

TOWNSHIP OF CENTRE
BERKS COUNTY, PENNSYLVANIA

SUBDIVISION AND LAND
DEVELOPMENT ORDINANCE

Enacted May 10, 1999

TABLE OF CONTENTS

CHAPTER 1. PURPOSE AND AUTHORITY

- Section 1.01 Title ✓
- Section 1.02 Purpose
- Section 1.03 Objectives
- Section 1.04 Application of Regulations

CHAPTER 2. DEFINITIONS

- Section 2.01 General Terms
- Section 2.02 Specific Terms

CHAPTER 3. PROCEDURES

- Section 3.01 Intent
- Section 3.02 Pre-Application
- Section 3.03 Minor Subdivision
- Section 3.04 Major Subdivision or Land Development Preliminary Plan
- Section 3.05 Major Subdivision or Land Development Final Plan

CHAPTER 4. PLANS AND PLATS: REQUIRED INFORMATION

- Section 4.01 Intent
- Section 4.02 Minor Subdivisions
- Section 4.03 Major Subdivisions - Preliminary Plan
- Section 4.04 Major Subdivisions - Final Plan

CHAPTER 5. REQUIRED IMPROVEMENTS AND DESIGN STANDARDS

- Section 5.01 Intent
- Section 5.02 General Standards
- Section 5.03 Energy Conservation Standards (Reserved)
- Section 5.04 Topography
- Section 5.05 Grading
- Section 5.06 Lot Sizes and Standards
- Section 5.07 Stormwater Management and Design Criteria
- Section 5.08 Soil Erosion and Sedimentation Controls and Plan Requirements
- Section 5.09 Sewage Disposal
- Section 5.10 Water Supply
- Section 5.11 Streets
- Section 5.12 Monuments
- Section 5.13 Utilities, Curbs and Sidewalks

- Section 5.14 Required Improvements
- Section 5.15 Completion of Improvements or Guarantee Thereof
Prerequisite to Final Plan Approval
- Section 5.16 Insurance
- Section 5.17 Building Construction and Occupancy
- Section 5.18 As-Constructed (As-Built) Plans
- Section 5.19 Traffic Impact Studies
- Section 5.20 Vehicular Parking Facilities
- Section 5.21 Prime Open Space and Recreation

CHAPTER 6. PLANNED RESIDENTIAL DEVELOPMENTS
(RESERVED FOR FUTURE USE)

CHAPTER 7. FLOOD PLAIN MANAGEMENT

- Section 7.01 Intent
- Section 7.02 Definitions of Terms Utilized in this Chapter
- Section 7.03 Applications, Procedures and Plat Requirements
- Section 7.04 Design Standards and Improvements
- Section 7.05 Performance Guarantee
- Section 7.06 Municipal Liability

CHAPTER 8. ADMINISTRATION, ENFORCEMENT AND PENALTIES

- Section 8.01 Administration, Enforcement and Penalties
- Section 8.02 Waivers
- Section 8.03 Appeals
- Section 8.04 Fees
- Section 8.05 Amendments
- Section 8.06 Severability
- Section 8.07 Validity
- Section 8.08 Effective Date

ORDINANCE NO. 84-1999

AN ORDINANCE OF THE TOWNSHIP OF CENTRE, BERKS COUNTY, PENNSYLVANIA, PROVIDING FOR CONTROL OF THE SUBDIVISION AND DEVELOPMENT OF LAND AND THE APPROVAL OF PLATS AND REPLATS OF LAND WITHIN THE JURISDICTION OF THE TOWNSHIP BOARD OF SUPERVISORS, AS A PART OF THE COMPREHENSIVE PLAN FOR THE TOWNSHIP

BE IT ENACTED AND ORDAINED by the Board of Supervisors of the Township of Centre, Berks County, Pennsylvania, and it is hereby ENACTED AND ORDAINED, under authority of Articles V and VII of the "Pennsylvania Municipalities Code", of the Act of the 1968 General Assembly No. 247, as amended, and by the authority of the same as follows:

CHAPTER 1. PURPOSE AND AUTHORITY

Section 1.01 Title. These regulations, rules, and standards for planning, subdividing and developing land within the Township of Centre, Berks County, Pennsylvania, including procedures for the application and administration, and penalties for the violation thereof, shall be known, cited and referred to as the "Subdivision and Land Development Ordinance for Centre Township, Berks County, Pennsylvania (Ordinance No. 84-1999)".

Section 1.02 Purpose. The general purpose of this Ordinance shall be to guide and regulate the planning, subdividing and development of land in order to promote and protect the public health, safety, convenience, comfort, prosperity and general welfare of the residents of Centre Township.

Section 1.03 Objectives. It is intended that the provisions of these regulations shall be applied to achieve the following objectives:

- 1.03.A. Orderly development of the land to obtain harmonious and stable neighborhoods;
and
- 1.03.B. Safe and convenient vehicular and pedestrian circulation; and
- 1.03.C. Adequate and economical provision for utilities and public services to conserve the public funds; and
- 1.03.D. Ample public open spaces for schools, recreational and other public purposes;
and
- 1.03.E. Accurate surveying of land and preparing and recording of plats; and

- 1.03.F. Discouraging of premature, uneconomical or scattered subdivision; and
- 1.03.G. Maximize conservation of all forms of energy; and
- 1.03.H. Storm water management, by reducing stream erosion and maintaining natural storm water runoff characteristics; and
- 1.03.I. Coordination of land development in accordance with the Township Zoning Ordinance, and other plans of the Township.

Section 1.04 Application of Regulations. No subdivision or land development of any lot, tract or parcel of land located within Centre Township shall be effected; no street, sanitary sewer, storm sewer, water main, storm water control facilities or other facilities in connection therewith shall be laid out, constructed, opened or dedicated for travel or public use, until a subdivision or land development plan has been approved in the manner prescribed herein, and recorded. Furthermore, no property shall be developed, no building shall be erected and no site improvements shall be completed except in strict accordance with the provisions of this Ordinance.

No lot in a subdivision may be sold or transferred; no permit to erect, alter or repair any building upon land in a subdivision or land development may be issued; and no building may be erected in a subdivision or land development, unless and until a final subdivision or land development plat has been approved or recorded, and until construction of any required site improvements in connection therewith has been completed or guaranteed in the manner prescribed herein.

CHAPTER 2. DEFINITIONS

Section 2.01 General Terms. Unless otherwise expressly stated, the following words shall, for the purpose of this Ordinance, have the meaning herein indicated:

- 2.01.A. Words in the singular shall include the plural, and words in the plural shall include the singular.
- 2.01.B. Words in the present tense shall include the future tense.
- 2.01.C. The word "shall" is always mandatory; the word "may" is permissive; and the word "should" means a suggested or preferred action.
- 2.01.D. The words "person" or "subdivider" or "developer" or "owner" include a firm, association, organization, partnership, trust, company or corporation as well as an individual.
- 2.01.E. The word "buildings" includes "structures" and shall be construed as if followed by the words "or any part thereof".
- 2.01.F. The word "watercourse" includes "drain", "ditch" and "stream".

2.01.G. The word "street" includes "highway", "road", "avenue" and "lane".

Section 2.02 Specific Terms. Unless otherwise expressly stated, the following words shall, for the purpose of this Ordinance, have the meanings herein indicated. Undefined terms or words used herein shall have as their meaning that which is defined in the Pennsylvania Municipalities Planning Code (the "PA MPC"). Terms or words used herein which are not defined herein nor defined in the PA MPC shall have as their meaning that which is defined in any other applicable State, County or Local acts, rules, regulations, manuals, ordinances or similar publications. In lieu of all of the above, undefined terms or words used herein shall have their ordinarily accepted meanings or such meanings as the context of this Ordinance may imply.

2.02.A. Accelerated Erosion. The removal of the surface of the land through the combined action of man's activities and the natural processes at a rate greater than would occur because of the natural process alone.

2.02.B. Act 247. See the Pennsylvania Municipalities Planning Code.

2.02.C. Applicant. A land owner or developer, as hereinafter defined, who has filed an application for development or subdivision including his heirs, representatives successors and assigns.

2.02.D. Building (Setback) Line. A line established by municipal zoning codes or the subdivision regulations which define the required minimum distance between any building and the adjacent public or private right-of-way or lot line.

2.02.E. Cartway. The portion of the street right-of-way, paved or unpaved, intended for vehicular use. The shoulder is not considered part of the cartway.

2.02.F. Common Open Space. A parcel or parcels of land or an area of water, or a combination of land and the water within the development site, designed and intended for the use or enjoyment of residents of the development, not including streets, off-street parking areas, and areas set aside for public facilities.

2.02.G. County. Berks County, Pennsylvania.

2.02.H. Detention Structure. A vegetated pond, swale or other structure designed to drain completely after storing runoff only for a given storm event and release it at a predetermined rate. Also, known as a dry pond.

2.02.I. Developer. Any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or a land development.

2.02.J. Easement. A right-of-way granted for limited use of private land for public or quasi-public or private purpose, and within which the owner of the property shall not have the right to make use of the land in a manner which violates the rights of the grantee.

2.02.K. Energy Dissipator. A device used to slow the velocity of storm water particularly at points of concentrated discharge such as pipe outlets.

2.02.L. Engineer, Township. A Registered Engineer designated by the Township Board of Supervisors to perform duties including, but not limited to, those as required by this Ordinance on behalf of the Township.

2.02.M. Engineer. An individual licensed and registered as a Professional Engineer by the Commonwealth of Pennsylvania.

2.02.N. Freeboard. The difference between the design flow elevation in the emergency spillway and the top of the settled embankment.

2.02.O. Governing Body. The Centre Township Board of Supervisors.

2.02.P. Grassed Waterway. A natural or man-made drainageway of parabolic or trapezoidal cross-section shaped to required dimensions and vegetated for safe disposal of runoff. (Also known as a swale).

2.02.Q. Holding Pond. A retention or detention pond.

2.02.R. Improvements. Physical additions and changes to the land, necessary to produce usable and desirable lots, including, but not limited to, grading, paving, installation of stormwater facilities, curbs, sidewalks, street lights, water and sanitary facilities, and non-residential structures.

2.02.S. Land Development.

2.02.S.1. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving (i) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or (b) 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;

2.02.S.2. A subdivision of land;

2.02.S.3. Development in accordance with section 503(1.1) of the Pennsylvania Municipalities Planning Code, as amended.

The definition of Land Development shall specifically exclude the placement of a second residential dwelling on a property which contains at least ten (10) acres. The definition shall also exclude: (i) the conversion of an existing single-family detached dwelling or single-family semi-detached dwelling into not more than three residential units, unless such units are intended to be a condominium; (ii) the addition of an accessory building, including farm buildings, on a lot or

lots subordinate to an existing principal building; (iii) the addition or conversion of buildings or rides within the confines of an enterprise which would be considered an amusement park, which for this purpose is defined as a tract or area used principally as a location for permanent amusement structures or rides, but this exclusion shall not apply to newly acquired acreage by an amusement park until initial plans for the expanded area have been approved by proper authorities.

2.02.T. Landowner. The legal or beneficial owner or owners of land, including the holder of an option or contract to purchase, a lessee if he is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in land.

2.02.U. 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. A parcel designated as "residue" shall be considered a lot.

2.02.V. Lot Area. The area contained within the property line of a lot or the allocation of land, excluding space within any right-of-way, but including any easement areas.

2.02.W. Major Subdivision or Land Development. Any subdivision or land development involving more than two (2) lots or dwelling units; or any subdivision or land development on a property after two (2) or more lots or dwelling units have been subdivided from that property since the effective date of this Ordinance; or any subdivision or land development proposing the opening, widening, extension or improvement of a street shall be deemed to be a major subdivision or land development. Multi-family, mobile home park, commercial and industrial development shall be considered major subdivision or land development, regardless of the number of lots or units created.

2.02.X. Minor Subdivision. A division of land to facilitate a lot addition or land exchange or a division of land which adjoins an existing public street and does not involve the opening, widening, extension or improvement of any street or the installation of any public utility outside the frontage road and does not involve more than (2) lots or dwelling units (except that subdivision of lots from a property after (2) or more lots have been previously subdivided is a major subdivision).

2.02.Y. Mobile Home. A transportable, single-family dwelling intended for permanent occupancy, contained in one unit, or in two or more units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation.

2.02.Z. Mobile Home Lot. A parcel of land in a mobile home park, improved with the necessary utility connections and other appurtenances necessary for the erections thereon of a single mobile home.

2.02.AA. Mobile Home Park. A parcel or contiguous parcels of land which has been so designated and improved that it contains two or more mobile home lots for the placement thereon of mobile homes.

2.02.BB. Municipality. The Township of Centre, Berks County, Pennsylvania.

2.02.CC. On-site Stormwater Management. The control of runoff to allow water falling on a given site to be absorbed or retained on site to the extent that after development the peak rate of discharge leaving the site does not exceed the rate prior to development.

2.02.DD. Pennsylvania Municipalities Planning Code. Adopted as Act 247 of 1968, this act enables municipalities to plan for, and regulate, community development with subdivision and land development ordinances. The code also contains guidelines for subdivision and land development ordinance content. For the purpose of this Ordinance, the Code is referred to as "Act 247" and is intended to include the current code and any further amendments thereto.

2.02.EE. Plan, Final. A complete and exact subdivision or land development plan prepared for recording as required by statute, to define property rights, proposed streets and other improvements; a final plat.

2.02.FF. Plan, Preliminary. A tentative subdivision or land development plan showing proposed street and lot layout as a basis for consideration prior to preparation of a final plat.

2.02.GG. Plan, Sketch. An informal plan, indicating existing features of a tract and the surrounding area and outlining the general layout of a proposed subdivision or land development.

2.02.HH. Planned Residential Development. An area of land, controlled by a landowner, to be developed as a single entity for a number of dwelling units, or combination of residential and nonresidential uses, the development plan for which does not correspond in lot size, bulk, type of dwelling, or use, density, or intensity, lot coverage and required open space to the regulations established in any one district created, from time to time, under the provisions of a municipal zoning ordinance.

2.02.II. Planning Commission, Township. The Centre Township Planning Commission.

2.02.JJ. Planning Commission, County. The Berks County Planning Commission.

2.02.KK. Plat. The map or plan of a subdivision or land development, whether preliminary or final.

2.02.LL. Public Hearing. A formal meeting held pursuant to public notice by the governing body or planning agency, intended to inform and obtain public comment, prior to taking action in accordance with this Ordinance and/or the Pennsylvania Municipalities Planning Code.

2.02.MM. Public Meeting. A forum held pursuant to notice under the act of July 3, 1986, as amended, known as the "Sunshine Act".

2.02.NN. Public Notice. A notice published once each week for two successive weeks in a newspaper of general circulation in the municipality. Such notice shall state the time and place of the hearing and the particular nature of the matter to be considered at the hearing. The

first publication shall not be more than thirty (30) days and the second publication shall not be less than seven (7) days from the date of the hearing.

2.02.OO. Retention Structure. A pond, swale or other structure containing a permanent pool of water designed to store runoff for a given storm event.

2.02.PP. Right-of-way. The total width of any land reserved or dedicated for use as street, alley or for any public purpose.

2.02.QQ. Sediment Basin. A temporary dam or barrier constructed across a waterway or at other suitable locations to intercept the runoff and to trap and retain the sediment.

2.02.RR. Sewage. All references to sewage treatment, collection and disposal systems shall be as defined in applicable Pennsylvania Department of Environment Protection rules and regulations.

2.02.SS. Stormwater Management. The control of runoff to allow water falling on a given site to be absorbed or retained on site to the extent that after development the peak rate of discharge leaving the site does not exceed the rate prior to development.

2.02.TT. Street. A strip of land including the entire right-of-way used or intended for use as a means of vehicular and pedestrian circulation, whether public or private. The word "street" includes street, thoroughfare, avenue, boulevard, court, expressway, highway, road, lane, and alley.

2.02.UU. Street. Private. A strip of private land providing access to abutting properties and not offered for dedication or accepted for municipal ownership and maintenance.

2.02.VV. Subdivider. Any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or land development.

2.02.WW. Subdivision. The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access of any residential dwelling, shall be exempted.

2.02.XX. Substantially Completed. Where, in the judgment of the Township Engineer, at least ninety percent (90%) (based on the cost of the required improvements for which financial security was posted) of those improvements required as a condition for final approval have been completed in accordance with the approved plan, so that the project will be able to be used, occupied or operated for its intended use.

2.02.YY. Surveyor, Registered. An individual licensed and registered as a Professional Land Surveyor by the Commonwealth of Pennsylvania.

2.02.ZZ. Swale. See grassed waterway.

2.02.AAA. Trip (Vehicular). A single or one direction vehicle movement with either the origin or the destination (exiting or entering) inside the study site.

2.02.BBB. Waiver. A process for alleviating specific requirements imposed by this Ordinance.

2.02.CCC. Water Survey. An inventory of the source, quantity, yield and use of groundwater and surface water resources within a municipality.

CHAPTER 3. PROCEDURES

Section 3.01 Intent. The procedures established in this Ordinance are intended to define the steps by which a developer shall design, make application, record plats, and construct improvements, and by which the Planning Commission and the Township Board of Supervisors may review, make recommendations, approve plans and otherwise administer these regulations and this Ordinance.

For those subdivisions hereinafter classified as a minor subdivision, a sketch plan and abbreviated final plan procedure is established. For all others, which are classified as major subdivisions or land developments, a preliminary plan and final plan procedure is established.

Section 3.02 Pre-application. The Township shall make available, for a fee, to developers copies of this Subdivision and Land Development Ordinance, the Township Zoning Ordinance, street maps, and other information which may affect the development of the property under consideration. Applications for approval of a subdivision or land development shall be in accordance with these regulations, other codes and plans as adopted and information furnished.

Prior to the formal submission of a subdivision or land development plan for review and approval, the subdivider is urged to submit a sketch plan to the Planning Commission for advice on the requirements necessary to achieve conformity to the standards of these regulations as well as to alert the subdivider as early as possible to factors which must be considered in the design of a subdivision, such as pertinent elements of any Municipal land use or other community plans. Review of a sketch plan is an informal, advisory process to guide the subdivider in eventual preparation of a formal preliminary or final plan.

Sketch plans and subsequent official minor and major subdivision and land development plans should be accompanied by any letters of transmittal or development details necessary to explain existing or proposed site conditions which are not self-explanatory on the actual sketch, minor or major subdivision or land development plan.

Section 3.03 Minor Subdivision.

3.03.A. Classification. A division of land to facilitate a lot addition or land exchange or a division of land which adjoins an existing public street and does not involve the opening, widening, extension or improvement of any street or the installation of any public utility outside the frontage road and does not involve more than two (2) lots or dwelling units (except that subdivision of lots from a property after two (2) or more lots have been previously subdivided is a major subdivision).

Dedication or establishment of an unimproved right-of-way or easement shall be a minor subdivision. Replatting, resubdivision or revision of two (2) lots or less shall also be considered a minor subdivision. Multi-family, commercial, industrial and mobile home park development shall be considered a major subdivision or land development regardless of the number of lots or units created.

3.03.B. Application. A final plan complying with the requirements set forth in this Ordinance shall be prepared for each minor subdivision and approval of said plat shall be requested from the Planning Commission and Township Board of Supervisors.

When filing an application for approval of a minor subdivision, the subdivider shall submit to the Planning Commission one (1) mylar or original (at final action stage only), and eight (8) blue or black line paper prints of the proposal on 18" X 24" sheets through 36" X 48" sheets.

A Minor Subdivision, as defined herein, requires preparation of a final subdivision plan showing only that portion of the tract being subdivided. Any further subdivisions from the parent tract requires the preparation of a final subdivision and land development plan showing the disposition of the remaining parcel.

3.03.C. Review. Upon receipt of the minor subdivision or land development plan application and fees, and upon acceptance for review by the Township Planning Commission at a public meeting, the Planning Commission shall begin to review the final plan for compliance with this Ordinance. Where applicable, the plan may be forwarded to the Township Engineer or other agencies for review and comment. The plan will also be forwarded to the Berks County Planning Commission for review. The Planning Commission shall convey any comments within thirty (30) days of the date that the plan was forwarded. Review comments, conditions and findings of the County may be used as substantiation for plan approval or disapproval. After completion of the review process, the Township Planning Commission shall recommend that the Board of Supervisors grant or deny approval.

3.03.D. Approval or Disapproval. After an application for approval of a minor subdivision or land development has been filed with the Planning Commission, together with all maps, necessary data and fees, the plan shall be reviewed and processed. The applicant shall pay the required review fees at the time of official submission of the plat, and official submission shall not be deemed to have been made until receipt of all the required review fees. The Planning Commission shall complete the review and recommend to the Board of Supervisors approval or disapproval not later than ninety (90) days after such application submission is accepted for review. Should the regularly scheduled meeting at which the plan would be accepted for review occur more than thirty (30) days after the application is filed, the said ninety (90) day period shall

be measured from the thirtieth (30th) day following the day the application has been filed. The decision shall be in writing and shall be communicated to the applicant personally or mailed to him at his last known address not later than fifteen (15) days following the decision.

The Planning Commission shall have the authority to impose specific conditions for approval upon a subdivision or land development plan. If such specific conditions are accepted by the Applicant, the plan shall be recommended for approval. If the Applicant fails to accept, or rejects, such conditions, the Planning Commission shall recommend the plan be disapproved by the Board of Supervisors.

All such conditions for approval shall be communicated by the Planning Commission Secretary, or such other person as designated by the Planning Commission or Board of Supervisors, within ten (10) calendar days of the imposition of such conditions by the Planning Commission. The Applicant shall respond in writing to the Planning Commission Secretary, or such other person as designated by the Planning Commission or Board of Supervisors, within fourteen (14) calendar days of the mailing of the written notice of the conditions indicating an acceptance or rejection of the conditions imposed. Failure of the Applicant to respond to the notice of conditions shall be deemed a rejection of the proposed conditions.

When the application is approved, it shall be appropriately signed and dated and copies shall be distributed according to Subsection 3.03.E. of this Ordinance. When the application is disapproved, 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 to the provisions of the Ordinance relied upon. A disapproved copy of the subdivision or land development plan shall be sent to the County and the remaining copies shall be returned to the subdivider, developer and/or his agent.

Failure of the Board of Supervisors to render a final decision and communicate it to the applicant within the time and in the manner required herein shall be deemed approval of the application in the terms as presented, unless the applicant has agreed in writing to an extension of time or change in the prescribed manner of presentation of communication of the decision in which case, failure to meet the extended time or change in manner of presentation of communication shall have like effect. However, removal or withdrawal of the subdivision or land development by the applicant and/or his agent shall be considered withdrawal of the plan application, shall not obligate the Board of Supervisors to approve or disapprove the plan within the herein described timetable and shall not result in a deemed approval when ninety (90) days have elapsed. Upon knowledge of plan withdrawal, the Planning Commission shall notify, in writing, the subdivider or land developer that plan withdrawal has disrupted the approval process and no approval or disapproval will be rendered unless the subdivision or land development plan is resubmitted as a new application.

3.03.E. Recording. After approval of a minor subdivision plat by the Board of Supervisors, the mylar copy shall be placed on record in the Municipal office and the print shall be filed and recorded in the office of the County Recorder of Deeds, said recording to occur within ninety (90) days of the final or deemed approval date of the plan or the approval shall be null and void. Recorder of Deeds shall not accept any plat for recording unless such plat officially notes

the approval of the Planning Commission and the Board of Supervisors. Likewise, whenever plan review and comment by the County Planning Commission is required (Subsection 3.03.C), the Recorder of Deeds shall not accept any plat for recording unless such plat officially notes the review of the Planning Commission. The applicant shall be responsible to adhere to any and all policies and procedures adopted by the Recorder of Deeds.

Copies of an approved plat shall be sent to the applicant and the County where the development is planned. Additional copies may be distributed to utility or related agencies making timely request for copies.

Section 3.04 Major Subdivision or Land Development - Preliminary Plan.

3.04.A. Classification. Any subdivision or land development involving more than (2) lots or dwelling units; or any subdivision or land development on a property after two (2) or more lots or dwelling units have previously been subdivided from that property; or any subdivision or land development proposing the opening, widening, extension or improvement of a street shall be deemed to be a major subdivision or land development. Multi-family, mobile home park, commercial and industrial development shall be considered major subdivision or land development, regardless of the number of lots or units created.

3.04.B. Application. A preliminary plat complying with the requirements set forth in this Ordinance shall be prepared for each major subdivision or land development and an approval requested from the Planning Commission and Board of Supervisors.

When filing an application for preliminary approval of a major subdivision or land development, the subdivider shall submit to the Planning Commission eight (8) blue or black line prints of the proposal. As part of the submission, the subdivider shall also submit four (4) paper prints of the improvement plan (if not contained on initial sheet) containing details of the physical site improvements (roadways, utilities, etc.) proposed for the subdivision or land development. All sheets shall be 18" X 24" through 36" X 48" in size.

3.04.C. Review. Upon receipt of the preliminary plan (and improvement plan, if separate) application and fees, and upon acceptance for review by the Township Planning Commission at a public meeting, the Planning Commission shall begin to review the plan for compliance with this Ordinance. The preliminary plan shall be examined for suitable relationship to adjoining subdivisions or undeveloped land, feasibility of the program for improvements, and provide an opportunity for advice, suggestions, and adjustments to meet ordinance requirements before the plan becomes rigid. The submission of alternate plans is recommended.

Where applicable, the plan may be forwarded to the Township Engineer, Soil Conservation Service, or other appropriate agency for review and comment. The preliminary plan, plus any applicable improvement plan, will be forwarded to the county in which the development is to occur to provide comment. Review comments, conditions and findings of the county shall be received by the Township within thirty (30) days of the date the plan was forwarded to the County. These comments may be used as substantiation for plan approval or disapproval. After completion

of the review process, the Township Planning Commission shall recommend that the Board of Supervisors grant or deny approval.

3.04.D. Approval or Disapproval. After an application for preliminary approval of a plat of a major subdivision or land development has been filed with the Planning Commission, together with all improvement plans, maps, necessary data and fees, the Planning Commission shall complete the review, and approval or disapproval of the plan shall be in accordance with the procedure outlined in Subsection 3.03.D.

3.04.E. Recording. After approval of a preliminary plan for a major subdivision or land development plat, recording of the preliminary plan is not authorized.

Approval of the preliminary plan shall assure the subdivider for a period of five (5) years from the date of approval that:

3.04.E.1. The general layout of streets, lots, and other features are approved and shall be the basis for the preparation of the final plan; and

3.04.E.2. The general terms and any special conditions under which the approval of the plan was granted will not be changed; and

3.04.E.3. The subdivider may install improvements as required in Chapter 5 of this Ordinance in accordance with the approved preliminary plan and other requirements contained in this Ordinance and the ordinances of Centre Township.

Approval of a preliminary plan does not constitute approval of the final plan, and therefore, does not authorize the recording of the subdivision or land development plan or the sale or transfer of lots. After a period of one (1) year, approval of the preliminary plan shall expire unless extended by the Board of Supervisors.

Section 3.05 Major Subdivision or Land Development - Final Plan.

3.05.A. Classification. Any subdivision or land development involving more than two (2) lots or dwelling units; or any subdivision or land development on a property after two (2) or more lots or dwelling units have previously been subdivided from that property; or any subdivision or land development proposing the opening, widening, extension or improvement of a street shall be deemed to be a major subdivision or land development. Multi-family, mobile home park, commercial and industrial development shall be considered major subdivision or land development, regardless of the number of lots or units created.

3.05.B. Application. Within one (1) years after the approval of the preliminary plat, a final plat with all necessary supplemental data shall be officially submitted to the Planning Commission with a request for approval. Failure to submit a final plan within one (1) years of the date of an approval of the preliminary plat shall void the preliminary approval, unless extended in writing by the Planning Commission. Said expired or voided preliminary plan shall not be used

as a basis for any development or construction. Any subsequent development shall be preceded by a new preliminary plan.

When filing an application for a final approval of the major subdivision or land development, the subdivider or developer shall submit to the Planning Commission one (1) mylar copy or original (at final action stage only), and eight (8) blue or black line paper prints of the proposal on 18" X 24" through 36" X 48" sheets.

The subdivider or developer may apply for final approval of: (1) only a portion, section or phase of the entire subdivision or land development as preliminarily approved; or (2) the entire subdivision or land development.

3.05.C. Review. Upon receipts of the final plan application, and fees, and acceptance by the Township Planning Commission for review, the Planning Commission shall begin to review the plan for compliance with this Ordinance. The final plan shall be examined for conformity to the preliminary plan, for design and detail for required site improvements and for adherence to other standards of this Ordinance. The plan shall also be examined to determine if the required site improvements have been installed or, in lieu thereof, a bond or financial security forwarded to the Township Engineer, or other agencies for review and comment. The final plan will be forwarded to the County to provide the County Planning Commission an opportunity for review and comment if deemed necessary by the County Planning Commission. These comments shall be conveyed to the Township within thirty (30) days of the date that the plan was forwarded.

Review comments, conditions and findings of the County may be used as substantiation for plan approval or disapproval. After completion of the review process, the Planning Commission shall recommend approval, with or without conditions, or disapproval by the Board of Supervisors.

3.05.D. Approval or Disapproval. After an application for final approval of a plat of a major subdivision or land development has been filed with the Planning Commission, approval or disapproval shall be granted in accordance with Subsection 3.03.D. of this Ordinance.

However, no plat shall be finally approved unless the streets on such plat have been improved as required in Section 5.11 of this Ordinance, and any walkways, curbs, gutters, street lights, fire hydrants, shade trees, landscaping, water mains, sanitary sewers, storm sewers, storm water management facilities, and other site improvements as may be required by this Ordinance and any applicable municipal requirements have been installed in accordance with such requirements. In lieu of the completion of any site improvements required as a condition for the final approval of a plat, financial security shall be deposited by the subdivider/developer with the municipality and/or county in an amount to cover the costs of any site improvements which may be required by ordinance. Such financial security shall provide for and secure to the public, the completion of any site improvements which may be required for the subdivision or land development. Financial improvement guarantees shall further be subject to the requirements of Section 5.15 of this Ordinance and Sections 5.09 through and including 5.11 of Act 247.

3.05.E. Recording. After approval of a final plat for a major subdivision or land development by the Planning Commission and Board of Supervisors, the plat shall be recorded and copies distributed in the manner prescribed in Subsection 3.03.E. of this Ordinance.

Recording shall entitle the subdivider to sell, transfer or develop the land shown on the plat in accordance with the approved plat, subject to any conditions attached thereto. Where final plans are approved for only a portion, section or phase of the entire subdivision or land development, sale, transfer or development may proceed only on that approved portion, section or phase.

When a final plat has been approved, no subsequent change or amendment in zoning, subdivision or other governing ordinance shall be applied to affect adversely the right of the subdivider or land developer to commence and complete any aspect of the approved development in accordance with the terms of such approval within five (5) years from such approval. Where final approval is preceded by preliminary approval, the aforesaid three (3) year period shall be counted from the date of the preliminary approval.

When the subdivider or land developer has failed to substantially complete development of the approved plan within five (5) years of the aforesaid approval date and when changes in a zoning, subdivision, or other governing ordinance have occurred which affect the design of the approved plat, the subdivision or land development shall be subject to the changes in the zoning, subdivision, or other governing ordinance. The Planning Commission shall notify, in writing, the subdivider or land developer that approval has expired and submission and approval of a revised preliminary and/or final plan (as necessary to detail changes), illustrating compliance with the revised ordinance, is required prior to further development or lot transfer.

CHAPTER 4. PLANS AND PLATS: REQUIRED INFORMATION

Section 4.01 Intent. Plans, maps, data and plats shall be prepared and furnished by the developer as required herein to assure accurate surveying, to provide adequate information for designing and preparing plans, and to facilitate review, approval and recording of plats. Plans and maps shall be neat, legible, uncluttered and easily readable to provide clear documentation of all data.

Section 4.02 Minor Subdivisions. The subdivider or land developer shall furnish, as part of an application for approval of a minor subdivision or land development plan, the following information on the required 18" X 24" through 36" X 48" final plan sheets:

4.02.A. Title Block.

4.02.A.1. Identification of the plan as a final plan

4.02.A.2. Name of the development

4.02.A.3. Name, address and phone number of the record owner(s), subdivider(s), developer(s) and authorized agent(s)

4.02.A.4. Name of the municipality in which the subdivision or land development is located

4.02.A.5. Written and graphic scale of plan

4.02.A.6. Name, address and phone number of plan preparer

4.02.A.7. Date of plan preparation and date of subsequent revisions

4.02.A.8. Deed reference or source of title.

4.02.B. Signature Blocks. Space for date, signature and type of formal action by each of the following:

4.02.B.1. Planning Commission

4.02.B.2. Municipal governing body

4.02.B.3. County Planning Commission

4.02.B.4. Township Engineer, where applicable

4.02.B.5. Other officials, where required elsewhere by this Ordinance.

4.02.C. Maps and Data.

4.02.C.1. Location drawing or map section, at a scale of 1":800', showing the location of the proposed subdivision in relation to named streets, boundaries, previous subdivisions, etc.

The proposed subdivision or land development area shall be identified by a tone or pattern differentiation and residual land of the subdivider shall be outlined.

The location drawing shall also contain a reference to north and, where possible, be depicted in northerly alignment with the property drawing.

4.02.C.2. Property drawing of the parcel which is to be subdivided. The lot, tract or parcel drawing shall include:

4.02.C.2.a. Bearings and dimensions for all property lines; corporation lines; center and right-of-way lines of streets; easements and other rights-of-way; natural and artificial water courses and streams; flood plain boundaries per FEMA maps (the Planning Commission may require, at its discretion, that one hundred (100) year flood plains be calculated and plotted for streams not included in FEMA mapping); wetlands; and other boundary lines with distances, radii arcs, chords and tangents of all deflection angles, nearest second and error of closure of not more than one foot (1') in ten thousand feet (10,000').

4.02.C.2.b. Proposed lot, tract, or parcel lines in prominent, solid lines. Lot, tract, or parcel lines proposed for removal shall be shown in dashed or broken lines and clearly identified as such.

4.02.C.2.c. Location and identification of all control points (iron pins, monuments, etc.) to which all dimensions, angles and bearings are to be referred.

4.02.C.2.d. Lot numbers or letters in progressive order to identify each lot or tract. Numbers shall be utilized only for lots, tracts or parcels which are eligible for independent or individual use, whereas letters shall be utilized for lot additions, land exchanges and transfer of lots or parcels which are not eligible for individual use or development. Lot numbers or letters from previous plans shall be encircled by a dashed or broken line circle while currently proposed lot numbers or letters shall be encircled by a solid line circle.

4.02.C.2.e. Square footage and acreage of all lots or parcels involved in the subdivision or land development, exclusive of land dedicated for right-of-way.

4.02.C.2.f. The location, size and use of all existing buildings. Proposed buildings shall be shown to the extent necessary to demonstrate compliance with other ordinance criteria.

4.02.C.2.g. The building setback lines, for all property lines, prescribed in the applicable zoning ordinance.

4.02.C.3. Streets, utilities, topography and natural features on the proposed subdivision and within one hundred feet (100') of the boundaries, in accordance with the following:

4.02.C.3.a. Layout, right-of-way, pavement width and name and number of all roads and streets.

4.02.C.3.b. Size and location of all existing and proposed utilities including easements.

4.02.C.3.c. Existing and proposed on-lot well and sewage disposal system locations, as well as soil probe and percolation test locations for sewage disposal systems.

4.02.C.3.d. The topography and drainage of all proposed development sites shall be depicted. Contour intervals shall be a maximum of five (5) feet, except that development areas with a grade of less than five percent (5%) shall be depicted utilizing two feet (2') contour intervals. Lot additions and currently developed sites shall be required to stipulate only lot corner elevations or general topographic information.

4.02.C.3.e. Streams, ponds, waterways, wetlands, flood plains, quarries and other significant topographical, physical or natural features.

4.02.C.4. Storm water management facilities, where required by Section 5.07 of this Ordinance.

4.02.C.5. North arrow and graphic and written scale. The scale shall not exceed fifty feet (50') to the inch. Deed reference and source of title to the land being subdivided shall be included, as shown by the County Recorder of Deeds.

4.02.C.6. Name of all surrounding property owners.

4.02.C.7. Evidence that the proposed subdivision or land development will meet the requirements of any and all other Township ordinances.

4.02.D. Plan Notes and Conditions. All necessary or recommended supplementary subdivision or land development plan notes or conditions shall be prominently lettered on the plan. This shall include, but not be limited to:

4.02.D.1. Total number of lots or dwelling units proposed by the plan.

4.02.D.2. Applicable zoning standards for front, rear and side yard setbacks, minimum lot area, minimum lot width and zoning district.

4.02.D.3. Statement of intended use for all lots.

4.02.D.4. Statement of deed restrictions or covenants which may be a condition of sale of the property.

4.02.D.5. Statement indicating the presence or absence of wetlands along with the name, address, and signature of the individual responsible for the determination. A note referencing wetland regulations shall be placed conspicuously on the plan to be recorded.

4.02.E. Certifications and Dedications.

4.02.E.1. A certification of ownership shall be signed by the property owner(s) verifying ownership and acceptance of the plan.

4.02.E.2. A statement shall be signed by the owner(s) offering land for dedication to public use for all appropriate streets, rights-of-way, easements, parks etc.

4.02.E.3. A certification statement by the plan preparer (registered surveyor, engineer, or landscape architect) verifying the plan accuracy.

4.02.E.4. Seal of the registered surveyor, engineer or landscape architect responsible for plan preparation. Any plan establishing property boundaries shall be prepared and sealed by a registered surveyor.

4.02.E.5. PA DEP Planning Approval letter, or verification of any applicable PA DEP Planning exemptions, must be on file with the Township. Erosion and Sedimentation Pollution Control Plan approval letter for plan must be on file with the Township when applicable.

4.02.E.6. All required PA DOT Highway Occupancy Permit numbers.

4.02.E.7. If water is to be provided other than by private wells owned and maintained by the individual lot owners, evidence that the subdivision or land development is to be supplied by a certificated public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility, in accordance with the Pennsylvania Municipalities Planning Code.

Section 4.03 Major Subdivision - Preliminary Plan. The subdivider or land developer shall furnish, as part of an application for preliminary approval of a major subdivision or land development plan, the following information on the required preliminary plan sheets.

4.03.A. Title Block

4.03.A.1. Identification of the plan as a preliminary plan

4.03.A.2. Name of the development

4.03.A.3. Name, address and phone number of the record owner(s), subdivider(s), developer(s), and authorized agent(s)

4.03.A.4. Name of the municipality in which the subdivision or land development is located

4.03.A.5. Written and graphic scale of plan

4.03.A.6. Name, address and phone number of plan preparer

4.03.A.7. Date of plan preparation and date of subsequent revisions

4.03.A.8. Deed reference or source of title.

4.03.B. Signature Blocks. Space for date, signature and type of formal action by each of the following:

4.03.B.1. Planning Commission

4.03.B.2. Municipal governing body

4.03.B.3. County Planning Commission

4.03.B.4. Township Engineer, where applicable

4.03.B.5. Other officials, where required elsewhere by this Ordinance.

4.03.C. Maps and Data

4.03.C.1. Location drawing or map section, at a scale of 1":800', showing the location of the proposed subdivision in relation to named streets, boundaries, previous subdivisions, etc.

The proposed subdivision or land development area shall be identified by a tone or pattern differentiation and residual land of the subdivider shall be outlined.

The location drawing shall also contain a reference to north and, where possible, be depicted in northerly alignment with the property drawing.

4.03.C.2. Property drawing of the parcel which is to be subdivided. The lot, tract or parcel drawing shall include:

4.03.C.2.a. Bearings and dimensions for all property lines; corporation lines; center and right-of-way lines of streets; easements and other rights-of-way; natural and artificial water courses and streams; flood plain boundaries per FEMA maps (the Planning Commission may require, at its discretion, that one hundred (100) year flood plains be calculated and plotted for streams not included in FEMA mapping); wetlands; and other boundary lines with distances, radii arcs, chords and tangents of all deflection angles, nearest second and error of closure of not more than one foot (1') in ten thousand feet (10,000').

4.03.C.2.b. Proposed lot, tract, or parcel lines in prominent, solid lines. Lot, tract or parcel lines proposed for removal shall be shown in dashed or broken lines and clearly identified as such.

4.03.C.2.c. Location and identification of all control points (iron pins, monuments, etc.) to which all dimensions, angles and bearings are to be referred.

4.03.C.2.d. Lot numbers or letters in progressive order to identify each lot or tract. Numbers shall be utilized only for lots, tracts or parcels which are eligible for independent or individual use, whereas letters shall be utilized for lot additions, land exchanges and transfer of lots or parcels which are not eligible for individual use or development. Lot numbers or letters from previous plans shall be encircled by a dashed or broken line circle while currently proposed lot numbers or letters shall be encircled by a solid line circle.

4.03.C.2.e. Square footage and acreage of all lots or parcels involved in the subdivision or land development, exclusive of land dedicated for right-of-way.

4.03.C.2.f. The location, size and use of all existing buildings and parking areas. Proposed buildings and parking areas shall be shown to the extent necessary to demonstrate compliance with other ordinance criteria.

4.03.C.2.g. The building setback lines, for all property lines, prescribed in the applicable zoning ordinance.

4.03.C.3. Streets, utilities, topography and natural features on the proposed subdivision and within one hundred feet (100') of the boundaries, in accordance with the following:

4.03.C.3.a. Layout, right-of-way, pavement width and name and number of all roads and streets, including profiles for all proposed roads.

4.03.C.3.b. Size and location of all existing and proposed utilities and easements, including plan and profile for all proposed stormwater, water supply, and sanitary facilities, and bearings and distance descriptions of all easements.

4.03.C.3.c. Existing and proposed on-lot well and sewage disposal system locations, as well as soil probe and percolation test locations for sewage disposal systems.

4.03.C.3.d. The topography and drainage of all proposed development sites shall be depicted. Contour intervals shall be a maximum of two feet (2') contour intervals.

4.03.C.3.e. Streams, ponds, waterways, wetlands, flood plains, quarries, and other significant topographical, physical or natural features.

4.03.C.4. Storm water management facilities, where required by Section 5.07 of this Ordinance.

4.03.C.5. North arrow and graphic and written scale. Deed reference and source of title to the land being subdivided shall be included, as shown by the County Recorder of Deeds.

The scale shall not exceed fifty feet (50') to the inch on subdivision plans with minimum proposed lot areas of one (1) acre, and shall not exceed twenty feet (20') to the inch for all other subdivision plans and for all land development plans. Waivers from the requirements of this section may be granted by the Planning Commission in accordance with the waiver procedures herein.

4.03.C.6. Name of all surrounding property owners.

4.03.C.7. Evidence that the proposed subdivision or land development will meet the requirements of any and all other Township ordinances.

4.03.C.8. A Traffic Impact Study (TIS) shall be prepared in accordance with the provisions of Section 5.19 of this Ordinance when, at a minimum, the proposed subdivision or land development: is expected to generate one thousand (1,000) or more vehicle trips per day, or; is expected to generate fifty (50) or more peak direction trips, or; in the opinion of the Township Planning Commission or Board of Supervisors, is expected to have a significant impact on the safety and/or traffic flow of the affected roadways.

4.03.C.9. A hydrogeological and/or related study shall be prepared when individual wells are proposed to be utilized for water supply for a subdivision or land development in which: Individual wells are proposed to supply greater than two (2) equivalent dwelling units (EDU's) per well, or; individual wells are proposed to supply two (2) EDU's or less on lots with a size of less than one (1) acre, or; when a subdivision or land development is proposing to utilize individual wells and is proposing to utilize any sewage system other than an on-lot sewage system, including but not limited to, any type of stream discharge sewage system, or connection to a public, private or community sewage system. Such study shall be prepared by a hydrogeologist or geologist with training, education and experience in performing such studies, and shall demonstrate that adequate quantity and quality of water will be available for such subdivision or land development without adversely affecting neighboring water supplies. Such study shall be based on a drought condition rainfall recharge rate of at least four hundred (400) gpd per acre, unless otherwise justified by a professional experienced in this field. Withdrawal rates shall be based on PA DEP Rules and Regulations for sewage flows. The study shall demonstrate that the recharge rate will exceed the withdrawal rate by at least twenty percent (20%).

4.03.D. Plan Notes and Conditions. All necessary or recommended supplementary subdivision or land development plan notes or conditions shall be prominently lettered on the plan. This shall include, but not be limited to:

4.03.D.1. Total number of lots or dwelling units proposed by the plan.

4.03.D.2. Applicable zoning standards for front, rear and side yard setbacks, minimum lot area, minimum lot width and zoning district.

4.03.D.3. Statement of intended use for all lots.

4.03.D.4. Statement of deed restrictions or covenants which may be a condition of sale of the property.

4.03.D.5. Statement indicating the presence or absence of wetlands along with the name, address, and signature of the individual responsible for the determination. A note referencing wetland regulations shall be placed conspicuously on the plan to be recorded.

4.03.E. Certifications and Dedications

4.03.E.1. A certification of ownership shall be signed by the property owner(s) verifying ownership and acceptance of the plan.

4.03.E.2. A statement shall be signed by the owner(s) offering land for dedication to public use for all appropriate streets, rights-of-way, easements, parks etc.

4.03.E.3. A certification statement by the plan preparer (registered surveyor, engineer, or landscape architect) verifying the plan accuracy.

4.03.E.4. Seal of the registered surveyor, engineer or landscape architect responsible for plan preparation. Any plan establishing property boundaries shall be prepared and sealed by a registered surveyor.

4.03.E.5. PA DEP Planning Approval letter, or verification of any applicable PA DEP Planning exemptions, must be on file with the Township. Erosion and Sedimentation Pollution Control Plan approval letter for plan must be on file with the Township when applicable.

4.03.E.6. All required PA DOT Highway Occupancy Permit numbers.

4.03.E.7. If water is to be provided other than by private wells owned and maintained by the individual lot owners, evidence that the subdivision or land development is to be supplied by a certificated public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility, in accordance with the Pennsylvania Municipalities Planning Code.

Section 4.04 Major Subdivision - Final Plan. The subdivider or land developer shall furnish, as part of an application for final approval of a major subdivision or land development plan, the following information on the required 18" X 24" through 36" X 48" final plan sheet(s):

4.04.A. Title Block.

4.04.A.1. Identification of the plan as a final plan

4.04.A.2. Name of the development

4.04.A.3. Name, address and phone number of the record owner(s), subdivider(s), developer(s), and authorized agent(s)

4.04.A.4. Name of the municipality in which the subdivision or land development is located

4.04.A.5. Written and graphic scale of plan

4.04.A.6. Name, address and phone number of plan preparer

4.04.A.7. Date of plan preparation and date of subsequent revisions

4.04.A.8. Deed reference or source of title.

4.04.B. Signature Blocks. Space for date, signature and type of formal action by each of the following:

4.04.B.1. Planning Commission

4.04.B.2. Municipal governing body__

4.04.B.3. County Planning Commission

4.04.B.4. Township Engineer, where applicable

4.04.B.5. Other officials, where required elsewhere by this Ordinance.

4.04.C. Maps and Data. All information required under Preliminary Plan requirements, complete with all necessary detail and accuracy. The plan shall include only the phase or section of the subdivision or land development proposed for immediate recording and development.

4.04.D. Plan Notes and Conditions. All necessary or recommended supplementary subdivision or land development plan notes or conditions shall be prominently lettered on the plan. This shall include, but not be limited to:

4.04.D.1. Statement of deed restrictions or covenants which may be a condition of sale of the property.

4.04.D.2. Statement indicating the presence or absence of wetlands along with the name, address, and signature of the individual responsible for the determination. A note referencing wetland regulations shall be placed conspicuously on the plan to be recorded.

4.04.D.3. An Erosion Control Plan Approval Letter from the Berks County Conservation District.

4.04.D.4. Sewage Planning Module Approval letter (or verification of PA DEP Planning exemption) from the Department of Environmental Protection.

4.04.E. Certifications and Dedications

4.04.E.1. A certification of ownership shall be signed by the property owner(s) verifying ownership and acceptance of the plan.

4.04.E.2. A statement shall be signed by the owner(s) offering land for dedication to public use for all appropriate streets, rights-of-way, easements, parks etc.

4.04.E.3. A certification statement by the plan preparer (registered surveyor, engineer, or landscape architect) verifying the plan accuracy.

4.04.E.4. Seal of the registered surveyor, engineer or landscape architect responsible for plan preparation. Any plan establishing property boundaries shall be prepared and sealed by a registered surveyor.

4.04.E.5. All required PA DOT Highway Occupancy Permit numbers shall be shown on the plan at the corresponding permitted locations.

4.04.E.6. If water is to be provided other than by private wells owned and maintained by the individual lot owners, evidence that the subdivision or land development is to be supplied by a certificated public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility, in accordance with the Pennsylvania Municipalities Planning Code.

CHAPTER 5. REQUIRED IMPROVEMENTS AND DESIGN STANDARDS

Section 5.01 Intent. The design standards established in this Ordinance are intended to be fundamental requirements to be applied with professional skill in the subdividing and planning of land so as to produce attractive and harmonious neighborhoods, convenient and safe streets, and economical layouts of residential and other land development. The design standards are further intended to encourage and promote flexibility and ingenuity in the layout and design of subdivisions and land developments, in accordance with modern and evolving principles of site planning and development.

It is also the intent of this Ordinance to require subdividers and developers to follow all applicable codes, regulations, and standards adopted by the municipality relative to improvements to the subdivision or development site. In all cases, the codes, regulations and standards of the municipality shall be followed and the improvements shall be approved by the municipal governing body before the final plan is approved. All improvements as specified in this Ordinance or in applicable municipal ordinances shall be installed before the final plat is approved or, in lieu thereof, a guarantee of installation shall be provided by the subdivider or developer prior to final plat approval. The guarantee shall assure the responsible body (Municipality) that the required improvements will be installed in accordance with the subdivision or land development plan.

During the design and approval of subdivision and land development plans the Planning Commission, the municipal governing body, and the developer shall give primary consideration to all thoroughfare plans, water plans, sewer plans, community facility plans, and official maps as may be in effect in the municipality.

Section 5.02 General Standards. In addition to the standards contained elsewhere in these regulations, the following general standards shall be observed.

5.02.A. Existing utilities and improvements shall be utilized wherever possible. New roads and extended utility services shall be discouraged if existing services and facilities may be utilized. Scattered urban development shall be avoided.

5.02.B. Development designs shall minimize street lengths necessary to serve developed properties.

5.02.C. Side lot lines shall be substantially at right angles or radial to street lines, unless the purpose of lot line orientation is to obtain greater solar access. Request for a waiver from these requirements shall be made to the Planning Commission who may grant such waiver at its discretion.

5.02.D. Depth of residential lots shall be not less than one (1) nor more than three (3) times the lot width. Request for a waiver from these requirements shall be made to the Planning Commission who may grant such waiver at its discretion.

5.02.E. Every lot shall abut a street. Lot frontage or access shall be physically accessible by standard vehicle in existing condition or the Planning Commission shall require illustration of the site improvements planned and necessary to alter steep banks, flood plains, visibility limitations, etc. to a condition that will facilitate safe and adequate access. The Planning Commission may also require that lots be arranged to reserve a right-of-way for street access to future lots.

5.02.F. Double or reverse frontage lots may be preferred or required when lot access to an adjoining street is not permitted or separation from the street is desired because of topographic, orientation, aesthetic, congestion, safety or high noise level considerations.

5.02.G. Adequate easements or rights-of-way shall be required for drainage and utilities. Easements shall be a minimum of twenty feet (20') in width and, whenever possible, shall be centered with ten feet (10') on each side of side or rear lot lines. No structure or buildings shall be erected within such easements, and said restriction shall be prominently noted on the plan.

5.02.H. Lots shall be suitably shaped to encourage and facilitate use and maintenance of all portions of the lot. Accordingly, lots shall be square or generally rectangular in shape. Lot configurations which result in flag lots and L-shaped, T-shaped, triangular or otherwise inappropriately shaped lots shall be avoided.

5.02.I. Site design and development shall include reasonable efforts to save existing trees and vegetation which shall, at a minimum, conform to the requirements for Landscaping provided in this Ordinance.

5.02.J. The standards of this Ordinance shall apply to all lots being subdivided or developed and residual land which is created by the subdivision or land development activity.

5.02.K. Lot additions, land exchanges, agricultural use only lands, and any other specific or special purpose subdivision or land development shall include prominent plan notes to avoid misinterpretation of the intent of the subdivision or land development plan. Applicable deed restrictions may be required.

5.02.L. Deeds filed subsequent to subdivision or land development approval shall accurately and correctly describe the property therein. Deeds shall be in complete compliance with all plan notes and conditions.

Recording a deed which omits or contradicts the information on an approved subdivision or land development plan shall be a violation of this Ordinance.

Section 5.03 Reserved for Energy Conservation Standards.

Section 5.04 Topography. Subdivisions shall be planned to take advantage of the topography of land in order to: utilize the natural contours, economize in the construction of drainage facilities, reduce the amount of grading, and minimize destruction of trees and topsoil. The natural features and other distinctive characteristics of the site shall be integrated into the plan to create functional variations in the neighborhoods.

Additionally, environmental safeguards may be mandated on slopes in excess of fifteen percent (15%). On steep slopes (in excess of fifteen percent (15%)), site and lot design shall be adjusted, where necessary, to mitigate the detrimental effects of development on steeper slopes. The following topographic considerations shall be utilized in design of subdivisions and land developments:

5.04.A. Streets. Land which is relatively flat or of very gentle slopes should be planned so that the streets follow the natural drainage courses and as many lots as possible shall be above the street grade. On more irregular topography, streets shall be designed to avoid extensive cuts and fills and follow the ridges or be planned approximately parallel to contour lines, and adjusted, however, so that lots on one (1) side of the street will not be excessively below the street grade.

5.04.B. Natural Drainage. Subdivisions shall be designed, particularly on land of very gentle slopes, to take every advantage of natural grades so that all the land can be drained without excessive grading. Unless water courses or drainage ways are enclosed, the plan shall be adjusted so that rear lot lines shall be approximately parallel to an open drainage course. Easements for drainage ways and low-lying land which are subject to flooding may be included as part of a lot but shall not be used as building sites or included in calculating the required lot area or width.

5.04.C. Natural Features. Natural features, irregularities, changes in level, brooks, lakes, hilltops and other focal points within the site, and distant views outside the subdivision shall be integrated in the design to obtain variations and interest in each neighborhood and more attractive building sites. Trees, topsoil, and other natural resources shall be preserved and utilized in the development of the subdivision. Natural features shall be further enhanced and protected in non-residential land developments and subdivisions as follows:

5.04.C.1. For any such non-residential land development or subdivision which is adjacent to an existing residential property or is adjacent to a property for which residential use is a use permitted under the Zoning Ordinance, a buffer planting shall be provided along the entire portion of such adjacent. The buffer planting shall consist of a completely planted visual barrier composed of evergreen vegetation arranged to form both a low-level and a high-level screen between grade and to a height of at least eight feet (8').

5.04.D. Driveways. All driveways shall be in conformity to the Township's Driveway Ordinance. A note shall be placed on the plan indicating that a driveway permit will be required from the Township. The applicant shall demonstrate that all proposed lots will have a driveway which conforms to the Driveway Ordinance, and the Planning Commission shall have the authority to stipulate specific driveway access location on lots with multiple road frontages.

Section 5.05 Grading. The developer shall grade each subdivision or land development to establish street grades, floor elevations of buildings, and lot grades in proper relation to each other and to existing topography. However, grading shall be kept to a minimum to avoid loss of topsoil and erosion potential. Lots shall be graded to secure drainage away from buildings. The grading shall facilitate collection of storm water in designated areas to avoid concentration of water in the sewage system location.

The grading of the roadway shall extend the full width of the cartway, shoulder and swale area, if applicable. Where possible, grass strips or channels between the curb or shoulder and right-of-way line should be graded at 3:1 slope; however, when unusual topographic conditions exist, good engineering practice shall prevail.

Section 5.06 Lot Sizes and Standards. The minimum lot size and lot width requirements established by municipal zoning ordinance shall be utilized as minimum subdivision standards. All lots shall satisfy the Centre Township zoning standards for lot width and lot size at the time of subdivision. The building setback lines established by the Zoning Ordinance shall be applicable and shall be noted on each subdivision or land development plan.

Section 5.07 Stormwater Management and Design Criteria.

5.07.A. Scope. A Storm Water Management Plan shall be required for each subdivision or land development plan (except single family residential lots meeting the criteria of Subsection 5.07.B.1.) at both the preliminary and final submittal stage, and shall be prepared in accordance with the Township Storm Water Management Ordinance. Erosion and sedimentation controls and plan requirements are listed in Section 5.08 of this Ordinance. A Storm Water Management Plan must be approved as per Subsection C. of this Section before construction of any expansion may proceed.

5.07.B. Residential Exception

5.07.B.1. Exception. Single family residential lots may be exempted from the mandatory design and installation of certain storm water management facilities when the lot improvements (house, buildings, driveway, regrading, etc.) on the proposed plan document to the satisfaction of the Planning Commission and the Township Engineer that the lot improvements will not result in detrimental storm water discharges within the lot(s) or upon adjoining lands, roads, waterways or other areas. Exemption may be granted by the Planning Commission provided all of the following criteria are satisfied:

5.07.B.1.a. The minimum lot area shall be one (1) acre, and the maximum total impervious area, existing and proposed, shall not exceed five percent (5%) of the net lot area or five thousand (5,000) square feet, whichever is smaller; and

5.07.B.1.b. The proposed slope of the lot shall not exceed ten percent (10%) in the lot improvement area and slopes in excess of fifteen percent (15%) shall not exist within fifty feet (50') of the lot improvement area; and

5.07.B.1.c. Streams, waterways and ecologically sensitive areas shall not exist within one hundred feet (100') of the lot improvement area; and

5.07.B.1.d. All proposed lot improvements shall be a minimum of fifty feet (50') from all lot lines, unless site conditions or other requirements necessitate greater setback.

5.07.B.1.e. Plan notes shall document that the soils within the lot improvement area are in the hydrologic soil group A, B, or C, as published in the current edition of TR-55, Urban Hydrology for Small Watersheds; and

5.07.B.1.f. Storm Water discharges shall not endanger or potentially damage the lot improvements, adjoining lands, roads or otherwise pose a threat to the health, safety or welfare of the public; and

5.07.B.1.g. No unique or adverse lot conditions shall exist which warrant refusal of the exemption request; and

5.07.B.1.h. The exemption request shall be submitted in writing with the subdivision application and shall address all the criteria cited herein; and

5.07.B.1.i. Subdivision plans containing any lots which have received storm water management design and installation exemptions in accordance with these provisions shall contain a prominent plan note explaining the exemption and the lot development restrictions applicable thereto, and shall be incorporated into the deeds as a restriction; and

5.07.B.1.j. Any lot receiving a storm water management installation exemption and subsequently found to be developed, or under development, contrary to the approved subdivision plan, contrary to these exemption provisions or otherwise evidencing a storm water runoff problem shall forthwith be subject to the following:

--Corrective action shall be taken in the lot development to eliminate the noncompliance.

--Submission of a revised subdivision plan shall be required, depicting necessary storm water management facilities, in accordance with standard plan processing procedures.

5.07.C. Agricultural Land Development Exception

5.07.C.1. Exception. Agricultural Land Development may be exempted from the mandatory design and installation of certain storm water management facilities when the lot improvements (buildings, driveway, regrading, etc.) on the proposed plan document to the satisfaction of the Planning Commission and the Township Engineer that the lot improvements will not result in detrimental storm water discharges within the lot(s) or upon adjoining lands, roads, waterways or other areas. Exemption may be granted by the Planning Commission provided all of the following criteria are satisfied:

5.07.C.1.a. The minimum lot area shall be fifty (50) acres, and the maximum total impervious area, existing and proposed, shall not exceed one percent (1 %) of the net lot area; and

5.07.C.1.b. The proposed slope of the lot shall not exceed ten percent (10%) in the lot improvement area and slopes in excess of fifteen percent (15 %) shall not exist within fifty feet (50') of the lot improvement area; and

5.07.C.1.c. Streams, waterways and ecologically sensitive areas shall not exist within two hundred feet (200') of the lot improvement area; and

5.07.C.1.d. All proposed lot improvements, including all concentrated storm water discharge points, shall be a minimum of three hundred feet (300') from all lot lines, unless site conditions or other requirements necessitate greater setback.

5.07.C.1.e. Plan notes shall document that the soils within the lot improvement area are in the hydrologic soil group A, B, or C, as published in the current edition of TR-55, Urban Hydrology for Small Watersheds; and

5.07.C.1.f. Storm Water discharges shall not endanger or potentially damage the lot improvements, adjoining lands, roads or otherwise pose a threat to the health, safety or welfare of the public; and

5.07.C.1.g. No unique or adverse lot conditions shall exist which warrant refusal of the exemption request; and

5.07.C.1.h. The exemption request shall be submitted in writing with the subdivision application and shall address all the criteria cited herein; and

5.07.C.1.i. Development plans containing any lots which have received storm water management design and installation exemptions in accordance with these provisions shall contain a prominent plan note explaining the exemption and the lot development restrictions applicable thereto, and shall be incorporated into the deeds as a restriction; and

5.07.C.1.j. Any lot receiving a storm water management installation exemption and subsequently found to be developed, or under development, contrary to the approved subdivision plan, contrary to these exemption provisions or otherwise evidencing a storm water runoff problem shall forthwith be subject to the following:

--Corrective action shall be taken in the lot development to eliminate the noncompliance.

--Submission of a revised development plan shall be required, depicting necessary storm water management facilities, in accordance with standard plan processing procedures.

5.07.D. Review and Approval. All Storm Water Management Plans shall be reviewed by the Township Engineer prior to Township approval. A set of design plans shall be maintained on file at the site during construction, as record drawings.

Observations of construction shall be done in accordance with the Storm Water Management Ordinance

Section 5.08 Soil Erosion and Sedimentation Controls and Plan Requirements. An Erosion and Sedimentation Pollution Control ("E&SPC") Plan is required for all earth moving activities. The E&SPC Plan must be approved by the Berks County Conservation District for all subdivisions with site improvements and for all land developments.

Section 5.09 Sewage Disposal. Sewage disposal facilities shall be designed and constructed to meet the needs of the proposed subdivision or land development. Sewage disposal facilities shall also meet all requirements of the Pennsylvania Department of Environmental Protection. Sewage disposal facilities shall also meet the following requirements which specify the design and installation standards for on-lot sewage disposal and public and private sewerage systems.

5.09.A. On-lot Sewage Disposal. All subdivision and land developments proposing on-lot sewage disposal shall be designed and submitted in compliance with the prevailing requirements of the Pennsylvania Sewage Facilities Act. Further, for each and every lot created by a proposed subdivision, there shall be a minimum of two (2) areas tested (probe and perc) which yield suitable results for on-lot sewage disposal. The plan shall clearly indicate these areas, and state that disturbance of these areas is not permitted unless written approval is received by the Township Sewage Enforcement Officer. It is the intent of this section to coordinate a simultaneous review of subdivision and land development plans with sewage planning modules at the municipal level, thereby avoiding the approval of lots that are not suitable for sewage disposal.

5.09.B. Existing Public Sewers. When a subdivision or land development has public sewers available on-site or within one hundred and fifty feet (150') of the site, sewer lines shall be included on the subdivision and land development plan and installation must be approved by the municipal authority responsible for the sewer system.

5.09.C. Planned Sewer Area. When a proposed subdivision or land development is located in an area not presently served by public sewers, but which has received design data preparatory to sewer system installation within eighteen (18) months, then the municipality shall determine the necessity of installing house connections and/or capped mains, even though on-site facilities will be required in the interim. Installation of house connections and capped mains shall be in accordance with municipal design data and approved by the municipal engineer prior to approval of a preliminary or final plan.

5.09.D. Private Sewerage System. When a subdivision or land development is to be provided with a private sewerage system, a statement shall be submitted to the Planning Commission from the Pennsylvania Department of Environmental Protection verifying Planning Approval for the proposed facilities. Additionally, the municipality must be satisfied that adequate

provisions have been made to guarantee the construction and maintenance of the proposed private sewerage system.

5.09.E. Plan Notice

5.09.E.1. On-lot Sewage Disposal. All subdivision and land development plans shall contain a plan note specifying that approval of the plan does not guarantee permit issuance for sewage disposal.

5.09.E.2. Public Sewers. All subdivision and land development plans shall contain a plan note specifying that connection to public sewer lines is required.

Section 5.10 Water Supply. A water supply system shall be designed and constructed by the subdivider or developer as required by PA DEP standards. The water supply system shall be capable of meeting the domestic and fire protection needs of the site, and documentation shall be provided to demonstrate that these needs will be met. When possible, the subdivision or land development should be served by a public water supply system approved by municipal water officials or a community water system approved by the Pennsylvania Department of Environmental Protection. If the subdivision or land development is to be supplied by a public or community water system, the subdivider or developer shall submit a written certification, commitment or evidence that the municipal water company or authority or the association of lot owners or private company, as applicable, has adequate water capacity and has agreed to provide water service.

For subdivisions proposing lot sizes of less than one (1) acre, and for all non-residential developments, where public water supply is not being proposed, the developer shall demonstrate that an adequate water source is available within or adjacent to the development for fire protection. In making a determination as to the adequacy of the source being proposed by the developer, the Township shall submit the proposal to the fire chief(s) of the fire company(ies) primarily responsible for serving the development, and shall take into consideration their comments.

In those cases where a public or community water system is not available or practical, a well shall be provided for each lot. Wells shall not be within one hundred feet (100') of any part of the absorption field of any existing or proposed on-site sewage disposal system and they shall not be placed within fifty feet (50') of lakes, streams, ponds, quarries, etc.

Subdivision and land development plans shall contain a plan note specifying the source of water supply. Plans proposing the use of public or community water shall contain a note specifying that connection to the public or community water line, as applicable, is required. Plans proposing the use of individual wells shall contain a note specifying that the lot(s) has not been tested for the availability of water or adequate quality or quantity and no guarantee of water availability is provided.

Section 5.11 Streets. In addition to relating to topography, natural features and solar orientation, streets shall be designed according to the function served, the use of abutting land, and standards of width, intersections, maximum grades and curvatures. The Planning Commission shall require that all developments have adequate access. Where major subdivision is proposed

or may occur because of the patterns started by minor subdivision activity, the Planning Commission shall require reservation for, or installation of, two or more streets to insure safe and convenient access. Elimination or vacation of previously approved streets shall be approved only when the Planning Commission determines that (a) alternate access has been provided in another, more suitable location, (b) further development is not possible utilizing the street, and (c) any land owners who purchased property with reliance upon the street agree in writing to its elimination.

The developer shall design and construct streets, including pavements, shoulders, gutters, curbs, etc., in accordance with the following regulations and any other Township Ordinance or regulations that may apply:

5.11.A. Classification and General Design Goals

5.11.A.1. Major Streets. Function primarily for the movement of fast traffic between points of heavy traffic generation. They are often known as arterial streets or highways. They shall be planned for continuation of existing streets in the system at the same or greater width in accordance with adopted municipal standards. Major streets shall contain as few intersections as possible.

5.11.A.2. Collector Streets. Function to collect traffic from local streets and distribute it into major streets, and, as such, they will normally contain a relatively large number of intersections with local streets and few with main streets. A collector street system may be required wherever a residential neighborhood near a major street is over one hundred fifty (150) acres in area or where the local street pattern is so designed as to converge and serve over five hundred (500) single-family dwellings, or one hundred (100) multi-family units. Collector streets shall be planned for continuity and to lead more or less directly to one or more focal points or centers of traffic generation, and may become bus routes.

5.11.A.3. Local Streets. Provide direct access to each lot and function to allow traffic to circulate toward the principal directions of travel, bus routes, schools and playgrounds; however, the design shall discourage through and high speed traffic. The street pattern shall be indirect and yet continuous to prevent through traffic, formed or straight, moderately winding, curved, looped or angular streets. Tee-intersections shall predominate and cross-intersections shall be minimized. There shall be an underlying systematic neighborhood pattern; however, gridiron and other rigid geometrical patterns should be avoided where possible.

The street pattern shall include extensions to the boundaries of the development to provide circulation between adjoining neighborhoods.

5.11.A.4. Cul-de-Sac Streets. Provide direct access to properties from other streets. Ordinarily, a cul-de-sac is a short street with only one outlet and having an appropriate terminal for safe and convenient reversal traffic movement. Drainage should be towards the open end. If drainage is toward the closed end it shall be conducted away in an underground storm sewer. Unless completely impractical, cul-de-sac streets shall be extended to adjacent property lines, or shall provide adequate right-of-way to adjacent property lines to allow for future extension of the road.

5.11.A.5. Roadway Classifications. For the purposes of this Section, the Township's existing roads shall be classified as follows:

Collectors

Main Street
Centerport Road
Shartlesville Road
Shoey Road
Bellemans Church Road from Garfield Road east
Garfield Road
Irish Creek Road
River Road
Rake Road and Plum Road

Local

All Other Roads

5.11.B. Minimum Street Standards. Developer shall, upon review and approval by the Township, make a determination as to the appropriate speed limit for each road, and shall provide for appropriate signs. Also, see Chart 5.11(b) below.

CHART 5.11.B.

Street Classification <u>Requirements</u>	Right-of- Way Width	<u>Streets Without Curbs</u>		Street Width With Curbs	Maximum Grade Vertical <u>Alignment</u>	Radius Curvature Horizontal <u>Alignment</u>	Reverse Curve Tangent
		Paved Cartway Width	Improved Shoulder Width (ea)				
Major Streets (*1)	60'	34'	10'	40'	6%	500'	200'
Collector Streets	60'	28'	7'	40'	8%	300'	100'
Local Streets	50'	24'(*2a)	4'	30'(*2b)	10%	150'	50'
Cul-de-sac Streets (*3) (Turnaround)	50' (Cartway + 10' Radius)	24' (50' Radius) (*4)	4'	28' (60' Radius (*4)	10% (5%)	150'	50'

All safe sight distances shall meet or exceed current PA DOT Standards.

*1 - Street width subject to PA DOT requirements.

*2a - No on-street parking shall be allowed, and developer shall provide proper signs restricting parking.

*2b - Developer shall show and provide for signs and appropriate street line painting to allow for parking on one side of the street. For lot sizes of less than one (1) acre, cartway width shall be 40'.

*3 - Minimum length of 300' and maximum length of 1,500', AND maximum 30 lots or dwelling units served.

*4 - The radius of the outside of the cartway at the transition to the turnaround portion of the cul-de-sac shall not be less than 50'.

5.11.C. Supplementary Street Standards. In addition to the specific standards cited in Subsection B. above, the following street standards shall apply to design and construction of streets:

5.11.C.1. Private Streets. Private streets are prohibited unless they meet the design standards of these regulations. Applications which propose a private street shall be accompanied by an agreement which shall be submitted with the preliminary plan application and ultimately recorded with the Berks County Recorder of Deeds as part of the final plan. This agreement shall establish the conditions under which the street will be constructed and maintained, as well as conditions controlling an offer of dedication, and shall stipulate:

5.11.C.1.a. That the street shall be constructed and maintained to conform to the specifications of this Ordinance.

5.11.C.1.b. That the owners of the abutting lots will include with any future offer for dedication sufficient monies, as estimated by the Township, to restore the street to conformance with the prevailing standards.

5.11.C.1.c. That an offer for dedication of the street shall be made only for the street as a whole.

5.11.C.1.d. The method of assessing maintenance and repair cost.

5.11.C.1.e. That an agreement by the owners of fifty-one percent (51 %) of the front footage thereon shall be binding on the owners of the remaining lots.

5.11.C.2. Arterial Street Design. The design standards for arterial streets shall be as specified by the PA DOT and based upon the projected average daily traffic and speed limit.

5.11.C.3. Arrangement. The development shall be designed to insure coordination between the proposed street system and all existing streets and intersections studied in the traffic impact study, all planned streets and intersections included on other subdivision or land development plans and all streets included in the Comprehensive Plan or any official map adopted by the Township.

5.11.C.3.a. All proposed streets within the tract shall be arranged to conform as closely as possible to original topography. Proposed streets within the development shall be laid out to provide convenient and safe access to each lot and/or structure and/or parking compound proposed as part of the development of the tract. Rigid rectangular street patterns are not required and curvilinear streets may be provided when their use will result in a more desirable layout.

5.11.C.3.b. The proposed street system shall be connected to the existing street system at a location which will minimize adverse effects and not place any burdens upon the functioning of the existing street system or access to other properties along the existing street system. The applicant shall install all necessary traffic control devices and shall make all necessary improvements to provide for such access which may include, but shall not be limited to, the installation of traffic signals and roadway improvements at affected intersections to regulate traffic flowing past or to and from the proposed point or points of access to the development.

5.11.C.3.c. Where a development abuts an existing or proposed arterial street, the developer shall use marginal access streets, reverse frontage lots or other means to provide protection for abutting properties, reduce the number of intersections with the arterial street, and separate the local and through traffic.

5.11.C.4. Street Provisions for Future Development. Where appropriate, areas shall be reserved for future street usage in conjunction with the development of adjacent tracts. Areas reserved for future street usage will not be required to be improved; however, these areas shall be reserved for street improvements to be provided by the developer of the adjacent tract. Wherever there exists a dedicated or platted area reserved for future street usage along the

boundary of a tract being developed, the adjacent street shall be extended into the proposed project by the developer, provided this use is not adverse to the manmade or natural features of the site.

5.11.C.4.a. Future Rights-of-Way. Future rights-of-way shall be designed in conformance with the street design requirements of this Part and the contiguous parcels must contain proper setbacks and sight distances.

5.11.C.4.(i) The area within the future rights-of-way shall be included within the deeds to the abutting lots with an easement in favor of the Township and landowners of the land into which the future rights-of-way will extend to permit the use of the future right-of-way for public street purposes should the adjoining lands be developed.

5.11.C.4.(ii) The landowners of the lots in which the future right-of-way is included shall have the duty to maintain the area included within the future right-of-way and this duty shall be indicated in a note on the final plan and in all deeds to such lots.

5.11.C.4.(iii) The landowners of the lots in which the future right-of-way is included shall have no obligation concerning the improvement of such future right-of-way for street purposes.

5.11.C.5. Half Streets. Half or partial streets (less than the required right-of-way or cartway width) will not be permitted. All plans shall be designed to provide for the entire required right-of-way and cartway.

5.11.C.6. Street Names. Continuations of existing streets shall be known by the same name. Names for new streets shall not duplicate or closely resemble names of existing streets within the same postal area. All street names shall conform, where applicable, to the local Township plan for street names.

5.11.C.6.a. Street Signs. All traffic control signs and street name signs shall be indicated on the plans and installed where identified along all new streets and intersections. The design and placement of such signs shall be in accordance with current PA DOT standards and subject to approval by the Township.

5.11.C.7. Vertical Alignments. Vertical street alignments shall be measured along the centerline. The minimum grade of all streets shall be seventy-five hundredths of one percent (0.75%) and the maximum grade shall be ten percent (10%); except for collector streets which shall be a maximum eight percent (8%) grade.

5.11.C.7.a. Vertical curves shall be used in changes in grade, exceeding one percent (1%). The minimum lengths (in feet) of crest vertical curves shall be twenty (20) times the algebraic difference in grade and the minimum length (in feet) of sag curves shall be thirty (30) times the algebraic difference in grade. For example, if a three percent (3%) upgrade is followed by a four percent (4%) downgrade, the algebraic difference in grade is $7[+3-(-4)=7]$; the minimum length of the vertical curve would then be one hundred forty feet (140') $[20 \times 7 = 140]$. All the cut and fill banks shall be a maximum of 3:1 slope.

5.11.C.7.b. Where the approaching grade exceeds seven percent (7%) on any or all streets at a four-way street intersection, or the terminating street at a three-way intersection, a leveling area shall be provided on the street(s) with such excessive grade. Such leveling area(s) shall have a maximum grade of five percent (5%) for a minimum length of seventy-five feet (75') measured from the intersection of the centerlines.

5.11.C.7.c. The grade within the diameter of a turnaround at the terminus of a permanent cul-de-sac shall not exceed five percent (5%).

5.11.C.7.d. All new streets shall be graded to the right-of-way line. Cut and fill slopes within right-of-ways shall not exceed 3:1. If 3:1 slopes are proposed and the height of such slope is proposed to be in excess of five feet (5'), a non-maintenance vegetative cover shall be proposed. The proposed vegetation shall be approved by the Township.

5.11.C.8. Street Improvements.

5.11.C.8.a. All street paving must conform to the following specifications, with the exception that the specifications for a street to be dedicated to the Township shall conform to the specifications contained in any other Township Ordinance should such Ordinance have more stringent specifications. Where another standard applies, the plan shall note that the street will be paved to such standard.

5.11.C.8.b. The base for local streets and special purpose streets which serve only local, residential traffic shall consist of crushed aggregate of a type specified in the latest edition of the PA DOT Manual Form 408 rolled to a minimum thickness of eight inches (8"). The base for all other streets, including but not limited to arterial streets and collector and special collector streets, shall consist of crushed aggregate of a type specified in the latest edition of the PA DOT Manual Form 408 rolled to a minimum thickness of six inches (6"). No base shall be covered until it is inspected and given final written approval by the Board of Supervisors or its designated representative.

5.11.C.8.c. The paved surface for local streets and special purpose streets which serve only local, residential traffic shall consist of hot-mixed, hot-laid materials in two (2) courses, the lower of which (binder course) shall be a bituminous surface (ID-2A) rolled down to four inches (4") in thickness, and the upper of which (wearing course) shall be a bituminous surface (ID-2A) rolled down to one and one-half inches (1-1/2") in thickness. The paved surface for all other streets including, but not limited to, arterial streets and special collector and collector streets, shall consist of hot-mixed, hot-laid materials in two (2) courses, the lower of which (binder course) shall be a bituminous concrete base course surface rolled down to six inches (6") in thickness, and the upper of which (wearing course) shall be a bituminous surface (ID-2A) rolled down to one and one-half inches (1-1/2") in thickness. All finished streets must maintain a one-quarter inch (1/4") per foot crown for each lane of travel except on super elevations and shall conform with the horizontal and vertical alignment of the plan as approved.

5.11.C.8.d. All work procedures for the paving of streets shall conform to the requirements of the latest edition of the PA DOT Manual Form 408.

5.11.C.8.e. Wherever street improvements occur along or adjacent to a project site and result in a widened cartway width, a paved transition area shall be provided. The minimum length (in feet) of the transition area shall be calculated based on the offset distance from the edge of the existing cartway to the edge of the widened cartway times fifteen (15). For example, if the existing lane width is ten feet (10') and the proposed lane width is fourteen feet (14'), the paved transition would be sixty feet (60') $((14-10) \times 15 = 60)$. The pavement section for all transition areas shall be the same as that required for any street widening.

5.11.C.8.f. For any non-residential subdivision or land development in which at least fifty (50) truck trips per day will be generated, the structural design of any roads shall be performed by an Engineer in accordance with current engineering standards. The design standards referred to herein, however, shall be the minimum standards utilized. In all cases, intersections shall be constructed of reinforced concrete cement, in accordance with PA DOT design standards, for a distance of at least seventy-five feet (75') from the intersection.

5.11.C.9. Extension of Existing Streets. The extension of existing streets which are presently constructed with a cartway different from the standards of this Chapter shall be provided with a transition area, the design of which is subject to Township approval.

5.11.C.10. Improvement of Existing Streets and Intersections. Where a subdivision or land development abuts an existing Township and/or State street or will have a traffic impact on an existing Township and/or State street or intersection as indicated by the traffic impact study performed under the provisions of this Ordinance, the developer shall make the following improvements:

5.11.C.10.a. Where the subdivision or land development abuts an existing Township or state street, the developer shall dedicate additional right-of-way to the Township or State, as applicable, to the extent necessary to increase the right-of-way width of the existing street to create a right-of-way width which is equivalent to the right-of-way width for new streets of the same classification established by this Ordinance. The developer shall improve the existing street to the cartway width established for new streets of the same classification set forth in this Ordinance. A developer shall install curbs, sidewalks, pavement widening, stormwater management facilities, and all other necessary or appropriate improvements in accordance with Township Ordinances. Notwithstanding the foregoing, the developer shall also improve State streets in accordance with the requirements of the PA DOT and any conditions which the PA DOT may impose upon its granting of a highway occupancy permit.

5.11.C.10.b. Where the subdivision or land development is situated only on one side of an existing street, the developer shall improve the side of the street abutting the subdivision or land development and, if the traffic impact study demonstrates that improvement of the entire cartway width is necessary for adequate, safe and convenient access to the proposed subdivision or land development, shall improve both sides of the street. If the Township requires the developer to improve only the side of the street abutting the subdivision or land development, the developer shall, in addition to all other required improvements, install one and one-half inches (1-1/2") of ID-2A pavement overlay from the centerline of the existing cartway to the limits of the improved cartway width. For single family residential subdivisions of ten (10) lots or less

(fronting on one road) with lots sizes all one (1) acre or larger, a waiver from specific requirements of Subsection 5.11(c)(10) may be requested. Such request must, at a minimum, include justification as to why the specific improvements are not necessary, and that not making such improvements will not result in any negative impact on the road system due to the proposed development.

5.11.C.10.c. Where the traffic impact study indicates that improvements are necessary or advisable to existing Township and/or State streets and/or intersections within the traffic impact study area in order: (a) to assure adequate, safe and convenient access to each lot and/or structure and/or parking compound proposed as part of the development of the tract; (b) to accommodate the traffic due to the proposed development; (c) to provide for a level of service and delay for the design year, or years for phased projects, with the development which is at least equivalent to the projected level of service and delay for the design year(s) without the proposed subdivision or development; and/or, (d) to preserve the existing convenience of access to or ability to exit from abutting properties which gain access from the existing street, the developer shall install all such indicated improvements. The developer shall install additional traffic lanes, traffic dividers, traffic control devices, traffic signals and other measures as appropriate to ensure that the development of the tract does not adversely impact the existing street system and/or access to or the ability to exit from properties gaining access from an affected street. If the traffic impact study indicates that improvements must be made to a State street, the developer shall also take all action necessary to obtain any PA DOT permits and/or approvals to install the necessary street widening and/or traffic signals or traffic control devices. If the traffic impact study recommends installation of traffic signals or traffic signal modifications, the developer shall prepare all studies and submit all necessary applications to enable the installation of the traffic signal or modifications at their cost and expense. If the traffic impact study indicates that traffic control devices or regulations including, but not limited to, stop intersections, speed limit reductions or parking prohibitions, are required, the developer shall prepare all studies necessary to justify imposition of such regulations in accordance with PA DOT regulations and shall pay all costs associated with the preparation and enactment of an ordinance to establish such regulations.

5.11.C.10.d. The developer shall bear all costs and expenses in connection with the improvements required by this subsection. If the developer requires the Township to submit permit applications or requests for approvals in the name of the Township, the developer shall reimburse the Township for all costs and expenses incurred by the Township in connection with its review of the application and submission of the application to the PA DOT or any other governmental agency.

5.11.C.10.e. When the Township determines that the required improvements are not feasible at the present time, the developer shall deposit funds with the Township in the amount of one hundred ten percent (110%) of the cost of the improvements computed in accordance with the provision of §509 of the Municipalities Planning Code. Such funds shall be maintained by the Township in a general account to be used for traffic improvements. The developer may request a modification to reduce the amount of funds to be deposited with the Township under this provision. In order to warrant the granting of such modification, the developer shall make application to the Township in accordance with the

provisions of this Ordinance. The developer shall establish the particular circumstances which are applicable to the development and shall demonstrate good cause for such modification. The Township Engineer shall make a recommendation to the Township Planning Commission and Board of Supervisors whether or not and to what extent such requested modification should be granted.

5.11.C.11 Specific Traffic Control and Access Requirements. The following specific traffic control and access requirements shall be met for developments which produce one hundred (100) peak hour directional trips:

5.11.C.11.a. If any traffic signals are to be installed, the distance between any new and/or existing signals shall be at least one thousand feet (1,000') unless it can be demonstrated that adjacent traffic signals can operate sufficiently at lesser distances.

5.11.C.11.b. Design of proposed development access points shall take into consideration the horizontal and vertical grades of the existing road network in the traffic impact study area to permit safe and convenient access to the site as defined in the latest PA DOT standards and regulations. All modifications required to meet these regulations will be the responsibility of the developer.

5.11.C.11.c. The developer shall demonstrate by using the latest PA DOT standards and regulations that the proposed use will not create traffic patterns and movements which will jeopardize the traveling public.

5.11.C.11.c.(i) Stacking of sufficient length shall be provided in all traffic lanes on the site and off the site on adjacent roadways to insure that there shall be no blockage of through traffic. The design and length of the stacking lanes shall be justified and supported by the queuing analysis required as part of the traffic impact study.

5.11.C.11.c.(ii) Street and/or access drives to and within the site shall be designed in a manner that blockage of through traffic by vehicles attempting to enter or exit on these streets or access drives will not occur.

5.11.C.11.c.(iii) Acceleration, deceleration and turning lanes shall be of sufficient lengths to accomplish their intended use.

5.11.C.11.d. If reduction of the speed limit, installation of traffic control devices, limitation of parking or turning movements or similar measures are required to mitigate traffic impacts upon Township or State highways, the applicant shall present traffic studies performed in accordance with PA DOT regulations and Publication No. 201, Engineering and Traffic Study Regulations. The erection or the installation of such traffic control devices shall be in accordance with Title 67, Chapter 211, Official Traffic Control Devices, of PA DOT regulations. If the enactment of an ordinance is necessary to effectuate the traffic regulations or the installation of the traffic control device, the applicant shall reimburse the Township for all expenses in the preparation and enactment of the necessary ordinance.

5.11.C.11.e. No street shall be located in a manner which would limit access to or exiting from abutting properties gaining access from the existing street with which a proposed street will intersect unless the developer provides such lots with alternate access from the proposed street system in a manner acceptable to each affected lot owner. It shall be the burden of the applicant to demonstrate that such access is acceptable to all owners of an affected lot. For the purpose of this provision, limitation of access shall include the limitation of turning movements into or exiting the abutting property or properties gaining access from the existing street, whether by traffic regulations, installation of barriers to prevent turning movements, installation of additional traffic lanes in front of a property, or difficulties or delays resulting from increased traffic flows.

5.11.C.11.f. Where new intersections are being established to serve as access to the proposed development, these intersections must be designed to at least operate at Level of Service C or better.

5.11.C.11.g. For access points to the proposed development and any major intersections where traffic signal control may be required or is being proposed, a traffic signal warrant analysis shall be performed in accordance with the requirements of PA DOT's Publication 201. A left turn lane shall be provided and an analysis shall be completed to determine the type of signal phasing required.

5.11.C.11.h. Emergency traffic signal preemption shall be addressed and provided as required.

5.11.C.11.i. Additional left and right turning lanes shall be provided to address the existing roadway site conditions and access to the proposed development.

5.11.C.11.j. An agreement between the Township and developer shall be provided with regard to operating expenses and maintenance of proposed traffic signals.

5.11.C.11.k. Additional through lanes and lane transitions of sufficient length shall be provided to allow smooth traffic flow to existing traffic lanes thus minimizing congestion, delays and or blockage of through traffic within the proposed improvement area. The design and length should be justified and supported by the queuing analysis required as part of the traffic impact study.

5.11.C.11.l. Sidewalks shall be provided along the property frontage and within the development.

5.11.C.12. Street Construction Specifications.

5.11.C.12.a. Streets must be surfaced to the grades and dimensions drawn on plans, profiles, and cross-sections submitted by the developer and approved by the Township. Before paving the street surface, the developer must install required utilities and provide subsurface drainage for the streets in accordance with the Township Stormwater Management Ordinance.

5.11.C.12.b. The construction of all streets shall comply with current Township standards and specifications as provided in a corresponding Appendix of this Ordinance and based on the construction standards in PA DOT, Form 408.

5.11.C.12.c. The Township shall determine if a collector or arterial street is required as direct result of the construction of the development, in which case the developer is responsible for paving the additional width required for such streets.

5.11.C.13. Street Intersections.

5.11.C.13.a. Multiple intersections involving the junction of more than two (2) streets are prohibited.

5.11.C.13.b. The distance between the centerline of streets opening onto the opposite sides of existing or proposed streets shall be no less than one hundred fifty feet (150') between centerline of the street being intersected.

5.11.C.13.c. The distance between the centerline of streets intersecting a collector or local street shall be no less than three hundred feet (300') measured along the centerline of the street being intersected.

5.11.C.13.d. Intersections with arterial streets shall be located not closer than one thousand feet (1,000'), measured from centerline to centerline, along the centerline of the arterial street being intersected.

5.11.C.13.e. Right angle intersections shall be used whenever possible. No street shall intersect another at an angle of less than seventy-five degrees (75°).

5.11.C.13.f. The cartway edge at street intersections shall be rounded by tangential arc with a minimum radius of twenty feet (20') for local streets and thirty feet (30') for intersections involving major streets. The right-of-way radii at intersections shall be substantially concentric with the edge of the cartway.

5.11.C.13.g. Where appropriate, the Board of Supervisors may require additional traffic lanes to facilitate turning movements at existing or proposed street intersections within or bordering the site. These additional lanes, including acceleration/deceleration lanes and lane transition areas, shall be provided in accordance with the latest PA DOT standards and regulations.

5.11.C.13.h. Where curbs and sidewalks are required or provided, clearly marked crosswalks shall be provided at all intersections. Crosswalks may also be required by the Board of Supervisors at other locations to promote the convenience and safety of pedestrian traffic. The design of crosswalks and the materials used shall be consistent with the PA DOT 408 Specifications.

5.11.C.14. Sight Distance at Street Intersections.

5.11.C.14.a. There shall be provided and maintained at all intersections a clear sight triangle easement or dedicated right-of-way which shall include the area on each street corner that is bounded by a line of sight triangle between points from the intersection of the street centerlines for the distance shown in the corresponding Appendix. Clear sight triangles shall be indicated on all plans, and a note shall be provided on the plans which states that no structures, landscaping or grading may be constructed, installed or performed within the area of the clear sight triangle which would obscure the vision of motorists. Deeds to lots which contain clear sight triangles shall provide that no structure, landscaping or grading shall be erected, installed or performed within the area of the clear sight triangle which will obscure the vision of motorists.

5.11.C.14.b. Proper sight distance shall be provided with respect to both horizontal and vertical road alignments at all intersections. The sight distance shall be measured from a line ten feet (10') back from the edge of the cartway of the intersected street perpendicular to the centerline of the intersecting street. The sight distance shall be determined by the design speed of the road and the grade of the intersected street in accordance with current PA DOT regulations and publications.

5.11.C.14.c. All streets intersecting a State route shall be subject to the approval of the PA DOT. The minimum sight distance requirements for such intersections shall be provided based on current PA DOT standards and regulations.

5.11.C.14.d. Lot Access.

5.11.C.14.d.(i) The Board of Supervisors may disapprove any point of ingress or egress to any lot, tract, parcel or development from any Township road when the proposed ingress or egress would create unsafe conditions, or result in substandard circulation and impaired vehicle movement.

5.11.C.14.d.(ii) The Board of Supervisors may require the applicant to provide ingress and egress to a particular lot or tract through the remainder of the property or other properties over which the applicant has control.

5.11.C.14.d.(iii) In recommending approval of ingress or egress from any State road or highway, the Board of Supervisors can only recommend those access points that are not in conflict with safety standards of the PA DOT. A highway occupancy permit is required for each access point onto a State road or highway.

5.11.C.15. Future Access Strips. Future access strips are rights-of-way reserved for future street improvements. They shall be designed in conformance with the design requirements of a street, and the contiguous parcels must contain proper setbacks and sight distances.

5.11.C.16. Emergency Access Requirements. All subdivisions or land developments containing fifty (50) or more dwelling units or nonresidential buildings containing twenty thousand (20,000) or greater square feet of gross floor area shall be provided with at least two separate and distinct means of access for the subdivision or land development.

5.11.C.16.a. Access may be provided through the location of two (2) or more public or private streets, each of which intersects with an existing public street. Such public or private streets shall meet all the requirements of this Ordinance concerning design and construction.

5.11.C.16.b. Access for a land development may be provided through two (2) or more driveways into the land development. Such driveways shall be separated by a distance of at least one hundred fifty feet (150') and shall comply with all requirements of this Ordinance.

5.11.C.16.c. If the applicant is unable to provide access to the subdivision or land development through two or more public or private streets, each of which intersects with an existing public street, or two or more driveways which intersect with one or more existing public streets, an emergency access shall be provided.

5.11.C.16.c.(i) The emergency access shall be improved so that emergency vehicles may safely transverse it and shall be indicated on the plans.

5.11.C.16.c.(ii) The emergency access shall be accessible to the providers of emergency services within the Township. Applicants proposing to provide emergency access shall submit evidence of such approval.

5.11.C.16.c.(iii) The emergency access may be located so that access to the subdivision or land development is gained from a public street at a location unsuitable for regular access with an existing public street.

5.11.C.16.c.(iv) The emergency access may be located so that access is gained from an adjacent tract. For example, a subdivision or land development adjoining a parking lot of another use may provide emergency access through a point with a break chain. Applicants with plans indicating emergency access through an adjoining private tract shall provide evidence that the adjoining property owner has consented to such emergency access location.

Section 5.12. Monuments. Sufficient monuments shall be set to ensure that reliable survey points are available for all parts of the subdivision. At least one (1) monument shall be placed for every two (2) lots or every two hundred feet (200') feet of streets, whichever requirement is less. The monument shall consist of either a cast iron box inside of which shall be placed a three-quarters inch (3/4") steel pin three feet (3') feet in length, with the top of the pin set to serve as the survey point, or four inches (4") square x thirty inches (30") in length concrete containing an iron bar for strength and drill hole for line, set level with finished grade. All lot corners and changes in direction shall be identified by steel pins.

The top of the monument box shall be set at the finished grade upon completion of the grading of the street.

Section 5.13 Utilities, Curbs and Sidewalks. All subdivisions shall be designed and serviced with adequate utilities, including electricity, telephone and gas service. The developer shall be responsible to cooperate with the utility companies to insure installation of the necessary

utilities. All utilities shall be underground, except where developments are exempted by the Pennsylvania Public Utility Commission. Where required, the developer shall obtain a letter from the utility company confirming that service may be extended to the development.

When required by the municipality, the developer shall provide a street lighting duct system, in accordance with the specifications of the appropriate public utility.

In areas where public water lines are available or proposed, fire hydrants shall be installed and properly connected to the water supply by the developer. Fire hydrants shall be located no more than one thousand feet (1,000') apart and within five hundred feet (500') of any dwelling or inhabited structure. The nearest fire protection unit may be contacted for input regarding the design and placement of a fire hydrant network.

5.13.A. Curbs and Gutters. Curbs and gutters shall be installed by the developer when the mean lot width is one hundred feet (100') or less, or when any non-residential development is proposed, or when residential development which is not solely single-family detached residential is proposed, or when lot sizes are less than one (1) acre in area.

Curbs and gutters shall be installed on each side of all new streets in subdivisions or land developments, along all existing street abutting a subdivision or land development, and along all new parking compounds in land developments by the developer in accordance with the following specifications:

5.13.A.1. Curbs, gutters, shall be constructed according to the specifications set forth in Section 641, Type A, C, and D, "Plain Cement Concrete Curb Gutter", in the Pennsylvania Department of Transportation Specifications, 1970 as amended, and must conform to all Americans With Disabilities requirements. Slant-type or mountable curbs may be required by the Township Board of Supervisors. After submission of a preliminary plan, the Township Engineer and Planning Commission shall make a recommendation to the Board, and the Board shall then make a determination as to the type of curb that will be required.

5.13.A.2. Vertical curbs shall be not less than six inches (6") wide at the top and seven inches (7") wide at the bottom. The overall depth of the curb shall be not less than twenty-two inches (22"). The curb shall rest on a six inch (6") crushed stone base.

5.13.A.3. The cross sections of gutters shall be constructed in accordance with the details shown on approved drawings.

5.13.A.4. Curbs and gutters shall be set and finished to the lines and grades given on the approved drawings.

5.13.A.5. The developer shall notify the Township a minimum of twenty-four (24) hours in advance of the start of construction.

5.13.B. Sidewalks. Sidewalks shall be installed by the developer when the mean lot width is one hundred feet (100') or less, or when any non-residential development is proposed, or when

residential development which is not solely single-family detached residential is proposed, or when lot sizes are less than one (1) acre in area.

Sidewalks shall be installed on each side of all new streets in subdivisions or land developments, along all existing street abutting a subdivision or land development, and along all new parking compounds in land developments by the developer in accordance with the following specifications:

5.13.B.1. Sidewalks shall be within the right-of-way of the street and shall extend in width from the right-of-way line toward the curb line.

5.13.B.2. Sidewalks shall be four feet (4') wide in single-family residential developments.

5.13.B.3. Sidewalks shall be five feet (5') wide in multi-family developments.

5.13.B.4. Sidewalks shall be ten feet (10') wide in commercial developments, unless justification is provided to warrant a lesser width.

5.13.B.5. Sidewalks shall be constructed according to the specifications as set forth in Section 676, "Cement Concrete Sidewalks", in the Pennsylvania Department of Transportation Specification, 1970, as amended, and must conform to all Americans With Disabilities requirements.

5.13.B.6. The developer shall notify the Township a minimum of twenty-four (24) hours in advance of the start of construction.

Section 5.14 Required Improvements. The land improvements required to be completed by the developer of a subdivision or land development, as set forth in this Ordinance, shall be designed and installed in accordance with this Ordinance and other codes of the municipality. The improvements shall be of such size and capacities as are required for the development of the proposed subdivision and of extra sizes as may be necessary to serve nearby land which is an integral part of the neighborhood service or drainage areas.

The developer shall be required to extend the improvements to serve adjoining unsubdivided land. Procedures for providing any necessary extra-size and general standards for pro-rating costs shall be coordinated with the municipality and shall be in accordance with the following:

5.14.A. Extra-Size Improvements. The developer shall be required to pay for a part of the materials or construction of streets, sewers or water lines which are determined by the Planning Commission according to the standards set forth in this Ordinance to be in excess of the size required for the development of the subdivision and the integral neighborhood, service, or drainage area.

If a storm sewer in excess of eighteen inches (18"), or a sanitary sewer in excess of eight inches (8") or a water main in excess of six inches (6") is required, but each less in size than the sewer trunk lines or water mains which are to be constructed and financed on a regional basis, the municipality shall construct the extra size utility and require a deposit in advance from the developer for the cost of the utility he is required to install and his portion of other costs which the municipality may assess against the benefited property owners of the service or drainage area.

5.14.B. Extensions to Boundaries. The developer shall be required to extend the improvements to the boundary of the proposed subdivision to serve adjoining unsubdivided land; however, where the municipality determines that a connecting street is necessary for the future subdividing of adjoining land, but the present construction of pavement and/or utilities therein are not warranted, the municipality may require the dedication of land, the pavement intersections constructed, utilities extended at least three feet (3') beyond the pavement, and connections provided and made available for future extensions by other developers.

5.14.C. Prorating Costs. In making determinations for prorating costs for the construction of extra-size improvements, the Planning Commission shall consider in addition to the standards set forth in this Ordinance and other regulations of the municipality the following conditions:

5.14.C.1. The relative location and size of the proposed subdivision,

5.14.C.2. The traffic estimated to be generated by the development in relation to present streets,

5.14.C.3. The natural drainage area for sewers and the service area for water,

5.14.C.4. The development benefits that will accrue to the subdivision,

5.14.C.5. The sequence of land and utility developments in the vicinity, and

5.14.C.6. Any other condition it may find pertinent.

Section 5.15 Completion of Improvements or Guarantee Thereof Prerequisite to Final Plan Approval.

5.15.A. Performance Guarantee in Lieu of Installation. No plat shall be finally approved unless the streets shown on such plan have been improved to a mud-free or otherwise permanently passable condition, or improved as may be required by the subdivision and land development ordinance and any walkways, curbs, gutters, street lights, fire hydrants, shade trees, water mains, sanitary sewers, storm sewers, storm water management facilities and other improvements as may be required by the subdivision and land development ordinance have been installed in accordance with this Ordinance. In lieu of the completion of any improvement required as a condition for the final approval of a plat, the subdivider or developer shall deposit with the municipality a fiscal security in an amount sufficient to cover the costs of any improvements or common amenities including, but not limited to roads, storm water detention and/or retention basins and other related recreational facilities, open space improvements, or buffer or screen plantings which may be

required. The developer shall be required to provide notification of expiration of security a minimum of thirty days prior to such expiration.

5.15.B. Type Guarantee. Without limitations as to other types of financial security which the municipality may approve, which approval shall not be unreasonably withheld, Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive or escrow accounts in such lending institutions shall be deemed acceptable financial security for the purpose of this Section. Such financial security shall be posted with a bonding company or Federal or Commonwealth chartered lending institution chosen by the party posting the financial security, provided said bonding company or lending institution is authorized to conduct such business within the Commonwealth. Such bond, or other security shall provide for, and secure to the public, the completion of any improvements which may be required on or before the date fixed in the formal action of approval or accompanying agreement for completion of the improvements.

5.15.C. Amount of Guarantee. The amount of financial security to be posted for the completion of the required improvements shall be equal to one hundred ten percent (110%) of the cost of completion estimated as of ninety (90) days following the date scheduled for completion by the developer. Annually the Township may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the ninetieth (90th) day after either the original date scheduled for completion or rescheduled date of completion.

Subsequent to said adjustment, the Municipality may require the developer to post additional security in order to assure that the financial security equals said one hundred ten percent (110%). Any additional security shall be posted by the developer in accordance with this subsection.

The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by an applicant or developer and prepared by a professional engineer licensed as such in this Commonwealth and certified by such engineer to be a fair and reasonable estimate of such cost. The Township Engineer shall review and approve the cost estimate or, for good cause, refuse to accept the estimate, in which case he shall calculate an accurate cost estimate of the required site improvements. If the applicant or developer and the Township Engineer are unable to agree upon an estimate, then the estimate shall be recalculated and rectified by another professional engineer licensed as such in this Commonwealth and chosen mutually by the Township and the applicant or the developer. The estimate certified by the third engineer shall be presumed fair and reasonable and shall be the final estimate. In the event that a third engineer is chosen, fees for the services of said engineer shall be paid equally by the Township and the applicant or developer."

If the party posting the financial security requires more than one (1) year from the date of posting of the financial security to complete the required improvements, the amount of financial security may be increased by an additional ten percent (10%) for each one (1) year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one hundred and ten percent (110%) of the cost of completing the required improvements as

reestablished on or about the expiration of the preceding one (1) year period by using the above bidding procedure.

Any financial guarantee other than a cash escrow shall state on its face, certified by the issuing financial institution, that the issuing financial institution agrees that the financial guarantee shall be irrevocable and shall not be allowed to expire, be withdrawn, or reduced in amount without at least ninety (90) days written notice to the Township, until the financial guarantee is released by the Township. A developer who fails to complete the improvements within the allotted time specified in the financial guarantee shall, at least thirty (30) days in advance of the guarantee expiration date, renew or resubmit a financial guarantee. Failure to keep a financial guarantee in effect until the completion and approval of all improvements shall be a violation of this Ordinance.

5.15.D. Progressive Installation. In the case where development is projected over a period of years, the Planning Commission may authorize submission of final plats by sections or stages of development subject to such requirements or guarantees and to improvements in future sections or stages of development as it finds essential for the protection of any finally approved section of the development.

5.15.E. Release from Guarantee. As the work of installing the required improvements proceeds, the party posting the financial security may request the release, from time to time, of such portions of the financial security necessary for payment to the contractor or contractors performing the work. Any such requests shall be made in writing to the municipal governing body, or Planning Commission where applicable, and within forty-five (45) days of receipt of such request the applicable Township Engineer, shall certify, in writing, to his employers whether or not such portion of the work upon the improvements has been completed in accordance with the approved plat. When the improvements are certified to be in accordance with the approved plat, the municipality shall authorize release by the bonding company or lending institution of an amount as estimated by the Township Engineer fairly representing the value of the improvements completed. If the municipality fails to act within said forty-five (45) day period, the release of funds shall be deemed to have been approved as requested. The municipality may, prior to final release at the time of completion and certification by its engineer, require retention of ten percent (10%) of the estimated cost of the aforesaid improvement. The applicant shall assume the necessary expense incurred for the inspection of improvements. Such inspection costs shall be based upon a schedule established and amended from time to time as deemed necessary.

5.15.F. Maintenance Guarantee. Where the municipality accepts dedication of all or some of the required improvements following completion, the municipality may require the posting of financial security to secure structural integrity of said improvements as well as the functioning of said improvements in accordance with the design and specifications depicted on the final plat for a term not to exceed eighteen (18) months from the date of acceptance of dedication.

Said financial security shall be of the same type as otherwise required in this Section with regard to installation of such improvements. The amount of financial security shall not exceed fifteen percent (15%) of the actual costs of installation of said improvements.

5.15.G. Remedies to Effect Completion of Improvements. In the event that any required improvements have not been installed as provided in this Ordinance or in accordance with the approved final plat, the municipality is hereby granted the power to enforce any corporate bond, or other security by appropriate legal and equitable remedies. If proceeds of such bond, or other security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, the municipality may, at its option, install part of such improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action to recover the moneys necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the improvements covered by such security, and not for any other municipal purpose. Failure to properly install the required improvements shall also constitute a violation of this Ordinance, punishable as provided by Section 8.06 of this Ordinance.

Section 5.16 Insurance. The developer agrees to indemnify and save harmless the municipality against and from any and all loss, cost, damage, liability, and expense, including counsel fees, account of damage to property of, or injury to or death of, the parties thereto or third person, caused by, growing out of, or in any way whatsoever attributable to the construction of said improvements and the use of the street or other improvements delineated on the subdivision plat during construction. The developer further agrees, but without limiting its liability to indemnify the municipality to carry liability insurance contracts with a reliable insurance company acceptable to the Township, covering the period of said construction in the sum of One Million Dollars (\$1,000,000.00) for injury to or death of person(s), and in the sum of Three Hundred Thousand Dollars (\$300,000.00) for damage to or destruction of property, which insurance contracts shall include the municipality as an additional insured.

Section 5.17 Building Construction and Occupancy. A building or zoning permit may be issued and building construction started only after the approval of the final plat. Occupancy shall not be permitted prior to the completion of streets, storm water management facilities and other improvements necessary for the reasonable use of the building, unless written authorization is granted by the Planning Commission where improvements have been guaranteed by valid bond or other security.

Section 5.18 As-constructed (As-builts) Plans. Prior to the final release of the financial security by the Supervisors, and prior to acceptance of dedication of any improvements, easements or rights-of-way, the developer shall provide the Township with one (1) mylar and two (2) prints of the as-constructed plan, prepared and certified by a Professional Engineer or Land Surveyor, at the same size and scale of the approved plans, showing the following:

5.18.A. Actual location of all concrete monuments and/or markers which were found or set at all angle breaks, points of curvature and tangents around the perimeter of the total tract. When the outside perimeter of a tract falls within or along an existing road right-of-way, then the right-of-way of that roadway shall be monumented at the above referenced points.

5.18.B. Actual location of all iron pins or drill holes in curbs for all individual lot lines.

5.18.C. Actual cul-de-sac radius.

5.18.D. Actual horizontal location of cartway centerline versus right-of-way centerline should be indicated by dimension.

5.18.E. Actual horizontal location of floodplain by elevation and dimension from property line.

5.18.F. Actual horizontal location and cross section of swales and accompanying easements.

5.18.G. Actual horizontal and vertical location of stormwater management facilities including type and size drainage pipes.

5.18.H. Retention and Detention basin.

5.18.H.1. Actual contours of the detention basin.

5.18.H.2. Actual outlet structure details including type, size and inverts of outlet pipes.

5.18.H.3. Actual elevation of the embankment and emergency spillway.

5.18.H.4. A table showing the stage/storage/discharge curve for the constructed conditions.

Section 5.19 Traffic Impact Studies.

5.19.A. The number of vehicle trips shall be computed based upon all phases of the development, and the required traffic impact study shall be completed and submitted with the first phase. Failure to submit the required study with the first phase of development, when subsequent phases are planned, shall constitute a violation of this Ordinance and the Township may avail itself of any and all remedies provided by the Municipalities Planning Code, including the refusal to issue any permits or approvals necessary for further development of the tract.

5.19.B. The Township encourages the developer to present a draft traffic impact study to the Township prior to the preliminary plan.

5.19.C. Traffic Study and Report Required to be Submitted with Preliminary Plans:

5.19.C.1. If a traffic impact study is required per Section 403.C.8 herein for a proposed subdivision or development, it shall be the responsibility of the applicant to ensure the study is conducted and a final report submitted in accordance with these guidelines. The traffic impact study and final report shall be prepared under the supervision of a qualified and experienced transportation engineer with specific training in traffic and transportation engineering.

5.19.C.2. The conduct of the traffic impact study must be in cooperation with and coordinated with the appropriate local and State officials. Of special importance is the need to work closely with the involved officials in determining the improvements which are to be implemented on the affected roadway(s).

5.19.C.3. When requested by the applicant, the Township shall perform a "procedural review" of the draft traffic impact study report. This review shall be limited to insuring the proper procedures have been used and adequate documentation has been provided in accordance with the requirements of these guidelines. This "procedural review" is intended to provide the study preparer with guidance on the adequacy of the study in meeting the requirements of these guidelines and shall not address the adequacy or appropriateness of the recommended improvements.

5.19.C.4. The traffic impact study (TIS) shall be conducted using currently accepted traffic engineering practices and procedures. The use of computer programs to conduct the required analyses is acceptable; provided, the programs reflect the most current provisions of the analysis procedure upon which they are based. Recommended geometric or traffic operations improvements must meet or exceed all applicable PA DOT and local minimum design criteria.

5.19.C.5. The TIS engineer shall be responsible for the collection of all information and data required to support the TIS effort. At the developer's request, the Township shall make available appropriate information and data which will assist in the TIS effort. When additional traffic counts are required for the TIS, the engineer shall collect such data to include average daily traffic (ADT) volumes and peak hour turning movement volumes on an average week day, as well as on Saturday or Sunday, if required, as defined in PA DOT's Publication 201. Traffic data may not be older than three (3) years.

5.19.C.6. The procedures and requirements outlined in these guidelines are intended to provide a basic framework for the conduct of TIS. Additions or modifications to this framework may be made provided such changes are approved by the Township.

5.19.C.7. The limits for the study area should be based upon engineering judgment and a knowledge of the existing traffic conditions in the vicinity of the proposed subdivision or development. The area must be of sufficient size to include the key roadway corridors and critical intersections which may be impacted by the proposed site traffic. Designation of the study area boundaries shall be a cooperative effort between the TIS engineer, Township and PADOT. In those instances where agreement cannot be reached on the boundaries, the Township will establish the boundaries to be used for the TIS. Designation of the future design year(s) as the basis for the study will be made by the Township dependent on the timing and/or phasing of the proposed project. The design year is the anticipated opening of a development assuming full build out and occupancy.

5.19.C.8. Existing and proposed land uses in the study area must be considered in the TIS. This consideration must include not only the current/proposed zoning of the various tracts within the study area, but also the specific use of the development site. Where the

current/proposed land use of the site is being modified, an analysis of the proposed changes should be made to determine the extent to which traffic volumes for the site will be modified.

5.19.C.9. Characteristics of the study area roadway network, intersections and the proposed site access point(s), to include geometrics and traffic control need to be identified as part of the TIS. Included in this proposed site access point(s). In addition, all committed roadway and traffic operational improvements to the study area network, which will occur during the designated time period on which the TIS is based, are to be identified. Committed improvements are those improvements within the study area which are proposed and for which funds have been allocated to be installed by other developers and/or governmental agencies.

5.19.C.10. The study area roadway network is to be analyzed for safety and capacity sufficiency for three separate conditions: existing network conditions, future network conditions without the proposed development and future network conditions with the proposed development. For each of the three conditions the following analyses shall be completed:

5.19.C.10.a. Average daily traffic (ADT) volumes and turning movement volumes for all critical intersections within the study area shall be determined for the AM peak hour, PM peak hour and the proposed development peak hour, which may be Saturday or Sunday, if other than either the AM or PM peak hour of the network.

5.19.C.10.b. The effectiveness of the traffic control (i.e., stop signs or traffic signals) at all critical intersections shall be evaluated by approach in terms of vehicle stops and delays.

5.19.C.10.c. Gap studies shall be conducted at the proposed site access points to evaluate the need for signal control, turn prohibitions or additional site access points to reduce the left turn volume to and from the site driveway(s).

5.19.C.10.d. Queue length analyses shall be completed to evaluate the potential for a backup of traffic from controlled intersections which could impact other intersections including access points to the proposed development.

5.19.C.10.e. Accident history within the past five (5) years on the streets adjacent to the proposed development and at intersections within the study area.

5.19.C.10.f. Existing non-motorized vehicle travel patterns shall be studied. Proposed improvements shall accommodate these patterns in such a manner to provide safe and convenient travel patterns for non-motorized vehicles during and after construction of the proposed development.

5.19.C.10.g. An analysis of the volume and capacity of the network and all critical intersections shall be conducted utilizing the most current "Highway Capacity Manual" procedures. Levels of service shall be determined and documented.

5.19.C.11. The analysis of the existing roadway and intersection conditions in the study area shall be based upon the current geometric conditions and traffic control operations. This analysis shall serve as a basis for determining the current adequacy of the roadway network and to document any deficiencies.

5.19.C.12. The analysis of the future conditions without the proposed subdivision or development shall document the adequacy of the study area network to accommodate traffic in the design year(s) without the proposed development. This analysis must include a full consideration of all committed roadway improvements to the study area network when determining the expected levels of service.

5.19.C.13. For the analysis of the future conditions with the proposed subdivision or development, one of the key factors shall be the total projected site generated traffic and its distribution on the study area network. The study preparer must fully document the methodology which is used to complete this effort and provide sufficient information such that the Township can verify the results. In addition, care must be taken to ensure that adequate consideration is given to that portion of the already projected future network traffic which will utilize the proposed development access points.

5.19.D. Improvement Recommendations:

5.19.D.1. The overall goal of this Section will be to detail necessary improvements to the study area roadway network which will provide for a level of service and delay for the design year or years for phased projects with the development which is at least equivalent to the projected level of service and delay for the design year(s) without the proposed subdivision or development. Based upon a comparison of the traffic analysis for the future conditions with and without the proposed subdivision or development, roadway and traffic operational improvements which will support this goal are to be identified and analyzed. These improvements may include both on-site and off-site roadway and traffic operational changes as determined by the preceding analyses.

5.19.D.2. In developing the proposed improvements, the study preparer is to consider the following:

5.19.D.2.a. All highway capacity evaluations shall consider not only the overall intersection level of service and delay but also evaluate each approach and movement to identify any substandard values which need to be improved.

5.19.D.2.b. The improvements shall provide an estimated delay which will be no worse than the delay for the design year without the proposed subdivision or development.

5.19.D.2.c. Where new intersections are being established to serve as access to the proposed development, these intersections must be designed to at least operate at Level of Service C or better.

5.19.D.2.d. For access points to the proposed development, which are not proposed to be controlled by a traffic signal, an analysis will be completed to determine the design details for a separate left turn lane on the adjoining highway.

5.19.D.2.e. For access points to the proposed development and any major intersection, where traffic signal control may be required or is being proposed, a traffic signal warrant analysis shall be performed in accordance with the requirements of PA DOT's Publication 201. A left turn lane shall be provided and an analysis shall be completed to determine the type of signal phasing required.

The final recommended study area network with proposed improvements will also be subjected to all the traffic analyses which are required under the previous sections of these guidelines. These analyses will serve to determine the "adequacy" of the improvements. If the improvements are determined to be inadequate additional improvements shall be recommended and assigned for implementation by the developer.

5.19.E. Final Report:

5.19.E.1. General:

5.19.E.1.a. A final report must be prepared to document the results of the traffic impact study and the recommended improvements to accommodate the projected traffic due to the proposed subdivision or development. Since this report will be reviewed by Township officials with varying levels of technical expertise, the report must be presented in a format and context which can be understood by both technical and non-technical parties.

5.19.E.1.b. The presentation of data and analyses results should, preferably, be accomplished on either schematic diagrams of the study area, or through the use of charts and/or tables. All sources of data and methodologies which were used in the TIS (including computer programs) must be properly reference and documented. Any modifications to the referenced procedures must be properly documented to enable a review of the appropriateness of the modification.

5.19.E.2. Contents. The final report shall include the following:

5.19.E.2.a. Executive summary which provides a concise description of the study area, results of the traffic analyses and any recommended improvements.

5.19.E.2.b. Description of the proposed subdivision or development site to include a map showing the site's location in regards to the region and the area roadway network.

5.19.E.2.c. Schematic diagram/map of the designated study area showing all major highways and critical intersections.

5.19.E.2.d. Results of the traffic analyses for the three traffic conditions. At a minimum, the following data must be shown for each of the three conditions:

5.19.E.2.d.(i) ADT and intersection turning movement counts.

5.19.E.2.d.(ii) Levels of service and delay.

5.19.E.2.d.(iii) Projected traffic distribution and network assignment for the proposed site.

5.19.E.2.e. Recommended improvements to the study area network to include preliminary cost estimates, proposed implementation schedule and expected levels of service and delay for the recommended network.

5.19.E.3. Review Procedures. Three (3) copies of the final TIS report shall be submitted for review and approval with the preliminary plan application. Reports which do not contain the required information or indicate that the study was not done in accordance with the requirements of these guidelines will be returned to the applicant for correction and resubmission.

5.19.F. Contribution in Lieu of Preparation of Studies. If a developer believes that the preparation of traffic study and report required herein is not warranted, he/she may request the Board of Supervisors to waive the preparation of such study and report and shall make a contribution of the estimated sum necessary to defray the costs of improvements which would be recommended by such studies. The minimum contribution shall be Three Hundred Fifty Dollars (\$350.00) per dwelling unit or residential lot in a residential subdivision or land development or One and 50/100 Dollars (\$1.50) per square foot of usable building floor area in a commercial, industrial or institutional subdivision or land development.

5.19.F.1. The developer of any commercial, industrial or institutional subdivision or land development shall provide the Township with a certification of the usable building floor area to be constructed for the purpose of determining the contribution in lieu of preparation of studies.

5.19.F.2. This contribution in lieu of preparation of studies provided for herein shall be in addition to all charges imposed by the Authority for tapping and connection fees and shall be in addition to all other review, inspection and other fees or charges imposed by the Township and/or the Authority, and all sums otherwise agreed to be paid by the developer.

5.19.F.3. The developer shall enter into an agreement with the Township setting forth the contribution in lieu of preparation of studies to be paid and the studies to be paid and the studies to be waived by the Township. All such agreements shall be in a form satisfactory to the Township Solicitor.

5.19.F.4. All contributions in lieu of preparation of studies shall be paid prior to approval of the final plan by the Township.

Section 5.20 Vehicular Parking Facilities.

5.20.A. Parking Areas. Off-street vehicular parking facilities shall be provided in accordance with the regulations set forth in the Zoning Ordinance, which regulations are incorporated herein by reference. Vehicular parking facilities for land uses other than detached single-family residences shall be designed in accordance with the following provisions:

5.20.A.1. Parking facilities shall not be permitted within ten feet (10') of a side or rear property line unless formal arrangements, satisfactory to the Township, have been made for the establishment of a common parking facility.

5.20.A.2. Parking spaces shall be guarded by curbs or other protective devices, which are arranged so that parked cars cannot project into the streets, yards or walkways.

5.20.A.3. Interior drives between rows of parking spaces shall have the minimum widths indicated in the following table:

<u>Angle of Parking</u>	<u>Minimum Width (Feet)</u>	<u>Minimum Width (Feet)</u>
	<u>One-way Traffic</u>	<u>Two-way Traffic</u>
90 Degrees	25	25
60 Degrees	20	22
45 Degrees	18	22
30 Degrees	11	22
Parallel	11	22

5.20.A.3.a. Interior drives in areas where there is no parking permitted shall be at least eleven feet (11') wide for each lane of traffic.

5.20.A.3.b. The following lists required minimum space sizes in feet:

Standard car spaces:

Parallel-23 by 8

Nonparallel-19 by 9

5.20.A.4. Not less than a four feet (4') radius of curvature shall be permitted for horizontal curves in parking areas.

5.20.A.5. All dead end parking lots shall be designed to provide sufficient back-up area for all end stalls.

5.20.A.6. All parking lots shall be adequately marked and maintained for the purpose of defining parking spaces and interior drives. As a minimum, the lines of all parking spaces and interior drives (including directional arrows, etc.) shall be solid white and four inches (4") in width. Painted lines, arrows and dividers shall be provided and maintained to control

parking, when necessary to direct vehicular circulation. Parking areas for over thirty (30) vehicles shall be divided by permanent raised curbing that clearly defines parking spaces from designated access lanes.

5.20.A.7. Parking areas, main entrances, exits, streets and pedestrian areas shall be provided with lights such that the areas are illuminated to the standards as indicated in the corresponding Appendix.

5.20.A.8. All parking areas shall provide for sufficient handicapped accessibility in the design of sidewalks, ramps, curbs and related facilities including the number of specific handicapped parking spaces in accordance with applicable Federal, State or local regulations.

5.20.A.9. All parking lots shall be constructed and maintained with a paved surface of concrete or bituminous materials, or another dust-free surface, approved by the Board of Supervisors.

5.20.A.10. Every parking lot shall be connected to a street by means of an access drive. This access drive shall be at least twelve feet (12') wide for each travel lane.

5.20.A.11. Parking lots shall be provided with adequate facilities to collect and convey stormwater in accordance with the Township Stormwater Management Ordinance.

5.20.A.12. Buffer planting shall be provided where parking compounds are adjacent to residential properties. The buffer planting area shall be at least fifteen feet (15') wide.

5.20.A.13. Speed Bumps.

5.20.A.13.a. Speed bumps, constructed as part of access drives or parking lots, shall be marked with permanent, yellow diagonal stripes.

5.20.A.13.b. The speed bumps shall be in the form of mounds or depressions in the pavement and shall be designed to restrain motor vehicle speed.

5.20.A.13.c. There shall be a warning sign posted at each entrance to a parking area having speed bumps.

5.20.A.13.d. In no case shall the overall height (or depth) of speed bumps exceed three inches (3").

Section 5.21 Prime Open Space and Recreation.

5.21.A. For every proposed residential subdivision or land development in which at least twenty-five (25) lots or dwelling units are proposed, initially or cumulatively as of the effective date of this Ordinance, the developer shall set aside one (1) contiguous acre of Prime Open Space, as herein defined, for every twenty-five (25) lots or units proposed. The amount of Prime Open Space shall be pro-rated, and shall be rounded up to the nearest one-half (1/2) acre (e.g. a

subdivision with 29 lots would require 1.5 acres of Prime Open Space, a subdivision with 65 dwelling units would require 3.0 acres of Prime Open Space). All Prime Open Space shall be contiguous and shall be accessible to all lots or units within the development without having to walk in streets (not including street cross-walks). For every subdivision proposing less than twenty-five (25) lots or units, section 5.21.B. shall be followed.

5.21.B. In lieu of setting aside Prime Open Space, the developer shall contribute to the Township the sum of Five Hundred Dollars (\$500.00) per lot or dwelling unit proposed over two (2) lots or dwelling units, to be used in accordance with the Township Recreation Plan and the provisions of the Pennsylvania Municipalities Planning Code. Should the Planning Commission and the Board of Supervisors determine that the subdivision or land development would better be served by existing open space or recreational facilities and not by Prime Open Space within the subdivision or land development, the Planning Commission may recommend, and the Board of Supervisors may require, that the fees in lieu of Prime Open Space be contributed as stated herein. Such contribution shall be submitted prior to Final Plan approval.

5.21.C. Prime Open Space is defined as land in which at least seventy-five percent (75%) of the area would meet all of the following standards:

5.21.C.1. Less than eight percent (8%) slope

5.21.C.2. Not a wetland

5.21.C.3. Not within the one hundred (100) year flood plain

5.21.D. The Planning Commission may, on a case by case, non-precendential basis, modify these standards depending on the developer's proposed use and improvements for such space.

CHAPTER 6. PLANNED RESIDENTIAL/CLUSTER DEVELOPMENTS

RESERVED FOR FUTURE USE

CHAPTER 7. FLOOD PLAIN MANAGEMENT

Section 7.01 Intent. The purpose of the regulations set forth in this Ordinance is to monitor the subdivision and/or development of flood plain areas in order to promote and protect the general health, welfare, and safety of the community; to require that each subdivision lot in flood plain areas be provided with a safe building site with adequate access; to insure that public facilities which serve such lots or development be designed and installed to preclude flood damage; and to protect individuals from purchasing lands which are unsuitable for development because of flood plain lands. The subsequent sections shall be considered requirements supplemental to those procedures and standards specified elsewhere in the Subdivision and Land Development Ordinance, municipal zoning ordinances, and any other applicable ordinances and codes.

Section 7.02 Definitions of Terms Utilized in This Chapter.

7.02.A. Building. A structure which has a roof supported by columns, piers, or walls, which is intended for the shelter, housing, or enclosure of persons, animals, or chattel or which is to house a use of a commercial or manufacturing activity.

7.02.B. Development. Any man-made change to improved or unimproved real estate, including, but not limited to buildings, mobile homes, or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

7.02.C. Flood Plain. (1) A relatively flat or low area adjoining a river, stream, or watercourse which is subject to partial or complete inundation by water, (2) an area subject to the unusual and rapid accumulation of runoff of surface water from any source.

7.02.D. Floodway. That portion of the one hundred (100) year flood plain including the channel of a river or other watercourse and adjacent land areas which are required to carry and discharge the one hundred (100) year flood where the activities permitted elsewhere in the flood plain district will not cumulatively increase the water surface elevation more than one (1) foot at any given point. Detailed studies of the Regulatory Flood by the Federal Insurance Administrator provide specific flood profiles and allow for the delineation of floodway and flood fringe areas within the bounds of the flood plain. For those areas where no floodway has been identified by the Flood Insurance Study, the floodway may be identified by other available studies or sources of information provided by a registered professional engineer.

7.02.E. Regulatory Flood. The flood which has been selected to serve as the basis upon which the flood plain management provisions of this and other ordinances have been prepared; for purpose of this Ordinance, the one hundred (100) year flood, as defined by the Federal Insurance Administrator.

7.02.F. Regulatory Flood Elevation. The one hundred (100) year flood elevation based upon the information contained in the Official Flood Insurance Study.

7.02.G. Structure. A man-made object usually assembled of interdependent parts or components which is designed to have a more or less fixed location, whether or not permanently attached at that location.

Section 7.03 Application Procedures and Plat Requirements. The following procedures shall be required in addition to those specified otherwise in these regulations.

7.03.A. Pre-Application Procedures

7.03.A.1. It is suggested that prospective developers consult the Pennsylvania Department of Environmental Protection concerning soil suitability when on-site sewage disposal facilities are proposed.

7.03.A.2. Prospective developers shall consult the County Conservation District representative concerning erosion and sediment control and the probable effect of geologic conditions on the proposed development. Concurrently, a determination should be made as to whether or not any flood hazards either exist or will be created as a result of the proposed subdivision or development.

7.03.B. Preliminary Plan Requirements. The following information shall be required as part of the Preliminary Plan when a subdivision is in a flood plain area and shall be prepared by a registered surveyor or professional engineer:

7.03.B.1. A map illustrating the location of the proposed subdivision or land development with respect to the municipality's flood plain areas including information on, but not limited to, Regulatory Flood Elevations, boundaries of flood plain areas, proposed lots and sites, fill, and flood or erosion protective facilities.

7.03.B.2. Where the subdivision or land development lies partially or completely in the flood plain area or where the subdivision borders on the flood plain area, the preliminary plan map shall include detailed information giving the location and elevation of proposed roads, public utilities, and building lots. All such maps shall also show contours at intervals of two feet (2') and identify accurately the boundaries of the flood plain area.

7.03.C. Final Plan Requirements. The following information shall be required as part of the Final Plan and shall be prepared by a registered engineer or surveyor:

7.03.C.1. All information required for submission of the Preliminary Plan plus any changes required by the Planning Commission and/or the municipal governing body.

7.03.C.2. A map showing the exact location and elevation of all proposed buildings, structures, roads, and public utilities to be constructed in flood plain areas. All such maps shall show contours at intervals of two feet (2') and identify accurately the boundaries of the flood plain area.

Section 7.04 Design Standards and Improvements. The design standards and improvements specified herein shall be considered requirements in addition to those of Chapter 5 and otherwise listed in this Ordinance.

7.04.A. General

7.04.A.1. Where not prohibited by this or any other laws or ordinances, land located in flood plain areas may be platted for development with the provisions that the developer construct all buildings and structures to preclude flood damage in accordance with this and any other laws and ordinances regulating such development.

7.04.A.2. Building sites for residences or any other type of dwellings or accommodations and building sites for structures or buildings other than residential uses shall be

permitted in the flood plain only when in compliance with appropriate municipal zoning ordinances, and any other applicable regulations.

7.04.A.3. If the documentation provided to the Planning Commission indicates that only a part of a proposed plat can be safely developed, they shall limit development to that part and shall require that development proceed consistent with this documentation.

7.04.A.4. When a developer does not intend to develop the plat himself and the Planning Commission receives documentation that additional controls are required to insure safe development, they shall require the developer to impose appropriate deed restrictions on the land. Such deed restrictions shall be inserted in every deed and noted on every recorded plat.

7.04.A.5. Lots which are within the flood plain shall be subject to the following:

7.04.A.5.a. Any lots created or revised shall have not more than fifty percent (50%) of their area within the flood plain, except that large lots may be exempted provided a minimum one (1) acre are of said lot is outside the flood plain.

7.04.A.5.b. Lot access to a public road shall not be restricted or prevented by flood plain areas.

7.04.B. Excavation and Grading. Where any excavation or grading is proposed or where any existing trees, shrubs, or other vegetative cover will be removed, the developer shall consult the County Conservation District representative concerning plans for erosion and sediment control and to also obtain a report on the soil characteristics of the site so that determination can be made as to the type and degree of development the site may accommodate. Before undertaking any excavation or grading, the developer shall obtain a Grading and Excavation Permit if such is required by the municipality.

7.04.C. Drainage Facilities. Storm drainage facilities shall be designed to convey the flow of surface water without damage to persons or property. The system shall insure drainage at all points along streets, and provide positive drainage away from buildings and on-site disposal sites.

Plans shall be subject to the approval of the Planning Commission. The Planning Commission may also require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be designed to prevent the discharge of excess runoff onto adjacent properties.

7.04.D. Streets. The finished excavation of proposed streets shall be no more than two feet (2') below the Regulatory Flood Elevation. The Planning Commission may require, where necessary, profiles and elevations of streets to determine compliance with this requirement. Drainage openings shall be sufficient to discharge flood flows without unduly increasing flood heights.

7.04.E. Sewer Facilities. All sanitary sewer systems located in flood plain areas, whether public or private, shall be floodproofed to a point two feet (2') above the Regulatory Flood Elevation.

7.04.E.1. The Planning Commission may prohibit installation of sewage disposal facilities requiring soil absorption systems where such systems will not function due to high ground water, flooding, or unsuitable soil characteristics. The Planning Commission may require that the developer note on the face of the plat and in any deed of conveyance that soil absorption fields are prohibited in designated areas.

7.04.E.2. The Planning Commission may prescribe adequate methods for waste disposal. If a sanitary sewer system is located on or within 1000 feet of the proposed subdivision and/or land development, the Planning Commission shall require the developer to provide sewage facilities to connect to this system where practical, and shall prescribe the procedures to be followed by the developer in connecting to the system.

7.04.F. Water Facilities. All water systems located in flood plain areas, whether public or private, shall be floodproofed to a point two feet (2') above the Regulatory Flood Elevation. If there is an existing public water supply system on or near the subdivision, the Planning Commission shall require the developer to connect to this system where practical, and shall prescribe the procedures to be followed by the developer in connecting to the system.

7.04.G. Other Public and/or Private Utilities and Facilities. All other public and/or private utilities and facilities shall be elevated or floodproofed to a point two feet (2') above the Regulatory Flood Elevation.

Section 7.05 Performance Guarantee. No final plat shall be approved by the Planning Commission until the improvements required by this Ordinance are completed in a satisfactory manner and approved by the Planning Commission. In lieu of such construction, approval may be granted prior to completion providing:

7.05.A. The developer enters into an agreement with the municipality guaranteeing that improvements will be installed in accordance with the plans, specifications, and schedules approved by the municipality prior to plat approval. This agreement shall also guarantee that no lot will be sold or building constructed in any flood plain area prior to completion of all protective works or measures planned for such lot and necessary access to facilities; and

7.05.B. The developer provides a fiscal surety to guarantee performance of this agreement and completion of the improvements as planned. The surety may include a certified check, escrow account, irrevocable letter of credit or other bond acceptable to the municipality. The procedural requirements of Section 5.15 of this Ordinance shall supply to any such bonding proposal.

Section 7.06 Municipal Liability. The grant of a permit or approval of a subdivision and/or land development plan in the identified flood plain area shall not constitute a representation guarantee, or warranty of any kind by the municipality or by any official or employee thereof of

the practicability or safety of the proposed use, and shall create no liability upon the municipality, its officials or employees.

CHAPTER 8. ADMINISTRATION, FEES AND PENALTIES

Section 8.01 Administration, Enforcement and Penalties

8.01.A. Penalties. No lot in a subdivision shall be leased or sold, no permit as required under any Township Ordinance to erect any building upon land in a subdivision or land development shall be issued, and no building or other structure, as defined in the Zoning Ordinance shall be erected in a subdivision or land development until a recorded plan of such subdivision or land development shall have been approved and properly recorded and until improvements have been either constructed or guaranteed.

8.01.B. Preventive Remedies. 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.

The Township may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which has been developed or which has resulted from a subdivision of real property in violation of this ordinance. This authority to deny such a permit or approval shall apply to any of the following applicants:

8.01.B.1. The owner/owners of record at the time of violation.

8.01.B.2. The vendee or lessee of the owner of record at any time of such violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.

8.01.B.3. 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 action.

8.01.B.4. The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.

As an additional condition for issuance 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.

8.01.C. Enforcement Remedies. Any person, partnership or corporation who or which has violated the provisions of this ordinance shall, upon being found liable thereof in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than Five Hundred Dollars (\$500.00) plus all court costs including reasonable attorneys fees incurred by the Township as a result thereof. No judgment shall commence or be imposed, levied or be payable until the date of the 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 rules of civil procedures. 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 person, partnership or corporation violating the ordinance to have been believed that there was non such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

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 8.02 Waivers.

8.02.A. The Planning Commission shall review all waiver requests, and shall: Grant or deny such request if this authority is specifically granted to the Planning Commission herein, or; make recommendations to the Board of Supervisors on such requests. Unless otherwise specified herein, the Board of Supervisors shall have the sole authority to grant or deny a waiver request.

8.02.B. The Board of Supervisors or Township Planning Commission, as outlined in Section 8.02.A may grant a waiver of the requirements of one or more provisions of this ordinance, if the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such waiver will not be contrary to the public interest and that the purpose and intent of the ordinance is observed.

8.02.C. All requests for 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, the provision or provisions of the ordinance involved and the minimum modification necessary.

8.02.D. The Township Supervisors shall keep written record of all requests for modification.

Section 8.03 Appeals. Appeals from a decision or the absence of a decision under this ordinance shall be based on the provisions of the relevant provisions of the Municipalities Planning Code and other relevant statutes and rules.

Section 8.04 Fees.

8.04.A. Fee Procedures. Each subdivision or land development plan application shall be accompanied by the required review fee as established and adopted by resolution from time to time by the Board of Supervisors. Fees shall be payable at the time of plan submission (unless otherwise noted herein) and plan processing, approval and recording shall not be completed until all required fees are paid.

There shall be no refund or credit of fees or a portion of any fee should the subdivider or developer withdraw the plan during the review process or fail to receive plan approval.

8.04.B. Township Fees. Fees for review, processing and approval of subdivision and land development plans by the Planning Commission shall be payable to Centre Township at the time of application, in accordance with the adopted fee schedule. In addition to the fees required for submission of the plans, it is anticipated that additional expenses will be incurred by the Township in processing the preliminary and/or final plans which are submitted or which may be required to be submitted under the Centre Township Subdivision and Land Development Ordinance, either for engineering, legal or other professional consultant fees. If the fees are not sufficient to cover the expenses incurred in the review of said plans, the Township secretary shall notify the person submitting the plans for review of the additional expense and shall request payment of the same. All payment requested by the Township for engineering, legal or other professional consultant expenses shall be the actual cost of the services incurred by the Township. These services shall be billed at the normal established rate for the services provided to the Township. The return of fees not used shall not be refunded unless and until the provisions of Section 8.04.D. have been complied with.

8.04.C. County Fees. All required County Plan review fees shall be paid at the time of plan submission to the Township.

8.04.D. Documentation. Documentation showing that the plans have been recorded, including as a minimum a copy of a complete set of plans with all signatures, stamps, seals and recording information must be provided before any permits will be issued by the Township.

Section 8.05 Amendments. Amendments to this Ordinance shall become effective only after a public hearing held pursuant to public notice as defined in the Municipalities Planning Code. In the case of an amendment other than that prepared by the Planning Commission, the Township Supervisors shall submit each such amendment to the Township Planning Commission for recommendations at least thirty (30) days prior to the date fixed for the public hearing on the proposed amendment. At least thirty (30) days prior to the hearing on the amendment, the Township shall submit the proposed amendment to the Berks County Planning Commission for recommendations.

Section 806. Severability. If any sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of this Ordinance. It is hereby declared as the intent of the Board of Supervisors of the

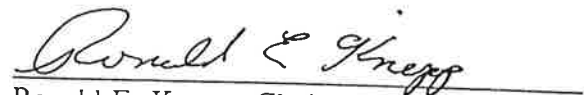
Township of Centre that this Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.


Section 8.07 Validity. Should any section, subsection 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 8.08 Effective Date. This Subdivision and Land Development Ordinance shall become effective on the fifth (5th) day after enactment.

ENACTED AND ORDAINED by the Board of Supervisors of the Township of Centre, Berks County, Pennsylvania this 10th day of May, 1999.

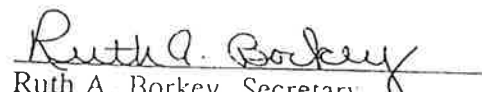
TOWNSHIP OF CENTRE


Ronald E. Knepp, Chairman


Larry C. Zimmerman


Wilmer H. Phillips

Attest:


Ruth A. Borkey, Secretary

SEAL

APPENDIX
TO
TOWNSHIP OF CENTRE,
BERKS COUNTY, PENNSYLVANIA
SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

Illumination of streets, parking areas and pedestrian ways shall be provided as specified in the following table:

ILLUMINATION GUIDELINES FOR STREET, PARKING AND PEDESTRIAN AREAS

A.

Street Illumination

Street Hierarchy	Area Classification					
	<u>Commercial</u>		<u>Intermediate</u>		<u>Residential</u>	
	Lux	Footcandles	Lux	Footcandles	Lux	Footcandles
Collector	13	1.2	10	0.9	6	0.6
Minor-Residential	10	0.9	6	0.6	4	0.4
Subcollector						
Local	6	0.6	4	0.4	4	0.4

B.

Parking Illumination (Open Parking Facilities)

Level of Activity	Illumination Objective					
	<u>Vehicular Traffic</u>		<u>Pedestrian Safety</u>		<u>Pedestrian Security</u>	
	Lux	Footcandles	Lux	Footcandles	Lux	Footcandles
Low Activity	5	0.5	2	0.2	9	0.8
Medium Activity	11	1	6	0.6	22	2
High Activity	22	2	10	0.9	43	4

ILLUMINATION GUIDELINES FOR STREET, PARKING AND PEDESTRIAN AREAS

IES Lighting Handbook definitions:

I. Area Classification:

1. Commercial

That portion of a municipality in a business development where ordinarily there are large numbers of pedestrians during business hours.

2. Intermediate

That portion of a municipality often characterized by a moderately heavy nighttime pedestrian activity such as blocks having libraries, community recreation centers, large apartment buildings and neighborhood retail stores.

3. Residential

A residential development, or a mixture of residential and commercial establishments, characterized by a few pedestrians at night. This definition includes areas with single family homes, townhouses and/or small apartment buildings.

II. Activity Level:

1. High Activity

Major league athletic events, major cultural or civil events and major regional shopping centers.

2. Medium Activity

Fast food facilities, area shopping centers, hospital parking areas, transportation parking (airports, etc.), cultural, civic or recreational events, and residential complex parking.

3. Low Activity

Local merchant parking, industrial employee parking, educational facility parking.

III. Bikeway Classification

1. Type A bikeway - a strip within or adjacent to a public roadway or shoulder, used for bicycle travel.

2. Type B bikeway - an improved strip identified for public bicycle travel and located away from a roadway or its adjacent sidewalk system.

Source: Illuminating Engineering Society of North America, IES Lighting Handbook (New York, NY: IES, 1981)

CERTIFICATION

I hereby certify that the foregoing ordinance, No. 84-1999 Subdivision and Land Development Ordinance, was advertised on April 19, 1999, in the Reading-Eagle Times, a newspaper of general circulation in the Township of Centre, Berks County, Pennsylvania, and was duly enacted and approved as set forth at a regular scheduled meeting of the Township of Centre on May 10, 1999, at 7:00 P.M., prevailing time, in the Township Municipal Building, Centre Township, Berks County, Pa.

ATTEST:

Ruth A. Borkey
Ruth A. Borkey, CGS, CMC
Secretary