ARTICLE IV

INFORMATION TO BE SHOWN ON OR SUBMITTED WITH SUBDIVISION AND LAND DEVELOPMENT PLANS

Section 401 General

This article sets forth the plan and report preparation standards. The following standards shall apply to the preparation of all sketch plans, subdivision, land development and reports. All plan information reports shall be provided in an easy to read format and shall be legible in every detail to the satisfaction of the Township.

Section 402 Sketch Plans

A. **General**

1. For major development or unusual circumstances that could benefit from the pre-planing process, applicants are encouraged to submit Sketch Plans as a means of facilitating the approval process. While the Township knows that Sketch Plan comments are not binding on either the Township or the applicant, the Township has identified the Sketch Plan process as one which allows for the exchange of information that is important in the planning process.

2. Sketch Plans should include any features of the Township's future land use plan, Official Map, community facilities plan, or any plans of the Township, including but not limited to, proposed streets, recreation areas, drainage reservation, future schools sites and public areas. A specific site analysis should be provided which highlights man-made and natural features. The analysis should include information pertaining to soil types and stability, wetlands, scenic vistas, water courses, drainage patterns, slope, and transportation patterns and systems including deficiencies of existing roadways, public utilities, recreational facilities, and any other features of the site and nearby areas which may be affected or impacted by the proposed development and land use.

B. **Drafting Standards** The scale and sheet size of Sketch Plans shall be as required in Section 403.1 for subdivision and land development plans. The Sketch Plan may be prepared by qualified landowner or individual, or an engineer, surveyor, or landscape architect licensed to practice in the Commonwealth of Pennsylvania. The Sketch Plan shall show or be accompanied by the following data, legible in every detail and drawn to scale, but not necessarily containing precise dimensions:

1. Name and address of the developer (if applicable) and landowner.

2. Name of the individual and/or the firm that prepared the plan.

3. Location map with sufficient information to enable the Board to locate the property.

4. North arrow.

5. Written and graphic scales.

6. Approximate tract boundaries with the name(s) of adjacent landowner(s).

7. Name of the municipality or municipalities in which the project is located, including the location of any municipal boundaries if located within the vicinity of the tract.

8. Significant topographical and man-made features [e.g. structures, streets, buildings, tree masses, sloped areas, quarries, bodies of water, floodplains, and potential wetland areas and GIS contours].

9. Location of all proposed streets, alleys, street names, rights-of-way and easements; proposed lot lines with approximate dimensions; proposed minimum building lines for each street; playgrounds; public buildings; public areas; historical sites; and parcels of land proposed to be dedicated or reserved for public use.

10. Proposed land use; if several land uses are proposed, the location of each land use shall be indicated.

11. Statement explaining the methods of water supply and sewage disposal to be used.

Section 403 General Requirements for Preliminary and Final Subdivisions and Land Development Plans

Preliminary and final subdivisions and land development plans shall be prepared by an engineer, surveyor, or landscape architect licensed to practice in the Commonwealth of Pennsylvania. The plans shall be accompanied by, or prepared in accordance with the following:

Section 403.1 Drafting Standards

All subdivision and land development plans shall be prepared in accordance with the following drafting standards.

A. The plan shall be clearly and legibly drawn at a horizontal scale of 10 feet, 20 feet, 30 feet, 40 feet, or 50 feet to the inch.

B. All profiles of storm water management facilities, streets, sanitary sewer facilities, and water supply facilities shall be drawn at a horizontal scale of 1” = 50’ and at a vertical scale of 1” = 10’, or 1" = 5'.

C. A north arrow, graphic scale and written scale shall be provided.

D. Dimensions shall be in feet and decimals; bearings shall be in degrees, minutes and seconds. Lot line descriptions shall read in a clockwise direction.

E. The survey shall not have an error of closure greater than one (1) foot in ten thousand (10,000) feet.

F. The sheet size shall be no smaller than eighteen by twenty-two (18 x 22) inches and no larger than twenty-four by thirty-six (24 x 36) inches. If the plan is prepared in two (2) or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one (1) sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g. Sheet 1 of 5).

Section 403.2 Project Location and Identification

The following location and identification shall be included on all subdivision and land development plans:

A. The proposed project name or identifying title.

B. Name of the municipality or municipalities in which the project is located, including the location of any municipal boundaries if located within 200 feet of the subject tract.

C. The name and address of the owner of the tract (or his authorized agent), the developer/subdivider, and the firm that prepared the plans.

D. The file or project number assigned by the firm that prepared the plan, the plan date and the date(s) of all plan revisions.

E. The entire parent tract boundary with bearing and distances as it existed on May 15, 1972.

1. If it is the intention of the landowner to retain a single lot with a lot area in excess of ten (10) acres, the boundary of that lot may be identified as a deed-plotting and may be drawn at any legible scale.

2. If the retained lot has a lot area of ten (10) or less acres, it must be described to the accuracy of the requirements of this Ordinance.

3. In the case of lot add-on plans and revised final plans, the boundary of the receiving tract shall also be identified as a deed plotting and may be drawn at any legible scale.

4. The parent tract plotting shall include the following:

a. All parcels subdivided from the parent tract after May 15, 1972;

b. The deed reference for each lot subdivided after May 15, 1972;

c. The recording date and subdivision plan book reference for each lot subdivided after May 15, 1972.

F. The total acreage of the entire existing parent tract.

G. The location of existing lot line markers along the perimeter of the entire existing tract.

H. The zoning district, lot size and/or density requirements of the Township Zoning Ordinance.

I. A statement on the plan indicating the granting of a prior zoning amendment, special exception or variance, if applicable, along with any prior modifications granted by the Board to sections of this Ordinance.

J. The names of all adjacent landowners; both adjoining and across existing rights-of-way along with the plan book record numbers of all previously recorded plans for adjacent properties.

K. A location map, drawn to scale, relating the subdivision or land development to at least two (2) intersections of street centerlines, including the approximate distance to the intersection of centerlines of the nearest improved street intersection.

L. Source of title, deed, book, page, plan book (if applicable), and account number.

Section 403.3 Existing Features

The following features shall be shown on all subdivision and land development plans and shall be shown on **a separate sheet** titled "Existing Features". No proposed features shall be included on this sheet.

A. Existing contours shall be shown at the following minimum vertical intervals:

Average Natural Slope	Required Contour Interval
0 to 3 %	1 foot contour interval
4 to 20%	2 foot contour interval
21% and greater	5 foot contour interval

1. Contour interval may be adjusted based upon horizontal scale with concurrence of the Township Engineer.

2. Contours shall be accompanied by the location of the bench mark and a notation indicating the datum used. The datum used by an Authority shall be used in all plans indicating connection to an Authority's public sewer system or public water system.

3. Contours plotted by interpolation of Lancaster County GIS mapping or LIDAR mapping will only be accepted when there is no new construction or earth disturbance proposed by the plan.

4. Contours plotted by interpolation of the United States Geodetic Survey 7.5' mapping will not be accepted.

B. The following items **when located upon or within two hundred (200) feet** of the tract:

1. The location and name of existing rights-of-way and cartways for private or public streets, alleys and driveways.

2. The location and size of the following features and any related right-of-way: sanitary sewer mains, water supply mains, fire hydrants, buildings, and storm water collection, conveyance and management facilities.

3. The location and size of existing on-lot sewage systems and wells.

4. The location of existing rights-of-way and easements for electric, gas and oil transmission lines, and railroads.

5. Significant environmental or topographic features such as floodplains, wetlands, quarry sites, solid waste disposal areas, historic structures, cemetery or burial sites, archaeological sites, highly erosive soils, or wooded areas.

C. The following items **when located within** the subject tract:

1. The size, capacity and condition of the existing storm water management system and any other facility that may be used to convey storm flows.

2. The location and size of existing on-lot sewage systems and wells.

3. The location and use of existing buildings and other man-made features.

4. Significant environmental or topographic features as identified in the Pequea Township Comprehensive Plan including, but not limited to:

   a. Prime agricultural soils;

   b. Underlying geology with any hazardous geology noted;

   c. Floodplains;

   d. Quarry sites;

   e. Solid waste disposal areas;

   f. Historic structures;

   g. Cemetery or burial sites;

   h. Archaeological sites;

   i. Highly erosive soils;

   j. Wooded areas;

   k. Natural habitat; and,

   l. PNDI sites.

5. The location of wetlands and subsequent data or information required by Section 408 of this Ordinance.

Section 403.4 Proposed Features and Plan Information

The following proposed features and plan information shall be shown on all subdivision and land development plans and shall be shown on **a separate sheet** entitled "Proposed Features". The proposed features and plan information shall be overlaid upon a copy of the existing features plan. The existing features shall be "screened" or "shaded" on the proposed features plan.

A. Block and lot numbers in consecutive order (e.g. Block "A", Lots 1 through 10; Block "B", Lots 11 through 22).

B. The location and configuration of proposed buildings, parking compounds, streets, alleys, driveways, common open space, recreational areas, and all other significant planned facilities.

C. Total number of lots, units of occupancy, density, and proposed land use. If a multiple land use is proposed, the location of each land use shall be indicated.

D. Easements and rights-of-way.

E. Building setback line and building envelope.

F. Identification of buildings to be demolished.

G. Typical street cross-section for each proposed public or private street and typical cross-section for any existing street which will be improved as part of the application. Each cross-section shall include the entire right-of-way width.

H. Storm water management data and plans designed in accordance with the Pequea Township Storm Water Management Ordinance.

I. A table indicating the existing zoning district, total tract area, required lot size, required setbacks, required maximum and/or minimum development density, maximum building height, maximum lot coverage, and number of lots in the proposed subdivision along with the proposals for each of these parameters.

J. A statement on the plan indicating the granting of a zoning amendment, special exception or variance, if applicable, along with modifications granted by the Board to sections of this Ordinance.

K. Where the proposed subdivision or land development is located partially or wholly within an area prone to frequent flooding (either by impoundment or conveyance) as indicated by the flood boundary and floodway map, profiles, and supporting data, soil type or local historical record; the developer shall supply the location and elevation of all proposed roads, fills, utilities, buildings, storm water management, and erosion control facilities.

L. Location of all percolation test holes, deep probe holes and proposed well locations.

M. Easements for the on-lot sewage replacement locations.

N. Clear sight triangles and stopping sight distances for all intersections as described in Section 602.10 of this Ordinance shall be shown on the plan.

O. The location of all trees and/or woodlands on the site and location of trees and/or woodland to be removed and trees and/or woodlands to remain.

P. All subdivision plans shall contain notes for future lot owners. The wetland boundary on each lot will be clearly marked. Each lot which contains wetlands, or to which access may be restricted by wetlands, shall have a note which states that state and federal laws require permits for all activities which result in a deposition of fill into delineated wetlands. The note shall also state that refusal of such a permit may restrict some uses of all or portions of the lot.

Section 403.5 Certifications

The following certifications shall be included on all subdivision and land development plans.

A. Certificate, signature and seal of the surveyor registered in the Commonwealth of Pennsylvania to the effect that the survey is correct as provided in the Appendix.

B. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, to the effect that the plan is correct as provided in the Appendix.

C. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, indicating compliance with the provisions of the Pequea Township Storm Water Management Ordinance.

D. Certificate of review by the Planning Commission as provided in the Appendix.

E. Certificate of approval by the Board of Supervisors as provided in the Appendix.

Section 403.6 Notifications

The following notifications shall be included on all subdivision and land development plans, where applicable.

A. **Emergency Services Provider Review**

1. The Township may, in its sole discretion, require the review of any proposed project by the Emergency Services Provider(s) responsible for providing protection in that area of the Township.

2. The purpose of this review shall be to provide notice to the Emergency Services Provider of the type and extent of the proposed use; to allow the Emergency Services Provider the opportunity to provide the Township and the applicant with comments on their ability to adequately respond to the proposed use; to recommend appropriate locations for dry hydrants; and, to allow the Emergency Services Provider to comment on the proposed horizontal and vertical geometry to insure adequate access for emergency response equipment.

3. The Emergency Services Provider shall respond, in writing, to the applicant's request within 30 days of the receipt of the applicant's submission. Failure of the Emergency Services Provider to respond within the above prescribed time period shall be deemed their concurrence with the proposed project.

4. The applicant shall address the Emergency Services Provider's comments to the satisfaction

of the Township.

B. **Public Utility Lines**

1. Where the tract described in the application includes any public utility, electric transmission line, gas pipeline, or petroleum product transmission line located within the tract, the applicant shall notify, in writing, the owner or lessee of the right-of-way of his intentions.

2. A note stating any conditions regarding the use of the land, minimum building setback or right-of-way lines shall be included on the plan.

3. This requirement may also be satisfied by submitting a copy of the recorded agreement.

C. **Natural Resource Easement**

1. Where the land included in the subject application has an agricultural, woodland or other natural resource easement located within the tract, the application shall be accompanied by a letter from the party holding the easement stating any conditions on the use of the land.

2. This requirement may also be satisfied by submitting a copy of the recorded easement.

Section 403.7 Reports

The following reports, as applicable, shall be included with all subdivision and land development plans.

A. A hydrologic/hydraulic or storm water management report as required by the Pequea Township Storm Water Management Ordinance.

B. A water feasibility report as described in Section 408.1 of this Ordinance.

C. A sewer feasibility report as described in Section 408.2 of this Ordinance.

D. A traffic impact study as described in Section 408.3 of this Ordinance.

E. A wetland report as described in Section 408.4 of this Ordinance.

Section 404 Specific Requirements for Preliminary Plans

In addition to the requirements listed in Section 403, the following additional information shall be included on all preliminary subdivision and land development plans.

Section 404.1 Proposed Features and Plan Information

The following proposed features and plan information shall be shown on the "Proposed Features" sheet(s).

A. The layout of streets, alleys and sidewalks, including cartway and right-of-way widths.

B. The layout of lots with approximate dimensions, gross and net acreage.

C. Street centerline profile for each proposed public or private street shown on the preliminary plan including corresponding centerline stationing.

D. The preliminary design of the proposed storm water facilities, sanitary sewer mains, and water supply mains and facilities. This information shall include the approximate size, vertical location and horizontal location, if applicable.

E. Proposed street names.

F. Where the preliminary plan covers only a part of an intended larger development, a sketch plan of the future development, in a form suitable to the Township and in compliance with the requirements of this Ordinance, including the logical extension of the sewer and water facilities for the unsubmitted part shall be furnished. The street system of the plan under consideration may be subject to review, and the submitted part will be considered in light of adjustments and connections with future streets and utilities in the part not submitted.

G. In case of a preliminary plan calling for the installation of improvements beyond a five (5) year period, a schedule delineating all proposed phases as well as deadlines within which applications for final plan approval of each phase are intended to be filed shall be provided. Each phase in any residential subdivision or land development, except for the last phase, shall contain a minimum of twenty-five (25) percent of the total number of dwelling units as depicted on the preliminary plan.

H. Certificate of review by the Planning Commission as provided in the Appendix.

I. Certificate for approval by the Board of Supervisors as provided in the Appendix.

Section 405 Specific Requirements for Final Plans

In addition to the requirements listed in Section 403, the following additional information shall be included on all final subdivision and land development plans. Revised Final Plans, as defined herein, shall not be required to include the off-site existing features information as specified in Section 403.3.B.

Section 405.1 Drafting Standards

All sheets to be recorded by the Recorder of Deeds shall be twenty-four by thirty-six (24 x 36) inches.

Section 405.2 Proposed Features and Plan Information

The following proposed features and plan information shall be shown on the "Proposed Features" sheet(s).

A. Complete description of the centerline and right-of-way line for all new streets, whether public or private, and alleys. This description shall include distances and bearings with curve segments comprised of radius, tangent, arc, and chord.

B. Lot lines with accurate bearings and distances and lot areas for all parcels. Curve segments shall be comprised of arc, chord, bearings, and distances. Along existing street rights-of-way the description may utilize the existing deed lines or street centerlines; along all proposed street rights-of-way, the

description shall be prepared to the right-of-way lines.

C. Total number of lots, units of occupancy, density, and proposed land use. If a multiple land use is proposed, the location of each land use shall be indicated.

D. Final vertical and horizontal alignment for proposed public or private streets and alleys, sanitary sewer, and water distribution systems. All street profiles shall show at least the existing (natural) profile along the centerline, proposed grade at the centerline and the length of all proposed vertical curves for streets. All water distribution and sanitary sewer systems shall provide manhole locations and size and type of material. This information may be provided on separate sheets and is not subject to recording with the final plans.

E. Final street names.

F. Location and material of all permanent monuments and lot line markers, including a note that all monuments and lot markers are set or indicating when they will be set.

G. A detailed grading plan. The grading plan shall include finished grades and ground floor elevations. This information may be provided on separate sheets and is not subject to recording with the final plans.

H. Identification of any lands to be dedicated or reserved for public, semi-public or community use.

I. In the case of a plan which requires access to a highway under the jurisdiction of the Department of Transportation, the inclusion of the following plan note:

> "A Highway Occupancy Permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law', before access to a state highway is permitted. Access to the state highway shall be as authorized by a Highway Occupancy Permit, and the Board of Supervisors' approval of this plan in no way implies that such a permit can be acquired."

J. All final plans proposing residential development or residential uses within or adjoining the Agricultural Zoning District or agricultural uses must contain in conspicuous form the following language: *"WARNING: The property described herein is located within an area where land is used for agricultural production. Owners, residents and other users of this property may be subjected to inconvenience, discomfort and the possibility of injury to property and health arising from normal accepted agricultural practices and operations, including but not limited to, noise, odors, dust, operation of machinery of any kind including aircraft, storage and disposal of manure, and application of fertilizers, soil amendments, herbicides, and pesticides. Owners, occupants and users of this property should be prepared to accept such inconveniences, discomfort and possibility of injury from normal agricultural operations, and are hereby put on official notice that Section 4 of Pennsylvania Act 133 of 1982 'The Right to Farm Law' may bar them from obtaining a legal judgement against such normal agricultural operations."* A copy of the final plan shall be issued to the purchaser of each lot within the subject subdivision. The note shall be included on all deeds of the subject subdivision.

K. A complete landscape plan, prepared by a landscape architect, showing the location, size and type of all plant material required by provisions of this Ordinance or any other applicable Township regulations, including but not limited to, screening, buffer planting, parking landscaping, replacement

trees, and street trees. The landscape plan should be provided on separate sheets and must include the signature and seal of the registered landscape architect responsible for preparation of the plan.

L. A detailed schedule of inspections, as generally outlined by Section 504 of this Ordinance, which is tailored for the site under consideration.

M. In the case of Land Development Plans, architectural elevations shall be submitted for review by the Township.

Section 405.3 Certificates

A. Certificate of review by the Planning Commission as provided in the Appendix.

B. Certificate for approval by the Board of Supervisors as provided in the Appendix.

C. Certificate for approval by the Township Engineer as provided in the Appendix.

D. A statement duly acknowledged before an officer authorized to take acknowledgment of deeds and signed by the landowner, certifying that the subdivision or land development shown on the plan is the act and the deed of the owner; that all those signing are all the owners of the property shown on the survey and plan; that they desire the same to be recorded as such, and that all streets and other property identified as proposed public property are dedicated for public use, as provided in the Appendix. This must be dated following the last change or revision to said plan.

E. Certificate of review by the County Planning Commission as provided in the Appendix.

Section 405.4 Notifications

A. Notification from DEP that approval of the sewage facility plan revision (plan revision module for land development), supplement or exemption request has been granted or notice from DEP that such approval is not required.

B. Notice from Lancaster County-Wide Communications stating that the proposed private and/or public street names are acceptable.

C. Notice from the Lancaster County Conservation District of the approval of the Erosion and Sedimentation Pollution Control Plan.

D. A note shall be placed on the plan indicating any area that is not to be offered for dedication, if applicable.

E. Written notice from the Township Engineer and the appropriate Authority Engineer that all proposed improvements have been designed to the standards of the Township and/or the Authority and that financial guarantees in a form suitable to the Board of Supervisors and the appropriate Authority have been received. (See the Appendix and Article V.)

F. When the applicant posts financial guarantee in lieu of completion of the improvements, the Final Plan shall be accompanied by a completed improvement guarantee agreement. General examples of these agreements are provided in the Appendix.

G. Such written notices of approval as may be required by this Ordinance, including written notices approving the water supply systems, sanitary sewage systems and storm water runoff to adjacent properties.

H. The submission of a controlling agreement in accordance with Section 602 when an application proposes to establish a street which is not offered for dedication to public use.

I. Notification from the appropriate state and federal agencies that permits have been issued, or are not required, for any proposed activities within streams, wetlands or any other state or federally regulated body of water. These permits include, but are not limited to, Floodplain Encroachment Permits, Dam Safety Permits, Earth Disturbance Permits, Stream Encroachment Permits, and General Permits.

J. When the final plan is submitted in sections, the above notifications for all applicable activities on the entire site, shown on the approved preliminary plan shall be provided upon submittal of the first final phase of the project.

Section 405.5 Reports

A. A final hydrologic/hydraulic report as required by the Pequea Township Storm Water Management Ordinance.

B. A final traffic impact study as described in Section 409.3 of this Ordinance.

Section 406 Lot Add-On Plans

Lot add-on plans shall be prepared by an engineer, surveyor, or landscape architect licensed to practice in the Commonwealth of Pennsylvania. The plan shall be accompanied by, or prepared in accordance with the following:

A. **Drafting Standards** The same standards shall be required for a lot add-on plan as specified for subdivision and land development plans in Section 403.1 of this Ordinance

B. **Project Location and Identification** The same standards shall be required for a lot add-on plan as specified for subdivision and land development plans in Section 403.2 of this Ordinance.

C. **Existing Features** The same standards shall be required for a lot add-on plan as specified for subdivision and land development plans in Section 403.3 of this Ordinance with the exception of topography required by Section 403.3.A and the off-site features required by Section 403.3.B.

D. **Proposed Features and Plan Information** The same standards shall be required for a lot add-on plan as specified for subdivision and land development plans in Section 403.4 and for final plans in Section 405.2 of this Ordinance.

Section 406.1 Certificates

A. Certificate, signature and seal of a surveyor registered in the Commonwealth of Pennsylvania to the

effect that the survey is correct as provided in the Appendix.

B. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, to the effect that the plan is correct as provided in the Appendix.

C. Certificate of review by the Planning Commission as provided in the Appendix.

D. Certificate for approval by the Board of Supervisors as provided in the Appendix.

E. Certificate for approval by the Township Engineer as provided in the Appendix.

F. A statement, duly acknowledged before an officer authorized to take acknowledgement of deeds and signed by the landowner, to the effect that the subdivision or land development shown on the plan is the act and the deed of the owner, that all those signing are all the owners of the property shown on the survey and plan, and that they desire the same to be recorded as such, as provided in the Appendix.

G. Certificate of review by the County Planning Commission as provided in the Appendix.

Section 407 Separation Subdivision Plans

Separation subdivision plans shall be prepared by an engineer, surveyor, or landscape architect licensed to practice in the Commonwealth of Pennsylvania. The plan shall be accompanied by, or prepared in accordance with the following:

A. **Drafting Standards** The same standards shall be required for a separation subdivision plan as specified for subdivision and land development plans in Section 403.1 of this Ordinance with the exception that all sheets to be recorded in the Recorder of Deeds Office shall be no larger than twenty-four by thirty-six (24 x 36) inches.

B. **Project Location and Identification** The same standards shall be required for a separation subdivision plan as specified for subdivision and land development plans in Section 403.2 of this Ordinance.

C. **Existing Features** The same standards shall be required for a separation subdivision plan as specified for subdivision and land development plans in Section 403.3 of this Ordinance with the exception of topography required by Section 403.3.A and the off-site features required by Section 403.3.B.

1. For any separation subdivision proposing new construction, existing and proposed contours shall be provided for all areas of proposed earth disturbance at the vertical interval as specified for subdivision and land development plans in Section 403.3.A of this Ordinance.

D. **Proposed Features and Plan Information** The same standards shall be required for a separation plan as specified for subdivision and land development plans in Section 403.4 and for final plans in Section 405.2 of this Ordinance.

Section 407.1 Certificates

A. Certificate, signature and seal of a surveyor registered in the Commonwealth of Pennsylvania to the

effect that the survey is correct as provided in the Appendix.

B. Certificate of review by the Planning Commission as provided in the Appendix.

C. Certificate for approval by the Board of Supervisors as provided in the Appendix.

D. Certificate for approval by the Township Engineer as provided in the Appendix.

E. A statement, duly acknowledged before an officer authorized to take acknowledgement of deeds and signed by the landowner, to the effect that the subdivision or land development shown on the plan is the act and the deed of the owner, that all those signing are all the owners of the property shown on the survey and plan, and that they desire the same to be recorded as such, as provided in the Appendix.

F. Certificate of review by the County Planning Commission as provided in the Appendix.

G. A certificate to accommodate the recorder of Deeds information as provided in the Appendix.

H. Notification from DEP that approval of the sewer facility plan revision (planning module), supplement, or exemption request has been granted or notice from DEP that such approval is not required.

Section 408 Required Reports

The following reports shall be included with all subdivision and land development plans as stipulated herein:

Section 408.1 Water Service Feasibility Report (**Amended Ordinance #225-2024)**

A. The applicant shall submit a feasibility report concerning the availability of a public, private, or individual on-lot water system in or near the proposed subdivision or land development. The report shall be prepared by a registered professional and be submitted in conjunction with the preliminary or final plan for review by the Township and the Authority (if applicable).

1. A drawdown/well interference report shall be prepared for all residential subdivisions of the parent tract into more than three (3) lots, including the remaining lands, either initially or cumulatively, as of the effective date of this Ordinance.

2. An aquifer test shall be prepared for all non-residential land developments and non-residential subdivisions proposing flows of four hundred (400) gpd or greater , either initially or cumulatively, as of the effective date of this Ordinance. A drawdown well interference report shall be provided for all non-residential land developments and subdivisions proposing flows greater than 200 gpd and less than 400 gpd.

3. All lots created, and any land development plan that proposes flows equal to or greater than four hundred (400) gallons per day, within any Urban Growth Area, or within any area that the 537 Plan identifies to be served by public utilities, shall be served by public water if available.

B. If connection to an existing public water system is proposed, the subdivider or developer shall submit an agreement committing the public water system to provide such water as will be utilized by the subdivision or land development for such period of time and under such terms and conditions as the public water system provides water service elsewhere in its service area.

C. If the water supply system proposed involves the utilization of water obtained from the tract being subdivided or developed (irrespective of whether that water is being distributed as a part of a community water supply system), that water supply source may be utilized only when the feasibility study establishes and the engineer performing the study certifies that:

1. Withdrawal rates and amounts shall be managed to balance natural recharge rates and amounts on a site-specific basis to insure that the potential of interference with adjacent properties is minimized as follows:

a. The groundwater recharge on the specific tract in question will exceed the anticipated water withdrawal during a one (1) in ten (10) year drought or a forty (40) percent below normal reduction in precipitation for recharge based upon the following:

1) The area available for recharge shall be based upon development impervious conditions;

2) The recharge rate may include estimated recharge from on-lot sewage disposal systems;

3) The recharge rate shall include an analysis of the impact of the development storm water management system; and,

4) The recharge rate may include estimated recharge from storm water management infiltration facilities.

b. For residential developments, the withdrawal rate shall be based upon a rate of three hundred fifteen (315) gallons per day per three (3) bedroom dwelling.

1) The withdrawal rate shall be increased by ninety (90) gallons per day for each additional bedroom over three (3) bedrooms.

c. Commercial, industrial, agricultural or any other non-residential withdrawal rates shall be calculated by increasing the DEP sewage flows as provided in Chapter 73.17 by twenty (20) percent or other data approved by the Township Engineer.

1) The feasibility study shall include a description of the proposed use, the proposed number of employees and whether or not water will be used for cleanup and/or processing or otherwise in connection with the use. The applicant shall in addition set forth the proposed allocation of available water supply between or among the proposed uses and shall set forth a plan or proposal pursuant to which such allocation can reasonably be monitored and enforced by the Township or Authority.

d. Withdrawal rates for all other uses not provided for by the above shall be based upon the maximum anticipated peak demand increased by twenty (20) percent.

1) The feasibility study shall include a description of the proposed use, the proposed number of employees and whether or not water will be used for cleanup and/or processing or otherwise in connection with the use. The applicant shall in addition set forth the proposed allocation of available water supply between or among the proposed uses and shall set forth a plan or proposal pursuant to which such allocation can reasonably be monitored and enforced by the Township or Authority.

e. A preliminary groundwater computer model shall be developed to produce a plot of the anticipated drawdown within the groundwater system to demonstrate that the installation of the proposed water system (s) will not lower the groundwater table in the area so as to endanger or decrease the water supplies necessary for properties adjacent to the proposed project;

2. The study is approved by the Township Engineer.

D. In all cases the applicant shall demonstrate that the water to be supplied shall be potable and shall meet all applicable standards of DEP or the United States Environmental Protection Agency.

E. If community water systems are proposed, these systems shall be in compliance with the above requirements as well as the regulations of DEP and the Authority.

Section 408.2 Sewer Service Feasibility Report

A. The applicant shall submit a feasibility report concerning the availability of a public sewer system in or near the proposed subdivision or land development. In the event the project is located beyond an area to be served by public sewer, the report shall discuss the appropriateness of on-lot sewage disposal facilities to service the project. The report shall be prepared by a registered professional engineer in accordance with the procedures of the Suburban Lancaster Sewer Authority and shall be submitted in conjunction with the preliminary or final plan for review by the Township and the Authority (if applicable).

1. All lots created and land development plans within any Urban Growth Area, or within any area that the 537 Plan identifies to be served by public utilities, shall be served by public sewer.

2. For those areas proposed for public sewage service by the future extension of public sewer, but at the sole discretion of the Township is not feasible at the time application is made.

3. For those areas not located within an Urban Growth Area or within any area that the 537 Plan identifies to be served by public utilities, the feasibility report is not required for residential subdivisions of three (3) lots or less, including remaining lands; and land development plans which propose flows less than four hundred (400) gallons per day both either initially or cumulatively, as of the effective date of this Ordinance.

B. If connection to an existing public sewer system is proposed, the subdivider or developer shall submit an agreement committing the public sewer system to provide such sewage disposal as will be utilized by the subdivision or land development for such period of time and under such terms and conditions as the public sewer system provides sewage disposal service elsewhere in its service area.

C. If other than connection to a public sewer system is intended on any of the lots, that fact shall be indicated on the plan itself.

1. The Board will approve on-lot sewage disposal systems only when the Township Sewage Enforcement Officer and/or a sanitarian of DEP shall certify that both an initial location and a replacement location for the on-lot sewage disposal system, as required by Section 611, are present on each lot.

2. As a part of the feasibility study, there shall be included the results of the probe hole analyses and soil absorption tests on each of the lots as proposed in the subdivision. These probe hole analyses and soil absorption tests shall be certified as accurate by the Township Sewage Enforcement Officer.

3. Subdivisions proposing a lot or lots utilizing alternate or experimental on-site sewage disposal systems will not be approved by the Board unless:

a. The Township Sewage Enforcement Officer and/or a sanitarian of DEP certifies that a proposed sewage disposal site cannot reasonably be located so as to enable the lot to utilize a conventional on-site sewage disposal system; and,

b. The lot itself cannot reasonably be redesigned or relocated consistent with the Township Zoning Ordinance and other Township regulations so as to enable utilization of a conventional on-site sewage disposal system.

D. If community sewer systems are proposed, these systems shall be in compliance with the above requirements as well as the regulations of DEP and the Authority.

Section 408.3 Traffic Impact Study

A. All residential developments or subdivisions containing ten (10) or more dwelling units or residential lots and all non-residential developments (with the exception of agricultural development) with buildings containing in excess of ten thousand (10,000) square feet of usable space shall provide studies and reports in accordance with the requirements of this Section and the PADOT "Policies and Procedures for Transportation Impact Studies, latest edition. All applicants with developments which do not meet the above stated criteria shall submit the information required in Section 408.3.C.5.

B. The applicant is responsible for assessing the traffic impacts associated with a proposed development that meets any condition set forth above. The Township or its designee will review the applicant's assessment and supply available data upon request to aid the applicant in preparing the study. The applicant shall be responsible for all data collection efforts required in preparing a traffic impact study including peak period turning movement counts. In addition, the applicant is responsible for ensuring that any submitted development plans meet the minimum state and local

standards for geometric design. The study shall be conducted only by a professional engineer that has verifiable experience in traffic engineering. Upon submission of a draft study, the Township or its designee may review the data sources, methods and findings and provide comments in written form. The applicant shall be responsible for all costs for such review. The applicant will then have the opportunity to incorporate necessary revisions prior to submitting a final study.

C. **Traffic Impact Study Contents** A traffic impact study prepared for a specific site development proposal shall follow the basic format shown below. Additions or modifications should be made for a specific site, when appropriate. This basic format allows for a comprehensive understanding of the existing site, future conditions without the proposed use and the impacts associated with the proposed development plan. Following is a brief narrative for each section of a traffic impact study.

1. **Introduction** This section identifies the land use and transportation setting for the site and its surrounding area.

   a. **Site and study area boundaries** A brief description of the size of the land parcel, general terrain features, legal right-of-way lines of the highway, and the location within the jurisdiction and the region should be included in this section. In addition, the roadways that afford access to the site and are included in the study area should be identified. The exact limits of the study area should be based on engineering judgment and an understanding of existing traffic conditions at the site. In all instances, however, the study limits must be mutually agreed upon by the developer, the developer's engineer, the Township and PA DOT, if applicable.

   b. **Site description** This section should contain a brief narrative that describes the proposed development in terms of its function, size and near and long term growth potential. This description should be supplemented by a sketch which clearly shows the proposed development within the site boundaries, its internal traffic circulation pattern and the location and orientation of its proposed access points.

   c. **Existing and proposed site uses** The existing and proposed uses of the site should be identified in terms of the various zoning categories in the jurisdiction. In addition, identify the specific use on which the request is made since a number of uses may be permitted under the existing ordinances.

   d. **Existing and proposed nearby uses** Include a complete description of the existing land uses in the vicinity of the site as well as their current zoning. The applicant should also state the proposed uses for adjacent land, if known. This latter item is especially important where large tracts of underdeveloped land are in the vicinity of the site and within the prescribed study area.

   e. **Existing and proposed roadways and intersections** Within the study area, describe existing roadways and intersections (geometrics and traffic signal control) as well as improvements contemplated by government agencies.

2. **Analysis of Existing Conditions** This section describes the results, as well as the data collection efforts, of the volume/capacity analysis to be completed for the roadways and intersections in the vicinity of the site under existing conditions.

a. **Daily and peak hour(s) traffic volumes** Provide schematic diagrams depicting daily and peak hour(s) traffic volumes for roadways within the study area. Turning movement and mainline volumes are to be presented for the three (3) peak hour conditions (AM, PM and site generated) while only mainline volumes are required to reflect daily traffic volumes. Include the source and/or method of computation for all traffic volumes.

b. **Volume/capacity analyses at critical points** Utilizing techniques described in the Highway Capacity Manual or Derivative nomographs, include an assessment of the relative balance between roadway volumes and capacity. Perform the analysis for existing conditions (roadway geometry and traffic signal control) for the appropriate peak hours.

c. **Level of service at critical points** Based on the results obtained in the previous section, levels of service (A through F) are to be computed and presented. This section should also include a description of typical operating conditions at each level of service.

3. **Analysis of Future Conditions Without Development** This section describes the anticipated traffic volumes in the future and the ability of the roadway network to accommodate this traffic without the proposed zoning or subdivision request. The future year(s) for which projections are made will be specified by the Township and will be dependent on the timing of the proposed development.

   a. **Daily and peak hour(s) traffic volume** Clearly indicate the method and assumptions used to forecast future traffic volumes in order that the Township can duplicate these calculations. The schematic diagrams depicting future traffic volumes will be similar to those described in Section 408.3.C.2.a. in terms of locations and times (daily and peak hours).

   b. **Volume/capacity analyses at critical locations** Describe the ability of the existing roadway system to accommodate future traffic (without site development). If roadway improvements or modifications are committed for implementation, present the volume/capacity analysis for these conditions.

   c. **Levels of service at critical points** Based on the results obtained in the previous section, determine levels of service (A through F).

4. **Trip Distribution** Identify the direction of approach for site generated traffic for the appropriate time periods. As with all technical analysis steps, the basic method and assumptions used in this work must be clearly stated in order that the Township can replicate these results.

5. **Trip Generation** Identify the amount of traffic generated by the site for daily and the three (3) peak conditions. The trip generation rates used in this phase of the analysis shall be justified and documented to the satisfaction of the Township.

6. **Traffic Assignment** Describe the utilization of study area roadways by site generated traffic. The proposed traffic volumes should then be combined with anticipated traffic volumes from Section 3 to describe mainline and turning movement volumes for future conditions with the site developed as the applicant proposes.

7. **Analysis of Future Conditions With Development** This section describes the adequacy of the roadway system to accommodate future traffic with development of the site.

    a. **Daily and peak hour(s) traffic volumes** Provide mainline and turning movement volumes for the highway network in the study area as well as driveways and internal circulation roadways for the appropriate time periods.

    b. **Volume/capacity analyses at critical points** Perform a volume/capacity analysis for the appropriate peak hours for future conditions with the site developed as proposed, similar to Sections 2.b. and 3.b.

    c. **Levels of service at critical points** As a result of the volume/capacity analysis, compute and describe the level of service on the study area roadway system.

    d. Final design must address both traffic flow and traffic safety considerations to provide safe operational characteristics.

8. **Recommended Improvements** In the event that the analysis indicates unsatisfactory levels of service will occur on study area roadways, a description of proposed improvements to remedy deficiencies should be included in this section. The levels of service shall not deteriorate to worse than C if they are currently A or B, must be maintained if they are C, and improved to C if they are D, E, or F. In addition, there shall be no increase in delay if a satisfactory level of service can not be attained. These proposals would not include committed projects by the state and local jurisdictions that were described in Section 1 and reflected in the analysis contained in Sections 2 and 3.

    a. **Proposed recommended improvements** Describe the location, nature and extent of proposed improvements to assure sufficient roadway capacity. Accompanying this list of improvements are preliminary cost estimates, sources of funding, timing, and likelihood of implementation.

    b. **Volume/capacity analyses at critical points** Another iteration of the volume/capacity analysis will be described which demonstrates the anticipated results of making these improvements.

    c. **Levels of service at critical points** As a result of the revised volume/capacity analysis presented in the previous section, present levels of service for the highway system with improvements.

9. **Conclusion** The last section of the report should be a clear concise description of the study findings. This concluding section should serve as an executive summary.

D. **Contribution in Lieu of Preparation of Studies** If an applicant believes that the preparation of traffic study and report required herein is not warranted, he may request the Board to waive the preparation of such study.

1. The applicant for approval of any residential subdivision or land development shall provide the Township with a certification of the number and type of dwelling units to be constructed for the purpose of determining the contribution in lieu of preparation of studies.

2. The applicant for approval 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.

3. The contribution in lieu of preparation of studies provided for herein shall be in addition to all charges imposed by any 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 any Authority, and all sums otherwise agreed to be paid by the applicant.

4. The applicant 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 waived by the Township. All such agreements shall be in a form satisfactory to the Township Solicitor.

5. All contributions in lieu of preparations of studies shall be paid prior to approval of the final plan by the Township Supervisors.

6. All developments receiving a modification of preparation of a traffic evaluation study in accordance with this section shall provide, as a minimum, the information required in Section 408.3.C.4.

Section 408.4 Wetlands Study

A. The applicant shall submit a wetland study with the submittal of all subdivision and land development plans. The purpose of the study shall be to determine the presence and extent of wetlands on the site.

B. The study shall be performed by a qualified wetland scientist. Qualified individuals should possess a minimum of a bachelor's degree in biology, botany, zoology, ecology, or environmental sciences. In general, other professionals, such as engineers, landscape architects, surveyors, planners, and geologists are not considered fully qualified to perform wetland delineations, unless they possess special ecological training and experience beyond their discipline. The Township reserves the right, in as much as no recognized certification program exists for wetland scientists, to determine the qualification of those preparing wetland delineations. Should a state or federal wetland scientist certification program be established, the Township will consider only those certified individuals qualified to perform delineations.

C. For sites on which no wetlands occur, an abbreviated report may be submitted. The abbreviated report should contain the results and discussion and conclusions information as required by Section 408.4.D.2 of this Ordinance. Site location, NWI and soil maps shall be provided.

D. Requirements for Wetland Studies:

1. Delineations should follow the procedures outlined in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands, and any subsequent amendments.

2. Delineations shall be supported by reports. The reports shall contain the following sections:

   a. **Introduction** Description of the physical features of the site, its location and the proposed plans for the site.

   b. **Methods** Description of the methods used for the survey, with particular emphasis on any deviation from the outlined federal method. Relevant information includes the date of the field studies, the number of transects and plots used, the size of vegetation quadrants employed, the size of soil pits used, taxonomic references used, and the disposition of any voucher specimens.

   c. **Results and Discussion** Description of the findings of the study. Soils, vegetation and hydrology for wetland and upland areas of the site should be discussed. Any problem areas should be thoroughly treated.

   d. **Conclusions** The extent of wetlands on the site should be discussed. The impact of the proposed project on these wetlands should also be considered.

E. Included in the report as appendices or tables should be:

1. Site location map (USGS 7.5' quadrangle will suffice).

2. NWI map.

3. Soil survey map with soil descriptions.

4. Data sheets for each plot.

5. **Wetland Boundary Map** Wetland boundaries shall be surveyed by a registered professional surveyor and shown on a plan of appropriate scale. The limits of the wetland study shall be clearly shown. The plan shall also show the location of all plots and/or transects used in the study, the date of the delineation, a statement of the method used for the study, the name of the consulting firm which performed the delineation, the name of the surveyor, and a disclaimer statement indicating no wetland boundary is considered jurisdictional until approved by DEP and COE.

6. Color photos of wetlands areas on the site, with locations and directions of view keyed to the wetland boundary map.

7. Resumes of the wetland scientist(s) who performed the delineation.

F. All subdivision plans shall contain notes for future lot owners. The wetland boundary on each lot will be clearly marked. Each lot which contains wetlands, or to which access may be restricted by wetlands, shall have a note which states that state and federal laws require permits for all activities which result in a deposition of fill into delineated wetlands. The note shall also state that refusal of such a permit may restrict some uses of all or portions of the lot.

G. Compensatory mitigation projects required as part of state or federal permits shall be shown on the subdivision plans. Future lot owners whose property encompasses all or part of a mitigation area shall be notified that the portion of their property that includes the mitigation area may not be altered, and is considered a jurisdictional wetland by the state and federal governments. Lot owners may be responsible for maintenance of mitigation areas. In order to help ensure the long-term viability of wetland mitigation efforts, the Township discourages multiple ownership of mitigation areas. Ownership by one individual or a homeowners association is encouraged. Owners of the wetland mitigation areas must be clearly identified to the Township.

H. The Township reserves the right to reject any submitted wetland delineations. Should the Township feel the actual wetland area differs from that shown on the subdivision plan, the Township has the right to secure, at the developer's expense, qualified personnel to check the delineation and redraw the boundary as necessary. Should the developer subsequently disagree with the Township's delineation, a jurisdictional delineation by DEP and COE will be requested. Any charges for the jurisdictional delineation will be the responsibility of the developer.

I. Where the study shows the existence of wetland areas, the delineated boundary shall be properly fenced off to prevent encroachment. Snow fence or other acceptable material shall be used (the use of silt fence is not acceptable). The fence shall be properly installed, at a minimum distance of five (5) feet outside the delineated boundary, prior to any construction or issuance of building permits. The fence must be properly maintained until all occupancy permits have been issued and/or for the extent of all construction.

Section 408.5 Aquifer Tests **(added Ordinance # 225-2024)**

A. Aquifer test standards and procedures. No person shall develop land requiring an Aquifer Test as stated in Section 408.1 without administering and passing on said land the aquifer test required by this section in compliance with the following objectives, standards, methods and procedures:

[1] Test objective. The objectives of an aquifer test shall be one or more of the following:

[a] To obtain sufficient data for the calculations of aquifer performance, including the coefficients of transmissibility and storage, permeability and specific yield.

[b] To determine the location and character of geologic boundaries.

[c] To ascertain the effects of well interference.

[d] To provide a guide in the spacing of wells for the development of a well field.

[2] Test standard. The aquifer test shall establish that the proposed well is capable of supplying potable water at the minimum rate determined by Section 408.1.c.1 of this Ordinance at a demand rate of not less than four gallons per minute for one-hour, either with or without the use of a storage system.

[3] Test supervision and evaluation. The aquifer test shall be conducted under the supervision of a qualified geologist or engineer using testing procedures hereafter set forth. The geologist or engineer shall be responsible for notifying the Township five working days prior to the start of the test. He/she or she will also summarize the test and its significance and make recommendations as to the suitability of the well or wells for the intended uses. The final report of the supervising person shall include an opinion as to whether the proposed use of the well will have an impact upon other existing wells in the immediate surrounding area. The supervising person shall provide the Township with a copy of all field notes and test results.

[4] Test method. The method for conducting the aquifer test shall be as follows:

An aquifer test shall be conducted for a minimum of 12 hours at a constant rate of pumping. The pumped well shall be the one proposed for the specific subdivision or land development for which the test is conducted. Two observation wells which have hydraulic continuity with the pumped well are required. The preferred method of analysis of the aquifer test data is the nonequilibrium formula, although other methods are available and may be used. These include various methods of analysis of either the drawdown or recovery data.

[5] Collection of data. Data shall be collected in conjunction with the aquifer test as follows:

[a] Prior to the test.

[i] Collection of geologic data of the area to be tested including well logs, if available.

[ii] History of water level fluctuations in the area when available.

[iii] The location, relative elevations and static water levels in the pumped well and the observation well or wells.

[b] During the test. A standard aquifer test field data sheet will be required for a pumped well and each observation well. The data sheet shall include columns for listing.

[i] The date.

[ii] Clock time.

[iii] Elapsed time since pumping started/stopped (in minutes + seconds).

[iv] Depth to water below land surface.

[v] Drawdown or recovery (in feet) + 10ths.

[vi] Observed discharge at specified intervals.

[c] Following the test. In accordance with recognized principles of well hydraulics, graphs shall be prepared to show time drawdown and time recovery for the pumped well and the observation wells. A distance drawdown graph will be required for anticipated rates of pumping, computation of the coefficients of transmissibility and storage as well as the rate of pumping, time and drawdown are required as well as other data which may be considered necessary to satisfy the test objectives.