CHAPTER 17

STORMWATER MANAGEMENT

PART 1

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§101. Statement of Findings.

The governing body of the Township finds that:

A. Inadequate management of accelerated stormwater runoff resulting from development throughout a watershed increases flood flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of existing streams and storm sewers, greatly increases the cost of public facilities to convey and manage stormwater, undermines floodplain management and flood-reduction efforts in upstream and downstream communities, reduces groundwater recharge, and threatens public health and safety.

B. A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated erosion, is fundamental to the public health, safety, and welfare and the protection of the people of the Township and all the people of the commonwealth, their resources, and the environment.

(Ord. 2009-01-51, 2/12/2009)

§102. Purpose.

The purpose of this Part 1 is to promote health, safety, and welfare within Huntington Township by minimizing the damages described in §101A of this Part 1 through provisions designed to:

A. Manage accelerated runoff and erosion and sedimentation problems at their source by regulating activities that cause these problems.

B. Utilize and preserve the existing natural drainage systems.

C. Encourage recharge of groundwater where appropriate and prevent degradation of groundwater quality.

D. Maintain existing flows and quality of streams and watercourses in the Township and the commonwealth.

E. Preserve and restore the flood-carrying capacity of streams.

F. Provide proper maintenance of all permanent stormwater management facilities that are constructed in the Township.

G. Provide performance standards and design criteria for watershed-wide stormwater management planning.

(Ord. 2009-01-51, 2/12/2009)

§103. Statutory Authority.

The Township is empowered to regulate land use activities that affect runoff by the authority of the Act of October 4, 1978, P.L. 864 (Act 167). 32 P.S. §680.1 et seq., as amended, the "Storm Water Management Act," and Chapter 22, Subdivision and Land Development, of this Code.

(Ord. 2009-01-51, 2/12/2009)

§104. Applicability.

Any person engaging in land development or construction activities which disturb and/or change the natural topography and/or ground cover shall submit a stormwater management plan to the Township for review and approval. Furthermore, any person who engages in the following activities shall be subject to the requirements of this Part 1:

A. New land development which creates a cumulative total impervious area, including building, paved and any impervious areas on the project site or property in excess of 1,000 square feet of new construction. All semipervious areas shall be considered impervious for the purposes of determining applicability.

B. Diversion or piping of any natural or man-made watercourse; this shall include the relocation of such facilities or watercourses.

(Ord. 2009-01-51, 2/12/2009; as amended by Ord. 2009-04-54, 9/10/2009)

§105. Repealer.

Any ordinance or ordinance provision of the Township inconsistent with any of the provisions of this Part 1 is hereby repealed to the extent of the inconsistency only.

(Ord. 2009-01-51, 2/12/2009)

§106. Severability.

Should any section or provision of this Part 1 be declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of any of the remaining provisions of this Part 1.

(Ord. 2009-01-51, 2/12/2009)

§107. Compliance with Other Requirements.

Approvals issued pursuant to this Part 1 do not relieve the applicant of the responsibility to comply with or to secure required permits or approvals for activities regulated by any other applicable codes, rules, statutes, or ordinances.

(Ord. 2009-01-51, 2/12/2009)

§108. Exemptions.

The following activities are considered to be exempt from the provisions of this Part 1:

A. Agricultural use of lands which have been included in a farm conservation plan as approved by the Adams County Conservation District and/or DEP. This exemption does not apply to any agricultural building/facilities, paving or impervious area not included in the conservation plan.

B. Any person who applies for a building permit for a single-family dwelling within a subdivision which was approved by the Township and which has approved stormwater management facilities in place and where the cumulative total impervious area for the property does not exceed that permitted as a percent of coverage under Chapter 27, Zoning, at the time the subdivision/land development was approved.

(Ord. 2009-01-51, 2/12/2009)

§109. Landowner Responsibility.

The granting of an exemption, permit, or approval by the Township does not relieve the applicant from the responsibility of preventing injury to health, safety or other property.

(Ord. 2009-01-51, 2/12/2009)

§110. Waivers, Variances, and Appeals.

The provisions of this Part 1 are intended as a minimum standard providing for the protection of the public health, safety and general welfare. If, for some reason, adherence to this Part 1 causes undue hardship as it applies to a particular property, the applicant may request a waiver or variance from this Part 1. The Huntington Township Board of Supervisors may grant a waiver of stormwater management requirements if the applicant submits a written request and sufficient documentation to support that such a request is valid. The request must state, in full, the exact waiver or variance therefrom which is requested. A copy of the waiver or variance request is to be sent to the Township Engineer and Planning Commission for review and comment prior to approval.

(Ord. 2009-01-51, 2/12/2009)

§111. Definitions.

1. For the purpose 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 word "person" includes an individual, firm, association, organization, partnership, trust, company, corporation, or any other similar entity.

   D. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.

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

   ACCELERATED EROSION — the removal of the surface of the land through the combined action of man's activity and the natural processes at a rate greater than would occur because of the natural process alone.

   AGRICULTURAL ACTIVITIES — the work of producing crops and raising livestock, including tillage, plowing, disking, harrowing, pasturing and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

   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 or developer who has filed an application for approval to engage in any regulated activities as defined in §103 of this Part 1.

BMP (BEST MANAGEMENT PRACTICE) — stormwater structures, facilities and techniques to maintain or improve the water quality of surface runoff.

CHANNEL EROSION — the widening, deepening, and headward cutting of small channels and waterways due to erosion caused by moderate to large floods.

CISTERN — an underground reservoir or tank for storing rainwater.

CONSERVATION DISTRICT — the Adams County Conservation District.

CULVERT — a structure, with appurtenant works, which carries a stream under or through an embankment or fill.

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

DESIGNEE — the agent of Huntington Township involved with the administration, review or enforcement of any provisions of this Part 1 by contract or memorandum of understanding.

DESIGN STORM — the magnitude and temporal distribution of precipitation from a storm event, measured in probability of occurrence (e.g., a five-year storm) and duration (e.g., 24 hours), used in the design and evaluation of stormwater management systems.

DETENTION BASIN — an impoundment structure designed to manage stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate.

DETENTION DISTRICT — those subareas in which some type of detention is required to meet the plan requirements and the goals of Act 167.

DEVELOPER — a person, partnership, association, corporation, or other entity, or any responsible person therein or agent thereof, that undertakes any regulated activity of this Part 1.

DEVELOPMENT SITE — the specific tract of land for which a regulated activity is proposed.

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

DRAINAGE CONVEYANCE FACILITY — a stormwater management facility designed to transmit stormwater runoff, and shall include streams, channels, swales, pipes, conduits, culverts, storm sewers, etc.

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

DRAINAGE PERMIT — a permit issued by the Township governing body after the drainage plan has been approved. Said permit is issued prior to or with the final Township approval.

DRAINAGE PLAN — the documentation of the stormwater management system, if any, to be used for a given development site, the contents of which are established in §112.

EARTH DISTURBANCE — any activity, including but not limited to construction, mining, timber harvesting and grubbing, which alters, disturbs, and exposes the existing land surface.

EROSION — the movement of soil particles by the action of water, wind, ice, or other natural forces.

EROSION AND SEDIMENT POLLUTION CONTROL PLAN — a plan which is designed to minimize accelerated erosion and sedimentation.

EXISTING CONDITIONS — the initial condition of a project site prior to the proposed construction. If the initial condition of the site is undeveloped land, the land use shall be considered as "meadow" in good condition, unless the natural land cover is proven to generate lower curve numbers or Rational "C" values, such as forested lands.

FLOOD — a general but temporary condition of partial or complete inundation of normally dry land areas from the overflow of streams, rivers, and other waters of this commonwealth.

FLOODPLAIN — any land area susceptible to inundation by water from any natural source or delineated by applicable Department of Housing and Urban Development, Federal Insurance Administration, Flood Hazard Boundary Maps, mapped as being a special flood hazard area. Also included are areas that comprise Group 13 soils, as listed in Appendix A of the Pennsylvania Department of Environmental Protection (PA DEP).

FLOODWAY — the channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the one-

hundred-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 one-hundred-year-frequency floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

FOREST MANAGEMENT/TIMBER OPERATIONS — planning and activities necessary for the management of forestland. These include timber inventory and preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation and re-forestation.

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

GRADE — a slope, usually of a road, channel or natural ground, specified in percent, and shown on plans as specified herein. (TO) GRADE – to finish the surface of a roadbed, top of embankment or bottom of excavation.

GRASSED WATERWAY — a natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses, used to conduct surface water from cropland.

GROUNDWATER RECHARGE — replenishment of existing natural underground water supplies.

IMPERVIOUS SURFACE — a surface that prevents the percolation of water into the ground.

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

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

INLET — a surface connection to a closed drain; a structure at the diversion end of a conduit; the upstream end of any structure through which water may flow.

LAND DEVELOPMENT —

A. The improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving a group of two or more buildings, or the division or allocation of land or space 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;

B. Any subdivision of land; or

C. Development in accordance with Section 503(1.1) of the Pennsylvania Municipalities Planning Code.[1]

LAND/EARTH DISTURBANCE — any activity involving grading, tilling, digging, or filling of ground or stripping of vegetation or any other activity that causes an alteration to the natural condition of the land.

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

MUNICIPALITY — Huntington Township, Adams County, Pennsylvania.

NON-POINT-SOURCE POLLUTION — pollution that enters a water body from diffuse origins in the watershed and does not result from discernible, confined, or discrete conveyances.

NRCS — the Natural Resource Conservation Service (previously SCS).

OPEN CHANNEL — a drainage element in which stormwater flows with an open surface. Open channels include but shall not be limited to natural and man-made drainageways, swales, streams, ditches, canals, and pipes flowing partly full.

OUTFALL — the point where water flows from a conduit, stream, or drain.

OUTLETS — points of water disposal from a stream, river, lake, tidewater or artificial drain.

PARKING LOT STORAGE — involves the use of impervious parking areas as temporary impoundments with controlled release rates during rainstorms.

PEAK DISCHARGE — the maximum rate of stormwater runoff from a specific storm event.

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

PLANNING COMMISSION — the Planning Commission of Huntington Township.

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[1] **Editor's Note: See 53 P.S. §10503.**

PMF (PROBABLE MAXIMUM FLOOD) — The flood that may be expected from the most-severe combination of critical meteorologic and hydrologic conditions that is reasonably possible in any area. The PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of data obtained from the National Oceanographic and Atmospheric Administration (NOAA).

RATIONAL FORMULA — a rainfall-runoff relation used to estimate peak flow.

REGULATED ACTIVITIES — actions or proposed actions that have an impact on stormwater runoff and that are specified in §103 of this Part 1.

RELEASE RATE — the percentage of the predevelopment peak rate of runoff from a site or subarea to which the postdevelopment peak rate of runoff must be reduced to protect downstream areas.

RETENTION BASIN — an impoundment in which stormwater is stored and not released during the storm event. Stored water may be released from the basin at some time after the end of the storm.

RETURN PERIOD — the average interval, in years, within which a storm event of a given magnitude can be expected to recur. For example, the twenty-five-year return period rainfall would be expected to recur on the average once every 25 years.

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.

ROOFTOP DETENTION — temporary ponding and gradual release of stormwater falling directly onto flat roof surfaces by incorporating controlled-flow roof drains into building designs.

RUNOFF — any part of precipitation that flows over the land surface.

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

SEDIMENT BASIN — a barrier, dam, and retention or detention basin located and designed to retain rock, sand, gravel, silt, or other material transported by water.

SEDIMENT POLLUTION — the placement, discharge or any other introduction of sediment into the waters of the commonwealth occurring from the failure to design, construct, implement or maintain control measures and control facilities in accordance with the requirements of this Part 1.

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

SHEET FLOW — runoff that flows over the ground surface as a thin, even layer, not concentrated in a channel.

SOIL-COVER-COMPLEX METHOD — a method of runoff computation developed by the NRCS that is based on relating soil type and land use/cover to a runoff parameter called Curve Number (CN).

SOIL GROUP, HYDROLOGIC — a classification of soils by the Soil Conservation Service into four runoff potential groups. The groups range from A soils, which are very permeable and produce little runoff, to D soils, which are not very permeable and produce much more runoff.

SPILLWAY — a depression in the embankment of a pond or basin which is used to pass a peak discharge greater than the maximum design storm controlled by the pond.

STORAGE INDICATION METHOD — a reservoir routing procedure based on solution of the continuity equation (inflow minus outflow equals the change in storage), with outflow defined as a function of storage volume and depth.

STORM FREQUENCY — the number of times that a given storm event occurs or is exceeded on the average in a stated period of years. See "return period."

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

STORMWATER — the total amount of precipitation reaching the ground surface.

STORMWATER MANAGEMENT FACILITY — any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include but are not limited to detention and retention basins, open channels, storm sewers, pipes, and infiltration structures.

STORMWATER MANAGEMENT SITE PLAN — the plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the particular site of interest according to this Part 1.

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

SUBAREA — the smallest drainage unit of a watershed for which stormwater management 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, 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 dwellings, shall be exempt.

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

TIMBER OPERATIONS — see "forest management."

TIME OF CONCENTRATION (Tc) — the time for surface runoff to travel from the hydraulically most distant point of the watershed to a point of interest within the watershed. This time is the combined total of overland flow time and flow time in pipes or channels, if any.

WATERCOURSE — a stream of water, river, brook, creek, or a channel or ditch for water, whether natural or man-made.

WATERS OF THE COMMONWEALTH — any and all rivers, streams, creeks, rivulets, ditches, watercourses, storm sewers, dammed water, lakes, 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.

WETLAND — those areas that are inundated or saturated by surface water 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, fens, and similar areas.

(Ord. 2009-01-51, 2/12/2009)

§112. Plan Requirements.

Stormwater management plans shall be prepared by professionals registered in the Commonwealth of Pennsylvania to perform such duties. Plans that require engineering expertise shall be sealed by a registered professional engineer with expertise in this field. The plan shall show, be accompanied by, or be prepared in accordance with the following:

A. General.

(1) The plan shall be clearly and legibly drawn at a maximum scale of 50 feet to the inch. Profile plans shall maintain a ratio of 1:10 vertical to horizontal.

(2) The name, address, and telephone number of the landowner, applicant, and individual who prepared the plan.

(3) The plan date and date of revisions to the plan, North point, graphic scale and written scale. All maps shall be drawn at a commonly used engineering scale.

(4) Note on the plan indicating any area that is proposed to be offered for dedication to the Township. Any area that is an easement and will not be offered for dedication shall be identified, along with a statement that the Township is not responsible for the maintenance of any area not dedicated to and accepted for public use.

(5) A certificate, signed and sealed by an individual registered in the Commonwealth of Pennsylvania and qualified to perform such duties, indicating compliance with the provisions of this Part 1.

B. Existing Features.

(1) Names, locations and dimensions of all existing watercourses, drainage facilities, floodplains, wetlands, drainage easements, and other significant features located either within or adjacent to the property or 200 feet from the property.

(2) The size, slope, capacity, and condition of the existing stormwater management system and any other facility that may be used to convey storm flows.

(3) Soils types as designated by the United States. Department of Agriculture, Soil Conservation Service, Soil Survey of Adams County.

(4) Designation of the location of on-site and off-site subwatersheds.

(5) Designation of the travel flow path used for calculation of the time of concentration for the on-site and off-site subwatersheds.

C. Proposed Features.

(1) Proposed changes to land surface and vegetative cover, including areas to be cut or filled.

(2) Plans and profiles of proposed stormwater management facilities, including horizontal and vertical location. Additionally, a detail with all pertinent construction requirements shall be provided for outlet struc-

tures. This information shall be of the quality required for the construction of all facilities.

(3) The size, slope, capacity, material, elevation, and condition of the proposed stormwater management system and any other facility that may be used to convey storm flows. This information shall include invert elevations and top of grade elevations.

(4) Plans and profiles of all erosion and sedimentation control measures, temporary as well as permanent.

(5) Designation of the location of on-site subwatersheds.

(6) Designation of the location of the travel flow path used for calculation of the time of concentration for the on-site subwatersheds.

D. Written Report and Calculations.

(1) Calculations, assumptions, criteria, methodology, and references used in the design of stormwater management facilities, the establishment of capabilities, and the predevelopment and postdevelopment peak discharge. This information shall include data on all subwatersheds.

(2) Analysis of the condition and capacity of downstream drainage facilities in which the discharge of stormwater from the project site will be directed.

(3) For all basins, a plotting or tabulation of the storage volumes and discharge curves, with corresponding water surface elevations, inflow hydrographs, and outflows hydrographs.

(4) Soil profiles and characteristics, including depth to limiting factors such as seasonal high-water table and rock, shall be provided for all proposed subsurface disposal systems and retention facilities or for detention basins which hold two acre-feet or more of water or have an embankment that is six feet or more in height. This data shall provide 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. The Township, in this case, may also require an analysis; when required, it shall be performed in accordance with the standards required by the Pennsylvania Department of Environmental Protection for performance of a dam breach analysis.

(5) The following requirements apply to all proposed groundwater recharge methods of stormwater management, such as seepage pits, beds, trenches, leaching wells, or retention basins:

(a) Representative percolation tests must be made throughout the proposed area. At least one percolation test must be included in each soil group and at locations agreed to by the Township Engineer. Testing shall follow the guidelines for on-lot sewage systems as established by the Pennsylvania Department of Environmental Protection.

(6) A description of all erosion and sedimentation control measures, temporary as well as permanent, including the staging of land-moving activities, sufficient in detail to clearly indicate their function. All erosion and sedimentation control measures shall conform to the requirements of the Pennsylvania Department of Environmental Protection, Soil Erosion and Sedimentation Control Manual.

(7) A description of an ownership and maintenance program, in a recordable form, that clearly sets forth the ownership and maintenance responsibilities for all temporary and permanent stormwater management facilities, which shall include the following:

(a) A description of the method and extent of the maintenance requirements.

(b) Identification of an individual, corporation, homeowners' association or other entity responsible for ownership and maintenance.

(c) When facilities are to be maintained by any private entity, a copy of the legally binding document which provides that the Township shall have the right to:

[1] Inspect the facilities at any time.

[2] Require the private entity to take corrective measures and assign the private entity a reasonable time period for any necessary action.

[3] Authorize maintenance to be done by the Township or an agent or contractor of the Township and the liening of the cost of the work against the properties of the private entity responsible for the maintenance.

(d) Establishment of suitable easements for access to stormwater management facilities.

(e) When an assignment of responsibility is made to the Township, it must include an acknowledgment of its formal acceptance of the responsibility. This document shall be recorded in the office

of the Recorder of Deeds for Adams County upon issuance of a plan approval. In all cases, the document shall be recorded prior to the initiation of construction and shall be fully effective at the postconstruction period.

(8) A Pennsylvania Department of Transportation highway occupancy permit for any stormwater management facility proposed within the right-of-way of any state road.

(9) Acknowledgment that an NPDES, DEP permit or other soil erosion and sediment pollution control approval is not required by law; or, if such approval is required by law, then a true and correct copy of such approval shall be provided to the Township.

(10) Notification of approval from the applicable state and federal agencies for any proposed encroachment into a wetland.

(11) A schedule for installation of the control measures and devices. In all cases, the proposed stormwater management devices must be completed prior to the construction of additional impervious areas.

(12) If diffused flow is proposed to be directed onto adjacent property, the developer must document that adequate downstream conveyance facilities exist to safely transport the discharge or otherwise prove that no erosion, sedimentation, or flooding will result from the discharge.

(Ord. 2009-01-51, 2/12/2009)

§113. Design and Installation Standards.

1. Predevelopment vs. Postdevelopment.

A. A predevelopment and postdevelopment comparison for Type II, twenty-four-hour, one-, two-, five-, ten-, twenty-five-, fifty-, and one-hundred-year-frequency storm events shall be provided. The twenty-four-hour rainfall values are as follows:

Frequency (years)	Rainfall (inches)
1	2.5
2	3.0
5	3.9
10	4.8
25	5.3

Frequency (years)	Rainfall (inches)
50	6.0
100	6.7

B. Both hydrographs and peak discharges shall be computed. For watersheds of less than 10 acres, the Rational Formula may be used to compute flow. For larger watersheds, the latest version of Soil Conservation Service Technical Release No. 55, Urban Hydrology for Small Watersheds, or other method approved by the Township Engineer shall be used.

2. Stormwater Collection System.

A. The design of stormwater collection and conveyance facilities shall be governed by the following criteria:

(1) Peak Discharge.

(a) Peak discharge shall be computed using the Rational Formula:

$$Q=CIA$$

Where:

Q = Peak discharge in cubic feet per second

C = Runoff coefficient expressed as the ratio of peak runoff rate to the average amount of rainfall over a period of time equal to the time of concentration

I = Average rainfall intensity in inches per hour for a time equal to the time of concentration

A = Drainage area in acres

(b) In general, the procedure from the Pennsylvania Department of Transportation Design Manual, Part 2, shall be followed.

[1] Runoff coefficients shall be computed as a weighted average of conditions which represent maximum development potential on the property. Soil types, ground slope, and storm frequency shall all be considered in the selection of runoff coefficients.

[2] Storm intensity (I) shall be computed as a function of the time of concentration (Tc). A Tc of five minutes shall be used in determining intensity, unless the drainage area

parameters justify the use of a greater value. Use of a Tc greater than five minutes shall be as approved by the Township Engineer.

(2) Storm Frequency.

(a) The following storm frequencies are to be used for design:

[1] Local streets: 10 years.

[2] Major intersections of local streets: 25 years.

[3] Collector streets and arterial streets: 50 years.

(b) Alternate criteria may be required following recommendation of the Township Engineer. In addition, functional classification of streets, for the purpose of determining storm frequencies, shall be as interpreted by the Township Engineer.

(3) For storm sewers that will be dedicated to the Township, all pipe material shall either be reinforced concrete or smooth lined corrugated polyethylene pipe, to be as determined by the Township. Standards as referenced from ASTM or other sources acceptable to the Township Engineer shall be specified.

(4) The minimum pipe size for storm sewers shall be 15 inches in diameter, unless otherwise approved by the Township Engineer.

(5) Installation.

(a) Storm sewers shall be installed a sufficient time in advance of final street paving in order to allow for settlement of the trench.

(b) Installation shall be in accordance with manufacturer's recommendations, PennDOT Publication 408 and RC standards, or as specified by the Township Engineer.

(c) Storm sewers to be dedicated to the Township shall be placed on a minimum of six inches of stone bedding. Stone backfill shall be required to a point of 12 inches minimum over the top of the pipe for pipes which will not be located under streets or parking lots and to the top of finished subgrade for pipes which will be beneath streets or parking lots. Backfill shall be compacted in lifts and shall be subject to inspection by the Township Engineer.

(d) The minimum cover from the top of the pipe to the top of subgrade shall be 12 inches.

(6) Safety features shall be incorporated into the storm sewer system as necessary.

(7) The minimum thickness of any corrugated steel or metal pipe shall be 16 gauge or as otherwise required by the Township for anticipated load conditions.

3. Inlets, Manholes, and Junctions.

A. In general, inlets, manholes, grates, covers, frames and the like shall conform to the Pennsylvania Department of Transportation Standard Specifications, Publication 408 and RC Standards. Design shall be performed in accordance with the Pennsylvania Department of Transportation or Federal Highway Administration standards. Additional/alternate criteria may be required following review by the Township Engineer.

(1) Inlets shall be spaced such that they are not subject to flows higher than five cubic feet per second or at a distance greater than 400 feet along curbed streets and at low points on sag vertical curves with an inlet on each side of the street. Additional inlets shall be placed at the upper side of street intersections to prevent stormwater from crossing the intersection. Inlets are not allowed on the intersection radii. In no case shall inlets be placed at a location where they function at less than 65% efficiency based on criteria in the PennDOT Design Manual. Design shall be such that the maximum allowable spread of water on streets shall not exceed 1/2 of the travel lane.

(2) Inlets shall have weep holes placed at the appropriate elevations to drain the bottom of the inlet box and the subgrade prior to placing the base and surface courses.

B. Where structures are subject to traffic loads, the structure shall be traffic rated.

C. Inlet tops in residential developments shall be bicycle safe, unless otherwise approved.

D. Manholes shall not be placed more than 500 feet apart. Additionally, manholes shall be placed at points of change in the horizontal and/or vertical direction of storm sewers. Inlets may be substituted for manholes where they will serve as a means of intercepting runoff.

E. If less than a forty-eight-inch diameter, curves in pipes or box culverts without junction are prohibited. Tee joints, elbows, and wyes are always prohibited.

4. Channels and Culverts.

A. In cases where drainage is collected by means of a headwall, and inlet or outlet conditions control, the pipe shall be designed as a culvert.

(1) The minimum diameter of the culvert shall be 18 inches. The design shall be in accordance with the United States Federal Highway Administration design procedure.

(2) The maximum HW/D ratio for inlet control shall be 1.25 or such that the water surface elevation is 1/2 foot below the edge of the street grade during a twenty-five-year storm event, whichever is more stringent.

(3) Headwalls and endwalls shall be provided for all culverts, unless otherwise approved by the Township Engineer. Material shall be reinforced concrete, unless otherwise approved.

(4) Culvert pipe and material shall be the same as that required for storm sewers.

(5) All applicable nomographs and supporting documentation shall be submitted.

B. Manning's equation shall be used for the design of all open channels. Complete calculations shall be submitted which detail flow, depth, and velocity. For channels and swales, design for erosion control must be provided.

C. All channels shall be designed to prevent erosion of the channel bottom and sides. The flow velocity in all vegetated drainage channels shall not exceed the maximum permissible velocity to prevent soil erosion. Stabilization techniques such as riprap, sodding, geofabrics and/or premanufactured products shall be utilized where necessary to minimize erosion potential.

D. The design of swales and channels shall, as a minimum, conform to the design procedures as outlined by the Federal Highway Administration and the Pennsylvania Department of Environmental Protection, Bureau of Soil and Water Conservation, Erosion and Sediment Pollution Control Manual.

E. Where swales are installed, and vegetative stabilization has not or will not occur between November 1 and March 1, other means of temporary stabilization shall be provided.

F. Design criteria for swales and channels shall be the same as that required for storm sewers.

(Ord. 2009-01-51, 2/12/2009)

§114. Stormwater Management Facilities.

1. General Design Criteria.

   A. Peak discharge and runoff shall be computed using the Soil-Cover-Complex Method contained in Urban Hydrology for Small Watersheds, Technical Release No. 55, published by the Engineering Division, Soil Conservation Service, United States Department of Agriculture. Alternate methodology may be used, subject to approval by the Township Engineer.

   B. Any preexisting pervious areas shall be assumed to be "meadow" for purposes of establishing an existing ground cover condition.

   C. Preexisting pervious or impervious areas where stormwater management controls have been previously provided may be included as existing conditions in predevelopment runoff calculations. However, if stormwater management controls have not been previously provided, ground cover shall be considered as "meadow."

   D. The rate and volume of stormwater runoff from any proposed subdivision and/or land development shall not exceed the rate and volume of runoff prior to development (i.e., zero increase in runoff and volume) for the one-, two-, five-, ten-, twenty-five-, and fifty-year storm event frequencies.

   E. Applicants are encouraged to include stormwater quality considerations in the design of stormwater management facilities.

      (1) Where required by the Township, following review by the Township Engineer, where high concentrations of oils, grease, metals and sediment may occur, the design shall include provisions for the interception of such constituents prior to discharge into surface waterways or municipal storm sewers.

   F. Stormwater shall not be rerouted or concentrated in a manner which is inconsistent with downstream conditions or where downstream properties are likely to be affected. In addition, the proposed stormwater discharge at the perimeter of the site shall not exceed the capacity of any existing facility, nor shall it alter the predevelopment flow characteristics.

   G. All new concentrated discharges of stormwater onto adjacent properties shall be within existing storm sewers or channels. The Township may require written acknowledgment or easement from adjacent property owners in the event that these conditions are not met.

(Ord. 2009-01-51, 2/12/2009)

§115. Detention Basins.

1. Basin Design Criteria.

   A. Basins shall provide control of postdevelopment peak runoff rates as previously specified.

   B. Basins shall be designed to safely convey the quantity of stormwater runoff resulting from a one-hundred-year, twenty-four-hour storm under full development conditions, neglecting the discharge capacity of the principal outlet structure. Contributing flow to the basin shall also include any off-site runoff which may enter the basin.

   C. The design of the facility shall be verified by routing the one-, two-, five-, ten-, twenty-five-, fifty-, and one-hundred-year-frequency postdevelopment storm hydrographs through the facility.

   D. The Modified PULS Routing Technique or other method approved by the Township Engineer shall be used for routing computations.

2. Basin Construction Standards.

   A. Basins shall not be located over any existing or proposed utility lines.

   B. The maximum slope of earthen embankments shall be 3:1, with 4:1 preferred. The top or toe of any slope shall be located a minimum of 15 feet from adjacent property lines, except for a downstream property line where there shall be sufficient additional distance for energy dissipation. Greater slopes may be allowed with the provision of a design basis which considers fill material and stabilization where approved by the Township Engineer. In areas which are not easily accessible for maintenance, side slopes shall not exceed 5:1.

   C. Where possible, the side slopes and basin shape shall blend with the natural topography.

   D. The minimum top width of detention basin berms shall be six feet.

   E. All basins shall have provisions for dewatering so as not to create unmaintainable conditions. The minimum grade of the basin floor shall be 2% to ensure proper drainage towards the outlet structure. This requirement may be waived if a paved low-flow channel (at 1% grade) is provided.

   F. All submitted basin plans shall indicate the construction specifications and compaction requirements to be used during construction. All earth fill dams shall be designed and certified by a registered professional engineer. Construction specifications shall be reviewed and approved by the Township Engineer.

G. A cutoff trench shall be excavated along the center line of any dam on an earth fill embankment. The minimum depth shall be three feet. The minimum bottom width shall be 10 feet or wide enough to permit operation of compaction equipment.

H. A minimum of six inches of topsoil shall be placed on all areas affected by the basin construction (i.e., basin floor, side slopes, top of berm, and the like) to allow for the establishment of vegetation.

I. All basins shall be stabilized using methods acceptable to the USDA Soil Conservation Service.

J. The maximum water depth of a finished detention basin (measured from the lowest point in the basin floor to the crest of the emergency spillway) shall not exceed eight feet, unless otherwise approved by the Township Engineer.

K. Fencing may be required where the Township, following consultation with the Township Solicitor and/or Township Engineer, determines that circumstances warrant a concern for Township liability. Fencing shall be as required by the Township for the specific case. The height of such fence shall be four feet to six feet, as required, and it shall include a locking man gate and vehicle access.

L. A minimum of one foot of freeboard shall be provided above the basin water surface elevation during a one-hundred-year-frequency storm.

M. Minimum floor elevations for all structures shall be two feet minimum above the basin water surface elevation during a one-hundred-year-frequency storm. If basements will be provided, detailed calculations and waterproofing design shall be provided which address the effects of stormwater on the structure.

N. The Township may, upon recommendation of the Township Engineer, impose additional requirements on earth fill dams for the safety and welfare of the Township.

O. For sites of geologic concern, a geotechnical analysis and design of the site as it relates to the proposed basin shall be provided.

3. Emergency Spillway Standards.

A. The minimum freeboard, or the distance between the design flow elevation and the top of the settled basin embankment, shall be one foot for a one-hundred-year-frequency storm.

B. Emergency spillway design should be based on a one-hundred-year design storm when neglecting the capacity of the outlet structure and outfall culvert.

C. Emergency spillways shall be constructed on undisturbed earth where possible. Emergency spillways shall be constructed of vegetated earth, reinforced concrete or concrete mound slabs. Emergency spillways shall not discharge stormwater over earthen fill or other easily erodible material without adequate protection against soil erosion. Detailed calculations and design shall be submitted.

4. Outlet Pipes and Structures. The following measures shall be incorporated into the design and construction of all outlet structures and pipes. Supporting calculations and drawings shall be submitted.

A. Antiseep collars shall be installed around all outlet pipes through embankments. The antiseep collars and their connections to the pipe barrel shall be watertight. Design calculations in accordance with the USDA Soil Conservation Service shall be submitted.

B. Temporary sedimentation controls shall be provided during construction to prevent the flow of sediment-laden runoff through the basin outlet pipe. Such measures may include temporary riser pipes, rock-filled gabions, plywood stand boxes, silt fences, skimmers and the like. The design of such measures shall comply with the requirements of the Adams County Conservation District.

C. Energy dissipation shall be provided at the outlet of detention basins, along outfall channels, and at the discharge end of all conveyance pipes.

D. Outlet control structures shall be constructed to prevent flotation.

E. Outlet control structures shall be equipped with a childproof, nonclogging, removable, trash rack for all openings larger than 12 inches in diameter.

F. All pipes through earthen embankments shall be of a type for which watertight joint systems are available. Outfall pipes and culverts shall be reinforced concrete, unless otherwise approved by the Township Engineer.

(Ord. 2009-01-51, 2/12/2009)

§116. Subsurface Disposal/Retention Basin Systems.

1. General Requirements. Subsurface disposal or surface infiltration of stormwater shall be allowed only where the applicant demonstrates that soils in that area are suitable for such control measures. Test pits shall be required to establish a soil profile which shall identify any potential limiting zones such as seasonal high-

water table, rock presence, spring activity, sinkholes, etc. Soil testing shall also be performed to determine permeability or percolation rates at locations where subsurface facilities are planned. All percolation tests shall be conducted in accordance with the Pennsylvania Department of Environmental Protection rules and regulations regarding subsurface disposal of wastewater. Tests shall be performed by a representative of the Township Engineer, as directed by the Township, or an individual certified to perform such tests, in which case the tests will be observed by the Township Engineer. The Township reserves the right to disallow the use of subsurface disposal or retention basin systems in areas which are deemed to be unsatisfactory.

2. Design Criteria. Various methods of subsurface disposal may be utilized, based on the applicability and efficiency of each. Acceptable methods include but are not limited to infiltration trenches, basins, and/or seepage beds and the like. In all instances, the applicants shall provide calculations to verify that facility is sized correctly to control stormwater runoff. Where required by the Township Engineer, infiltration/permeability rates shall be accounted for in the design of subsurface disposal or retention basins.

   A. Design criteria for subsurface disposal shall be that adequate storage capacity shall be provided to accommodate the increase in runoff volume over the area in which ground cover is affected by development for a ten-year-frequency storm. Increase in runoff volume shall be calculated by determining the runoff depth for pre- and postdevelopment conditions. The methodology shall be as required under §114, Stormwater Management Facilities.

   B. Additional design criteria for retention basins shall be the same as for detention basins.

3. Installation Requirements. The following procedures and materials shall be required for all subsurface facilities:

   A. Excavation for an infiltration facility shall be performed with equipment which will not compact the bottom of the seepage bed, infiltration trench or like facility.

   B. The bottom of the bed or trench shall be roughened prior to placement of aggregate.

   C. Only clean, open-graded aggregate, free of fines, shall be used in subsurface systems.

   D. The top, sides, and bottom of all seepage beds, infiltration trenches, or like facilities shall be covered with a drainage filtration fabric which meets the requirements of Pennsylvania Department of Transportation Publication 408 for Class I geofabrics.

E. All pipes leading into subsurface drainage systems shall be equipped with screening devices to prevent debris from entering the system.

F. The bottom of all subsurface disposal or retention basin systems shall be a minimum of 12 inches above the limiting zone as established by the site-specific soil profile. Depths of less than 12 inches above the limiting zone will only be allowed where the developer provides a written report, certified by a registered professional engineer, geologist, or hydrogeologist, which certifies that the condition will not create an environmental hazard.

G. Inspection points, cleanouts and overflow facilities shall be provided for subsurface disposal systems.

H. All subsurface stormwater disposal systems or retention basins shall be located a minimum of 100 feet from any potable water wells. The owner or developer shall be responsible for the proper installation, operation, and maintenance of all subsurface stormwater disposal facilities. If, in the opinion of the Township, the system is not functioning properly, the owner or developer shall be required to make necessary improvements and/or corrections or provide a new alternate facility which does function properly. Ownership and maintenance shall be the same as under §114, Stormwater Management Facilities.

4. Basins with Permanent Pools (Wet Basins).

A. Basins designed to have a permanent pool of water stored in the reservoir shall conform to the design standards of detention or retention basins. Where deemed to be necessary, after consulting with the Township Engineer, the Township may impose additional criteria for design and construction of wet basins. Earthen embankment designs shall be sealed by a registered professional engineer experienced in such design.

B. Embankments shall have a slope not exceeding four horizontal to one vertical.

C. Adequate stabilization shall be provided to control anticipated wave action.

(Ord. 2009-01-51, 2/12/2009)

§117. Erosion and Sediment Pollution Control.

1. General Requirements. Where required by the Township, all earthmoving activities, as identified in this section, shall be reviewed and approved by the Adams County Soil Conservation District. In addition, a copy of the erosion control plan shall be submitted to the Township Engineer for review and comment.

2. Design Criteria. Design criteria and drawing requirements shall conform to the Pennsylvania Department of Environmental Protection, Soil Erosion and Sedimentation Control Manual, and as supplemented by the Adams County Conservation District and the Township Engineer. The following practices shall be incorporated (at a minimum) into the erosion control plan:

   A. Silt fences or silt socks shall be utilized wherever straw bale silt barriers are required and shall be securely anchored in place.

   B. Temporary and permanent seeding and mulch specifications shall be noted on all plans. The specifications shall include lime and fertilizer, rates of application and other provisions regarding stabilization procedures and materials.

   C. Stone base course for driveways, roadways, streets, and parking lots shall be placed as soon as possible to prevent soil erosion of the subgrade.

   D. Temporary vegetation, mulching, sodding or other measures shall be used to protect critical areas during construction. (Critical areas are those areas where the soil is extremely vulnerable to soil erosion.)

   E. Stripping of vegetation, regrading or other development shall be done in such a way that will minimize soil erosion.

   F. Earthmoving activities shall be minimized where possible and practical to preserve desirable natural features and the topography of the site.

   G. Disturbed areas shall be stabilized with vegetation, mulch, erosion control fabric, and the like as soon as possible following completion of earthmoving activities.

3. If a conflict arises between this section and Soil Conservation District requirements, the more stringent of the two shall apply.

(Ord. 2009-01-51, 2/12/2009)

§118. Easements.

1. Easements shall be provided where stormwater or surface water drainage facilities are existing or proposed, whether located within or beyond the boundaries of the property. Easements for maintenance of pipes and culverts shall run from outlet to inlet. Swales which receive runoff from more than one lot must be provided with an easement.

2. The plan shall comply with the requirements of Chapter 22, Subdivision and Land Development, and shall be adequately designed to provide area for the collection

and discharge of water; the maintenance, repair, and reconstruction of the drainage facilities; and the passage of machinery for such work.

3. Easements shall include a description of an ownership and maintenance program, in a recordable form, which clearly sets forth responsibility for all temporary and permanent stormwater management facilities. In the case of lot boundaries in subdivisions, it shall be the property owner's responsibility to maintain adequate drainage from the property to the point of access to the public right-of-way or to privately owned storm sewer drainage facilities.

(Ord. 2009-01-51, 2/12/2009)

§119. Floodplains.

1. All stormwater management plans shall conform to the floodplain standards specified in other applicable Township ordinances, regulations, or codes.

2. The downstream toe of any embankments shall be located outside of any designated floodway. In the absence of a designated floodway, the toe of the embankment shall be located a minimum of 60 feet from the top of any stream bank.

3. Where the embankment of any stormwater management facility is shown to be located within a designated floodplain as indicated on the Township Flood Insurance Rate Map, the following additional information shall be provided:

   A. Calculations shall be submitted to verify that the emergency spillway will be capable of passing the one-hundred-year flood flows associated with the floodplain as referenced from the Flood Insurance Rate Map as prepared by the Federal Emergency Management Agency; or, in the absence of detailed flow data in the Federal Emergency Management Agency Study, the applicant shall submit calculations, as prepared by a registered professional engineer, to substantiate such design. The calculations shall be reviewed by the Township Engineer. If determined to be necessary by the Township to protect downstream property, such calculations shall include a dam breach analysis prepared in accordance with criteria established by the Pennsylvania Department of Environmental Protection, Bureau of Waterways Engineering. In addition, the Township may refer such design to the Pennsylvania Department of Environmental Protection where determined to be necessary.

   B. Design drawings, sealed by a registered professional engineer, which indicate protection from flood flows associated with the one-hundred-year floodplain.

   C. All requirements of Chapter 22, Subdivision and Land Development, relating to structures within floodplains shall be met.

D. Calculations to indicate that the embankment will not cause an increase in the one-hundred-year flood water surface elevation.

E. Slope protection shall be incorporated into all embankments. For earthen embankments, this may include keyed riprap, geogrid, or other approved method. The design of such stabilization shall be certified by a registered geotechnical engineer.

(Ord. 2009-01-51, 2/12/2009)

§120. Inspection Requirements.

1. In the case of a subdivision or land development which is being administered under Chapter 22, Subdivision and Land Development, inspection shall be coordinated with the inspection of other improvements.

2. Inspections shall be required prior to the start of construction, during installation of materials and structures, and upon the completion of all improvements.

(Ord. 2009-01-51, 2/12/2009)

§121. As-Built Drawings.

Upon completion of all required improvements, the applicant shall submit an as-built plan showing the location, dimension and elevation of all stormwater management facilities. In addition, the plan shall indicate that the resultant grading, drainage structures and/or drainage systems, and erosion and sediment control practices, including vegetative measures, are in substantial conformance with the previously approved drawings and specifications. The applicant's engineer shall certify that the construction of the stormwater management facilities was completed in accordance with the plans and specifications as approved by the Township, including a certified volume of detention and retention basins, in which case a stage vs. storage table shall be shown on the as-built plan. Two copies of the plan shall be submitted, one for the Township's files and one for the Township Engineer.

(Ord. 2009-01-51, 2/12/2009)

§122. Guaranties.

1. Performance Guaranties.

A. The Township may, prior to approving a stormwater management plan, require a performance guaranty for installation of stormwater management facilities.

B. Where required, the developer shall file with the Board of Supervisors financial security in an amount sufficient to cover the costs of the stormwater management facilities. The administration of the financial security shall comply with the financial security provisions of Chapter 22, Subdivision and Land Development.

2. Maintenance Guaranties.

A. At the time a stormwater management plan is submitted for review by the Township, the ownership and maintenance responsibilities of all temporary and permanent stormwater management and soil erosion and sedimentation control facilities shall be clearly defined on the plan.

B. In all instances, maintenance of all stormwater management facilities during development and until completion shall be the sole responsibility of the developer and shall include but not be limited to:

(1) Removal of silt from all basins, traps or other structures or measures when 30% of capacity is filled with silt.

(2) Periodic maintenance of temporary control facilities as described in the soil erosion and sedimentation control plan, such as replacement of silt fencing, straw filters, or similar measures.

(3) Establishment or reestablishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not successfully been established.

(4) Installation of necessary controls to correct unforeseen problems caused by storm events within designed frequencies.

(5) Removal of all temporary measures and installation of permanent measures upon completion of the project.

(6) Requirements of the PA DEP Chapter 102 regulations.

C. Ownership of all stormwater management facilities after construction shall be the sole responsibility of the developer or the private landowner, as set forth in the plan. The only stormwater management facilities that are to be controlled by the Township shall be those facilities which have been offered for dedication and accepted for dedication by the Township. Future offers for dedication can only be made for facilities which meet Township specifications.

3. Private Facilities.

A. Prior to approval of any stormwater management plan, the Township shall require the applicant or owner to execute an inspection and maintenance

agreement binding on all subsequent owners of land served by the private stormwater facility. Such agreement shall provide for access to the facility at reasonable times for regular inspection by the Township or its authorized representative and for regular or special inspections of stormwater facilities to ensure that the facility is maintained in proper working condition to meet the approved design standards and any provisions or conditions established by the Township.

B. All executed agreements shall be approved by the Township Solicitor.

(Ord. 2009-01-51, 2/12/2009)

§123. Remedies.

Any person, partnership or corporation who is the owner of land on which a land disturbance activity for which a stormwater management plan is required, as defined in this Part 1, has occurred or is engaged in shall comply with the provision of this Part 1 and the approved stormwater management plan. Any land disturbance conducted in violation of this Part 1 or the approved stormwater management plan is hereby declared a public nuisance.

A. Suspension of a Stormwater Management Permit.

(1) Any permit issued under this Part 1 may be suspended by the Township based upon the following. Under the suspension of an approval, only such work as the Township so authorized may proceed. This work shall be limited to that which is necessary to correct the violation.

(a) The noncompliance with or failure to implement any provision of the stormwater management plan.

(b) A violation of any provision of this Part 1 relating to the project.

(c) The creation of any condition or the commission of any act during construction which constitutes or creates a hazard or nuisance or which endangers the life or property of others.

(2) The Township shall reinstate a suspended approval when:

(a) The Township has inspected and approved the corrections to the stormwater management facilities or the elimination of the hazard or nuisance; and

(b) The Township is satisfied that the violation of this Part 1 has been corrected.

(3) A permit will not expire while under suspension or noncompliance exists with the permit.

B. Revocation of a Stormwater Management Plan Approval.

(1) Based upon a report from the Township Engineer that the existing site condition or further construction is likely to endanger property or create hazardous conditions, the Township may:

(a) Revoke an approval.

(b) Require protective measures to be taken and assign a reasonable time period for the necessary action.

(c) Authorize protective measures to be done and lien all costs of the work against the property on which work is required.

(2) An approval which has been revoked cannot be reinstated. The applicant may apply for a reapproval in accordance with the processing procedures listed in this Part 1.

(3) In the event of a suspension or revocation of an approved stormwater management plan, the Township shall provide written notification of the violation to the landowner and/or applicant at his last known address. Such notification shall:

(a) Cite the specific violation, describe the requirements which have not been met, and cite the provisions of the ordinance relied upon.

(b) Identify the specific protective measures to be taken.

(c) Assign a reasonable time period necessary for action or, in the case of revocation, identify if the Township has authorized protective measures to be performed at cost to the landowner.

(d) Identify the right to request a hearing before the Board of Supervisors if aggrieved by the suspension or revocation.

C. Civil Remedies.

(1) Suits to restrain, prevent, or abate a violation of this Part 1 may be instituted in equity or at law by the Township. Such proceedings in equity or law may be initiated before any court of competent jurisdiction.

(2) In cases of emergency where, in the opinion of the court, the circumstances of the case require immediate abatement of the unlawful con-

duct, the court may, in its decree, fix a reasonable time during which the person responsible for the unlawful conduct shall correct or abate the same.

(Ord. 2009-01-51, 2/12/2009)

§124. Penalties.

1. Any person who shall violate any of the provisions of this Part 1 or who shall fail to comply with any written notice from Huntington Township which describes a condition of noncompliance shall be guilty of a summary offense and, upon conviction thereof, shall be subject to a fine payable to Huntington Township of not more than $1,000 for each violation, recoverable with costs. In default of payment of the fine, such person shall be liable to imprisonment for not more than 30 days. A new and separate violation shall be deemed to be committed for each day after receipt of the aforesaid notice that such violation exists.

2. In addition, the Township may institute injunctive or any other appropriate action or proceeding of law or in equity for the enforcement of this Part 1. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, writs, or other appropriate forms of remedy or relief.

(Ord. 2009-01-51, 2/12/2009)

§125. Liability.

Neither approval of a stormwater management plan nor compliance with the provisions hereto or any conditions imposed by the municipality shall relieve any person from any responsibility for damages otherwise imposed by law nor impose any liability upon Huntington Township or its officers, appointed professionals, and employees for damages to persons or property.

(Ord. 2009-01-51, 2/12/2009)

§126. Fees and Expenses.

1. Fees covering the cost to the Township for plan reviews, plan approval, and inspections shall be established by resolution of the Board of Supervisors. Fees shall be related to the engineering, legal and administrative costs incurred by the Township. Approval to begin any work shall not be issued until all the required fees have been paid. Fees payable by an applicant shall at a minimum cover:

   A. Review of the stormwater management/erosion and sedimentation control plan.

B. Site inspections.

2. In addition to the fees required in Subsection 1A and B of this section, the applicant shall deposit with the Township, before a plan is finally approved, a sum determined by the Township Engineer. The sum deposited by the applicant shall be used by the Township to cover the following costs:

   A. Inspection of required controls and improvements during construction.

   B. Final inspection upon completion of the controls and improvements required in the plan.

   C. Any additional work required to enforce the conditions of the approved plan, correct violations, and assure the completion of the stipulated remedial actions.

3. Any additional costs incurred by the Township in the administration of this section not paid by the applicant pursuant to the previous conditions shall be charged to the applicant and shall be paid promptly by the applicant.

4. Upon completion of construction of stormwater management facilities and upon final approval thereof by the Township Engineer, any monies in excess of Township costs or expenses deposited by the applicant shall be refunded to the applicant.

(Ord. 2009-01-51, 2/12/2009)

§127. Appeals.

1. Any person aggrieved by any action of the Township or its designated representatives relevant to the provisions of this Part 1 may appeal to the Board of Supervisors within 30 days of that action.

2. Any person aggrieved by any decision of the Board of Supervisors relevant to the provisions of this Part 1 may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the Board of Supervisors' decision.

(Ord. 2009-01-51, 2/12/2009)

§128. Enactment; When Effective.

This Part 1 was enacted and ordained at a regular meeting of Huntington Township on the 12th day of February 2009. This Part 1 shall take effect immediately.

(Ord. 2009-01-51, 2/12/2009)