Chapter 107

STORMWATER MANAGEMENT

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[HISTORY: Adopted by the Borough Council of the Borough of Alburtis 11-9-88 as Ord. No. 263, approved 11-9-88. Amendments noted where applicable.]

GENERAL REFERENCES

Flood damage prevention — See Ch. 68.
Subdivision and land development — See Ch. 113.
Zoning — See Ch. 137.

ARTICLE I
General Provisions

§ 107-1. Findings.

The Borough Council for the Borough of Alburtis finds that:

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

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

§ 107-2. Purpose.

The purpose of this chapter is to promote the public health, safety and welfare within Management Districts I-14, I-16, V-13, V-11 and V-5 of the Little Lehigh Creek Watershed by minimizing the damages described in § 107-1A of this chapter by provisions designed to:

A. Control accelerated runoff and erosion and sedimentation problems at their source by regulating activities which cause such problems.

B. Utilize and preserve the desirable existing natural drainage systems.

C. Encourage recharge of groundwaters where appropriate.

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

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

F. Provide for proper maintenance of all permanent stormwater management structures which are constructed in the borough.

§ 107-3. Statutory authority.

The Borough of Alburtis is empowered to regulate these activities by the authority of the Act of October 4, 1978, P.L. 864 (No. 167), the "Storm Water Management Act" and the.[1]

§ 107-4. Applicability; regulated activities.

A. This chapter shall only apply to those areas of the borough which are located within the Little Lehigh Creek drainage basin as delineated on an official map available for inspection at the borough office. The Alburtis segment of the Little Lehigh Creek Watershed Municipal District Map is included in Appendix A for general reference.[2]

B. This chapter shall only apply to permanent stormwater management facilities constructed as part of any of the activities listed in this section. Stormwater management and erosion and sedimentation control during construction involved with any of these activities are specifically not regulated by this chapter but shall continue to be regulated under existing laws and ordinances.

C. This chapter contains only those stormwater runoff control criteria and standards which are necessary or desirable from a total watershed perspective. Additional stormwater management design criteria (i.e., inlet spacing, inlet type, collection system details, etc.) which represent sound engineering practice may be regulated either by separate stormwater ordinance provisions or as part of the general responsibilities of the Borough Engineer.

D. The following activities are defined as regulated activities and shall be regulated by this chapter, except those which meet the waiver specifications presented thereafter:

[1] Editor's Note: See 32 P.S. § 680.1 et seq.
[2] Editor's Note: Appendix A is on file in the office of the Borough Secretary.

(1) Land development.

(2) Subdivision.

(3) Construction of new or additional impervious surfaces (driveways, parking lots, etc.).

(4) Construction of new buildings or additions to existing buildings.

(5) Diversion or piping of any natural or man-made stream channel.

(6) Installation of stormwater systems or appurtenances thereto.

E. Any proposed regulated activity, except those defined in Subsection D(5) and (6) above, which would create ten thousand (10,000) square feet or less of additional impervious cover would be exempt from meeting the provisions of this chapter. For development taking place in stages, the entire development plan must be used in determining conformance with this criteria. Additional impervious cover shall include but not be limited to any roof, parking or driveway areas and any new streets and sidewalks constructed as part of or for the proposed regulated activity. Any areas which may be designed to initially be semipervious (e.g., gravel, crushed stone, porous pavement, etc.) shall be considered impervious areas for the purpose of waiver evaluation. No waiver shall be provided for regulated activities as defined in Subsection D(5) and (6) above.

§ 107-5. Compatibility with other requirements.

Approvals issued pursuant to this chapter do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act or ordinance.

ARTICLE II
Definitions

§ 107-6. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

CISTERN — An underground reservoir or tank for storing rainwater.

CONSERVATION DISTRICT — The Lehigh County Conservation District.

CULVERT — A pipe, conduit or similar structure, including appurtenant works, which carries surface water.

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

DESIGN STORM — The magnitude of precipitation from a storm event measured in probability of occurrence (e.g., fifty-year storm) and duration (e.g., twenty-four-hour) and used in computing stormwater management control systems.

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

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

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

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

DRAINAGE PLAN — The documentation of the proposed stormwater management controls, if any, to be used for a given development site, the contents of which are established in § 107-13.

EROSION — The removal of soil particles by the action of water, wind, ice or other geological agents.

GROUNDWATER RECHARGE — Replenishment of existing natural underground water supplies.

IMPERVIOUS SURFACE — A surface which prevents the percolation of water into the ground.

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

LAND DEVELOPMENT:

A. The improvement of one (1) lot or two (2) or more contiguous lots, tracts or parcels of land for any purpose involving a group of two (2) or more buildings or involving the division or allocation of land or space between or among two (2) or more existing or prospective occupants by means of or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.

B. A subdivision of land.

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

REGULATED ACTIVITIES — Actions or proposed actions which impact upon proper management of stormwater runoff and which are governed by this chapter as specified in § 107-4.

RELEASE RATE — The percentage of the predevelopment peak rate of runoff for a development site to which the postdevelopment peak rate of runoff must be controlled to protect downstream areas.

RETURN PERIOD — The average interval in years over which an event of a given magnitude can be expected to recur. For example, the twenty-five-year "return period" rainfall or runoff event would be expected to recur on the average once every twenty-five (25) years.

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

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

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

SOIL-COVER COMPLEX METHOD — A method of runoff computation developed by the SCS which is based upon relating soil type and land use/cover to a runoff parameter called a "curve number."

STORAGE INDICATION METHOD — A reservoir routing procedure based on solution of the continuity equation (inflow minus outflow equals the change in storage for a given time interval) and based on outflow being a unique function of storage volume.

STORM SEWER — A system of pipes or other conduits which carries intercepted surface runoff, street water and other wash waters or drainage but excludes domestic sewage and industrial wastes.

STORMWATER MANAGEMENT PLAN — The plan for managing stormwater runoff adopted by Lehigh County for the Little Lehigh Creek Watershed as required by the Act of October 4, 1978, P.L. 864 (No. 167), and known as the "Storm Water Management Act."[3]

STREAM — A watercourse.

[3] Editor's Note: See 32 P.S. § 680.1 et seq.

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

SUBDIVISION — The division or redivision of a lot, tract or parcel of land by any means into two (2) or more lots, tracts, parcels or other divisions of land, including changes in existing lot lines, for the purpose, whether immediate or future, of lease, transfer of ownership or building or lot development.

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

WATERCOURSE — Any channel or conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

ARTICLE III
Stormwater Management Requirements

§ 107-7. General requirements.

A. Storm drainage systems shall be provided in order to permit unimpeded flow of natural watercourses, except as modified by stormwater detention facilities or open channels consistent with this chapter.

B. The existing points of concentrated drainage discharge onto adjacent property shall not be altered.

C. Areas of existing diffused drainage discharge onto adjacent property shall be managed such that, at a minimum, the peak diffused flow does not increase in the general direction of discharge, except as otherwise provided in this chapter. If diffused flow is proposed to be concentrated and discharged onto adjacent property, the developer must document that there are adequate downstream conveyance facilities to safely transport the concentrated discharge or otherwise prove that no harm will result from the concentrated discharge. Areas of existing diffused drainage discharge shall be subject to any applicable release rate criteria in the general direction of

existing discharge whether they are proposed to be concentrated or maintained as diffused drainage areas.

D. Where a subdivision is traversed by watercourses other than permanent streams, there shall be provided a drainage easement conforming substantially to the line of such watercourse. The width of the easement shall be adequate to provide for unimpeded flow of storm runoff based on calculations made in conformance with § 107-10 for the one-hundred-year return period runoff and to provide a freeboard allowance of one-half (½) foot above the design water surface level. The terms of the easement shall prohibit excavation, the placing of fill or structures and any alterations which may adversely affect the flow of stormwater within any portion of the easement. Also, periodic maintenance of the easement to ensure proper runoff conveyance shall be required.

E. Any drainage facilities required by this chapter that are located on state highway rights-of-way shall be subject to approval by the Pennsylvania Department of Transportation.

F. When it can be shown that, due to topographic conditions, natural drainage swales on the site cannot adequately provide for drainage, open channels may be constructed conforming substantially to the line and grade of such natural drainage swales. Capacities of open channels shall be calculated using the Manning equation.

G. Storm drainage facilities and appurtenances shall be so designed and provided as to minimize erosion in watercourse channels and at all points of discharge.

H. Consideration should be given to the design and use of volume controls for stormwater management, where geology permits.

§ 107-8. Management districts.

A. Mapping of stormwater management districts. In order to implement the provisions of the Little Lehigh Management Plan, the borough is hereby divided into stormwater management districts consistent with a Release Rate Map. The boundaries of the stormwater management districts are shown

on an official map which is available for inspection at the borough office. A segmented copy of the Official Map is included as Appendix A to this chapter.[4]

B. Description of stormwater management districts. Three (3) types of stormwater management districts may be applicable to the borough, namely, Release-Rate Districts, Provisional No-Detention Districts and Provisional One-Hundred-Percent Release-Rate Districts as described below.

(1) Release-Rate Districts. There are six (6) Release-Rate Districts which differ in the extent to which postdevelopment runoff must be controlled. The release rates and districts are fifty percent (50%), sixty percent (60%), seventy percent (70%), eighty percent (80%), ninety percent (90%) and one hundred percent (100%). Within a given district, the postdevelopment peak rate of storm runoff must be controlled to the stated percentage of the predevelopment peak rate of storm runoff in order to protect downstream watershed areas.

(2) Provisional No-Detention Districts. These watershed areas may discharge postdevelopment peak runoff without detention without adversely affecting the total watershed peak flow. In certain instances, however, the local runoff conveyance facilities, which transport runoff from the site to the main channel, may not have adequate capacity to safely transport increased peak flows associated with no-detention for a proposed development. In those instances, the developer shall either use a one-hundred-percent release-rate control or provide increased capacity of downstream drainage elements to convey increased peak flows consistent with § 107-9H. In determining if adequate capacity exists in the local watershed drainage network, the developer must assume that the entire local watershed is developed per current zoning and that all new development would use the runoff controls specified by this chapter. Similarly, any capacity improvements must be designed to convey runoff from

[4] Editor's Note: Appendix A is on file in the office of the Borough Secretary.

development of all areas tributary to the improvement consistent with the capacity criteria specified in § 107-9C.

(3) Provisional One-Hundred-Percent Release-Rate Districts. These areas should use a one-hundred-percent release-rate control to protect the areas upstream of the mainstem. Direct discharge of postdevelopment flows with no detention could be appropriate for these areas if the developer could prove that adequate downstream capacity exists to convey the increased peak flows generated with development of the subarea(s) within which the development site is located, without detention controls, to the mainstem. Evaluation of downstream capacity must assume development of all areas tributary to the local drainage network consistent with current zoning and that all new development would use the runoff controls specified by this chapter, except as otherwise specified above.

§ 107-9. Implementation provisions.

A. Any stormwater management controls required by this chapter and subject to release-rate criteria from fifty percent (50%) through one hundred percent (100%) shall meet the applicable release-rate criteria for each of the two- , ten- , twenty-five- and one-hundred-year return period runoff events consistent with the calculation methodology specified in § 107-10.

B. The exact location of the Stormwater Management District boundaries as they apply to a given development site shall be determined by mapping the boundaries using the two-feet topographic contours provided as part of the drainage plan. The district boundaries, as originally drawn, coincide with topographic divides or, in certain instances, are drawn from the intersection of the watercourse and a physical feature such as the confluence with another watercourse or a potential flow obstruction (road, culvert, bridge, etc.) to the topographic divide consistent with topography.

C. Any downstream capacity analysis conducted in accordance with this chapter shall use the following criteria for determining adequacy for accepting increased peak flow rates:

(1) Natural or man-made channels or swales must be able to convey the increased runoff associated with a two-year return period event within their banks at velocities consistent with protection of the channels from erosion. Acceptable velocities shall be based upon criteria included in the Department of Environmental Resources Soil Erosion and Sedimentation Control Manual (February 1985) and presented in Appendix C of this chapter.[5]

(2) Natural or man-made channels or swales must be able to convey the increased twenty-five-year return period runoff peak within their banks or otherwise not create any hazard to persons or property.

(3) Culverts, bridges, storm sewers or any other facilities which must pass or convey flows from the tributary area must have sufficient capacity to pass or convey the increased flows associated with the twenty-five-year return period runoff event, except for facilities located within a designated floodplain area which must be capable of passing or conveying the one-hundred-year return period runoff. Any facilities which constitute stream enclosures per the Department of Environmental Resources' Chapter 105 regulations shall be designed to convey the one-hundred-year return period runoff.

D. For a proposed development site located within a single release-rate category area, the total runoff from the site shall meet the applicable release rate criteria. For development sites with multiple points of concentrated runoff discharge, individual drainage points may be designed for up to a one-hundred-percent release rate so long as the total runoff from the site is controlled to the applicable release rate.

E. For a proposed development site located within two (2) or more release-rate category areas, the maximum peak rate of runoff that may be discharged at any point is limited to the

[5] **Editor's Note: Appendix C is on file in the office of the Borough Secretary.**

predevelopment peak rate of runoff at that point multiplied by the applicable release rate. The control rates shall apply regardless of any grading modifications which may change the drainage area which discharges at a given point.

F. For proposed development sites located partially within a release-rate category area and partially within a provisional no-detention area, in no event shall a significant portion of the site area subject to the release-rate control be drained to the discharge point(s) located in the no-detention area.

G. No-harm option.

(1) For any proposed development site not located in a Provisional No-Detention District, the developer has the option of using a less-restrictive runoff control (including no-detention) if the developer can prove that no harm would be caused by discharging at a higher runoff rate than that specified by the plan. Proof of no harm would have to be shown from the development site through the remainder of the downstream drainage network to the confluence of the Little Lehigh Creek with the Lehigh River. Proof of no harm must be shown using the capacity criteria specified in Subsection C above if downstream capacity analysis is a part of the no-harm justification. Attempts to prove no harm based upon downstream peak flow versus capacity analysis shall be governed by the following provisions:

(a) The peak flow values to be used for downstream areas for the design return period storms (two-, ten-, twenty-five-, and one-hundred-year) shall be the values from the calibrated Penn State Runoff Model for the Little Lehigh Creek Watershed. These flow values would be supplied to the developer by the Borough Engineer upon request.

(b) Any available capacity in the downstream conveyance system as documented by a developer may be used by the developer only in proportion to his development site acreage relative to the total upstream undeveloped acreage from the identified capacity [i.e., if his site is ten percent (10%) of the

upstream undeveloped acreage, he may use up to ten percent (10%) of the documented downstream available capcity].

(c) Developer-proposed runoff controls which would generate increased peak flow rates at documented storm drainage problem areas would, by definition, be precluded from successful attempts to prove no harm, except in conjunction with proposed capacity improvements for the problem areas consistent with Subsection I below.

(2) Any no-harm justifications shall be submitted by the developer as part of the drainage plan submission per Article IV.

H. Regional or subregional detention alternatives. For certain areas within the watershed, it may be more cost-effective to provide one (1) control facility for an entire subarea, group of subareas or portion of a subarea incorporating more than one (1) development site than to provide an individual control facility for each development site. The initiative and funding for any regional or subregional runoff control alternatives are the responsibility of prospective developers. The design of any regional control basins must incorporate reasonable development of the entire upstream watershed. The peak outflow of a regional basin would be determined on a case-by-case basis using the hydrologic model of the watershed consistent with protection of the downstream watershed areas. "Hydrologic model" refers to the calibrated Little Lehigh Creek version of the Penn State Runoff Model as developed for the Storm Water Management Plan.[6]

I. Capacity improvements.

(1) In certain instances, primarily within the provisional no-detention and provisional one-hundred-percent release-rate category areas, local drainage conditions may dictate more-stringent levels of runoff control than those based upon protection of the entire watershed. In these instances, if the developer could prove that it would be

[6] Editor's Note: See 32 P.S. § 680.1 et seq.

feasible to provide capacity improvements to relieve the capacity deficiency in the local drainage network, then the capacity improvements could be provided by the developer in lieu of runoff controls on the development site. Any capacity improvements would be designed based upon development of all areas tributary to the proposed improvement and the capacity criteria specified in Subsection C above. In addition, all new development upstream of a proposed capacity improvement shall be assumed to implement the applicable runoff controls consistent with this chapter, except that all new development within the entire subarea(s) within which the proposed development site is located shall be assumed to implement the developer's proposed discharge control, if any.

(2) Capacity improvements may also be provided as necessary to implement any regional or subregional detention alternatives or to implement a modified no-harm option which proposes specific capacity improvements to document the validity of a less stringent discharge control which would not create any harm downstream.

J. Waiver of runoff control based on minimum additional impervious cover. Any proposed regulated activity, except those defined in § 107-4D(5) and (6), which would create ten thousand (10,000) square feet or less of additional impervious cover would be exempt from meeting the runoff control provisions of this chapter. For developments which are to take place in stages, the entire development plan must be used in determining conformance to this criteria. Additional impervious cover shall include but not be limited to any roof, parking or driveway areas and any new streets and sidewalks constructed as part of or for the proposed development. Any areas which may be designed to initially be semipervious (e.g., gravel, crushed stone, porous pavement, etc.) shall be considered impervious areas for the purposes of waiver evaluation. No waiver shall be provided for any regulated activities as defined in § 107-4D(5) and (6).

§ 107-10. Calculation methodology.

A. Stormwater runoff from all development sites shall be calculated using either the rational method or a soil-cover-complex methodology.

B. The design of any detention basin intended to meet the requirements of this chapter shall be verified by routing the design storm hydrograph through the proposed basin. For basins designed using the modified rational method technique, the detention volume shall, at minimum, equal the volume derived from the approximate routing process as contained in SCS Technical Release Number 55 (TR55).

C. All stormwater detention facilities shall provide a minimum one-and-zero-tenths-foot freeboard above the maximum pool elevation associated with the two- through twenty-five-year runoff events. An emergency spillway shall be designed to pass the one-hundred-year runoff event with a minimum five-tenths-foot freeboard.

D. All calculations using the soil cover complex method shall use the Soil Conservation Service Type II twenty-four-hour rainfall distribution. The twenty-four-hour rainfall depths for the various return periods to be used consistent with this chapter are taken from the PennDOT Intensity - Duration - Frequency Field Manual (May 1986) for Region 4:

Return Period (years)	24-Hour Rainfall Depth (inches)
2	2.88
10	4.56
25	5.52
100	7.68

A graphical and tabular presentation of the Type II twenty-four-hour distribution is included in Appendix C.[7]

[7] **Editor's Note: Appendix C is on file in the office of the Borough Secretary.**

E. All calculations using the Rational Method shall use rainfall intensities consistent with appropriate times of concentration and return periods and the intensity - duration - frequency curves as presented in Appendix C.

F. Runoff curve numbers (CN's) to be used in the soil cover complex method shall be based upon the matrix presented in Appendix C.

G. Runoff coefficients for use in the Rational Method shall be based upon the table presented in Appendix C.

H. The Manning equation shall be used to calculate the capacity of watercourses. Manning "n" values used in the calculations shall be consistent with the table presented in Appendix C. Pipe capacities shall be determined by methods acceptable to the Borough Engineer.

I. Any detention basin intended to meet the requirements of this chapter which requires a dam safety permit from the Department of Environmental Resources shall be designed consistent with the provisions of the Dam Safety and Encroachments Act[8] and the Department of Environmental Resources Chapter 105 rules and regulations.

ARTICLE IV
Drainage Plan

§ 107-11. Plan required.

For any of the regulated activities of this chapter, prior to the final approval of subdivision and/or land development plans or the issuance of any permit or the commencement of any land disturbance activity, the owner, subdivider, developer or his agent shall submit a drainage plan for approval.

[8] Editor's Note: See 32 P.S. § 693.1 et seq.

§ 107-12. Exemptions.

Any regulated activity which would create ten thousand (10,000) square feet or less of additional impervious cover is exempt from the drainage plan preparation provisions of this chapter. This criteria shall apply to the total proposed development even if development is to take place in stages. Additional impervious cover shall include but not be limited to any roof, parking or driveway areas and any new streets and sidewalks constructed as part of or for the proposed regulated activity. Any areas designed to initially be gravel, crushed stone, porous pavement, etc., shall be assumed to be impervious for the purposes of this chapter.

§ 107-13. Contents of plan.

The following items shall be included in the drainage plan:

A. General. The plan shall include:

(1) A general description of project.

(2) A general description of proposed permanent stormwater controls.

B. Map(s) of the project area showing:

(1) The location of the project relative to highways, municipalities or other identifiable landmarks.

(2) Existing contours at intervals of two (2) feet. In areas of steep slopes [greater than fifteen percent (15%)], five-foot contour intervals may be used.

(3) Streams, lakes, ponds or other bodies of water within the project area.

(4) Other physical features, including existing drainage swales and areas of natural vegetation to be preserved.

(5) Locations of proposed underground facilities, sewers and waterlines.

(6) An overlay showing soil types and boundaries.

(7) Proposed changes to land surface and vegetative cover.

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

(9) Final contours at intervals of two (2) feet. In areas of steep slopes [greater than fifteen percent (15%)], five-foot contour intervals may be used.

(10) Stormwater Management District boundaries applicable to the site.

C. Stormwater management controls.

(1) All stormwater management controls must be shown on a map and described, including:

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

(b) Other control devices or methods such as rooftop storage, semipervious paving materials, grass swales, parking lot ponding, vegetated strips, detention or retention ponds, storm sewers, etc.

(2) All calculations, assumptions and criteria used in the design of the control device or method must be shown.

D. Maintenance program. A maintenance program for all stormwater management control facilities must be included. This program must include the proposed ownership of the control facilities and the maintenance requirements for the facilities and detail the financial responsibility for the required maintenance.

§ 107-14. Submission procedure.

A. For regulated activities specified in § 107-4D(1) and (2):

(1) The drainage plan shall be submitted by the developer to the Borough Secretary (or other appropriate person) as part of the preliminary plan submission for the subdivision or land development.

(2) Three (3) copies of the drainage plan shall be submitted.

(3) Distribution of the drainage plan will be as follows:

(a) One (1) copy to the Borough Council.

(b) One (1) copy to the Borough Engineer.

(c) One (1) copy to the Joint Planning Commission.

B. For regulated activities specified in § 107-4D(3) and (4), the drainage plan shall be submitted by the developer to the municipal building permit officer as part of the building permit application.

C. For regulated activities specified in § 107-4D(5) and (6):

(1) The drainage plan shall be submitted by the developer to the Joint Planning Commission for coordination with the Department of Environmental Resources permit application process under Chapter 105 (Dam Safety and Waterway Management) or Chapter 106 (Flood Plain Management) of the Department of Environmental Resources' rules and regulations.

(2) One (1) copy of the drainage plan shall be submitted.

§ 107-15. Review procedure.

A. The Borough Engineer shall review the drainage plan for consistency with the adopted Little Lehigh Creek Stormwater Management Plan as embodied by this chapter against any additional storm drainage provisions contained in the Municipal Subdivision and Land Development or Zoning Ordinance, as applicable.[9]

B. The Joint Planning Commission shall provide an advisory review of the drainage plan for consistency with the Little Lehigh Creek Stormwater Management Plan.

C. For regulated activities specified in § 107-4D(1) and (2), the Joint Planning Commission shall provide written comments to the borough within a time frame consistent with established procedures under Act 247 as to whether the drainage plan has

[9] **Editor's Plan: See Ch. 113, Subdivision and Land Development, and Ch. 137, Zoning, respectively.**

been found to be consistent with the Stormwater Management Plan.

D. For regulated activities specified in § 107-4D(5) and (6), the Joint Planning Commission shall notify the Department of Environmental Resources whether the drainage plan is consistent with the Stormwater Management Plan and forward a copy of the review letter to the borough and developer.

E. The borough shall not approve any subdivision or land development [regulated activities in § 107-4D(1) and (2)] or building permit application [regulated activities in § 107-4D(3) and (4)] if the drainage plan has been found to be inconsistent with the Stormwater Management Plan as determined by the Borough Engineer.

§ 107-16. Modification of plans.

A modification to a submitted drainage plan for a proposed development site which involves a change in 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 drainage plan, as determined by the Borough Engineer, shall require a resubmission of the modified drainage plan consistent with § 107-14 subject to review per § 107-15 of this chapter.

§ 107-17. Hardship waivers.

A. The Borough Council may hear requests for waivers where it is alleged that the provisions of this chapter (or Act 167[10]) inflict unnecessary hardship upon the applicant. The waiver request shall be in writing on an application form promulgated by the borough and accompanied by the requisite fee based upon a fee schedule adopted by the borough. A copy of the completed application form shall be provided to each of the following: the borough, Borough Engineer, Borough Solicitor

[10] Editor's Note: See 32 P.S. § 680.1 et seq.

and Joint Planning Commission. The application shall fully document the nature of the alleged hardship.

B. The borough may grant a waiver, provided that all of the following findings are made in a given case:

(1) That there are unique physical circumstances or conditions, including irregularity of lot size or shape or exceptional topographical or other physical conditions peculiar to the particular property and that the unnecessary hardship is due to such conditions and not the circumstances or conditions generally created by the provisions of this chapter in the Stormwater Management District in which the property is located.

(2) That, because of such physical circumstances or conditions, there is no possibility that the property can be developed in strict conformity with the provisions of this chapter, including the no-harm provision, and that the authorization of a waiver is therefore necessary to enable the reasonable use of the property.

(3) That such unnecessary hardship has not been created by the applicant.

(4) That the waiver, if authorized, will represent the minimum waiver that will afford relief and will represent the least modification possible of the regulation in issue.

C. In granting any waiver, the Borough Council may attach such reasonable conditions and safeguards as it may deem necessary to implement the purposes of Act 167 and this chapter.

ARTICLE V
Inspections

§ 107-18. Schedule of inspections; revocation of permits.

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

B. If, at any stage of the work, the Borough Engineer determines that the permanent stormwater control facilities are not being installed in accordance with the approved development plan, the borough shall revoke any existing permits until a revised development plan is submitted and approved as required by § 107-16.

ARTICLE VI
Fees and Expenses

§ 107-19. Fee established.

A fee shall be established by the borough to defer municipal costs for drainage plan review and processing.

§ 107-20. Expenses covered by fee.

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

A. The review of the drainage plan by the Borough Engineer.

B. The site inspection.

C. The inspection of required controls and improvements during construction.

D. The final inspection upon completion of the controls and improvements required in the plan.

E. Any additional work required to enforce any permit provisions regulated by this chapter, to correct violations and to assure the completion of stipulated remedial actions.

ARTICLE VII
Maintenance

§ 107-21. Maintenance responsibilities.

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

A. Single-entity ownership. In all cases where the permanent stormwater runoff control facilities are designed to manage runoff from property in a single-entity ownership as defined below, the maintenance responsibility for the stormwater control facilities shall be with the single-entity owner. The single-entity owner shall enter into an agreement with the borough which specifies that the owner will properly maintain the facilities consistent with accepted practice as determined by the Borough Engineer. A "single entity" shall be defined as an individual, association, public or private corporation, partnership, firm, trust, estate or any other legal entity empowered to own real estate.

B. Multiple ownership.

(1) In cases where the property controlled by the permanent stormwater control facilities shall be in multiple ownership (i.e., many individual owners of various portions of the property), the developer shall dedicate the permanent stormwater control facilities to the borough for maintenance. The developer shall pay a fee to the borough corresponding to the present worth of maintenance of the facilities for a ten-year period. The estimated annual maintenance cost for the facilities shall be based on a fee calculated by the Borough Engineer and approved by the borough for each separate stormwater facility. The fee shall be reasonable and related to the terrain features reflecting on both design and maintenance.

(2) In certain multiple ownership situations, the borough may benefit by transferring the maintenance responsibility to an individual or group of individuals residing within the controlled area. These individuals may have the permanent stormwater control facilities adjacent to their lots or otherwise have an interest in the proper maintenance of the facilities. In these instances, the borough and the individual(s) may enter into a formal agreement for the maintenance of the facilities. The borough shall maintain ownership of the facilities and be responsible for periodic inspections.

§ 107-22. Right of entry.

Upon presentation of the proper credentials, duly authorized representatives of the borough may enter, at reasonable times, upon any property within the borough to investigate or ascertain whether facilities for which the borough is not directly responsible for maintenance as provided in § 107-21.