

Chapter 9

Grading, Excavating, Erosion and Sediment Control

Part 1 Earth Disturbance

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Part 1**Earth Disturbance****§9-101. Short Title.**

The name of this Part shall be the "Richland Township Earth Disturbance Ordinance."

(Ord. 210, 3/22/2004)

§9-102. Regulated Activities.

1. A plan or plans for the control of erosion, sediment and grading is required whenever topography and vegetation are to be disturbed. All plans shall comply with best management practices (BMP's) outlined in the latest edition of the "Pennsylvania Handbook of Best Management Practices for Developing Areas," the Pennsylvania DEP "Erosion and Sediment Pollution Control Manual" (Pub: 363-2134-008) and all related requirements of DEP and Richland Township Ordinances.

2. No regulated earth disturbance activities within Richland Township shall commence until approval by Richland Township of an erosion and sediment control plan for construction activities.

3. Under 25 Pa.Code, Chapter 92, a Department of Environmental Protection (DEP) "NPDES Construction Activities" permit is required for any earth disturbance of 1 acre or more with a point source discharge to surface waters or the Richland Township storm sewer system, or 5 acres or more regardless of the planned runoff. This includes earth disturbances on any portion of, part of, or during any stage of, a larger common plan of development.

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

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.

6. *Post-Construction Runoff Control Requirements.*

A. No regulated earth disturbance activities within Richland Township shall commence until approval by Richland Township of a plan which demonstrates compliance with Pennsylvania water quality requirements after construction is complete.

B. To control post-construction stormwater impacts from regulated earth disturbance activities, State water quality requirements can be met by best management practices (BMP's), 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:

(1) *Infiltration*. Replication of pre-construction stormwater infiltration conditions.

(2) *Treatment*. Use of water quality treatment BMP's to ensure filtering out of chemical and physical pollutants from the stormwater runoff.

(3) *Streambank and Streambed Protection*. Management of volume and rate of post-construction stormwater discharges to prevent physical degradation of receiving waters (e.g., from scouring and erosion).

C. The BMP's must be designed to protect and maintain uses (e.g., drinking water use; cold water fishery use) and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in "special protection" streams, as required by Pennsylvania regulations at 25 Pa.Code, Chapter 93 (collectively referred to herein as State water quality requirements").

D. DEP has regulations that require municipalities to ensure design, implementation and maintenance of BMP's that control runoff from new development and redevelopment (hereinafter "development") after regulated earth disturbance activities are complete. These requirements include the need to implement post-construction stormwater BMP's with assurance of long-term operations and maintenance of those BMP's.

E. Evidence of any necessary permit(s) for regulated earth disturbance activities from the appropriate DEP regional office or from the Bucks County Conservation District must be provided to Richland Township. The issuance of an NPDES construction permit (or permit coverage under the Statewide General Permit (PAG-2)) satisfies the requirements of this Part.

7. Notwithstanding anything in the contrary set forth in this Part, no permit shall be required pursuant to this Part in the following circumstances:

A. Normal agricultural operations.

B. Where the aggregate area to be stripped at one time does not exceed 1,000 square feet; and the grade change does not exceed 6 inches in any one area and all bare earth is properly seeded, sodded or otherwise protected from erosion.

(Ord. 210, 3/22/2004)

§9-103. Unlawful Acts.

It shall be unlawful for any person, firm or corporation to do any of the following without first securing a permit as required pursuant to this Part:

A. To pave, fill, strip or change the existing grade of any land within the Township.

B. To disturb, modify, block, divert or affect the natural overland or subsurface flow of stormwater within the Township.

C. To construct, erect or install any dam, ditch, culvert, drainpipe, bridge or any other obstruction affecting the drainage of any property, or portion thereof, in the Township.

(Ord. 210, 3/22/2004)

§9-104. Effect on Other Permits.

Whenever any proposed activity requires a building and/or driveway permit, no such building or driveway permit shall be issued unless the permit required hereunder has been issued. The plans and applications required herein may be combined, when applicable, with plans and application materials submitted for building and/or driveway permits.

2. The need for a permit under this Part may also require the applicant to satisfy other Township ordinance requirements such as the Stormwater Management Ordinance [Chapter 25] and the Subdivision and Land Development Ordinance [Chapter 22]. It is the applicant's responsibility to comply with all other Township ordinances and local, State, and Federal regulations.

(Ord. 210, 3/22/2004)

§9-105. Application for Permit.

1. Any person, firm or corporation proposing to engage in activity requiring a permit hereunder shall apply for a permit by written application which shall include the applicant's agreement to comply with the regulations in §9-106 hereof upon issuance of the permit.

2. The applicant shall consult the Quakertown Area Zoning Ordinance and the Quakertown Area Subdivision and Land Development Ordinances as prepared and as may be amended for Richland Township, and all Richland Township ordinances and regulations which govern the development of land within the Township prior to making application for a permit under this Part.

3. A separate application shall be required for each grading operation. Three copies of all the documents referred to below and in §9-106 hereof shall be submitted with each application. The application forms submitted shall consist of the forms provided by the Township together with the required fees. All applications shall be submitted to the Township Zoning Officer who shall retain one for Township records and forward two copies of all documents to the Township Engineer.

4. The Township Secretary, within 10 days of the adoption of this Part, shall establish operating procedures including the required number of copies of the application; the content of the application, and all of the above shall be in conformity with the provisions of this Part. The Board of Supervisors of Richland Township shall determine the fees for such permits by resolution, from time to time.

5. Any application for an erosion, sedimentation and grading permit shall be accompanied by a plan of property showing the following:

A. An area plan or plans, describing existing and proposed features of the area surrounding the site of the work, including topography, existing vegetation, water courses, man-made features, the affected watersheds and other pertinent natural features. This may be in the form of a recent USGS map with the property and required features located thereon.

B. A topographical survey of the site, at a suitable scale of no less than 1 inch equals 50 feet and contour interval of no more than 2 feet, prepared by a registered

professional land surveyor or registered professional engineer, including also a boundary line survey, the location and description of vegetative cover, soil types (available from the Bucks County Conservation District) and any other pertinent existing natural or manmade features. Interpolated contours from USGS maps or any other similar source are not acceptable. The plan size shall be, at a minimum, 8½ inches by 14 inches.

C. An improvements plan of the same size and scale as in subsection .B hereof, as practicable, showing and describing all changes to the site, including cuts, fills, structures, paving; waste disposal systems, wells and utilities (this may be combined with the topographical survey on simple projects).

D. A written description of soil erosion and sedimentation control measures (with appropriate plans and specifications), in accordance with §44 of Chapter 102, Title 25, Rules and Regulations, Part I, Commonwealth of Pennsylvania Department of Environmental Protection, Subpart C, Protection of Natural Resources, Article II, Water Resources, Chapter 102, Erosion Control, which shall be in conformity with the standards and specifications of the Bucks County Conservation District and Township ordinances including, without limitation, retention basins or other erosion and stormwater control measures necessary to limit the rate of stormwater runoff.

E. A time schedule stating the anticipated starting and completion dates of the development sequence, the expected date of completion of construction of each of the measures referred to in subsection .D herein, and the time of exposure of each area prior to the completion of such measures.

F. A grading plan of the same scale as subsection .B herein showing and describing all changes to the site including cuts, fills, structures, paving, utilities, rights-of-way and easements. Also to be shown on the plan is the exact location of on-site waste disposal systems, wells and reserve waste disposal system areas.

G. The proposed final topographical survey of the site showing in detail the final grading upon completion of all construction activity.

(Ord. 210, 3/22/2004)

§9-106. Additional Requirements for Permits.

The following information shall be supplied whenever a permit is requested and it shall be prepared by registered professional civil engineer (however, the Township Engineer upon written application may waive in writing the necessity for filing a portion of or all of the following information), which said information shall be in addition to any other requirements imposed upon the applicant by this Part. The information is as follows:

A. A plan shall indicate present and proposed sources, storage and disposition of water being channeled through or across the site, together with elevations, gradients and maximum flow rates. The application shall describe the work to be performed, the materials to be used and the manner, or method, of performance, including provisions for protecting and maintaining existing drainage facilities, whether on public or private property.

B. Calculations to determine runoff for stormwater management control

facilities (i.e., detention basins) shall be based on the SCS TR-55 Method and shall be based upon the assumption that the predevelopment land use condition is meadowland in good condition unless the actual predeveloped condition has a stormwater runoff rate less than meadowland. The condition having the least runoff shall be the basis of all stormwater runoff calculations for all portions of the subject lot or tract of land.

C. Storm sewer piping, inlet systems to retention/detention basins, private culverts, swales and all related facilities shall be designed to freely convey and carry stormwater runoff of the 25-year frequency storm. All basins shall be designed on a 100-year frequency storm basis. Sedimentation basins should be designed to meet the requirements of Title 25, Chapter 102, Erosion Control. If there is any doubt to the requirements for stormwater management and control devices, the design engineer shall consult with the Township Engineer prior to the design implementation.

(Ord. 210, 3/22/2004)

§9-107. Specification and Requirements.

The following provisions apply for all activity governed by the provisions of this Part:

A. All drainage facilities shall be designed to retard the rate of stormwater runoff to the same rate or a lesser rate as that existing prior to construction. Such a determination shall be made by the method of calculations hereinbefore set forth.

B. Lots shall be graded to secure proper drainage away from buildings and streets, except streets where curbs or adequately sized roadside swales exist and to prevent the unnecessary collection of stormwater pooling. Stockpiling of topsoil shall be protected from erosion.

C. All drainage provisions shall be of such design as to efficiently carry surface waters to the nearest street (if curbs or adequately sized swales exist), storm drain, or natural watercourse. If the aforementioned facilities do not exist, then in that event, stormwater shall be evenly dispersed over the lot so as to best promote infiltration of stormwater into the ground within the boundaries of the subject lot. The designer shall clearly indicate how this will be achieved.

D. The applicant shall construct and/or install such drainage structures and/or pipes which are necessary to prevent erosion damage and to satisfactorily manage surface waters in accordance with Title 25, Rules and Regulations, Part I, Commonwealth of Pennsylvania Department of Environmental Protection, subpart C., Protection of Natural Resources, Article II, Water Resources, Chapter 102, Erosion Control. Any drainage system not operating as planned shall be corrected at the expense of the applicant.

E. The applicant shall not modify, fill, excavate, or regrade the land in any manner so close to a property line as to endanger or damage any adjoining public street, sidewalk, alley or any other public or private property without supporting and protecting such property from settling, cracking, erosion, sediment, stormwater pooling or other physical damage or personal injury which might result. Failure to do so will constitute a nuisance punishable by the provisions of

this Part.

F. No person, firm or corporation shall deposit or place any debris or other material whatsoever, or cause such to be thrown or placed in any drainage ditch or drainage structure in such a manner as to obstruct free flow.

G. Unless final grade has been achieved, in which case State regulations require stabilization within 20 days, all graded surfaces shall be seeded, sodded and/or planted or otherwise protected from erosion within 60 days of ground breaking and shall be watered, tended and maintained until growth is well established at the time of completion and final inspection.

H. Natural and/or existing slopes exceeding five horizontal to one vertical shall be benched or continually stepped into competent materials where vertical cuts exceed 10 feet prior to placing all classes of fill.

I. Fills toeing out or slopes steeper than four horizontal to one vertical shall not be made, unless approved by the Township Engineer after receipt of a report deemed acceptable by the Township Engineer by a soil engineer certifying that he has investigated the property, made the soil tests and that in his opinion such steeper slopes will safely support the proposed fill. Cost for such investigation and report shall be borne by the applicant. In no case shall steeper slopes be utilized if it is determined that their location would be a nuisance for proper maintenance.

J. A quality control program is critical for fills; therefore, whenever load bearing fill material is to be used, each layer of compacted fill shall be tested to determine its dry density per ASTM D1556. The density of each layer shall not be less than 95% of the maximum dry density as determined per ASTM D 1557. These tests shall be required for all fills and stormwater or sediment basins within the Township.

K. All permanent grading shall be designed to:

(1) Provide positive surface drainage away from on-site sewage disposal systems.

(2) Provide positive surface drainage away from buildings and structures.

(3) To limit stormwater runoff from the subject lot to other lands so that no more runoff occurs than that which occurred prior to any construction of any nature on the subject lot.

(4) No stormwater runoff or drainable water shall be diverted as to overload existing drainage systems or create flooding or the need for additional drainage structures on other private properties or public land.

(5) Stormwater roof drains and any sump pump drains shall not discharge water directly onto a sidewalk, a lane or a street or within the street or within the street right-of-way and shall be constructed to retain the discharge only on the lot which is the subject of the application or to an approved stormwater system.

(Ord. 210, 3/22/2004)

§9-108. Approval of Permits.

The Township Engineer shall approve and issue all earth disturbance permits on

the form provided by the Township for that purpose. The building inspector shall issue no building permit and the Township shall issue no driveway permit until such time as the applicant, whenever required, has obtained an earth disturbance permit. Furthermore, the building inspector shall issue no certificate of occupancy permit until such time as the Township Engineer certifies in letter form that all grading has been completed in accordance with the final grading plan.

(Ord. 210, 3/22/2004)

§9-109. Regulations for Permits Holders and Others.

1. The permittee is responsible for any property damage or personal injury caused by the permittee's activity authorized by the permit.

2. No person, firm or corporation shall modify, fill, excavate, pave, grade or regrade land in any manner as to endanger or damage public or private property or to cause physical damage or personal injury. All precautions will be taken to prevent any damage to adjoining streets, sidewalks, buildings and other structures, which could be caused by settling, cracking, erosion or sediment.

3. No person, firm or corporation shall fail to adequately maintain in good operating order, any drainage facility on its premises. All watercourses, drainage ditches, culverts, drainpipes and drainage structures shall be kept open and free flowing at all times.

4. The owner, from time to time, of any property on which any work has been done pursuant to a permit issued under this Part shall continuously maintain and repair all graded surface and anti-erosion devices such as retaining walls, drainage structures or means, plants and ground cover, installed or completed.

5. When required by the permit, adequate provision shall be made for dust control measures as determined by the Township Engineer.

6. All plans and specifications accompanying any permit application shall include provisions for both temporary and permanent grading.

7. The installation and maintenance of erosion and sedimentation control measures shall be accomplished in accordance with standards and specifications established by the Bucks County Conservation District.

8. The issuance of an earth disturbance permit shall not negate the owner and/or applicant's responsibility of obtaining any other permit or approval from any agency, including the Bucks County Conservation District, which may have jurisdiction over any aspect of the project.

(Ord. 210, 3/22/2004)

§9-110. Inspections.

1. All inspections shall be the responsibility of the Township Engineer, Township officials, and any other agency, which may also have jurisdiction.

2. Inspection by the Township Engineer shall be carried out on a random basis, except as stated hereafter.

3. If the construction of a building or structure is part of the earth disturbance permit: (A) no excavation for footings shall commence until after the building permit

approval; (B) no footings shall be poured until the soil conditions are inspected by the Code Enforcement Officer; and (C) immediately following construction of the foundation wall, and prior to the erection of the superstructure of any building, the Township Engineer shall be furnished with a "foundation location and elevation survey" bearing a certification from the builder's licensed engineer or surveyor indicating compliance with the approved plan and (D) no further construction above the foundation wall will be permitted until the Township Engineer has issued approval of the aforementioned foundation plan to the Code Enforcement Officer.

4. A final inspection shall be conducted by the Township Engineer to certify compliance with this Part. The permittee and owner of the subject real property shall submit an as-built grading plan (bearing a licensed engineer or surveyor's certification that the lot grading complies with the approved plan) to the Township Engineer and shall notify the Township Engineer within 14 days of the completion of all activities to which the permit was issued hereunder. The Township Engineer shall then conduct an inspection to insure that a satisfactory compliance with this Part has been accomplished. If the subject property, as finally graded, does not satisfactorily conform to the approved final grading plan filed with the permit applications hereunder, then the Township Engineer shall note changes required on the as-built grading plan. The permittee and owner of the subject real property shall correct all noted deficiencies and resubmit a revised as-built grading plan for reinspection. When the Township Engineer is satisfied that the finally graded parcel of real property complies with the provisions of this Part, he shall then notify the Township Building Inspector that the subject lot is in compliance with this Part. The Building Inspector shall issue no occupancy permit under the Township Building Code [Chapter 5, Part 1] until such time as the Township Engineer certifies to him that all grading has been completed in accordance with the approved grading plan and the permit.

(Ord. 210, 3/22/2004)

§9-111. Public Nuisance.

1. The violation of any provision of this Part is hereby deemed a public nuisance.
2. Each day that a violation continues shall constitute a separate violation.

(Ord. 210, 3/22/2004)

§9-112. Enforcement.

1. Whenever the Township finds that a person has violated a prohibition or failed to meet a requirement of this Part, the Township 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 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 BMP's.

G. Operation and maintenance of stormwater BMP's.

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

(Ord. 210, 3/22/2004)

§9-113. Revocation or Suspension.

Any building, land development or other permit or approval for regulated earth disturbance activities issued by the Township may be suspended or revoked by the Board of Supervisors for:

A. Failure to carry out the control measures described in the application at the appropriate times as specified in the applicable time schedule or within such reasonable extensions as may be granted by the Township Engineer.

B. Violation of any other condition of the permits.

C. Violation of any provision of this Part or any other applicable law, ordinance, rule or regulation relating to the work.

D. 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.

(Ord. 210, 3/22/2004)

§9-114. Remedies.

1. In the case of any paving, filling, stripping, grading or regrading; any disturbing, modifying, blocking or diverting the natural overland or subsurface flow of stormwater; or any construction, erection and installation of any dam, ditch, culvert, drainpipe, bridge or any other structure or obstruction affecting the drainage of any premises, in violation of this Part or any regulations made pursuant hereto, the proper Township authorities, in addition to other remedies provided by law, may institute an appropriate action or proceedings to prevent such unlawful activities; to restrain, correct or abate such violations; to prevent the use of the applicable premises; or to prevent any illegal act, conduct business or use in or about such premises.

2. In addition, upon the failure of any permit holder to complete the control measures specified in his application, the Township may, after revoking such permit, proceed to complete such measures itself, and recover the cost thereof from the permittee.

(Ord. 210, 3/22/2004)

§9-115. Penalties.

1. For any and every violation of the provisions of this Part: (A) the owner, general agent or contractor of a building or premises where such violation has been committed or shall exist; (B) the lessee or tenant of an entire building or entire premises where such violation has been committed or shall exist; (C) the owner, general agent, contractor, lessee or tenant or any part of a building or premises in which part such violation has been committed or shall exist; and (D) the general agent,

architect, contractor or any other person who knowingly commits, takes part or assists in any such violation or who maintains any building or premises in which any such violation exists, upon conviction thereof in an action brought before a District Justice in the manner provided for the enforcement of summary offenses under the Pennsylvania Rules of Criminal Procedure, 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 90 days.

2. Whenever such person or persons shall have been notified by the Township Zoning Officer, Township Engineer, Township Manager, the Township Board of Supervisors or the Township Solicitor or by service of a summons in a prosecution or in any official manner that a violation of this Part is being committed, each days continuance of such violation after such notification shall constitute a separate offense punishable by a like fine or penalty. Such fines or penalties shall be collected as like fines or penalties are now collected by law.

(Ord. 210, 3/22/2004)