

**STORMWATER MANAGEMENT ORDINANCE  
OF PENN TOWNSHIP**

**ORDINANCE NO. 2013- 03**

**PENN TOWNSHIP  
CUMBERLAND COUNTY  
PENNSYLVANIA**

**Adopted at a Public Meeting  
July 11, 2013**

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# ARTICLE I GENERAL PROVISIONS

## **Section 101. Short Title.**

This Ordinance shall be known and may be cited as Penn Township Stormwater Management Ordinance.

## **Section 102. Statement of Findings.**

The Board of Supervisors of Penn Township finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases non-point source pollution of water resources.
- B. A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety and welfare and the protection of people of the Commonwealth, their resources and the environment.
- C. Stormwater is an important water resource, which provides groundwater recharge for water supplies and base flow of stream, which also protects and maintains surface water quality.

## **Section 103. Purpose.**

The purpose of this Ordinance is to promote health and welfare within Penn Township and its watershed by minimizing the harms and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 PA Code Chapter 93 to protect, maintain, reclaim and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve the natural drainage systems as much as possible.
- C. Manage stormwater runoff close to the source.
- 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 permanent Stormwater Management (SWM) Best Management Practices (BMPs) that are implemented within Penn Township.
- H. Provide standards to meet NPDES permit requirements.
- I. Meet general water quality and soil disturbance goals by implementing measures to:
  - 1. Minimize disturbance to floodplains, wetlands, natural slopes over 15% and existing native vegetation.
  - 2. Preserve and maintain trees and woodlands. Maintain or extend riparian buffers and protect existing forested buffer. Provide trees and woodlands adjacent to impervious areas whenever feasible.
  - 3. Establish and maintain non-erosive flow conditions in natural flow pathways.
  - 4. Minimize soil disturbance and soil compaction. Over disturbed areas, replace topsoil to a minimum depth equal to the original depth or 4 inches, whichever is greater. Use tracked equipment for grading when feasible.
  - 5. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.
  - 6. Incorporate the techniques for Low Impact Development Practices described in the most current version of "The Pennsylvania Stormwater Best Management Practices Manual" (SWM Manual).<sup>1</sup>
  - 7. Minimize thermal impacts to Waters of the Commonwealth.

#### **Section 104. Statutory Authority.**

##### **A. Primary Authority:**

The municipality is empowered to regulate these activities by the authority of the Act of October 4, 1978, P. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended the "Storm Water Management Act" and Penn Township.

Hereafter, all earthmoving activities and land development within Penn Township, including without limitation, the location, design and construction within the watershed

of storm water management systems, obstructions, flood control projects, subdivisions and major land developments, highways and transportation facilities, facilities for the provisions of public utility services and facilities owned or financed in whole or in part by funds from the Commonwealth, shall be in full compliance with the requirements of the Cumberland County Stormwater Management Plan and shall be conducted in a manner consistent therewith. Any violation of the Cumberland County Stormwater Management Plan shall be considered a violation of this ordinance.

**B. Secondary Authority:**

Penn Township also 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.

**Section 105. Applicability.**

All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this Ordinance as is reasonably necessary to prevent injury to health, safety or other property. The following activities are defined as "regulated activities" and shall be subject to the provisions of this Ordinance (unless otherwise exempted by Section 302):

1. Land development and/or redevelopment
2. Subdivision
3. Construction of new or additional impervious or semi-pervious surfaces (driveways, parking lots, etc.)
4. Construction of structures or additions to existing structures, as determined by the municipality
5. Diversion or piping of any natural or man-made stream channel
6. Installation of stormwater management facilities or appurtenances thereto
7. Forest management/timber operations that include logging road construction and timber harvesting.

**Section 106. Repealer.**

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

**Section 107. Severability.**

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

**Section 108. Compatibility with Other Requirements.**

Approvals issued and actions taken under this Ordinance 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.

**Section 109. Waiver Procedure.**

The provisions of this Ordinance are intended as minimum standards for the protection of the public health, safety and welfare. The elected officials may waive any mandatory provisions of these regulations to the benefit of the applicant provided the waiver:

1. Is consistent with the purpose of the ordinance as described in Section 103;
2. Will remove or reduce an unreasonable standard or undue hardship as it applies to the particular property, which is grossly disproportionate to any benefit derived from the standard, or when an alternative standard provides equal or better results.
3. Is consistent with Section 301.C when involving water quality requirements.

It shall be the burden of the Applicant to demonstrate compliance with the above conditions.

## ARTICLE II DEFINITIONS

For the purposes of this Ordinance, 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 words “shall” and “must” are mandatory; the words “may” and “should” are permissive.

**Agricultural Activity** – The work of producing crops, including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops, pasturing and raising of livestock, and installation of conservation measures. Construction of new buildings or impervious area is not considered an Agricultural Activity.

**Applicant** – A landowner, developer or other person who has filed an application to Penn Township for approval to engage in any Regulated Activity at a project site in Penn Township.

**Best Management Practice (BMP)** – 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 Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “non-structural”. In this Ordinance, 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 ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design bio-retention, 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 project site.

**Conservation District** – A conservation district, as defined in Section 3(c) of the Conservation District Law (3 P.S. § 851(c) ), which has the authority under a delegation agreement executed with the Department to administer and enforce all or a portion of the erosion and sediment control program in this Commonwealth.

**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 systems. Also see Return Period.

**Detention Volume** – The volume of runoff that is captured and then infiltrated, evaporated, reused, or released into the waters of this Commonwealth at a controlled rate.

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

**Development Site (Site)** – See Project Site.

**Disconnected Impervious Area (DIA)** – An impervious or impermeable surface which has its stormwater runoff disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area which allows for infiltration, filtration, and increased time of concentration as specified in Appendix B, Disconnected Impervious Area.

**Disturbed Area** – An unstabilized land area where an Earth Disturbance Activity is occurring or has occurred.

**Earth Disturbance Activity** – A construction or other human activity which disturbs or exposes the underlying soil, including, but not limited to, clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

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

**Existing Condition** – The initial condition of a project site prior to the proposed construction.

**FEMA** – Federal Emergency Management Agency.

**Floodplain** – The lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

**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.

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

**Hydrologic Soil Group (HSG)** – Refers to soils grouped according to their runoff-producing characteristics. The chief consideration is the inherent capacity of soil bare of vegetation to permit infiltration. Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSG's (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 pervious as the HSG varies from A to D (NRCS<sup>3,4</sup>).

**Impervious Surface (Impervious Area)** – A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to, roofs used to cover indoor living spaces, patios, garages, storage sheds and similar structures, and any new streets or sidewalks. Decks, parking areas, and driveways are not counted as impervious areas if they allow for infiltration.

**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.

**Land Development (Development)** – Inclusive of 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 buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure, or
  - 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. Any subdivision of land;
3. Development in accordance with Section 503.(1.1) of the PA Municipalities Planning Code.

**Municipality** – Penn Township, Cumberland County, Pennsylvania.

**NRCS** – USDA Natural Resources Conservation Service (previously SCS).

**Peak Discharge** – the maximum rate of stormwater runoff from a specific storm event.

**Pervious Area** – Any area not defined as impervious.

**Project Site** – The specific area of land where any Regulated Activities in Penn Township are planned, conducted or maintained.

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

**Regulated Activities** – Shall include, but not be limited to any Earth Disturbance Activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff as specified in Section 105.

**Regulated Earth Disturbance Activity** – Activity involving Earth Disturbance subject to regulation under 25 PA Code Chapter 92, Chapter 102, or the Clean Streams Law.

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

**Return Period** – The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one year is 0.04 (i.e. a 4% chance).

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

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

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

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

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

**Stormwater Management Plan** – the Cumberland County Stormwater Management Plan for managing stormwater runoff adopted by the County of Cumberland as required by the Act of October 4, 1978, P.L. 864, (Act 167), as amended, and known as the “Storm Water Management Act”.

**Stormwater Management Site Plan** – The plan prepared by the developer, municipality, or other entity indicating how storm water runoff will be managed at the development site in accordance with this Ordinance. Stormwater Management Site Plan will be designated as SWM Site Plan throughout this Ordinance.

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

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

**Waters of this Commonwealth** – Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and 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 the Commonwealth.

**Wetland** – Those 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.

## ARTICLE III STORMWATER MANAGEMENT STANDARDS

### Section 301. General Requirements.

- A. For all Regulated Activities, unless preparation of a SWM Site Plan is specifically exempted in Section 302:
  - 1. Preparation and implementation of an approved SWM Site Plan is required.
  - 2. No Regulated Activities shall commence until Penn Township issues written approval of an SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
- B. SWM Site Plans approved by Penn Township in accordance with Section 406, shall be on site throughout the duration of the Regulated Activity.
- C. The Municipality, after consultation with DEP, may approve measures for meeting the State Water Quality Requirements other than those in this Ordinance, provided that they meet the minimum requirements of, and do not conflict with, State law including but not limited to the Clean Streams Law.
- D. 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 Ordinance and to meet all requirements under the Pennsylvania Code Title 25 and the Clean Streams Law. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual (E&S Manual)<sup>2</sup>, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (2000), as amended and updated.
- E. For all Regulated Activities not exempted by Section 302, implementation of the Volume Controls in Section 303 is required.
- F. For all new development projects, 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. Similarly, for new development projects taking place in stages, the entire proposed new development plan must be used in determining conformance with this Ordinance.
- G. Stormwater flows/direct discharges onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification to the adjacent property owner(s). Such stormwater flows shall be subject to the requirements of this Ordinance.

- H. The design of all facilities over Karst shall include an evaluation of measures to minimize adverse effects in accordance with the procedures outlined in Section 7.4 (Special Management Areas – Karst Areas) of the most current version of the SWM Manual<sup>1</sup>.
- I. Storage facilities should completely drain both the volume control and rate control capacities within 72 hours from the end of the design storm subject to site conditions.
- J. The design storm precipitation depth estimates to be used in the analysis of peak rates of discharge should be obtained from the Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design studies Center, Silver Spring, Maryland 20910. NOAA's Atlas 14<sup>5</sup> can be accessed at Internet Address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
- K. For all Regulated Activities, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Stormwater Management Act.

### **Section 302. Exemptions**

- A. Regulated Activities resulting in less than or equal to 1,000 square feet of new impervious surface are exempt from Article IV SWM Site Plan preparation requirements including Sections 303 and 304 of this Ordinance. Regulated Activities greater than 1,000 square feet and less than or equal to 5,000 square feet of new impervious area may be exempt from the SWM Site Plan preparation requirements including Section 303 and 304 of this Ordinance when justification is provided that stormwater impact is minimal.\*
- B. Regulated Activities that create new Disconnected Impervious Areas greater than 1,000 square feet and less than or equal to 5,000 square feet that are proven to meet the 75-foot minimum pervious flow path requirement outlined in Appendix B are exempt from the SWM Site Plan preparation requirements including Sections 303 and 304 of this Ordinance.\*
- C. Regulated Activities meeting the following parcel size and square footage requirements are exempt from the peak rate control requirements, but not the volume control or SWM Site Plan preparation requirements of this Ordinance. These criteria shall apply to the total proposed development even if development is to take place in phases. The date of the municipal ordinance adoption 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.\*

### New Impervious Area Exemption Criteria for Peak Rate Control

Total Parcel Size (acres)	Total Parcel Size (square feet)	New Impervious Area Exemption (square feet)
<0.25	<10,890	1,500
0.25 – 0.5	10,890 – 21,780	2,500
>0.5	>21,780	5,000

- D. Agricultural plowing and tilling are exempt from the SWM Site Plan requirements including Sections 303 and 304 of this Ordinance provided the activities are performed according to the requirements of 25 PA Code Chapter 102.
- E. Forest management and timber operations are exempt from the rate control and SWM Site Plan preparation requirements of this ordinance provided the activities are performed according to the requirements of 25 PA Code Chapter 102.

#### **Section 303. Volume Controls.**

Water volume controls shall be implemented using the Design Storm Method in Subsection 1 or the Simplified Method in Subsection 2 below for all Regulated Activities not otherwise exempted by Section 302. For Regulated Activity areas equal or less than one (1) acre that do not require hydrologic routing to design the stormwater facilities, this Ordinance 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 (See Section 8.7 of the most current version of the SWM Manual<sup>1</sup>) is applicable to any size of Regulated Activity. This method requires detailed modeling based on site conditions.
  - 1. Do not increase the post-development runoff volume for all storms equal to or less than the 2-year 24-hour duration precipitation.
  - 2. For modeling purposes:
    - a. Existing (pre-development) non-forested pervious areas must be considered meadow or its equivalent.
    - b. Twenty (20) percent of existing impervious area when present, shall be considered meadow in the model for existing conditions.
- B. The Simplified Method (See Section 8.7 of the most current version of the SWM Manual<sup>1</sup>) provided below is independent of site conditions and should be used if the Design Storm Method is not followed. This method is not applicable to Regulated

Activities greater than one (1) acre or for projects that require design of stormwater detention or rate control facilities. For new impervious surfaces:

1. Stormwater facilities shall be sized to capture at least the first two 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, and infiltration.
3. Infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first one-half inch of the permanently removed runoff should be infiltrated.
4. The second one inch of runoff from new impervious surfaces should be detained using structural and non-structural BMPs (as outlined in the most current version of the SWM Manual) and released at a controlled rate.
5. Regulated Activities eligible under this method are exempt from the requirements of Section 304, Rate Controls.

**Section 304. Rate Controls** (see Section 8.3 of the most current version of the SWM Manual<sup>1</sup>).

- A. Areas not covered by a Release Rate Map from an approved Act 167 Stormwater Management Plan:

Post-development discharge rates shall not exceed the predevelopment discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year storms. If it is shown that the peak rates of discharge indicated by the post development analysis are less than or equal to the peak rates of discharge indicated by the pre-development analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storms, then the requirements of this section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement.

- B. Areas covered by a Release Rate Map from an approved Act 167 Stormwater Management Plan (see Appendix C):

For the 1-, 2-, 5-, 10-, 50-, and 100-year storms, the post-development peak discharge rates will follow the applicable approved release rate maps (See Appendix C). For any areas not shown on the release rate maps, the post-development discharge rates shall not exceed the predevelopment discharge rates.

## ARTICLE IV STORMWATER MANAGEMENT PLAN REQUIREMENTS

### **Section 401. General Requirements.**

For any of the activities regulated by this Ordinance, the final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, or the commencement of any land disturbance activity may not proceed until the Property Owner or Developer or his/her agent has received written approval of a Stormwater Management Site Plan from Penn Township.

### **Section 402. Stormwater Management Site Plan Contents.**

The Stormwater Management Site Plan shall consist of all applicable calculations, maps, and plans. A note on the maps shall refer to the associated computations and erosion and sedimentation control plan by title and date. The cover sheet of the computations and erosion and sedimentation control plan shall refer to the associated maps by title and date. All Stormwater Management Site Plan materials shall be submitted to the municipality in a format that is clear, concise, legible, neat, and well organized; otherwise, the Stormwater Management Site Plan shall be disapproved and returned to the Applicant.

The following items shall be included in the Stormwater Management Site Plan:

A. General description of project.

1. General description of project.
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.

B. Map(s) of the project area shall be submitted on 24-inch x 36-inch sheets and shall be prepared in a form that meets the requirements for recording the offices of the Recorder of Deeds of Cumberland County. The contents of the map(s) shall include, but not be limited to:

1. The location of the project relative to highways, municipalities or other identifiable landmarks.
2. Existing contours at intervals of two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.

3. Existing streams, lakes, ponds, or other bodies of water within the project area.
4. Other physical features including flood hazard boundaries, sinkholes, streams, existing drainage courses, areas of natural vegetation to be preserved, and the total extent of the upstream area draining through the site.
5. The locations of all existing and proposed utilities, sanitary sewers, and water lines within 50 feet of property lines.
6. An overlay showing soil names and boundaries.
7. Proposed changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added.
8. Proposed structures, roads, paved areas, and buildings.
9. Final contours at intervals at two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.
10. The name of the development, the name and address of the owner of the property, and the name of the individual or firm preparing the plan.
11. The date of submission.
12. 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.
13. A North arrow.
14. The total tract boundary and size with distances marked to the nearest foot and bearings to the nearest degree.
15. Existing and proposed land use(s).
16. A key map showing all existing man-made features beyond the property boundary that would be affected by the project.
17. Horizontal and vertical profiles of all open channels, including hydraulic capacity.
18. Overland drainage paths.
19. A fifteen-foot wide access easement around all stormwater management facilities that would provide ingress to and egress from a public right-of-way.
20. A note on the plan indicating the location and responsibility for maintenance of stormwater management facilities that would be located off-site. All off-site facilities shall meet the performance standards and design criteria specified in this Ordinance.
21. A construction detail of any improvements made to sinkholes and the location of all notes to be posted, as specified in this Ordinance.

22. A statement signed by the landowner, acknowledging the stormwater management system to be a permanent fixture that can be altered or removed only after approval of a revised plan by the municipality.

23. The location of all erosion and sedimentation control facilities.

C. Supplemental Information

1. A written description of the following information shall be submitted.

a. The overall stormwater management concept for the project.

b. Stormwater runoff computations as specified in this Ordinance.

c. Stormwater management techniques to be applied both during and after development.

d. Expected project time schedule.

2. A soil erosion and sedimentation control plan, where applicable, including all reviews and approvals, as required by PA DEP.

3. A geologic assessment of the effects of runoff on sinkholes as specified in this Ordinance.

4. 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 project site.

5. A Declaration of Adequacy and Highway Occupancy Permit from PennDOT District Office when utilization of a PennDOT storm drainage system is proposed.

D. Stormwater Management Facilities

1. All stormwater management facilities must be located on a plan and described in detail.

2. When groundwater recharge methods such as seepage pits, beds or trenches are used, the locations of existing and proposed septic tank infiltration areas and wells must be shown.

3. All calculations, assumptions, and criteria used in the design of the stormwater management facilities must be shown.

**Section 403. Plan Submission.**

For all activities regulated by this Ordinance, the steps below shall be followed for submission. For any activities that require a PA DEP Joint Permit Application and regulated under Chapter 105 (Dam Safety and Waterway Management) or Chapter 106 (Floodplain Management) of PA DEP's Rules and Regulations, require a PennDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the permit(s) shall be part of the plan.

- A. The SWM Site Plan shall be submitted by the Developer as part of the Preliminary Plan submission for the Regulated Activity.
- B. Four (4) copies of the SWM Site Plan shall be submitted.
- C. Distribution of the SWM Site Plan will be as follows:
  - 1. Two (2) copies to the Municipality accompanied by the requisite Municipal Review Fee, as specified in this Ordinance.
  - 2. One (1) copy to the Municipal Engineer.
  - 3. One (1) copy to the County Planning Commission.

**Section 404. Stormwater Management (SWM) Site Plan Review.**

- A. The Municipal Engineer shall review the SWM Site Plan for consistency with this Ordinance.
- B. The Municipal Engineer shall review the SWM Site Plan for any subdivision or land development against the municipal subdivision and land development ordinance provisions not superseded by this Ordinance.
- C. For activities regulated by this Ordinance, the Municipal Engineer shall notify the Municipality in writing, within a time frame consistent with the Subdivision and Land Development Ordinance, whether the SWM Site Plan is consistent with the Stormwater Management Plan. Should the SWM Site Plan be determined to be consistent with the Stormwater Management Plan, the Municipal Engineer will forward an approval letter to Penn Township with a copy to the Developer (Consultant).
- D. Should the SWM Site Plan be determined to be inconsistent with the Stormwater Management Plan, the Municipal Engineer will forward a disapproval letter to Penn Township with a copy to the Developer (Consultant) citing the reason(s) for the disapproval.

Any disapproved SWM Site Plan may be revised by the Developer and resubmitted consistent with this Ordinance.

- E. For Regulated Activities requiring a PA DEP Joint Permit Application, the Municipal Engineer shall notify PA DEP whether the SWM Site Plan is consistent with the Stormwater Management Ordinance and forward a copy of the letter to Penn Township and the Developer. PA DEP may consider the Municipal Engineer's review comments in determining whether to issue a permit.
- F. The Township's Building Permit Office shall not issue a building permit for any Regulated Activity specified in Section 104 of this Ordinance if the SWM Site Plan has been found to be inconsistent with the Stormwater Management Ordinance, as determined by the Municipal Engineer, or without considering the comments of the Municipal Engineer.

- G. The Developer shall be responsible for completing an "As-Built Survey" of all stormwater management facilities included in the approved SWM Site Plan. The As-Built Survey and an explanation of any discrepancies with the design plans shall be submitted to the Township Engineer for final approval. In no case shall the municipality approve the As-Built Survey until the Municipality receives a copy of an approved Declaration of Adequacy, Highway Occupancy Permit from the PennDOT District Office, and any applicable permits from PA DEP.
- H. The Municipality's approval of a SWM Site Plan shall be valid for a period not to exceed five (5) years. This five-year time period shall commence on the date that Penn Township approves the SWM Site Plan. If stormwater management facilities included in the approved plan have not been constructed, or if an As-Built Survey of these facilities has not been approved within this five-year time period, then Penn Township may consider the SWM Site Plan disapproved and may revoke any and all permits.

**Section 405. Modification of Plans.**

A modification to a submitted SWM Site Plan for a development site that involves a change in stormwater management facilities or techniques, or that involves the relocation or re-design of stormwater management facilities, or that is necessary because soil or other conditions are not as stated on the SWM Site Plan as determined by the Township Engineer, shall require a resubmission of the modified SWM Site Plan consistent with Section 403 of this Ordinance and be subject to review as specified in Section 404 of this Ordinance.

**Section 406. Resubmission of Disapproved SWM Site Plans.**

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the Township Engineer's concerns documented in writing, to the Township Engineer in accordance with Section 403 of this Ordinance and be subject to review as specified in Section 404 of this Ordinance. The applicable Review Fee must accompany a resubmission of a disapproved SWM Site Plan.

## **ARTICLE V FEES AND EXPENSES**

### **Section 501. General.**

The fee required by this Ordinance is the Township Review Fee. The Township Review Fee shall be established by Penn Township to defray review costs incurred by Penn Township and the Township Engineer. All fees shall be paid by the Applicant.

### **Section 502. Township SWM Site Plan Review Fee.**

Penn Township shall establish a Review Fee Schedule by resolution based on the size of the Regulated Activity and based on the Township's costs for reviewing the SWM Site Plans. Penn Township shall periodically update the Review Fee Schedule to ensure that review costs are adequately reimbursed.

### **Section 503. Expenses Covered by Fees.**

The fees required by this Ordinance shall at a minimum cover:

- A. Administrative costs/clerical processing.
- B. The review of the SWM Site Plan by the Township and the Township Engineer.
- C. Site inspections.
- D. Inspection of stormwater management facilities and drainage improvements during construction.
- E. Final inspection upon completion of the stormwater management facilities and drainage improvements presented in the SWM Site Plan.
- F. Attendance at meetings.
- G. Any additional work required to enforce any permit provisions regulated by this Ordinance, correct violations, and assure proper completion of stipulated remedial actions.

## ARTICLE VI MAINTENANCE RESPONSIBILITIES

### **Section 601. Performance Guarantee.**

The Applicant should provide a financial guarantee to Penn Township for the timely installation and proper construction of all stormwater management controls as required by the approved stormwater plan and this Ordinance equal to the full construction cost of the required controls.

### **Section 602. Maintenance Responsibilities.**

- A. The SWM Site Plan for the development site shall contain an operation and maintenance plan prepared by the Developer and approved by the Township Engineer. The operation and maintenance plan shall outline required routine maintenance actions and schedules necessary to insure proper operation of the facility(ies).
- B. The SWM Site Plan for the development site shall establish responsibilities for the continuing operating and maintenance of all proposed stormwater control facilities, consistent with the following principals:
  - 1. If a development consists of structures or lots that are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Municipality, stormwater control facilities may also be dedicated to and maintained by the Municipality.
  - 2. If a development site is to be maintained in a single ownership or if sewers and other public improvements are to be privately owned and maintained, then the ownership and maintenance of stormwater control facilities shall be the responsibility of the owner or private management entity.
- C. The governing body, upon recommendation of the Township engineer, shall make the final determination on the continuing maintenance responsibilities prior to final approval of the stormwater management plan. The governing body reserves the right to accept the ownership and operating responsibility for any or all of the stormwater management controls.

### **Section 603. Maintenance Agreement for Privately Owner Stormwater Facilities.**

Prior to final subdivision plan approval or the issuance of any building permit and prior to the final approval of the site's stormwater management plan, the property owner shall sign and record the maintenance agreement contained in Appendix A of this Ordinance. The agreement shall be recorded among the land records of Cumberland County, Pennsylvania and on the final (approved) subdivision plan.

- A. Other items may be included in the agreement by the Municipality where determined necessary to guarantee the satisfactory maintenance of all facilities. The maintenance

agreement shall be subject to the review and approval of the Municipal Solicitor, Municipal Engineer and the Board of Supervisors.

**Section 604. Municipal Stormwater Maintenance Fund.**

- A. If stormwater facilities are accepted by Penn Township for dedication, persons installing stormwater storage facilities shall be required to pay a specified amount to Penn Township's Stormwater Maintenance Fund to help defray costs of periodic inspections and maintenance expenses. The amount of the deposit shall be determined as follows:
  - 1. If the storage facility is to be owned and maintained by Penn Township the deposit shall cover the estimated costs for maintenance and inspections for ten (10) years. The Township Engineer will establish the estimated costs utilizing information submitted by the Applicant.
  - 2. The amount of the deposit to the fund shall be converted to present worth of the annual series values. The Township Engineer shall determine the present worth equivalents, which shall be subject to the approval of the Board of Supervisors.
- B. If a storage facility is proposed that also serves as a recreation facility (e.g. ball field, lake), Penn Township may reduce or waive the amount of the maintenance fund deposit based upon the value of the land for public recreation purpose.
- C. If at some future time a storage facility (whether publicly or privately owned) is eliminated due to the installation of storm sewers or other storage facility, the unused portion of the maintenance fund deposit will be applied to the cost of abandoning the facility and connecting to the storm sewer system or other facility. Any amount of the deposit remaining after the costs of abandonment are paid will be retained by Penn Township.

**Section 605. Post-Construction Maintenance Inspections.**

- A. Stormwater facilities should be inspected by the land owner/developer or responsible entity on the following basis:
  - 1. Annually for the first 5 years.
  - 2. Once every 3 years thereafter.
  - 3. During or immediately after the cessation of a 100-year or greater storm event.
- B. The entity conducting the inspection shall be required to submit a report to Penn Township regarding the condition of the facility and recommending any necessary repairs, if needed.

## ARTICLE VII ENFORCEMENT AND PENALTIES

### **Section 701. Right-of-Entry.**

Upon presentation of proper credentials, duly authorized representatives of Penn Township may enter at reasonable times upon any property with Penn Township to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

### **Section 702. Notification.**

In the event that a person fails to comply with the requirements of this Ordinance, or fails to conform to the requirements of any permit issued hereunder, Penn Township shall provide timely written notification of the violation. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violation(s). Failure to comply within the time specified shall subject such person to the penalty provision of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent Penn Township from pursuing any and all other remedies. It shall be the responsibility of the owner of the real property on which any Regulated Activity is proposed to occur, or has occurred, to comply with the terms and conditions of this Ordinance and the Stormwater Operation and Maintenance Agreement.

### **Section 703. Enforcement.**

The Board of Supervisors, designated municipal employees and the municipality's solicitor are hereby authorized and directed to enforce all of the provisions of this ordinance. All inspections regarding compliance with the SWM Site plan shall be the responsibility of the Municipal Engineer or other qualified persons designated by Penn Township.

A. A set of design plans approved by the Municipality shall be on file at the site throughout the duration of the construction activity. Periodic inspections may be made by Penn Township or designee during construction.

B. Adherence to Approved Plan.

It shall be unlawful for any person, firm or corporation to undertake any Regulated Activity under Section 104 on any property except as provided for in the approved drainage plan and pursuant to the requirements of this Ordinance. It shall be unlawful to alter or remove any control structure required by the drainage plan pursuant to this Ordinance or to allow the property to remain in a condition which does not conform to the approved SWM Site Plan.

C. At the completion of the project, and as a prerequisite for the release of the Performance guarantee, the owner or his representative shall:

1. Provide a certification of completion from an engineer, architect, surveyor or other qualified person verifying that all permanent facilities have been constructed according to the plans and specifications and approved revisions hereto.
  2. Provide a set of as-built drawings when applicable.
- D. After receipt of the certification by Penn Township, a final inspection shall be conducted by the Township Engineer to certify compliance with this Ordinance.
- E. Prior to revocation or suspension of a permit, the Board of Supervisors will schedule a hearing to discuss the non-compliance if there is no immediate danger to life, public health or property.
- F. Suspension and Revocation of Permits.
1. Any permit issued under this ordinance may be suspended or revoked by the Board of Supervisors for:
    - a. Non-compliance with or failure to implement any provision of the permit.
    - b. A violation of any provision of this Ordinance or any other applicable law, ordinance, rule or regulation relating to the project.
    - c. The creation of any condition or the commission or any act during construction or development which constitute or creates a hazard or nuisance, pollution or which endangers the life or property of others, or as outlined in this Ordinance.
  2. A suspended permit shall be reinstated by the Board of Supervisors.
    - a. The Municipal Engineer or his designee has inspected and approved the corrections to the stormwater management and erosion and sediment pollution control measure(s), or the elimination of the hazard or nuisance, and/or
    - b. The Board of Supervisors is satisfied that the violation of the ordinance, law, or rule and regulation has been corrected.
  3. A permit that has been revoked by the Board of Supervisors cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Ordinance.

G. Occupancy Permit.

1. An occupancy permit shall be issued unless a certification of compliance has been secured. The occupancy permit shall be required for each lot owner and/or developer for all subdivisions and land development in Penn Township.

**Section 704. Public Nuisance.**

- A. The violation of any provision of this Ordinance is hereby deemed a Public Nuisance.
- B. Each day that a violation continues shall constitute a separate violation.

**Section 705. Penalties.**

- A. Anyone violating the provisions of this Ordinance shall be subject to a fine not more than \$1,000.00 for each violation, plus court costs and attorney fees. Each day that the violation continues shall be a separate offense.
- B. In addition, Penn Township, through his solicitor, may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. 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 706. Appeals.**

- A. Any person aggrieved by any action of Penn Township or its designated representatives, relevant to the provisions of this Ordinance or the Stormwater Operation and Maintenance Agreement, may appeal to the Board of Supervisors within thirty (30) days of that action.
- B. Any person aggrieved by any decision of the Board of Supervisors, relevant to the provisions of this Ordinance of the Stormwater Operation and Maintenance Agreement, may appeal to the County Court of Common Pleas in the county where the activity has taken place within thirty (30) days of the Board of Supervisor's decision.

**ENACTED and ORDAINED** at a regular meeting of Penn Township on the 11<sup>th</sup> day of July, 2013. This Ordinance shall take effect immediately.

**BOARD OF SUPERVISORS  
OF PENN TOWNSHIP**

  
\_\_\_\_\_  
**GARY MARTIN, Chairman**

\_\_\_\_\_  
**KENNETH SHEAFFER, Vice Chairman**

  
\_\_\_\_\_  
**AMOS SEIDERS, Supervisor**

**ATTEST:**

  
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**VICKI KNEPP, Secretary**