

# WHITPAIN TOWNSHIP

## ORDINANCE NO. 426

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AN ORDINANCE AMENDING THE CODE OF THE TOWNSHIP OF WHITPAIN AT PART II [GENERAL LEGISLATION], CHAPTER 125 [STORMWATER MANAGEMENT], BY AMENDING AND RESTATING ARTICLE I [GENERAL PROVISIONS], ARTICLE II [DEFINITIONS], ARTICLE III [STORMWATER MANAGEMENT FOR WATER QUALITY], ARTICLE IV [STORMWATER BMP OPERATIONS AND MAINTENANCE SITE PLAN REQUIREMENTS], ARTICLE VII [INSPECTIONS], ARTICLE VIII [FEES AND EXPENSES], ARTICLE IX [FEES AND EXPENSES], ARTICLE X [PROHIBITIONS], ARTICLE XII [MISCELLANEOUS PROVISIONS], AND ARTICLE XX [PROHIBITIONS] TO PROVIDE FOR NEW STORMWATER MANAGEMENT STANDARDS, AND TO MAKE TYPOGRAPHICAL, GRAMMATICAL, AND REFERENCE CORRECTIONS

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### CERTIFICATION

I, ERIC TRAUB, BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT I AM THE TOWNSHIP MANAGER IN WHITPAIN TOWNSHIP, MONTGOMERY COUNTY, PA AND THAT ATTACHED HERETO IS A TRUE AND COMPLETE CORRECT COPY OF ORDINANCE NO. 426



Eric Traub, Township Manager  
June 18, 2025

ENACTED: 6-17-2025

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AN ORDINANCE AMENDING THE CODE OF THE TOWNSHIP OF WHITPAIN AT PART II [GENERAL LEGISLATION], CHAPTER 125 [STORMWATER MANAGEMENT], BY AMENDING AND RESTATING ARTICLE I [GENERAL PROVISIONS], ARTICLE II [DEFINITIONS], ARTICLE III [STORMWATER MANAGEMENT FOR WATER QUALITY], ARTICLE IV [STORMWATER BMP OPERATIONS AND MAINTENANCE SITE PLAN REQUIREMENTS], ARTICLE VII [INSPECTIONS], ARTICLE VIII [FEES AND EXPENSES], ARTICLE IX [FEES AND EXPENSES], ARTICLE X [PROHIBITIONS], ARTICLE XII [MISCELLANEOUS PROVISIONS], AND ARTICLE XX [PROHIBITIONS] TO PROVIDE FOR NEW STORMWATER MANAGEMENT STANDARDS, AND TO MAKE TYPOGRAPHICAL, GRAMMATICAL, AND REFERENCE CORRECTIONS

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**WHEREAS**, The Board of Supervisors of Whitpain Township is duly empowered by the Second Class Township Code, 53 P.S. § 65101, *et seq.*, to enact certain regulations relating to the public health, safety welfare of the residents of Whitpain Township;

**WHEREAS**, The Pennsylvania Storm Water Management Act (Act 167) requires municipalities 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 storm water plan and the provisions of this act;"

**WHEREAS**, Federal regulations at 40 CFR § 122.34 require the use of ordinances by small Municipal Separate Storm Sewer Systems to address 1) the prohibition of unauthorized non-stormwater discharges; 2) erosion and sediment controls for construction activities involving earth disturbances of one acre or more (or disturbances less than one acre if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more); and 3) post-construction stormwater management for new development and redevelopment projects;

**WHEREAS**, The Board of Supervisors of Whitpain Township has adopted a comprehensive stormwater management ordinance, as amended, which contains two parts, with Part One being known as the "Whitpain Township Stormwater Management Ordinance for Watersheds Other than the Wissahickon" and Part Two being known as "Wissahickon Creek Stormwater Management Ordinance," in accordance with the provisions of the Second Class Township Code, Pennsylvania Storm Water Management Act, and applicable federal regulations;

**WHEREAS**, The Second Class Township Code authorizes the Board of Supervisors to make, amend and adopt amendments to the Whitpain Code of Ordinances, as amended, that are consistent with the Constitution and laws of the Commonwealth that it deems

necessary for the proper management and control of the Township and the best interests of its residents;

**WHEREAS**, The Board of Supervisors of Whitpain Township have determined that certain amendments to the Whitpain Township Code of Ordinances, as amended, are required for the orderly administration of the laws of Whitpain Township;

**WHEREAS**, The Board of Supervisors of Whitpain Township have determined that certain amendments to the Whitpain Township Code of Ordinances, as amended, are required to provide for clarity in the administration of the laws of Whitpain Township;

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**NOW, THEREFORE, IT IS HEREBY ENACTED AND ORDAINED** by the Whitpain Township Board of Supervisors that the Township's Code is amended as follows:

**SECTION 1.**

**Amendment to Chapter 125 [Stormwater Management], Article I [General Provisions], Section 2 [Findings], to clarify the Statement of Findings and to provide background about green infrastructure.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article I [General Provisions], Section 2 [Findings], is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**§ 125-2. Statement of Findings.**

The Board of Supervisors of Whitpain Township finds as follows:

- A. ~~Concerns of inadequate stormwater management.~~ Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases runoff volumes, flood flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, generally increases the cost of public facilities to carry and control stormwater, undermines floodplain management and flood control efforts in downstream communities, reduces groundwater recharge and threatens public health and safety, and increases nonpoint source pollution of water resources.
- B. ~~Desirability of plan.~~ A comprehensive program of stormwater management (SWM), including minimization of impacts of development reasonable regulation of development and activities causing accelerated runoff and loss of natural infiltration, is fundamental to the public health, safety and welfare and the protection of the people of the municipality and all the people of the commonwealth, their resources and the environment.
- C. 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, and greatly increases the cost to the public to manage stormwater.

- D. The use of green infrastructure and low impact development (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to: 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and use precipitation near where it falls to earth. Green infrastructure practices and LID contribute to the restoration or maintenance of pre-development hydrology.  
~~A 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 Whitpain Township and all the people of the commonwealth, their resources, and the environment.~~
- E. 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.
- F. Public education on the control of pollution from stormwater is an essential component in successfully addressing stormwater.
- G. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES)
- H. Nonstormwater discharges to municipal separate storm sewer systems can contribute to pollution of waters of the commonwealth by Whitpain Township.
- I. Within Whitpain Township there are multiple watershed areas, including the Stony Creek/Saw Mill Run/Mermaid Run and Plymouth Creek Watershed Area, and the Township finds that in addition to the general requirements for stormwater management in all the other watershed areas within Whitpain Township, additional requirements and regulations are desirable for all stormwater management of the Stony Creek/Saw Mill Run/Mermaid Run and Plymouth Creek Watershed areas of the Township.

**SECTION 2.** **Amendment to Chapter 125 [Stormwater Management], Article I [General Provisions], Section 3 [Purpose], to further explain the purpose of the ordinance.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article I [General Provisions], Section 3 [Purpose] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**§ 125-3. Purpose.**

The purpose of this Part 1 is to promote health, safety, and welfare within Whitpain Township and its watersheds by minimizing the harms and maximizing the benefits described in § 125-2 of this Part 1, through provisions designed to:

- A. Establish stormwater management requirements and practices for all watershed areas located in Whitpain Township and to adopt additional requirements for the Stony Creek/Saw Mill Run/Mermaid Run and Plymouth Creek Watershed area within Whitpain Township.
- B. 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.
- C. Utilize and preserve the existing natural drainage systems as much as possible.
- B. D. Manage stormwater runoff impacts at their source by regulating activities that cause the problems, which requires a minimum of structures and relies on natural processes.
- C. E. Provide review procedures and performance standards for stormwater planning and management.
- D. Utilize and preserve the existing natural drainage systems as much as possible.
- E. Manage stormwater impacts close to the runoff source, which requires a minimum of structures and relies on natural processes.
- F. Focus on infiltration of stormwater, to maintain groundwater recharge, to prevent degradation of surface and ground water quality and to otherwise protect water resources.
- G. Maintain existing flows and quality of streams and watercourses.
- H. 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 these uses in all streams, and to protect and maintain water quality in special protection streams.
- I.-H. Prevent scour and erosion of stream banks and streambeds.
- J. I. Provide for proper operations and maintenance of all permanent stormwater facilities, including best management practices (hereinafter referred to as "BMPs") that are implemented in the Whitpain Township.

K. J. Provide a ~~mechanism to identify controls~~ standards necessary to meet the National Pollutant Discharge Elimination System (NPDES) permit requirements.

L. K. Implement an illegal discharge detection and elimination program to address nonstormwater discharges into Whitpain Township's separate storm sewer system.

### **SECTION 3.**

### **Amendment to Chapter 125 [Stormwater Management], Article I [General Provisions], Section 4 [Statutory authority], to better format the list of statutory authority for this ordinance.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article I [General Provisions], Section 4 [Statutory authority] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

#### **§ 125-4. Statutory authority.**

The Municipality is empowered to regulate land use activities that may affect runoff and surface and groundwater quality and quantity by the authority of:

- A. Primary authority. Act of October 4, 1978, P.L. 864 (Act 167), the Storm Water Management Act
- B. The Second Class Township Code, §§ 2701 through 2704, as amended
- C. Municipalities Planning Code, Act of June 9, 1978, P.L. 460, as amended (hereinafter "MPC").

~~The Whitpain Township Board of Supervisors is empowered to regulate these activities by the authority of the Act of October 4, 1978, P.L. 864 (Act 167), the Storm Water Management Act, the Second Class Township Code, §§ 2701 through 2704, as amended, and the Municipalities Planning Code, Act of June 9, 1978, P.L. 460, as amended (hereinafter "MPC").~~

### **SECTION 4.**

### **Amendment to Chapter 125 [Stormwater Management], Article I [General Provisions], Section 5 [Applicability], to add additional regulated activities.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article I [General Provisions], Section 5 [Applicability] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

...

H. Regulated activities. The following activities are defined as regulated activities and shall be regulated by this Part 1, except those that meet the waiver specifications presented thereafter:

- (1) Land development
- (2) Subdivisions
- (3) Redevelopment
- (4) Alteration of the natural hydrologic regime
- (2)(5) Construction of new or additional impervious surfaces (driveways, parking lots, etc.), including residential subdivision with improvements, such as roads, curbs, sewer, etc.
- (3)(6) Construction of new buildings or additions to existing buildings
- (4)(7) Diversion or piping of any natural or man-made stream channel
- (8) Installation of stormwater systems or appurtenances thereto
- (5)(9) Earth disturbance activities greater than or equal to 5,000 square feet

## **SECTION 5.**

### **Amendment to Chapter 125 [Stormwater Management], Article I [General Provisions], Section 7 [Applicability], to add additional exemptions.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article I [General Provisions], Section 7 [Applicability] is hereby restated and amended to add the following:

#### **§ 125-7. Exemptions. [Amended 9-21-2004 by Ord. No. 280-1]**

A. Regulated activities that do not add any new impervious surfaces and result in cumulative earth disturbances less than 5,000 SF are exempt from the requirements in Sections 125-9(O) and 125-9(P), and Article IV of this ordinance.

B. Agricultural activity is exempt from the Stormwater Management Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.

C. Forest management and timber operations are exempt from the Stormwater Management Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.

D. Exemptions from any provisions of this Ordinance shall not relieve the applicant from the requirements in Section 125-9(A).

E. The Municipality may deny or revoke any exemption pursuant to this Section at any time for any project that the Municipality believes may pose a threat to public health and safety or the environment.

F. Any regulated activity that meets the following ~~exception~~ criteria shall be exempt from the provisions of this Part 1. This exemption criteria shall apply to

the totality of any development which meets the criteria regardless of whether it is undertaken in phases. The date of the adoption of this Part 1 shall be considered the commencement date or starting point from which to consider tracts as parent tracts in which future subdivisions and respective impervious area computations shall be cumulatively considered. Exemption shall not relieve an applicant from implementing such measures as are necessary to protect the health, safety and property within Whitpain Township.

G. The following table summarizes the exemptions from certain requirements in this Part I, includes new, additional impervious surface/cover on existing improved residential lots.

Stormwater Management Exemption Criteria ( <u>Improved Residential Lot/Parcel</u> )	
Total Parcel Size (acres)	Impervious Area (square feet)
0 - 0.5	300
Greater than 0.5 - 1	500
Greater than 1 - 2	1,000
Greater than 2 - 5	2,000
Greater than 5	3,000

## **SECTION 6.**

## **Amendment to Chapter 125 [Stormwater Management], Article II [Definitions], Section 8 [Word usage; terms defined], to add additional defined terms.**

The Code of the Township of Whitpain, Part II [Definitions], Chapter 125 [Stormwater Management], Article II [Definitions], Section 8 [Word usage; terms defined], is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

### **ARTICLE II**

#### **Definitions**

##### **§ 125-8. Word usage; terms defined.**

For the purposes of this Part 1, 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.

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

D. E. As used in this Part 1, the following terms shall have the meanings indicated:

AGRICULTURAL ACTIVITY — Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

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.

APPLICANT — A landowner, developer or other person who has filed an application for approval to engage in any regulated earth disturbance activity at a project site in Whitpain Township.

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; also the changing of surface conditions by causing the surface to be more or less impervious; land disturbance.

APPLICANT — A landowner, developer or other person who has filed an application to the Municipality for approval to engage in any regulated activity at a project site in the Municipality.

AS-BUILT DRAWINGS — Engineering or site drawings maintained by a developer to show the actual locations of building components and changes from the original contract documents. These documents, or a copy of same, are turned over to the Municipality at the completion of the project.

BANKFULL — The channel at the top-of-bank or point from where water begins to overflow onto a floodplain.

BASEFLOW — Portion of stream discharge derived from groundwater; the sustained discharge that does not result from direct runoff or from water diversions, reservoir releases, piped discharges, or other human activities.

BIORETENTION — A stormwater retention area that utilizes woody and herbaceous plants and soils to remove pollutants before infiltration occurs.

BMP (BEST MANAGEMENT PRACTICE) — Activities, facilities, designs, measures or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge and to otherwise meet the purposes of this Part 1. Stormwater BMPs are commonly grouped into one of two broad categories or measures: "structural" or "nonstructural." In this Part 1, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff, or to provide other environmental or aesthetic benefits such as low-impact designs, riparian or forested buffers; 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, bioretention, wet ponds, permeable paving, grassed swales, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

BMP MANUAL — Pennsylvania Stormwater Best Management Practices Manual, No. 363-0300-002, as amended from time to time.

BUFFER — The area of land immediately adjacent to any stream, measured perpendicular to and horizontally from the top-of-bank on both sides of a stream (see "top-of-bank").

CHANNEL — An open drainage feature through which stormwater flows. Channels include, but shall not be limited to, natural and man-made drainageways, swales, streams, ditches, canals, and pipes flowing partly full.

CHANNEL EROSION — The widening, deepening, or headward cutting of channels and waterways caused by stormwater runoff or bankfull flows.

CISTERN — An underground reservoir or tank for storing rainwater.

CONSERVATION DISTRICT — A conservation district, 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 Chapter 102.

CONVEYANCE — A facility or structure used for the transportation or transmission of something from one place to another.

COUNTY — Montgomery County.

CULVERT — A structure with its appurtenant works which carries water under or through an embankment or fill.

DAM — Any artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or any other fluid or semifluid or any refuse bank, fill or structure for highway, railroad or any other purpose which does or may impound water, fluid or semifluid.

DEP (or PADEP) — The Pennsylvania Department of Environmental Protection.

DESIGN STORM — The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence that such magnitude will be equaled or exceeded in any one year (e.g., the twenty-percent chance, or so-called five-year (recurrence interval) storm), and duration (e.g., 24 hours), used in the design and evaluation of stormwater management systems. Also see "return period."

DETENTION BASIN — An impoundment designed to collect and retard stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate. Detention basins are designed to drain completely soon after a rainfall event, and to become dry until the next rainfall event.

DETENTION VOLUME — The volume of runoff that is captured and released into the waters of the commonwealth at a controlled rate.

DEVELOPER — A person that seeks to undertake any regulated earth disturbance activities at a project site in Whitpain Township.

DEVELOPMENT — Any human-induced change to improved or unimproved real estate, whether public or private, including, but not limited to, land development, construction, installation, or expansion of a building or other structure, land division, street construction, and site alteration such as embankments, dredging, grubbing, grading, paving, parking or storage facilities, excavation, filling, stockpiling, or clearing.

DEVELOPMENT SITE — The specific ~~tract~~ area of land where any earth disturbance activities in the municipality are planned, conducted or maintained.

DIAMETER AT BREAST HEIGHT (DBH) — The outside bark diameter at breast height which is defined as 4.5 feet (1.37m) above the forest floor on the uphill side of the tree.

DIFFUSED DRAINAGE DISCHARGE — Drainage discharge that is not confined to a single point location or channel, including sheet flow or shallow concentrated flow.

DIRECTLY CONNECTED IMPERVIOUS AREA (DCIA) — An impervious or impermeable surface that is directly connected to a stormwater drainage or conveyance system, leading to direct runoff, decreased infiltration, decreased filtration, and decreased time of concentration.

DISCONNECTED IMPERVIOUS AREA (DIA) — An impervious or impermeable surface that is 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.

DISTURBED AREA — An unstabilized land area where an earth disturbance activity is occurring or has occurred.

DITCH — A man-made waterway constructed for irrigation or stormwater conveyance purposes.

DOWNSLOPE PROPERTY LINE — That portion of the property line of the lot, tract, or parcels of land being developed, located such that overland or pipe flow from the project site would be directed towards it by gravity.

DRAINAGE CONVEYANCE FACILITY — A stormwater management facility designed to transport stormwater runoff that includes channels, swales, pipes, conduits, culverts, and storm sewers.

DRAINAGE EASEMENT — A right granted by a landowner to a grantee, allowing the use of private land for stormwater management purposes.

DRAINAGE PLAN — The documentation of the proposed stormwater management controls, if any, to be used for a given development site, the contents of which are established in § 125-26. See Stormwater Management Site Plan (SWM Site Plan).

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, building construction and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

EMERGENCY SPILLWAY — A conveyance area that is used to pass peak discharge greater than the maximum design storm controlled by the stormwater facility.

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

EROSION — The natural process by which the surface of the land, including channels, is worn away by water, wind, or chemical action.

EROSION AND SEDIMENT CONTROL PLAN — A plan for a project site which identifies BMPs to minimize accelerated erosion and sedimentation.

EXCEPTIONAL VALUE WATERS — Surface waters having quality that satisfy one or more of the conditions established in Pennsylvania Code Title 25, Environmental Protection, Chapter 93, Water Quality Standards, § 93.4b(b).

EXISTING CONDITION — The dominant land cover during the 5 year period immediately preceding a proposed regulated activity.

FEMA — Federal Emergency Management Agency.

FLOOD — A temporary condition of partial or complete inundation of land areas from the overflow of streams, rivers, and other waters of the commonwealth.

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).

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.

FLUVIAL GEOMORPHOLOGY — The study of landforms associated with river channels and the processes that form them.

FOREST MANAGEMENT/TIMBER OPERATIONS — 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.

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

GRADE — Either of the following:

- A. A slope, usually of a road, channel, or natural ground specified in percent and shown on plans as specified herein.
- B. To finish the surface of a roadbed, the top of an embankment, or the bottom of an excavation.

GRASSED WATERWAY — A natural or man-made waterway, usually broad and shallow, covered with erosion-resistant grasses used to convey surface

water.

GREEN INFRASTRUCTURE — Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

GROUNDWATER RECHARGE — The replenishment of existing natural underground water supplies from precipitation or overland flow.

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, additional indoor living spaces, patios, garages, storage sheds and similar structures, swimming pools, and any new streets or sidewalks. ~~Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.~~

IMPROVED RESIDENTIAL LOT/PARCEL — A parcel with existing impervious surface area located in a residential zoning district.

IMPOUNDMENT — A retention or detention basin designed to retain stormwater runoff and release it at a controlled rate.

INFILL — Development that occurs on smaller parcels that has remained undeveloped, but is within or in very close proximity to urban or densely developed areas. Infill development usually relies on existing infrastructure and does not require an extension of water, sewer, or other public utilities.

INFILTRATION — Movement of surface water into the soil, where it is absorbed by plant roots, evaporated into the atmosphere, or percolated downward to recharge groundwater.

INFILTRATION BASIN — A shallow impoundment that is designed to infiltrate stormwater into the soil. Infiltration basins are believed to have a high pollutant removal efficiency and can also help recharge the groundwater, thus restoring baseflows to stream systems. Infiltration basins can be problematic at many sites because of stringent soil requirements.

INFILTRATION STRUCTURE — A structure designed to direct runoff into the ground (e.g., French drains, seepage pits or seepage trenches).

INFLOW — The flow entering the stormwater management facility and/or BMP.

INLET — The upstream end of any structure through which water may flow.

INTERMITTENT STREAM — A stream that flows only part of the time. Flow generally occurs for several weeks or months in response to seasonal precipitation or groundwater discharge.

INVERT — The lowest surface, the floor or bottom of a culvert, drain, sewer, channel, basin, BMP, or orifice.

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 — 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; 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) A subdivision of land;

(3) Development in accordance with Section 503(1.1) of the Pennsylvania Municipalities Planning Code.

LIMITING ZONE — A soil horizon or condition in the soil profile or underlying a stratum that includes one of the following:

- A. A seasonal high water table, whether perched or regional, determined by direct observation of the water table or indicated by soil mottling.
- B. A rock with open joints, fracture or solution channels, or masses of loose rock fragments, including gravel, with sufficient fine soil to fill the voids between the fragments.
- C. A rock formation, other stratum, or soil condition that is so slowly permeable that it effectively limits downward passage of water.

LOT — A designated parcel, tract, or area of land established by a plat or otherwise as permitted by law and to be used, developed, or built upon as a unit.

MAIN STEM (MAIN CHANNEL) — Any stream segment or other runoff conveyance used as a reach in the Wissahickon Creek Watershed hydrologic model.

MANNING EQUATION (MANNING FORMULA) — A method for calculation of velocity of flow (e.g., feet per second) and flow or discharge rate (e.g., cubic feet per second) in open channels based upon channel shape, roughness, depth of flow, and slope. "Open channels" may include closed conduits so long as the flow is not under pressure.

MAXIMUM DESIGN STORM — The maximum (largest) design storm that is controlled by the stormwater facility.

MUNICIPAL ENGINEER — A professional engineer (PE) licensed as such in the Commonwealth of Pennsylvania, duly appointed as the Engineer for a Municipality, planning agency, or joint planning commission.

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.

MUNICIPALITY — Whitpain Township, Montgomery County, Pennsylvania.

NATURAL CONDITION — Pre-development condition.

NATURAL RECHARGE AREA — Undisturbed surface area or depression where stormwater collects and a portion of which infiltrates and replenishes the underground and groundwater.

NONPOINT SOURCE POLLUTION — Pollution that enters a waterbody from diffuse origins in the watershed and does not result from discernible, confined, or discrete conveyances.

NONSTORMWATER DISCHARGES — Water flowing in stormwater collection facilities, such as pipes or swales, which are not the result of a rainfall event or snowmelt.

NONSTRUCTURAL BEST MANAGEMENT PRACTICE (BMPs) — Methods of controlling stormwater runoff quantity and quality, such as innovative site planning, impervious area and grading reduction, protection of natural depression areas, temporary ponding on site, and other techniques.

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.

NRCS — Natural Resource Conservation Service of the U.S. Department of Agriculture [previously the Soil Conservation Service (SCS)].

OPEN CHANNEL — A conveyance channel that is not enclosed.

OUTFALL — "Point source" as described in 40 CFR § 122.2 at the point where Whitpain Township's storm sewer system discharges to surface waters of the commonwealth.

OUTFLOW — The flow exiting the stormwater management facility and/or BMP.

OUTLET — Points of water disposal to a stream, river, lake, tidewater, or artificial drain.

PADEP — The Pennsylvania Department of Environmental Protection.

PEAK DISCHARGE — The maximum rate of flow of storm runoff at a given point and time resulting from a specified storm event.

PENNDOT (or PADOT) — Pennsylvania Department of Transportation.

PERSON — An individual, partnership, public or private association or corporation, or a governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

PERVIOUS AREA — Any area not defined as impervious.

PIPE — A culvert, closed conduit, or similar structure (including appurtenances) that conveys stormwater.

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.

POST-CONSTRUCTION — Period after construction during which disturbed areas are stabilized, stormwater controls are in place and functioning, and all proposed improvements in the approved land development plan are completed.

PRE-CONSTRUCTION — Prior to commencing construction activities.

PRE-DEVELOPMENT CONDITION — Undeveloped/natural condition.

PRETREATMENT — Techniques employed in stormwater BMPs to provide storage or filtering to trap coarse materials and other pollutants before they enter the system, but not necessarily designed to meet the water quality volume control requirements (WQV) of § 125-69. For example, any inlets draining to an infiltrating system should be sumped and trapped to prevent the system from becoming clogged with excess sediment.

PROJECT SITE — The specific area of land where any regulated earth disturbance activities in the municipality are planned, conducted or maintained.

QUALIFIED PERSON — Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by this Ordinance.

RAIN BARREL — An above-ground reservoir or tank ~~that holds no greater than 75 gallons of fluid~~ for the collection of stormwater from roof leaders, from which a person may recycle such rainwater for various uses, including, but not limited to, watering vegetation and washing vehicles.

RAIN GARDEN — A BMP that is a planted depression or shallow hole that collects stormwater runoff from impervious areas, such as roofs, driveways, hardscaping and paved parking lots. Rain gardens are designed, constructed and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or underground aquifer. A rain garden shall have a maximum ponding depth of one foot and shall be in conformance with the Pennsylvania DEP BMP guidelines, as amended from time to time.

RATIONAL FORMULA — A rainfall-runoff equation used to estimate peak flow;  $Q = CiA$ .

REACH — Any stream segment or other runoff conveyance used in the Watershed hydrologic model.

RECHARGE — The replenishment of groundwater through the infiltration of rainfall, other surface waters, or land application of water or treated wastewater.

RECHARGE VOLUME (REV) — The volume of stormwater, in cubic feet, required to be infiltrated on site, where practicable and appropriate.

RECONSTRUCTION — Demolition and subsequent rebuilding of impervious surface.

RECORD DRAWINGS — Construction drawings revised to represent the as-built conditions.

REDEVELOPMENT — Any development that requires demolition or removal of existing structures or impervious surfaces at a site and replacement with new impervious surfaces. Maintenance activities such as top-layer grinding

and repaving are not considered to be redevelopment. Interior remodeling projects and tenant improvements are also not considered to be redevelopment.

REGULATED ACTIVITIES – Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

REGULATED EARTH DISTURBANCE ACTIVITY (Regulated Activity) — Activity involving earth disturbance subject to regulation under 25 Pa. Code Chapter 92, 25 Pa. Code Chapter 102, or the Clean Streams Law.<sup>5</sup>

RELEASE RATE — The level of control of the postdevelopment peak rate of runoff to be achieved for a particular site, expressed as a percentage of the predevelopment peak rate of runoff.

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 or greater magnitude can be expected to recur. For example, the twenty- five-year return period rainfall would be expected to recur on the average of once every 25 years, or conversely would have a four-percent chance of occurrence or exceedance in any given year.

RIPARIAN BUFFER – An area of land adjacent to a body of water and managed to maintain the integrity of stream channels and shorelines to 1) reduce the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals, and 2) supply food, cover and thermal protection to fish and other wildlife.

RIPARIAN FOREST BUFFER — A type of riparian buffer that consists of permanent vegetation that is predominantly native trees, shrubs, and forbs along surface waters that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and separate land use activities from surface waters.

RISER — A vertical pipe extending from the bottom of a pond that is used to control the discharge rate from the pond for a specified design storm.

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.

ROOF DRAINS — A drainage conduit or pipe that collects water runoff from a roof and leads it away from the structure.

ROOFTOP DETENTION — The temporary ponding and gradual release of stormwater falling directly onto flat roof surfaces using controlled-flow roof drains in building designs.

RUNOFF — That part of precipitation which flows over the land.

SALDO — Subdivision and Land Development Ordinance.

SCS — The Soil Conservation Service, United States Department of Agriculture.

SEDIMENT — Soils or other materials transported by surface water as a product of erosion.

SEDIMENTATION — The process by which mineral or organic matter is accumulated or deposited by the movement of water or air.

SEDIMENT BASIN — A barrier, dam, or retention or detention basin located and designed in such a way as to retain rock, gravel, sand, silt, clay or other material transported by water during construction.

SEDIMENT POLLUTION — The placement, discharge, or any other introduction of sediment into the waters of the commonwealth.

SEEPAGE PIT/SEEPAGE TRENCH — An area of excavated earth filled with loose stone or similar material and into which surface water is directed for infiltration into the ground.

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.

SHALLOW CONCENTRATED FLOW — Stormwater runoff flowing in shallow, defined ruts prior to entering a defined channel or waterway.

SHEET FLOW — A flow process associated with broad, shallow water movement on sloping ground surfaces that is not channelized or concentrated.

SOIL-COVER COMPLEX METHOD — A method of runoff computation developed by the National Resources Conservation Service (NRCS) that is based on relating soil type and land use/cover to a runoff parameter curve number (CN).

SOURCE WATER PROTECTION AREAS (SWPA) — The zones through which contaminants, if present, are likely to migrate and reach drinking water wells or surface water intakes.

SPILLWAY — A conveyance that is used to pass the peak discharge of the maximum design storm that is controlled by the stormwater facility.

STANDARD GRADING PERMIT — The permit required to be issued by the Municipality before any grading activities are allowed to commence on a site within the Municipality. Such permits typically require information including, but not limited to, a contour map of the site showing existing and proposed contours, a plot plan showing streams and drainage courses on or within 50 feet of the site, drainage structures, neighboring streets and alleys, trees, and floodplain zones on or within 50 feet of the site, soil classifications.

STATE WATER QUALITY REQUIREMENTS — The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

STORM SEWER — A system of pipes and/or open channels that convey intercepted runoff and stormwater from other sources but exclude domestic sewage and industrial wastes.

STORMWATER — Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

STORMWATER MANAGEMENT FACILITY (SMF) — 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 watershed plan, for managing those land use activities that will influence stormwater runoff quality and quantity.

STORMWATER MANAGEMENT SITE PLAN (or SWM Site Plan or Drainage Plan) — A plan prepared by the applicant or the applicant's representative indicating how stormwater runoff will be managed at the project site to meet the requirements of this Part I for managing stormwater runoff adopted by Whitpain Township.

STREAM — A natural watercourse.

STREAM BUFFER — The land area adjacent to each side of a stream essential to maintaining water quality (see "buffer").

STREAM ENCLOSURE — A bridge, culvert, or other structure in excess of 100 feet in length upstream to downstream, which encloses a regulated water of the commonwealth.

SUBAREA (SUBWATERSHED) — The smallest unit of watershed breakdown for hydrologic modeling purposes for which the runoff control criteria have been established in the stormwater management plan.

SUBDIVISION — The division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels, or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership, or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than 10 acres not involving any new street or easement of access or any residential dwelling shall be exempted. As defined in the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land, including changes to existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership or building or lot development.

SURFACE WATERS — Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, excluding water at facilities approved for wastewater treatment, such as wastewater treatment impoundments, cooling water ponds, and constructed wetlands used as part of a wastewater treatment process.

SWALE — A low-lying stretch of land which gathers or carries surface water runoff.

TIME-OF-CONCENTRATION (TC) — The time required for surface runoff to travel from the most remote point of a watershed to the watershed outlet.

TOP-OF-BANK — Highest point of elevation in a stream channel cross-section at which a rising water level just begins to flow outside of the channel and over the floodplain.

TOWNSHIP — Whitpain Township, with offices located at 960 Wentz Road,

Blue Bell, Pennsylvania.

USDA – United States Department of Agriculture.

VERNAL POND — Seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring but may be completely dry for most of the summer and fall.

WATERCOURSE — A channel or conveyance of surface water, such as a stream or creek, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

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 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 body of water, whether natural or artificial.

WATER VOLUME CONTROL — (See § 125-69.) The storage capacity, in acre-feet, required to capture and treat a portion of stormwater runoff from the developed or redeveloped areas of the site.

WELLHEAD — Either one of the following:

- A. A structure built over a well.
- B. The source of water for a well.

WELLHEAD PROTECTION AREA — The surface and subsurface area surrounding a water supply well, well field, or spring supplying a public water system through which contaminants are reasonably likely to move toward and reach the water source.

WET BASIN — Pond for urban runoff management that is designed to detain urban runoff and always contains water.

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.

## **SECTION 7.**

**Amendment to Chapter 125 [Stormwater Management], Article III [Stormwater Management for Water Quality], Section 9 [General requirements; low impact development practices] to revise general requirements for stormwater management in relation to maintaining water quality.**

The Code of the Township of Whitpain, Part II [Definitions], Chapter 125 [Stormwater Management], Article III [Stormwater Management for Water Quality], Section 9 [General requirements; low impact development practices], is hereby restated and amended to delete the struck-through language (~~example~~) and add the underlined language (example) as follows:

**ARTICLE III**  
**Stormwater Management for Water Quality**

**§ 125-9. General requirements; low-impact development practices.**

A. For all regulated activities, unless preparation of a Stormwater Management Plan is specifically exempted, activities shall be designed, implemented, operated and maintained to meet the purposes of this Part 1, through these elements:

- (1) Preparation and implementation of an approved Stormwater Management Plan is required which shall include erosion and sediment controls during earth disturbance activities (e.g., during construction; and
- (2) Water quality protection measures after completion of earth disturbance activities (e.g., after construction), including operations and maintenance.
- (3) No regulated activities shall commence until the municipality issues written approval of a Stormwater Management Plan, which demonstrates compliance with the requirements of this Ordinance. No regulated earth disturbance activities within Whitpain Township shall commence until the requirements of this Part 1 are met.
- (4) The municipality may, after consultation with DEP, 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.

A. All regulated earth disturbance activities within Whitpain Township shall be designed, implemented, operated and maintained to meet the purposes of this Part 1, through these two elements:

- (1) Erosion and sediment control during the earth disturbance activities (e.g., during construction); and
- (2) Water quality protection measures after completion of earth disturbance activities (e.g., after construction), including operations and maintenance.

B. No regulated earth disturbance activities within Whitpain Township shall commence until the requirements of this Part 1 are met.

C.B. Erosion and sediment control during regulated earth disturbance activities shall be addressed as required by § 125-11.

D.C. Postconstruction water quality protection shall be addressed as required by § 125-12. Operations and maintenance of permanent stormwater BMPs shall be addressed as required by Article IV.

E.D. All best management practices (BMPs) used to meet the requirements of this Part 1 shall conform to the state water quality requirements, and any more stringent requirements as determined by Whitpain Township.

F.E. Techniques for low-impact development, as hereinafter set forth, are encouraged to be implemented because they reduce the costs of complying with the requirements of this Part 1 and the state water quality requirements.

F. At the Township's discretion, the applicant may be required to provide written notification to the adjacent property owner(s) for any stormwater flows onto the adjacent property that will be created, increased, decreased, relocated, or otherwise altered. Such stormwater flows shall be subject to the requirements of this Ordinance.

G. Impervious areas:

- (1) 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.
- (2) For development taking place in stages, the entire development plan must be used in determining conformance with this Ordinance.
- (3) For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance; except that the volume controls in Section 125-9(O) and the peak rate controls of Section 125-9(P) do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.

H. Incorporate methods described in the Pennsylvania Stormwater Best Management Practices Manual (BMP Manual). If methods other than green infrastructure and LID methods are proposed to achieve the volume and rate controls required under this Ordinance, the Stormwater Management Plan must include a detailed justification demonstrating that the use of LID and green infrastructure is not practicable.

G.I. Low-impact development practices alternative approach for managing stormwater runoff.

- (1) Natural hydrologic conditions may be altered radically by poorly planned development practices, such as introducing unneeded impervious surfaces, destroying existing drainage swales, constructing unnecessary storm sewers, and changing local topography. A traditional drainage approach of development has been to remove runoff from a site as quickly as possible and capture it in a detention basin. This approach leads ultimately to the degradation of water quality as well as expenditure of additional resources for detaining and managing concentrated runoff at some downstream location.
- (2) The recommended alternative approach is to promote practices that will minimize postdevelopment runoff rates and volumes, which will minimize needs for artificial conveyance and storage facilities. To simulate predevelopment hydrologic conditions, forced infiltration is often necessary to offset the loss of infiltration by creation of impervious surfaces. The ability of the ground to infiltrate depends upon the soil types and its conditions.
- (3) Preserving natural hydrologic conditions requires careful alternative site design considerations. Site design practices include preserving natural drainage features, minimizing impervious surface area, reducing the hydraulic connectivity of impervious surfaces, and protecting natural depression storage. A well-designed site will contain a mix of all those features. The following describes various techniques to achieve the alternative approach:

(a) Preserving natural drainage features. Protecting natural drainage features, particularly vegetated drainage swales and channels, is desirable because of their ability to infiltrate and attenuate flows and to filter pollutants. However, this objective is often not accomplished in land development. In fact, commonly held drainage philosophy encourages just the opposite pattern; streets and adjacent storm sewers typically are located in the natural headwater valleys and swales, thereby replacing natural drainage functions with a completely impervious system. As a result, runoff and pollutants generated from impervious surfaces flow directly into storm sewers with no opportunity for attenuation, infiltration, or filtration. Developments designed to fit site topography also minimizes the amount of grading on site.

(b) Protecting natural depression storage areas. Depressional storage areas have no surface outlet, or drain very slowly following a storm event. They can be commonly seen as ponded areas in farm fields during the wet season or after large runoff events. Traditional development practices eliminate these depressions by filling or draining, thereby obliterating their ability to reduce surface runoff volumes and trap pollutants. The volume and release-rate characteristics of depressions should be protected in the design of the development site. The depressions can be protected by simply avoiding the depression or by incorporating its storage as additional capacity in required detention facilities.

(c) Avoiding introduction of impervious areas. Careful site planning should consider reducing impervious coverage to the maximum extent possible. Building footprints, sidewalks, driveways and other features producing impervious surfaces should be evaluated to minimize impacts on runoff.

(d) Reducing the hydraulic connectivity of impervious surfaces. Impervious surfaces are significantly less of a problem if they are not directly connected to an impervious conveyance system (such as storm sewer). Two basic ways to reduce hydraulic connectivity are routing of roof runoff over lawns and reducing the use of storm sewers. Site grading should promote increasing travel time of stormwater runoff, and should help reduce concentration of runoff to a single point in the development.

(e) Routing roof runoff over lawns. Roof runoff can be easily routed over lawns in most site designs. The practice discourages direct connections of downspouts to storm sewers or parking lots. The practice also discourages sloping driveways and parking lots to the street. By routing roof drains and crowning the driveway to run off to the lawn, the lawn is essentially used as a filter strip.

(f) Reducing the use of storm sewers. By reducing use of storm sewers for draining streets, parking lots, and back yards, the potential for accelerating runoff from the development can be greatly reduced. The practice requires greater use of swales and may not be practical for some development sites, especially if there are concerns for areas that do not drain in a reasonable time. The

practice requires educating local citizens and public works officials, who expect runoff to disappear shortly after a rainfall event.

(g) Reducing street widths. Street widths can be reduced by either eliminating on-street parking or by reducing roadway widths. Municipal planners and traffic designers should encourage narrower neighborhood streets which ultimately could lower maintenance.

(h) Limiting sidewalks to one side of the street. A sidewalk on one side of the street may suffice in low-traffic neighborhoods. The lost sidewalk could be replaced with bicycle/recreational trails that follow back-of-lot lines. Where appropriate, backyard trails should be constructed using pervious materials.

(i) Using permeable paving materials. These materials include permeable interlocking concrete paving blocks or porous bituminous concrete. Such materials should be considered as alternatives to conventional pavement surfaces, especially for low-use surfaces such as driveways, overflow parking lots, and emergency access roads.

(j) Reducing building setbacks. Reducing building setbacks reduces driveway and entry walks and is most readily accomplished along low-traffic streets where traffic noise is not a problem.

(k) Constructing cluster developments. Cluster developments can also reduce the amount of impervious area for a given number of lots. The biggest savings is in street length, which also will reduce costs of the development. Cluster development clusters the construction activity onto less sensitive areas without substantially affecting the gross density of development.

(4) In summary, a careful consideration of the existing topography and implementation of a combination of the above-mentioned techniques may avoid construction of costly stormwater control measures. Other benefits include reduced potential of downstream flooding, water quality degradation of receiving streams/water bodies and enhancement of aesthetics and reduction of development costs. Beneficial results include more stable base flows in receiving streams, improved groundwater recharge, reduced flood flows, reduced pollutant loads, and reduced costs for conveyance and storage.

J. The design of all facilities over karst shall include an evaluation of measures to minimize adverse effects.

K. Infiltration BMPs should be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Ordinance.

(1) All sites utilizing infiltration stormwater facilities must perform soil infiltration testing in compliance with the Soil Infiltration Testing Requirements as defined in Attachment 3, Appendix C. Results from the soil testing must be submitted to the Township for review.

(2) All infiltration BMPs should be designed with a positive overflow that discharges excess volume in a non-erosive manner and allows for

controlled discharge during rainfall events.

L. Stormwater BMPs should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.

M. The design storm volumes to be used in the analysis of peak rates of discharge should be obtained per the latest NOAA Atlas precipitation data.

N. 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 Storm Water Management Act.

#### O. Volume Controls

The green infrastructure and low impact development practices provided in the BMP Manual shall be utilized for all regulated activities wherever possible. Water volume controls shall be implemented using the Design Storm Method in Subsection A or the Simplified Method in Subsection B below. For regulated activity areas equal or less than one 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.

(1) The Design Storm Method (CG-1 in the BMP Manual) is applicable to any size of regulated activity. This method requires detailed modeling based on site conditions.

(a) Do not increase the post-development total runoff volume for all storms equal to or less than the 2-year 24 hour duration precipitation.

(b) For modeling purposes:

(i) Existing (predevelopment) non-forested pervious areas must be considered meadow in good condition.

(ii) 20% of existing impervious area, when present, shall be considered meadow in good condition in the model for existing conditions.

(2) The Simplified Method (CG-2 in the BMP Manual) 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 acre, or for projects that require design of stormwater storage facilities. For new impervious surfaces:

(a) Stormwater facilities shall capture at least the first two inches of runoff from all new impervious surfaces. [Note: An asterisk (\*) in equations denotes multiplication.]

Volume (cubic feet) = (2 / 12) \* impervious surfaces (square feet)

(b) 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 the commonwealth). Removal options include reuse, evaporation, transpiration, and infiltration.

Volume (cubic feet) = (1/12) \* Impervious Surfaces (square feet)

(c) Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5-inch of the permanently removed runoff should be infiltrated.

#### P. Rate Controls

(1) For areas not covered by a release rate map from an approved Act 167 Stormwater Management Plan:

Post-development discharge rates shall not exceed the pre-development discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storm events. 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.

(2) For areas covered by a release rate map from an approved Act 167 Stormwater Management Plan:

For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storm events, the post-development peak discharge rates will follow the applicable approved release rate maps. For any areas not shown on the release rate maps, the post-development discharge rates shall not exceed the pre-development discharge rates.

#### Q. Riparian Buffers

(1) In order to protect and improve water quality, a Riparian Buffer Easement shall be created and recorded as part of any subdivision or land development that encompasses a Riparian Buffer.

(2) Except as required by Chapter 102, the Riparian Buffer Easement shall be measured to be the greater of the limit of the 100 year floodplain or a minimum of 10 feet from the top of the streambank (on each side).

(3) Minimum Management Requirements for Riparian Buffers.

(a) Existing native vegetation shall be protected and maintained within the Riparian Buffer Easement.

(b) Whenever practicable invasive vegetation shall be actively removed and the Riparian Buffer Easement shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.

(4) The Riparian Buffer Easement shall be enforceable by the

municipality and shall be recorded in the appropriate County Recorder of Deeds Office, so that it shall run with the land and shall limit the use of the property located therein. The easement shall allow for the continued private ownership and shall count toward the minimum lot area a required by Zoning, unless otherwise specified in the municipal Zoning Ordinance.

(5) Any permitted use within the Riparian Buffer Easement shall be conducted in a manner that will maintain the extent of the existing 100-year floodplain, improve or maintain the stream stability, and preserve and protect the ecological function of the floodplain.

(6) The following conditions shall apply when public and/or private recreation trails are permitted within Riparian Buffers:

(a) Trails shall be for non-motorized use only.

(b) Trails shall be designed to have the least impact on native plant species and other sensitive environmental features.

(7) Septic drainfields and sewage disposal systems shall not be permitted within the Riparian Buffer Easement and shall comply with setback requirements established under 25 Pa. Code Chapter 73.

## **SECTION 8.**

**Amendment to Chapter 125 [Stormwater Management], Article IV [Stormwater BMP Operations and Maintenance Site Plan Requirements], Section 13 [General plan requirements] to alter title of Article IV and revise site plan requirements for stormwater management plans.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article IV [Stormwater BMP Operations and Maintenance Site Plan Requirements], Section 13 [General plan requirements] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

## **ARTICLE IV**

### **Stormwater BMP Operations and Maintenance Management (SWM) Site Plan Requirements**

#### **§ 125-13. General plan requirements.**

A. No regulated earth disturbance activities within Whitpain Township shall commence until approval by Whitpain Township of Stormwater Management Site Plan BMP operations and maintenance plan which describes how the permanent (e.g., postconstruction) stormwater BMPs will be properly operated and maintained.

B. The Municipality shall not approve any Stormwater Management Site Plan or BMP Operations and Maintenance Plan that is deficient in meeting the requirements of this Ordinance. At its sole discretion and in accordance with this Article, when a Stormwater BMP Operations and Maintenance Plan is found to be deficient, the municipality may either disapprove the submission and

require a resubmission, or in the case of minor deficiencies, the Municipality may accept submission of modifications.

C. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, must be provided as necessary to implement the BMP Operation and Maintenance (O&M) Plan.

D. The Stormwater Management Site Plan shall provide the following information:

(1) The overall stormwater management concept for general description of the project.

(2) A determination of site conditions in accordance with the BMP Manual. A detailed site evaluation shall be completed for projects proposed in areas of carbonate geology or karst topography, and other environmentally sensitive areas, such as brownfields.

(3) Complete hydrologic, hydraulic, and structural computations for all stormwater management facilities. Stormwater runoff design computations and documentation as specified in this Ordinance, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Ordinance, including the recommendations and general requirements in this section.

(4) Expected project time schedule.

(5) An erosion and sediment control plan. The applicant is required to obtain a letter of approval or adequacy from the Conservation District for the erosion and sedimentation control plan.

(6) The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.

(7) Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.

(8) Stormwater Management Plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells.

(9) A justification must be included in the Stormwater Management Plan if BMPs other than green infrastructure methods and LID practices are proposed to achieve the volume, rate and water quality controls under this Ordinance.

(10) The Stormwater Management Plan shall include an O&M Plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.

(11) The SWM Site Plan permit application with the required SWM Site Plan permit fee as listed in the Township Fee Schedule.

E. Maps.

(1) Prepare an existing resource and site analysis map (ERSAM) showing

environmentally sensitive areas including, but not limited to, steep slopes, ponds, lakes, streams, wetlands, hydric soils, vernal pools, stream buffers, floodplains, hydrologic soil groups, closed topographic depressions and recharge areas. Land development, existing recharge areas, and any other requirements specifically outlined in the municipal SALDO also shall be included.

(2) The contents of the map(s) shall include, but not be limited to:

- (a) The location of the project relative to highways, municipal boundaries, or other identifiable landmarks.
- (b) Existing contours at intervals of two feet or less. In areas of slopes greater than 10% five-foot contour intervals may be used.
- (c) Existing streams, lakes, ponds, or other waters of the commonwealth within the project area.
- (d) Other physical features including flood hazard boundaries, stream buffers, existing drainage courses, areas of natural vegetation to be preserved, and the total extent of the upstream area draining through the site.
- (e) The locations of all existing and proposed utilities, sanitary sewers, and water lines within 50 feet of property lines.
- (f) A map, which may be done as an overlay, showing soil names and boundaries.
- (g) Limits of earth disturbance, including the type and amount of impervious area that is proposed.
- (h) Proposed structures, roads, paved areas, and buildings.
- (i) Final contours at intervals of two feet or less. In areas of steep slopes (greater than 10%), five-foot contour intervals may be used.
- (j) 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.
- (k) The date of submission.
- (l) A graphic and written scale of one inch equals no more than 50 feet; for tracts of 20 acres or more, the scale shall be one inch equals no more than 100 feet.
- (m) A North arrow.
- (n) The total tract boundary and size with distances marked to the nearest foot and bearings to the nearest degree.
- (o) Existing and proposed land use(s).
- (p) A key map showing all existing man-made features beyond the property boundary that would be affected by the project.
- (q) Location of all open channels.

(r) Overland drainage patterns and swales.

(s) A fifteen-foot-wide access easement around all stormwater management facilities or a blanket easement over subject property to provide ingress to and egress from a public right-of-way, where necessary, or appropriate at discretion of the Municipality.

(t) The location of all erosion and sediment control facilities.

(u) 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 located within this Municipality.

(v) A statement, signed by the applicant, acknowledging that any revision to the approved drainage plan must be approved by the Municipality, and that a revised erosion and sediment control plan must be submitted to the Municipality and County Conservation District for approval.

(w) The following signature block for the Design Engineer: [Amended 9-20-2016 by Ord. No. 350]

"I, (Design Engineer), on this date (date of signature), hereby certify that this drainage plan meets all requirements of the Department of Environmental Protection's (DEP's) regulations and the Stormwater Management Ordinance of Whitpain Township."

(x) The SWM site plan and existing resource and site analysis map (ERSAM) shall be signed and sealed by a professional engineer or professional land surveyor licensed in the Commonwealth of Pennsylvania.

F. Supplemental information to be submitted to the Municipality.

(1) The following information shall be submitted by the applicant and shall include:

(a) The overall stormwater management concept for the project designed.

(b) Stormwater runoff computations required by this ordinance.

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

(d) Expected project time schedule.

(e) Development stages or project phases, if so proposed.

(f) An operations and maintenance (O&M) plan in accordance with this ordinance.

(g) Results from any soil infiltration testing performed in support of an infiltration BMP.

(2) A description of 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.

(3) An approved highway occupancy permit from the Pennsylvania Department of Transportation (PennDOT) District office when drainage towards PennDOT property is proposed.

(4) Stormwater management facilities.

(a) When infiltration measures such as seepage pits, beds, or trenches are used, the locations of existing and proposed septic tank infiltration areas and wells must be shown.

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

B.G. The following items shall be included in the BMP operations and maintenance plan:

(1) Map(s) of the project area, in a form that meets the requirements for recording at the offices of the Recorder of Deeds of Montgomery County, and shall be submitted on twenty-four-inch-by-thirty-six-inch or thirty-inch-by-forty-two- inch sheets. The contents of the maps(s) shall include, but not be limited to:

(a) Clear identification of the location and nature of permanent stormwater BMPs;

(b) The location of the project site relative to highways, municipal boundaries or other identifiable landmarks;

(c) Existing and final contours at intervals of two feet, or others as appropriate;

(d) Existing streams, lakes, ponds, or other bodies of water within the project site area;

(e) Other physical features, including flood hazard boundaries, sinkholes, streams, existing drainage courses, and areas of natural vegetation to be preserved;

(f) The locations of all existing and proposed utilities, sanitary sewers, and water lines within 50 feet of property lines of the project site;

(g) Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.

(g)(h) Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added;

(h)(i) Proposed final structures, roads, paved areas, and buildings; and

(i)(j) A fifteen-foot-wide access easement around all stormwater BMPs that would provide ingress to and egress from a public right-of-way.

(2) A description of how each permanent stormwater BMP will be operated and maintained, and the identity of the person(s) responsible for operations

and maintenance;

(3) The name of the project site, the name and address of the owner of the property, and the name of the individual or firm preparing the plan; and

(4) A statement, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that can be altered or removed only after approval by Whitpain Township.

#### H. Authorization to Construct and Term of Validity

The Municipality's approval of an Stormwater Management Plan authorizes the regulated activities contained in the Stormwater Management Plan for a maximum term of validity of 5 years following the date of approval. The Municipality may specify a term of validity shorter than 5 years in the approval for any specific Stormwater Management Plan. Terms of validity shall commence on the date the Municipality signs the approval for an Stormwater Management Plan. If an approved Stormwater Management Plan is not completed according to Section 125-46(F) within the term of validity, then the Municipality may consider the Stormwater Management Plan disapproved and may revoke any and all permits. Stormwater Management Plans that are considered disapproved by the Municipality shall be resubmitted in accordance with Section 125-13 of this Ordinance.

#### I. As-Built Plans, Completion Certificate, and Final Inspection

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

#### SECTION 9.

**Amendment to Chapter 125 [Stormwater Management], Article IV [Stormwater BMP Operations and Maintenance Site Plan Requirements], Section 15 [Municipality review of plan] to make basic verbiage alterations to municipal plan review provisions.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article IV [Stormwater BMP Operations and Maintenance Site Plan Requirements], Section 15 [Municipality review of plan] is hereby restated and

amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**§ 125-15. Municipality review of plan.**

- A. Whitpain Township shall review the BMP operations and maintenance plan for consistency with the purposes and requirements of this Part 1, and any permits issued by DEP.
- B. Whitpain Township shall notify the applicant in writing whether the BMP operations and maintenance plans are is approved.
- C. Whitpain Township may require an as-built survey of all stormwater BMPs, and an explanation of any discrepancies with the operations and maintenance approved plan.

**SECTION 10.**

**Amendment to Chapter 125 [Stormwater Management], Article V [General Requirements], Section 24 [Calculation methodology] to make basic verbiage alterations to municipal plan review provisions.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article V [General Requirements], Section 24 [Calculation methodology] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

...

- C. Freeboard requirements. All stormwater management facilities shall provide a minimum of 1.0 foot of freeboard above the maximum pool elevation associated with the two-year through twenty-five-year events to the emergency spillway. An emergency spillway shall be designed to pass the one-hundred-year runoff event with a minimum 0.5 foot freeboard between the crest elevation and top of berm.

**SECTION 11.**

**Amendment to Chapter 125 [Stormwater Management], Article VI [Stormwater BMP Operations and Maintenance Site Plan Requirements], Section 27 [Submission procedure] to revise submission procedure for stormwater management site plans.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article VI [Stormwater BMP Operations and Maintenance Site Plan Requirements], Section 27 [Submission procedure] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**§ 125-27. Submission procedure.**

The Municipality requires submission of a complete SWM site plan, as specified in this Part I.

- A. Proof of application or documentation of required permit(s) or approvals for the programs listed below shall be part of the plan:
  - (1) National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from construction activities, when required.
  - (2) Any other permit under applicable state or federal regulations.
- B. Five copies of the SWM site plan shall be submitted and distributed as follows:
  - (1) Three copies to the Municipality accompanied by the requisite fees, as specified in this ordinance.
  - (2) Two copies to the County Conservation District when required.
- C. If any submissions to the agencies listed above are found to be incomplete, the municipalities have the option of notifying the applicant and requesting specific information missing from the submission. The time period within which the Municipality must review the application shall not start until the Municipality has determined that the submission is complete.
- D. Additional copies shall be submitted as requested by the Municipality, County Conservation District, or DEP.
- E. For regulated activities specified in § 125-5H:
  - (1) The drainage plan shall be submitted by the developer to the Township Engineer as part of the preliminary plan submission for the subdivision or land development.
  - (2) Three copies of the drainage plan shall be submitted.
  - (3) Distribution of the drainage plan will be as follows:
    - (a) One copy to the Township Board of Supervisors.
    - (b) Two copies to the Township Engineer.
- F. For regulated activities specified in § 125-5H, the drainage plan shall be submitted by the developer to the Township Codes Enforcement Officer as part of the building permit application.
- G. For regulated activities specified in § 125-5H that require a Pennsylvania Department of Environmental Protection permit:
  - (1) The drainage plan shall be submitted by the developer to the County Planning Commission for coordination with the PaDEP permit application process under Chapter 105 (Dam Safety and Waterway Management) or Chapter 106 (Floodplain Management) of PaDEP's rules and regulations.
  - (2) One copy of the drainage plan shall be submitted.

**SECTION 12.****Amendment to Chapter 125 [Stormwater Management], Article VI [Drainage Plan], Section 30 [Stormwater detention/storage facilities] to amend fee in lieu requirements.**

The Code of the Township of Whitpain, Part II [General Legislation], 125 [Stormwater Management], Article VI [Drainage Plan], Section 30 [Stormwater detention/storage facilities] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

...

C. Fee-in-lieu alternative for detention/storage facilities.

...

- (3) Applicants shall pay the following fees in lieu of stormwater facilities:
  - (a) Fees in lieu of stormwater detention/storage facilities on an improved residential lot shall be based on the square feet of new impervious surface area that will not be controlled. Such fee shall be established at \$2.50 \$7.50 per square foot as of the date of the ordinance and updated annually based on the Consumer Price Index (CPI-U published for the Greater Philadelphia area by the U.S. Department of Labor).

**SECTION 13.****Amendment to Chapter 125 [Stormwater Management], Article VII [Inspections], Section 31 [Schedule of inspections; revocation of permits] to specify inspection frequencies and timing.**

The Code of the Township of Whitpain, Part II [General Legislation], 125 [Stormwater Management], Article VII [Inspections], Section 31 [Schedule of inspections; revocation of permits] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**ARTICLE VII**

**Inspections**

**§ 125-31. Schedule of inspections; revocation of permits.**

A. The Township Engineer or his designee shall inspect all phases of the installation of the permanent stormwater control facilities and at the completion of the installation.

B. If at any stage of the work the Township Engineer determines that the permanent stormwater control facilities are not being installed in accordance with the approved development plan, Whitpain Township shall revoke any existing permits until a revised development plan is submitted and approved as required by § 125-29 above.

C. Inspection The landowner or the owner's designee (including the Municipality

for dedicated and owned facilities) shall inspect SWM BMPs, facilities and/or structures installed under this Ordinance according to the following frequencies, at a minimum, to ensure the BMPs, facilities and/or structures continue to function as intended:

- (1) Annually for the first 5 years.
- (2) Once every 3 years thereafter.
- (3) During or immediately after the cessation of a 10-year or greater storm.

Inspections should be conducted during or immediately following precipitation events. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the Municipality within 30 days following completion of the inspection.

**SECTION 14.** **Amendment to Chapter 125 [Stormwater Management], Article VIII [Fees and Expenses], Section 33 [Expenses covered by fees] to add administrative costs to expenses covered by fees and revise verbiage for other covered expenses.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article IX [Fees and Expenses], Section 33 [Expenses covered by fees].is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**§ 125-33. Expenses covered by fees.**

The fees required by this Part 1 shall, at a minimum, cover:

- A. Administrative Costs
- A.B. The review of the SWM Site Plan drainage plan by the Municipal Engineer.
- B.C. The site inspection Site inspections.
- C.D. The inspection of required controls and improvements during construction.
- D.E. The final inspection upon completion of the controls and improvements required in the plan.
- E.F. Any additional work required to enforce any permit provisions regulated by this Part 1, to correct violations and to assure the completion of stipulated remedial actions.

**SECTION 15.** **Amendment to Chapter 125 [Stormwater Management], Article IX [Fees and Expenses], Section 35 [Maintenance responsibilities] to rename Article IX and add new provisions regulating responsibilities of landowners and developers, sett**

**out requirements for operations and maintenance agreements, and set out requirements for performance guarantees.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article IX [Fees and Expenses], Section 35 [Maintenance responsibilities] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**ARTICLE IX**  
**Operations and Maintenance**

**§ 125-35. Maintenance responsibilities.**

The maintenance responsibilities for permanent stormwater runoff control facilities shall be determined based upon the type of ownership of the property which is controlled by the facilities.

- A. Single-entity ownership. In all cases where the permanent stormwater runoff control facilities are designed to manage runoff from property in a single-entity ownership as defined below, the maintenance responsibility for the stormwater control facilities shall be with the single-entity owner. The single-entity owner shall enter into an agreement with Whitpain Township which specifies that the owner will properly maintain the facilities consistent with accepted practice as determined by the Municipal Engineer. The agreement shall provide for regular inspections by Whitpain Township and contain such provisions as necessary to ensure timely correction of any maintenance deficiencies by the single-entity owner. A "single entity" shall be defined as an individual, association, public or private corporation, partnership, firm, trust, estate or any other legal entity empowered to own real estate.
- B. Multiple ownership.
  - (1) In cases where the property controlled by the permanent stormwater control facilities shall be in multiple ownership (i.e., many individual owners of various portions of the property), each owner shall be responsible for that portion of the stormwater control facilities which are constructed on each owner's property and shall be considered as a single-entity owner in accordance with Subsection A above for maintenance purposes.
  - (2) In certain multiple ownership situations, Whitpain Township may benefit by transferring the maintenance responsibility to an individual or group of individuals residing within the controlled area. These individuals may have the permanent stormwater control facilities adjacent to their lots or otherwise have an interest in the proper maintenance of the facilities. In these instances, Whitpain Township and the individual(s) may enter into a formal agreement for the maintenance of the facilities. Whitpain Township shall be responsible for periodic inspections.

**C. Responsibilities of Developers and Landowners**

- (1) The Municipality shall make the final determination on the continuing

maintenance responsibilities prior to final approval of the Stormwater Management Plan. The municipality may require a dedication of such facilities as part of the requirements for approval of the Stormwater Management Plan. Such a requirement is not an indication that the municipality will accept the facilities. The municipality reserves the right to accept or reject the ownership and operating responsibility for any portion of the stormwater management controls.

(2) Facilities, areas, or structures used as SWM BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.

D. The O&M Plan shall be recorded as a restrictive deed covenant that runs with the land.

E. The Municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

F. Operation and Maintenance Agreements

(1) Prior to final approval of the Stormwater Management Plan, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement covering all stormwater control facilities which are to be privately owned.

(a) The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M Agreement.

(b) The owner shall convey to the Municipality conservation easements to assure access for periodic inspections by the Municipality and maintenance, as necessary.

(c) The owner shall keep on file with the Municipality the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the Municipality within ten (10) working days of the change.

(2) The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the Municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

G. Performance Guarantee

For Stormwater Management Plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the Municipality for the timely installation and proper construction of all stormwater management controls as required by the approved Stormwater Management Plan and this Ordinance in accordance with all applicable provisions of sections of the Pennsylvania Municipalities Planning Code.

**SECTION 16.****Amendment to Chapter 125 [Stormwater Management], Article X [Prohibitions], Section 37 [Prohibited discharges] to revise allowable discharges and make basic verbiage modifications.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article X [Prohibitions], Section 37 [Prohibited discharges] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**ARTICLE X  
Prohibitions****§ 125-37. Prohibited discharges.**

A. No person in Whitpain Township shall allow, or cause to allow, stormwater discharges into the municipality's separate storm sewer system which are not composed entirely of stormwater, except:

- (1) As provided in Subsection B below; and
- (2) Discharges allowed under a state or federal permit.

B. ~~The following~~ Discharges which may be allowed, based on a finding by Whitpain Township that the discharge(s) do not significantly contribute to pollution to surface waters of the commonwealth, are:

- (1) Discharges or flows from fire-fighting activities.
- (2) ~~Un~~Non-contaminated water from pumped ground water and water from foundation or from footing drains and crawl space pumps.
- (3) ~~Discharges from~~ Potable water sources including dechlorinated water line and fire hydrant flushings, if such discharges do not contain detectable concentration of Total Residual Chlorine (TRC).
- (4) Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
- (5) Lawn watering.
- (6) Irrigation drainage.
- (7) ~~(5)~~ Pavement wash waters 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.
- (6) Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
- (8) ~~(7)~~ Routine external building wash down (which does not use detergents or other compounds).
- (9) ~~(8)~~ Non-contaminated HVAC condensation and water from geothermal systems. Air conditioning condensate.

- (11)(9) Dechlorinated swimming pool discharges.
- (12)(10) Diverted stream flows and springs.
- (13) Uncontaminated groundwater.
- (14) ~~Uncontaminated water from crawl space pumps or basement sump pumps.~~

C. In the event that Whitpain Township or DEP determines that any of the discharges identified in Subsection B significantly contribute to pollution of pollutants to a regulated small MS4 or to the waters of the commonwealth, or is so notified by DEP, Whitpain Township or DEP will notify the responsible person to cease the discharge.

D. Upon notice provided by Whitpain Township or DEP under Subsection C, the discharger will have a reasonable time, as determined by Whitpain Township or DEP, to cease the discharge consistent with the degree of pollution caused by the discharge.

E. Nothing in this section shall affect a discharger's responsibilities under state law.

**SECTION 17.** **Amendment to Chapter 125 [Stormwater Management], Article X [Prohibitions], Section 39 [Roof drains] to revise requirements for sump pumps and add in a new section regulating pipe terminals.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article X [Prohibitions], Section 39 [Roof drains] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

**§ 125-39. Roof drains and Sump Pumps.**

A. Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches, except as provided in § 125-39B.

B. When it is more advantageous to connect directly to streets ~~or~~ storm sewers, connections of roof drains ~~to streets or roadside ditches~~ may be permitted by Whitpain Township.

C. Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

D. Sump pumps may be connected into storm sewer systems upon approval by Whitpain Township and acquiring necessary permits.

E. Pipe terminals: Pipe discharge terminals for storm- or subsurface water that terminate on the surface of the ground shall be located a sufficient distance from any

lot line, except the ultimate right-of-way line, such that the discharge water will blend with the natural sheet runoff before it reaches the property line.

- A.) A pipe discharge terminal for gravity runoff shall be located no closer than 10 feet to a lot line or ultimate right-of-way line.
- B.) A pipe discharge terminal for pressurized runoff, including such runoff from sump pumps or similar mechanical equipment related to the management of stormwater, shall be located no closer than 20 feet to a lot line or ultimate right-of-way line.

## **SECTION 18.**

**Amendment to Chapter 125 [Stormwater Management], Article XII [Miscellaneous Provisions], Section 43 [Violations and Penalties] to add provisions providing for enforcement, suspension and revocation of permits, and violations and penalties.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article XII [Miscellaneous Provisions], Section 43 [Violations and penalties] is hereby restated and amended to add the underlined language (example) as follows:

### **§ 125-43. Violations and penalties.**

A. Any person, partnership, corporation, unincorporated association, institution or other entity who or which shall violate any of the provisions of this Part 1 shall, upon conviction thereof in a summary proceeding, be sentenced to pay a fine of not more than \$1,000 shall be subject to a fine of not more than \$1,000 for each violation, recoverable with costs. In default of payment of the fine, such person, the members of such partnership or unincorporated association and the officers of such corporation or institution shall be liable to imprisonment for not more than 60 days.

B. Per diem penalties. Each day that a violation continues shall constitute a separate violation or offense and penalties shall be cumulative.

C. 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 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.

#### **D. Enforcement**

- (1) It shall be unlawful for a person to undertake any regulated activity except as provided in an approved Stormwater Management Plan, unless specifically exempted in Section 125-7.
- (2) It shall be unlawful to violate Section 125-39 of this Ordinance.
- (3) Inspections regarding compliance with the Stormwater Management Plan are a responsibility of the Municipality.

## E. Suspension and Revocation

- (1) Any approval or permit issued by the Municipality pursuant to this Ordinance may be suspended or revoked for:
  - (a) Non-compliance with or failure to implement any provision of the approved Stormwater Management Plan or O&M Agreement.
  - (b) A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.
  - (c) The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- (2) A suspended approval may be reinstated by the Municipality when:
  - (d) The Municipality has inspected and approved the corrections to the violations that caused the suspension.
  - (e) The Municipality is satisfied that the violation has been corrected.
- (3) An approval that has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.
- (4) If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Municipality may provide a limited time period for the owner to correct the violation. In these cases, the Municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

## F. Appeals

- (1) Any person aggrieved by any action of the Municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the Municipality within 30 days of that action.
- (2) Any person aggrieved by any decision of the Municipality, relevant to the provisions of this Ordinance, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the Municipality's decision.

## **SECTION 19.**

## **Amendment to Chapter 125 [Stormwater Management], Article XII [Miscellaneous Provisions], Section 47 [Responsibility of Applicant] to add provisions for erroneous permits and revise verbiage.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article XII [Miscellaneous Provisions], Section 47 [Responsibility of Applicant], is hereby restated and amended to add the underlined language (example) as follows:

**§ 125-47. Responsibility of applicant.**

- A. Approvals issued pursuant to this Part I do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance, including 25 Pa. Code, Chapters 92, 102 and 105.
- B. 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

**SECTION 20.**

**Amendment to Chapter 125 [Stormwater Management], Article XIII [General Provisions], Section 50 [Purpose], to delete one of the former purposes of this ordinance.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article XIII [General Provisions], Section 50 [Purpose] is hereby restated and amended to delete the struck-through language (~~example~~) and add the underlined language (example) as follows:

**§ 125-50. Purpose.**

The purpose of this Part 2 is to promote the public health, safety, and welfare within the Wissahickon Creek Watershed by maintaining the natural hydrologic regime and by minimizing the harms and maximizing the benefits described in § 125-49 of this Part 2, through provisions designed to:

A. Meet legal water quality requirements under state law, including regulations of 25 Pa. Code, Chapter 93, to protect, maintain, reclaim, and restore the existing and designated uses of the waters of the commonwealth.

B. Preserve the natural drainage systems as much as possible.

C. Manage stormwater 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 streambanks and streambeds.~~

G.F. Provide proper operation and maintenance of all stormwater best management practices (BMPs) that are implemented within the Municipality.

H.G. Provide standards to meet National Pollutant Discharge Elimination System (NPDES) requirements.

I.H. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code § 93.4.a requiring protection and maintenance of "existing uses" and maintenance of the level of water quality to support those uses in all streams,

and the protection and maintenance of water quality in "special protection" streams.

J.I. Address the quality and quantity of stormwater discharges.

K.J. Provide standards necessary to meet NPDES permit requirements.

L.K. Implement an illegal discharge detection and elimination program that addresses nonstormwater discharges into the Municipality's separate storm sewer system.

M.L. Preserve and restore the flood-carrying capacity of streams.

N.M. Prevent scour and erosion of streambanks and streambeds.

## **SECTION 21.**

### **Amendment to Chapter 125 [Stormwater Management], Article XVI [Stormwater Management], Section 72 [Calculation methodology], to revise stormwater requirements.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article XVI [Stormwater Management], Section 72 [Calculation methodology] is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

...

H. Freeboard requirements. All stormwater management facilities shall provide a minimum of 1.0-foot of freeboard above the maximum pool elevation associated with the two-year through twenty-five-year events to the emergency spillway. An emergency spillway shall be designed to pass the one-hundred-year runoff event with a minimum 0.5-foot freeboard between the crest elevation and top of berm.

## **SECTION 22.**

### **Amendment to Chapter 125 [Stormwater Management], Article XX [Prohibitions], Section 82 [Roof drains], to alter the title of the subsection, revise requirements for roof drains, and add in provisions for sump pumps.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Article XX [Prohibitions], Section 82 [Roof drains], to delete Subsection F is hereby restated and amended to delete the struck-through language (example) and add the underlined language (example) as follows:

#### **§ 125-82. Roof drains and Sump Pumps.**

A. Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches, except as provided in § 125-39B.

B. When it is more advantageous to connect directly to storm sewers, connections of roof drains may be permitted by Whitpain Township.

C. Roof drains shall discharge to infiltration areas or vegetative BMPs to the

maximum extent practicable.

D. Sump pumps may be connected into storm sewer systems upon approval by Whitpain Township and acquiring necessary permits.

E. Pipe terminals: Pipe discharge terminals for storm- or subsurface water that terminate on the surface of the ground shall be located a sufficient distance from any lot line, except the ultimate right-of-way line, such that the discharge water will blend with the natural sheet runoff before it reaches the property line.

A.) A pipe discharge terminal for gravity runoff shall be located no closer than 10 feet to a lot line or ultimate right-of-way line.

B.) A pipe discharge terminal for pressurized runoff, including such runoff from sump pumps or similar mechanical equipment related to the management of stormwater, shall be located no closer than 20 feet to a lot line or ultimate right-of-way line.

A. In Montgomery County, roof drains shall not be connected to streets, sanitary or storm sewers, or roadside ditches, and shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable, except for already existing developed sites where the onsite stormwater system already is designed and equipped to accomplish stormwater rate, quality, and quantity mitigation. The applicant shall, in these cases, submit documentation on the existing stormwater system to the municipal engineer, who shall determine if the stormwater system accomplishes comparable stormwater rate, quality, and quantity mitigation.

B. In the event that an existing developed site is to be redeveloped, existing roof drains that discharge to an existing stormwater system that is designed and equipped to accomplish stormwater rate, quality, and quantity mitigation, those existing roof drains may remain, provided the applicant submits documentation on the existing stormwater system to the municipal engineer, who shall determine if the stormwater system accomplishes comparable stormwater rate, quality, and quantity mitigation.

**SECTION 23. Amendment to Chapter 125 [Stormwater Management] to create Article XXIII [Waivers], Section 91 [Waivers] to provide for a waiver process.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management] to create Article XXIII [Waivers], Section 91 [Waivers] to add the underlined language (example) as follows:

**Section 125-91 Waivers**

- A. If the Municipality determines that any requirement under this Ordinance cannot be achieved for a particular regulated activity, the Municipality may, after an evaluation of alternatives, approve measures other than those in this Ordinance, subject to Section 125-91, paragraphs B and C.

- B. Waivers or modifications of the requirements of this Ordinance may be approved by the Municipality if enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that the modifications will not be contrary to the public interest and that the purpose of the Ordinance is preserved. Cost or financial burden shall not be considered a hardship. Modification may be considered if an alternative standard or approach will provide equal or better achievement of the purpose of the Ordinance. A request for modifications shall be in writing and accompany the Stormwater Management Site Plan submission. The request shall provide the facts on which the request is based, the provision(s) of the Ordinance involved and the proposed modification.
- C. No waiver or modification of any regulated stormwater activity involving earth disturbance greater than or equal to one acre may be granted by the Municipality unless that action is approved in advance by the Department of Environmental Protection (DEP) or the delegated county conservation district.

**SECTION 24.** **Amendment to Chapter 125 [Stormwater Management] Appendix C [Soil Infiltration Testing Requirements for the Installation of Infiltration Facilities] to revise requirements.**

The Code of the Township of Whitpain, Part II [General Legislation], Chapter 125 [Stormwater Management], Appendix C [Soil Infiltration Testing Requirements for the Installation of Infiltration Facilities] is hereby replaced in its entirety by Exhibit "A" attached hereto.

**SECTION 25.** **Repeal and Ratification.**

All ordinances or parts of ordinances inconsistent herewith or in conflict with any of the specific terms enacted hereby, to the extent of said inconsistencies or conflicts, are hereby specifically repealed. Any other terms and provisions of the Township's Code unaffected by this Ordinance are hereby reaffirmed and ratified.

**SECTION 26.** **Severability.**

Should any section, paragraph, sentence, clause, or phrase in this Ordinance be declared unconstitutional or invalid for any reason, the remainder of the Ordinance shall not be affected thereby and shall remain in full force and affect, and for this reason the provisions of this Ordinance shall be severable.

**SECTION 27.** **Effective Date.**

This Ordinance shall become effective 5 days after enactment.

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**ORDAINED AND ENACTED** this 17th day of June 2025, by the Whitpain Township Board of Supervisors.

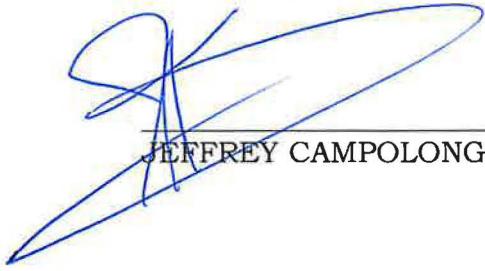
**WHITPAIN TOWNSHIP  
BOARD OF SUPERVISORS**



SCOTT M. BADAMI, *Chair*

[Seal]

Attested by:



JEFFREY CAMPOLONGO, *Secretary*