

Article 10

Design Standards and Required Improvements

1001. APPLICABILITY.
- 1001.A. Minimum Requirements. The design standards and improvements required in this Article are the minimum requirements for approval of a subdivision or land development.
- 1001.B. Modifications, Waivers and Exceptions. See Section 107 of this Ordinance.
1002. REQUIRED IMPROVEMENTS. This Article sets forth the design and construction standards for required improvements, regardless of whether the improvement will be dedicated to the Township.
1003. OVERALL REQUIREMENTS; TREE PRESERVATION; EROSION CONTROL.
- 1003.A. Land shall be suitable for the purpose for which it is to be subdivided or developed.
- 1003.B. Hazardous Conditions. Subdivisions or land developments subject to hazardous conditions (such as open quarries, hazardous or toxic site pollution, limestone solution channels, unconsolidated fill, floods, excessive erosion or unsafe water supply) shall not be approved until the developer has provided or has legally committed to provide adequate measures to overcome or eliminate the hazards, in the determination of the Board of Supervisors, to the best of their knowledge. See also the Township’s floodplain requirements.
- 1003.C. Zoning. All aspects of a proposed subdivision or land development shall conform to the Township Zoning Ordinance and all other Township Ordinances and specifications.
- 1003.D. Nearby Development. A subdivision or land development and its street pattern shall be coordinated with existing or approved nearby developments or neighborhoods to help develop the area harmoniously and to help prevent conflicts between neighboring development.
- 1003.E. Open Burning. Open burning during construction is controlled by a separate Township Ordinance.
- 1003.F. Preservation of Existing Trees. The provisions in the Zoning Ordinance shall apply.
- 1003.G. Erosion Control and Soil Protection.
1. Ground Cover and Top Soil. After completion of construction on a lot, all exposed ground surfaces that are not paved and that are not covered by approved gravel areas or decorative stones or similar material shall be covered by a minimum of 6 inches of topsoil and a vegetative ground cover that will prevent soil erosion and the raising of dust.

2. Erosion Control. Any earth disturbance should be controlled by proper measures to prevent soil erosion and sedimentation, following DEP regulations and standards of the County Conservation District.
 - a. A soil erosion and sedimentation control plan is required to be submitted to the County Conservation District and found to be acceptable for most types of earth disturbance under the State regulations.
 - b. Compliance with such plan shall be an automatic condition of any approval or permit under this Ordinance.
 - c. Township permits may be suspended if earth disturbance does not comply with such approved plan.
3. Both the owner of the property at the time of any earth disturbance and the person(s)/company accomplishing the work shall be responsible to ensure that adequate erosion control measures are used, and that the grading is in compliance with the Township-approved plan.
4. All lots, tracts, or parcels shall be graded in accordance with the Township Stormwater Management Ordinance to provide proper drainage away from buildings, prevent any surface runoff from ponding, and all other stated purposes of such Ordinance.
5. Grading shall be done in such a way so as to not divert water (*other than runoff that previously occurred*) onto the property of another landowner without the express consent of the Township and the *written permission from* the landowner.
6. During grading operations, necessary measures for off-premises dust and mud control shall be exercised at all times in accordance with approved Erosion and Sedimentation Control Plans.
7. Grading equipment shall not be permitted to cross through streams. Provisions shall be made for the installation of temporary culverts and/or bridges as necessary and such crossings shall be permitted in accordance with requirements of DEP.
8. Excavations and Fills.
 - a. Cut and fill slopes shall be no steeper than 2:1 unless stabilized by a retaining wall or cribbing except as approved by the Township Engineer under special conditions. *Slopes exceeding 3:1 must have suitable protection against erosion until stabilization is achieved.*
 - b. Fills shall be placed and compacted so as to minimize sliding or erosion of soil.
 - c. Fill shall not encroach on watercourses.
 - d. Fill places adjacent to natural watercourses or constructed channels shall have suitable protection against erosion during periods of flooding.

1004. STREETS.

1004.A. Access to Streets.

1. All proposed subdivisions and land developments shall have adequate and safe access to the public street system.

2. Frontage.
 - a. Any lot created under this Ordinance shall have frontage and access onto either:
 - 1) a public street (which may be required to be improved as necessary under Section 1004.L), or
 - 2) a private street constructed to the same standards as a public street and that has a permanent system to ensure adequate maintenance.
 - b. If a residential lot is adjacent to two streets, it shall only have vehicle access onto one street. Such limitation shall be stated on the plan.
3. Private Streets and an Existing Lot. A pre-existing lawful lot of record that abuts an existing private street that does not meet Township standards may have access for a single principal use onto such private street, but no new lot shall be created with access onto such street.
4. Access for Emergency Vehicles. Suitable access for emergency vehicles shall be provided within all subdivisions and land developments, including adequate clear width, and including access to reach all principal buildings. Driveways shall be designed to be accessible to emergency vehicles. Driveways that are greater than 100 feet in length and that provide access to a principal building shall have a 10 feet minimum horizontal clearance, a 12 feet minimum vertical clearance and be designed to accommodate the weight of a fire engine with a 73,000 pound aggregate vehicle weight.
 - a. Where an access is limited to use by emergency vehicles, the following standards shall apply:
 - 1) A Township-appointed method shall be used to restrict access by non-emergency vehicles, with such construction detail submitted to the Township.
 - 2) One coordinated emergency accessway may be shared by adjacent developments.
 - 3) Existing or proposed utility easements or rights-of-way should be considered for use as emergency accessways.
 - 4) The applicant shall provide evidence that the design of the emergency access will be able to accommodate the weight of emergency vehicles.
 - 5) Such access should be offered for review by the local Fire Company.

1004.B. Streets and Topography. Proposed streets shall be adjusted to the contour of the land to produce usable lots and reasonably sloped streets. See the street grade regulations in Section 1004.F.

1004.C. Street Continuations.

1. Stub Street Right-of-Way. Where deemed necessary by the Board of Supervisors for efficient movement of traffic, a subdivision or land development shall include the extension of a street right-of-way to the boundary line of the parcel proposed for development to provide for an eventual extension into the adjacent tract for efficient circulation of traffic throughout the area. If a stub street is constructed, see Section 1004.I.4., which addresses temporary turnarounds.

- a. The Township may require that a concept sketch be submitted showing that the proposed stub street is at a logical location to link with an adjacent parcel.
2. Widening. Where a subdivision or land development abuts or contains an existing street of inadequate cartway or right-of-way width, additional right-of-way and/or cartway width shall be required conforming with Table 10.1, “Design Standards for Streets.” See Section 1004.L. concerning right-of-way.

1004.D. Intersections.

1. The centerlines of streets shall intersect at right angles except where the Board of Supervisors grant a modification under Section 107 after finding that a right angle intersection is not feasible. In such case, the intersection shall be at as nearly a right angle as possible, with an absolute minimum angle of 75 degrees.
2. Alignment of Street Intersections.
 - a. No more than four legs of streets shall intersect at one point, regardless of the names given to each street.
 - b. Where a proposed street or access drive intersects an existing cross street, such proposed street or access drive shall be aligned with any street intersecting on the other side of the cross street.
 - c. If a proposed street cannot intersect at the same location as a street on the other side of the cross street, then the proposed street shall be offset by the following minimum distances from the nearest intersection of streets:
 - 1) 150 feet along a local street,
 - 2) 400 feet along a collector street, and
 - 3) 800 feet along an arterial street.
 - 4) Measurement. The minimum distances of this subsection shall be measured between the points where the centerlines of the rights-of-way of the intersecting streets intersect with the centerline of the cross street.
3. At street intersections, curb lines shall be rounded by arcs with the radii listed below, whichever is most restrictive. The right of way shall be maintained at least 10 feet from the inside of the curb line or edge of pavement. *A larger radius may be required by the Township where necessary for trucks or buses (such as off-site intersections) or by PennDOT.*

<u>Type of Street</u>	<u>Minimum Radius of Arc at Intersection of Pavement Edge or Curb Line (in feet)</u>
Any street within an industrial district or that provides truck access to an industrial district	55
At least one arterial street, other than above	40
At least one collector street, but no arterial street, other than above	30
Local streets, other than above	15

1004.E. Access Management.

1. Where a subdivision or land development abuts or contains an existing or proposed arterial or collector street, the Township shall require:
 - a. The minimization of the number and length of driveway cuts or street intersections onto an arterial or collector street, which may include requiring the use of shared driveways between adjacent uses or lots, and/or
 - b. The restriction of ingress and egress involving left-hand turns onto or off of the arterial or collector street with Township-approved medians, signage and/or other devices to prevent unauthorized turns, and/or
 - c. The prohibition of driveways from individual dwellings entering directly onto an arterial or collector street. If there is no alternative to this, each driveway entering onto an arterial or collector street shall have adequate turn-around space for vehicles provided within the lot so that vehicles do not back onto the street, and/or
 - d. The construction of a rear street to link driveways from two or more business lots to reach a more appropriate access point onto a more heavily traveled road.
2. All access to commercial and office lots within a subdivision or land development shall use internal access and shared driveways to the maximum extent feasible, as opposed to separate driveway access to roads from individual uses and lots.
3. See Section 1013 concerning access connections between commercial use parking lots.
4. A maximum of one access shall be permitted *per lot* onto any one arterial road. A maximum of one additional access point may be permitted if the applicant demonstrates through a capacity and circulation analysis that an additional access point is necessary to accommodate traffic to and from the site and can be achieved in a safe and efficient manner, *or where specifically required by PennDOT.*
5. Lawful existing commercial lots that do not limit vehicle access to defined driveway locations shall be brought into conformance with this Ordinance and the driveway width requirements of the Zoning Ordinance as a condition of a new subdivision or land development approval or where such change is required under a State Highway Occupancy Permit.
6. Unless specifically required otherwise by the Township or PennDOT, where a property fronts on two or more roads, access shall be obtained from the lowest functional classification road.
7. See maximum driveway slope at approaches to a road in Section 1012.
8. See minimum and maximum width of driveway openings in Article 7 of the Zoning Ordinance.
9. See sight distance requirements in Section 1004.H.

10. The installation of a non traversable median may be required along an arterial road where in the opinion of the Township Engineer in conjunction with Penn DOT (where relevant), the median is needed to reinforce the prohibition of left turns to or from a driveway. The placement, type and design of the median barrier shall be in accordance with the most recent edition of Penn DOT Publication 13M, Design Manual Part II or its successor standard.
11. For minimum use driveways (as defined by PennDOT), the radii shall be a minimum of 15 feet. For low volume and medium volume driveways (as defined by PennDOT), the radii shall be a minimum of 25 feet. For high volume driveways, the minimum radii shall be as approved by the Township Engineer. In all cases, the radii shall be designed to accommodate the largest vehicle expected to frequently use the driveway. Except for joint driveways, no portion of a driveway radius may be located on or along the frontage of an adjacent property.

1004.F. Street Design Standards.

1. Minimum street design standards shall be as shown in Table 10.1., unless PennDOT establishes a more restrictive requirement along a State road.
 - a. Rear or side alleys, where approved, shall have a minimum cartway width of 16 feet for two-way traffic and 12 feet for one-way traffic.
2. Shoulders. In addition to the cartway widths stated above, any street that does not have curbs shall include appropriate **8 feet wide shoulders along each side of an arterial street, 6 feet wide shoulders along each side of the cartway of a collector street and 4 feet wide shoulders** on each side of the cartway of a local street.
 - a. See construction standards in Section 1004.K.
 - b. If the shoulders are paved, they shall be separated by a stripe from the travel-lanes.
3. Horizontal curves shall connect street lines that are deflected in excess of 2 degrees. Vertical curves shall be used at changes of grade exceeding 1 percent. The length of the vertical curve shall be determined by the required *sight* distance specified in Table 10.1. *Vertical curves shall be calculated following the latest published standards of PennDOT. Horizontal curves shall be calculated based upon the following AASHTO formula: $R_{min} = V^2 / 15 * (0.01e + f_{max})$.*
4. All approaches to intersections shall have a leveling area not greater than 4 percent grade for a minimum distance of 25 feet, measured from the nearest edge of cartway of the intersecting street. Vertical curves near an intersection on a local street may be reduced to a 20 mile per hour design speed if a stop condition will be utilized.
5. The minimum grade of any street gutter shall be *1.0* percent.
6. A minimum tangent of 100 feet, measured from edge of cartway, shall be required between a curve and a street intersection.

TABLE 10.1 - DESIGN STANDARDS FOR STREETS
(All Dimensions in Feet Unless Specified)

DESIGN SPECIFICATIONS	TYPE OF STREET:		
	Arterial	Collector	Local
Right-of-Way Width	80*****	60*****	50
Cartway Width without curbs and without on-street parking (plus shoulders if required by subsection “2.” above, plus turning lanes as determined to be needed by the Board of Supervisors or PennDOT)	24 to 32	24 to 30	22 *****
Cartway Width:			
- w/curbs on both sides & no on-street parking	30	30	26 *****
- w/curbs on both sides and on-street parking on 1 side	34	34	30 *****
- w/curbs on both sides and on-street parking on 2 sides	36	36	36 **
Plus Acceleration/Deceleration Lane Width (where determined to be needed by the Board of Supervisors or PennDOT)	11	11	NA
Minimum Sight Distance*	500	300	200
Minimum Tangent between Reverse Curves, measured along the street centerline.	200	100	100
Minimum Centerline Radii for Horizontal Curves	500***	300	200
Maximum Grade****	6%	8%	10%
Minimum Grade	1.0%	1.0%	1.0%

* *These standards are for road sight distance, not clear sight distance at intersections.* Horizontal sight distances shall be measured from a point 3.5 feet above the road surface to a point 6 inches above the road surface, and shall be based upon standards of PennDOT.

** A Local Residential Street *servicing only single family detached dwellings* may have a minimum cartway width of 26 feet for portions of a cul-de-sac street that ultimately will not serve more than 200 average weekday trip-ends. This reduction shall not apply to a cul-de-sac street that may be extended in the future to serve additional traffic.

*** Larger radii may be required as determined to be needed by the Township Engineer or PennDOT. The Township may approve a reduced horizontal curve requirements if the applicant proves that the curve would not typically cause vehicles to cross the centerline and if such reduction if proven to be necessary because of the unique conditions of the property.

**** Up to 400 feet of length of a local street may have a maximum grade of 12 percent if the Township determines a less steep grade is not feasible.

***** A 32 foot wide minimum cartway width shall be required abutting a development of townhouses or apartments. *In addition, a minimum of 0.5 additional parking space per dwelling shall be provided for overflow parking.*

***** As may be established by PennDOT along a State road.

7. **Second Access to Development.** Any subdivision or land development of more than 25 dwelling units shall have at least two means of vehicle access into the development. The second means of access may be limited to emergency vehicles, provided the applicant

proves the access will be properly designed for its intended purpose. See Section 1004.A.4. regarding emergency access.

8. Boulevard Entrance. Where the Board of Supervisors determine that additional measures are needed to make sure that a street entrance to a subdivision or land development will not be obstructed, the Supervisors may require that a boulevard-type of street entrance be used. The intent is to separate entrances and exits so that both sides of the street are unlikely to be obstructed at the same time. This shall include a one-way entrance of at least 20 feet width and a one-way exit of at least 20 feet width, separated by an island at least 10 feet in width, with a right-of-way width of 70 feet.
9. See Section 1004.L. regarding improvements to existing streets.

1004.G. Street Crown.

1. With the exception of alleys and divided streets, streets shall be constructed with a center crowned cross-section with a minimum slope of 2 percent and a maximum slope of 4 percent from the street centerline, unless required otherwise by PennDOT for a State road.
2. An alley may have an inverted crown.

1004.H. Clear Sight Triangle; Minimum Sight Distance.

1. Clear Sight Triangle.
 - a. See the Clear Sight Triangle requirements in the Zoning Ordinance.
 - b. In addition, the Township may require that such clear sight triangle be elongated where a new street or driveway will enter onto an arterial or collector street. Such clear sight triangle shall be designed to keep an area free of sight obstructions that is equal in length along the arterial or collector street to the clear sight distance that would be required under PennDOT sight distance requirements. Such clear sight triangle may be required regardless of whether a State road is involved.
2. Sight Distances.
 - a. An applicant for access for a new street or driveway onto a Township street shall prove that the new access would meet the same PennDOT sight distance requirements as if the street was a State road. See Section 441.8 of PennDOT highway occupancy regulations, or its successor sections, including the Safe Stopping Sight Distance table.
 - b. If the applicant proves to the Township that it is not possible to meet the desirable sight distances that are stated in PennDOT regulations, then the intersection shall be located at the point of maximum sight distances that are achievable within the street length of the property and shall meet the minimum required safe sight distances set forth in such PennDOT regulations.
 - c. In the event that the applicant proves to the Township that the minimum required safe sight distances cannot be met, then the Board of Supervisors may require one or more of the following:

- 1) Require that the intersection be located at the point where maximum sight distance can be achieved;
 - 2) Restrict turning movements into or out of the intersection (such as no left turns into or out of the intersection);
 - 3) Require the installation of a right turn acceleration or deceleration lane;
 - 4) Require the installation of a left turn standby lane;
 - 5) Require that the horizontal or vertical alignment of the street be altered;
 - 6) Require an alternative form of access, such as a shared driveway with another lot, or access onto a different street; and/or
 - 7) Deny approval of the plan on the grounds that the minimum safe distance requirement cannot be met and that therefore public safety cannot be adequately protected, and/or that any restrictions on turning movements would not be practical or would have adverse impacts upon other properties and streets that may be used for turnarounds.
- d. In the event that turning movements from an intersection are to be restricted, the applicant shall provide a detailed design of the proposed intersection and an engineering analysis of the anticipated impacts resulting from such restricted turning movements. The design and analysis shall be prepared by a professional engineer with expertise in traffic engineering, and shall address the following:
- 1) The impacts on other lots and streets within the vicinity that may be used by motorists for turnarounds.
 - 2) The impacts on public safety, considering sight distance and types of vehicles.
 - 3) The provision of appropriate methods to ensure compliance with the turning restrictions, such as channelization, alignment, and signage. Such methods meet applicable standards of PennDOT.

1004.I. Cul-de-Sac Streets.

1. Cul-de-sac streets shall be permitted with a maximum length of 1,000 feet. Cul-de-sac streets shall be provided with a turn-around with a minimum paved radius of 50 feet to the face of the edge of the cartway. *The radius of the right-of-way line return between the bulb and stem of cul-de-sacs shall be a minimum of 150 feet. The curb line or pavement edge radius shall be a minimum of 160 feet.*
2. The circular right-of-way of the cul-de-sac shall maintain a minimum 10 feet width between the edge of paving and the edge of the right-of-way. The circular paving of the cul-de-sac shall be connected to the approach paving by an arc having a radius of not less than 50 feet.
3. The Board of Supervisors may permit acceptable alternative turn-around designs *where adjustments are needed because of topography.*
 - a. The turn-around shall have a sufficient radius to allow movement by school buses, snow plows and delivery trucks, even if a vehicle is parked along the side of the cartway. To accomplish this, a 45 foot radius turnaround shall be required as part of an alternative design and a 24 feet wide paved cartway shall be provided.

- a. The right-of-way shall be graded according to the cross-section *submitted by the applicant after it has been approved*. The excavation shall be backfilled and suitably compacted to the satisfaction of the Township Engineer.
 - b. The finished street surface shall be crowned in conformance with the Township specifications.
 - c. A proper super-elevation (banked curves) shall be provided on arterial and collector streets when required by the Township Engineer.
3. Grading Beyond Right-of-Way.
- a. The subdivider or developer may be required to grade beyond the right-of-way line in order to provide continuous slope from the right-of-way line to the *existing / proposed* elevation of the abutting property.
 - b. Such grading beyond the right-of-way shall generally maintain the original directions of slope except where storm water runoff designs dictate changes.
 - c. Approved plans, either preliminary or final, showing proposed grading, shall be binding upon all future lot owners, unless altered by written permission from the Board of Supervisors.
 - d. In no case shall the required street grading extend onto an adjoining property with a different landowner, unless the other adjoining property owner gives a written agreement to the developer to accomplish such work. A copy of such agreement shall be provided to the Township.
4. Trench Excavation. All trenches excavated within the cartway of an existing or proposed public street or right-of-way shall be mechanically compacted with backfill acceptable to the Township Engineer. See also Federal Occupational and Safety regulations for trenching.
5. Drainage of streets shall comply with the Township Stormwater Management Ordinance.
6. Street Construction Standards. All street pavements shall comply with the provisions of this Section, *except that PennDOT shall determine the required cross-section* for a State road.
- a. All materials, construction procedures and other specifications shall be in conformance with the PennDOT Publication 408.
 - b. A 6 inch minimum compacted depth stable sub-base shall be provided, using PennDOT Type 2A aggregate or better, unless the Township pre-approves an alternative sub-base. The sub-grade shall be properly rolled and crowned.
 - 1) The Township may require a greater depth where necessary considering the conditions of the sub-grade. Materials that are unsuitable, wet soils and soils subject to frost-heave shall be removed and replaced, drained or otherwise stabilized to handle anticipated loads.
 - 2) The Township may require field and/or laboratory testing of the sub-grade, particularly if on-site shale is proposed to be used.
 - 3) The Township may require compaction tests, with the Township's costs reimbursed by the developer.

- c. A 4 inch minimum compacted depth 25mm Superpave Hot Mix asphalt base course shall be provided. This depth may be decreased to 3 inches if the depth of the sub-base is increased to 8 inches.
 - d. For local streets, a 1.5 inch minimum depth 9.5mm Superpave Hot Mix Asphalt Wearing Course shall be provided. Such depth shall be 2 inches for a collector street and 3 inches for an arterial street.
 - e. Where shoulders are required, PennDOT “Type 3” or better shoulders shall be provided on each side of the travelway.
 - f. All street construction materials shall be certified in writing by the supplier as meeting PennDOT or Township specifications as applicable. *The Township may require that a developer provide testing results for paving materials.*
7. Sub-drains. In poorly drained areas, suitable sub-grade drains or parallel drains may be required by the Township. Sub-grade drains shall conform to PennDOT Publication 408 and shall be provided with a suitable outlet.
8. Alleys and Shared Driveways. Alleys and shared driveways serving more than one lot shall be constructed with a 5 inch minimum compacted depth stone sub-base, 2 inch minimum compacted depth bituminous base course, and a 1.5 inch minimum compacted depth surface course. Shared driveways shall only be allowed under the conditions of Section 1012.E. If a shared driveway is more than 250 feet long, it shall include *at least one 9 by 20 feet* layby area *for every 300 feet* that allows one car to wait while another car proceeds.
9. Guide-Rails. Streets shall be designed with geometric features that minimize the need for guide-rails. Guide-rails shall only be installed where the result of striking an object or leaving the roadway would be more severe than the consequence of striking the guide-rail.
- a. Guide-rails shall be installed by the developer where necessary to meet the guide-rail standards in the PennDOT publication entitled “Guidelines for Design of Local Roads and Streets” or where otherwise required by the Board of Supervisors. Guide-rails shall meet the construction standards of PennDOT Publication 408 and PennDOT Standards for Roadway Construction.
10. Street Inspections. The entity constructing a street shall provide the Township Engineer with a minimum 5 business days advance notice before the start of initial construction of improvements and a minimum 2 business days advance notice before the following street construction is accomplished so that an inspection may be scheduled:
- a. Excavation of the road site.
 - b. Preparation of the road sub-grade.
 - c. Installation of the road sub-base.
 - d. Compaction of the base course.
 - e. Installation of paving material.

1001.L. Required Transportation Improvements.

1. Purpose. In recognition of Sections 503(2)(ii) and 503(3) of the Municipalities Planning Code, this Section is primarily intended to ensure that streets bordering a subdivision or land development are coordinated and of such widths and grades and in such locations as deemed necessary to accommodate prospective traffic and to facilitate fire protection and to ensure that the access into and out of subdivisions and land developments is sufficiently safe.
2. Process. This sub-section "L." shall be carried out through determinations of the Board of Supervisors, after considering any recommendations of the Planning Commission, the Township Engineer, the applicant, the applicant's professional representatives, any comments from PennDOT that may be provided regarding a State road and any professional traffic studies that may have been submitted.
3. On-Site / Abutting Traffic Improvements. If, in the determination of the Board of Supervisors, there is a reasonable relationship between the need for an "on-site improvement" and the traffic created by a proposed subdivision or land development, the applicant for such subdivision or land development shall be required to complete the needed improvement or fund his/her fair share of the cost of such transportation improvement and to dedicate sufficient street right-of-way for needed improvements.
 - a. Widening of Abutting Street. An applicant for any land development or subdivision shall be required to widen, pave and improve any abutting street and provide additional right-of-way as needed to meet current Township standards.
 - b. Existing Streets With Insufficient Right-of-Way. Where a public street exists with a right-of-way of less than the width required by this Section, then as part of any new subdivision or land development, additional right-of-way shall be dedicated to bring the adjacent street segment into conformance. For example, if a street has a 33 feet wide right-of-way, and a 50 feet wide right-of-way is required, and a subdivision only involves one side of the street, then the applicant shall dedicate 8.5 feet of additional right-of-way so that there is at least 25 feet of right-of-way from the original centerline of the street.
 - 1) Where a State road is involved, and PennDOT does not wish to accept the additional right-of-way, then the right-of-way shall be offered to the Township. If the Township does not wish to accept the additional right-of-way on a State or Township street, then the record plan shall state that the right-of-way shall be reserved for dedication in the future if needed.
 - c. Such improvements shall be required unless the Board of Supervisors determine:
 - 1) the subdivision or land development does not create any need for the improvement, or
 - 2) a modification is granted under Section 107, or
 - 3) that PennDOT specifically refuses in writing to allow such improvement to a State road in the foreseeable future.
 - d. Any improvement to a State road shall meet all PennDOT standards.
 - e. Fee in Lieu of Street Improvements. Where this Ordinance would require a widening of a street and/or the construction of curbing, and where the applicant desires to not complete such improvements, and where the applicant proves to the satisfaction of the Board of Supervisors that such widening and/or curbing is not essential at that location at the present time, then as a modification under this

Ordinance, the Board of Supervisors may offer the option of a fee in lieu of the widening or curbing.

- 1) The Township Engineer shall provide a review of the need for and cost of the widening or curbing to the Board of Supervisors. The fee shall be equal to 80 percent of the estimated costs of the street widening and/or curbing, unless another fee is established by resolution of the Board of Supervisors.
- 2) If the Board approves a request of the applicant to pay the fee in lieu of the street widening or curbing, then such fee shall only be used for public street or curbing improvements within the Township. Such funds do not necessarily need to be used on the street where the requirement was modified.
- 3) Such funds do not need to be kept in a separate bank account and are not escrow accounts, but should be identified as part of a Road Improvement Account.
- 4) *A waiver may be approved in any case, but such fee shall only apply for a land development or a major subdivision.*

4. Types of Required Traffic Improvements.

- a. The following shall be the definition of "on-site improvement," (unless this definition is amended by State law): "all street improvements constructed on the applicant's property, or the improvements constructed on the property abutting the applicant's property necessary for the ingress or egress to the applicant's property."
- b. On-site improvements may include, but are not limited to, a new or upgraded traffic signal, land dedication to improve an abutting intersection, realignment of an abutting curve in a road or the widening of the abutting cartway and right-of-way.

5. Funding. In place of completing a required street improvement as a condition of final approval, an applicant may enter into a legally binding development agreement with the Township for the applicant to fund the improvement, or his/her fair share of such improvement, as determined by the Board of Supervisors.

6. Staging. Any completion or funding of a required improvement may occur in stages in relationship to the stages of the development, if so stated in a legally binding development agreement and/or as a condition of final plan approval.

1004.M. Traffic Impact Studies.

1. Purposes. To enable the Township to assess the impact of a proposed development on the transportation system. To ensure that proposed developments do not adversely affect the transportation network. To identify any traffic problems associated with access from the site to the existing transportation network. To delineate solutions to potential problems and propose improvements to be incorporated into the proposed development.

2. Applicability.

- a. A traffic impact study shall be required for any subdivision or land development that at build-out after completion of all phases is projected to generate 250 or

more average daily trip ends. “Trip ends” shall mean the total number of trips both entering and exiting the proposed development. These projected trip ends shall be based on the latest edition of the publication titled “Trip Generation,” published by the Institute of Transportation Engineers, or upon traffic studies conducted within the last five years at comparable developments that are acceptable to the Township Engineer. The ITE land use codes shall be stated.

- b. If a development is proposed to be submitted in phases, the initial traffic study shall consider a reasonable estimate of the likely development in later phases, in addition to the current phase.
- c. The boundaries of the study area to be analyzed shall include those existing and proposed streets and intersections which may be affected by the proposed subdivision or land development. If there is any dispute as to whether existing and proposed streets and intersections may be affected or not, the final discretion shall rest with the Township Engineer or designated Traffic Engineer.
- d. In lieu of submitting a traffic impact study, under the provisions of Section 107, the Board of Supervisors may approve a modification to accept a fee from an applicant to be put towards the cost of a larger more comprehensive traffic study or to accept a developer making an improvement to a street that otherwise would not be required by the Township or PennDOT. For a larger traffic study, the Township shall have the authority to select the consultant or forward the funding to the County or PennDOT to conduct a study.
- e. Prior to preparing a Traffic Impact Study, the applicant is requested to meet with the Township Engineer and Township Staff, with officials of PennDOT and Lehigh Valley Planning Commission invited.

3. Traffic Impact Study Contents.

- a. Site Description. This section shall include the location, proposed land uses, acreage, construction staging and completion date of the proposed land development. Types of dwelling units and number of bedrooms shall be included for residential developments, and gross and usable floor area for non-residential developments. A brief description of surrounding land uses and other proposed land developments within the study area shall be provided. A study area map should also be included.
- b. Transportation Facilities Description.
 - 1) The study shall describe the proposed internal transportation system, including vehicular, bicycle, bus and pedestrian circulation, all internal roadway widths and rights-of-way, parking conditions, traffic channelizations and any traffic controls within the site. If the site will be served by public transit, the study shall describe any benches, shelter or transit signs that will be provided.
 - 2) The study shall describe location and design of proposed access, including sight distance limitations and distance from adjacent driveways and intersections.
 - 3) The report shall describe the external roadway system within the study area. Major intersections in the study area shall be identified and mapped. Any proposal for bus or van service shall be described. Pedestrian and bicycle

- facilities on abutting properties shall also be documented. All proposed or approved roadway improvements within the study area shall be noted.
- 4) The report shall list the proposed timing of major road improvements, including the Lehigh Area Transportation Improvement Program.
- c. Existing Traffic Conditions. Existing traffic conditions shall be documented for all streets and intersections in the study area. Traffic volumes shall be recorded for existing average daily traffic, existing peak hour traffic and for traffic during the development's peak hour. Complete traffic counts at all intersections in the study area shall be conducted, encompassing the peak hours of the development and roadway. A volume capacity analysis using the procedures of the current "Highway Capacity Manual" and based upon existing volumes shall be performed during the peak hour(s) of the development for the peak hour(s) of all roadways and major intersections in the study area. Levels of service shall be determined for each location.
 - 1) The study shall include information on traffic crashes in the study area for the previous 5 years, if such information is available from PennDOT or the Township.
 - d. Traffic impact of the Development. Estimation of vehicular trips to result from the proposal shall be completed for the peak hour(s) of both the street system and the development. Acceptable source(s) and methodology shall be followed. These generated volumes shall be distributed to the study area and assigned to the existing streets and intersections throughout the study area. Documentation of all assumptions used in the distribution and assignment phase shall be provided. Traffic volumes shall be assigned to all access points. Safety issues for any pedestrian crossings shall be described. Any characteristics of the site that will cause trip generation rates that vary from the ITE Manual shall be noted.
 - e. Analysis of Traffic Impact. The total future traffic demand based on full occupancy of the proposed subdivision or land development shall be calculated for the existing and proposed streets and intersections. This demand shall consist of the combination of the existing traffic expanded to the completion year through the use of an accepted background growth rate, the development-generated traffic, and the traffic generated by other proposed developments in the study area. To assist in determining the background growth rate, the Annual PennDOT Traffic Report shall be considered. A volume/capacity analysis shall also be conducted using the total future demand and the future roadway capacity. This analysis shall be performed using the peak hour(s) for all streets and major intersections in the study area. The Township Engineer may also require this analysis to be conducted for the peak hour(s) of the development. Volume/ capacity calculations shall be completed for all movements at major intersections. Levels of service for all streets and intersections shall be listed.
 - 1) The Study shall consider the year when the development will be complete, as well as a time period afterward.
 - 2) The Study shall describe the method that is used to allocate the direction of trips.
 - 3) As applicable, the Study shall analyze traffic signal warrants, traffic signal optimization, turn lane analysis and queue analysis.

- f. Conclusions and Recommended Improvements.
 - 1) Any movements on streets and intersections within the study area showing a Level of Service D or worse, based on the latest edition of the “Highway Capacity Manual,” shall be considered deficient. Specific recommendations for the elimination of these problems shall be listed. Unsignalized intersections shall be evaluated for a signal warrant. Highway capacity evaluations shall consider not only the overall intersection level of service, but also each approach and movement to identify any substandard values which need to be improved.
 - 2) All locations where the level of service for the completion year of the development is deficient without the proposed development, the study shall determine improvements which would provide a level of service and delay no worse than conditions without the subject development. These improvements may include street and intersection design and improvements, traffic signal installation and operation, traffic signal timing and other improvements. The study shall also provide an analysis to determine improvements which would eliminate all deficient levels of service.
 - 3) Actions to facilitate use of bus or van service and carpooling should be included, if applicable.
 - 4) The listing of recommended improvements for both streets and transit shall include, for each improvement, the party responsible for the improvement, a preliminary cost estimate and funding of the improvement, and the phase of development during which the improvement is proposed to be completed. Any roadway improvement which requires increased right-of-way shall be identified. The Study should estimate the applicant’s fair share of the costs of the needed improvements.
 - 5) The traffic impact study may be used as a basis for a Township requirement under Section 1004.L. or another section of this Ordinance
 - 6) Improvement plans shall not be submitted to the PA Department of Transportation (PennDOT) before they are submitted to the Township. Approval of a site access plan by PennDOT does not guarantee approval by the Township.
- g. Preparation and Review. The preparer of the traffic impact study shall be a professional engineer or transportation planner. The developer shall reimburse the Township for reasonable fees and expenses incurred by the Township Engineer or Traffic Engineer for the review of the developer’s traffic impact study and plans.
- h. Data sources and methodology shall be described in the report.

1005. BLOCKS.

- 1005.A. Maximum Length. Residential blocks shall not exceed 2,000 feet in length in subdivisions using an average lot size of 1 acre or larger and shall not exceed 1,500 feet in length in subdivisions having an average lot size less than 1 acre. Where this distance would be

exceeded, the Township may require the construction of a cross-street, where topographically feasible.

1. Pedestrian Crossings. The Board of Supervisors may require that a pedestrian access easement be provided to provide pedestrian access where street connections are not available to serve the same purpose. The Township may require a marked crosswalk to be created.
2. Future Street. Blocks shall be considered to be separated by the reservation as part of an approved subdivision plan of a 50 feet minimum right-of-way reserved for a future cross-street, such as a street is intended to serve future interior lots. Such future street is not required to be constructed until such time as the lots fronting on it are subdivided. Such right-of-way shall be retained in the same ownership as the abutting interior lot(s) until a street may be developed. Potential future street extensions shall be shown on the plan.

1005.B. Blocks shall be of sufficient width to permit 2 tiers of lots, except where access is limited by virtue of an adjoining arterial street or by virtue of topographic limitations, unless permitted by the Board of Supervisors.

1006. LOTS; FLAG LOTS.

1006.A. Zoning. All lots shall conform to all requirements of the Township Zoning Ordinance, as were in effect at the time such subdivision plan was duly submitted.

1006.B. Street Frontage. Section 1004.A.2. shall apply.

1006.C. The average depth-to-width ratio of a lot shall generally not be greater than 3 to 1, unless otherwise permitted by the Board of Supervisors to accommodate an unusual configuration of the site.

1006.D. Side lot lines shall abut and be approximately at right angles to straight streets and on radial lines to curved streets. Pointed or very irregularly shaped lots shall be avoided.

- 1006.E. 1. Lots abutting two streets on two non-contiguous sides shall ordinarily not be created except as needed to avoid direct vehicular access onto an arterial or collector street by individual driveways.
2. Rear Yard Buffers Along Collector or Arterial Streets.
- a. Any residential lot of less than 2 acres with a rear yard directly abutting a collector or arterial street shall along such rear yard include a 10 feet wide planting strip along the back of the lot, in addition to the minimum yard requirement, with access across this strip clearly prohibited on notes on any approved plan.
 - b. In addition to any street trees required by Section 1019 of this Ordinance, this planting strip shall include evergreen plantings meeting the buffer yard requirements of the Zoning Ordinance or alternative landscaping approved by the Township. American Arborvitae and similar weak-stem plants shall not be used.
 - c. Any fencing in the rear of such lots shall be placed on the inside of such plantings. Such plantings shall be placed so that they do not obstruct safe sight distance.
3. See Section 1004.A.2.b.

1006.F. Flag Lots. Flag lots are lots that do not meet the required minimum lot width at the minimum building setback line, and which have an elongated and more narrow extension connecting the bulk of the lot area with a street. A flag lot shall only be approved where the applicant proves that a flag lot is necessary to minimize the amount of disturbance of natural features or prime agricultural land, and shall not be used to increase the number of dwelling units or lots that would otherwise be allowed on a tract. A flag lot shall need specific approval as such by the Board of Supervisors, after providing the Township Engineer and Planning Commission with an opportunity for comment.

- 1. A maximum of one flag lot shall be allowed for each 3 proposed new lots in a subdivision. The Township may require that a flag lot include a prohibition against future subdivision.
- 2. Only one tier of flag lots shall be allowed.
- 3. The flag lot shall have a driveway within the same lot, which shall connect to a public street.
- 4. A flag lot shall only be allowed for one of the following:
 - a. a single family detached dwelling lot with a minimum lot area of one acre, unless a larger lot is required by the applicable zoning district; or
 - b. a lot that is only occupied by a well, sewage pumping station, stormwater detention basin or similar utility and which is deed restricted against further development.
- 5. The minimum lot width shall be met at the proposed front yard principal building setback line, which shall not be more than 250 feet from a public street.
- 6. The driveway shall be suitable for access by emergency vehicles. See Section 1004.A.4.

1007. RECREATION AREAS AND FEES.

1007.A Purposes. To provide adequate open spaces, recreational lands and recreational facilities to serve new inhabitants/occupants of new developments, for both active and passive recreation.

To recognize and work to carry out the Park, Recreation and Open Space Plan for Upper Milford Township, which is adopted as Recreation Plan for the Township or by a successor document that may be adopted as the Recreation Plan for Upper Milford Township.

1007.B. Applicability. This section shall apply to any subdivision or land development for which a preliminary plan or a combined preliminary/ final plan is submitted after the enactment date of this amendment.

1. This Section 1007 shall not apply to plans that the Township determines only involve adjustments or corrections to an approved preliminary plan or a preliminary plan that was actively before the Township for consideration as of the date of the adoption of this Section, provided the adjustments do not increase the number of proposed dwelling units.

1007.C. Limitations on Use of Fees.

1. Any fees collected under this section shall be placed within the Township Recreation Escrow Fund, or its successor account.
2. To make sure that the lands and facilities are accessible to the inhabitants of the developments that paid fees towards their cost, such fees should only be used within a 5-mile radius of the boundaries of the subdivision or land development that paid the fees, unless the fees are used within a recreation area open to the public that the Township intends to serve the entire Township.
3. Such fees shall only be used for the following: acquisition of public open space/recreation land and related debt payments, development of public recreational facilities, landscaping of public open space and necessary engineering and design work.

1007.D. Land to be Preserved. Any subdivision or land development regulated under this Section 1007 shall be required to preserve the specified amount of recreation land, unless the Board of Supervisors and the applicant mutually agree that recreation fees shall be required in-lieu of land.

1. As a general non-binding guideline, it is the intent of this Section that smaller developments (such as 10 or fewer dwelling units) that do not include land that is adjacent to existing publicly-owned land shall be required to pay a recreation fee in lieu of dedicating land. However, if the applicant refuses to pay such fees, then recreation land shall be required to be preserved.
2. The land and fee requirements of this section shall be based upon the number of new dwelling units that would be allowed on the lots of a subdivision or land development after approval.
3. Prime Recreation Land. For the purposes of this section, the term “Prime Recreation Land” shall mean land proposed to be established as recreation land that would meet all of the following standards:

- a. less than 6 percent slope,
 - b. not a “wetland” under Federal and/or State regulations,
 - c. be part of a contiguous tract of at least 2 acres (which may include existing adjacent recreation land), and
 - d. not be within the “100 Year Floodplain” as defined by official floodplain maps of the Township.
4. Amount of Recreation land. If a subdivision or land development is required to include recreation land, the following amounts for each permitted new dwelling unit shall apply:

Percentage of the Total Required Recreation Land that Would Meet the Definition of “Prime Recreation Land”:	Minimum Required Recreation Land Per Permitted Dwelling Unit
0% to 25.0%	5,000 square feet
25.1% to 99.9%	2,500 square feet
100%	1,250 square feet

1007.E. Fees. If the Board of Supervisors determines that a proposed subdivision or land development is required to pay fees-in-lieu of dedicating recreation land, this fee shall be \$3,150 for each new dwelling unit, unless such fee is updated by future action by the Board of Supervisors.

1007.F. Decision on Land vs. Fees. The Board of Supervisors shall determine whether a land dedication would be in the public interest, or whether the payment of fees is required. This initial determination should, but is not required to, be made at the time of sketch plan review. The Township should, at a minimum, consider the following in this decision:

1. Whether the land in that location would serve a valid public purpose.
2. Whether there is potential to make a desirable addition to an existing public or School District recreation area or to create a greenway along a creek.
3. Whether the proposed land would meet the objectives and requirements of this section and any relevant policies of the Comprehensive Plan and any Recreation or Open Space Plan.
4. Whether the area surrounding the proposed development has sufficient existing recreation and open space land, and whether it is possible for pedestrians and bicyclists to reach those lands.
5. Any recommendations that may be received from the Planning Commission, the Township Engineer, the local School Board or School District staff and the Township Parks and Recreation Board.

1007.G. Recreation Land to be Preserved.

1. Suitability. Recreation land shall be suitable for its intended purpose, in the determination of the Board of Supervisors. The applicant shall state in writing what improvements, if any, he/she will commit to make to the land to make it suitable for its intended purpose, such as grading, landscaping, or development of trails. Such land shall be free of construction debris at the time of dedication. Proposed recreation land shall be suitable to meet the needs of the residents of the development.
2. Ownership. Required recreation land shall be dedicated to the Township, unless the Board of Supervisors agree to accept a dedication to any of the following: the School District, the County, a State agency charged with maintaining recreation land, a similar governmental agency, an incorporated property-owner association (such as a homeowner or condominium association) or an established environmental organization acceptable to the Board of Supervisors. In the case of a rental development, the Township may permit the recreation land to be retained by the owner of the adjacent principal buildings.
 - a. If recreation land is to be owned by a property-owner association, the developer shall be required to establish such association in a form that requires all property owners within the development to annually contribute to the maintenance of the recreation land.
 - 1) Any property-owner association agreements regarding required recreation land shall be subject to acceptance by the Board of Supervisors, based upon review by the Township Solicitor.
 - 2) Prior to the sale of any dwelling unit or lot, all deeds shall require each property-owner to pay fees on a regular basis for the maintenance and other expenses of owning such land. The property-owners shall be incorporated with covenants and bylaws providing for the filing of assessments. After providing notice to affected owners, the Township shall have the authority to establish municipal liens upon all properties in the association to fund maintenance of the land and Township legal costs if the property-owners association does not fulfill its responsibilities.
 - 3) An orderly process shall be established for the transfer of the land to the association. The dedication of maintenance responsibilities by a developer to a property-owners association shall not occur until such association is incorporated and able to maintain such land.
 - 4) The property-owners association shall be established in full compliance with applicable State law, including the Uniform Planned Community Act.
 - b. Transfer to another Entity. If the approved plan states that ownership of and/or responsibilities to maintain the recreation land are given to a particular entity, then any transfer of ownership or responsibilities to another entity shall require pre-approval by the Board of Supervisors. Where land is to be owned by a conservation organization, a process shall be established for the land to transfer to a different organization if the first organization is not able to fulfill its obligations.
 - c. The Board of Supervisors shall have the authority to refuse to accept an offer of dedication of recreation land to the Township, and/or to determine that an offer does not meet Township requirements.

3. Easements. Any required recreation land dedication shall include a conservation easement to permanently prevent its development for buildings, except buildings for approved types of non-commercial recreation or to support maintenance of the land. Such conservation easements shall, at a minimum, be enforceable by the Board of Supervisors. The Supervisors may require that the easements also authorize their enforcement by a suitable third party.
 4. Priorities. Priority shall be given to dedication of land that would be suitable for a) additions to existing public schools and public parks, or b) preservation of woods, steep slopes or other important natural features or land along a creek, or c) for centralized active recreation.
 5. Suitability. Land that is not suitable for active or passive recreation shall not be permitted to meet the requirements of this section. Any land area used to meet the requirements of this Section 1007 shall meet the definition of “Recreation Land.” Portions intended for active recreation shall be well-drained, of less than 6 percent average slope and not require filling in of a wetland for use.
 6. Access and Contiguosness. Recreation land within a subdivision or land development shall be contiguous, except as may be specifically exempted by the Board of Supervisors, if necessary considering the unique features of the site, and shall have a minimum of 20 feet of road frontage at a location that allows access for maintenance and by pedestrians.
 7. Other Ordinances. Any required land dedication or fees under this Section shall be in addition to any land dedication or improvement requirements of any other Township ordinance.
 - a. However, the Board of Supervisors may allow common open space provided under a zoning ordinance provision to also count towards the recreation land requirement if the land will be improved for recreation, capable of meeting all of the requirements of this Section, and be available without charge on a daily basis to the public.
 8. Residual Lands. If only a portion of a larger tract of land is currently proposed to be subdivided, or the applicant owns one or more adjacent tracts that are not currently proposed to be subdivided, the applicant shall provide a sketch of a possible future land dedication on these adjacent lands. The intent is to coordinate current plans with any future development, even in the long-term.
 9. Coordination With Future Adjacent Dedication. The Board of Supervisors may require that a required land dedication within a property currently being subdivided be placed along an edge of the property so that it may, in the future, be combined with a recreation land/ open space dedication on the edge of an adjoining property when that adjoining property is subdivided or developed.
- 1007.H. Combination of Land and Fees. Upon mutual agreement of the Board of Supervisors and the applicant, the Township may accept a combination of recreation land and fees-in-lieu of land

to meet the requirements of this section for a subdivision or land development. This combination shall be based upon the recreation land requirement applying for a certain number of dwelling units and the fee-in-lieu of land requirement applying for the remaining development.

1. For example, if a development included 25 dwelling units, recreation land could be required for 15 dwelling units and fees could be required for 10 dwelling units.

1007.I. Timing of Residential Fees. Fees required by this Section for all of the dwelling units shall be paid prior to the recording of the final plan, except as follows:

1. If the required fee would be greater than \$4,000, and the applicant and the Township mutually agree to provisions in a binding development agreement to require the payment of all applicable recreation fees prior to the issuance of any building permits within each clearly defined phase or sub-phase of the development, then fees are not required to be paid prior to recording of the final plan but may instead be paid within the requirements of that development agreement.
2. If the applicant agrees to pay such fees in installments, then all such fees shall not be considered to be “paid” for the purposes of any applicable time limitations for utilization under the Municipalities Planning Code until all such fees are paid in full, including all installments and phases.

1007.J. Facilities in Place of Land or Fees. An applicant may submit a written request for a modification of the requirements of this section by offering to construct substantial permanent recreation facilities within the proposed subdivision or land development or on public parkland. Such modification shall only be approved if the applicant clearly proves to the satisfaction of the Board of Supervisors that the facilities will serve a valid public purpose, will be designed following modern standards in a durable manner and will have a higher market value than the land or fees that would otherwise be required.

1. A modification of these requirements may also be approved by the Board of Supervisors if the applicant donates or sells appropriate public recreation land to the Township or the School District. In such case, the applicant shall provide a written appraisal from a qualified professional that the market value of the donation or price reduction is greater than the value of the fee or land requirement that is waived. In such case, the land shall be determined to be suitable for public recreation by the Board of Supervisors.

1008. STORM WATER MANAGEMENT AND FLOODPLAIN. **See the provisions of the Township Stormwater Management and Floodplain Regulations.**

1008.A. Landscaped Screening of Detention Basins.

1. A detention basin with a basin depth of greater than 20 inches shall have landscaping that screens it from view of existing dwellings, a residential zoning district or a public street, unless the basin would meet either of the following conditions:

- a. it would have an average slope of less than 4 to 1 on the inside of the berm of the basin and both the inside and outside of the basin would be planted in grass and intended to be mowed or planted in other attractive vegetative ground cover, or
 - b. it would be designed to closely resemble a natural pond and be a scenic asset.
2. Any required screening shall meet the *landscaping* standards of the Township Zoning Ordinance, unless the Board of Supervisors approve an alternate landscaping arrangement that serves the same purposes. This landscaping shall not be required along an area where natural vegetation will be maintained that will completely fulfill this purpose.
 3. Thorny and prickly shrubs (that are also attractive) are encouraged to be used around detention basins to discourage entry by children, if there may be a hazard.
 4. Areas of stormwater basins that are visible from streets and dwellings shall be attractively maintained.
 5. Recreation. When reasonable, efforts should be made to allow suitable recreational uses of portions of detention areas. This might include designing a detention basin with a low-flow channel so that only a portion would be wet after a minor storm, and the remainder would be well-drained during all except the most serious storms. These areas may be acceptable at the discretion of the Township as part of any Township requirement to provide recreation land.

1008.B. Storm Water Easements.

1. Where Required. Where a subdivision or development is traversed by a watercourse, drainage way, channel or stream that the Township Engineer determines is subject to significant stormwater flows, there shall be provided a drainage easement established along the following:
 - a. the 100-year floodway, where that is defined;
 - b. where a 100-year floodway is not defined, a width shall be used that includes a minimum of 25 feet on each side of the top of the primary bank of the waterway.
2. The drainage easements required by the above subsection are intended to preserve the unimpeded flow of natural drainage and to provide for future possible widening, deepening, relocating, improving or protecting of such drainage facilities. The Township Engineer may require up to a 0.5 foot freeboard and/or an additional 10 feet building setback if deemed necessary along newly constructed watercourses.
3. If a major man-made drainage channel would pass within close proximity to homes and possibly threaten the safety of persons, the Board of Supervisors, based upon the advice of the Township Engineer, may require such certain lengths of such channel to be placed within appropriate underground pipes.

4. It shall be the responsibility of the applicant to obtain all stormwater easements on, over or through other properties that are needed to carry out the proposed storm management plan.
5. Areas where stormwater easements have or will be granted shall not be obstructed during or after construction.
6. See also the easement requirements in Section 1011 of this Ordinance, including provisions regarding maintenance and obstructions.

1008.C. Floodplain Regulations. See the Township Floodplain regulations and the relevant provisions of the State Construction Codes.

1. Fill shall not be allowed within the 100 Year Floodplain if it would cause any increase in flood levels.
2. If fill is used within the 100 Year Floodplain, it shall meet the following additional requirements:
 - a. It shall extend laterally at least 15 feet beyond any proposed building footprint.
 - b. It shall consist of well-compacted materials to provide the necessary resistance to erosion, scouring or settling.
 - c. It shall not have a finished slope greater than 3:1.
3. The finished elevation of a proposed street shall be *above* the 100 year flood level. The applicant shall provide profiles and elevations to show that this requirement will be met.
4. Any structure within the 100 year floodplain shall include openings as needed to allow flood flows to be discharged without increasing flood heights.
5. Sanitary sewage systems shall be floodproofed up to the 100 year flood level.
6. No on-lot septic system shall be located within the 100 year floodplain.
7. All water supply facilities shall be floodproofed up to the 100 year flood level and shall be designed to minimize infiltration of floodwaters into the water supply.

1008.D. Fencing. The Board of Supervisors may require secure fencing to be placed around a stormwater basin.

1009. SEWAGE DISPOSAL SYSTEMS.

1009.A. In General.

1. All subdivisions and land developments shall be served with an approved and adequate sewage disposal system (either on-lot or public) that will meet State and Township regulations.
2. Public Sewage Connections. Any principal building or use within a subdivision or land development that generates wastewater and that in the determination of the Board of Supervisors, based upon the advice of any applicable municipal authority and the Township Engineer, could reasonably connect into a public sewage system *may be required by the Township* to connect into that system.
 - a. The applicant shall be responsible to pay such reasonable capital expenses that are necessary for such connection.

1009.B. Central Sewage Service.

1. If a municipality or a municipal authority is to provide the central sewage service, such agency shall have the authority to approve or reject the proposed sewage collection system for just cause.
2. Non-Public Sewage Service. If non-public central sewage service is proposed, the Board of Supervisors shall have the authority to permit or not permit such service to meet the sewage requirements of this Section based upon:
 - a. whether public sewage service is expected to be available within 5 years of the date of preliminary plan approval,
 - b. whether the proposed system would be consistent with the Township's official Sewage Facilities Plan and
 - c. whether the system would include an appropriate permanent system for professional operation and maintenance.

1009.C. On-Lot Sewage Disposal System.

1. If connection to a public sewage system is not required at the time of occupancy, and if non-public central sewage system is not approved by the Township under the Township Sewage Facilities Plan, then each lot shall be required to be served by an on-lot sewage disposal system that will meet all applicable State regulations. Each such proposed location shall be tested and approved by Township Sewage Enforcement Officer, prior to approval of the Final Plan. See the requirements of DEP for a planning module.
2. Portable chemical toilets allowed as per DEP regulation or other approved privies shall not be used as a primary method of sewage service for a subdivision or land development that operates more than 10 days in any calendar year, other than publicly-owned outdoor recreation uses and construction sites.
3. Each new lot using on-lot septic service shall include a tested alternate septic system location meeting all DEP regulations, which shall be kept available for use if needed.
4. The applicant shall submit results or a summary of the tests of required on-lot septic tests and shall show approved test locations on the Preliminary Plans in accordance with DEP planning module requirements.

1009.D. Laterals. Each lot with central sewage service shall be served by a separate sewage lateral.

1010. WATER SUPPLY SYSTEMS.

1010.A. In General.

1. All subdivisions and land developments shall be served with an adequate on-lot or central water supply system that will meet DEP and Township requirements.
2. Required Connections to Central Water Systems.

- a. The Board of Supervisors, after requesting any recommendations of the Planning Commission, the Township Engineer and the appropriate water supplier, *may* require all lots and principal uses within a subdivision or land development to be connected to an existing public or Township-approved central water system where the Board of Supervisors determines that such connection would be feasible, cost-effective and reasonable, considering the distances that the lines would need to be extended and the average cost per dwelling or *lot*.
 - b. If an applicant does not wish to extend central water service, then the Township may require the applicant to provide a comparison of the estimated total costs of extending the central water service vs. the total costs of developing wells. Such cost comparison shall be prepared by a professional and be provided to the water supplier and the Township Engineer for review. This analysis is intended to assist the Township in determining whether a water extension would be reasonable.
 - 1) The Township shall also have the authority to require a subdivision or land development to include an extension of central water service if such service is needed to resolve a significant public health or safety hazard, or where such extension is required by another ordinance or utility agreement.
3. Dry Water Lines.
- a. The Board of Supervisors, after requesting any recommendations of the Planning Commission, the Township Engineer and the appropriate water supplier, may require that a subdivision or land development include the installation of "dry" water lines if the Board of Supervisors determine that such requirement would be reasonable and that such development is likely to be able to be served by an extension of an existing Township-approved central water system within 10 years.
 - 1) The Township is not responsible to guarantee that such water connection will occur or be possible within the 10 year period.
 - b. Such lines shall be required to meet the construction standards of the water supplier to which the lines are intended to be connected.
 - c. A developer in such case may only be required to construct:
 - 1) such mains and laterals that would be needed to be located within the right-of-way of a newly constructed or reconstructed street(s) and
 - 2) such other mains that would be needed within the boundaries of the subdivision or land development.
4. Private Water System.
- a. The Board of Supervisors, based upon recommendations of the Township Engineer, may require or permit the development of a new private central water system if such system can reasonably be expected to be connected into an extension of an existing central water supplier within 10 years.
 - b. Such system in that case shall be constructed following official standards of the water supplier to which it is intended to be connected.
 - c. In such case, the approved plan should include a specific provision offering dedication of such system to the central water supplier in the future, without any purchase cost by such central water supplier.

1010.B. Central Water Supply System.

1. Water Supplier Approval. Proposed extensions of central water systems shall meet all applicable procedures, reviews and requirements of any appropriate municipal authority or water company. Such extension shall be approved by such agency prior to Final Plan approval, although specific detailed service agreements are not required to be signed until prior to recording.
2. Non-Public Supplier. Any new central water system that is not owned by a public authority or municipality shall be found to be acceptable in capacity, pressure, design and construction by the Board of Supervisors, based upon review of the Township Engineer. The Board of Supervisors may deny permission for a subdivision or land development to be served by a non-public central water system if such system cannot guarantee sufficient water pressure and capacity and would not include a suitable process for long-term operation and maintenance. The applicant may be required by the Township to establish a test well prior to recording of any lots to show that adequate water will be available and a back-up well.

1010.C. On-Lot Water System (Wells).

1. Well Locations. When a subdivision or land development is not required to connect to a central water system, acceptable locations for wells shall be shown on plans and each well shall be setback a minimum of 100 feet from any on-lot septic system.
2. Setback. Wells should be located no closer than 25 feet from any future street right-of-way. Wells should also be located to meet minimum requirements of the Federal Housing Administration, in case a FHA mortgage may be sought.

1010.D. Fire Hydrants. All subdivisions and land developments that will be served by central water service shall provide fire hydrants as needed with appropriate water pressure so that all non-residential principal buildings and all dwelling units are within 500 feet of an active fire hydrant. Such distances shall be measured along lengths that are accessible to firefighters.

1. The fire hydrant shall have connections compatible with those used by the Township fire companies.
2. The Township may require that the applicant prove that fire flows will be not be less than 500 gallons per minute in single family detached residential areas and 1,000 gallons per minute in other developed areas, at 20 pounds per square inch residual pressure.

1011. OTHER UTILITIES; UTILITY EASEMENTS.

1011.A. Utilities. All electric power service lines (as opposed to distribution lines) and all telephone, cable television (where available) and natural gas service lines within a new subdivision or land development shall be placed underground.

1011.B. Easements. Easements shall be provided as follows:

1. Stormwater drainage, sanitary sewage, central water, emergency access and other types of easements shall be provided as determined to be needed by the Township and as indicated on the plans.
2. Locations. All lots shall include a stormwater drainage and utility easement around the perimeter of each lot, including adjacent to the street right-of-way. However, such easements shall not be required where buildings are to be attached at a lot line.
3. Width. The standard minimum width of a stormwater drainage or underground utility easement shall be 15 feet, which may be reduced to 10 feet for each lot if a 10 feet minimum easement exists on the abutting side of the abutting lot.
4. See also drainage easement provisions in Section 1008 of this Ordinance.
5. Additional width of easements shall be provided if required by the utility provider or the Board of Supervisors, based upon advice of the Township Engineer. The easement widths along side lot lines may be reduced if the Zoning Ordinance allows a principal building setback that is more narrow than the width of the easement that would otherwise be required.
6. Separation. Minimum separation distances between utility lines shall be as required by the applicable utility or as deemed necessary by the Township Engineer.
7. Utilities. If any activity is proposed within the right-of-way of an underground pipeline or utility, the applicant shall provide written evidence from the operator of such pipeline or utility that such activity is acceptable under their safety standards and the terms of that right-of-way.
8. Maintenance and Obstructions. The owner of the lot shall maintain an easement in such a condition that does not inhibit its intended purpose(s). Fill or structures shall not be placed in an easement in a way that inhibits its intended purpose(s). Specifically, structures or grading that could alter or obstruct stormwater flows in violation of the approved Final Plan shall be prohibited within storm water easements.
9. Township Entry. The Township at its option shall have the right to enter a stormwater easement or any municipal easement to maintain it or improve it for its intended purpose(s), although the Township does not accept the responsibility to complete such work.
10. *The following note or a Township-approved equivalent may be required to be placed on the Record Plan, unless another method of maintenance is specifically approved by the Township. The property owner shall have the responsibility for the perpetual maintenance of the permanent stormwater management facilities. No changes shall be made to the stormwater management facilities or finish grading without prior written approval from the Township. A blanket easement is hereby granted giving the Township the right, but not the obligation, to enter the property to perform any required maintenance which has not been properly performed in a timely manner. The property owner shall be responsible for the cost of any maintenance which is performed by the*

Township. The Township shall lien the property for said costs until the Township has been reimbursed in full.

1012. ACCESS DRIVES AND DRIVEWAYS.

1012.A. Construction Standards. See Section 1004.

1012.B. Access; State Roads. A State Highway Occupancy Permit is required for all access onto or work within the right-of-way of a State road. A Township Driveway Permit shall be obtained before any vehicle access is allowed from a State road or Township-owned street.

1. If the Township becomes aware that a State Highway Occupancy Permit is needed, and one has not been issued, the Township may delay the issuance of a Construction Permit and/or Occupancy Permit until such time as such State Permit is issued.

1012.C. Slope and Emergency Access.

1. The maximum slope of an access drive or driveway shall be 14 percent, except the first 20 feet adjacent to a cartway of a street shall have a maximum slope of 4 percent.
2. See Section 1004.A.4.

1012.D. Drainage. The developer shall make adequate provisions to maintain uninterrupted parallel drainage along a street where intersected by an access drive or driveway. Access drives and aisles within parking lots shall be graded and drained to keep the primary travel lane free of stormwater.

1012.E. Shared Driveways. Unless otherwise approved, a driveway shall serve a maximum of one residential lot. A driveway serving more than one residential lot shall only be approved if the applicant proves to the Board of Supervisors that it is needed because of a sight distance concern, to provide proper access management along a road, or to minimize disturbance of natural features or agricultural areas.

1012.F. Turnarounds. For lots abutting collector streets, driveways shall be designed with a location on the lot to turn a vehicle around, so as not to require a vehicle to back out onto that collector or arterial street.

1013. OFF-STREET PARKING CONNECTIONS.

1013.A. Interconnected Parking Lots. The Board of Supervisors may require that the following methods be used adjacent to a collector or arterial street where two lots that are each intended for current or future business uses will be contiguous to each other.

1. When two contiguous business uses or lots are in common ownership at the time of subdivision or land development application, the parking lots shall include an inter-connection to allow motorists and pedestrians to travel from one business to another business without needing to re-enter a public street.

2. Where two contiguous lots involving current or future businesses are not in common ownership, the applicant for a subdivision or land development shall seek permission from the abutting lot owner to allow a vehicle interconnection between the parking lots. Unless the abutting property-owner refuses to permit the interconnection, the subdivision or land development shall include the construction of a vehicle and pedestrian inter-connection between the parking areas.
 - a. If the abutting property-owner refuses to permit the inter-connection or the inter-connection is currently not feasible, the Board of Supervisors may require that the subdivision or land development include an easement allowing a future inter-connection and/or construct the inter-connection as a “stub” up to the applicant’s property line.
3. Where an interconnection is required or planned between two uses or lots, the subdivision or land development shall include a suitable cross-easement that permits vehicles and pedestrians from one use or lot to have access through the parking lot and driveway of the adjacent use or lot.

1014. CURBS.

- 1014.A. Curbs shall only be required where the Board of Supervisors determines they are necessary. Such determination shall consider comments of the Township Engineer and should consider whether the curbs are needed to continue existing curbing along an existing street, whether they are needed for stormwater management purposes, and/or whether they are needed for road edge stabilization.
- 1014.B. If curbs are not provided, appropriate stabilized drainage channels designed to meet the Township Stormwater Management Ordinance shall be required along all streets, within the street right-of-way, or drainage easements.
- 1014.C. Required curbs shall meet the following specifications, unless other specifications are pre-approved by the Township:
 1. Only straight or slant concrete curbs shall be provided, unless a modification is approved under Section 107, *such as for granite curbing*. Such curbs shall meet construction specifications of PennDOT Publication 408.
 2. Gutter design shall be subject to the approval of the Township Engineer based upon standard engineering practices. *The curb reveal shall be between 7 and 8 inches.*

1015. SIDEWALKS, PATHWAYS AND DRIVEWAY APRONS.

- 1015.A. Sidewalks built to Township specifications shall be required where the average residential density exceeds 3 dwelling units per acre or where the Board of Supervisors determine they are necessary for safe pedestrian movement, such as near a school.
 1. As a modification under Section 107, an applicant may propose an alternate system of pathways, such as a crushed stone or bituminous pathway, that serve the same purposes as sidewalks and which guarantee public access, but which are not necessarily within a street right-of-way, *if approved by the Township Engineer.*

1015.B. Pathway or Bikeway.

1. If deemed necessary for the convenient and safe circulation of bicycles and pedestrians, the Board of Supervisors, upon the recommendation of the Planning Commission, may require that a major subdivision or land development include the construction of a pathway or bikeway.
2. A bikeway/pathway shall have a minimum width of 6 feet and a maximum width of 12 feet. It may be required to be placed within a street right-of-way in place of a sidewalk, or may be placed elsewhere on a lot within an easement or other right-of-way.

1015.C. Location and Width of Sidewalks.

1. Sidewalks, where required or provided, shall be located within the street right-of-way and should be no closer than 4 feet from the curb line. Any area between the sidewalk and curb shall be planted in an attractive vegetative ground cover, such as grass. This strip shall only be paved at driveway entrances.
2. Any required sidewalks shall have a minimum width of: a) 5 feet along arterial streets or along routes used to access primary or secondary schools and b) 4 feet along collector or local streets in other locations.

1015.D. Construction.

1. Sidewalks shall meet construction specifications in PennDOT Publication 408.
2. Bikeways/pathways shall be constructed of a one inch bituminous surface course, a 1.5 inch bituminous binder course, and 6 inches of compacted gravel or crushed stone, unless an alternative standard is pre-approved by the Township. To the maximum extent feasible considering topography, pathways should be accessible to persons in wheelchairs. Stop signs should be posted along bikeways where they meet streets.

1015.E. Maintenance. It shall be the responsibility of the adjacent landowner to maintain, plow snow and remove ice off of and repair sidewalks.

1015.F. Wheelchair Ramps. Ramps shall meet the requirements of the Americans With Disabilities Act and accompanying Federal regulations.

1016. STREET LIGHTING.

1016.A. Street lights or other Township-approved lighting *may be* provided and installed by the developer along streets within and abutting a proposed subdivision or land development in the following situations:

1. *One or more lights may be required* at or near an intersection of 2 or more streets; and
2. *One or more lights may be required* at other locations where the Board of Supervisors deems them necessary to provide safe traffic or pedestrian circulation, to illuminate curves in streets or to illuminate the more isolated areas of a development.

- 1016.B. The developer shall coordinate with the electric utility regarding the responsibilities between the developer and the utility, and shall reimburse the utility for its reasonable costs for such work.
- 1016.C. Private Lighting. On all private streets, parking areas and other areas requiring lighting, the developer shall provide materials, installation, energizing and power for all lighting systems necessary for security and public safety. A system acceptable to the Township shall be established for the maintenance of such lights. *The Township may require that business and multi-family parking lots and related walkways maintain a minimum 0.5 footcandles of illumination during hours of use.*
1017. STREET IDENTIFICATION SIGNS.
- 1017.A. Any new street name signs that are needed shall be provided and installed by the developer, or if the Township volunteers to provide and install such signs, the developer shall reimburse such costs.
- 1017.B. Street names are subject to the approval of the Township. Names shall continue the name of any street with the same or similar alignment.
- 1017.C. Names shall not duplicate or be closely similar to the name of another street within the Township, the same fire company or ambulance service district or the same 5 digit zip code area. The street names shall be submitted for acceptance by the U. S. Postal Service and County Emergency Communications to avoid duplications.
1018. REGULATORY SIGNS. The developer shall install Township-specified, or shall reimburse the Township for the costs of supplying and installing, needed traffic regulatory signs and street name identification signs on public streets. The developer shall be responsible to provide and install signs on private streets. All traffic regulatory signs shall meet current standards of PennDOT.
1019. LANDSCAPING.
- 1019.A. Street Trees. Within and abutting all land developments and major subdivisions, along any existing or proposed street, or any access drive serving more than one commercial, industrial or institutional principal use or any access drive serving 5 or more dwelling units, street trees are required to be planted. However, street trees shall not be required: 1) along a single family detached residential lot or agricultural lot with a lot area of greater than 3 acres, or 2) where the Township determines that existing healthy trees proposed to be preserved will serve the same function.
1. The Board of Supervisors may approve other species of trees than those listed below if the applicant proves to the satisfaction of the Supervisors that the trees would be sturdy, attractive and resistant to disease and road salt.
 2. A tree required by this Section shall be of the following species. This list shall not regulate types of trees that are not required to be planted by this Ordinance.

Acer rubrum - American Red Maple
Acer saccharum - Sugar Maple
Carpinus - Hornbeam
Celtis occidentalis - Common Hackberry
Fagus sylvatica - European Beech
Fraxinus pennsylvanica - Green Ash
Fraxinus americana - White Ash
Ginkgo biloba fastigiata - Maiden Hair Tree (male only)
Gleditsia triacanthos - Thornless Locust or Honey Locust
Liriodendron tulipifera - Tulip Poplar
Prunus sargentii - Sargent Cherry
Quercus - all varieties of Oak
Sophora japonica - Scholar Tree/Pagoda Tree
Tilia americana - American Linden
Tilia petiolaris - Silver Linden
Tilia euchlora - Crimean Linden
Tilia cordata - Little Leaf Linden
Ulmus - hybrids: Homestead or Sapporo Autumn Gold Elms
Ulmus parviflora - Chinese or Lacebark Elm, not including Siberian Elm
Zelkova serrata - Zelkova

3. In certain cases where evergreen trees would provide a buffer between a street and dwellings, or be more consistent with native vegetation, then the Township may permit the planting of evergreen trees instead of deciduous trees. In such case, the trees are intended to be planted immediately outside of the right-of-way. Such trees shall be of one of the following species:

Ilex opaca - American Holly
Picea - all varieties of Spruce
Pinus - all varieties of Pine
Pseudotsuga taxifolia - Douglas Fir

- a. If more than 10 trees are required to be planted, then no more than 50 percent shall be of one species.
4. Quality of Trees.
 - a. Trees shall be of symmetrical growth, free of insect pests and disease and durable under the maintenance contemplated.
 - b. Trees which have died or have become diseased or pest-ridden within 18 months from the time of planting shall be replaced by the developer.
 5. Minimum Sizes and Standards. The trunk diameter (measured at a height of 4.5 feet above the finished grade level) of deciduous shade trees required by this Ordinance shall be a minimum of 2.5 inches. The minimum height above the ground level at the time of planting of evergreen trees required by this Ordinance shall be 6 feet.
 6. Planting and Maintenance.
 - a. Trees shall be planted in conformance with good landscaping practices.

- b. Trees adjacent to or within parking areas shall be properly protected from damage by vehicles by raised curbs, raised earth, protective devices and/or sufficient setback.
- c. Required trees shall be properly maintained and shall not be removed without being replaced by another tree that meets the requirements of this section.

7. Required Number and Spacing of Street Trees.

- a. Along streets and access drives where street trees are required, an average of one street tree shall be required for every 50 feet of distance along the street right-of-way line on each affected side of the street. Where a right-of-way does not exist, an average of one street tree shall be required for every 50 feet of length of cartway.
- b. Spacing. The trees required under this Section shall be spaced throughout the development along the street, but are not required to be planted at exact intervals and may be clustered following an approved plan. Trees shall be located so that they do not restrict sight distance at driveway and street intersections.

8. Location of Street Trees. The trunks of required street trees shall be planted outside of the street right-of-way, but within the front yard area unless an alternative location is specifically approved by the Township or required by PennDOT. Where trees are not allowed in a location because of a sight distance issue, the trees shall be planted at other locations on the tract.

9. Other Requirements. The street trees required under this Section shall be in addition to any trees required under other Township regulations. *The planting of street trees shall follow good nursery practices, and may be required to include staking. Trees shall be properly watered and fertilized.*

1019.B. Buffer Yards. See the requirements in the Township Zoning Ordinance.

1020. MONUMENTS AND MARKERS.

1020.A. Monuments.

- 1. Location. For a major subdivision, permanent reference monuments shall be located at each intersection of rights-of-ways of street(s) constructed by the Developer, at the beginning and ending of all street curves, and at exterior corners of the subdivision or land development. For a minor subdivision, two permanent monuments shall be required, preferably at the street right-of-way line. Alternative monument requirements may be approved by the Township Engineer if an alternate arrangement still permits a surveyor to stake out accurately any building lot shown on the Record Plan.
- 2. Type. Reference monuments shall be constructed of steel reinforced portland cement concrete or to other materials pre-approved by the Township Engineer, and should have a minimum size of 4 by 4 inches square at the top, 6 by 6 inches square at the bottom, 24 inches in length, and shall have the top flush with the grade level.

- 1020.B. Markers. All lot corner markers shall be permanently located and shall be at least a 3/4 inch metal pin or pipe with a minimum length of 20 inches, located in the ground to existing grade. Such markers shall be located prior to the lot being offered for sale.

ARTICLE 11
Additional Standards for
Mobile / Manufactured Home Parks

1101. APPLICABILITY.

1101.A. The requirements in this Article shall apply to any “Manufactured/Mobile Home Park” as defined by the Zoning Ordinance.

1101.B. Terms. The terms "mobile home" and "manufactured home" shall have the same meaning.

1102. EXEMPTIONS. The following shall not be considered to be a manufactured/mobile home park, but instead shall be ruled by the applicable sections of this Ordinance and the Zoning Ordinance:

1102.A. Offering of more than one manufactured/mobile home for sale for relocation to another tract, other than routine sale of previously occupied homes within a mobile home park.

1102.B. Any development of mobile homes involving only one dwelling unit per fee-simple lot, which shall meet all of the requirements for a single family dwelling residential development;

1102.C. A manufactured/mobile home that is used only as a field office or work or tool house during an on-site construction project as a temporary use.

1103. OTHER REQUIREMENTS OF THIS ORDINANCE.

1103.A. All provisions of this Ordinance shall apply to a manufactured/mobile home park, except for provisions that are specifically amended by this Article.

1103.B. Every proposed mobile home park shall be submitted, reviewed, approved and recorded as a land development. The requirements for a subdivision may also need to be met if one or more new lots are created or lot lines are changed.

1104. GENERAL STANDARDS AND REQUIREMENTS.

1104.A. All mobile homes sites within a mobile home park shall be located on land with an average natural slope of less than 15 percent.

1104.B. Any street, not including an approved parking court, shall meet Township road bed construction requirements that would apply to a public street.

1104.C. The mobile home park shall have adequate access by emergency vehicles and shall include measures to provide adequate water supply for firefighting. If the water supply cannot feasibly be provided on-site, the requirement may be met by the applicant constructing a hydrant to access an available nearby water supply.

1104.D. All mobile home parks of more than 25 dwelling units shall include a qualified resident manager.

1104.E. Access.

1. Vehicle access to individual mobile home spaces shall be from interior parking courts, access drives or private streets and shall not be from public streets exterior to the development. Streets within the development providing access to 20 or more dwellings shall have a paved cartway width of at least 26 feet, and other streets shall have a paved cartway width of at least 22 feet, provided on-street parking is prohibited. If on-street parking is allowed, the minimum cartway width shall be 30 feet.
2. All new streets within the Mobile Home Park shall be private and be maintained as part of the Mobile Home Park.

1104.F. Parking.

1. In addition to the off-street parking required by the Zoning Ordinance, an average of 0.5 off-street parking spaces per dwelling unit shall be provided in convenient locations for visitor parking.
2. An area shall be set aside for the parking of recreational vehicles and boats of residents, with a minimum of one space for every 20 dwelling units.

1104.G. Other Design Standards and Improvements.

1. Every mobile home space shall be graded to provide a level, stable and well-drained stand for the mobile home.
2. Every space shall be provided with underground electric, telephone and T.V. Cable (if available) connections.
3. All fuel storage and supply systems shall be constructed and maintained in conformity with the regulations of all authorities having jurisdiction. No above ground fuel tanks shall be allowed within a required setback.
4. An average of one deciduous street tree shall be provided for each 50 feet of frontage along any street. These trees shall meet the requirements of Article 10 of this Ordinance.

**APPENDIX B
STATEMENTS, FORMS AND LETTERS**

B.1 PLAN PREPARER'S STATEMENTS. - Model Forms.

I, _____, a registered surveyor of the Commonwealth of Pennsylvania, do hereby certify that the Plan, prepared from a field survey on _____, 20__ correctly represents the property boundary of the proposed subdivision or land development.

Date Registered Surveyors' Signature

I, _____, a registered surveyor, registered landscape architect or licensed professional engineer in the Commonwealth of Pennsylvania, do hereby certify that the accompanying application, plans and supporting documentation are true and accurate, to the best of my knowledge.

Date Plan Preparer's Signature

Address Printed Name

B.2 OWNER'S STATEMENT. - Model Form.

I/we make this statement being duly sworn according to law. I/we state that for the land involving the accompanying plans, we are the majority owners of this property or the authorized officers of the corporation that owns this property, and are in peaceful possession of it, and that there are no suits pending affecting the title of same, and that I/we acknowledge and endorse the accompanying plans and that we will propose a record plan for recording (as applicable), after receiving all required Township approvals.

OWNER'S OR AUTHORIZED CORPORATE OFFICER'S SIGNATURES

Printed Name Printed Name

SWORN AND SUBSCRIBED BEFORE THIS _____ DAY OF _____, 20__.

B.3 PERMIT/APPROVAL CERTIFICATION - Required, Unless Alternative Text Pre-Approved by the Township.

I/we hereby certify this date of _____ that I/we am/are the owners or authorized equitable owners of the property shown and depicted on the accompanying plans and that I/we and my/our heirs and assigns shall comply with all requirements and obtain all permits and approvals required by all local, state and federal agencies and bodies; and I/we agree and acknowledge that any approval of this plan by Upper Milford Township is contingent upon my/our obtaining such permits and approvals, and that if all such permits and approvals are not obtained as required, any and all approvals given by Upper Milford Township with respect to this plan shall automatically become null and void without further action on the part of the Upper Milford Township.

Notary Public

My Commission Expires:

B.4 APPROVAL/REVIEW BLOCK.

REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION

Lehigh Valley Planning Commission Staff Person _____ Date

REVIEWED BY THE TOWNSHIP ENGINEER

Township Engineer _____ Date

REVIEWED BY THE UPPER MILFORD TOWNSHIP PLANNING COMMISSION

Chair _____ Secretary _____ Date

APPROVED BY THE UPPER MILFORD TOWNSHIP BOARD OF SUPERVISORS AND ACCEPTED FOR RECORDING

Chair _____ Secretary _____ Date

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