

Chapter 9

Grading and Excavating

Part 1

Grading, Clearing, Excavating, and Filling

- §9-101. General Requirements
- §9-102. Permit Fees
- §9-103. Inspections
- §9-104. Excavation Standards
- §9-105. Fill Standards
- §9-106. Maintenance of Protective Devices
- §9-107. Grading Certificate
- §9-108. Violations and Penalties
- §9-109. Additional Remedy
- §9-110. Hazardous Conditions
- §9-111. Denial of Permit; Appeal
- §9-112. Standards for Compaction Fills
- §9-113. Standards for Minimizing Erosion and Sediment
- §9-114. Retaining Walls
- §9-115. Drainage Provisions
- §9-116. Liability

Part 1

Grading, Clearing, Excavating, and Filling

§9-101. General Requirements.

1. Grading, clearing, excavation, and filling as hereinafter used shall include all grading, clearing, excavations, removal of earth or earth fillings involving quantities as follows:

Single-family House Site (Square Feet)	Maximum Gradient without Permit (feet)	Maximum Excavation of Fill without Permit (Cubic Yards)
Less than 6,000	12 to 100	75
6,000 to 10,000	15 to 100	100
10,000 to 18,000	15 to 100	200
18,000 to 30,000	15 to 100	250
Over 30,000	20 to 100	250
Commercial and Industrial Site		
Over 6,000	12 to 100	50

2. It shall not, however, include the movement of earth in the course of farming. A grading, clearing, excavation, and filling permit required under this Section is issued at the same time as a building permit, where required, is issued under this Part.

A. Any person who desires to perform any of the activities set forth above shall complete and file an application with the Building Inspector for a grading, clearing, excavation, and filling permit on the form prescribed by the Township of Baldwin. Sample of this form is shown in the Appendix of this Part.

B. The Township Engineer in conjunction with the Building Inspector shall review the application and shall issue a grading, clearing, excavation, and filling permit when satisfactory evidence has been furnished of the following:

(1) That the applicant is the owner of the premises involved or is acting under or on behalf of the owner, or any one of the owners, if there be more than one.

(2) That the proposed earth movement is to be performed according to sound engineering principles.

(3) That such earth movement will not endanger any public streets or properties or any adjacent private properties.

(4) That any changes of grade will not result in a steeper finish than 3 to 1 slope for cuts or 2 to 1 slope for fills.

C. Drain pipes shall be installed where deemed necessary by the Building Inspector to control surface water and to prevent erosion.

D. All disturbed surfaces not planned to be built upon or paved within 1 year

of the date of the permit shall be planted in grass or crown vetch or other plant material as may be approved by the Building Inspector.

E. The Township Engineer shall, where he deems necessary, require plans, topographical surveys, or other types of design drawings for the purpose of establishing compliance with this Section. The applicant shall bear the full cost of such surveys and studies.

F. In addition to the permit, the Building Inspector shall issue a placard which shall be displayed on the premises during the time the work is in progress. This placard shall show the number of their permit, the date of its issuance, and shall be signed by the Building Inspector.

G. After the issuance of a permit by the Building Inspector, no changes of any kind shall be made to the application, permit, or any of the plans, specifications, or other documents submitted with the application without the written approval of the Building Inspector.

H. All work done pursuant to such a Grading, Clearing, Excavation, and Filling Permit shall commence within 90 days from the date of the permit and shall be completed within 1 year from the date of the permit.

3. At the top of all cut or fill slopes which are steeper than 2 horizontal to 1 vertical, and 8 or more feet in total height, a chain-link fence not less than 4 feet in height, and of a design meeting the approval of the Township Engineer shall be erected.

4. The owner of the property being graded shall be responsible to protect and clean up lower properties of silt and debris which have washed down onto the lower properties as a result of the grading work on the higher property.

5. In order to prevent the denuding of the landscape, wherever practicable, large trees and other natural features constituting important physical, aesthetic, and economic assets to existing or impending development work, shall be preserved.

(*Ord. 336, 8/1/1989*)

§9-102. Permit Fees.

Before issuing a grading permit, the Township Secretary shall collect a fee, as provided herein.

A. The Administrator shall receive the applications and shall collect all fees. He shall review all applications and shall indicate his approval thereon. In the event of disapproval, he shall note the reasons therefor, a copy of which shall be sent the applicant.

B. Before issuing a grading permit, the Administrator shall collect a permit fee in an amount as established from time to time by resolution of the Board of Commissioners. [A.O]

(*Ord. 336, 8/1/1989; as amended by Ord. 427, 4/4/2006*)

§9-103. Inspections.

1. The Township shall cause to be made the inspections hereinafter required and shall either approve that portion of the work that has been completed or notify the permit holder wherein the work fails to comply with the provisions of this Part. Where it is found by inspection that the soil or other conditions are not as stated or as shown

in the application, the Township may refuse to approve further work until approval is obtained for a revised grading plan conforming to existing conditions.

2. If at any stage of the work, the Township, with the concurrence of the Township Engineer, shall determine by inspection that the nature of the formation is such that further work, as authorized by an existing permit, is likely to endanger property or streets or alleys or create hazardous conditions, the Township may require, as a condition for allowing the work to be done, that such reasonable safety precautions be taken as the Township considers advisable to avoid the likelihood of danger. Safety precautions may include, but are not limited to, specifying a flatter exposed slope, construction of additional drainage facilities or berms, terracing, compaction, or cribbing.

3. The permittee or his agent shall notify the Administrator in writing of the start and completion of each continuous grading operation. Notice shall be received by the Administrator or at his office at least 2 working days before start or completion of grading operations.

4. Plans for grading work, bearing the stamp of approval of the Township of Baldwin Engineer, shall be maintained at the site during the progress of the grading work and until the work has been approved.

5. Grading work at the various stages, or at any other time will be subject to spot inspections at the discretion of the Administrator to determine that the work is being performed in compliance with this Part.

6. Any physical changes in the site such as surface water, drainage, soil and bedrock dislocations, alteration of ground water, 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 Administrator within 24 hours of discovery of such condition. Failure to do so is deemed as just reason for revocation of permit and forfeiture of security.

7. In special cases, when grading occurs in areas of landslide prone soil as recognized by the Soil Survey or better, the Administrator may required special precautions and/or soil tests from the grader. The results of all soil tests and core borings made relating to the site graded shall be submitted to the Administrator, cost of such tests and reports to be borne by the permittee.

(Ord. 336, 8/1/1989)

§9-104. Excavation Standards.

1. Excavation shall not extend below the angle of repose or natural slope of the soil under the nearest point of any footing or foundation or any building or structure unless the footing or foundation is first properly underpinned or protected against settlement.

2. Before commencing any excavation, which will in any way affect an adjoining property or structure thereon, the person making or causing the excavation to be made shall notify in writing the owners of the adjacent property or buildings, not less than 30 days before such excavation is to be made, that the proposed excavation is to be started. Adjoining properties and structures shall be protected as provided in the Township's Building Code [Chapter 5, Part 1] as is then on file in the office of the

Building Inspector and/or as required by the Administrator.

3. Maximum slope steepness of a cut shall 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 existing slopes are of a gradient greater than 25 percent shall have cut slopes no steeper than three horizontal to one vertical. Soil Survey map symbols are:

- (1) 34-DE-6
- (2) 34-E-2
- (3) 34-F-1
- (4) 65-E-2

B. Landslide-prone soils where existing slopes are of a gradient less than 25 percent shall have cut slopes no steeper than two horizontal to one vertical. Soil Survey map symbols are:

- (1) 32-B-2
- (2) 32-C-2
- (3) 34-B-2
- (4) 34-C-2
- (5) 34-D-2
- (6) 65-B-2
- (7) 65-C-2
- (8) 65-D-2
- (9) 67-B-1
- (10) 67-C-2
- (11) 67-D-2

C. Soils which are not landslide-prone, or have a low probability of being landslide-prone, shall have a slope no steeper than two horizontal to one vertical. All soil survey map symbols except the symbols listed above denote soils of low landslide probability.

4. Cut slopes which are steeper than those specified above may be allowed under a grading permit, at the discretion of the Administrator, provided one or both of the following are 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 soils 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 Administrator for approval.

B. A retaining wall or other approved support, designed by a professional engineer and approved by the Administrator is provided to support the face of excavation. General requirements set forth in §9-101 of this Part must also be met.

5. The top or bottom edge of slopes shall generally be set back 3 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.

6. Guidelines for cuts in the "Erosion and Sediment Control Handbook" for Allegheny County, Pennsylvania, shall be followed. One or a combination of guidelines shall be used to minimize hazard, depending on site conditions and proposed grading. (*Ord. 336, 8/1/1989*)

§9-105. Fill Standards.

1. No fill shall be made in a residentially zoned area of the Township or with an exposed face adjacent to such a district which creates a slope steeper than 2 horizontal to 1 vertical, except under one or more of the following conditions:

A. The fill, in the opinion of the Township, as concurred by the Township Engineer, is located so that settlement, sliding, or erosion of the fill material will not result in property damage or be a hazard to adjoining property, streets, alleys, ways, or building.

B. A written statement from a civil professional engineer licensed by the Commonwealth of Pennsylvania and experienced in soils engineering, certifying that he has inspected the site and that the proposed deviation from the standard specified slopes specified above will not endanger any property or result in personal hazard or property damage, is submitted to and approved by the Administrator.

2. In issuing permits, the Administrator may impose conditions requiring that a fill be constructed with an exposed surface flatter than two horizontal to one vertical, if under the particular circumstances involved, such flatter surface is necessary for stability and for the safety of persons and property.

3. Whenever a fill is to be made of materials other than clean soil or earth, the grading permit shall be subject to the following additional limitations and requirements:

A. The fill shall be completed within a reasonable length of time as determined by the Township Engineer and so specified on the grading permit.

B. Clean soil or earth shall be placed over the top and exposed surfaces of the fill to a depth sufficient to effectively conceal all materials used in the fill other than clean soil or earth. If the filling operation is intermittent, the Administrator may require that the top and exposed surfaces for the fill be so covered at the completion of each such interruption.

4. No fill of any kind shall be placed over trees, stumps, or other materials which could create a nuisance or be susceptible to attracting rodents, termites, or other pests.

5. No grading permit shall be issued for the filling of materials other than clean soil or earth until a faithful performance bond in the amount of at least 20 percent more than the Township Engineer's estimated cost of adequately covering such fill with clean soil or earth has been furnished to the Township. Such bond shall be executed by a corporate surety, as well as by the principal, and shall be subject to the approval of the Township Solicitor as to form. The Bond shall inure to the benefit of the Township and be conditioned upon the faithful performance of the work required under the terms and conditions of the grading permit to the satisfaction of the Township Engineer. In lieu

of such bond, a cash deposit or a certified check in the same amount may be made with the Township Treasurer.

(Ord. 336, 8/1/1989)

§9-106. Maintenance of Protective Devices.

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 constructed, and also all the retaining walls, cribbing, drainage structure, 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 erosion, or other evidence which might be detrimental to the properties above and below the graded site, the Administrator 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. 336, 8/1/1989)

§9-107. Grading Certificate.

1. If, upon final inspection of an excavation or fill, it is found that the work authorized by the grading permit has been satisfactorily completed in accordance with the requirements of this Part and any other requirements imposed, a grading certificate covering such work and stating that the work is approved shall be issued to the permit holder by the Township Manager.

2. The Township shall have the power to revoke any grading certificate whenever it finds that the work covered by the certificate has been materially extended or altered without a permit to do so, or that any retaining wall, cribbing, drainage structure, fence, or other protective device shown on the approved plans and specifications submitted with the application for a permit have not been maintained in good order and repair.

3. Before such revocation the Township shall first give written notice to the permit holder and to the owner of the property involved, specifying the defective conditions and stating that unless such defective conditions are remedied satisfactorily, the grading certificate may be revoked. If defective conditions are remedied, the certificate shall not be revoked.

(Ord. 336, 8/1/1989)

§9-108. Violations 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 violation of, or non-compliance with the provisions of this Part has been given by the Administrator or their representative, to any person, such violation shall be discontinued immediately or within a reasonable time limit specified in such notice. If such violation is not discontinued, or extends beyond the specified time limit, the Administrator shall revoke the grading permit and the violator

shall be subject to the applicable penalty.

3. Any person, firm or corporation who shall violate any provision of this Part, upon conviction thereof, 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 30 days. Each day that a violation of this Part continues shall constitute a separate offense. [Ord. 427]

(Ord. 336, 8/1/1989; as amended by Ord. 427, 4/4/2006)

§9-109. Additional Remedy.

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

(Ord. 336, 8/1/1989)

§9-110. Hazardous Conditions.

1. Whenever the Administrator determines that any existing excavation, embankment, or fill has become a hazard, the owner of the property upon which the excavation, embankment, or fills is located, or other person or agent in control of said property, upon receipt of notice from the Administrator shall, within 24 hours or other reasonable period specified therein, repair, reconstruct, or remove such excavation, embankment, or fill so as to eliminate the hazard. [Ord. 427]

2. If after such notification, the property owner or his agent has not made the necessary repairs, within the time specified, then the Board of Commissioners may direct Township employees or hired personnel to make the required repairs and the cost thereof shall be borne by the property owner, said costs to be collected in the manner provided by law, including the imposition of a lien against the property.

(Ord. 336, 8/1/1989; as amended by Ord. 427, 4/4/2006)

§9-111. Denial of Permit; Appeal.

1. When the requirements of this Part for obtaining a permit have been met, the Administrator 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 Administrator, 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 any property or any street or alley, or create hazardous conditions, the Administrator 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 Commissioners shall, within 45 days, consider appeals from the decision of the Administrator or from the denial of a permit by the Administrator, and the Board of Commissioners, within 45 days, shall consider alternative methods, standards, or materials proposed by the developer when, in his opinion, strict compliance with the provisions of this Part is unwarranted or creates undo hardship.

Any applicant or permit holder shall have the right to appeal to any court of competent jurisdiction from any decision of the Board of Commissioners under the provisions of applicable State law relating to appeals.

(*Ord. 336, 8/1/1989*)

§9-112. Standards for Compaction Fills.

1. All fills shall be compacted to provide stability of fill material and to prevent undesirable settlement or slippage. Fills shall be compacted using modern methods and equipment. Fills shall be constructed under the supervision of a qualified soils engineer who shall certify in writing as to the adequacy of the compaction and he shall submit results of the compaction tests to the Township Engineer.

2. The top or bottom edge of slopes shall, generally, be set back 3 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.

3. Guidelines for fills in the “Erosion and Sediment Control Handbook” for Allegheny County, Pennsylvania, shall be followed. One or a combination of guidelines shall be used to minimize hazard, depending on site conditions and proposed grading.

(*Ord. 336, 8/1/1989*)

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

1. All grading shall be done and in conformity with the requirements of the Pennsylvania Department of Environmental Protection. Reports and plans required to be submitted to this agency shall also be submitted to the Township. [*Ord. 427*]

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

3. All slopes shall be sown with crown vetch or other approved anti-erosion vegetation.

4. Care shall be taken to prevent erosion and sedimentation entering adjoining streams. Approved anti-erosion devices shall be installed where directed to achieve this requirement.

(*Ord. 336, 8/1/1989; as amended by Ord. 427, 4/4/2006*)

§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 fill 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 maximum 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 Township regulations, shall not be required.

The grading permit will apply to the retaining wall, but the requirements for inspection, etc., as stated herein are applicable.

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 Township specifications.

5. In general, where a wall is replacing an exposed slope, the vertical face of the wall shall be set back a minimum of 3 feet from the adjoining property.

A. A special exception to this requirement may be applied for and granted by the Administrator if it can be satisfactorily demonstrated that such a variance is necessary to permit normal use of the property, i.e., for a sideline driveway, or other reasonable consideration.

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. 336, 8/1/1989)

§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. Such drainage provisions shall be indicated on the grading plans submitted for approval.

3. To prevent damage, grading plans shall follow vegetative control methods and ditch and conduit control methods in the "Erosion and Sediment Control Handbook" for Allegheny County, Pennsylvania, when they are applicable to the site. The Administrator 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 severest storm that might occur during a 25-year period.

(Ord. 336, 8/1/1989)

§9-116. Liability.

1. 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 Board of Commissioners 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.

2. Compliance with the requirements of this Part shall be incumbent upon the person performing any grading, presence or absence of an inspector notwithstanding.

(Ord. 336, 8/1/1989)

Appendix A

Application for Grading, Clearing, Excavation, and Filling Permit

1. Owner of Property: _____
Address: _____ Phone: _____
2. Project Contractor: _____
Address: _____ Phone: _____
3. Project Engineer: _____
Address: _____ Phone: _____
4. Description of Property and Work:
 1. Location of Property: _____
 2. Purpose of Grading Work _____

 3. Brief description of project: _____

 4. Size of site in square feet: _____
 5. Most severe slope on site before starting: _____
 6. Most severe slope on site after completion: _____
 7. Distance from grading work to nearest property line: _____

 8. Number of cubic yards excavation: _____
 9. Location of site for disposal of waste: _____

 10. Maximum depth of excavation: _____
 11. Number of cubic yards of fill: _____
 12. Location of source of fill: _____
 13. Maximum height of fill: _____
 14. Estimate starting date: _____
Completion date: _____
 15. Type of structure to be built on site, if any: _____

5. Estimated value of the proposed work: _____

6. Attachments:

1. Plot plan or survey prepared by: _____
2. Plans and specifications prepared by: _____

3. Permit fee in the amount of \$ _____
4. Performance bond(2) as follows: 10 percent of the total cost of site improvements as determined by the Township Engineer.

7. The undersigned makes application for a grading, clearing, excavation and filling permit and agrees as a condition of the issuance of such permit to abide with the terms and conditions of the Zoning Ordinances of Baldwin Township.

Date: _____ Owner Signature: _____

Date: _____ Building Inspector Approval: _____

Date: _____ Township Engineer Approval: _____