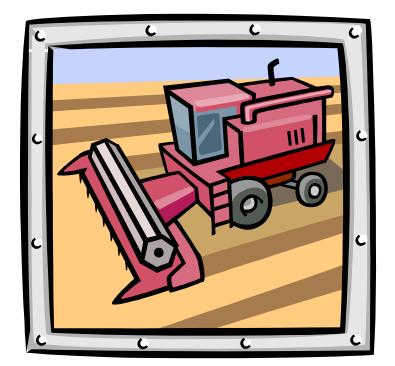
## **ARTICLE X**



# CONSTRUCTION REQUIREMENTS

## **CONSTRUCTION REQUIREMENTS**

#### Section 1001 General

**1001.1** The construction of improvements shall be in accordance with the requirements of this section. It is the intent of those regulations that these construction requirements shall be for the purpose of establishing a standard of quality and durability. If the local municipality has established construction standards, and if their governing body shall so require, in writing, they shall be used in lieu of ones set forth in the Article.

## Section 1002 Monuments & Markers

- **1002.1** Survey monuments and markers shall be placed at all points as determined by the following criteria:
  - A. Monuments shall be set at the intersection of all lines forming angles in the boundaries of major subdivisions and at all street angle points, and at the intersection of all street centerlines.
    - (1) Monuments shall be concrete with a 3/8" metal dowel in the center at the top. Monument size shall be no less than 6"x6"x30". Where double monuments are used, the top monument shall be as described in the preceding sentence; the bottom monument shall be concrete with a 3/8" metal dowel in the center at the top. A bottom monument shall be no less than 6"x6"x6"x6" in size.
    - (2) Monuments shall be placed so that the center point shall coincide exactly with the intersection of lines to be marked.
    - (3) Monuments shall be placed so that they protrude approximately two (2) inches above grade in areas which are not paved, at grade if in a paved area not subject to vehicle traffic, and four (4) inches to eight (8) inches below grade if in a paved area subject to vehicle traffic. Monuments set in areas subject to traffic shall be protected with a cast iron frame and access cover of adequate design for truck traffic, or may have double monuments, one above the other, with the top monument flush with the pavement.
  - B. Markers shall be set at all lot angles and corners, and at the beginning and end of all curves in lot and street lines. Curves for corner radii at intersection need not be marked if the intersection is monumented.
    - (1) Markers shall be ferrous metal pipe or rods, one-half (1/2) inch minimum diameter by eighteen (18) inches minimum length or may be standard manufactured steel survey markers of a similar length.
    - (2) Markers shall be driven into the ground so as to be approximately flush with the final grade.

#### Section 1003 Water Supply

- **1003.1** The developer shall contact the local municipality and/or public utility for the specifications of a water supply system. Prior to the approval of the Preliminary Plan, the developer shall provide documentation to the Planning Commission that arrangements for the provision of the water system are proceeding satisfactorily.
- **1003.2** Fire hydrants shall be provided concurrently with the water supply with locations and frequency as required by the local municipality or water service provider.
- **1003.3** If a development requires such additional water supply as to require changes to the local municipality's water distribution system, the developer will be requested to pay a share of the costs consistent with the provisions of Act 203 of 1990. It is the purpose of these regulations that developments which occur under this Ordinance shall pay their fair share toward needed improvements as set forth by Act 203 of 1990.
- **1003.4** When the subdivision or land development is proposed to be served by individual water supply (on-lot well), a statement must accompany the application for the final plan that adequate quantity and quality of water is available to support the development. Such statement shall be made by a registered professional engineer with experience in such hydrological assessments. Such statements must consider the minimum standards of the Pennsylvania Department of Environmental Protection.

## Section 1004 Sanitary Sewage Conveyance

- **1004.1** Where required, the developer shall construct a sanitary sewer system and provide lateral connections for each lot in accordance with the specifications of the local municipality.
- **1004.2** The developer shall secure from the local municipality, prior to approval of the Preliminary Plan, a letter indicating the general design, location and preliminary approval of the proposed sanitary sewer collection system. Prior to the approval of the Final Plan, the developer shall supply documentation attesting to the installation of the sanitary sewer collection system and its approval/acceptance by the local municipality. The developer may also offer an acceptable financial surety in lieu of this arrangement.
- **1004.3** If a development generates such additional sanitary sewer flows as to require changes to the local municipality's sanitary sewer collection system, the developer will be requested to pay a share of the costs consistent with the provisions of Act 203 of 1990. It is the purpose of these regulations that developments which occur under this Ordinance shall pay their fair share toward needed improvements as set forth by Act 203 of 1990.

- **1004.4 Private Sewer Systems** When a complete private sanitary sewer system using a treatment plant is to be provided, a statement shall be submitted to the County from the Pennsylvania Department of Environmental Protection certifying that a permit has been issued by the appropriate agency approving the proposed facilities. Adequate security for the maintenance of such plant shall be furnished to the County and local municipality.
- 1004.5 On-Lot Sewage Disposal In subdivisions where public sewers are not available and a complete private sanitary sewer system is not required, on-lot sewage disposal systems shall be provided. In such instances, the developer shall provide evidence that the planning module required for on-lot disposal by DEP has been approved. The developer must show compliance with Act 537 and other state, County or local law and/or regulation governing on-lot sewage disposal.
- **1004.6** Capped Sewer System Where the sanitary sewer system is not yet accessible, but is planned for extension to the subdivision or development, the subdivider shall install sewer lines, including lateral connections, in order to provide service to each lot. The sewer mains shall be suitable capped at the limits of the subdivision and laterals shall be capped at the street right-of-way line when not extended to houses or other structures. When laterals are extended to houses or other structures, the internal plumbing system shall be constructed to accommodate them as well as any septic system required.

#### Section 1005 Storm Sewers

- **1005.1** A drainage system adequate to serve the needs of the proposed natural waterways, and overland flow will be required in new subdivisions. The developer shall construct a storm sewer system and connect the drainage system with the existing local municipal storm sewer system if one exists.
- **1005.2** If a development generates such additional storm drainage sewer flows as to require changes to the local municipality's storm sewer collection system, the developer will be requested to pay a share of the costs consistent with the provisions of Act 203 of 1990. It is the purpose of these regulations that developments which occur under this Ordinance shall pay their fair share toward needed improvements as set forth by Act 203 of 1990.
- **1005.3** Bridges or culverts shall be designed to support and carry loads in accordance with Form 408 Specifications of the Pennsylvania Department of Transportation.
- **1005.4** Where open watercourses are planned, adequate safety, erosion control, drainage, protection of capacity and appearance measures shall be taken by the developer to insure proper, safe, healthful disposal of storm water. All open watercourses must be approved by the local municipal engineer.

- **1005.5** Minimum grade of drainage courses shall be designed to create a minimum cleaning effect (velocity of two [2] feet per second). Lesser grades may be permitted by the local municipal engineer where such required grades cannot be achieved.
- **1005.6** Storm sewers shall have a minimum diameter of fifteen (15) inches and a minimum grade of one-half (1/2) of one percent (1%). Lesser grades may be permitted when substantiated with calculations which prove that cleaning velocities will be maintained.
- **1005.7** Manholes shall normally be spaced at three hundred (300) feet maximum spacing where pipe sizes of twenty-four (24) inches or less are used, and not over four hundred (400) feet where larger sizes are installed. Inlets may, if approved by the local municipal engineer, be substituted for manholes.
- **1005.8** All phases of construction of open ditches, gutters, or storm sewers including width, depth, shapes, erosion control, minimum grade, size and area shall be in accordance with the requirements of these regulations and all storm drainage facilities shall be inspected and certified by the local municipal engineer.

## Section 1006 Streets, Subgrade, Subdrains, Pavement, Curbs & Sidewalks

- **1006.1** Streets shall be graded, surfaced, curbed (if required), and improved to the grades and dimensions shown on plans, with profiles and typical cross-sections submitted by the developer and approved by the local municipal engineer.
- **1006.2** Side slopes shall be graded to blend with the natural lay of the land, or in accordance with cross sections approved by the local municipal engineer. Where fill material is necessary to establish uniform grades, compacting shall be required in accordance with Pennsylvania Department of Transportation Form 408 Specifications for embankment. Slopes of two (2) horizontal feet to one (1) vertical foot beyond the right-of-way line in cut or fill, shall ordinarily be required.
- **1006.3** Subgrade and drainage shall be provided, shaped and compacted in accordance with Form 408 Specifications of the Pennsylvania Department of Transportation.
- **1006.4** Subdrains shall be designed and installed per the Form 408 Specifications of the Pennsylvania Department of Transportation
- **1006.5** All pavement, base, subbase (where required), and sidewalk shall conform to the requirements of the Form 408 Specifications of the Pennsylvania Department of Transportation
- **1006.6** Areas between the sidewalk and curb (if required) shall be seeded as required by the local municipal engineer.

#### Section 1007 Utilities

Gas, electric and telephone utilities shall be located in subdivisions in accordance with utility company practice and in accordance with agreements with, or as approved by, the local municipal engineer.

## Section 1008 Street Trees

Street trees of a deciduous hardwood type with a minimum caliper of one-andone-half  $(1\frac{1}{2})$  inches shall, when provided, be planted between the curb and the sidewalk (if required), provided the planting strip is a minimum of six (6) feet wide and located as near the center of the planting strip as possible, but as no instance shall a tree be planted closer than three (3) feet to the curve, sidewalk or any other utility above or below the grade. The tree species shall be subject to the approval of the local municipality.

## Section 1009 Street Lighting

Street lighting shall be provided if required by the local municipality in accordance with their practice.

## Section 1010 Existing Natural Area

In wooded areas, floodplains, wetlands, areas having slopes of seventeen percent (17%) or greater, or where other natural conditions exist in such a manner that development would be hazardous to the safety of life and property or would cause permanent ecologic instability, the local municipality may require that the developer preserve as much of the original natural conditions as is economically feasible and ecologically practicable and may limit the amount of grading and excavating to the minimum improvement standards included herein.

## Section 1011 Erosion Control

- A. It shall be a requirement of all major subdivisions that the developer shall have a Soil Erosion and Sedimentation Control Plan and/or permit, prepared in accordance with current state law (Erosion and Sedimentation Control, Chapter 102, Pennsylvania Rules and Regulations, as amended), reviewed by the Clearfield County Conservation District. The County Planning Commission may also require a like plan for any minor subdivision. The Plan shall be fully implemented during the construction of the development.
- B. The Clearfield County Conservation District, under a delegation agreement with the Department of Environmental Protection, requires any construction activity to have an Erosion & Sedimentation Control plan on site. If the construction activity is one (1) acre or greater, an NPDES (National Pollutant Discharge Elimination System) Permit along with an Erosion & Sedimentation control plan and a filing fee must be submitted to the Clearfield County Conservation District before construction begins.