

**LONGSWAMP TOWNSHIP  
BERKS COUNTY, PENNSYLVANIA**

**SUBDIVISION AND LAND  
DEVELOPMENT ORDINANCE**



**ADOPTED SEPTEMBER 12, 2006**

**PREPARED BY:**

**HANOVER  
ENGINEERING**  
A REGISTERED PROFESSIONAL ENGINEERING FIRM

# THE UNIVERSITY OF CHICAGO

PHILOSOPHY DEPARTMENT

PHILOSOPHY 101

LECTURE NOTES

PROFESSOR [Name]

WINTER 2024

LECTURE 1

THE PHILOSOPHY OF

PLATO

LECTURE 2

THE PHILOSOPHY OF

**LONGSWAMP TOWNSHIP  
SUBDIVISION AND LAND  
DEVELOPMENT ORDINANCE**

**ORDINANCE NO. 231**

**ADOPTED SEPTEMBER 12, 2006**

**Prepared by:**

**HANOVER ENGINEERING ASSOCIATES, INC.  
5920 HAMILTON BLVD, SUITE 108  
ALLENTOWN, PA 18106-8942  
(610) 395-9222  
FAX (610) 395-9262  
[www.hanovereng.com](http://www.hanovereng.com)**



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**ARTICLE I**

**GENERAL PROVISIONS**

**Section 101 - ADOPTION OF REGULATIONS AND EFFECTIVE DATE**

- A. The Board of Supervisors of the Township of Longswamp, by authority granted through the Pennsylvania Municipalities Planning Code, has adopted the Longswamp Township Subdivision and Land Development Ordinance governing the subdivision and development of land within the Township.
  
- B. This Ordinance shall become effective five (5) days after the adoption and shall remain in effect until modified, amended, or rescinded by the Board of Supervisors of the Township of Longswamp.

**Section 102 - TITLE**

This Ordinance shall be known and may be cited as the "Longswamp Township Subdivision and Land Development Ordinance".

**Section 103 - PURPOSE**

This Ordinance is designed in accordance with the Municipalities Planning Code, Act 247 (as amended), to regulate subdivision and land development and to assist in implementing the purposes of the *Eastern Berks County Region Comprehensive Plan*, as amended, and the *Longswamp Township Zoning Ordinance*, as amended, and summarized as follows:

- A. To protect the health, safety, and welfare of the residents of Longswamp Township.
  
- B. To provide for the orderly and integrated development of the Township.
  
- C. To ensure sound community growth that safeguards the interests of the residents, landowners, the applicant, the investor, and the local government.
  
- D. To provide for the development of a range of housing types that maintains the character of the existing community.
  
- E. To provide for a safe, efficient road system, adequate recreation and open space, and appropriate community facilities and services.



- F. To ensure conformance of subdivision and land development plans with the comprehensive plans of Berks County and Longswamp Township.
- G. To secure equitable handling of all subdivision and land development plans by establishing uniform procedures and standards.
- H. To preserve, protect, and manage the natural and historic resources of Longswamp Township, including but not limited to, watersheds, headwaters, riparian buffer networks, greenways, woodlands, wildlife habitat and travel corridors, prime farmland, and wetlands.
- I. To support the idea of conservation subdivision design as a practical tool to help protect interconnected networks of greenway land, and to help establish substantial buffers along boundaries with existing protected land.
- J. To protect the people's rights to clean air, pure water, and the preservation of the natural scenic, historic and aesthetic values of the environment pursuant to Article 1, Section 27 of the Pennsylvania Constitution.

**Section 104 - JURISDICTION**

The Board of Supervisors shall have jurisdiction over subdivision and land development within the Township. In order to aid in its consideration of subdivision and land development applications, the Board of Supervisors hereby designates the Longswamp Township Planning Commission as the agency of the Board of Supervisors in performing the following functions:

- A. The Planning Commission shall review all plans and applications submitted to it by the Board of Supervisors.
- B. The Planning Commission shall make recommendations to the Board of Supervisors concerning application approval, disapproval or modification, and the reasons for such determinations.
- C. The Planning Commission shall make recommendations to the Board of Supervisors concerning the interpretation and the granting of modifications to provisions and standards of this Ordinance.

**Section 105 - INTERPRETATION**

The provisions of this Ordinance shall be held to be minimum requirements to meet the above stated purposes. Where the provisions of this Ordinance impose greater restrictions than those of any statute, other ordinance, or regulation, the provisions of this

Ordinance shall prevail. Where the provisions of any statute, other ordinance, or regulation impose greater restrictions than those of this Ordinance, the provision of such statute, ordinance, or regulation shall prevail.

**Section 106 - VALIDITY AND SEVERABILITY**

The provisions of this Ordinance shall be severable, and if any of its provisions shall be held to be unconstitutional, illegal, or invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance. It is hereby declared as a legislative intent that this Ordinance would have been adopted had such unconstitutional, illegal, or invalid provision not been included herein.

**Section 107 - REPEALER**

The Subdivision and Land Development Ordinance in place prior to the enactment of this Ordinance, is hereby repealed.

## ARTICLE II

### DEFINITIONS

#### Section 201 - GENERAL

For the purpose of this Ordinance, certain terms and words are defined below. Words used in the present tense shall include the future tense. Words in the singular shall include the plural and words in the plural shall include the singular. Words in the masculine include the feminine and the neuter. The word "shall" is mandatory. The word "may" is permissive. The word "person" includes "individual", "company", "unincorporated association", or other similar entities. The words "used for" include "designed for", "arranged for", "intended for", "maintained for", or "occupied for". The word "building" shall be construed as if followed by the phrase "or part thereof".

#### Section 202 - SPECIFIC TERMS

Unless otherwise expressly stated, the following words and phrases throughout these regulations shall have the meanings indicated in this section:

**ACCESS DRIVE:** An improved cartway designed and constructed to provide for vehicular movement between a public road or private street and the off-street parking and/or loading for any use other than one single-family dwelling unit or farm.

**ACT:** The Pennsylvania Municipalities Planning Code of July 31, 1968, 53 PS 10101, et. Seq. (Act No. 247).

**AGRICULTURE:** (1) The cultivation of the soil and the raising and harvesting of the products of the soil, including nursery and horticulture but excluding forestry; (2) animal husbandry, poultry farming, and dairy farming, excluding kennels.

**ALLEY:** A minor right-of-way, privately or publicly owned, primarily for service access to the rear or sides of two (2) or more properties.

**ALLUVIAL (FLOODPLAIN) SOILS:** See SOILS, ALLUVIAL

**APPLICANT:** A landowner or developer, as herein defined, who has filed an application for subdivision or land development, including his heirs, successors and assigns or the equitable owner of property with the owner's permission.

**APPLICATION FOR DEVELOPMENT:** Every application, whether preliminary or final, required to be filed and approved prior to the start of construction or development, including, but not limited to an

application for a building permit, for the approval of a subdivision plan, or for the approval of a land development plan.

APPROVAL, TOWNSHIP: (1) A vote of the Longswamp Township Board of Supervisors to approve without conditions; or (2) after a vote by the Township Board of Supervisors to approve with conditions, acknowledgment by the Township Board of Supervisors that all conditions of approval have been met; or (3) deemed approval.

AQUIFER: A water bearing strata beneath the surface of the earth that is a source of drinking water.

AUTHORITY, MUNICIPAL: A Municipal Authority, created pursuant to the Municipality Authorities Act of 1945.

BASEMENT: A story partly below the finished grade but having one-half or more of its height (measured from finished floor to finished ceiling) above the average level of the finished grade where such grade abuts the exterior walls of the building.

BEST MANAGEMENT PRACTICES (BMPs): Measures employed to control stormwater runoff. BMPs include structural and non-structural practices that prevent adverse impacts to streams and other watercourses and protect watersheds from the damaging affects of uncontrolled stormwater runoff. The primary reference for implementation of BMPs in the Township shall be the *Pennsylvania Handbook of Best Management Practices for Developing Areas*, published by the PA Department of Environmental Protection, PA Association of Conservation Districts, Inc., Natural Resources Conservation Service, and Keystone Chapter, Soil and Water Conservation Society, Spring 1998, or as amended.

BLOCK: A unit of land bounded by streets or by a combination of streets and public land, railroad rights-of-way, waterways, or any other similar barriers to the continuity of development.

BOARD OF SUPERVISORS: Board of Supervisors of the Township of Longswamp, Berks County, Pennsylvania.

BOULEVARD ISLAND: Similar to a parkway, but located in the center of a street, effectively dividing the street into two streets of opposite directions. Boulevard islands typically contain planting areas running the full length of the island. Boulevards may or may not include curbs.

BOUNDARY SURVEY: See SURVEY, BOUNDARY

BUFFER: An area which provides a year-round visual and/or sound attenuation between uses, through the application of such means as plantings, earthen berms, depressions, fences and walls.

**BUFFER STRIP:** A continuous strip of landscaped land which is clear of all buildings and paved areas, designed for the visual or aural separation from adjacent land.

**BUILDING:** Any structure with a roof intended for shelter or enclosure of persons, animals or property.

- A. **DETACHED:** A building which has no party wall.
- B. **SEMI-DETACHED:** A building which has only one party wall in common.
- C. **ATTACHED:** A building which has two or more party walls in common.

**BUILDING COVERAGE:** See LOT COVERAGE

**BUILDING SETBACK LINE:** A line parallel to the front, side or rear lot line set so as to provide the required yard. In the case of flag lots, the building line shall be established at a point that provides the required yard depth as measured from a point where the lot provides the required lot width.

**CALIPER:** The diameter of a tree trunk measured at a point six (6) inches above the ground.

**CANOPY TREE:** A deciduous tree which, when mature, yields a significant amount of shade during summer and a colorful autumn spectacle. Their winter silhouettes provide passages for sunlight.

**CARBONATE AREAS:** Areas underlain by carbonate rocks composed of limestone, dolomite, or marble.

**CARTWAY:** The portion of a street right-of-way, whether paved or unpaved designed for vehicular use.

**CELLAR:** A story partly below the finished grade, having more than one-half of its height (measured from finished floor to finished ceiling) below the average level of the adjoining finished grade where such grade abuts the exterior walls of the building.

**CLEAR CUTTING:** The felling of all trees on a tract of land, or any portion thereof, at one time.'

**CLEAR SIGHT TRIANGLE:** An area of unobstructed vision at street intersections defined by lines of sight between points at a given distance from the intersection of the street center lines.

**CLUSTER DEVELOPMENT:** An arrangement of residential structures that allows for grouping the structures by reducing lot area and yard requirements and incorporating the remaining area as open space.

**COMMON WALL:** A wall used or adopted for joint service between two buildings or parts thereof.

COMPREHENSIVE PLAN: The latest version of the document adopted by the Township, pursuant to Article 3 of the Act.

CONDOMINIUM: A form of property ownership providing for individual ownership of a specific dwelling unit, or other space not necessarily on ground level, together with an undivided interest in the land or other parts of the structure in common with other owners.

CONSERVANCY LOT: A large, privately-owned lot comprising part of an area of open land. The purpose of the conservancy lot is to provide surrounding residents with visual access to greenway land, while keeping the land under private ownership and maintenance. Only a small portion of such lots may be developed; the remainder must be protected through conservation easements and used in conformance with standard for greenway land. Public access to conservancy lots is not required.

CONSERVATION AREA, PRIMARY: Lands within the 100-year floodplain, wetlands, areas greater than 1,000 square feet in size containing rock outcrops, boulder-fields and/or soils with bedrock at the surface and slopes in excess of 25 percent.

CONSERVATION AREA, SECONDARY: All landscape elements not included in the primary conservation area. Certain Secondary Conservation Areas may be designed to be protected while others may be developed. Secondary Conservation Areas include:

- A. Hydric soils, swales, springs, lowland areas other than wetlands.
- B. Moderately steep slopes up to 25 percent, particularly those adjoining watercourses and ponds, where disturbance and resulting soil erosion and sedimentation could be detrimental to water quality.
- C. Healthy woodlands, particularly those performing important ecological functions such as soil stabilization and protection of streams, wetlands and wildlife habitats.
- D. Areas where precipitation is most likely to recharge local groundwater resources because of topographic and soil conditions affording high rates of infiltration and percolation.
- E. Hedgerows, groups of trees, large individual trees of botanic significance, and other vegetative features.
- F. Historic structures and sites.
- G. Visually prominent topographic features such as knolls, hilltops and ridges, and scenic viewsheds as seen from public roads (particularly those with historic features).

- H. Existing trails, especially those connecting the tract to other locations in the Township.
- I. Class I, II and III agricultural soils as defined by the United States Department of Agriculture, Natural Resources Conservation Service's County Soil Survey for Berks County.

CONSTRUCTION: The construction, reconstruction, renovation, repair, extension, expansion, alteration, or relocation of a building or structure, including the placement of mobile homes.

CONVERSION: An alteration of a building, structure or land by change of an existing use to a new use which imposes other special provisions of applicable regulations governing building, construction, equipment, exits, or zoning regulations.

COUNTY PLANNING COMMISSION: Berks County Planning Commission, Berks County, Pennsylvania.

CUL-DE-SAC: A paved circular turnaround area situated at the dead end of a cul-de-sac street. (See STREET, CUL-DE-SAC)

CUL-DE-SAC STREET: See STREET, CUL-DE-SAC

DBH (Diameter at Breast Height): The diameter of a tree trunk(s) measured at a point four and one-half (4.5) feet above ground level at the base of the tree.

DENSITY: A term used to express the allowable number of dwelling units per acre of land.

- A. DENSITY, GROSS: The number of dwelling units in relation to the entire area of a tract exclusive of existing public rights of way whether interior or exterior but including interior parking areas and access lanes, sidewalks, parks, playgrounds, and common open space.
- B. DENSITY, NET: The number of dwelling units in relation to the land area actually in use or proposed to be used for residential development exclusive of existing and proposed rights of way, common open space, streets, sidewalks, parks, playgrounds, and other non-residential uses.

DETENTION BASIN: A facility designed to detain surface water runoff for a period of time sufficient to cause the deposit of sediment and to reduce the velocity and/or volume of surface flows leaving a site, thus controlling erosion, reducing flood potential and promoting groundwater recharge.

DEVELOPER: Any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made an application for subdivision or a land development.

DEVELOPMENT: Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

DEVELOPMENT AGREEMENT: A written contract between an applicant or applicant's agent, and the Township, specifying the conditions of final approval by the Township and providing for the completion and dedication of public improvements.

DEVELOPMENT PLAN: The design or site layout plan required for certain land uses and development design options which cover the entire property.

DRAINAGE AREA: The upstream watershed area of a drainage basin measured from a point of discharge in the watercourse.

DRAINAGE FACILITY: Any ditch, gutter, pipe, culvert, storm sewer, or other structure designed, intended or constructed for the purpose of diverting surface waters from or carrying surface water off streets, public rights-of-way, parks, recreational areas, or any part of any subdivision, land development or contiguous area.

DRIVEWAY: An improved cartway designed and constructed to provide vehicular movement between a public road or private street and a tract of land serving one single-family dwelling unit or a farm.

DWELLING UNIT: A building or structure or portion thereof providing one (1) or more rooms arranged for the use of one (1) or more individuals living together as a single housekeeping unit, and having no cooking or sanitary facilities in common with any other dwelling unit.

EARTHMOVING ACTIVITY: Any construction or other activity (excluding agriculture) which disturbs the surface of the land including, but not limited to, excavations embankments, land development, mineral extraction, and the moving, depositing or storing of soil, rock or earth.

EASEMENT: An interest in land owned by another that entitles the holder of the easement to a specific use or enjoyment of the land.

ENGINEER: An individual licensed and registered under the laws of the Commonwealth to engage in the practice of engineering, and having training and experience in the specific field in which he or she is practicing. An Engineer shall be licensed and registered in accordance with the Act of May 23, 1945 (P.L. 913, No. 367, 63 P.S. § 148 et seq.), known as the "Engineer, Land Surveyor, and Geologist Registration Law."

EROSION: The removal of surface materials by natural means such as wind and water.



EVERGREEN TREE: Coniferous trees having dense, green foliage that makes them well-suited to group planting for privacy screens, windbreaks, or backdrops for flowering trees and shrubs, yet they are handsome enough to stand alone. They hold their needles to provide year-round shelter and color.

EXCAVATION: Any activity that results in earth, sand, gravel, rock or other similar materials being dug, cut, quarried, uncovered, removed, displaced, relocated or moved, including the condition resulting from such activity.

FILL: Materials such as soil or gravel, placed and compacted to form an embankment, to raise the surface elevation of the land, or to fill a trench.

FLAG LOT: See LOT, FLAG

FLOOD PLAIN: A relatively flat or low land area adjoining a river, stream or watercourse which is subject to partial or complete inundation. An area subject to the unusual and rapid accumulation or run-off of surface waters from any source.

FLOOD, ONE HUNDRED YEAR: The highest level of flooding that, on the average, is likely to occur every one hundred (100) years; that is, that has a one (1) percent chance of occurring each year, as delineated by the Federal Flood Insurance Maps developed in the Flood Insurance Program.

FRACTURE TRACE: A small scale linear break in the subsurface bedrock which expresses itself in the surface topography.

FRONTAGE: The lot dimension measured along the street line or right-of-way line of any one street or highway abutting a lot.

GEOLOGIST: A licensed professional geologist registered by the Commonwealth of Pennsylvania.

GRADE: The level of the ground adjacent to the exterior walls of a building or structure, or adjacent to the base of a storage pile or sign.

GRADE, FINISHED: The completed surfaces of lawns, walks and roads brought to grades as shown on official plans or designs relating thereto.

GREENWAY LAND: That portion of a tract that is set aside for the protection of sensitive natural features, farmland, scenic views, and other unique features. Greenway land may be accessible to the residents of the development and/or the municipality, or it may contain areas of conservancy lots which are not accessible to the public.

GROUNDWATER RECHARGE: The replenishment of water in an aquifer, by the percolation of precipitation, streams, lakes, or other water sources.

HEDGEROW: A linear plant community dominated by trees and/or shrubs. Hedgerows often occur along roads, fence lines, property lines, or between fields, and may occur naturally or be specially planted (e.g. as a windbreak).

HISTORIC STRUCTURE: Any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  1. By an approved State program as determined by the Secretary of the Interior; or
  2. Directly by the Secretary of the Interior in states without an approved program.

HOMEOWNERS ASSOCIATION: A non-profit organization duly registered with the Pennsylvania Corporation Bureau comprised of homeowners or property owners, planned and operated under negotiated and approved rules and regulations, for the purpose of administering the needs of residents through the maintenance of community owned property. This term is synonymous with property owners association.

HALF OR PARTIAL STREET: See STREET, HALF OR PARTIAL

HYDRIC SOILS: See SOILS, HYDRIC

IMPERVIOUS SURFACE: A surface which prevents the percolation of water into the ground (i.e., roads, buildings, sidewalks, access drives, loading areas, parking areas, and paved recreation courts). Impervious surfaces are more specifically defined in the Storm Water Management Ordinance applicable to the lot in question.

IMPROVEMENTS: Changes made to the natural state of the ground and anything that is man-made or constructed on land or underground, including, but not limited to, grading, paving, curbing, sidewalks, fire hydrants, water mains, sanitary sewers, storm sewers, catch basins, culverts, gutters, monuments, planting screens, landscaping and any underground electric or other utilities. For purposes of this Ordinance, the terms, "improvements" and "public improvements" may be used interchangeably.

IMPROVEMENT GUARANTEE: Any security which is accepted by the Township to guarantee that certain improvements will be made within the subdivision or land development.

INFILTRATION: Flow or movement of water from the soil surface into subsurface soils and bedrock.

INSPECTION: The act of monitoring compliance with applicable provisions contained in this Ordinance or other applicable regulations, as undertaken by authorized representatives of Longswamp Township and in the manner specified herein.

INTERSECTION: All of the area comprising where two or more streets, roads and rights-of-way meet.

INVASIVE PLANT SPECIES: Predominantly non-native, non-indigenous, alien tree, shrub, vine, or herbaceous species that grow or reproduce aggressively, usually because they have few or no natural predators, and which can so dominate an ecosystem that they kill off or drive out many indigenous plant species. Invasive trees, shrubs, vines, or herbaceous species include, but are not limited to:

Norway Maple (*Acer platanoides*), Tree-of-Heaven (*Ailanthus altissima*), Paper Mulberry (*Broussonetia papyrifera*), White Mulberry (*Morus alba*), Empress Tree (*Paulownia tomentosa*), White Poplar (*Populus alba*), Multiflora Rose (*Rosa multiflora*), Japanese Barberry (*Berberis thunbergii*), European Barberry (*Berberis vulgaris*), Autumn Olive (*Eleagnus umbrella*), Border Privet (*Ligustrum obtusifolium*), Common Privet (*Ligustrum vulgare*), Morrow's Honeysuckle (*Lonicera morrowii*), Tartarian Honeysuckle (*Lonicera tatarica*), Japanese Honeysuckle (*Lonicera japonica*), Common Buckthorn (*Rhamnus cathartica*), Wineberry (*Rubus phoenicolasius*), Japanese Spiraea (*Spiraea japonica*), Linden Viburnum (*Viburnum dilatatum*), Guelder Rose (*Viburnum opulus*), Oriental bittersweet (*Celastrus orbiculatus*), Leatherleaf Climatis (*Clematis terniflora*), Mile-a-Minute Weed (*Polygonum perfoliatum*), Kudzu (*Pueraria lobata*), Garlic Mustard (*Alliaria petiolata*), Canada Thistle (*Cirsium arvense*), Crown Vetch (*Coronilla varia*), Tall Fescue (*Festuca elatior*), Purple Loosestrife (*Lythrum*

salicaria), Sweet Clover (*Melilotus afficinalis*), Japanese Stilt Grass (*Microstegium vimineum*), Reed Canary Grass (*Phalaris arundinacea*), and Johnson Grass (*Sorghum halepense*).

ITE TRIP GENERATION RATES: Vehicle trips generated for a particular type of land use published by the Institute of Transportation Engineers, ITE Trip Generation Manual, the most current edition.

KARST: Topography formed over carbonate rocks by dissolution and characterized by sinkholes or closed depression, caves, and underground drainages.

LAKES AND PONDS: Natural or artificial bodies of water which retain water year-round. Artificial ponds may be created by dams, or result from excavation. Lakes are bodies of water two (2) or more acres in area. Ponds are bodies of water less than two (2) acres in area.

LAKE AND POND SHORELINES: The landside edges of lakes and ponds from established shoreline to an upland boundary. For the purposes of this Ordinance, such boundary shall be equivalent to that required for a wetland margin.

#### LAND DEVELOPMENT:

A. The definition of "land development" shall be as follows:

1. The improvement of one (1) or two (2) or more contiguous lots, tracts or parcels for any purpose involving:
  - a. A group of two (2) or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants; or
  - b. The division of allocation of space, whether initially or cumulatively, between or among two (2) or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
2. A subdivision of land, streets, common areas, leaseholds, condominiums, building groups or other features.
3. A subdivision of land.
4. Any change in use of the property or any structures thereon that create any impacts relating to stormwater management, erosion, grading, sedimentation control, sanitary sewer facilities, traffic impacts, lighting, noise, and/or any other impact to neighboring or adjacent property. A change in the nature of the use shall presumptively be a land development.

B. The definition of land development shall not include the following activities:

1. The conversion of an existing single-family detached dwelling or single-family semi-detached dwelling into not more than two (2) residential units, unless such units are intended to be a condominium;
2. The addition of an accessory building, including farm buildings, on a lot or lots subordinate to an existing principal building; or
3. The addition or conversion of buildings or rides within the confines of an enterprise which constitutes an amusement park. This exclusion shall not apply to newly acquired acreage by an amusement park until initial plans for the expanded area have been approved by the proper authorities.

LAND DEVELOPMENT PLAN, MAJOR: See Section 302

LAND DEVELOPMENT PLAN, MINOR: See Section 302

LAND DISTURBANCE: Any activity which exposes soils, alters topography and/or alters vegetation, except for removal of a safety hazard, diseased trees, or invasive vegetation.

LAND OWNER: The legal or beneficial owner or owners of land, including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition), a lessee if he is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in land, shall be deemed to be a landowner for the purposes of this Ordinance.

LANDSCAPING: The planting of turf-grass or other appropriate ground cover and the planting of evergreen and deciduous trees, and shrubs, including the maintenance thereof.

LOT: Any area of land intended as a single unit for purposes of ownership, transfer of ownership, use, rent, improvement, or development. The word "lot" includes the word "plot," "parcel" or "tract." The area and depth of a lot abutting a street shall be determined by measurements to the street line. No building lot shall be bisected by a street nor shall the lot area include any land within a street right-of-way.

LOT, FLAG: A lot of irregular shape that has a narrow access strip (not meeting the minimum lot widths requirements of the Zoning Ordinance and thus too narrow for the construction of a principal building) leading from a street or other right-of-way to a wider portion of the lot which is intended for construction of a principal

building and which wider portion complies with the minimum lot width requirements of the Township Zoning Ordinance.

LOT, REVERSE FRONTAGE: A lot extending between and having frontage on an arterial or collector street and a local street, with vehicular access solely from the latter.

LOT AREA, GROSS: The area of land contained within the limits of the legally described property lines bounding the lot.

LOT AREA, NET: The area of land contained within the limits of the legally described property lines bounding the lot, exclusive of any street or railroad rights-of-way.

LOT COVERAGE: The percentage of a lot covered by principal and accessory buildings.

LOT LINE: Any line dividing a lot from another lot, street or parcel.

A. FRONT LOT LINE: On an interior lot, the lot line abutting the street; on a corner or through lot, each lot line which abuts a street; on a flag lot, the interior lot line most parallel to and nearest the street from which access is obtained.

B. REAR LOT LINE: The lot line not intersecting a front lot line that is most distant from and most closely parallel to the front lot line. The rear lot line of any triangularly or irregularly shaped lot shall be established such that it will be at least ten feet long.

C. SIDE LOT LINE: Any lot line that is not a front or rear lot line.

MAINTENANCE GUARANTEE: Any security which may be required by the Township of a developer, after final acceptance by the Township of improvements installed by the developer.

MARKER: A metal pipe or pin at least one-half (1/2) inch in diameter and at least twenty-four inches (24) in length.

MONUMENT: A stone, marble or concrete monument with a flat top at least four inches across and at least twenty-four (24) inches in length, to the top of which is permanently affixed a brass or copper marker or on top of which is permanently inscribed a center mark.

OPEN AREA: Ground upon which no buildings or paved areas are permitted.

OPEN SPACE, COMMON: A parcel or parcels of land or an area of water, or a combination of land and water, within a development site, designed and intended for the use and enjoyment by residents of such development and possibly the general public. Common open space shall be substantially free of structures, but may contain such improvements as are in the finally approved development plan, and shall not include

individually owned private yards, streets, and off-street parking areas unless provided in conjunction with a recreational facility.

ORNAMENTAL/FLOWERING TREE: Usually a deciduous tree selected for its perceived beauty and ability to add color to the landscape.

PARKWAY: A planting area parallel or adjacent to the cartway designed to provide continuity of vegetation along the right-of-way and to soften the impact of development by providing a pleasing view from the road. Parkways may or may not include curbs. They can include or be bordered by sidewalks but need not be.

PARTY WALL: See COMMON WALL

PERFORMANCE GUARANTEE: An acceptable bond or funds in escrow sufficient to cover cost of required improvements, estimated in accordance with the provisions of this Ordinance.

PENNSYLVANIA MUNICIPALITIES PLANNING CODE: Act 247 of 1968 as amended.

PINNACLES: A bedrock tower formed by the dissolution of carbonate rock found between sinkholes.

PLAN: Any one or more of the following:

- A. EXISTING FEATURES: A plan to accompany preliminary and final application submissions that include the property boundaries, a natural features inventory, and a man-made features inventory as required in this Ordinance.
- B. FINAL: An accurate and complete site design and layout plan, and construction improvements plan prepared and sealed by a registered engineer, surveyor or landscape architect to be recorded upon approval.
- C. GRADING: A plan graphically illustrating all earthmoving activities and the timing of such activities in accordance with the provisions of this Ordinance.
- D. CONSTRUCTION IMPROVEMENTS: A component of the preliminary and final plan, prepared by a registered engineer, showing the construction details of streets, drains, sewers, water supply systems, bridges, culverts and other improvements required, including a horizontal plan, profiles and cross-sections.
- E. LAND DEVELOPMENT: A sketch, preliminary or final plan, including written and graphic material, showing the provisions for development of a subject tract when a subdivision plan is not applicable.
- F. LIGHTING: A plan that shows the type, location and intensity of site lighting as required by this Ordinance.

- G. PRELIMINARY: A preliminary site design and layout plan showing the subdivision or land development proposed for a specific site containing the information required of such a plan by this Ordinance.
- H. RECORDED: A final plan, with accompanying documents as required by this Ordinance, that has been recorded by the applicant in the Office of the Recorder of Deeds, Berks County, Pennsylvania.
- I. SITE DESIGN AND LAYOUT: A plan submitted that includes the layout and dimension of all proposed lots, location of all proposed streets, and the location of other site features as required by this Ordinance.
- J. SKETCH: A plan submitted, at the applicant's option, for review and discussion prior to application for preliminary plan approval, including the information suggested for such plans by this Ordinance.
- K. STORMWATER MANAGEMENT, AND SEDIMENT AND EROSION CONTROL: Separate or combined plans that contain all proposed measures and facilities for managing stormwater quantity and quality impacts from Regulated Activities and for minimizing accelerated erosion and sedimentation.

PLANNING COMMISSION: Longswamp Township Planning Commission.

PLANTING SCREEN: Evergreen plantings, or a combination of evergreen and deciduous plantings, intended to provide an effective screen throughout the year.

RESERVE STRIP: A parcel of land separating a street from adjacent properties.

RETENTION BASIN: A reservoir designed to temporarily or permanently retain a specified amount of stormwater from a catchment area. It may also be used to retain freshwater from year-round streams or springs. A retention basin is generally designed to always contain water.

REVERSE FRONTAGE LOT: A lot extending between and having frontage on a major traffic street and a minor street, with vehicular access only from the minor street.

RECREATION, ACTIVE: Those recreational uses which typically require significant physical alteration to the area in which they are performed. Such areas are intensively used and include, but are not limited to playgrounds, ball courts and swimming pools, excluding amusement parks.

RECREATION, PASSIVE: Recreational uses which can be carried out with little alteration or disruption in the area in which they are



performed. Such uses include, but are not limited to hiking, biking and picnicking.

RIGHT-OF-WAY: The total width of any land reserved or dedicated as a street, road, lane, alley, crosswalk, or for other public or semipublic uses, including easements for utilities, detention ponds, etc.,

RIGHT-OF-WAY, LEGAL: The existing right-of-way of dedicated streets as established by the Commonwealth of Pennsylvania or other appropriate governing authority.

RIGHT-OF-WAY, FUTURE, ULTIMATE or REQUIRED: The right-of-way deemed appropriate to provide adequate width for future street improvements, as specified in this Ordinance.

RIPARIAN BUFFER: An area of trees and other vegetation adjacent to a watercourse that forms a transition area between the aquatic and terrestrial environment.

ROAD: The term road shall have the same meaning as "street" as defined hereunder.

SANITARY SEWAGE DISPOSAL SYSTEM, ON-SITE: Any structure designed to treat sanitary sewage within the boundaries of an individual lot.

SANITARY SEWERAGE SYSTEM, COMMUNITY: A sanitary sewage collection system in which sewage is carried from individual lots by a system of pipes to a temporary central treatment and disposal plant, generally serving a neighborhood area.

SANITARY SEWERAGE SYSTEM, PUBLIC: A sanitary sewage collection system in which sewage is carried from individual lots by a system of pipes to a central treatment and disposal plant, generally not confined to one neighborhood.

SANITARY SEWERS: Any pipe, conduit, or appurtenance which conveys sewage, constitutes a part of the sewer system, or is used for collection purposes. Storm, surface, and ground waters are excluded and prohibited from sanitary sewers.

SEDIMENT: Mineral or organic material which is being transported, or has been moved from its site of origin by wind, water, or gravity.

SEWAGE: A substance that contains the waste products or excrement or other discharge from the bodies of human beings or animals; a substance harmful to the public health, to animal or aquatic life or to the use of water for domestic water supply or for recreation; or a substance which constitutes pollution under The Clean Streams Law.

SIGHT DISTANCE: The required length of roadway visible to the driver of a passenger vehicle at any given point on the roadway when the view is

unobstructed by traffic. Sight distance measurement shall be made from a point 3.75 feet above the center line of the road surface to a point 0.5 feet above the center line of the road surface.

SOILS, ALLUVIAL (FLOODPLAIN): Areas subject to periodic flooding and listed in the *Soil Survey of Berks County, Pennsylvania*. Alluvial soils include, but are not limited to:

Holly silt loam (Ho)  
Middlebury silt loam (Me)

SOILS, HYDRIC: A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of wetlands vegetation. For the purposes of this Ordinance, hydric soils include any soil inventoried or described as hydric or as a soil with hydric inclusions according to the *Soil Survey of Berks County, Pennsylvania*, or other information provided by the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS). In Longswamp Township, hydric soils shall include, but are not limited to:

Soils with Major Hydric Components	Soils with Hydric Inclusions and Hydric Component of the Inclusions
Holly silt loam (Ho)	Berks-Weikert complex (Bk) - Brinkerton (Bt)
Thorndale-Penlaw silt loams (Th)	Edgemont channery sandy loam (Ed) - Andover (An)
Towhee silt loam (To)	Edgemont channery loam (Eh) - Andover (An)
	Laidig gravelly loam (La) - Andover (An)
	Laidig very gravelly loam (Lb) - Andover (An)

Where site conditions indicate that the location of hydric soils or the hydric inclusions differ from locations indicated by the County Soil Survey or NRCS, the burden shall be upon the applicant to verify such location(s) to the satisfaction of the Board of Supervisors, otherwise the County Soil Survey or NRCS information shall be presumed to be accurate. Where the applicant seeks reclassification of hydric soils and their location, such reclassification shall be undertaken by a Certified Soil Scientist or other similarly qualified professional.

SOLICITOR: The Longswamp Township Solicitor.

SPECIMEN VEGETATION: Individual trees or other vegetation determined to be of specimen quality as determined by a registered landscape architect or which generally fall within the parameters of the following table shall be protected in accordance with these standards. The examples of specimen trees included in the following table are intended to provide general guidelines and examples of what constitutes a specimen tree and is not considered all inclusive.

Examples of Specimen Trees

Species	Min. Size (dbh)	Species	Min. Size (dbh)	Species	Min. Size (dbh)
Apple	24"	Locust	30"	Sassafras	20"
Ash	32"	Maple	32"	Spruce	30"
Beech	32"			Sycamore	36"
Cherry	24"	Oak	32"	Tulip Poplar	36"
Elm	30"	Osage Orange	20"	Walnut	30"
Hemlock	30"	Pine	30"	Hickory	32"

STEEP SLOPES: Those areas of land where the grade is fifteen (15) percent or greater. For the purposes of this Ordinance, steep slopes are divided into two categories:

- A. Precautionary slopes are those areas of land where the grade is fifteen (15) to twenty-five (25) percent.
- B. Prohibitive slopes are those areas of land where the grade is twenty-five (25) percent or greater.

Slope shall be measured as the change in elevation over the horizontal distance between consecutive contour lines. For this Ordinance, slope shall be measured over three (3) two (2) foot contour intervals (six (6) cumulative vertical feet of slope). All slope measurements shall be determined by a topographic survey signed and sealed by a registered surveyor or engineer licensed to practice in the Commonwealth of Pennsylvania.

STORM EVENT (Return Frequency Storm): The statistical period of time between storms of equal magnitude. For example, a return frequency period of one hundred (100) years means that, on the average, an event of this magnitude or greater is expected to occur not more often than once in one hundred (100) years, or have a one (1) percent chance of occurring in any given year.

STORMWATER MANAGEMENT FACILITY: Any ditch, depression, swale, gutter, pipe, culvert, basin or other natural or mechanical facility designed, intended, or constructed for the purpose controlling and managing stormwater runoff.

STREET: A public (dedicated) or private (undedicated) right-of-way intended for use as a means of vehicular and pedestrian circulation to provide access to more than one (1) lot. The word street includes thoroughfare, avenue, boulevard, court, drive, expressway, highway, lane, alley, road, right-of-way, intersection, and/or similar terms. The word street shall also include and encompass such intersections that are directly related to or affected by the right-of-way intended for use as a means of vehicular and/or pedestrian circulation providing access

to more than one (1) lot. Streets are further classified within the Comprehensive Plan adopted by the Township:

- A. LOCAL OR MINOR STREET: Those streets used primarily to provide access to abutting properties.
- B. COLLECTOR STREET: Those streets which, in addition to giving limited access to abutting properties, intercept local or minor streets and provide routes, carrying considerable volumes of traffic to community facilities and to major traffic streets, and are identified as such in the Comprehensive Plan adopted by the Township.
- C. ARTERIAL OR MAJOR STREET: Those streets serving large volumes of comparatively high-speed and long distance traffic and include facilities classified as main and secondary highways by the Pennsylvania State Highway Department and are identified as arterial streets in the Comprehensive Plan adopted by the Township.
- D. MARGINAL ACCESS STREET: Local or minor streets, parallel and adjacent to abutting properties with controlled access points onto collector or arterial streets.

STREET CENTERLINE: The horizontal line paralleling the street that bisects the street right-of-way into two equal widths. In those instances where the street right-of-way cannot be determined, the street centerline shall correspond to the center of the cartway.

STREET, CUL-DE-SAC: A local street intersecting another street at one end and terminating in a vehicular turnaround at the other end or, a street which intersects another street at one end, forms a loop and intersects itself.

STREET, HALF (PARTIAL): A street, generally parallel and adjacent to a property line, having a lesser right-of-way width than normally required for improvement and use of the street.

STREET (RIGHT-OF-WAY) LINE: The dividing line between a lot and the outside boundary of a public street, road, or highway right-of-way legally open or officially mapped by a municipality or higher governmental authority, between a lot and the outside boundary of a street shown on a recorded subdivision or land development plan, or between a lot and a private street, road, or way over which the owners or tenants of one or more lots held in single and separate ownership have a right-of-way.

STREET, PRIVATE: A thoroughfare serving not less than two (2) lots held in single and separate ownership and not deeded or dedicated to the Township.

STREET, PUBLIC: A public thoroughfare which has been dedicated and deeded to the Township and which affords the principal means of access to the abutting property.

STREET, SINGLE ACCESS: A street which has access to an existing public road and circulation system at only one (1) point. A single access street includes cul-de-sacs, loop roads, and dead end streets.

STREET TREE: A tree, shrub, bush or other woody vegetation growing within a public right of way along a street, in a median, in a boulevard, in a sidewalk tree well or median tree well, or in a similar area in which the public right of way borders areas owned by private individuals.

STRUCTURE: Any man-made object having an ascertainable stationary location on or in land or water, whether or not affixed to the land.

A. STRUCTURE, ACCESSORY: A structure associated with an accessory use (e.g. swimming pools, patios, antennas, tennis courts, garages, utility sheds, etc.). However, for the purpose of establishing setbacks, any accessory building larger than seven hundred twenty (720) square feet shall comply with principal structure setbacks.

B. STRUCTURE, PRINCIPAL: A structure associated with a primary use.

Structures shall not include such things as fences, sand boxes, decorative fountains, swing sets, birdhouses, bird feeders, mailboxes, and any other similar nonpermanent improvements.

SUBDIVISION: The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development; provided, however, that the subdivision by lease of land for agriculture purposes into parcels of more than ten acres not involving any new street or easement of access or any residential dwelling shall be exempted. The term subdivision shall refer, as appropriate in this ordinance, to the process of subdividing land or to the land proposed to be subdivided. The term subdivision includes resubdivision.

SUBDIVISION PLAN, MAJOR: See Section 302

SUBDIVISION PLAN, MINOR: See Section 302

SUBSOIL: Clay, sand, gravel, or other natural earth material below the surface soil and containing little organic matter.

SUBSTANTIAL IMPROVEMENT: A substantial improvement includes any repair, reconstruction, rehabilitation, addition, or other improvement

of a structure to an extent or amount equaling fifty (50) percent or more of the market value of the structure before the start of construction of the improvement. "Substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building, commences, whether or not that alteration affects the external dimensions of the structure. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either of the following:

A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to ensure safe living conditions,

or

B. Any alteration of a "historic" structure provided that the alteration will not preclude the structure's continued designation as a "historic structure".

SUPERVISORS: The Longswamp Township Board of Supervisors.

SURFACE RUNOFF: That part of the precipitation that passes over the surface of the soil.

SURVEY, BOUNDARY: The determination of the boundaries of a tract of land as certified by a registered land surveyor.

SURVEYOR: An individual licensed and registered under the laws of the Commonwealth of Pennsylvania to engage in the practice of land surveying or to perform engineering land surveys. A licensed land surveyor.

TOPSOIL: Natural and friable loam containing sufficient nitrogen, phosphorus and potassium to support plant growth and extending in depth to the extent of penetration of feeder roots of the prevailing native grasses.

TOWNSHIP: Township of Longswamp, Berks County, Pennsylvania.

TOWNSHIP ENGINEER: The duly designated representative employed by Longswamp Township to perform the duties of the engineer as herein specified.

TOWNSHIP PLANNING COMMISSION: Planning Commission of the Township of Longswamp, Berks County, Pennsylvania.

TOWNSHIP SECRETARY: The Township Recording Secretary or other designated person authorized to perform such duties.

TOWNSHIP SUPERVISORS: Board of Supervisors of the Township of Longswamp, Berks County, Pennsylvania.

TRACT AREA OR SIZE, GROSS: The total amount of land contained within the limits of the legally described property lines bounding the tract.

TRACT AREA, ADJUSTED: The gross tract area minus the constrained land, as further defined in Section 434.3 of the Longswamp Township Zoning Ordinance (used only in the design of conservation subdivisions).

TREE DRIPLINE: The line marking the outer edges of the branches of the tree.

UTILITY FACILITY: Telephone, electric and cable television lines, poles, equipment and structures; water or gas pipes, mains valves or structures; sewer pipes, valves or structures; pumping stations, telephone exchanges and repeater stations, and all other facilities, equipment and structures necessary for conducting a service by a government or a public utility.

WALKWAY, PUBLIC: Any place designed or maintained for public pedestrian use, without regard to ownership.

WATERCOURSE: A watercourse is a channel or conveyance of surface water, such as a stream, creek, or run, having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow. For the purposes of this Ordinance, a watercourse shall not include manmade swales constructed expressly for the purpose of stormwater management.

WATER DISTRIBUTION SYSTEM, COMMUNITY: A system for supplying and distributing water from a common source to two or more dwellings and/or other buildings within a single neighborhood.

WATER DISTRIBUTION SYSTEM, ON-SITE: A system for supplying and distributing water to a single dwelling or other building from a source located on the same lot.

WATER DISTRIBUTION SYSTEM, PUBLIC: A system for supplying and distributing water from a common source to dwellings and other buildings, but generally not confined to one neighborhood.

WATER TABLE: The upper surface of a zone of saturation, except where that surface is formed by an impermeable body.

WETLANDS: Those areas that are inundated and saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas. Any area meeting the official wetland definition of the U.S. Army Corps of Engineers or the Pennsylvania Department of Environmental Protection, as amended, shall

be considered a wetland for the purposes of this Ordinance. In the event the definition of wetland accepted by the U.S. Army Corps of Engineers conflicts with the definition of a wetland accepted by the Pennsylvania Department of Environmental Protection, the more restrictive definition shall apply.

WOODLANDS: A tree mass or plant community in which tree species are dominant or co-dominant and the branches of the trees form a complete, or nearly complete, aerial canopy. Any area, grove, or stand of mature or largely mature trees (i.e., larger than six inches dbh) covering an area of one-quarter (1/4) acre or more, or consisting of ten (10) individual trees larger than six (6) inches dbh, shall be considered a woodland. For the purposes of this Ordinance, the extent of any woodland plant community or any part thereof shall be measured from the outer-most dripline of all the trees in the community. Woodlands do not include orchards or oldfields (former agricultural fields or pastures where natural succession has been allowed to occur, but where most trees are smaller than six (6) inches dbh). Woodlands shall include any area where timber has been harvested within the previous three (3) years and/or woodland disturbance has occurred within the previous three (3) years which would have met the definition of woodland prior to timbering or disturbance.

WOODLAND DISTURBANCE: (1) Any activity which alters the existing structure of a woodland or hedgerow. Alterations include the cutting or removal of canopy trees, subcanopy trees, understory shrubs and vines, and herbaceous woodland floor species; (2) Any activity which constitutes a land disturbance within a woodland or hedgerow; (3) Woodland disturbance does not include the selective cutting or removal of invasive plant species. (See also INVASIVE PLANT SPECIES.)

YARD: An area between the permitted structures and the property lines.

- A. YARD, FRONT: The area contained between the ultimate right-of-way line and the principal structure. For flag lots, the front yard shall include the flagpole plus that area between the principal structure and that property line which is most parallel to the street that provides access and is not part of the flagpole.
- B. YARD, REAR: The area contained between the principal structure and the property line directly opposite the street of address. For flag lots, the rear yard shall be that area between the principal structure and that lot line which is directly opposite the above described front yard.
- C. YARD, SIDE: The area(s) between a principal structure and any side lot line(s). On corner lots, the side yard shall be considered those areas between the principal structure and the property lines directly opposite the non-address street(s). For flag lots, the side yards shall be the area between the principal structure and that one (1) outermost lot line which forms the flag and pole, plus the area on the opposite side of the principal structure.



ZONING MAP: The official Zoning Map of Longswamp Township, as adopted or amended from time to time.

ZONING ORDINANCE: Longswamp Township Zoning Ordinance of 2006, as amended.

## ARTICLE III

### PLAN SUBMISSION AND REVIEW PROCEDURE

#### Section 301 - GENERAL

- A. In order to discharge the duties imposed by law, the Board of Supervisors of Longswamp Township has adopted the following procedures which shall be observed by all subdividers, applicants, developers, and their agents.
- B. All preliminary and final subdivision or land development plans shall be reviewed by the Township Planning Commission and Township Engineer, and may be reviewed by any township consultants recommended by them and approved by the Board of Supervisors. The preliminary and final plans shall be approved or disapproved by the Board of Supervisors in accordance with the procedure specified in this Ordinance.

#### Section 302 - CLASSIFICATION OF PLANS - MAJOR AND MINOR

- A. All subdivision and land development applications shall, for the purposes of this procedure, be classified as either minor or major. Plans shall be classified in accordance with the following criteria:

- 1. Minor Subdivision Plan

A subdivision plan may be classified as a minor subdivision where the following circumstances apply:

- a. No street, either public or private, nor any improvement (including the extension of a public water or sewer main), which is intended to be dedicated to the Township, is to be constructed; and
- b. No land disturbance activities will take place except those incidental to construction of a single family detached dwelling on a single family lot; and
- c. No more than three (3) lots are proposed; and
- d. No further subdivision can occur within the resulting lots; or
- e. Where the purpose of the plan is to provide a lot line adjustment, a consolidation of lots or a recombination of lots and no development is proposed.

- 2. Minor Land Development Plan

- a. The addition to an existing non-residential structure having an area which is the equivalent of not more than

ten (10) percent of the existing gross floor area or one thousand (1,000) square feet, whichever is less.

- b. The expansion of an existing parking lot having an area which is the equivalent of not more than twenty (20) percent of the existing parking lot area or fifteen-hundred (1,500) square feet, whichever is less.

3. Major Subdivision or Land Development Plan

All subdivision or land development plans not meeting the minor criteria, as defined above, shall be classified as a major subdivision or land development plan.

B. Determination of Plan Classification

Subdivision or land development plan submittals shall be made to the Township Secretary, or other person so designated by the Board of Supervisors to receive plans. Thereafter, said designee shall transmit the plans to the Township Engineer who shall make the determination as to whether the subdivision or land development is classified as major or minor.

C. Review Procedure for Major and Minor Plan Submittals

Applications for subdivision or land development shall be submitted in accordance with the following review procedures:

Plan Stage	Minor Subdivision or Land Development	Major Subdivision	Major Land Development	See Section
Sketch	Recommended	Recommended	Recommended	308
Preliminary	Not Required	Required	Required	309
Final	Required	Required	Required	310

The Board of Supervisors may require a Preliminary Plan for subdivisions or land developments otherwise exempted above if they determine that the plans could cause significant harm to the environment or the health, safety, or welfare of the citizens of Longswamp Township.

**Section 303 - MINOR PLAN REVIEW PROCEDURE**

Where an application qualifies as a minor subdivision or land development under the terms of Section 302, the applicant may seek approval according to the following procedure:

- A. A Final Plan, prepared in accordance with Section 403 and Section 404, as applicable, shall be submitted and reviewed in accordance with the applicable provisions of Section 310.
- B. As part of the final plan review process for minor subdivisions or land developments, copies shall be sent by the Township to the

relevant agencies applicable to Preliminary Plans in Section 309.A.3. of this Ordinance.

- C. All minor subdivision or land development plans shall be referred to the Planning Commission for review by the Board of Supervisors.

#### Section 304 - TIME LIMITATIONS FOR PLAN REVIEW

- A. Start of Plan Review Time Period

A Preliminary or Final Plan shall not be considered officially filed and the time requirements of this section shall not be considered in effect until the submittal requirements of Section 309.A.1 for Preliminary Plans or Section 310.A.1 for Final Plans have been met. A Plan shall be considered administratively complete when the items required within the Township's submission checklist have been satisfied. A copy of the Checklist for submittal requirements for Preliminary and Final Plans is attached as Appendix B.

- B. Planning Commission Review

If no reply is made by the Planning Commission concerning their recommendation on a pending Plan prior to the expiration of the Township review period, the Board of Supervisors may proceed to act on the plan without the recommendation.

- C. Board of Supervisors Review

1. All applications for Preliminary or Final Plan approval shall be acted upon by the Board of Supervisors and communicated to the applicant within ninety (90) days following the date of the next regular Planning Commission meeting following the date the application is filed. However, if the next regular meeting of the Planning Commission occurs more than thirty (30) days following the filing of the application, the ninety (90) day period shall be measured from the thirtieth (30th) day following the day the application is filed, unless the applicant agrees to grant the Township an extension of time as provided for in Sub-Section 4, below.
2. The decision of the Board shall be in writing and shall be communicated to the applicant personally or mailed to the applicant not later than fifteen (15) days following the decision. The form and content of the decision shall comply with the applicable requirements of Section 508 of the Pennsylvania Municipalities Planning Code.
3. Failure of the Supervisors to render a decision and communicate it to the applicant within the time and in the manner required herein shall be deemed an approval of the application in terms as presented, unless the applicant has

agreed in writing to an extension of time as described in Sub-Section 4, below.

4. The applicant may agree to permit the Township an extension of time to review the plan. Following receipt of the applicant's written agreement, the Board shall render a decision and communicate it to the applicant before the end of the extended time period.

#### **Section 305 - OVERVIEW OF SUBMITTAL AND REVIEW PROCESS PHASES**

The process of submitting, reviewing and approving subdivision and land development site plans consists of various stages: Sketch Plan phase (optional), formal submission processing, Preliminary Plan phase and Final Plan phase. Below is a description of each submission stage and its purpose in the overall process:

##### **A. Sketch Plan Phase**

The Sketch Plan phase provides the applicant and the Township an opportunity for informal discussion as to the contents of a plan. This stage requires a formal application and review fee in order for a review by the Township Engineer to be completed.

##### **B. Formal Submission Processing**

When an application is submitted for a subdivision or land development project, and is accompanied by the specified fee, it is reviewed by the Township Engineer. This review is conducted to determine if the application is correctly executed and the plan(s) accompanying it contain enough information to constitute a valid application (See Checklists in Appendix B). This review will not consider whether the Plan is complete or accurate but rather whether it warrants being submitted to the appropriate reviewing agencies. If judged to be inadequate, the Plan will be presented to the Board of Supervisors for a determination whether resubmission is required.

##### **C. Preliminary Plan Phase**

1. The Preliminary Plan phase commences with the Township's acceptance of the applicant's submission of a subdivision or land development application and ends with a decision on the Plan by the Board of Supervisors. The length of that review process depends chiefly upon two critical factors. First, whether the submitted Plan is fully responsive to Township and other agency ordinances and requirements. Second, whether the information on the Plan is accurate and complete. A Plan that ignores Ordinance requirements or lacks sufficient detail can be only partially reviewed and will result in delays while the information is sought and subsequent reviews initiated.

2. Although referred to as "Preliminary" to differentiate from the "Final" Plan from a design and engineering perspective, if the Board of Supervisors grants preliminary approval, the design at that point becomes fixed. Subsequently, only minor changes such as adding design details can be made to the plan. If a change in design concept is proposed after the granting of preliminary approval, the plan must be resubmitted as a Preliminary Plan.

D. Final Plan Phase

The submission of the Final Plan differs according to whether the proposed plan is classified as a major or minor subdivision or land development as outlined in Section 302. Major subdivision or land development plans are required to proceed through the Preliminary Plan review phase prior to the submittal of a Final Plan. Minor subdivision and land development plans may proceed directly to Final Plan submittal. The purpose served by each type of Final Plan is described below.

1. Major Plans - The purpose of the Final Plan of a major subdivision or land development is to enable the Township to determine whether or not all aspects of a major subdivision or land development conform to Township standards and conditions of Preliminary Plan approval, and to provide a means to ensure that required improvements are guaranteed prior to official approval and recording of the plan.
2. Minor Plans - In the case of a minor subdivision or land development, the purpose of the Final Plan is to ensure that the proposal meets all the provisions of the Township codes and ordinances and other applicable requirements prior to official approval and recording of the plan. No Preliminary Plan is required.

**Section 306 - PRE-DEVELOPMENT MEETINGS**

A Sketch Plan is strongly encouraged for all proposed major or minor subdivisions. Prior to the submission of the Sketch Plan, the pre-application meeting and site inspection process described below will significantly improve the quality of the Sketch Plan and its usefulness to the Township in their review of the Plan. These pre-development discussions are particularly important for the residential design options requiring the Four-Step Design Process described in Appendix C of this Ordinance. Sketch Plans, as described in Section 401, shall be submitted to the Township for review by the Planning Commission. Submission of the Sketch Plan shall not constitute formal filing of a Plan with the Township, nor shall it commence the statutory review period as required by the Municipalities Planning Code. The procedures for submission of a Sketch Plan, are described in Section 308, and may be altered only at the discretion of the Township.

A. Preapplication Meeting

A Preapplication Meeting is encouraged between the applicant, the site designer, one (1) member of the Board of Supervisors, and a committee of the Planning Commission members (which shall not constitute a quorum) to introduce the applicant to the Township's zoning and subdivision regulations and procedures and to discuss the applicant's objectives. Applicants are required to present the Existing Resources and Site Analysis Plan at this meeting. The Preapplication Meeting can be held in conjunction with the Site Inspection or can be scheduled as a separate meeting.

B. Site Inspection

1. A site inspection is encouraged between the applicant, the site designer, one (1) member of the Board of Supervisors, and a committee of the Planning Commission members (which shall not constitute a quorum). Applicants are also required to submit a copy of the Existing Resources and Site Analysis Plan prior to this meeting. Comments made by the parties at this meeting shall not be considered official or binding on the Township Board of Supervisors or Planning Commission but are merely for discussion purposes.
2. The purpose of the site inspection is to familiarize Township officials with the property's existing conditions and special features, to identify potential site design issues, and to provide an informal opportunity to discuss design concepts, including the general layout of the designated open space lands (if applicable), and potential locations for proposed buildings and street alignments.
3. The procedures set forth in Section 307 shall be followed in order to schedule a Site Inspection.

C. Existing Resources and Site Analysis Plan

Regardless of whether a Sketch Plan is submitted, the applicant shall submit an Existing Resources and Site Analysis Plan as part of its Preliminary Plan application (or Final Plan application in the case of a minor subdivision or minor land development plan), in its context, prepared in accordance with the requirements contained in Section 402.D. The purpose of this key submission is to familiarize all parties with the existing conditions on the applicant's tract and within its immediate vicinity, and to provide a complete and factual reference for them in making a Site Inspection. This Plan shall be provided prior to the Site Inspection, if scheduled, and shall form the basis for the development design as shown on the Sketch Plan (or on the Preliminary Plan, if the optional Sketch Plan is not submitted).

**Section 307 - PREAPPLICATION MEETING AND SITE INSPECTION PROCEDURE**

- A. In order to initiate an informal Preapplication Meeting and/or Site Inspection, the application shall submit to the Township Secretary during regular business hours, a formal request for a Preapplication Meeting and/or Site Inspection, applicable application (see Appendix D), fee and the Existing Resources and Site Analysis Plan.
- B. At the Township Planning Commission's next regularly scheduled meeting it shall announce a date and time for the Preapplication Meeting and/or Site Inspection. Said Preapplication Meeting and/or Site Inspection shall not occur later than 45 days after the first regularly scheduled Planning Commission meeting after the submission of the required Application, fee and Existing Resources and Site Analysis Plan. A report from the committee as to the discussion during the Preapplication Meeting and/or Site Inspection shall occur at the next regularly scheduled Planning Commission meeting following the meeting and/or inspection.

**Section 308 - SKETCH PLAN SUBMISSION AND REVIEW**

A. Submittal Procedure

- 1. A Sketch Plan submission is strongly encouraged by the Township for all proposed major and minor subdivisions, since Sketch Plans are considered to be an essential step in the development design process. The Sketch Plan shall diagrammatically illustrate initial thoughts about a conceptual layout for open space, house sites, and street alignments, and shall be based upon the information contained in the Existing Resources and Site Analysis Plan.
- 2. A Sketch Plan submission, if made, shall be submitted at least thirty (30) days prior to a regularly scheduled meeting of the Township Planning Commission for new submissions, and at least twenty-four (24) days for revised Plans. The submission of a Sketch Plan shall include:
  - a. Submission of five (5) copies of the completed Application for Review of Sketch Plan (See Appendix A-1).
  - b. Submission of five (5) copies of the Sketch Plan Checklist (See Appendix B-1).
  - c. Payment of the filing fee.
  - d. Submission of five (5) copies, if applicable, of an affidavit that the Applicant is the Owner or Equitable Owner of the land proposed to be developed and has the authority to proceed on behalf of all parties claiming any ownership interest therein.



- e. Submission of fourteen (14) (folded to 8-1/2" x 11") prints on paper of the Sketch Plan.
  - f. Submission of fourteen (14) (folded to 8-1/2" x 11") prints on paper of the Existing Resources and Site Analysis Plan.
  - g. Submission of five (5) copies of any supplemental data.
3. The Township Secretary shall distribute the submitted information as follows:
- a. To the Board of Supervisors
    - (1) Three (3) copies of the Sketch Plan.
    - (2) Three (3) copies of the Existing Resources and Site Analysis Plan.
  - b. To the Township Planning Commission
    - (1) Seven (7) copies of the Sketch Plan.
    - (2) Seven (7) copies of the Existing Resources and Site Analysis Plan.
    - (3) One (1) copy of the Application for Review of Sketch Plan.
    - (4) One (1) copy of the Sketch Plan Checklist.
    - (5) One (1) copy of all other required information.
  - c. To the Township Engineer
    - (1) One (1) copy of the Sketch Plan.
    - (2) One (1) copy of the Existing Resources and Site Analysis Plan.
    - (3) One (1) copy of the Application for Review of Sketch Plan.
    - (4) One (1) copy of the Sketch Plan Checklist.
    - (5) One (1) copy of all other required information.
  - d. To the Township Zoning Officer
    - (1) One (1) copy of the Sketch Plan.

- (2) One (1) copy of the Existing Resources and Site Analysis Plan.
- (3) One (1) copy of the Application for Review of Sketch Plan.
- (4) One (1) copy of the Sketch Plan Checklist.
- (5) One (1) copy of all other required information.

e. To the Township Solicitor

- (1) One (1) copy of the Sketch Plan.
- (2) One (1) copy of the Existing Resources and Site Analysis Plan.
- (3) One (1) copy of the Application for Review of Sketch Plan.
- (4) One (1) copy of the Sketch Plan Checklist.
- (5) One (1) copy of all other required information.

f. To be retained by the Township Secretary

- (1) One (1) copy of the Sketch Plan.
- (2) One (1) copy of the Existing Resources and Site Analysis Plan.
- (3) One (1) copy of the Application for Review of Sketch Plan.
- (4) One (1) copy of the Sketch Plan Checklist.
- (5) One (1) copy of all other required information.

4. Additional copies of the Sketch Plan, Existing Resources and Site Analysis Plan and other supplemental data shall be submitted by the applicant, at the request of the Township, for transmittal to other appropriate review agencies, such as the Berks County Planning Commission. Any fees charged by these agencies shall be paid by the applicant.

B. Township Review Procedure

1. The Planning Commission shall review the Sketch Plan in accordance with the criteria contained in this Ordinance and with other applicable Township ordinances, provided that the

Plan was submitted at least thirty (30) days prior to that meeting for new submission or twenty four (24) days for revised plans. Their review shall informally advise the applicant of the extent to which the proposed subdivision or land development conforms to the relevant standards of this Ordinance, and may suggest possible plan modifications that would increase its degree of conformance. Their review shall include but is not limited to:

- a. The location of all areas proposed for land disturbance (streets, foundations, yards, septic disposal systems, water lines, storm water management areas, etc.) with respect to natural or cultural features as identified on the applicant's Existing Resources and Site Analysis Plan and on the Township's Map of Primary Conservation Areas.
  - b. The potential for street connections with existing streets, with other proposed streets, or with potential developments on adjoining parcels.
  - c. The location of proposed access points along the existing road network.
  - d. The proposed building density and impervious coverage.
  - e. Consistency with the *Longswamp Township Zoning Ordinance of 2006*, as amended.
2. The Planning Commission shall submit its comments to the applicant and the Board of Supervisors. The Sketch Plan may also be submitted by the Township to the County Planning Commission, or other appropriate agencies, for unofficial review and comment.
  3. The Planning Commission may request the applicant to submit a second draft of the Sketch Plan to ensure that its comments have been properly incorporated into the revised Plan.
  4. If an applicant so desires, he may also make a presentation of the Sketch Plan to the Board of Supervisors.

#### **Section 309 - PRELIMINARY PLAN SUBMISSION AND REVIEW**

##### **A. Submittal Procedure**

1. A Preliminary Plan shall be considered officially submitted only upon the receipt by the Township Secretary of the appropriate number of Plan copies with supporting documents, a completed official Application for Review form, a completed Preliminary Plan Checklist, and a correct application fee.

Official application form and checklist are included in Appendix A and B of this Ordinance or may be obtained at the Township office.

- a. The application shall not be considered complete until plan information, as required by Section 402 and as outlined in the Preliminary Plan Checklist, is included with the submission. The initial determination of the completeness of the application shall be made by the Township Secretary.
  - b. Thereafter, the Township Engineer shall review the Preliminary Plan for a formal determination of whether the application is complete. If the application is determined to not comply with the general submittal requirements of this Ordinance, the application shall be returned within ten (10) working days of filing, with a letter indicating the specific provisions of the Ordinance that have not been complied with.
  - c. A decision by the Township Engineer to return an application as incomplete under the provisions of this section may be appealed to the Board of Supervisors within thirty (30) days of notice. In the absence of such appeal, the decision of the Township Engineer shall be deemed to be final. Subsequent applications shall be deemed to be new applications.
2. Preliminary Plans and required supplementary data for all subdivisions and land developments shall be submitted to the Township Secretary no less than thirty (30) days prior to a regularly scheduled meeting of the Township Planning Commission for new submissions or at least twenty four (24) days for revised Plans. The official submission of a Preliminary Plan shall include:
- a. Submission of sixteen (16) copies on paper of the Preliminary Plan which shall comply with the requirements of Article IV. Plans shall be submitted as sets, stapled and folded into 8 ½" by 11".
  - b. Submission of five (5) copies of the completed Application for Review of Preliminary Plan (See Appendix A-2).
  - c. Submission of five (5) copies of the Preliminary Plan Checklist (See Appendix B-2).
  - d. Submission of seven (7) copies of all other information and plans which are required by Article IV.
  - e. Payment of the filing fee.

- f. Submission of five (5) copies, if applicable, of an affidavit that the applicant is the owner or equitable owner of the land proposed to be developed and has the authority to proceed on behalf of all parties claiming any ownership interest therein.
3. The Township Secretary shall distribute submitted information as follows:
- a. To the Township Planning Commission
    - (1) Seven (7) copies of the Plan.
    - (2) One (1) copy of the Application for Review of Preliminary Plan.
    - (3) One (1) copy of the Preliminary Plan Checklist.
    - (4) One (1) copy of all other required information and plans.
  - b. To the County Planning Commission
    - (1) Two (2) copies of the Plan.
    - (2) One (1) copy of all other required information and plans.
  - c. To the Township Engineer
    - (1) Two (2) copies of the Plan.
    - (2) One (1) copy of the Application for Review of Preliminary Plan.
    - (3) One (1) copy of the Preliminary Plan Checklist.
    - (4) Two (2) copies of all other required information and plans.
  - d. To the Township Zoning Officer
    - (1) One (1) copy of the Plan.
    - (2) One (1) copy of the Application for Review of Preliminary Plan.
    - (3) One (1) copy of the Preliminary Plan Checklist.
    - (4) One (1) copy of all other required information and plans.
  - e. To the Township Solicitor

- (1) One (1) copy of the Plan.
  - (2) One (1) copy of the Application for Review of Preliminary Plan.
  - (3) One (1) copy of the Preliminary Plan Checklist.
  - (4) One (1) copy of all other required information and plans.
- f. To the Municipal Authority or Township Sewage Enforcement Officer, as applicable.
- (1) One (1) copy of the Plan.
- g. To be retained by the Township Secretary
- (1) Two (2) copies of the Plan.
  - (2) One (1) copy of the Application for Review of Preliminary Plan.
  - (3) One (1) copy of the Preliminary Plan Checklist.
  - (4) One (1) copy of all other required information and plans.
4. Failure of the applicant to submit all items required under this section and failure of the Preliminary Plan to comply with the requirements of Article IV shall be grounds for the Township Supervisors to refuse to accept the Preliminary Plan for review.
5. It shall be the ongoing responsibility of the applicant to provide to the Township accurate copies, in numbers to be determined by the Township, of all revisions made to any and all plans, including any and all related plans submitted to any other agency for review or for the obtaining of permits related to the proposed subdivision or land development. It also shall be the ongoing responsibility of the applicant to provide to the Township accurate copies, in triplicate, of any reviews, permits and documents related to the proposed subdivision or land development. The applicant shall obtain and provide the Township copies, in triplicate, of all required permits from the Pennsylvania Department of Environmental Protection, the Pennsylvania Department of Transportation, the Berks County Conservation District, Public Utility Commission or any other agency, if appropriate.
6. Upon submission of a complete application, together with all required fees and escrow deposits, the Township Secretary shall accept the application, plans, and other required materials as filed, and shall transmit the requisite number of copies of the plans and other required materials to the

Township Planning Commission and the Township Engineer. In addition, copies shall be transmitted to the agencies noted above in Sub-Section 3. Any fees charged by these agencies shall be paid by the applicant.

B. Township Review Procedure

Before acting on any Preliminary Plan, the Board of Supervisors may refer such Plan to the Township Planning Commission for review and recommendation. The Township Board of Supervisors shall not approve any Plan until the Township Engineer has made a final recommendation.

1. Township Planning Commission

- a. The Township Planning Commission shall review all plans referred to it by the Board of Supervisors and shall consider any recommendations made by the Township Engineer, any State or County agencies, and any other review agencies who have submitted comments with respect to any such application. In addition, the Township Planning Commission shall review the plans as to overall conformance with this Ordinance, the Township Zoning Ordinance, Township Comprehensive Plan, and any other applicable plans, practices and guidelines the Planning Commission wishes to use.
- b. After such review, the Planning Commission shall send to the Board of Supervisors the recommendations of the Planning Commission and the reasons therefore, citing specific sections of the statutes or ordinances relied upon in the case of Plan rejection. The Planning Commission's recommendations for Plan approval shall include any suggested conditions, changes, modifications or additions required to be addressed at the Final Plan stage and, if applicable, an explicit listing of all Ordinance requirements being recommended for waiver. Recommendations for Plan rejection shall include a listing of the specific areas in which the Planning Commission deems the Plan deficient.

2. Township Engineer

For each application for preliminary subdivision or land development, the authorized Township Engineer is responsible for reviewing all plans and documents submitted by the applicant and for informing the Township of any nonconformance with Township, County, State and Federal laws and regulations. The Township Engineer shall state what permits are required of each application for subdivision or land development. The Township Engineer also shall review each Plan with respect to general planning issues.

3. Board of Supervisors

- a. When the Planning Commission submits its recommendations to the Board of Supervisors, such Plan shall be placed on the Board of Supervisors' agenda for review and action.
- b. In acting on the Preliminary Plan, the Board shall review the Plan and the comments of the Planning Commission, the Berks County Planning Commission, and all other reviewing agencies, and comments from public hearings, if any, to determine its conformance with existing ordinances.
  - (1) The Board may request the modification of any subdivision or land development plan and specify conditions, changes, modifications, or additions thereto, which it deems necessary, and may make its decision to grant Preliminary Plan approval subject to such conditions, changes, modifications, or additions.
  - (2) Whenever the approval of a Preliminary Plan is subject to conditions, the written action of the Board, as prescribed herein, shall, a) specify each condition of approval, citing relevant ordinance provisions; and b) require the applicant's written agreement to the conditions. Where the applicant's written agreement is not received within fifteen (15) days from the date the written action of the Board is issued, the Board shall be deemed to have denied the application.
  - (3) A decision for Plan rejection shall include a listing of the ways in which the Board deems the Plan deficient and shall cite specific sections of the statutes or ordinances relied upon in the decision.
- c. Before acting on a Plan, the Supervisors may hold a public hearing thereon, after giving proper public notice.

**Section 310 - FINAL PLAN SUBMISSION AND REVIEW**

A. Submittal Procedure

- 1. A Final Plan shall be considered officially submitted only upon the receipt by the Township Secretary of the appropriate number of Plan copies with supporting documents, a completed official Application for Review form, a completed Final Plan Checklist of submittal requirements, and a correct application fee. Official application form and checklist are included in



Appendix A and B of this Ordinance or may be obtained at the Township Office.

- a. The application shall not be considered complete until plan information, as required by Section 403 and as outlined in the Final Plan Checklist, is included with the submission. The initial determination of the completeness of the application shall be made by the Township Secretary.
  - b. Thereafter, the Township Engineer shall review the Final Plan for a formal determination of whether the application is complete. If the application is determined to not comply with the submittal requirements of this Ordinance, the application shall be returned within ten (10) working days of filing, with a letter indicating the specific provisions of the Ordinance that have not been complied with.
  - c. A decision by the Township Engineer to return an application as incomplete under the provisions of this section may be appealed to the Board of Supervisors within thirty (30) days of notice. In the absence of such appeal, the decision of the Township Engineer shall be deemed to be final. Subsequent applications shall be deemed to be new applications.
2. The applicant shall submit to the Board of Supervisors, within one (1) year after the Board's action on the Preliminary Plan in the case of major plans, copies of the Final Plan, including all sheets, drawings and notes of the approved Final Plan, and complying fully with Section 403 and the Final Plan Checklist, for circulation as follows:
- a. Submission of fourteen (14) copies on paper of the Final Plan which shall comply with the requirements of Article IV. Plans shall be submitted as sets, stapled and folded into 8 ½" by 11".
  - b. Submission of five (5) copies of the completed Application for Review of Final Plan (See Appendix A-3).
  - c. Submission of five (5) copies of the Final Plan Checklist (See Appendix B-3).
  - d. Submission of seven (7) copies of all other information and plans which are required by Article IV.
  - e. Payment of the filing fee.
  - f. Submission of five (5) copies, if applicable, of an affidavit that the applicant is the owner or equitable owner of the land proposed to be developed and has the

authority to proceed on behalf of all parties claiming any ownership interest therein.

3. The Township Secretary shall distribute submitted information as follows:
  - a. To the Township Planning Commission
    - (1) Seven (7) copies of the Plan.
    - (2) One (1) copy of the Application for Review of Final Plan.
    - (3) One (1) copy of the Final Plan Checklist.
    - (4) One (1) copy of all other required information and plans.
  - b. To the County Planning Commission
    - (1) Two (2) copies of the Plan.
    - (2) One (1) copy of all other required information and plans.
  - c. To the Township Engineer
    - (1) Two (2) copies of the Plan.
    - (2) One (1) copy of the Application for Review of Final Plan.
    - (3) One (1) copy of the Final Plan Checklist.
    - (4) Two (2) copies of all other required information and plans.
  - d. To the Township Zoning Officer
    - (1) One (1) copy of the Plan.
    - (2) One (1) copy of the Application for Review of Final Plan.
    - (3) One (1) copy of the Final Plan Checklist.
    - (4) One (1) copy of all other required information and plans.
  - e. To the Township Solicitor
    - (1) One (1) copy of the Plan.
    - (2) One (1) copy of the Application for Review of Final Plan.

- (3) One (1) copy of the Final Plan Checklist.
    - (4) One (1) copy of all other required information and plans.
  - f. To the Municipal Authority or Township Sewage Enforcement Officer, as applicable.
    - (1) One (1) copy of the Plan.
  - g. To be retained by the Township Secretary
    - (1) Two (2) copies of the Plan.
    - (2) One (1) copy of the Application for Review of Final Plan.
    - (3) One (1) copy of the Final Plan Checklist.
    - (4) One (1) copy of all other required information and plans.
- 4. Prior to final approval of a subdivision or land development plan, the applicant shall also submit to the Township deed descriptions, and plot plans if applicable, prepared by a registered land surveyor, for:
  - a. Any road and road right-of-way to be offered for dedication to the Township for public ownership;
  - b. Any areas reserved for common open space; and
  - c. Any lots on which deed restrictions or easements are a condition for final Township approval of the subdivision or land development.
- 5. In the case of major plan applications, the Final Plan shall conform in all important respects with the Preliminary Plan as previously approved by the Supervisors and shall incorporate modifications and revisions specified by the Board in its conditional approval of the Preliminary Plan. If it does not conform in all important respects, the Plan shall be considered as a Revised Preliminary Plan and shall be resubmitted with the fee required for a Preliminary Plan.

B. Township Review Procedure

Before acting on any Final Plan, the Board of Supervisors may refer such Plan to the Township Planning Commission for review and recommendation and to the Township Engineer for review and comments. The Township Board of Supervisors shall not approve any Plan until the Township Engineer has made a final recommendation.

1. Township Planning Commission

- a. The Planning Commission shall review the Plan and the recommendations of the State and County agencies, the Township Engineer, and any other review agencies.
- b. After such review, the Planning Commission shall provide notice of its recommendations, and the reasons therefore; citing specific sections of the applicable statutes or ordinances relied upon to the Board of Supervisors and the applicant.

2. Township Engineer

The Township Engineer shall review the Final Plan to determine that the information and contents required by this Ordinance, the Township Zoning Ordinance, other laws, regulations and accepted engineering standards, and the conditions of Preliminary Plan approval, when applicable, are presented in the submitted plans. The findings of the Township Engineer shall be forwarded to the Planning Commission and Board of Supervisors for their consideration during review of the Final Plan.

3. Board of Supervisors

- a. When a Final Plan has been officially submitted to the Board of Supervisors, such Plan shall be placed on its agenda for review and forwarding to the Planning Commission.
- b. Upon receipt of the recommendations of the Planning Commission, Township Engineer, and all other applicable reviewing agencies, and any other supporting information, the Board may, at one or more regular or special meetings, review the Final Plan and shall within the time limitations set forth in Section 304, either approve or disapprove the Plan.
- c. The Board may specify conditions, changes, modifications, or additions to the application which it deems necessary and may make a decision to grant final approval subject to such conditions, changes, modifications, or additions. Whenever the approval of a Final Plan is subject to conditions, the written action of the Board as prescribed herein shall:
  - (1) Specify each condition of approval, citing relevant Ordinance provisions in each case; and
  - (2) Require the applicant's written agreement to the conditions. Where the applicant's written agreement

is not received within the time allotted, the Board shall be deemed to have denied approval.

d. Additional Conditions of Approval - Where applicable, the following conditions shall also be met prior to Final Plan approval:

(1) No subdivision plan or land development plan shall have final Township approval until the developer and the Township Board of Supervisors enter into a written Development Agreement setting forth the developer's obligations, including but not limited to, compliance with all Township ordinances, regulations and resolutions, all applicable state and federal laws, and all conditions and safeguards specific to the development. Such Development Agreement shall be recorded with the Final Plan in the County Office of Recorder of Deeds. The developer shall comply with all terms of such Development Agreement, with all applicable laws, ordinances, regulations, resolutions and permits, and with all approved plans, except only where changes to such plans are authorized and approved in writing by the Township.

(2) In the event that the subdivision or land development requires improvements not already installed, the Plan shall not have final Township approval until the developer and the Township Board of Supervisors enter into a Financial Security Agreement setting forth the developer's obligations. These obligations shall include, but not be limited to, completion of the planned improvements, immediate correction of all foreseen and unforeseen soil erosion and stormwater runoff problems that arise during development, and immediate posting of an escrow account or other acceptable financial security sufficient to guarantee construction of all required improvements. Such Financial Security Agreement shall be recorded with the Final Plan in the County Office of Recorder of Deeds.

e. The following number of copies of the Final Plan and supporting information, as approved, shall be submitted to the Township for endorsement by the Planning Commission and the Board of Supervisors and/or retaining in the Township file:

(1) A minimum of nine (9) copies of the Plan Sheets to be recorded (additional copies should be submitted if the developer would like to retain a copy or copies);

- (2) Two (2) copies of the full plan set;
- (3) Two (2) copies of all supporting materials;
- (4) One (1) electronic copy of the full plan set in AutoCAD format.

f. Before acting on a Plan, the Supervisors may hold a public hearing thereon, after giving proper public notice.

C. Recording of Final Plan

After the Township has approved the Plan for recording, a minimum of nine (9) copies of the Plan Sheets to be recorded shall be delivered to the Berks County Planning Commission for signature. Two (2) copies are required for the County Planning Commission. Of these two (2) copies, one (1) copy of the plan is permanently retained by the County Planning Commission and one (1) copy is retained for the County Mapping Office. In addition, one (1) copy of the plan is required for the Recorder of Deeds. The remaining six (6) plan copies shall be returned to the Township after recording for distribution to the Township file, the Township Planning Commission file, the Township Engineer, the Township Solicitor, the Township Zoning Officer, and the Township Sewage Enforcement Officer or Municipal Authority as applicable.

The applicant has ninety (90) days to record the Plan after the Board of Supervisors approves the Plan at a public meeting.

**Section 311 - TIME LIMITATIONS ON APPROVED PLANS**

- A. Conditional Plan approval shall be valid for a period of six (6) months. If all conditions of the Plan approval are not satisfied within the six-month period, the Plan shall be deemed to be rejected. Extensions of the six-month time period shall only be considered by the Board of Supervisors if the request is submitted to the Township in writing and sets forth the progress to date on satisfying said conditions of Plan approval.
- B. Within twelve (12) months after approval of the Preliminary Plan by the Township Supervisors, the developer or his agent shall submit a Final Plan and all required supplementary data to the Township Secretary unless an extension of time is granted by the Supervisors. If an extension is not granted, failure to submit the Final Plan within twelve (12) months may result in a determination by the Township Supervisors that they will consider any Plan submitted after twelve (12) months as a new Preliminary Plan.
- C. From the time an application for approval of a Preliminary or Final Plan is duly filed as provided in this Ordinance, and while such

application is pending approval or disapproval, no change or amendment of the zoning, subdivision and land development or other governing ordinance or plan shall affect the decision on such application adversely to the applicant and the applicant shall be entitled to a decision in accordance with the provisions of the governing ordinances or plans as they stood at the time the application was duly filed.

- D. In addition, when a preliminary application has been duly approved, the applicant shall be entitled to final approval in accordance with the terms of the approved preliminary application as hereinafter provided. However, if an application is properly and finally denied, any subsequent application shall be subject to the intervening change in covering regulations.
- E. When an application for approval of a Preliminary or Final Plan has been approved or approved subject to conditions acceptable to the applicant, no subsequent change or amendment in the zoning, subdivision and land development or other governing ordinance or plan shall be applied to affect adversely the right of the applicant to commence and to complete any aspects of the approved development in accordance with the terms of such approval within five (5) years from such approval. Where final approval is preceded by preliminary approval, the five (5) year period shall be counted from the date of the preliminary approval.
- F. In the case of any doubt as to the terms of a preliminary approval, the terms shall be construed in the light of the provisions of the governing ordinances or plans as they stood at the time when the application for such approval was duly filed.
- G. If land development in accordance with an approved Plan does not begin within five (5) years of the date of the Preliminary Plan approval, said approval shall expire and the submission of new plans shall be required.

## ARTICLE IV

### PLAN INFORMATION REQUIREMENTS

#### Section 401 - SKETCH PLAN INFORMATION

- A. Submission of a Sketch Plan is strongly encouraged by the Township. A Sketch Plan may be submitted by the applicant as a diagrammatic basis for informal discussion with the Township Planning Commission, the Board of Supervisors, and the County Planning Commission regarding the design of a proposed subdivision or land development. The procedures for pre-development discussions and Sketch Plan submissions are outlined in Section 306.
- B. The optional Sketch Plan shall be submitted as follows:
1. The Sketch Plan shall be clearly and legibly drawn to a scale of one inch (1") equals twenty feet (20'), thirty feet (30'), forty feet (40') or fifty feet (50') with all dimensions shown in feet and hundredths of a foot, except that if the average size of the proposed lots is two (2) acres or larger, the Plan may be drawn to a scale of one inch (1") equals one hundred feet (100').
  2. The Sketch Plan shall be made on sheets not smaller than eighteen inches (18") by twenty-four inches (24") and no larger than thirty-six inches (36") by forty-eight inches (48").
- C. The Sketch Plan shall include the following:
1. Name and address of the applicant and of the applicant's engineer, surveyor, planner, architect, or landscape architect, as applicable.
  2. Name and address of record owner and/or equitable owner.
  3. Location Map.
  4. North arrow.
  5. Graphic scale and written scale.
  6. Date of the Plan.
  7. Name of the subdivision or land development.
  8. Zoning District lines and designations, including overlay districts if applicable, and area, yard and height requirements applicable to the property.
  9. Municipality(ies) in which the subdivision or land development is located.



10. Approximate tract boundaries sufficient to locate the tract on a map of the Township.
11. Streets on and adjacent to the tract (both existing and proposed.)
12. Significant existing topographical and physical features within one thousand feet (1000') of the site for sites under one hundred (100) acres and within two thousand feet (2000') of the site for sites one hundred (100) acres or more. These features shall include floodplains, known wetlands, watercourses, woodlands, fields, pastures, meadows, trees with fifteen (15) DBH or greater, hedgerows and other significant vegetation, prohibitive steep slopes (25% and over), rock outcrops, soil types, ponds, streams, and existing structures, easements and rights-of-way.
13. Schematic layout indicating a general concept for land conservation and development, including lot and street layout.
14. In the case of land development plans, proposed general layout including building and/or major structure locations, streets and access drives, parking layouts, and other improvements.
15. When apartment and/or townhouses are proposed, the building(s), street(s) and access drive(s), recreation and open spaces, and parking layout shall be shown.
16. The plan should be clearly labeled "Sketch Plan."

#### **Section 402 - PRELIMINARY PLAN**

The Preliminary Plan information shall consist of and be prepared in accordance with the following standards. The initial submittal of the Preliminary Plan for review by the Township shall contain the minimum Plan information outlined in the Preliminary Plan Checklist located in Appendix B.

##### **A. Drafting Standards**

1. The Preliminary Plan shall be clearly and legibly drawn to a scale of one inch (1") equals twenty feet (20'), thirty feet (30'), forty feet (40') or fifty feet (50') feet, except that if the average size of the proposed lots is two acres or larger, the plan may be drawn to a scale of one inch (1") equals one hundred feet (100').
2. The Preliminary Plan shall be made on sheets no smaller than eighteen inches (18") by twenty-four inches (24") and no larger than thirty-six inches (36") by forty-eight inches (48").

3. If the Preliminary Plan requires more than one sheet, a key diagram showing the relative location of all the sheets shall be drawn on each sheet. In addition, a match line shall be drawn on each sheet and the developer shall indicate along each match line what sheet is adjoined at that match line.
4. Dimensions shall be in feet and decimal parts thereof, bearings in degrees, minutes, and seconds. Errors of closure shall not be more than one (1) part per ten thousand (10,000).
5. Each sheet shall be numbered and shall show its relationship to the total number of sheets. The first sheet of each submittal shall include a table of contents listing the sheet number and title of each sheet in the set.
6. Plan revisions shall be numbered "00" on the first submission, and consecutively numbered "01", then "02", and so on, for each of the subsequent revisions. Alternative alpha-numeric systems may also be used.
7. The Plan shall bear an adequate legend that indicates clearly which features are existing and which are proposed.
8. The boundary line of the subdivision shall be shown as a solid heavy line.
9. All plans and surveys shall be prepared by a registered professional engineer or a registered surveyor in accordance with the Act of May 23, 1945 (P.L. 913, No.367, 63 P.S. § 148 et seq.), known as the "Engineer, Land Surveyor, and Geologist Registration Law," except that this requirement shall not preclude the preparation of a plan in accordance with the Act of January 24, 1966 (1965 P.L. 1527, No. 535, 63 P.S. § 901), known as the "Landscape Architects' Registration Law," when it is appropriate to prepare the plan using professional services as set forth in the definition of the "Practice of Landscape Architecture" under Section 2 (63 P.S. § 902) of that Act. The plan shall bear the seal and signature of such registered professionals.

B. The Preliminary Plan shall show or include the following information:

1. Name of the proposed subdivision or land development or other identifying title, which shall be other than just the name of the subdivider or landowner, and the name of the municipality(ies) in which the subdivision or land development is located.
2. Name, address, and telephone number of the applicant and the name and address of the landowner of the tract, if different than the applicant.

3. Name, address, and telephone number of the registered engineer, surveyor, or landscape architect responsible for the Plan.
4. Statement identifying the Plan as "Preliminary".
5. Scale of the Plan, both written and graphic.
6. The intent of the Plan.
7. Date of Plan, including the month, day and year that the original drawing was completed and in the case of revised drawings the month, day and year that the original drawing was revised and a description of each revision.
8. A location map drawn at a scale of not less than eight hundred (800) feet to the inch, showing the relationship of the tract to surrounding properties, roads, and watercourses within one thousand (1,000) feet of any part of the property. Zoning boundaries that traverse or are within three hundred (300) feet of the tract, including overlay district boundaries.
9. Tract boundaries with bearings and distances, tax parcel number(s) and approximate acreage(s). The source of tract boundary data shall be given if not from field survey.

If the developer is going to retain a single parcel with an area in excess of ten (10) acres and that parcel will not be improved beyond its current level of improvement, that parcel may be considered residue and may be identified by deed plotting. If the retained parcel has an area of ten (10) acres or less, that parcel may be considered residue but is required to be described to the accuracy requirements of this Ordinance.

10. A copy of the deed(s) for the tract shall be submitted.
11. Names of owners of properties adjacent to the tract with the book and page numbers where recorded, and the names of any abutting subdivisions and land developments with the book and page numbers where recorded.
12. As a Plan note or table, existing Township zoning regulations applicable to the tract, including district designation, lot area, building setback lines, dimensional requirements, and average proposed lot size.
13. North arrow.
14. An approval block for signatures of the Board of Supervisors, Planning Commission Chairman and Secretary, and a certification block for the Owner/Applicant and the Owner/Applicant's Surveyor and/or Engineer shall be provided.

15. A 3½" x 6" minimum rectangular approval block for the Berks County Planning Commission shall be provided.
16. A blank space, minimum 3" x 3" square, for the Recorder of Deeds to acknowledge receipt and recording of the plan when it is presented shall be provided.
17. Proposed method of water supply and sewage disposal, as a note on the Plan. If on-site sewage disposal is proposed, a table shall be provided summarizing the minimum isolation distances for sewage treatment tanks and for sewage absorption areas. Isolation distances shall be based on PADEP Chapter 73, latest revision.
18. If any element of the Plan is not in conformance with Township ordinances and regulations, a Plan note or table shall indicate the nonconformity and the reason for requesting an exception. All requests for waivers shall be made in accordance with Section 406 of this Ordinance.
19. Preliminary design of any bridges or culverts. Such designs shall meet all applicable requirements of the Pennsylvania Department of Transportation and the Pennsylvania Department of Environmental Protection. Capacity/loading calculations shall be submitted.
20. Schematic architectural drawings of proposed townhouses, apartment buildings, and commercial and industrial buildings, including building orientation.

C. Context Map

A map showing the location of the proposed subdivision within its neighborhood context shall be submitted.

1. For sites under one hundred (100) acres in area, such maps shall be at a scale not less than one (1) inch equals two hundred (200) feet, and shall show the relationship of the subject property to natural and man-made features existing within one thousand (1,000) feet of the site. For sites of one hundred (100) acres or more, the scale shall be one (1) inch equals four hundred (400) feet, and shall show the above relationships within two thousand (2,000) feet of the site.
2. The features that shall be shown on Context Maps include topography (from the most current U.S.G.S. maps), stream valleys, wetland complexes (from the most current maps published by the U.S. Fish & Wildlife Service or the USDA Natural Resources Conservation Service), woodlands over one-half (1/2) acre in area (from aerial photographs), ridge lines, public roads and trails, utility easements and rights of way, public land, and land protected under conservation easements.

D. Existing Resources and Site Analysis Plan

For all subdivisions and land developments, an Existing Resources and Site Analysis Plan shall be prepared to provide the developer and the Township with a comprehensive analysis of existing conditions, both on the proposed development site and within two hundred (200) feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies and from aerial photographs. The Township shall review the Plan to assess its accuracy, conformance with Township ordinances, and likely impact upon the natural and cultural resources on the property. The following information shall be required:

1. Complete current perimeter boundary survey of the property to be subdivided or developed prepared by a registered surveyor, showing all courses, distances, and area and tie-ins to all adjacent intersections.
2. Natural Features, including:
  - a. Contour lines at intervals of not more than two (2) feet. (Ten (10) foot intervals are permissible beyond the parcel boundaries, interpolated from U.S.G.S. published maps.) Contour lines shall be based on information derived from a topographic survey for the property, evidence of which shall be submitted including the date and source of the contours. Datum to which contour elevations refer and references to known, established benchmarks and elevations shall be included on the plan. The Township elevations are based on the 1929 mean sea level datum. All contours and elevations shown on plans submitted to the Township shall be based on this system.
  - b. Steep slopes in the following ranges: 15 to 25 percent, 25 percent and greater. The location of these slopes shall be graphically depicted by category on the plan. Slope shall be measured over three (3) or more two (2) foot contour intervals.
  - c. Watercourses, either continuous or intermittent and named or unnamed, and lakes, ponds or other water features as depicted on the Allentown West, East Greenville, Manatawny or Topton U.S.G.S. Quadrangle Maps, most current edition.
  - d. Wetlands as defined by this Ordinance.
  - e. 100-year flood plains, including delineation of floodway and flood fringe, established by study of FEMA, with base flood elevations for the 100-year storm. For those watercourses for which studies have not been performed by FEMA, calculated 100-year flood plains shall be

established by the developer in accordance with Appendix I of this Ordinance.

When a subdivision or land development contains a flood plain, the elevation of roads, building sites and public utilities in the vicinity of the flood plain shall be given.

In the case of a proposed revision of a FEMA-mapped flood plain, a letter of approval of such revision from FEMA shall be submitted.

- f. Soil types and their boundaries, as mapped by the USDA Natural Resource Conservation Service, including a table listing the soil characteristics pertaining to suitability for construction and, in un-sewered areas, for septic suitability. Alluvial and hydric soils shall specifically be depicted on the plan.
  - g. Existing vegetation, denoted by type, including woodlands, hedgerows, and specimen vegetation, as defined in this ordinance, tree masses, tree lines, individual freestanding trees over six (6) inch DBH, wetland vegetation, pasture or croplands, orchards, permanent grass land, old fields, and any other notable vegetative features on the site.
  - h. Any portion of the tract identified as a Pennsylvania Natural Diversity Inventory (PNDI) site. If such habitats exist on the tract, the measures proposed to protect the habitats shall be indicated.
  - i. Ridgelines and watershed boundaries.
  - j. Geologic formations on the tract, including rock outcroppings, cliffs, sinkholes, and fault lines, based on available published information or more detailed data obtained by the applicant.
3. Existing Man-Made Features, including:
- a. Location, dimensions, and use of existing buildings and driveways.
  - b. Location, names, widths, centerline courses, paving widths, identification numbers, and rights-of-way, of existing streets, alleys, and streets recorded but not constructed on or abutting the tract.
  - c. Location of trails that have been in public use (pedestrian, equestrian, bicycle, etc.).
  - d. Location and size of existing sanitary sewer, storm drainage, and water supply facilities.

- e. Any easements, deed restrictions, rights-of-way, or any other encumbrances upon the land, including location, size, and ownership.

Where the subdivider proposes to locate a street, driveway, or other improvement within a portion of a utility right-of-way, or to relocate an existing utility line, a letter from the appropriate utility company giving permission to locate within the right-of-way or relocate the existing line shall be submitted.

- f. Site features or conditions such as hazardous waste, dumps, underground tanks, active and abandoned wells, quarries, landfills, sand mounds, and artificial land conditions.
- g. Locations of Historic and Archaeological Resources which have been identified and/or inventoried by the Township, the County, the Berks County Planning Commission, and/or the Pennsylvania Historical and Museum Commission and all significant sites or structures on the tract, including, but not limited to foundations, cellar holes, stone walls, earthworks, and burial sites.

- 4. The Gross Tract Area, Total Tract Area, Adjusted Tract Area, where applicable, and the constrained land area with detailed supporting calculations.

E. Four-Step Design Process

Preliminary Plans for Conservation Subdivision Design Options included in the Conservation Zone and Rural Zone shall include plans evidencing that the Four-Step Design Process was utilized in drafting the layout for a subdivision. It is strongly recommended that the four steps are done in order. The Four-Step Design Process is set forth in Appendix C, which includes the full criteria for inclusion on each particular plan.

F. Site Design and Layout Plan

The following information shall be provided with the Site Design and Layout Plan. For those subdivisions requiring the submission of the Four-Step Design Process described in Sub-Section E. above, the information below may be included with that required in Sub-Section E. above if the additional information is legible; otherwise, the information below shall be shown on a separate sheet.

- 1. Layout and dimensions of proposed lots, including:
  - a. A statement of the total number of lots with each lot identified by a lot number in a logical sequence. The Township shall assign house numbers upon approval of the lot configuration or at the time of Preliminary Plan

approval. The Applicant shall include these numbers on the Final Plan.

- b. Area of each proposed lot, including gross lot area and net lot area.
  - c. Building envelope showing setback lines, yard and area requirements.
  - d. The proposed location of all percolation tests and test pits observed by the Township Sewage Enforcement Officer, including both primary and replacement sewage absorption areas. The absorption area shown shall reflect the size and type of absorption area required based on the soil test data for that site.
  - e. Location of proposed water supply.
2. Location, right-of-way width, cartway width, and names of all proposed streets within the subdivision or land development with intended ownership, a statement of any conditions governing their use, and classification (i.e. collector).

The designation of minor, collector, and arterial streets is subject to the approval of the Township Supervisors.

Streets to be dedicated shall be indicated. For streets which will not be dedicated, the arrangements to be made for the ownership and maintenance of those streets shall be given.

3. Design speed of all proposed streets.
4. Clear sight triangles at all proposed intersections, as required in Section 611.
5. For residential subdivisions, parcels of land to be dedicated or reserved for nonresidential use. Statements shall also be included indicating the intended use of all nonresidential lots and the proposed or existing restrictions of any type which will exist as covenants in the deed(s) for all non-residential lots.
6. Location of greenway land and existing vegetation to be preserved.
7. Location, size and proposed use of any parks, playgrounds, and other areas or buildings dedicated or reserved for public use, with any conditions governing such use.
8. Provisions for pedestrian and other non-vehicular circulation throughout the development.
9. Location of school bus stop shelters or pads.



10. The location and a typical treatment of the construction of driveways.
11. Proposed location and type of traffic control devices.
12. A review from the fire marshal or fire chief regarding the location, number, and type of fire hydrants and the feasibility of access to, maneuvering within and providing protection to the site of fire fighting equipment.
13. Land development plans shall show proposed building locations, parking lots, provisions for access and traffic control, locations of loading docks, refuse collection areas, fire lanes, fire department connections, and provisions for the landscaping and lighting of the site where applicable. Total building coverage, impervious surface coverage and building height(s) shall be noted on the Plan.
14. Proposals for developments with semi-detached dwellings, townhouses, and/or multi-family dwellings, or which include permanently preserved open space shall provide the following information as applicable:
  - a. Total number of dwelling units, by type; number of buildings and distances between buildings; proposed density; and total parking spaces.
  - b. Total building coverage and impervious surface coverage.
  - c. Areas that are proposed to remain open including the intended use of the open land (recreation, agriculture, etc.).
15. Where the Preliminary Plan covers only part of the applicant's entire holding, a sketch of the entire contiguous land holdings and indicating the area of ultimate proposed subdivision or development shall be submitted. The sketch shall include the prospective future street system for the remainder of the holdings so that the street system in the submitted portion can be considered in relation to future connections with the unsubmitted portion. A statement indicating the proposed future land use for the unsubmitted portion of the property shall also be included.
16. Location of easements or rights-of-way necessary for any purpose, including but not limited to utilities, drainage, and grading.

G. Construction Improvements Plan

The Construction Improvements Plan shall contain sufficient information to provide working plans for the layout and construction of proposed streets, utilities, stormwater retention structures, and other improvements. Information shall include, but not be limited to the following:

1. A statement describing proposed public improvements including: streets, curbs, sidewalks, and the means of water supply and sewage disposal to be provided.
2. Water Supply and Sewage Facilities

All plans shall be accompanied by Planning Modules for Land Development provided by the Pennsylvania Department of Environmental Protection (DEP), including information with regard to the means of sewage disposal and provision of water supply.

a. Water Supply

- (1) Where off-site or central water service is proposed, the preliminary design of water distribution facilities including the size and location of water mains, fire hydrants, storage tanks, and, where appropriate, wells or other water sources.
- (2) Where individual on-site water service is proposed, approximate location of well sites.

b. Sewage Facilities

Sufficient information shall be provided to determine if the proposed subdivision or land development meets the recommendations and intent of the Township's Act 537 Sewage Facilities Plan.

- (1) Where public sewer service is determined to be feasible and consistent with the sewage service area of the Act 537 Sewage Facilities Plan, the preliminary design of sewage systems, including but not limited to the location of sewers, pumping stations, sewer mains, and, where applicable, sewage treatment plants, showing the size, capacity, and location of treatment facilities.
- (2) Where a community sewage system is proposed, plan information shall include the evaluation of alternate technologies in order of preference and the most preferred feasible alternative, as agreed to by the Township, the Department of Environmental Protection (PADEP), and the applicant. The preliminary design of the proposed system shall also be included, showing the size, capacity, and location of treatment facilities and, where applicable, wastewater reclamation/land application sites.
- (3) Where individual on-site sewage facilities are proposed, the applicant shall submit a statement

with regard to the suitability of the soil to absorb sewage wastes. Test pit and percolation test information as called for in Section 402.F.1.d, shall be provided and the approximate location of the system shall be indicated. Horizontal isolation distances for treatment tanks and sewage absorption areas shall be provided as required by PADEP Chapter 73.

3. Horizontal Plan for Streets showing details of the horizontal layout including:
  - a. Centerline with bearings, distances, curve data, and stations corresponding to the profile.
  - b. Right-of-way and curb lines with radii at intersections.
  - c. Tie-ins by courses and distances to intersection of all public roads, with their names and widths.
  - d. Location of all monuments and other boundary markers by bearing and distances.
  - e. Location and size of all drainage facilities, sidewalks, public utilities, fire hydrants, lighting standards, guide rail, and street name signs.
  - f. Street intersection plan drawn to a scale of one (1) inch equals twenty (20) feet defining all existing and proposed features for each new intersection.
  - g. Sight distance calculations at street intersections.
4. Horizontal Plan for Storm Water Management and Sanitary Sewer Facilities
  - a. Location and size of line with stations corresponding to the profile.
  - b. Location of manholes or inlets with grade between and elevation of flow line and top of each manhole or inlet.
  - c. Location of laterals.
  - d. Location of other drainage facilities and public utilities in the vicinity of storm and/or sanitary sewer lines.
  - e. Hydraulic design data and calculations for storm sewers, inlets, culverts, and bridge structures.
5. A profile plan indicating final grades of streets, sanitary sewers, stormwater management facilities, and the extent of cut and fill operations.

- a. The profile plan shall show the vertical section of the existing grade and proposed grade along the centerline of the proposed street with sight distance calculations provided for vertical curves. Where storm drainage and/or sanitary sewer lines are to be installed, they shall also be indicated on the profile plan.
  - b. The horizontal scale on the profile plan shall be not less than one (1) inch equals one hundred (100) feet and the vertical scale shall not be less than one (1) inch equals ten (10) feet or in cases where larger scales are used, the ratio shall be 1:10 vertical to horizontal.
  - c. A typical cross-section of street construction shall be shown on the profile plan and shall indicate the following:
    - (1) Right-of-way width and the location and width of paving within the right-of-way.
    - (2) Type, thickness, and crown of paving.
    - (3) The location, width, type, and thickness of curbs and sidewalks or shoulders to be installed, if any.
    - (4) Grading of sidewalk area.
    - (5) Typical location, size, and depth of any underground utilities that are to be installed in the right-of-way where such information is available.
6. The Construction Improvements Plan shall include a Phasing Plan for the proposed sequence of development.

In the case of subdivision or land development plans proposed to be submitted in stages at Final Plan, a drawing delineating the proposed stages and indicating the order of submittal and schedule of submittal of the stages. Staging of sanitary sewer, water and storm drainage facilities and the location of any temporary street turnarounds shall also be indicated.

In the case of a Preliminary Plan calling for the installation of improvements beyond a five (5) year period, a schedule shall be filed by the land owner delineating all proposed sections as well as deadlines within which applications for Final Plan approval of each section are intended to be filed. Such schedule shall be updated annually by the applicant on or before the anniversary of the Preliminary Plan approval, until Final Plan approval of the final section has been granted and any modification in the aforesaid schedule shall be subject to approval of the Township Supervisors in their discretion.

Each section in any residential subdivision or land development, except for the last section, shall contain a

minimum of twenty-five percent (25%) of the total number of dwelling units as depicted on the Preliminary Plan, unless a lesser percentage is approved by the Township Supervisors in their discretion.

7. Detail sheet(s) providing sufficient details and notes to define the construction methods and materials of proposed improvements. Details shall include but not be limited to:
  - a. Details of all public sewer improvements as required and approved by the Township.
  - b. Details of all public water improvements as required and approved by the Township or other municipal or private water companies.
  - c. A cross-section of each utility trench, showing proposed bedding and backfill material as well as the required compaction methods.
  - d. Erosion and sediment control methods and materials.
  - e. Stormwater management facilities.

H. Stormwater Management Plan

A complete Stormwater Management Plan consistent with the requirements of Section 620 of this Ordinance and the requirements of the Township Stormwater Management Ordinance and the appropriate Act 167 Stormwater Management Ordinance, if applicable, shall be provided as required.

I. Erosion and Sedimentation Control Plan

A complete Erosion and Sedimentation Control Plan consistent with the requirements of Section 621 of this Ordinance and the requirements of the Berks County Conservation District and the Department of Environmental Protection shall be provided as required.

J. When applicable, a Landscape Plan consistent with the requirements of Section 625 of this Ordinance shall be provided.

K. When applicable, a Lighting Plan consistent with the requirements of Section 627 of this Ordinance shall be provided.

L. When applicable, Impact Studies consistent with the requirements of Section 404 of this Ordinance shall be provided.

**Section 403 - FINAL PLAN**

Minor Subdivision and Land Developments - Plans meeting the definition of a minor subdivision, as defined in Section 302 shall conform to the plan information and review procedure as described in Section 303. The

submittal of a Minor Final Plan for review by the Township shall contain the minimum plan information outlined in the Final Plan Checklist of Submittal Requirements located in Appendix B.

Major Subdivision and Land Developments - Final Plans for major subdivisions and land developments shall not be submitted for review prior to Preliminary Plan approval. Final Plans shall consist of and be prepared in accordance with the standards outlined below. The submittal of a Major Final Plan for review by the Township shall contain the minimum plan information outlined in the Final Plan Checklist of Submittal Requirements located in Appendix B.

A. Drafting Standards

1. The drafting standards of Section 402.A shall apply to Final Plans.
2. Plans submitted for Final Plan review shall be clear and legible black or blue on white prints.

B. Plan Information

All Plan information, as required by Section 402.B, shall apply to Final Plans except that the Plan shall be identified as "Final."

C. Context Map

The Context Map, as required by Section 402.C, consistent with the terms of Preliminary Plan approval.

D. Existing Resources and Site Analysis Plan

The Existing Resources and Site Analysis Plan information as required by Section 402.D shall apply, consistent with the terms of Preliminary Plan approval.

E. Four-Step Design Process

The Four-Step Design Process, if required during the Preliminary Plan stage, shall be provided consistent with the terms of Preliminary Plan approval.

F. Site Design and Layout Plan

The following information relating to the layout shall be shown on the Final Plan. For those subdivisions requiring the submission of the Four-Step Design Process described in Section 402.E and Appendix C, the information below may be included with that required in Appendix C if the additional information is legible; otherwise, the information below shall be shown on a separate sheet.

1. Information required in Section 402.F consistent with the terms of Preliminary Plan approval.

2. Sufficient data to determine readily the locations, bearing and length of every street, lot, easement, trail, and boundary line and to reproduce such lines upon the ground, including all dimensions, angles, or bearings of the lines and areas of each lot and of each area proposed to be dedicated to public use.
3. The gross tract area, total (net) tract area, and Adjusted Tract Area (where applicable) shall be included.
4. For residential subdivisions or land developments, the house locations and names of all streets. The Township shall assign house numbers and the applicant shall include these numbers on the Final Plan.
5. Location and width of all private driveways. Driveway designs shall be in accordance with the Township standards.
6. The location of all existing and proposed permanent reference monuments and the locations of lot corner markers. All property corners shall be marked as existing or proposed.
7. Lots and blocks within a subdivision numbered in a logical sequence.

G. Construction Improvements Plan

1. Information required in Section 402.G consistent with the terms of Preliminary Plan approval.
2. Where off-site or community sewer service is to be provided, the final design of all facilities, including but not limited to sewer mains, manholes, pumping stations, and sewage treatment facilities. If public sewer is to be provided, a letter from the agency having right of approval of the sanitary sewer system confirming that it has adequate capacity to serve the subdivision or land development and giving its comments regarding the proposed sanitary sewer system shall be submitted.
3. Where off-site or central water service or water supply is to be provided, the final design, including location and size of all water service facilities within the subdivision, shall be shown, including wells, storage tanks, pumps, mains, valves, and hydrants. If public water is to be provided, a letter from the agency having right of approval of the water supply and distribution system confirming that it has adequate capacity to serve the subdivision or land development and giving its comments regarding the proposed water supply and distribution system shall be submitted.
4. The plan shall contain a statement that the placement of fire hydrants, site emergency access, and the components of the system have been reviewed by the Fire Marshall and that both

are compatible with the firefighting methods and equipment used by local fire companies.

5. For on-site water supply and sewage facilities, the final location of wells and sewage systems.

H. Stormwater Management Plan

A Stormwater Management Plan, consistent with Section 402.H and with the terms of Preliminary Plan approval shall be required. A surface drainage plan shall also be included with the Final Plan showing adjusted contours indicating the direction of runoff on each lot.

I. Erosion and Sedimentation Control Plan

An Erosion and Sedimentation Control Plan, consistent with Section 402.I. and with the terms of Preliminary Plan approval shall be required.

J. Landscaping Plan

A final Landscaping Plan, consistent with Section 402.J and the terms of Preliminary Plan approval shall be required.

K. Lighting Plan

A final Lighting Plan, consistent with Section 402.K and with the terms of Preliminary Plan approval shall be required. If applicable, the Plan shall include the location and type of street lights to be installed, together with the necessary contract information for street light installation and maintenance for approval by the Township.

L. Impact Studies

Impact Studies consistent with the requirements of Section 404 and the terms of Preliminary Plan approval shall be required when applicable.

M. Approvals, Certificates, and Documents

1. Certification by the engineer, land surveyor, or landscape architect who prepared the plan that the plans are in conformity with zoning, subdivision, building, fire, and other applicable Township ordinances, codes, and regulations. In any instance where such plans do not conform, evidence shall be presented that an exception has been officially authorized. In addition, a certification of accuracy indicating compliance with State law and signed by the design professional shall be included on the Final Plan.
2. A certificate of title showing the ownership of the land to be vested in the subdivider or other applicant for Plan approval.



3. A statement duly acknowledged before an officer authorized to take acknowledgments of deeds and signed by the owner or owners of the property, to the effect that the subdivision or land development shown on the Final Plan is made with his or their free consent and in accordance with his or their desires, and it is desired to record the same.
4. All offers of dedication and covenants, including homeowner association documents, governing the reservation and maintenance of undedicated open space, which shall be approved by the Township Solicitor as to their legal sufficiency. Any other restrictive covenants and/or trusteeships and their period of existence shall be indicated on the Final Plan wherever applicable.
5. A copy of such private deed restrictions, including building setback lines, as may be imposed upon the property as condition to sale, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided.
6. Such certificates of approval (or of Preliminary Plan approval) by proper authorities of the Commonwealth as may have been required by the Board or by this Ordinance. Final Plan approval shall be conditioned upon receipt of an approved Sewage Facilities Planning Module from the PADEP or approval of a planning exemption.
7. Where access is required to a highway under the jurisdiction of the Pennsylvania Department of Transportation, the Plan shall contain a notice that a highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the "State Highway Law," before driveway access to a state highway is permitted.
8. A copy of all easements executed with private property owners, utilities, or municipalities, including conservation easement documents or other approved mechanism to permanently preserve the greenway land in a Conservation Design subdivision, as approved by the Township Solicitor.
9. Upon completion of review and approval, and for the affixing of signatures, fully legible prints for all plans shall be submitted. Signature blocks for the Board of Supervisors, Township Planning Commission, and County Planning Commission shall be provided on the face of the plans.
10. Whenever a developer proposes to establish a street which is not offered for dedication to public use, the Township Supervisors may require the developer to submit, and also to record with the Plan, a copy of an agreement made with the Township on behalf of his heirs and assigns, which shall establish the conditions under which the street may later be offered for dedication.

11. When required by the Township, the following notification:  
"The provisions of Notes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ hereof shall be and are hereby considered covenants running with the land affected thereby, enforceable by any other owner of property in this subdivision. In addition to the foregoing, the Township of Longswamp may, but need not, at its discretion, enforce such covenants as it desires, and is hereby given such right, irrevocably."

N. Other Requirements

1. In the preparation, submission, recording and implementation of any subdivision or land development plan, the subdivider or land developer shall comply with all applicable Township ordinances, Township resolutions, written agreements between the Township and the developer, laws of the Commonwealth of Pennsylvania, and laws of the United States of America.
2. When filed with the Berks County Office of Recorder of Deeds, each and every deed for a lot, street, open space area or other element of any approved subdivision or land development plan shall conform fully to the requirements, restrictions, provisions and easements shown on the Plan, and to any other conditions placed on the Plan as part of Final Plan approval by the Township Board of Supervisors.

**Section 404 - IMPACT STATEMENTS**

The following impact statements shall be submitted as described within this Section. In addition, the Township Supervisors may require the Applicant for any subdivision or land development to submit any Impact Statement as described below or in Appendix J, when the Township Supervisors deem such a study necessary to adequately review and determine the effect or impact of the proposed subdivision or land development on the Township.

Organization of Statement. Each impact statement should be one written document. Necessary maps, charts, etc., should be labeled as consecutively numbered exhibits and properly referenced throughout the text of the written document. The statement should be written in a manner and style that clearly focus the information, data and analyses on the issues and objectives described above. The sources of all data should be appropriately documented.

Preparation of Statement. The statement shall be prepared by a professional engineer, professional hydrogeologist, attorney, landscape architect or professional planner as appropriate. The cost of the study shall be the responsibility of the developer

A. Traffic Impact Study

1. A Traffic Impact Study shall be submitted in the following instances:

- a. A residential subdivision or land development which has or will accumulate twenty (20) or more lots and/or dwelling units.
- b. A non-residential subdivision of five (5) or more lots.
- c. A non-residential land development containing 20,000 square feet or more of gross floor area.
- d. Any non-residential land development within one quarter (1/4) mile of an intersection involving an arterial road or two collector roads.

Provided that the Township Supervisors reserve the right to require a traffic study for any subdivision or land development, when the Township Supervisors deem such a study necessary to adequately review the impact of the subdivision or land development on existing and proposed roads within the Township.

2. The Traffic Impact Study shall be prepared by a qualified professional traffic engineer or traffic planner with verifiable experience in preparing such studies.
3. The study area for the traffic study shall be based on engineering judgment and an understanding of existing traffic conditions at the site and represent the area which is likely to be affected by the development. The study limits shall be initially agreed upon by the developer, his engineer, and the Township.
4. The Traffic Impact Study shall contain all the elements identified in the "Traffic Impact Study Contents and Scope" section of the Guidelines for Preparation of a Traffic Impact Study, by the Pennsylvania Department of Transportation, February 2004, as may be amended from time to time.

B. Recreation Impact Study

1. A Recreation Impact Study shall be submitted in the following instances:
  - a. A residential subdivision or land development which has or will accumulate twenty (20) or more lots and/or dwelling units.
  - b. A non-residential subdivision of five (5) or more lots.
  - c. A non-residential land development containing 20,000 square feet or more of gross floor area.

Provided that the Township Supervisors reserve the right to require an impact study for any subdivision or land

development, when the Township Supervisors deem such a study necessary to adequately review the impact of the subdivision or land development.

2. The study shall analyze the demand for recreational facilities which the proposed development will generate and determine whether adequate facilities exist or are planned or proposed. At a minimum, the study shall include the following:
  - a. A description of the projected age breakdown of the residents of the proposed development.
  - b. A description of any recreational facilities to be provided by the Developer.
  - c. A description of existing municipal recreational facilities and the impact of the proposed development on these facilities. Accepted national standards for required recreation shall be used in the analysis.
  - d. Discussion of potential for any recreational facilities to be provided by the Developer to compensate for any anticipated deficiencies of the Township's recreational facilities.
  - e. A description of any contributions the Developer plans to make for Township recreation to compensate for expected impacts.

C. Historic and Archeological Resources Impact Study

All Historic and Archaeological Resources which have been identified and/or inventoried by the Township, the County Planning Commission, and/or the Pennsylvania Historical Museum Commission located within the tract shall be identified and the impact on such resources detailed.

D. Hydrogeologic Impact Study

1. A Hydrogeologic Impact Study shall be submitted in the following instances:
  - a. A residential subdivision or land development which has or will accumulate twenty (20) or more lots and/or dwelling units.
  - b. A non-residential subdivision of five (5) or more lots.
  - c. A non-residential land development containing 20,000 square feet or more of gross floor area.

Provided that the Township Supervisors reserve the right to require an impact study for any subdivision or land development, when the Township Supervisors deem such a study

necessary to adequately review the impact of the subdivision or land development.

2. Those applications proposing the use of a well shall require the preparation of hydrogeologic study. Such study shall be conducted by a qualified hydrogeologist and consist of the following minimum considerations:
  - a. A map showing the location of the site and proposed wells.
  - b. A description of the geologic conditions on and around the site, including factors which would affect the groundwater recharge rate and the degree of groundwater renovation. Site geology, including stratigraphy, structure, and soils shall be analyzed. Hydrogeology, including aquifer characteristics, groundwater movement, local water use, aquifer yield, and water quality shall be analyzed. Groundwater impacts, availability of groundwater, well interference, water quality, and yield availability shall be analyzed.
  - c. Should it be determined that the proposed use(s) would result in a degradation of groundwater quality, or eliminate the potential groundwater use at nearby properties, the study shall present measures that will be employed to prevent these adverse impacts.
  - d. Results of a test well, including quality of water and flow rate.

E. Fiscal Impact Analysis

1. Fiscal Impact Analysis shall be submitted in the following instances:
  - a. A residential subdivision or land development which has or will accumulate twenty (20) or more lots and/or dwelling units.
  - b. A non-residential subdivision of five (5) or more lots.
  - c. A non-residential land development containing 20,000 square feet or more of gross floor area.

Provided that the Township Supervisors reserve the right to require an Impact Study for any subdivision or land development, when the Township Supervisors deem such a study necessary to adequately review the impact of the subdivision or land development.

2. The Fiscal Impact Analysis shall identify the likely impact of the development on the Township and School district's tax structure and expenditure patterns. The Study shall include a determination of the revenues to be accrued to the Township

and School District as a result of a proposed development, as well as an identification of the costs associated with delivering services to the proposed development.

3. The Fiscal Impact Analysis shall address the impact of the proposed development on the ability of the Township to deliver fire, police, administrative, public works and utility services to the development and the associated impact on the Township's economy.
4. In order to prepare the analysis, the Applicant shall utilize a methodology from The New Guide to Fiscal Impact Analysis (Rutgers Center for Urban Policy Research, 1985, as modified from time to time), adapted as appropriate and to the Township satisfaction.
5. Particular aspects of the Township's service delivery capability to be analyzed shall include:
  - a. Public Works - This includes potential effects on the maintenance, repair and upkeep of roads, signal systems, sanitary sewer, water and drainage systems, open space and recreation areas or any other applicable function. This study shall address projected cost increases for the above-mentioned items in terms of administration, personnel, equipment and materials.
  - b. Administration - This includes time that would be required by the Township Supervisors, Secretary, and other staff to process the application and handle the project during construction, as well as long-term administration demands. This should include, but not be limited to, the handling of plans, contracts, various legal instruments or agreements, permits, special problems, and escrow. Added demands on the code administration staff also shall be projected.
  - c. Fire and Emergency Services - The analysis shall incorporate the development's impact on the fire company capabilities, including but not limited to, municipal water supply, pumping capacity, specialized equipment and training requirements.
  - d. Police - If applicable, the study shall project the overall effects of the proposed development on existing Township police personnel numbers, equipment, vehicles and working space. The study shall include whatever facilities or assistance the development will provide to handle emergencies, criminal investigation, armed robbery, or other security-related problems.

## SECTION 405 - WETLANDS STUDY

- A. The Applicant shall submit a wetlands study with the submission of all subdivision or land development plans. The purpose of the study shall be to determine the presence and extent of wetlands on the site. A wetlands study is not required for lot add-on plans, resubdivisions, and other plans covering minor changes in boundary lines and not proposing any new land disturbance activity.
- B. The study shall be performed by a qualified wetlands scientist. Qualified individuals should possess a minimum of a bachelor's degree in biology, botany, zoology, ecology, or environmental sciences. In general, other professionals, such as engineers, landscape architects, surveyors, planners, and geologist are not considered fully qualified to perform wetland delineations, unless they possess special ecological training and experience beyond their discipline. The Township reserves the right, in as much as no recognized certification program exists for wetland scientists, to determine the qualification of those preparing wetland delineations. Should a state or federal wetland scientist certification program be established, the Township will consider only those certified individuals qualified to perform delineations.
- C. Requirements for Wetlands Studies
  1. Delineations shall follow the procedures outlined in the Corps of Engineers Wetland Delineation Manual (USACE, 1987), and any pertinent subsequent guidance documents.
  2. Delineations shall be supported by a report which shall contain the following sections:
    - a. Introduction - Description of the physical features of the site, its location and the proposed plans for the site.
    - b. Methods - Description of the methods used for the survey, with particular emphasis on any deviation from the outlined federal method. Relevant information includes the date of the field studies, the number of transects and plots used, the size of vegetation quadrants employed, the size of soil pits used, taxonomic references used, and the disposition of any voucher specimens.
    - c. Results and Discussion - Description of the findings of the study. Soils, vegetation and hydrology for wetland and upland areas of the site should be discussed. Any problem areas should be thoroughly treated.
    - d. Conclusions - The extent of wetlands on the site shall be discussed. The impact of the proposed project on these wetlands shall also be considered.
  3. Included in the report as appendices or tables should be:

- a. Site location map (USGS 7.5' quadrangle will suffice).
  - b. National Wetlands Inventory map.
  - c. Soil survey map with soil descriptions.
  - d. Data sheets for each plot.
  - e. Wetlands boundary map. Wetlands boundaries shall be surveyed by a surveyor and shown on a plan of appropriate scale. The limits of the wetlands study shall be clearly shown. The plan shall also show the location of all plots and/or transects used in the study, the date of the delineation, a statement of the method used for the study, the name of the consulting firm which performed the delineation, the name of the surveyor, and a disclaimer statement indicating no wetland boundary is considered jurisdictional until approved by the Pennsylvania Department of Environmental Protection and the Army Corps of Engineers.
  - f. Color photos of wetlands areas on the site, with locations and directions of view keyed to the wetland boundary map.
  - g. Resumes of the wetlands scientist(s) who performed the delineation.
- D. For sites on which no wetlands occur, an abbreviated report may be submitted. The abbreviated report shall contain the introductory material, the methods section and a discussion of the results of the study. Site location, National Wetland Inventory and soil maps shall also be provided.
- E. All subdivision and land development plans shall contain notes for future lot owners. The wetlands boundary on each lot will be clearly marked. Each lot which contains wetlands, or to which access may be restricted by wetlands, shall have a note which states that State and Federal laws require permits for all activities which result in a deposition of fill into delineated wetlands. The note shall also state that refusal of such a permit may restrict some uses of all or portions of the lot. Where no wetlands are present, a note to that effect shall be placed on the plan.
- F. Compensatory mitigation projects required as part of state or federal permits shall be shown on the subdivision plans. Future lot owners whose property encompasses all or part of a mitigation area shall be notified that the portion of their property which includes the mitigation area may not be altered, and is considered a jurisdictional wetland by the state and federal governments. Lot owners may be responsible for maintenance of mitigation areas. In order to help ensure the long-term viability of wetland mitigation efforts, the Township discourages multiple ownership of mitigation areas. Ownership by one individual or a homeowners association is



encouraged. Owners of the wetlands mitigation areas must be clearly identified to the Township.

- G. The Township reserves the right to reject any submitted wetland delineations. If the Township determines that the actual wetland area differs from that shown on the plan, the Township has the right to secure, at the Developer's expense, qualified personnel to check the delineation and redraw the boundary as necessary. Should the developer disagree with the Township's delineation, the Developer shall request a jurisdictional determination by the Pennsylvania Department of Environmental Protection and the Army Corps of Engineers. Any charges for the jurisdictional delineation will be the responsibility of the Developer.
- H. Where the study shows the existence of wetlands areas, the delineated boundary shall be properly fenced off to prevent encroachment during construction. Snow fence or other acceptable material shall be used; the use of silt fence is not acceptable. The fence shall be properly installed, at a minimum distance of five (5) feet outside the delineated boundary, prior to any construction or issuance of building permits. The fence shall be properly maintained until all occupancy permits have been issued and/or for the extent of all construction. The applicant shall obtain any necessary approvals for fence within the flood plain.

#### Section 406 - PROCEDURE FOR REQUESTING CONSIDERATION OF WAIVER PROVISIONS OF THIS ORDINANCE

##### A. Application Requirements

All requests for waivers shall be made in accordance with the following procedure:

1. All requests for a waiver shall be made in writing and shall accompany and be a part of the application for development. The request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the section or sections of this ordinance which are requested to be waived, and the minimum modification necessary.
2. Should a revision to a submitted plan require a waiver, which was not apparent at the time of initial submission, the request for a waiver shall be submitted in accordance with subsection 1 above at the time of submission of the revised plan.
3. The Board of Supervisors shall consider requests for waivers at a public meeting. In each case, the request for a waiver shall initially be presented to the Longswamp Township Planning Commission for their review and recommendation prior to submission to the Board of Supervisors. In the event the plan review deadline as set forth in Article III must be considered prior to Planning Commission recommendation (See

Section 304.C.), the Board shall be free to consider said waiver request without recommendation by the Planning Commission.

B. Township Action

The Board of Supervisors shall review the request to determine if the literal compliance with any mandatory provision of this chapter is demonstrated by the applicant to exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modification will not be contrary to the public interest and that the purpose and intent of this chapter is observed. The applicant shall demonstrate that an alternative proposal will allow for equal or better results and represents the minimum modification necessary. If the Board of Supervisors determines that the applicant has met his burden, it may grant a waiver from the literal compliance with the terms of this chapter. In granting a modification, the Board of Supervisors may impose such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so modified.

C. Notification of Township Action

The Township shall keep a written record of all actions on all requests for modifications. If the Township grants the request, the final plan shall include a note, which identifies the specific waiver as granted, including any conditions attached thereto.

ARTICLE V

PERFORMANCE GUARANTEES, CONSTRUCTION AND  
ACCEPTANCE OF IMPROVEMENTS

Section 501 - COMPLETION AND GUARANTEE OF IMPROVEMENTS

A. Subdivision Improvements Agreement

No Final Plan shall be endorsed by the Township Supervisors unless a Subdivision Improvements Agreement in a form acceptable to the Township Supervisors and Township Solicitor is executed. A unit breakdown of all improvements required by this Ordinance in a form acceptable to the Township shall be included within the Agreement (See Appendix F).

B. Completion and Guarantee of Improvements

1. No Final Plan shall be endorsed by the Township Supervisors unless all the improvements required by this Ordinance and the Subdivision Improvements Agreement have been installed, inspected and approved, in accordance with this Ordinance and said Agreement.
2. In lieu of the completion of any improvements as stated in Section 501 B.1 above, prior to endorsement of the Plan, the Subdivider shall deposit with the Township a financial security in an amount sufficient to cover the cost of all improvements or common amenities required by this Ordinance and the Subdivision Improvements Agreement and the cost of preparing as-built drawings for those improvements. The financial security may be in the form of an irrevocable letter of credit or restrictive or escrow account in a federal or Commonwealth chartered lending institution or other type of financial security which the Township approves and is permissible by the Pennsylvania Municipalities Planning Code. The financial security shall guarantee the completion of all required improvements on or before the date fixed in the formal action of approval or accompanying agreement for completion of the improvements.
3. When requested by the Developer, in order to facilitate financing, the Township Supervisors shall furnish the Developer with a signed copy of a resolution indicating approval of the Final Plan contingent upon the Developer obtaining a satisfactory financial security. The Final Plan shall not be signed nor recorded until the financial improvements agreement is executed.

The resolution or letter of contingent approval shall expire and be deemed to be revoked if the financial

security agreement is not executed within ninety (90) days unless a written extension is granted by the Township Supervisors; such extension shall not be unreasonably withheld and shall be placed in writing at the request of the developer.

C. Amount of Security

The amount of the financial security to be posted for the completion of the required improvements shall be equal to one hundred and ten percent (110%) of the cost of completion estimated as of ninety (90) days following the date scheduled for completion by the developer. Annually, the Township may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the ninetieth (90<sup>th</sup>) day after either the original date scheduled for completion or a rescheduled date of completion by the Developer. Subsequent to said adjustment, the Township may require the Developer to post additional security in order to assure that the financial security equals said one hundred ten percent (110%). Any additional security shall be posted by the Developer in accordance with this subsection.

D. Basis for Security

The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by an Applicant or Developer and prepared by a professional engineer licensed as such in the Commonwealth of Pennsylvania and certified by such engineer to be a fair and reasonable estimate of such cost. Such estimate shall be submitted to the Township no less than fourteen (14) days prior to a meeting of the Township Supervisors. The Township, upon the recommendation of the Township Engineer, may refuse to accept such estimate for good cause shown.

E. Disputes

In the event the Developer and the Township are unable to agree upon an estimate for improvements, then the estimate shall be recalculated and recertified by another professional engineer pursuant to the dispute procedures of the Municipalities Planning Code. The Developer shall bear all costs associated with the recalculation.

F. Improvements Exceeding One Year

If the party posting the financial security requires more than one (1) year from the date of posting of the financial security to complete the required improvements, the amount of financial security may be increased by an additional ten percent (10%) for

each one-year period beyond the first anniversary date of posting of financial security or to an amount not exceeding one hundred ten percent (110%) of the cost of completing the required improvements as re-established on or about the expiration of the initial one-year period.

G. Release of Security

The party posting the financial security may request the Township Supervisors to release or authorize release, from time to time, such portions of the financial security necessary for payment to the contractors performing the work. Any such requests shall be in writing addressed to the Township Supervisors, and the Supervisors shall have forty-five (45) days from receipt of such requests within which to allow the Township Engineer to certify, in writing, to the Township Supervisors that such portion of the work upon the improvements has been completed in accordance with the approved subdivision or land development plan. Upon such certification the Township Supervisors shall authorize release by the bonding company or lending institution of an amount as estimated by the Township Engineer fairly representing the value of the improvements completed. If the Township Supervisors fail to act within said forty-five (45) day period, the Supervisors shall be deemed to have approved the release of funds as requested. The Township Supervisors may, prior to final release at the time of completion and certification by their engineer, require retention of ten percent (10%) of the estimated cost of the aforesaid improvements. In the case where development is projected over a period of years, the Township may authorize submission of Final Plans by sections or stages of development, subject to such requirements or guarantees for improvements in the future sections or stages of development as it finds essential for the protection and proper development of any finally approved section of the development.

H. Water and Sewer Improvements

If water mains or sanitary sewer lines, or both, along with apparatus of facilities related thereto, are to be installed under the jurisdiction and pursuant to the rules and regulations of a public utility or municipal authority separate and distinct from the Township, financial security to assure proper completion and maintenance thereof shall be posted in accordance with the regulations of the controlling public utility or municipal authority and shall not be included within the financial security as otherwise required by this section.

**Section 502 - REMEDIES TO EFFECT COMPLETION OF IMPROVEMENTS**

In the event that any improvements which are required by this Ordinance have not been installed as provided in this Ordinance or in

accord with the approved Final Plan, the Township may enforce any corporate bond or other security by appropriate legal and equitable remedies. If the proceeds of such bond or other security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, the Township may, at its option, install part of such improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action to recover the moneys necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the Developer, or both, shall be used solely for the installation of the improvements covered by such security.

**Section 503 - RELEASE OF PERFORMANCE GUARANTEE**

- A. When the Developer has completed all of the necessary and appropriate improvements, the Developer shall notify the Township Supervisors, by certified or registered mail, of the completion of the improvements and shall send a copy of the notice to the Township Engineer.

The Township Supervisors shall within ten (10) days after receipt of notice of completion of improvements direct and authorize the Township Engineer to inspect the improvements. The Township Engineer shall then submit a written report regarding the improvements to the Supervisors and promptly mail a copy of the report to the Developer by certified or registered mail.

The report shall be made and mailed by the Township Engineer within thirty (30) days after receipt of the authorization from the Township Supervisors. The report shall be detailed and shall indicate approval or rejection of the improvements, either in whole or in part. If the improvements or any portion thereof shall not be approved or shall be rejected by the Township Engineer, the report shall contain a statement of reasons for such non-approval or rejection.

The Township Supervisors shall notify the Developer within fifteen (15) days of receipt of the Engineer's report, in writing by certified or registered mail of their action.

- B. If any portion of the improvements shall not be approved or shall be rejected by the Township Supervisors, the Developer shall proceed to complete the improvements, and upon completion the same procedure of notification as outlined above shall be followed.
- C. When completed improvements have been approved by the Township, the performance guarantee shall be reduced by no more than the amount which was estimated in the Subdivision Improvements Agreement for the approved improvements.

#### Section 504 - CONSTRUCTION REQUIRED

- A. The Developer or the Developer's Agent shall construct all roads, together with all other improvements including, but not limited to, grading, paving, curbs, gutters, sidewalks, street lights, fire hydrants, water mains, street signs, shade trees, storm drainage facilities, sanitary sewers, landscaping, traffic control devices, open space and restricted areas, and stormwater management. All construction shall be in conformance with the Final Plan, the Township Construction Standards and Specifications and the applicable provisions of the Pennsylvania Department of Transportation Specifications, Form 408, the latest revision and all applicable regulations.
- B. No Plan shall be finally approved for recording, and no building permits shall be issued until the Developer or the Developer's Agent has completed all required improvements.

#### Section 505 - INSPECTIONS

- A. The Township Engineer shall be notified by the Developer or the Developer's Agent at least two (2) working days before the start of construction of any improvements requiring inspection. The construction or installation of all improvements shall at all times be subject to inspection by the Township, who shall determine that such improvements comply with approved plans and Township Standards. If such inspection reveals that work is not in accordance with approved plans and specifications, that construction is not being done in a workmanlike manner, or that stormwater management and erosion control facilities are failing to prevent accelerated erosion or water-borne sediment from leaving the site of construction, the said representatives may be empowered to require corrections to be made, and/or the suspension of subdivision approval, and to issue a cease and desist order which may include any or all of the following sanctions:
  - 1. That no lot in the subdivision shall be conveyed or placed under agreement of sale;
  - 2. That all construction on any lots for which a building permit has been issued shall cease;
  - 3. That no further building permits for any lots shall be issued.
- B. The said cease and desist order shall be terminated upon determination by the Township that the said defects or deviations from plan requirements have been corrected.

- C. After commencement of initial earth-moving operations, the Township Engineer or his designee shall inspect at the following milestones in the development of the site, or at each stage thereof. The Township Engineer may make random inspections as deemed necessary and appropriate.
1. Upon completion of stripping, the stockpiling of topsoil, the construction of temporary stormwater management and erosion control facilities, disposal of all unsuitable materials, and preparation of the ground.
  2. Upon completion of rough grading, but prior to placing topsoil, installing permanent drainage or other site improvements, or establishing covers.
  3. During construction of the permanent facilities, at such time(s) as specified by the Township Engineer.
  4. Upon completion of permanent storm water management facilities, including established ground covers and planting for that purpose.
  5. Upon completion of final grading, vegetative control measures, and all other site restoration work undertaken in accordance with the approved plan and permit.
- D. No underground pipes, conduits, cables, structures, subgrades or base course shall be covered until inspected and approved by the Township Engineer or designee. A minimum of seven (7) inspections shall be required. The Developer or Developer's Agent shall be responsible for arranging for other inspections that may be required by another agency or entity. These inspections shall occur at the following times:
1. Upon excavation and completion of subgrade.
  2. Upon excavation, installation and completion of drainage structures, community sewage systems and water supply systems, and other utilities.
  3. During backfill.
  4. Before placing first base course and between subsequent base courses.
  5. Before binder course.
  6. Before wearing course.
  7. Final inspections in accordance with Section 503.A.



**Section 506 - PREPARATION OF AS-BUILT PLANS**

As-built plans for all improvements within the subdivision or land development listed in the Subdivision Improvements Agreement shall be submitted to the Township within thirty (30) days after inspection and approval of the improvements by the Township and prior to the release of the Performance Guarantee and acceptance of any such improvements by the Township. Plans shall be a corrected copy of the approved Plan indicating actual dimensions and conditions of streets and all other improvements, and certified by a professional engineer to be in accordance with actual construction. The Developer is responsible for the preparation of such plans. If any information relating to potential lot owners shown on the recorded Final Plan shall have been changed, such as lot boundaries, easements, and maintenance responsibilities, a revised subdivision and/or land development plan shall be filed with the Township in accordance with the procedures of this Ordinance.

**Section 507 - MAINTENANCE GUARANTEE**

Where the Township Supervisors accept dedication of all or some of the required improvements within a subdivision or land development following completion, the Township Supervisors shall require the posting of financial security to secure structural integrity of said improvements as well as the functioning of said improvements in accordance with the design specifications as depicted on the Final Plan for a term not to exceed eighteen (18) months from the date of acceptance of dedication. The financial security shall be of the same type as permitted for installation of improvements and the amount of the financial security shall not exceed fifteen percent (15%) of the actual cost of installation of the improvements.

**ARTICLE VI**  
**DESIGN STANDARDS**

**Section 601 - PURPOSE**

This article establishes and defines the public improvements and design standards that the Township shall require in the review, approval, and construction of any subdivision or land development.

**Section 602 - APPLICATION**

- A. The following principles, standards and requirements shall be met by applicants in preparing plans for proposed subdivisions and land developments.
- B. The standards and requirements outlined herein shall be considered minimum standards and requirements for the promotion of public health, safety, morals and general welfare.
- C. When other applicable regulations impose more restrictive standards than those specified herein, the more restrictive standards shall apply.
- D. Where literal compliance with the standards herein specified is clearly impractical, the Township may modify or adjust the standards to permit reasonable use of property while securing substantial conformance with the objectives of these standards.

**Section 603 - LAND REQUIREMENTS**

- A. The proposed use shall be suited to the land to be subdivided and developed in conformance with the Township Comprehensive Plan, Zoning Ordinance, and other applicable regulations.
- B. Land or properties subject to life, health or safety hazards shall not be subdivided or developed for residential purposes until all such hazards have been eliminated or unless adequate safeguards against such hazards are provided by the plan.
- C. The design of the proposed subdivision and land development shall preserve, to the greatest extent possible, the natural features and topography of the site.
- D. No parcel of land shall be created, either by inclusion or exclusion from a proposed subdivision or land development, which cannot be properly used for a permitted use under the existing zoning regulations for that district.

## Section 604 - BLOCKS

- A. The length, width, and shape of blocks shall be determined with due regard to:
1. Provision of adequate sites for buildings of the type proposed;
  2. Least adverse impact to topography and natural features;
  3. Requirements for safe and convenient vehicular and pedestrian circulation; and,
  4. Thoughtful and innovative design to create an attractive community.
- B. Blocks shall not exceed eighteen hundred (1,800) feet in length, or be less than five hundred (500) feet in length. In the design of blocks longer than one thousand (1,000) feet, special consideration shall be given to access for fire protection.
- C. Wherever practicable, blocks shall be two (2) lot depths wide. Except for lots located at street intersections or where reverse frontage lots are approved, no blocks shall have lots that front on more than one (1) street.
- D. Blocks in non-residential areas may vary from the elements of design detailed above if required by the nature of the use and if approved by the Township Supervisors. In all cases, however, adequate provisions shall be made for off-street parking and loading areas and pedestrian and vehicular circulation.

## Section 605 - LOTS AND LOT AREA

- A. General Lot Design Standards
1. Lot dimensions, areas, and minimum setback standards shall not be less than as required by the Township Zoning Ordinance.
  2. Lot dimensions, areas, and orientation shall be appropriate for the type of development and use contemplated, and sufficient to provide satisfactory space for required off-street parking, accessory uses, and other applicable standards of Township codes and ordinances.
  3. The depth of residential lots for single-family detached lots shall not be less than one or more than three times their width at the building setback line. The lot width to depth ratio of residential lots for single-family semi-detached dwellings shall typically be one by one and one-

half for both units or one by three for each lot (unit) at the building setback line.

4. Depth and width of parcels intended for non-residential uses shall be adequate for the use proposed and sufficient to provide satisfactory space for on-site parking, loading and unloading, setbacks, buffer areas and landscaping, etc.
5. Side property lines of lots shall be at right angles or radial to the right-of-way line.
6. In order to avoid jurisdictional problems, lot lines shall follow municipal boundaries rather than cross them, to the greatest extent feasible.
7. Remnants of land that do not meet minimum area and bulk requirements for the applicable zoning district shall not exist after subdivision. All portions of a plan shall be incorporated into existing or proposed lots unless special usage for a specific piece of land is applied for as part of a land development proposal.

B. Lot Frontage Standards

1. All lots shall have frontage along the right-of-way of a street and have direct access to an existing or proposed public street or private street meeting the requirements of this Ordinance. Each lot shall have, in addition to the minimum width at the front lot line, sufficient free and complete access to an existing or proposed street cartway to avoid the need to cross any portion of another lot to reach such street.
2. Reverse Frontage Lots.

Proposed subdivisions involving the creation of three (3) or more residential lots (in total) abutting an existing or proposed arterial, or the creation of five (5) or more lots abutting an existing or proposed collector, shall be designed as reverse frontage lots. The applicant shall be required to provide a local access street to connect the reverse frontage lots to the arterial or collector. Where a choice exists, the applicant shall connect to the street with the lowest classification. Access and design for new residential streets shall be consistent with the requirements of Section 608.

All residential reverse frontage lots shall contain a landscape screen, fence, earth mounding, or similar screening device and barrier to vehicular access subject to Township approval within the rear yard.

### 3. Flag Lots

Flag lots are prohibited, unless permission is granted by the Township Supervisors. The Supervisors may grant permission to utilize flag lots when it deems flag lots appropriate because of topographical or other conditions unique to the site. The access strip portions of a flag lot must be wide enough to permit the construction of a road with a right-of-way meeting the requirements of this Ordinance and shall not be used for building purposes.

In granting permission to use flag lots, the Township Supervisors shall find:

- a. That the use of flag lots will not result in conditions which will cause increased interruptions to traffic flow, accident hazards and sedimentation and runoff problems onto public roads.
- b. That the use of an internal street system or marginal access streets on which lots would front will not be more appropriate for development of the tract than the use of flag lots.
- c. That the use of flag lots is necessary to permit utilization of a tract of ground, otherwise not feasible to utilize under the applicable standards for lots found in this Ordinance.
- d. No more than one (1) flag lot shall be created from the original tract of land for each ten (10) lots created from the original tract of land which meet the requirements of this Ordinance for lot configuration.
- e. Should a flag lot be divided into two or more lots, the access strip shall be constructed into a street complying with the specifications of this Ordinance.
- f. All structures shall be located on the flag lot so as to provide the required setback should the access strip be used for construction of a street.

#### **Section 606 - STREET SYSTEM**

- A. Proposed streets shall be properly related to such street plans or parts thereof as have been officially prepared and adopted by the Township, including recorded subdivision or land development plans.
- B. Proposed streets shall further conform to such Township, County, and State road and highway plans as have been prepared, adopted

and/or filed as prescribed by law.

- C. Streets shall be logically related to the topography so as to produce usable lots, reasonable grades, proper alignment and drainage, and to provide for adequate sight distances.
- D. Local streets shall be so laid out as to not encourage through traffic, but provision for street connections into and from adjacent areas may be required. Streets shall be extended by dedication to the boundary of such property. Collectors and arterials shall be connected with such existing streets and highways to form continuations thereof.
- E. If lots resulting from the proposed subdivision are of sufficient area to permit further subdivision, or if a portion of the tract is not subdivided at the time of application, adequate street rights-of-way to permit further subdivision shall be provided as necessary, to be no less than the right-of-way required for local streets. Remnants and landlocked areas shall not be created.
- F. Where a proposed subdivision or land development abuts or contains an existing or proposed arterial or collector street, the Township may require marginal access streets, rear service alleys, reverse frontage lots or such other treatment as will provide protection for abutting properties, reduction in the number of intersections or access points with the major street, and separation of local and through traffic.
- G. Where a subdivision or land development abuts an existing street which does not meet the standards of this Ordinance, the Township Supervisors may require the dedication of land sufficient to widen the street to meet the standards of this Ordinance.
- H. Where a proposed subdivision or land development abuts or contains a collector or arterial street identified in Township, County or State plans for future road widening beyond normal Township design standards, the applicant shall be required to reserve additional right-of-way to provide for the planned widened street or highway.
- I. Streets within the subdivision or land development and adjacent roads which will receive traffic from and distribute traffic to the subdivision or land development shall be adequate in construction, grade, width and capacity to accommodate traffic generated by the subdivision or land development.
- J. When streets will be extended to the boundaries of the subdivision or land development to provide for access to potentially developable tracts and sanitary sewer and/or water lines will be constructed in the streets within the developer's tract, the Township Supervisors may require extension of the sanitary sewer and/or water lines to the tract boundary in order

to facilitate future extensions to abutting land.

- K. If a subdivision proposes lots, all of which front on existing public roads, the Township Supervisors may require the Developer to reserve land adequate to provide for future street access from the public roads on which the lots front to the land to the rear of the proposed lots. Such reserved areas shall be of such dimensions to permit the construction of streets meeting the standards of this Ordinance.
- L. Where a subdivision or land development fronts on and will provide for vehicular access to and from an existing Township road which does not meet the minimum cartway width requirements of this Ordinance, the Township Supervisors may require the Developer to improve at his expense the Township road cartway to meet those requirements. Pavement shall be constructed in accordance with the requirements of this Ordinance. In addition, provision shall be made for adequate drainage along the sides of the roads. Such drainage provisions shall be approved by the Township Supervisors.
- M. New half or partial streets shall not be permitted.
- N. A parcel of land separating a street from adjacent properties (reserve strips) including those controlling access to streets, shall be prohibited, unless dedicated to the Township.
- O. Continuations of existing streets shall be known by the same name, but names for other streets shall not duplicate or closely resemble names for existing streets. All street names are subject to approval by the Board of Supervisors and the Postmaster having jurisdiction.
- P. Where streets continue into adjoining municipalities, evidence of compatibility of design, particularly with regard to street widths, shall be submitted. The applicant shall coordinate such designs with both municipalities to avoid abrupt changes in cartway width, alignment, or in improvements provided.
- Q. New streets shall be laid out to continue existing streets at equal or greater width, in regard to both cartway and right-of-way, where such continuations are reasonable and practical. Minimum widths shall be as established in Section 608 below.
- R. Attempts shall be made to connect lower order streets to the lesser of higher order streets.
- S. All design elements of all streets, including general layout, horizontal and vertical alignment, sight distance, and super-elevation, are subject to review and approval by the Township Supervisors. When reviewing the design of streets, in addition to the standards in this Ordinance, the Rural Design Criteria in

the Pennsylvania Department of Transportation Design Manual Part 2, Highway Design, latest edition, and A Polity on Geometric Design of Rural Highways, AASHTO, latest revision, shall be consulted to assure that the road design is in accordance with acceptable engineering practice.

- T. For certain aspects of vertical and horizontal alignment, standards are determined by design speed of the road involved. For all proposed streets, the developer shall indicate the proposed design speed. The designated design speed is subject to the approval of the Township Supervisors. In general, the design speed on arterial streets shall be considered as 55 mph (to be determined in each individual case), on collector streets a minimum of 35 mph (to be determined in each individual case), and on local streets 35 mph unless a lesser design speed is permitted by the Township Supervisors.
- U. Streets shall be designed to preclude or minimize the need for guide rail. The Township Supervisors may require guide rail to be placed for protection on embankments or for fixed obstructions along streets when a barrier is indicated as warranted in Design Manual Part 2 Highway Design by the Pennsylvania Department of Transportation, latest edition.
- V. Street systems in developments utilizing Conservation Design Option 4 - Hamlets and Option 5 - Villages shall incorporate the supplemental design standards as provided in Appendix K.

#### Section 607 - CUL-DE-SAC STREETS

- A. Dead-end streets shall be prohibited, except as stubs to permit future street extension into adjoining tracts, or when designed as a cul-de-sac street in accordance with the requirements of this Section.
- B. Unless future extension is clearly impractical and undesirable, the cul-de-sac turnaround right-of-way shall be placed adjacent to a property line, and a right-of-way of the same width as the street shall be carried to the property line in such a way as to permit future extension of the street into the adjoining tract. The Applicant shall have the burden of showing the impracticality of extending a street to a property line in order to justify a shorter street.
- C. A cul-de-sac street, permanently terminated, is not permitted when, in the determination of the Township, a through street is feasible and more desirable. In order to justify a cul-de-sac street, permanently terminated, the Applicant shall have the burden of showing the infeasibility of a through street.
- D. Each permanently terminated cul-de-sac street shall serve not



more than twenty (20) single-family residential dwelling units, not more than forty (40) two-family or multiple family dwelling units, and not more than four (4) non-residential lots. The cul-de-sac street shall be a minimum of two hundred fifty (250) feet in length and a maximum of one-thousand (1,000) feet in length from the right-of-way of the street intersected to the beginning of the turnaround. A cul-de-sac street of greater length may be approved by the Township where the topography, shape or other limitations of the tract preclude the possibility of providing a second street.

E. Permanently terminated cul-de-sac streets shall have a circular turnaround with minimum rights-of-way and paving radii as prescribed below.

1. Residential Cul-de-sac: Right-of-way Radius sixty feet (60'), Outer Paving Radius fifty feet (50').
2. Commercial/Industrial Cul-de-sac: Right-of-way Radius seventy feet (70'), Outer Paving Radius sixty feet (60').

F. Cul-de-sacs with center islands shall be permitted only when approved by the Township Board of Supervisors. Minimum rights-of-way and paving radii shall be provided as prescribed below.

1. Residential Cul-de-sacs with Center Island: Right-of-way Radius sixty feet (60'), Outer Paving Radius fifty feet (50'), Inner Paving Radius thirty feet (30'), Moving Lane twenty feet (20').
2. Commercial/Industrial Cul-de-sac with Center Island: Right-of-way Radius seventy feet (70'), Outer Paving Radius sixty feet (60'), Inner Paving Radius thirty-five feet (35'), Moving Lane twenty-five feet (25').

Maintenance responsibility of such islands shall be determined prior to Final Plan approval and recorded on the deed. The island shall be landscaped with a permanent ground cover subject to approval by the Township.

G. Drainage of cul-de-sac streets shall preferably be toward the open end. If drainage is toward the closed end, runoff shall be conveyed through underground storm sewer or by other means approved by the Township Supervisors.

H. No more than four (4) lots shall have frontage on the cul-de-sac turnaround and no more than four (4) driveways shall have access to the cul-de-sac turnaround.

I. Greater cul-de-sac radii may be used, such as when parking is to be permitted, based on the recommendation of the Township

Planning Commission and approval of the Township Board of Supervisors.

- J. The maximum slope across the diameter of a cul-de-sac turnaround shall not exceed five (5) percent. The minimum grade around the curbing shall not be less than one (1) percent.
- K. Any street temporarily dead-ended either for access to an adjoining property or for authorized stage development shall be provided with a temporary all-weather turnaround within the subdivision or land development. The use of such a turnaround shall be guaranteed to the public until such time as the street is extended. The temporary turnaround shall be circular, with a minimum cartway radius of forty (40) feet, and shall remain completely within the right-of-way. The turnaround right-of-way shall be placed adjacent to the property line and a right-of-way of the same width as the street shall be carried to the property line in such a way as to permit future extension of the street into the adjoining tract.
- L. The street grade requirements of Section 610 shall apply to cul-de-sac streets.
- M. Cul-de-sac (dead end) streets shall be provided, when required by the Township, with a secondary means of access to permit the flow of emergency vehicles in the event that the primary means becomes blocked. The Township Fire Marshall and the Township Engineer shall approve the secondary access means.
- N. Paved snow plow easement(s) shall be provided, as directed by the Township Supervisors, on all cul-de-sacs to be dedicated as a public street to the Township.

**Section 608 - STREET WIDTHS**

- A. Minimum street right-of-way and cartway (pavement) widths shall be as follows:

<u>Street Type</u>	<u>Required Width</u> (in feet)
1. Local (Minor) Streets and Permanent Cul-de-sacs	
a. Conservation Design: Option 3 - Country Properties	
No Parking Permitted	
Cartway, Paved	16
Cartway, Mudfree & Passable	18
Right-of-way	33

<u>Street Type</u>	<u>Required Width</u> (in feet)
b. Conventional Design; Conservation Design: Option 1 - Neutral Density and Option 2 - Enhanced Density	
No Parking Permitted	
Cartway, No Curbs	22
Cartway, With Curbs	24
Right-of-way	44
c. Conservation Design: Option 4 - Hamlet and Option 5 - Village	
<i>(See Table 1 in Appendix K)</i>	
2. Collector Street	
a. Residential	
Right-of-way	60
Cartway	
No Parking Permitted	24
Parking Permitted	36
b. Commercial, Industrial	
Right-of-way	60
Cartway	
No Parking Permitted	24
Parking Permitted	40
3. Arterial Street	
Right-of-way	As determined after consultation with the Township, the County and PennDOT
Cartway	
4. Marginal Access Street	
Right-of-way	As determined after consultation with the Township, the County and PennDOT
Cartway	As specified for local streets
5. Alley (Service Street)	
Right-of-way	33
Cartway	16
B. Additional right-of-way widths may be required by the Township Supervisors for the purpose of promoting the public safety and	

convenience and for providing for proposed traffic volumes.

- C. The designation of streets as "local", "collector", and "arterial" and as to "no parking", and "parking permitted" is subject to Township Supervisors approval. The Township Supervisors may prohibit parking along collector streets.
- D. Where a subdivision or land development abuts or contains an existing street of substandard width, all normally required public improvements and additional cartway width, in conformance with Township design standards, shall be constructed and additional right-of-way width, in conformance with Township design standards, shall be dedicated. The Board of Supervisors may approve, in lieu of immediate construction of the public improvements, a cash payment sufficient to cover the costs of the public improvements. The amount of such cash payment shall be determined by the Board of Supervisors in consultation with the Township Engineer. Any such payment shall be set aside in a Township fund for public improvements.
- E. Public streets shall be constructed or improved in accordance with the applicable design and construction standards of this Article and the Township Construction Standards and Specifications Ordinance.
- F. Private streets shall adhere to the design standards and other requirements of Section 613, Private Streets, of this Ordinance.
- G. Where it is necessary to relocate existing utility poles to make room for new or improved roads or for other improvements related to a subdivision or development, the Developer shall be fully responsible for relocating the utility poles and the associated costs.

**Section 609 - STREET ALIGNMENT**

- A. Whenever street lines are deflected in excess of five (5) degrees, connection shall be made by horizontal curves.
- B. To ensure adequate sight distance, minimum centerline radii for horizontal curves shall be as follows:

<u>Design Speed</u> <u>(in miles per hour)</u>	<u>Minimum Radius</u> <u>(in feet)</u>
20	100
25	150
30	230
35	310
40	430
45	550

<u>Design Speed</u> (in miles per hour)	<u>Minimum Radius</u> (in feet)
50	700
55	850

- C. A straight section of road of at least one hundred (100) feet shall be provided between all horizontal curves on collector streets. A straight section of road of at least two hundred (200) feet shall be provided between all horizontal curves on arterial streets.
- D. Superelevation (commonly known as "banking a curve") shall be required when curve radii are less than six hundred (600) feet on arterial or collector streets or as most currently specified by PennDOT.

**Section 610 - STREET GRADES**

- A. Centerline grades shall not be less than one percent (1%).
- B. Centerline grades shall be in conformance with the American Association of State Highway and Transportation Officials (AASHTO) recommendations but, in no case shall they exceed the following:
  - 1. Local Street or Alley: Ten percent (10%).
  - 2. Collector: Seven percent (7%).
  - 3. Arterial Street: Six percent (6%).
  - 4. Street Intersection: Five percent (5%).
- C. Grades up to twelve percent (12%) may be permitted by the Township Supervisors on local streets, except cul-de-sacs, if the Supervisors at their discretion deem that unsafe conditions will not result from the increase in grade.
- D. For Conservation Design Options 1, 2 and 3, the Board of Supervisors may permit at their discretion grades up to fourteen percent (14%) if it is determined that unsafe conditions will not result from the increase in grade.
- E. Vertical curves shall be used at changes of grade exceeding one (1) percent and shall be designed in relation to the extent of the grade change (at a rate no more abrupt than one percent change in grade per 25 feet along centerline) provided that the following minimum sight distances are maintained. If the minimum sight distances using AASHTO formulas are greater than those listed below, the greater sight distances shall apply.

<u>Design Speed</u> (in miles per hour)	<u>Minimum Sight Distance</u> (in feet)
20	150
25	175
30	200
35	250
40	300
45	375
50	450
55	550

- F. Where the grade of any street at the approach to an intersection exceeds five percent (5%), a leveling area shall be provided, having not greater than five percent (5%) grades for a distance of fifty (50) feet measured from the nearest right-of-way line in the intersecting street.
- G. Under no conditions shall maximum grades be permitted with minimum curve radii.
- H. Grading of one quarter (1/4) of an inch per one (1) foot shall be provided in the area from the back of the curb to at least ten (10) feet from the face of the curb, or in the full right-of-way width from the back of the curb, whichever area is greater. This grading width shall be increased as necessary where sidewalks or planting strips, or sidewalks and planting strips, are to be provided. Beyond the limits of this grading, banks shall be sloped to prevent erosion, but this slope shall not exceed two (2) horizontal to one (1) vertical, with tops of slope in cuts rounded
- I. All streets shall be graded to the grades shown on the street profile and the cross-section plan submitted and approved with the Final Plan. All grading of streets also shall meet the requirements of all Township Ordinances in the judgment of, and after inspection by, the Township Engineer.

**Section 611 - STREET INTERSECTIONS**

- A. Streets shall be laid out to intersect at right angles.
- B. Intersections shall be approached on all sides by a straight area at least fifty feet (50') in length.
- C. No more than two (2) streets shall intersect at the same point.
- D. Clear sight triangles shall be provided at all street intersections and shall be shown on the subdivision or development plan. Each side of the sight triangle shall be a minimum of seventy-five (75) feet, measured from the point of

intersection along each road centerline, except that clear sight triangles of a minimum of one hundred (100) feet shall be provided for all intersections involving a collector street and clear sight triangles of a minimum of one hundred and fifty (150) feet shall be provided for all intersections involving arterial streets. Within such triangle, no vision-obstructing object shall be permitted which obscures vision above the height of thirty (30) inches and below ten (10) feet, measured from the centerline grade in intersecting streets. Deed restrictions shall be recorded to ensure that clear sight triangles are maintained. Clear sight triangles shall be provided at all driveway intersections with streets in accordance with the Longswamp Township Driveway Ordinance.

- E. Intersections with arterial streets shall be located not less than one thousand (1,000) feet apart, measured from centerline to centerline.
- F. Streets entering opposite sides of another street shall be laid out either directly opposite one another or with a minimum offset of at least one hundred fifty (150) feet on local and collector streets and five hundred (500) feet on arterial streets, measured from centerline to centerline.
- G. All street intersections shall have a minimum paving radius corresponding to the following corner curb radii: Twenty (20) feet for local streets and service streets, thirty (30) feet for residential collector streets, and forty (40) feet for commercial or industrial collectors and arterial streets. Where streets of different functional classifications intersect, the requirements for the higher classification shall hold.
- H. In designing street intersections, the sight distance dimensions most currently recommended by PENNDOT shall be used. Sight distance shall be measured from a point set back fifteen (15) feet from the intersected pavement edge on the street controlled by a stop sign original.
- I. All necessary street name signs and traffic control signs shall be the responsibility of the Applicant to provide and erect. The street signs shall meet PENNDOT safety standards, and shall be subject to approval by the Board of Supervisors. Street signs and traffic control signs shall be erected before the issuance of any certificates of occupancy on that street.

#### **Section 612 - PUBLIC STREET CONSTRUCTION STANDARDS**

All public streets of any new subdivision or land development shall be built to the standards and specifications contained in the Township Construction Standards and Specifications Ordinance, and to applicable

State and Federal Highway Department specifications (e.g. Pennsylvania Department of Transportation Specifications, Publication 408, latest version).

#### Section 613 - PRIVATE STREETS

Private streets, that is streets not to be offered for dedication, will be permitted only when proper maintenance is guaranteed by the developer and when in accordance with the requirements outlined below. Private streets shall be clearly identified as such on each Preliminary and Final Plan. Deeds transferring any lots served by such a private street shall identify the street as a private street to be privately maintained. Private streets shall be prohibited in non-residential subdivisions.

##### A. Design Standards

1. Private streets shall be designed and constructed in accordance with the Township requirements for public streets except where permitted for Conservation Design Option 3 - Country Properties.
2. If an unpaved private street is proposed, as permitted in Conservation Design Option 3 - Country Properties, the street shall be paved with concrete or bituminous material from the edge of the intersecting State or Township street cartway to a distance of one hundred (100) feet along the private street.

##### B. Agreement

1. As a condition of Final Plan approval, an agreement providing for maintenance, repair, construction, and reconstruction, including drainage facility maintenance and snowplowing of private streets, shall be submitted to the Township and recorded with the approved Final Plan. The deed for each new or existing lot fronting on the private street shall reference the agreement.
2. The agreement shall also contain the conditions under which the street may later be offered for dedication. The conditions shall state that at the time of offer for dedication the street must conform to the Township public street specifications or that the owners of the abutting lots shall include with the offer of dedication sufficient money, as estimated by the Township Engineer, for the Township to bring the street into conformance with Township specifications in effect at the time of dedication.



**Section 614 - ALLEYS (SERVICE STREETS)**

- A. Alleys are permitted in residential developments, except that use of alleys must be approved by the Township Supervisors for developments consisting entirely of single family detached dwellings. In any residential development the Township Supervisors may require the use of alleys to avoid direct driveway access to arterial or collector streets.
- B. Alleys proposed for new residential development shall be consistent with the standards of Section 608 of this Ordinance.
- C. Where alleys are permitted and are intended to be dedicated to the Township, they shall have a minimum right-of-way width of thirty-three (33) feet and have a minimum paved cartway width of sixteen (16) feet.
- D. No part of any dwelling, garage or other structure may be located within twenty (20) feet of the center line of the alley or within the applicable setback required by the Township Zoning Ordinance.
- E. Dead-end alleys shall be prohibited.
- F. Parking is prohibited along alleys.
- G. Construction standards shall be the same as that required for public streets. Where alleys intersect other roads, such intersections shall be consistent with the standards for road intersections.

**Section 615 - DRIVEWAYS**

- A. Private driveways shall be designated and constructed in accordance with the Longswamp Township Driveway Ordinance and the specifications contained herewithin.
- B. Subdivisions and land developments shall be provided with internal streets to which the lots will have driveway access in order to minimize the number of driveway intersections with existing public streets. This reduction in driveway intersections will lessen interruptions to traffic flow and accident hazards and minimize sedimentation and runoff problems onto existing public streets.
- C. Private driveways shall have such grades as to furnish a safe and convenient parking space and to provide a safe and convenient means of access.
- D. Provision shall be made at all intersections of driveways with streets to ensure adequate stormwater drainage and erosion and sediment control.

The Township Supervisors may require subdivision and land development plans to show a typical treatment of the construction of driveways and handling of storm drainage where the driveways intersect a street. The Supervisors may require as a condition of plan approval that prior to the issuance of zoning or building permits the specific proposals for the construction of a driveway and treatment of storm drainage and erosion and sediment control for that driveway be submitted to the Township for approval.

- E. Driveways shall be placed at locations at which sight distance is adequate to safely allow each permitted movement to be made into or out of the driveways; such that the free movement of normal street traffic is not impaired; such that the driveways will not create a hazard; and such that the driveways will not create an area of undue traffic congestion on streets. Applicable safe sight distance as established in the regulations of the Pennsylvania Department of Transportation shall be provided.
- F. The Township Supervisors may require the driveway to a lot which abuts two or more streets to be restricted to that street which can more safely accommodate its traffic. The Township Supervisors may also require a driveway to be located directly across from a street or driveway on the opposite side of the street the driveway intersects if the Supervisors judge that offset driveways will create a safety hazard.

The Township Supervisors may require the permissible location of a driveway for a lot to be shown on the subdivision or land development plan, and further require that driveway locations be subject to approval of the Supervisors.

- G. All residential driveways shall be paved with concrete or bituminous materials from the edge of the State or Township street cartway to the required building setback line. The remainder of the driveway may be constructed of any suitable stone, pavement, or all-weather surface.
- H. Driveway widths, radii, angle of intersection with street, and clear sight triangles shall be provided as shown on the Plan as required in the Longswamp Township Driveway Ordinance.
- I. All driveways which provide access to arterial and collector streets, if such driveways are permitted by the Township Supervisors, shall be designed with adequate turnaround areas on the property so that egress to the street is in a forward direction.
- J. Driveways shall be graded so that, wherever possible, surface drainage will remain on the owner's property; otherwise, adequately sized pipes, inlets, and/or headwalls shall be

installed and gutter improvements shall be made to direct surface drainage into the road drainage system and not onto the paving of the intersecting road.

- K. The Township Supervisors may require the developer to submit with his subdivision or land development plans evidence that the above, and the other standards for driveways established in the Longswamp Township Driveway Ordinance, can be met for each lot where doubt exists as to the feasibility of meeting the standards.

#### **Section 616 - EASEMENTS**

- A. Where easements are required for utilities, such as water and/or sewer facilities intended for dedication, the requirements for easement shall be determined by the Township. Easement requirements for other utilities, and road construction and maintenance shall be similarly established.
- B. Utility easements and easements to community facilities shall be at least twenty (20) feet wide to provide access for maintenance vehicles. Local utility companies shall be consulted when locating easements. Storm drainage easements shall be provided as required in Section 620, Stormwater Management.
- C. To the fullest extent possible, easements shall be centered on or adjacent to rear or side lot lines.
- D. Easements abutting street rights-of-way shall be a minimum of ten (10) feet in width. Other easements shall be a minimum of twenty (20) feet in width.
- E. There shall be a minimum distance of fifty (50) feet, measured in the shortest distance, between any proposed dwelling unit and any petroleum products or natural gas transmission line which traverses the subdivision or land development.
- F. Where new gas or petroleum transmission lines are proposed or where existing lines will be relocated as a part of the proposed development, construction shall occur within a right-of-way of fifty (50) feet minimum and shall comply with the applicable requirements of the Pennsylvania Public Utilities Commission.
- G. Underground electric distribution lines shall be installed in all new subdivisions and land developments of five dwelling units or more. In existing subdivisions with five or more unimproved lots any extensions of the electric distribution lines shall be placed underground.

- H. All telephone and television distribution lines shall be placed underground when electric distribution lines are placed underground.
- I. The required minimum setback and yard dimensions for any lot shall be measured from the lot line, except where the Township makes a determination that such dimension shall be measured from the edge of an easement.
- J. Except for driveways, nothing shall be constructed, placed, planted, set or installed within the area of an easement. The area shall be kept as lawn or, where required, vegetative buffer.
- K. Where a subdivision or land development is traversed by a watercourse, there shall be provided a drainage easement or right-of-way conforming substantially with the line of such watercourse and of such width as will be adequate to preserve natural drainage and provide sufficient width for maintenance.
- L. No right-of-way or easement shall be recited or described in any deed unless the same has been shown on the approved plan. Any easement or right-of-way required herein shall be made part of the deeds of all affected properties. Any error found in a deed shall be immediately corrected and re-recorded in the Berks County Recorder of Deeds office, at the sole expense of the Applicant. The Applicant shall be solely responsible to the buyer for any failure to record an easement or right-of-way shown on the approved plan. Failure to record an easement or right-of-way shown on the approved plan shall not prevent its intended use from being realized.

**Section 617 - SIDEWALKS AND PATHS**

**A. Sidewalks**

- 1. For Conventional Subdivisions and Conservation Subdivisions using Design Options 1, 2 and 3, sidewalks may be required on all streets when determined by the Township to be necessary for the safety and convenience of the projected pedestrians.
- 2. Sidewalks shall be required in the following cases:
  - a. In Conservation Subdivisions using Design Options 4 or 5.
  - b. In all commercial and industrial park streets.
- 3. Where sidewalks are proposed or required, sidewalks shall be located along the side(s) of proposed streets and/or access drives throughout the project, and adjacent to vehicular parking compounds. These sidewalk locations may be varied

if, in the judgment of the Board of Supervisors, the proposed alternate system meets the projected need for pedestrian circulation.

4. Sidewalks shall comply with the Township's Construction Standards and Specifications Ordinance and shall be located within the street right-of-way.
5. Sidewalks shall be separated from curbs by a two-foot (2') minimum wide planting strip.
6. Each plan showing proposed curbs and/or sidewalks, as applicable, shall contain a note to the effect of the following:

"Developer shall be responsible for and bear the sole cost of the installation for all curbs and sidewalks shown on the Plan. Sidewalks shall be constructed in accordance with all requirements of the Longswamp Township Subdivision and Land Development Ordinance and other applicable Township regulations. The owner of each lot shall be responsible for the care and maintenance of the curbing and sidewalk along the full frontage of the lot. Curbs and sidewalks shall be kept in a continuous and constant state of repair and shall be generally maintained in a good and safe condition, with a smooth surface, only minor cracks, no bulging, and free of obstructions, ice and snow. Longswamp Township shall be considered as a third party beneficiary of this note and shall have the full right, but no duty, to enforce the terms hereof."

B. Paths, Trails and Walkways

1. At the discretion of the Board of Supervisors, with recommendations from the Planning Commission, a system of pedestrian, bicycle and/or equestrian paths and/or trails for public use generally unrelated to and separate from streets shall be established and secured by dedication or easement with verification to the satisfaction of the Board of Supervisors of good title thereto. Such paths and/or trails shall be consistent with the Township Open Space Plan or any other applicable plans specified by the Township, so as to encourage the formation of an interconnecting trail network both within and beyond the Township. Existing paths and/or trails may be relocated, if approved by the Board of Supervisors, if a connection with a public path and/or trail on an adjoining property is thereby established.

2. To facilitate circulation, public pedestrian paths, trails and/or walkways may be required to serve the interior of a development and link to an outside path, trail and/or walkway network. The specifications for such public paths, trails and/or walkways shall be as follows:

a. Community Public Path, Trail and/or Walkway: Providing connection between areas of the Township or interconnection to trails beyond the Township.

(1) Easement width: 20 feet

(2) Trail width: 6 feet

(3) Clearing height: 10 feet

(4) Clearing width: 2 feet from both edges of the trail

b. Development Path, Trail and/or Walkway: Providing internal pedestrian circulation within a development.

(1) Easement width: 20 feet

(2) Trail width: 4 feet

(3) Clearing height: 10 feet

(4) Clearing width: 2 feet from both edges of the trail

c. Rural Public Path, Trail and/or Walkway: Providing a rural public bicycle, equestrian and/or pedestrian pathway in a defined location with or without connection between areas of the Township or with other municipalities.

(1) Easement width: 20 feet

(2) Trail width: 4 feet

(3) Clearing height: 8 feet

(4) Clearing width: 2 feet from both edges of the trail

Paths, trails and/or walkways shall comply with the Township's Construction Standards and Specifications (Ordinance No. 227).

3. Access Control Barriers

Bollards, gates or such appropriate barriers shall be provided as necessary, taking in consideration common design standards, planning considerations, safety and access concerns.

4. Signage

Appropriate signage shall be provided as necessary, as determined by the Board of Supervisors.

5. Drainage

All trails shall be designed to include drainage improvements as recommended by the Township Engineer. Community and Development Trails shall be utilize storm pipes with endwalls or end sections to capture and convey concentrated stormwater flow under the trail. Swales shall be utilized uphill of trails to prevent stormwater from flooding trails. The Developer shall be responsible for installing additional drainage facilities, after trail construction, but before dedication to the Township (if dedication is proposed) should drainage problems arise as required by the Township Engineer.

6. As used in this Section, the term "clearing width" shall mean the distance measure from each edge of the trail surface.

**Section 618 - CURBS**

A. For Conventional Subdivisions and Conservation Subdivisions using Design Options 1, 2 and 3, curbs may be required on all streets at the discretion of the Board of Supervisors, where necessary for stormwater management. However, in general, grassy swales are the preferred option to reduce runoff and help maintain rural character.

B. Curbs shall be required in the following cases:

1. In Conservation Subdivisions using Design Options 4 or 5.
2. In all commercial and industrial park streets.
3. Whenever sidewalks are proposed along the side(s) of a proposed street and/or excess drive or adjacent to parking areas, in accordance with Section 617. When curbs are required, they will be required to be constructed on both sides of the street or access drive.

C. In areas where curbs are not used, a stabilized shoulder shall be

provided, and satisfactory provisions, such as drainage swales, shall be made to prevent erosion.

- D. Except where State or Federal Highway Department manuals require a greater standard, concrete curbs shall be constructed in accordance with the Township Construction Standards and Specifications Ordinance.
- E. Each plan showing proposed curbs and/or sidewalks, as applicable, shall contain a note to the effect of the following:

"Developer shall be responsible for and bear the sole cost of the installation for all curbs and sidewalks shown on the Plan. Sidewalks shall be constructed in accordance with all requirements of the Longswamp Township Subdivision and Land Development Ordinance and other applicable Township regulations. The owner of each lot shall be responsible for the care and maintenance of the curbing and sidewalk along the full frontage of the lot. Curbs and sidewalks shall be kept in a continuous and constant state of repair and shall be generally maintained in a good and safe condition, with a smooth surface, only minor cracks, no bulging, and free of obstructions, ice and snow. Longswamp Township shall be considered as a third party beneficiary of this note and shall have the full right, but no duty, to enforce the terms hereof."

#### Section 619 - MONUMENTS AND MARKERS

- A. Monuments or markers shall be placed in accordance with the requirements of this section. Monuments and markers shall be installed flush with the ground and meet the following minimum criteria:

- 1. A monument shall be a stone or concrete post, with a flat top at least four (4) inches across and at least twenty-four (24) inches in length with a permanently inscribed center mark on the top.
- 2. A marker shall be a metal pipe or pin of at least one-half (1/2) inch diameter and at least twenty-four (24) inches in length.

- B. Placement

- 1. Monuments shall be placed at all corners and angle points of boundaries of the original tract to be subdivided; and at each intermediate point as may be required to facilitate the location of lots and streets.



2. Two (2) monuments shall be placed at each location where streets intersect and one (1) on one (1) side of each street at angle points and at the beginning and end of street curves.
  3. Easements, such as for utilities, shall be monumented at their beginning and their end; and areas to be conveyed for public use shall be fully monumented at their external boundaries.
  4. Monuments shall be placed at such other locations along the line of streets as may be deemed necessary by the Township in order to readily define the street in the future.
- C. Markers may be substituted for monuments only when placed at individual lot corners within a subdivision.
- D. All monuments and markers shall be set by a registered professional surveyor and placed in the ground after final grading is completed, at a time agreeable to the Township.
- E. All monuments and markers shall have their accuracy certified by the Applicant's engineer and be checked for accuracy by the Township Engineer. Accuracy of monuments shall be within three one-hundredths (3/100) of a foot.
- F. The Township elevations are based on the 1929 mean sea level datum. All contours and elevations shown on plans submitted to the Township must be based on this system. Elevations must be shown on all monument sets.

#### **Section 620 - STORMWATER MANAGEMENT**

##### **A. Applicability**

The provisions of this Section shall apply to all subdivisions and land developments as defined by this Ordinance, or as otherwise required by the Township. All storm drainage systems (collection systems) shall be designed in accordance with the Longswamp Township Stormwater Management Ordinance. In addition, all stormwater management plans shall be in accordance with the Longswamp Township Stormwater Management Ordinance or the Longswamp Township Little Lehigh Creek Watershed Act 167 Stormwater Management Ordinance or the Longswamp Township Sacony Creek Watershed Stormwater Management Ordinance, as applicable.

##### **B. General Provisions**

The following provision shall be followed and incorporated into the development review and construction process:

1. The choice and design of stormwater management systems used to meet the requirements of this Section and other applicable Ordinances shall be based on the system types and specifications set forth in the Pennsylvania Handbook of Best Management Practices for Developing Areas, published by the Commonwealth of Pennsylvania or other State approved publications. Various combinations of methods should be tailored to suit the particular requirements for the type of development and the local site conditions.
2. The choice and design of stormwater management systems are to be developed through a procedure that selects and locates Best Management Practices, viewing components in the following priority:
  - a. Seeking to control runoff at its source through infiltration;
  - b. Improving the quality of the stormwater during conveyance;
  - c. Providing for detention.
3. The Applicant or Applicant's agent shall design, construct and/or install drainage facilities to prevent soil erosion, damage and siltation, and to manage stormwater in order to prevent the impairment of public safety or physical damage due to concentration of the stormwater runoff onto adjacent properties in accordance with this Ordinance, the Longswamp Township Stormwater Management Ordinance and/or the Longswamp Township Little Lehigh Creek Watershed Act 167 Stormwater Management Ordinance and/or the Longswamp Township Sacony Creek Watershed Act 167 Stormwater Management Ordinance, as applicable, and applicable rules and regulations of the Pennsylvania Department of Environmental Protection, and the Berks County Conservation District. All land areas shall be graded to secure proper drainage away from buildings and on-site sewage disposal systems, and to prevent the uncontrolled collection of stormwater in pools. The system shall be designed to collect and recharge water to the greatest extent possible.

C. Plan Information

1. The following stormwater management data for all plans shall be provided and designed in accordance with the Longswamp Township Stormwater Management Ordinance or applicable Act 167 Stormwater Ordinance. This information may be provided on a sheet with other data or on separate sheets. All pertinent maintenance notes, easements, deed restrictions, and design data, as determined by the

Township, shall be recorded with the Final Plan. In the case of any dispute in the methodology used in the design of any stormwater management plan and/or in the presentation of such information, the Board of Supervisors shall make the final determination on the design criteria, methodology, and form of presentation.

- a. All calculations, assumptions, criteria, and references used in the design of the stormwater management facilities, the establishment of existing facilities' capacities, and the pre and post development peak discharges.
- b. All plans and profiles of the proposed stormwater management facilities, including the horizontal and vertical location, size, and type of material. This information shall be to a detail required for construction of the facilities.
- c. For all basins, a plotting or tabulation of the storage volumes and discharge curves with corresponding water surface elevations, inflow and outflow hydrographs.
- d. For all basins which hold (2) acre-feet or more of water and have an embankment that is six (6) feet or more in height, soil structure and characteristics shall be provided. An engineer shall prepare plans and data. These submissions shall provide design solutions for the frost-heave potential, spring-swell potential, soil bearing strength, water infiltration, soil settling characteristics, fill and back-filling procedures, and soil treatment techniques as required to protect the improvements for adjacent structures.
- e. All erosion and sedimentation control measures, temporary as well as permanent, including the staging of earth-moving activities, in sufficient detail to clearly indicate their function. The erosion and sedimentation control plan shall meet all requirements of the DEP Erosion and Sedimentation Control Manual. The applicant shall demonstrate that the applicant has submitted the erosion and sedimentation control plan to the County Conservation District for review.
- f. The guidelines for lot grading within subdivisions. This information shall identify the direction of storm water runoff flow within each lot and the areas where storm water flows will be concentrated.
- g. Finished first floor elevations for all residential units shall be shown on the plan.

- h. A note on the plan indicating any area that is not to be offered for dedication along with a statement that the Township is not responsible for maintenance of any area not dedicated to and accepted for public use, and that no alteration to swales, or basins, or placement of structures shall be permitted within easements.
- i. Designation of limits of on-site watershed areas, including a map which shows the off-site watershed areas.
- j. All other plan and design information as required by all other applicable Township Stormwater Management Ordinances.

D. Maintenance Responsibilities

1. General Responsibilities

- a. The owner of stormwater management facilities shall be responsible for their property maintenance during and after development. A maintenance plan shall be prepared for review and approval by the Township. Where appropriate, maintenance responsibilities must be included as deed restrictions on individual lots. During all subsequent real estate transactions, maintenance responsibilities shall be pointed out to new owners. All deeds shall incorporate these specified maintenance responsibilities, making explicit individual owners responsible for stormwater management measures and for the common property.
- b. Upon or before completion of subdivision or land development improvements, the permanent stormwater management system for a tract shall be fully installed and functional in accordance with the approved stormwater management plan. Temporary sediment trapping facilities in detention basins, upon inspection and approval by the Township Engineer, shall be converted into permanent stormwater management basins; additional facilities designed to serve more than an individual lot shall begin operation. All such work shall be specified in the approved Plan.

2. Homeowners Association Ownership (Other than On-Lot Stormwater Facilities)

A single entity taking the form of a private corporation, partnership firm, estate or other legal entity empowered to own real estate exclusive of individual lot owners

(i.e. Homeowners Association) shall be set up to manage stormwater management facilities. The entity shall be suitable for such management and shall and able to perform other functions defined in this Ordinance. Responsibilities for ownership and management of facilities shall be defined in the stormwater management plan.

### 3. Individual Lot Stormwater Facilities

a. Stormwater management facilities and systems that are located on an individual lot are the responsibility of that landowner to maintain. As with non-individual lot situations, a stormwater management plan must be prepared, including a maintenance plan which shall include:

- (1) Any obligations concerning perpetuation of natural drainage or infiltration facilities, and/or the maintenance of facilities constructed by the individual lot owner under terms of the building permit (e.g., berms, cisterns, downspout connections, seepage pits, etc.)
- (2) Assurances that no action will be taken by the occupant to disrupt or in any way impair the effectiveness of any stormwater management system.
- (3) A description of the facilities and systems on the lot, as called for above, setting forth in deed restrictions binding on the landowner's successors in interest.

### 4. Municipal Ownership

Where the Township has accepted an offer of dedication of the permanent stormwater management facilities, the Township shall be responsible for maintenance. Municipal ownership notwithstanding, the Applicant is required to prepare a stormwater management plan including a maintenance plan component. Upon approval of the stormwater management facilities by the Township, the Applicant shall provide for maintenance guarantees as follows:

a. Long-Term Maintenance Bond - The long-term maintenance bond shall be in any amount equal to the present worth of maintenance of the facilities for a ten (10) year period. The estimated annual maintenance cost for the facilities shall be based on a reasonable fee schedule provided by the Township Engineer and adopted by the Board of Supervisors.

- b. Documentation - The terms of the maintenance guarantees shall be documented as part of the stormwater management plan and the maintenance plan.
5. Failure of any person, individual lot owner or private entity to properly maintain any stormwater management facility shall be construed to be a violation of this Ordinance and is declared to be a public nuisance.

**Section 621 - SOIL EROSION, SEDIMENT CONTROL AND GRADING REQUIREMENTS**

**A. Applicability**

The requirements of this Section shall apply to all proposed subdivision or land development involving any land disturbance activity, including but not limited to: grading, excavating, or disturbance of the topsoil, trees, or other vegetative cover, or introduction of fill material.

**B. Soil Erosion and Sediment Control Requirements**

1. The Applicant or Applicant's Agent shall prepare a soil erosion and sediment control plan in accordance with the provisions of this Section and all County and State regulations. All land disturbance activities shall be conducted in such a way as to minimize erosion and sedimentation on adjoining and downslope properties.
  - a. The Applicant or Applicant's Agent undertaking land disturbance activity including, but not limited to grading, excavating, or disturbance of topsoil or vegetative cover, or introduction of fill material that may affect the existing flow of surface water within or downslope from the subject parcel, shall be required to:
    - (1) Collect on-site run-off and manage its release to a point of discharge into a natural watercourse of the drainage area,
    - (2) Protect and clean the downslope, and adjoining properties of silt and debris washed from the subject property as a result of land disturbance activities on the subject property,
    - (3) Install all drainage and erosion control improvements as required by the Berks County Conservation District approved soil erosion and sediment control plan.

- b. Measures to minimize soil erosion and sedimentation shall meet the standards and specifications contained in the Pennsylvania Department of Environmental Protection, *Soil Erosion and Sediment Pollution Control Manual*, as amended, and the Pennsylvania Clean Streams Law, Chapter 102, Erosion and Sedimentation Control Rules and Regulations, as amended, and the specifications contained herein.
2. The disturbed area and the duration of exposure shall be kept to a practical minimum and the disturbed soils shall be stabilized as quickly as practical.
3. Sediment in the run-off water shall be trapped until the disturbed area is permanently stabilized by the use of measures such as debris basins, sediment basins, silt traps, or similar measures. Accumulated sediment shall be removed to ensure continued adequate capacity in the basins or traps.
4. A grading, excavation, erosion and sediment control plan shall be submitted with the Preliminary and Final Plan applications. Such plan shall be submitted in accordance with the Pennsylvania Department of Environmental Protection *Erosion and Sediment Pollution Control Manual*, as amended, and the *Special Protection Waters Implementation Handbook*, as amended, and in compliance with the most current review requirements of the Berks County Conservation District.
  - a. When required by the most current regulations of the Pennsylvania Department of Environmental Protection, development plans will be filed by the County Conservation District with the Department of Environmental Protection for issuance of a National Pollutant Discharge Elimination System (N.P.D.E.S.) permit.
  - b. Soil erosion and sediment control plans shall incorporate facilities for stormwater management in accordance with the policies and regulations of the Berks County Conservation District and the stormwater management plan required by Section 620.
  - c. Upon recommendation from the Township Engineer, the Township may require the submission of plans, regardless of their size or other outside review requirements, to the Berks County Conservation District for review and approval. In such a case, approval by the Berks County Conservation District shall be required before final approval of a

subdivision or land development, or the issuance of a building permit in the case of a minor subdivision.

C. Standards for Grading: Excavation and Fill Requirements

1. No excavation or fill shall be made with an exposed face steeper in slope than three (3) horizontal to one (1) vertical, except under one or more of the following conditions:
  - a. The material in which the excavation or fill is to be made is sufficiently stable to sustain a slope of steeper than three (3) horizontal to one (1) vertical, and a written statement to that effect by a licensed professional engineer experienced in erosion control is submitted and approved by the Township Engineer. The statement shall certify that the site has been inspected and that the deviation from the slope specified will not result in injury to persons or damage to property or increased erosion and resulting sedimentation.
  - b. When a retaining wall is provided to support the face of the excavation at a maximum height of three (3) feet or a stepped level or terraced retaining wall system with a combined maximum height of six (6) feet.
2. The Township Engineer may require a flatter slope when it is found that the material in which the excavating is to be made is unusually subject to erosion or if other conditions exist which make such a shallower slope necessary for stability and safety.
3. The top or bottom edge of slopes shall be located at least five (5) feet from property lines or from any ultimate right-of-way, whichever is more restrictive, in order to permit a gradual rounding of the edge without encroaching onto the abutting property. At property lines where resulting slopes are steeper than three (3) horizontal to one (1) vertical or a retaining wall system is three (3) feet or more in height, a protective fence shall be located on top of the slope or retaining wall system. The fence shall be a minimum of four (4) feet in height.
4. Excavation shall not exceed below the angle of repose or natural slope of the soil under the nearest point of any footing or foundation or any existing building or structure unless such footing or foundation is first properly underpinned or protected against settlement.



5. Grading shall not redirect or concentrate surface water onto an adjacent property.
6. During grading operations, necessary measures for dust control to prevent particulate matter from becoming airborne shall be followed. These measures shall include, but not be limited to the following:
  - a. A tire cleaning area shall be provided at each point of egress from the development areas;
  - b. Use, where possible, of water or other method approved by the Township Engineer for control of dust during any land disturbance activity; and
  - c. Prompt removal of earth or other material from paved streets.
7. Grading equipment shall not be allowed to cross permanent or intermittent streams without first obtaining appropriate permits from the Pennsylvania Department of Environmental Protection.
8. No Applicant shall engage in land disturbance activities that endanger any adjoining property, public street, sidewalk, alley or other property from settling, cracking or other damage which might result from such land disturbance. If, in the opinion of the Township Engineer, the land disturbance would create a hazard to life or property unless adequately safeguarded, the Applicant shall construct walls, fences, guard rails, or other structures to safeguard the adjoining property, public street, sidewalk, alley, or other property and persons.
9. Excavations or fills shall not encroach on natural watercourses, flood plain areas, constructed channels, or wetlands without the necessary state and federal permits. Excavations or fills located adjacent to natural watercourses or constructed channels shall have suitable protection against erosion.
10. All fill shall be compacted to provide stability of material and to prevent undesirable settlements. The fill shall be spread in a series of layers, not exceeding twelve (12) inches in thickness, and be compacted by a sheepsfoot roller or other approved method after each layer is spread. The Township Engineer may require compaction tests and reports.
11. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloping surface or a fill within the area of a proposed subdivision

or land development. Slopes of more than ten (10) feet in vertical height shall be separated by level berms of at least four (4) feet in width within which ditches shall be constructed where necessary to prevent erosion and as a safe place to deposit and receive such water. The Township Engineer may require such drainage structures or pipes to be constructed or installed which are perceived necessary to prevent erosion damage and to satisfactorily carry off surface waters.

12. When excavation or fill is proposed, all retaining walls, cribbing, drainage structures, fences or other protective devices shall be maintained in good condition and repair.

D. Grading for Drainage

1. All lots, tracts or parcels shall be graded to provide proper drainage away from buildings, and to dispose of water without ponding. All land within a development shall be graded to drain and dispose of surface water without ponding, except where ponding as in the case of detention basins, is part of the stormwater management system for the proposed subdivision or land development.
2. All drainage provisions shall be of such design to adequately handle the surface run-off and carry it to the nearest suitable outlet. Where drainage swales are used to direct surface waters away from buildings, they shall be sodded or planted as required.

E. Vegetative Cover

1. Removal of trees, tree clusters and associated vegetation layers as a result of earth movement shall be kept to the absolute minimum. Wherever possible, existing vegetation shall be retained and protected in accordance with Section 625.A.7.d. of this Ordinance.
2. Removal of any portion of existing vegetation shall be done in such a manner as to minimize erosion and sedimentation.

F. Responsibility

1. Whenever sedimentation is caused by the removal of vegetation, regrading or other development, it shall be the responsibility of the Applicant or Applicant's Agent causing such sedimentation to remove it from all adjoining surfaces, drainage systems and watercourses and to repair any damage at his or her expense within a time period acceptable to the Township.

2. No Applicant shall block, impede the flow of, alter, construct any structure, or deposit any material or thing, or commit any act which will affect normal flood flow in any stream or watercourse without having obtained prior approval from the Pennsylvania Department of Environmental Protection, and the Township. All such activity shall be in compliance with applicable provisions of the Longswamp Township Zoning Ordinance.
3. Where a subdivision or land development is traversed by a watercourse, a drainage easement or right-of-way shall be established along the line of such watercourse, and of adequate width to preserve the natural drainage.
4. All required drainage and erosion control improvements, whether temporary or permanent, shall be installed by the Applicant or Applicant's Agent, at their expense, and in accordance with applicable requirements.

G. Compliance with Regulations and Procedures

1. The Township, in considering preliminary subdivision and land development plans shall condition its approval upon the execution of soil erosion and sediment control measures as required by this Ordinance.
2. Each Application shall contain a commitment to submit for approval, a modified soil erosion and sediment control plan should the proposed plan prove to be inadequate prior to final release of escrow and dedication of improvements.

H. Soil Erosion and Sediment Control Plan Contents

A Soil Erosion and Sediment Control Plan shall accompany the Preliminary and Final Plan. It shall be prepared by a professional engineer experienced in stormwater management and soil erosion control, and in accordance with federal, State, County and Township requirements and regulations.

1. The Soil Erosion and Sediment Control Plan shall contain, at a minimum, the following information.
  - a. A description of proposed earth moving, grading, temporary erosion and sedimentation control facilities, and the relationship to permanent stormwater management facilities.
  - b. Proposed alterations to the project area including changes to the surface and vegetative cover, areas of cut and fill, structures, roads, paved areas and buildings.

- c. A description of the staging of earth-moving activities including the staging of cover removal and all cuts and fill, and installation of erosion and sediment control facilities and practices.
  - d. Installation of improvements including streets, storm sewers, underground utilities, sewer and water lines, buildings, driveways, parking areas, recreational facilities and other structures shall be described.
  - e. The program of operations to convert erosion and sedimentation controls to permanent stormwater management facilities, along with a schedule of the relative time sequence of activities.
2. A narrative description and a map illustrating temporary control measures and facilities to be used during earthmoving. The description shall include the following information:
  - a. The type, location and dimensions of each measure and/or facility to be used, along with its purpose;
  - b. Design considerations and calculations of control measures and facilities;
  - c. The facilities or measures to be used to protect trees and existing vegetation;
  - d. Facilities or measures to prevent tracking of mud by construction vehicles.
3. A narrative description of the maintenance procedures for temporary control facilities and the ownership arrangements including the methods and frequency of removal and ultimate disposal site for sediments and other material removed from control facilities both during and upon completion of the project.
4. The Applicant or Applicant's Agent shall produce proof of the acquisition of all required permits or certificates for soil erosion and sedimentation controls including, but not limited to, permits required by:
  - a. Pennsylvania Department of Environmental Protection
  - b. Pennsylvania Department of Transportation
  - c. Berks County Conservation District
  - d. Utility Companies

e. Public Utility Commission

5. The Soil Erosion and Sediment Control Plan shall be available at all times on the construction site. The Applicant or Applicant's Agent shall be responsible for correcting any stormwater runoff problems that arises from the subdivision or land development, even if final approval has been granted. The Township reserves the right to order a cease and desist of all construction where runoff problems arise.

**Section 622 - WATER SUPPLY**

- A. Adequate and potable water supply system(s) shall be installed consistent with design principles and requirements contained in this Ordinance and the Township Construction Standards and Specifications Ordinance, standards which are the U.S. Public Health criteria for drinking water, as administered by the Environmental Protection Agency's Safe Drinking Water Act.
- B. Where public water is available, the Applicant or Applicant's Agent shall make use of such public water service to supply each lot in the subdivision or the land development.
- C. Where no public water supply is available, the Applicant or Applicant's Agent, upon approval of the Township, may be permitted to construct a well on each lot exclusively to serve that lot or a shared well or wells to exclusively serve that development. The Township may require that a groundwater withdrawal impact study be prepared verifying the availability of a sufficient potable water supply or require the Applicant to provide at least one test well for each ten (10) proposed dwelling units and proof of potability. All wells shall be constructed according to all applicable rules and regulations of the Pennsylvania Department of Environmental Protection and the Township, including but not limited to, the Township Well Ordinance. The Township may also impose additional requirements to accommodate or mitigate the impacts of the proposed development.
- D. The Applicant or Applicant's Agent shall submit proof of the quality and adequacy of the water supply proposed to be utilized by the subdivision or land development and approval by the Township of the type and construction methods to be employed in the installation of the individual water supply systems, in accordance with the Township Well Ordinance. In cases where review by the Delaware River Basin Commission is required, proof of this review shall be submitted as well.

E. Well Locations

The proposed location of the wells shall be shown on the Preliminary Plan for each lot. Where there are existing wells, whether functional or abandoned, on the property or adjoining lots, they shall also be shown.

1. The isolation distance, depicted as a circular area, with a radius conforming to the rules and regulations of the Pennsylvania Department of Environmental Protection and the Township shall be shown around each well to denote an area in which an on-site sewage disposal system shall not be located.
2. Where public water is provided, depiction of the isolation distance is not necessary except where existing wells on parcels adjacent to the subdivision may be affected by proposed on-site sewage disposal facilities. In any case, the usable area for on-site sewage disposal systems would still be limited by a clear zone surrounding the water service line to each house, as required by the Pennsylvania Department of Environmental Protection and the Township.

F. Fire Hydrants

Where public or a community water system is provided, fire hydrants or acceptable alternatives shall be installed for fire protection, as approved by the Township Fire Marshall and Township Engineer. Where fire hydrants are installed, they shall meet the specifications of the Insurance Services Offices of Pennsylvania. Location and number of the hydrants shall be approved by the Township Fire Marshall.

1. Fire hydrants, in general, will be located on an eight (8) inch line or looped six (6) inch line. Where a dead end line is required to contain a fire hydrant, the portion of the line between the main loop and the hydrant shall be an eight (8) inch minimum diameter.
2. Fire hydrants shall be spaced in a development so that all proposed building(s) shall be no more than six hundred (600) unobstructed feet from the hydrant measured along traveled ways to be used by fire apparatus.
3. All public or community water systems must provide a minimum of five hundred (500) GPM at a residual pressure of twenty (20) psi for a two (2) hour period.
4. To provide additional protection, the Fire Marshall may require the incorporation of a dry hydrant into existing and proposed ponds or reservoirs and an access easement be provided for emergency use.

#### G. Alternate Sources

Two (2) sources of groundwater are recommended for each public or community water system due to the unusual density and demand served by such systems. Each should be capable of supplying the average daily demand of the proposed dwelling units. A two (2) well system is preferred; however, the following alternatives, which would ensure an adequate water supply, may be acceptable:

1. A single well, capable of providing twice the daily average demand, as demonstrated by a pumping test of at least forty-eight (48) hours duration, producing a stabilized drawdown of unchanging water level for at least five (5) hours duration.
2. A single well capable of supplying the average daily demand and an additional reliable surface water source.
3. A single well capable of supplying the average daily demand, plus a dependable connection to another satisfactory public water supply system.
4. A second well is recommended for use as a monitor of the aquifer and as a stand-by in the event of emergency.

#### H. Public-Community Well Certification and Permitting

Where water is to be provided by means other than private wells owned and maintained by the individual owners of lots within the subdivision or land development, the Applicant or Applicant's Agent shall present evidence to the Township prior to Final Plan approval, that the subdivision or land development is to be supplied by a certified public utility, a bona fide cooperative association of homeowners, or by a municipal corporation, authority or utility. Written approval as required by subsection H.1 below for capacity and construction methods and details shall be provided prior to final plan approval. A copy of Certificate of Public Convenience from the Pennsylvania Public Utility Commission or an application for such certificate, a cooperative agreement or a commitment or agreement to serve the area in question, whichever is appropriate, shall be acceptable evidence.

1. The design, installation, and construction of any such system shall be in accordance with the standards of the applicable authority or utility company and shall be subject to the approval of the Pennsylvania Department of Environmental Protection and the Township. Construction details for all facilities shall be shown on the Final Plan, in accordance with the Township Construction Standards and Specifications Ordinance, or applicable authority on utility standards. Such system shall be

further subject to satisfactory provision for the maintenance thereof.

2. Where a permit is required by the Pennsylvania Department of Environmental Protection, it shall be presented as evidence of such review and approval in the case of private or public systems before construction commences.

## Section 623 - SEWAGE DISPOSAL FACILITIES

### A. General

1. Each lot within a proposed subdivision and each land development shall be planned and provided with a permitted sewage disposal facility in accordance with the Pennsylvania Department of Environmental Protection Rules and Regulations, any Township Sewage Facility Ordinance or Regulations, the Township Construction Standards and Specifications Ordinance, and any other applicable sections of this Ordinance or applicable Ordinances and Regulations of the Township.
2. Documented approval of the Sewage Facilities Planning Module for Land Development by the Pennsylvania Department of Environmental Protection shall be required prior to Final Plan approval.
3. The proposed sewage disposal facilities shall be in accordance with the Township's Act 537 Sewage Facilities Plan. Where the Developer proposes subsurface soil absorption areas and/or spray irrigation areas for distribution and renovation of treated or untreated sewage and where the Pennsylvania Department of Environmental Protection or the Township have identified or documented that the quality of subsurface groundwater providing individual or public water supplies, within one-quarter (1/4) mile of the proposed disposal site exceeds five (5) mg/L nitrate-nitrogen, the Developer shall provide a preliminary hydrogeologic evaluation in accordance with 25 PA Code, Section 71.62 of the Pennsylvania Department of Environmental Protection Regulations. The land development planning for subdivisions or land developments in these areas must be prepared and processed as a revision to the Township's Act 537 Sewage Facilities Plan in accordance with 25 PA Code, Section 71.51 through Section 71.53. In those cases, planning "exemptions" and/or planning "exceptions" shall not be utilized or permitted.

For subdivisions or land developments proposing utilization of subsurface sewage disposal systems and/or spray



irrigation as a means of disposal of treated or untreated sewage in areas of carbonate geology and/or karst features, the plans and supporting studies submitted with the planning module for a subdivision or land development must identify the location of any geologic conditions that may contribute to the potential for groundwater pollution from the proposed sewage facilities by way of site evaluation through a preliminary hydrogeologic evaluation or, if required by the Pennsylvania Department of Environmental Protection and/or the Township, a "detailed hydrogeologic study." Such studies and supporting documents must be provided in accordance with 25 PA Code, Section 71.62.

4. The sewage facilities selected to serve a proposed use shall be determined in accordance with the Township's Sewage Facilities Plan and the highest type of sanitary sewage disposal facility available and consistent with existing physical, geographical and geological conditions. The following types of sanitary sewage and disposal facilities are listed in order of decreasing desirability:
  - a. Public sanitary sewer and treatment plant system
  - b. Community sanitary sewer system with a sewage treatment plant
  - c. Capped sewers with temporary, approved on-site facilities
  - d. Approved on-site facilities
5. Sewage facilities shall be designed and constructed in strict accordance with Pennsylvania Department of Environmental Protection and Township requirements and specifications. A copy of the approval of such systems and all required permits shall be submitted prior to Final Plan approval.
6. Sanitary sewers shall not be used to carry stormwater nor shall floor drains be connected to the sanitary sewer.
7. Prior to the issuance of any permit for construction in any subdivision or land development, temporary toilet facilities shall be installed for the builders, contractors and subcontractors, unless the applicant or applicant's agent shows, to the satisfaction of the Township Supervisors, that other suitable toilet facilities will be made available during construction.

B. Public Sewage System

1. Each property shall connect with the public sanitary sewer

system, if accessible as defined by the Township Ordinance, and if the extension of collection lines to serve the proposed use is consistent with the Township's Sewage Facilities Plan. Proposed sewer collection facilities and proposed extensions to existing facilities shall be subject to review and approval by the Township. All proposed sewer lines shall extend to the far property line of the development.

- a. A signed sewer connection agreement, containing terms and conditions for connection to the Township system, shall be required. A satisfactory escrow agreement will also be required prior to granting final approval.
  - b. Authorization for capacity and approval of the construction design and details shall be obtained in writing from the Township, if applicable, before the Final Plan is approved by the Township.
  - c. Construction details shall be shown on the Final Plan in accordance with the Township Construction Standards and Specifications Ordinance.
2. Where the public sewer system is not yet accessible, as defined by ordinance, but is planned for extension to the subdivision or land development, the Applicant or Applicant's Agent shall install sewer lines, including lateral connections, as may be necessary to provide adequate service to each lot when connection with the public sewer system is made in accordance with the following:
- a. The sewer lines shall be suitably capped at the limits of the subdivision or land development, and the laterals shall be capped at the street right-of-way. When capped sewers are provided, individual or community sewage disposal facilities shall be provided in the interim.
  - b. Where studies by the Township indicate that construction or extension of sanitary trunk systems to serve the property being subdivided, appear probable within a reasonably short time (ten (10) years or less), the Township shall require the installation and capping of sanitary sewer mains and house connections, in addition to the installation of temporary individual sewage systems. The Township shall review and approve the design and installation of such sewers.

- c. Design of capped sewer systems and the interim sewage facilities shall be subject to approval by the Pennsylvania Department of Environmental Protection and the Township.
3. All lots which cannot be connected to a public sewage system in operation at the time of construction shall be provided with a community or individual sewage system meeting the design standards set forth by the Pennsylvania Department of Environmental Protection and the Township.

C. Community Sewage System

1. The planning, design and construction of any community sewage system shall be subject to the review and approval of the Pennsylvania Department of Environmental Protection and the Township.
2. Where surface or subsurface disposal of wastewater effluent is proposed, preliminary hydrogeologic and permeability testing shall be required as part of the planning module submission.
3. A Sewage Management Program shall be prepared by the Applicant or Applicant's Agent indicating the ownership, operation and maintenance responsibilities for the proposed system in accordance with the Title 25 of the Pennsylvania Code. This program shall be subject to Township approval.
4. Each community sewage system shall, at a minimum, provide sand infiltration to extend the life of the disposal area and reserve area in the event the disposal area should fail. The reserve area shall be located within soils suitable to support such a system. Both the primary and reserve area shall be tested and preserved from construction damage or paving. Locations of primary and reserve areas and deed restrictions preventing construction on such areas shall be noted on the Final Plan.

D. Individual Sewage System

1. If on-site sanitary sewage disposal facilities are proposed, the Township may require that the Subdivider submit a Feasibility Report if the Township considers that such facilities are not the highest type consistent with existing conditions. Such Report shall compare the feasibility of providing on-site facilities with that of providing higher types of facilities (see Section 623.A.4). Based on analysis of the Feasibility Report, the Township may require the installation of a higher type of facility.

2. Where lots are to be served by individual on-site sewage facilities, a primary area and alternate area for the sewage disposal shall be identified on the Preliminary Plan, or Final Plan in the case of a minor subdivision. No construction or paving shall be permitted on the primary or the alternate on-site sewage disposal areas and the final subdivision or land development plan shall note this deed restriction.
3. Where individual on-lot sewage systems are to be used, each lot so served shall be the necessary size and shape to accommodate the required length of the disposal area at a safe distance from, and at a lower elevation than the proposed well and buildings in order to facilitate gravity flow where practical in accordance with State and Township regulations. Individual sewage systems shall be located upon the same parcel as the use which is served, unless the use of an off-site system is specifically approved by the Township.
4. The surveyed location of the individual sewage system, alternate area, all soil test probes and percolation test holes, and well shall be shown prior to Final Plan approval.
5. Unless served by a public or community sewer system, the Applicant or Applicant's Agent, prior to the sale of each lot or parcel within the subdivision, shall install or shall require by deed restriction, the installation of an approved system.

E. Soil Percolation Test Requirements

1. Unless served by a public or community sewer system, soil percolation tests shall be performed for all subdivision or land developments.
2. Soil testing shall be conducted for a primary and an alternate absorption area on each proposed lot to confirm that each site is suitable to support an on-lot sewage disposal system.
3. Soil percolation tests shall be made in accordance with the procedure required by the Pennsylvania Department of Environmental Protection by either a licensed professional engineer, a Pennsylvania certified sewage enforcement officer, or similarly qualified professional.
4. Soil percolation tests shall be performed within the site of the proposed on-site absorption areas. Soil test pits shall be within ten (10) feet of the absorption area.

5. The results of the soil percolation tests shall be analyzed in relation to the physical characteristics of the tract being subdivided or developed and of the general areas surrounding the tract being subdivided. The Final Plan lot layout shall be based on this analysis.

## Section 624 - COMMUNITY AND RECREATION FACILITIES

### A. Community Facilities

1. In reviewing subdivision or land development plans, the Township shall consider the adequacy of existing or proposed community facilities to serve the additional dwellings proposed by the subdivision or land development.
2. The Applicant or Applicant's Agent shall consider providing or reserving areas for community facilities normally required in residential neighborhoods, including churches, libraries, schools and other public buildings.
3. Areas provided or reserved for community facilities should adequately accommodate building sites, landscaping and off-street parking as appropriate to the use proposed. Such areas should be located in a manner to best serve the public likely to use the same.
4. Areas may be provided for community subsurface sewage disposal systems, sewage disposal spray irrigation areas, open space areas for wellhead protection as a community facility, and stormwater management facilities including, but not limited to, detention basins and/or stormwater recharge areas. Such areas, however, shall not be utilized for the purpose of meeting the requirement for recreation areas as described elsewhere in this Ordinance or as described in the Township Zoning Ordinance.

### B. Recreation Facilities

#### 1. Purpose

All subdivision and land developments shall provide for suitable and adequate recreation in order to insure adequate recreational areas and facilities to serve the future residents of the subdivision or land development and insure that all future Township residents have the opportunity to engage in a variety of recreational activities.

2. Requirements for Reservation of Recreation Areas

- a. The Developer shall set aside recreation areas exclusive of paved areas within the subdivision or land development, or at some other nearby location if approved by the Township Supervisors. The Developer shall set aside no less than two thousand (2,000) square feet of recreation area for each lot or dwelling unit.
- b. In lieu of setting aside areas for recreation, and upon agreement between the Township Supervisors and the Developer, the Developer shall pay the Township a fee in accordance with the current Township Recreation Fee requirements. The first single-family residential lot or any agricultural use lots created after the effective date of this Ordinance shall be exempted from the recreation requirements of this Ordinance.

Any such fees received by the Township in lieu of recreation area shall be deposited in a special account to be maintained by the Township and to be used for Township recreation purposes. Fees deposited to this account shall be administered as required by Section 503(11) of the Pennsylvania Municipalities Planning Code, as amended.

- c. The Township Supervisors shall accept the land based on the above stated formula, or the money, as stated above, for all residential subdivision and land developments, as well as all non-residential subdivision and land developments. The amount of land or cash from non-residential subdivisions and land developments shall be determined by the number of dwelling units that would result if eighty percent (80%) of the tract was occupied by one-acre lots for single-family development where on-site sewage disposal and water supply are used. If public sewage disposal and/or water supply will serve the non-residential subdivision or land development, the site capacity to calculate the number of dwelling units is as if eighty percent (80%) of the tract was occupied by three (3) dwelling units per acre or fraction thereof. Where the computation of dwelling units result in a fractional number, only the fraction of one-half (1/2) or more shall be counted as one.
- d. Upon agreement with the Township, the Developer may provide privately-owned recreation facilities acceptable to the Township; the Developer shall design and operate the same in accordance with the provisions of this Section, except that the Developer shall

receive a credit equal to his in-place costs measured against the required formula of this Section. If the Developer's credit exceeds the Ordinance requirements, the Developer is not entitled to any compensation from the Township. The Developer shall make arrangements for the perpetual ownership and maintenance of the recreation areas for those intended to remain privately owned.

3. General Standards for Recreation Areas Set Aside by the Developer
  - a. Land shall be suitable to serve the purpose of active recreation by reason of its size, shape, location and topography and shall be subject to the approval of the Township Supervisors. Examples of active recreation areas are athletic fields and hard-surfaced courts, pools, open turf areas, and apparatus areas.
  - b. Land shall be easily and safely accessible from all areas of the development to be served and have suitable ingress and egress from a public roadway for maintenance equipment. However, no public roadways shall traverse the site(s).
  - c. Land shall be contiguous and regular in shape.
  - d. Land shall have suitable topography and soil conditions for use and development as a recreation area.
  - e. A minimum of seventy-five percent (75%) of the reserved area shall have a maximum slope of seven percent (7%).
  - f. A maximum of twenty-five percent (25%) of the reserved area may be within flood plain or wetland areas.
  - g. Land shall be easily accessible to all essential utilities.
  - h. Land shall be suitable for development as a particular type of active recreation facility, as categorized by the National Recreation and Park Association's National Park, Recreation and Open Space Standards and Guidelines, 1983, as amended.
  - i. Land shall be designed and developed according to the standards established by the National Recreation and Park Association upon agreement between the Township Supervisors and the Developer.

## Section 625 - LANDSCAPING

### A. Conservation of Existing Vegetation

1. The character and extent of existing plant communities on a site shall be fully and accurately described and recorded on the Existing Conditions Plan as required by Sections 402.J. and 403.I., and on the Landscape Plan.
2. Existing native vegetation within a proposed development shall be preserved to the maximum extent possible. Proposed site improvements shall be located, designed and constructed to minimize the loss of existing vegetation and plant communities, particularly native woodlands, old fields, hedgerows and specimen trees.
3. Subdivision shall be designed to preserve existing native vegetation along roadways, property lines and lines occurring within a site such as streams, swales, stone fences and hedgerows. Such lines and the native vegetation associated with them shall be preserved as buffers between adjacent properties and between areas being subdivided within a property. Preservation shall include ground, understory and canopy vegetation.
4. Disturbance or removal of native vegetation occupying environmentally sensitive areas shall be undertaken only when approved by the Board and on a limited, selective basis to minimize the adverse impacts of such actions. This shall include, but not necessarily be limited to, vegetation performing important soil stabilizing functions on wet soils, stream banks, and sloping lands.
5. No clearing or earth disturbance (except for soil analysis for proposed sewage disposal systems) shall be permitted on a site before the completion of subdivision and land development agreements. The determination of sight distance clearances along roadways shall be made graphically and not by clearing on-site prior to final plan approval.
6. During construction, no clearing shall be permitted on a site beyond that minimally necessary for the specific construction activity to be undertaken.
7. Areas of a site which are to be preserved and areas which do not need to be disturbed for construction of required subdivision site improvements (roads, utilities, stormwater management facilities, etc.) shall be protected with a limit of disturbance line.



- a. The limit of disturbance line shall be indicated on the improvements construction plan.
  - b. No construction activity, grading or disturbance shall be permitted beyond the limit of disturbance line.
  - c. Limit of disturbance lines shall also be indicated for the protection of individual specimen trees, groups of trees, and other natural features to be retained or preserved within a development.
  - d. Limit of disturbance lines shall be clearly marked in the field to the satisfaction of the Township prior to the start of construction activities. The lines shall be indicated by use of snow fencing, flagged stakes, or other means acceptable to the Township for the specific condition or feature to be protected. Fencing shall be placed one-foot (1') outside the dripline of the trees, hedges, or landscape material. The lines shall be maintained throughout the period of construction activity.
8. When applying for a building permit for construction of a dwelling within an approved subdivision, the applicant shall submit a plan of the lot in accordance with Township requirements. The plan shall show the proposed locations of the buildings, water supply system, sewage service system, stormwater management facilities, driveway, and other structures and improvements. The plan shall also show limit of disturbance lines for the lot.

B. Shade Trees

1. Shade trees shall be provided on every lot in a subdivision in an amount equivalent to three (3) trees per acre of minimum lot area.
2. Where significant existing vegetation is to be preserved on a lot, the Board may modify or eliminate the requirement for installation of shade trees.
3. Shade trees shall be located in groves or groupings adjacent to road rights-of-way along existing or proposed property lines. Shade trees shall be located to compliment existing vegetation to be preserved. Shade trees shall not be planted within public rights-of-way.
4. Shade trees shall be native, deciduous canopy trees having a minimum caliper of three (3) inches and a minimum height of eight (8) feet. Species shall be selected with particular emphasis on hardiness and compatibility with

other features of the site and shall be acceptable to the Board.

5. Shade trees shall be shown on the Improvements Construction Plan or on a separate Landscape Plan, if required by the Board. Tree size and species shall be indicated. Shade trees shall be considered an improvement required of a developer for subdivision and shall be included as part of required subdivision escrow agreements.
6. Shade trees planted by the developer shall be guaranteed for a period of one (1) year against death and unhealthy condition. Inspection of installed trees to determine the beginning of the guarantee period shall be made by the Township Engineer and an approval by the Township Engineer issued in writing. Final acceptance of the trees shall be made at the end of the guarantee period after another inspection and approval in writing by the Township Engineer. The developer shall replace any tree that is dead or, in the opinion of the Township, is in an unhealthy condition or has lost its natural shape due to dead branches. All replacement plantings shall be of the same kind and size as those specified on the subdivision plan and shall be subject to the same guarantee.

#### C. Landscaping of Stormwater Management Facilities

1. Unless otherwise approved by the Board, detention basins required for subdivision approval shall be located adjacent to buffer areas or areas of preserved natural vegetation. Basins shall not be located within mature woodlands.
2. Basins may be landscaped with native vegetation to the satisfaction of the Board. The vegetation shall include wet meadow, meadow, old field and woodland species. Species shall be appropriately located as to the hydric and other ecological conditions to be expected in the various areas in and around the basin. Vegetation shall be shown and shall be subject to the same guarantees as required on the plan for shade trees.
3. Detention basins shall be stabilized with grass or a low maintenance ground cover approved by the Township in accordance with the Township Construction Standards and Specifications Ordinance.

#### D. Buffer Areas

1. Buffer areas shall be maintained in a natural vegetative state and shall not be lawn.

- a. Buffer areas established in woodlands shall preserve the existing native vegetation. Buffers established in areas other than woodlands shall be permitted to succeed naturally into woodland.
  - b. Buffers established over areas of disturbed earth shall be planted with approved meadow grasses and wildflowers and permitted and managed to succeed into old field, young woodland and woodland.
  - c. Additional native trees and shrubs may be planted by the developer or landowner and may be required by the Board. The planting of large numbers of bare-rooted seedlings of native trees and trees which will reseed is encouraged. Proposed plantings shall be indicated on the Landscape Plan and shall be approved by the Board.
2. Buffer areas shall be maintained in a natural vegetative state protected from disturbance by deed restriction in the deeds of the lots on which restriction shall be to the satisfaction of the Board as recommended by the Township Solicitor.

#### **Section 626 - STRIPPING, REPLACEMENT OR REMOVAL OF TOPSOIL**

- A. Initial construction on the subdivision site shall consist of stripping and stock piling of topsoil from all areas to be disturbed. Upon completion of other construction, the entire amount of topsoil stripped shall be replaced on the subdivision site.
  1. No topsoil shall be disposed of, by sale or otherwise, off the site of the subdivision or land development.
  2. Subsoil may be disposed of at the option of the Applicant or Applicant's Agent.
  3. Topsoil and subsoil shall be piled separately and not intermixed.

#### **Section 627 - LIGHTING REQUIREMENTS AND DESIGN STANDARDS**

##### **A. Street Lights**

A street lighting system shall be installed where required by the Board of Supervisors. Any such required system shall be designed and constructed as approved by the Board of Supervisors and the applicable electric utility company. Lighting fixtures shall be

of a type and design appropriate to the lighting application and aesthetically acceptable to the Township.

- B. For subdivision and land-development and conditional use applications where site lighting is required by the Township or is proposed by Applicant, lighting plans shall be submitted to the Township for review and approval with preliminary and final subdivision/land development plan applications and conditional use applications and shall contain the following:
  - 1. Site plans, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), vegetation that might interfere with lighting, and adjacent uses that might be adversely impacted by the lighting. The lighting plan shall contain a layout of all proposed fixtures by location, orientation, aiming direction, mounting height and type. The submission shall include, in addition to area lighting, all other exterior lighting, e.g., architectural, building-entrance, landscape, flag, sign, etc.
  - 2. Landscaping plans shall contain lighting fixture locations and shall demonstrate that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- C. All exterior lighting shall be designed to minimize light pollution within the Township and to maintain the rural character of the Township.
- D. The design, installation and fixture type of all exterior lighting shall be in accordance with Township Construction Standards and Specification Ordinance subject to approval by the Board of Supervisors.
- E. All exterior lighting shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property.
- F. Lamps of post-mounted exterior lighting fixtures shall be shielded with light directed to ground surfaces.

#### Section 628 - PARKING

- A. Each proposed dwelling unit in a subdivision or land development shall be provided with a minimum of two off-street parking spaces.

1. In the case of single-family or two-family dwellings and townhouses with on-lot parking, such off-street parking spaces shall be provided behind the street right-of-way line and may be provided in an attached or separate garage, carport, or driveway. The spaces shall not be located within any clear sight triangle required by this Ordinance.
  2. In the case of multiple-family dwellings, such off-street parking spaces shall be provided in parking facilities located adjacent to, within or near the multiple family dwellings. Spaces shall be located behind the street right-of-way line and not be located within any clear sight triangle required by this Ordinance. Each off-street parking space shall contain a minimum of two hundred (200) square feet. In addition, adequate aisles with a minimum width of twenty-four feet (24') for maneuvering and movement of vehicles shall be provided. The grade of areas used for parking shall not exceed five percent (5%). The grade of areas used only for access shall not exceed ten (10) percent.
- B. Non-residential development shall meet the off-street parking requirements of the Township Zoning Ordinance.
- c. The design and landscaping of required off-street parking shall be in compliance with Article VI, Sections 604, 611 and 612 of the *Longswamp Township Zoning Ordinance*.

#### Section 629 - GREENWAY LANDS REVIEW STANDARDS

A. Prioritized List of Resources to be Conserved

The location of proposed greenway land shall take into consideration the open space and potential trail corridor recommendations of the Township and the resources identified on the Map of Primary Conservation Areas. During the development review process, the Township shall be satisfied that the Applicant has incorporated the following resources, listed in order of priority, into the greenway land to the fullest extent practicable:

1. Lands within the 100-year floodplain, wetlands, areas greater than 1,000 square feet in size containing rock outcrops, boulder-fields and/or soils with bedrock at the surface and slopes in excess of twenty-five percent (25%).
2. Hydric soils, swales, springs, lowland areas other than wetlands.
3. Moderately steep slopes up to twenty-five percent (25%), particularly those adjoining watercourses and ponds, where

disturbance and resulting soil erosion and sedimentation could be detrimental to water quality.

4. Healthy woodlands, particularly those performing important ecological functions such as soil stabilization and protection of streams, wetlands and wildlife habitats.
5. Areas where precipitation is most likely to recharge local groundwater resources because of topographic and soil conditions affording high rates of infiltration and percolation.
6. Hedgerows, groups of trees, large individual trees of botanic significance, and other vegetative features.
7. Historic structures and sites.
8. Visually prominent topographic features such as knolls, hilltops and ridges, and scenic viewsheds as seen from public roads (particularly those with historic features).
9. Existing trails, especially those connecting the tract to other locations in the Township.
10. Class I, II and III agricultural soils as defined by the United States Department of Agriculture, Natural Resources Conservation Service's County Soil Survey for Berks County.

B. Other Design Considerations

The configuration of proposed greenway lands set aside for common use in residential subdivisions shall be consistent with the following standards:

1. It shall be free of all structures except historic buildings, stone walls, structures related to open space uses, and those structures specifically permitted in Section 436 - Greenway Land Use and Design Standards of the Zoning Ordinance. The Board of Supervisors may grant approval of structures and improvements required for storm drainage within the greenway land provided that such facilities would not be detrimental to the greenway land. The acreage of lands required for such uses shall not be credited towards minimum greenway land acreage requirements for the tract, unless the land they occupy is appropriate for passive recreational use. However, in no case shall more than fifty percent (50%) of the greenway land be occupied by stormwater management facilities and related infrastructure. At least twenty-five percent (25%) of the greenway land shall be free of structures or infrastructure of any type and the site constraints outlined in Section 434.3. of the Zoning Ordinance.

2. It shall generally not include parcels smaller than three (3) acres, have a length-to-width ratio of less than 4:1, or be less than seventy-five (75) feet in width, except for such lands specifically designed as neighborhood greens, playing fields or trail links.
3. It shall be directly accessible to the largest practicable number of lots within the subdivision. Non-adjoining lots shall be provided with safe and convenient pedestrian access to greenway land.
4. It shall be suitable for active recreational uses to the extent deemed necessary by the Board of Supervisors, without interfering with adjacent dwelling units, parking, driveways, and roads.
5. It shall be interconnected wherever possible to provide a continuous network of greenway lands within and adjoining the subdivision.
6. It shall provide buffers to adjoining parks, preserves or other protected lands.
7. Except in those cases where part of the greenway land is located within private houselots, greenway lands shall provide for pedestrian pathways for use by the residents of the subdivision and/or the Township. Consideration shall be given to providing for public access on such trails if they are linked to other publicly-accessible pathway systems within the Township. Provisions should be made for access to the greenway lands, as required for land management and emergency purposes.
8. It shall be undivided by public or private streets, except where necessary for proper traffic circulation.
9. It shall be suitably landscaped either by retaining existing natural cover and wooded areas and/or according to a landscaping plan to protect open space resources.
10. It shall be made subject to the requirements of Section 438 - Ownership and Maintenance of Greenway Land and Common Facilities of the Zoning Ordinance.
11. It shall be consistent with the policies of the Township's Comprehensive Plan.

C. Ownership and Maintenance

Applicants shall demonstrate compliance with the Section 438 - Ownership and Maintenance of Greenway Land and Common Facilities of the Zoning Ordinance.

**SECTION 630 - STREET TRAFFIC CONTROL DEVICES**

- A. All street name signs, traffic control signs, and other traffic control devices as deemed necessary by the Township shall be provided and erected by the Applicant and at the Applicant's expense.
- B. All street name signs shall conform to and be erected as per Longswamp Township specifications.
- C. All traffic control signs shall be Pennsylvania Department of Transportation approved, conform to applicable regulations, and placed using heavy-duty break-away channel posts (or equal as approved by the Township).
- D. All other traffic control devices shall be Township approved and conform to Pennsylvania Department of Transportation regulations, as well as all other applicable regulations, including any Federal or County regulations promulgated for specific projects. Traffic signal bodies shall be constructed of aluminum; plastic shall not be permitted. To ensure commonality of parts, the Township shall approve all signal hardware and software.
- E. All traffic signals on any road in the Township shall have pre-emptive equipment provided and erected by the Applicant, which shall be compatible with existing equipment of the local police, fire department, or other emergency agencies. All traffic signals, connections, controllers, and other associated equipment shall also conform to a Closed Loop Traffic Signal System, if applicable.
- F. Street traffic control devices containing an illuminated signal or signals shall use Light Emitting Diodes (LED's) as their light source.

**SECTION 631 - CARBONATE AREAS**

A. Designation of Area

Carbonate Areas are any areas underlain by the following geologic formations: Leithsville (Clv), Allentown (Cal), and the Epler (Oe). These formations are composed of limestone and/or dolomite which are carbonates and susceptible to the formation of sinkholes. Areas subject to this Section shall include all areas of



Clarksburg (CmA and CmB), Duffield (DbA and DbB), Duffield-Ryder (DfC), and Thorndale-Penlaw (ThA) soils, plus any other areas documented as having carbonate geology.

In Carbonate Areas, alteration and development of land may be hazardous with respect to foundation safety of structures, the creation of unstable land as a result of changes in drainage, and the contamination of ground and surface waters. Within the limitations of the information available at the time of review of individual applications, the Township shall attempt to make reasonable judgments as to the Applicant's compliance with the standards of this Section. Under no circumstances shall the Township or any officer or employee of the Township assume any liability for any damages that may result from an Applicant's or any interested party's reliance upon the regulations of Section B below or any decisions made by the Township in the administration of such regulations.

B. Standards

1. Land grading or construction of buildings or other site improvements shall not directly or indirectly diminish the flow of natural springs or contaminate existing or potential water supplies. If warranted, as determined by the Township Supervisors, water table data from observation wells shall be provided by the Applicant.
2. All buildings, structures, roads and other impervious surfaces and storm drainage facilities and other utilities shall be so situated, designed and constructed as to minimize the risk of structural damage from existing or future sinkholes. A recognized professional engineer licensed in Pennsylvania with competence in the field shall demonstrate that a minimal risk of structural damage due to sinkholes will exist or indicate mitigating measures to be taken to minimize the risk of structural damage. Proposed areas to be dedicated to the Township shall have the mitigating measures approved by the Township.
3. Karst Evaluation. Whenever a detention or retention basin for the control of storm water will be located in a Carbonate Area, a karst evaluation of the proposed location shall be conducted to determine susceptibility to sinkhole formation. A proposal must be submitted for comment and approval by the Township prior to conducting on-site testing for the Karst Evaluation. The proposal shall contain the methods and locations of on-site testing. Onsite testing should include at least two geophysical techniques and soil boring and/or test pits. Soil borings and/or test pits are not sufficient to fulfill the karst analysis.

The Karst Evaluation will indicate karst features such as but not limited to the following features:

- a. sinkholes
- b. closed depressions
- c. lineaments
- d. fracture traces
- e. caverns
- f. ghost lakes
- g. disappearing streams
- h. bedrock pinnacles (surface or subsurface)

The Karst Evaluation should include analysis of pre- and post-development susceptibility to sinkhole formation. The Karst Evaluation shall be completed by a professional geologist licensed in the Commonwealth of Pennsylvania.

The Karst Evaluation shall include map(s) depicting karst characteristics identified during the on-site testing at the Site. The map(s) shall depict sinkholes, closed depressions, lineaments, fracture traces, caverns, ghost lakes, disappearing streams, and bedrock pinnacles (surface and subsurface).

The Karst Evaluation should include methods for sinkhole repair. Sinkhole repair methods of sinkholes within rights-of-way to be dedicated to the Township must be approved by the Township.

The design of all facilities areas within rights-of-way to be dedicated to the Township; over carbonate formations shall include measures to prevent ground water contamination and, where necessary, sinkhole formation. Soils used for the construction of basins shall have low-erodibility factors ("K" factors). The Township may require the installation of an impermeable liner in basins. All detention facilities shall be above ground unless otherwise approved by the Township Supervisors.

4. The following guidelines shall be considered during construction activities.

- a. Care should be taken to prevent collection and drainage of surface water into excavated or low-lying areas of the site during excavation and construction.
  - b. Soft and wet conditions should be located wherever they may exist or be encountered.
  - c. Soft areas should be removed and replaced with suitable fill compacted in accordance with recognized standards, such as ASTM.
  - d. The bottom of all excavations should be inspected for soft or unusually moist conditions. A visual inspection of the excavated bearing surface, together with soundings or probes of the soil at regular intervals, should be done. Any soft or unusually moist soil should be further excavated and a determination made of the extent of the problem. Remedial measures should be adopted as necessary.
  - e. The low points of swales and outlet locations for drainage pipes should be lined with impermeable liners instead of stone riprap in order to prevent infiltration of runoff.
  - f. Excavation should be kept to a practical minimum.
  - g. Water from roof drains or other drainage systems should be collected and conveyed away from structures to prevent infiltration near foundations. If possible, roof drains should discharge directly into a storm sewer system or the street gutter.
  - h. Subsoil erosion/sinkholes that occur during the construction of a project should be corrected as quickly as possible under the supervision of a qualified Geotechnical Engineer.
  - i. Blasting should be avoided.
5. Should the Township Supervisors find that an Applicant may create a significant risk to the public's health or safety, in spite of taking all reasonable actions to minimize such risks, or should the Supervisors determine that the Applicant has not taken all reasonable actions to minimize such risks, the Supervisors may deny the Application.

C. Submission Requirements

The following information shall be submitted:

1. For areas proposed for grading, construction of buildings and other improvements, the Applicant shall indicate the presence of any of the following carbonate features:

Depressions fissures, lineaments, faults or air photo fracture traces "ghost lakes" occurring after rainfall events outcrops of bedrock seasonal high water tables sinkholes soil mottling, as defined by a soil scientist springs surface drainage entering the ground. Such information shall be supported by an explanation of its source, including the qualifications of the individuals directly responsible for preparing such information.

2. The Applicant shall furnish a plan indicating existing and proposed drainage conditions, existing and proposed grading, the locations of existing private and public wells on adjoining properties and the locations and extent of all proposed uses and improvements.
3. An Environmental Assessment Report containing the following information:
  - a. Description of Existing Conditions. This section shall present a description of existing characteristics of the property with respect to geology, topography, ground and surface water hydrology, soils, vegetation, and existing improvements and uses.
  - b. Description of the Proposed Action. This section shall describe the proposed action including: types, locations and phasing of proposed site disturbances and construction, as well as proposed future ownership and maintenance of the property and the proposed improvements.
  - c. Proposed Measures to Control Potential Adverse Environmental Impacts. This section shall describe all measures proposed by the Applicant to control all adverse impacts which may occur as a result of the proposed action.
  - d. List and Qualifications of Preparers. The names, addresses, telephone numbers and qualifications of persons directly responsible for preparing the Environmental Assessment shall be provided.

#### SECTION 632 - FLOOD PLAINS

- A. Flood plains shall be calculated using the method established in Appendix E of this Ordinance and shown on all subdivision and land

development plans. The Flood Plain controls established within Township Ordinances shall be applied to those flood plains.

- B. The Township Supervisors may require that vehicular access be provided to each dwelling unit within a subdivision or land development over a street or other approved means of access which is elevated above the level of the 100-year flood. If construction of street is proposed, and approved by the Township Supervisors, within the 100-year flood plain or in an area with a high water table and/or unstable soils, the design of such street shall be in accordance with PennDOT's Design Manual Part 2 Highway Design, Chapter 10.
  
- C. The following controls shall apply to the flood plains:
  - 1. No watercourse shall be altered or relocated unless approved by the Township Supervisors and, where applicable, the Pennsylvania Department of Environmental Protection, Bureau of Dams and Waterway Management and FEMA.
  - 2. No watercourse shall be altered or relocated unless the person proposing the alteration or relocation submits calculations assuring that the flood carrying capacity within the altered or relocated portion of the watercourse shall be designed to be not less than the flood carrying capacity of the watercourse prior to the proposed alteration or relocation.
  - 3. No encroachment shall be made on a flood plain or watercourse which will increase flood levels within the Township during the occurrence of the 100-year flood discharge. With any proposal for an encroachment, calculations which will indicate compliance with this requirement shall be submitted to the Township. All encroachments are subject to Township Supervisors approval. Encroachments into the 100-year floodway must be reviewed and approved by the Pennsylvania Department of Environmental Protection and FEMA.
  - 4. No construction or development shall be permitted within the floodplain without approval from the U.S. Corps of Engineers and the Pennsylvania Department of Environmental Protection.

#### **SECTION 633 - SOLID WASTE MANAGEMENT**

- A. Provision shall be made in developments containing apartments and townhouses and in non-residential developments to adequately store within containers all solid waste generated between collections. The following information shall be provided and/or shown on the plan:

1. Size and type of container(s);
  2. Method and frequency of pick up;
  3. Storage locations with adequate accessibility; and
  4. Effective screening of storage areas.
- B. All storage containers shall be located to permit efficient depositing of wastes in the containers and efficient collection from the containers.
- C. Debris, rubbish, or other waste material resulting from grading or construction activities on the lot shall be removed from the lot prior to the issuance of a certificate of use and occupancy for the lot. No debris, rubbish, or waste material shall remain within the area of an improvement covered by a performance guarantee upon expiration of the guarantee or completion of the improvements, whichever is sooner.

#### SECTION 634 - MOBILE HOME PARKS

A. Area, Density, Yard, and Lot Requirements

1. The minimum area of a mobile home park shall be ten (10) acres.
2. All mobile home parks shall be served by either a public or community sewage disposal system and by either a public or community water supply system. Both the sewage disposal and water supply system shall be approved by the Pennsylvania Department of Environmental Protection.
3. The maximum gross density of any mobile home park shall be in five (5) dwelling units per acre.
4. Not less than fifteen percent (15%) of the total area of the mobile home park shall be devoted to recreation areas for the use of all residents of the park. Provision shall be made by the owner of the mobile home park for the development, installation, and perpetual maintenance of such recreation areas.
5. The minimum area of a mobile home lot shall be 6000 square feet. The minimum width of a mobile home lot shall be forty (40) feet at the street right-of-way line and fifty (50) feet at the building setback line.
6. Two off-street parking spaces shall be provided on each mobile home lot.

7. The minimum allowable distance between any mobile home, service or accessory building, or parking facility and a boundary line of the mobile home park shall be thirty (30) feet, provided that no mobile home shall be located closer than fifty (50) feet to any street located outside the boundary lines of the park. No mobile home shall be located closer than twenty-five (25) feet to any street located within the boundary lines of the mobile home park. The minimum allowable distance between any mobile home and another mobile home, service or accessory building, or common parking facility shall be thirty (30) feet.
8. An evergreen planting screen a minimum of four (4) feet in height at planting shall be placed along all boundary lines of the mobile home park separating the mobile home park from adjacent properties and/or streets in accordance with Section 625 - Landscaping and the Township Construction Standards and Specifications Ordinance. The screen shall be a year-round screen which shall be maintained permanently. Plant material which does not live shall be replaced within one year. The distance between trees shall be such that a full screen will be provided within three years of planting. The permissible distance between plants will vary with the species of planting.
9. Each mobile home shall be placed on a lot which has frontage on and direct access to an approved street and shall be located to provide safe and convenient access for servicing and fire protection.
10. The limits of each mobile home lot shall be clearly marked on the ground by permanent markers.
11. Each mobile home space shall be provided with a permanent foundation that will not heave, shift, settle, or move due to frost action, inadequate drainage, vibration or other forces acting on the foundation. The foundation shall be of adequate size, material, and construction so as to be durable and adequate for the support of the maximum anticipated loads during all seasons of the year. Each mobile home space shall be equipped with utility connections. Any open spaces between a mobile home floor and a mobile home foundation shall be permanently enclosed to prevent unauthorized entry and to conceal supports and utility connections. Every mobile home shall be anchored to the foundation to prevent overturning or uplift. The anchorage shall be adequate to withstand wind forces as specified in Act 45 of Uniform Construction Code 2003 as amended.

The application for placement of the mobile home shall be accompanied by specifications for the foundation and

anchoring and calculations indicating that the foundation and anchoring are adequate to meet the standards of this Section.

B. Compliance with State Requirements

All mobile home parks shall comply with the requirements for mobile home parks established by the Pennsylvania Department of Environmental Protection.

C. Compliance with Design Standards and Improvements Specifications of Articles V and VI

1. Mobile home parks shall comply with the requirements of Article V of this Ordinance regarding improvement specifications.
2. Mobile home parks shall comply with all applicable requirements of Article VI of this Ordinance, including but not limited to, streets, blocks, lots and parcels, storm drainage, and sediment and erosion control.

D. Additional Design Standards

1. Pedestrian Circulation System, Service and Accessory Buildings and Landscaping
  - a. All mobile home parks shall contain a pedestrian circulation system which shall be designed, constructed, and maintained for safe and convenient movement from all mobile home spaces to principal destinations within the park and, if appropriate, shall provide safe and convenient access to pedestrian ways leading to destinations outside of the park. "Principal destinations" include such uses as recreation areas, service buildings, storage areas, common parking areas and management offices.
  - b. All pedestrian walks shall have a minimum width of four (4) feet.
  - c. All pedestrian walks shall be paved. Paving shall be completed in accordance with the Township Construction Standards and Specifications Ordinance.
  - d. All pedestrian walks must be provided with lighting units spaced, equipped, and installed to allow safe movement of pedestrians at night.
  - e. All service and accessory buildings, including management offices, storage areas, laundry buildings, and indoor recreation areas, shall conform to the requirements of the Township Building Code.



Attachments to mobile homes in the form of sheds and lean-to's are prohibited.

- f. The mobile home park shall have a structure designed and clearly identified as the office of the mobile home park manager.
- g. Service and accessory buildings located in a mobile home park shall be used only by the occupants of the park and their guests.
- h. Ground surfaces in all parts of a mobile home park must be paved or covered with grass or other suitable vegetation capable of preventing soil erosion and the emanation of dust.
- i. Park grounds must be kept free of vegetative growth which is poisonous or which may produce pollen or harbor rodents, insects, or other pests harmful to man.

2. Solid Waste and Vector Control and Electric Distribution System

- a. The storage, collection, and disposal of solid wastes from the mobile home park shall be the responsibility of the mobile home park operator.
- b. The storage, collection, and disposal of solid wastes must be conducted so as to prevent insect and rodent problems.
- c. All solid wastes must be stored in approved fly-tight, rodent-proof and water-tight containers, and these containers shall be maintained in a clean condition.
- d. Solid wastes containers must be distributed throughout the mobile home park in adequate numbers and be readily accessible to the mobile home spaces in use.
- e. Exterior storage areas for solid wastes must be completely screened on three sides with evergreen plantings.
- f. Adequate measures must be taken by the operator of the mobile home park to prevent an infestation of insects and rodents.
- g. Every mobile home park shall be provided with an electrical distribution system to which every mobile home and service building shall be connected. Such system and connections shall be installed, inspected, and maintained in accordance with the specifications

and rules of the appropriate utility company, the Township, and the State. The appropriate electric utility shall inspect all transformers and underground connections to all mobile homes located within mobile home parks and shall attach its dated "tag-of-approval" to each mobile home at a visible location before any mobile home is occupied.

- h. Underground electric distribution lines are to be installed in all mobile home parks.

E. Permits

1. A representative of the Township may inspect a mobile home park at reasonable intervals and at reasonable times to determine compliance with this Ordinance.
2. A copy of the occupancy permit for a mobile home park issued by the Township shall at all times be posted in the office of the mobile home park manager.
3. Applications for Occupancy Permits for mobile home parks shall be filed with the Township Secretary, using application forms available from the Township Secretary.
4. An Application for an Occupancy Permit for a mobile home park shall be accompanied by three (3) copies of plans for the mobile home park and three (3) copies of any supplemental drawings which shall contain all information necessary to allow the Township Supervisors to determine that all the requirements of this Ordinance have been met.
5. An application for renewal of an occupancy permit for a mobile home park must be submitted each year. Application forms shall be obtained from the Township Secretary. Only an application is required to be submitted when an occupancy permit is to be renewed. A plan of the mobile home park is not required when a permit is to be renewed.
6. After the effective date of this Ordinance, before the area, number of mobile home spaces, road system, service facilities, sewer facilities, water facilities, or any other aspect of a mobile home park which is regulated by this Ordinance may be altered or expanded, this alteration or expansion must be approved by the Township Supervisors. Plans which indicate all proposed modifications shall be filed with the Township Secretary and the Township Secretary will submit the plans to the Township Supervisors.

F. Supervision of Park

1. The person to whom an occupancy permit for a mobile home park is issued shall operate the park in compliance with this Ordinance and shall provide adequate supervision to maintain the park, its facilities, and equipment in good repair and in a clean and sanitary condition.
2. A register containing the names of all park occupants, the make, model, and serial number of each mobile home, the date of arrival of each mobile home in the park, and the lot number upon which the mobile home is parked, and the date of departure from the park shall be maintained by the person to whom an occupancy permit for a mobile home park was issued. The register shall be available to any person whom the Township Supervisors authorize to inspect the park and shall be kept within the office of the mobile home park manager.
3. A space within a mobile home park shall be rented for periods of one hundred eighty (180) days or more.
4. Whenever the ownership or management of any mobile home park changes, the new owner or manager of the mobile home park shall notify the Township Secretary of the change.

G. Notices, Hearings and Orders

1. Whenever, after inspection of any mobile home park, it is determined by the Board of Supervisors that conditions or practices exist which are in violation of any provision of this Ordinance, the Township Secretary shall give notice in writing to the person to whom an occupancy permit for a mobile home park was issued, advising such person that unless such conditions or practices are corrected within a reasonable period of time specified within the notice, the permit to operate a mobile home park in the Township will be suspended. At the end of the specified period of time the mobile home park will be re-inspected by the Township Supervisors and if the conditions or practices in violation of the Ordinance have not been corrected, the Township Supervisors shall suspend the occupancy permit and give notice in writing of such suspension to the person to whom the permit was issued.
2. The written notice advising that conditions or practices exist which are in violation of this Ordinance and that these conditions or practices may result in the suspension of an occupancy permit for a mobile home park shall:
  - a. be in writing
  - b. include a statement of the reasons for its issuance

- c. allow a reasonable time for the performance of any act it requires
  - d. contain an outline of remedial action which, if taken, will effect compliance with the provisions of the Ordinance
  - e. be served upon the person to whom an occupancy permit for a mobile home park was issued
3. Any person affected by any notice which has been issued in connection with the enforcement of any provision of this Ordinance, or of any regulation adopted pursuant thereto, may request and shall be granted a hearing on the matter before the Board of Supervisors provided that such person shall file with the Township Secretary a written petition requesting such hearing and setting forth a brief statement of the grounds for the request for the hearing within ten (10) days after the notice was served.
4. Upon receipt of such petition, the Board of Supervisors shall set a place and time for the hearing and shall give the petitioner written notice thereof. At the hearing the petitioner will be given an opportunity to show why the notice which was issued should be modified or withdrawn. The hearing shall be held not later than ten (10) days after the day on which the petition was filed. Upon written application by the petitioner, the Board of Supervisors may waive this ten (10) day requirement when in their judgment the petitioner has submitted sufficient reasons for such a postponement.
5. After the hearing has been held, the Board of Supervisors shall make findings as to the compliance with the provisions of this Ordinance and shall issue an order in writing sustaining, modifying, or withdrawing the notice. Upon failure to comply with the conditions of the sustained or modified notice, the Township Supervisors shall suspend the occupancy permit for the mobile home park in question and give notice in writing of such suspension to the person to whom the permit was issued.
6. Any person aggrieved by the decision of the Township Supervisors may seek relief in any court of competent jurisdiction, as provided by the laws of the Commonwealth of Pennsylvania.

## ARTICLE VII

### ADMINISTRATION AND ENFORCEMENT

#### Section 701 - REVISION AND AMENDMENT

- A. The Board of Supervisors may, from time to time, revise, modify and amend these regulations by appropriate action in accordance with the provisions of the Pennsylvania Municipalities Planning Code, as amended.

#### Section 702 - LIABILITY

- A. Any review of activity within the floodplain, site plan review, subdivision or land development approval, erosion control review, wetland delineation review, stormwater runoff review, review of activity on steep slopes, or any other review, approval or permit under this Ordinance by an officer, employee, board, commission, solicitor, consultant or agency of the Township shall not constitute a representation, guarantee or warranty of any kind by the Township, or its employees, officials, boards, solicitor(s), consultants or agencies of the practicality or safety of any structure, use or subdivision, and shall create no liability upon nor a cause of action against such entity or person for any damage that may result pursuant thereto.
- B. If the Zoning Officer mistakenly issues a permit under this Ordinance, the Township shall not be liable for any later lawful withdrawal of such permit.

#### Section 703 - ENFORCEMENT

- A. The Board of Supervisors is authorized to enforce the provisions of this Ordinance. The Board of Supervisors may institute and maintain appropriate legal proceedings in law or in equity to restrain, correct or abate violations including but not limited to, requiring compliance with the provisions of this Ordinance, to recover damages, and to prevent the illegal occupancy of a building, structure or premises in accordance with the Township's Civil/Criminal Enforcement Ordinance and/or the enforcement provisions of the Pennsylvania Municipality Planning Code.
- B. The Township may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which has been developed or which has resulted from a subdivision of real property in violation of this Ordinance. The authority to deny such a permit shall apply to any of the following:
  - 1. The owner of record at the time of such violation.

2. The vendee or lessee of the owner of record at the time of such violation with regard as to whether such vendee or lessee has actual or constructive knowledge of the violation.
  3. The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner has actual or constructive knowledge of the violation.
  4. The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.
- C. As an additional condition for issuance of a permit or the granting of an approval to any such owner, current owner, vendee or lessee for the development of any such real property, the Board of Supervisors may require compliance with the conditions that would have been applicable to the property at the time the applicant acquired an interest in such real property.

#### **Section 704 - SANCTIONS AND PENALTIES**

- A. Any person, partnership or corporation violating the provisions of the Longswamp Township Subdivision and Land Development Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than five hundred (500) dollars, plus all court costs, including reasonable attorney fees incurred by the Township as a result thereof, in accordance with the Township Civil/Criminal Enforcement Ordinance.
1. District justices shall have initial jurisdiction in proceedings brought under this Section. No judgment shall commence or be imposed, levied or be payable until the date of the determination of a violation by the district justice.
  2. If the defendant neither pays nor timely appeals the judgment, the municipality may enforce the judgment pursuant to the applicable rules of civil procedure.
  3. Each day that a violation continues shall constitute a separate violation, unless the district justice determines that there was a good faith basis for the person, partnership or corporation violating the ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth (5th) day following the date of the

determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

- B. The applicant shall be held responsible for the integrity of the subdivision or land development. Approval of a final subdivision or land development plan or dedication of a street within a development does not relieve the applicant from responsibility for any problems that may arise from development.
- C. Nothing contained in this Section shall prohibit or prevent the Township Board of Supervisors from attaining injunctive relief if it deems immediate and irreparable harm from violation of this Ordinance. Violation of this Ordinance shall constitute irreparable for purposes of obtaining injunctive relief.

#### **Section 705 - FEES**

- A. In applying for Township review of a subdivision or land development application, the applicant shall pay a cash fee to be determined in accordance with a fee schedule ordinance adopted by resolution of the Longswamp Township Board of Supervisors, as amended or modified from time to time.
- B. The costs of all studies and consulting work, including legal and engineering fees, required by this Ordinance shall be the responsibility of the Applicant. The Applicant is free to choose his own consultant; however, the Township may, at its discretion, select a consultant(s) to participate in or review the work of the Applicant's consultant, at Applicant's expense. In addition, the Applicant or Applicant's Agent shall be responsible for and shall pay all Township Engineer's inspection and review costs incurred by the Township, and all legal and other consulting costs and expenses incurred by the Township in the review of the subdivision or land development application and other reviews necessary to carry out all aspects of this Ordinance, including costs of hearing administration, document and plat review, inspection processes, ordinance and legal interpretation as to plat and supplemental information or other costs appurtenant to this Ordinance, in the event that scheduled fees do not cover the actual costs.
- C. The fee schedule resolution adopted by the Longswamp Board of Supervisors shall establish an initial payment to cover administrative expenses related to the subdivision or land development review process. It also shall establish an initial payment, to be held by the Township as security for payment of the Township Engineer, legal and other consulting costs and expenses in the Township review process.

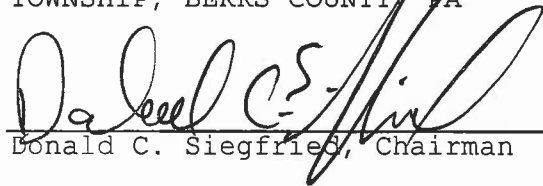
1. In the event the Township Board of Supervisors determines that the engineering, legal and other consulting costs and expenses are likely to exceed the maximum initial payment toward those costs and expenses, additional security may be required by the Board of Supervisors.
2. If the engineering, legal and other consulting costs and expenses exceed the amounts paid from fees, the Township shall bill the developer for the excess costs and expenses, and the developer shall pay the Township by check for those excess costs and expenses within thirty (30) days. In the event payment is not received within thirty (30) days of billing, finance charges and charges of administration of delinquent bills will be charged to the developer.

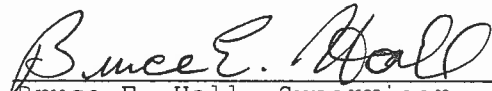


**ENACTMENT**

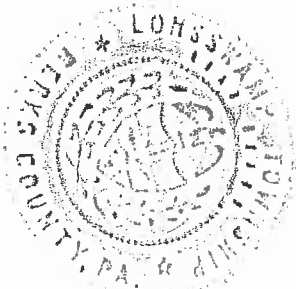
This Ordinance shall become effective 18 September 2006.  
Duly enacted by the Board of Supervisors of the Township of  
Longswamp, Berks County, Pennsylvania, this 12<sup>th</sup> day of  
September, 2006 in lawful session duly assembled.

BOARD OF SUPERVISORS OF LONGSWAMP  
TOWNSHIP, BERKS COUNTY, PA

  
Donald C. Siegfried, Chairman

  
Bruce E. Hall, Supervisor

  
Steven C. Wyka, Supervisor



Attest:

  
Township Secretary



# APPENDICES



**APPENDIX A-1**  
**LONGSWAMP TOWNSHIP**  
**APPLICATION FOR REVIEW OF SKETCH PLAN**

*Application is hereby made for review of the Sketch Plan submitted herewith and more particularly described below.*

1. Name of Subdivision/Land Development: \_\_\_\_\_
2. Proposed Plan Classification:                      Subdivision:                       Minor                       Major  
   Land Development:                       Minor                       Major
3. Was a Site Inspection requested and conducted for this Plan in accordance with SALDO Sections 306 and 307?  
    Yes                       No
4. Applicant(s):  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_                      Fax No.: \_\_\_\_\_
5. Property Owner(s) (If other than applicant):  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_                      Fax No.: \_\_\_\_\_
6. Applicant's interest, if other than Owner: \_\_\_\_\_
7. Engineer or Surveyor responsible for Plan:  
Name/Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_                      Fax No.: \_\_\_\_\_  
Contact Person: \_\_\_\_\_                      Email: \_\_\_\_\_
8. Address/Location of Subdivision: \_\_\_\_\_  
\_\_\_\_\_
9. Acreage being subdivided: \_\_\_\_\_                      Number of Lots: \_\_\_\_\_  
Residue acreage not being subdivided: \_\_\_\_\_
10. Source of Title: County Deed Book No.: \_\_\_\_\_                      Page No.: \_\_\_\_\_



11. Acreage of adjoining land in same ownership (different deed): \_\_\_\_\_

12. Zoning District: \_\_\_\_\_

Has zoning relief been requested:  Yes  No If "Yes", type of relief requested \_\_\_\_\_

\_\_\_\_\_  
*(Attach Zoning Hearing Board decision, if received)*

13. Lot use proposed:  Single Family  Two Family  Townhouse  
 Multi-Family  Commercial  Industrial  
 Other (Please specify) \_\_\_\_\_

14. Proposed use is:  Permitted by Right  
 Permitted by Special Exception  
 Permitted by Conditional Use

15. Type of Proposed Subdivision Design, if Residential:  Conventional  
 Conservation  
 Option One - Density Neutral  
 Option Two - Enhanced Density  
 Option Three - Country Properties  
 Option Four - Hamlet  
 Option Five - Village

16. Please state method of ownership and maintenance of Open Space/Greenway:  
\_\_\_\_\_

17. Type of water supply proposed:  Public System  Community System  Individual On-Site

18. Type of sanitary sewage disposal proposed:  
 Public System  Community System  Individual On-Site

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Applicant

FOR TOWNSHIP USE ONLY	
Date Received _____	Accepted by (initials) _____
Required Review Fee \$ _____	Check # _____
Application Deemed Complete by (initials) _____	Date: _____





**APPENDIX A-2**  
**LONGSWAMP TOWNSHIP**  
**APPLICATION FOR REVIEW OF PRELIMINARY PLAN**

*Application is hereby made for review of the Preliminary Plan submitted herewith and more particularly described below.*

- 1. Name of Subdivision/Land Development: \_\_\_\_\_
- 2. Plan Classification:        \_\_\_\_ Major Subdivision                \_\_\_\_ Major Land Development
- 3. Was a Site Inspection requested and conducted for this Plan in accordance with SALDO Sections 306 and 307? \_\_\_\_ Yes \_\_\_\_ No        Was a Sketch Plan submitted for the Plan? \_\_\_\_ Yes \_\_\_\_ No
- 4. Applicant(s):  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_                                Fax No.: \_\_\_\_\_
- 5. Property Owner(s) (If other than applicant):  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_                                Fax No.: \_\_\_\_\_
- 6. Applicant's interest, if other than Owner: \_\_\_\_\_
- 7. Engineer or Surveyor responsible for Plan:  
Name/Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_                                Fax No.: \_\_\_\_\_  
Contact Person: \_\_\_\_\_                                Email: \_\_\_\_\_
- 8. Address/Location of Subdivision: \_\_\_\_\_  
\_\_\_\_\_
- 9. Acreage being subdivided: \_\_\_\_\_                                Number of Lots: \_\_\_\_\_  
Residue acreage not being subdivided: \_\_\_\_\_
- 10. Source of Title: County Deed Book No.: \_\_\_\_\_                                Page No.: \_\_\_\_\_
- 11. Acreage of adjoining land in same ownership (different deed): \_\_\_\_\_
- 12. Zoning District: \_\_\_\_\_  
Has zoning relief been requested: \_\_\_\_ Yes \_\_\_\_ No    If "Yes", type of relief requested \_\_\_\_\_

*(Attach Zoning Hearing Board decision, if received)*



13. Lot use proposed:  Single Family  Two Family  Townhouse  
 Multi-Family  Commercial  Industrial  
 Other (Please specify) \_\_\_\_\_

14. Proposed use is:  Permitted by Right  
 Permitted by Special Exception  
 Permitted by Conditional Use

15. Type of Proposed Subdivision Design, if Residential:  Conventional  
 Conservation  
 Option One - Density Neutral  
 Option Two - Enhanced Density  
 Option Three - Country Properties  
 Option Four - Hamlet  
 Option Five - Village

16. If a Conservation Design Option is being used, provide the following information in accordance with Zoning Ordinance Section 434.

- a. Gross Tract Area (acres): \_\_\_\_\_
- b. Calculated Constrained Land Acreage (acres): \_\_\_\_\_
- c. Adjusted Tract Area (acres): \_\_\_\_\_
- d. Required Density Factor: \_\_\_\_\_
- e. Maximum Number of Permitted Dwelling Units: \_\_\_\_\_ (Adjusted Tract Area divided by Density Factor)
- f. Minimum Required Greenway Land (lesser of (i) or (ii) below):
  - (i) Constrained Land (b) + Adjusted Tract Area (c) x \_\_\_\_\_% = \_\_\_\_\_ acres **OR**
  - (ii) Total Tract Area (Gross Tract Area minus existing right-of-way) x 80% = \_\_\_\_\_ acres
- g. Proposed Open Space/Greenway Acreage: \_\_\_\_\_
- h. Method of Ownership and Maintenance of Open Space/Greenway: \_\_\_\_\_

17. Type of water supply proposed:  Public System  Community System  Individual On-Site

18. Type of sanitary sewage disposal proposed:  
 Public System  Community System  Individual On-Site

19. Type of off-street parking proposed:  Garages  Driveways \_\_\_\_\_ Other (Specify)

20. Intent:  Sell lots only  Construct houses for sale \_\_\_\_\_ Other (Specify)

21. Lineal Feet of new streets planned: \_\_\_\_\_

22. Are all streets proposed for dedication?  Yes  No

23. Are there any Deed Restrictions required or contemplated?  Yes (attach copy)  No

24. Acreage proposed for Recreation in accordance with SALDO Section 624.B: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Applicant

FOR TOWNSHIP USE ONLY

Date Received \_\_\_\_\_

Accepted by (initials) \_\_\_\_\_

Required Review Fee \$ \_\_\_\_\_

Check # \_\_\_\_\_

Application Deemed Complete by (initials) \_\_\_\_\_

Date: \_\_\_\_\_



**APPENDIX A-3**

**LONGSWAMP TOWNSHIP**

**APPLICATION FOR REVIEW OF FINAL PLAN**

*Application is hereby made for review of the Final Plan submitted herewith and more particularly described below.*

1. Name of Subdivision/Land Development: \_\_\_\_\_

2. Plan Classification: Subdivision: \_\_\_\_\_ Minor \_\_\_\_\_ Major  
 Land Development: \_\_\_\_\_ Minor \_\_\_\_\_ Major

3. Was a Site Inspection requested and conducted for this Plan in accordance with SALDO Sections 306 and 307? \_\_\_\_\_ Yes \_\_\_\_\_ No Was a Sketch Plan submitted for the Plan? \_\_\_\_\_ Yes \_\_\_\_\_ No

4. Date of Preliminary Plan Approval (if applicable): \_\_\_\_\_  
 Submit a copy of Conditions of Approval of Preliminary Plan.

5. Applicant(s):  
 Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

6. Property Owner(s) (If other than applicant):  
 Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

7. Applicant's interest, if other than Owner: \_\_\_\_\_

8. Engineer or Surveyor responsible for Plan:  
 Name/Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Email: \_\_\_\_\_

9. Address/Location of Subdivision: \_\_\_\_\_  
 \_\_\_\_\_

10. Acreage being subdivided: \_\_\_\_\_ Number of Lots: \_\_\_\_\_

Residue acreage not being subdivided: \_\_\_\_\_

11. Source of Title: County Deed Book No.: \_\_\_\_\_ Page No.: \_\_\_\_\_

12. Acreage of adjoining land in same ownership (different deed): \_\_\_\_\_



13. Zoning District: \_\_\_\_\_  
Has zoning relief been requested:  Yes  No If "Yes", type of relief requested \_\_\_\_\_

(Attach Zoning Hearing Board decision, if received)

14. Lot use proposed  Single Family  Two Family  Townhouse  
 Multi-Family  Commercial  Industrial  
 Other (Please specify) \_\_\_\_\_

15. Proposed use is:  Permitted by Right  
 Permitted by Special Exception  
 Permitted by Conditional Use

16. Type of Proposed Subdivision Design, if Residential:  Conventional  
 Conservation  
 Option One - Density Neutral  
 Option Two - Enhanced Density  
 Option Three - Country Properties  
 Option Four - Hamlet  
 Option Five - Village

17. If a Conservation Design Option is being used, provide the following information in accordance with Zoning Ordinance Section 434.  
a. Gross Tract Area (acres): \_\_\_\_\_  
b. Calculated Constrained Land Acreage (acres): \_\_\_\_\_  
c. Adjusted Tract Area (acres): \_\_\_\_\_  
d. Required Density Factor: \_\_\_\_\_  
e. Maximum Number of Permitted Dwelling Units: \_\_\_\_\_ (Adjusted Tract Area divided by Density Factor)  
f. Minimum Required Greenway Land (lesser of (i) or (ii) below):  
(i) Constrained Land (b) + Adjusted Tract Area (c) x \_\_\_\_\_% = \_\_\_\_\_ acres **OR**  
(ii) Total Tract Area (Gross Tract Area minus existing right-of-way) x 80% = \_\_\_\_\_ acres  
g. Proposed Open Space/Greenway Acreage: \_\_\_\_\_  
h. Method of Ownership and Maintenance of Open Space/Greenway: \_\_\_\_\_

18. Type of water supply proposed:  Public System  Community System  Individual On-Site

19. Type of sanitary sewage disposal proposed:  
 Public System  Community System  Individual On-Site

20. Type of off-street parking proposed:  Garages  Driveways \_\_\_\_\_ Other (Specify)

21. Intent:  Sell lots only  Construct houses for sale \_\_\_\_\_ Other (Specify)

22. Lineal Feet of new streets planned: \_\_\_\_\_

23. Are all streets proposed for dedication?  Yes  No

24. Are there any Deed restrictions required or contemplated?  Yes (attach copy)  No

25. Acreage proposed for Recreation in accordance with SALDO Section 624.B: \_\_\_\_\_  
Or amount of fee in lieu of land dedication: \$ \_\_\_\_\_





26. If the Plan is a Major Subdivision or Major Land Development, does the Final Plan conform in all important respects with the Preliminary Plan as previously approved by the Supervisors with the modifications and revisions specified by the Board in its conditional approval of the Preliminary Plan? \_\_\_\_\_ Yes \_\_\_\_\_ No

If "No," list changes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Applicant

FOR TOWNSHIP USE ONLY	
Date Received _____	Accepted by (initials) _____
Required Review Fee \$ _____	Check # _____
Application Deemed Complete by (initials) _____	Date: _____



**APPENDIX B-1**  
**LONGSWAMP TOWNSHIP**  
**SKETCH PLAN CHECKLIST**  
*(To Be Completed By the Applicant)*

Name of Subdivision/Land Development: \_\_\_\_\_

Applicant(s):

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_

*Submission of a Sketch Plan is optional, and such submission shall not constitute formal filing of a Plan with the Township. The Sketch Plan is submitted only for informal discussion between the Developer and the Township Planning Commission. When submitted, Sketch Plans should comply with the requirements of SALDO Sections 308 and 401.*

YES      NO      N/A

- |       |       |       |  |
|-------|-------|-------|--|
| _____ | _____ | _____ | 1. Complete submission in accordance with SALDO Section 401 made by the Developer or his agent to the Township Secretary no less than thirty (30) days prior to a regularly scheduled meeting of the Township Planning Commission for new submissions or at least twenty-four (24) days for revised plans. |
| _____ | _____ | _____ | 2. Submission of five (5) copies of the completed Application for Review of Sketch Plan (Appendix A-1).  |
| _____ | _____ | _____ | 3. Submission of five (5) copies of the Checklist, signed and dated.   |
| _____ | _____ | _____ | 4. Payment of the filing fee.  |
| _____ | _____ | _____ | 5. Submission of five (5) copies of an affidavit that the Applicant is the Owner or Equitable Owner of the land proposed to be developed and has the authority to proceed on behalf of all parties claiming any ownership interest therein.  |
| _____ | _____ | _____ | 6. Submission of fourteen (14) prints on paper (folded to 8-1/2" x 11") of the Sketch Plan.  |
| _____ | _____ | _____ | 7. Submission of fourteen (14) prints on paper (folded to 8-1/2" x 11") of the Existing Resources and Site Analysis Plan.  |
| _____ | _____ | _____ | 8. Submission of five (5) copies of any supplemental data.   |

Applicant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**APPENDIX B-2**

**LONGSWAMP TOWNSHIP**  
**PRELIMINARY PLAN CHECKLIST**  
*(To Be Completed By the Applicant)*

**Name of Subdivision/Land Development:**

\_\_\_\_\_

**Applicant(s):**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No.: \_\_\_\_\_

YES	NO	N/A	
_____	_____	_____	1. Complete submission in accordance with SALDO Section 402 made by the Developer or his agent to the Township Secretary no less than thirty (30) days prior to a regularly scheduled meeting of the Township Planning Commission for new submissions or at least twenty-four (24) days for revised plans.
_____	_____	_____	2. Submission of five (5) copies of the completed Application for Review of Preliminary Plan (Appendix A-2).
_____	_____	_____	3. Submission of five (5) copies of the Checklist, signed and dated.
_____	_____	_____	4. Payment of the filing fee.
_____	_____	_____	5. Submission of five (5) copies of an affidavit that the Applicant is the Owner or Equitable Owner of the land proposed to be developed and has the authority to proceed on behalf of all parties claiming any ownership interest therein.
_____	_____	_____	6. Submission of sixteen (16) prints on paper (folded to 8-1/2" x 11") of the Preliminary Plan, specifically including the following:
_____	_____	_____	a. Plans prepared in accordance with the drafting standards in SALDO Section 402.A
_____	_____	_____	b. Plans containing the minimum information required as listed in SALDO Section 402.B
_____	_____	_____	c. Context Map
_____	_____	_____	d. Existing Resources and Site Analysis Plan
_____	_____	_____	e. Four-Step Design Process Plans (Required for Conservation Subdivision Designs Only)
_____	_____	_____	f. Site Design and Layout Plan
_____	_____	_____	g. Construction Improvements Plan
_____	_____	_____	h. Landscape Plan
_____	_____	_____	i. Lighting Plan
_____	_____	_____	7. Submission of seven (7) copies of all other information and plans which are required by SALDO Section 402, specifically including the following:
_____	_____	_____	a. Stormwater Management Plan and Calculations
_____	_____	_____	b. Erosion and Sedimentation Control Plan
_____	_____	_____	c. Traffic Study



\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- d. Impact Studies
  - 7. (continued)
  - e. Wetlands Study
  - f. 100-year floodplain calculations
  - g. Preliminary designs of any bridges or culverts
  - h. Schematic architectural drawings of proposed townhouses, apartment buildings, and commercial and industrial buildings, including building orientation.
8. Berks County Planning Commission "Land Subdivision and Land Development Review Application" (properly completed by Applicant) and Required Fee (submitted as a separate check to the Township).

***Failure of the Subdivider to submit all items listed above as required under SALDO Section 309, or failure of the Preliminary Plan to comply with the requirements of Section 402, shall be grounds for the Township Supervisors to refuse to accept the Preliminary Plan for review.***

Applicant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_





**APPENDIX B-3**  
**LONGSWAMP TOWNSHIP**  
**FINAL PLAN CHECKLIST**  
*(To Be Completed By the Applicant)*

Name of Subdivision/Land Development: \_\_\_\_\_

Applicant(s):

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No.: \_\_\_\_\_

*Within one (1) year after the Board of Supervisor's action on a Preliminary Plan for a Major Subdivision or Major Land Development, the developer or his agent shall submit a Final Plan and all required supplementary data to the Township Secretary unless an extension of time is granted by the Supervisors. If an extension is not granted, failure to submit the final plan within one (1) year may result in a determination by the Township Supervisors that they will consider any plan submitted after one (1) year as a new Preliminary Plan.*

YES    NO    N/A

- |       |       |       |  |
|-------|-------|-------|--|
| _____ | _____ | _____ | 1. Complete submission in accordance with SALDO Section 403 made by the Developer or his agent to the Township Secretary no less than thirty (30) days prior to a regularly scheduled meeting of the Township Planning Commission for new submissions or at least twenty-four (24) days for revised plans. |
| _____ | _____ | _____ | 2. Submission of five (5) copies of the completed Application for Review of Final Plan (Appendix A-3).   |
| _____ | _____ | _____ | 3. Submission of five (5) copies of the Checklist, signed and dated.   |
| _____ | _____ | _____ | 4. Payment of the filing fee.  |
| _____ | _____ | _____ | 5. Submission of five (5) copies of an affidavit that the Applicant is the Owner or Equitable Owner of the land proposed to be developed and has the authority to proceed on behalf of all parties claiming any ownership interest therein, if not previously submitted.                                   |
| _____ | _____ | _____ | 6. Submission of sixteen (16) prints on paper (folded to 8-1/2" x 11") of the Final Plan, specifically including the following:  |
| _____ | _____ | _____ | a. Plans prepared in accordance with the drafting standards in SALDO Section 403.A   |
| _____ | _____ | _____ | b. Plans containing the minimum information required as listed in SALDO Section 403.B  |
| _____ | _____ | _____ | c. Context Map   |
| _____ | _____ | _____ | d. Existing Resources and Site Analysis Plan   |
| _____ | _____ | _____ | e. Four-Step Design Process Plans (Required for Conservation Subdivision Designs Only)   |
| _____ | _____ | _____ | f. Site Design and Layout Plan   |
| _____ | _____ | _____ | g. Construction Improvements Plan  |
| _____ | _____ | _____ | h. Landscape Plan  |
| _____ | _____ | _____ | i. Lighting Plan   |
| _____ | _____ | _____ | 7. Submission of seven (7) copies of all other information and plans which are required by SALDO Section 403, specifically including the following, if not previously submitted with the Preliminary Plan Submission:  |
| _____ | _____ | _____ | a. Stormwater Management Plan and Calculations   |
| _____ | _____ | _____ | b. Erosion and Sedimentation Control Plan  |
| _____ | _____ | _____ | c. Traffic Study   |



7. (continued)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- d. Impact Studies
- e. Wetlands Study
- f. 100-year floodplain calculations
- g. Final designs of any bridges or culverts
- h. Schematic architectural drawings of proposed townhouses, apartment buildings, and commercial and industrial buildings, including building orientation.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Berks County Planning Commission "Land Subdivision and Land Development Review Application" (properly completed by Applicant) and Required Fee (submitted as a separate check to the Township), if not previously submitted with the Preliminary Plan submission.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Three (3) copies of all offers of dedication and covenants, including homeowner association documents, governing the reservation and maintenance of undedicated open space.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. Three (3) copies of such private deed restrictions, including building setback lines, as may be imposed upon the property as condition to sale, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Three (3) copies of such certificates of approval (or of Preliminary Plan approval) by proper authorities of the Commonwealth as may have been required by the Board or by this Ordinance.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Where access is required to a highway under the jurisdiction of the Pennsylvania Department of Transportation, the Plan shall contain a notice that a highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the "State Highway Law," before driveway access to a state highway is permitted.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. Three (3) copies of all easements executed with private property owners, utilities, or municipalities, including conservation easement documents or other approved mechanism to permanently preserve the greenway land in a Conservation Design subdivision.

**Failure of the Developer or his agent to submit all items listed above as required under SALDO Section 310, or failure of the Final Plan to comply with the requirements of Section 403, shall be grounds for the Township Supervisors to refuse to accept the Final Plan for review.**

**In the case of major plan applications, the Final Plan shall conform in all important respects with the Preliminary Plan as previously approved by the Supervisors and shall incorporate modifications and revisions specified by the Board in its conditional approval of the Preliminary Plan. If it does not conform in all important respects, the Plan shall be considered as a Revised Preliminary Plan and shall be resubmitted with the fee required for a Preliminary Plan.**

Applicant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## APPENDIX C

### FOUR-STEP DESIGN PROCESS FOR SUBDIVISIONS UTILIZING CONSERVATION DESIGN OPTIONS

Residential subdivisions proposed under Conservation Design Options 1 through 5 shall follow a four-step design process as described below. Applicants will be required to document the design process as required in SALDO Section 402.E and Section 403.E and as described below.

1. Step 1: Delineation of Greenway Lands and Development Areas

Greenway lands and development areas shall be delineated according to the following procedure:

- a. The minimum percentage and acreage of required greenway lands shall be calculated by the Applicant and submitted as part of the Sketch Plan or Preliminary Plan in accordance with the provisions of this Ordinance and of the Zoning Ordinance.
- b. Using the Existing Resources and Site Analysis Plan as a base map, Primary and Secondary Conservation Areas shall be delineated consistent with the Map of Primary Conservation Areas and other available information. Mapped Primary and Secondary Conservation Areas on the site should include all protected resources as defined in Section 201 of the Zoning Ordinance, whether or not specifically mapped on the Township Map of Primary Conservation Areas.
- c. Protected greenway lands shall include all Primary Conservation Areas as designated on the Primary Conservation Areas Map and those parts of the Secondary Conservation Areas with the highest resource significance. In determining those Secondary Conservation Areas to be included in the greenway land, the applicant shall prioritize natural and cultural resources on the tract in terms of their highest to lowest suitabilities for inclusion in the proposed greenway land, in consultation with the Planning Commission and in accordance with SALDO Sections 629.A and B ("Prioritized List of Resources to be Conserved" and "Other Design Considerations").
- d. Greenway land shall be delineated to meet at least the minimum area percentage requirements for greenway lands and in a manner clearly indicating greenway boundaries as well as the types of resources included within them. Location of the greenway land shall be determined as indicated in Sub-Section C, above.
- e. Development areas constitute the remaining lands of the tract outside of the designated greenway areas and protected constrained lands, where house sites, streets, and lots are to be delineated in accordance with Steps 2, 3, and 4 below.



2. Step 2: Location of House Sites

Potential house sites shall be tentatively located, using the proposed greenway lands as a base map as well as other relevant data on the Existing Resources and Site Analysis Plan. The house site locations in the tract's designated development areas shall be designed to fit the tract's natural topography; be served by adequate water and sewage facilities; and provide views of and access to adjoining greenway areas (without encroaching upon them in a manner visually intrusive to users of such areas). House sites shall be no closer than one hundred (100) feet from Primary Conservation Areas and fifty (50) feet from Secondary Conservation Areas.

3. Step 3: Alignment of Streets and Trails

- a. Once the house site locations have been identified, the applicant shall delineate a street system to provide a safe pattern of vehicular and pedestrian access to each house in a manner conforming to the tract's natural topography and providing for a safe pattern of circulation and ingress and egress to and from the tract. Proposed streets shall comply with the standards in Article VI, Design Standards.
- b. Streets shall avoid, or at least minimize, adverse impacts on the greenway areas. To the greatest extent practicable, wetland crossings and new streets or driveways traversing slopes of fifteen (15) percent or greater shall be avoided.
- c. Street connections shall generally be encouraged to minimize the number of new cul-de-sacs and to facilitate easy access to and from homes in different parts of the tract (and on adjoining parcels where applicable).
- d. A tentative network of trails shall also be shown, connecting streets with various natural and cultural features in the conserved greenway lands. Potential trail connections to adjacent parcels shall also be shown in areas where a Township trail network is envisioned.
- e. Preferred locations for the stormwater and wastewater management facilities shall be identified using the Existing Resources & Site Analysis Plan and proposed greenway lands as the base maps. Opportunities to use these facilities as an additional buffer between the proposed greenway lands and development areas are encouraged. These facilities should generally be designed to improve the quality of stormwater runoff and wastewater effluent with emphasis placed on achieving maximum groundwater recharge. The facilities should be located in areas identified as groundwater recharge areas as indicated on the Existing Resources & Site Analysis Plan. The design of the facilities should strive to use the natural capacity and features of the site to facilitate the management of stormwater and wastewater generated by the development.

4. Step 4: Design of Lot Lines

Lot lines for the subdivision should be drawn as the last step in the design procedure. They should follow the configuration of house sites and streets in a logical and flexible manner and be consistent with the applicable dimensional standards of Section 434 of the Zoning Ordinance.





**APPENDIX D**  
**LONGSWAMP TOWNSHIP**  
**APPLICATION FOR PREAPPLICATION MEETING/SITE INSPECTION**

Application is hereby submitted as a formal request for a Preapplication Meeting and/or Site Inspection in accordance with SALDO Section 306 and 307.

1. Request is for: Preapplication Meeting \_\_\_\_\_ Site Inspection \_\_\_\_\_ Both \_\_\_\_\_
2. Name of Subdivision/Land Development:  
\_\_\_\_\_
3. Applicant(s):  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_
4. Property Owner(s) (If other than applicant):  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_
5. Applicant's interest, if other than Owner: \_\_\_\_\_
6. Engineer or Surveyor responsible for Plan:  
 Name/Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax No.: \_\_\_\_\_  
 Contact Person: \_\_\_\_\_ Email: \_\_\_\_\_
7. Address/Location of Subdivision: \_\_\_\_\_  
\_\_\_\_\_
8. Acreage of tract: \_\_\_\_\_ Tax parcel/Pin I.D.: \_\_\_\_\_
9. Source of Title: County Deed Book No.: \_\_\_\_\_ Page No.: \_\_\_\_\_
10. Acreage of adjoining land in same ownership (different deed): \_\_\_\_\_
11. Zoning District: \_\_\_\_\_  
 Has zoning relief been requested: \_\_\_\_\_ Yes \_\_\_\_\_ No If "Yes", type of relief requested \_\_\_\_\_

\_\_\_\_\_  
 (Attach Zoning Hearing Board decision, if received)



12. Lot use proposed:  Single Family  Two Family  Townhouse  
 Multi-Family  Commercial  Industrial  
 Other (Please specify) \_\_\_\_\_

13. Type of Proposed Subdivision Design, if Residential:  Conventional  
 Conservation  
 Option One - Density Neutral  
 Option Two - Enhanced Density  
 Option Three - Country Properties  
 Option Four - Hamlet  
 Option Five - Village

14. Please state method of ownership and maintenance of Open Space/Greenway:  
\_\_\_\_\_

15. The following items are required to be submitted for this Application to be considered complete in accordance with SALDO Section 307 and for the Planning Commission to schedule the Site Inspection. Site Inspections shall be held no later than 45 days after the first regularly scheduled Planning Commission meeting after a complete Application is received by the Township.

- a. Submission of seven (7) copies of the completed Application for Site Inspection.
- b. Submission of seven (7) prints on paper (folded to 8-1/2" x 11") of the Existing Resources and Site Analysis Plan complying with the requirements of SALDO Section 402.D.
- c. Payment of Application Fee.

16. Names of Person(s) attending on behalf of the Applicant: \_\_\_\_\_  
\_\_\_\_\_

**I/WE, THE UNDERSIGNED, CERTIFY THAT I/WE AM/ARE THE OWNER(S) OF THE PROPERTY REFERENCED IN THIS APPLICATION AND GRANT PERMISSION TO THE TOWNSHIP AND ITS DESIGNATED REPRESENTATIVES TO ENTER THE PROPERTY TO CONDUCT A SITE INSPECTION FOR THE PURPOSES DESCRIBED IN SALDO SECTION 306.A.2.**

**I/WE ALSO UNDERSTAND THAT COMMENTS MADE BY REPRESENTATIVES OF THE TOWNSHIP OR OTHER ATTENDEES AT THIS MEETING SHALL NOT BE CONSIDERED OFFICIAL OR BINDING ON THE TOWNSHIP BOARD OF SUPERVISORS OR PLANNING COMMISSION BUT ARE MERELY FOR DISCUSSION PURPOSES.**

Date: \_\_\_\_\_ Signature of Applicant \_\_\_\_\_

FOR TOWNSHIP USE ONLY	
Date Received _____	Accepted by (initials) _____
Required Review Fee \$ _____	Check # _____
Application Deemed Complete by (initials) _____	Date: _____



**APPENDIX E**

**CERTIFICATION OF OWNERSHIP  
AND ACKNOWLEDGEMENT OF PLAN**

The following certification, in the wording shown, must be labeled and complete on the Final Subdivision Plan:

Commonwealth of Pennsylvania  
County of Berks

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_, before me, the undersigned officer, personally appeared \_\_\_\_\_, who being duly sworn according to law, deposes and says that he/she is the (1) \_\_\_\_\_ of the property shown on this plan, that the subdivision plan thereof was made at his/her direction.

(2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_

(5) \_\_\_\_\_ (6) \_\_\_\_\_

My Commission expires \_\_\_\_\_, 20 \_\_\_\_

- (1) Insert either: Owner  
Equitable Owner  
President of the (name of corporation) which is the owner
- (2) Where necessary, signature of secretary of corporation
- (3) Signature of individual, partners, or president of corporation
- (4) If necessary, corporate seal
- (5) Signature of notary public or other officer
- (6) Seal of notary public or other officer



## APPENDIX F

### PLAN PREPARER'S STATEMENT (MODEL FORMAT)

#### CERTIFICATION OF ACCURACY

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 Surveyor's Signature

(Seal)

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

\_\_\_\_\_  
Date

\_\_\_\_\_  
Plan Preparer's Signature

(Seal)





## APPENDIX G

### CERTIFICATE OF MUNICIPAL APPROVAL

The approval of the Final Plan by each municipality in which the subdivision is located must be indicated on the Record Plan, in substantially the following form:

On \_\_\_\_\_, 20 \_\_\_\_, the Board of Supervisors of the Township of Longswamp accepted and approved for recording the Final Subdivision/Land Development Plan of the property of (1) \_\_\_\_\_, as shown hereon.

(2) \_\_\_\_\_

\_\_\_\_\_

(3)

\_\_\_\_\_

- (1) Insert name of Property Owner
- (2) Signatures of the Township Supervisors
- (3) Municipal Seal

On \_\_\_\_\_, 20 \_\_\_\_, the Planning Commission of the Township of Longswamp voted to recommend approval to the Board of Supervisors of the Final Subdivision/Land Development Plan of the property of (1) \_\_\_\_\_ as shown hereon.

(2) \_\_\_\_\_

\_\_\_\_\_

- (1) Insert name of Property Owner
- (2) Signatures of the Planning Commission Chairman and Secretary



## APPENDIX H

### FORMAT FOR SUBMITTAL OF IMPROVEMENTS COST ESTIMATE

(ALL IMPROVEMENTS REQUIRED BY SECTION 504  
SHALL BE ITEMIZED AND QUANTITIES ESCROWED)

<u>Item No.</u>	<u>Description</u>	<u>Units</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
A.					
1.					
2.					
3.					
	Subtotal Item A				
B.					
1.					
2.					
3.					
	Subtotal Item B				
	Subtotal of Items A and B				
	Escalation				
	Contingencies				
	TOTAL AMOUNT OF ESCROW				

I hereby certify that the foregoing estimate of the cost of completion of the required improvements is a fair and reasonable estimate of such cost.

\_\_\_\_\_  
Professional Engineer

(Seal)



## APPENDIX I

### DETERMINATION OF FLOOD PLAINS

For all subdivisions and land developments, all existing and proposed 100-year flood plain areas shall be shown on the subdivision or land development plans. Flood plain areas shall be determined using the methods set forth below, except that where 100-year flood plains have been calculated and mapped by FEMA, such FEMA mapping shall be used.

#### A. Hydrologic Criteria for Estimating Runoff

The following methods may be used in computing runoff for the 100-year storm. A conservative average of at least two (2) methods shall be used, and the design flow is subject to approval by the Township.

1. The method in Technical Release No. 55, "Urban Hydrology for Small Watersheds," latest edition, by the United States Department of Agriculture Soil Conservation Service. The graphical method may be used for streams whose drainage area at the point of interest is no larger than 2,000 acres, and the tabular method may be used for drainage areas up to twenty (20) square miles.
2. The Rational Method can be used for streams whose drainage area at the point of interest is no larger than 320 acres.
3. The method in Water Resources Bulletin Number 13, Floods in Pennsylvania, issued by the Pennsylvania Department of Environmental Resources can be used for streams whose drainage area at the point of interest is larger than two (2) square miles.
4. The "Procedure PSU-IV for Estimating Design Flood Peaks on Ungauged Pennsylvania Watersheds."
5. The Penn State Runoff Model.

#### B. Hydraulics of Flow

The horizontal and vertical limits of the flood plain shall be determined utilizing the Standard Step Method (i.e., HEC-RAS or similar approved computer model). If the HEC-RAS model is used, the applicant shall submit a computer disc containing all input files for the calculations, in order to expedite the flood plain review. For drainage areas less than one hundred (100) acres, the Mannings Equation may be used.

All methods used and calculations performed in estimating runoff and computing flood elevations are subject to the review and approval of the Township.



## APPENDIX J

### ADDITIONAL IMPACT STATEMENTS

The Applicant of a subdivision or land development plan may be required to submit any of the following additional Impact Statements when the Township Supervisors deem such a study necessary in order to adequately review and determine the effect or impact of the proposed subdivision or land development on the Township. The Township shall determine during the Preliminary Plan review stage, or Final Plan review stage for a Minor Subdivision or Land Development, which, if any, additional Impact Studies will be required to be submitted.

Any additional Impact Statements required to be submitted shall be prepared in accordance with SALDO Section 404 - Impact Statements and as described below.

1. **Utilities Impact Study**

The study shall be prepared by a registered professional engineer and shall indicate the impact of the proposed development on the existing sanitary sewer, water, solid waste, and drainage systems serving the Township. The study shall identify the existing capacity of facilities which would serve the development, the prospects of those facilities being able to provide service to it, and any improvements that might be required as a direct result of the proposed development. Additionally, the study shall identify the likely ability of sanitary sewer, water, solid waste, and drainage systems to continue to provide efficient and economic service to existing residents and businesses within the Township considering the added service requirements of the proposed development.

2. **Environmental Impact Study**

The study shall include the following impacts:

- a. Habitats of Threatened and Endangered Species of Special Concern in Pennsylvania within the tract, as established by the Pennsylvania Biological Survey and/or Pennsylvania Natural Diversity Inventory, shall be identified and the impact on such resources detailed. If such habitats exist on the tract, the measures proposed to protect the habitats shall be indicated.
- b. The suitability of the site's soils, slopes, woodlands, wetlands, flood plains, aquifers, natural resources and other natural features for the intensity of the use proposed;
- c. The impact of the proposed use on the site's soils, slopes, woodlands, wetlands, flood plains, natural resources and natural features, the degree to which these are protected or destroyed, the tolerance of the resources to development and any adverse environmental impacts; and
- d. The impact of the proposal on the preservation of agriculture and other land uses which are essential to public health and welfare.





## APPENDIX K

### SUPPLEMENTAL DESIGN STANDARDS FOR OPTION 4 - HAMLETS AND OPTION 5 - VILLAGES

#### SECTION 100 - Purposes

- A. Conservation Design Option 4 and Option 5 are established to provide opportunities for creating compact housing developments of a traditional character in the form of hamlets and villages.
- B. In order to ensure that developments utilizing Conservation Design Options 4 and 5 will be compatible with historic village and hamlet building patterns in the rural parts of the County, and that such developments will reinforce the "sense of place" and neighborhood feeling experienced in traditional rural settlements, the standards herein are proposed to control the location, scale and physical character of such new development, as well as the manner in which they would fit into the existing pattern of fields, woodlands and developed areas.
- C. If a conflict occurs between the provisions of this Appendix and other provisions of this Ordinance, the former shall prevail.

#### SECTION 101 - Site Design and Building Location and Design

##### A. The Four-Step Site Design Process for Hamlets and Villages

- 1. The design process for laying out hamlets and villages shall be a variation on the four-step process for conservation subdivisions, as described in Appendix C of this Ordinance. In hamlets and villages, where traditional streetscapes and "terminal vistas" are of greater importance, Steps Two and Three are generally reversed, so that streets and squares are located during the second step, and house sites are located immediately thereafter. The first step is to identify greenway lands, including both Primary and Secondary Conservation Areas.

##### B. Standards in both Hamlets and Villages

- 1. All lots shall front onto a street or a green (except for flag lots, where permitted).
- 2. At least two-thirds of the buildings shall have pitched gabled roofs with roof pitches between 8/12 and 12/12, and the orientation of those gable ends shall be mixed, with some facing the street and others with the ridgeline parallel to the street.

##### C. Building Design Standards for the Mixed Use/Commercial Subdistrict

- 1. New commercial buildings may be either traditional in their architectural character, or be a contemporary expression of traditional styles and forms, respecting simply the scale, proportion and character of village shops. The massing of larger commercial buildings shall be softened in a variety of ways,



including the use of projecting and recessed sections, to reduce their apparent overall bulk and volume.

To harmonize with the traditional scale of commercial buildings in historic hamlets and villages, new commercial buildings shall not contain more than 10,000 sq. ft. (above grade), and those with more than 6,000 sq. ft. of floor space (above grade) shall be of two-story construction.

2. Buildings shall not be less than one and one-half stories in height, and at least half the buildings in any single development for commercial, mixed-use and institutional buildings shall be two stories in height, with respect to the average ground grade along the front building line.
3. Buildings shall generally be designed for multiple uses, with offices and/or residential units above, and shall generally have traditional sloping roofs with overhanging eaves. Desired roof materials include shingle (both wood and asphalt composition) and metal formed to resemble "standing seams." Roof color should be traditional (which encompasses a wide variety of hues, but which does not include white or tan composition shingles, or shiny unpainted metal). The use of dormers and gables is encouraged to provide visual interest.
4. Exterior wall materials may include stucco, wood clapboarding (including vinyl or aluminum imitation clapboard siding), native stone, or brick of a shape, color and texture very similar to that found in the historic villages and boroughs of the County. Specifically prohibited shall be brick that is white, tan, spray-painted, or used; except on rear walls, all forms of concrete block shall also be prohibited. In addition, concrete block and metal buildings shall also be excluded from this subdistrict.
5. Shopfront design shall be based upon historic examples in the area, with large display windows having low sills and high lintels. Traditional canvas awnings without interior illumination shall be encouraged, and all signs shall be of wood or metal, preferably with dark background colors and light-colored lettering.
6. Landscaping around commercial buildings and their parking lots shall emphasize native species trees, shrubs and flowers to reduce maintenance, help ensure longevity, and to reinforce the natural spirit of the area. Species should be selected partly on the basis of their visual interest at different times of the year (spring blossoms, summer foliage, autumnal berries, winter bark and foliage). Examples of appropriate shrub selections include viburnum, laurel, lilac, clethra (sweet pepperbush), winterberry, chokeberry, holly and red-osier dogwood. Interesting non-native shrub species that are recommended include: caryopteris (bluebeard), pyrocantha (firethorn), winged euonymus (burning bush), and spirea.

#### **D. Building Design Standards for Residential Areas**

1. Single-family homes on the smaller village-scale lots (especially those less than 8,000 sq. ft.) shall generally be designed so that approximately two-thirds are oriented with their gable-ends facing the street. At least 35% of the houses shall have a covered front entry porch, raised a minimum of eighteen inches above



ground level. When front porches are screened, they may be located within 10 feet of the front property line (those enclosed with windows shall observe the minimum 15-foot front setback).

2. Homes may be located at or within five feet of side lot lines if that side either has no windows, or window sills are at least 64 inches above the finished floor elevation. Such design allows houses to be located off-center on their lots, so that one side yard may be larger and therefore provide more usable outdoor space.
3. Residences housing more than one family shall be designed to emulate traditional buildings of this nature in historic settlements in the County, or shall be designed to resemble large single-family residences.
4. Stucco and painted wood clapboard siding shall be encouraged, as shall pitched roofs with slopes between 8/12 and 12/12. Housing styles, shapes and materials should be varied, within the overall theme of traditional village dwellings found in the rural parts of the County (which may also include contemporary interpretations of vernacular building forms).
5. If garages, carports or other accessory structures designed for accessory parking of automobiles in the Residential Areas are front-loaded (i.e., having their large entry door facing the street), they shall generally be set back at least 10 feet further (see also Section 434.8.e.(1) of the Zoning Ordinance) from the front property line than the foremost facade of the principal building facing the front property line (stoops, porticos, open colonnades and open porches excluded).
6. Off-street parking for multi-family residences shall generally be located at the rear of the lot, in garages accessed by lanes or alleys.

## **SECTION 102 - Streets and Streetscape Design**

### **A. Street Design**

1. New streets proposed to be created as a part of any development proposal shall be integrated closely with the Township's Official Map of existing and future streets. The Official Map shall show the realignment and redesign of certain intersections and road segments to facilitate traffic flow and improve safety.
2. Rectilinear street layouts are generally preferred, with occasional diagonal elements to enhance visual interest, although curvilinear layouts shall be acceptable when designed to interconnect and to produce terminal vistas of protected open space or prominent structures.
3. Streets shall be aligned so that their terminal vistas are of greens or other open space, or civic or institutional buildings, wherever possible (see Section 434.8.b.(3) of the Zoning Ordinance). Where this is not possible, every effort shall be made to terminate those streets with buildings of above-average size, whose architecture shall be encouraged to be special in one way or another.



4. Streets shall be interconnected as far as practicable (employing cul-de-sacs only where essential), and they may also be supplemented with back lanes or alleys. Where cul-de-sacs are deemed to be unavoidable, continuous pedestrian circulation shall be provided for by connecting sidewalks that link the end of the cul-de-sac with the next street (or open space).
5. To the greatest extent practicable, streets shall be designed to have maximum lengths of 600 feet between intersections, and maximum lengths of 1,200 feet before terminating at three-way "T" intersections or angling off in a diagonal direction. (This design approach helps to reduce traffic speed, making the development friendlier to pedestrians.) Blocks greater than 600 feet long shall generally be provided with cross-block pedestrian connections at mid-block locations.
6. Streets shall be laid out to promote pedestrian circulation and ease of access from all points in the Residential Areas to the Village Mixed Use/Commercial Area.
7. Easements shall be reserved to permit streets to be extended to allow adjoining properties to be connected in the future, if so desired.
8. Collector streets shall generally connect existing Township roads to central greens in each subdistrict.
9. The street width standards listed below take into account the need for on-street parking spaces, which generally increase as lot widths decrease.

**Table 1 - Street Design Standards for Hamlets and Villages**

	Total Lanes	Parking Lanes	Pavement Width	Shoulders	R.O.W
<b>Collector</b>					
No Parking	2	0	22' (24' curbed)	4' grassed	60'
Parking - 1 side	3	1	28' (30' curbed)	4' grassed	60'
Parking - 2 sides	4	2	34' (36' curbed)	4' grassed	60'
<b>Local / Cul-de-Sac</b>					
No Parking	2	0	20' (22' curbed)	4' grassed	44'
Parking - 1 side	3	1	24' (26' curbed)	4' grassed	44'
Parking - 2 sides	4	2	28' (30' curbed)	4' grassed	44'
<b>Alleys</b>	1	0	16'	2' grassed	33'
<b>Shared Driveway</b>	1	0	10'	3' grassed	N/A

**B. Street Trees**

1. The coordinated planting of deciduous shade trees within the right-of-way of all streets is a central unifying feature of development in villages.
2. Such trees shall be 2" to 2.5" in diameter, measured at chest height, when planted, and shall be spaced at intervals no greater than fifty feet along both sides of each street, including arterial roads, but not including rear access lanes or alleys.





3. Species shall be selected according to the following criteria:
  - a. cast moderate shade to dense shade in summer;
  - b. long-lived (over 60 years);
  - c. mature height of at least 50 feet;
  - d. be tolerant of pollution and direct or reflected heat;
  - e. require little maintenance, by being mechanically strong (not brittle) and insect-and disease-resistant;
  - f. be able to survive two years with no irrigation after establishment; and
  - g. be of native origin, provided they meet the above criteria.

Among the species that are recommended in this ordinance are sycamore or London Plane, sweet gum, red maple, green ash, Shademaster golden locust, littleleaf linden and Village Green Zelkova.

#### **C. Streetscape Standards**

1. Shade trees shall generally be planted in planting strips (sometimes called "tree lawns") at least four feet wide, located between the pavement or curb and the continuous sidewalk or footpath system (which shall also be required).
2. All village streets shall be provided with sidewalks, preferably of brick, stone or concrete paving block in commercial areas. Street lighting in villages shall utilize cast-iron posts that are decorative but not overly ornate and, in order to ensure consistency, the final decision on their style, height, color and brightness shall rest with Township officials.
3. Sidewalks shall be constructed in villages along at least one side of all streets on which on-street parking is provided, and in front of civic, institutional or community uses (however, they are not required in back lanes or alleys). They shall be constructed of brick pavers, rectangular flagstones, or concrete "paving bricks" or "flagstones." Exceptions may be made for sidewalks of poured concrete, but not for asphalt.
4. In village commercial areas and in neighborhoods where lot sizes are 15,000 square feet or less, on-street parking shall be provided in parking lanes parallel to curbs (which should also be required at such building densities, to channelize runoff and to protect the paved edge from damage by parked vehicles). Parking lanes shall be encouraged to be surfaced with alternative materials, textures or colors (such as asphalt with red-colored stone chips steamrolled in just after the asphalt is laid). Such on-street parking shall be supplemented, wherever necessary, by off-street parking areas that are screened from the street by landscaping and low fences or walls (vehicle "hood-height").



5. Buildings in the Village Mixed Use/Commercial Area shall generally be located close together with minimal side yard areas, in order to form a fairly continuous row of shop fronts.

### **SECTION 103 - Modifications**

- A. The Board of Supervisors may approve modifications of the provisions of this Appendix, in order to encourage a well-planned traditional town center. Applicants must demonstrate that such modifications would not substantially diminish the traditional character of the proposed development, and that they would be within the spirit of this Appendix.
- B. Any modifications shall be subject to the following criteria:
  1. The design and modifications shall be in harmony with the purposes and the land-use standards contained in this Appendix;
  2. The design and modifications shall generally enhance the development plan, the central core area, the streetscapes, and the neighborhoods, or at least not be any less desirable than the plan that could be created in conformance with this Appendix;
  3. The design and modifications shall not produce lots or street systems that would be impractical or detract from the appearance of the District, and shall not adversely affect emergency vehicle access or deprive adjoining noncommercial properties of adequate light and air.
  4. Increased residential density or intensification of nonresidential uses shall be offset by corresponding special efforts by the applicant to improve the appearance of the development through enhanced architectural and landscaping efforts.
  5. The applicant shall demonstrate that the proposed modifications will produce equal or better results, from the Township's perspective, and represent the minimum modification necessary.
- C. If the Board of Supervisors determines that the applicant has met his/her burden, it may grant a modification of the requirements of this Appendix. In granting modifications, the Board of Supervisors may impose such conditions as will, in its judgment, secure the objectives and purposes of this Appendix.

### **SECTION 104 - Illustrated Design Principles**

Illustrated design principles are provided in the publication "Growing Greener: Putting Conservation into Local Plans and Ordinances" (1999, Island Press). These illustrations provide additional guidance to applicants, designers, local officials, and interested residents, with respect to the intended ultimate visual appearance of hamlets and villages. If a conflict occurs between the text of this Ordinance and the information contained in the Illustrated Design Principles, the former shall prevail. These illustrations and their captions are not intended to be used as regulatory language but rather as guidelines.



Additional information regarding these design principles can be found in a publication entitled "Crossroads, Hamlet, Village, Town: Design Characteristics of Traditional Neighborhoods, Old and New" (American Planning Association, Planning Advisory Service Report Number 487/488, September 1999) by Randall Arendt, pages 43-94.



**APPENDIX L**  
**APPLICANT REVIEW FEE CERTIFICATION**

*(To Be Inserted)*

