

Chapter 23

Stormwater Management

Part 1 General Provisions

- §23-101. Short Title
- §23-102. Statement of Findings
- §23-103. Purpose
- §23-104. Statutory Authority
- §23-105. Applicability
- §23-106. Compatibility with Other Requirements

Part 2 Definitions

- §23-201. Definitions

Part 3 Stormwater Management for Water Quality

- §23-301. General Requirements for Stormwater Management
- §23-302. Permit Requirements by Other Government Entities
- §23-303. Erosion and Sediment Control During Regulated Earth Disturbance Activities
- §23-304. Water Quality Requirements after Regulated Earth Disturbance Activities Are Complete

Part 4 Stormwater BMP Operations and Maintenance Plan Requirements

- §23-401. General Requirements
- §23-402. Responsibilities for Operations and Maintenance of BMPs
- §23-403. Borough Review of BMP Operations and Maintenance Plan
- §23-404. Adherence to Approved BMP Operations and Maintenance Plan
- §23-405. Operations and Maintenance Agreement for Privately Owned Stormwater BMPs
- §23-406. Stormwater Management Easements
- §23-407. Recording of Approved BMP Operations and Maintenance Plan and Related Agreements
- §23-408. Borough Stormwater BMP Operation and Maintenance Fund

Part 5 Inspections and Right of Entry

- §23-501. Inspections
- §23-502. Right of Entry

**Part 6
Fees and Expenses**

- §23-601. General
- §23-602. Expenses Covered by Fees

**Part 7
Prohibitions**

- §23-701. Prohibited Discharges
- §23-702. Prohibited Connections
- §23-703. Roof Drains
- §23-704. Alteration of BMPs

**Part 8
Enforcement and Penalties**

- §23-801. Public Nuisance
- §23-802. Enforcement Generally
- §23-803. Suspension and Revocation of Permits and Approvals
- §23-804. Penalties

**Appendix 23-A
Low Impact Development Practices**

**Appendix 23-B
Stormwater Best Management Practices**

**Appendix 23-C
Performance Standards–Design Criteria–Maintenance of Facilities**

Part 1**General Provisions****§23-101. Short Title.**

This Chapter shall be known and may be cited as the “Hatboro Borough Stormwater Management Ordinance.”

(*Ord. 956, 3/28/2005, §101*)

§23-102. Statement of Findings.

The governing body of the Borough finds that:

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

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

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

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

E. Public education on the control of pollution from stormwater is an essential component in successfully addressing stormwater.

F. Federal and State regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).

G. Non-stormwater discharges to municipal separate storm sewer systems can contribute to pollution of waters of the Commonwealth by the Borough.

(*Ord. 956, 3/28/2005, §102*)

§23-103. Purpose.

The purpose of this Chapter is to promote health, safety, and welfare within the Borough and its watershed by minimizing the harms and maximizing the benefits

described in §23-102 of this Chapter, through provisions designed to:

- A. Manage stormwater runoff impacts at their source by regulating activities that cause the problems.
- B. Provide review procedures and performance standards for stormwater planning and management.
- C. Utilize and preserve the existing natural drainage systems as much as possible.
- D. Manage stormwater impacts close to the runoff source, which requires a minimum of structures and relies on natural processes.
- E. Focus on infiltration of stormwater, to maintain groundwater recharge, to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Maintain existing flows and quality of streams and watercourses.
- G. Meet legal water quality requirements under State law, including regulations at 25 Pa.Code, Chapter 93.4a, to protect and maintain “existing uses” and maintain the level of water quality to support those uses in all streams, and to protect and maintain water quality in “special protection” streams.
- H. Prevent scour and erosion of streambanks and streambeds.
- I. Provide for proper operations and maintenance of all permanent stormwater management BMPs that are implemented in the Borough.
- J. Provide a mechanism to identify controls necessary to meet the NPDES permit requirements.
- K. Implement an illegal discharge detection and elimination program to address non-stormwater discharges into the Borough’s separate storm sewer system.

(*Ord. 956, 3/28/2005, §103*)

§23-104. Statutory Authority.

The Borough is empowered to regulate land use activities that affect stormwater impacts by the authority of the Municipalities Planning Code, 53 P.S. §10101 *et seq.*

(*Ord. 956, 3/28/2005, §104*)

§23-105. Applicability.

1. This Chapter applies to any Regulated earth disturbance activities within the Borough, and all stormwater runoff entering into the Borough’s separate storm sewer system from lands within the boundaries of the Borough.

2. Earth disturbance activities and associated stormwater management controls are also regulated under existing State law and implementing regulations. This Chapter shall operate in coordination with those parallel requirements; the requirements of this Chapter shall be no less restrictive in meeting the purposes of this Chapter than State law.

(*Ord. 956, 3/28/2005, §105*)

§23-106. Compatibility with Other Requirements.

1. Approvals issued and actions taken under this Chapter do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation, or ordinance. To the extent that this Chapter imposes more rigorous or stringent requirements for stormwater management, the specific requirements contained in this Chapter shall be followed.

2. Nothing in this Chapter shall be construed to affect any of the Borough's requirements regarding stormwater matters which do not conflict with the provisions of this Chapter, such as local stormwater management design criteria (e.g., inlet spacing, inlet type, collection system design and details, outlet structure design, etc.). Conflicting provisions in other Borough ordinances or regulations shall be construed to retain the requirements of this Chapter addressing state water quality requirements. (*Ord. 956, 3/28/2005, §108*)

Part 2**Definitions****§23-201. Definitions.**

For the purposes of this Chapter, certain terms and words used herein shall be interpreted as follows:

A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender, and words of feminine gender include masculine gender.

B. The word “includes” or “including” shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.

C. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.

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 Borough.

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 Chapter. BMPs include, but are not limited to, infiltration, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, forested buffers, sand filters, and detention basins.

Borough—Hatboro Borough, Montgomery County, Pennsylvania.

Conservation District—the Montgomery County Conservation District.

DEP—the Pennsylvania Department of Environmental Protection.

Developer—a person that seeks to undertake any regulated earth disturbance activities at a project site in the Borough.

Development—see “earth disturbance activity.” The term includes redevelopment.

Development site—the specific tract of land where any earth disturbance activities in the Borough are planned, conducted, or maintained.

Earth disturbance activity—a construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, road maintenance, building construction and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

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

Erosion and sediment control plan—a plan for a project site which identifies BMPs to minimize accelerated erosion and sedimentation.

Groundwater recharge—replenishment of existing natural underground water supplies.

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.

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.

Outfall—“point source” as described in 40 CFR §122.2 at the point where the Borough’s storm sewer system discharges to surface waters of the Commonwealth.

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

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 Borough are planned, conducted, or maintained.

Redevelopment—earth disturbance activities on land which has previously been disturbed or developed.

Regulated earth disturbance activity—earth disturbance activity 1 acre or more with a point source discharge to surface waters or the Borough’s storm sewer system, or 5 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.

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.

Separate storm sewer system—a conveyance or system of conveyances (including roads with drainage systems, Borough streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) primarily used for collecting and conveying stormwater runoff.

State water quality requirements—as defined under state regulations—protection of designated and existing uses (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.

Stormwater–the surface runoff generated by precipitation reaching the ground surface.

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.

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

Watershed–region or area drained by a river, watercourse, or other body of water, whether natural or artificial.

(Ord. 956, 3/28/2005, §201)

Part 3**Stormwater Management for Water Quality****§23-301. General Requirements for Stormwater Management.**

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

A. Erosion and sediment control during the earth disturbance activities (e.g., during construction).

B. Water quality protection measures after completion of earth disturbance activities (e.g., after construction), including operations and maintenance.

2. No regulated earth disturbance activities within the Borough shall commence until the requirements of this Chapter are met.

3. Erosion and sediment control during regulated earth disturbance activities shall be addressed as required by §23-303.

4. Post-construction water quality protection shall be addressed as required by §23-304. Operations and maintenance of permanent stormwater BMPs shall be addressed as required by Part 4.

5. All best management practices (BMPs) used to meet the requirements of this Chapter shall conform to the State water quality requirements, and any more stringent requirements as determined by the Borough.

6. Techniques described in Appendix 23-A (Low Impact Development) of this Chapter are encouraged, because they reduce the costs of complying with the requirements of this Chapter and the State water quality requirements.

(*Ord. 956, 3/28/2005, §301*)

§23-302. Permit Requirements by Other Government Entities.

The following permit requirements may apply to certain regulated earth disturbance activities, and must be met prior to commencement of regulated earth disturbance activities, as applicable:

A. All regulated earth disturbance activities subject to permit requirements by DEP under regulations at 25 Pa.Code, Chapter 102.

B. Work within natural drainageways subject to permit by DEP under 25 Pa.Code, Chapter 105.

C. Any stormwater management facility that would be located in or adjacent to surface waters of the Commonwealth, including wetlands, subject to permit by DEP under 25 Pa.Code, Chapter 105.

D. Any stormwater management facility that would be located on a State highway right-of-way, or require access from a State highway, shall be subject to approval by the Pennsylvania Department of Transportation (PennDOT).

E. Culverts, bridges, storm sewers, or any other facilities which must pass or convey flows from the tributary area and any facility which may constitute a dam

subject to permit by DEP under 25 Pa.Code, Chapter 105.
(Ord. 956, 3/28/2005, §302)

§23-303. Erosion and Sediment Control During Regulated Earth Disturbance Activities.

1. No regulated earth disturbance activities within the Borough shall commence until approval by the Borough of an erosion and sediment control plan for construction activities.

2. DEP 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).

3. In addition, under 75 Pa.Code, Chapter 92, a DEP “NPDES Construction Activities” permit is required for regulated earth disturbance activities.

4. Evidence of any necessary permit(s) for regulated earth disturbance activities from the appropriate DEP regional office or County Conservation District must be provided to the Borough. The issuance of an NPDES Construction Permit (or permit coverage under the Statewide General Permit (PAG-2) satisfies the requirements subsection .1.

5. A copy of the erosion and sediment control plan and any required permit, as required by DEP regulations, shall be available at the project site at all times.

(Ord. 956, 3/28/2005, §303)

§23-304. Water Quality Requirements after Regulated Earth Disturbance Activities Are Complete.

1. No regulated earth disturbance activities within the Borough shall commence until approval by the Borough of a plan which demonstrates compliance with State water quality requirements after construction is complete.

2. The BMPs must be designed, implemented and maintained to meet State water quality requirements, and any other more stringent requirements as determined by the Borough.

3. 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 DEP Comprehensive Stormwater Management Policy (#392-0300-002, September 28, 2002), this may be achieved by the following:

A. *Infiltration*: replication of pre-construction stormwater infiltration conditions.

B. *Treatment*: use of water quality treatment BMPs to ensure filtering out of the chemical and physical pollutants from the stormwater runoff.

C. *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).

4. DEP has regulations that require municipalities to ensure design, implementa-

tion and maintenance of best management practices (“BMPs”) that control runoff from new development and redevelopment 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.

5. Evidence of any necessary permit(s) for regulated earth disturbance activities from the appropriate DEP regional office must be provided to the Borough. The issuance of an NPDES Construction Permit (or permit coverage under the statewide General Permit (PAG-2)) satisfies the requirements of subsection .1.

6. BMP operations and maintenance requirements are described in Part 4 of this Chapter.

(Ord. 956, 3/28/2005, §304)

Part 4**Stormwater BMP Operations and Maintenance Plan Requirements****§23-401. General Requirements.**

1. No regulated earth disturbance activities within the Borough shall commence until approval by the Borough of BMP operations and maintenance plan which describes how the permanent (e.g., post-construction) stormwater BMPs will be properly operated and maintained.

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

A. Map(s) of the project area, in a form that meets the requirements for recording at the offices of the Recorder of Deeds of Montgomery County, and shall be submitted on 24-inch by 36-inch or 30-inch by 42-inch sheets. The contents of the maps(s) shall include, but not be limited to:

(1) Clear identification of the location and nature of permanent stormwater BMPs.

(2) The location of the project site relative to highways, Borough boundaries, or other identifiable landmarks.

(3) Existing and final contours at intervals of 2 feet, or others as appropriate.

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

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

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

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

(8) Proposed final structures, roads, paved areas, and buildings.

(9) A 15-foot wide access easement around all stormwater BMPs that would provide ingress to and egress from a public right-of-way.

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

C. The name of the project site, the name, and address of the owner of the property, and the name of the individual or firm preparing the plan.

D. A statement, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that can be altered or removed only after approval by the Borough.

(Ord. 956, 3/28/2005, §401)

§23-402. Responsibilities for Operations and Maintenance of BMPs.

1. The BMP operations and maintenance plan for the project site shall establish responsibilities for the continuing operation and maintenance of all permanent stormwater BMPs, as follows:

A. If a plan includes structures or lots which are to be separately owned and in which streets, sewers, and other public improvements are to be dedicated to the Borough, stormwater BMPs may also be dedicated to and maintained by the Borough.

B. If a plan includes operations and maintenance by a single ownership, or if sewers and other public improvements are to be privately owned and maintained, then the operation and maintenance of stormwater BMPs shall be the responsibility of the owner or private management entity.

2. The Borough shall make the final determination on the continuing operations and maintenance responsibilities. The Borough reserves the right to accept or reject the operations and maintenance responsibility for any or all of the stormwater BMPs.

(Ord. 956, 3/28/2005, §402)

§23-403. Borough Review of BMP Operations and Maintenance Plan.

1. The Borough shall review the BMP operations and maintenance plan for consistency with the purposes and requirements of this Chapter, and any permits issued by DEP.

2. The Borough shall notify the applicant in writing whether the BMP operations and maintenance plan is approved.

3. The Borough may require an “as-built survey” of all stormwater BMPs, and an explanation of any discrepancies with the operations and maintenance plan.

(Ord. 956, 3/28/2005, §403)

§23-404. Adherence to Approved BMP Operations and Maintenance Plan.

It shall be unlawful to alter or remove any permanent stormwater BMP required by an approved BMP operations and maintenance plan, or to allow the property to remain in a condition which does not conform to an approved BMP operations and maintenance plan, unless an exception is granted in writing by the Borough.

(Ord. 956, 3/28/2005, §404)

§23-405. Operations and Maintenance Agreement for Privately Owned Stormwater BMPs.

1. The property owner shall sign an operations and maintenance agreement with the Borough covering all stormwater BMPs that are to be privately owned. The agreement shall be substantially the same as the agreement in Appendix 23-B of this Chapter.

2. Other items may be included in the agreement where determined necessary to guarantee the satisfactory operation and maintenance of all permanent stormwater BMPs. The agreement shall be subject to the review and approval of the Borough.

(Ord. 956, 3/28/2005, §405)

§23-406. Stormwater Management Easements.

1. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Borough Engineer.

2. Stormwater management easements shall be provided by the property owner if necessary for (A) access for inspections and maintenance, or (B) preservation of stormwater runoff conveyance, infiltration, and detention areas and other BMPs, by persons other than the property owner. The purpose of the easement shall be specified in any agreement under §23-405.

(*Ord. 956, 3/28/2005, §406*)

§23-407. Recording of Approved BMP Operations and Maintenance Plan and Related Agreements.

1. The owner of any land upon which permanent BMPs will be placed, constructed, or implemented, as described in the BMP operations and maintenance plan, shall record the following documents in the Office of the Recorder of Deeds for Montgomery County, within 15 days of approval of the BMP operations plan by the Borough:

- A. The operations and maintenance plan, or a summary thereof.
- B. Operations and maintenance agreements under §23-405.
- C. Easements under §23-406.

2. The Borough may suspend or revoke any approvals granted for the project site upon discovery of the failure of the owner to comply with this Section.

(*Ord. 956, 3/28/2005, §407*)

§23-408. Borough Stormwater BMP Operation and Maintenance Fund.

1. If stormwater BMPs are accepted by the Borough for dedication, the Borough may require persons installing stormwater BMPs to pay a specified amount to the Borough Stormwater BMP Operation and Maintenance Fund, to help defray costs of operations and maintenance activities. The amount may be determined as follows:

- A. If the BMP is to be owned and maintained by the Borough, the amount shall cover the estimated costs for operations and maintenance for 10 years, as determined by the Borough.
- B. The amount shall then be converted to present worth of the annual series values.

2. If a BMP is proposed that also serves as a recreation facility (e.g., ball field, lake), the Borough may adjust the amount due accordingly.

(*Ord. 956, 3/28/2005, §408*)

Part 5**Inspections and Right of Entry****§23-501. Inspections.**

1. DEP or its designees (e.g., County Conservation Districts) normally ensure compliance with any permits issued, including those for stormwater management. In addition to DEP compliance programs, the Borough or its designee may inspect all phases of the construction, operations, maintenance, and any other implementation of stormwater BMPs.

2. During any stage of the regulated earth disturbance activities, if the Borough or its designee determines that any BMPs are not being implemented in accordance with this Chapter, the Borough may suspend or revoke any existing permits or other approvals until the deficiencies are corrected.

(Ord. 956, 3/28/2005, §501)

§23-502. Right of Entry.

1. Upon presentation of proper credentials, duly authorized representatives of the Borough may enter at reasonable times upon any property within the Borough to inspect the implementation, condition, or operation and maintenance of the stormwater BMPs in regard to any aspect governed by this Chapter.

2. BMP owners and operators shall allow persons working on behalf of the Borough ready access to all parts of the premises for the purposes of determining compliance with this Chapter.

3. Persons working on behalf of the Borough shall have the right to temporarily locate on any BMP in the Borough such devices as are necessary to conduct monitoring and/or sampling of the discharges from such BMP.

4. Unreasonable delays in allowing the Borough access to a BMP is a violation of this Part.

(Ord. 956, 3/28/2005, §502)

Part 6**Fees and Expenses****§23-601. General.**

The Borough may charge a reasonable fee for review of BMP operations and maintenance plans to defray review costs incurred by the Borough. The applicant shall pay all such fees.

(Ord. 956, 3/28/2005, §601)

§23-602. Expenses Covered by Fees.

The fees required by this Chapter may cover:

- A. Administrative/clerical costs.
- B. The review of the BMP operations and maintenance plan by the Borough Engineer.
- C. The site inspections including, but not limited to, pre-construction meetings, inspections during construction of stormwater BMPs, and final inspection upon completion of the stormwater BMPs.
- D. Any additional work required to monitor and enforce any provisions of this Chapter, correct violations, and assure proper completion of stipulated remedial actions.

(Ord. 956, 3/28/2005, §602)

Part 7**Prohibitions****§23-701. Prohibited Discharges.**

1. No person in the Borough shall allow, or cause to allow, stormwater discharges into the Borough's separate storm sewer system which are not composed entirely of stormwater except (A) as provided in subsection .2 below, and (B) discharges allowed under a State or Federal permit.

2. Discharges which may be allowed, based on a finding by the Borough that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are:

- A. Discharges from firefighting activities.
- B. Uncontaminated water from foundation or from footing drains.
- C. Potable water sources including dechlorinated water line and fire hydrant flushings.
- D. Flows from riparian habitats and wetlands.
- E. Lawn watering.
- F. Irrigation drainage.
- G. Pavement wash-waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used.
- H. Routine external building wash-down (which does not use detergents or other compounds).
- I. Air conditioning condensate.
- J. Water from individual residential car washing.
- K. Dechlorinated swimming pool discharges.
- L. Springs.
- M. Uncontaminated groundwater.
- N. Water from crawl space pumps.

3. In the event that the Borough determines that any of the discharges identified in subsection .2 significantly contribute to pollution of waters of the Commonwealth, or is so notified by DEP, the Borough will notify the responsible person to cease the discharge.

4. Upon notice provided by the Borough under subsection .3, the discharger will have a reasonable time, as determined by the Borough, 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.

(Ord. 956, 3/28/2005, §701)

§23-702. Prohibited Connections.

The following connections are prohibited, except as provided in §23-701.2 above:

A. Any drain or conveyance, whether on the surface or subsurface, which allows any non-stormwater discharge including sewage, process wastewater, and wash water, to enter the separate storm sewer system, and any connections to the storm drain system from indoor drains and sinks.

B. Any drain or conveyance connected from a commercial 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 Borough.

(Ord. 956, 3/28/2005, §702)

§23-703. Roof Drains.

1. Roof drains shall not be connected to streets, sanitary, or storm sewers or roadside ditches, except as provided in subsection .2.

2. When it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted by the Borough.

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

(Ord. 956, 3/28/2005, §703)

§23-704. Alteration 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 Borough.

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 Borough.

(Ord. 956, 3/28/2005, §704)

Part 8**Enforcement and Penalties****§23-801. Public Nuisance.**

1. The violation of any provision of this Chapter is hereby deemed a public nuisance.

2. Each day that a violation continues shall constitute a separate violation.

(*Ord. 956, 3/28/2005, §801*)

§23-802. Enforcement Generally.

1. Whenever the Borough finds that a person has violated a prohibition or failed to meet a requirement of this Chapter, the Borough may order compliance by written notice to the responsible person. Such notice may require without limitation:

- A. The performance of monitoring, analyses, and reporting.
- B. The elimination of prohibited connections or discharges.
- C. Cessation of any violating discharges, practices, or operations.
- D. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property.
- E. Payment of a fine to cover administrative and remediation costs.
- F. The implementation of stormwater BMPs.
- G. Operation and maintenance of stormwater BMPs.

2. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violations(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Borough or designee and the expense thereof shall be charged to the violator.

3. Failure to comply within the time specified shall also subject such person to the penalty provisions of this Chapter. All such penalties shall be deemed cumulative and shall not prevent the Borough from pursuing any and all other remedies available in law or equity.

(*Ord. 956, 3/28/2005, §802*)

§23-803. Suspension and Revocation of Permits and Approvals.

1. Any building, land development, or other permit or approval issued by the Borough may be suspended or revoked by the Borough for:

- A. Noncompliance with or failure to implement any provision of the permit.
- B. A violation of any provision of this Chapter.
- C. The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life or property of others.

2. A suspended permit or approval shall be reinstated by the Borough when:

A. The Borough Engineer or designee has inspected and approved the corrections to the stormwater BMPs, or the elimination of the hazard or nuisance.

B. The Borough is satisfied that the violation of the Chapter, law, or rule and regulation has been corrected.

3. A permit or approval which has been revoked by the Borough cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Chapter.

(*Ord. 956, 3/28/2005, §803*)

§23-804. Penalties.

1. Any person, firm, or corporation who shall violate any provision of this Part, upon conviction thereof, shall be sentenced to pay a fine of not more than \$1,000 plus costs and, in default of payment of said fine and costs, to a term of imprisonment not to exceed 30 days. Each day that a violation of this Part continues shall constitute a separate offense. [*Ord. 1005*]

2. In addition, the Borough, through its Solicitor, may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this Chapter. 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.

(*Ord. 956, 3/28/2005, §804; as amended by Ord. 1005, 5/23/2011*)

APPENDIX 23-A

LOW IMPACT DEVELOPMENT PRACTICES

ALTERNATIVE APPROACH FOR

MANAGING STORMWATER RUNOFF

Natural hydrologic conditions may be altered radically by poorly planned development practices, such as introducing unneeded impervious surfaces, destroying existing drainage swales, constructing unnecessary storm sewers, and changing local topography. A traditional drainage approach of development has been to remove runoff from a site as quickly as possible and capture it in a detention basin. This approach leads ultimately to the degradation of water quality as well as expenditure of additional resources for retaining and managing concentrated runoff at some downstream location.

The recommended alternative approach is to promote practices that will minimize post-development runoff rates and volumes, which will minimize needs for artificial conveyance and storage facilities. To simulate pre-development hydrologic conditions, forced infiltration is often necessary to offset the loss of infiltration by creation of impervious surfaces. The ability of the ground to infiltrate depends upon the soil types and its conditions.

Preserving natural hydrologic conditions requires careful alternative site design considerations. Site design practices include preserving natural drainage features, minimizing impervious surface area, reducing the hydraulic connectivity of impervious surfaces, and protecting natural depression storage. A well-designed site will contain a mix of all those features. The following describes various techniques to achieve the alternative approach:

- **Preserving Natural Drainage Features.** Protecting natural drainage features, particularly vegetated drainage swales and channels, is desirable because of their ability to infiltrate and attenuate flows and to filter pollutants. However, this objective is often not accomplished in land development. In fact, commonly held drainage philosophy encourages just the opposite pattern — streets and adjacent storm sewers typically are located in the natural headwater valleys and swales, thereby replacing natural drainage functions with a completely impervious system.

As a result, runoff and pollutants generated from impervious surfaces flow directly into storm sewers with no opportunity for attenuation, infiltration, or filtration. Developments designed to fit site topography also minimizes the amount of grading on site.

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

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

- **Reducing the Hydraulic Connectivity of Impervious Surfaces.** Impervious surfaces are significantly less of a problem if they are not directly connected to an impervious conveyance system (such as storm sewer). Two basic ways to reduce hydraulic connectivity are routing of roof runoff over lawns and reducing the use of storm sewers.

Site grading should promote increasing travel time of stormwater runoff, and should help reduce concentration of runoff to a single point in the development.

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

- **Reducing the Use of Storm Sewers.** By reducing use of storm sewers for draining streets, parking lots, and back yards, the potential for accelerating runoff from the development can be greatly reduced. The practice requires greater use of swales and may not be practical for some development sites, especially if there are concerns for areas that do not drain in a “reasonable” time. The practice requires educating local citizens and public works officials, who expect runoff to disappear shortly after a rainfall event.

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

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

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

- **Reducing Building Setbacks.** Reducing building setbacks reduces driveway and entry walks and is most readily accomplished along low-traffic streets where traffic noise is not a problem.

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

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

APPENDIX 23-B

STORMWATER BEST MANAGEMENT PRACTICES

OPERATIONS AND MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 200__, by and

between _____, (hereinafter the "Landowner"), and

the Borough of Hatboro, Montgomery County, Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Montgomery County, Pennsylvania, Deed Book _____ at Page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the stormwater management BMP Operations and Maintenance Plan approved by the Municipality (hereinafter referred to as the "Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of Best Management Practices (BMP's); and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site stormwater Best Management Practices be constructed and maintained on the Property; and

WHEREAS, for the purposes of this agreement, the following definitions shall apply:

- BMP – "Best Management Practice;" activities, facilities, designs, measures or procedures used to manage stormwater impacts from land development, to protect and maintain water quality and groundwater recharge and to otherwise meet the purposes of the Municipal Stormwater Management Ordinance, including but not limited to infiltration trenches, seepage pits, filter strips, bioretention, wet ponds, permeable paving, rain gardens, grassed swales, forested buffers, sand filters and detention basins.
- Infiltration Trench – A BMP surface structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer,
- Seepage Pit – An underground BMP structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer,
- Rain Garden – A BMP overlain with appropriate mulch and suitable vegetation designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or underground aquifer, and

WHEREAS, the Municipality requires, through the implementation of the Plan, that stormwater management BMP's as required by said Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, his successors and assigns. And

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The BMPs shall be constructed by the Landowner in accordance with the plans and specifications identified in the Plan.
2. The Landowner shall operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality and in accordance with the specific maintenance requirements noted on the Plan.

3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper identification, to inspect the BMP(s) whenever it deems necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s).

This provision shall not be construed to allow the Municipality to erect any permanent structure on the land of the Landowner. It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.

5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMP(s) by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality's employees and designated representatives from all damages, accidents, casualties, occurrences or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality. In the event that a claim is asserted against the Municipality, its designated representatives or employees, the Municipality shall promptly notify the Landowner and the Landowner shall defend, at his own expense, any suit based on the claim. If any judgment or claims against the Municipality's employees or designated representatives shall be allowed, the Landowner shall pay all costs and expenses regarding said judgment or claim.
8. The Municipality shall inspect the BMP(s) at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Montgomery County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL) For the Municipality:

(SEAL) For the Landowner:

ATTEST:

_____ (City, Borough, Township) County of _____,
Pennsylvania I, _____, a Notary Public in and for
the County and State aforesaid, whose commission expires on the ____ day of
_____, 20__, do hereby certify that _____ whose name(s)
is/are signed to the foregoing Agreement bearing date of the _____ day of
_____, 20__, has acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 200____.

NOTARY PUBLIC (SEAL)

APPENDIX 23-C

PERFORMANCE STANDARDS - DESIGN CRITERIA – MAINTENANCE OF FACILITIES

DESIGN STANDARDS

Section 101. GENERAL REQUIREMENTS

- A. All storm water management plans shall be designed and certified by individuals registered in the Commonwealth of Pennsylvania and qualified to perform such duties.
- B. Where applicable, storm water management facilities shall comply with the requirements of Chapter 105 (Water Obstructions and Encroachments) of Title 25, Rules and Regulations of the DEP.
- C. Storm water management facilities which involve a State Highway shall also be subject to the approval of the PennDOT.
- D. Storm water management facilities located within or affecting the floodplain of any watercourse shall also be subject to the requirements of the Zoning Ordinance of the Municipality, as amended, or any future Zoning Ordinance, regulating construction and development within areas of the Municipality subject to flooding and any other applicable requirements of the Pennsylvania Floodplain Management Act, Act 166 of 1978.
- E. Storm water runoff from a project site shall flow directly into a natural watercourse or into an existing storm sewer system, or onto adjacent properties in a manner similar to the runoff characteristics of the pre-development flow. Where a concentrated flow cannot be directly discharged into a natural watercourse or an existing storm sewer system, the developer shall be required to establish an easement through such adjacent properties until said flow enters a natural watercourse or existing storm sewer system.
- F. Storm water runoff shall not be transferred from one watershed to another unless the watersheds are sub-watersheds of a common watershed which join together within the perimeter of the property, or the effect of the transfer does not alter the peak discharge onto adjacent lands, or drainage easements from the affected landowners are provided.
- G. All storm water runoff flowing over the project site shall be considered in the design of the storm water management facilities.
- H. Storm water management facilities (detention, retention or infiltration) shall be provided so that the post-development rates of runoff from any regulated activity shall not exceed fifty percent (50%) of the peak rates of runoff prior to development for all design storms unless the pre-existing hydrograph is not exceeded at all points in time.
- I. Runoff calculations for the pre-development and post-development comparison shall consider six (6) different storm frequencies; the two (2), five (5), ten (10), twenty-five (25), fifty (50) and one hundred (100) year storm events.
- J. Stormwater management facilities shall be supplemented by BMP's as defined by the DEP criteria. Required storage volume shall be provided to minimize the impacts to water quality of receiving waters.
- K. Innovative methods for the detention and control of storm water runoff may be used when approved by the Municipality. Various combinations of methods should be tailored to suit the particular requirements of the type of development and the topographic features of the project site. The following is a partial listing of detention and

control methods which can be utilized in storm water management systems where appropriate:

1. Detention basins and retention basins
2. Roof-top storage
3. Parking lot ponding
4. Seepage pits, seepage trenches, rock bins or other infiltration structures
5. Concrete lattice block surfaces
6. Grassed channels and vegetated strips
7. Cisterns and underground reservoirs
8. Routed flow over grass
9. Decreased impervious surface coverage

L. If existing storm water management facilities within a project site do not meet the design requirements of this Ordinance, and if such facilities are affected by new development being proposed within the site, then the existing storm water management facilities must be redesigned and improved to meet the requirements of this Ordinance.

M. Where proposed development and improvements to existing storm water management facilities will cause adverse impacts on adjacent downstream properties, the developer shall mitigate such impacts.

N. All developments in the Municipality which do not fall under the exemption criteria shall prepare and submit a storm water management plan consistent with this Ordinance. The exemption criteria shall apply to the total development even if development is to take place in stages. Refer to sections 104 and 402 of this ordinance.

O. Runoff from impervious areas shall be drained to pervious areas of the project site.

P. When final plan applications are submitted in sections, and if temporary facilities are required for construction of a section, such facilities shall be included in the submitted plans for that section in accordance with 25 PA Code Chapter 102.

Q. The Municipality shall comply with all applicable provisions of any Montgomery County Storm Water Management Plan which pertains to a watershed within the Municipality upon adoption of said Plan. If the provisions of this Ordinance are sufficient to regulate development within the Municipality in a manner consistent with any such Montgomery County Storm Water Management Plan, this Ordinance shall be deemed to satisfy the requirement of Section 11(b) of Act 167 of 1978 without necessity of reenactment.

R. The applicant or his agent shall demonstrate that any facilities intended to be installed and located on an individual or group of individual lots can be adequately maintained by the homeowner(s) and/or lot owner(s).

S. All stormwater plans shall be submitted and approved by the County Conservation District for verification of Chapter 102 and applicable section of the NPDES Phase II SM4 criteria for earth moving.

Section 102. METHODS OF CALCULATION OF RUNOFF

A. Runoff calculations shall include a hydrologic and hydraulic analysis indicating volume and velocities of flow and the grades, sizes, and capacities of water carrying structures, sediment basins, and retention and detention structures, and sufficient design information to construct such facilities. Runoff calculations shall also indicate both pre-developed and post-developed rates for peak discharge of storm water runoff from the project site.

B. The methods of calculation used to determine peak discharge and runoff values for sizing storm water management facilities shall be:

1. For all projects with a total watershed area of ten (10) acres or more, the USDA Soil Conservation Service Soil-Cover-Complex Method as set forth in the latest edition of "Urban Hydrology for Small Watersheds, Technical Release No. 55", published by SCS (SCS - TR #55) or SCS TR-20, shall be used. An antecedent moisture content of one (1) should be used for the pre-development condition. Rainfall values shall be based on the following 24-hour storm events:

<u>Storm Event</u>	<u>Inches of Rainfall</u>
2 years	3.1
5 years	4.1
10 years	5.0
25 years	5.5
50 years	6.2
100 years	7.0

2. For all projects with a total watershed area of less than ten (10) acres, the Rational Method shall be used. The Rational Method is based on the formula of $Q = CIA$ where Q is the peak discharge of the watershed in cubic feet per second, C is the coefficient of runoff, I is the intensity of rainfall in inches per hour as shown in PennDOT Region 5, and A is the area of the watershed in acres.

3. Any other method approved by the Municipality's Engineer.

C. Time of Concentration values for all methods shall be based on those methods as outlined in SCS - TR #55. The worksheet in Appendix #9 shall be used in the computation of the time of concentration.

D. For the purpose of calculating pre-development peak discharges, all grass areas shall be considered to be in good condition.

E. Any areas designed to initially be gravel or crushed stone shall be assumed to be impervious.

Section 103. DESIGN STANDARDS - WATER CARRYING FACILITIES

A. All storm sewer pipes, open channels, swales and other water carrying facilities on the site shall be designed for a twenty-five (25) year storm event. All facilities used to convey offsite runoff through or around the site shall be sized to carry the fifty (50) year storm event. All facilities which carry flows to the storm water management basins or structures shall be sized to carry the one hundred (100) year storm events in conjunction with surface drainage systems. If in the opinion of the Municipality's Engineer, there is potential for damage to property or the loss of life due to the failure of the system to carry flows above the minimum design flows as outlined above, the design storm event shall be increased.

B. All storm sewer pipes, culverts, manholes, inlets, endwalls and endsections shall be constructed in accordance with "PennDOT, Form 408", as amended.

C. Storm sewer pipes, culverts, manholes, inlets, endwalls and endsections proposed for dedication or located along streets shall conform to the requirements of the "PennDOT, Bureau of Design, Standards for Roadway Construction, Publication No. 72", in effect at the time the design is submitted, as modified by the adopted Municipality's construction standards.

D. Storm sewer pipes and culverts, other than those used as basin outlets,

which are intended to be dedicated to the Municipality shall be Reinforced Concrete Pipe (Class III), Corrugated Aluminum Alloy Pipe, Aluminized Corrugated Steel Pipe, Corrugated Polyethylene Pipe, or approved equivalent, and shall have a minimum diameter of fifteen (15) inches and shall be installed on sufficient slope to provide a minimum velocity of three (3) feet per second when flowing full. Manning "n" values used for design of pipes and culverts shall be in accordance published engineering referennces.

E. Flow capacity for all swales shall be based on a mannings n value of 0.05. Maximum velocities shall be based on a mannings n value of 0.03. Allowable velocities shall be as outlined in "Erosion and Sediment Pollution Control Manual", DEP, as amended.

F. All storm sewer pipe shall be laid to a minimum depth of one (1) foot from subgrade to the crown of pipe.

G. Crown elevations of inflow and outflow storm sewer pipes in inlets and manholes shall be matched or the crown elevation of the inflow pipes shall be higher than the crown of the outflow pipe.

H. PennDOT Type Endwalls shall be used where storm water runoff enters or leaves the storm sewer horizontally from a natural or manmade channel. Endsections may be used in special cases at the discretion of the Municipality.

I. Inlets shall be placed on both sides of the street at low spots, at a maximum of six hundred (600) feet apart along a storm sewer pipe, at all points of change in horizontal alignment or slope, at any point where the depth of flow in the gutterline will cover one half of the travel lane width, and at any point where the design flow exceeds the capture ability of the inlet by 50%. At street intersections, inlets shall be located along the curb line at or beyond the curb radius points, and the depth of flow across the through streets shall not exceed one (1) inch. Inlets shall be depressed two (2) inches below the grade of the gutter or ground surface. Manholes may be substituted for inlets at locations where inlets are not required to handle surface runoff. The depth of flow in the inlet shall be a minimum of one (1) foot below the top of grate elevation for the design storm flow conditions.

J. All storm sewers shall be perpendicular to the street centerline unless otherwise approved by the Municipality's Engineer. Runoff entering an inlet or manhole from an inflow storm sewer pipe shall not be designed in a manner that requires the runoff to be redirected greater than ninety (90) degrees in order to enter the outflow storm sewer pipe.

K. The proposed design discharge at the perimeter of the site shall not be beyond the capacity of the existing storm sewer system into which it flows.

L. All existing and natural watercourses, channels, drainage systems and areas of surface water concentration shall be maintained in their existing condition unless an alteration is approved by the Municipality. If existing conditions currently function in an erosive state, improvements shall be required as part of the overall site improvements.

M. Flow velocities from any storm sewer may not result in a deflection of the receiving channel.

N. The capacities of open channels shall be computed from the Manning Equation. Permissible open channel velocities and design standards shall be in accordance with good engineering practice as documented in the "Erosion and Sediment Pollution Control Project Manual, DEP, as revised.

O. Energy dissipators shall be placed at the outlets of all storm sewer pipes where flow velocities exceed maximum permitted channel velocities.

P. Where flow velocities of storm water runoff exceed the allowable velocity

of an open channel, erosion protection shall be provided. The method of erosion protection proposed must be supported by appropriate design information and references.

Q. Where proposed development is to be performed in phases, each phase of the project shall be designed to accommodate the full development of the project. If temporary facilities are required to properly implement the development of a phase, the design and construction of such facilities shall be included within the appropriate phase. In the event temporary facilities cannot adequately handle the storm water runoff, proposed storm water management facilities of future phases of development shall be incorporated within the current phase of development as necessary to adequately handle the runoff from the current phase of development.

Section 104. DESIGN STANDARDS - DETENTION AND RETENTION BASINS & INFILTRATION STRUCTURES

A. Permanent detention and retention basins shall be designed to control the storm water runoff from all storm events up to the one hundred (100) year post-development storm. Greater control of developed discharges may be required where: (1) the peak discharge cannot be properly handled by the existing or proposed downstream storm water management facilities; or (2) the peak discharge will be detrimental to the downstream areas. The storage volume shall be calculated from the beginning of the storm event until such time as the inflow rate equals the outflow rate from the basin.

B. All basins shall be structurally sound and shall be constructed of sound and durable materials. The completed structure and the foundation of all basins shall be stable under all probable conditions of operation. The design of the outlets shall be capable of discharging the peak discharge of a post-development one hundred (100) year storm event through the emergency spillway facilities and primary outlet combined in a manner which will not damage the integrity of the facility or the downstream drainage areas. Each facility shall implement Best Management Practices (BMP) in order to protect the water quality of this Municipality in accordance with DEP BMP criteria (as amended). BMP outlets shall be sized with a release drawdown of approximately thirty-six (36) hours, utilizing orifices with a minimum diameter of 1/2". A cone of gravel or a non-corrosive fine-mesh screen shall be installed around the BMP outlet orifice to prevent clogging. BMP storage shall not be used in the calculations of storage requirements for storm water management.

C. An emergency spillway shall be provided for all basins to handle the 100-year post-development flow conditions. A minimum of one (1) foot of freeboard shall be provided above the calculated flow elevation at the emergency spillway. The emergency spillway shall not be used for storms of lesser frequency than the 50-year event. A drainage easement shall be provided from the spillway to a natural or artificial watercourse.

D. The effect on downstream areas if the basin embankment fails shall be considered in the design of all basins. The basin shall be designed to minimize the potential damage caused by such failure of the embankment.

E. All outlet structures shall permit draining the basin to the BMP design elevation within twenty-four (24) hours of the end of the storm event. The bottom of the basin shall have a minimum slope to the BMP impoundment area of two (2%) percent if grassed. When this grade cannot be attained, or if other factors indicate erosion of the bottom of the basin will occur, stone low flow channels and underdrains may be used to properly dewater the bottom of the basin.

F. Discharge structures shall be designed to eliminate the possibility of blockage during operation.

G. All structures and emergency spillways shall include a satisfactory means of dissipating the energy of flow at its outlet to assure conveyance of flow without endangering the safety and integrity of the basin and the downstream drainage areas.

Special consideration shall be given to protection of emergency spillways located in filled areas.

H. All culverts through basin embankments shall be constructed of reinforced concrete with water tight joints and properly sized and spaced reinforced concrete anti-seep collars installed with water tight seals between the collar and the culvert.

I. A cutoff core of impervious material (compacted to 95% of maximum density based on a modified proctor test) shall be provided within all basin embankments. The core material shall extend 1' below the anti-seep collar projection.

J. The top width of basin embankments shall be a minimum of five (5) feet or two-thirds (2/3) of the maximum depth of storage, which ever is greater.

K. Infiltration facilities utilizing rock for storm water storage shall be designed with a maximum stone void ratio of 35% unless supporting information can be supplied. Percolation test results for all recharge systems shall be provided at the location and depth of the proposed facility. Required storage shall be based on a 24-hour storm duration.

L. Minimum floor elevations for all structures that would be affected by a basin, other temporary impoundments, or open conveyance systems where ponding may occur shall be two (2) feet above the computed water surface during the one hundred (100) year storm event. If basement or underground facilities are proposed, detailed calculations addressing the effects of storm water ponding on the structure and waterproofing design information shall be submitted for approval.

M. Upon completion and final stabilization of all storage and control facilities, an as-built survey of the facilities shall be prepared to confirm that adequate storage has been provided and that all drainage facilities have been properly installed.

Section 105. DESIGN STANDARDS - EROSION AND SEDIMENT POLLUTION CONTROL

A. All earthmoving activities shall be conducted in such a way as to minimize accelerated erosion and resulting sediment pollution. Measures to control erosion and sediment pollution shall, at a minimum, meet the standards of the Montgomery County Conservation District and Chapter 102 (Erosion Control) of Title 25, Rules and Regulations of the DEP.

B. The erosion and sediment pollution control plan must be available at all times at the project site. When required, a permit allowing earthmoving activity shall be obtained by the developer before any construction on the project site shall begin.

C. Approval of an erosion and sediment pollution control plan by the Municipality shall not be construed as an indication that the plan complies with the standards of any agency of the Commonwealth.

D. The erosion and sediment pollution control plan shall be submitted to the Montgomery County Conservation District for its review and approval.

Section 106. WETLANDS

No development or earthmoving activities shall involve uses, activities or improvements which would entail encroachment into, the regrading of, or the placement of fill in wetlands in violation of State or Federal regulations.

Section 107. EASEMENTS

A. The developer shall reserve easements where storm water management facilities, floodplains or wetlands are existing or proposed, whether located within or beyond the boundaries of the project site. If storm water management facilities,

floodplains or wetlands are to be installed or created beyond the boundary of the property, the developer shall provide the Municipality with all necessary easements, in a form acceptable to the Municipality's Solicitor, clearly demonstrating that the developer has the right to install storm water management facilities on such adjoining property and/or create floodplains or wetlands upon such adjoining property.

B. Easements shall have a minimum width of twenty (20) feet and shall be adequately designed to provide area for (a) the collection and discharge of water, (b) the maintenance, repair and reconstruction of all storm water management facilities, (c) the passage of machinery for such work, and (d) the preservation of floodplains and wetlands. The easements shall clearly identify who has the right of access and the responsibility of maintenance.

C. Storm water management facilities shall be centered within the easement.

D. To the fullest extent possible, easements shall be centered on or be adjacent to lot lines.

E. Nothing shall be placed, planted, set, or put within the area of an easement that would adversely affect the function of the easement or conflict with the easement agreement.

PLAN REQUIREMENTS

Section 201. GENERAL REQUIREMENTS

Prior to the final approval of any subdivision or land development plan, or the issuance of any permit, or the commencement of any development within the jurisdiction of this Ordinance, the developer shall submit a storm water management plan to the Borough for approval.

Section 202. EXEMPTIONS

The following activities are specifically exempt from the plan requirements of this Ordinance.

A. Use of land for gardening and landscaping of the property, when performed as an accessory use to the primary use of the property.

B. Agricultural when operated in accordance with a conservation plan or erosion and sediment pollution control plan approved by the Montgomery County Conservation District, except where the Borough determines that said agricultural use may adversely affect any existing storm water management facilities, storm water patterns, watercourse, floodplain or wetland.

Section 203. PLAN CONTENTS

The following items shall be included as part of the storm water management plan:

A. Plans, showing the following information:

1. General

a. All plans shall be on sheet sizes consistent with the Borough Subdivision and Land Development Ordinance

b. Proposed name or identifying title of project.

c. Name and address of the landowner and developer of the project site.

d. Plan date and date of the latest revision to the plan, north point, graphic scale and written scale. All plans shall be at a scale often (10), twenty (20), thirty (30), forty (40), fifty (50), or one hundred (100) feet to the inch.

e. Total acreage of the project site and the tract of land on which the project site is located.

f. A location map, for the purpose of locating the project site to be developed, at a minimum scale of eight hundred (800) feet to the inch, showing the relation of the tract to adjoining property and to all streets and Borough boundaries existing within two thousand (2,000) feet of any part of the tract of land on which the project site is proposed to be developed. [*Ord. 1005*]

g. Certificate for approval by the Borough Council.

h. Certificate for review by the Borough Planning Commission.

i. Certificate for review by the Borough Engineer.

2. Existing Features

a. Tract boundaries showing distances, bearings and curve data, as located by field survey or by deed plotting.

b. Existing contours at vertical intervals of two (2) feet for land with an average natural slope of four (4%) percent or less and at vertical intervals of five (5) feet for more steeply sloping land; except that no contours shall be required for residential and agricultural uses where a preliminary subdivision or land development plan is not required by the Borough Subdivision and Land Development Ordinance; however, the plan shall indicate the natural drainage patterns of the site along with the approximate grades of the slopes. Where contours are shown, the location of the benchmark and the datum used shall also be indicated.

c. The names of all owners of all immediately adjacent unplatted land, the names of all proposed or existing developments immediately adjacent, and the locations and dimensions of any streets or easements shown thereon.

d. The names, locations and dimensions of all existing streets, railroads, watercourses, drainage facilities, floodplains, wetlands and other significant features within two hundred (200) feet of any part of the tract proposed to be developed and the location of all buildings and approximate location of all tree masses within the tract.

e. Soil types as designated by the most recent USDA NRCS Soil Survey.

3. Proposed Features

a. The proposed land use, the number of lots and dwelling units and the extent of commercial, industrial or other non-residential uses.

b. The locations and dimensions of all proposed streets, parks, playgrounds, and other public areas; sewer and water facilities; lot lines and building locations; and parking compounds and other impervious and semi-pervious surfaces.

c. The proposed changes to land surface and vegetative cover including areas to be cut or filled.

d. Proposed grading including spot elevations and final contours at vertical intervals of two (2) feet for land with an average natural slope of four (4%) percent or less and at vertical intervals of five (5) feet for more steeply sloping land. The grading plan shall be detailed enough to show positive drainage to all storm water management facilities, to show all slopes within the project site, to show stabilization methods for slopes exceeding 3:1 and for areas subject to erosion, and to show minimum floor elevations for buildings and structures near floodplains, basins or swales. Where proposed contour lines cannot be accurately located (i.e., as in a single family detached residential development when the building has not been determined), tentative grading shall be shown to justify assumptions made in the storm water calculations. Where existing contours are not shown, arrows indicating general surface runoff flow patterns shall be shown.

4. Storm Water Management Facilities

a. All storm water management facilities along with any proposed connections to existing facilities.

b. Groundwater recharge methods such as rock bins, seepage pits, seepage beds or trenches. When these structures are used, the locations of nearby septic tank infiltration areas and wells must be shown.

c. Other control devices or methods such as roof-top storage, grass swales, parking lot ponding, vegetated strips, and detention or retention basins.

d. Plans and profiles, to scale, of all proposed storm water management facilities including vertical and horizontal alignment, size and type of material. This information shall be of the quality required for the construction of all facilities. All plans shall be consistent with the storm water calculations submitted with the plan application.

e. When plan applications, whether preliminary or final, are submitted in sections, a

generalized storm water management plan for the entire project site shall be submitted in addition to the detailed storm water management plan for the proposed section. This generalized plan shall demonstrate how the storm water management facilities of the proposed section will relate to the entire development. The amount and velocity at the discharge point of the section shall be included in the data submitted. If temporary facilities are required for construction of a section, such facilities shall be included in the submitted plans.

f. All easement locations.

g. A note on the plan indicating any area that is not to be offered for dedication along with a statement that the Borough is not responsible for maintenance of any area not dedicated to and accepted for public use, and that no alteration to swales, or basins, or placement of structures shall be permitted within easements.

h. A certificate, signed and sealed by an individual registered in the Commonwealth of Pennsylvania and qualified under all applicable local and State laws to perform such duties, indicating the compliance of the design of the storm water management facilities with the provisions of this Ordinance

5. Erosion and Sediment Pollution Controls

The type, location and extent of all erosion and sediment pollution control measures shall be shown on an erosion and sediment pollution control plan that conforms to the requirements of the "Erosion and Sediment Pollution Control Manual", DEP, as amended.

B. Written Report, including the following information:

1. Storm water runoff calculations for both pre-development and post-development conditions. These calculations shall include all hydrologic and hydraulic analysis, computed and graphic drainage areas for each collection facility, and required support information for each storm water management facility as needed to justify proper use and function.

2. An erosion and sediment pollution control plan narrative that conforms to the requirements of the "Erosion and Sediment Pollution Control Manual", DEP, as amended.

3. An ownership and maintenance program that clearly sets forth the ownership and maintenance responsibility of all temporary and permanent storm water management facilities and erosion and sediment pollution control facilities, including:

a. Description of temporary and permanent maintenance requirements.

b. Identification of a responsible individual, corporation, association or other entity for ownership and maintenance of both temporary and permanent storm water management and erosion and sediment pollution control facilities.

c. Establishment of suitable easements for access to all facilities.

d. The intent of these regulations is to provide private ownership and maintenance of storm water management and erosion and sediment pollution control facilities. Where the Storm Water Management Plan proposes that the Borough own or maintain the facilities, a description of the methods, procedures, source of funds to maintain the facilities, and the extent to which any facilities shall be turned over to the Borough shall be incorporated as an integral part of the plan.

C. Financial security for the completion of storm water management facilities as set forth in this Ordinance.

D. Maintenance guarantee, as set forth in this Ordinance.

E. Filing fee and/or inspection fee in the amount specified on the fee schedule, as may be amended from time to time, adopted by resolution of Borough Council.

F. A DEP permit for any storm water management facility requiring a permit to be issued by DEP.

G. A PennDOT Highway Occupancy Permit for any storm water management facility proposed within the right of way of a State road.

H. Approval by the DEP and the U.S. Army Corps of Engineers of the location of any wetlands, and of any revision to the site that will affect the wetlands.

I. A National Pollution Discharge Elimination System (NPDES) Permit, when applicable.

J. A letter from the County Conservation District approving the erosion and sedimentation control plan.

K. A completed "Storm Water Management Agreement and Declaration of Easement", a completed "Joinder by Mortgagee", and a completed "Consent and Joinder of Homeowners' Association", each where applicable.

Section 204. PLAN PROCEDURES FOR SUBDIVISION AND LAND DEVELOPMENTS

All storm water management plans for subdivisions and land developments submitted under the jurisdiction of the Borough Subdivision and Land Development Ordinance, shall adhere to the procedures required by said Ordinance including the number of copies of material to be submitted. Storm Water Management Plans for all other development shall adhere to the plan procedure delineated in this Ordinance.

Section 205. RECORD DRAWINGS

At the completion of the project, and as precondition for the final release of financial security, the developer shall provide a certificate of completion of all storm water management facilities from an individual registered in the Commonwealth of Pennsylvania and qualified to perform such duties verifying that all permanent facilities have been constructed according to the plans and specifications approved and any approved revisions thereto. This certification shall be provided on a set of record drawings of the storm water management facilities as installed. After receipt of the

record drawings containing the certification of completion, the Borough Engineer or other person designated by the Borough shall make a final inspection of the storm water management facilities to verify compliance with this Ordinance.

Section 206. EXPIRATION OF STORM WATER MANAGEMENT PLAN APPROVAL

All storm water management plans shall expire twelve (12) months from the date of unconditional approval by Borough Council unless an extension of time is approved. An extension of an unexpired storm water management plan shall be issued by Borough Council following the submission of a written request if the subject property or affected surrounding area has not been altered in a manner which requires alteration to the storm water management plan. The refusal of a request for an extension of time shall cite the reasons for such a refusal. A storm water management plan shall not expire while a request for an extension is pending.

ARTICLE V. COMPLETION OF FACILITIES OR GUARANTEE THEREOF

Section 301. COMPLETION OF FACILITIES AS PART OF A SUBDIVISION OR LAND DEVELOPMENT

Storm water management facilities shall be completely installed prior to final plan approval unless the developer submits proper financial security with the final plan application in accordance with the Borough Subdivision and Land Development Ordinance .

Section 302. DETERMINATION OF FINANCIAL SECURITY

Where required, the developer shall file with Borough Council financial security in an amount sufficient to cover the costs of all storm water management facilities required by this Ordinance. Without limitation as to other types of financial security which the Borough may approve, which approval shall not be unreasonably withheld, Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive or escrow accounts in such lending institutions shall be deemed acceptable financial security. Such financial security shall be posted with a bonding company or Federal or Commonwealth chartered lending institution chosen by the developer provided said bonding company or lending institution is authorized to conduct such business within the Commonwealth. Such bond, or other security shall provide for, and secure to the public, completion of all storm water management facilities within one (1) year of the date fixed on the final approved plan for such facilities. The amount of financial security shall be equal to one hundred ten (110%) percent of the cost of the required facilities for which financial security is to be posted. The cost of the facilities shall be established by submission to the Borough Council an estimate of the cost of completion of the requirements, submitted by an applicant or developer and prepared by a professional engineer licensed as such in this Commonwealth and certified by such engineer to be a fair and reasonable estimate of such costs. If the developer requires more than one (1) year from the date of posting of the financial security to complete the required facilities, the amount of financial security may be increased by an additional ten (10%) percent for each one (1) year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one hundred ten (110%) percent of the cost of completing the required facilities as reestablished on or about the expiration of the preceding one (1) year period by using the above bidding procedure.

Section 303. FINANCIAL SECURITY FOR STAGED DEVELOPMENT

In the case where development is projected over a period of years, Borough Council may authorize submission of storm water management plan applications by section or stages of development subject to such requirements or guarantees as to storm water management facilities in future sections or stages of development as it finds essential for the protection of any finally approved section of the development.

Section 304. RELEASE OF FINANCIAL SECURITY

As the work of installing the required storm water management facilities proceeds, the developer may request the Borough to release or authorize the release of, from time to time, such portions of the financial security necessary for payment to the contractor or contractors performing the work. Any such requests shall be in writing addressed to the Borough which shall have forty-five (45) days from receipt of such request within which to allow the Borough Engineer to certify, in writing, to the Borough that such portion of the work upon the facilities has been completed in accordance with the approved plan. Upon such certification, the Borough shall authorize release by the bonding company or lending institution of an amount as estimated by the Borough Engineer fairly representing the value of the facilities completed or, if the Borough fails to act within said forty-five (45) day period, the Borough shall be deemed to have approved the release of funds as requested. The Borough may, prior to final release at the time of completion and certification by the Borough Engineer, require retention of ten (10%) percent of the estimated cost of the aforesaid facilities.

Section 305. SCHEDULE OF INSPECTIONS

A. During the construction of the development, the Borough Engineer or other authorized Borough official may inspect the premises to determine that the work is progressing in compliance with the information provided on the approved storm water management plan and with all applicable Borough laws and ordinances.

B. The cost for the conducting of inspections by the Borough Engineer or other authorized Borough official shall be borne by the developer in accordance with the inspection fee adopted by resolution of the Borough Council.

C. In the event the Borough Engineer or authorized official discovers that the work does not comply with the approved plan or any applicable laws and ordinances, the Borough shall suspend any existing zoning permits related to the development until the required corrections have been made. Any portion of the work which does not comply with the approved plan must be corrected by the developer within ten (10) days. No work may proceed on any subsequent phase of the storm water management plan, the subdivision or land development, or the building construction, until the related zoning permits have been reinstated.

D. If at any stage of the work, the Borough Engineer or authorized official determines that the soil or other conditions are not as stated or shown in the approved application, or that there has been a false statement or misrepresentation by the developer, the Borough Engineer or authorized official may refuse to approve further work and the Borough may revoke existing zoning permits until a revised plan is submitted and approved, as required this Ordinance.

Section 306. FINAL INSPECTION

A. When the developer has completed all the required facilities, he shall notify the Borough in writing by certified or registered mail, and shall send a copy of such notice to the Borough Engineer. The Borough shall, within ten (10) days after receipt of such notice, authorize the Borough Engineer to inspect the required facilities. The Borough Engineer shall promptly file a report, in writing, with the Borough and shall mail a copy of the report to the developer by certified or registered mail. The report shall be made and mailed within thirty (30) days after receipt by the Borough Engineer of the aforesaid authorization by the Borough.

B. Based on the report of the Borough Engineer, the Borough shall indicate approval or rejection of the storm water management facilities, either in whole or in part; and if not approved, state reasons for the rejection. The Borough shall immediately notify the developer, in writing by certified or registered mail, of its actions.

C. If Borough Council or the Borough Engineer fails to comply with the time limitation provisions contained herein, all storm water management facilities will be

pursuant to its performance guaranty bond, or other security agreement.

D. If any portion of said improvements are not approved or are rejected by the Borough, the developer shall proceed to complete the same and, upon completion, the same procedure of notification outlined herein shall be followed.

Section 307. REMEDIES TO EFFECT COMPLETION OF FACILITIES

In the event any storm water management facilities which may be required have not been installed as provided in this Ordinance or in accordance with the approved final plan, the Borough Council has the power to enforce any corporate bond or other security by appropriate legal and equitable remedies. If proceeds of such bond or other security are insufficient to pay the cost of installing or making repairs or corrections to all the facilities covered by said security, the Borough Council may, at its option, install such facilities in all or part of the development and may institute appropriate legal or equitable action to recover the monies necessary to complete the remainder of the facilities. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the storm water management facilities covered by such security, and not for any other purpose.

ARTICLE VI. MAINTENANCE OF STORM WATER MANAGEMENT FACILITIES

Section 401. MAINTENANCE OF FACILITIES DURING DEVELOPMENT

Maintenance of storm water management facilities during development of a project site shall be the responsibility of the developer and the landowner and shall include but not be limited to:

A. Removal of silt from all debris basins, traps or other structures or measures in accordance with the approved erosion and sediment control plan. When required, clean out shall be performed to restore the original design volume to the basin or other structure. The elevation corresponding to the maximum allowable sediment level shall be determined and stated in the design data as a distance below the top of the riser. The elevation shall be clearly marked on the riser to enable proper maintenance.

B. Periodic maintenance of temporary control facilities, such as replacement of straw bale dikes, straw filters or similar measures.

C. Establishment or re-establishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not successfully been established.

D. Installation of necessary controls to correct unforeseen problems caused by storm events within design frequencies.

E. Removal of all temporary storm water management control facilities upon installation of permanent storm water management facilities at the completion of the development.

Section 402. MAINTENANCE OF FACILITIES ACCEPTED BY BOROUGH

Where the Borough Council accepts dedication of all or some of the required storm water management facilities following completion, the Borough Council shall require the posting of financial security to secure the structural integrity of said facilities, as well as the functioning of said facilities in accordance with the design and specifications as depicted on the approved storm water management plan. The term of the financial security shall be eighteen (18) months from the date of acceptance of dedication, and the amount of financial security shall be fifteen percent (15%) of the actual cost of installation of said improvements. The financial security shall be of the

same type required in Section 502 with regard to installation of storm water management facilities.

Section 403. MAINTENANCE OF FACILITIES NOT ACCEPTED BY BOROUGH

A. It is the purpose and intent of this Ordinance that the Borough shall not become responsible for maintenance and supervision of storm water management facilities unless such facilities are within rights of way dedicated to and accepted by the Borough or unless such facilities are specifically accepted by the Borough. The responsibility for storm water management facility maintenance falls upon the developer of the project site, who shall remain responsible for those areas of the project site which are subject to the requirements of this Ordinance. This responsibility may be retained or assigned to third persons as is deemed most acceptable to the developer.

B. It is the intent of this Ordinance that the purposes of this Ordinance shall be carried out through the exercise of responsibility of private parties, and therefore, it is anticipated that storm water management plans shall be designed with a view towards facilities which can effectively be contained within the tracts to be owned and maintained by private parties. To foster this purpose, with respect to storm water management facilities on a project site as shown on a plan of a developer, which storm water management facilities will not otherwise become part of Borough property, such facilities shall become the responsibility of the individual property owners on whose properties such storm water management facilities lie, including but not limited to retention ponds, detention ponds, sediment basins, energy dissipaters or grassed waterways, and the Borough and developer shall enter into an agreement, which shall be recorded, setting forth such maintenance responsibilities. Persons, including developers, conveying property within a project site to another party, which property contains any storm water management facilities, shall include a specific deed reference to such grantee's responsibility for the maintenance and care of the storm water management facilities as are included within such grantee's property. The deed reference to such storm water management facilities shall be in the form of a deed restriction imposing responsibilities upon said property owner for the maintenance of the portions of the storm water management facilities within the boundary lines of said property as may be necessary for proper maintenance of the storm water management facilities in accordance with the terms of this Ordinance. Such maintenance shall include, at a minimum, the following:

1. Liming and fertilizing vegetated channels and other areas according to specifications in the "The Agronomy Guide," Penn State University, College of Agricultural Sciences.
2. Re-establishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not been successfully established.
3. Mowing as necessary to maintain adequate stands of grass and to control weeds. Chemical weed control may be used if federal, state and local regulations are met.
4. Removal of silt from all permanent structures which trap silt or sediment in order to keep the material from building up in the grass waterways, thus reducing their capacity.
5. Regular inspection of the areas in question to assure proper maintenance and care.
6. Removal of silt debris or any other obstruction from all permanent drainage structures in order to maintain the design storage volumes. Regular maintenance programs shall be established and maintained.

C. The deed restrictions herein above mentioned shall also include notice that, in the event that the individual property owner should fail to comply with the terms

of this Ordinance for the maintenance and care of the land in question, the Borough shall have the authority to carry out those duties hereby imposed upon individual property owners. The Borough may, after giving notice to an individual property owner that he is not properly maintaining the areas subject to this Ordinance and by making a demand that such compliance shall be made within the time period set forth in the notification, enter upon said property and take such actions as may be required to bring the area into compliance with this Ordinance. The Borough shall further have the right to file a municipal lien against such property for the cost of maintenance work carried out under this section, plus a penalty of ten percent (10%) of the costs of such work. The Borough shall, in addition to the filing of a municipal lien, have any other remedies provided by law against any property owner who should fail to comply with the terms of this Ordinance.

Section 404. MAINTENANCE OF FACILITIES BY PRIVATE ENTITY

In cases where permanent maintenance of storm water management facilities is to be performed by private entity, such as a homeowners' association or a condominium unit owners' association, such entity shall be responsible for the maintenance of such facilities and shall enter into a legally binding agreement with the Borough. Such agreement shall provide the Borough rights, in accordance with Section 705 of the Pennsylvania Municipalities Planning Code, relating to the maintenance of common open space should the private entity fail to adequately maintain the storm water management facilities.

Section 405. MAINTENANCE OF EXISTING FACILITIES

Storm water management facilities existing on the effective date of this Ordinance on individual lots which have not been accepted by the Borough or for which maintenance responsibility has not been assumed by a private entity such as a homeowners' association shall be maintained by the individual property owners. Such maintenance shall include at a minimum those items set forth in Section 603, Paragraph B. If the Borough determines at any time that any permanent storm water management facility has been eliminated, altered, blocked through the erection of structures or the deposit of materials or improperly maintained, the Borough may determine that such condition constitutes a nuisance and shall notify the property owner of corrective measures which are required and provide for a reasonable period of time, not to exceed thirty (30) days, within which the property owner shall take such corrective action. If the property owner does not take the required corrective action, the Borough may either perform the work or contract for the performance of the work and bill the property owner for the cost of the work, plus a penalty of ten percent (10%) of the cost of the work. If such bill is not paid by the property owner within thirty (30) days, the Borough may file a municipal claim against the property upon which the work was performed in accordance with applicable laws.

Section 406. ALTERATION OF FACILITIES

No person shall modify, remove, fill, landscape or alter storm water management facilities which may have been installed on a property unless a storm water management plan has been approved which authorizes such modification, removal, filling, landscaping or alteration. No person shall place any structure, fill, landscaping or vegetation into a storm water management facility or within a drainage easement which will limit or alter the functioning of the facility or easement in any manner.

ARTICLE VII. ADMINISTRATION

Section 501. RIGHT OF ENTRY ONTO PRIVATE PROPERTY

Upon presentation of proper credentials, duly authorized representatives of the Borough may enter at reasonable times upon any property within the Borough to investigate or ascertain the condition of the subject property in regard to any aspect regulated by this Ordinance.

Section 502. MODIFICATION OF APPROVED PLAN

A modification which involves a change in storm water management control methods or techniques, or which involves the relocation or redesign of control measures, or which is necessary because soil or other conditions are not as stated on the approved plan, shall require a resubmission by the developer in accordance with the plan requirements as set forth in Article IV of this Ordinance.

Section 503. MODIFICATION OF ORDINANCE PROVISIONS

The provisions of this Ordinance are intended as minimum standards for the protection of the public health, safety, and welfare. The Borough Council reserves the right to modify or to extend them conditionally in individual cases as may be necessary in the public interest; provided, however, that such variation shall not have the effect of nullifying the intent and purpose of this Ordinance; and provided the applicant can demonstrate either (1) that compliance would cause undue hardship as it applies to a particular property, or (2) that an alternative proposal will allow for equal or better results. Any request for a modification of a provision of this Ordinance shall adhere to the procedures set forth in Section 408 herein.

(Ord. 956, 3/28/2005, App. C; as amended by Ord. 1005, 5/23/2011)

