

Section 403. TABLE 1 CONSTRUCTION SPECIFICATIONS^(a)

(In cases where the local municipality has not adopted their own specifications, the following minimum requirements shall apply.)

		Materials	Local Street	Collector Street	All Arterial Streets(e)
Rigid Pavement	Surface	Plain Cement Concrete(b)	6"	6"	8"
	Subbase	—	(c)	6"	6"
Flexible Pavement Alternative 1	Surface	ID-2	1 1/2"	1 1/2"	1 1/2"
	Base	Bit. Conc.	4"	5"	7"
	Subbase	Stn. Bal.	6"	6"	6"
Flexible Pavement Alternative 2	Surface	ID-2	2 1/2"	3"	3"
	Base	Cr. Agg. D.G.	6"	8"	12"
	Subbase	Stn. Bal.	6"	8"	6"
Flexible Pavement Alternative 3	Surface	ID-2	2 1/2"	3"	3"
	Base	Cr. Agg.	6"	8"	12"
	Subbase	Stn. Bal.	6"	8"	10"
Flexible Pavement Alternative 4	Surface	ID-2	1 1/2"	1 1/2"	2"
	Base	Stab. Base(d)	5"	6"	7"
	Subbase	Stn. Bal.	6"	8"	10"

Notes: (a) Data per Pavement Design Guidelines - Rural Areas, PennDOT Publication No. 70, October 1977 Reprint, page 17.

(b) Sawed joint spacing shall be 15' for all plain concrete slabs. Expansion joints shall be provided at intersection where the adjoining pavement is concrete.

(c) Use 6" subbase on silty or poorly drained soils.

(d) Stabilized Base - either bituminous aggregate plant mix, lime pozzolona plant mix, or cement aggregate plant mix is permissible (see above source (a)).

(e) If the average daily traffic count exceeds 4500 vehicles, consult PennDOT Design Manual; Part 2, Chapt. 14, Pavement Design.

4. Slope - Maximum slope of banks measured perpendicular to the center-line of the street shall be three (3) to one (1) for fills, and two (2) to one (1) for cuts. Cuts through bedrock formation may be one (1) to one (1).

404. Bridges and Culverts

The structural design for bridges shall meet the design loading, width, and clearances as described or required in PennDOT Form 408 (latest issue), or other standards found acceptable by the County and/or Municipal Engineer. Bridge culverts shall be adequate to meet applicable stream flow characteristics and shall be designed to accepted engineering standards and practices. If permits are required by other agencies, these must be obtained by the Applicant prior to Final Plan approval, see Section 415.

405. Blocks

A. Residential Subdivisions

1. Residential blocks shall have sufficient width to provide for two (2) tiers of lots. Exceptions to this may be permitted in blocks adjacent to major streets, railroads and waterways.
2. Blocks shall have a minimum length of three hundred (300) feet and a maximum length of twelve (12) times the minimum allowable lot width, to a maximum of twenty-two hundred (2200) feet. Wherever practicable, blocks along arterials and collector streets shall be not less than one thousand (1000) feet in length.
3. In the design of blocks longer than one thousand (1000) feet in length, special consideration shall be given to the requirements of fire protection, pedestrian access and utility service. The Commission reserves the right to require easements as necessary for these purposes.

B. Commercial, Industrial and Residential Land Developments

The block layout shall conform, as appropriate, with due consideration of site conditions, to the best possible layout to serve the buying public; to permit good traffic circulation and the parking of vehicles; to make delivery and pickup efficient; and

to facilitate the best design of the units in the proposed development. The block layout in these areas shall further be governed by the most efficient arrangement of space for the proposed present use and future expansion.

406. Sidewalks

A. Sidewalks may be required in all Subdivisions or Land Developments where the distance to the nearest school is within State limits which require students to walk rather than be transported; as may be required by the local Municipality; to continue existing sidewalks from adjoining Subdivisions or Land Developments; to provide access to community facilities; and in Subdivisions with lots of less than fifteen thousand (15,000) square feet in size.

B. Sidewalks, where provided, shall be located within the street right-of-way and shall be no closer than four (4) feet from the curb face, shoulder, or street drainage facility. A grass planting strip may be required between the curb and sidewalk.

C. Sidewalks, where provided, shall be constructed of Class A. Cement Concrete (PennDOT Form 408 latest issue) or suitable equal material. They shall be constructed at least four (4) inches thick, underlain by three (3) inches of compacted crushed stone or gravel. Joints shall be provided in accordance with good construction practice.

407. Monuments and Markers

A. Carefully PRESERVE existing monumentation which is found. Locate all such monumentation and establish their relationship to the true corner, where applicable. Establish new monumentation for unmarked boundary and/or reference points.

B. Concrete monuments shall be a minimum size of 4" x 4" x 30" or 4" diameter x 30" plastic pipe filled with concrete using an iron rod in the center or a brass or copper plate on the top for marking the exact point. Concrete monuments shall be required at such places as the Commission and Staff deem necessary to establish permanent control points for the re-establishment of tract boundaries, lot lines, and street lines.

C. Iron markers shall be a minimum size of 1/2" diameter pipe or #4 rebar and should have a minimum length of 24". Iron markers shall be set at all points where lot lines intersect curves, at all angles in lot lines and tract boundary lines, at all lot corners, and at the beginning and ending of all curves.

D. It is recommended that witness monuments be set on at least one (preferably both) lines which intersect at inaccessible boundary points with linear ties to the inaccessible corner shown along the boundary line(s).

It is also recommended that two (2) consecutive monuments have three (3) ties (references). This should be accomplished frequently in large boundaries.

When feasible, the survey should be tied to approved monuments in the State Plane Coordinate System.

408. Building Setback Lines

A. Building setback lines shall be established from the right-of-way lines or ultimate right-of-way lines of all streets. These setback lines shall be equal to one-half (1/2) of the right-of-way width, or, where applicable, ultimate right-of-way width, to a maximum of forty (40) feet.

B. Corner lots shall be large enough to allow for erection of buildings, observing the minimum front yard building setback from both streets.

C. Where a Subdivision or Land Development is traversed or is adjacent to an existing non-public or private street or road, a fifty (50) foot building setback line shall be established. In this case the setback line shall be measured from the centerline of the street or road.

D. A side and rear yard building setback line of at least ten (10) feet shall be reserved for all lots, parcels, and tracts which are intended for residential dwelling purposes unless otherwise specified herein or required by the Commission. The delineation of side and rear yard building setbacks may be graphically described on the Plan or an appropriate notation may be placed on the Plan.

409. Minimum Distance Between Residential Buildings

A. The minimum Distance between residential buildings shall be sufficient to provide adequate separation to minimize danger due to fire and to assure the safety, health, and general welfare of the inhabitants of the residential structures and in no case shall the distance between residential buildings be less than twenty (20) feet.

410. General Lot Standards

A. Lots shall be laid out so as to provide reasonable access; soil and geologic conditions should be compatible with proposed uses; and the alteration of existing site conditions should be kept to a minimum.

B. All lots shall front on a public street, existing or proposed, except under the conditions listed in Sections 402 B. 6. and B. 7.

C. Lots shall be laid out so as to provide proper drainage away from all buildings. Individual lot drainage shall be coordinated with the general storm drainage pattern for the area.

D. Side lot lines shall be substantially at right angles or radial to street lines.

E. If unusable remnants of land exist after subdividing, such that they cannot be further subdivided, they shall be incorporated into existing or proposed lots.

F. Double frontage lots are prohibited except where essential to provide separation of residential development and traffic arterials or to overcome topographic and orientation disadvantage.

G. Generally, the depths of lots shall be not less than one (1) nor more than three (3) times their width.

H. The prescribed minimum lot or area requirements for residential dwelling units, as required in Section 411 herein, may be increased by the Commission in those areas described elsewhere in this Ordinance which have been identified as Sensitive Areas or those areas with Development Limitations in order to assure the safety, health, and general welfare of the inhabitants of the residential structures.

411. Lot or Area Requirements for Residential Dwelling Units

A. The minimum lot or area requirements for residential dwelling units shall be determined by the applicable Municipal ordinance or where local standards have not been officially established the standards of this Section shall prevail.

B. For the specific lot or area requirements see Section 411. Table 1, at the end of this Article, which is entitled LOT OR AREA REQUIREMENTS FOR RESIDENTIAL DWELLING UNITS.

412. Storm Water Management

A. The Subdivision or Land Development shall be designed to adequately control, collect and dispose of storm water drainage from the site, including, if necessary, storm sewers, culverts, ditches, swales, retention ponds and other related storm water control facilities.

B. Storm water management controls are intended to reduce the impact of storms, enhance groundwater recharge, prevent erosion, sedimentation and flooding and maintain natural drainageways. The specific intent of these controls is that storm water runoff from any site during and after site disturbance be no greater than that which existed prior to development.

C. Storm water management plans shall include, but not be limited to the following:

1. A soil erosion and sedimentation control plan reviewed and/or approved by the Pennsylvania Department of Environmental Resources, or its designated agent; see Section 413. Soil Erosion and Sedimentation Control.
2. Review and comments of the plan by the Centre County Conservation District.
3. A declaration of adequacy from the local Pennsylvania Department of Transportation District Office when utilization of a Pennsylvania Department of Transportation storm water drainage system is contemplated.
4. Upstream watershed map.
5. Delineation of soil types, pursuant to the "Soil Survey of Centre County, Pennsylvania," issued August 1981, prepared by the Soil Conservation Service, U.S. Department of Agriculture, in cooperation with The Pennsylvania State University and the Pennsylvania Department of Agriculture.
6. Horizontal and vertical profiles of any existing watercourse, drainage-way, channel or stream, including hydrologic capacity.
7. Construction specifications, including the materials to be used, for storm water management structures.

8. Structure classification, pursuant to Chapter 105, Water Obstructions and Encroachments, Pennsylvania Department of Environmental Resources (25 Pa. Code).
9. Intended use of structures, pursuant to Chapter 6, Engineering Field Manual, 1975 Edition (revised 1977), USDA, SCS.
10. A twenty (20) foot access easement around all storm water management facilities and from such facilities to a public right-of-way.
11. Hydraulic, hydrology and storm water management structure computations.
12. A determination of the effect on downstream property within one hundred (100) feet of the tract for a residential site plan and within five hundred (500) feet of the tract for other uses or combinations of uses.
13. A determination of the effect upon a Municipal storm drainage system when utilization of such is contemplated.
14. The following certification by the applicant's engineer and/or surveyor, as appropriate, shall appear on the storm water management plan.

I, _____, hereby certify that the storm water management plan meets all design criteria of the storm water management controls of the Centre County Subdivision and Land Development Ordinance.

D. Design criteria shall include, but not be limited to, the following:

1. All sites shall limit the rate of storm water runoff so that no greater runoff is permitted than that of the site prior to development.
2. Where farm field or disturbed earth is the existing natural condition, meadowland shall be used as the starting base for such calculations instead of the actual condition.
3. All runoff shall be computed by using the U.S. Department of Agriculture Soil Conservation Service Soil-Cover Complex Methods. The peak discharges and volumes of runoff shall be determined by using Chapter 2 of the Engineering Field Manual, 1969 Edition, USDA, SCS, and by using Technical Release No. 55, January 1975, "Urban Hydrology for Small Watersheds," USDA, SCS, or another method approved by the Municipal and/or County Engineer.

4. Storm frequencies for 2, 5, 10, 25, 50 and 100 year events shall be evaluated and no greater runoff rate shall be permitted after development than what existed prior to development.
5. The minimum storage capacity shall be that volume required by routing the after-development 25-year, 24-hour frequency storm released at a rate not to exceed the before-development 10-year, 24-hour discharge.
6. Information and references regarding the design of ponds or retention basins shall be determined by using the "Standards for Water Management Basin," Centre and Clinton County Erosion and Sedimentation Control Handbook, 1974 Edition, and "Standard Specifications for Ponds," U.S. Department of Agriculture Service Manual, May, 1977, Code 378, or another method approved by the Municipal and/or County Engineer.
7. Where the Subdivision or Land Development is traversed by an important watercourse, drainageway, channel or stream, there shall be provided a drainage easement conforming substantially with the line of such important watercourse, drainageway, channel or stream, and of such width as will be adequate to preserve the unimpeded flow of natural drainage or for the purpose of widening, deepening, improving or protecting such drainage facilities.
8. Where the Subdivision or Land Development is traversed by drainageways or streams which carry or will carry storm waters generated upstream of the Subdivision or Land Development, appropriate storm water drainage facilities shall be designed to carry and dispose of such additional flows.
9. Storm water drainage facilities and easements must be designed such that development as proposed shall not adversely effect or cause hazards to existing use of adjacent properties.
10. Where a drainage ditch intersects a driveway or other access road an adequately sized culvert, bridge, swale must be provided.
11. Natural drainageways shall be utilized to the maximum.

12. Roof drains and footing drains shall be controlled on-site.

13. When the elevation of any entrance to a structure, including windows, existing or to be constructed on a site is lower than the elevation of the public cartway serving that site, any site plan dealing with construction of structures and/or grading shall show a method to minimize the risk of flooding from drainage moving from the public cartway.

14. The Commission may require additional storm drainage outfall treatment and/or channel protection based on the Erosion Control regulations of the Pennsylvania Department of Environmental Resources, 25 PA. Code §102.1 et seq.

E. Maintenance

1. An agreement, suitable for recording, shall be entered into between the Applicant and the Municipality or County

Specifying:

a. The legal entity responsible for maintaining the storm water management system.

b. That the storm water management structures shall be maintained in proper working order.

c. That the site shall continue to meet all of the design criteria of the storm water management controls as approved by the Municipality or Commission.

2. A one (1) year maintenance guarantee in an amount of not less than ten (10) percent of the estimate of the cost of the improvements required by these storm water management controls shall be filed with the Municipality or County upon their completions; see Article XII, Section 1208. Maintenance of Improvements.

F. The following technical reference material is incorporated in these controls by reference for information, design and hydrologic control purposes:

1. Centre and Clinton County Erosion and Sedimentation Control Handbook, 1974 Edition.
2. Soil Erosion and Sedimentation Control Manual, May, 1976, Pennsylvania Department of Environmental Resources.
3. Engineering Field Manual, 1975 Edition (revised 1977), USDA, SCS.
4. Urban Hydrology for Small Watersheds, Technical Release No. 55, January, 1975, USDA, SCS.
5. Practices in Detention of Urban Storm Water Runoff, Special Report No. 43, June, 1974, American Public Works Association.
6. Standard for Water Management Basin, Centre and Clinton County Erosion and Sedimentation Control Handbook, 1974 Edition.
7. Engineering Standard and Specifications, May, 1977, USDA, SCS.
8. National Engineering Handbook, Section 4, Hydrology, dated August, 1972, USDA.

413. Soil Erosion and Sedimentation Control

A. The Commission shall require that a Soil Erosion and Sedimentation Control Plan be submitted as provided for under Chapter 102 of Administrative Code, Title 25, as authorized by the Clean Streams Law, Act 222 as amended, for review and/or approval by the Centre County Conservation District or the Department of Environmental Resources, as appropriate.

B. The Soil Erosion and Sedimentation Control Plan must be prepared by a person trained and experienced in erosion and sedimentation control methods and techniques. It will be examined for comparison with standards using an erosion control handbook, soil survey, Department of Environmental Resources Rules and Regulations, and sound erosion control principles as the basis for acceptability.

C. Facilities and structures, such as drainage swales, ponding areas, paved gutters, curbing, construction drainageways and other improvements as may be required to eliminate or reduce erosion and sedimentation shall, as a minimum, meet the