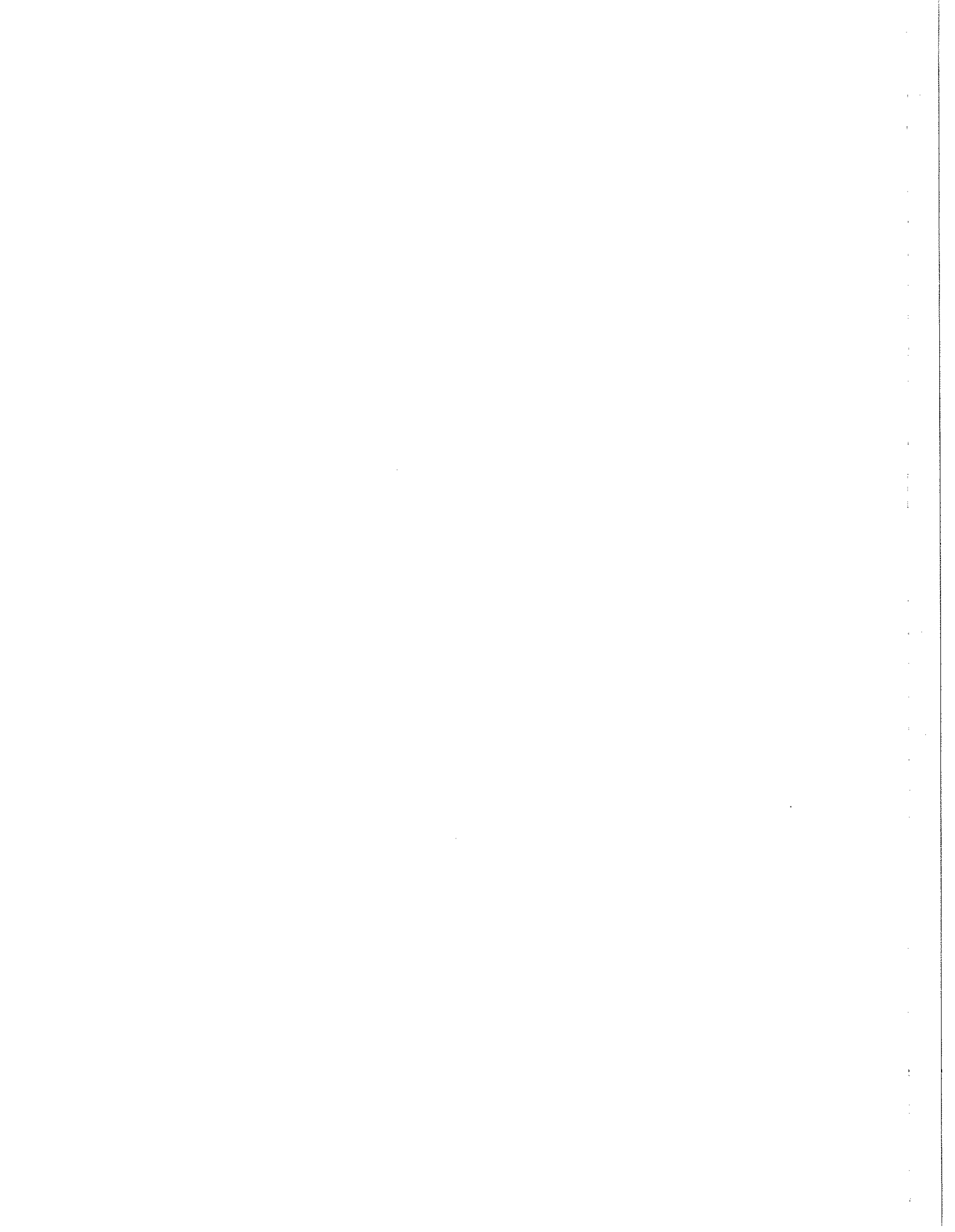


ARTICLE IV



ARTICLE IV
GENERAL STANDARDS AND REQUIREMENTS

401. Land Requirements

Land shall be suited to the purpose for which it is to be subdivided or developed. In general, the following factors will be considered.

A. Hazards to Life, Health and Property

Those areas which are subject to hazards of life, health, or property as may arise from fire, flood, disease, geologic movement, or considered to be uninhabitable for other reasons shall not be platted for building purposes unless the hazards have been eliminated or adequate safeguards have been taken to prevent damage from such hazards.

B. Preservation of Natural Features

In all Subdivisions or Land Developments care should be taken to preserve natural features such as trees, watercourses, watersheds, views, historic features (including buildings) and topographical continuity.

402. Street Requirements - General

A. Typical Street Layout and Design

1. Streets shall conform to the requirements of this Ordinance in order to best serve public safety and convenience. They shall be related appropriately to the topography to produce usable lots served by streets of reasonable grade such that all building sites are located as close as possible to the grades of streets.

2. Proposed streets shall be located such that congestion is minimized and hazardous intersections are avoided. They shall be properly related to official street and/or highway plans or parts thereof as have officially been prepared and adopted by the Municipality in which the Subdivision or Land Development is located, or other applicable plans as have been officially adopted. They shall be constructed to the standards of the Municipality when

said Municipality has adopted a streets or roads standard ordinance. Where no such ordinance has been adopted they shall meet the standards of this Ordinance except that extension of existing public streets may be built to the standards of the existing street or the standards of this Ordinance, at the discretion of the Commission after consultation with the Municipality.

3. Streets located in floodplain or flood prone areas shall meet the standards of the floodplain section as well as all other applicable sections of this Ordinance (See Article XI).

4. Local streets shall be laid out to discourage thru traffic. However, provision for the extension and continuation of streets into and from adjoining areas may be required. Where a Subdivision or Land Development abuts or contains an existing or proposed arterial street, the Commission may require marginal access streets, reverse frontage lots, or such other treatment as will provide protection for abutting properties, reduction in the number of intersections and/or curb cuts with an arterial street, the separation of local and thru traffic, and the preservation and enhancement of traffic safety on the arterial street.

5. If lots resulting from the proposed Subdivision or Land Development are large enough to permit resubdivision or, if a portion of the tract is not subdivided, adequate street rights-of-way to permit further Subdivision or Land Development shall be provided as necessary, and located so as to allow proper development of surrounding properties.

6. Where a Subdivision or Land Development abuts or contains an existing street right-of-way of improper width or alignment, the Commission may require the dedication or reservation of additional land (ultimate right-of-way) sufficient to widen the street or correct the alignment. Where an additional dedication or reservation is required all building setback lines will be measured from such dedicated or reserved right-of-way line.

7. Proposed streets which are obviously in alignment with others already existing and names, shall bear the names of the existing streets.

8. In no case shall the name of proposed streets not in alignment with others so named duplicate the name of an existing street in the postal district. The Applicant shall submit the proposed street names for review to the local Post Office prior to filing a Preliminary Plan.

B. Special Streets - Partial, Half, Dead-end, Cul-de-sac, Service, Private Streets and Private Driveway Access Easements

1. New half or partial streets will not be permitted, except where essential to reasonable Subdivision or Land Development of a tract in conformance with the other requirements and standards of this Ordinance and where, in addition, satisfactory assurance for completion and dedication of the remaining part of the street can be obtained. Wherever a tract to be subdivided borders on an existing half or partial street, the other part of the street shall be plotted within such a tract and applicable building setback lines established.

2. When a tract is being subdivided or developed which includes, or is adjacent to, a non-public or private road or street not serving the lots created by said Subdivision, building setback lines shall be established from the centerline of said road or street such that eventual dedication may be accomplished. In no case shall this setback be less than fifty (50) feet from the centerline of said road or street.

3. Dead-end streets shall be prohibited; except as temporary stubs to permit future street extension into adjoining tracts, or when designed as permanent cul-de-sacs.

4. Any dead-end street which is constructed for future access to an adjoining property or because of authorized stage development, and which is open to traffic shall be provided with a temporary, all-weather turnaround. The turnaround shall be completely within the boundaries of the Subdivision or Land Development and the use of the turnaround shall be guaranteed to the public until such time as the street is extended. Cul-de-sac streets permanently designed as such, shall terminate in a turnaround of the same

construction material as the cartway and shall meet the local street standards of Sections 402 and 403.

5. Service streets and alleys are not permitted in Residential Subdivisions except as may be required by the local Municipality to conform with the existing street layout. However, service streets may be permitted in other types of Land Development.

6. Private Streets are to be discouraged unless otherwise provided for in this Ordinance. They will be accepted only under circumstances where the Municipality does not desire to accept a proposed street or where they feel a public street may be unnecessary and further where it serves not more than seven (7) lots* and a complete private right-of-way agreement is obtainable.

a. A private right-of-way agreement shall be properly executed between the landowner granting the access and all affected parties abutting and adjoining said easement and shall create a private right-of-way which shall run with the land. Such private right-of-way shall not be less than fifty (50) feet in width and shall be available for the use of all owners, present and future, of the lands to be made accessible by said right-of-way. This agreement shall include all provisions listed in Appendix No. 3 of this Ordinance and must be approved by the Municipality, the Commission, and the Solicitor of the Commission, where applicable, prior to Final Plan Approval.

b. The Subdivision shall be designed to provide an access street system adequate to accommodate the type and volume of traffic anticipated to be generated and shall be constructed to a sound all-weather driving surface, reasonably smooth and free from mud, dust or standing water. The private street system, unless or until built to applicable Municipal specifications or street design specifications herein, shall be

*Consult Article IX. RECREATION SUBDIVISION AND LAND DEVELOPMENT for applicable requirements.

built to at least the following design requirements:

(1) Right-of-Way width - 50 feet;

(2) Cartway width - 18 feet;

(3) Cartway construction specifications:

Six (6) inches of suitable stone base material* appropriately compacted and graded to provide a permanent, all-weather surface which will facilitate storm water drainage patterns;

(4) Maximum Allowable Grade - The maximum allowable grade for private access streets shall be a finished grade of 12 percent slope. Special drainage considerations will be required to eliminate or control erosion, sedimentation and storm water management, especially on grades exceeding six (6) percent slope, these will include special roadway cross sections, grading, shoulder construction and stabilization, cross drainage and cut and fill slopes as approved by the County or Municipal Engineer;

(5) Cul-de-sac Length - There shall be no minimum or maximum required length; however, excessive access street length shall be discouraged due to the increased difficulty which would be experienced by emergency vehicles;

(6) Cul-de-sac Turnaround Area - A turnaround area shall be provided at the terminus of all dead-end access streets and at other appropriate areas which shall have a minimum unobstructed maneuvering area equal to or equivalent of a fifty (50) foot turning radius;

(7) Building Setback Lines - Building setback lines shall be established at the right-of-way line. These setbacks shall be a minimum of twenty-five (25) feet;

*Suitable Stone Base Material: If the use of "shale" is proposed, it must be as approved, hard shale (refer to Section 309. Review by Engineer).

(8) Plan Notation - a Notation shall be placed on the Final Plan identifying the right-of-way as "Private";

(9) Private streets shall be considered a required improvement and must be constructed prior to Final Plan Approval or, in lieu of completion of improvement the Applicant must provide an acceptable guarantee to be approved by the Commission and its Solicitor, see Article XII. IMPROVEMENTS.

Note: Where appropriate, the Commission may allow certain reduction in the above standards subject to specific topographical and/or environmental constraints; whereby an innovative design is submitted consistent with the intent of this Ordinance.

7. Private driveway access easements are to be discouraged unless otherwise provided for in this Ordinance. They will be accepted only under circumstances where the Municipality does not desire to accept a proposed driveway access easement as a public street or where they feel a public street may be unnecessary, not more than two (2) lots* are involved and a complete private right-of-way agreement is obtainable. Note: The "total number of lots" shall be defined to include all existing and/or proposed lots utilizing the private driveway for access; as in the case involving an extension of an existing private driveway.

a. The private driveway access easement shall be designed to provide a driveway to accommodate the type and volume of traffic anticipated to be generated and shall be constructed to provide a sound, all-weather driving surface, reasonably smooth and free from mud, dust or standing water.

b. A private right-of-way agreement shall be properly executed between the landowner granting access and all affected parties abutting and adjoining said easement and shall create a private right-of-way which shall be a covenant running with the land. As a condition for Final Plan

*Consult Article IX. RECREATION SUBDIVISION AND LAND DEVELOPMENT for applicable requirements.

Approval, this agreement shall include all provisions listed in Appendix No. 3.

c. Such private right-of-way easement shall be fifty (50) feet in width; however, the Commission may grant a reduction in required width pending site specific circumstances.

d. The maximum allowable grade for a private driveway access shall be twelve (12) percent and for distances not greater than five hundred (500) feet the grade may be increased to fourteen (14) percent.

e. The private driveway access must be constructed and found acceptable (by Staff review and inspection) prior to Final Plan Approval.

f. Where verified by a staff field inspection that an existing access roadway is essentially in a non-erodable condition and where it can be determined that the required CCPC Private Street improvement standard would likely result in an access roadway which potentially could cause accelerated erosion, sedimentation and/or storm water management concerns -- then the existing road system may be considered acceptable.

g. Bridges and culverts may be designed to the minimum specifications as contained in the Timber Management Manual, Division of State Forest Management, Bureau of Forestry, Pennsylvania Department of Environmental Resources.

8. Procedural Guidelines for Use of Easement over "Lands of Others":

When a "landlocked" parcel exists which is proposed to be developed or subdivided, the County shall avoid any appearance of an approval which promises a road system or other improvement greater or better than what will be provided. Rather than impose standards that are clearly inappropriate and unreasonable, efforts shall be directed toward establishing notice to prospective buyers that access will sometimes be less than is customarily expected.

A notice concerning the above shall be in three (3) forms:

a. A letter shall be submitted from the subdivider's attorney. This letter shall contain specific identification of the plan by name and

number and a statement that the subdivider has authorized the letter. The letter should specifically identify the location of the access road; describe the existing/proposed features; i.e., right-of-way width, length, cartway width, type of construction, etc.

It should also list all construction and design standards as specified in the Subdivision and Land Development Ordinance which cannot be met and provide reasons why the normal standards cannot be met.

The letter must also contain a clear opinion of the subdivider's attorney that the subdivider and all prospective purchasers will have either an easement or right-of-way across intervening lands of others. There must be a statement that access is not restricted in any manner, other than such limitation expressly contained in the letter.

Please be advised that generally the same road construction specifications should apply within the easement/right-of-way over lands of others as shall apply within the property being subdivided. It shall be the subdivider's responsibility to make any required improvements subject to obtaining the necessary rights to do so over lands of others.

b. Notation on the plan to be recorded should reflect the above situation and be in a prominent location of larger and bolder type than customary plan notes. The note should describe the location and design of the access road over lands of others, identify all normal construction or design standards which are not met, and describe the legal nature of the subdivider's use (i.e., easement or right-of-way).

This notation should also relieve the Municipality and County of any liability with respect to the provision of an access road by a statement placing such responsibility on either the seller and/or buyer.

c. Preparation of proper legal documentation concerning the easement rights and responsibilities for that portion of the access easement "over lands of others"; for recording in the Centre County Recorder of Deeds Office.

C. Street and Intersection Design Specifications

Streets shall be designed to meet or exceed the minimum standards set forth in the following tables except as provided for in Section 402 A. 2. of this Ordinance:

Section 402 Table 1 - STREET DESIGN SPECIFICATIONS:

Table 1a - For Local Residential Street/Driveway Access Easement Classifications

Section 402 Table 2 - INTERSECTION DESIGN SPECIFICATIONS.

403. Streets - Construction Standards

A. Streets shall meet or exceed all applicable street requirements set forth in Section 403, Table 1, CONSTRUCTION SPECIFICATIONS, as well as other standards set forth elsewhere herein except as provided for Section 402 A. 2. of this Ordinance.

B. Street Construction

1. All property pins or monuments will be witnessed with suitable four (4) foot high stakes before the beginning of construction. In addition, all property pins or monuments removed, destroyed or altered by construction shall be replaced by a Professional Land Surveyor.
2. The bottom of the excavation and the top of the fill when completed will be known as the improved subgrade and shall conform to the line, grades and cross sections as required by this Ordinance. After all utilities and applicable storm water management facilities have been installed, the improved subgrade shall be fine graded and shaped to the proper cross section. The improved subgrade shall be formed by shaping the graded street surface correctly with approved material and shall be brought to a firm, thoroughly compacted surface, for the width of the base. All unsuitable material which will not compact satisfactorily, shall be removed and replaced with suitable material. All large rocks, boulders or ledges shall be broken off six (6) inches below the improved subgrade surface.
3. Subbase materials for flexible pavements shall conform to the grading requirements of PennDOT No. 4 aggregate, or an approved equivalent, as

Section 402. TABLE 1 STREET DESIGN SPECIFICATIONS*

Street Type (1)	Right-of-Way	Cartway	Shoulders (S) or Curbs (C)	Shoulder Width (2)	Max. Centerline Grade	Min. Centerline Grade	Min. Centerline Horiz. Curve Radius	Min. Tangent Length Between Curves	Vertical Curves
I. Local	50'	18'	S	6' ⁽⁴⁾	10% ⁽³⁾	0.5%	250'	100'	Vertical curves shall be used in changes of grade exceeding 1%. To provide proper sight distances, length of vertical curves measured at centerline shall be as follows: - Local Residential Streets: 15 x algebraic difference in grade - Major Collector Streets: 30 x algebraic difference in grade - Arterial Streets: 55 x algebraic difference in grade Ex., 4% upgrade followed by 3% downgrade Algebraic difference is 3 + 4 = 7; thus For Local Residential Streets, 15 x 7 = 105 For Major Collector Streets, 30 x 7 = 210 For Arterial Streets, 55 x 7 = 385
	50'	26'	C	-	10% ⁽³⁾	0.5%	250'	100'	
II. Collector	60'	20'	S	8' ⁽⁴⁾	7%	0.5%	500'	150'	
	60'	28'	C	-	7%	0.5%	500'	150'	
III. Arterial	70'	As deemed appropriate by Commission & Engineer			5%	0.5%	750'	300'	
IV. Commercial/Industrial		As per Collector Streets above							
V. Mobile Home Park		As per Local Streets above (or) Sections 402. B. 6. & B. 7., as appropriate							

(1) Cul-de-sac Streets - Cul-de-sac streets shall meet the applicable requirements, and terminate in a turnaround meeting the following minimum standards:
 Radius of right-of-way - 50 feet
 Radius of cartway not including shoulder width - 40 feet.
 (2) Shoulder Width - includes right and left shoulders, as applicable.

(3) Grades of up to 12% may be allowed for distances up to 500 ft.
 (4) Shoulder shall be stabilized where grades are three (3) percent slope and over, with asphalt material at an application rate of 0.5 gallons per square yard of shoulder area at a depth of six (6) inches and then covered with screening where necessary.
 * Intended as Minimum Specifications

Section 402. Table 1a. STREET DESIGN SPECIFICATIONS*

— For Local Residential Street/Driveway Access Easement Classifications —

GENERAL SPECIFICATIONS:	PUBLIC		PRIVATE/NON-PUBLIC	
	RESIDENTIAL	RESIDENTIAL	SEASONAL/RECREATIONAL	DRIVEWAY ACCESS EASEMENT
Right-of-Way Width	50 Feet	50 Feet	50 Feet	50 Feet ⁽¹⁾
Cartway Width	18 Feet	18 Feet	16 Feet	Adequate for ⁽²⁾ Intended Purpose
Construction Material	Asphalt Pavement	Stone Base	Stone Base	Mud-Free
Shoulder Width	6 Feet Per Side	Not Required	Not Required	Not Required
Maximum Center-line Grade	10% ⁽³⁾	12%	12% ⁽⁴⁾	12% ⁽⁴⁾

(1) Reduction in right-of-way width may be granted subject to site specific conditions.

(2) Grades up to 14% may be allowed for distances up to 500 feet.

(3) Driveway must be improved to a mud-free or otherwise permanently passable condition.

(4) Grades up to 14% may be allowed for distances up to 500 feet.

* Intended as minimum specifications.

	Intersection Types					
	Arterial with Arterial	Arterial with Collector	Arterial with Local (a)	Collector with Collector	Collector with Local	Local with Local
Maximum number of intersecting streets	2	2	2	2	2	2
Minimum distance between centerlines of streets intersecting with Arterial, Collector or Local Streets same side / opposite side	1000'/1000'	800'/800'	800'/300'	500'/300'	500'/300'	300'/150'
Angle at intersection of street centerlines	90°	90°	90°	90°	75° to 105°	75° to 105°
Length and grade of intersection approaches measured from the nearest right-of-way of the street being intersected	50'/4%	50'/4%	50'/4%	50'/4%	50'/4%	50'/4%
Minimum Curb Radius	50'	50'	20'	35'	20'	20'
Minimum intersection sight distance triangle along centerlines of streets (b)	300'	300'	200'	200'	200'	150'

Notes:

(a) Where the centerlines of local or private streets opening onto opposite sides of an Arterial street are within 150' of each other they shall be made to coincide by curving the two streets to form a four-way intersection whenever possible.

(b) Including railroads

* Intended as minimum specifications

defined by PennDOT Form 408 (latest issue). Fine material shall conform to the grading requirements of PennDOT No. 1 or No. 18 aggregate, or an approved equivalent, as defined by PennDOT Form 408 (latest issue).

The subbase course shall be constructed in two (2) courses. Fine material shall be spread only in such quantities as to fill all voids in the coarse aggregate, and the entire surface dry rolled sufficiently to compact to one-half the subbase thickness. The top course shall be constructed in the same manner and shall be dry rolled until all aggregate is thoroughly compacted after which sufficient water (by sprinkling) and additional fine aggregate shall be applied and rolling continued to produce a thoroughly compacted, firmly set subbase course having granular surface.

4. The base material shall conform to PennDOT Form 408 (latest issue). Such base material shall be laid to the thickness prescribed in the Construction Specifications Section of this Ordinance, shall be uniformly spread, thoroughly rolled, in conjunction with any shoulders, to the proper depth, grade, slope as provided by this Ordinance.

5. The surface course shall consist of a wearing course of hot mixed bituminous wearing material type ID-2 meeting all quality and gradation requirements of PennDOT Form 408 (latest issue). The surface course shall have a total thickness after compression under the roller, equal to the required thickness as provided under the Construction Specification's Section of this Ordinance.

6. The surface course for rigid pavements shall be constructed following good construction practices and the construction procedure shall be as recommended by the local and/or County Engineer.

7. After the street has been constructed and before such streets are dedicated, the earthen areas between the shoulders or curbs and the right-of-way line shall be finish graded and seeded to prevent erosion.

C. Curbs, Shoulders and Slopes

1. Curbs may be required on streets where the Commission deems it necessary for public safety, and for the control of storm water; where curbs exist on abutting properties; or when intensive or unusual traffic movements are anticipated due to commercial, industrial, or multi-family residential developments.

2. Curb construction standards:

a. Straight concrete curbs shall be twenty-four (24) inches in depth, five (5) inches wide at the top and six (6) inches wide at the base and shall have an exposed face of six (6) inches or an acceptable equivalent. Expansion joints shall be provided as needed, in any case at least every twenty (20) feet;

b. Combination concrete curb and gutter shall be twenty-four (24) inches wide at the base, twelve (12) inches high in the back and have an exposed face of six (6) inches or an acceptable equivalent. The curb shall be five (5) inches thick at the top and the gutter portion shall be pitched back to the face for proper drainage;

c. Rolled bituminous curbing shall be six (6) inches high and six (6) inches wide or an acceptable equivalent. Such curbing shall be hot mix, machine applied; free of voids or irregularities.

3. Shoulders - Where applicable, shoulders shall be constructed of a six (6) inch layer of 2RC material, graded and rolled, which on grades three (3) percent and over shall then receive an application of cut-back asphalt [RC-250] at an application rate of 0.5 gallons per square yard. Application temperature range shall be within 150-190 degrees Fahrenheit, in accordance with PennDOT Form 408 (latest issue). The shoulder shall be protected from traffic for twenty-four (24) hours. In driveway entrances screenings may be applied to prevent tracking of asphalt.

a. Gutter and Drainage requirements shall be in conformance with good engineering practice and shall be subject to the approval of the Commission.