

TOWNSHIP OF NORTH FAYETTE
STORMWATER MANAGEMENT ORDINANCE
ORDINANCE # _____

**TOWNSHIP OF NORTH FAYETTE
ORDINANCE NO. _____**

AN ORDINANCE OF THE TOWNSHIP OF NORTH FAYETTE, ALLEGHENY COUNTY, PENNSYLVANIA, ESTABLISHING REQUIREMENTS FOR THE MANAGEMENT OF STORMWATER IN THE TOWNSHIP AND IMPLEMENTING THE PROVISIONS OF THE MONTOUR RUN STORMWATER MANAGEMENT PLAN ADOPTED BY ALLEGHENY COUNTY AS REQUIRED BY THE PENNSYLVANIA STORMWATER MANAGEMENT ACT (ACT 167 of 1978, .P.L. 864).

BE IT ORDAINED AND IT IS HEREBY ENACTED by the Board of Supervisors of the Township of North Fayette, Allegheny County, as follows:

TABLE OF CONTENTS

<u>ARTICLE I</u>	GENERAL PROVISIONS
Section 101.	Short Title
Section 102.	Purpose
Section 103.	Authority
Section 104.	Validity
Section 105.	Applicability
Section 106.	Exemptions and Prohibitions
Section 107.	Compliance with other Ordinances
Section 108.	Abrogation and Greater Restrictions
Section 109.	Municipal Liability
<u>ARTICLE II</u>	DEFINITIONS
Section 201.	Definitions of Terms
<u>ARTICLE III</u>	PROCEDURES
Section 301.	Stormwater Plan Review Procedures
Section 302.	Status of stormwater Plan After Final Plan Approvals

Section 303. Stormwater Plan Modifications

Section 304. Dedication of Facilities

ARTICLE IV STORMWATER PLAN REQUIREMENTS

Section 401. Exemptions for Small Developments

Section 402. Stormwater Plan Content

ARTICLE V STORMWATER MANAGEMENT PERFORMANCE STANDARDS

Section 501. Stormwater Management Districts

Section 502. General Standards

Section 503. Watershed Standards: Montour Run Watershed District

Section 504. Watershed Standards – Robinson Run Watershed District

ARTICLE VIII CONSTRUCTION AND MAINTENANCE CRITERIA FOR STORMWATER CONTROL FACILITIES

Section 801. Construction Criteria for Stormwater Control Facilities

Section 802. Standard Details

Section 803. Maintenance of Stormwater Control Facilities and Systems

Section 804. Post-Construction Stormwater Runoff Control Requirements For New Development and Redevelopment, Including Operations and Maintenance of Stormwater BMPs

ARTICLE IX PERMITS, FEES, BONDS AND PENALTIES

Section 901. Permits

Section 902. Fees

Section 903. Bonds

Section 904. Penalties

ARTICLE X

ADMINISTRATION, INSPECTION AND ENFORCEMENT

Section1001.

Administration

Section1002.

Inspections

Section1003.

Enforcement

Section1004.

Review of Stop Work Order

Section1005.

Revocation of Permit

ARTICLE XI

APPEALS

Section1101.

Appeals to Court

Section1102.

Enactment

ARTICLE I

GENERAL PROVISIONS

SECTION 101. SHORT TITLE

This ordinance shall be known and may be cited as the "Stormwater Management Ordinance" of the Township of North Fayette.

SECTION 102. PURPOSE

The purpose of this ordinance is to:

- A. Promote the general health, welfare and safety of the community;
- B. Regulate the modification of the natural terrain and alteration of existing drainage from land developments in order to control erosion and sedimentation of soils, the speed and flow of water runoff, and preserve stream channels:
- C. Provide design, construction and maintenance criteria for permanent on-site stormwater management facilities necessary to control stormwater, erosion and sedimentation.

SECTION 103. AUTHORITY

Act 247 of July 31, 1968, as amended, known as the "Pennsylvania Municipalities Planning Code", authorizes the governing body of each municipality to regulate subdivision and land developments.

The Stormwater Management Act of October 4, 1978, P.L. 864, No. 167 provides for the regulation of land development and stormwater and confers powers of enforcement to the Township.

This ordinance is intentionally enacted as an independent ordinance rather than included in the Township Subdivision and Land Development Ordinance. The authority to enact this ordinance derives from both specific and general authority within North Fayette Township's Code of Ordinances and legislative grants of Authority to municipalities in general and Second Class Townships in particular.

SECTION 104. VALIDITY

Should the courts declare any portion of this ordinance to be invalid, such declaration shall not affect the validity of the ordinance as a whole or of any part thereof, other than that portion declared to be invalid.

SECTION 105. APPLICABILITY

It shall be unlawful for any person, partnership, business or corporation to undertake any of the following activities without approval of a final Stormwater Management Plan in accordance with the provisions of this Ordinance:

- A. Earth disturbance activity, as defined herein.
- B. Diversion, impeding, re-channeling, straightening, or piping of any natural or manmade water channel. (Streams, creeks, rivers, etc., whether they be flowing on a permanent or intermittent basis).
- C. Installation of a stormwater or sewer, pond, or appurtenances thereto.
- D. Placement of fill, structures or pipes in a floodplain as designated on the official floodplain map of North Fayette Township.
- E. Subdivision or Land Development, as defined herein.
- F. Installation of impervious cover material anywhere within the Township.
- G. Commercial timbering activity or any deforestation (this does not include the removal of isolated, diseased trees or trees whose location and/or health create a public danger).
- H. Mining Operations, including both underground and open cut strip mining.

SECTION 106. EXEMPTIONS AND PROHIBITIONS

- A. Prohibitions Against Non-Stormwater Discharges
 - 1. No person in the Township shall allow, or cause to allow, stormwater discharges into the Township's separate storm sewer system which are not composed entirely of stormwater, except (1) as provided in subsection A.2 below, and (2) discharges allowed under a state or federal permit.
 - 2. Discharges which may be allowed, based on a finding by the Township that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are:
 - Discharge from fire fighting activities.
 - Potable water sources including dechlorinated water line and fire hydrant flushing.
 - Irrigation drainage.
 - Routine external building washdown (which does not use detergents or other compounds).

- Air conditioning condensate.
- Water from individual residential car washing.
- Springs.
- Water from crawl space pumps.
- Uncontaminated water from foundations or footing drains.
- Flows from riparian habitats and wetlands.
- Lawn watering.
- Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used.
- Dechlorinated swimming pool discharges.
- Uncontaminated groundwater.

3. In the event that the Township determines that any of the discharges identified in Subsection A.2 significantly contribute to pollution of waters of the Commonwealth, or is so notified by PADEP, the Township will notify the responsible person to cease the discharge.
4. Upon notice provided by the Township under Subsection C, the discharger will have a reasonable time, as determined by the Township, to cease the discharge consistent with the degree of pollution caused by the discharge.
5. Nothing in this Section shall affect a discharger's responsibilities under state law.

B. Prohibited Connections. The following connections are prohibited, except as provided in Section B.2 below:

1. Any drain or conveyance, whether on the surface or subsurface, which allows any non-storm water discharge including sewage, process wastewater, and wash water, to enter the separate storm sewer system, and any connection to the storm drain system from indoor drains and sinks; and
2. Any drain or conveyance connected from a commercial or industrial land use to the separate storm sewer system which has not been documented in plans, maps, or equivalent records, and approved by the Township.

C. The following activities are specifically exempt from this ordinance:

1. Use of land for gardening primarily for home consumption.
2. Use of land for construction of landscaping improvements provided such improvements do not significantly alter the runoff characteristics of the land.

3. Agricultural use-of lands when operated in accordance with a farm conservation plan approved by the Allegheny County Soil Conservation District or when it is determined by the County Conservation District that such use will not cause excessive erosion and sedimentation.

SECTION 107. COMPLIANCE WITH OTHER ORDINANCES

Compliance with the requirements set forth in other applicable ordinances with respect to the submission and approval of preliminary and final subdivision and land development plans, grading plans, building permits, inspections, and compliance with applicable State Statutes and regulations shall be a prerequisite to the commencement of any work regulated by this ordinance.

SECTION 108. ABROGATION AND GREATER RESTRICTIONS

This ordinance supersedes any provisions of the North Fayette Township Code of Ordinances currently in effect with respect to stormwater management. However, all other ordinances and regulations shall remain in full force and effect to the extent that their provisions are more restrictive.

SECTION 109. MUNICIPAL LIABILITY

For regulatory purposes, the degree of stormwater management sought by the provisions of this ordinance is considered reasonable. This ordinance shall not create liability on the part of North Fayette Township, any appointed or elected official of North Fayette Township, the Allegheny County Conservation District or any officer, engineer, or employee thereof for any erosion, sedimentation or flood damages that result from adherence to this ordinance or any administrative decisions lawfully made thereunder. It is not the intention of the Township to guarantee the elimination of harm resulting from stream flow, floods, rain, storms, water runoff or erosion resulting therefrom. It is the intention of the Township to create reasonable stormwater management regulations which balance several competing interests in an appropriate fashion with the emphasis on public safety.

ARTICLE II

DEFINITIONS

SECTION 201. For the purposes of this ordinance, these terms shall be defined 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.

ACCD: The Allegheny County Conservation District

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 the Municipality.

BMP (BEST MANAGEMENT PRACTICE): Activities, facilities, designs, measures or procedures used to manage stormwater impacts from regulated earth disturbance activities, to meet State Water Quality Requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. BMPs include, but are not limited to, infiltration, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, sand filters, and detention basins.

CHANNEL: A natural stream which conveys water; a ditch or open channel excavated to convey water.

COMMISSION: The Planning commission of North Fayette Township.

CONDUIT: Any watercourse intended for the conveyance of water, whether open or closed.

CONSERVATION DISTRICT: The Allegheny County Conservation District.

COUNTY: The County of Allegheny, Pennsylvania.

CULVERT: A pipe, conduit or similar structure including appurtenant works which carries a stream under or through an embankment or fill.

DEP: Pennsylvania Department of Environmental Protection.

DESIGN STORM: The magnitude of precipitation from a storm event measured in probability of frequency of occurrence (e.g., 50 year storm) and duration (e.g., 24 hour), and used in computing stormwater management control systems.

DETENTION: The holding, slowing, dampening or attenuating of runoff flows entering the natural drainage pattern or storm drainage system by temporarily holding water on a surface area, in a detention basin or within the drainage system itself, or delaying the movement of water into the natural or man-made drainage system.

DETENTION BASIN: A basin designed to retard stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate.

DETENTION STORAGE: The temporary detaining or storage of stormwater in reservoirs, on rooftops, in streets, parking lots, or other areas under predetermined and controlled conditions, with the rate of drainage therefrom regulated by appropriately installed devices.

DEVELOPER: The person, persons, corporation, partnership, association, or other entity or any responsible person therein or agent therefor that undertakes the activities regulated by this ordinance. The term "developer" is intended to include, but not necessarily be limited to the terms "subdivider", "owner", or "builder", even though the individuals involved in successive stages of a project may vary.

DEVELOPMENT: Any activity, construction, alteration, change in land use or similar action that affects stormwater runoff characteristics.

DISCHARGE: Rate of flow, specifically fluid flow. A volume of fluid flowing from a conduit or channel or being released from detention storage per unit of time. Commonly expressed as cubic feet per second (C.F.S.), million gallons per day (M.G.D.), gallons per minutes (G.P.M.), or cubic meters per second (C.M.S.).

DRAINAGE: Interception and removal of excess surface water or groundwater from land by artificial or natural means.

DRAINAGE AREA: The contributing area to a single drainage basin, expressed in acres, square miles or other units of area; also called a catchment area, watershed or river basin; the area served by a drainage system or by a watercourse receiving storm and surface water.

DRAINAGE BASIN: The area from which water is carried off by a drainage system; a watershed or catchment area.

DRY BOTTOM STORMWATER STORAGE AREA (DRY BOTTOM BASIN): A facility that is designed to be normally dry and contains water only when excess stormwater runoff occurs.

EARTH DAM: A dam constructed of compacted soil materials.

EARTH DISTURBANCE ACTIVITY: Any activity involving the changing, grading or transportation of fill from or on to land, or any other activity which causes an increase in the exposure of land to the danger or erosion.

EFFLUENT: The discharge or outflow of water from ground or subsurface storage.

EMBANKMENT (FILL): A bank of earth, rock or other material above the natural ground surface.

ENGINEER (TOWNSHIP ENGINEER): An experienced, licensed engineer or engineering firm duly appointed as the engineer for North Fayette Township.

ERODIBLE: Susceptible to erosion.

EROSION: The wearing away of the land surface by running water, wind, ice or other geological agents, including gravitational creep.

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

EXCAVATION (CUT): Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated and shall include the conditions resulting therefrom.

FLOOD HAZARD AREA (ZONE): That portion of a floodplain which is subject to inundation under Intermediate Regional Flood (100-year frequency flood) conditions. Such a flood has a one percent annual chance of occurring each year.

FLOODPLAIN: The land adjoining a watercourse that have been or may be expected to be inundated by flood waters in a 100-year frequency flood.

FLOODWAY: The channel of the watercourse and portions of the adjoining floodplains which are reasonably required to carry and discharge the 100-year frequency flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodway, the PADEP considers that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

GROUNDWATER RECHARGE: Replenishment of existing natural underground water supplies.

HYDRAULIC CHARACTERISTICS: The features of a watercourse which determine its water conveyance capacity. These include size and configuration of a cross section of the watercourse, alignment of the watercourse, gradient of the watercourse, texture of materials along the watercourse, amount and type of vegetation within the watercourse, and size, configuration and other characteristics of structures within the watercourse.

HYDROGRAPH: A plot of the discharge of stream flow, discharge, or runoff versus time.

IMPERVIOUS MATERIAL: Material which resists the entrance or passing through of water or other liquids.

IMPERVIOUS SURFACE: A surface that prevents the infiltration of water into the ground. Impervious surface includes, but is not limited to, any roof, parking or driveway areas, and any new streets and sidewalks. Any surface areas designed to initially be gravel or crushed stone shall be assumed to be impervious surfaces.

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:
 - (i) 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
 - (ii) 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.

MINING: Underground and open cut strip mining activities.

MULCHING: The application of plant residue or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.

MUNICIPALITY: Township of North Fayette, Allegheny County, Pennsylvania.

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: The U.S. Department of Agriculture, Natural Resources Conservation Service, formerly the Soil Conservation Service

OUTFALL: “Point source” as described in 40 CFR 122.2 at the point where the Township’s storm sewer system discharges to surface waters of the Commonwealth.

OUTLET CONTROL STRUCTURE: A structure designed to control the volume of stormwater runoff that passes through it during a specific length of time.

PADEP: Pennsylvania Department of Environmental Protection, formerly the Pennsylvania Department of Environmental Resources

PEAK DISCHARGE: The maximum rate of flow of water at a given point and time resulting from a hypothetical predetermined storm.

PERMEABILITY: The rate at which water will move through a saturated soil.

PERVIOUS MATERIALS: Material which permits the passage or entrance of water or other liquid.

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.

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

REDEVELOPMENT: Earth disturbance activities on land which has previously been disturbed or developed.

REGULATED EARTH DISTURBANCE ACTIVITY: Earth disturbance activities one acre or more with a point source discharge to surface waters or the Township’s storm sewer system, or five acres or more regardless of the planned runoff. This includes earth disturbance on any portion of, part, or during any stage of, a larger common plan of development. This only includes road maintenance activities involving 25 acres or more or earth disturbance.

RELEASE RATE PERCENTAGE: The percentage that, when multiplied by the pre-development peak rate of runoff from a development site, defines the allowable post-development peak discharge from any development site in that subarea.

RETENTION FACILITY: A facility which provides for storage of stormwater runoff and controlled release of this runoff during and after a 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.

RUNOFF: That part of precipitation that flows off the land without filtering into the soil.

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SEDIMENT: Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site or origin by air, water, gravity or ice and has come to rest on the earth's surface.

SEDIMENTATION: The process by which mineral or organic matter is accumulated or deposited by moving wind, water, ice, or gravity.

SEDIMENT BASIN: A barrier or dam built at a suitable location to retain rock, sand, gravel, silt or other non-liquid material.

SEPARATE STORM SEWER SYSTEM: A conveyance or system of conveyances (including roads with drainage systems, municipal roads, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) primarily used for collecting and conveying stormwater runoff.

SLOPE: Degree of deviation of a surface from the horizontal, usually expressed in percent or degrees.

SOIL: The upper layer of earth which may be dug or plowed; the loose surface material of the earth in which vegetation normally grows.

STATE WATER QUALITY REQUIREMENTS: As defined under state regulations – protection of *designated* and *existing* used (See 25 PA Code Chapters 93 and 96) – including:

- A. Each stream segment in Pennsylvania has a “designated use,” such as “cold water fishery” or “potable water supply,” which are listed in Chapter 93. These uses must be protected and maintained, under state regulations.
- B. “Existing uses” are those attained as of November 1975, regardless whether they have been designated in Chapter 93. Regulated earth disturbance activities must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in special protection streams.
- C. Water quality involves the chemical, biological, and physical characteristics of surface water bodies. After regulated earth disturbance activities are complete, these characteristics can be impacted by addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or

rates as a result of changes in land surface area from those activities. Therefore, permanent discharges to surface waters must be managed to protect the stream bank, streambed, and structural integrity of the waterway, to prevent these impacts.

STORM SEWER: A conduit that carries intercepted surface runoff, street water and other wash waters, or drainage, but excludes domestic sewage and industrial wastes.

STORMWATER: The surface runoff generated by precipitation reaching the ground surface.

STORM SEWER DISCHARGE: Flow from a storm sewer that is discharged into a receiving stream.

STORMWATER DRAINAGE FACILITY: Any element in a stormwater drainage system which is made or improved by man.

STORMWATER RUNOFF: Waters resulting from snowmelt or precipitation within a drainage basin, flowing over the surface of the ground, collected in channels and conduits and carried by receiving streams.

STRUCTURE: Any manmade object having an ascertainable stationary location on or in land or water, whether or not affixed to the land.

SUBAREA: A portion of the watershed that has similar hydrological characteristics and drains to a common point.

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 ten (10) acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

SUPERVISORS: The North Fayette Township Board of Supervisors.

SURFACE WATERS OF THE COMMONWEALTH: Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

TOWNSHIP: The Township of North Fayette, located in Allegheny County, Pennsylvania.

TIME OF CONCENTRATION: The time period necessary for surface runoff to reach the outlet of a subarea.

WATERCOURSE (WATERWAY): A permanent stream; intermittent stream, river, brook, creek, channel or ditch, having a defined bed and banks with perennial or intermittent flow, for the conveyance of water whether natural or manmade.

WATERSHED: The entire region or area drained by a river or other body of water, whether natural or artificial. A "designated watershed" is an area delineated by the Pennsylvania Department of Environmental Protection and approved by the Environmental Quality Board for which counties are required to develop Watershed stormwater Management Plans.

WATERSHED STORMWATER MANAGEMENT PLAN (WATERSHED PLAN): The plan for managing stormwater runoff throughout a designated Watershed adopted by Allegheny County as required by the Pennsylvania stormwater Management Act (Act 167).

ARTICLE III

PROCEDURES

SECTION 301. STORMWATER PLAN REVIEW PROCEDURES

A. Pre-Application Phase

1. Prior to submitting a preliminary stormwater management plan, applicants are urged to consult with the Township, the Allegheny County Planning Department and the County Conservation District on the requirements for safely managing stormwater runoff from the development site in a manner consistent with this Ordinance and applicable watershed stormwater management plans. These agencies may be helpful in providing the data that is necessary for preparing the stormwater management plans.
2. Applicants are encouraged to submit a sketch plan with a narrative description of the proposed stormwater management controls for general guidance and discussion with the Township and other agencies.
3. The pre-application phase is not mandatory, and any review comments provided by the Township or other agencies are advisory only and do not constitute any legally binding action on the part of the Township or any County agency.

B. Preliminary and Final Stormwater Plan Review

1. Preliminary and final stormwater management plans shall be required for all developments listed in Section 105 except as provided for in Section 106 and 401 of this ordinance.

In the case of subdivision and land development activities, as defined herein, the applicant shall be required to submit stormwater management plans with" the preliminary and final subdivision or land development plan application in accordance with the submission requirements and procedure specified in the Township Subdivision and Land Development Ordinance.

2. Review by Township Engineer and Conservation District

Preliminary and final stormwater management plans will be reviewed by the Township Engineer and County Conservation District. At its discretion, the Township may also engage other specialists in hydrology and hydraulics to assist with the stormwater plan review.

3. Preliminary Plan to County

A copy of the preliminary stormwater management plan, along with all supporting documentation, will be forwarded to the Allegheny County Planning Department for review and comment.

4. Review by Department of Transportation

In cases where the Stormwater Management and Erosion and Sedimentation Control projects fronts on an existing or proposed state highway, the Township may require that a copy of the plans and pertinent data be submitted to the Pennsylvania Department of Transportation for review.

5. Township Engineers Recommendation

The Township Engineer shall recommend approval or disapproval of the preliminary and final stormwater management plans based on the requirements of the Township ordinances, the standards and criteria of the watershed plan, and good engineering practice. The Engineer shall submit a written report, along with supporting documentation to the Board of Supervisors for consideration as part of the overall subdivision or land development plan review.

6. Notification of Affected Municipalities

The Township shall notify municipalities upstream and downstream of the development site, which may be affected by the stormwater runoff and proposed management system for the site when both the preliminary and final plan applications are submitted. Copies of the plans will be made available to the municipalities upon request. Comments received from any affected municipality will be considered by the Township Engineer and will be submitted with the Engineer's report to the Planning Commission and Supervisors.

7. Variance

In the event that any variance from this ordinance is requested by the applicant or is deemed necessary for approval, the requested variance and the reasons for its alleged necessity shall be entered into the records of the Township Board of Supervisors. The Board will consider the variance in accordance with the provisions set forth in Township Ordinance No. 86, as amended.

C. Preliminary and Final Stormwater Plan Approval

1. Within ninety (90) days from the date of submittal of a preliminary or final stormwater management plan, the Supervisors shall approve, approve

with modifications or disapprove the Plan and shall notify the applicant in writing thereof not later than fifteen (15) days following the decision.

2. When the application is not approved in terms as filed, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite the provisions of the Ordinance.
3. Failure of the Township to render a decision and communicate it to the applicant within the ninety (90) day time limit and in the manner required shall be deemed to be a recommendation for approval of the application in terms as presented unless the applicant has agreed in writing to an extension of time or change in the prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change in manner of presentation of communication shall have the like effect.

SECTION 302. STATUS OF STORMWATER PLAN AFTER FINAL PLAN APPROVAL

Upon final stormwater plan approval and all other approvals required under Township ordinances, the applicant may commence to install or implement the approved stormwater management controls. If site development does not begin within two (2) years of the date of final approval of the stormwater management plan, then before doing so, the applicant shall resubmit the stormwater management plan to verify that no condition has changed within the watershed that would affect the feasibility or effectiveness of the previously approved stormwater management controls. In addition, if for any reason, development activities are suspended for two (2) years or more, then the same requirement for resubmission of the stormwater management plan shall apply.

SECTION 303. STORMWATER PLAN MODIFICATIONS

Requests for modifications in the finally approved stormwater management controls shall be submitted to the Township Engineer as follows:

- A. If the request is initiated before construction begins, the stormwater plan must be resubmitted and reviewed according to the procedures in Section 301 of this Article.
- B. If the request is initiated after construction is underway, the Township Engineer shall have the authority to approve or disapprove the modification, based on field inspection provided: (1) the requested changes in stormwater controls do not result in any modifications to other approved land use/development requirements (e. g., required building setbacks, yards, etc.), and (2) the performance standards in Article V are met. Notification of the Engineer's action shall be sent to the

Township Supervisors. The Supervisors may issue a stay of stormwater plan modification within five (5) days and require the applicant to resubmit the plan modification for full stormwater plan review in accordance with the procedures in Section 301.

Section 304. DEDICATION OF FACILITIES

When drainage and stormwater control facilities have been completed in accordance with this ordinance and all applicable requirements of the Township Subdivision and Land Development Ordinance, such improvements shall be deemed private until such time as they have been offered for dedication to the Township and accepted by separate ordinance or resolution, or until they have been condemned for use as a public facility. The Township will not accept dedication of any facilities, or portions thereof, that are still being utilized for, or impacted by, construction activities.

Prior to the acceptance of any improvement, As-Built plans and surveys must be submitted that clearly illustrate which facilities are to be dedicated to the Township and which will remain as private systems or facilities and the Township Engineer shall inspect the entire system to ensure that it has been constructed in accordance with the approved plan and is functioning properly. In the case of any stormwater control facility, it must be free of sediment and debris. In addition, the developer shall submit as-built plans of all facilities proposed for dedication.

ARTICLE IV

STORMWATER PLAN REQUIREMENTS

SECTION 401. EXEMPTIONS FOR SMALL DEVELOPMENTS

- A. At the time of application, the Township Zoning Officer shall determine if the development qualifies as a "small development" and, therefore, is eligible for a simplified stormwater plan submission. For the purposes of this ordinance, a small development is:
- Any development which results (or will result when fully constructed) in the creation of 5, 000 or less square feet of impervious surface area, including roofs, patios, driveways, and sidewalks.
- B. A small development shall be exempt from the preparation of a stormwater management plan as specified by Section 402 of this ordinance. However, such developments shall provide safe management of stormwater runoff in accordance with the performance standards of Section 502 of this ordinance and as approved by the Township Engineer.
- C. Applications for small developments shall include a plan which describes narratively and graphically, the type and location of proposed on-site stormwater management techniques or the proposed connection to an existing storm sewer system. The plan should show accurately site boundaries, five (5) foot interval contours, location of watershed and/or subarea boundaries on the site (if applicable), and any watercourses, flood plains or existing drainage facilities or structures located on the site. Where the applicant is proposing to connect to an existing storm sewer, the applicant shall submit documentation showing that sufficient capacity exists in the storm sewer from the point of connection to the point of outlet in the natural drainage system. Depending upon actual site conditions, number of lots involved and similar considerations, the Township Engineer shall determine if the plan and supporting documentation must be prepared by a registered professional engineer.
- D. The Township Engineer shall review and approve the proposed provisions for stormwater management for small developments. The Township Engineer shall also determine if the proposed development site is part of a larger parcel or tract for which a stormwater management plan was approved previously and, therefore, subject to any specific stormwater management controls contained in the prior plan.
- E. For a parcel or tract of land held under single ownership, only one application for a small development, as defined above, shall be permitted before requiring a stormwater management plan for the entire parcel.

SECTION 402. STORMWATER PLAN CONTENT

The Stormwater Management Plan for all developments except for small developments as defined above shall consist of three parts:

A. Part I - Narrative Report

The narrative report shall consist of a general statement of the project giving the purpose and engineering assumptions and calculations for control measures and facilities. The following, information shall be included:

1. General description of the project.
2. General description of accelerated runoff control plan.
3. General description of erosion and sedimentation control plan.
4. Expected project time schedule, including anticipated start and completion dates.
5. Project's stormwater district, location and watershed characteristics.
6. On-site detention methods.
7. Hydraulic and hydrologic calculations, methodology and basis of design.
8. Brief soil description.

B. Part II - Preliminary Plan

The preliminary plan shall provide, and be accompanied by, maps or other descriptive material indicating the feasibility of the plan and showing the following:

1. A key map showing the development site's location within the designated watershed and watershed subsheds (consult watershed stormwater plans for boundaries). On all site drawings, show the boundaries of the watershed(s) and subarea(s) as they are located on the development site and identify watershed names and/or subshed numbers.
2. Location of the 100-year floodplain on the development site based on the municipal Flood Insurance Study maps or a determination by the Applicant's Engineer.
3. An overlay showing soil types and boundaries within the development site.

4. The street, storm sewers and other storm drains to be built, the basis of their design, and outfall and outlet locations and elevations, receiving stream or channel and its high water elevation, and the functioning of the drains during high water conditions.
5. The parts of the proposed parking area pavements, which are planned to be depressed to provide stormwater storage or conveyance.
6. Existing streams and watercourses to be maintained, and new channels to be constructed, their locations, cross sections and profiles.
7. Proposed culverts and bridges to be built, their materials, elevations, waterway openings and basis of design.
8. Existing detention ponds and basins to be maintained, enlarged, or otherwise altered and new ponds or basins to be built and the basis of their design.
9. The approximate location and percentage of the total land area in the development which will be covered by impervious surfaces after construction is completed.
10. The slope, type and size of all proposed and existing storm sewers and other waterways.
11. Existing contours at intervals of two (2) feet except in areas with slopes greater than fifteen (15) percent, in which case five (5) foot contour intervals may be used.
12. All natural features including bodies of water (natural and artificial), watercourses (permanent and intermittent), swales, wetlands, and other natural drainage courses on the development site or those off-site which will be affected by runoff from the development.
13. Approximate depth, shape, size and storage of any proposed retention facility.
14. One or more typical cross sections of all existing and proposed channels or other open drainage facilities, showing the elevation of the existing land and the proposed changes thereto, together with the high water elevations expected from the 100 year storm under the controlled conditions called for by this ordinance, and the relationship of structures, streets, and other utilities.

15. A site plan showing property lines, dimensions of the site, and location of existing and proposed buildings, structures, sewers, waterlines, easements and rights-of-way.
16. Certification and seal of the registered professional engineer responsible for the preparation of the plan.
17. A list of approvals/permits relative to stormwater management that will be required from other governmental agencies and anticipated dates of submission/receipt. Copies of applications may be requested by the Township where they may be helpful for the stormwater plan review.

C. Part III – Final Plan

Upon approval of the preliminary plan, the final plan shall be submitted to the Township Zoning Officer. The final plan shall provide all descriptive material and maps previously submitted and required prior to the final plan, in addition to the following items:

1. All calculations, assumptions and criteria used in the design of the storm sewer system, detention facilities and sediment and erosion control operations.
2. All plans and profiles of proposed storm sewers and open channels including horizontal and vertical controls, elevations, sizes, slopes and materials.
3. Locations, dimensions and design details required for the construction of all facilities.
4. For all detention basins, a plot or tabulation of storage volumes with corresponding water surface elevations and of the basin outflow rates for those water surface elevations.
5. For all detention basins, design hydro graphs of inflow and outflow for the peak design flows from the site under natural and developed conditions.
6. A description of operation for all detention basins.
7. Contours of the finished project site at intervals of two (2) feet except in areas with slopes greater than fifteen (15) percent, in which case, five (5) foot contour intervals may be used.
8. The staging of earthmoving activities and a program of operation, including a schedule for the installation of all temporary and permanent stormwater control measures and devices.

9. All information relative to the design and operation of emergency spillways.
10. Emergency routing of outfall for stormwater runoff in the event of failure off-site drainage structures.
11. When major control facilities, such as retention basins, require a PADEP permit, are planned, soil structures and characteristics shall be investigated. Plans and data prepared by a licensed professional engineer or geologist with experience and education in soil mechanics shall be submitted. These submissions should consider and offer design solutions for frost heave potential, shrink/swell potential, soil bearing strength, water infiltration, soil settling characteristics, fill and backfilling procedures and soil treatment techniques as required to protect the improvements or structures.
12. All erosion and sedimentation control measures, temporary as well as permanent, having sufficient detail in order to clearly indicate effectiveness of the plan.
13. Project specifications relative to stormwater control, erosion and sedimentation.
14. An operation and maintenance program establishing ownership and maintenance responsibilities for all stormwater management control facilities (identify specific person or entity) and detailing financial requirements and sources of funding. Submit any legal agreements or covenants required to implement the maintenance program.

ARTICLE V

STORMWATER MANAGEMENT PERFORMANCE STANDARDS

SECTION 501. STORMWATER MANAGEMENT DISTRICTS

A. For the purposes of stormwater management, the Township is divided into the following stormwater management districts:

1. Montour Run
2. Robinson Run

These stormwater management districts may be further subdivided into subareas which have similar hydrological characteristics and drain to a common point.

B. The location and boundaries of the stormwater management districts and subareas are adopted as overlay districts to the Township zoning map and are shown on the zoning map and watershed maps which are available in the Township offices.

SECTION 502. GENERAL STANDARDS

The following provisions shall be considered the overriding performance standards against which all proposed stormwater control measures shall be evaluated, and they shall apply in all stormwater management districts in the Township.

A. Any landowner and any person engaged in the alteration or development of land which may affect stormwater runoff characteristics shall implement such measures as are reasonably necessary to prevent injury to health, safety or other property. Such measures shall include such actions as are required:

1. To assure that the maximum rate of stormwater runoff is no greater after development than prior to development activities; and
2. To manage the quantity, velocity and direction of resulting stormwater runoff in a manner which will not adversely impact the health on, or value of, any affected properties.

B. Design Storms

1. The 2-, 5-, 10-, 25-, and 100-year design storm frequencies shall be used for analyzing stormwater runoff in pre- and post-development conditions as well as for designing runoff control facilities.
2. The SCS, Type II Rainfall Distribution shall be used for all analyses. The design storms, along with the 24-hour total rainfall for these storm frequencies for the watershed are:

<u>Design Storm</u>	Rainfall Depth
	<u>24 Hour (Inches)</u>
2 year	2.6
5 year	3.3
10 year	3.8
25 year	4.4
100 year	5.0

C. The Stormwater Management Plan must consider all of the stormwater runoff flowing over the project site. Runoff calculations shall be made to insure that runoff from the fully developed upstream watershed area (based on the Township Comprehensive Land Use Plan) can be accommodated by the pipes, drainage easements, watercourses, etc. on the site.

D. Joint Development of Control Systems

Stormwater control systems may be planned and constructed in coordination with two or more developments provided they are in compliance with the applicable provisions of this Ordinance.

E. Method of Computation

All computations used in conjunction with the analysis and design, of stormwater management facilities shall be based on one or more of the following methods:

1. HEC-HMS – U.S. Army Corps of Engineers Hydrologic Modeling System
2. TR-55 - Soil Conservation Service Technical Release No. 55
3. TR-20 - Soil Conservation Service Technical Release No.20
4. Modified Rational Method
5. Penn state Runoff Model

These methods for determining peak discharge shall be used (1) to determine pre-development runoff conditions; (2) to analyze the impact of development and (3) to perform calculations in the design of any detention/retention facilities used in controlling runoff. These methods of runoff computation developed and used by the Soil Conservation Service and other authorities are hereby adopted by the Township.

The use of the Basic Rational Method in estimating runoff may be employed in the design of the storm sewer system within the development. The storm sewer system shall be interpreted as the conduits, channels, culverts, inlets and appurtenances featured for the conveying of stormwater to, through or from a development site to the point of final

discharge or control facility. The Rational Method shall not be used in the analysis of stormwater runoff from the development in its entirety or in conjunction with the design of any retention/detention facilities or other runoff control measures.

F. Stormwater Drains

All stormwater roof drains, footer drains, and yard drains shall be connected directly into underground pipe which shall flow into an approved storm drainage system, unless approved by the Township Engineer. All pipe from roof and footer drains shall be a minimum four inch (4") Schedule 40 ABS, PVC or SDR 35 pipe. Four inch (4") Schedule 40 ABS or PVC pipe is required for a distance of five (5) feet from the foundation of the dwelling. Yard drains shall be sized based on the area contributing to the drain; ABS, PVC, or SDR 35 pipe shall be utilized unless approved by the Township Engineer.

SECTION 503. WATERSHED STANDARDS: MONTOUR RUN WATERSHED DISTRICT

The stormwater performance standards contained in this section are intended to implement the standards and criteria contained in the Montour Run Watershed Stormwater Management Plan, adopted and approved as required by the Pennsylvania Stormwater Management Act (Act 167).. If there is any discrepancy between the provisions of this Ordinance and the standards and criteria of the Plan, or if the Plan is subsequently amended, then the standards and criteria of the current Watershed Plan shall govern.

A. Release Rate Percentage

1. Application – All subdivision and land development activities which result in an increase in the post-development peak rate of stormwater runoff from any outfall on the development site shall be subject to the release rate percentage for the watershed subarea in which the site (or outfall) is located. A listing of the release rate percentage for each subarea in the Montour Run Watershed appears in Appendix A of this Ordinance, and the subareas are delineated on the Watershed subarea map in the Watershed Plan.
2. Procedure for Use: The steps that must be followed to utilize the release rate percentage for a particular development site are as follows:
 - a. Identify from the watershed subarea map, the specific subarea in which the development site is located and obtain the subarea release rate percentage from Appendix A.
 - b. Compute the pre- and post-development run-off hydrographs for each stormwater outfall for the site, using one of the methods listed

in Section 502(E) of this Ordinance, for the 2-, 5-, 10-, 25-, and 100-year design storms, applying no on-site detention for stormwater management but including any techniques to minimize impervious surfaces and/or increase the time of concentration for stormwater runoff flowing over the development site. If the post-development peak runoff rate is less than or equal to the pre-development peak runoff rate, then additional stormwater control shall not be required at the outfall. If any of the post-development peak runoff rates are greater than the pre-development values, then stormwater detention will be required and proceed to subsection c.

- c. Multiply the subshed's release rate percentage by the pre-development rate of runoff from the development site to determine the maximum allowable release rate from any detention facility for the 2-, 5-, 10, 25-, and 100-year storm events.

B. No-Harm Evaluation

1. An Applicant may seek to exceed the otherwise applicable subarea release rate percentage by performing a No-Harm Evaluation which requires an independent engineering analysis to demonstrate that other reasonable options exist to protect areas from harmful storm runoff impacts.
2. The No-Harm Evaluation shall be prepared by a registered engineer, who is experienced in hydrology and hydraulics, in accordance with the procedure contained in Appendix B of this Ordinance.
3. The analysis for the No-Harm Evaluation shall be submitted to the Township Engineer for review and approval.

SECTION 504. WATERSHED STANDARDS - ROBINSON RUN
 WATERSHED DISTRICT

The stormwater performance standards contained in Section 503 of this Ordinance with the exception of the release rate percentages shall be implemented in the Robinson Run Watershed District.

Release rate percentages at all points within this district may be assumed to be 100 percent unless shown otherwise in a subsequent Watershed Stormwater Management Plan.

ARTICLE VI

DESIGN CRITERIA FOR STORMWATER MANAGEMENT CONTROLS

SECTION 601.

A. GENERAL DESIGN GUIDELINES

1. Developers may select runoff control techniques, or a combination of techniques, which are most suitable to control stormwater runoff from the development site. All stormwater facilities shall be designed to meet or exceed the minimum design standards, specifications and standard details of the Township and shall be subject to the approval of the Township Engineer.
2. In selecting and designing stormwater management systems and controls, applicants may be guided by the following references or their latest releases:
 - a. "Urban Hydrology for Small Watersheds", Technical Release No. 55, ASDA, Soil Conservation Service, 1975 (or most recent edition).
 - b. "Erosion and Sediment Pollution Control Manual", Pennsylvania Department of Environmental Protection, April 2000.
 - c. "Standards and Specifications for Soil Erosion and Sediment Control", Maryland Water Resources Administration, 1983.
 - d. "Urban Stormwater Management", Special Report No. 49, American Public Works Administration, 1981.
 - e. "Water Resource Protection Measures in Land Development A Handbook", University of Delaware Water Resources Center, April 1974.
 - f. "Design and Construction of Sanitary and Storm Sewers", WPCF Manual of Practice No.9, Water Pollution Control Federation, 1970.
3. Maintenance of Natural Drainage Ways

All natural streams, channels, swales, drainage systems and/or areas of surface water concentration shall be maintained in their existing condition unless an alteration is approved by the Township. All encroachment activities shall comply with the requirements of Chapter 105 (Water

Obstructions and Encroachments) of Title 25, Rules and Regulations of the Pennsylvania Department of Environmental Protection.

4. The Developer should consider the effect on the proposed stormwater management techniques of any special soils conditions or geological hazards which may exist on the development site. In the event such conditions are identified on the development site, the site, the Township may require in-depth studies by a competent geotechnical engineer.

B. CRITERIA FOR STORMWATER DETENTION/RETENTION FACILITIES

1. If detention/retention facilities are utilized for the development site, the facility(s) shall be designed such that the post-development peak runoff rates from the developed site are controlled to those rates defined by the subarea release rate percentage or no-harm evaluation for the 2-, 5-, 10-, 25-, and 100-year design storms.
2. All detention/retention facilities shall be equipped with multi-stag outlet structure to provide discharge controls or the 2-, 5-, 10-, 25-, and 100-year storm frequencies provisions shall also be made for safely passing the post-development 100year storm runoff flows without damaging (i.e., impairing the continued function of) the facilities.
3. Where detention facilities will be utilized, multiple-use facilities, such as lakes, ball fields or similar recreational uses, are encouraged wherever feasible.
4. Other considerations which should be incorporated into the design of the detention facilities include:
 - a. Inflow and outflow structures shall be designed and' installed to prevent erosion, and bottoms of impoundment type structures should be protected from soil erosion.
 - b. Control and removal of debris both in the storage structure and in all inlet or outlet devices shall be a design consideration.
 - c. Inflow and outflow structures, pumping stations, and other structures shall be protected and designed to minimize safety hazards.
 - d. The water depth of a storage pond which is not fenced shall be limited to two (2) feet unless approved by the Township Engineer. Otherwise, (appropriate landscaped fencing at least four feet in height shall be required.

- e. Landscaping shall be provided for the facility which harmonizes with the surrounding area.
- f. The facility shall be located to facilitate maintenance, considering the frequency and type of equipment that will be required.
- g. The facility shall be equipped with an access road at least 15 feet wide and with a maximum grade of 15 percent.

C. CRITERIA FOR COLLECTION/CONVEYANCE FACILITIES

1. As a general rule, no stormwater may be discharged to unprotected areas such as hillsides without special erosion and/or energy dissipation controls being installed. Stormwater shall either be conveyed to the nearest established stream channel as approved by the Township Engineer, or provided with an approved energy dissipation device. Conveyance shall be by pipe or an erosion protected ditch.
2. The design for culverts, pipes and other stormwater conveyance structures shall be consistent with the design of the other stormwater management facilities.
3. All sites shall be graded to provide drainage away from and around structures to prevent potential flooding damage.
4. Collection/conveyance facilities should not be installed parallel to the top or bottom of major embankments to avoid the possibility of failing or causing the embankments to fail.

ARTICLE VII

EROSION AND SEDIMENTATION CONTROLS

Section 701

No earthmoving activity, including cuts and fills, excavation, removal of topsoil, trees, or vegetative cover of the land, shall commence until the plans for minimizing soil erosion and sedimentation, both during and after construction, have been approved by the Township Engineer and/or the Allegheny County Conservation District (ACCD).

The Pennsylvania Department of Environmental Protection (PADEP) has regulations that require an Erosion and Sediment Control Plan for any earth disturbance activity of 5,000 square feet or more, under 25 Pa. Code 102.4(b).

In addition, under 25 Pa. Code Chapter 92, a PADEP “NPDES Construction Activities” permit is required for any earth disturbance one acre or more with a point source discharge to surface waters or the Township’s storm sewer system, or five acres or more regardless of the planned runoff (hereinafter collectively referred to as “Regulated Earth Disturbance Activities”). This includes earth disturbance on any portion of, part of, or during any stage of, a larger common plan of development.

Evidence of any necessary permit(s) for Regulated Earth Disturbance Activities from the PADEP regional office or the ACCD must be provided to the Township.

A copy of the approved Erosion and Sediment Control Plan and any required permits, as required by the PADEP regulations, shall be available at the project site at all times.

Section 702

The erosion/sedimentation plan shall be prepared in accordance with the Pennsylvania Erosion and Sedimentation Regulations (25 PA Code, Chapter 102) and the standards and specifications of the Allegheny County Conservation District.

Section 703

Proposed erosion/sedimentation measures shall be submitted with the stormwater management plan as part of the applicant's preliminary and final plans.

Section 704

The plan should show the type, location, and application of the proposed erosion/sedimentation control measures, and include the calculations and criteria used in designing them.

Section 705

Some of the guides to be followed in designing the erosion/sedimentation measures include:

- A. Smallest practicable area of soil should be exposed at anyone time during construction, and exposure should be limited to the shortest practicable period of time.
- B. Temporary ditches, dikes, vegetation, and/or mulching shall be used to protect critical areas exposed during development.
- C. Sediment basins (debris basins, desilting basins, or silt traps) shall be installed and maintained to remove sediment from runoff waters from land undergoing development.
- D. Wherever possible, temporary erosion/sedimentation control measures should. be designed to serve as part of a site's permanent stormwater management control system.
- E. Permanent vegetation and erosion control structures should be installed as soon as practicable during construction activities.
- F. Wherever feasible, natural vegetation should be retained and protected, and natural grade alterations kept to a minimum.

ARTICLE VIII

CONSTRUCTION AND MAINTENANCE CRITERIA FOR STORMWATER CONTROL FACILITIES

SECTION 801. CONSTRUCTION CRITERIA FOR STORMWATER CONTROL FACILITIES

Stormwater management facilities shall be constructed in accordance with the following minimum specifications:

- A. All workmanship and materials shall conform to the North Fayette Township Standard Details. In addition, all workmanship and materials shall conform to the latest edition of PENNDOT Publication 408.
- B. All connections to existing storm sewer pipes shall be made by construction of a suitable junction box (inlet or manhole) to provide access for cleanout. No blind connections will be permitted.
- C. All storm sewers constructed in roadway right-of-ways or drainage easements shall be constructed of reinforced cement concrete pipe (RCCP), Class III, or stronger, if required by the Township Engineer, or smooth lined, corrugated, high density polyethylene pipe that complies with PENNDOT specifications.
- D. All pond outlet structure pipes shall have suitable gaskets to prevent leakage and piping of water through the pond embankment.
- E. All pipe outlets shall discharge onto a stone rip-rap blanket to prevent erosion of soil. Rip-rap will be sized considering pipe exit velocities.

SECTION 802. STANDARD DETAILS

The following standard details appear in Appendix C and shall apply to all stormwater management facilities:

- A. Permanent Earth Dam
- B. Sewer Headwall
- C. Anti-seep Collar
- D. CMP Riser
- E. Manhole Riser
- F. Emergency Spillway

SECTION 803. MAINTENANCE OF STORMWATER CONTROL FACILITIES
AND SYSTEMS

A. Maintenance Requirements

1. Maintenance during development of a project shall be the responsibility of the developer and/or landowner and shall usually include but not be limited to:
 - a. Removal of silt from all debris basins, traps or other structures or measures when forty (40) percent of capacity is filled with silt;
 - b. Disposal of collected silt in accordance with the approved Erosion and Sediment Control Plan and in a manner which will not adversely affect the environment.
 - c. Periodic maintenance of temporary control facilities such as replacement of straw bale dikes, straw filters or similar measures in accordance with the procedures outlined in the PADEP E&S Manual;
 - d. Establishment or re-establishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not successfully been established;
 - e. Installation of necessary controls sufficient to protect against problems caused by storm events within design frequencies;
 - f. The contractor or developer will be responsible for removal of all temporary measures upon completion of the project.
2. After development of the project, maintenance shall be the responsibility of the entity specified in the approved maintenance plan and shall include when necessary:
 - a. Mowing to maintain adequate stands of grass and to control weeds. Chemical weed control may be used if State and the Township regulations are met. Selection of seed mixtures should reflect the type of maintenance desired by North Fayette Township.
 - b. Removal of silt from all permanent structures which trap silt or sediment to keep this material from building up in grassed waterways, and other permanent structures, thereby reducing their capacity.

B. MAINTENANCE RESPONSIBILITIES

1. The stormwater management plan for the development site shall establish responsibilities for the continuing operation and maintenance of all proposed stormwater control facilities.
2. The Township Supervisors shall make the final determination on the continuing maintenance responsibilities as part of development application review and reserve the right to accept the ownership and operating responsibility of any or all of the stormwater management controls.

C. MAINTENANCE AGREEMENT FOR PRIVATELY OWNED STORMWATER FACILITIES

1. Prior to final approval of the site's stormwater management plan, the property owner shall sign and record a maintenance agreement covering all stormwater control facilities which are to be privately owned. The agreement shall stipulate that:
 - a. The owner shall maintain all facilities in accordance with the approved maintenance schedule and shall keep all facilities maintained in a safe and attractive manner.
 - b. The owner shall convey to the Township easements and/or rights-of-way to assure access for periodic inspections by the Township and maintenance, if required.
 - c. The owner shall keep on file with the Township the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information will be submitted to the Township within ten (10) days of the change.
 - d. The owners shall establish any special maintenance funds or other financing sources, in accordance with the approved maintenance plan.
 - e. The owner shall pay the amount due to the Special Stormwater Facility Maintenance Fund (see Section 803. D).
 - f. If the owner fails to maintain the stormwater control facilities, following due notice by the Township to correct the problems, the Township shall perform the necessary maintenance or corrective work. The owner shall reimburse the Township for all costs.

2. Other items may be included in the agreement where determined necessary to guarantee the satisfactory maintenance of all facilities. The maintenance agreement shall be subject to the review and approval of the Township Solicitor.

D. STORMWATER FACILITY MAINTENANCE FUND

1. Persons installing stormwater storage facilities will be required to pay a specified amount to the Township of North Fayette Stormwater Facility Maintenance Fund to help defray costs of periodic inspections and annual maintenance expenses for a period of thirty (30) years. The amount of the deposit shall be determined as follows:
 - a. If the storage facility(s) is to be privately owned and maintained, the deposit shall cover the cost of semi-annual inspections, as estimated by the Township Engineer.
 - b. If the storage facility(s) is to be owned and maintained by the Township, the deposit shall cover the estimated annual costs for maintenance and inspection. The Township Engineer will establish the estimated annual maintenance costs utilizing information submitted by applicant.
 - c. The amount of deposit to the Maintenance Fund covering annual inspection and maintenance costs, shall be converted to present worth of the annual series values. The Township Engineer shall determine the present worth equivalents which shall be subject to the final approval of the Township Supervisors.
2. If a storage facility is proposed, which also serves as a recreation facility such as a lake or ballfield, the Township may reduce or waive the amount of the maintenance fund deposit based on the value of the land for public recreational purposes.
3. If at some future time any storage facility (whether publicly or privately owned) is eliminated due to the installation of a storm facility, the unused portion of the maintenance fund will be applied to the cost of abandoning the facility and connecting to the storm sewer system or other facility. Any amount of the deposit remaining after the costs of abandonment are paid will be returned to the depositor.

SECTION 804. POST-CONSTRUCTION STORMWATER
RUNOFF CONTROL REQUIREMENTS FOR NEW
DEVELOPMENT AND REDEVELOPMENT, INCLUDING
OPERATIONS AND MAINTENANCE OF STORMWATER
BMPS

- A. No regulated earth disturbance activities within the Township shall commence until approval by the Township of the plan which demonstrates compliance with State Water Quality Requirements after construction is complete.
- B. The BMPs must be designed to protect and maintain existing uses (e.g., drinking water use; cold water fishery use) and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in “Special Protection” streams, as required by statewide regulations at 25 Pa. Code Chapter 93 (collectively referred to herein a “State Water Quality Requirements”).
- C. To control post-construction stormwater impacts from regulated earth disturbance activities, state water quality requirements can be met by BMPs, including site design, which provide for replication of pre-construction stormwater infiltration and runoff conditions, so that post-construction stormwater discharges do not degrade the physical, chemical, or biological characteristics of the receiving waters. As described in the PADEP Comprehensive Stormwater Management Policy (#392-0300-002, September 28, 2002), this may be achieved by the following:
 - 1. Infiltration: replication of pre-construction stormwater infiltration conditions,
 - 2. Treatment: use of water quality treatment BMPs to ensure filtering out of chemical and physical pollutants from the stormwater runoff, and
 - 3. Streambank and Streambed Protection: management of volume and rate of post-construction stormwater discharges to prevent physical degradation of receiving waters (e.g., from scouring and erosion).
- D. PADEP has regulations that require municipalities to ensure design, implementation and maintenance of BMPs that control runoff from new development and redevelopment (hereinafter referred to as “development”) after regulated earth disturbance activities are complete. These requirements include the need to implement post-construction stormwater BMPs with assurance of long-term operations and maintenance of those BMPs.
- E. Evidence of any necessary permit(s) for regulated earth disturbance activities from the PADEP regional office or ACCD must be provided to the Township.

F. Alterations of BMPs.

1. No person shall modify, remove, fill, landscape, or alter any existing stormwater BMP, unless it is part of an approved maintenance program, without the written approval of the Township.
2. No person shall place any structure, fill, landscaping, or vegetation into a stormwater BMP or within a drainage easement, which would limit or alter the functioning of the BMP, without the written approval of the Township.

ARTICLE IX

PERMITS, FEES, BONDS AND PENALTIES

SECTION 901. PERMITS

A. BUILDING PERMIT

No structure as defined by and regulated by this ordinance shall hereafter be erected or structurally altered until a building permit has been issued by the Township. Such permit shall state that the proposed structure shall comply with all laws of North Fayette Township relating thereto.

B. GRADING PERMIT

No earth disturbance activity, as defined by and regulated by this ordinance, shall commence until a grading permit has been issued by the Township. Such permit shall state that the proposed activity shall comply with the North Fayette Township Grading Ordinance, No. 194.

C. EXPIRATION OF PERMITS

All such building and grading permits shall expire one (1) year from the date of issuance unless an extension of the permit is issued by the Township upon application by the permit holder to the Township Building Inspector.

D. ISSUANCE OF PERMITS

No permit required by this ordinance shall be issued until all Stormwater Management Plans have been approved by the Township.

E. APPLICATION FOR PERMIT

All application for permits required by this ordinance shall be made on printed forms as approved by the North Fayette Township Board of Supervisors. Such applications shall describe the stormwater control structure and/or earth disturbance activity. Such application shall be presented to the Township along with duly approved plans and such fees and bonds as required by Sections 902 and 903 of this ordinance.

SECTION 902. FEES

A. FILING FEES

A filing fee shall accompany the application for permits. No application shall be accepted by the Township or acted upon unless payment is made to the Township.

The Township shall by resolution create a schedule of fees to be paid by the developer to defray the cost of processing the plans required by this ordinance.

B. INSPECTION AND ENGINEERING FEE

An inspection and engineering fee shall accompany the application for permits required by this ordinance. The amount of the fee shall be determined from time to time by resolution of the Board of Supervisors and shall be sufficient to cover the costs of:

1. Reviewing the plan's engineering details.
2. Site inspection.
3. Inspecting required improvements during construction.
4. Final inspection of completion of installation of the required improvements.

Should additional fees be required for inspection and engineering review, the developer shall pay promptly to North Fayette Township such fees upon invoice.

C. STORMWATER FACILITY MAINTENANCE FEE

A stormwater facility maintenance fee is required. The amount of such fee shall be determined by the Township Engineer and approved by the Township Supervisors in accordance with the procedures specified in Section 803.D of this Ordinance. Payment terms of the stormwater facility maintenance fee shall be stipulated in the Developer's Agreement. The Fee shall be paid prior to placing the facility in service, and in no case shall the Township accept the facility until the Fee is paid.

SECTION 903. BONDS

The developer or landowner shall provide bonds in accordance with the provisions of the Township Subdivision and Land Development Ordinance.

SECTION 904. PENALTIES

- A. It shall be unlawful for any person to:
1. Undertake any earth disturbing activity on any property unless a Stormwater Management Plan has been approved by the Township and the required permits issued as provided herein; or

2. Continue work on the offending portion of a project after receipt of a stop work order, other than remedial work to bring the project into compliance, unless said stop work order is reversed, cancelled or suspended by the Township; or
 3. Fail to complete the recommended remedial action within the time allowed under those circumstances set forth in section 1003 of this ordinance.
- B. Any person, firm, association or corporation violating any provision of this ordinance shall upon summary conviction before the District Magistrate having jurisdiction, be punished by a fine not to exceed the sum of One Thousand Dollars (\$1,000.00) for each offense, recoverable with costs, and in default of the payment of the final costs, shall be subject to imprisonment for a period not exceeding thirty (30) days. Each day that a violation is continued shall constitute a separate offense and may be punishable as such. In the case of firms or associations, the penalty may be imposed upon any of the partners or members thereof, and in the case of corporations, upon any of the officers thereof or any of its agents, who may have executed any applications for permits on its behalf.
- C. In addition, the Township, through its solicitor, may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.

ARTICLE X

ADMINISTRATION, INSPECTION AND ENFORCEMENT

SECTION 1001. ADMINISTRATION

The Township Zoning Officer or his designee is hereby designated to be the administrator of this ordinance and as such will be responsible for the enforcement of this ordinance.

SECTION 1002. INSPECTIONS

- A. The Zoning Officer or a designated representative shall inspect the construction of all temporary and permanent stormwater management facilities for the development. The permittee shall notify the engineer 48 hours in advance of the completion of the following key development phases:
1. At the completion of preliminary site preparation, including striping of vegetation, stockpiling of topsoil, and construction of temporary stormwater management and erosion control facilities.
 2. At the completion of rough grading, but prior to placing top soil, permanent drainage, or other site development improvements and ground covers.
 3. During construction of the permanent stormwater facilities at such time as specified by the Zoning Officer.
 4. Completion of permanent stormwater management facilities, including established ground covers and plantings.
 5. Completion of any final grading vegetative control measures, or other site restoration work done in accordance with the approved plan and permit.
- B. No work shall commence on any subsequent phase until the preceding one has been inspected and approved. If there are deficiencies in any phase, the Zoning Officer shall issue a written description of the required corrections and stipulate the time by which they must be made.
- C. If, during construction, the contractor or permittee identifies any site condition, such as subsurface soil conditions, alterations in surface or subsurface drainage, which could adversely affect the construction or performance of the approved stormwater facilities, the Zoning Officer must be notified within 24 hours of the discovery of such condition and request a field inspection. The Zoning Officer shall determine if the condition requires a stormwater plan modification.

- D. In cases where stormwater facilities are to be installed in areas of landslide-prone soils or other special site conditions exist, the Township may require special precautions such as soil tests and core borings, full-time resident inspectors, and/or similar measures. All costs of any such measures shall be borne by the permittee.

SECTION 1003. ENFORCEMENT

A. ADHERENCE TO PLAN

After approval of the required plans as set forth herein, the developer shall be required to adhere strictly to the plans as approved and shall be required to construct and properly maintain any control measures contained on said approved plan. If the developer adheres to said plan including continued maintenance of any control measures during the clearing and development operations as approved, he shall not be deemed in violation of this ordinance, however, it is not intended that this shall relieve such person of any civil liability including injunctive relief, to any property owner who believes he has been wronged by some action or inaction of the developer.

B. ENFORCEMENT

If the Township Zoning Officer determines that clearing and development of the land is not being carried out in accordance with the approved plan or that approved control measures have not been constructed or are not being properly maintained in accordance with the approved plan, then he is authorized to:

1. Immediately issue a written notice to the developer indicating the nature and location of the alleged noncompliance which, at the discretion of the Township may be accompanied by documentary evidence, including but not limited to photographs demonstrating failure to comply with the approved plan, and specifying what remedial steps are necessary to bring the project into compliance. The developer shall immediately, conditions permitting, commence the recommended remedial action and shall have seven (7) working days after receipt of said notice, or such longer time as may be allowed by the Zoning Officer, to complete the remedial action set forth in said notice.
2. If the remedial work is not completed within the time allowed or in the manner prescribed, then the Zoning Officer is authorized to issue a stop work order specifying where the noncompliance has occurred and specifying what remedial steps are necessary to bring the project into compliance. Said order is to be directed to the developer, directing him to cease and desist all or any portion of the work on any geographical portion of the project which is contributing to unacceptable on-site generated erosion, sedimentation, runoff or other problems regulated by this

ordinance except such remedial work as is deemed necessary to bring the project into compliance.

3. If the developer fails to complete the recommended remedial action within the time allowed, or fails to take the recommended remedial action after issuance of a stop work order under Section 1003.B.2, then the Zoning Officer shall issue a stop work order on all or any portion of the project.

C. NOTIFICATION OF NON-COMPLIANCE

A copy of any notice or stop work order issued under 1003.B.2 above shall be served upon the developer by either personal delivery or certified mail.

D. CANCELLATION OF NOTICE

Upon completion of remedial steps required by a notice under 1003.B.2 above, the Zoning Officer shall forthwith issue a notice of compliance and cancellation of said notice of noncompliance or stop work order.

SECTION 1004. REVIEW OF STOP WORK ORDER

Any person who feels aggrieved by any stop work order that is issued by the Zoning Officer under this ordinance, or by failure to cancel the same after performance of remedial steps, shall have the right to request a hearing within fifteen (15) days after making said request. At said hearing, the Zoning Officer and the aggrieved person shall present any evidence bearing on the propriety of said stop work order or continuation of same. At the conclusion of the hearing, and based upon the evidence presented to it, the Township shall:

- A. Affirm the stop work order and the remedial steps required therein and direct continuing effect and enforcement of said stop work order until the offending portion of the project has been brought into compliance; or
- B. Affirm the stop work order, but upon such modified remedial steps as the Township may find necessary and appropriate; or
- C. Reverse, cancel or suspend the stop work order upon a finding that remedial steps are not necessary or that required remedial steps have been taken, or upon a finding that a stop work order is not appropriate or necessary during the performance of required remedial steps.

SECTION 1005. REVOCATION OF PERMIT

The Township Supervisors, upon request by the Zoning Officer, at the next regular meeting of the Township, after at least three (3) days notice in writing to the developer, may revoke the permit issued pursuant to this ordinance for any project which the

Township finds, upon evidence presented to it that the developer has proceeded with work on the offending portion of any project, except specified remedial work to bring the project into compliance with the approved plan, while under a valid stop work order which has neither been reversed, cancelled nor suspended by the Township.

ARTICLE XI

APPEALS

SECTION 1101. APPEAL TO COURT

Any person aggrieved by any decision of the North Fayette Township Board of Supervisors or any Municipal Officer appointed thereby, may appeal therefrom within thirth (30) days, to the Court of Common Pleas of Allegheny County.

SECTION 1102. ENACTMENT

DULY ORDAINED AND ENACTED into an ordinance this ____ day of _____, 2004.

NORTH FAYETTE TOWNSHIP BOARD OF SUPERVISORS

Chairman

ATTEST:

Secretary

APPENDIX A

RELEASE RATES FOR MONTOUR RUN WATERSHED

SUBSHED	RELEASE RATE PERCENTAGE
1	75
2	75
3	75
4	75
5	75
6	80
7	75
8	75
9	80
10	80
11	80
12	80
13	100
14	70
15	70
16	90
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
25	100
26	100
27	100
MIDFIELD TERMINAL	100

NOTE: The above release rates apply to runoff conditions resulting from proposed (new) development in the subsheds and are applicable for all design events to be analyzed.

APPENDIX B

PROCEDURES FOR PERFORMING NO-HARM EVALUATION MONTOUR RUN WATERSHED

1. Identify the discharge control points, as shown on the subarea map, which are downstream of the proposed development site and at which the existing peak flow from the subarea in which the development site is located is greater than twenty (20) percent of the watershed peak flow rate at that point. These points of interest so identified shall be used for comparison in subsequent steps of the no-harm evaluation.
2. Compute the pre- and post-development peak rate of runoff for the subarea in which the development site is located for the 2-, 5-, 10-, 25-, and 100-year design storms, using one of the methods addressed in Section 502.
3. Using the same method of calculation, determine the pre- and post-development peak flow rate at the points of interest identified in Step 1 above. For determining the contributing flow of subareas (other than that in which the development is located) at a point of interest, the applicant shall use the existing conditions runoff hydrograph for that subarea prepared for the watershed plan. Copies of this information may be obtained from the Allegheny County Conservation District.
4. When the computed post-development discharges for the 2-, 5-, 10-, 25-, and 100-year storms at all designated points of interest do not exceed the computed pre-development discharges at the same points, then the applicant shall have demonstrated, within reasonable limits, that no harm or adverse affects will occur downstream.
5. Computed post-development discharges may exceed computed pre-development discharges at a designated point of interest, provided that the applicant can demonstrate that the potential for flooding is not increased at that point of interest.