EAST NANTMEAL TOWNSHIP

CHESTER COUNTY, PENNSYLVANIA

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

May 4, 2006

Prepared By:

East Nantmeal Township Board of Supervisors And East Nantmeal Township Planning Commission

With The Assistance Of:

The Grafton Association And LTL Consultants, Ltd.

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ARTICLE I

PREAMBLE AND LEGISLATIVE PURPOSE

SECTION 100 SHORT TITLE

These regulations shall be known as and may be cited as "The East Nantmeal Township Subdivision & Land Development Ordinance".

SECTION 101 PURPOSE

This Ordinance is adopted for the following purposes:

- A. To promote and protect the public health, safety, and welfare.
- B. To foster efficient, harmonious, integrated, and orderly development in the Township.
- C. To ensure conformance of subdivision and land development plans with the Township Comprehensive Plan and public improvement plans.
- D. To encourage preservation of adequate open space and provide conformance with the Township Open Space and Recreation Plan.
- E. To require that sites be suitable for the specified building or development purpose and be suitable for human habitation, and to guide development in keeping with the standards of quality existing in the Township.
- F. To coordinate proposed streets, parks, stormwater management, water supplies, sewage systems of a private nature to contribute positively to the Township's long-term plans.
- G. To maintain the economic well-being of the Township by preventing unnecessary water runoff, contamination or pollution of water supplies, creation of traffic hazards, and excessive impervious surface coverage.
- H. To ensure equitable treatment of all subdivision and land development plans by providing uniform procedures and standards.
- I. To ensure that the infrastructure and development is consistent with the

- relevant provisions of the Township Zoning Ordinance and capable to supporting the uses and densities therein authorized.
- J. To ensure that the infrastructure and development is consistent with the relevant provisions of the Township Zoning Ordinance and capable to supporting the uses and densities therein authorized.

SECTION 102 INTERPRETATION OF ORDINANCE PROVISIONS

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

SECTION 103 VALIDITY

Should any section or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this Ordinance as a whole or any other part thereof.

SECTION 104 COMPLIANCE REQUIRED

- A. No subdivision or land development of any lot shall be effected, and no street, drive, sanitary sewer, storm drain, water main or other facilities in connection therewith shall be laid out, constructed, opened or dedicated for public use or travel or for the common use of occupants of buildings abutting thereon, except in accordance with the provisions of this Ordinance and in strict accordance with all plans approved and any conditions attached thereto.
- B. Where, owing to special conditions, a literal enforcement of any of the requirements of this Ordinance would result in unnecessary hardship or where a requirement does not serve the purpose for which it was designed, the Board of Supervisors may make such reasonable exception thereto as will not be contrary to the public interest. See Section 803 for modification to strict interpretation of this Ordinance that may cause a hardship.

SECTION 105 REPEALS

All other ordinances and parts thereof inconsistent herewith, to the extent of such inconsistency, are herewith repealed. The prior East Nantmeal Township Subdivision and Land Development Ordinance of May 1, 1997 is repealed in total. All land development applications filed subsequent to the date of enactment of this new Ordinance shall follow the requirements of the new Ordinance. This Ordinance shall take effect five (5) days after the adoption of this Ordinance by the East Nantmeal Township Board of Supervisors.

ARTICLE II

DEFINITIONS

SECTION 200 GENERAL INTERPRETATIONS OF WORDS

All definitions in the Municipalities Planning Code are adopted by reference. Where a word or phrase has a generally accepted technical meaning in the applicable field that accepted definition shall apply. Unless otherwise expressly stated or the context clearly indicates another meaning, the following words and phrases shall be construed throughout this Ordinance so that:

- A. The present tense includes all other tenses; the singular includes the plural and the plural includes the singular; the masculine gender includes the feminine and neuter.
- B. The words "person" or "applicant" includes any individual, estate trust, fiduciary, partnership, firm, association, corporation or any other organization or entity, including the principle officers thereof or any other individual or entity acting directly or indirectly by, through or under any of the foregoing.
- C. The work "shall" is always mandatory and the word "may" is always permissive.
- D. The word "used" shall include the words "arranged", "designed", or "intended to be used".
- E. The word "structure" shall include the word "building" and where the context is appropriate the word "building" shall include the word "structure".
- F. The word "built" shall include the words "constructed", "erected", or "altered".
- G. The terms "such as", "including", and the like are intended to introduce matters which are illustrative of the meaning of the sentence, clause or phrase in which such terms appear without limiting or derogating from the general application of the sentence, clause or phrase in which such terms appear.
- H. The words "as amended" as applied to any statute, ordinance, code,

regulation, plan or map, include replacements, supplements or restatements thereof; and reference to a particular Article, Section or Subsection which inherently refers to other Articles, Sections or Subsections, includes all Articles, Sections and Subsections referred to.

- I. The word "Township" means East Nantmeal Township, Chester County, Pennsylvania; the term "Planning Commission" means the Planning Commission of East Nantmeal Township; the term "Board" means Board of Supervisors of East Nantmeal Township; and the term "Zoning Hearing Board" means the Zoning Hearing Board of East Nantmeal Township.
- J. Where a word appears in this Ordinance and also appears in the Pennsylvania Municipalities Planning Code, as amended, the definition or the implied definition based on its use in context within this Ordinance shall apply.
- K. When terms, phrases or words are not hereafter defined, they shall have the first mentioned relevant definition given in the most recent edition of Webster's unabridged Dictionary. If not found in the aforementioned dictionary their meaning shall have the ordinarily accepted meaning or such as the context may imply.
- L. Where any activity is regulated by any relevant act of the Commonwealth of Pennsylvania or the United States and specific definitions are set forth in such act, the definition set forth in the act shall apply, by way of but not limited to, the following examples: the Municipalities Planning Code, the Federal Floodplain Act, and the Clean Streams Act.

SECTION 201 SPECIFIC DEFINITIONS OF WORDS

In this Ordinance, words, terms and phrases shall have the following meanings:

ACCELERATED EROSION - The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur from natural processes alone.

ACT 247/MPC - The Pennsylvania Municipalities Planning Code of July 31, 1968, 53 PS 10101, et seq. (Act No. 247), as amended by Act 170 of 1988.

ALTERATION, STRUCTURAL - Any change in or addition to the supporting or structural members of a building or other structure such as the bearing walls,

partitions, columns, beams, or girders, or any change to adapt a structure to a different use.

APPLICATION FOR DEVELOPMENT - Every application, whether preliminary or final, which is required to be filed and approved prior to start of construction of development, including but not limited to an application, for the approval of a subdivision plan, or for the approval of a land development plan.

BASIN, DETENTION - A structure designed to retard surface runoff for a period of time sufficient to cause the deposition of sediment and to reduce the velocity and volume of surface flows leaving a site, thus preventing further erosion.

BASIN, RETENTION - A reservoir, formed from soil or other material, designed to permanently retain stormwater from a specified amount of stormwater runoff. Retention basins always contain water and may include man-made lakes and ponds.

BLOCK - A tract of land bounded by streets, or by a combination of streets and public lands, rights-of-way, waterways, or boundary lines of the Township.

BUFFER AREA - An area with natural ground-cover adjacent to a property boundary and which is landscaped and maintained as required by this Ordinance. (Also see East Nantmeal Zoning Ordinance, Article 12 and the applicable district regulations.)

BUILDING SETBACK LINE, FRONT YARD - The line, normally parallel to the public or private street right-of-way line, measured at a distance equal to the minimum depth of the required front yard. All yards adjacent to a public or private street right-of-way normally shall be considered front yards. However, in the case of an interior lot, such setback line shall coincide with the front lot line.

BUILDING SETBACK LINE, SIDE YARD - The line, normally parallel to the side lot line, measured at a distance equal to the minimum depth of a required side yard.

BUILDING SETBACK LINE, REAR YARD - The line, normally parallel to the rear lot line, measured at a distance equal to the required minimum depth of the rear yard.

CALIPER -The diameter of a tree trunk measured at a point four and one-half (4½) feet from the ground surface at the center of the base of the tree for all existing trees, also known as Diameter Breast Height (DBH); and at a point sic (6) inches from the ground surface at the center of the base of the tree for all

trees to be planted.

CARTWAY - The paved area of a public or private street, within which vehicles are permitted, including travel lanes, but not including shoulders, curbs, gutters, sidewalks or drainage swales.

CENTERLINE, CARTWAY - A line in the center of a street which is equidistant from and parallel to the cartway edge lines.

CLEAR CUTTING - The felling of all or the majority of the trees on a tract of land, or on any significant portion thereof, beyond those essential to permit the proposed development.

CLEAR SIGHT TRIANGLE - An area of unobstructed vision at the intersection of two (2) streets, or a street and a driveway defined by line of sight between points at given distances from the intersection of the street or street and driveway centerlines.

COMMERCIAL - A use of land or improvements thereto for the purpose of engaging in retail, wholesale or service activities for profit.

COMMON DRIVEWAY - A driveway shared by two (2) to three (3) lots or dwelling units with equal rights-of-access, common maintenance, a singular street access, Township approved construction, and appropriate easement width.

COMMON OPEN SPACE - A parcel or parcels of land or an area of water, or a combination of land and water within a land development or subdivision, designed and intended for the use and enjoyment of residents or occupants thereof, not including streets, off-street parking areas and areas set aside for public facilities.

COMPREHENSIVE PLAN - The East Nantmeal Township Comprehensive Plan, as may be amended from time to time, including maps, tables and text which constitute a policy guide for decisions regarding land use, circulation, community facilities and utilities within the Township.

CONSTRUCTION OPERATION OR ACTIVITY - The erection, repair, renovation, demolition, removal, rehabilitation or other work performed for, to, or with regard to any building or structure; including the excavation, filling and grading of lots in connection therewith or in preparation thereof

CONTINUOUS VISUAL BUFFER -A visually impenetrable screen created with

plant materials, fencing, walls and/or earthen berms.

COUNTY - Any reference to the "County" contained herein shall refer specifically to Chester County, Pennsylvania.

CRITICAL AREAS - Areas of subdivision or land development particularly subject to erosion and sedimentation, such as areas not covered with vegetation due to grading, cutting and filling, which contain exposed subsoil or mixtures of soil horizons, or excessively long slopes and steep grades.

DBH - The diameter of a tree at breast height, or 4½ feet above the ground.

DESIGN STANDARDS - Minimum standards in the layout by which a subdivision or land development is developed.

DESIGNATED OPEN SPACE - Areas, identified on an applicant's plan, which will be limited to open space use in perpetuity.

DEVELOPER - Any landowner, equitable owner or authorized agent of such landowner or tenant with permission of the landowner who formally proposes or makes, or causes to be made, a subdivision, land development or any other development.

DRAINAGE - The movement of water from an area by stream or sheet flow and removal of excess water from soil by downward flow.

DRIVE, INTERNAL ACCESS - A private driveway within a tract of land designed to serve multiple units or buildings, linking parking lots and individual driveways to adjacent streets.

DRIVEWAY - A private cartway located on private property providing vehicular access from such property to and from a public or private street, designed in accordance with the Township's Subdivision/Land Development Ordinance.

EASEMENT - The right to use or prevent use of another's land for a particular purpose.

ENGINEER, TOWNSHIP - A licensed professional engineer or engineering firm designated by the Township to perform the duties of engineer as herein specified.

ENVIRONMENT - The conditions, resources and/or characteristics which exist within and surround the area to be affected by a proposed subdivision and/or

land development including; natural elements such as land, water, air, minerals, natural flora and natural fauna; and man-made components such as objects of historic or aesthetic significance, infrastructure and man-related attributes of a social and economic nature.

FILL - Material, exclusive of structures, placed or deposited so as to form an embankment or raise the surface elevation of the land.

FOOTCANDLE - A unit of light quantity or density when one foot is the unit of measure. One footcandle equals one lumen per square foot of area.

FULL CUTOFF - An industry recognized IESNA designation use by the lighting industry to describe a lighting fixture from which no light output is emitted at or above a horizontal plane drawn through the bottom of the fixture and no more than ten percent (10%) of the lamp's light intensity is emitted at an angle ten (10) degrees below that horizontal plane at all lateral angles around the fixture. Implicit in the definition is a fixture that is aimed straight down and has a flat lens.

GLARE - Brightness in the field of view that is sufficiently greater than the amount of light to which the eye is adapted, to cause annoyance, discomfort or loss of visual performance and visibility.

GLARE, DISABLING - Brightness in the field of view that impairs visibility and creates a potential hazard to the health, safety and welfare of the community.

GLARE, NUISANCE - Brightness in the field of view that creates an annoyance or aggravation but does not create a potentially hazardous situation.

HOMEOWNERS ASSOCIATION - A non-profit organization 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.

IESNA - Illuminating Engineering Society of North America.

IMPROVEMENTS - Physical additions and changes to land such as grading, paving, streets, curbing, fire hydrants, water mains, sanitary sewers, capped sewers, storm sewers, storm drains, catch basins, culverts, sidewalks, monuments, crosswalks, bridges, earthworks, street lights, street trees and other plantings and other structures that may be necessary to produce usable and desirable land development.

I AND DEVELOPMENT:

- A. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:
 - A group of two or more residential or non-residential buildings, whether proposed initially or cumulatively, or
 - 2. A single non-residential building on a lot or lots regardless of the number of occupants or tenure; or
 - The division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
- B. Development in accordance with Section 503(1.1) of the MPC.

LAND DEVELOPMENT PLAN - A sketch, preliminary, or final plan which complies with the requirements of the Township's Subdivision and Land Development Ordinance (see also, Subdivision Plan and Development, Land).

LANDOWNER - The legal or beneficial owner or owners of land; the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition or a lessee if he is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in the land.

LOT - A designated parcel, tract or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.

LOT, INTERIOR - A lot which has limited frontage on a public street and has access to a public street by a relatively thin strip of land; a "flag-shaped" lot or a lot which has access to a street only by way of an easement or right-of-way, such as a shared driveway, and does not front on a public street.

LOT, REVERSE FRONTAGE - A lot extending between and having frontage on two generally parallel streets with vehicular access limited to one street.

LUMEN - A unit used to express the light output of a lamp or fixture. The number of lumens striking a square foot of area determines the footcandle level (lumens per square foot).

LUMINAIRE - A complete lighting unit consisting of a lamp(s) together with the parts required to distribute the light, position and protect the lamp(s) and to connect the lamp to the power supply. The term may be used synonymously with the term "fixture".

MITIGATION - The act of precluding a potentially adverse effect and/or making a potentially adverse effect less severe through measures which will improve a condition and/or lessen the impact.

OPEN SPACE - Open space shall be those areas within a development dedicated to the use and enjoyment of the residents thereof or to the public generally. The common open space shall include, but is not limited to, those areas dedicated to water and sewage treatment facilities, parks and recreation areas, active or passive, sedimentation and erosion control facilities, common parking areas and like amenities, but shall exclude from the definition sewer lines, water lines and electrical easements not otherwise used for the purpose herein described, and shall exclude roads and sidewalks and required yard distances and spaces between structure perimeter setbacks.

OPERATOR, MOBILE HOME PARK - The owner of the park or his agent or assign. In all events the owner of the mobile home park shall bear the responsibility for compliance with all regulations governing the operation of the mobile home park.

PA DEP - The Pennsylvania Department of Environmental Protection.

PA PUC - The Pennsylvania Public Utility Commission.

PENN DOT - The Pennsylvania Department of Transportation.

PHASE - An area or tract which is part of a proposed development which will be constructed according to a timetable for development over a period of years included by the applicant in the development plan.

PLAN, AS BUILT - A corrected final plan, showing dimensions and locations of all streets and other improvements as actually constructed.

PLAN, CONSERVATION - A plan to accompany preliminary and final plan submissions detailing stream channels, tree masses, and other natural features, and measures to protect the same and control erosion and sedimentation during construction.

PLAN, IMPROVEMENT CONSTRUCTION - A plan prepared by an engineer,

registered in the State, showing the construction details of streets, drains, sewers, water supply systems, bridges, culverts, and other improvements as required by these regulations, and including a horizontal plan, profiles, and cross-sections.

PLAN, PROFILE - A plan prepared by an engineer, land planner, landscape architect or surveyor, showing the vertical section of the existing grade and proposed grade along the center line of any proposed street, and any street appurtenances to be constructed or installed, which must include a typical cross-section of the Street construction; part of the required submission for an Improvement Construction Plan.

PLAN, FINAL - A complete and exact subdivision plan, prepared for official recording as required by statute, to define property rights and proposed streets and other improvements.

PLAN, PRELIMINARY - A tentative subdivision plan, in lesser detail than the final plan, showing approximate street, utility easements and lot layout on a topographic map as a basis for consideration prior to preparation of a final plan.

PLAN, SKETCH - A plan submitted for review and discussion prior to application for preliminary plan approval not necessarily to exact scale, indicating location of stream channels, tree masses, and other natural features and a general layout of the proposed subdivision or land development. (See Section 303.A)

PUBLIC - Owned and maintained through a governmental body whether municipal, county, state, or federal.

RECORDED - Properly recorded at the Office of the Chester County Recorder of Deeds.

RESUBDIVISION - A change in the map of an approved or recorded subdivision plan if such change affects any street layout on such map or area reserved thereon for public use, or any lot line; or if it affects any map or plan legally recorded prior to the adoption of any regulations controlling subdivisions. Any re-subdivision, other than a minor lot line adjustment, will constitute a new subdivision.

RESERVE STRIP - A parcel of ground in separate (sometimes public) ownership separating a street from other adjacent properties, or from another street.

RIGHT-OF-WAY - Any street, avenue, boulevard, highway, sidewalk, alley or similar place which is owned by a governmental entity and/or the general public, and may include an area beyond the paved or finished surface portion thereof. In the case of a private street, there shall be a deemed right-of-way equivalent to a public street or equivalent cartway width.

SEDIMENT - Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by water.

SELECTIVE CUTTING - The felling of certain, but not all, trees in an area for the purposes of: removing dead, diseased, damaged, mature or marketable timber; improving the quality of a tree stand or species; or meeting personal domestic needs.

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, as defined by applicable Penn DOT regulations.

SITE RESTORATION - Measures taken following completion of land disturbance activities which will stabilize the land surface and minimize exposure to possible erosion or sedimentation.

SOIL MOTTLING - A soil irregularly marked with spots or patches of different colors, usually indicating poor aeration or lack of good drainage.

SOIL PERCOLATION TEST - A field test conducted to determine the suitability of the soil for on-site sanitary sewage disposal facilities by measuring the absorptive capacity of the soil at a given location and depth.

STATUTORY REVIEW PERIOD - The length of time, cited in State MPC (Act 170, as amended) required for the municipal review of the preliminary and final plans for subdivision and land development.

STREET - A strip of land, including the entire right-of-way intended for use as a means of vehicular and pedestrian access. The word "street" includes avenue, boulevard, thoroughfare, road, highway, alley, land and other ways used or intended to be used by vehicular traffic or pedestrians, whether public or private.

STREET CENTERLINE - A line that is an equal distance from both street lines.

STREET LINE - The legal right-of-way line of a street dividing the legal limit of a public street from a lot, or in the case of a private street, the line dividing a lot

from a private street. When a future right-of-way line has been established, the street line shall be the line of such future right-of-way.

STREET, PARTIAL - A thoroughfare proposed to be connected to a future thoroughfare, whether that future thoroughfare is within the development and proposed for a future phase or external to the development and not controlled by the development plans.

STREET, PRIVATE - A thoroughfare serving two or more lots held in single and separate ownership and not dedicated or deeded to the Township.

STREET, PUBLIC - A public thoroughfare that has been dedicated to the Township and provides the principal means of access to the abutting property.

STREET, RIGHT-OF-WAY LINE - The line dividing a lot from the full street right-of-way, not just the cartway. The word "Street" shall include the words road, highway, thoroughfare and, where applicable, the word alley.

STREET TYPES -

- A. Arterial Street A street which serves high volumes of traffic at relatively high rates of speed, including controlled access bypasses and highways serving the region.
- B. Collector Street A street which serves as access between residential areas and village centers within the Township and provides access to the arterial street network.
- C. Local Street A street which solely serves abutting properties and provides access to the collector street network.
- Cul-De-Sac Street A local access street intersecting another street at one end and terminating at the other end by a permanent vehicular turnaround.
- E. Marginal Access Street A minor local access street, parallel and adjacent to an arterial street, but separated from it by a reserve strip. The marginal access street provides access to abutting properties and control of intersections with arterial streets.

SUBDIVISION, MAJOR - Any subdivision of land into five (5) or more lots and/or requiring the installation of public improvements.

SUBDIVISION, MINOR - A subdivision in which only a lot line adjustment and no development is proposed; or a subdivision in which no more than four (4) lots are proposed; and no public improvement to be dedicated to the Township is proposed; and no street is to be constructed, improved or widened; and no land disturbance is proposed except that incidental to construction of a single-family dwelling and/or structures accessory thereto on a single lot; and no further subdivision of any proposed lot is proposed and any additional land is deed restricted from further subdivision and/or development.

SUBDIVISION PLAN - A sketch, preliminary or final plan that is submitted in compliance with the Township Subdivision and Land Development Ordinance. (See also, Land Development Plan.)

SURFACE RUNOFF - That part of the precipitation that passes over the surface of the soil to the nearest surface stream without first passing beneath the surface.

SURVEY, MARKER - A metal pipe or pin of at least one (1) inch diameter and at least twenty-four (24) inches in length, said marker to be driven into the ground in a vertical position.

SURVEY, MONUMENT - A stone or concrete marker with a flat top of at least four (4) inches in diameter or side with a length of at least twenty-four (24) inches and a base the same shape as its top, but two (2) inches larger in dimension to minimize movement caused by frost. The preferred length is thirty (30) inches to thirty-six (36) inches.

SURVEYOR - A licensed surveyor registered with the State.

TRACT - One (1) or more lots assembled for the purpose of development.

TRAIL - A right-of-way containing a marker or beaten path, paved or unpaved, for pedestrians, equestrian and/or bicycle use.

TREE MASS - Areas, groves, or stands of mature trees (i.e., greater than six (6) inches caliper, at a height of four and one-half (4.5) feet from the ground, covering an area greater than one-fourth (1/4) acre; or consisting of more than ten (10) individual trees.

WATERCOURSE - A stream with year-round or substantially year-round flow such as a creek, run or other body of running water, whether natural or manmade.

WATER SUPPLY:

- A. Individual A safe and healthful supply of water, to a single user from a private well located on the lot in which the use is located.
- B. Community A system for supplying potable water from a common source or sources to all dwellings and other buildings within a development. The water supply source may be located on-site and/or off-site and may be publicly or privately owned.
- C. Public A system for supplying potable water in sufficient quantities to all dwellings or other buildings of a development, which is administered by a municipality, municipal authority or public utility as defined and regulated by the PA PUC.

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

WATER AND WATER SYSTEM, PUBLIC - Water supplied through a system owned and/or operated by the Township, a municipality, a municipal authority or a public utility company.

WOODLAND AND FOREST - Those areas of extensive vegetation in which the dominant plants are healthy trees that are indigenous to the area.

ARTICLE III

PLAN PROCESSING PROCEDURES

SECTION 300 GENERAL

Hereafter, all preliminary and final subdivision plans or land development plans shall be referred to and reviewed by the Township Planning Commission and the County Planning Commission. The Township Planning Commission shall make a written recommendation for approval, or denial, or waiver of certain specific elements of such plans to the Board of Supervisors. Said plans shall be approved or disapproved by the Board of Supervisors in accordance with the procedures specified in this Article and other sections of this Ordinance. Any approval not processed as required hereafter shall be null and void unless such approval predated adoption of this Ordinance.

SECTION 301 CLASSIFICATION OF PLANS

All subdivision applications shall be classified for the purpose of procedure, as either minor or major. Applicants shall apply for and secure approval in accordance with the following requirements.

A. Minor Subdivision

- To be classified a minor subdivision the subdivision shall meet either the requirements of Section 301.A.1.a or all of Section 301.A.1.b below.
 - a. Contain only lot line adjustments where no development is proposed.
 - b. Contain no more than four (4) proposed lots.
 - Have no public improvement intended to be dedicated to the Township.
 - (2) Propose no street, public or private, which is proposed to be constructed, improved, or widened.
 - (3) Contain no land disturbance except that incidental to construction of a single-family residence and

structures accessory thereto on a single lot.

(4) No further subdivision of any proposed lots is proposed and any additional land is to be deed restricted from further subdivision and/or development if approved as a minor subdivision.

Procedure

- a. A minor subdivision may optionally contain a sketch plan.
- b. A minor subdivision shall require a final plan.
- B. Major Subdivision or Land Development
 - 1. A major subdivision shall be any subdivision not classified a minor subdivision.
 - 2. A land development shall be:
 - a. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:
 - A group of two or more residential or non-residential buildings, whether proposed initially or cumulatively; or
 - (2) A single non-residential building on a lot or lots regardless of the number of occupants or tenure; or
 - (3) The division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
 - Development in accordance with Section 503(1.1) of the MPC.

3. Procedure

a. A major subdivision or land development proposal may

- optionally commence with a sketch plan.
- b. A major subdivision or land development proposal shall commence with a preliminary plan.
- c. A major subdivision or land development proposal shall conclude with a final plan.

SECTION 302 PLAN PROCESSING PROCEDURES

A. Sketch Plan Submission and Review

1. Submission

- a. All applicants for subdivision or land development are encouraged to submit a sketch plan to the Township Planning Commission for review prior to submission of a formal application. Submission of a sketch plan does not constitute an official application for subdivision or land development.
- b. When the applicant requests a formal sketch plan review, the applicant shall submit ten (10) copies of the sketch plan to the Planning Commission.
- No application or fee is required for submission of a sketch plan however an escrow to cover appropriate reviews may be required.
- d. All applicants submitting a sketch plan shall submit enough detail to cover the relevant issues, as they relate to Section 303.D, that may be raised by the Planning Commission.
- e. All applications for waivers shall be accompanied by a sketch plan.

2. Review

a. The Planning Commission shall consider the sketch plan at a regularly scheduled meeting and the applicant or designated representative must be present to provide informal but knowledgeable dialogue with the Planning

Commission.

b. The Planning Commission shall consider the suitability of the sketch plan for the development of the land and its relationship to the extension of streets, access points, arrangement and density or proposed use, along with the compatibility of the proposal with the objectives and recommendations of the Township Comprehensive and Open Space and Recreation Plans and its consistency with the Township Zoning Ordinance.

B. Preliminary Plan Submission and Review

Submission

- a. All preliminary plans submitted pursuant to this Ordinance shall conform to the requirements of Section 303.B.
- b. All preliminary plan applications shall be submitted to the Township Secretary at least five (5) days prior to the Board of Supervisors regular meeting. The Township Secretary shall determine whether the submission is complete and inform the applicant of either a complete submission or give a list of items missing.
- c. The applicant or his representative will be placed on the agenda for the Board of Supervisors next regularly scheduled meeting when the submission is complete.
- d. The applicant or his representative shall formally submit the plan to the Board of Supervisors at their regularly scheduled meeting and pay the required fees.
- e. The ninety (90) day review period will begin on the date the supervisors accept the plan at a regularly scheduled meeting. Whenever the next regularly scheduled meeting of the Board occurs more than thirty (30) days following the filing of a complete and official submission, the said ninety (90) day review period shall be measured from the thirtieth (30th) day following the day the application if filed. An extension to the ninety (90) day review period shall occur only when agreed to in writing by the applicant.

f. The applicant, or designated representative, shall be present when the plan is submitted. The applicant shall affirm in writing any designated representative.

2. Planning Commission Review

- a. The Township Planning Commission shall review all plans referred to it and shall consider any recommendations made by a county agency, the Township Engineer, and any other persons or agencies who shall have submitted comments with respect to any such application.
- b. After such review, the Planning Commission Secretary or the Commission representative shall send a written recommendation from the Commission and the reasons therefore, citing specific sections of the ordinance relied upon, to the Board of Supervisors.

Board of Supervisors Review

- a. When a preliminary plan has been officially submitted to the Board of Supervisors by the Planning Commission, such plan shall be placed on the Board's agenda for review at its next scheduled meeting.
- b. In acting on the preliminary subdivision or land development plan, the Board of Supervisors shall review the plan and the written comments of the Township Planning commission, Township Engineer, County Planning Commission, Chester County Health Department, and all other reviewing agencies, to determine conformity of the application to the standards of this and any other applicable ordinance. The Board may specify conditions, changes, modifications, or additions to the application which the Board deems necessary and may make a decision to grant preliminary approval subject to such conditions, changes, modifications, or additions, citing appropriate ordinance provisions.
- c. The Board of Supervisors shall designate a copy of the preliminary plan as the official copy. This copy shall include all necessary corrections as required by the Board and shall be retained in the Township files.

- d. The decision of the Board of Supervisors 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 applicable requirements of the Municipalities Planning Code (MPC), Section 508.
- e. Whenever the recommendation for extension of a preliminary plan is subject to conditions, the written action of the Board of Supervisors 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 concurrence is not received within the time allotted, the Board shall be deemed to have denied their approval.

C. Final Plan Submission and Review

1. Submission

- a. All final plans submitted pursuant to this Ordinance shall conform to the requirements of Section 303.C.
- b. All final plan applications shall be submitted to the Township Secretary at least five (5) days prior to the Board of Supervisors regular meeting. The Township Secretary shall determine whether the submission is complete and inform the applicant of either a complete submission or give a list of items missing.
- c. The applicant or his representative will be placed on the agenda for the Board of Supervisors next regularly scheduled meeting when the submission is complete.
- d. The applicant or his representative shall formally submit the plan to the Board of Supervisors at their regularly scheduled meeting and pay the required fees.
- e. The ninety (90) day review period will begin on the date the

Board of Supervisors accept the plan at a regularly scheduled meeting. Whenever the next regularly scheduled meeting of the Board of Supervisors occurs more than thirty (30) days following the filing of a complete and official submission, the said ninety day review period shall be measured from the thirtieth (30th) day following the day the application is filed. An extension to the ninety (90) day review period shall occur only when agreed to in writing by the applicant.

- f. The applicant, or designated representative, shall be present when the plan is submitted. The applicant shall affirm in writing any designated representative.
- g. The final plan shall conform to the terms of approval of the preliminary plan.
- h. The Board of Supervisors may permit submission of the final plan in sections each covering a reasonable portion of the entire proposed subdivision or land development as shown on the approved preliminary plan, but in no case shall include less than twenty percent (20%) of the total lots or units as depicted on the approved preliminary plan.
- i. All final plan applications, along with the material listed below, shall be submitted to the township Secretary prior to the next regularly scheduled meeting of the Board of Supervisors. The Township Secretary shall determine whether the applicant presents a complete submission. However, the official submission date shall not be established until the Board of Supervisors confirms a complete submittal at its next scheduled meeting.
 - (1) The required number of prints of the final plan;
 - (2) Copies of all permits and regulatory actions issued by state and other governmental agencies and public utility agencies necessary to support the infrastructure aspects of the plan.
 - (3) The required number of copies of all required supporting information and plans; and

- (4) Payment of required application fees and escrow deposits as determined by resolution of the Board of Supervisors.
- j. The Township Secretary shall note the date of the receipt of the application, fees and any escrow deposits. The application shall not be deemed to be submitted until a complete application and required fees have been submitted.
- k. Upon receipt of all items comprising a complete and official submission, the township Secretary shall accept the application and transmit such applications according to the requirements of Township, and county, state, and federal agencies involved.
- I. Where the final plan is for minor subdivision, the Township Secretary shall forward copies of the plan to the Township Planning Commission, the Chester County Health Department, the County Planning Commission, the Township Engineer and the Township Planner.

Review

- a. Official Review Period
 - (1) The Township shall have ninety (90) days in which to review and take action on the final plan.
 - (2) The ninety (90) day period shall commence on the date of the next regularly scheduled Board of Supervisors meeting following the date a complete and official submission of a final plan application was filed with the Township Secretary.
 - (3) Whenever the next regularly scheduled meeting of the Board of Supervisors occurs more than thirty (30) days following the filing of a complete and official submission, the said ninety (90) day review period shall be measured from the thirtieth (30th) day following the day the application is filed.
 - (4) An extension to the ninety (90) day review period

shall occur only when agreed to in writing by the applicant or his authorized representative.

b. Planning Commission Review

- (1) The Township Planning Commission shall review the final plan referred to it and shall consider any recommendations made by a county agency, the Township engineer, and any other persons or agencies who shall have submitted comments with respect to any such application.
- (2) After such review, the Planning Commission shall send written notice of the recommendation of the Planning Commission and the reasons therefor citing specific sections of the Ordinance relied upon, to the Board of Supervisors.

c. Board of Supervisors Review

- (1) The decision of the Board of Supervisors 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 applicable requirements of the MPC, Section 508.
- (2) When the application is not approved in terms as filed, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite the provisions of the ordinance relied upon.
- d. Every major final plan approval shall be subject to the following conditions:
 - (1) The applicant shall execute a subdivision or land development agreement in accordance with Section 302.F, agreeing with the Township to install all the improvements as required by this Ordinance and all regulations adopted pursuant thereto.
 - (2) The applicant shall provide a performance

guarantee in accordance with Section 302.G.

- (3)The applicant agrees, if requested, to tender a deed of dedication to the Township for any and all easements for sanitary sewers, water lines, or storm sewers, and public improvements including water mains, any fire hydrants, sanitary and storm sewers, as are required for promotion of public health, safety and welfare, after all said improvements are completed and such completion is certified as satisfactory by the Township Engineer. The Board of Supervisors may require that the applicant supply a title insurance certificate or title report, indicating such dedication is free from all encumbrances, from a reputable title insurance company licensed in the State of Pennsylvania before any property is accepted by the Township.
- (4) Whenever the applicant is providing open space as part of the subdivision or land development, an agreement restricting, in perpetuity, such open space against further subdivision or development shall be executed between the applicant and the township, or an organization acceptable to the Township, and shall run to the benefit of the Township and lot purchasers in the subdivision or land development.
- (5) The applicant shall have applied for, and where feasible received, all required permits from agencies having jurisdiction over ancillary development, such as Penn DOT, PADEP, PA PUC, and the Chester County Health Department.
- (6) Changes in this or other Township ordinances shall affect subdivision and land development plans as prescribed in Section 508(D) of the MPC.
- (7) Before acting upon any subdivision or land development plan, the Board of Supervisors may hold a public hearing thereon pursuant to public notice.

- (8) No plan which will require access onto a road under the jurisdiction of Penn DOT shall be finally approved unless the plan contains a notice that a highway occupancy permit is required pursuant to Section 420 of Act 428, known as the "State Highway Law", before access to a State road is permitted.
- (e) Minor final plan approvals shall be subject to the provisions of paragraphs 5 and 8 of Section 302.C.2.d, above.

D. Recording of the Final Plan

The applicant shall provide to the Township Secretary proof of recording of the plan and any imposed covenants, deed restrictions, easements or other encumbrances within the required time. The applicant shall, within ten (10) business days of approval of the final plan, return to the Township two (2) copies of the recorded plan, appropriately signed and stamped by the Chester County Recorder of Deeds.

E. Resubdivision Procedure

Any resubdivision, as defined herein, shall be considered a new subdivision and shall be processed in accordance with the procedures of this Section 302. Resubdivisions for minor lot line adjustments shall be processed as a minor subdivision.

F. Subdivision and Land Development Improvements Agreement

The applicant shall execute an agreement, to be approved by the Township, pending the review of the Township Engineer and Township Solicitor, before the final plan is released by the Board of Supervisors and filed on record. The agreement shall specify, among other things, the following where applicable:

1. The applicant agrees that he will layout and construct all streets and other public improvements, including grading, paving, sidewalks, fire hydrants, water mains, street signs, shade trees, storm and sanitary sewers, landscaping, traffic control devices, open space areas, and erosion and sediment control measures in accordance with the final plan as approved, where any or all of these improvements are required as conditions of approval.

- 2. The applicant guarantees completion and maintenance of all improvements by means of a type of financial security acceptable to the Township, as specified in Section 302.G.2 of this Ordinance.
- 3. Should the Township request, the applicant shall agree to have prepared, and will tender to the Township or other entities, a deed(s) of dedication for easements for sanitary sewers, sidewalks, and other public improvements as may be required, provided that the Township shall not accept dedication of such improvements until their completion is certified as satisfactory by the Township Engineer.

G. Performance Guarantees

- The applicant shall deposit with the Township, financial security in an amount sufficient to cover the cost of all improvements, both public and private, and common amenities, including but not limited to streets, walkways, shade trees, stormwater detention and/or retention facilities, recreational facilities, open space improvements, buffer or screen plantings, and water mains and other water supply facilities, fire hydrants, and sanitary sewage disposal facilities.
- 2. When requested by the applicant, in order to facilitate financing, the Board of Supervisors shall furnish a signed copy of the resolution indicating approval of the final plan contingent upon the applicant obtaining a satisfactory financial security. The final plan or record plan shall not be signed nor recorded until the financial improvements agreement is executed. The resolution of the Board 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 Board; such extension shall not be unreasonably withheld and shall be placed in writing at the request of the developer. (See Section 107.B)
- 3. Financial security required herein shall be in the form of a Federal or Commonwealth chartered lending institution irrevocable letter of credit, a restrictive or escrow account in such institution or with a financially responsible bonding company, or such other type of financial security which the Township may, in its reasonable discretion, approve. The bonding company may be chosen by the

party posting the financial security, provided that said bonding company or lending institution is authorized to conduct business within the Commonwealth and stipulates that it shall submit to Pennsylvania jurisdiction and Chester County venue in the event of legal action.

- 4. The said financial security shall provide for, and secure to the public, the completion of all subdivision or land development improvements for which such security is being posted within one (1) year of the date fixed in the subdivision plan and subdivision agreement for completion of such improvements.
- 5. The amount of financial security shall be equal to one-hundred ten percent (110%) of the cost of completion of the required improvements such cost estimated as of ninety (90) days following the date scheduled for completion by the developer. The Township may annually adjust the amount of financial security by comparing the actual cost of the improvements as of the expiration of the ninetieth (90th) day after either the original date scheduled for completion or a rescheduled date of completion. 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 and ten percent (110%). Any additional security shall be posted by the developer in accordance with this Section 302.G.

The cost of the improvements shall be established by:

- Submission to the Board of Supervisors of a bona fide bid(s) from the contractor(s) chosen by the party posting the financial security to complete the improvements; or
- b. In the absence of such bona fide bids(s) from the contractor(s), the costs shall be established by estimate prepared by the applicant's engineer and agreed to by the Township Engineer, at the sole expense of the applicant.
- 6. 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 shall be increased by an additional ten (10%) percent for each one (1) year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one -

hundred and ten (110%) percent of the cost of completing the required improvements as established on or about the expiration of the preceding one (1) year period by using the above bidding procedure.

- 7. In the case where development is projected over a period of years, the Board of Supervisors may authorize submission of final plans by section or stage of development, subject to such requirements or guarantees as to improvements in the future sections or stages of development as it finds essential for the protection of any finally approved section of the development.
- 8. As the installation of the required improvements proceeds, the party posting the financial security may request the Board of Supervisors to release or authorize to be released, from time to time, such portions of the financial security necessary for payment to the contractor(s) performing the work. Any such requests shall be in writing addressed to the Board of Supervisors of East Nantmeal Township, and the Board shall have forty-five (45) days from receipt of such request within which to allow the Township Engineer to certify in writing, that such portion of the work on the improvements has been completed in accordance with the approved plans. Upon receipt of such certification, the Board 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. The Township Engineer, in certifying the completeness of the work for a partial release, shall not be bound to the amount requested by the applicant, but shall certify to the Board of Supervisors his independent evaluation of the proper amount of partial release. The Board of Supervisors may, prior to final release at the time of completion and certification by the township engineer, require retention of ten (10%) percent of the estimated cost of the aforesaid improvements.

H. Commencement of Development

1. No construction or land disturbance activities, with the exception of soil percolation testing, well drillings, or similar engineering or surveying activities shall be commenced until the applicant submits to the Township Secretary, a copy of the Recorder of Deed's receipt for recording of the final plan.

- 2. No application for a building permit under the Township Zoning Ordinance shall be submitted and no building permit shall be issued for any building in any subdivision or land development until the final plans for said subdivision or land development have been approved and recorded as provided for and until the terms of Section 302.H.1 have been satisfied. Further, where final subdivision or land development approval has been conditioned upon the submission and approval of individual lot grading plans for some or all lots, no building permit shall be issued for construction on any such lot(s) until this condition has been complied with.
- 3. No water system or sewer system, including extensions to existing or proposed Township systems or new systems employing sewage treatment plants, shall be constructed prior to the issuance of appropriate permits from DEP or from federal, state, or local approving local agencies, as required.

Plan Amendments

Major modification of the approved plan, as determined by the Township, shall be resubmitted and reprocessed in the same manner as the original plan. All land disturbance activities inconsistent with the approved plan shall cease pending approval of the modified plan.

SECTION 303 PLAN CONTENTS

A. Sketch Plan

Although a sketch plan is not required, applicants are strongly encouraged to submit a sketch plan, consistent with the Growing Greener concepts, for Planning Commission review. To facilitate the fullest possible response from the Planning Commission, the applicant should submit the following:

- Name and address of the owner/applicant;
- 2. Name and address of the applicant's engineer, surveyor, planner, architect, or landscape architect if used;
- 3. Written graphic scale used, the plan need not be to an exact

scale, nor are precise dimensions required, so long as the plan fairly represents the land and features to which it relates;

- The title: "Sketch Plan" on the submitted plan;
- 5. Approximate tract boundaries;
- North point;
- Location map;
- 8. Streets on and adjacent to the tract;
- Significant topographical and physical features as required by the site analysis plan under Section 303.D. These may be provided on a separate sheet if necessary for clarity;
- General location of wooded areas;
- 11. Proposed general lot, building, and street layout; and;
- 12. In the case of development plans, proposed general layout, including building locations, parking lots, and open spaces.
- 13. Multi-page submissions should be numbered with each page showing its relationship to the total.
- B. Preliminary Plan

A reproducible (Mylar®) copy and eighteen paper copies of the preliminary plan shall be submitted to the Township and shall consist of and be prepared in accordance with the following minimum standards:

- 1. Drafting Standards
 - a. The plan shall be drawn on a scale of 1" = 50' unless the average size of the proposed lots is in excess of five (5) acres, in which case, a scale of 1" = 100' may be used.
 - Dimensions shall be set in feet, bearing in degrees, minutes, and seconds, with errors of closure not to exceed one part per 10,000.

- c. Each sheet shall be numbered and shall show its relationship to the total number of sheets.
- d. The plan shall bear an adequate legend to indicate clearly which features exist and which are proposed.
- e. The reproducible (Mylar®) copy, and all required prints thereof, shall be made on sheets with a maximum size of thirty-six (36) inches by forty-eight (48) inches (Architectural B size). In addition eighteen (18) reduced copies of all plans on sheets no greater than eleven (11) by seventeen (17) inches shall be provided.
- f. If the preliminary plan requires more than one (1) sheet, a master sheet at a scale not smaller than 1' = 400' showing the location of each section shall accompany the plan.
- g. The preliminary plan shall include signature blocks on the right hand side of the title sheet.
- h. The preliminary plan shall be prepared by a registered surveyor and a registered engineer and contain the seal of the surveyor and engineer or firm employing such surveyor and engineer.
- 2. Site Design and Layout Standards
 - a. A location map and north arrow for the purpose of locating the site to be subdivided or developed, at a scale of not less than 1" = 2,000', showing the relation of the tract to adjoining properties and to all streets and municipal boundaries existing within 1,000' of any part of the property proposed to be subdivided or developed.
 - A series of maps, prepared in accordance with Section 303.B.1, with the accompanying narrative as needed, showing the following existing conditions:
 - Proposed subdivision or land development name or other identifying title;
 - (2) Name and address of the owner of record or of his authorized agent, if any;

- (3) Name and address of the registered engineer and surveyor responsible for the plan. If a registered engineer, architect or landscape architect collaborated in the preparation of the plan, his name and address and seal shall also appear;
- (4) Zoning information including: applicable district, lot size and yard requirements, proof of any variance or special exception which may have been granted, and any zoning boundaries that traverse or are within two-hundred (200) feet of the tract;
- (5) All waivers being requested by the applicant as well as all waivers granted to the applicant by the Board of Supervisors shall be clearly stated on the first sheet of the preliminary plan submission;
- (6) Original date of preparation, revision dates, with concise descriptions of each revision, north point, and scale both written and graphic;
- (7) Total tract boundaries showing bearings and distances and along all existing rights-of-way within and adjacent to the tract prepared by a registered professional land surveyor;
- (8) Total acreage of the tract to the nearest square foot, and the acreage of the tract for both total and net lot area;
- (9) The names and deed book references of all owners of adjacent lands, including landowners on the other side of boundary streets, the names of all proposed and existing subdivisions or land developments adjacent to the tract, and the locations and dimensions of any streets or rights-of-way easements;
- (10) The locations and dimensions of all existing street rights-of-way and cartways, railroads, sewers and sewage systems, aqueducts, water mains and feeder lines, fire hydrant, gas, electric, phone, and oil transmission lines, water courses, sources of

water supply, easements, and other significant features within the property, and/or such driveways, intersections and utilities within one-hundred (100) feet of any boundary of the tract proposed to be subdivided or developed. All existing street surface types, names and state route numbers shall be indicated;

- (11) Delineation of wetlands as determined by the criteria of the U.S. Army Corps of Engineers most current guidance letters. The delineation shall be performed by a qualified professional and the date of the survey shall be noted on the plans. The Board of Supervisors may, at its discretion, require a jurisdictional determination report from the U.S. Army Corps of Engineers. If no such lands exist on the proposed tract, the plan must include a statement indicating that fact.
- (12) Any proposed improvements requiring a permit from the U. S. Corps of Engineers or the DEP, or any other federal, state, or local agencies having jurisdiction, shall be so indicated;
- (13) In the case where individual on-lot sewage disposal systems are proposed, percolation tests, and deep hole test pits shall be performed according to Section 604.D herein, and the exact locations of the test pits shall be so indicated on the plan;
- (14) In the case where an individual or community well is proposed to serve the subdivision or land development, the exact location of the well shall be indicated on the plan;
- (15) The location and widths of any proposed streets or other public ways or places as shown upon an adopted local or county plan, if such plan exists for the area to be subdivided or developed;
- (16) Location of all existing structures on the tract, and distance thereof from lot lines;

- (17) Contour lines, including location and elevation to which contour lines refer, at vertical intervals of not more than two (2) feet in the following ranges: 0 -15% slopes, 15 - 25% slopes and > 25% slopes. Actual field surveying or aerial photo interpretation shall be required when public improvements are proposed;
- (18) Location and elevation of the datum to which contour elevations refer shall be a known established benchmark.
- (19) Zoning compliance table.
- (20) Clear sight triangles at all driveway and street intersections.
- (21) Required and available safe stopping sight distances base on PennDOT criteria.
- c. A full plan of the proposed subdivision or land development, prepared in accordance with Section 303.B.1, including as a minimum:
 - Location and width of all proposed street rights-ofway, cartways and street name, with a statement of any conditions governing their use;
 - (2) Location and width of all proposed utility easements;
 - (3) All proposed lot lines with approximate dimensions and lot areas;
 - (4) Building setback lines along each street, minimum side and rear yard limits for each lot;
 - (5) A statement of the intended use of all non-residential lots and parcels;
 - (6) Lot numbers, and a statement of the total number of lots and parcels;
 - (7) Sanitary and storm sewers, and other drainage

- facilities with the size and material of each indicated, and any proposed connections with existing facilities;
- (8) Parks, playgrounds, trails and all private and public open space areas as may be shown on the community facilities and services map of the current East Nantmeal Township Comprehensive Plan and/or the Open Space and Recreation Plan, with any conditions governing such use, ownership and maintenance;
- (9) To avoid land-locked parcels or inadequate public improvements, in any case where subdivision or land development of the entire tract is not proposed, the subdivision or land development of the tract is proposed in phases or stages, or the subdivision or development integrates with an existing or future proposal, any undeveloped portion of the tract not under current consideration shall be required to have submitted a sketch plan indicating how the remainder of the tract may be accessed in the future.
- d. The preliminary plan shall include the following:
 - (1) A preliminary site analysis plan, prepared in accordance with Section 303.D;
 - (2) A preliminary conservation plan, prepared in accordance with Section 303.E;
 - (3) Documentation describing any ownership/maintenance arrangement for commonly owned facilities proposed by the plan.
 - (4) A Preliminary Improvements and Construction Plan, prepared in accordance with Section 303.F.
 - (5) A Preliminary Proposed Water Supply Study, if the applicant proposes that the subdivision or land development be served by a water system, prepared in accordance with Section 303.G., and

(6) A Preliminary Landscaping Plan shall be included with each commercial or industrial plan, prepared in accordance with Section 1305 of the Township Zoning Ordinance.

C. Final Plan

Final plans shall, under major proposals, conform in all aspects to preliminary plans, including any conditions specified by the Board of Supervisors. A final plan shall consist of and be prepared in accordance with the following:

Drafting Standards

- a. Subdivision or land development plans submitted for review and final approval shall be clear and legible black or blue on white prints of the drawings. Six (6) clear and legible reproducible (Mylar®) copies, and a digital (AutoCAD 2000® or earlier version in .dxf format) copy of all plans shall be submitted.
- b. Final plans shall be made on maximum size sheets of thirty-six (36) inches by forty-eight (48) inches. Where necessary to avoid sheets larger than the above size, final plans shall be drawn in two (2) or more sections, accompanied by a key diagram showing relative location of all sections. The scale shall not be less than one-hundred (100) feet to the inch. All dimensions shall be shown in feet and hundredths of a foot.

2. Site Design and Layout Standards

- a. All information required in Section 303.B.2, and the following minimum data:
 - (1) The total tract boundary lines of the area being subdivided with accurate distances to hundredths of a foot and bearings to one-quarter (1/4) of a minute. These boundaries shall be balanced and closed with an error of closure not to exceed one (1) foot in tenthousand (10,000) feet; provided however, that the boundary(s) adjoining additional un-platted land of the applicant are not required to be based upon field

survey, and may be calculated. The monuments and iron pins shall be indicated, along with a statement of the total area of the property being subdivided. In addition, the engineer or surveyor shall certify to the accuracy of the survey, the drawn plan, and the placement of the monuments

- (2) All straight lot lines and chords and radii of curved lot lines, defined in feet and hundredths of a foot by distances, and in degrees, minutes and seconds either by magnetic bearings or by angles of deflection from other lot and street lines;
- (3) A statement of the total number of lots, each lot numbered, both total and net lot areas in acres to four (4) places of decimal rounded;
- (4) A statement of the intended use of all non-residential lots. A statement of restrictions of any type which exists as covenants in the deed(s) for all lots contained wholly or in part in the subdivision and, if covenants are recorded, including the deed book and page number;
- (5) All proposed building setback and yard line requirements for each lot, and the proposed placement of each building, and the proposed location of on-site water and sewer facilities;
- (6) The location of all existing and proposed Street monuments;
- (7) All existing and proposed rights-of-way and any limitations on such easements or rights-of-way. They shall be shown and accurately identified on the plan;
- (8) Location, size, material used, invert elevation, and percent grade of all sanitary and storm water sewers and location of all manholes, inlets and culverts. This data must be submitted as a separate plan;
- (9) Location, size and material used of all water lines including location and types of fittings and location of

hydrants.

- (10) If the subdivision or land development proposes a new street intersection with a state legislative route, the intersection permit number(s) shall be indicated for all such intersections;
- (11) A certification of ownership, acknowledgment of plan and offer of dedication shall be affixed on the plan, and shall be duly acknowledged and signed by the owner(s) of the property and notarized;
- (12) All waivers being requested by the applicant, as well as all waivers granted to the applicant by the Board of Supervisors, shall be clearly stated on the first sheet of the final plan submission;
- (13) Signature blocks shall be provided, on the right hand side of the sheet, for the Township Planning Commission review, the County Planning Commission review and the Board of Supervisors approval;
- (14) The name and number (for PennDOT roads) and cartway width and lines of all existing public streets and the name and location of all other roads within the property; and
- (15) The following data for the centerline of the cartway and both right-of-way lines of all recorded, and proposed streets, within and adjacent to the property;
 - Courses and distances with length in feet rounded to three decimal places of all straight lines and of the radius and the arc of chord of all curved lot lines, and bearings in degrees, minutes and seconds for all straight lines; and
 - ii. The width in feet of the cartway, right-of-way and the ultimate right-of-way, and in degrees, minutes, and seconds of the delta angle of all curved lines, including curved lot lines.

- b. The final plan shall include the following:
 - (1) A final site analysis plan, prepared in accordance with Section 303.D;
 - (2) A final conservation plan, prepared in accordance with Section 303.E:
 - (3) A final improvements construction plan, prepared in accordance with Section 303.F.
 - (4) A final proposed water supply study. If the applicant proposes that the subdivision or land development be served by a water system, it shall be prepared in accordance with Section 303.G.

D. Site Analysis Plan

- 1. The applicant shall identify all the following site features, as applicable, on a single map, or maps, depending on the tract size and scale of the drawing. The site analysis plan shall be labeled such and shall be placed on a sheet separate from all other required plan information. The site analysis plan shall not substitute for the individual plan requirements of Section 303.A through C and Section 303.E, which identify features and proposed disturbance. The site analysis plan shall also include the following:
 - a. Contour lines, including location and elevation to which contour lines refer, at vertical intervals of not more than two (2) feet in the following ranges: 0 15% slopes, 15 25% slopes and > 25% slopes. Actual field surveying or aerial photo interpretation shall be required when public improvements are proposed;
 - b. Areas within the Floodplain District, including floodway fringes, and approximated floodplain areas as delineated by the most recently completed Flood Insurance Study prepared for the Township of East Nantmeal by the Federal Insurance Administration.
 - Soil types as mapped in the Soils Survey of Chester and Delaware Counties. Names and significant limitations shall

be listed such as, but not limited to, seasonal or perennial high water table, shallow depth to bedrock, alluvial soils and hydric soils;

- d. Water bodies and watercourses, both perennial and seasonal;
- e. Drainage basins and sub-basins;
- f. Wetlands as determined by the criteria of the U.S. Army Corps of Engineers most current guidance letters. The delineation shall be performed by a qualified professional and the date of the survey shall be noted on the plans. The Board of Supervisors may, at its discretion, require a jurisdictional determination report from the U.S. Army Corps of Engineers;
- Generalized geological characteristics, including rock formation type(s) and location of fault zones;
- h. Existing vegetation denoted as to type, including tree masses, tree lines, and hedgerows; individual freestanding trees over six (6) inch caliper DBH; wetland vegetation, meadow, pasture, or cropland, orchard, cultivated and ornamental garden areas, etc.;
- Existing structures and other improvements;
- Historic resources, including structures, ruins, sites, traces, and relationship to the bounds of any historic district on the National Register of Historic Places;
- k. Existing paths and trails.
- 2. The site features identified as per Section 303.D.1 above, shall be shown on plan map(s) in order to determine the relationship of identified site features to the development proposed, including proposed structures, roads, driveways, parking areas, stormwater management facilities, recreation areas, sewer and water lines or facilities, change to natural grade, and vegetation removal.
- 3. The site analysis plan shall be required with the submission of sketch, preliminary, and final plans.

E. Conservation Plan

A conservation plan is required to accompany each preliminary and final subdivision or land development plan. Such plan shall be clearly and legibly drawn to the same scale as that of the preliminary and final plans and shall be reviewed for comment and approved by the Chester County Conservation District. The conservation plan shall be recorded as well as the title plan.

- 1. The conservation plan shall show the total tract boundaries of the property being subdivided or developed and shall show:
 - a. Contour lines, including location and elevation to which contour lines refer, at vertical intervals of not more than two (2) feet in the following ranges: 0 15% slopes, 15 25% slopes and > 25% slopes. Actual field surveying or aerial photo interpretation shall be required when public improvements are proposed.
 - Location and elevation to which contour elevations refer.
 Where reasonably feasible, the datum used, shall be a known established bench mark.
 - c. All existing water courses (including water quality classification), tree masses, trees over six (6) inch caliper DBH and not part of a tree mass, and other significant natural features within the proposed subdivision or land development and within fifty (50) feet of the boundaries of the proposed subdivision. Where floodplain and/or groundwater protection areas, as defined in the Township Zoning Ordinance, are located on the tract, such area(s) shall be delineated in accordance with the Flood Hazard District contained in that Ordinance.
 - Locations of all soil classifications.
 - e. Location of soil tests whenever on-site disposal of sewage is planned.
 - f. Notations indicating: all trees or portion of tree masses proposed to be cleared as part of the proposed subdivision or land development plan, together with reasons for such clearing; all proposed alterations of natural grade(s),

whether by cut or fill, exceeding two (2) feet, together with reasons for such alteration; compliance with all applicable erosion and sedimentation control standards.

- 2. A required element of any conservation plan shall be a plan for the control of erosion and sedimentation and for stormwater management. Any preliminary and final plan for subdivision or land development must be accompanied by a storm water management plan; the contents of the submitted plan shall reflect discussion by the applicant with the Township Engineer. The minimum components of that plan are as follows:
 - a. A narrative summary of the project, including:
 - (1) General description of the project;
 - (2) General description of accelerated erosion control;
 - (3) General description of sedimentation control;
 - (4) General description of stormwater management, both during and after construction;
 - (5) Date project is to begin and expected date of final stabilization will be completed.
 - b. Mapping of various physical features of the project area, both existing and proposed, including:
 - The location of the project relative to highways, municipal boundaries, and other identifiable landmarks;
 - (2) Property lines of proposed project area;
 - (3) Contour lines, including the location and elevation to which contour lines refer, at vertical intervals of not more than two (2) feet in the following ranges: 0 -15% slopes, 15 - 25% slopes and > 25% slopes. Actual field surveying or aerial photo interpretation shall be required when public improvements are proposed;

- (4) Acreage or square footage of the project;
- (5) The water classification streams, lakes, ponds, or other bodies of water within the subject property or within fifty (50) feet of any boundary of the property;
- (6) Other significant natural features, including existing drainage swales, tree masses, and areas of trees and shrubs to be protected during construction;
- (7) Proposed location of underground utilities, sewer and/or water lines;
- (8) Scale of maps and north arrow; and
- (9) Existing roads and easements.
- c. Mapping of the soils and underlying geology of the project area, including:
 - (1) Soil types, including depth, slope, texture, structure, and locations;
 - (2) Geologic formation underlying the project area and extending fifty (50) feet beyond all property boundaries.
- d. A map of proposed alterations to the project area, including:
 - (1) Changes to land surface and vegetative cover;
 - (2) Annotated area(s) of cut and fill;
 - (3) Structures, roads, paved areas, and buildings;
 - (4) Proposed stormwater control facilities; and
 - (5) Finished contours at intervals as described in Section 303.E.2.b.3.
- e. Calculations and description of the amount of runoff form the project area and the upstream watershed area, in

accordance with the terms of Section 607 and its subsections herein, including the method of calculation and figures used, including square footage's for impervious surfaces of buildings, driveways, parking areas, etc.

- f. The staging of earth-moving activities, described in the narrative, including:
 - (1) Cover removal, including all cuts and fills;
 - (2) Installation of erosion and sediment control facilities and practices;
 - (3) Installation of improvements, including streets, storm sewers, underground utilities, sewer and water lines, buildings, driveways, parking areas, recreation facilities, and other structures; and
 - (4) Program of operations to convert erosion and sedimentation controls to permanent stormwater management facilities, including a chart of the relative time sequence of activities.
- g. Temporary control measures and facilities for use during earthmoving, in both map and narrative form, including:
 - (1) Purpose;
 - (2) Temporary facilities or other soil stabilization measures to protect existing trees and shrubs from earth-moving activities;
 - (3) Types, locations, and dimensioned details of erosion and sedimentation control measures and facilities;
 - (4) Design consideration and calculations of control measures and facilities; and
 - (5) Facilities to prevent tracking of mud by construction vehicles onto existing roadways.
- h. Permanent stormwater management program indicating as appropriate, measures for ground water recharge and

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facilities for site restoration and long-term protection, in both map and narrative form, including:

- (1) Purpose and relationship to the objectives of this Ordinance;
- (2) Establishment of permanent vegetation or other soil stabilization measures;
- Installation of infiltration facilities, rooftop storage, cisterns, seepage pits, french drains, etc., to serve structures;
- (4) Use of pervious materials for driveways, parking areas, etc;
- (5) Types, locations, and dimensioned details of storage, and conveyance;
- (6) Location of wells and on-lot sewage disposal systems;
- (7) Design consideration and calculations supporting the stormwater management program.
- A narrative description of the maintenance procedures for both temporary and permanent control facilities, and of ownership arrangements, including:
 - (1) The methods and frequency for removal of, and ultimate disposal site for, sediment and other materials removed from control facilities, both during and upon completion of the project;
 - (2) The proposed ownership and financial responsibility for maintenance of the permanent control facilities.
 - (3) A maintenance proposal for any landscaping or plantings.

F. Improvements Construction Plan

An improvements construction plan shall be required to accompany preliminary and final plan whenever an improvement is to be constructed

or installed and shall contain the following:

Scale

The improvements construction plan shall have the same scale as required for a preliminary and final plan.

2. Data

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

- A horizontal plan showing the layout of proposed improvements, including stations corresponding to those shown on the profiles, horizontal curves, location and size of inlets and manholes, traffic control signs and street name signs, and existing and proposed contours;
- A profile plan indicating the final grades of streets and sewers and the extent of cut and fill operations, including the following:
 - (1) The profile plan shall show the vertical section of the existing grade along the centerline of the proposed street. Where storm drainage lines, sanitary sewer lines and/or water lines are to be installed, they also shall be indicated on the profile plan.

Where storm, sanitary sewer and/or water lines are not to be installed in the street, but are outside of the right-of-way, separate profiles shall be provided showing existing and proposed ground surface elevations along the proposed lines;

- (2) The horizontal scale on the profile plan shall be 1" = 100' and the vertical scale 1" = 10';
- (3) A typical cross-section street construction shall be shown on the profile plan and shall indicate the following:

- Right-of-way width and the location and width of paving within the right-of-way;
- ii. Type, thickness and crown of the paving;
- iii. The location, width, type, and thickness of curbs and sidewalks to be installed, if any;
- iv. Typical location, size and depth of any underground utilities that are to be installed in the right-of-way, where such information is available.

c. Utilities Plan

The applicant shall identify all the following information, as applicable, on a single plan map, or maps, depending on the tract size and scale of drawing. The utilities plan shall be labeled as such and shall be placed on a sheet separate from all other required plan information. The utilities plan shall not substitute for plan requirements of any other sections of this Ordinance and shall include:

- (1) All proposed utilities, including easements, as well as points of tie-in with existing utilities;
- Approval of the respective utility companies and/or authorities involved;
- (3) Type and location of all lighting standards, hydrants, manholes, inlets, and other storm drainage structures, all sanitary sewers with complete data, and all other information pertaining to utilities and necessary for approval by the Board shall be shown.

G. Proposed Water Supply Study

A proposed Water Supply Study shall be required to accompany a preliminary and final plan whenever a public water supply system is proposed to serve a subdivision or land development and shall contain the following:

1. The purpose of the provisions of this subsection is to:

- Insure that each dwelling unit and each commercial or industrial building in all subdivisions and land developments hereafter granted approval shall have an adequate supply of potable water for domestic use;
- b. Insure that each unit or building shall have an adequate supply of water for fire protection; and
- c. Insure that in each case where water is to be supplied to a subdivision or land development by means of a water supply system, such system meets minimum standards controlling water storage and production capabilities for domestic and fire use for the protection of the health, safety and welfare of all Township residents.

2. When public water is required

All land developments within East Nantmeal Township and the franchise area of a public water company lying within the distances set forth below of a water main operated by said water company shall be serviced by public water, which shall be provided by a public utility, or by a municipal authority, or other municipal corporation, organized and operating under the laws of the Commonwealth of Pennsylvania. The land use scale and distances from the main are as follows:

- a. Major Subdivision 5 or more units 1,000 feet
- b. Minor Subdivision no more than 4 units 500 feet
- c. Single Unit 150 feet

3. When on-site water is proposed

All land developments within East Nantmeal Township shall follow the regulations and procedures established by the Chester County Health Department and other state and federal regulating agencies.

H. Impact Studies

Impact statements shall be required for all developments in accordance with Section 1323 of the Township Zoning Ordinance.

I. Recording of Final Plan

Recording of the final plan shall comply with the provisions of Section 302.D, herein.

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ARTICLE IV

MOBILE HOME PARKS

SECTION 400 SUBMISSION AND REVIEW OF PLANS

The construction of new mobile home park, as permitted in Article VII (IA-2, Industrial Agricultural - 2 District) of the Township Zoning Ordinance by special exception, or the alteration of an existing park shall be made only after the plans have been submitted in accordance with this Ordinance. Application for an original mobile home park permit shall follow the requirements and procedures of a major subdivision plan as described in Article III of this Article. The plans shall include the following:

- A. A complete park layout showing lot sizes and dimensions, open space areas, and all improvements including streets, vehicular parking areas, water supply location, sewer and water lines, sewerage disposal facilities, service buildings, lighting facilities, walkways, refuse storage areas and disposal methods, and recreation facilities.
- B. Plans for adequate storm water management facilities.
- C. Details of the construction of the sewage disposal facilities, including soil percolation tests, if a soil absorption or spray disposal type system is to be used.
- D. Details of the construction of the sewerage collection system, including size, slopes, materials, manhole and clean-out construction and location.
- E. Water supply including expected capacity and size of well, pump rating, water storage facilities, methods of sealing the well head, housing for pump and storage tank, distribution system including size, materials and valve locations.
- F. Construction of service buildings showing plumbing, heating, ventilation and other sanitary systems which are to be included.
- G. Lighting facilities and electrical power line installation.
- H. Anticipated number of parking spaces as would be permitted under available land area.

 A copy of approved plans that shall be kept on file by the reviewing health agency.

Section 401 PERMITS, LICENSES, INSPECTIONS AND FEES

A. Permits Required

- It shall be unlawful for any person to construct, alter, extend, or operate a mobile home park within East Nantmeal Township unless and until he obtains:
 - a. A permit issued by the Chester County Health Department in the name of the operator of the mobile home park in accordance with the Rules and Regulations, Commonwealth of Pennsylvania, Department of Environmental Protection, Chapter 4, Article 415, "Regulations for Mobile Home Parks", October 30, 1959, as amended; and,
 - b. A mobile home park permit issued by the Township Zoning Officer in the name of the mobile home park operator, which shall not be issued until a copy of the Chester County Health Department permit has been furnished to the Township, all permits for water supply and sewage systems shall have been obtained, and all other requirements contained herein have been complied with and final approval of the application has been granted by the Board of Supervisors;
 - A building permit is issued by the Township Building Inspector after having paid a fee for each unit to be placed within the mobile home park;
 - d. A current license issued annually by the Township, which shall not be issued until a copy of the Chester County Health Department permit has been furnished to the Township, and all other requirements contained herein have been complied with.
- 2. Inspection and Issuance, or Refusal of License Upon receipt of the application for license, the Zoning Officer shall:

- Verify the validity of the Department of Environmental Protection Permit.
- b. Verify the issuance of a certificate of the Board of Supervisors granting a Special Exception; verify the Planning Commission's recommendations and the Supervisors' approval of the development plan; and, upon finding that all requirements of this Ordinance have been met, shall thereupon issue a license in the name of the mobile home park operator; the license shall be valid for a period of one (1) year from the date of issue.
- c. For a yearly license renewal, there shall be a fee, payable to the Township of East Nantmeal and submitted to the Zoning Officer with the application for renewal. The license fee shall be established by the Board of Supervisors by resolution.
- 3. No permit or license shall be transferable Every operator holding such permit or license shall give notice in writing to the Township Secretary within twenty-four (24) hours after having sold, transferred, given away, or otherwise having disposed of his interest in or control of any mobile home park. Such notification shall provide the name and address of the operator succeeding to the interest in or control of such mobile home park.
- 4. The mobile home park permit and current license shall be conspicuously posted in the mobile home park office or elsewhere on the premises of the mobile home park at all times.

B. Fees

- 1. Fees for the initial application and preliminary and final approvals shall be prescribed by resolution of the Board of Supervisors.
- The fee for the annual license shall be prescribed by resolution of the Board of Supervisors and shall be submitted to the Zoning Officer with the application for the annual license.
- Fees for the inspection of a mobile home park during and following construction shall be by resolution of the Board of Supervisors.

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C. Inspections

- A mobile home park shall be subject to inspection during any stage of construction and at any time during its operation by an authorized representative of the Township of East Nantmeal or any other agency having jurisdiction, and such representative shall make known his presence and authorization to the operator at the time of each inspection.
- 2. The Zoning Officer is hereby authorized to stop all work or other activity which he finds to be in violation of the provisions of this or other applicable ordinances.
- 3. Upon receipt of the application for annual license and before issuing such annual license, the Zoning Officer or other designated representative of the Township shall make an inspection of the mobile home park to determine compliance with this Subdivision and Land Development Ordinance. The Zoning Officer or other representative shall thereafter notify the licensee of any instances of non-compliance with this Ordinance and shall not issue a license until licensee has corrected all such violations.
- D. Where the applicant or licensee feels that the Zoning Officer has failed to follow procedures or has misinterpreted or misapplied any provision of this Ordinance in the review of an application for a mobile home park permit or an annual license renewal, he may appeal such action to the Township Zoning Hearing Board in accordance with Section 909 of the MPC.
- E. No permit issued under this Ordinance shall be transferable to a different location. No person, holding a permit under this Ordinance, shall extend or reduce the area of any mobile home park, add any new facility or structure, until notice of such proposed changes shall be given to the Zoning Officer or Township appointed representative who shall have ascertained, after investigation as in the case of an original application for a permit, that such proposed changes are in accordance with all the requirements of this Ordinance, and shall have signified this fact by his approval.

SECTION 402 DISCONTINUANCE OF USE

In the event a mobile home park operator intends to discontinue operation of the park, the operator shall notify park residents and the Township one (1) year in advance of the intended closing date.

SECTION 403 DENSITY, DIMENSIONAL, AND GENERAL LAYOUT REQUIREMENTS

Requirements governing the density of dwelling units in any mobile home park and the dimensions of any such park or any lot contained therein shall be as specified in Section 703 of the Township Zoning Ordinance.

SECTION 404 ACCESS REQUIREMENTS

A safe and convenient vehicular access shall be provided from abutting public roads to each mobile home park. To ensure safe access, the following standards shall apply:

- A. With the exception of those street standards specified in this Article, the standards in Article V of this Ordinance shall govern the design and construction of streets in a mobile home park. All access streets and interior streets in a mobile home park shall be private streets.
- B. Access Streets The entrance road, or area, connecting the park with a public street or road shall have a minimum pavement width of twenty-four (24) feet. All access streets shall be designed and constructed to the same specifications as required for subdivisions. At least two-hundred (200) feet must separate roads connecting the park with a public street or road if more than one exit and/or entrance is provided.
- C. Interior Streets All interior streets shall be designed and constructed to the same specifications as required for subdivisions, and shall be paved to a minimum width of twenty-four (24) feet.
- D. Required Illumination of Park Streets All parks shall be furnished with lighting units so spaced and equipped with luminaries placed at such mounting heights as shall provide average levels of illumination for the safe movement of pedestrians and vehicles at night per Section 611 of this Ordinance.

E. Parking Areas

- 1. The requirements of Article XII of the Township Zoning Ordinance shall be applicable to all mobile home parks.
- 2. There shall be no on-street parking permitted within the mobile home park.
- Off-street parking areas shall be provided in all mobile home parks for the use of park residents and guests. Two (2) on-lot parking spaces are required for each mobile home site. In addition a minimum of one (1) off-lot parking space for guests shall be required.
- 4. The required off-site parking spaces shall be so located as to provide convenient access to the mobile home, but shall not exceed a distance of two-hundred (200) feet from the mobile home that it is intended to serve.
- Common parking areas, for the use of recreational vehicles, trailers, and the like shall be separated from general guest parking and shall be clearly marked as to their intended use.

F. Walkways

- All mobile home parks shall provide safe, durable, convenient, allseason pedestrian walkways of the required width between the park streets and all park community facilities and to all mobile home lots.
- 2. All sidewalks shall be constructed to the standards and widths required by Section 514 of this Ordinance.

SECTION 405 SEWAGE DISPOSAL

A. General

An adequate and safe sewerage system shall be provided in all parks for conveying and disposing of sewage from each mobile home, service buildings and other accessory facilities. Such system shall be designed, constructed and maintained in accordance with the Pennsylvania

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Department of Environmental Protection and the Chester County Health Department regulations.

B. Individual Sewer Connections

- 1. Each mobile home lot shall be provided with at least a three (3) inch diameter riser pipe. The sewer riser pipe shall be so located on each stand that the sewer connection to the mobile home drain outlet meets in approximately a vertical position and shall have a concrete apron at ground level.
- 2. The sewer connection shall have a nominal inside diameter (I.D.) of not less than three (3) inches, and the slope of any portion thereof shall be at least one-fourth (1/4) inch per foot. All joints shall be watertight.
- All materials used for sewer connection shall be semi-rigid, corrosive resistant, non-absorbent, and durable. The inner surfaces shall be smooth.
- 4. Provision shall be made for plugging the sewer riser pipe when a mobile home does not occupy the lot. Surface drainage shall be diverted away from the riser. The rim of the riser pipe shall extend at least one (1) inch above ground elevation.

C. Sewer Lines

- All sewer lines shall be located in trenches of sufficient depth to be free of breakage from traffic or other movements and shall be separated from the park water supply system. All sewer lines shall be constructed of materials approved by the Pennsylvania Department of Environmental Protection and other local agencies, and shall have watertight joints.
- 2. Sewer and water lines shall be laid in separate trenches with a horizontal distance of at least ten (10) feet from each other, except that these lines may be laid in the same trench by placing the water pipe on a shelf of undisturbed earth two (2) feet above and to one side of the caulked tight joint sewer line.

D. Sewage Treatment and Discharge

- Where the sewer lines of the mobile home park are not connected to a public sewer, all proposed sewage facilities shall be approved by the Pennsylvania Department of Environmental Protection, as well as other applicable agencies, prior to any construction within the mobile home park.
- 2. Where public sewerage systems are accessible, connection shall be made to such system.
- All storm water drainage shall be kept separate from the sewerage system.

SECTION 406 WATER SUPPLY

A. General

An adequate supply of community water shall be provided for mobile homes, service buildings, and other accessory facilities as required by this Ordinance. Where a public water supply system of satisfactory quantity, quality and pressure is available, connection shall be made thereto and its supply shall be used exclusively. Where a satisfactory public water supply system is not available, the development of a private community water supply system shall be approved by the Pennsylvania Department of Environmental Protection or other agency having jurisdiction. Individual on-lot wells shall not be permitted within a mobile home park.

B. Source of Supply

- 1. The water supply shall be capable of supplying a minimum of three hundred and fifty (350) gallons per day per mobile home.
- 2. The well or suction line of the water supply system shall be located and constructed in such manner that neither underground nor surface contamination shall reach the water supply from any source.
- 3. Wells shall be located a safe distance from sources of contamination. The minimum distance from lines with permanent water-tight joints is twenty (20) feet. Absorption field, seepage pits

and absorption beds shall be located at least one hundred (100) feet from a well.

- 4. No well, casing, pump, pumping machinery, suction pipe, or other appurtenances which are necessary for proper functioning of a water system, shall be placed in any pit, room or space extending below ground level, nor in any room or space above ground which is walled in or otherwise sealed, unless such space has free drainage by gravity away from all well facilities.
- 5. Water supply treatment, if necessary, shall be in accordance with the requirements of the Pennsylvania Department of Environmental Protection or other applicable agency.

C. Water Storage Facilities

All water storage reservoirs shall be covered, water tight, constructed of impervious material, and placed underground where possible.

D. Water Distribution System

- 1. All water piping, fixtures and other equipment shall be constructed and maintained in accordance with all applicable regulatory standards.
- 2. The water piping system shall not be connected with non-potable or questionable water supplies and shall be protected against the hazards of backflow or back-siphoning.
- The system shall be so designed and maintained as to provide a
 pressure of not less than forty (40) pounds per square inch, under
 normal operating loads.

E. Individual Water Riser Pipes and Connections

- 1. Individual water riser pipes shall be located within the confined area of the mobile home stand at a point where the water connection shall approximate a vertical position, reducing line length and the possibility of freezing.
- 2. The water pipe shall have a minimum inside diameter (I.D.) of one-half (1/2) inch and terminate at least four (4) inches above the ground surface. The water outlet shall be provided with an

approved underground shut-off valve, located below the frost line, and a cap.

 Adequate provisions shall be made to prevent freezing and heaving of service lines, valves and riser pipes. Surface drainage shall be diverted away from the location of the riser pipe.

SECTION 407

LIGHTING STANDARDS

Standards for lighting shall conform to the provisions set forth in Section 611 of this Ordinance.

SECTION 408 ELECTRICAL DISTRIBUTION SYSTEM

A. General Requirements

Every park shall contain an electrical system consisting of wiring, fixtures, equipment and appurtenances, which shall be installed and maintained in accordance with local electric power company specifications regulating such systems, and other local codes.

B. Power Distribution Lines

All electrical utility lines shall be underground. All direct burial conductors or cable shall be buried at least eighteen (18) inches below the ground surface and shall be insulated and specifically designed for the purpose. Such conductors shall be located not less than eighteen (18) inches radial distance from any water, sewer, gas, or communication lines.

C. Individual Electric Connections

All exposed non-current carrying metal parts of mobile homes and all other equipment shall be grounded by means of an approved grounding conductor run with branch circuit conductors or other approved method of grounded metallic wiring. The neutral conductor shall not be used as an equipment ground for mobile homes or other equipment.

SECTION 409 REFUSE DISPOSAL

A. General Requirements

1. The mobile home park operator shall be responsible for the proper storage, collection and disposal of refuse. Such actions shall be conducted as to create no health hazard, rodent harborage, insect breeding areas, accident or fire hazard, or air pollution and shall comply with the Pennsylvania Department of Environmental Protection regulations or other applicable agencies, governing such activities.

All refuse storage, collection and disposal shall be conducted in accordance with a centralized plan.

- 2. All refuse shall be stored in fly-tight, watertight, rodent-proof containers, which shall be located not more than two-hundred (200) feet from any lot and no closer than fifty (50) feet to any mobile home park boundary. A sufficient number of containers shall be provided to properly store all refuse. All individual containers shall be housed in racks or holders designed to prevent tipping and spillage of the contents and to facilitate cleaning of the area around the containers.
- Community bulk disposal containers shall be properly screened from view.
- 4. All refuse is to be collected at least once weekly. Where a suitable collection service is not available from private sources, the mobile home park operator shall provide the service. All refuse shall be collected and transported in covered vehicles or containers.

SECTION 410

FUEL SUPPLY AND STORAGE

A. Natural Gas System

- A natural gas piping system, when installed in mobile home parks, must be in conformity with accepted engineering practices.
- Each mobile home lot provided with piped gas shall have an approved shut-off valve, installed upstream of the gas outlet. The

outlet shall be equipped with an approved cap to prevent accidental discharge of gas when the outlet is not in use.

B. Liquefied Petroleum Gas (LPG) Systems

- 1. When LPG is utilized, a centralized distribution system shall be used within a mobile home park. The use of individual trailer LPG tanks shall not be permitted. The design, installation, construction, and maintenance of containers and pertinent equipment for the storage and handling of LPG shall conform to the provisions of Act of December 27, 1951, P.L. 1973, as amended, and the regulations promulgated pursuant thereto by the Pennsylvania Department of Labor and Industry, its successors, or other governmental agencies having jurisdiction thereof. These regulations include but are not limited to:
 - Systems shall be provided with safety devices to relieve excess pressures and shall be arranged so that the discharge terminates at a safe location.
 - b. Systems shall have at least one accessible means for shutting off gas. Such means shall be located outside the mobile home at the stand and shall be maintained in effective working order.
 - All LPG piping outside the mobile home shall be well supported and protected against mechanical injury.
 Undiluted petroleum gas in liquid form shall not be conveyed through piping equipment or systems in mobile homes.
 - d. All pipe connections shall be of an approved flare type.

C. Fuel Oil Supply System

- 1. All fuel oil supply systems provided for mobile homes, service buildings and other structures shall be installed and maintained in conformity with the rules and regulations of the authority having jurisdiction.
- 2. All piping from outside fuel storage tanks or cylinders to mobile homes shall be securely, but not permanently, fastened in place.

- 3. All fuel oil supply systems provided for mobile homes, service buildings and other structures shall have shut-off valves located within five (5) inches of the storage tanks.
- 4. No fuel combustion unit shall be used within a mobile home unit without being vented to the outside of the trailer.
- 5. All fuel storage tanks shall be securely placed. No tank shall be placed any closer than five (5) feet to a mobile home exit and no closer to any window than three (3) feet.
- Storage tanks located in areas subject to vehicular traffic shall be protected against physical damage and shall be screened from the street.

SECTION 411 STORMWATER MANAGEMENT

The provisions of Section 607 of this Ordinance shall be applicable to all mobile home park development.

SECTION 412 LANSCAPED BUFFER STANDARDS

The landscaped buffer standards of Section 1305 of the Township Zoning Ordinance shall apply to all mobile home parks.

SECTION 413 COMMUNITY BUILDINGS AND FACILITIES

- A. Where a community building is provided, it must contain a toilet and lavatory for each sex and be Americans with Disabilities Act (ADA) compliant. In addition, the mobile home park may provide laundry facilities, storage facilities, management office, indoor recreation facilities, and other amenities for the residents and their guest.
- B. Construction of all community buildings and facilities shall be in compliance with all applicable codes and shall be maintained in a clean, sanitary and structurally safe condition.
- C. Ownership and maintenance of all community facilities shall be defined in the application for a permit to operate a mobile home park.

SECTION 414 FIRE PROTECTION

- A. The mobile home park area shall be subject to the rules and regulations of the applicable fire prevention authority.
- B. Mobile home park areas shall be kept free of litter, rubbish and any other flammable materials.
- C. Portable fire extinguishers of a type approved by the fire prevention authority shall be kept in public service buildings under park operator control. Further, fire extinguishers of a type approved by the Fire underwriter Laboratories (BC Classification Type) bearing the Underwriters label, shall be readily accessible within three hundred (300) feet of each mobile home. It is recommended that mobile home park operators require individual mobile home owners to equip each unit with a fire extinguisher.
- D. A public or community water system is required. Fire hydrants shall be installed within six hundred (600) feet of all existing and proposed structures and all mobile homes, measured by way of accessible streets (as specified by the Middle Department Association of Fire Underwriters).
- E. Fire hydrants shall be installed in accordance with the following requirements:
 - 1. The water supply source shall permit the operation of a minimum of two (2) one and one-half (1-1/2) inch hose streams.
 - 2. Each of two nozzles, held four (4) feet above the ground, shall deliver at least seventy-five (75) gallons of water per minute at a flowing pressure of at least forty (40) pounds per square inch at the highest point of the park.
 - 3. A water storage capacity of ten thousand (10,000) gallons minimum shall be required. The fire hydrant system shall be certified by the fire company of first call for the mobile home park.
- F. In order to remove potential fuel sources for fires, by November 1 and December 1 of each year, all leaves shall be picked up and properly disposed of by way of composting or some other acceptable method of disposal.

SECTION 415 MAINTENANCE OF COMMON AREAS AND FACILITIES

- A. The operator of a mobile home park shall be responsible for the proper repair and maintenance of all common facilities, including, but not limited to, roads, parking areas, sidewalks and pathways, common open space, water supply and sewage disposal systems, and community buildings.
- B. The operator of a mobile home park shall, either have under his full time employ or shall retain the services of a registered plumbing contractor capable of maintaining the sewer and water systems of the park in safe operating condition.
- C. The operator of a mobile home park shall, prior to issuance of any certificate of occupancy pursuant to final approval of an application for a new development or expansion, post with the Township a maintenance bond in a form acceptable to the township in an amount sufficient to cover for a period of two (2) years beginning with the end of construction, the costs of maintenance of all common areas and facilities as described in Section 705 of this Ordinance; said costs to be estimated by the Township Engineer or other township representative.

SECTION 416 APPLICABILITY OF THE PENNSYLVANIA UNIFORM CONSTRUCTION CODE

If any provision of the Pennsylvania Uniform Construction Code as adopted and amended by East Nantmeal Township conflicts with the requirements and standards of this Article, the more stringent requirement or standard shall apply.

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ARTICLE V

STREET DESIGN STANDARDS

SECTION 500 GENERAL

The following standards shall apply to the design and construction of streets associated with subdivisions and land development applications. Such standards are intended as the minimum for the promotion of the public health, safety, and welfare. In those cases where it can be clearly demonstrated by the applicant to their satisfaction of the Board that, because of peculiar conditions pertaining to the tract of land, the literal enforcement of these standards would cause undue hardship, such variations from their literal interpretations may be permitted as may be reasonable and consistent with the purpose and intent of this Ordinance. All streets in subdivisions and land developments shall be private streets and shall not be offered for dedication.

SECTION 501 STREET SYSTEM

- A. Proposed streets shall be consistent with such street plans or parts thereof as have been officially prepared and adopted by the Township including recorded subdivision plans and the Official Map of the township, if adopted. In addition, all proposed streets shall be classified according to their hierarchical function as contained in the Township Comprehensive Plan.
- 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 of the tract so as to produce usable lots, reasonable grades, and proper alignment and drainage. Further, such designs shall minimize the necessity of cut-andfill operations and major earth disturbance.
- D. Local streets shall be laid out so as to discourage through traffic, but provisions for street connections into and from adjacent areas may be required.
- E. If lots resulting from original subdivisions are large enough to permit resubdivision, or if a portion of the tract is not subdivided, adequate street

- right-of-way to permit further subdivision shall be provided as necessary. Such rights-of-way shall be no less than those required for streets classified as local in the Comprehensive Plan.
- F. Where a subdivision abuts or contains an existing or proposed major or arterial thoroughfare and the subdivision shall create a traffic problem, the Board may require setting aside of additional right-of-way to provide a minimum right-of-way specified hereinafter and marginal access streets, reverse frontage lots, or such other treatment as shall provide protection for abutting properties, reduction in the number of intersections with the major thoroughfare and separation of local and through traffic.
- G. Where lots abut an existing street or access is taken to an existing street, which street does not meet the standards of this Ordinance, additional right-of-way, paving, grading, alignment, drainage facilities and other improvements shall be required to correct any deficiencies, or provision of sufficient escrow funds for use by the Township to execute such improvements shall be provided.
- H. New partial streets shall not be permitted except where essential to reasonable subdivision of a tract in conformance with the other requirements and standards of this Ordinance and where, in addition, dedication of the remaining part of the street has been secured. Wherever a tract to be subdivided borders an existing partial street, the other part of the street shall be plotted within such tract. Where partial streets are proposed, the acceptance of final plans shall be conditioned upon the provision of guarantees providing for the construction or completion of such streets to Township standards. As an interim measure, a temporary turnaround must be provided for partial streets.
- I. Dead-end streets shall be prohibited, except as stubs to permit future street extension into adjoining tracts, or when designed as cul-de-sacs in accordance with the provisions of Section 507, herein.
- J. Where streets and other public improvements continue into adjoining municipalities, evidence of compatibility of design particularly with regard to street width, base design, or shoulders shall be submitted. The applicant shall coordinate such design with both municipalities to avoid abrupt changes in cartway width or in improvements provided.
- K. Continuations of existing streets or proposed streets which are in obvious alignment with existing streets shall be known by the same

name, but names for other streets shall not duplicate or closely resemble names for existing streets within the township or Postal ZIP Code. The Board shall approve and may reject proposed street names and suggest alternative names.

- L. Street name signs shall be installed at all street intersections. The design and placement of such signs shall be subject to the approval of the Township. Traffic control signs, in compliance with all PennDOT standards, including, but not limited to, stop, speed limit, no outlet, and no parking signs shall be installed at intersections and along streets.
- M. As a condition of final plan approval, an agreement providing for the maintenance, repair, construction and reconstruction, including drainage facility maintenance and snow plowing of streets, shall be submitted to the Township for approval. The agreement shall be described on the record plan and recorded therewith.

SECTION 502 STREET AND RIGHT-OF-WAY WIDTHS

A. The minimum right-of-way, cartway and shoulder widths for all new streets in the Township shall be as follows:

Street Function	Right-of-Way Width*	Cartway Width	Shoulder Width
Expressway	Per PennDOT	Per PennDOT	Per PennDOT
Major Arterial	Per PennDOT	Per PennDOT	Per PennDOT
Minor Arterial	60 Feet	26 Feet	8 Feet (paved)
Major Collector	60 Feet	26 Feet	8 Feet (paved)
Minor Collector	50 Feet	24 Feet	6 Feet (paved)
Local Access**			
51+ Lots/DU	50 Feet	24 Feet	3 Feet
26 to 50 Lots/DU	50 Feet	22 Feet	3 Feet
11 to 25 Lots/DU	50 Feet	20 Feet	3 Feet
4 to 10 Lots/DU	40 Feet	18 Feet	3 Feet

All street right-of-way widths shall be provided in accordance with this table but shall not be dedicated. No
fences shall be permitted within any right-of-way.

^{**} Local access street widths are based on development plan design and Board of Supervisors approval.

- B. Additional right-of-way and cartway widths may be required by the Township for the following purposes:
 - 1. To promote public convenience and safety.
 - 2. To provide parking space in commercial districts and in areas of high-density residential development.
 - To accommodate special topographic circumstances which may result in cut/fill slopes extending beyond the standard right-of-way in certain circumstances to assure accessibility for maintenance operations.
- C. A right-of-way of lesser width than that prescribed in this Article shall not be permitted.

SECTION 503 INCREASE OF RIGHT-OF-WAY WIDTH

In the case where lots created within a subdivision are large enough to accommodate either further subdivision, or a higher intensity of development, and thus may result in higher traffic levels; the Township may require that additional right-of-way and cartway be provided to permit the future development of a higher order street.

SECTION 504 STREET GRADES

A. There shall be a minimum centerline grade of one percent (1%). The maximum centerline grade shall not exceed the following:

Street Function	Maximum Grade	
Expressway	Per PennDOT	
Major Arterial	Per PennDOT	
Minor Arterial	Per PennDOT	
Major Collector	8%	
Minor Collector	9%	
Local Access	10%	

B. All streets shall be graded in accordance with township regulations. The slope ratio of banks along street right-of-way lines shall not exceed 3 to 1 (horizontal to vertical) for fills, and 2 to 1 for cuts, the measurement of which shall be made perpendicular to the street right-of-way line.

C. At all changes of street grade where the algebraic difference exceeds one percent (1%), vertical curves shall be provided to permit the following minimum sight distances:

Street Function	Sight Distance
Expressway Major Arterial Minor Arterial Major Collector Minor Collector Local Access	Per PennDOT Per PennDOT Per PennDOT 300 Feet 300 Feet 200 Feet
Local Access	200 Feet

- D. Under no circumstances shall maximum grades be permitted using the minimum curve radii.
- E. The maximum grade within any intersection and within fifty (50) feet of any intersection, measured from the intersection of the curb lines or edge of cartway shall not exceed five percent (5%) and approaches to an intersection shall follow a straight course for no less than one-hundred (100) feet to the centerline of the intersected street.

SECTION 505 STREET ALIGNMENT

- A. Whenever streets 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:

Street Function	Centerline Radii	
Expressway	Per PennDOT	
Major Arterial	Per PennDOT	
Minor Arterial	Per PennDOT	
Major Collector	300 Feet	
Minor Collector	300 Feet	
Local Access	150 Feet	

C. A tangent of at least one-hundred (100) feet shall be introduced between all horizontal curves on collector and arterial streets and between reverse curves on local streets; however, a long radius curve is preferred in all cases to a series or curves and tangents.

D. A super elevation shall be required when curve radii are less than sixhundred (600) feet on a collector and above street.

SECTION 506 STREET INTERSECTIONS

- A. Right angle intersections shall be used whenever practicable, especially when local access streets empty into collector or arterial streets. There shall be no intersection angle of less than sixty (60) degrees, or more than one-hundred and twenty (120) degrees measured at the centerline.
- B. No more than two (2) streets shall cross at the same point or intersect at the same point.
- C. Right-of-way at intersections shall have a minimum twenty-five (25) foot radius.
- D. To the fullest extent possible, intersections with collector and arterial streets shall be located not less than one-thousand (1,000) feet apart, measured from centerline to centerline. Exceptions shall be those cases deemed by the Board to require close spacing without endangering the public's safety.
- E. Streets entering from opposite sides of another street shall either be directly across from each other or offset by at least one-hundred fifty (150) feet on local and collector streets and three hundred (300) feet on arterial streets, measured from centerline to centerline.
- F. Where curbs are required, curb radii shall not be less than thirty-five (35) feet, forming a tangential arc, and the top curb grade lines for intersecting streets shall be so designed that they would meet at a common point if projected.
 - 1. For all intersections involving an arterial street, a forty (40) foot radius shall be required.
 - 2. Where streets of different hierarchy intersect, the requirements for the more important one shall hold.
- G. A clear sight triangle shall be provided at all street intersections in accordance with the provisions of Appendix A of this Ordinance for determining the minimum safe stopping sight distance (SSSD).

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- H. Whenever a subdivision abuts or contains an existing or proposed street with an ultimate right-of-way of sixty (60) feet or more, the Board of Supervisors, on the recommendation of the township Planning Commission or Township Engineer, may require restriction of access and egress to such street by:
 - 1. Provision of reverse frontage lots;
 - 2. Provision of service streets along the rear of the abutting lots, together with the prohibition of private driveways intersecting the major collector street; or
 - 3. Provision of marginal access streets, provided that the reverse strips establishing such marginal access streets shall be definitely placed within the jurisdiction of the Township under an agreement meeting the approval of the Township. Marginal access streets shall be constructed as any other street and have a minimum cartway width of twenty-two (22) feet. The ultimate right-of-way for such streets shall be forth (40) feet.
- I. Except as specified above, reverse strips shall be prohibited.

SECTION 507 SINGLE ACCESS STREETS

- A. Single access shall not be approved wherever a through street is practical, except where the single access is clearly the basic principle for effective and efficient design of the subdivision.
- B. All cul-de-sac streets, permanently designed as such, shall be provided at the closed end with a fully paved turn-around.
- C. Any street with a dead-end for access to an adjoining property or because of authorized stage development shall be provided with an allweather turnaround, within the subdivision, and the use of such turnaround shall be guaranteed to the public until such time as the street is extended. Right-of-way shall be extended to the tract boundary in such cases. The Township reserves the right to specify the course of the rightof-way until the developer commences development of the stage requiring the right-of-way.
- D. Single access streets, permanently designed as such, shall not exceed twelve hundred (1,200) feet in length for lots of an average of one (1)

- acre or greater, and shall be not more than eight hundred (800) feet in length for lots containing an average of less than one (1) acre.
- E. The minimum radius to the pavement edge or curb line of the cul-de-sac shall be fifty (50) feet and the minimum radius of the right-of-way line shall be sixty (60) feet
- F. Drainage of cul-de-sac streets shall not be towards the center line of the open end.
- G. The centerline grade on a cul-de-sac street shall not exceed eight percent (8%) and the grade of the diameter of the turn-around shall not exceed four percent (4%).
- H. There shall be a maximum of four (4) lots containing any access along the turn-around portion of a cul-de-sac street measured from reverse curve to reverse curve.
- I. Whenever a future extension is found to be practical by the Planning Commission and the Board of Supervisors, a fifty (50) foot wide easement with an offer of dedication shall extend to the property line.

SECTION 508 ACCELERATION, DECELERATION AND TURNING LANES

- A. Deceleration or turning lanes shall be required by the Township along existing and proposed streets whenever the Board of Supervisors determines such lanes are required to meet reasonable safety needs, as determined by a traffic impact study per Section 515.
- B. Deceleration lanes shall be designed to the following standards:
 - 1. The lane shall have a minimum width of twelve (12) feet, or in the case of intersections with State highways, such width as is required by the applicable regulations and standards of PennDOT.
 - 2. The lane shall provide the full required width for the entire length which shall be measured from the centerline of the intersecting road. In addition, there shall be a seventy five (75) foot taper provided at the beginning of the lane so that traffic can leave the main traveled lane smoothly. The minimum length of the deceleration lane shall be one hundred and fifty (150) feet.

C. Acceleration lanes shall be required only when the need is indicated by a traffic impact study. The design shall be as per the recommendation of the township engineer. As necessary, a paved taper shall be provided for right-hand turns.

SECTION 509 SERVICE STREETS

- A. No part of any dwelling, garage, or other structure shall be located within sixteen (16) feet of the edge of the cartway of a service street.
- B. Except where other adequate provision is made for off-street loading and parking consistent with the use proposed, service streets shall be required in all commercial and industrial type districts and shall have a minimum paved width of twenty-four (24) feet.
- C. Dead-end service streets shall be avoided, but where this proves impossible, dead-end service streets shall be terminated with a paved circular turn-around with either:
 - 1. A minimum radius to the outer pavement edge (curb line) of fifty (50) feet if parking is prohibited on the turn-around; or
 - 2. A minimum radius to the outer pavement edge (curb line) of sixty (60) feet if parking is permitted on the turn-around.
- D. Service street intersections and sharp changes in alignment shall be avoided, but where necessary, corner lot curb lines shall be rounded or cut back sufficiently to permit safe vehicular circulation.
- E. Wherever service streets are proposed, the ownership and maintenance of such streets shall be the responsibility of the individual lot owner, a management association, or other such entity. Maintenance of such streets shall conform to the maintenance guarantee requirements of Section 705, prescribed in this Ordinance.

SECTION 510 STREET CONSTRUCTION

All streets, public and private, shall be paved in accordance with this Section, or as otherwise specified by the Township regulations, and only after all required improvements have been properly installed as per the Township Engineer. All materials entering into the construction of streets and methods of constructions

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and drainage shall be in accordance with the applicable requirements of the Pennsylvania Department of Transportation Specifications Publication 408, latest revision thereof, and shall be supplied by vendors approved by the Pennsylvania Department of Transportation for the supply of such materials. The specifications for road construction are provided in appendix B, herein.

A. Subgrade

Whenever possible, the sub-grade shall be in cut, or undisturbed subsoil. In no case shall the subgrade consist of filled or undisturbed topsoil or frozen soils. All deleterious material such as tree roots, leaves, branches, trash, stones exceeding six (6) inches in diameter, and miscellaneous construction debris shall be removed from the sub-grade. Compacting shall be accomplished by sheep's-foot, smooth wheel or rubber tired roller, at the discretion of the Township Engineer. The sub-grade shall be compacted tight and dry and shall not be soft and spongy when check rolled. Wet or swampy subgrade areas shall be permanently drained or stabilized at the discretion of the Township Engineer. Underdrains, installed according to methods and materials based on current PennDOT publications may be required. Compacting of the subgrade shall extend two (2) feet on either side of the full cartway width on streets without shoulders, unless curbing is to be installed, and to the outer limit of the shoulders when shoulders are applicable. The required road crown shall be built into the shaped subgrade per Section 510.C. below].

B. Aggregate Subbase

Aggregate base course shall consist of six (6) inches of 2A modified gradation aggregate. The subbase shall be rolled uniformly and thoroughly compacted according to the requirements of PennDOT Publication 408. Rolling shall continue until the material does not creep or wave ahead of the roller. Aggregate shall be extended two (2) feet beyond the cartway when no curbs are constructed. In addition, all streets shall be laid out and be in a mud-free condition subsequent to the commencement of construction of any structure, building or facility.

C. Paving

Paving shall consist of five (5) inches of HMA (Hot Mix Asphalt) base course and one and one-half (1½) inches of HMA wearing course. All paving thicknesses are measured after compaction. All paving courses shall be laid with a mechanical bituminous paver in accordance with PennDOT Publication 408, latest edition.

After proper cleaning, repairing and preparing of the HMA base course as directed by the Township Engineer, a tack coat shall be applied to the HMA base course prior to placing the wearing course. The tack coat shall consist of materials meeting the specifications of PennDOT for roads of that class. Repair of the HMA base course may include installation of underdrain to improve wet conditions. The wearing course shall not be applied until the phase of development is near completion (85% of houses completed) . The wearing course shall consist of HMA material meeting the requirements of PennDOT.

The completed road surface shall have a uniform slope of one-quarter (¼) inch per foot from the edge of centerline, except that on super-elevated curves, this slope shall not be less than one-quarter (¼) inch per foot and shall extend up from the inside edge to the outside edge of the paving.

No visible moisture shall be present prior to the paving of each course. Road surface temperature shall be 40 degrees F. or greater prior to laying the paving, with the air temperature rising.

D. Joint Seal

After application of the wearing course, all curb, inlet, manhole, etc., joints shall be sealed with a PennDOT approved joint sealer applied to neat lines with a minimum width of six (6) inches.

SECTION 511 PRIVATE STREETS

The following standards shall apply to private streets:

- A. No more than four (4) lots shall be served by a private street. In the case where lots served by a private street are capable of further subdivision, and therefore, having the potential to exceed the four (4) lot limit, the private street shall be designed in accordance with public street standards for a local street.
- B. All private streets shall be constructed with a base course of eight (8) inches of PennDOT type 2A placed on a prepared and compacted dry subgrade. The base course shall be shaped and rolled to provide a two (2) inch crown or sloped laterally to facilitate drainage and shall be covered with one and two (2) inches of HMA compacted wearing course and built to the applicable width specified in Section 502.A.

- C. As a condition to final plan approval, an agreement providing for the maintenance, repair, construction and reconstruction, including drainage facility maintenance and snow plowing of private streets, shall be submitted to the Township for approval. The agreement shall be described on the title plan and recorded.
- D. Any subdivision or land development application proposing four (4) or more lots or units served by a private street or private drive shall be designed in accordance with township public street standards.
- E. If the private street is a single access street a turn-around shall be provided with an all-weather surface to be approved by the Board of Supervisors and Planning Commission and shall be constructed in accordance with Section 507 above.

SECTION 512 DRIVEWAYS

- A. The construction or alteration of any driveway shall be in accordance with the provisions of the Township Driveway Ordinance.
- B. No building permit shall be issued without first obtaining a permit to construct such driveway.
- C. Common driveways shall be limited to serving no more than three (3) dwellings or uses. A paved pull-off, a minimum length of thirty (30) feet, shall be provided every two hundred and fifty (250) feet.
- D. Private driveways, whether individual or common, on corner lots shall be located at least fifty (50) feet from a local street intersection's nearest right-of-way line and at least one hundred (100) feet from a collector street intersection's nearest right-of-way line. For any lots other than corner lots, driveways shall be at least one hundred (100) feet from the point of intersection of the nearest street rights-of-way lines.

SECTION 513 CURBS

A. No curbs shall be required unless otherwise recommended by the Planning Commission or the Township Engineer to facilitate stormwater runoff on proposed streets and approved by the Board.

- B. Where the township deems necessary to facilitate stormwater management, curbs shall be required along both sides of proposed streets. Curbs shall be of one of the following types; standard vertical or rolled.
- C. In areas where curb may not be required, i.e., low density residential development, satisfactory provisions, such as drainage swales, must be made to avoid erosion. The use of drainage swales shall be allowed only on streets with a grade less than seven percent (7%). Swales shall not be used when velocity of run-off exceeds three (3) feet per second (F.P.S.).
- D. Curbs shall be provided on all new parking areas located within a land development.
- E. All curbs shall conform to specifications for Class AA concrete as specified by PennDOT that requires a minimum twenty eight (28)-day structural design compression strength of three thousand seven hundred and fifty (3,750) psi, with six percent (6%) air entrainment. White curing compound shall be applied immediately following initial set of the concrete.
- F. Except as otherwise specified herein, curbs shall be constructed in accordance with the criteria of PennDOT RC Standards, Publication 408.
- G. If depressed curb is used at a driveway, it shall be no higher than one and one-half (1-1/2) inch above the final street surface. The length of this depressed curb shall not exceed thirty-six (36) feet. Pipes or grates or other constructions shall not be placed in the gutter to form a driveway ramp.
- H. Excavations shall be made to the required depth, and the material upon which the curb is to be constructed shall be compacted to a firm, even surface. Where the sub-grade is soft or spongy as determined by the Township Engineer, a layer of 2A crushed stone, not less than four (4) inches thick, shall be placed under the curb.
- When it is necessary to replace existing curbing with depressed curbing, full sections of the existing curb should be removed down to the subgrade without disturbing the adjacent cartway paving. Any portions of the cartway disturbed during curb removal or installation shall be repaired to a new condition.

J. When curbing must be cut for depressed curb installation, the length of the remaining section shall be no less than four (4) feet between expansion joints and the cut shall be made in a neat manner with a power saw equipped with a proper masonry cutting blade.

SECTION 514 SIDEWALKS

- A. Sidewalks shall be required in all high density residential developments but shall not be required where the average tract lot size exceeds one (1) acre. Single-family detached lots of less than one (1) acre, when such lots are the result of using a clustering option, may have the sidewalk requirement waived by the Board of Supervisors.
- B. Sidewalks may be required in any subdivision or land development where it is desirable, in the opinion of the Board of Supervisors, to continue sidewalks that are existing in adjacent developments, or to provide access to community facilities (schools, recreational areas, shopping areas, etc.), or to insure pedestrian safety in unusual or peculiar conditions with respect to prospective traffic.
- C. Sidewalks shall be provided along all new streets and parking areas located in non-residential subdivisions or land developments unless it can be shown, to the satisfaction of the Board of Supervisors, that pedestrian traffic does not follow or mix with vehicular traffic, in which case, both sidewalks and/or curbs may be waived by the Board.
- D. When required, sidewalks shall be located within the street right-of-way a minimum of three (3) foot from the right-of-way line. Generally, a grass planting strip shall be provided between the curb and the sidewalk.
- E. All sidewalks shall conform to specifications for Class A concrete, as specified by PennDOT that requires a minimum twenty eight (28)-day structural design compression strength of three thousand (3,000) psi, with six percent (6%) air entrainment. White curing compound shall be applied immediately following initial set of the concrete.
- F. Sidewalks shall be a minimum of four (4) feet wide except along collector and arterial streets and adjacent to shopping centers, schools, recreational areas and other community facilities, where they shall be a minimum of five (5) feet wide.

- G. Sidewalks shall have a minimum thickness of four (4) inches when used solely for pedestrian traffic and a minimum thickness of six (6) inches at all driveways. Welded wire fabric (6/6 - 10/10) shall be provided in all sidewalks constructed at driveways.
- H. Excavation shall be made to the required depth and a layer of 2A crushed stone not less than six (6) inches thick shall be placed and thoroughly compacted prior to laying the sidewalks when used solely for pedestrian traffic and a minimum thickness of six (6) inches at all driveways.
- I. Where sidewalks abut the curb and a building, wall or other permanent structure, a pre-molded expansion joint one-fourth (1/4) inch in thickness shall be placed between the curb and sidewalk for the full length of such structure. Sidewalks shall be constructed in separate slabs thirty (30) feet in length except for closures. The slabs between expansion joints shall be divided into blocks five (5) feet in length by scoring transversely one-half (1/2) inch in depth.
- J. All sidewalks shall be designed to facilitate access by disabled persons in compliance with the Americans with Disabilities Act (ADA) requirements.

SECTION 515 TRAFFIC IMPACT STUDY

- A. The Board may require a traffic impact study as part of the application for subdivision and land development.
- B. Traffic impact studies shall be prepared in accordance with the provisions of Section 1323.A of the Township Zoning Ordinance and the applicable rules and regulations for traffic study in PennDOT, Title 67, PA Code, Chapter 610.
- C. An implementation plan shall be presented and carried out according to the plan. Such implementation plan shall address and correct any traffic deficiencies created by the development plan, and those deficiencies shall be corrected as they are created.

ARTICLE VI

DEVELOPMENT DESIGN STANDARDS

SECTION 600 GENERAL

- A. The following standards shall be complied with in all subdivision and land development, and are intended as the minimum for the promotion of the public health, safety and welfare.
- B. All proposed subdivisions shall fully comply with the existing zoning regulations applicable to the land, and no parcel of land shall be created, either by inclusion or exclusion from a proposed subdivision, which cannot be properly utilized for a permitted use under the existing zoning regulations.
- C. Physical improvements to the property being subdivided shall be provided, constructed, and installed as shown on the plan of record, in accordance with the regulations of the Township.
- D. All improvements installed by the applicant shall be constructed in accordance with the design specifications of the Township. Where there are no applicable Township specifications, all such specifications are subject to the approval of the township Engineer or County, State or Federal agency responsible for such specifications.

SECTION 601 LAND REQUIREMENTS

- A. Land shall be suited to the purposes for which it is to be subdivided. Proposed land developments shall be coordinated with existing nearby neighborhoods so that the community as a whole may develop harmoniously.
- B. No land shall be developed for residential purposes unless all hazards to life, health, or property from flood and fire shall have been eliminated or unless the plans for the development shall provide adequate safeguards against such hazards.
- C. No plan for subdivision or land development shall be approved which would result in lots or land use, which would in any way be inconsistent

with the Township Zoning Ordinance then in effect for the zoning district in which said land is to be developed or subdivided.

SECTION 602 LOT DESIGN

A. General Lot Design Standards

- Lot dimensions, areas and orientation shall be appropriate for the type of development, use contemplated, Zoning District requirements, and sufficient to provide satisfactory space for offstreet parking and other accessory uses.
- Lot dimensions and areas shall not be less than as required, for the applicable District, by the Township Zoning Ordinance, as amended from time to time.
- Insofar as practical, side lot lines shall be at right angles to straight street lines, and radial to curved street lines and cul-desac turnaround.
- 4. Where feasible, lot lines shall follow municipal boundaries rather than cross them, in order to avoid jurisdictional problems.
- 5. Generally the depth of single-family residential lots shall not be less than one (1) or more than three (3) times their width.
- 6. Lots shall be located solely within the Zoning District appropriate to their intended use and shall be of sufficient size to incorporate any required buffer area.

B. Lot Frontage Standards

- All lots shall have direct access to a public street, or an approved private street (constructed to township standards) and shall have frontage in accordance with the district zoning standards and shall have a minimum width at the street line in accordance with those same standards.
- 2. Any development in excess of five (5) lots abutting an existing arterial street in the Township shall be designed as reverse frontage lots having access to the street with a lower functional

classification, as required in Section 1201 of the Township Zoning Ordinance.

3. All residential lots using reverse frontage shall have a rear yard with a minimum depth of seventy-five (75) feet and shall, within such rear yard and immediately adjacent to the right-of-way, have a planting screen easement of at least twenty-five (25) feet in width, across which there shall be no right of access.

C. Building Setback Lines

The minimum building setback line shall be in accordance with the Township Zoning Ordinance for the applicable district in which the building shall be located.

D. Interior Lots

- The creation of interior lots shall be minimized and limited to those circumstances dictated by the configuration of the site. However the applicant shall not be permitted to use interior lots in the design to avoid constructing or extending streets.
- No more than two (2) contiguous interior lots shall be created along any street. Access to all lots should be designed for direct street access.
- 3. Where an interior lot is absolutely necessary because of site configuration, such lot shall have an access strip with a minimum width of forty (40) feet and shall not exceed forty-five (45) feet. The area of any access strip shall not be used in the computation of minimum lot area as prescribed by the Township Zoning Ordinance.
- 4. Interior lots shall not be permitted on the closed end of a single access street, unless no other design alternative is available.

E. Crosswalks

Crosswalks may be required by the Board of Supervisors to facilitate pedestrian circulation and to give access to community facilities where situations warrant concern for the safety and welfare of Township residents.

SECTION 603 MONUMENTS AND IRON PINS

Monuments shall be indicated on any submitted plans as a filled square or an outlined square. Iron pins shall be indicated on any submitted plans as a filled circle or an outlined circle. A key indicating the icon chosen shall be placed on the title page of any submitted plans.

A. Monument Standards

- 1. Permanent stone or concrete monuments (as defined in Article 2 of this Ordinance) shall be accurately placed at the intersection of all lines forming angles and at changes in directions of lines in the boundary (perimeter) of the property being subdivided.
- All monuments shall be placed by a registered engineer or surveyor so that the scored point created by an indented cross or drill-hole in the top of the monument shall coincide exactly with the point of intersection of the lines being monumented.
- 3. Monuments shall be set with their top level with the finished grade of the surrounding ground.
- 4. All streets shall be monumented on the right-of-way line at the following locations:
 - a. At least one (1) monument at each intersection.
 - b. At changes in direction of street lines.
 - At each end of a curved street line, e.g., points of curvature and tangency, (only one (1) side of each street need be monumented);
 - d. An intermediate monument wherever topographical or other conditions make it impossible to sight between two (2) otherwise required monuments; and
 - e. At such other places along the line of streets as may be determined by the Township Engineer to be necessary so that any street may be readily defined in the future.
- 5. All community sewage disposal areas shall be monumented.

B. Iron Pin Standards

- Iron pins shall be accurately placed at the intersection of all lines forming angles, at changes in directions of lines, and at all lot corners within a subdivision.
- 2. Iron pins shall be solid iron, with a minimum diameter of one (1) inch and shall have a minimum length of twenty-four (24) inches.
- 3. Iron pins shall be driven vertical to the earth to ensure that they shall not be moved or removed and shall be set level with the finished grade.

SECTION 604 SEWAGE TREATMENT AND DISPOSAL

A. General Requirements

- Where the plan contemplates individual on-lot systems, each lot shall be suitable for a sanitary sewage disposal system in accordance with the provisions of the Chester County Health Department.
- 2. Each property shall be connected to a public sewer system, if accessible. Where there is no access or planned extension to the immediate vicinity of the subdivision, the developer may use a central community sewage disposal system with disposal fields covering at least one (1) acre or on-lot systems if the proposed lots are one (1) or more acres in area.
- 3. Except in the AP Zoning District, where public sewage is planned for the immediate vicinity of a subdivision but the trunk line is not yet accessible, the developer shall install the sewer lines, including lateral connections as may be necessary to provide service to each lot when the trunk connection is made. The sewer lines shall be capped within the street right-of-way. When capped sewers are provided, community disposal facilities shall also be provided.
- 4. Public or community sanitary sewers shall not be used to carry stormwater and shall be guarded against infiltration.

B. Public Sewage Disposal System Requirements

Public sanitary sewers installed by the developer shall conform to the requirements of any authority having applicable jurisdiction, e.g., the PA Department of Environmental Protection Rules and Regulations, the PA Sewage Facilities Act 537, and any municipal authority or public utility so created to regulate sanitary sewage facilities.

C. Community Sewage Disposal System Requirements

- 1. Where a community sanitary sewage system is proposed, such a system shall be located on a separate non-residential lot, which shall be monumented according to Section 603 as a sewage disposal area. Areas so designated shall be fully tested for sewage disposal suitability. Approval of community sewage systems shall be part of the application for final plan approval.
- Where community sanitary sewage facilities are proposed or required to be utilized, the limit of such system shall be no closer than two-hundred (200) feet to any adjacent property line. Where such system requires a building, structure, or facilities to be located above ground, the aforesaid shall be completely screened from the view of adjacent properties, according to the landscaped buffer standards of Section 1305 of the Township Zoning Ordinance.
- 3. The design, installation, ownership, and proposed future maintenance of any community sanitary sewer system shall be subject to the review and recommendations of the Township Engineer and Township Planning Commission and further to the approval of the Board of supervisors. As a minimum design criterion, each proposed system shall be required to provide a reserve area in the event of a primary system failure. The reserve area shall be located in an area with soils suitable for such function and shall not be located within any area required for open space.

D. On-Lot Sewage Disposal System Requirements

 Whenever an applicant proposes that individual on-lot sanitary sewage systems shall be utilized within a subdivision, the applicant shall install such a facility as approved by the Chester

- County Health Department. In addition a suitable area on the lot shall be provided for a replacement absorption area.
- The backfilling of all percolation test pits on a tract shall be accomplished within one (1) calendar day after the test has been completed.
- On-lot sewage disposal systems shall be located only on the lot it serves.

SECTION 605 WATER SUPPLY

A. General Requirements

- Adequate and potable water supply system(s) shall be installed consistent with the design principles and requirements contained in this Ordinance and applicable Township standards, which are based on U.S. public health criteria for drinking water, PA DEP Rules and Regulations, Chapter 109, and the applicable standards of the Chester County Health Department.
- Wherever feasible, the subdivision shall be provided with a complete public or community water distribution system. The design and installation of a public system shall be subject to the approval of the Township or authority. The design and installation of a community system shall be subject to the approval of PA DEP and shall be further subject to satisfactory provision for maintenance thereof. Where a permit is required by PA DEP, it shall be presented as evidence of such review and approval in the case of private or public systems before construction shall commence.
- 3. No subdivision or land development application proposing a public or community water supply system shall be granted preliminary or final approval unless the applicant demonstrates full compliance with the applicable provisions of this Section 605.

B. Individual On-Site Water Survey

Where a subdivision or land development proposes individual on-site water service, the following requirements shall apply:

- 1. Water survey The applicant shall file as part of the final plan submission, a water survey report executed by a person having an accredited degree in geology with a demonstrated knowledge and experience in the field of hydrogeology, which report shall state:
 - a. That he has reviewed the soil, underlying rock formation, known sources of contamination, adjacent wells and uses, streams and surface water, wetlands and other features and conditions within the zone of contribution for the wells proposed to serve the contemplated lots.
 - b. That, based upon this analysis and review, he is of the opinion that a safe and adequate water supply can be provided on each individual lot proposed and within the lot lines thereof giving adequate, potable water supply of not less than three (3) gallons per minute and meeting all of the chemical and biological standards of the Chester County Health Department with reference to water supplies for human consumption.
 - c. That the cone of depression for each such well will be such as not to interfere with any other well proposed for the development or existing within the zone of contribution of the proposed or existing well.
 - d. That the proposed wells will not cause the movement of known sources of contamination within the zone of contribution.
 - e. That the proposed wells within the project shall not result individually or cumulatively in the withdrawal of water beyond the safe yield of the aquifer.
- 2. All wells shall be constructed to the AWWA Standard A-l00-84.
- Copies of the drilling logs and quantitative and qualitative tests for each well drilled within the proposed project shall be filed with the township and reviewed by the Township Engineer prior to issuance of any building permit for any building or structure to be served by a proposed individual on-site well.

C. Individual Off-Site Water Service

Where a single EDU is served by an individual off-site water supply, the requirements of Section 605.B., above, shall apply and, in addition thereto, there shall be appended to the water study copies of all easements and agreements necessary to assure the right to construct, maintain and operate the sanitary facility at the site designated and adequate assurances of access for the purpose of maintenance and repair to assure a permanent and continuous supply of water and access to the facility for the maintenance thereof. All such documents shall be in a form and substance satisfactory to the Township Solicitor.

D. Community Water Service

Where a subdivision or land development proposes community water service, whether on or off-site, the following requirements shall apply:

- 1. Where water is to be supplied by a certified public utility rendering service at the time of submission of the final plan to users and customers other than those proposed to be served within the proposed development or where such water is to be provided by a municipality or municipal authority, a copy of the certificate of public convenience from the Public Utility Commission or certificate of incorporation of the municipal authority and a statement of the letterhead of the utility, municipality or authority providing such service, signed by an officer of such entity authorized so to do, stating that the provider has sufficient capacity and pressure to provide a safe, continuous and adequate supply of water to all EDU's within the proposed development for consumptive and fire protection use shall be appended to the application for final approval. Also appended thereto shall be a statement of the terms and conditions under which such service will be provided and a statement of the cost for construction of any mains or transmission facilities or treatment facilities rendering such service and a statement of any charges or tap-in or connection fees and inspection fees to be imposed. This information shall be acceptable evidence but not conclusive evidence of a safe and adequate water supply.
- Where the applicant proposes to furnish water by means of a community water facility owned and operated by the owner or owners of the lands and/or buildings within the development, a

water survey shall be provided as part of the applicant's final plan submission, containing all of the following:

- a. A water survey report executed by a person having an accredited degree in geology with a demonstrated knowledge and experience in the field of hydrogeology, which report shall state that he has reviewed the soil, underlying rock formation, known sources of contamination. adjacent wells and uses, streams and surface water, wetlands and other features and conditions within the zone of contribution for the wells proposed to serve the contemplated lots; that, based upon this analysis and review, he is of the opinion that a safe and adequate water supply can be provided on each individual lot proposed and within the lot lines thereof giving adequate, potable water supply of not less than three hundred fifty (350) gallons per EDU and meeting all of the chemical and biological standards of the Chester County Health Department with reference to water supplies for human consumption; that the cone of depression for each such well will be such as not to interfere with any other well proposed for the development or existing within the zone of contribution of their proposed or existing well; that the proposed wells will not cause the movement of known sources of contamination within the zone of contribution: that the proposed wells within the project shall not result individually. or cumulatively in the withdrawal of water beyond the safe yield of the aguifer; and that there are proposed for the project and considered with the report one (1) or more primary wells and one (1) or more reserve well that, in the vent of failure of the primary wells, the reserved wells are adequate to meet the needs for water within the project.
- b. The applicant shall append to the water report a copy of all deeds of easement, declarations of easement and reservations of easement necessary or appropriate to assure the continued installation, protection, preservation, maintenance, repair and operation of all facilities and equipment necessary to assure a permanent, continuous and adequate supply of water meeting the chemical and biological standards of the Chester County Health Department and all other regulatory agencies.

- c. The applicant shall append to the water report copies of all proposed declarations, covenants and agreements to assure the fiscal integrity, operation and maintenance of the water facility, which covenants, declarations and agreements shall include, among other things, a requirement that said facility shall be maintained by a professional, licensed water plant operator.
- d. All documentation required in and shall be in form and content to the Board of Supervisors and to the Township solicitor. The Township may adopt by resolution rules and regulations for the establishment and operation of sanitary facilities within the Township, including, without limitation, regulations for budgeting review, continuity of management and financial responsibility.
- e. All wells shall be constructed to AWWA Standard A-100-84.
- f. Copies of the drilling logs and quantitative and qualitative tests for each well drilled within the proposed project shall be filed with the township and reviewed by the Township Engineer prior to issuance of any building permit for any building or structure to be served by a proposed community well.

E. Public Water Supply Requirements

- Whenever a public water system is provided, fire hydrants or acceptable alternatives shall be installed for fire protection as approved by the Chief of the local fire company with first call jurisdiction and the township engineer. Installed fire hydrants shall meet the specifications of the Insurance Services Office of Pennsylvania.
 - a. Fire hydrants within a subdivision shall be placed so that a proposed building shall be no more than seven-hundredfifty (750) feet from the nearest hydrant as measured along roadways.
 - b. For additional fire protection, a dry hydrant may be required to be incorporated into existing or proposed ponds or

- reservoirs and an access easement provided for emergency use.
- c. Fire hydrants are required in all developments proposing in excess of seven (7) multi-family units of any type of construction.
- d. Where fire hydrants are provided, there shall be adequate storage capacity.
- Wherever a water system is provided, applicants shall present evidence to the Board of Supervisors that the subdivision or land development is to be supplied by a certified public utility, a bona fide cooperative association, or by a municipal authority. A copy of the certificate of Public Convenience from the PA Public Utility commission, a cooperative agreement, or an agreement to serve the area in question, whichever is appropriate, shall be acceptable evidence.
- 3. It is required that two (2) sources of groundwater be provided for any water system due to the usual density and demand served by such systems. Each source should be able to supply the average daily demand of the proposed development units as measured in EDU's (Equivalent Dwelling Units of 350 gallons per unit per day). Upon satisfactory evidence being presented for one (1) of the following, the Board of Supervisors may allow a single source water supply to be utilized.
 - a. 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.
 - b. A single well capable of supplying the average daily demand with an additional reliable surface water source.
 - A single well capable of supplying the average daily demand plus a dependable connection to another approved public water supply system.

d. A second well may be required by the Board of Supervisors for use as a monitor of the aquifer and as a standby in the event of an emergency.

4. Construction Standards:

- a. Water mains shall be constructed of cement-lined, ductile iron, minimum class 52 pipe, or of equal or better construction, or as approved by the Township Engineer. No extension of water mains shall be permitted for a pipe having a diameter of less than six (6) inches.
- b. All pipes shall have a minimum cover of three feet six inches (3'6") from grade to the crown of the pipe.
- c. Generally, water mains shall be so designed as to form a loop system to enhance the continual supply of fresh water. When dead ends occur on new mains, they shall all be closed with cast iron plugs and caps, with a blow-off valve, with a concrete anchor or fire hydrant.
- Mains shall be drained through drainage branches or blowoffs to dry wells from which the water can be pumped.
 Drainage branches, blow-offs, air vents, and appurtenances shall be provided with valves.
- e. Blow-offs shall not be connected to any sewer, or submerged in any manner that shall permit back siphonage in the distribution system. All blow-offs should be located out of paved areas.
- f. Water mains, valves and all appurtenances shall be located, where possible, outside of the cartway and within the street rights-of-way.
- g. Manholes shall be constructed of brick or concrete, with cast iron frames and covers or as approved by the Township Engineer.
- h. Fire hydrants shall be provided as an integral part of any public water system. Each hydrant shall be connected to the system with a minimum of six (6) inch ductile iron

branch controlled by a minimum of an independent six (6) inch gate valve.

Hydrants shall be spaced apart at a maximum distance of fifteen-hundred (1500) feet, where required, as measured along the street right-of-way.

i. Fire hydrants shall be located in a manner to provide accessibility and so that the possibility of damage from vehicles or injury to pedestrians shall be minimized.

SECTION 606 OTHER UTILITIES

- A. In accordance with the provisions of Act 287, the applicant shall contact all applicable utility companies and accurately determine the locations and depths of all underground utilities within the boundaries of the tract proposed for development prior to any excavation. A list of the applicable utilities and their telephone numbers shall appear on final plans submitted for review, and proof of contact shall be presented to the Township prior to final plan approval.
- B. All utility lines including, but not necessarily limited to, gas, street light supply, electric, cable television, and telephone shall be placed underground. The installation of any utility shall be in strict accordance with the engineering standards and practices of the Township and public utility concerned.
- C. Where underground utilities lie under a proposed cartway, such utilities shall be put in place, and approved before the streets are constructed and before any entity is permitted to occupy any building(s) to be served by such utilities.
- D. Prior to the sale of any lot, tract or parcel of land, the party responsible for selling the property shall show on the recorded plan any and all easements which traverse the property and have such easements recorded on any resulting deeds.

SECTION 607 STORM WATER MANAGEMENT

A. General Requirements

- 1. General Compliance There shall be no increase in stormwater runoff at any particular time during any stage of subdivision or land development of a site as compared to the pre-development rate for any frequency of storm. The management of storm water on the site, both during and upon completion of the disturbances associated with the proposed subdivision or land development, shall be accomplished in accordance with the standards and criteria of this Section and the U.S.D.A. Natural Resources Conservation Service. The design of any temporary or permanent facilities and structures shall be in full compliance with the terms of this Ordinance.
 - a. Residential development of single-family detached dwellings on lots greater than ten (10) acres, and residential subdivisions or land developments of four (4) lots or less shall comply with the stormwater management requirements of this Section 607.
 - b. Residential subdivisions or land developments of five (5) or more lots and all other subdivisions and land developments shall comply with the requirements of both the Chester County Water Resources Agency Post Construction Stormwater Management Model Ordinance, January 4, 2005, Sections 3, 4, 5 and 6 and this Section 607.

In addition a stormwater management plan shall be prepared in compliance with the provisions of Section 607.C.1.

It is mandatory to provide on-site or dispersed groundwater recharge of stormwater where soil and geologic conditions so permit. To that end it is suggested that soil percolation or subsurface disposal be evaluated as a primary method of stormwater disposal.

2. Stormwater Drainage - A storm sewer system and all appurtenances shall be required to be constructed by the applicant in any area from which the surface or subsurface

- drainage could impair public safety or cause physical damage to adjacent lands or public property.
- 3. Total Watershed Evaluation The future use of undeveloped areas within the tract, and within the same watershed as shown in the Township Comprehensive Plan and/or Township Open Space and Recreation Plan, shall be taken into account in the design of all storm sewer systems. The capacity of any receiving system shall be based on the maximum anticipated present flow plus that proposed by the new land development. Stormwater management facilities designed to serve more than one (1) property in the same watershed are encouraged. Consultation with the Township is required prior to the design of such facilities. The specific off-site drainage improvements required shall be those specified by the Board of Supervisors at the recommendation of the Township Engineer.
- 4. Erosion and Sedimentation Control In order to prevent accelerated erosion and resulting sedimentation, land disturbance activities relating to an approved subdivision or land development shall be conducted only in accordance with the U.S.D.A. Natural Resources Conservation Service standards and submitted to the Chester County Conservation District.
- 5. Under-drains All building foundations, grade slabs, and cellar floors located on soils that have a community development limitation degree of moderate to severe seasonal high water table (as defined in the Soils Survey of Chester and Delaware Counties) shall be provided with an under-drain system. This system shall provide for drainage of the enclosed volume above the slab, and relief of subsurface water to a depth of not less than eighteen (18) inches below the slab or foundation bottom.

B. Water Protection Districts

Where the Township has determined that the development site falls within a Water Protection District overlay, stricter standards for maintaining and protecting State classified High Quality and Exceptional Value Streams shall be required. A plan for water quality shall be developed which demonstrates that post-development run-off when it enters the stream shall not degrade the stream below the predevelopment quality classification.

C. Stormwater Management Plan

- General Requirements For all subdivisions and land development plans except as provided under Section 607.A.1.a, a stormwater management plan and report shall be submitted containing but not necessarily limited to the following.
 - a. A suitable map of the total watershed in which the tract is located. A U.S.G.S. quadrangle map may be sufficient.
 - Suitable maps and drawings showing all existing and proposed drainage facilities affecting the subject property.
 - A plan of the proposed stormwater drainage system attributable to the subdivision or land development.
 - d. The design computations for the stormwater drainage system(s), including storm drain pipes and inlets, runoff control measures, and culverts and drainage channels.
 - e. A plan of the grading of the subject subdivision or land development.
 - f. A plan of the erosion and sedimentation procedures to be utilized.
 - g. Ownership and proposals for continued maintenance of any proposed basins.
- 2. Storm Drainage Plan A complete plan of the stormwater drainage system showing all pipes, swales, channels, structures, and detention basins shall be submitted as part of the stormwater management plan. The drainage areas feeding each inlet or structure must be delineated on the plan of the storm drainage system and be designed:
 - To permit unimpeded flow of natural watercourses. Such flow may be redirected as required, subject to the approval of the PA DEP.
 - b. To insure adequate drainage of all low points along the line of streets.

c. To intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained, and to prevent substantial flow of water across streets and intersections during storms up to and including a ten (10) year frequency.

3. Storm Drain Pipes and Inlets

- a. Design Flow Rate The storm drain system shall be designed to carry a twenty-five (25) year peak flow rate, and a fifty (50) year peak flow rate at the sump area. The twenty-five (25) year peak flow rate into each inlet shall be indicated on the stormwater drainage plan.
- b. Overflow System An overflow system shall be provided to carry flow to the detention basin when the capacity of the storm drainpipe system is exceeded. The overflow system shall be of sufficient capacity to carry the difference between the one hundred (100) year and the ten (10) year peak flow rates.
- c. Inlet Capacity All inlets must be designed to accommodate the twenty-five (25) year peak flow rate.
- d. Pipe Capacity The capacity of all pipe culverts shall, as a minimum, provide the required carrying capacity as determined by the following sources:

United States Department of Commerce Bureau of Public Roads:

Hydraulic Engineering Circular #5 - Hydraulic Charts for the Selection of Highway Culverts, and

Hydraulic Engineering Circular #10 - Capacity Charts for the Hydraulic Design of Highway Culverts.

e. Minimum and Maximum Cover - A minimum of eighteen (18) inches of cover above the crown of any storm system pipe. The maximum cover over storm drainpipes shall be no more than ten (10) feet.

- f. Diversion of Runoff All storm drainpipes shall be designed to carry the runoff into a detention or retention basin or similar facility utilized to control the rate of runoff leaving the site.
- g. Inlet Grade Elevation The top of all inlet grates shall be designed to be flush with the binder surface. All inlets not located on a road surface shall be sumped six (6) inches from the immediately surrounding grade.
- Runoff Control Measures.
 - a. Runoff Control Generally, the rate and quality of stormwater runoff from any proposed subdivision or land development shall not exceed the rate and/or be less than the quality of runoff prior to development, i.e., zero increase. This standard shall be maintained for storms of all frequencies (two-year, ten-year, twenty-five-year, fifty-year, and one-hundred-year).
 - b. Runoff Control Devices The increased runoff which may result from subdivisions or land developments shall be controlled by permanent runoff control measures that shall provide sufficient carrying, percolating, and/or holding capacity to achieve Section 607.C.4.a, above.
 - c. Stormwater Control Design Criteria All subdivision and land development activities proposing an increase in impervious cover shall be constructed in conformance with the following performance standards:
 - (1) After installation of impervious cover, storm peak discharge rates from the site shall not exceed the before construction peak discharge rate.
 - (2) In establishing the antecedent conditions for calculating runoff prior to development, the following assumptions shall apply:
 - Woodland shall be used as the prior condition for those portions of the site having trees greater than six (6) inches DBH or where

- such trees existed on the site within eighteen (18) months prior to the application.
- Meadow shall be used for all other areas, including areas which are presently or will be covered by impervious surface.
- iii. The area of the site shall contain average antecedent moisture conditions.
- iv. The area of the site shall be subject to a Type Il distribution storm.
- d. Detention Basin vs. Other Surface Methods In general, a detention basin is the most desirable surface method to control the rate of runoff from a development. However, other methods may be permitted by the township upon a positive recommendation from the Township Engineer. These other methods may include, but are not limited to, diversion or retention basins. As in the case of detention basins, all applicable engineering practices and these Township regulations shall be followed.
- e. Design of Detention Basins All detention/retention basins shall be designed in accordance with the U.S.D.A. Natural Resources Conservation Service standards. All plans for erosion and sedimentation control and stormwater management shall conform to the Plan Content requirements of PA DEP Soil Erosion and Sedimentation Control Manual.
- f. Emergency Spillway Whenever possible, the emergency spillway for basins shall be constructed on undisturbed ground. The dimensions of the spillway shall be determined from the Environmental Protection Handbook, U.S.D.A. Natural Resources Conservation Service.
- g. Energy Dissipaters Energy dissipating devices, i.e., riprap, end sills, etc., shall be placed at all basin outlets.
- h. Design Information As part of the stormwater management plan and report, all design information shall be submitted including, but not limited to, the following:

- A general description of the proposed facilities and the operation of the runoff control measures.
- (2) All computations of the stormwater runoff before, during, and after construction, including all supporting material and references.
- (3) A detail of the berm embankment and outlet structure indicating the embankment top elevation, embankment side slopes, top width of embankment, emergency spillway elevation, riser dimensions, pipe barrel dimensions, and dimensions and spacing of anti-seep collars
- (4) Design computations for the outlet pipe RCP and riser.
- (5) A plot of the stage-storage (acre-feet vs. elevation) and all supporting computations.
- (6) Flood routing computations.
- (7) A detailed plan of the riser.
- (8) A plan, at a scale of one (1) inch equals fifty (50) feet, showing the grading, landscaping, and fencing around the basin.
- i. Culverts, Drainage Channels, or Swales
 - (1) Design Flow Standard All culverts, drainage channels, or swales shall be designed to carry a flow rate equal to a fifty (50) year, twenty-four (24) hour storm as described in Technical Release No. 55, Natural Resources Conservation Service.
 - (2) Erosion Prevention All drainage channels shall be designed to prevent the erosion of the bed and bank areas and shall allow a maximum velocity of three (3) feet per second if constructed of earthen materials. The stabilization shall be designed to prevent erosion and frost heave under and behind the stabilized media.

- (3) Maximum Side Slope Any vegetated drainage channel requiring mowing shall have a maximum grade of three (3) horizontal to one (1) vertical on areas to be mowed.
- (4) Drainage Channels and Swales Where drainage channels or swales are used in lieu of storm sewers, such channels or swales shall be designed not only to carry the required discharge without erosion, but also to increase the time of concentration, reduce the peak discharge and velocity, and permit the water to percolate into the soil.
- (5) Acceptable Design Standards Because of the critical nature of vegetated drainage channels, the design of all such channels shall, as a minimum, conform to the design procedures outlined in the Chester County Conservation District Environmental Protection Handbook. Acceptable sources outlining applicable standards for non-vegetated drainage channels are as follows:

Bureau of Public Roads Hydraulic Engineering Circular No. 5 Hydraulic Charts for the Selection of Highway Culverts, as amended

Federal Highway Administration Hydraulic Engineering Circular No. 13 Hydraulic Design of Improved Inlets for Culverts, as amended

- Groundwater Recharge Where practical, on-site runoff control measures shall be designed to facilitate groundwater recharge where suitable subsurface conditions exist.
- k. Subsurface Stormwater Disposal Subsurface disposal of stormwater shall be required where natural, well-drained soils exist and may be implemented as an effective means of stormwater management.

I. Infiltration Beds or Covered Trenches

- (1) Infiltration Trenches Infiltration trenches shall have vertical walls and regularly spaced side supports capable of sustaining the weight of a concrete slab cover. The trench should be void of earthen backfill and outflow drainage conduits. The trench should be backfilled with clean aggregate to the level of the concrete slab and have a perforated input pipe running the full length of the trench.
- (2) Infiltration Beds Infiltration beds should be void of earthen backfill and outflow drainage conduits. The bed shall then be lined on three sides by filter cloth (geotextile fabric) with a flap sufficient to cover the top of the bed after fill with clean aggregate. Perforated pipe should be placed in the aggregate to evenly distribute stormwater.
- (3) Pre-filtration A major concern in the design, construction, and use of infiltration techniques is prevention of sedimentation which clogs the aggregate and degrades the efficiency of the system. The use of basins, sediment traps, filtration manholes, filter bags, etc. shall be required in specific situations to prevent clogging from sedimentation as determined by the Township Engineer.
- m. Recharge Wells The disposal of stormwater directly into the subsurface may be achieved by the use of recharge wells. Such wells may be required to drain areas with standing water that resist other methods of draining. It should be noted that recharge wells with their direct access to the underlying geologic strata pose a significant possibility of contamination to the groundwater supply. Therefore, the Chester County Health Department shall be contacted before any drilling commences. Filtration and ongoing inspection may be required.
- n. Percolation Rates The rate of percolation is dependent on the type of soil(s), the structure of the substratum, and location of the water table. Therefore, soil analysis is

mandated before any final subsurface disposal facilities are to be designed or implemented.

SECTION 608 STRIPPING, PILING, AND REPLACEMENT OF TOP SOIL

Initial construction at any site shall consist of stripping and piling of topsoil from the areas to be developed. The area stripped of topsoil should be kept to a minimum by limiting disturbance to those areas planned for construction and limited access. Upon completion of construction the entire amount of topsoil removed shall be replaced on the site and seeded or otherwise stabilized. No topsoil shall be disposed of, by sale or otherwise, off the site of the development.

SECTION 609 GRADING AND EROSION CONTROL

- A. The applicant shall not modify, fill, excavate, or re-grade land in any manner so close to the property line as to endanger or damage any adjoining public, street, sidewalk, or any other public or private property. Any adjoining property which may be adversely affected by earth moving activities on the site proposed for subdivision or land development shall be fully protected from settling, cracking, erosion, sedimentation and the like which may result.
- B. The applicant shall not deposit or place any debris or any other material whatsoever, or cause such to be thrown or placed, in any drainage channel, drainage facility, or other burial place on the site.
- C. All plans and specifications accompanying applications shall include provisions for both interim (temporary) and ultimate (permanent) erosion and sedimentation control.
 - 1. The design, installation and maintenance of erosion and sedimentation control measures shall be accomplished in accordance with guidelines as may be established from time to time by the Pennsylvania Department of Environmental Protection and the Chester County Conservation District. No earth moving or other land shaping operations shall commence prior to the construction of erosion and sedimentation control protection.

- 2. No grading or earth disturbance shall take place within ten (10) feet of a property line, except as may be required for a driveway to intersect an access road.
- 3. All graded surfaces shall be seeded, sodded and/or planted or otherwise protected from erosion within fifteen (15) days of completion of earth moving activities for that area. They further shall be watered, tended and maintained until growth is well established at the time of completion and final inspection.
- 4. Sites, including single-family residences, shall be graded to secure proper drainage away from buildings and to provide for the collection of stormwater in swales and/or inlets.
- 5. During grading operations all necessary measures for dust control shall be exercised.
- 6. All existing trees in areas of extreme grade change shall be protected with suitable tree wells. Should the necessity for the removal of such a tree be established, it shall be replaced with the same or similar species a minimum of two and one-half (2½) DBH.
- D. Any man-made slope steeper than three (3) horizontal to one (1) vertical shall be benched or continuously stepped into competent materials where vertical cuts exceed ten (10) feet prior to placing all classes of fill.
- E. Fills toeing out on natural slopes exceeding three (3) horizontal to one (1) vertical shall not be made, unless approved by the Township after receipt of a positive recommendation by the Township Engineer. A preliminary report to the Township Engineer shall be made by the applicant's soil scientist certifying that he has investigated the property, made soil tests and that in his opinion such steeper slopes shall safely support the proposed fill. Costs for such investigation and report shall be borne by the applicant/developer.

SECTION 610 COMMUNITY FACILITIES AND PUBLIC OPEN SPACE

A. Whenever the proposed development contemplates or includes common open space or common facilities for the use and enjoyment of the residents thereof, the preliminary plan application shall include a declaration of covenants, restrictions and conditions assuring the continued maintenance of such open space and/or facilities and their

- continued availability to the residents. This shall be satisfactory in form and content to the Township and its Solicitor.
- B. Applicants shall give particular consideration to the desirability of providing or reserving areas for facilities normally required in residential neighborhoods, including but not limited to libraries, schools, parks and playgrounds, and local community centers. Areas provided or reserved for such community facilities should be adequate to provide for building sites with sufficient landscaping and off-street parking as is appropriate for the use proposed. Standards for such facilities and uses are found in the Township Open Space and Recreation Plan and are adopted by reference.
- C. In subdivisions, which are intended to provide residential dwellings of more than twenty-five (25) units and having an average dwelling density of less than one (1) acre, or fifty (50) or more dwellings in all other cases, the Township Planning commission and the Open Space & Recreation Committee shall determine the need for suitable open space and recreation areas/facilities and make a recommendation thereon. The following table shall be used by the applicant in determining minimum acreage requirements.

DWELLINGS TO BE SERVED	MINIMUM REQUIRED ACREAGE
25 TO 50 units	5.0 acres
For each additional 50 units or fraction thereof	2.0 acres

- D. Open Space Characteristics and Design Standards In designing areas for open space and recreation within the subdivision and land development plan, the following criteria and standards shall be adhered to by the applicant:
 - The proposed areas/facilities shall be consistent with the Township's Open Space & Recreation Plan and Comprehensive Plan.
 - 2. The proposed area shall be suitable for active recreational uses to the extent deemed suitable by the Board, without interfering with adjacent dwelling units, parking, driveways, roads, and properties.

- 3. The proposed area shall be comprised of no more than twenty-five percent (25%) environmentally sensitive lands; including floodplain, wetlands, woodlands, and slopes exceeding fifteen percent (15%).
- 4. The proposed area shall be comprised of areas of not less than one hundred fifty (150) feet across, except for access or those parts of a trail or path system, and not less than two (2) acres of contiguous land.
- 5. The proposed area shall be interconnected with common open space areas on abutting tracts wherever possible, to create linked open space systems within the Township.
- 6. The proposed area shall be provided with sufficient perimeter parking when necessary, and with safe and convenient access by adjoining street frontage or other rights-of-way or easements capable of accommodating pedestrian, bicycle, maintenance and vehicle traffic, and containing appropriate access movements.
- 7. The proposed area shall be free of all structures, except those related to the recreational use.
- 8. The proposed area shall be suitably landscaped either by retaining existing natural cover and wooded areas and/or by a landscaping plan for enhancing open space areas through plantings which are consistent with the purposes of this section and the Open Space & Recreation Plan, and which minimize maintenance costs.
- 9. The proposed area shall be made subject to such agreement with the Township, and deed restrictions duly recorded in the office of the County Recorder of Deeds, as may be required by the Board for the purpose of preserving the common open space for such use.

E. Ownership and Maintenance

The ownership and maintenance of any such open space and/or recreation areas created under the terms of this Ordinance shall be vested in a duly created and authorized homeowners association or other entity approved by the Township.

SECTION 611 OUTDOOR LIGHTING

A. Applicability

The requirements and standards of this Section shall apply to sign, architectural, landscape lighting and outdoor lighting facilities when provided for in all off-street parking areas, off-street loading areas and roadways, all residential compound parking areas consisting of ten (10) or more parking spaces, and such other developments or uses which the Board of Supervisors deems outdoor lighting necessary for the protection of the health, safety and general welfare of the residents and the community.

B. Lighting Plans

Lighting plans required by this Section shall be submitted as part of the preliminary plan requirements of this Ordinance. Such lighting plans shall include a schematic layout of all proposed lighting fixture locations, both free-standing and building mounted, and isofootcandle plots of individual fixture installations and ten (10) foot by (10) foot illuminance grid plots for multi-fixture installations that demonstrate full compliance with the illuminance requirements herein specified.

The plan shall also include complete catalog numbers of fixtures and lamps, fixture catalog cuts, the lamp lumen ratings and light-loss factors used in illuminance calculations, proposed hours of operation, specific fixtures proposed for security lighting, if any, on/off control devices and proposed fixture mounting heights.

The applicant shall demonstrate that no nuisance glare or disabling glare will result from the implementation of the proposed lighting plan. In addition the applicant shall also demonstrate that the lighting plan provides adequate measures to conceal visibility of the light source from any point off the property being illuminated.

C. Outdoor Lighting Design Standards and Illumination Standards

 All outdoor lighting facilities required by this Section shall provide an illumination level utilizing the current recommended practices and standards of the Illuminating Engineering Society of North America (IESNA). 2. Illumination where required by this Section shall have the lighting intensities and uniformity ratios as provided in the Lighting Handbook of the Illuminating Engineering Society of North America (IESNA), 9th Edition, as follows:

USE	MAINTAINED FOOTCANDLES	UNIFORMITY AVERAGE: MINIMUM
PARKING, MULTI-FAMILY		
Vehicular/Pedestrian Activity		
Low Activity	0.2 Min	4:1
Medium Activity	0.6 Min	4:1
PARKING, INDUSTRIAL/COMMERCIAL/ INSTITUTIONAL/MUNICIPAL		
High Activity Regional Shopping Centers/ Fast Food Facilities/ Major Athletic, Civic, Cultural Facilities	0.9 Min	4:1
Medium Activity Community Shopping Centers/ Office Parks, Hospitals, Commuter Parking Lots/Recreational, Civic, Cultural Facilities	0.6 Min	4:1
Low Activity	0.2 Min	4:1
Neighborhood Shopping Centers/ Industrial Employee Parking/ Schools, Church Parking		
Local Commercial/Streets	0.9 Avg	6:1
Building Entrances	5.0 Avg	

Notes:

- Illumination levels are maintained horizontal footcandles on the task, e.g. pavernent area surface.
- Uniformity ratios dictate that average illuminance values shall not exceed minimum values by more than the product of the minimum value and the specified ratio, e.g. for commercial parking, high activity, the average footcandles shall not exceed 3.6 (0.9 x 4)
- 3. Lighting fixtures shall be of a type and design appropriate to the lighting application and sensitive to the architecture and overall character of the area in which they are located.
- For lighting horizontal surfaces such as nonresidential streets and parking areas, fixtures shall meet IESNA full cutoff criteria.

- 5. The use of floodlighting, spotlighting, wall mounted fixtures, decorative globes and other fixtures not meeting IESNA full cutoff criteria may be permitted by the Board of Supervisors only when the applicant can demonstrate acceptable glare and light trespass control and concealment of the light source.
- 6. Fixtures shall be equipped with, or be capable of being retrofitted with, light directing devices such as shields, visors or hoods when necessary to redirect offending light distribution or conceal the light source.
- D. Control of Nuisance Glare, Disabling Glare and Light Source
 - 1. All outdoor lighting shall be aimed, located, designed, installed and maintained so as not to present a hazard (disabling glare) 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 (nuisance glare) onto neighboring properties or uses.
 - 2. Floodlights and spotlights, when specifically permitted by the Board of Supervisors, shall be so installed and aimed so that they do not project their output into windows of neighboring residences, adjacent uses, directly skyward or onto a street.
 - 3. Unless otherwise permitted by the Board of Supervisors for reasons of safety and security, all exterior lighting required by this Section shall be controlled by automatic switching devices, such as time clocks or combination motion detectors and photocells to permit extinguishing light between 11 p.m. and dawn so as to mitigate nuisance glare and skyward light trespass.
 - 4. When all-night safety or security lighting is permitted by the Board of Supervisors, the lighting intensity levels shall not exceed twenty percent (20%) of the levels permitted by this Section.
 - Vegetative or other screens shall not be employed as a primary means of controlling glare. Glare control shall be achieved through the use of such means as cutoff fixtures, shields and baffles and the appropriate selection and application of fixture mounting height, wattage, aiming angle and fixture placement.

- 6. The intensity of illumination projected onto a residential use from another property shall not exceed one tenth (0.1) vertical footcandles measured at thirty (30) inches above the ground at the property line.
- 7. Fixtures meeting IESNA full cutoff criteria shall not be mounted in excess of fourteen (14) feet above finished grade.
- 8. Fixtures used for architectural lighting, e.g. façade, fountain, feature and landscape lighting, shall be aimed so as not to project their output beyond the objects intended to be illuminated and shall be extinguished between 11 p.m. and dawn, unless specifically approved by the Board of Supervisors.
- The source of all lighting shall be sufficiently shielded and concealed so that it shall not be visible from any point off the property being illuminated.

E. Installation

- 1. Electrical feeds for exterior lighting standards shall be placed underground.
- 2. Exterior lighting standards shall be placed a minimum of five (5) feet outside of paved or on concrete pedestals at least thirty (30) inches high above the pavement or suitably protected by other means as approved by the Township.

F. Maintenance

Lighting fixtures and ancillary equipment shall be maintained so as to continuously meet the requirements of this Section.

G. Inspection and Compliance

1. The Township shall conduct a post-installation nighttime inspection to verify compliance with the requirements of this Section and if appropriate require remedial action, the cost of which shall be borne by the applicant.

- 2. Nuisance Glare and Inadequate Illumination
 - a. The owner of an exterior lighting fixture or installation that produces unacceptable levels of nuisance glare, skyward light, excessive or insufficient levels of illumination, or otherwise does not conform to the requirements of this Section shall be notified thereof by the Township and shall be required to take remedial action.
 - b. Remedial action shall be completed within thirty (30) days of notification by the Township after which the Township may levy a fine or take such other action as allowed by law.

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ARTICLE VII

OF PUBLIC IMPROVEMENTS

SECTION 700 CONSTRUCTION REQUIREMENTS

- A. The applicant shall construct or place all roads, streets, or lanes, together with all other improvements, including grading, paving, curbs, gutters, sidewalks, street lights, fire hydrants, monuments, water mains, street signs, shade trees, storm drainage facilities, sanitary sewers, landscaping, traffic control devices, open space and restricted areas, and erosion control measures in conformance with the Final Plan as approved.
- B. No plat shall be finally approved for recording, and no building permits shall be issued until the applicant has completed all required improvements or has provided a performance guarantee in accordance with Section 702 and Section 704 of this Ordinance.
- C. All trenches or other excavations in existing or proposed streets shall be backfilled in accordance with the following:
 - Backfilling shall be done as promptly as possible.
 - 2. The pipe shall be embedded on a minimum of six (6) inches of #8 coarse aggregate. The trench shall be backfilled with 2A aggregate to a height of at least one (1) foot above the top of the conduit, pipe or pipe bell. This 2A aggregate shall be thoroughly hand-tamped around the side of the pipe and placed with hand shovels and free from refuse, boulders, rocks, organic material or other material which, in the opinion of the Township Engineer, is unsuitable. The remainder of the trench shall be backfilled and mechanically tamped in approximately six (6) inch layers.
 - When openings have been made in existing Township roads, paving shall be restored in accordance with the paving standards contained in this Ordinance. Openings made in State roads shall be restored in accordance with Pennsylvania Department of Transportation specifications. A permit shall be required before paving is opened in any existing State road. Notification and

- approval from the Township Engineer shall be required for opening any Township road.
- 4. Where openings are made behind the curb line, the opening shall be covered with good topsoil to a depth of six (6) inches and seeded or sodded to the satisfaction of the Township Engineer.
- 5. Whenever the trenches have not been properly filled or if settlement occurs, they shall be refilled, compacted, smoothed off and finally made to conform to the surface of the surrounding ground or grade.
- Frozen earth shall not be used for backfilling, nor shall any backfilling be done when materials in the trench are frozen.
- 7. Where the excavated material, or any portion thereof, is deemed by the Township Engineer to be unsuitable for backfilling, the applicant shall remove and properly dispose of the unsuitable material and procure and place backfill material approved by the Township, such removal and replacement at no cost to the Township.
- 8. Open trenches shall be backfilled or plated by the end of the work shift.
- 9. Any access to a Township or state road shall require a traffic control plan be submitted to the Township for approval.
- D. At all times during the construction of the project, scrubbers shall be positioned at all points exiting the site to facilitate the cleaning of mud and debris from all vehicles leaving the site.
- E. No burning or burying of trash, debris, trees or stumps shall be permitted in any building envelope, in any area of public improvement, or within any ultimate rights-of-way. In addition, no hazardous or toxic material, or non-biodegradable materials are to be burned or buried on the construction site. To ensure that such trash and debris are removed, a Dempsey Dumpster, or similar trash container, shall be placed at various locations on the work site. Such containers shall be removed and their contents properly disposed of prior to completion and acceptance of the project.

F. It shall be the applicant's responsibility to notify all emergency service agencies serving the Township when construction shall begin and where the site is located.

SECTION 701 INSPECTIONS

- All land disturbance work shall be performed in accordance with an Α. inspection and construction control schedule approved by the Township Engineer. No work shall proceed to a subsequent phase until inspected and approved by the Township Engineer or his designee, who shall then file a report thereon with the Township. The construction or installation of all improvements shall at all times be subject to inspections by representatives of the Township. If such inspection reveals that the work is not in accordance with approved plans or specifications, that construction is not being performed in the prescribed manner, or that erosion or sedimentation controls are falling to prevent erosion or waterborne sediment from leaving the construction site, the said representative is empowered to require corrections to be made and/or suspension of subdivision or construction approval and to issue a cease and desist order, which may include any or all of the following interim relief:
 - 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; and/or
 - 3. That no further building permits for any lots shall be issued.
- B. The said cease and desist order shall be terminated upon the determination by Township representatives that the said defects or deviations from plan requirements have been corrected.
- C. Before commencement of earth moving operations, the requisite Erosion and Sediment Pollution Control Plan shall be approved and a copy shall be kept at the construction site at all times. The Township Engineer or his designee shall inspect at the following points in the development of the site, or of each stage thereof:
 - 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 disturbance covers.
- 3. During construction of the permanent facilities, at such time(s) as specified by the Township Engineer.
- Upon completion of permanent stormwater management facilities, including established ground covers and plantings for that purpose.
- 5. Upon completion of the final grading, vegetative control measures, and all other site restoration work undertaken in accordance with the approved plan and permit.
- 6. The Township Engineer is authorized to make random inspections as he deems necessary and appropriate.
- No underground pipes, structures, sub-grade or base course shall be covered until inspected and approved by the Township. A minimum of six (6) inspections by the designated representative shall be required. These inspections shall be effected as follows:
 - 1. Excavation and completion of grade.
 - 2. Excavation, installation and completion of drainage, structures, community sewage systems or water supply systems.
 - 3. Before placing first base course and between each base course.
 - 4. Before placing binder course.
 - Before placing wearing course.
 - Final inspection in accordance with Section 702.A.
- E. The applicant shall notify the Township Engineer at least twenty-four (24) hours in advance of commencement of any construction operations requiring an inspection.

- F. In the review of any stormwater management plan, the Board of Supervisors, upon recommendation from the Township Engineer, shall have the discretion to modify or waive the otherwise applicable inspection schedule called for in this Article.
- G. The applicant shall reimburse the Township for the reasonable and necessary expense incurred for the inspection of improvements. Such reimbursement shall be based upon a schedule established and from time to time revised by resolution. Such expense shall be reasonable and in accordance with the ordinary and customary fees charged by the Township Engineer or consultant for work performed for similar services in the Township, but in no event shall the fees exceed the rate or cost charged by the engineer or consultant to the Township when fees are not reimbursed or otherwise imposed on applicants.
 - 1. In the event the applicant disputes the amount of any such expense in connection with the inspection of improvements, the applicant shall, within ten (10) working days of the date of billing, notify the Township that such expenses are disputed as unreasonable or unnecessary, in which case the Township shall not delay or disapprove a subdivision or land development application or any approval or permit related to development due to the applicant's request over disputed engineer or consultant expenses.
 - 2. If, within twenty (20) days from the date of billing, the Township and applicant cannot agree on the amount of expenses which are reasonable and necessary, then the applicant and Township shall jointly, by mutual agreement, appoint another professional engineer licensed as such in the Commonwealth of Pennsylvania to review the said expenses and make a determination as to the amount thereof which is reasonable and necessary.
 - 3. The professional engineer so appointed shall hear such evidence and review such documentation as the professional engineer in his or her sole opinion deems necessary and render a decision within fifty (50) days of the billing date. The applicant shall be required to immediately pay the entire amount determined in the decision.
 - 4. In the event the Township and applicant cannot agree upon the professional engineer to be appointed within twenty (20) days of the billing date, then upon application by either party, the

President Judge of the Court of Common Pleas of the judicial district in which the municipality is located (or if at the time there be no President Judge, then the senior active judge then sitting) shall appoint such engineer, who, in that case, shall be neither the Township Engineer nor any professional engineer who has been retained by, or performed services for, the Township or the applicant within the preceding five (5) years.

5. The fee of the appointed professional engineer for determining the reasonable and necessary expense shall be paid by the applicant if the amount of payment required in the decision is equal to or greater than the original bill. If the amount of payment required in the decision is less than the original bill by \$1,000 or more, the Township shall pay the fee of the professional engineer, but otherwise the Township and the applicant shall each pay one-half of the fee of the appointed professional engineer.

SECTION 702 RELEASE FROM PERFORMANCE GUARANTEE

- A. When the applicant has completed all of the necessary and appropriate improvements, he shall notify the Board of Supervisors, in writing, by certified or registered mail, of the completion of the aforesaid improvements and shall send a copy thereof to the Township Engineer to inspect all of the aforesaid improvements. The Township Engineer shall, thereupon, file a report, in writing, with the Board, and shall promptly mail a copy of the same to the applicant by certified mail. The report shall be made and mailed within thirty (30) days after receipt by the Township Engineer of the aforesaid authorization from the Board. Said report shall be detailed and shall indicate approval or rejection of said improvements, either in whole or in part. If said improvements, or any portion thereof, shall not be approved or shall be rejected by the Township Engineer, said report shall contain a statement of reason for such non-approval or rejection.
- B. The Board of Supervisors shall notify the applicant, in writing, by certified mail, of the action of the Board with regard to approval, non-approval, or rejection of improvements.
- C. If any portion of the said improvements shall not be approved or shall be rejected by the Board of Supervisors, the applicant shall proceed to complete those improvements and, upon completion, the same procedure of notification as outlined herein shall be followed.

- D. The applicant shall be responsible for maintenance of all subdivision or land development improvements until such improvements are offered for dedication and are accepted by the Township. The applicant shall be responsible for snow removal on all roads within the developments.
- E. Where the Board of Supervisors accepts dedication of all or some of the improvements following completion, the provisions of Section 509 (k) of the MPC shall apply.
- F. Partial releases of the performance guarantee during the period of construction shall be authorized as per Section 302.G.7 and 8 of this Ordinance.

SECTION 703 AS-BUILT PLANS

Within thirty (30) days after completion of subdivision or land development improvements as shown on the final plans, and before Township acceptance of such improvements, and before release from any performance guarantee, the applicant shall submit to the Board of Supervisors a plan showing actual locations, dimensions and conditions of streets and all other public improvements, including easements showing geometry and monument locations certified by a registered engineer to be in accordance with actual construction. As-built plans shall show elevations and inverts to all manholes, pipes and roads. Such as-built plans shall consist of a clear and legible reproducible (Mylar®) copy and a digital (AutoCAD 2000 or earlier version in .dxf format) copy.

SECTION 704 DEDICATION AND ACCEPTANCE OF PUBLIC IMPROVEMENTS

A. Upon completion of any public improvements shown on an approved subdivision plan and within ninety (90) days after approval of such public improvements as herein provided, the applicant shall submit a written offer of such public improvements for dedication to the Township. Said offer shall include a deed of dedication covering said public improvements together with satisfactory proof establishing the applicant's clear title to such property. Such documents are to be filed with the Township Secretary for review of the Township Solicitor. Deeds of dedication for public improvements may be accepted by resolution of the Board at a regular meeting thereof. The Board of Supervisors may require that at least eighty percent (80%) of the lots in any approved

subdivision or land development (or phase thereof, if final plan approval has been in phases) have certificates of occupancy issued for buildings thereon prior to acceptance of dedication. Should the streets, even though constructed according to the specifications of this Ordinance, deteriorate before the said eighty percent (80%) of the lots have certificates of occupancy issued, such streets shall be repaired in a manner acceptable to the Board of Supervisors.

- B. If financial security has been provided in lieu of the completion of improvements required as a condition for the final approval of a plat as set forth in this Article, the Township shall not condition the issuance of building, grading or other permits relating to the erection or placement of improvements, including buildings, upon the lots or land as depicted upon the final plat upon actual completion of the improvements depicted upon the approved final plat. Moreover, if said financial security has been provided, occupancy permits for any building(s) to be erected shall not be withheld following: the improvement of the streets providing access to and from existing public roads to such building(s) to a mud-free and otherwise permanently passable condition; as well as the completion of all other improvements as depicted upon the approved plat, either upon the lot(s) or beyond the lot(s) in question if such improvements are necessary for the reasonable use for occupancy of the buildings.
- C. The Board of Supervisors may require that certain subdivision and land development improvements remain undedicated, with maintenance the responsibility of individual lot owners, a homeowner's association or similar entity, or an organization capable of carrying out maintenance responsibilities.
- D. The Township shall have no responsibility with respect to any street or other improvement, notwithstanding the use of the same by the public, unless the street or other improvement is accepted by ordinance or resolution of the Board of Supervisors.

SECTION 705 MAINTENANCE GUARANTEE

A. Where the Board of Supervisors accept dedication of all or some of the required improvements following completion (whether such dedication is of a fee or of an easement), the Board shall require the posting of a financial security to secure the structural integrity of the improvements and the functioning of the improvements for their intended purpose and in accordance with the design and specifications as depicted on the final

plan. The security shall be in the form authorized for the deposit of the performance guarantee, as described in Section 302.G., hereof, and shall be for a term of eighteen (18) months from the date of the acceptance of dedication and shall be in an amount equal to fifteen percent (15%) of the actual cost of installation of the improvements so dedicated.

- B. Where maintenance of subdivision and land development improvements is to be the responsibility of individual lot owners, homeowners association or similar entity, or an organization capable of carrying maintenance responsibilities, the Board of Supervisors shall require that such responsibilities shall be set forth in perpetual covenants or deed restrictions binding on the landowner's successors in interest, and may further require maintenance funds be established.
- C. Subdivision and land development improvements for the general health, safety, and welfare of the entire development, and not assumed by the Township, are to be located on a common lot(s), and are the responsibility of the homeowners association to maintain and assure proper performance. Such performance is to be guaranteed in accordance with Section 302.G, Section 705.A, and Section 705.B of this Ordinance. Failure to maintain any such improvement shall result in the Township assessing each lot owner a prorated portion of the cost to bring such facility into compliance with Township regulations. Obligations shall include the perpetuation of natural drainage and may include perpetuation of infiltration facilities and/or the maintenance of facilities constructed by the applicant under terms of the building or stormwater permit, e.g., community cisterns, detention/retention basins, stormwater sewers, certain swales, downspout connections, seepage pits, etc.
- D. Subdivision and land development improvements for the individual health, safety, and welfare of the lot owner are to be located on that owner's lot(s), and are the responsibility of the individual lot owner to maintain and assure proper performance. Such performance is to be guaranteed in accordance with Section 302.G, Section 705.A, and Section 705.B of this Ordinance. Failure to maintain any such improvement shall result in the Township assessing the lot owner the cost to bring such facility into compliance with Township regulations. Obligations shall include the perpetuation of natural drainage and may include perpetuation of infiltration facilities and/or the maintenance of facilities constructed by the applicant under terms of the building or stormwater permit, e.g., individual cistern, downspout connections, onsite seepage pits, etc.

- E. On or before the completion of subdivision or land development improvements, the permanent stormwater management system for a tract shall be installed or constructed in accordance with the approved stormwater management plan. All such work shall be as specified in the approved plan. Continued functioning of these facilities shall be guaranteed and maintained, as necessary, and performed in accordance with Section 302.G, and Section 705.B of this Ordinance.
- F. If the Township determines at any time that stipulated permanent stormwater management facilities have been eliminated, altered, or improperly maintained, the owner(s) shall be advised of corrective measures required within a period of time set by the Township Engineer. If such measures are not taken by the owner(s), the Township may cause the work to be done and lien all costs against the property.
- G. Where the maintenance of stormwater management facilities and systems is the responsibility of an individual lot owner, the terms of that maintenance agreement and a description of the facilities and systems on the lot, as called for in Section 705.D, of this Ordinance, shall be set forth in perpetual covenants or deed restrictions binding on the landowner's successors in interest and shall be noted on the final plan to be recorded.

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ARTICLE VIII

ADMINISTRATION

SECTION 800 ENFORCEMENT

A. Compliance - Inspection revealing noncompliance with plans submitted under the provisions of this Ordinance, including all supplementary data required, shall be sufficient grounds for withdrawal of building permits by the Township until correction thereof, or other penalties or remedies, including injunctive relief, as may be provided by law.

B. Preventive Remedies

- 1. In addition to other remedies, the Township may institute and maintain appropriate actions by law or in equity to restrain, correct or abate violations, to prevent unlawful construction, to recover damages and to prevent illegal occupancy of a building, structure or premises. The description by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the seller or transferor from such penalties or from the remedies herein provided.
- 2. 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 any ordinance adopted pursuant to this Article. This authority to deny such permit or approval shall apply to any of the following applicants:
 - a. The owner of record at the time of such violation.
 - b. The lessee of the owner of record at the time of such violation without regard as to whether such lessee had actual or constructive knowledge of the violation.
 - c. The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner had actual or constructive knowledge of the violation.

- d. The lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such lessee had actual or constructive knowledge of the violation.
- 3. 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 Township 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.

C. Enforcement Remedies

- 1. Any person, partnership or corporation who or which has violated the provisions of any subdivision or land development requirement enacted under this Ordinance by enabling laws shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, pay a judgment not exceeding five hundred dollars (\$500) per lot or parcel, or per dwelling within each lot or parcel. In addition, any violator found liable shall also bear the reasonable attorney fees incurred by the Township and all court costs as a result thereof. No judgment shall commence or be imposed, levied or be payable until the date of determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the Township may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation. unless the district justice determining that there has been a violation further determines that there was a good faith basis for the defendant violating the ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one (1) such violation until the fifth (5) day following the date of the determination of a violation by the district justice. Thereafter each day that a violation continues shall constitute a separate violation.
- The Court of Common Pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgment pending a final adjudication of the violation and judgment.

 Nothing contained in this Section shall be construed or interpreted to grant to any person or entity other than the Township, the right to commence any action for enforcement pursuant to this Section.

SECTION 801 RECORDS

- A. The Township shall keep a record of its findings, decisions, and recommendations relative to all plans filed with it for review.
- B. All such records shall be public records.

SECTION 802 FEES AND COSTS

- A. Fees for Township activities such as, the filing of plans, Township inspections, Township Engineer reviews, legal and consultant reviews, etc. shall be established by the Board of Supervisors at a regular public meeting, and may be revised from time to time by Board resolution at a regular public meeting.
- B. No application for preliminary or final approval shall be deemed to have been filed until the fee and any escrow deposit, as set forth below, shall have been paid.
- C. A subdivision or land development application fee (non-refundable) and an escrow deposit shall be submitted with any application for preliminary or final plan approval to cover the costs of plan review and processing. Amounts of the application fee and escrow deposit shall be established by the Board of Supervisors by resolution. The escrow funds shall be used to reimburse the Township for actual expenditures incidental to these processes, including, but not limited to, fees of the Township Engineer and legal fees in excess of the fee for review of the Township's standard forms. Any costs incurred by the Township in excess of the amount held in escrow shall be fully reimbursed by the applicant prior to the issuance of any permits. Any unexpended balance in the escrow deposit shall become part of the second deposit required in Section 802.D.
- D. Following final plan approval and recording, and the establishment of any required performance guarantee, a second escrow deposit shall be established to cover the cost of inspections of improvements construction, materials and/or site testing, and/or maintenance costs

prior to the acceptance of improvements by the Township. Any costs incurred by the Township in excess of the amount held in escrow shall be fully reimbursed by the applicant. The amount of the escrow deposit shall be fixed by resolution of the Board of Supervisors.

SECTION 803 MODIFICATION FOR HARDSHIP

- A. In any case in which an applicant demonstrates to the satisfaction of the Board of Supervisors that strict application of any provisions of this Ordinance would be unreasonable and would cause unnecessary hardship as applied to the proposed subdivision or land development, the Board may grant a modification from the mandatory provision to grant relief from the unnecessary hardship; provided, however, that such modification shall not be granted if it would be contrary to the public interest and have the effect of nullifying the intent and purpose of this Ordinance.
- B. In granting modifications, the Board of Supervisors may impose such conditions as will, in its judgment, secure substantially the objectives of the standards and requirements so modified.
- C. All requests for a modification shall be in writing and shall accompany and be 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, provision or provisions of the ordinance involved and the minimum modification necessary.
- D. The request for modification may be referred by the Board of Supervisors to the Planning Commission for advisory comments. The Board of Supervisors shall keep a written record of all action on all requests for modification with the subject plan of such request.

SECTION 804 APPEALS

Appeals from the actions of the Board of Supervisors with respect to any application for subdivision or land development approval shall be governed by the provisions of PA Act 170, or any successor legislation thereto.

SECTION 805 LIABILITY INSURANCE

If, in the opinion of the Township Engineer, the nature of any land disturbance work is such that it may create a hazard to human life or endanger adjoining property or property at a higher or lower elevation, or any street or street improvement, or any other public property, then the Township may require, upon the advice of the Township Engineer, that the applicant provide a certificate of insurance confirming that he is insured against claims for damages for personal and bodily injury and property damage (including damage to East Nantmeal Township by deposit or washing of material(s) onto municipal streets or other public improvements), which may arise from or out of the performance of the work, whether such performance be by the applicant, his subcontractor, or any person or entity directly or indirectly employed or contracted by the applicant. The certificate of insurance shall also list East Nantmeal Township as an additional insured and be presented to the Township prior to the disturbance work. The amount of such insurance shall be prescribed by the Township in accordance with its determination of the risks involved to persons or property but in no event shall the amount be less than one hundred thousand dollars (\$100,000) per occurrence. Such insurance shall be written by a company licensed to do business in Pennsylvania and approved by the Township. Neither issuance of a permit nor compliance with the provisions thereto or any condition imposed by the Township shall relieve any person or entity from any responsibility for damages to persons or property otherwise imposed by law. nor shall it impose any liability upon the Township for damages to persons or property.

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APPENDIX A

DETERMINATION OF SIGHT DISTANCES AT INTERSECTIONS OF NEW DRIVEWAYS AND STREETS WITH EXISTING TOWNSHIP ROADS

The following tables shall be used to determine clear sight triangle sight distances. They are based on a formula published in the Pennsylvania Code Title 67, Chapter 441 (Access to and Occupancy of Highways by Driveways and Local Roads).

Access driveways shall be located at a point within the property frontage limits which provides at least the minimum safe stopping sight distance (SSSD) listed in Tables 1 or 2. These minimum sight distances shall be obtainable and measured from a point ten feet back of the pavement edge and 3.5 feet above the road surface to a point 3.5 feet above the road surface at the required SSSD. Tables 1 and 2 give minimum safe stopping sight distance (SSSD) for vehicles approaching downhill (descending) and uphill (ascending) respectively towards intersections for various vehicle speeds and road grades.

The distance tabulated in Tables 1 and 2 were calculated using the following formula.

SSSD = [.47Vt +
$$\frac{V^2}{30.(f+0.01a)}$$

SSSD = Minimum safe stopping sight distance (feet).

V = Velocity of vehicle (miles per hour).

= Perception time of motorist (average = 2.5 seconds).

= Wet friction of pavement (average = 0.30).

g = Grade of roadway (percent)

(±) for ascending and (-) for descending vehicles)

Minimum Safe Stopping Sight Distance (SSSD) for Vehicles Approaching Down Hill (Descending) Towards Intersection SSSD'S FOR DOWN HILL GRADES APPROACHING INTERSECTION (Feel) Table 1

%	Q	4	<u>.</u>	Ŋ	1119
14%	222	384	587	832	-
13%	214	369	295	795	1067
12%	207	356	540	762	1021
11%	202	344	521	733	980
10%	196	333	502	706	943
9%	191	323	486	682	808
%₿	186	315	472	099	879
7%	181	306	458	640	851
%9	178	299	446	622	825
5%	175	292	435	605	802
4%	172	286	425	590	780
3%	169	280	415	575	760
2%	166	275	406	562	742
1%	163	270	398	550	724
Level	. 161	265	330	538	708
Speed MPH	25	35	45	55	65

Minimum Sale Stopping Sight Distance (SSSD) for Vehicles Approaching Up Hill (Ascending) Towards Intersection

Table 2

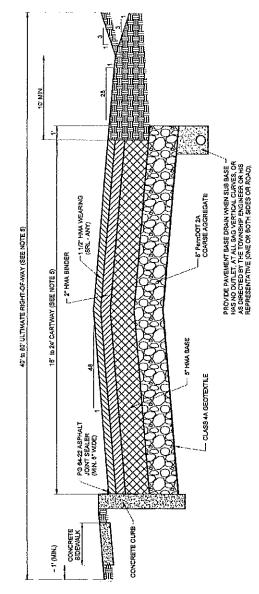
SSSD'S FOR UP HILL GRADES APPROACHING INTERSECTION (Feel)

	 7			-	Ī
14%	139	221	319	431	559
13%	140	224	322	436	566
12%.	141	226	326	442	574
11%	143	228	330	448	582
10%	144	231	334	454	591
%6	145	233	338	461	909
8%	147	236	343	467	610
7%	148	239	348	475	620
%9	150	242	353	482	630
5%	151	245	358	490	641
4%	153	249	363	499	653
3%	155	252	370	507	999
2%	157	256	376	517	679
1%	159	260	383	527	693
Level	161	265	390	538	708
Speed MPH	25	35	45	55	65

APPENDIX B

EAST NANTMEAL TOWNSHIP ROAD SPECIFICATION

lay 3, 2005



NOTES.

- 1. ALL MATERIALS SHALL BE PennDOT APPROVED.
- 2. MATERIALS SHALL BE PLACED IN ACCORDANCE WITH PEMIDOT PUBLICATION 408, LATEST EDITION.
- 3. ALL ASPHALT (BASE, BINDER AND WEARING COURSES) SHALL BE PG 84-22 ABPHALT, 0.3-31 MESALB.
- 4. CROSS SLOPE OF 1 VERTICAL TO 48 HORIZONTAL IS EQUIVALENT TO % PER 1" OR 0.0208.
- CARTWAY AND RIGHT-OF-WAY WIDTHS VARY BASED ON DENSITY AND STREET CLASSIFICATION, SEE SUBDIVISION AND LAND DEVELOPMENT ORDIVANCE.

