

ARTICLE V

DESIGN STANDARDS

SECTION 501 APPLICATION AND GENERAL STANDARDS

- A. The standards and requirements contained in Article V and VI are intended as the minimum for the promotion of the public health, safety, and general welfare, and shall be applied as such by the Township Planning Commission and Board of Supervisors in reviewing all subdivision/land development plans.

- B. Whenever other Township Ordinances and/or regulations impose more restrictive standards and requirements than those contained herein, such other ordinances and/or regulations shall be observed; otherwise, the standards and requirements of this Ordinance shall apply.

- C. The standards and requirements of this Ordinance may be modified by the Board of Supervisors, upon submission to the Township Planning Commission for review and recommendation, where such modifications achieve substantially the objective of this Ordinance and which are further protected by such covenants or other legal provisions as will assure conformity to and achievement of the subdivision/land development plan.

- D. Land subject to hazards to life, health, or property, such as may arise from fire, flood disease, or other causes, shall not be subdivided or developed for building purposes unless such hazards have been eliminated or unless the subdivision/land development plan shall show adequate safeguards against them, which shall be approved by the appropriate regulatory agencies.

- E. Subdivision/land development plans shall give due recognition to the Comprehensive Plans of the Township and of the County or to such parts thereof as may have been adopted pursuant to statute.

- F. Land proposed for subdivision or land development shall not be developed or changed by grading, excavating, or by the removal or destruction of the natural topsoil, trees, or other vegetative cover unless adequate provisions for minimizing erosion and sediment are proposed under DEP Rules and Regulations and Section 510 of this Ordinance.

- G. Whenever all or a portion of the land contained within an application for subdivision or land development approval constitutes all or a portion of land included in a prior subdivision or land development plan approved by the Township and recorded in the Office of the Recorder of Deeds in and for Berks County, Pennsylvania, the plan shall comply with all conditions, restrictions and notes imposed on the prior approval and/or included upon the recorded subdivision or land development plan. The applicant shall identify all prior recorded subdivision and/or land development plans of which all or a portion of the land contained in the plan was a part and all conditions, restrictions and notes which affect the current application. Failure to identify all applicable conditions, restrictions and notes of record on prior plans constitutes a violation of this Ordinance. The applicant shall submit with the application for preliminary plan approval a statement identifying the prior plans reviewed; the conditions, restrictions and notes which would impact development in accordance with the plan for which approval has been requested; and an explanation of the manner in which the proposed plan has been designed to comply with such

conditions, restrictions and notes. This information shall be signed by the applicant or the applicant's registered professional.

SECTION 502 STREETS

A. General Standards

1. The location and width of all streets shall conform to the “Official Map” or to such parts thereof as may have been adopted by the Board of Supervisors
2. The proposed street system shall extend existing or proposed streets on the “Official Map” at the same width or larger but in no case at less than the required minimum width in Section 502.B.
3. Where, in the opinion of the Board of Supervisors it is desirable to provide for street access to adjoining property, street stubs shall be extended, by dedication, to the boundary of such property.
4. New minor streets shall be so designed as to discourage through traffic, but the subdivider/developer shall give adequate consideration to provision for the extension and continuation of major and collector streets into and from adjoining properties.
5. Where a subdivision or land development abuts or contains an existing street of improper width or alignment, the Board of Supervisors may require the dedication of land sufficient to widen the street or correct the alignment.
6. Private streets (streets not to be offered for dedication) are permitted subject to the provisions of Section 502.K.

B. Street Widths

Minimum street right-of-way and pavement widths shall be as shown on the “Official Plans” or if not shown on such plans, shall be as follows:

<u>Street Types</u>	Required Widths (in feet)
Minor Streets (Residential)*	
Right-of-Way	50
Cartway	24
Minor Street (Rural Residential)*	
Right-of-way	50
Cartway	20
Collector Street	
Right-of-way	60
Cartway	30

Required Widths

<u>Street Types</u>	<u>(in feet)</u>
Major Street	
Right-of-way	See Note (a)
Cartway	See Note (a)
Permanent Cul-de-Sac Street	
Right-of-way	50 (b)
Cartway	20 (b)
Marginal Access Street	
Right-of-way	36 (c)
Cartway	24
Service Street	
Right-of-way	25
Cartway	22

- * Serving lots of one acre or less
- ** Serving lots in excess of one acre

Notes: (a) As specified in the “Official Plans”, or as determined after consulting with the Township, the County Planning Commission and the Pennsylvania Department of Transportation.

(b) All cul-de-sac streets, whether permanently or temporarily designed as such, shall be provided at the closed end with a fully paved turnaround. The minimum radius of the pavement edge or curb line shall be forty (40) feet, and the minimum radius of the right-of-way line shall be fifty (50) feet.

(c) Variable, depending on the widths of the adjacent right-of-way, but not less than thirty-six (36) feet.

The above widths are for streets with no on-street parking. Additional right-of-way and cartway widths may be required by the Board of Supervisors for the purpose of promoting the public safety and convenience or to provide parking in commercial and industrial areas and in areas of high density residential development, or if necessary when curbs are required.

C. Restriction of Access

1. Whenever a subdivision or land development abuts or contains an existing or proposed street with an ultimate right-of-way of fifty (50) feet or more or contains or abuts an existing or proposed collector street, the Township Planning Commission may recommend and the Board of Supervisors may require restriction of access to said street by:
 - a. Provision of reverse frontage lots.
 - b. Provision of service streets along the rear of the abutting lots, together with prohibition of private driveways intersecting the major streets.

- c. Provision of marginal access streets, provided that the reserve strips establishing such marginal access streets shall be definitely placed within the jurisdiction of the Township under an agreement meeting the approval of the Township.
2. Except as specified under Section 502 C. above, reserve strips shall be prohibited.

D. Street Grades

1. There shall be a minimum centerline grade of one (1) percent.
 2. Centerline grades shall not exceed the following:
 - a. Minor Street - Ten (10) percent
 - b. Collector Street - Eight (8) percent
 - c. Major Streets - Five (5) percent
 - d. Street Intersection* - Five (5) percent
- *Applies to intersecting streets only and not through streets.
3. Grades up to twelve (12) percent may be permitted on a through minor street where access to the street is possible over streets with grades of ten (10) percent or less.
 4. The Slope of the Crown on Proposed street shall be one-quarter ($\frac{1}{4}$)-inch per foot.

E. Horizontal Curves

1. Horizontal curves shall be required for all changes in horizontal alignment in excess of two (2) degrees.
2. To ensure adequate sight distance, minimum centerline radii for horizontal curves shall be as follows:
 - a. Minor Streets - One hundred fifty (150) feet
 - b. Collector Streets - Three hundred (300) feet
 - c. Major Streets - Five hundred (500) feet
3. A tangent of at least one hundred (100) feet shall be introduced between all horizontal curves on collector and major streets.
4. To the greatest extent possible, combination of the minimum radius and maximum grade shall be avoided.
5. A tangent of at least one hundred (100) feet, measured from edge of cartway, shall be required between a horizontal curve and a street intersection.

F. Vertical Curves

At all changes of street grades where the algebraic difference exceeds one (1) percent, vertical curves shall be designed which provide the following minimum sight distances:

1. Minor Streets - Two hundred (200) feet.
2. Collector Streets - Three hundred (300) feet.
3. Major Streets - Five hundred (500) feet.

G. Intersections

1. Streets shall intersect as nearly as possible at right angles, and no street shall intersect another at an angle of less than sixty (60) degrees or more than one hundred twenty (120) degrees.
2. No more than two streets shall intersect at the same point.
3. Streets intersecting another street shall either intersect directly opposite to each other or shall be separated by at least one hundred fifty (150) feet between centerlines measured along the centerline of the street being intersected.
4. Intersections shall be approached on all sides by a straight leveling area, the grade of which shall not exceed five (5) percent within fifty (50) feet of the intersection of the nearest right-of-way lines.
5. Intersections with major streets shall be located not less than one thousand (1,000) feet apart measured from centerline to centerline along the centerline of the major street.
6. Street curb or cartway edge intersections shall be rounded by a tangential arc with a minimum radius of:
 - a. Twenty-five (25) feet for intersections involving only minor streets.
 - b. Thirty (30) feet for all intersections involving a collector street.
 - c. Forty (40) feet for all intersections involving only major streets.
 - d. Ten (10) feet for all intersections involving only service streets.
7. Street right-of-way lines shall be parallel to (concentric with) curb or cartway edge arcs at intersection.

H. Sight Distance at Intersection

1. Clear sight triangles shall be provided at all street intersections. The clear sight triangles shall be free of any vegetation obstructions. Within such triangles, no vision-obstructing object other than utility poles, street lights, street signs, or traffic signs shall be permitted which obscures vision above the height of thirty (30) inches and below ten (10) feet measured from the centerline grade of intersecting streets. Such triangles shall be

established to facilitate the driver, when positioned ten (10) feet behind the street cartway to have a clear line-of-sight for a distance determined by the procedure described in Appendix 17 of this Ordinance.

2. Wherever a portion of the line of such triangles occurs behind (i.e., from the street) the building setback line, such portion shall be shown on the Final Plan of the subdivision/land development and shall be considered a building setback line.
3. This clear sight triangle shall be provided under all circumstances and shall apply regardless of whether or not the triangle can be obtained on the developer's property.

I. Cul-de-Sac Streets

1. Dead-end streets are prohibited unless designated as Cul-de-Sac streets or designed for future access to adjoining properties.
2. Any temporarily dead ended street shall be provided with a temporary all-weather turn-around, within the subdivision/land development, and the use of such turnaround shall be guaranteed to the public by easement until such time as the street is extended.
3. Permanent cul-de-sac streets shall not be less than two hundred fifty feet in length and shall not exceed seven hundred fifty (750) feet in length. If a street has only one entrance but more than one branch or turnaround, that street shall be considered one cul-de-sac, and the length shall be measured from the common entrance. The Township may require a permanent easement for emergency vehicle access to be provided and maintained from the end of the cul-de-sac to another street.
4. Unless future extension is clearly impractical or undesirable, the turn-around right-of-way shall be placed adjacent to the tract boundary with sufficient additional width provided along the boundary line to permit extension of the street at full width.
5. All cul-de-sac streets, whether permanently or temporarily designed as such, shall be provided at the closed end with a fully paved turnaround. The minimum radius of the pavement edge or curb line shall be forty (40) feet, and the minimum radius of the right-of-way line shall be fifty (50) feet.
6. Drainage of cul-de-sac streets shall preferably be toward the open end. If drainage is toward the closed end it shall be conducted away in an underground storm sewer, or drainage swales recommended by the Township Engineer and approved by the Board of Supervisors.
7. The centerline grade on a cul-de-sac street shall not exceed ten (10) percent, and the grade of the diameter of the turnaround shall not exceed five (5) percent unless approved by the Board of Supervisors.

J. Street Construction

All materials entering into the construction of streets and the methods of construction and drainage shall be in accordance with the applicable requirements of Pennsylvania Department of Transportation Specifications Publication 408, latest revision thereof, and shall be supplied by vendors approved by the Pennsylvania Department of Transportation

for the supply of such materials. Cross-sections shall be as described in Table A. Inspection of materials and construction methods shall be conducted by the Township Engineer.

1. Street Design

- a. Thickness of base and paving for new Township streets shall meet the minimum requirements outlined in Table A.

TABLE A

<u>Material</u>	<u>Thickness for Road Classification</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
PA - 2A Stone	6"	6"	6'
Bituminous Concrete Base Course (BCBC)	4.5"	4"	5"
Bituminous Concrete Binder Course (ID-2)	-	2"	2"
Bituminous Concrete Wearing Course (ID-2)	1.5"	1.5"	1.5"
<u>Road Classification:</u>			
Minor Street (Residential)			1
Collector Street		2	
Commercial or Industrial Street			3

- b. Paving design is based on overall soil conditions in the Township. The Board may require additional paving, base or subbase materials where soil types are inferior, wet or otherwise unsuitable as indicated by the "Soil Survey of Berks County, Pennsylvania" prepared by the U.S. Soil Conservation Service or where, in the opinion of the Board, such conditions exist.

2. Subgrade

- a. The area within the limits of the proposed road surface shall be shaped to conform to the line, grade and cross-section of the proposed road.
- b. Remove or stabilize all unsuitable materials.
- c. Wet areas below the subgrade shall be permanently drained and stabilized.
- d. Fills shall be made with suitable materials approved by the Township Engineer and thoroughly compacted for full width in uniform layers of not more than eight (8) inches thick. No more than two (2) feet of fill shall be laid between inspection by the Township Engineer.
- e. The subgrade shall be thoroughly compacted by rolling with a minimum ten-ton three-wheel roller. Equivalent vibratory, sheeps foot or rubber tire rollers may be used at the discretion of the Township Engineer. Subgrade shall be compacted tight and dry, to ninety-five (95) percent compaction at optimum moisture, and shall not be soft and spongy under the roller. Compaction of the subgrade shall

extend the full width of the cartway, including the width to be occupied by shoulders.

- f. In fill areas over three (3) feet thick, compaction tests are required in each eight (8) inch layer at one hundred fifty (150) foot intervals. The test must be performed by a certified testing laboratory and results submitted to the Township Engineer. All compaction must be ninety-five (95) percent compaction at optimum moisture. Any layer not coming up to standard will be removed or rerolled until suitable compaction is obtained.

3. Subbase Course

- a. Subbase course thickness and materials shall be as specified in Table A.
- b. The subbase course shall be rolled uniformly and thoroughly compacted according to the requirements of PennDOT Publication 408, latest edition.
- c. When curbs are not to be installed, the subbase course shall extend twelve (12) inches beyond the paving line on all streets.
- d. Subbase materials shall not be placed on wet or frozen subgrade.

4. Bituminous Concrete

- a. Paving Thickness shall be as specified in Table A.
- b. Bituminous base, binder and surface courses shall be laid to the specified thickness, measured after compaction. All bituminous course shall be laid with a mechanical bituminous paver in accordance with specifications of the Pennsylvania Department of Transportation Specifications, Publication 408, latest edition thereof.
- c. Crown board and straight edge shall be used for checking street construction. Maximum tolerance shall not exceed one-quarter ($\frac{1}{4}$) inch in the finished surface.
- d. Delivery slips for all material deliveries shall be furnished to the Board.
- e. Failure to adhere to the above specifications shall give the Board cause to refuse to accept streets for dedication.

5. Grading and Shoulders

- a. Roadways shall be graded for the full width of the right-of-way on each side. Shoulders or berm areas, including planting strips behind curbs, shall be graded with a minimum slope of one-half ($\frac{1}{2}$) inch per foot and a maximum slope of one (1) inch per foot. Beyond the limits of this grading, banks shall be sloped to prevent erosion but this slope shall not be less than three (3) horizontal to one (1) vertical with tops of slope in cuts rounded. All unpaved areas between the street line and the curb or shoulders (as the case may be) shall be covered with not less

than four (4) inches of topsoil, seeded and mulched in a manner and with materials approved by the Board.

K. Private Streets

Occasionally a parcel of land could be used for residential subdivision and development except for the prohibitive cost of street installation in strict compliance with specifications required in this ordinance for proposed public streets. This situation generally arises in the case where the parcel has a limited amount of road frontage and where only a small number of lots are available on a proposed street, making the per lot cost of the street relatively high. The result has been to encourage development along existing streets and roadways and a corresponding lack of productive use of “background” located to the rear of the roadfront lots. In order to allow a more productive use of land, in a manner consistent with the public health, safety and welfare the following provisions are established.

1. No private street shall be allowed in District Township unless specifically approved by the Board of Supervisors, and subject to conditions established by the Board.
2. Private streets shall be designed to conform to Township street design standards for right-of-way width, vertical and horizontal curves, grades, sight distance at intersections, and street names.
3. Private streets shall not provide access to more than three lots. The first 50 feet from the public street shall be paved in accordance with the public street construction specifications. This requirement will not apply to private streets that intersect with a non-paved public street.
4. Street cartway width for private streets may be reduced from normal Township street standards subject to approval by the Board of Supervisors. In no case shall the cartway width for a private street be less than sixteen (16) feet.
5. Private streets shall be constructed with a base course consisting of a minimum of six (6) inches of PA 3A modified stone placed on a prepared and compacted subgrade. The base course shall be shaped and rolled to provide a two (2) inch crown or sloped laterally to facilitate drainage and shall be covered with a minimum of two (2) inches of PA 2A or 2RC stone (compacted thickness).
6. In the case of private streets having an approved reduced cartway width, the grading for the street may be less than the total width of the right-of-way but not less than a distance of eight (8) feet from the edge of the cartway to provide for shoulder and swale areas. In this manner, excessive tree clearing through a wooded area would be minimized.
7. The use and maintenance of a private street shall be the responsibility of the property owners of the lots shown on the plan having access via the private street. It shall be a joint responsibility of the lot owners to share in the maintenance and/or reconstruction costs as may be required.
8. District Township shall have no responsibility for maintenance of a private street, or snow removal, or any other services.

9. The above use and maintenance conditions shall be expanded and incorporated into the individual documents for future conveyance of each lot, and shall be shown on the plan. Furthermore, the Developer shall execute an agreement stipulating such use and maintenance conditions for recording with the Final Plan.
10. A proposed private street shall be labeled on the Final Plan in the following manner:

“Street Name” (Private Street)
11. Applications that propose a private street shall be by an agreement that shall be recorded with the Recorder of Deeds as part of the final plan. This agreement shall establish the conditions under which the street will be constructed and maintained, as well as conditions controlling an offer of dedication, and shall stipulate:
 - a. That the street shall be constructed and maintained to conform to the provisions of this Ordinance.
 - b. The method of assessing maintenance and repair costs.
 - c. That an offer for dedication of the street shall be made only for the street as a whole.
 - d. That the owners of the abutting lots will include with any offer of dedication sufficient funds, as estimated by the Township, to restore the street to the prevailing standards.
 - e. That an agreement by the owners of fifty-one (51) percent of the front footage thereon shall be binding on the owners of the remaining lots.

L. Street Names

1. Proposed streets that are obviously in alignment with others already existing and named shall bear the names of the existing streets.
2. In no case shall the name of a proposed street be the same as or similar to an existing street name in the Township and in the same postal district, irrespective of the use of the suffix street, road, avenue, boulevard, driveway, place, court, lane, etc.
3. All street names shall be subject to the approval of the Board of Supervisors, local emergency providers and the U.S. Postal Service.

M. Service Streets (Alleys)

1. Service Streets may be permitted, provided that the subdivider produces evidence satisfactory to the Board of Supervisors of the need for such service streets.
2. Dead-end service streets shall be avoided, but where this proves impossible, dead-end service streets shall terminate with a paved circular turnaround with a minimum radius to the outer pavement edge (curb line) of forty (40) feet.
3. Service street intersections and sharp changes in alignment shall be avoided, but where necessary, corners shall be rounded as required in Section 502.G.6. and deflection in alignment in excess of five degrees shall be made by horizontal curves.

N. Driveways and Off-Street Parking

1. Private driveways on corner lots shall be located at least forty (40) feet from the point of intersection of the nearest street right-of-way lines.
2. Clear sight triangles shall be provided. Such clear sight triangles shall be established to facilitate the driver, when positioned ten (10) feet behind the street cartway, to have a clear line-of-sight for a distance determined by the procedure described in the Appendices of this Ordinance.
3. In order to provide a safe and convenient means of access, grades on private driveways shall not exceed twelve (12) percent. Entrances shall be rounded at a minimum radius of six (6) feet, or should have a flare construction that is equivalent to this radius at the point of intersection with the cartway edge (curb line). In addition a leveling area not to exceed five (5) percent shall be required within twenty (20) feet of the driveway's intersection with the road.
4. Subdivisions and land development which will require access to a highway under the jurisdiction of the Department of Transportation shall contain the following note in compliance with Act 42 of 1986:

"A highway occupancy permit is required pursuant to Section 420 of the State Highway Law before driveway access to State Highway _____ is permitted. Access to the state highway shall be only as authorized by a highway occupancy permit."
5. Private driveways serving lots abutting a proposed street shall access directly to the proposed street, and not to existing public roads.

6. Private driveways shall be constructed in accordance with the standards set forth in the District Township Driveway Ordinance.
7. Off-street parking is required for each building. The number of spaces to be provided shall be in accordance with the requirements of the Township Zoning Ordinance.

In the case of single-family detached or semi-detached buildings, off-street parking spaces shall be provided behind the street right-of-way line and may be an attached or separate garage, carport, or driveway.

In the case of single-family attached or multi-family buildings, off-street parking spaces may be provided in the form of parking compounds located adjacent or near the buildings.

8. Each off-street parking area shall provide a useable parking space of at least two hundred (200) square feet, and, where access to such area is from a collector or major street, adequate turnaround space shall be provided behind the right-of-way line. The grade for the parking areas shall not exceed five (5) percent.

SECTION 503 BLOCKS

A. Layout

The length, width and shape of blocks shall be determined with due regard to:

1. Provisions of adequate sites for buildings of the type proposed;
2. Zoning requirements;
3. Topography;
4. Requirements for safe and convenient vehicular and pedestrian circulation, including the reduction of intersections with major streets.

B. Length

1. Blocks shall have a maximum length of one thousand eight hundred (1,800) feet and a minimum length of five hundred (500) feet, provided however that the Board of Supervisors may increase the maximum and/or decrease the minimum lengths of blocks if in the opinion of either body, topography of the land in question and/or surface water drainage conditions warrant such a change.
2. In the design of blocks longer than one thousand (1,000) feet, special consideration shall be given to the requirements of satisfactory fire protection.
3. Where practicable, blocks along major and collector streets shall not be less than one thousand (1,000) feet long.

C. Crosswalks and Sidewalks

1. Crosswalks shall be required wherever necessary to facilitate pedestrian circulation and to give access to community facilities.
2. Such crosswalks shall have an easement of not less than ten (10) feet and a paved walk of not less than four (4) feet.
3. Major streets shall not require sidewalks unless special conditions dictate. All other streets shall have sidewalks when deemed necessary by the Board of Supervisors.
4. Sidewalks at street intersections shall have handicap ramps in accordance with Americans with Disabilities Act (ADA).

D. Depth

Residential blocks shall be of sufficient depth to accommodate two tiers of lots, except where prevented by the size, topographical conditions or other inherent conditions of the property, in which case the Board of Supervisors may approve a single tier of lots.

E. Commercial and Industrial Blocks

Blocks in commercial and industrial areas may vary from the elements of design detailed above as required by the nature of the use. In all cases, however, adequate provision shall be made for off-street parking and loading areas as well as for traffic circulation and parking for employees and customers.

SECTION 504 LOTS AND PARCELS

A. General Standards

1. Insofar as practical, side lot lines, should be at right angles to straight street lines or radial to curved street lines.
2. Where feasible, lot lines should follow municipal boundaries, rather than cross them in order to avoid jurisdiction problems.
3. Generally, the depth of residential lots should be not less than one (1) or more than two and one-half (2½) times their width.
4. Depth and width of parcels intended for non-residential uses shall be adequate for the use proposed and sufficient to provide satisfactory space for on-site parking, loading and unloading, setbacks, landscaping, etc.

5. If, after subdividing, there exist remnants of land, they shall be either:
 - a. Incorporated into existing or proposed lots, or
 - d. Legally dedicated to public use, if acceptable to the Township.

B. Lot Frontage

1. All lots shall front on a public street, existing or proposed, or on a private street if it is approved and meets the requirements of this Ordinance. The creation or use of easements for access purposes shall be prohibited.
2. Double or reverse frontage lots shall be avoided except where required to provide separation of residential development from major streets or to overcome specific disadvantages of topography or orientation.
3. All residential reverse frontage lots shall have a rear yard with a minimum depth of seventy-five (75) feet, measured in the shortest distance from the proposed dwelling unit to the required right-of-way, and shall have within such rear yard and immediately adjacent to the right-of-way, a planting screen easement of at least ten (10) feet in width, across which there shall be no right of access.
4. Flag lots shall be prohibited with the exception that the Board of Supervisors may approve the creation of a flag lot in accordance with the guidelines set forth in this section.
 - a. A flag lot shall be approved only when necessary for the productive use of land located to the rear of road front lots due to unique topographic conditions, avoidance of stream crossings or tract boundary conditions, and shall not be used as a substitute for available alternative land planning concepts.
 - b. Approval of a flag lot may be granted by the Supervisors, at their discretion, on a case-by-case basis, consistent with the public health, safety and welfare.
 - c. No flag lot shall be approved if the land located to the rear of road front lots can be accomplished by the creation of a public or private street.
 - d. Access strips of a minimum width of fifty (50) feet, must be provided to connect the flag lot to a public or private street, and must be conveyed in fee as part of the lot.
 - e. The grade of a driveway located in the fifty (50)-foot access strip shall not exceed twelve (12) percent.
 - f. The minimum lot size and widths, building setback lines and other applicable portions of the Township Zoning Ordinance and this ordinance shall be applicable to the main portion of the flag lot, excluding the access strip.
 - g. The Township Planning Commission and/or Supervisors shall attach necessary and reasonable conditions to the approval of a flag lot to assure proper

compliance with other portions of this ordinance, including but not limited to erosion and sediment controls, storm drainage, and utility easements.

- h. Generally, no more than one flag lot will be approved in each subdivision or land development.

C. Lot Size

Lot dimensions and areas shall not be less than specified by the provisions of the Township Zoning Ordinance, and shall further conform to DEP Rules and Regulations and Sections 505 and 507 of this Ordinance.

SECTION 505 SANITARY SEWAGE DISPOSAL

- A. The applicant shall prepare a feasibility report relating to sewage disposal facilities in accordance with the provisions of Section 405 of this Ordinance.
- B. Where on-site sanitary sewage facilities are to be utilized, each lot so served shall be of a size and shape to accommodate the necessary septic tanks and absorption area and provide for isolation distance from them in accordance with Township and State regulations.
- C. The proposed method of sanitary sewer disposal shall be in accordance with the Township's officially adopted Act 537 Sewage Facilities Plan.
- D. When DEP Rules and Regulations determine the necessity for an Act 537 Sewage Facilities Plan Revision or plan supplements, the procedure set forth the DEP Rules and Regulations shall be followed. Five (5) copies of the appropriate Sewage Facilities Planning Module shall be submitted with the Preliminary Plan.
- E. Where there is an existing dwelling on a lot which is part of a subdivision and/or land development plan the applicant shall demonstrate that the on-lot sewage disposal system serving the existing dwelling meets all applicable requirements.

SECTION 506 SOIL PERCOLATION TEST REQUIREMENTS

- A. An applicant presenting a plan that proposes installation of on-lot sewage disposal facilities shall provide the following documentation:
 - 1. Each lot or lots to be created and each residue tract shall contain a suitable location for the installation of an initial individual on-lot sewage system except when such lot or lots to be created are to be served by a community sewage system. The Sewage Enforcement Officer shall perform or observe all tests required by the Department of Environmental Protection and this Ordinance for the location of an individual on-lot sewage system to conform to the suitability of the location.
 - 2. Each lot or lots to be created and each residue tract shall contain a suitable location for the installation of a replacement location for the individual on-lot sewage system which shall comply with all regulations issued by the Department of Environmental Protection concerning individual on-lot sewage systems, including isolation distances, and with the terms of this Ordinance and any other applicable Township ordinances.

3. Each applicant shall demonstrate to the satisfaction of the Sewage Enforcement Officer and/or a sanitarian certified by the Department of Environmental Protection that an area exists on the lot or on each lot to be created for an initial individual on-lot sewage system and for the replacement location. The Sewage Enforcement Officer shall perform or observe all tests required by the Department of Environmental Protection and this Ordinance for the location of individual on-lot sewage system initial location and replacement location to confirm the suitability of the location. Allowance of open land for the replacement location without such testing shall not constitute compliance with the requirements of this Section.
 4. The location of each initial individual on-lot sewage system and each replacement location shall be notated upon the plans, and the purchaser of each lot shall be provided with a copy of the plans. The applicant shall include a note upon the recorded plans stating that no improvements shall be constructed upon the replacement location, and the deed to each lot created as a part of the subdivision or land development shall contain language reflecting this limitation.
- B. All soil tests shall be shown on the site investigation and percolation test report for on-lot disposal of sewage.
 - C. Any revisions to a permit or plan affecting a replacement location which previously has been approved pursuant to the provisions of this Ordinance shall be approved by the Board of Supervisors or its authorized representative.
 - D. During the development of the lot, the replacement location shall not be excavated, graded, filled or otherwise disturbed in any manner that would prevent its use as a future location for an on-lot sewage disposal system. No permanent or temporary improvements of any character other than the planting of trees, shrubs, or other plant matter shall be constructed upon the replacement location unless the person who desires to construct such improvements shall demonstrate to the satisfaction of the Sewage Enforcement Officer that an alternate replacement location which complies with all applicable Township ordinances exists upon the lot. If such an alternate replacement location shall be identified, the alternate replacement location may be considered to be the replacement required by this Ordinance, shall be designated as the replacement location, and the plans shall be accordingly revised and submitted to the Township. The newly designated replacement location shall thereafter be considered the replacement location for the purposes of this Ordinance.

SECTION 507 WATER SUPPLY

- A. The applicant shall prepare a feasibility report relating to water supply facilities in accordance with the provisions of Section 405 of this Ordinance.
- B. The developer shall demonstrate that the proposed development shall meet all of the following requirements:
 1. The net groundwater recharge after development shall exceed the anticipated water usage during drought conditions.
 2. The development and its water source shall not adversely impact surface water or riparian rights of adjoining landowners.

3. The development and its water source shall not lower the groundwater table in the area and decrease water supplies for adjoining landowners.
4. The water supply for the development shall meet DEP and EPA standards concerning potability.
5. The water supply for the development shall meet the quantity requirements in Section 405.D.

SECTION 508 STORMWATER MANAGEMENT

- A. Land Disturbance Plans shall be prepared for proposed subdivisions and land developments in accordance with the District Township Stormwater Management and Earth Disturbance Ordinance.
- B. All storm water management facilities shall comply with all regulations of the District Township Storm Water Management and Earth Disturbance Ordinance.

SECTION 509 PUBLIC USE AND SERVICE AREAS

A. Public Open Spaces

1. In reviewing subdivision plans, the Township Planning Commission and Board of Supervisors shall consider whether community facilities, especially schools, in the area are adequate to serve the needs of the additional dwellings proposed by the subdivision, and shall make such report thereon as they deem necessary in the public interest.
2. Subdividers/developers and Township Planning Commission shall give earnest consideration to providing facilities or reserving areas for facilities normally required in residential neighborhoods, including churches, libraries, schools and other public buildings; parks, playgrounds, and playfields; shopping and local business centers. Areas provided or reserved for such community facilities shall be adequate to provide for building sites, landscaping and off-street parking as appropriate to the use proposed, and shall be suitably prepared for this end use at the expense of the subdivider/developer. Prior to the preparation of plans, subdividers of large tracts should review with the Township Planning Commission the minimum standards for various community facilities applicable to the tract being subdivided/developed.

B. Other Utilities

1. All other utility lines including, but not limited to electric, gas, street light supply, cable television, and telephone shall be placed underground. Installation of all utilities shall be in strict accordance with the engineering standards and specifications of the public utility concerned.
2. In accordance with the provisions of Act 178, all developers, contractors, etc., shall contact all applicable utilities and accurately determine the locations and depth of all underground utilities within the boundaries of the tract proposed for development, prior

to excavation. A list of the applicable utilities and their telephone numbers shall appear on the plans submitted for review.

3. Easements with a minimum width of twenty (20) feet with five (5) feet additional added per utility use shall be provided for poles, wires, conduits, storm and sanitary sewers, gas, water and heat main and/or other utility lines intended to service the abutting lots. No structures or trees shall be placed within such easements.
4. Easements shall be centered on or adjacent to rear or side lot lines.
5. There shall be a minimum distance of fifty (50) feet, measured in the shortest distance, between any proposed dwelling unit and any petroleum, petroleum products or natural gas transmission line that traverses the subdivision/land development.
6. Petroleum products or natural gas transmission lines shall be located in a fifty (50) foot minimum right-of-way. Unless the pipeline company requires a greater width, the subdivider/developer shall provide a fifty (50)-foot right-of-way for all such existing transmission lines within the subdivision/land development.

SECTION 510 EROSION AND SEDIMENT CONTROLS AND GUIDELINES

- A. A Land Disturbance Plan shall be prepared for proposed subdivisions and land development in accordance with the District Township Stormwater Management and Earth Disturbance Ordinance.
- B. All erosion and sedimentation control facilities shall comply with all regulations of the District Township Storm Water Management and Earth Disturbance Ordinance.

SECTION 511 LANDSCAPING AND SCREENING

- A. Landscaping.
 1. Any part or portion of a non-agricultural site where landscaping is required and which is not used for buildings or other structures, loading and parking spaces and aisles, sidewalks and designated storage areas shall be planted and maintained with landscaping.
 2. Except for agricultural uses and single-family detached, single-family semi-detached, two-family detached dwellings and two-family semi-detached dwellings, any part or portion of a site which is not used for buildings or other structures, loading and parking spaces and aisles, sidewalks and designated storage areas shall be landscaped according to an overall plan, prepared and approved as part of a Land Development Plan required under this Ordinance.
- B. Planting Strip. All commercial, industrial and nonresidential uses, but excluding agricultural uses, shall be separated from all side and rear property lines and all street right-of-way lines by a planting strip. The planting strip may be included in the required yard space and shall be based on the following criteria:
 1. The planting strip shall be a minimum of ten (10) feet wide, measured from the property line or street right-of-way line.

2. Said planting strip shall be planted in grass, shrubbery, trees, or other plant material, but in no case shall these areas be paved or covered by an impervious surface.
3. Said planting strip shall only be broken by approved entrances or exits.
4. Accessory buildings or structure shall be permitted within a planting strip provided they conform to the specific requirements of this Ordinance.
5. Exceptions.
 - a. No planting strip is required along a rear property line when the rear property line abuts a public alley.
 - b. No planting strip is required along a side and/or rear property line where the adjacent owners have a written agreement, suitable to the Board of Supervisors, waiving the side and/or rear yard setbacks relating to parking facilities along their abutting property line(s).
 - c. No planting strips are required on lands in agricultural production.

C. Screening

1. Screening requirements shall be applicable under the following circumstances:
 - a. Where a proposed commercial, industrial, or institutional use abuts an existing residential use or residential district.
 - b. Where any proposed multi-family residential use abuts an existing single-family detached, single-family semi-detached, two-family detached or two-family semi-detached dwelling.
 - c. Any other instances where screening is required by this Ordinance or by the Township.
2. Screening shall comply with the following requirements:
 - a. Trees and shrubs used for screening shall consist of at least seventy-five (75) percent evergreen trees and shrubs and shall be so arranged as to provide an immediate visual screen of fifty (50) percent.
 - b. Plant materials used in the screen planting shall be at least six (6) feet in height when planted and be of a species which will produce a complete visual screen of at least eight (8) feet in height at maturity.
 - c. All trees shall have a minimum trunk diameter of two and one-half (2.5) inches at a height of six (6) inches above finished grade.
 - d. No plantings shall be placed with their center closer than five (5) feet from the property line of the tract.

- e. All existing trees within the required planting strip above three (3) inches in caliper and/or eight (8) feet in height shall be preserved wherever possible.
- f. When additional height is deemed necessary, an additional row of deciduous trees with calipers of not less than two and one-half (2.5) inches shall be planted within the screening area at intervals of not more than forty (40) feet on center.
- g. Vegetative screening shall incorporate earthen mounds or berms, wherever possible, to improve sound as well as visual buffering, and shall be broken at points of vehicular or pedestrian access.
- h. Screening design, including the type of plant materials used, spacing of plant materials, and the use and location of earthen berms, shall be subject to review and approval by the appropriate reviewing agency.
- i. Vegetative screens shall be perpetually maintained during the period the principal use causing the need for screening is in operation. Any plant material that does not survive shall be replaced within six (6) months.
- j. Walls, ornamental structures, fences and berms, or a combination of these, not less than five (5) feet in height may be used in combination with appropriate plant material subject to the specific land use areas involved and as approved by the appropriate reviewing agency.
- k. Innovative means of screening are encouraged; however, as a guideline to quantity of materials required, there shall be a minimum of one (1) tree for each twelve (12) lineal feet of property line.
- l. Screening shall be designed so as to not obstruct the clear-sight triangles at intersections.

3. Exceptions.

- a. No screening along a rear property line is required when the rear property line abuts a public alley.
- b. No screening is required along a side and/or rear property line where the adjacent owners have a written agreement, suitable to the Board of Supervisors, waiving the side and/or rear yard setbacks relating to parking facilities along their abutting property line(s).

D. Off-Street Parking Areas. Except as modified elsewhere in this Ordinance, the following shall apply to the landscaping and screening of off-street parking areas:

- 1. Any off-street parking lot perpendicular to and within one hundred (100) feet of a public street or intersection shall be screened with a hedge, berm or other measure to prevent distraction or confusion from parking car's headlights.
- 2. No parking lot shall be located closer to a building than ten (10) feet to allow adequate room for landscaping.

3. No more than twenty-five (25) parking spaces shall be placed in a continuous row without an intervening planting island of at least ten (10) feet in width and the length of the parking stall.
4. A minimum of ten (10) percent of any parking lot facility over 2,000 square feet in gross area (measured from the outside edge of paving to outside edge of paving) shall be devoted to landscaping. This landscaping shall include a minimum of one tree per twenty (20) parking spaces and all planting beds within a parking lot shall be surfaced in lawn or ground cover planting.
5. For any land use where the total number of parking spaces exceeds 100 stalls, the parking area shall be divided by continuous islands perpendicular to the spaces every 130 feet (130 feet assumes four (4) rows of parking at 20' length and two (2) aisles at 25' width). These divider islands shall be a minimum of ten (10) feet wide.
6. Wherever a parking area of over five (5) spaces abuts or is within fifteen (15) feet of the side or rear lot line of a lot in any Residential District, the said parking lot shall be screened from such adjoining lot by a wall, fence, or hedge. Such screening shall be not less than three (3) or more than eight (8) feet in height.
7. Whenever a parking area of over five (5) spaces is located across the street from other land in any Residential District, it shall be screened from the view of such land by a hedge, wall, or fence located along a line drawn parallel to the street and a distance of twenty (20) feet therefrom; such screening to be interrupted only at points of ingress and egress. Such screening shall be not less than three (3) feet or more than eight (8) feet in height. The open area between such screening and the street shall be landscaped in harmony with the landscaping prevailing on neighboring properties fronting on the same street.

E. Service, Loading and Trash Disposal Areas.

1. All service, delivery, loading and outdoor storage and trash disposal areas shall be screened from all residential districts, public streets, parking lots and pedestrian walkways.
2. These areas shall be totally screened from the above-listed places by the use of fences, walls, berms, evergreen plant material, or a combination of these, not less than six (6) feet in height.

F. All mechanical equipment not enclosed in a structure shall be fully and completely screened in a matter compatible with the architectural and landscaping style of the remainder of the lot.