#### TOWNSHIP OF HOPEWELL

# ORDINANCE NO. 79-6

AN ORDINANCE OF THE TOWNSHIP OF HOPEWELL, REGULATING GRADING, EXCAVATIONS, FILLS AND ESTABLISHING STANDARDS THEREFORE AND REQUIRING GUARANTEES; PROVIDING FOR INSPECTION: CERTIFICATES OF COMPLETION: CONFERRING CERTAIN POWERS ON THE ADMINISTRATOR AND IMPOSING FINES AND PENALTIES.

BE IT ORDAINED AND ENACTED by the Board of Commissioners of the Township of Hopewell and it is hereby ordained and enacted by and with the authority of the same:

## ARTICLE 1 TITLE, PURPOSE, VALIDITY

SECTION 1. This Ordinance shall be known as the "Township of Hopewell Grading, Excavating and Fill Ordinance."

SECTION 2. The purpose of this ordinance is to provide minimum standard to safequard persons, to protect property, maintain the present level of ecology and promote the public welfare by regulating and controlling the design, construction, quality of materials, use, location, and maintenance of grading, excavation and fill.

SECTION. 3. If any Section, Sub-section, sentence, clause or phrase of the Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.

## ARTICLE 2 DEFINITIONS

SECTION 1. Wherever used in this Ordinance the words shall have the following meaning:

- (a) Administrator -- the qualified individual disignated from time to time by the Board of Commissioners to act for the Township of Hopewell under this Ordinance.
- (b) <u>Building Permit</u> -- a valid permit issued by the Township of Hopewell, pursuant to the provisions of applicable Township Ordinances for the construction, erection of or alterations of a structure or buildings.
- (c) <u>Erosion</u> -- the detachment and movement of soil or rock fragments by water, wind, ice or gravity, including such processes as gravitational creep.
- (d) Excavation -- any act by which earth, sand, gravel, rock, coal, or any other similar material is cut into, dug, quarried, uncovered, removed, displaced or relocated or bull-dozed and shall include the conditions resulting therefrom.
- (e) <u>Fence</u> -- a structural barrier to prevent intrusion within a given area.
- (f) <u>Fill</u> -- any act by which earth, sand, grave, rock or any other material is deposited, placed, pushed, dumped, pulled, transported, or moved to a new location and shall include the conditions resulting therefrom.
- (g) Existing or Natural Grade -- the elevation of the existing ground surface above sea level prior to any excavating or filling.
- (h) Rough Grade -- that state of grading which approximates the finished grade in a plan of grading.

- (i) Finished Grade -- the elevation of the ground surface above sea level after grading has been completed and the elevation coincides with the elevation called for in a plan of grading.
- (j) <u>Grading</u> -- an excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.
  - (k) Grading Permit -- any permit required by this Ordinance.
- (1) Paving -- the application of such material as will produce a dust-free, all weather, hard surface.
- (m) <u>Hazard</u> -- 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.
- (n) <u>Person</u> -- a natural person or persons but shall also include a partnership or corporation and their heirs, successors and assigns.
- (o) <u>Site</u> -- a lot, tract, or parcel of land, or a series of lots, tracts, or parcels of land, joined together, where grading work is continuous and performed at the same time.
- (p) <u>Slope</u> -- that ratio formed by the horizontal over the vertical difference of position and where the vertical difference is usually expressed as one. (e.g. 2/1, 3/1, etc.)
  - (q) Township -- the Township of Hopewell.

#### ARTICLE 3 SCOPE

SECTION 1. New grading (excavations or fills) or changes, additions, repairs, or alterations made to existing grading (excavations or fills) shall conform to the provisions of this Ordinance.

## ARTICLE 4 PERMITS REQUIRED

SECTION 1. No person shall commence or perform any grading (excavation or fill) without first having obtained a grading permit from the Township. A separate grading permit shall be required for each site. One permit may cover both an excavation and any fill made on the same site.

## ARTICLE 5 EXCEPTIONS

SECTION 1. A grading permit will not be required in the following situations, but in all other respects, the provisions of this Ordinance shall apply:

- (a) An excavation which does not exceed four (4) feet in vertical depth at its deepest point measured from the existing grade, if the grading (1) does not cover an area of more than twenty (20) per cent of the site, and (2) does not exceed 6,000 square feet, and (3) does not exceed 250 cubic yards, (4) does not result in cut and/or fill slope steeper than three (3) horizontal to one (1) 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. This exception shall not effect the applicability of this Ordinance to the requirement of a grading permit for any fill made with the material from such excavation, unless such fill is within the exception of sub-section (b) herein.
- (b) A fill which does not exceed four (4) feet in vertical depth at its deepest point measured to the existing grade, if the grading (1) does not cover an area of more than twenty (20) per cent of the site, and (2) does not exceed 6,000 square feet, and

- (3) does not exceed 250 cubic yards; provided that the surface of such fills does not have a slope at any point steeper than three (3) horizontal to one (1) vertical.
- (c) An excavation for basements and footings of a building, swimming pool, or underground structure authorized by a building permit and excavation of a driveway between a building site and the street where the plot plans attached to the building permit indicate existing and proposed contours. A grading permit shall not be required for the temporary stockpiling on the same site, of the material from such excavation, within a one-year period beginning from issuance of the building permit.
- (d) A single-family house site where the minimum slope between property lines or the maximum excavation or fill (exclusive of the situations referred to in Article 5, Section 1, Paragraph (c) hereof) do not exceed the slopes or quantities set forth in the following table:

Single Family HOuse Site (Area to be graded in sq. ft.)	Maximum Slope Without permit (feet vertical per 100 ft. horizontal)	Maximum Ex- cavation or fill without permit (cubic yards)
Less than 12,000 S.F.	12 in 100 feet	100
From 12,000 to 30,000 S.F.	15 in 100 feet	500
over 30,000 S.F.	20 in 100 feet	1000
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#### ARTICLE 6 APPLICATION

SECTION 1. Every applicant for a grading permit shall file a written application therefor, with the Township. 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 locate the proposed work.
- Be accompanied by plans and specifications, in triplicate, prepared by a Registered Engineer, Registered Surveyor or Registered Landscape Architect, licensed by the Commonwealth of Pennsylvania, including: a plan of survey, a contour map showing the present contours of the land and the proposed contours of the land after completion of the proposed grading at a scale not smaller than fifty (50) feet to one (1) inch and at a contour interval of not greater than five (5) feet, and a plan showing cross sections of the proposed cut and/or fill on fifty (50) foot intervals which show the method of benching both cut and/ or fill, under no circumstances shall there be less than two (2) cross sections for each property involved under said permit; a plot plan showing the location of the grading, boundaries, lot lines, neighboring streets and ways, existing and proposed buildings, existing water lines and sewers or drains, existing utility lines, type of ground cover or vegetation, and sufficient dimensions and other data to show the location of all work; description of the type and classification of the soils obtained from an on-site investigation; details and location of existing water courses, area and details of paving, and any proposed drainage structures and pipes, walls and cribbing, details of bridges and/or culverts required to cross over water courses; nature of fill material and such other information as the Township may require to carry out the purpose of this Ordinance. All plans shall be dated and bear; (1) the name and seal of the Registered

Professional who prepared same; (2) the name of the applicant and (3) the name of the owner of the land.

- (c) State the estimated dates of the starting and completion of the grading work.
- (d) State the purpose for which the grading application is filed.

# ARTICLE 7 PERMIT FEES -- WORK COMPLETION GUARANTEES

SECTION 1. Before issuing a grading permit, the Township shall collect a permit fee as follows:

Volume of Material	Permit Fee
Not more than 200 cu. yds	\$30.00
More than 200 cubic yards *(\$8.00 for each additional 100 cubic yards or portion thereof)	\$30.00 plus *
More than 500 cubic yards *(\$7.00 for each additional 100 cubic yards or portion thereof)	l \$54.00 plus *
More than 1,000 cubic yards *(\$6.00 for each additional 100 cubic yards or portion thereof)	\$90.00 plus *

SECTION 2. Before issuance of a grading permit the applicant shall post a bond, with a corporate surety. 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 be issued 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. In lieu of said bond, a cash deposit in the said amount may be made with the Township. Said bond or cash deposit shall be in the amount of 50% of the estimated cost of the work to guarantee the completion of said work, including erosion and sedimen-

tation control and storm drainage system, contemplated by the permit.

## ARTICLE 8 EXPIRATION OF PERMIT

SECTION 1. 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 (1) year or is not completed within two (2) years from the date of issue, provided that the Township may, if the permit holder presents satisfactory evidence in writing that unusual difficulties have prevented the work from 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.

## ARTICLE 9 DENIAL OF PERMIT --APPEAL

SECTION 1. Where, in the opinion of the Administrator the work as proposed by the applicant is likely to endanger any person, property or any street or way, he shall deny the grading permit. In determining whether the proposed work is likely to endanger property, or streets, or alleys, or streams, or create hazardous conditions or damage the ecology of the area, the Administrator shall give consideration to, but shall not be limited to, possible saturation by rains, earth movements, run-off of surface waters and sub-surface conditions such as the stratification and faulting of rock, and the nature and type of the soil, rock, or other minerals.

SECTION 2. The Board of Commissioners shall consider appeals from the provisions of this Ordinance or from the determinations of the Administrator, within thiry (30) days at which time the Board may consider alternate methods, standards or materials proposed by the applicant. (Any applicant or permit holder shall have the right to appeal to any court of competent jurisdiction from any decision of determination of the Board of Commissioners.)

#### ARTICLE 10 INSPECTION

SECTION 1. The Administrator shall make the inspections hereinafter required and shall either approve that portion of the work that has been completed or notify the permit holder wherein the same fails to comply with the provisions of this Ordinance. Where it is found by inspection that the soil or other conditions are not as stated or shown on the application, the Administrator shall stop work on the site immediately until approval is obtained for a revised grading plan conforming to the existing conditions.

SECTION 2. Plans for grading work, approved by the Township, shall be maintained at the site during the progress of the grading work until the work has been approved.

SECTION 3. The permit holder shall notify the Township in order to obtain inspections in accordance with the following schedule and such notifications shall be made by the permit holder at least seventy-two (72) hours before the inspection is to be made:

(a) <u>Initial Inspection</u>. When work on the excavation or fill is about to be commenced.

- (b) Rough Grading. When all rough grading has been completed.
- (c) <u>Drainage Facilities</u>. When drainage facilities are to be installed and before such facilities are back-filled.
- (d) <u>Special Inspection</u>. If at any time conditions are found which are not stated on the permit holder's application.
- (e) <u>Special Structures</u>. When excavations are complete for retaining and crib walls and when reinforcing steel is in place and before concrete is poured.
- (f) Final Inspection. When all work, including the installation of all drainage and other structures has been completed.

SECTION 4. If, at any stage of the work, the Administrator shall determine by inspection that conditions exist, such that the work as authorized by an existing permit is likely to endanger any property, or streets, or ways, or create hazardous conditions, the Administrator may require, as a condition to allowing the work to be done, that such reasonable "Safety Precautions" be taken as the Administrator considers advisable to avoid the likelihood of danger. "Safety Precautions" may include, but shall not be limited to, specifying a lesser degree of slope, construction of additional drainage facilities, berms, terracing, compaction, cribbing, or walls.

## ARTICLE 11 STANDARDS OF EXCAVATION

SECTION 1. Maximum slope steepness of a cut should be three

(3) horizontal to one (1) 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 twenty-five (25) percent shall have cut slopes no stepper than three (3) horizontal to one (1) vertical. Soil survey map symbols are:

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

(b) Landslide-prone soils where slopes are less than twenty-five (25) percent shall have cut slopes no steeper than two (2) horizontal to one (1) vertical. Soil Survey map sympols are:

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 landslideprone shall have a slope no steeper than one and one-half (1-1/2)
horizontal to one (1) vertical. All Soil Survey map symbols except
the symbols listed above donate soils of low landslide probability.

SECTION 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 Township.

- (b) A retaining wall or other approved support, designed by a professional engineer and approved by the Township is provided to support the face of the excavation.
- SECTION 3. The top or bottom edge of slopes shall generally be set back from adjacent property lines or street right-of-way.

#### ARTICLE 12 STANDARDS FOR FILLS

SECTION 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.

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

SECTION 3. No fill shall be made which creates any exposed surface steeper in slope than two and one-half (2-1/2) horizontal to one (1) vertical, except under one or more of the following conditions:

(a) A written statement from a Registered Professional Engineer, licensed by the Commonwealth of Pennsylvania and experienced in erosion control and geological sciences, certifying that he has inspected the site and that the proposed deviation from the slope specified above will not result in increased risk of injury to persons or damage to adjacent property, streets, alleys, structures, or receiving streams from erosion and sedimentation, is submitted to and approved by the Township.

SECTION 4. The administrator may require that the fill be constructed with an exposed slope less than or flatter than three

(3) horizontal to one (1) vertical if he finds that under the particular conditions such flatter slope is necessary for stability and safety.

SECTION 5. 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, the said time limit to be determined by the Administrator and to be 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, other than clean soil or earth, within the fill.

SECTION 6. When the fill is other than clean soil or earth, the Administrator may require clean soil or earth to be placed over the top and exposed surfaces of the fill to a depth sufficient to conceal all materials at the end of each day's operations.

- (a) No fill of any kind shall be placed over trees, stumps, or other material which would create a nuisance or be susceptible to attracting rodents, termites, or other pests.
- (b) No grading permit shall be issued for the filling with materials other than clean soil or earth until a performance bond in the amount of at least ten per cent (10%) more than the Administrator's estimated cost (i.e. 110%) of adequately covering such fill with clean soil or earth and providing erosion and sedimentation control and drainage has been furnished to the Township. Such bond shall be in conformance with that as set forth in Article 7, Section 2.

# ARTICLE 13 STANDARDS FOR MINIMIZING EROSION AND SEDIMENT

SECTION 1. In order to prevent erosion, the permitee shall be required to provide adequate surface treatment by installing ground cover of such kind and character as may be approved by the Administrator. Earth moving activity which affects five or more acres must be approved by the Department of Environmental Resources, Beaver County Conservation District Pursuant to Section 102.41 and 102.42 relating to permit requirements of Title 25, Chapter 102, Erosion Control. One or a combination of guidelines for erosion and sediment control should be used to minimize hazard, depending on site conditions and proposed grading. However, the Administrator may approve grading plans not meeting Governmental guidelines if the proposed grading will not constitute a hazard. Governmental and/or engineering reports should be used as evidence that the proposed grading will not constitute a hazard.

# ARTICLE 14 STANDARDS FOR COMPACTION OF FILLS AND BENCHING

SECTION 1. All fills shall be compacted to provide stability of material and to prevent undesireable settlement. The fill shall be spread in a series of layers and shall be compacted by a sheepsfoot roller or other approved method after each layer is spread. The Administrator may require tests or other information if, in his opinion, the conditions or materials are such that additional information is necessary. Where fills are placed on slopes of fifteen per cent (15%) or more, benching of the surface shall be required and indicated on the cross sections. Fills that exceed a height of eight (8) feet shall be provided at the toe of the slope with a key bench at least two (2) feet deep and four (4) feet wide across the entire length of the toe.

### ARTICLE 15 DRAINAGE

SECTION 1. Adequate provisions shall be made to prevent any surface waters from damaging the cut face of an excavation or sloping surface of a fill. The Administrator shall require drainage structures or pipes to be constructed or installed which are necessary to prevent erosion and to satisfactorily carry off surface waters. All drainage provisions shall be of such design as to carry surface waters to the nearest practical location or natural water course which is a safe place to deposit or receive such waters. Culverts and bridges of proper size shall be installed where a water course is to be crossed in accord with State rules, regulations and law.

#### ARTICLE 16 MAINTENANCE

SECTION 1. The owner of any property on which an excavation or fill has been made shall maintain in good condition and repair all retaining walls, cribbing, drainage structures, fences, ground cover, and other protective devices as established by permit and further, the continued use of said area shall be contingent upon the maintenance and upkeep, satisfactory to the Township. The Certificate of Completion therefore may, at any time, be revoked by the Board of Commissioners, in accordance with the procedures set forth in Article 18, Section 2 and 3, if the conditions of the permit are not being observed or if conditions exist that prejudice the health, safety and welfare of any person, persons or property.

#### ARTICLE 17 GENERAL REQUIREMENTS

SECTION 1. The top or bottom edge of excavations and fills shall be at least three (3) feet from property lines or right-ofway lines of streets in order to permit the normal rounding of the edge without encrouching on the abutting property. or bottom edge of excavation and fills shall be at least twentyfive (25) feet from the nearest bank of any stream or body of water. A temporary fence not less than four (4) feet in height and approved by the Administrator shall be placed at the top of all cuts or fills and slopes in excess of one and one-half (1-1/2)horizontal to one (1) vertical, prior to excavation. Upon completion of grading a permanent fence not less than four (4) feet in height and meeting Township fence requirements shall be placed at the top of all such cuts or fills and slopes. Before a grading permit is issued a bond shall be required as provided in Article 7, Section 2 hereof, to quarantee the protection of steep slopes.

SECTION 2. The owner of a property shall be responsible to protect and clean up affected properties of silt or debris washing from his property as a result of the re-grading of his property. The duties imposed under this paragraph shall be in addition to those duties owed to other property owners by law.

SECTION 3. In order to prevent the denuding of the landscape, wherever practicable, large trees and other natural features constituting important physical, esthetic and economic assets to existing or impending suburban development shall be preserved. SECTION 4. All grading, excavation or fill shall be performed so that no unnecessary dust or smoke shall be raised in such amounts as to cause annoyance or discomfort to, or be offensive and objectionable to the public or shall cause injury or is a health hazard, the permittee shall comply with all statutes and regulations of the Commonwealth of Pennsylvania concerning Environmental Quality Control administered by the Department of Environmental Resources, including the Clean Streams Law and the Air Pollution Control Act.

Burning of materials from clearing and grubbing operations shall be governed by local codes and ordinances and/or the Regulations of the Department of Environmental Resources. For each day that the Contractor may contemplate open burning, he shall secure written approval from the Department of Environmental Resources.

The Administrator may revoke any permit issued under this Ordinance until dust and smoke control requirments are met.

## ARTICLE 18 GRADING CERTIFICATE OF COMPLETION

SECTION 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 Ordinance, a grading certificate of completion covering such work and stating that the work is approved, shall be issued to the permit holder by the Administrator.

SECTION 2. The Board of Commissioners shall have the power to revoke, any grading certificate of completion upon the recommendation of the Administrator that the work covered by the permit, or that any retaining walls, cribbing, drainage structures, fence, or other protective devices shown on the approved plans and specifications submitted for a permit have not been maintained in good order and repair.

SECTION 3. Before such revocation, the Administrator shall first give written notice to the permit holder and to the owner of the property involved, specifying the defective condition and stating that unless such defective condition is remedied, the certificate shall be revoked. Such conditions shall be corrected within thirty (30) days of notice to the owner to correct same.

#### ARTICLE 19 VIOLATIONS AND PENALTIES

SECTION 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 Ordinance.

SECTION 2. When written notice of a violation of any of the provisions of this Ordinance has been served by the Administrator on any person, such violation shall be discontinued immediately.

SECTION 3. Any person, firm, partnership, or corporation violating any of the provisions of this Ordinance shall be liable on conviction thereof before a justice of the peace or other proper

judicial officer to a penalty not exceeding \$300.00 for each and every offense, and whenever such person, firm, partnership, or corporation shall have been notified by the Administrator by service of summons in a prosecution or in any other way that he is committing such violation of this Ordinance, each day that he shall continue 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 by law collected.

### ARTICLE 20 REMEDIES

SECTION 1. In case any work is performed by any person in violation of any of the provisions of this Ordinance, the Administrator 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.

## ARTICLE 21 REPEALER

SECTION 1. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

ORDAINED AND ENACTED THIS 13 DAY OF DECEMBER

TOWNSHIP OF HOPEWELL BOARD OF COMMISSIONERS

ATTEST: