

CHAPTER 9

GRADING AND EXCAVATING

PART 1

GRADING

- §9-101. Title and Purpose**
- §9-102. Definitions**
- §9-103. Scope**
- §9-104. Exceptions**
- §9-105. Hazardous Conditions**
- §9-106. Application for Permit; Duties of Authorized Township Official**
- §9-107. Completion and Performance Guarantee**
- §9-108. Expiration of Permit**
- §9-109. Denial of Permit; Appeal**
- §9-110. Grading Inspection and Supervision**
- §9-111. Standards for Excavation**
- §9-112. Standards for Fills**
- §9-113. Standards for Minimizing Erosion and Sediment**
- §9-114. Retaining Walls**
- §9-115. Drainage Provisions**
- §9-116. Maintenance**
- §9-117. Liability**
- §9-118. Violation and Penalties**
- §9-119. Remedies**

PART 1
GRADING

§9-101. Title and Purpose.

1. Title. This Part shall be known and may be cited as “The Richland Township Grading Ordinance.”
2. Purpose. The purpose of this Part is to provide minimum standards to safeguard persons and property, to protect and to promote the public welfare, by preventing excess erosion, hazardous rock and soil slippage, sediment production and other soil and water management problems, and by regulating and controlling the design, construction, quality of materials, use, location and maintenance of grading, excavation and fill.

(Ord. 76, 11/21/1972, §1)

§9-102. Definitions.

Wherever used in this Part the following words shall have the meaning indicated:

AUTHORIZED TOWNSHIP OFFICIAL — the person qualified and officially appointed by the Board of Supervisors to manage this Part.

BEDROCK — natural rock layer, hard or soft, in place at ground surface or beneath unconsolidated surficial deposits.

ENGINEER, PROFESSIONAL — a person licensed by the Commonwealth of Pennsylvania to practice engineering and who is knowledgeable in the branch of civil engineering.

ENGINEERING GEOLOGIST — a person who holds a degree in geology from an accredited college or university and who has training and experience in the field of engineering geology.

EROSION — the detachment and movement of soil or rock fragments by water, wind, ice or gravity, including such processes as gravitational creep.

EXCAVATION — any act by which earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the conditions resulting therefrom.

FILL — any act by which earth, sand, gravel, rock or any other foreign material is deposited, placed, pushed, dumped, pulled, transported or moved to a new location and shall include the condition resulting.

GRADING AND EXCAVATING

GOVERNING BODY — the Board of Supervisors of the Township of Richland.

GRADING — excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

GRADING PERMIT — any permit required under these regulations.

HAZARD — a danger or potential danger to life, limb, or health, or an adverse effect, or potential adverse effect, to the safety, use or stability of property, waterways, public ways, structures, utilities and storm sewers, including stream pollution.

PERSON — a natural person but shall also include a partnership, corporation, trust or association.

SITE — a lot, tract or parcel of land, or a series of lots, tracts, or parcels of land which are adjoining where grading work is continuous and performed at the same time.

SOIL SURVEY — the unpublished and operational soil survey for Allegheny County, Pennsylvania, and the accompanying text, Soil Survey Interpretations of Allegheny County, Pennsylvania, as prepared by the USDA Soil Conservation Service, et al. When applicable, “soil survey” shall mean Soil Survey, Allegheny County, Pennsylvania, when this publication is completed.

SOILS ENGINEER — a person registered by the Commonwealth of Pennsylvania as a professional engineer and who has training and experience in the branch of soils engineering.

SOLID WASTE — all parts or combinations of ashes, garbage, refuse, radioactive material, combustible demolition materials and industrial wastes such as food-processing wastes, woods, plastic, metal scrap, etc.

(Ord. 76, 11/21/1972, §2: as amended by Ord. 278, 9/18/1991)

§9-103. Scope.

1. A grading permit must be obtained from the Authorized Township Official for new grading, excavations and fills and any changes, additions or alterations made to existing excavations or fills shall conform to the provisions of these regulations. A separate grading permit shall be required for each site. One permit may cover the grading, excavation and any fills made on the same site, when related to each other. [Ord. 278]
2. Only one permit is required for a continuous parcel to be graded for a proposed major planned development, such as residential planned unit development or a

planned industrial park when adequate standards or requirements for grading the parcel are approved by the Authorized Township Official. [Ord. 278]

3. Fees for permits shall be determined by the Township Supervisors by motion at any regular or special meeting.

(Ord. 76, 11/21/1972, §3; as amended by Ord. 278, 9/18/1991)

§9-104. Exceptions.

A grading permit will not be required for any of the following situations when:

- A. Grading is limited to mining, quarrying or stockpiling of coal, rock, sand, aggregate or clay that satisfy requirements of regulations of the Commonwealth of Pennsylvania.
- B. Grading is limited to solid waste disposal areas or sanitary landfills operated in accordance with the requirements, rules and ordinances adopted by the Pennsylvania Department of Environmental Resources and the Allegheny County Department of Health.
- C. Excavation does not exceed five feet in vertical depth, does not result in cut and/or fill slope steeper than four horizontal to one vertical and does not exceed an area of 1,000 square feet for areas recognized by the soil survey or better source as containing landslide-prone soils. Better sources recognizing landslide-prone soil areas may be the Pennsylvania Bureau of Topographic and Geologic Survey, a professional engineer experienced in geology or an engineering geologist.
- D. Excavation does not exceed 10 feet in vertical depth, does not result in a cut or fill slope steeper than three horizontal to one vertical and does not exceed an area of 5,000 square feet in areas of soils not recognized by the soil survey or better as landslide-prone.
- E. Fill amount does not exceed 500 cubic yards on any one site.
- F. Fill does not exceed 10 feet in vertical depth at its deepest point measured from the top of such fill to the natural ground surface, the area of fill does not exceed 5,000 square feet and the slope of fill is not steeper than three horizontal to one vertical.
- G. Grading does not exceed new construction authorized by a building permit properly issued by the Board of Supervisors. Grading under the authorization of a building permit should follow the standards and requirements of this Part.

GRADING AND EXCAVATING

- H. Soil excavated under the authorization of a building permit properly issued by the Board of Supervisors is temporarily stockpiled on the same site as excavation; provided, however, that if the material from such excavation is thereafter to be used for fill purposes for which a grading permit is required, such permit must be obtained prior to such use in accordance with the requirements of this Part. In addition, if excavated material is stockpiled on a site for a period of longer than 120 days, then a permit shall be necessary when disposing of the fill material.

(Ord. 76, 11/21/1972, §4)

§9-105. Hazardous Conditions.

1. Whenever the Board of Supervisors, upon the recommendation of its Authorized Township Official, determines that any existing excavation, embankment or fill has become a hazard as defined in §102, the owner of the property upon which the excavation, embankment or fill is located, or other person or agent in control of said property, upon receipt of notice in writing from the Authorized Township Official, shall within the reasonable period specified therein repair, reconstruct or remove such excavation, embankment, or fill so as to eliminate the hazard. [Ord. 278]
2. If, after such notification, the property owner has not made the necessary repairs within the time adopted, then the Board of Supervisors may take the necessary action to make the required repairs and the cost thereof shall be borne by the property owner by a lien filed as provided by law.

(Ord. 76, 11/21/1972, §5; as amended by Ord. 278, 9/18/1991)

§9-106. Application for Permit; Duties of Authorized Township Official.

1. Every applicant for a grading permit shall file a written application therefor with the Authorized Township Official in a form prescribed by the Authorized Township Official. Such application shall:
 - A. Describe the land on which the proposed work is to be done by lot, block, tract or street address, or similar description which will readily identify and definitely locate the proposed work.
 - B. Be accompanied by plans and specifications prepared, signed and sealed by a professional engineer or architect giving a reasonable picture of the site and proposed soil erosion controls, if any. The Authorized Township Official may waive the preparation or approval and signature by the professional engineer or architect only when it is self-evident that the proposed work is simple, clearly shown on the plans submitted, and creates no potential nuisance to adjacent property or hazard, and does not include the construction

of a fill upon which a structure may be erected. Such plans may include a description of the site proposed for grading; accurate location by lot, block, tract, street address, longitude and latitude, co-ordinates, a location map or other similar information; a contour map showing the present contours of the land and the proposed contours of the land after completion of the proposed grading, and a plan showing cross-sections of the proposed cut or fill which show the method of benching both cut and/or fill. In addition, a plot plan may show the location of the grading, boundaries, lot lines, neighboring streets or ways, buildings, surface and subsurface utilities and waterways. In addition, plans may include a description of the type and classification of the soil from the soil survey or better; details and location of any proposed drainage structures and pipes, walls, and cribbing; seeding locations and schedules, debris basins, diversion channels; nature of fill material and such other information as the Authorized Township Official may need to carry out the purposes of this Part. All plans shall be dated and bear: [Ord. 278]

- (1) The name and seal of the professional engineer who prepared the same.
- (2) The name of the applicant.
- (3) The owner of the land.

Plans shall be submitted in triplicate.

- C. State the estimated dates for the starting and completion of grading work.
 - D. State the purpose for which the grading application is filed.
2. The duty of the Authorized Township Official shall be to obtain information and reports from governmental agencies, and scientific and/or engineering journals, if available, and professional engineers and/or engineering geologists, if necessary. This information and these reports must be of sufficient detail to insure that proposed grading will not create a hazard and that there will be a minimum of soil erosion on the site to be graded. [Ord. 278]
 3. To be adequate, a geological report may include a detailed description of the geological conditions of the site; may include conclusions and recommendations that will demonstrate the relationship of the geological conditions to the proposed development, including hazardous conditions, water resources, mineral resources and environmental impact. A soil conservation report may include existing site description as to topography, drainage, cover and soils; major resource problems as to soil limitations, erosion and sediment potential and surface runoff charges; and recommendations to minimize soil limitations, erosion and sediment, and surface water disposal problems.
 4. In no case shall the Authorized Township Official require more than minimum adequate standards, as recommended by governmental agencies, professional en-

GRADING AND EXCAVATING

gineers or engineering geologists, and other requirements specified in this Part for issuing a grading permit. [Ord. 278]

5. No permit to grade or excavate land shall be issued until a stormwater management plan meeting the requirements of the Subdivision and Land Development Ordinance [Chapter 22] has been prepared and approved by the Township Engineer, or a certificate signed by the Township Zoning Officer verifying that the proposed operation does not require such a plan has been presented to the Authorized Township Official. [Ord. 278]

(Ord. 76, 11/21/1972, §6; as amended by Ord. 237, 7/15/1987; as amended by Ord. 278, 9/18/1991)

§9-107. Completion and Performance Guarantee.

Before issuance of a grading permit, the applicant shall post a bond, with a Pennsylvania approved corporate surety, or other approved security in the amount of 10% of the estimated cost of the grading work and erosion control facilities proposed for the permit to guarantee performance of said work and facilities in a satisfactory manner and meeting the requirements of this Part. No bond shall be required if another bond or other approved security is posted for construction and/or site improvements. When all requirements of this permit have been met, security shall be returned to the person posting said security (Ord. 76, 11/21/1972, §7)

§9-108. Expiration of Permit.

Every grading permit shall expire by limitation and become null and void if the work authorized by such permit has not been commenced within one year or is not completed within the time indicated on the permit; provided, the Supervisors, acting upon the recommendation of the Authorized Township Official, may, if the permit holder presents satisfactory evidence that unusual difficulties have prevented work being started or completed within the specified time limits, grant a reasonable extension of time, and, provided further, that the application for the extension of time is made before the date of expiration of the permit. Any physical changes in the site such as surface water drainage, soil and bedrock dislocations, alteration of groundwater discharge or any other natural or man-made modification which would cause a doubt to be cast upon the feasibility of the contents of the original permit approval, must be reported to the Authorized Township Official in the intervening period between approval of permit and completion of the project.

(Ord. 76, 11/21/1972, §8; as amended by Ord. 278, 9/18/1991)

§9-109. Denial of Permit; Appeal.

1. When the requirements of this Part for obtaining a permit have been met, the Authorized Township Official shall approve the proposed plan and grant a grading permit to the applicant. Approved work may then start. However, when in the opinion of the Authorized Township Official work proposed by the applicant is likely to endanger any property, or person, or any street or alley, or create hazardous conditions, the grading permit shall be denied. In determining whether the proposed work is likely to endanger property or streets or alleys, or create hazardous conditions, the Authorized Township Official shall give due consideration to possible saturation by rains, earth movements, runoff surface waters and subsurface conditions such as the stratification and faulting of rock, aquifers, springs and the nature and type of the soil or rock.
2. The Board of Supervisors shall consider within 45 days an appeal from the provisions of this Part from the denial by the Authorized Township Official, and the Board of Supervisors within 45 days shall consider alternate methods, standards or the provisions of these regulations is unnecessary. Any applicant or permit holder shall have the right to appeal to any court of competent jurisdiction from any decision of the Board of Supervisors.

(Ord. 76, 11/21/1972, 59; as amended by Ord. 278, 9/18/1991)

§9-110. Grading Inspection and Supervision.

1. The permittee or his agent shall notify the Authorized Township Official in writing of the start and completion of each continuous grading operation. Notice shall be received by the Authorized Township Official at his office at least two working days before start or completion of grading operations.
2. Grading work at these stages or at any other time will be subject to spot inspections at the discretion of the Authorized Township Official to determine that the work is being performed in compliance with this Part.
3. In special cases, when grading occurs in areas of landslide-prone soil as recognized by the soil survey or better, the Authorized Township Official may require special precautions from the grader. The results of all soil tests and core borings made relating to the site graded shall be submitted to the Authorized Township Official.

(Ord. 76, 11/21/1987, §10; as amended by Ord. 278, 9/18/1991)

§9-111. Standards for Excavation.

1. Maximum slope steepness of cut should be three horizontal to one vertical for minimizing erosion and landslide hazard. However, a governmental review

GRADING AND EXCAVATING

agency, professional engineer or engineering geologist may recognize the types of soil on the site to be graded from the soil survey or better. Maximum slopes can then be determined as follows:

- A. Landslide-prone soils where slopes greater than 25% shall have cut slopes no steeper than three horizontal to one vertical. Soil survey map symbols are:

| | | | |
|---------|-------|--------|--------|
| 34-DE-6 | 3-E-2 | 34-F-1 | 65-E-2 |
|---------|-------|--------|--------|

- B. Landslide-prone soils where slopes are less than 25% shall have cut slopes no steeper than two horizontal to one vertical. Soil survey map symbols are:

| | | | |
|---------|--------|--------|--------|
| 34-DE-6 | 3-E-2 | 34-F-1 | 65-E-2 |
| 32-B-2 | 34-C-2 | 65-C-2 | 67-C-2 |
| 32-C-2 | 34-D-2 | 65-D-2 | 67-D-2 |
| 34-B-2 | 65-B-2 | 67-B-1 | |

- C. Soils which are not or have a low probability of being landslide-prone shall have a slope not steeper than one-and-one-half (15) horizontal to one vertical. All soil survey map symbols except the symbols listed above denote soils of low landslide probability.

2. Cut slopes which are steeper than those specified above may be allowed under a grading permit, provided one or both of the following is satisfied:

- A. The material in which the excavation is made is sufficiently stable to sustain a slope steeper than the slope specified above for recognized soil conditions on the site. A written statement, signed and sealed by a professional engineer, stating that the steeper slope will have sufficient stability and that risk of creating a hazard will be slight, must be submitted to the Authorized Township Secretary. [Ord. 278]

- B. A retaining wall or other approved support, designed by a professional engineer and approved by the Authorized Township Secretary, is provided to support the face of excavation. [Ord. 278]

3. The top or bottom edge of slopes shall generally be set back from adjacent property lines or street right-of-way lines in order to permit the normal rounding of the edge without encroaching on the abutting property or street.

4. Guidelines for cuts in the "Erosion and Sediment Control Handbook for Allegheny County, Pennsylvania" should be followed. One or a combination of guidelines should be used to minimize hazard, depending on site conditions and proposed grading.

(Ord. 76, 11/21/1972, §1; as amended by Ord. 278, 9/18/1991)

§9-112. Standards for Fills.

1. No fill should be placed over trees, stumps or other material which could create a hazard. Instead, such materials may be buried in natural ground where no structures will be built or hazard created, limbs can be chipped and mixed with the topsoil.
2. All fills should be compacted to provide stability of fill material and to prevent undesirable settlement or slippage.
3. Clean soil or earth should be placed over the top and exposed surfaces of the fill to a depth sufficient to conceal all materials used in the fill other than clean soil or earth. If the filling operation is intermittent, the top and exposed surfaces of the fill should be so covered at the completion of each lift.
4. The top or bottom edge of slopes should generally be set back from adjacent property lines or street right-of-way lines in order to permit the normal rounding of the edge without encroaching on the abutting property or street.
5. Guidelines for fills in the “Erosion and Sediment Control Handbook for Allegheny County, Pennsylvania,” should be followed. One or a combination of guidelines should be used to minimize hazard, depending on site conditions and proposed grading.

(Ord. 76, 11/21/1972, §12)

§9-113. Standards for Minimizing Erosion and Sediment.

Guidelines for minimizing erosion and sediment in the “Erosion and Sediment Control Handbook for Allegheny County, Pennsylvania,” should be followed. One or a combination of guidelines should be used to minimize hazard, depending on site conditions and proposed grading. However, the Authorized Township Official may approve grading plans not meeting guidelines of the handbook if proposed grading will not constitute a hazard. Governmental and/or engineering reports should be used as evidence that proposed grading will not constitute a hazard.

(Ord. 76, 11/21/1972, §13; as amended by Ord. 278, 9/18/1991)

§9-114. Retaining Walls.

1. Definition of “retaining wall” – a structure composed of concrete, steel or other approved building material constructed for the purpose of supporting a cut or filled embankment which would otherwise not comply with the requirements of

GRADING AND EXCAVATING

the standard set forth in this Part and which is more than four feet in height as measured on the exposed vertical surface of the wall.

2. If a retaining wall is constructed to satisfy a requirement of this Part a building permit, as provided for by other municipal regulations, shall not be required. The grading permit will apply to the retaining wall, and the requirements for inspection, etc., as stated herein will be complied with.
3. Retaining walls must be constructed in accordance with sound engineering practice. The plans submitted for approval shall bear the seal of a professional engineer.
4. The backfilling of retaining walls and the insertion of subterranean drainage facilities shall be done strictly in accordance with the provisions of this Part and the appropriate municipal specifications.
5. In general, where a wall is replacing an exposed slope, the vertical face of the wall shall be 3' – 0" back from the adjoining property.
 - A. A modification to this requirement may be applied for and granted by the Authorized Township Official if it can be satisfactorily demonstrated that such a variance is necessary to insure normal use of the property, i.e., for a sideline driveway. [Ord. 278]
 - B. The requirements of this §114 may also be modified when the proposed retaining wall is a joint venture between adjacent property owners, and appropriate documents so stating are filed with the application for the permit. [Ord. 278]

(Ord. 76, 11/21/1972, §14; as amended by Ord. 278, 9/18/1991)

§9-115. Drainage Provisions.

1. Adequate provisions shall be made to prevent any surface or subsurface waters from damaging:
 - A. The cut face of an excavation.
 - B. The sloping surface of a fill.
 - C. Adjacent property affected by the change in the existing natural runoff pattern.
2. To prevent damage, grading plans should follow Vegetative Control Methods and Ditch and Conduit Control Methods in the "Erosion and Sediment Control Handbook for Allegheny County, Pennsylvania," when they fit the site. The Authorized Township Official may approve methods and materials more suitable to the site in

preventing damage when recommended by governmental agencies and professional engineers. Drainage facilities shall be designed to accommodate the maximum rainfall of any ten-year period.

(Ord. 76, 11/21/1972, §15; as amended by Ord. 278, 9/18/1991)

§9-116. Maintenance.

1. The owner of any property on which an excavation or fill has been made shall maintain in good condition and repair the excavation or fill permitted, and also all retaining walls, cribbing, drainage structures, fences, ground cover, and any other protective devices as may be a part of the permit requirements.
2. If, at any time subsequent to the completion of the grading work, the cut face or fill slope shall evidence signs of deterioration, erosion, or other evidence which might be detrimental to the properties above and below the grading site, the Board of Supervisors, upon the recommendation of its Authorized Township Official, may direct the property owner to take necessary remedial steps in accordance with sound engineering practice to restore the grading to a safe condition, and to do so in a reasonable period of time. [Ord. 278]

(Ord. 76, 11/21/1972, §16; as amended by Ord. 278, 9/18/1991)

§9-117. Liability.

Neither the issuance of a permit under the provisions of this Part, nor the compliance with the provisions hereto or with any condition imposed by the building official hereunder, shall relieve any person from any responsibility for damage to persons or property resulting therefrom, or as otherwise imposed by law, nor impose any liability upon the Township for damages to persons or property.

(Ord. 76, 11/21/1972, §17)

§9-118. Violation and Penalties.

1. No person shall construct, enlarge, alter, repair or maintain any grading, excavation or fill, or cause the same to be done contrary to or in violation of any provision of this Part.
2. When written notice of any of the provisions of this Part has been served by the Authorized Township Official on any person, such violation shall be discontinued immediately or within a reasonable time limit specified in such notice. If the violation is not discontinued, or extends beyond the specified time limit, the Authorized Township Official shall revoke the grading permit and the violator is subject to fine. [Ord. 278]

GRADING AND EXCAVATING

3. Any person who shall violate any provision of this Part shall, upon conviction thereof, be sentenced to pay a fine not exceeding \$500 and costs and, in default of payment thereof, shall be subject to imprisonment for a term not to exceed 30 days. Each day that a violation of this Part continues shall constitute a separate offense. [Ord. 336]

(Ord. 76, 11/21/1972, §18; as amended by Ord. 135, 11/21/1978; by Ord. 278, 9/18/1991; by Ord. 325, 7/3/1996; and by Ord. 336, 2/5/1997)

§9-119. Remedies.

In case any work is performed by any person in violation of any of the provisions of this Part, the proper officer of the Township, in addition to other remedies, may institute in the name of the Township, any appropriate action or proceeding, whether by legal process or otherwise, to prevent such unlawful work and to restrain or abate such violation.

(Ord. 76, 11/21/1972, §19)