

## **Chapter 9**

### **Grading and Excavating**

#### **Part 1 Grading**

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**Part 1****Grading****§9-101. Title and Purpose.**

1. *Title.* This Part shall be known and may be cited as the "Frazer 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 controlling the design, construction, quality of materials, use, location and maintenance of grading, excavation, and fill.

(*Ord. 68, 4/6/1989, §1*)

**§9-102. Definitions.**

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

*Architect* - a person licensed by the Commonwealth of Pennsylvania to practice architecture.

*Bedrock* - natural rock layer, hard or soft, in place at ground surface or beneath unconsolidated surficial deposits.

*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 material is deposited, placed, pushed, dumped, pulled, transported or moved to a new location and shall include the condition resulting.

*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 this Part.

*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.

*Landslide prone soils* - any geologic formation that is especially susceptible to landslides due to the presence of one or more conditions such as unstable rock formations, soil types, groundwater seepage or saturated soils, including without limitation, areas containing soils identified as landslide prone in the Soil Survey of Allegheny County or other maps or surveys in the Allegheny County Department of Economic Development, or its successor. [*Ord. 137*]

*Professional engineer* - a person licensed by the Commonwealth of Pennsylvania to practice engineering and who is knowledgeable in the branch of civil

engineering

*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 the standards set forth in this Part, and which is more than 4 feet in height as measured on the exposed vertical surface of the wall.

*Soil survey* - the 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.*

*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, wood, plastic, metal scrap, etc.

*Surveyor* - a person registered by the Commonwealth of Pennsylvania as a surveyor.

(*Ord. 68, 4/6/1989, §2; as amended by Ord. 137, 7/5/2005*)

### **§9-103. Scope.**

1. A grading permit must be obtained from the Township Code Official/Building Inspector for new grading, excavations and fills; changes, additions or alterations made to existing excavation 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.

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 Township Code Official/Building Inspector.

(*Ord. 68, 4/6/1989, §3; as amended by Ord. 137, 7/5/2005*)

### **§9-104. Exceptions.**

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

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 Protection and the Allegheny County Department of Health. [*Ord. 137*]

C. Excavation does not exceed 5 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 5 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 3 horizontal to 1 vertical.

(*Ord. 68, 4/6/1989, §4; as amended by Ord. 137, 7/5/2005*)

#### **§9-105. Hazardous Conditions.**

1. Whenever the Board of Supervisors, upon the recommendation of its Township Code Official/Building Inspector, determines that any existing excavation, embankment or fill has become a hazard as defined in §9-102, 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 Township Code Official/Building Inspector, shall within the reasonable period specified therein repair, reconstruct or remove such excavation, embankment, or fill so as to eliminate the hazard. [*Ord. 137*]

2. If, after such notification, the property owner or other person has not made the necessary repairs within the time requested, then the Board of Supervisors may make the required repairs and the cost thereof shall be borne by the property owner by a lien or judgment obtained as provided by law.

(*Ord. 68, 4/6/1989, §5; as amended by Ord. 137, 7/5/2005*)

#### **§9-106. Application.**

1. *Duties of Township Code Official/Building Inspector.* Every applicant for a grading permit shall file a written application therefor with the Township Code Official/Building Inspector in a form prescribed by the Township Code Official/Building Inspector. Such application shall: [*Ord. 137*]

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 licensed professional engineer or professional land surveyor giving a reasonable picture of the site and proposed soil erosion controls, if any. The Township Code Official/Building Inspector may waive the preparation or approval and signature by the professional engineer, surveyor 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 shall normally 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 and constructing both cut and/or fill. In addition, a plot plan shall normally show the location of the grading, boundaries, lot lines, neighboring streets or ways, buildings, surface and subsurface utilities and waterways. In addition, plans shall normally 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 Township Code Official/Building Inspector may need to carry out the purposes of this Part. All plans shall be dated and bear: [Ord. 137]

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

Plans shall be submitted in triplicate, one set of which shall be of reproducible nature.

- C. State the estimated dates for the starting and completion of grading work.
- D. State the purpose for which the grading application is filed.
- E. Be accompanied by a permit fee in an amount as established, from time to time, by resolution of the Board of Supervisors. [Ord. 137]

2. The Township Code Official/Building Inspector shall obtain such advice as he deems necessary for proper review of an application for a grading permit from governmental agencies, professional engineers, or engineering geologists. The advice so obtained shall be in sufficient detail to reasonably 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. 137]

3. The advice obtained from a professional engineer or engineering geologist 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 changes; and recommendations to minimize soil limitations, erosion and sediment, and surface water disposal problems.

4. In no case shall the Township Code Official/Building Inspector require more than minimum adequate standards, as recommended by governmental agencies, professional engineers or engineering geologists, and other requirements specified in this Part, for issuing a grading permit. [Ord. 137]

(Ord. 68, 4/6/1989, §6; as amended by Ord. 137, 7/5/2005)

**§9-107. Completion and Performance Guarantee.**

Before issuance of a grading permit, the applicant shall post with the Township financial security in a form and amount acceptable to the Township Solicitor and in compliance with the requirements of Part 1 of Chapter 1 of this Code, in the amount of 10% of the estimated cost of the grading work and erosion control facilities proposed for the permit to guarantee completion of said work and facilities in a satisfactory manner, meeting the requirements of this Part. No such financial security shall be required if another approved form of financial security is posted for construction and/or site improvements. When all requirements of this permit have been met and the work has been completed in a satisfactory manner, the full amount of security shall be returned to the person posting said security.

(*Ord. 68, 4/6/1989, §7; as amended by Ord. 137, 7/5/2005*)

**§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 6 months or is not completed within 18 months from the date of issue, provided that the Board of Supervisors, acting upon the recommendation of the Township Code Official/Building Inspector, 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 Township Code Official/Building Inspector in the intervening period between approval of permit and completion of the project.

(*Ord. 68, 4/6/1989, §8; as amended by Ord. 137, 7/5/2005*)

**§9-109. Issuance and Denial of Permit.**

When the requirements of this Part for obtaining a permit have been met and the Township Engineer has approved the proposed grading plans the Township Code Official/Building Inspector shall issue a grading permit to the applicant. Approved work may then start. However, when in the opinion of the Township Code Official/Building Inspector, work proposed by the applicant is likely to endanger any property, person, street or roadway, or create hazardous conditions, the grading permit shall be denied. In determining whether the proposed work is likely to endanger property, streets or roadways, or create hazardous conditions, the Township Code Official/Building Inspector shall give due consideration to: possible saturation by rains, earth movements, run-off surface waters and sub-surface conditions such as the stratification and faulting of rock, aquifers, springs and the nature and type of the soil or rock.

(*Ord. 68, 4/6/1989, §9; as amended by Ord. 137, 7/5/2005*)

**§9-110. Application for Appeal.**

1. Any person directly affected by a decision of the Township Code Official/Building Inspector or Township Engineer or a notice or order issued under this Part shall have the right to appeal to the Board of Appeals established under §5-105 “Board of Appeals,” of this Code, provided that a written application for an appeal is filed within 10 days after receipt of said decision, notice or order, along with payment of an appeal hearing fee in an amount set from time to time by resolution of Board of Supervisors. An application for appeal shall be based on a claim that the true intent of this Part or the rules legally adopted hereunder has been incorrectly interpreted, the provisions of this Part do not fully apply, or the requirements of this Part are adequately satisfied by other means.

2. All appeals under this Part shall proceed under the regulations and procedures established under §5-105, “Board of Appeals,” of this Code.

(*Ord. 68, 4/6/1989; as added by Ord. 137, 7/5/2005*)

### **§9-111. Grading Inspection and Supervision.**

1. The permit holder or his agent shall notify the Township Code Official/Building Inspector in writing of the start and completion of each continuous grading operation. Notice shall be received by the Township Code Official/Building Inspector or at his office at least 2 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 Township Code Official/Building Inspector to determine that the work is being performed in compliance with these regulations.

3. In special cases, when grading occurs in areas of landslide-prone soil as recognized by the Soil Survey or better, or where a hazardous condition exists, the Township Code Official/Building Inspector 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 Township Code Official/Building Inspector.

(*Ord. 68, 4/6/1989, §10; as amended by Ord. 137, 7/5/2005*)

### **§9-112. Standards for Excavation.**

1. Maximum slope steepness of a cut should be three horizontal to one vertical for minimizing erosion and landslide hazard. However, a governmental review 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 are greater than 25% shall have cut slopes no steeper than 3 horizontal to 1 vertical.

B. Landslide-prone soils where slopes are less than 25% shall have cut slopes no steeper than 2 horizontal to 1 vertical.

C. Soils which are not or have a low probability of being landslide-prone shall have a slope no steeper than 1½ horizontal to 1 vertical.

2. Cut slopes which are steeper than those specified above may be allowed under a grading permit, provided one 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 proficient in geotechnical engineering, stating that the steeper slope will have sufficient stability and that risk of creating a hazard will be slight, must be submitted to the Township Code Official/Building Inspector.

B. A retaining wall or other approved support, designed by a professional engineer proficient in geotechnical engineering and approved by the Township Code Official/Building Inspector, is provided to support the face of excavation.

[*Ord. 137*]

3. The top or bottom edge of slopes shall be set back a minimum of 10 feet 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. [*Ord. 137*]

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. 68, 4/6/1989, §11; as amended by Ord. 137, 7/5/2005*)

#### **§9-113. Standards for Fills.**

1. No fill shall be placed over trees, stumps or other material which could create a hazard. If authorized by the Township Code Official/Building Inspector in writing, 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. [*Ord. 137*]

2. All fills shall be compacted to provide stability of fill material and to prevent undesirable settlement or slippage.

3. Clean soil or earth shall 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 shall be so covered at the completion of each lift.

4. The top or bottom edge of slopes shall be set back a minimum of 10 feet 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. [*Ord. 137*]

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. 68, 4/6/1989, §12; as amended by Ord. 137, 7/5/2005*)

#### **§9-114. 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 Township Code Official/Building Inspector 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. 68, 4/6/1989, §13; as amended by Ord. 137, 7/5/2005*)

#### **§9-115. Retaining Walls.**

1. If a retaining wall is constructed to satisfy a requirement of this Part, a building permit, as provided for by other Township regulations shall not be required unless otherwise provided by the Township Construction Code, Part 1 of Chapter 5. The grading permit will apply to the retaining wall, and the requirements for inspection, etc., as stated herein shall be complied with.

2. Retaining walls must be constructed in accordance with sound engineering practice. The plans submitted for approval shall bear the seal of a professional engineer.

3. 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.

4. In general, where a wall is replacing an exposed slope, the vertical face of the wall shall be 3 feet - 0 inches back from the adjoining property.

A. A special exception to this requirement may be applied for and granted by the Township Code Official/Building Inspector 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. 137*]

B. The requirement of this subsection may also be set aside 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. 68, 4/6/1989, §14; as amended by Ord. 137, 7/5/2005*)

#### **§9-116. 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 Township Code Official/Building Inspector may approve methods and materials recommended by governmental agencies and professional engineers when they are more suitable to the site in preventing damage. Drainage facilities shall be designed to accommodate the largest size storm that would occur on the average of every 5 years, except where the Township Code Official/Building Inspector deems greater protection necessary. [*Ord. 137*]

(*Ord. 68, 4/6/1989, §15; as amended by Ord. 137, 7/5/2005*)

**§9-117. 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 Township Code Official/Building Inspector, 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. 137]

(Ord. 68, 4/6/1989, §16; as amended by Ord. 137, 7/5/2005)

**§9-118. 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 Township Code Official/Building Inspector 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 or any person, firm, or agency engaged to review a permit application for damages to persons or property.

(Ord. 68, 4/6/1989, §17; as amended by Ord. 137, 7/5/2005)

**§9-119. 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 sent by the Administrator to any person, such violation shall be discontinued immediately or within a reasonable time limit specified in such notice. If violation is not discontinued, or extends beyond the specified time limit, the Administrator shall revoke the grading permit and the violation is subject to fine.

3. Any person, firm or corporation who shall violate any provision of this Part, 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 less than \$300 nor 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. Each day that a violation of this Part continues or each Section of this Part which shall be found to have been violated shall constitute a separate offense. Whenever such person shall have been notified by the Administrator that he is committing such violation of this Part, each day that he shall continue such a 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 by law collected. [Ord. 137]

(Ord. 68, 4/6/1989, §18; as amended by Ord. 137, 7/5/2005)

**§9-120. Remedies.**

In case any work is performed by any person in violation 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. 68, 4/6/1989, §19)*