

## **ARTICLE V. PRELIMINARY PLAN**

### **SECTION 501. APPLICATION PROCEDURE**

1. The PRELIMINARY PLAN application shall be submitted for all SUBDIVISIONS and/or LAND DEVELOPMENTS, as defined by Section 302. of this ORDINANCE. Such application shall be APPROVED prior to consideration of the FINAL PLAN application. In the case of a LAND DEVELOPMENT PLAN involving not more than one (1) PRINCIPAL BUILDING on not more than one (1) recorded LOT, the Board of COMMISSIONERS may waive the requirement that a PRELIMINARY PLAN application be submitted and APPROVED prior to consideration of the FINAL PLAN application.
2. The PRELIMINARY PLAN application and all information and procedures relating thereto shall, in all respects, be in compliance with the applicable provisions of this ORDINANCE. It is the responsibility of the APPLICANT to coordinate all requirements pursuant to the provisions of this ORDINANCE with respective private and public service agencies.
3. Eight (8) copies of the PRELIMINARY PLAN application, including the PRELIMINARY PLAN, all supporting information required in Section 502. of this ORDINANCE, and an 11 x 17 copy of the site plan and a filing fee shall be submitted to the TOWNSHIP Manager. The TOWNSHIP Manager shall submit all applications to the PLANNING COMMISSION and the TOWNSHIP ENGINEER for their review and recommendations to the Board of COMMISSIONERS.
  - A. In the event the APPLICANT disputes the amount of any such review fees, the APPLICANT shall, within ten days of the billing date, notify Manheim TOWNSHIP that such fees are disputed, in which case the TOWNSHIP shall not delay or disapprove a SUBDIVISION or LAND DEVELOPMENT application due to the APPLICANT'S request over disputed fees.
  - B. In the event that Manheim TOWNSHIP and the APPLICANT cannot agree on the amount of review fees which are reasonable and necessary, then the APPLICANT and Manheim TOWNSHIP shall follow the procedure for dispute resolution set forth in Section 503. of the MUNICIPALITIES PLANNING CODE.
4. A PRELIMINARY PLAN application shall be accompanied by all required plans and documents and the required filing fee. No application shall be considered complete without the payment of the required filing fee. The TOWNSHIP Manager and/or Manager's designees shall have seven (7) days from the date of submission of an application to check the plans and documents to determine if on their face they are in proper form and contain all the information required by this ORDINANCE, thereby establishing the official filing date, or incomplete and rejected. Within said time, the TOWNSHIP shall notify the APPLICANT in writing that the PRELIMINARY PLAN application is essentially complete and accepted including the official filing date and date

of review by the PLANNING COMMISSION, if applicable, or that the preliminary application is incomplete and rejected, stating the deficiencies in the application and returning the filing fee. The APPLICANT can reapply, submitting the fee and missing material at any time.

5. Failure of the TOWNSHIP to make a determination of acceptance/rejection shall result in deemed acceptance of the PRELIMINARY PLAN application for processing. However, deemed acceptance for processing shall not constitute a waiver of any deficiencies in the PRELIMINARY PLAN application or approval of the PRELIMINARY PLAN application.
6. In addition to submitting the required material in accordance with Subsection 3 of this Section, the APPLICANT shall file with the Lancaster COUNTY PLANNING COMMISSION the required number of copies of plans and supporting information including a filing fee, as determined by the County. The Board of COMMISSIONERS will not approve the PRELIMINARY PLAN application until the Board receives County review comments or until the expiration of thirty (30) days from the date the application was forwarded.
7. In general, the PLANNING COMMISSION will schedule the PRELIMINARY PLAN application for action at its regular meeting which is at least twenty-one (21) calendar days following the filing of the application by the APPLICANT. The TOWNSHIP ENGINEER shall also submit a REPORT to the PLANNING COMMISSION for action at the meeting scheduled by the PLANNING COMMISSION to review that particular application.
8. The PLANNING COMMISSION will discuss the PRELIMINARY PLAN application with the APPLICANT or his agent at its regular meeting and will review the application to determine if it meets the standards set forth in this ORDINANCE. The PRELIMINARY PLAN application shall then be submitted by the PLANNING COMMISSION, together with its analysis and recommendations, to the Board of COMMISSIONERS for consideration.
9. Any ACT or recommendation of the PLANNING COMMISSION which involves engineering consideration may be subject to review and comment by the TOWNSHIP ENGINEER, whose comments shall be incorporated and separately set forth with the analysis and recommendations of the PLANNING COMMISSION to the Board of COMMISSIONERS.
10. All applications for approval of a plan shall be acted upon by the Board of COMMISSIONERS which shall render its decision and communicate it to the APPLICANT not later than ninety (90) days from the official filing date as established in accordance with Section 201.5 of this ORDINANCE the date of the regular meeting of the Board of COMMISSIONERS or the PLANNING COMMISSIONERS (whichever first reviews the application) next following the date the application is filed.

- A. The decision of the Board of COMMISSIONERS shall be in writing and shall be communicated to the APPLICANT personally or mailed to him at his last known address not later than fifteen (15) days following the decision;
- B. When the APPLICANT is not APPROVED in terms as filed, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite the provisions of the ORDINANCE relied upon;
- C. Failure of the Board of COMMISSIONERS to render a decision and communicate it to the APPLICANT within the time and in the manner required herein shall be deemed an approval of the application in terms as presented, unless the APPLICANT has agreed in writing to an extension of time or change in the prescribed manner of presentation of communication of the decision; in which case, failure to meet the extended time or change in manner of presentation of communication shall have like effect.
- D. The APPLICANT must notify the Board of COMMISSIONERS in writing, within thirty (30) days from the receipt of the plan review, indicating acceptance or rejection of any conditions of approval. If the APPLICANT fails to notify the Board of COMMISSIONERS of either the acceptance or rejection of such conditions or rejection of any conditions within such time period, the approval of the plan will be automatically rescinded.
- E. From the time an application for approval of a plan, whether preliminary or final, is duly filed as provided in this ORDINANCE and while such application is pending approval or disapproval, no change or amendment of the zoning, SUBDIVISION or other governing ORDINANCE or plan shall affect the decision on such application adversely to the APPLICANT, and the APPLICANT shall be entitled to a decision in accordance with the provisions of the governing ORDINANCE or plans as they stood at the time the application was duly filed. In addition, when a preliminary application has been duly APPROVED, the APPLICANT shall be entitled to final approval in accordance with the terms of the APPROVED preliminary application as hereinafter provided. However, if an application is properly and finally denied, any subsequent application shall be subject to the intervening change in governing regulations. When an application for approval of a plan, whether preliminary or final, has been APPROVED or APPROVED subject to conditions acceptable to the APPLICANT, no subsequent change or amendment in the zoning, SUBDIVISION or other governing ORDINANCE or plan shall be applied to effect adversely the right of the APPLICANT commence and to complete any aspect of the APPROVED DEVELOPMENT in accordance with the terms of such approval within five (5) years from such approval. Where final approval is proceeded by preliminary approval, the five (5) year period shall be counted from the date of the preliminary approval. In case of any doubt as to the terms of preliminary approval, the terms

shall be construed in the light of provisions of the governing ORDINANCES or plans as they stood at the time when the application for such approval was duly filed.

- F. Where the LANDOWNER has SUBSTANTIALLY COMPLETED the required IMPROVEMENTS as depicted upon the FINAL PLAN within the aforesaid five-year limit, or any extension thereof as may be granted by the Board of COMMISSIONERS no change of municipal ORDINANCES or plan enacted subsequent to the date of filing of the PRELIMINARY PLAN shall modify or revoke any aspect of the APPROVED FINAL PLAN pertaining to zoning classification or DENSITY, LOT, BUILDING, STREET or utility location.
- G. In the case of a PRELIMINARY PLAN calling for the installation of IMPROVEMENTS beyond the five (5) year period, a schedule shall be filed by the LANDOWNER with the PRELIMINARY PLAN delineating all proposed sections as well as deadlines within which applications for FINAL PLAN approval of each section are intended to be filed. Such schedules shall be updated annually by APPLICANT on or before the anniversary of the PRELIMINARY PLAN approval, until FINAL PLAN approval of the final section has been granted and any MODIFICATION in the aforesaid schedule shall be subject to approval of the Board of COMMISSIONERS in its discretion.
- H. Each section in any residential SUBDIVISION or LAND DEVELOPMENT, except for the last section, shall contain a minimum of twenty-five percent (25%) of the total number of DWELLING units as depicted on the PRELIMINARY PLAN, unless a lesser percentage is APPROVED by the Board of COMMISSIONERS in its discretion. Provided the LANDOWNER has not defaulted with regard to or violated any of the conditions of the PRELIMINARY PLAN approval, including compliance with LANDOWNER'S aforesaid schedule of submission of FINAL PLANS for the various sections, then the aforesaid protections afforded by substantially completing the IMPROVEMENTS depicted upon the FINAL PLAN within five (5) years shall apply and for any section or sections, beyond the initial section, in which the required IMPROVEMENTS have not been SUBSTANTIALLY COMPLETED within said five (5) year period the aforesaid protections shall apply for an additional term or terms of three (3) years from the date of FINAL PLAN approval for each section.
- I. Failure of LANDOWNER to adhere to the aforesaid schedule of submission of FINAL PLANS for the various sections shall subject any such section to any and all changes in zoning, SUBDIVISION and other governing ORDINANCES enacted by the MUNICIPALITY subsequent to the date of the initial PRELIMINARY PLAN submission.

11. Approval of the PRELIMINARY PLAN application shall constitute approval of the DEVELOPMENT as to the character and intensity of DEVELOPMENT, the arrangement and approximate dimension of STREETS, LOTS, and other planned features, but shall not authorize the sale of LOTS, the lease of land, BUILDINGS or portions of BUILDINGS, or the DEVELOPMENT of land.
12. Multiple Applications. The resources of the TOWNSHIP and the orderly administration of this ORDINANCE are unduly burdened by multiple and conflicting applications. Therefore, the same APPLICANT may not submit multiple applications for approval of a SUBDIVISION or LAND DEVELOPMENT PLAN for the same property or a portion thereof involving the same land use. If an APPLICANT desires to submit a new application, then the APPLICANT must withdraw in writing any pending applications. In the event the APPLICANT fails or refuses to withdraw any pending applications, the Board of COMMISSIONERS may deny the new application due to noncompliance with this section.

## **SECTION 502. APPLICATION REQUIREMENTS**

1. The copies of all plans submitted with the application for PRELIMINARY PLAN approval can be either black and white or blue and white prints. The sheet sizes shall be no smaller than 18" x 22" and no larger than 30" x 42", provided that the plan for recording is drawn to scale and is no larger than 24" x 36".
2. The PRELIMINARY PLAN shall be at a scale of twenty (20) feet, thirty (30) feet, forty (40) feet or fifty (50) feet to the inch. If the PRELIMINARY PLAN is drawn in two or more sections, a key map showing the location of the several sections shall be placed on each sheet. The plan shall show the following information and shall conform to any other specifications, documents, codes, or regulations adopted by the TOWNSHIP COMMISSIONERS:
  - A. Proposed SUBDIVISION or LAND DEVELOPMENT name or identifying title and the location of the SUBDIVISION or LAND DEVELOPMENT in the TOWNSHIP and any other MUNICIPALITY.
  - B. Name and address of the LANDOWNER of the tract or of the authorized agent, if any, and of the DEVELOPER.
  - C. North point, written scale, graphic scale, plan date, and dates of all revisions to the plan.
  - D. Total acreage of the tract, number of LOTS or DWELLING units and net DENSITY.
  - E. Proposed land uses and AREA for residential and non-residential uses.

- F. Schedule of zoning district requirements, including AREA and bulk regulations, DENSITY, LOT COVERAGE, IMPERVIOUS SURFACE, BUILDING and yard requirements.
- G. A location map of the DEVELOPMENT at a minimum scale of two thousand (2,000) feet to the inch, showing the relation of the tract to adjoining property and to all STREETS and municipal boundaries existing within one thousand (1,000) feet of any part of the property proposed to be subdivided or developed.
- H. Tract boundaries showing distances and bearings, however, when a LANDOWNER retains a single LOT with a LOT AREA in excess of the largest LOT of the SUBDIVISION, the boundary of that LOT may be identified as deed plotting and shall be drawn at a minimum scale of one inch equals four hundred feet (1"=400').
- I. Contours of existing elevations at intervals of two (2) feet. In AREAS of slopes greater than fifteen percent (15%), five (5) foot contour intervals may be used; location of bench mark and datum used. United States Geodetic Surveys are not acceptable. Differentials between U.S.G.S. (e.g. Manheim TOWNSHIP Sanitary Sewer System datum, Lancaster AREA Sewer AUTHORITY datum, or Lancaster Sewer AUTHORITY datum) shall be made note of on the submitted plan.
- J. Contours and elevations for items required as IMPROVEMENTS of the plan, including but not limited to existing and proposed STREET profiles, sanitary sewer extensions, storm drainage systems, and all known IMPROVEMENTS requiring GRADE, profile, and elevation documentation.
- K. Soil types and soil classifications as indicated by the United States Department of AGRICULTURE SOIL SURVEY of Lancaster County.
- L. The names of all owners of all immediately adjacent undeveloped land; the names of all proposed or existing DEVELOPMENTS immediately adjacent, and the locations and dimensions of any STREETS or EASEMENTS shown thereon; the names, locations and dimensions of all existing STREETS, railroads, PUBLIC SEWERS, PUBLIC WATER mains and feeder lines, fire hydrants, gas, electric, and oil transmission lines, storm drains, WETLANDS, WATERCOURSES, one hundred (100) year FLOOD plain, and other significant features on or within two hundred (200) feet of any part of the property proposed to be developed and the location of all BUILDINGS approximate location of all TREE masses within the property.
- M. The location and width of any STREETS or public ways or places shown upon an adopted TOWNSHIP or County plan, if such exists for the AREA to be subdivided or developed.

- N. The full plan of the DEVELOPMENT, showing the location of all proposed and existing STREETS, fire hydrants, parks, playgrounds, and other public AREAS; proposed connection BUILDING SETBACK LINES for each STREET; proposed LOT lines and approximate dimensions of LOTS; LOT numbers and/or BLOCK numbers in consecutive order; BUILDING locations, PRIVATE STREETS and parking compounds in relation to LAND DEVELOPMENTS; and all STREETS and other AREAS designed for appurtenant facilities, public use, or proposed to be dedicated or reserved for public use, together with the conditions of such dedications or reservations. Location of existing and proposed EASEMENTS, including widths, ownership and purposes.
- O. The size, material, and approximate location of any proposed capped sewers permitted by the Pennsylvania Department of Environmental Protection, any on-LOT lateral main sewer system, sewers, sewage facilities as well as capped water lines and proposed connections with existing facilities.
- P. The size, material and approximate location of any proposed individual, community or PUBLIC WATER supply facilities, and proposed connections with existing facilities, as well as capped water lines and proposed connections with existing facilities.
- Q. Storm water management control measures and devices (temporary and permanent), and RUNOFF calculations for the proposed project in conformance with Manheim TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.
- R. Proposed STREET names.
- S. Typical STREET cross sections for each proposed and existing STREET shown on the PRELIMINARY PLAN.
- T. A bench mark shall be placed on an existing frost proof STRUCTURE, said STRUCTURE and structural elevation to remain as part of required IMPROVEMENTS plan, or if said STRUCTURE does not exist, bench mark shall be placed on a newly installed frost proof monument as described in Section 807.3. of this ORDINANCE.
- U. Seal of the registered professional ENGINEER, PROFESSIONAL LAND SURVEYOR or registered LANDSCAPE ARCHITECT who prepared the plan.
- V. RIGHT-OF-WAY dimensions and locations for all utilities.
- W. The location of all TREES and/or woodlands on the site and the location of TREES and/or woodlands to be removed and TREES and/or woodlands to remain.

- X. List of any variances, SPECIAL EXCEPTIONS and/or CONDITIONAL USES previously granted for the site and list of MODIFICATIONS or waivers of SUBDIVISION and LAND DEVELOPMENT, or STORMWATER MANAGEMENT requirements previously granted for the site.
- Y. List of any MODIFICATIONS of SUBDIVISION and LAND DEVELOPMENT or STORMWATER MANAGEMENT requirements being requested and a justification for request.

3. The application for PRELIMINARY PLAN approval shall contain the following supporting information:

- A. A Lancaster COUNTY PLANNING COMMISSION preliminary Appendix 24 Application for Consideration of SUBDIVISION and/or LAND DEVELOPMENT PLAN.
- B. Proposed and existing centerline profiles for each STREET shown on the PRELIMINARY PLAN.
- C. A letter from the postmaster of the AREA in which the SUBDIVISION or LAND DEVELOPMENT is located stating that the proposed STREET names are acceptable.
- D. A SKETCH PLAN of the remaining lands of the DEVELOPER, including the prospective future STREET system. The STREET system of the PRELIMINARY PLAN will be considered in the light of adjustments and connections with the future STREETS as shown in the SKETCH PLAN of the remaining lands.
- E. When connection to public or private water and/or sewer facilities is proposed, assurance of the availability of such service. This assurance shall be in the form of a letter signed by an authorized and responsible officer or person, as appropriate, of the company, party or AUTHORITY concerned, indicating their ability and willingness to make such service available.
- F. A properly executed Pennsylvania Department of Environmental Protection Planning Module for LAND DEVELOPMENT.
- G. A draft of any proposed covenants to run with the land.
- H. A phasing plan and tentative timetable for the proposed sequence of DEVELOPMENT for SUBDIVISION or LAND DEVELOPMENT. The timetable may be in a letter form, indicating the order in which activities will occur.

- I. Where the land included in the proposed DEVELOPMENT has a gas pipeline, PETROLEUM PRODUCTS transmission line, electric transmission line, or any other cable or pipeline located thereon, the application shall be accompanied by a letter from the owner of such pipeline stating minimum distance requirements and restrictions on the use of the land.
- J. A check or money order drawn to the TOWNSHIP in the amount specified on the fee schedule, as may be amended from time to time, adopted by resolution of the Board of COMMISSIONERS.

4. Whenever a proposed project will have (a) ten (10) or more DWELLING units or (b) contain five thousand (5,000) or more total square feet of commercial or industrial gross FLOOR AREA or (c) will generate one hundred (100) or more average weekday vehicle trips, the APPLICANT shall perform a traffic impact study in accordance with Section 502.4.A.

- A. Traffic Impact Study
  - (1) Definition of Influence AREA.
    - (a) An influence area must be defined which contains eighty percent (80%) or more of the trip ends that will be attracted to the DEVELOPMENT. A market study can be used to establish the limits of an influence AREA, if available. If no market study is available, an influence AREA should be estimated based on a reasonable documented estimate. The influence AREA can also be based on a reasonable maximum convenient travel time to the site, or delineating AREA boundaries based on locations of competing DEVELOPMENTS.
    - (b) Other methods such as using trip data from an existing DEVELOPMENT with similar characteristics or using an existing origin-destination survey of trips within the AREA can be used in place of the influence AREA to delineate the boundaries of the impact.
  - (2) AREA of Traffic Impact Study. The traffic impact study AREA shall be based on the characteristics of the influence AREA. The intersections and roadway segments to be included in the study shall be adjacent to the site or impacted by vehicular traffic generated by the DEVELOPMENT of the site. The intersections and roadway segments shall be mutually agreed upon by the TOWNSHIP Staff and the traffic ENGINEER preparing the study. In the absence of an agreement, the APPLICANT may be required to analyze additional intersections and/or roadway segments within the study AREA.

(3) Preparation by Transportation ENGINEER Required. When it has been determined that a traffic impact study is required for a proposed site DEVELOPMENT, it shall be the responsibility of the DEVELOPER to ensure the study is conducted and a final REPORT submitted in accordance with these guidelines. The traffic impact study and final REPORT shall be prepared under the supervision of a registered Professional ENGINEER who possesses a license issued by the Pennsylvania State Registration Board for Professional ENGINEERS. The final traffic impact study REPORT must have the seal of the supervising ENGINEER on it when submitted.

(4) Documentation Required. A traffic impact study REPORT shall be prepared to document the purpose, procedures, findings, conclusions, and recommendations of the study.

(a) The documentation for a traffic impact study shall include, at a minimum:

- [i] Executive summary.
- [ii] Study purpose and objectives.
- [iii] Description of the site and study AREA.
- [iv] Existing conditions in the AREA of the DEVELOPMENT.
- [v] Recorded or APPROVED nearby DEVELOPMENT.
- [vi] Trip generation, trip distribution, and modal split.
- [vii] Projected future traffic volumes (build and no-build).
- [viii] A description of the change in roadway operating conditions resulting from the DEVELOPMENT traffic.
- [ix] Recommendations for site ACCESS and transportation IMPROVEMENTS needed to maintain traffic flow to, from, within, and past the site at an acceptable and safe level of service.
- [x] Supplemental studies, i.e., gap, queue, left turn, etc.
- [xi] IMPROVEMENTS to be implemented by the APPLICANT.

[xii] Appendix - Include data collection summaries, detailed capacity analysis worksheets, etc.

[xiii] Signed and Sealed by a Professional ENGINEER.

- (b) The analysis shall be presented in a straight forward and logical sequence. It shall lead the reader step-by-step through the various stages of the process and resulting conclusions and recommendations.
- (c) Recommended IMPROVEMENTS to the study AREA network to include preliminary cost estimates, proposed implementation schedule and expected levels of service for the recommended network. Any off-site IMPROVEMENTS which are to be constructed, should be noted.
- (d) The recommendations shall specify the time period within which the IMPROVEMENTS should be made (particularly if the IMPROVEMENTS are associated with various phases of the DEVELOPMENT CONSTRUCTION), and any monitoring of operating conditions and IMPROVEMENTS that may be required.
- (e) Data shall be presented in tables, graphs, maps, and diagrams.
- (f) An executive summary of one or two pages shall be provided, concisely summarizing the purpose, conclusions, and recommendations.

## 5. Data Collection.

- (a) Existing twenty-four-hour and peak hour traffic volume data, including weekdays, Saturdays and Sundays, for all STREETS which provide direct ACCESS to the proposed DEVELOPMENT and for the ARTERIAL STREETS and COLLECTOR STREETS which will serve the proposed DEVELOPMENT, as well as any major intersection within the traffic impact AREA.
- (b) Traffic count data shall not be more than two (2) years old. Manual turning movement traffic counts shall be taken on a Tuesday, Wednesday or Thursday of a non-holiday week. Additional counts (i.e. on a Saturday or Sunday for a proposed commercial or non-residential DEVELOPMENT) may also be required in some cases.

6. Horizon Year. The traffic forecasts shall be prepared for the anticipated completion year of the DEVELOPMENT, assuming full buildout and occupancy. This year shall be referred to as the horizon year in the remainder of this ORDINANCE. If ACCESS is proposed onto a State Highway, an analysis shall be conducted at a period of 10 years beyond the horizon year.
7. Non-Site Traffic Estimates. Estimates of non-site traffic shall be made, and will consist of traffic generated by all other DEVELOPMENTS within the impact study AREA for which preliminary or FINAL PLANS have been APPROVED. Non-site traffic may be estimated using historic trends for the roadway or the PennDOT Traffic Data Collection and Factor Development Report.
8. Trip Generation Rates Required. The traffic impact study REPORT shall include a table showing the categories and quantities of land uses, with the corresponding trip generation rates or equations (with justification for selection of one or the other), and resulting number of adjacent STREET peak trips (AM and PM), generator peak hour trips, and total daily trips. The trip generation rates used must be either from the 6th edition of Trip Generation by Institute of Transportation ENGINEERS, or from a local study of corresponding land uses and quantities. All sources must be referenced in the study. The reasoning and data used in developing a trip generation rate for special/unusual generators must be justified and explained in the REPORT.
9. Consideration of Pass-By Trips. If a reduction in the site generated traffic volumes is a consideration for the land use in question, studies and interviews at similar land uses, in similar AREAS must be conducted or referenced justifying the pass-by reduction to be applied.
10. Rate Sums. Any significant difference between the sums of single-use rates and proposed mixed-use estimates must be justified in the study REPORT. If a reduction in the overall trip generation of a mixed-use DEVELOPMENT was proposed due to internalization, documentation should be provided.
11. Estimates of Trip Distribution Required.
  - (a) Trip distribution can be estimated using any one of the following three methods:
    - [i] Analogy
    - [ii] Trip distribution model

[iii] Surrogate data

(b) Whichever method is used, trip distribution must be estimated and analyzed for the horizon year. A multi-use DEVELOPMENT may require more than one distribution and coinciding assignment for each phase (for example, residential and retail phases on the same site). Consideration must also be given to whether site generated inbound and outbound trips will have similar distributions.

12. Trip Assignments. Assignments must be made considering logical routings, available roadway capacities, left turns at intersections, and projected (and perceived) minimum travel times. In addition, multiple paths should often be assigned between origins and destinations to achieve realistic estimates rather than assigning all of the trips to the route with the shortest travel time. The assignments must be carried through the external site ACCESS points and in large projects (those producing two hundred (200) or more additional peak direction trips to or from the site during the DEVELOPMENT'S peak hour) through the internal roadways. When the site has more than one ACCESS DRIVE, logical routing and possibly multiple paths should be used to obtain realistic DRIVEWAY volumes. The assignment should reflect conditions at the time of the analysis. Assignments can be accomplished either manually or with applicable computer models. If a thorough analysis is required to account for pass-by trips, the following procedure should be used:

- (a) Determine the percentage of pass-by trips in the total trips generated.
- (b) Estimate a trip distribution for the pass-by trips.
- (c) Perform two separate trip assignments, based on the new and pass-by trip distributions.
- (d) Combine the pass-by and new trip assignment.

13. Total Traffic Impacts.

- (a) Traffic estimates for any site with current traffic activity must reflect not only new traffic associated with the site's redevelopment, but also the trips subtracted from the traffic stream because of the removal of a land use. The traffic impact REPORT should clearly depict the total traffic estimate and its components.

(b) The study AREA roadway network is to be analyzed for safety and capacity sufficiency for three separate conditions: (1) existing network conditions, (2) future network conditions without the proposed DEVELOPMENT and 3) future network conditions with the proposed DEVELOPMENT. For each of the three conditions the following analyses shall be completed:

- [i] Mainline ADT volumes and turning movement volumes for all critical intersections within the study AREA will be determined for the AM peak hour, PM peak hour and the proposed DEVELOPMENT peak hour, if other than either the AM or PM peak hour of the network.
- [ii] The effectiveness of the traffic signal control at all intersections will be evaluated by approach in terms of vehicle stops and delays.
- [iii] Gap studies will be conducted in accordance with standards established by the ITE at the proposed site ACCESS points to evaluate the need for signal control, turn prohibitions or additional site ACCESS points to reduce the left turn volume from the site DRIVEWAYS if unsatisfactory levels of service are achieved.
- [iv] Queue length studies will be completed in accordance with standards established by the ITE to evaluate the potential for a backup of traffic from controlled intersections which could impact other intersections including ACCESS points to the proposed DEVELOPMENT.

(c) The analysis of the existing roadway and intersection conditions in the study AREA will be based upon the current geometric conditions and traffic control operations. This analysis will serve as a basis for determining the current adequacy of the roadway network and to document any deficiencies.

(d) The analysis of the future conditions without the proposed DEVELOPMENT will document the adequacy of the study AREA network to accommodate traffic in the horizon year(s) without the proposed DEVELOPMENT.

(e) The analysis of the future conditions with the proposed DEVELOPMENT will document the adequacy of the study AREA network to accommodate traffic in the horizon year(s) with the proposed DEVELOPMENT.

14. Required Levels of Service. The recommendations of the traffic impact study shall provide safe and efficient movement of traffic to and from and within and past the proposed DEVELOPMENT, while minimizing the impact to non-site trips. The current levels of service must be maintained if they are C or D, they should not deteriorate to worse than C if they are currently A or B, and shall be improved to a D if they are E or F. In addition, there shall be no increase in delay if an unsatisfactory level of service cannot be attained.
15. Capacity Analysis.
  - (a) Capacity analysis must be performed at each of the STREET and PROJECT SITE ACCESS intersection locations (signalized and unsignalized) within the study AREA. In addition, analyses must be completed for roadway segments effected by the proposed site traffic within the study AREA. These may include such segments as weaving sections, ramps, internal site roadways, parking facility ACCESS points, and reservoirs for vehicles queuing off site and on site. Other locations may be deemed appropriate depending on the situation.
  - (b) The recommended level-of-service shall be computed in accordance with 1994 Highway Capacity Manual, Special REPORT 209, published by the Transportation Research Board, or any subsequent revision of such manual. The most current version of the Highway Capacity Software can be used.
  - (c) The operational analyses in the Highway Capacity Manual should be used for analyzing existing conditions, traffic impacts, ACCESS requirements, or other future conditions for which traffic, geometric, and control parameters can be established.
  - (d) In developing the proposed IMPROVEMENTS, the study prepared is to consider the following:
    - [i] All highway capacity evaluations shall consider not only the overall intersection level of service and delay but also evaluate each approach and movement to identify any substandard values which need to be improved.
    - [ii] For locations where the level of service of the horizon year without the proposed DEVELOPMENT is F, the IMPROVEMENTS shall provide an estimated delay which will be no worse than the delay for the horizon year without the proposed DEVELOPMENT.

- [iii] Where new intersections are being established to serve as ACCESS to the proposed DEVELOPMENT, these intersections must be designed to at least operate at Level of Service C or better.
- [iv] IMPROVEMENTS must be designed to meet the preferred level of service which is defined in TOWNSHIP Impact Fee ORDINANCE for the applicable transportation service AREA.
- [v] For ACCESS points to the proposed DEVELOPMENT, which are not proposed to be controlled by a traffic signal, an analysis will be completed to determine the design details for a separate left turn lane on the adjoining highway.
- [vi] For ACCESS points to the proposed DEVELOPMENT where traffic signal control is being proposed, a traffic signal warrant analysis shall be performed in accordance with the requirements of the PA Department of Transportation, Publication 201. Although a left turn lane shall be provided, an analysis shall be completed to determine the type of signal phasing required.

## B. Soils

- 1. Those applications involving lands with soils characterized by "severe" limitations for BUILDING site DEVELOPMENT according to the "SOIL SURVEY", and/or those plans involving the use of on-LOT sewage disposal systems on lands with soil characterized by "severe" limitations for such facilities according to the "SOIL SURVEY", or those applications involving land that contains prime farmland as defined in such SOIL SURVEY, shall require the preparation of a statement by a qualified planner, soil scientist, or ENGINEER which includes the following minimum considerations:
  - (a) A planimetric map of the site that depicts those soils contained on the site. Soils with severe DEVELOPMENT constraints or which constitute prime farmland shall be highlighted. The map shall also depict all existing and proposed IMPROVEMENTS on the site;
  - (b) A description of the site planning methods used to protect soils with severe DEVELOPMENT constraints from deleterious impacts associated with the proposed use; and,

- (c) A description of the CONSTRUCTION techniques used to assure that the site's soils can safely accommodate the proposed use.
- (d) APPLICANT shall identify the classification of agricultural soil is involved, what efforts, if any, are being made to preserve such prime soil.

#### C. Steep Slopes

- (1) All application involving lands that possess slopes exceeding ten (10%) percent shall include a statement by a Commonwealth registered ENGINEER or LANDSCAPE ARCHITECT which includes the following minimum considerations:
  - (a) A topographic map of the site which highlights those AREAS that possess slopes exceeding ten (10%) and fifteen (15%) percent, respectively. Also reflected on this map shall be all existing and proposed site IMPROVEMENTS (e.g. BUILDINGS, roads, sewer systems, DRIVEWAYS and etc.);
  - (b) A detailed description of the methods that are being used to:
    - (i) protect and stabilize AREAS that have a high potential for soil EROSION;
    - (ii) prevent the CONSTRUCTION of STRUCTURES and other site IMPROVEMENTS on AREAS with slopes exceeding fifteen percent (15%) or a description of the specific design and CONSTRUCTION techniques used to assure structural safety and minimize harm to the environment associated with DEVELOPMENT of steep slopes;
    - (iii) minimize grading throughout the site;
    - (iv) protect water quality on and around the site from the adverse effects of the proposed use;
    - (v) protect any steep slopes on adjoining properties; and
  - (c) In those instances where BUILDINGS and/or other STRUCTURES are being placed on slopes exceeding ten percent, a description of the methods used to assure adequate foundations, shall be provided.

D. Historic Properties or STRUCTURES.

- (1) APPLICANT shall identify on-site properties or STRUCTURES listed with the National Register of Historic Places and/or listed on the Pennsylvania Register of Historic Places. APPLICANT shall also identify such other properties and STRUCTURES as may be of local historic significance by means of a field survey by the Historic Preservation Trust of Lancaster County or such other individual or organization of equivalent expertise. Properties or STRUCTURES that are identifiable links to past ownership, such as markers or cemeteries shall be identified.
  - (a) The APPLICANT shall describe the ways in which the APPLICANT intends to preserve, protect and maintain such historic properties or STRUCTURES and other man-made resources.

E. Wildlife and Woodlands.

- (1) The APPLICANT shall identify wildlife habitats on the property. In addition, the APPLICANT shall also identify all stands of TREES on the property. The APPLICANT shall also identify individual TREES that are more than 6 inches in diameter or greater than 20 feet in height on the property. The APPLICANT shall identify all public utilities and site IMPROVEMENTS in relation to such TREES, with the intent of preserving and protecting such TREES.
  - (a) The APPLICANT shall describe the way in which the APPLICANT intends to preserve and protect such habitats and woodlands.

F. Parks and Recreation.

- (1) All APPLICANTS for residential DEVELOPMENT shall review the COMPREHENSIVE PLAN and the Parks & Recreation Plan, and any updates thereto, relative to the need for parks and recreation facilities in Manheim TOWNSHIP and shall specify the effect of the proposed residential use on TOWNSHIP parks and recreation facilities.
  - (a) The review shall specify the adopted level of service standard for TOWNSHIP parks; the existing park and recreational facilities in the vicinity of the proposed DEVELOPMENT; the need, if any, for additional parks and recreational facilities; the cost of needed IMPROVEMENTS; and the method of funding such IMPROVEMENTS.

(b) All APPLICANTS shall comply with the mandatory dedication requirements or fees in lieu thereof, and other applicable provisions of this ORDINANCE.

G. STORMWATER/Hydrogeology

(1) All APPLICANTS shall submit hydrogeological data to show that the proposed use of the site will not adversely affect the geology of the site and the regional groundwater table underlying the site. Hydrogeological data shall be compiled by a qualified hydrologist or hydrogeologist.

(a) If hydrogeological examination of the site discloses a condition which could adversely affect the geology of the site or of any adjacent sites or the regional groundwater table underlying the site or adjacent AREAS, APPLICANT shall submit a plan for addressing and correcting any such condition.

(b) All APPLICANTS shall comply with The Manheim Township Stormwater Management Ordinance.

H. Public Facilities

(1) The APPLICANT shall review the COMPREHENSIVE PLAN (December 1995) and any amendments or updates thereto, and shall submit the following information relative to public facilities and services.

(a) A description of the effect of the proposed use on the need for additional TOWNSHIP BUILDINGS, IMPROVEMENTS and services including, but not limited to, municipal and maintenance BUILDINGS and properties, and any measures taken to account for these additional needs.

(b) A description of the effect of the proposed use on the need for additional police and/or fire protection in order to maintain the standards specified in the COMPREHENSIVE PLAN.

(c) A description of the effect of the proposed use on the need for any additional public facilities or services deemed necessary by the TOWNSHIP to protect and promote the health, safety and general welfare of the public.