

(4) All existing buildings or other structures located within the proposed development.

(5) All existing man-made features within the proposed development and within fifty feet (50') of the proposed development. This may include, but not be limited to, sanitary sewer facilities, on-lot sewage facilities, water supply facilities, wells, fire hydrants, utility transmission lines, storm water management facilities, culverts, bridges and railroad lines. Where applicable, the size, type, material and invert elevations shall also be identified on the Plan.

(6) All existing natural features within the proposed development and within fifty feet (50') of the proposed development. This may include, but not be limited to, water courses, flood plain areas, natural drainage patterns, soil types and descriptions, delineated wetlands, hydric soils, high water table soils, tree masses, steep slopes, sinkholes and rock out-crops.

(7) The location, size and ownership of all existing utilities and utility rights-of-way within the proposed development. A statement of any conditions governing their ownership and use shall be included on the Plan.

(8) The location, dimensions and ownership of all access rights-of-way or easements within the proposed development. A statement of any conditions governing their ownership and use shall be included on the Plan.

(d) Proposed Layout. The following design information shall be identified on the Preliminary Plan:

(1) Location, dimensions and functional classification of all proposed streets and rights-of-way, with a statement of any conditions governing their ownership and use.

(2) Suggested street names.

(3) Location and dimensions of all proposed easements and rights-of-way, with a statement of any conditions governing their ownership and use.

(4) Locations, layout, dimensions and areas of all existing and proposed lots within the development.

(5) The minimum building setback lines for each lot within the development. This shall include the front, side, rear and reverse setbacks.

(6) A statement of the intended use of all lots and parcels within the development.

(7) Lot numbers and a statement of the total number of lots and parcels being developed. The residue parcel shall be included as a separate lot, not intended for development.

(8) The location and elevation of all existing and proposed street monuments.

(9) The location of all existing and proposed property markers.

(10) The location of proposed sanitary sewage facilities, with a statement of any conditions governing the ownership, operation and maintenance of the proposed facilities and their relationship to existing facilities.

(11) The location of proposed water supply facilities, with a statement of any conditions governing the ownership, operation and maintenance of the proposed facilities and their relationship to existing facilities.

(12) The location and arrangement of proposed storm water management facilities, with a statement of any conditions governing the ownership, operation and maintenance of the proposed facilities and their relationship to existing facilities.

(13) Parks, playgrounds and other areas dedicated or reserved for public use, with a statement of any conditions governing their ownership, operation, maintenance and use.

(14) Where on-lot sewage disposal is proposed, the location of the probe and percolation test sites shall be shown on the Plan. The results of such tests shall be submitted to the Township for review.

(e) Supporting Information. The Preliminary Plan shall be accompanied by the following supplementary data:

(1) Typical street cross-section drawing(s) for all proposed streets.

(2) Tentative profiles along the centerline of each proposed street shown on the Preliminary Plan. Such profiles shall show at least the following information, properly labeled:

(i) Existing (natural) and proposed finished grades along the centerline and at the right-of-way line for both sides of each proposed street.

(ii) The length of all vertical curves.

(iii) Existing and proposed storm sewer mains, manholes, inlets and culverts.

(iv) Existing and proposed sanitary sewer mains and manholes.

(v) All profiles shall show pipe crossings, storm sewers, sanitary sewers, water mains and any other underground utility crossings.

(vi) Profiles shall extend to points of connection with existing lines.

(vii) Proposed water distribution system and all appurtenances (if applicable).

(3) The profile sheets shall be drawn at one of the following sets of scales:

One inch (1") equals ten feet (10') horizontal, and one inch (1") equals one foot (1') vertical; or

One inch (1") equals twenty feet (20') horizontal, and one inch (1") equals two feet (2') vertical; or

One inch (1") equals forty feet (40') horizontal, and one inch (1") equals four feet (4') vertical; or

One inch (1") equals fifty feet (50') horizontal, and one inch (1") equals five feet (5') vertical.

(4) A Storm Water Management Plan shall be prepared in accordance with Section 511 of this Chapter.

(5) A Sediment and Erosion Control Plan shall be prepared in accordance with Section 512 of this Chapter.

(6) Preliminary designs of any bridges or culverts which may be required. Such designs shall meet all applicable requirements of this Chapter, the Pennsylvania Department of Environmental Protection and/or the Pennsylvania Department of Transportation.

(7) The Pennsylvania Department of Transportation shall review all Plans when access is proposed onto a state road or when encroachment is proposed within a state right-of-way. All applicable permits shall be approved by the Pennsylvania Department of Transportation prior to Preliminary Plan approval. The Highway Occupancy Permit Number shall be noted on the Plan.

(8) Eight (8) completed copies of Planning Modules for land development, as required by the Pennsylvania Department of Environmental Protection.

(Ordinance 135, November 18, 1992, Section 402)

Section 403. Final Plans. A Final Plan application will not be considered complete unless all provisions specified under Subsection 305(a) have been completed. In addition, the Final Plan shall be prepared in accordance with the standards and requirements specified within this Section.

(a) Drafting Standards. Final Plans shall be prepared as follows:

(1) The Final Plan shall be clearly and legibly drawn to a scale of one inch (1") equals fifty feet (50'), except that, if the average size of the proposed lots in the subdivision is five (5) acres or larger, the Plan may be drawn to a scale of one inch (1") equals one hundred feet (100').

(2) The original drawing, and all submitted prints thereof, shall be made on sheets no smaller than twenty-four inches by thirty-six inches (24" x 36") and no larger than thirty-six inches by forty-eight inches (36" x 48").

(3) If the Final Plan requires more than one sheet, a key diagram showing relative location of the several sections shall be drawn on each sheet.

(4) Where the Final Plan shows the proposed subdivision of only a part of the subdivider's total property, a sketch shall be required, showing the prospective street system in the remainder of the property so that the street system in the submitted portion may be considered in relation to connections with the unsubmitted portion. To prevent undue hardship in the case of extremely large properties, the Planning Commission may, based on existing natural or man-made features, limit the area for which a prospective street system shall be sketched.

(b) General Information. The following general information shall be required on all Final Plans:

(1) Name or identifying title of the proposed subdivision or land development.

(2) North point, graphic scale, written scale and date, including the month, day and year that the original drawing was completed, and the month, day and year that the original drawing was revised, for each revision.

(3) A key map, for the purpose of locating the property being subdivided, drawn at a scale of one inch (1") equals eight hundred feet (800') and showing the relation of the property, differentiated by tone or pattern, to adjoining properties and to all streets, roads, municipal boundaries and recorded subdivision plans existing within one thousand feet (1,000') of any part of the property. In addition, the name and approximate distance to the closest recognized city, town or village, or the approximate distance to the nearest existing street, shall be shown and a title, scale and north point shall be indicated.

(4) Name and address of record owner, equitable owner and subdivider.

(5) Name and address of the registered engineer, surveyor, architect or planner responsible for the Plan.

(6) Names of all adjoining record owners, with the deed book volume and page Number.

(7) Names of all adjoining subdivisions, if any, with the Plan book and page numbers where recorded.

(8) Total tract boundaries of the property being subdivided or developed with accurate distance to hundredths of a foot and bearings to one-quarter (1/4) of a minute. These boundaries shall be determined by accurate survey in the field, which shall be balanced and close with an error of closure not to exceed one foot (1') in ten thousand feet (10,000'); provided, however, that the boundary adjoining additional unplatted land of the subdivider (for example, between separately submitted Final Plan sections) is not required to be based upon field survey, and may be calculated. The location and elevation of all boundary line (perimeter) monuments shall be indicated, along with a statement of the total area of the property being subdivided. In addition, the engineer or surveyor shall certify to the accuracy of the survey, the drawn plan and the placement of the monuments.

(9) A statement of total acreage of the property and the area being subdivided or developed.

(10) Zoning data including all of the following which are applicable:

(i) Existing zoning district designations, requirements, use and bulk regulations, and any zoning district boundary lines traversing the proposed subdivision.

(ii) Any changes in the existing zoning including any variances, conditional uses or special exceptions that have been granted.

(iii) Any changes in the existing zoning proposed to be requested by the subdivider.

(11) A "Certification of Ownership, Acknowledgment of Plan and Offer of Dedication" shall be provided on the Plan and shall be duly acknowledged and signed by the owner or owners of the property before an officer authorized to take acknowledgment of deeds. A sample certification note has been included within Section 802 (Appendix B) of this Chapter.

(12) A "Certification of Accuracy" shall be provided on the Plan and shall be duly acknowledged, signed and sealed by the professional engineer, surveyor, architect or landscape architect

responsible for preparing the Plan. A sample certification note has been included within Section 802 (Appendix B) of this Chapter.

(13) Certificates for municipal endorsement of the Plan by the Township Planning Commission and the Board of Supervisors. Sample endorsement notes have been included within Section 802 (Appendix B) of this Chapter.

(14) A blank space measuring three and one-half inches by five inches (3-1/2" x 5") shall be left, preferably adjacent to the Township certification, in which the endorsement stamp of the Berks County Planning Commission may be applied.

(15) A blank space measuring three inches (3") square shall be left along the lower edge of the Plan, in order that the Berks County Recorder of Deeds may acknowledge receipt and recording of the Plan when it is presented.

(c) Existing Features. The following existing features shall be depicted on the Final Plan:

(1) Contour lines determined by acceptable surveying practices at vertical intervals of at least two feet (2') for land with average natural slope of four percent (4%) or less, and at intervals of at least five feet (5') for land with average natural slope exceeding four percent (4%).

(2) Location and elevation of the datum to which contour elevations refer; where reasonably practicable, datum used shall be a known established bench mark.

(3) All existing streets, including streets of record (recorded but not constructed), on or abutting the tract, including names, rights-of-way widths, cartway (pavement) widths, and approximate road grades.

(4) All existing buildings or other structures located within the proposed development.

(5) All existing man-made features within the proposed development and within fifty feet (50') of the proposed development. This may include, but not be limited to, sanitary sewer facilities, on-lot sewage facilities, water supply facilities, wells, fire hydrants, utility transmission lines, storm water management facilities, culverts, bridges and railroad lines. Where applicable, the size, type, material and invert elevations shall also be identified on the Plan.

(6) All existing natural features within the proposed development and within fifty feet (50') of the proposed development. This may include, but not be limited to, water courses, flood plain areas, natural drainage patterns, soil types and descriptions, delineated wetlands, hydric soils, high water table soils, tree masses, steep slopes, sinkholes and rock out-crops.

(7) The location, size and ownership of all existing utilities and utility rights-of-way within the proposed development. A statement of any conditions governing their ownership and use shall be included on the Plan.

(8) The precise location, dimensions and ownership of all access rights-of-way or easements within the proposed development. A statement of any conditions governing their ownership and use shall be included on the Plan.

(d) Proposed Layout. The following design information shall be identified on the Final Plan:

(1) Location, dimensions, and functional classification of all proposed streets and rights-of-way, with a statement of any conditions governing their ownership and use.

(2) Suggested street names.

(3) Location and dimensions of all proposed easements and rights-of-way, with a statement of any conditions governing their ownership and use.

(4) Location, layout, dimensions and areas of all existing and proposed lots within the development. All dimensions, arc length and curve radii shall be shown and defined to the nearest one-hundredth (0.01) foot. Bearings or deflection angles at changes in direction of line as well as central angles of all curves shall be shown to the nearest fifteen (15) seconds.

(5) The minimum building setback lines for each lot within the development. This shall include the front, side, rear and reverse setbacks.

(6) A statement of the intended use of all lots and parcels within the development.

(7) Lot numbers and a statement of the total number of lots and parcels being developed. The residue parcel shall be included as a separate lot, not intended for development.

(8) The location and elevation of all existing and proposed street monuments.

(9) The location of all existing and proposed property markers.

(10) The location of proposed sanitary sewage facilities, with a statement of any conditions governing the ownership, operation and maintenance of the proposed facilities and their relationship to existing facilities.

(11) The location of proposed water supply facilities, with a statement of any conditions governing the ownership, operation and maintenance of the proposed facilities and their relationship to existing facilities.

(12) The location and arrangement of proposed storm water management facilities, with a statement of any conditions governing the ownership, operation and maintenance of the proposed facilities and their relationship to existing facilities.

(13) Parks, playgrounds and other areas dedicated or reserved for public use, with a statement of any conditions governing their ownership, operation, maintenance and use.

(14) Where on-lot sewage disposal is proposed, the location of the probe and percolation test sites shall be shown on the Plan. The results of such tests shall be submitted to the Township for review.

(e) Supplemental Information. The Final Plan shall be accompanied by the following supplementary data:

(1) Typical street cross-section drawing(s) for all proposed streets.

(2) Profiles along the centerline of each proposed street shown on the Final Plan. Such profiles shall show at least the following information, properly labeled:

(i) Existing (natural) and proposed finished grades along the centerline and at the right-of-way line for both sides of each proposed street.

(ii) The length of all vertical curves.

(iii) Existing and proposed storm sewer mains, manholes, inlets and culverts.

(iv) Existing and proposed sanitary sewer mains and manholes.

(v) All profiles shall show pipe crossings, storm sewers, sanitary sewers, water mains, and any other underground utility crossings.

(vi) Profiles shall extend to points of connection with existing lines.

(vii) Proposed water distribution system and all appurtenances (if applicable).

(3) The profile sheets shall be drawn at one of the following sets of scales:

One inch (1") equals ten feet (10') horizontal, and one inch (1") equals one foot (1') vertical; or

One inch (1") equals twenty feet (20') horizontal, and one inch (1") equals two feet (2') vertical; or

One inch (1") equals forty feet (40') horizontal, and one inch (1") equals four feet (4') vertical; or

One inch (1") equals fifty feet (50') horizontal, and one inch (1") equals five feet (5') vertical.

(4) A Storm Water Management Plan shall be prepared in accordance with Section 511 of this Chapter.

(5) A Sediment and Erosion Control Plan shall be prepared in accordance with Section 512 of this Chapter. The Sediment and Erosion Control Plan must be approved by the Berks County Conservation District prior to municipal approval.

(6) Final designs of any bridges or culverts which may be required. Such designs shall meet all applicable requirements of this Chapter, the Pennsylvania Department of Environmental Protection and/or the Pennsylvania Department of Transportation. All such designs shall be approved by the appropriate agency or authority prior to municipal approval.

(7) The Pennsylvania Department of Transportation shall review all Plans when access is proposed onto a state road or when encroachment is proposed within a state right-of-way. All applicable permits shall be approved by the Pennsylvania Department of Transportation prior to Preliminary Plan approval. The Highway Occupancy Permit Number shall be noted on the Plan.

(8) All conditions, standards and provisions pertaining to the guarantee and/or the installation of all required improvements has been included under Part 6 of this Chapter. If required, an

improvements agreement shall be properly executed between the Township and the developer prior to municipal approval.

(9) All conditions and provisions pertaining to developer contributions has been included under Part 7 of this Chapter. All pertinent agreements shall be properly executed between the Township and the developer prior to municipal approval.

(10) When required, the Pennsylvania Department of Environmental Protection shall review the appropriate Planning Modules for Land Development. The appropriate Planning Modules must be approved by the Pennsylvania Department of Environmental Protection prior to municipal approval.

(11) The proposed Plan shall include a statement by the owner dedicating streets, public rights-of-way, and any other sites for public use. All offers of dedication, and covenants governing the reservation and maintenance of undedicated open space, shall be acceptable to the Township.

(Ordinance 135, November 18, 1992, Section 403)

Section 404. As-Built/Improvements Plan. Upon the completion of all improvements required under Part 5 (Design Standards and Required Improvements) of this Chapter, the applicant or developer shall supply the Township with a set of plans for the entire tract showing all lot lines as deeded and all surface improvements and subsurface improvements as actually constructed. The plans shall be prepared at the same scale as the approved Final Plan.

The As-Built/Improvements Plan shall contain the information and requirements specified under Section 805 (Appendix E) of this Chapter. The applicant/developer shall submit the As-Built/Improvements Plan to the Township for review and approval prior to the acceptance of any municipal improvements within the development. (Ordinance 135, November 18, 1992, Section 404; as amended by Ordinance 165, April 26, 1999, Section 3)

Part 5

Design Standards and Required Improvements

Section 501. Application and General Standards.

(a) The design standards and required improvements contained within this Part 5 are intended as the minimum for the promotion of the public health, safety and general welfare, and shall be applied as such by the Township Planning Commission and the Board of Supervisors in reviewing all subdivision and land development plans.

(b) Whenever other Township regulations impose more restrictive standards, specifications and requirements than those contained herein, such other regulations shall prevail.

(c) Where, in the opinion of the Planning Commission, the literal application of these design standards and/or required improvements would, in certain cases, cause undue hardship and/or is clearly unreasonable, the Planning Commission may recommend such reasonable exceptions. All such exceptions shall be consistent with the purposes of this Chapter and the established goals, objectives and policies of the Township Comprehensive Plan and the Township Zoning Ordinance (see Chapter XXXII of the Township Code of Ordinances). The Board of Supervisors shall have the power to grant such exceptions, as recommended by the Planning Commission, upon written request by the applicant.

(d) The design standards and required improvements identified within this Section of this Chapter may be modified by the Township in the case of plans for complete communities, neighborhood units or other large scale developments which, in the judgment of the Planning Commission, achieve substantially the objectives of these regulations and which are further protected by such covenants or other legal provisions as will assure conformity to and achievement of the subdivision or land development plan.

(e) Land subject to hazards of life, health or property, such as may arise from fire, floods, disease or other causes, shall not be subdivided or developed unless such hazards have been eliminated or unless the subdivision or land development plan shall show adequate safeguards against them, which shall be approved by the appropriate regulatory agencies.

(f) Subdivision and land development plans shall give due recognition to the Township Comprehensive Plan and the Zoning Ordinance (see Chapter XXXII of the Township Code of Ordinances) or to such parts thereof as may have been adopted pursuant to statute.

(g) The transportation system of a proposed subdivision or land development shall be planned and designed with consideration to nearby developments or neighborhoods in order to minimize traffic hazards and congestion.

(h) All proposed subdivisions and land developments shall be reviewed to assure that all such applications are consistent with the need to minimize flood damage. Adequate drainage facilities shall be provided to minimize or reduce exposure to flood hazards.

(i) Approval of Plans and the specifications provided within this Section shall be of equal force and effect. In the case of any discrepancy between the Plans and these specifications, the decision of the Township or its authorized representative shall be final and conclusive as to which is preferred.

(j) All required improvements shall be installed by the developer in accordance with Part 5 and Part 6 of this Chapter and with Article V of the Pennsylvania Municipalities Planning Code (Act 247, as amended).

(Ordinance 135, November 18, 1992, Section 501)

Section 502. Street Design.

(a) General Standards.

(1) The location, arrangement, extent, grade and width of all streets shall conform to the Township Comprehensive Plan and/or to all other "official transportation plans", or such parts thereof, as may have been adopted by the Township and/or the County.

(2) All proposed subdivisions or land developments shall have adequate access to the public street system of the Township.

(3) The proposed street system shall extend existing or recorded streets at the same width as the existing or recorded streets, but in no case at less than the required minimum width identified under Subsection 502(b) of this Chapter.

(4) Where, in the opinion of the Planning Commission, it is desirable to provide for street access to an adjoining property, street stubs shall be extended to the boundary of such property. The street stub shall meet the width requirements for a cul-de-sac street. The developer of the tract shall properly grade the street stub and provide an eight inch (8") stone base. The street stub or right-of-way shall be granted as an easement to the Township.

(5) If required by the Planning Commission, new minor streets shall be designed and located to facilitate through traffic. In addition, the applicant shall give consideration to the extension and continuation of collector streets into and from adjoining properties.

(6) Where a proposed subdivision or land development is of sufficient size to warrant an interior circulation system, a clear hierarchy of streets shall be designed and established.

(7) Where subdivision abuts an existing street of improper width, grade or alignment, the Township Planning Commission may require the dedication of land sufficient to widen the existing street or correct the improper grade or alignment.

(8) Proposed streets shall be logically adjusted to the topographic conditions of the site so as to produce reasonable grades, proper drainage, sufficient erosion control and suitable building sites.

(9) Proposed streets shall be laid out to avoid environmentally sensitive areas such as flood plains, wetlands, sinkholes and steep slopes.

(10) Where possible, proposed streets should be oriented in a general east-west direction to provide the opportunity for solar utilization and to maximize south facing slopes.

(11) Whenever a tract to be subdivided or developed encroaches upon the legal right-of-way of a state highway, a Highway Occupancy Permit issued by the Pennsylvania Department of Transportation shall be required.

(12) Whenever a tract to be subdivided or developed abuts or contains an arterial or a major collector street, the Township Planning Commission may require restriction of access to the street by one or more of the following methods:

(i) Provision of reverse frontage lots; or

(ii) Provision of service streets along the rear of the abutting lots, together with prohibition of private driveways intersecting the arterial or major collector streets; or

(iii) Provision of marginal access streets, provided that the reverse strips establishing such marginal access streets shall be definitely placed within the jurisdiction of the Township under an executed agreement meeting the approval of the Township; or

(iv) Provision of an internal street system on which the proposed lots would have proper frontage and access; or

(v) The restriction of ingress and egress involving left-hand turns onto or off of the arterial or major collector street.

(13) Private streets (streets not to be offered for dedication) are prohibited, unless they meet the design standards of these regulations and are constructed to Township specifications.

(14) Dead-end streets are prohibited, unless designed and constructed as cul-de-sac streets.

(15) New half or partial streets shall be prohibited.

(16) Whenever a tract to be subdivided or developed borders on an existing half or partial street, the other part of the street shall be platted within such tract.

(17) Service streets (alleys) are prohibited in developments containing single-family dwelling units, except where required to avoid direct access onto an arterial street.

(18) Service streets (alleys) may be permitted in developments containing multi-family dwelling units (townhouses and apartments) and non-residential land uses, provided that the service street is not the primary access point to the development. Where permitted, the service street shall have a minimum paved width of twenty-four feet (24').

(19) The developer of any residential land development or subdivision involving fifteen (15) or more dwelling units shall contact the Daniel Boone Area School District prior to Preliminary Plan approval to establish an acceptable, safe and convenient location for a school bus stop.

(20) Residential developments containing twenty (20) or more dwelling units shall provide and design an internal street system with a minimum of two (2) separate points for ingress and egress. The proposed points of ingress and egress shall be designed to meet the standards which are specified for street intersections (Subsection 502(f)) of this Chapter.

(21) Residential developments containing fifty (50) or more dwelling units shall provide a minimum of one (1) internal street designed as a collector street. The proposed street which is to be designed as a collector street shall be subject to the approval by the Township.