use of an alternative site(s) for meeting the requirements of the Article. The Developer or Applicant should request approval from the Municipality to use off-site management prior to submitting a Stormwater

Management Plan. The Developer or Applicant shall provide a brief description of the site and location for the proposed off-site management plan.

2. The alternative site(s) shall be within the same subwatershed as the project site and shall manage areas that will provide a benefit to the subwatershed by managing existing impervious area. This may be achieved through BMP retrofitting or installation of new BMPs. The Stormwater Management Plan for all off-site management shall provide Volume and Rate Control at least equal to what is required for control of the Project Site. The Stormwater Management Plan for all off-site management shall comply with all requirements of this Article and the location of the off-site management must be approved by the municipality.

3. Review of any Off-site management will be simultaneous to the review of the Project Site and no additional fees will be collected for a separate review.

4. The Developer or Applicant may determine that management at the Project Site and Off-site management are not feasible or practicable. The Developer or Applicant must provide a written request to be exempt from constructing BMPs at the Project Site or Off-site to the Municipality. The Municipality will provide a written response to the Developer or Applicant which may or may not approve the exemption request. For all approved exemption requests, the Developer or Applicant shall be required to pay a fee to the Municipality in an agreed upon amount that is at least equal to the estimated construction cost of BMPs needed to meet the requirements of the Article. The fees collect by the Municipality shall be utilized to construct BMPs on public property to offset the negative stormwater impacts within the watershed that are created by the Developer or Applicant activity.

#### H. Low Impact Development and Green Infrastructure

1. Low Impact Development and green infrastructure techniques described in the PA DEP Stormwater BMP Manual 2006 or most current edition are encouraged.

2. The use of BMPs not included within the current Pennsylvania Stormwater BMP Manual could result increase review time and approval of the use of these BMPs is not guaranteed.

#### I. Hot Spots

1. Projects located within in a Hot Spot are encouraged to utilize specific BMPs such as storm inlet filters, proprietary stormwater quality devices, underground detention tanks, detention ponds with forebays, tree planting, and green roofs.

2. Projects located within a Hot Spot are discouraged from utilizing specific BMPs such as permeable pavement, infiltration BMPs, and rain gardens.

### **§ 82-5. Stormwater Management Requirements.**

A. The Stormwater Management Plan shall be prepared, except for exempted activities, for all land development activities. The Drainage Plan shall be prepared under the supervision of, and certified by, a Professional Engineer, Surveyor, or Landscape Architect registered in the State of Pennsylvania.

- B. The Stormwater Management Plan shall include the following minimum requirements:
1. Plan drawings reflecting the proposed Land Development and Project Site.
    - a. Plans, profiles, sections and details for all proposed stormwater infrastructure.
    - b. Lot lines
    - c. Existing Conditions and Proposed Conditions
      - i. Illustrate limits and provide surface area for impervious and non-impervious land cover.
      - ii. Illustrate topography and grading.
    - d. Identify each point of stormwater runoff discharge to waterways and public facilities.
    - e. Municipal Approval Signature Block provided on overall site plan or first plan sheet of site plans. The Municipal Approval Signature Block shall read as follows: "I am a duly authorized representative of the Municipality of Ligonier Township and have reviewed the Stormwater Management Plan for consistency with the Ligonier Township Stormwater Management Ordinance. Based on the Developer/Applicant information provided the Plan appears consistent with the Ordinance."
    - f. The Municipal Approval Signature Block shall include a line for signature and date.
  2. Stormwater runoff computations, computation summary table, descriptive narrative, and a copy of all referenced publications to demonstrate that the Land Development meets or exceeds the requirements of Section § 82-4 of this Article.
  3. Written plan for post-construction, long-term operation and maintenance of all permanent stormwater management facilities including designation of parties responsible for operation and maintenance activities, detailed descriptions of maintenance activities, and inspection frequency (minimum annual inspection shall be required).

C. Submissions & Review

1. Land Development activities that also require building, zoning, or subdivision approval shall submit the Stormwater Management Plan simultaneously with all other required Municipal approval packages.
2. Land Development activities which require planning approval shall be submitted to the Municipality fourteen (14) days prior to a regular meeting of the Planning Commission.
3. Developer/Applicant shall be responsible for separately submitting and obtaining all other non-Municipality approvals and permits required for the Land Development and associated construction activities.
4. Developer/Applicant must indicate if a Stormwater Management Consistency Letter is being sought for inclusion in other approval or permit packages.
5. Municipality will provide written approval of the Stormwater Management Plan by issuance of any of the following:
  - a. Building Permit
  - b. Stormwater Management Consistency Letter
6. Submittal Package
  - a. Two (2) copies of the Stormwater Management Plan.
  - b. One (1) electronic copy. Delivered on portable data storage device. All devices submitted to the Municipality will not be returned unless specifically requested.

- c. Stormwater Management Plan Application
  - d. Fees
7. Review
- a. The Municipality shall review the Stormwater Management Plan and provide a written response within thirty (30) calendar days from receipt of the Stormwater Management Plan.
  - b. Each review of a Stormwater Management Plan which required revision or modification shall be reviewed and a written response will be provided within fifteen (15) calendar days from receipt of the revised or modified Stormwater Management Plan.
  - c. The Operation and Maintenance Agreement shall be executed by the Municipality and Applicant once the Stormwater Management Plan has been deemed to be consistent with the Article. A copy of the executed Operation and Maintenance Agreement shall be recorded at the Westmoreland County Recorder of Deeds Office.

**§ 82-6. Inspections and Construction Completion.**

- A. The Applicant shall notify the Municipality two (2) business days prior to the commencement of any activity covered by this Article so that appropriate inspections to insure compliance with this Article can be made.
- B. The Applicant shall notify the Municipality of completion of construction of stormwater management facilities within thirty (30) calendar days of completion. The notice of completion shall include submittal of one (1) copy and one (1) electronic file of as-built documentation of constructed stormwater management facilities.
- C. As-built documentation shall include a revised Stormwater Management Plan, if applicable, meeting all requirements of this Article with specific statement that the Stormwater Management Plan accurately represents the constructed facilities and shall be prepared under the supervision of and certified by a Registered Professional Engineer, Registered Landscape Architect, or Registered Surveyor.

**§ 82-7. Fees.**

- A. Fees imposed under this Article shall be established by Resolution of the Municipality from time to time hereafter.
- B. Municipality shall not issue approval of the Stormwater Management Plan until all applicable fees have been paid to the Municipality by the Developer or Applicant.

**§ 82-8. Financial Guarantees.**

A. Financial Guarantees shall only be required for Project Sites involving more than one (1) acre of Regulated Impervious Area.

B. In order to ensure that any required stormwater management controls are properly installed the applicant shall provide a financial guarantee equaling 110% of the full estimated cost of construction of all Stormwater Management BMPS. The financial guarantee will be in the form acceptable to the Municipality. The financial guarantee will be released after completion of the final construction inspection and receipt of the As-built documentation.

C. The Applicant or Developer shall deposit with the Municipality a corporate bond, other financial security, lending institution letter of credit, escrow account in a lending institution, or other financial guarantee type in form and substance acceptable to the Municipality.

### **§ 82-9. Enforcement and Penalties.**

A. This section includes penalties for violations of this Article.

1. Duly authorized representatives of the Municipality have the right to enter private property at reasonable times to investigate any condition associated with this Article.
2. No BMP shall be altered or modified inconsistent with the approved plan without written approval from the Municipality.
3. A copy of the as-built plan, verified by a Registered Professional, shall be recorded at the Westmoreland County Recorder of Deeds Office.
4. Anyone violating the provisions of this Article shall be guilty of a summary offense, and upon conviction shall be subject to a fine of not more than \$300.00 for each violation, recoverable with costs, or imprisonment of not more than 30 days, or both. Each day that the violation continues shall be a separate offense. In addition, the Municipality may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this Article. Any court of competent jurisdiction shall have the right to issue restraining order, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief. In addition, the Municipality may seek recovery of a civil penalty for violations of this Article of \$300.00 for each violation. Each day that the violation continues shall be a basis for an additional civil penalty.

### **§ 82-10. Exhibits.**

The following exhibits are on file in the township offices:

- Exhibit A – Stormwater Management Plan Application
- Exhibit B – Operation and Maintenance Agreement
- Exhibit C – Fee Schedule and Resolution
- Exhibit D – Small Project Application
- Exhibit E – Stormwater Management Requirements

**§ 82-11. Effective Date.**

This Article shall be effective thirty (30) days following passage.