#### ORDINANCE NO. 36 - 1989

AN ORDINANCE OF THE TOWNSHIP OF CENTRE, BERKS COUNTY, PENNSYLVANIA, REGULATING THE ACCELERATED EROSION AND RESULTING SEDIMENTATION OF WATERS, PREVENTING POLLUTION OF WATERS FROM SEDIMENT, FERTILIZERS, PESTICIDES, AND OTHER POLLUTANTS CARRIED BY SEDIMENT, PROVIDING FOR DEFINITIONS, PROVIDING FOR PERMITS, AND PENALTIES FOR VIOLATION AND REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES INCONSISTENT THEREWITH.

WHEREAS, the Supervisor of the Township of Centre find it to be in the public interest to regulate accelerated soil erosion and excessive sedimentation.

NOW, THEREFORE, THE SUPERVISORS OF THE TOWNSHIP OF CENTRE, HEREBY ORDAIN as follows:

#### SECTION 1 - SHORT TITLE

This Ordinance shall be known as the erosion control ordinance and may be cited as "the CENTRE TOWNSHIP EROSION CONTROL ORDINANCE".

# SECTION 2 - PURPOSE

The purpose of this Ordinance is to provide minimum standards for the protection of life, limb, health, property, environment and for the safety and welfare of the residents and general public of the Township.

#### SECTION 3 - SCOPE

The provisions of this Ordinance impose requirements on earthmoving activities which create accelerated erosion or a danger of accelerated erosion and which require planning and implementation of effective soil conservation measures.

#### SECTION 4 - AUTHORITY

The Ordinance enforcement officer is hereby authorized and directed to administer and enforce all of the provisions of this Ordinance.

#### SECTION 5 - ENTRY

Upon presentation of proper credentials, the ordinance enforcement officer or his duly authorized representatives may enter at reasonable times any building, lot, structure or premises in the Township to perform any duty imposed upon the officer by this Ordinance.

#### SECTION 6 - DEFINITIONS

The following words and terms, when used in this Ordinance shall have the following meanings, unless the context clearly indicates otherwise:

- A. Accelerated erosion The removal of the surface of the land through the combined action of man's activities and the natural processes at a rate greater than would occur because of the natural process alone.
- B. <u>Department</u> The Department of Environmental Resources of the Commonwealth.
- C. <u>Diversion terrace</u> A channel or dike constructed up slope of a project for the purpose of diverting storm water away from the unprotected slope.

- D. <u>Earthmoving activity</u> Any construction or other activity which disturbs the surface of the land including, but not limited to, excavations, embankments, land development, subdivision development, mineral extraction and the moving, depositing or storing of soil, rock or earth.
- E. Embankment or fill A deposit of soil, rock, or other material placed by man, or man directed or controlled action.
- F. <u>Erosion</u> The natural process by which the surface of the land is worn away by the action of water, wind or chemical action.
- G. Excavation A cavity formed by digging, quarrying, uncovering, displacing, or relocating soil or rock.
  - H. <u>Interceptor channel</u> A channel or dike constructed across a slope for the purpose of intercepting storm water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.
  - I. <u>Land developer</u> Any person who is engaged in land development as the principal rather than an agent or contractor.
  - J. <u>Land development</u> The constructing, installing, placing, planting, or building of surface structures, utility lines, shopping centers and malls, golf courses, apartment complexes, schools, roads, highways, parking areas or any other similar activity.
  - K. <u>Sediment</u> Soils or other surficial materials transported by surface water as a product of erosion.

- L. <u>Sedimentation</u> The process by which sediment is deposited on stream bottoms.
- M. <u>Stabilization</u> The proper placing, grading and/or covering of soil, rock or earth to insure resistance to erosion, sliding, or other movement.
- N. <u>Subdivision</u> The division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tract, parcels or other division of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership or building or lot development.
  - O. <u>Township</u> The Township of Centre, Berks County, Pennsylvania.

# SECTION 7 - GENERAL REQUIREMENT

All earthmoving activities within this Township shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation. To accomplish this, all persons engaged in earthmoving activities shall design, implement and maintain erosion and sedimentation control measures which effectively prevent accelerated erosion and sedimentation. These erosion and sedimentation measures must be set forth in a plan as described in SECTION 8 of this Ordinance and must be available at all times at the site of the activity.

# SECTION 8 - EROSION AND SEDIMENTATION CONTROL PLAN

- (a) The erosion and sedimentation control plan shall be prepared by a professional engineer or professional surveyor licensed in Pennsylvania and experienced in erosion and sedimentation control methods and techniques.
- (b) The erosion and sedimentation control plan shall be designed to prevent accelerated erosion and sedimentation and shall consider all factors which contribute to erosion and sedimentation including, but not limited to, the following:
  - 1. The topographic features of the project area.
  - 2. They types, depth, slope, and areal extent of the soils.
    - 3. The proposed alteration to the area.
  - 4. The amount of runoff from the project area and the upstream watershed area.
    - 5. The staging of earthmoving activities.
  - 6. Temporary control measures and facilities for use during earthmoving.
  - 7. Permanent control measures and facilities for long term protection; and
  - 8. A maintenance program for the control facilities including disposal of materials removed from the control facilities or project area.

# EROSION AND SEDIMENTATION CONTROL MEASURES AND FACILITIES

#### SECTION 10 - GENERAL REQUIREMENT

The erosion and sedimentation control facilities set forth in SECTION 11 and SECTION 12 of this Ordinance (relating to control measures and facilities) shall be appropriately incorporated into all earthmoving activities unless the designer of the erosion and sedimentation control plan shows that alteration of these measures and facilities will prevent accelerated erosion and sedimentation.

#### SECTION 11 - CONTROL MEASURES

- (a) <u>Limiting exposed areas</u> All earthmoving activities shall be planned in such a manner as to minimize the areal extent of disturbed land.
- (b) <u>Surface water division</u> All surface water shall be diverted away from the project area.
- (c) <u>Velocity control</u> All permanent facilities for the conveyance of water around through or from the project area shall be designed or contain facilities to limit the velocity of flow in the facilities to less than 1.5 feet per second.
- (d) <u>Stabilization</u> All slopes, channels, ditches or any disturbed area shall be stabilized as soon as possible after the final grade or final earthmoving has been completed.

- (e) Interim stabilization Where it is not possible to permanently stabilize a disturbed area immediately after the final earthmoving has been completed or where the activity ceases for more than 20 days, interim stabilization measures shall be implemented promptly.
- (f) <u>Collection of runoff</u> All runoff from a project area shall be collected and diverted to facilities for removal of sediment.
- (g) Solids separation Runoff from a project area shall not be discharged to the waters of the Commonwealth without means to prevent sedimentation.

#### SECTION 12 - CONTROL FACILITIES

## (a) Diversion Terraces

- 1. Diversion terraces shall be constructed up-grade of a project area to convey runoff around the project area. For temporary diversion the channel shall have a capacity to convey 1.6 cubic feet per second per acre of land tributary to it. For permanent diversion, the channel shall have a capacity to convey 2.75 cubic feet per second per acre of land tributary to it.
- 2. Diversion terraces shall be grassed or lined with erosion resistant material to prevent accelerated erosion within the channel.
- 3. Outlet structures shall be designed to maintain a discharge velocity of less than 3.0 feet per second and shall be stabilized before use.

#### (b) Interceptor Channels

- 1. Interceptor channels may be used within a project area to reduce the velocity of flow and thus prevent accelerated erosion.
- 2. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams.
- 3. Outlets to vegetated areas shall be designed to maintain an outlet velocity of less than 3.0 feet per second.

# (c) Channels of Conveyance

1. All channels used to convey water through a project area shall be designed to have a velocity of less than 1.5 feet per second. Where this is not possible, the channel shall be grassed or lined with erosion resistant material.

## (d) Sedimentation Basins

- 1. A sedimentation basin shall have a capacity of 7,000 cubic feet for each acre of project area tributary to it and shall the provided with a 24-inch freeboard.
  - 2. If the basin shall be cleaned the storage capacity of the basin is reduced to 5,000 cubic feet per acre of project area tributary to it.
  - 3. Outlet structures shall be designed to pass a minimum flow of 2.0 cubic feet per second for each acre of project area tributary to the basin.
  - 4. The discharge from a sedimentation basin shall be to a natural waterway.

5. Sedimentation basins shall be structurally sound and protected from unauthorized acts of third parties.

#### RESTORATION

## SECTION 13 - APPLICABILITY

The provisions of SECTION 13 - SECTION 16 of the Ordinance (relating to restoration) shall apply to all earthmoving activities which have not been stabilized.

#### SECTION 14 - STABILIZATION

Upon completion of the project, all areas which were disturbed by the project shall be stabilized so that accelerated erosion will be prevented.

## SECTION 15 - INTERIM CONTROL MEASURES

Any erosion and sedimentation control facility required or necessary to protect areas from erosion during the stabilization period shall be maintained until stabilization is completed.

#### SECTION 16 - FINAL MEASURES

Upon completion of stabilization, all unnecessary or unusable control facilities shall be removed, the areas shall be graded and the soils shall be stabilized.

## PERMITS AND PLAN

#### SECTION 17 - PERMIT REQUIREMENTS

- (a) Any person who engages in an earthmoving activity within the Township shall obtain a permit prior to commencement of the activity except a permit will not be required:
  - where the earthmoving activity involves plowing or tilling for agricultural purposes;
  - 2. where an erosion and sedimentation control plan has been developed for an earthmoving activity by the U.S.D.A. Soil Conservation Service;
    - 3. where an activity is required to obtain a permit pursuant to the Clean Streams Law (35 P.S. Section 691.1 et seq.), the Surface Mining and Reclamation Act (52 P.S. Section 1396.1 et seq.), the Water Obstruction Act (32 P.S. Section 681 et. seq.), or the provisions of Chapter 91 101 of DER Rules and Regulations (relating to water pollution);
    - 4. where an earthmoving activity affects more than 25 acres. Permits for this size project are issued and controlled by Title 25, Rules and Regulations of the Department of Environmental Resources.

## SECTION 18 - APPLICATION FOR PERMIT

- (a) Applications for permits shall be submitted by the person undertaking the earthmoving activity using application forms furnished by the Ordinance Enforcement Officer. In case of land development, the application shall be submitted by the land developer rather than the contractor or agent.
- (b) Applications shall be accompanied by an erosion and sedimentation control plan and such other documents as the Township may require.
- (c) Applications shall be accompanied by a processing fee as established by resolution by the Board of Supervisors.

#### SECTION 19 - PERMIT FEES

Permit fees shall be established by the Township Board of Supervisors by resolution at their regular stated meetings.

#### SECTION 20 - PLANS

Plans shall be drawn to scale and shall be of sufficient clarity to indicate the nature and extent of the work proposed and shall show in detail that it will conform to the provisions of this Ordinance and all relevant laws, ordinances, rules and regulations. Plans shall include a plot plan drawn to scale showing the location of all easements, drainage facilities, adjacent grades, property lines, any proposed buildings and of every existing building on the property. Plans shall be designed using appendix A - permissible velocities for channels as a minimum standard.

## SECTION 21 - WITHHOLDING BUILDING PERMITS

The Township shall not issue a building permit for construction upon; any lot or parcel within the Township until proper application has been made and an erosion control permit has been issued for subject lot.

#### VIOLATIONS AND PENALTIES

#### SECTION 22 - STOP ORDERS

The Ordinance Enforcement Officer and one Supervisor have the authority to issue a stop order for any structure the Ordinance Enforcement Officer and one Supervisor deem to be placed in a dangerous or hazardous condition resulting from lack of proper soil erosion control measures; or noncomformity to this Ordinance or the submitted and approved plan.

#### SECTION 23 - UNLAWFUL ACTION

It shall be unlawful for any person, firm or corporation whether as owner, lessee, sub-lease or occupant to erect, construct, enlarge, alter, repair, improve, remove, convert, demolish, equip, use, occupy or maintain any lot or parcel of ground in the Township or cause or permit the same to be done, contrary to or in violation of any of the provisions of this Ordinance.

#### SECTION 24 - VIOLATIONS

It is hereby declared that any violation of this code constitutes a public nuisance, and in addition to any other remedies provided by this code for its enforcement, the Township may bring civil suit to enjoin the violation of any provisions of this code.

If for any reason any one or more sections, sentence clauses or parts of this Ordinance are held invalid, such judgment shall not affect, impair or invalidate the remaining provisions.

## SECTION 25 - PENALTY

Any person, firm or corporation violating any of the provisions of this code shall be guilty of a Summary Offense and each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this Ordinance is committed, continued or permitted, and upon conviction of any such violation such person shall be punishable by a fine not to exceed Three Hundred and 00/100 Dollars (\$300.00) per occurrence.

ENACTED and ORDAINED as an Ordinance of the Township of Centre this 8th day of February, 1989.

TOWNSHIP OF CENTRE

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Marke a System of Supervisor

ATTEST

Secretary Seifut

# EROSION CONTROL CODE

# APPENDIX A

## PERMISSIBLE VELOCITIES FOR CHANNELS\*

CHANNEL LINING	PERMISSIBLE CHANNEL VELOCITY (FEET PER SECOND)
<u>Vegetation</u>	
Alfalfa Bermudagrass Crabgrass Crownvetch Kentucky Bluegrass Kentucky 31 Tall Fescue Red Clover or Red Fescue Reed Canary Ryegrass Small Grains Smooth Brome	2.5 - 3.5 4 - 8 2.5 - 3.5 3 - 5 4 - 7 3 - 7 2.5 - 3.5 3 - 5 2.5 - 3.5 3 - 7
Sudan Grass or Timothy	2.5 - 3.5
Bare Earth, Easily Eroded	
Fine Sand Sandy Loam Silt Loam or Alluvial Silts, Loo Firm Loam  Bare Earth, Erosion Resistant	1.5 1.75 ese 2 2.25
Fine Gravel Stiff Clay or Alluvial Silts, Fi Loam to Cobbles (graded) Silt to Cobbles (graded) or Coar Cobbles and Stones or Shales and Durable Bedrock	3.75 se Gravel 4
<u>Other</u>	
Plastic 6" Rip Rap Asphalt 9" Rip Rap 12" Rip Rap or Wood Concrete or Steel	4 6 7 8 9 12

\* These values, if applied to uniform, straight channels, may be considered in accordance with Chapter 102.21 of the D.E.R. Erosion Control Rules and Regulations. However, slope, soil condition, climate, and management must be considered in channel design. If different channel linings exist in a channel, and size and slope do not change, design the channel for the lining with the lower velocity listing.

Where velocity ranges are listed, the lower velocity is for design with easily eroded soils and slopes greater than 10%. The higher velocity is for design with erosion resistant soils and slopes less than 5%.

Filtration and/or sedimentation of sediment in the channel is encouraged. However, this must be considered for velocity determination in the design of the channel cross-section.