

## ARTICLE IV DRAINAGE PLAN REQUIREMENTS

### Section 401. General Requirements

For any of the activities regulated by this Ordinance, the final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, or the commencement of any land disturbance activity may not proceed until the Property Owner or Developer or his/her agent has received written approval of a Drainage Plan from the Municipality.

### Section 402. Drainage Plan Contents

The Drainage Plan shall consist of all applicable calculations, maps, and plans. A note on the maps shall refer to the associated computations and erosion and sedimentation control plan by title and date. The cover sheet of the computations and erosion and sedimentation control plan shall refer to the associated maps by title and date. All Drainage Plan materials shall be submitted to the Municipality in a format that is clear, concise, legible, neat, and well organized; otherwise, the Drainage Plan shall be disapproved and returned to the Applicant.

The following items shall be included in the Drainage Plan:

#### A. General

1. General description of project.
2. General description of permanent stormwater management techniques, including construction specifications of the materials to be used for stormwater management facilities.
3. Complete hydrologic, hydraulic, and structural computations for all stormwater management facilities.
4. Four copies completed drainage plan application as contained in Appendix C.

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

1. The location of the project relative to highways, municipalities or other identifiable landmarks.
2. Existing contours at intervals of two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.
3. Existing streams, lakes, ponds, or other bodies of water within the project area.
4. Other physical features including flood hazard boundaries, sinkholes, streams, existing drainage courses, areas of natural vegetation to be preserved, and the total extent of the upstream area draining through the site.
5. The locations of all existing and proposed utilities, sanitary sewers, and water lines within 50 feet of property lines.

6. An overlay showing soil names and boundaries.
7. Proposed changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added.
8. Proposed structures, roads, paved areas, and buildings.
9. Final contours at intervals of two feet. In areas of steep slopes (greater than 15 percent), five-foot contour intervals may be used.
10. The name of the development, the name and address of the owner of the property, and the name of the individual or firm preparing the plan.
11. The date of submission.
12. A graphic and written scale of one (1) inch equals no more than fifty (50) feet; for tracts of twenty (20) acres or more, the scale shall be one (1) inch equals no more than one hundred (100) feet.
13. A North arrow.
14. The total tract boundary and size with distances marked to the nearest foot and bearings to the nearest degree.
15. Existing and proposed land use(s).
16. A key map showing all existing man-made features beyond the property boundary that would be affected by the project.
17. Horizontal and vertical profiles of all open channels, including hydraulic capacity.
18. Overland drainage paths.
19. A fifteen-foot wide access easement around all stormwater management facilities that would provide ingress to and egress from a public right-of-way.
20. A note on the plan indicating the location and responsibility for maintenance of stormwater facilities that would be located off-site. All off-site facilities shall meet the performance standards and design criteria specified in this Ordinance.
21. A construction detail of any improvements made to sinkholes and the location of all notes to be posted, as specified in this Ordinance.
22. A statement signed by the Landowner, acknowledging the stormwater management system to be a permanent fixture that can be altered or removed only after approval of a revised plan by the Municipality.
23. The following signature block for the Municipal Engineer:  
  
“ \_\_\_\_\_, on this date (date of signature), have reviewed and hereby certify that the Drainage Plan meets all design standards and criteria of the Municipal Ordinance.”

24. The location of all erosion and sedimentation control facilities.

C. Supplemental Information

1. A written description of the following information shall be submitted.
  - a) The overall stormwater management concept for the project.
  - b) Stormwater runoff computation as specified in this Ordinance.
  - c) Stormwater management techniques to be applied both during and after development.
  - d) Expected project time schedule.
2. A soil erosion and sedimentation control plan, where applicable, including all reviews and approvals, as required by PADEP.
3. A geologic assessment of the effects of runoff on sinkholes as specified in this Ordinance.
4. The effect of the project (in terms of runoff volumes and peak flows) on adjacent properties and on any existing municipal stormwater collection system that may receive runoff from the project site.
5. A Declaration of Adequacy and Highway Occupancy Permit from the PENNDOT District Office when utilization of a PENNDOT storm drainage system is proposed.
6. Stormwater management and conveyance facilities operation and maintenance plan.

D. Stormwater Management Facilities

1. All stormwater management facilities must be located on a plan and described in detail.
2. When groundwater recharge methods such as seepage pits, beds or trenches are used, the locations of existing and proposed septic tank infiltration areas and wells must be shown.
3. All calculations, assumptions, and criteria used in the design of the stormwater management facilities must be shown.

**Section 403. Plan Submission**

For all activities regulated by this Ordinance, the steps below shall be followed for submission. For any activities that require a PADEP Joint Permit Application and regulated under Chapter 105 (Dam Safety and Waterway Management) or Chapter 106 (Floodplain Management) of PA DEP's Rules and Regulations, require a PENNDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the permit(s) shall be part of the plan.

- A. The Developer as part of the Preliminary Plan submission shall submit the Drainage Plan for the Regulated Activity.
- B. Four (4) copies of the Drainage Plan shall be submitted.

C. Distribution of the Drainage Plan will be as follows:

1. Two (2) copies to the Municipality accompanied by the requisite Municipal Review Fee, as specified in this Ordinance. The Municipal fee schedule work sheet is contained in Appendix "C" which shall be completed to determine the fee. It shall accompany the check to the Municipality.
2. One (1) copy to the Municipal Engineers.
3. One (1) copy to the County Planning Commission/Department

**Section 404. Drainage Plan Review**

- A. The Municipal Engineer shall review the Drainage Plan for consistency with the adopted Susquehanna Tributaries Watershed Act 167 Stormwater Management Plan. The Municipality shall require receipt of a complete plan, as specified in this Ordinance.
- B. The Municipal Engineer shall review the Drainage Plan for any submission or land development against the municipal subdivision and land development ordinance provisions not superseded by this Ordinance.
- C. For activities regulated by this Ordinance, the Municipal Engineer shall notify the Municipality in writing, within 30 calendar days, whether the Drainage Plan is consistent with this Ordinance. Should the Drainage Plan be determined to be consistent with this Ordinance, the Municipal Engineer will forward an approval letter to the Developer with a copy to the Municipal Secretary.
- D. Should the Drainage Plan be determined to be inconsistent with this Ordinance, the Municipal Engineer will forward a disapproval letter to the Developer with a copy to the Municipal Secretary citing the reason(s) for the disapproval. Any disapproved Drainage Plans may be revised by the Developer and resubmitted consistent with this Ordinance.
- E. The Municipal For Regulated Activities specified in Section 104 of this Ordinance, the Municipal Engineer shall notify the Municipal Building Permit Officer in writing, within a time frame consistent with the Municipal Building Code and/or Municipal Subdivision Ordinance, whether the Drainage Plan is consistent with this Ordinance and forward a copy of the approval/disapproval letter to the Developer. Any disapproved drainage plan may be revised by the Developer and resubmitted consistent with this Ordinance.
- F. For Regulated Activities requiring a PADEP Joint Permit Application, the Municipal Engineer shall notify PADEP whether the Drainage Plan is consistent with this Ordinance and forward a copy of the review letter to the Municipality and the Developer. PADEP may consider the Municipal Engineer's review comments in determining whether to issue a permit.
- G. The Municipality shall not approve any subdivision or land development for Regulated Activities specified in Section 104 of this Ordinance if the Drainage Plan has been found to be inconsistent with this Ordinance, as determined by the Municipal Engineer. All required permits from PADEP must be obtained prior to approval.
- H. Building Permit Office shall not issue a building permit for any Regulated Activity specified in Section 104 of this Ordinance if the Drainage Plan has been found to be inconsistent with this Ordinance, as determined by the Municipal Engineer, or without considering the comments of the Municipal Engineer. All required permits from PADEP must be obtained prior to issuance of a building permit.

- I. The Developer shall be responsible for completing an "As-Built Survey" of all stormwater management facilities included in the approved Drainage Plan. The As-Built Survey and an explanation of any discrepancies with the design plans shall be submitted to the Municipal Engineer for final approval. In no case shall the Municipality approve the As-Built Survey until the Municipality receives a copy of an approved Declaration of Adequacy, Highway Occupancy Permit from the PENNDOT District Office, and any applicable permits from PADEP.
- J. The Municipality's approval of a Drainage Plan shall be valid for a period not to exceed 5 years. This 5-year time period shall commence on the date that the Municipality signs the approved Drainage Plan. If stormwater management facilities included in the approved Drainage plan have not been constructed, or if an As-Built Survey of these facilities has not been approved within this 5-year time period, then the Municipality may consider the Drainage plan disapproved and may revoke any and all permits. Drainage Plans that are considered disapproved by the Municipality shall be resubmitted in accordance with Section 406 of this Ordinance.

#### **Section 405. Modification of Plans**

A modification to a submitted Drainage Plan for a development site that involves a change in stormwater management facilities or techniques, or that involves the relocation or re-design of stormwater management facilities, or that is necessary because soil or other conditions are not as stated on the Drainage Plan as determined by the Municipal Engineer, shall require a resubmission of the modified Drainage Plan consistent with Section 403 of this Ordinance and be subject to review as specified in Section 404 of this Ordinance.

A modification to an already approved or disapproved Drainage Plan shall be submitted to the Municipality, accompanied by the applicable review fee. A modification to a Drainage Plan for which the Municipality has not taken a formal action shall be submitted to the Municipality, accompanied by the applicable Municipality Review Fee.

#### **Section 406. Resubmission of Disapproved Drainage Plans**

A disapproved Drainage Plan may be resubmitted, with the revisions addressing the Municipal Engineer's concerns documented in writing, to the Municipal Engineer in accordance with Section 404 of this Ordinance and be subject to review as specified in Section 405 of this Ordinance. The applicable Municipality Review Fee must accompany a resubmission of a disapproved Drainage Plan.

## **ARTICLE V INSPECTIONS**

### **Section 501. Schedule of Inspections**

- A. The Municipal Engineer or the municipal assignee shall inspect all critical phases of the installation of the permanent stormwater management facilities. The critical phases for inspection shall be determined by the reviewing engineer at the time the stormwater plan is reviewed. They shall be listed in the municipal engineer's approval letter.
- B. During any stage of the work, if the Municipal Engineer determines that the permanent stormwater management facilities are not being installed in accordance with the approved Stormwater Management Plan, the Municipality shall suspend or revoke at the Engineer's discretion, any existing permits until a revised Drainage Plan is submitted and approved, as specified in this Ordinance.

## **ARTICLE VI FEES AND EXPENSES**

### **Section 601. General**

The fee required by this Ordinance is the Municipal Review Fee. The Municipal Review fee shall be established by the Municipality to defray review costs incurred by the Municipality and the Municipal Engineer. The Applicant shall pay all fees.

### **Section 602. Municipality Drainage Plan Review Fee**

The Municipality shall establish a Review Fee Schedule by resolution of the municipal governing body based on the size of the Regulated Activity and based on the Municipality's costs for reviewing Drainage Plans. The Municipality shall periodically update the Review Fee Schedule to ensure that review costs are adequately reimbursed.

### **Section 603. Expenses Covered by Fees**

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

- A. Administrative/clerical costs
- B. The review of the Drainage Plan by Municipality and the Municipal Engineer.
- C. The site inspections.
- D. The inspection of stormwater management facilities and drainage improvements during construction.
- E. The final inspection upon completion of the stormwater management facilities and drainage improvements presented in the Drainage Plan..
- F. Any additional work required to enforce any permit provisions regulated by this Ordinance, correct violations, and assure proper completion of stipulated remedial actions.



## **ARTICLE VII MAINTENANCE RESPONSIBILITIES**

### **Section 701. Performance Guarantee**

The applicant shall provide a financial guarantee to the Municipality for the timely installation and proper construction of all stormwater management controls as required by this Ordinance equal to the full construction cost of the required controls.

### **Section 702. Maintenance Responsibilities**

- A. The Drainage Plan for the development site shall contain an operation and maintenance plan prepared by the developer and approved by the municipal engineer. The operation and maintenance plan shall outline required routine maintenance actions and schedules necessary to ensure proper operation of the facility(ies).
- B. The Drainage Plan for the development site shall establish responsibilities for the continuing operating and maintenance of all proposed stormwater control facilities, consistent with the following principals:
  - 1. If a development consists of structures or lots which are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Municipality, stormwater control facilities may also be dedicated to and maintained by the Municipality. The acceptance of maintenance responsibility for storm water ponds, infiltration areas and water quality BMP's by municipalities will be at the discretion of the Municipality.
  - 2. If a development site is to be maintained in a single ownership or if sewers and other public improvements are to be privately owned and maintained, then the ownership and maintenance of stormwater control facilities shall be the responsibility of the owner or private management entity.
  - 3. The governing body, upon recommendation of the municipal engineer, shall make the final determination on the continuing maintenance responsibilities prior to final approval of the Drainage Plan. The governing body reserves the right to accept the ownership and operating responsibility for any or all of the stormwater management controls.

### **Section 703. Maintenance Agreement for Privately Owned Stormwater Facilities**

- A. Prior to final approval of the site's stormwater management plan, the property owner shall sign and record a maintenance agreement covering all stormwater control facilities that are to be privately owned. Said agreement, designated as "Standard Stormwater Maintenance and Monitoring Agreement" found in Appendix C of the Susquehanna River Tributaries Watershed Act 167 Stormwater Management Plan Columbia County Pennsylvania Volume II, is attached and made part hereto.
- B. Other items may be included in the agreement where determined necessary to guarantee the satisfactory maintenance of all facilities. The maintenance agreement shall be subject to the review and approval of the municipal solicitor and governing body.



#### **Section 704. Municipal Stormwater Maintenance Fund**

If the Municipality for dedication accepts stormwater facilities, persons installing stormwater storage facilities shall be required to pay a specified amount to the Municipal Stormwater Maintenance Fund to help defray costs of periodic inspections and maintenance expenses. The amount of the deposit shall be determined as follows:

- A. If the storage facility is to be privately owned and maintained, the deposit shall cover the cost of periodic inspections performed by the Municipality engineer and/or their assignee. After that period of time, inspections will be performed at the expense of the Municipality.
- B. If the storage facility is to be owned and maintained by the Municipality, the deposit shall cover the estimated costs for maintenance and inspections for ten (10) years. The municipal engineer will establish the estimated costs utilizing information submitted by the applicant.
- C. The amount of the deposit to the fund shall be converted to present worth of the annual series values. The municipal engineer shall determine the present worth equivalents, which shall be subject to the approval of the municipal governing body.
- D. If a storage facility is proposed that also serves as a recreation facility (e.g. ball-field, lake), the Municipality may reduce or waive the amount of the maintenance fund deposit based upon the value of the land for public recreation purpose.
- E. If at some future time a storage facility (whether publicly or privately owned) is eliminated due to the installation of storm sewers or other storage facility, the unused portion of the maintenance fund deposit will be applied to the cost of abandoning the facility and connecting to the storm sewer system or other facility. Any amount of the deposit remaining after the costs of abandonment are paid will be returned to the depositor.

#### **Section 705. Post Construction Maintenance Inspections**

- A. Basins should be inspected by the land owner/developer or responsible entity (including the municipal engineer for dedicated facilities) on the following basis:
  - 1. Annually for the first 5 years.
  - 2. Once every 2 years thereafter.
  - 3. Immediately after the cessation of a 2.9-inches in 24 hours or greater storm event.
- B. The entity conducting the inspection should be required to submit a written report to the municipality regarding the condition of the facility and recommending necessary repairs, if needed.

## **ARTICLE VIII ENFORCEMENT AND PENALTIES**

### **Section 801. Right-of-Entry**

Upon presentation of proper credentials, duly authorized representatives of the Municipality may enter at reasonable times upon any property within the Municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

### **Section 802. Notification**

In the event that a person fails to comply with the requirements of this Ordinance, or fails to conform to the requirements of any permit issued hereunder, the Municipality shall provide written notification of the violation. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violations(s). Failure to comply within the time specified shall subject such person to the penalty provision of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Municipality from pursuing any and all other remedies. It shall be the responsibility of the owner of the real property on which any Regulated Activity is proposed to occur, is occurring, or has occurred, to comply with the terms and conditions of this Ordinance.

### **Section 803. Enforcement**

The municipal governing body is hereby authorized and directed to enforce all of the provisions of this ordinance. All inspections regarding compliance with the drainage plan shall be the responsibility of the municipal engineer or other qualified persons designated by the Municipality.

- A. A set of design plans approved by the Municipality shall be on file at the site throughout the duration of the construction activity. The Municipality or designee may make periodic inspections during construction.
- B. Adherence to Approved Plan. It shall be unlawful for any person, firm or corporation to undertake any regulated activity under Section 104 on any property except as provided for in the approved drainage plan and pursuant to the requirements of this ordinance. It shall be unlawful to alter or remove any control structure required by the drainage plan pursuant to this ordinance or to allow the property to remain in a condition, which does not conform to the approved drainage plan.
- C. At the completion of the project, and as a prerequisite for the release of the performance guarantee, the owner or his representatives shall:
  - 1. Provide a certification of completion from an engineer, architect, surveyor or other qualified person verifying that all permanent facilities have been constructed according to the plans and specifications and approved revisions thereto.
  - 2. Provide a set of as-built (record) drawings.
- D. After receipt of the certification by the Municipality, the governing body or its designee to certify compliance with this ordinance shall conduct a final inspection.
- E. Prior to revocation or suspension of a permit, the governing body will schedule a hearing to discuss the non-compliance if there is no immediate danger to life, public health or property.

#### F. Suspension and Revocation of Permits

1. Any permit issued under this ordinance may be suspended or revoked by the governing body for:
  - a) Non-compliance with or failure to implement any provision of the permit.
  - b) A violation of any provision of this ordinance or any other applicable law, ordinance, rule or regulation relating to the project.
  - 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, or as outlined in Article IX of this ordinance. (Note: Article IX to be added by Municipality to cover special local considerations.)
2. A suspended permit shall be reinstated by the governing body when:
  - a) The municipal engineer or his designee has inspected and approved the corrections to the stormwater management and erosion and sediment pollution control measure(s), or the elimination of the hazard or nuisance, and/or;
  - b) The governing body is satisfied that the violation of the ordinance, law, or rule and regulation has been corrected.
  - c) A permit, which has been revoked by the governing body, cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Ordinance.

#### G. Occupancy Permit

An occupancy permit shall not be issued unless the certification of compliance has been secured. The occupancy permit shall be required for each lot owner and/or developer for all subdivisions and land development in the Municipality.

#### Section 804. Public Nuisance

- A. The violation of any provision of this ordinance is hereby deemed a Public Nuisance.
- B. Each day that a violation continues shall constitute a separate violation

#### Section 805. Penalties

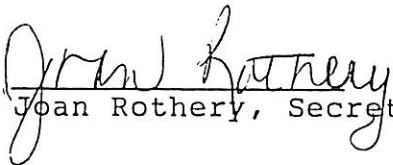
- A. Anyone violating the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction shall be subject to a fine of not more than \$ 500.00 for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense.
- B. In addition, the Municipality, through its solicitor, may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.

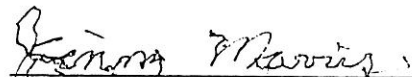
## Section 806. Appeals

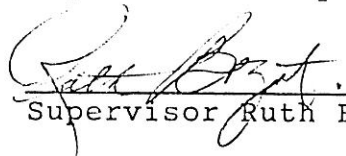
- A. Any person aggrieved by any action of the Municipality or its designee, relevant the provisions of this ordinance may appeal to the Municipal Zoning Hearing Board within thirty (30) days of that action.
- B. Any person aggrieved by any decision of Zoning Hearing Board, relevant to the provisions of this ordinance, may appeal to the County Court of Common Pleas in the county where the activity has taken place within thirty (30) days of the Zoning Hearing Board's decision.

ENACTED and ORDAINED by the Board of Supervisors of Briar Creek Township on the 7TH of JUNE, 2004. This Ordinance shall take effect immediately.

BRIAR CREEK TOWNSHIP SUPERVISORS:

  
Joan Rothery, Secretary

  
Supervisor Jimmy Morris, Chairman

  
Supervisor Ruth Bogart

Supervisor Gary Stair

  
Supervisor Michael T. Hart

  
Supervisor Max R. Sitler