Chapter 71

GRADING, EXCAVATION AND FILL

§ 71.1. Purpose.

§ 71.2. Definitions.

§ 71.3. Permit required.

§ 71.4. Exceptions.

§ 71.5. Application for permit.

§ 71.6. Responsibilities of the Grading Administrator.

§ 71.7. Expiration of permit; extension.

§ 71.8. Denial of permit.

§ 71.9. Permit and fees.

§ 71.10. Performance security.

§ 71.11. Inspections.

§ 71.12. Working conditions.

§ 71.13. Excavations.


§ 71.15. Retaining walls.

§ 71.16. Drainage.

§ 71.17. Erosion and sedimentation control.

§ 71.18. Maintenance.

§ 71.19. General requirements.

§ 71.20. Violation and penalties.
§ 71.21. Additional remedy.

§ 71.22. Appeals.

[HISTORY: Adopted by the Board of Commissioners of the Township of Upper St. Clair 9-6-60 as Ord. No. 148. Sections 71.2 and 71.17.3 amended at time of adoption of Code; see Ch. 1, Adoption of Township Code. Other amendments noted where applicable. Repealed in its entirety and new chapter enacted 8-7-95 by Ord. No. 1674].

GENERAL REFERENCES

Definitions and rules of interpretation - See Ch. 3.
Building construction - See Ch. 51.
Abandoned excavations and wells - See Ch. 56.
Drainage facilities - See Ch. 106, Art. IV.
Changes of land contours over sewer lines - See Ch 106, Art VII.
Street excavations - See Ch. 112, Art. VIII.

§ 71.1. Purpose.

The purpose of this chapter is to provide minimum standards to safeguard PERSONS and property 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.

§ 71.2. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

APPLICANT - A LANDOWNER who filed an application for a GRADING PERMIT.

ARCHITECT - A registered ARCHITECT licensed as such in the Commonwealth of Pennsylvania.

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

BOARD OF COMMISSIONERS - The BOARD OF COMMISSIONERS of the TOWNSHIP.

BUILDING CODE - The TOWNSHIP BUILDING CODE.
DEVELOPMENT PLAN - The provisions for development, including a planned residential development, a plat of subdivision, all covenants relating to use, location and bulk of buildings and other structures, intensity of use or density of development, streets, ways and parking facilities, common open space and public facilities.

ENGINEER - A registered professional ENGINEER licensed as such in the Commonwealth of Pennsylvania, and knowledgeable in civil engineering.

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, disturbed, 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 including the condition resulting therefrom.

FLOOD - A temporary inundation of normally dry land areas.

GEOTECHNICAL ENGINEERING REPORT - A report prepared by a registered professional ENGINEER having demonstrated expertise in geotechnical matters, which at a minimum contains a site description, land disturbance history, data on cover, an assessment of risk, and recommendations for stabilization.

GRADE - The elevation of the existing or proposed ground surface at the location of any proposed EXCAVATION or FILL.

GRADING - An EXCAVATION or FILL or a combination thereof.

GRADING ADMINISTRATOR - The TOWNSHIP MANAGER or his designated representative.

GRADING PERMIT - Any permit required pursuant to the provisions of this Chapter.

HAZARD - Any danger or potential danger to life, limb or health, or any 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.

IDENTIFIED FLOODPLAIN AREA - The floodplain area specifically identified in Chapter 130 of the TOWNSHIP CODE, Zoning, as being inundated by the ONE-HUNDRED-YEAR FLOOD. Included would be areas identified as floodway (FW), flood-fringe (FF) and general floodplain (FA).
LAND DEVELOPMENT - Any of the following activities: the improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features; or a subdivision of land. LAND DEVELOPMENT shall not include the conversion of an existing single-family detached dwelling or single-family semi-detached dwelling into not more than three residential units, unless such units are intended to be a condominium; or the addition of an accessory building, including farm buildings, on a lot or lots subordinate to an existing principal building.

LANDOWNER - The legal or beneficial owner or owners of land including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition), a lessee if he is authorized under the lease to exercise the rights of the landowner, or other PERSON having a proprietary interest in land.

LANDSCAPE ARCHITECT - A LANDSCAPE ARCHITECT licensed by the Commonwealth of Pennsylvania.

ONE-HUNDRED-YEAR FLOOD - A FLOOD that, on the average, is likely to occur once every one hundred (100) years (i.e., that has a one-percent chance of occurring each year, although the FLOOD may occur in any year).

PERMIT HOLDER - Any LANDOWNER, agent of said LANDOWNER, or tenant with the permission of said LANDOWNER who has been granted a GRADING PERMIT pursuant to the provisions of this Chapter.

PERSON - A natural PERSON, but also includes a partnership, corporation, trust, association or any type of legal entity.

RETAINING WALL - A structure composed of concrete, steel, wood, or other approved building material within the allowable stresses as specified under the BUILDING CODE constructed for the purpose of supporting a cut or filled embankment, or to retain or support the lateral pressure of earth or other superimposed loads.

SECURITY - A bond, letter of credit or cash provided by the PERMIT HOLDER to secure performance under this Chapter.

SITE - A lot, tract or parcel of land, or a series of lots, tracts or parcels of land which are adjoining and with respect to which GRADING work is to be continuous and performed at the same time.
SLOPE - The upward or downward slant or inclination or degree of slant, expressed either as a horizontal to vertical ratio or as a percentage of vertical inclination from the horizontal.

SOIL CONSERVATION REPORT - A report, prepared by a registered professional ENGINEER, that includes a description of a SITE and topography, drainage, cover, soils, soil limitations, EROSION and sediment potential, surface runoff changes and recommendations to minimize soil limitations, EROSION and sediment, and surface water disposal problems.

SOILS ENGINEER - A registered professional ENGINEER licensed as such in the Commonwealth of Pennsylvania and having training and experience in the branch of soils engineering.


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

STEEP SLOPE - Where in a 100 foot horizontal distance, the SLOPE exceeds 40%.

TOWNSHIP - The Township of Upper St. Clair, a home-rule municipality located in Allegheny County, Pennsylvania.

TOWNSHIP CODE - The Code of the TOWNSHIP adopted by the BOARD OF COMMISSIONERS and as amended from time to time.

TOWNSHIP ENGINEER - The appointed ENGINEER of the TOWNSHIP.

TOWNSHIP MANAGER - The Manager of the TOWNSHIP, duly appointed as set forth in Section 29.1 of the TOWNSHIP CODE.

§ 71.3. Permit Required.

No PERSON shall commence or perform and GRADING, EXCAVATION, and/or FILL operations without first having obtained a GRADING PERMIT from the TOWNSHIP. A separate GRADING PERMIT shall be required for each SITE as follows:

71.3.1. One (1) permit shall cover the GRADING, EXCAVATION, and any FILL made on the same SITE.
§ 71.3.2. Only one (1) permit shall be required for the GRADING of a large continuous parcel of land for a major planned development, such as a planned residential development or a planned commercial development, when the standards for the GRADING of the entire parcel are satisfactory to and approved by the GRADING ADMINISTRATOR.

§ 71.4. Exceptions.

A GRADING PERMIT will not be required, however, in any one (1) of the following situations, but in all other respects, the provisions of this Chapter shall apply:

71.4.1. An EXCAVATION which does not exceed four (4) feet in vertical depth at its deepest point measured from the natural ground surface or cover an area of more than one thousand (1,000) square feet, provided that the surfaces of such EXCAVATION do not have SLOPE at any point steeper than two (2) horizontal to one (1) vertical.

71.4.2. FILL which does not exceed four (4) feet in vertical depth at its deepest point measured from the natural ground surface and/or does not cover an area of more than one thousand (1,000) square feet, provided that the surfaces of such FILLS do not have a SLOPE at any point steeper than two (2) horizontal to one (1) vertical.

71.4.3. An EXCAVATION below finished GRADE for basements and footings of a building, or a one family dwelling, swimming pool, or underground structure authorized by a building permit and an EXCAVATION of a driveway between a building SITE and the street, with the following exceptions:

71.4.3.1. When residential construction for a single-family dwelling will result in an EXCAVATION or FILL, other than for a foundation, exceeding one-hundred (100) cubic yards or create a SLOPE exceeding two (2) horizontal to one (1) vertical, then a GRADING PERMIT shall be required in addition to the building permit.

71.4.3.2. A permit is required for an EXCAVATION of a driveway between the building SITE and the street when, in the judgment of the GRADING ADMINISTRATOR, extreme conditions (such as excessive cut or FILL) exist.

71.4.4. Soil excavated under the authorization of a properly issued building permit which is stockpiled, for a period not exceeding one (1) year, on the same SITE as the EXCAVATION.

71.4.5. Work performed or directed by the TOWNSHIP in a public street or alley or in a TOWNSHIP park, playground or recreation area or on other public property.

§ 71.5. Application for Permit.
Every APPLICANT for a GRADING PERMIT shall file a written application with plans, specifications, and a SOIL CONSERVATION REPORT with the GRADING ADMINISTRATOR in a form prescribed by the TOWNSHIP. Unless waiver is granted by the GRADING ADMINISTRATOR to one or more items, the application shall:

71.5.1. Describe the land on which the proposed work is to be done by lot, block, tract, and street address, or similar description which will readily identify and definitively locate the proposed work.

71.5.2. State the estimated dates for the starting and completion of GRADING work.

71.5.3. State the purpose for which the GRADING application is filed.

71.5.4. State whether or not a building, structure or other improvement, the construction of which will require a building permit pursuant to the provisions of the BUILDING CODE, is intended to be erected on the land on which the GRADING is to be done.

71.5.5. Include plans and specifications prepared, signed and sealed by a professional ENGINEER, surveyor, ARCHITECT or LANDSCAPE ARCHITECT, and shall accurately portray and describe the SITE and proposed soil EROSION controls, if any. Plans shall be submitted in triplicate, one (1) set of which shall be of a reproducible nature, and shall include:

71.5.5.1. The name of the APPLICANT.

71.5.5.2. The name of the owner of the land.

71.5.5.3. The permission and approval of the owner of the property if the APPLICANT is an agent or tenant of the LANDOWNER, by affidavit.

71.5.5.4. An accurate location by lot, block, tract, street address, a location map or other similar information.

71.5.5.5. A contour map showing the present contours of the land and the proposed contours of the land after completion of the proposed GRADING at two (2) foot intervals where the average SLOPE is fifteen percent (15%) or less and at five (5) foot intervals where the average SLOPE exceeds fifteen percent (15%).

71.5.5.6. Cross-sections of the proposed cut or FILL on fifty (50) foot intervals which show the method of benching both cut and/or FILL; provided, however, that there shall be not less than two (2) cross-sections for each SITE.
71.5.5.7. A plot plan showing the location of the GRADING boundaries, lot lines, neighboring streets, or ways, buildings, surface and subsurface utilities and waterways, drainage patterns and sufficient dimensions and other data to show all work.

71.5.5.7.1. Where grading is to be performed over or adjacent to existing utility lines, cross-sections shall include utility line elevations.

71.5.5.8. A description of the type and classification of the soil from the SOIL SURVEY, other standard surveys, or other methods.

71.5.5.9. Details and location of any proposed drainage, structures and pipes, walls and cribbing.

71.5.5.10. Seeding locations and schedules, debris basins, diversion channels.

71.5.5.11. A SOIL CONSERVATION REPORT.

71.5.5.12. If truck or trailer loads of soil are to be removed from or delivered to the SITE, a description of truck travel routes must be approved by the TOWNSHIP. Evidence of approval from a State or County agency, where required, shall also be provided.

71.5.6. If proposed GRADING, EXCAVATION or FILL is located entirely or partially within any IDENTIFIED FLOODPLAIN AREA, a document, certified by a registered professional ENGINEER or ARCHITECT, which states that the proposed GRADING, EXCAVATION or FILL has been adequately designed to withstand the ONE-HUNDRED-YEAR FLOOD elevations, pressure, velocities, impact and uplift forces associated with the ONE-HUNDRED-YEAR FLOOD and that the plans adhere to the restrictions of this Chapter. Such statement shall include a description of the type and extent of measures which have been incorporated into the design of the GRADING, EXCAVATION or FILL.

§ 71.6. Responsibilities of the GRADING ADMINISTRATOR.

The responsibilities of the GRADING ADMINISTRATOR shall be as follows:

71.6.1. The GRADING ADMINISTRATOR shall require that a GEOTECHNICAL ENGINEERING REPORT be submitted by the APPLICANT if the SITE is, has been, or is likely to become hazardous to PERSONS or property. The Coal Resource Maps prepared by USGS, 1975, for the Greater Pittsburgh Region, the SCS SOILS SURVEY for Allegheny County and other reliable sources shall be used to locate hazardous areas. The report shall contain a detailed description of the geological conditions of the SITE and shall 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.
§ 71.6.2. Where, due to special circumstances and conditions, compliance with the provisions of this Chapter would result in unnecessary hardship, the GRADING ADMINISTRATOR may make such special reasonable exceptions thereto, upon recommendation from the TOWNSHIP ENGINEER, as will not be contrary to the public interest, and may impose such conditions as it deems necessary to adequately protect the public interest.

§ 71.7. Expiration of Permit; Extension.

Every GRADING PERMIT shall expire by limitation and become null and void if the work authorized by such permit has not been commenced within six (6) months or is not completed within one (1) year from the date of issue, provided that the TOWNSHIP MANAGER 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 from the original plan uncovered in the SITE during the construction such as surface water drainage, soil and BEDROCK dislocations, alteration of ground water discharge or any other natural or man-made modification which would tend to adversely affect the basis upon which the permit was issued, must be immediately reported to the GRADING ADMINISTRATOR by the PERMIT HOLDER. If the circumstances dictate, the GRADING ADMINISTRATOR shall revoke the permit or otherwise modify the conditions upon which the permit was initially issued.

§ 71.8. Denial of Permit.

71.8.1. Where, in the opinion of the TOWNSHIP ENGINEER, the work as 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 TOWNSHIP ENGINEER 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.

§ 71.9. Permit and Fees.

71.9.1. Before issuing a GRADING PERMIT, the GRADING ADMINISTRATOR shall collect a permit fee. Fees will be as established by Chapter 57 of the TOWNSHIP CODE, entitled, Fees.

71.9.2. Before issuance of a GRADING PERMIT, the APPLICANT shall post all necessary SECURITY, in accordance with the requirements set forth in § 71.10 of this Chapter.
71.9.3. The APPLICANT will be responsible for all costs associated with the approval of the permit. Such costs shall include, but are not limited to, inspection, engineering, legal, and administrative.

§ 71.10. Performance SECURITY.

SECURITY shall be provided as follows:

71.10.1 As a condition of GRADING approval for projects having an estimated cost of $25,000 or more, the APPLICANT shall post a SECURITY acceptable to the TOWNSHIP in the amount of one hundred ten percent (110%) of the estimated cost to perform the GRADING and remedial work. The cost estimate shall include the complete scope of work needed to be performed by the APPLICANT to comply with this Chapter and shall be determined by the TOWNSHIP ENGINEER.

71.10.1.1. For projects having an estimated cost to perform the work of less than $25,000, SECURITY in the amount of fifty percent (50%) of the estimate as determined by the TOWNSHIP ENGINEER shall be provided.

71.10.2. No SECURITY shall be required if SECURITY is posted for construction and/or SITE improvements which already covers the cost of GRADING and other control facilities.

§ 71.11. Inspections.

71.11.1. Application for the permit by the APPLICANT shall constitute consent to enter the SITE for inspections at any time.

71.11.1.1. The GRADING ADMINISTRATOR shall, when requested by the PERMIT HOLDER, make the inspections hereinafter required and shall either approve that portion of the work which has been completed or notify the PERMIT HOLDER wherein the same fails to comply with the provisions of this Chapter. Where it is found by inspection that the soil or other conditions are not as stated or shown in the application, the GRADING ADMINISTRATOR may refuse to approve further work until approval is obtained for a revised GRADING plan conforming to existing conditions.

71.11.2. Plans for GRADING work bearing the approval of the TOWNSHIP ENGINEER shall be maintained at the SITE during the progress of the GRADING work and until the work has been approved.

71.11.3. The PERMIT HOLDER shall notify the GRADING ADMINISTRATOR in order to obtain inspections in accordance with the following schedule and at least forty-eight (48) hours before the inspection is to be made. Before calling for any inspection, the owner shall have the property line stakes set and sufficient GRade stakes set by a registered ENGINEER,
surveyor or other qualified person to enable the GRADING ADMINISTRATOR to verify the GRADING operation.

71.11.3.1. Initial inspection: when work on the EXCAVATION or FILL is about to be commenced.

71.11.3.2. Rough GRADING to achieve general design contours: when all rough GRADING has been completed.

71.11.3.3. Drainage facilities: when drainage facilities which connect to or shall become public facilities, are to be installed and inspected before such facilities are backfilled.

71.11.3.4. Special structures: when EXCAVATIONS are complete for retaining and crib walls when reinforcing steel is in place and before concrete is poured.

71.11.3.5. Final inspection: when all work, including the installation of all drainage and other structures, has been completed.

71.11.4. If at any stage of the work the GRADING ADMINISTRATOR 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 to allowing the work to be done that such reasonable safety precautions be taken as the GRADING ADMINISTRATOR considers advisable to avoid such likelihood of danger. Safety precautions may include but shall not be limited to specifying a flatter exposed SLOPE, construction of additional drainage facilities, berms, temporary safety fencing, terracing, compaction or cribbing.


The following general working conditions will apply to all GRADING SITES.

71.12.1. Dust Control - During GRADING operations, necessary measures for dust control will be exercised.

71.12.2. Clean Up - All soil washed or carried onto public streets shall be removed promptly, and in no instance shall remain past 7:00 p.m. on any given day. Temporary driveway or road surfaces shall be provided as soon as possible. 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 and to restore the property to original condition.

71.12.3. Permit Hours - The operation of heavy construction or EXCAVATION machinery, including but not limited to bulldozers, highlifts, backhoes, trucks, power shovels,
pumps and jackhammers, and the operation of equipment, such as saws and drills or any other type of machinery used outside a structure, in conjunction with work requiring a building permit, which causes a noise sufficient to disturb the peace and general tranquility of the general public or any portion thereof shall be prohibited in the entire TOWNSHIP between the hours of 7:00 p.m. and 7:00 a.m., Monday through Saturday, and all day Sunday and on federally designated legal holidays.

§ 71.13. EXCAVATIONS.

Standards for EXCAVATIONS shall be as follows:

71.13.1. Maximum SLOPE steepness of a cut shall be two (2) horizontal to one (1) vertical for minimizing EROSION and landslide HAZARDS. However, upon a determination by a governmental review agency or a registered SOILS ENGINEER that the properties of the types of soil on the SITE to be graded, as identified by the SOIL SURVEY, other standard surveys, geological surveys or core borings, require special consideration, then maximum SLOPES may then be determined as follows:

71.13.1.1. Landslide prone soils or unstable rock formations where existing SLOPES are less than twenty-five percent (25%) shall have proposed cut SLOPES no steeper than that are recommended by a registered SOILS ENGINEER. A document signed and sealed by said ENGINEER shall be forwarded to the TOWNSHIP prior to approval of the GRADING PERMIT. SOIL SURVEY map symbols for landslide prone soils include, but are not limited to:

<table>
<thead>
<tr>
<th>UGD</th>
<th>Urban land - Guernsey complex, gently sloping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0% - 8% SLOPE</td>
</tr>
<tr>
<td>UGD</td>
<td>Urban land - Guernsey complex, moderately sloping</td>
</tr>
<tr>
<td></td>
<td>8% - 25% SLOPE</td>
</tr>
</tbody>
</table>

71.13.2. Cut SLOPES which are steeper than those specified above may be allowed under a GRADING PERMIT, provided one (1) or both of the following is satisfied:

71.13.2.1. 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 registered 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 GRADING ADMINISTRATOR for evaluation.

71.13.2.2. A RETAINING WALL or other approved support designed, signed and sealed by a professional structural ENGINEER and approved by the ADMINISTRATOR, is provided to support the face of EXCAVATION.

71.13.3. The bottom edge of final SLOPES shall be set back a minimum of six (6) feet from adjacent property lines, excepting side property lines and street right of way lines, in which case the distance shall be a minimum of three (3) feet, in order to permit the normal
rounding of the edge without encroaching on the abutting property or street and to allow for location of proper drainage facilities and protective devices.

71.13.4. Before commencing any EXCAVATION which will in any way affect an adjoining property or structures thereon, the PERSON making the EXCAVATION shall notify in writing the owners of the adjacent property or buildings not less than three (3) days before such EXCAVATION is to be made that the proposed EXCAVATION is to be started. Copies of all such notices shall be supplied to the GRADING ADMINISTRATOR.

71.13.5. The GRADING ADMINISTRATOR may require an EXCAVATION to be made with a cut SLOPE flatter than those specified above if he finds the material in which the EXCAVATION is to be made is unusually subject to EROSION, or if other conditions exist which, under applicable engineering practice, make such flatter cut SLOPE necessary for stability and safety.

71.13.5.1. EXCAVATIONS adjacent to any footing, foundation or structure shall not extend below the minimum angle of repose or natural SLOPE of the soil under the nearest point of same unless such footing, foundation or structure is first properly underpinned or otherwise protected against settlement.

§ 71.14. FILLS.

Standards for FILLS shall be as follows:

71.14.1. Maximum SLOPE steepness of a FILL shall be two (2) horizontal to one (1) vertical in order to minimize EROSION and landslide HAZARDS. However, the TOWNSHIP, on the advice and recommendation of a SOILS ENGINEER, may impose conditions requiring that a FILL be constructed with an exposed surface flatter than two (2) horizontal to one (1) vertical if the SOILS ENGINEER states that under the particular circumstances involved, such flatter surface is necessary for stability and for the safety of PERSONS and property.

71.14.2. FILL SLOPES which are steeper than those specified above may be allowed under a GRADING PERMIT, provided one (1) or both of the following is satisfied:

71.14.2.1. The material of which the FILL is made is sufficiently stable to sustain a SLOPE steeper than the SLOPE specified above for recognized soil conditions. A written statement, signed and sealed by a registered 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 GRADING ADMINISTRATOR for evaluation.

71.14.2.2. A RETAINING WALL or other approved support designed, signed and sealed by a professional structural ENGINEER and approved by the GRADING ADMINISTRATOR is provided to support the face of FILL.
71.14.3. 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:

71.14.3.1. The FILL shall be completed within a reasonable length of time as determined by the TOWNSHIP ENGINEER and specified on the GRADING PERMIT.

71.14.3.2. Clean soil or earth shall be placed over the top and exposed surfaces of the FILL, including all embankments, planting and seeding areas, to a minimum depth of six inches (6") to effectively conceal all materials used in the FILL other than clean soil or earth. Prior to spreading topsoil, the subgrade shall be scarified to a depth of two inches (2") to facilitate the bonding of the subsoil with the topsoil. If the filling operation is intermittent, the TOWNSHIP ENGINEER may require that the top and exposed surfaces of the FILL be so covered at the completion of each lift.

71.14.3.3. No FILL of any kind shall be placed over topsoil, trees, stumps or other material which would create a nuisance, potential fire HAZARD or sanitary problem such as decomposition which would attract rodents, termites or other pests.

71.14.3.4. FILL areas shall be prepared by removing organic material such as vegetation and rubbish, and any other material determined by the GRADING ADMINISTRATOR to prevent proper compaction and stability.

71.14.4. Where FILLS are located so that earth movement may result in personal injury or damage to adjacent property, streets, alleys or buildings, the bearing value and stability of the material under proposed FILLS and embankments shall be determined by subsurface investigation performed by a SOILS ENGINEER.

71.14.5. All FILLS and embankments shall be installed in accordance with the requirements set forth in the Public and Private Improvements Code, as well as any special provisions as specified by a SOILS ENGINEER.

71.14.5.1. Rock may be incorporated into FILLS and embankments in layers twenty-four (24) inches thick, maximum, with voids filled and a blanket of compacted FILL separating one layer of rock from the next. Layers greater than twenty-four (24) inches thick may be permitted by the GRADING ADMINISTRATOR upon submittal of a written statement, signed and sealed by a registered SOILS ENGINEER, stating that incorporation of rocks of the greater thickness will have sufficient stability.

71.14.5.2. Rock FILL shall not be placed near the bottom of foundations, building caissons and subsurface utility installations. Suitable earth shall be reserved or provided to cover rock FILL under proposed seeded or planted areas.
71.14.6. No unsuitable material, including but not limited to wood or SOLID WASTE, shall be placed in FILL areas. Coal, boney, red dog, or expansive shale may in FILL areas be permitted by the GRADING ADMINISTRATOR upon submittal of a written statement, signed and sealed by a registered SOILS ENGINEER, stating that incorporation of these materials will have sufficient stability.

71.14.7. On major FILLS or embankments, a toe bench to prevent erosion of soil shall be constructed below the mantle under the toe of FILL. A porous drain and a discharge pipe shall be installed on the bottom and the back wall of the toe bench.

71.14.8. The bottom edge of final SLOPES shall be set back a minimum of six (6) feet from adjacent property lines, excepting side property lines and street right of way lines, in which case the distance shall be a minimum of three (3) feet, in order to permit the normal rounding of the edge without encroaching on the abutting property or street and to allow for location of proper drainage facilities and protective devices.

71.14.9. Pursuant to a determination by the GRADING ADMINISTRATOR that the nature of a FILL or embankment so warrants, a compaction test shall be required at the end of each eight inch lift, prior to the start of the next lift of material.

71.14.10. Within any IDENTIFIED FLOODPLAIN AREA, FILL, if used, shall:

71.14.10.1. Extend laterally at least fifteen (15) feet beyond the building line from all points.

71.14.10.2. Consist of soil or small rock materials only. Sanitary landfills shall not be permitted.

71.14.10.3. Be compacted to provide the necessary permeability and resistance to EROSION, scouring or settling.

71.14.10.4. Be no steeper than two (2) horizontal to one (1) vertical, unless substantiated data justifying steeper SLOPES are submitted to and approved by the TOWNSHIP ENGINEER.

71.14.10.5. Be used to the extent to which it does not adversely affect adjacent properties.

§ 71.15. RETAINING WALLS.

Standards for RETAINING WALLS shall be as follows:

71.15.1. When the topography natural condition of the property is such that a ground SLOPE of two (2) horizontal to one (1) vertical is not feasible, the GRADING
ADMINISTRATOR may consider the submission of a GRADING plan showing a RETAINING WALL and ground SLOPE combination that would be aesthetically acceptable.

71.15.2. Criteria for the acceptance of such a combination shall as a minimum provide the following:

71.15.2.1. That the RETAINING WALL(S) not exceed a height of six feet (6'), except where there is a showing of extraordinary circumstances.

71.15.2.2. If the plan incorporates terracing, the gradient of the SLOPE between RETAINING WALLS shall not exceed two (2) horizontal to one (1) vertical and that the horizontal distance between walls be at least equal to the height of the RETAINING WALL.

71.15.2.3. Where a stable natural rock ledge is existing, as established by a written statement from a registered, professional SOILS ENGINEER, a similar design of rock ledge and ground SLOPE combination may be considered by the GRADING ADMINISTRATOR.

71.15.3. When a RETAINING WALL is constructed to satisfy the requirements of this ordinance and all other applicable codes (including, but not limited to the TOWNSHIP Zoning and BUILDING CODES), a building permit will not be required in addition to the GRADING PERMIT.

71.15.4. RETAINING WALLS must be designed and constructed in accordance with sound engineering practice. The plans submitted for approval shall include a description of proposed backfilling and subterranean drainage facilities and bear the seal of a professional ENGINEER.

71.15.5. The vertical face of the wall shall be set back a minimum of six feet (6') from adjacent property lines, excepting side property lines and street right of way lines, in which case the distance shall be a minimum of three feet (3').

71.15.5.1. An exception to this requirement may be granted by the GRADING ADMINISTRATOR upon an application satisfactorily demonstrating that such an exception is necessary to permit normal use of the property, that is, for a sideline driveway, or other reasonable consideration.

§ 71.16. Drainage.

Standards for drainage shall be as follows:

71.16.1. Adequate provisions shall be made to prevent surface water from damaging the cut face of EXCAVATIONS and/or the sloping surface of FILLS and/or adjacent properties. Interception and diversion facilities for storm water and surface water run-off, both above and below the cut area during and after construction, shall be included in the design.
71.16.2. Drainage ditches shall be constructed prior to, or in conjunction with, clearing or GRADING at the toe and top of cut and FILL SLOPES to divert the surface water to drainage facilities such as storm sewers, street gutters or natural water sheds during and after construction.

71.16.3. Drainage ditches with a GRADE of five percent (5%) or greater shall be paved or lined with concrete, bituminous material, brick, half pipe, rubble or other suitable material.

71.16.4. The GRADING ADMINISTRATOR may approve methods and materials recommended by governmental agencies, professional ENGINEERS and ARCHITECTS, when they are more suitable to the SITE in preventing damage. Private drainage facilities of any nature shall be at least designed to accommodate the largest size storm that would occur on the average of every ten (10) years.

§ 71.17. EROSION and Sedimentation Control.

The standards for soil EROSION and sedimentation control shall be as follows:

71.17.1. A soil EROSION and sedimentation control plan shall be prepared in accordance with the provisions of Title 25, Environmental Resources, Chapter 102 Erosion Control, and approved by the Allegheny County Conservation District (ACCD) prior to the commencement of any GRADING or other regulated earth-disturbance activity, unless the ACCD determines that said plan is not required.

§ 71.18. Maintenance.

The standards for maintenance shall be as follows:

71.18.1. 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.

71.18.2. If at any time subsequent to the completion of the GRADING work the cut face or FILL SLOPE shows evident signs of deterioration, EROSION or other evidence which might be detrimental to the properties above or below the GRADING SITE, the TOWNSHIP, upon the recommendation of its ENGINEER, may direct the property owner to take whatever necessary remedial steps are deemed necessary to restore the GRADING area to a safe condition and to do so in a reasonable period of time.
§ 71.18.3. If after such notification the property owner has not made the necessary repairs within the allotted time, the TOWNSHIP MANAGER may direct that the required repairs be undertaken and the cost thereof shall be borne by the property owner.

§ 71.19. General Requirements.

General requirements shall be as follows:

71.19.1. The owner of the property being graded shall notify the GRADING ADMINISTRATOR of the starting date of GRADING activity no later than twenty-four (24) hours prior to the commencement of GRADING activity.

71.19.2. The top or bottom edge of SLOPES shall be set back an appropriate distance, as established by the provisions of this Chapter, 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.

71.19.3. 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 and restore to original condition.

71.19.4. Proposed GRADING shall be accomplished so that existing storm water runoff flows are neither increased from predevelopment rates nor concentrated at the point of release onto abutting properties.

71.19.5. Screening, buffering and landscaping shall be provided for all GRADING activities as follows:

71.19.5.1. In a LAND DEVELOPMENT, a minimum fifteen foot buffer shall be provided between the top or bottom edge of any SLOPE area on the land proposed to be graded and the adjacent property line. Existing vegetation, such as trees, bushes and shrubs, shall remain undisturbed. If none exist or existing vegetation is ineffective or not hardy, natural screening shall be provided consisting of trees, bushes or shrubs at least six feet (6') in height, planted in the buffer area in accordance with a plan to be approved by the TOWNSHIP.

71.19.5.2. For all other GRADING activities, natural screening must be provided between the proposed area to be graded and the adjacent property line, consisting of trees, bushes, or shrubs, at least six feet (6') in height.

71.19.6. No GRADING, clear-cutting or denuding of the landscape shall be permitted on property zoned R-LI, Low Intensity Residential District, unless zoning approval for development in accordance with the TOWNSHIP CODE has been obtained. [Amended 10 2 95 by Ord. No. 1684]
71.19.7. No encroachment, alteration or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be affected by such action have been notified by the municipality and until all required permits and approvals have been obtained from the Pennsylvania Department of Environmental Resources, Bureau of Dams and Waterways Management.

71.19.8. 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.

71.19.9. All disturbed soil surfaces shall be stabilized by appropriate, effective seeding or other proper means prior to the first day of November of any year.

71.19.9.1. Any resultant noxious vegetation that results from improper planting or maintenance of stabilized or partially stabilized soil shall be removed in accordance with the provisions of Chapter 48, entitled "Brush, Grass and Weeds."

71.19.10. Within any FW (Floodway Zoning District) and within any floodway area of any FA (General Floodplain Zoning District) as delineated in Chapter 130, Zoning, the following provisions shall apply:

71.19.10.1. Any new GRADING, EXCAVATION or filling that would cause any increase in FLOOD heights shall be prohibited.

71.19.10.2. No new GRADING, EXCAVATION or filling shall be allowed, unless a permit is obtained from the Pennsylvania Department of Environmental Resources, Bureau of Dams and Waterways Management.

71.19.11. In order to protect hillsides exceeding twenty-five percent (25%) in SLOPE, no more than twenty percent (20%) by area of the natural vegetative cover may be removed unless a program approved by the TOWNSHIP for reforestation of disturbed areas over twenty percent (20%) by area is guaranteed by a performance SECURITY.

71.19.12. GRADING and soil EXCAVATION are prohibited on any STEEP SLOPE.

§ 71.20. Violation and Penalties.

71.20.1. 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 Chapter.
§ 71.20.2. When written notice of a violation of any of the provisions of this Chapter has been served by the GRADING ADMINISTRATOR on any PERSON, such violation shall be discontinued immediately.

71.20.3. Any PERSON violating any of the provisions of this Chapter shall be subject to the provisions of Chapter 5, Enforcement of Ordinances; Penalties. In addition, any violation of this Chapter shall be deemed a violation of Chapter 130 of the TOWNSHIP CODE. Whenever such PERSON has been notified by the GRADING ADMINISTRATOR, by service of summons in a summary prosecution or in any other way, that he has committed such violation of this Chapter, each day that he shall continue such violation after such notification shall constitute a separate offense, punishable by a like fine or penalty.

§ 71.21. Additional Remedy.

In case any work is performed by any PERSON in violation of any of the provisions of this Chapter, the proper officers of the TOWNSHIP, in addition to the other remedies prescribed by law, may institute, in the name of the TOWNSHIP, any appropriate legal action or proceedings to prevent such unlawful work and restrain or abate said violation.

§ 71.22. Appeals.

Any APPLICANT may appeal a decision of the GRADING ADMINISTRATOR to the Zoning Hearing Board of the TOWNSHIP in accordance with the procedures set forth in Chapter 130 of the TOWNSHIP CODE.