FRANKLIN TOWNSHIP
YORK COUNTY, PENNSYLVANIA
ORDINANCE NO. 1- 2012

AN ORDINANCE OF THE TOWNSHP OF FRANKLIN, YORK COUNTY, PENNSYLVANIA AMENDING THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE (ORDINANCE NO. 3-2009) BY AMENDING ARTICLE II "DEFINITIONS", ARTICLE III"APPLICATION PROCEDURES AND PLAT REQUIREMENTS" SECTION 306 "PRELIMINARY PLAN REQUIREMENTS", SECTION 307 "PRELIMINARY PLAN SUPPLEMENTARY DATA REQUIREMENTS", SECTION 309 "SUBMISSION OF FINAL PLANS", SECTION 310 "REFERRAL OF FINAL PLANS", SECTION 313 "RECORDING OF FINAL PLANS", AND SECTION 316 "FINAL PLAN SUPPLEMENTARY DATA REQUIREMENTS"; ARTICLE IV "DESIGN STANDARDS", SECTION 409 "SEWAGE DISPOSAL SYSTEMS"; ARTICLE V "IMPROVEMENTS AND CONSTRUCTION REQUIREMENTS", SECTION 501 "STREETS", SECTION 506 "STORM DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT", ADDING A NEW ARTICLE IV.I "TRANSPORTATION", AND EXHIBIT F "FRANKLIN TOWNSHIP ROAD CLASSIFICATION CHART".

BE IT ENACTED AND ORDAINED by the Board of Supervisors in and for the Township of Franklin, York County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same as follows:

Section 1. Article II "Definitions" of the Franklin Township Subdivision and Land Development Ordinance is hereby amended to add the following definitions:

Half Street – A street parallel and adjacent to a property line having a lesser right-of-way than required for a satisfactory improvement and use of the street.

Reserve Strip – A parcel of ground in separate ownership separating a street from other adjacent properties or from another street.

Section 2. Article III "Application Procedures and Plat Requirements", Section 306 "Preliminary Plan Requirements" (D)(20), (21) and (25) of the Franklin Township Subdivision and Land Development Ordinance are hereby amended by substitution to read as follows:

"D. The Preliminary Plan shall show the following information:

...

20. For those areas where public water will be utilized, an identification of the source of said public water and a transmittal from said source indicating the availability of such services at the site shall be provided. If water is to be provided by means other than by private wells owned and maintained by the individual owners of lots within the subdivision or development, the applicant shall present evidence that the subdivision or development is to be supplied by a certificated public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility. A copy of a Certificate of Public Convenience from the Pennsylvania Public Utility Commission or an application for such certificate, the cooperative agreement, or a commitment or agreement to serve the area in question from a municipal corporation, authority or utility, whichever is appropriate, shall be acceptable evidence.

21. For those areas where public sewer will be utilized, an identification of said public sewer and a completed sewage facilities planning module, including signature by the entity proposed to provide the service.

...

25. A notarized statement to the effect that the applicant is or represents the owner of the land proposed to be developed and that the land development shown on the Plan is made with his or their free consent. For those subdivisions involving the addition of a lot to an existing recorded lot, a notarized statement shall also be provided to the effect that the owner of the land to whom the lot is being added or transferred is aware of the transaction and that the land development shown on the Plan is made with his or her free consent."

Section 3. Article III "Application Procedures and Plat Requirements", Section 307 "Preliminary Plan Supplementary Data Requirements" (A)(3) of the Franklin Township Subdivision and Land Development Ordinance is hereby amended by substitution to read as follows:

"A. The Preliminary Plan shall be accompanied by the following supplementary data where applicable:

...

3. A completed planning module for land development, as required by the PA DEP, including signature by the entity to provide the sewer service. Additionally, a feasibility study shall be completed to show the connection of the proposed development to the existing public sanitary sewer system. This feasibility study shall be in accordance with requirements of the owner of the public system and shall be signed by an engineer licensed in the Commonwealth of Pennsylvania."

Section 4. Article III "Application Procedures and Plat Requirements", Section 309 "Submission of Final Plans" (C) of the Franklin Township Subdivision and Land Development Ordinance is hereby amended by substitution as follows:

"C. An application for Final Plan approval may be for all land included in the Preliminary Plan approval or for a section thereof. When Preliminary Plan approval, either with or without conditions, has been granted by the Board of Supervisors, the developer shall have a maximum of five (5) years after the Preliminary Plan approval date to submit an application for Final Plan approval. In the case of a Preliminary Plan calling for the installation of improvements beyond the 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 schedule shall be updated annually by the 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 governing body in its discretion. Each section in any residential subdivision or land development, except for the last section, shall contain a minimum of twenty-five (25%) percent of the total number of dwelling units as depicted on the Preliminary Plan, unless a lesser percentage is approved by the Board of Supervisors in its discretion. Provided that landowner has not defaulted with regard to or violated any of the conditions of the Preliminary Plan approval, including compliance with landowners aforesaid schedule of submission of Final Plan for the various sections, then the protections afforded by substantially completing the improvements depicted upon the Final Plan within 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 5 year period, the aforesaid protection shall apply for an additional term or terms of 3 years from the date of Final Plan approval for each section. Failure of the 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 ordinance enacted by the Township subsequent to the date of the initial Preliminary Plan Submission."

Section 5. Article III "Application Procedures and Plat Requirements", Section 310 "Referral of Final Plans" (B)(2) of the Franklin Township Subdivision and Land Development Ordinance is hereby amended by substitution as follows:

"B. The Secretary may also notify the following agencies in writing that the Final Plan has been received and will be considered at its meeting of specified date:

...

2. One (1) copy of the plan and five (5) copies of the PA DEP Planning Module for Land Development, as previously approved during Preliminary Plan review by the municipal authority and the Board of Supervisors, and transmitted to the local office of the PA DEP."

Section 6. Article III "Application Procedures and Plat Requirements", Section 316 "Final Plan Supplementary Data Requirements" (A)(10) and (21) of the Franklin Township Subdivision and Land Development Ordinance are hereby amended by substitution as follows:

"A. Unless previously submitted, the Final Plan shall be accompanied by the following supplementary data where applicable:

...

10. If a Final Plan for a land development covers only a part of the developer's entire tract, a Sketch Plan shall be submitted of the prospective development for the remainder of the tract. Such Sketch Plan shall be prepared in accordance with this Ordinance. However, if the Final Plan is for a minor land subdivision (four (4) lots or less and involving no new streets or other public improvements), this requirement shall be waived if the developer certifies that the Final Plan constitutes the entire extent of his development intentions.

...

21. A review letter from the York County Planning Commission reviewing and commenting on the proposed subdivision and/or land development."

Section 7. Article IV "Design Standards" is hereby amended by the deletion of the following sections:

402 "Street and Highway Standards"

403 "Off Street Parking"

404 "Driveways"

413 "Traffic Impact Studies"

Section 8. Article IV "Design Standards" Section 409 (A)(3) "Sewage Disposal Systems" of the Franklin Township Subdivision and Land Development Ordinance is hereby amended by substitution as follows:

"A. Design of all sewage disposal systems shall be subject to review and approval of the Township as follows:

...

3. In the case of sanitary sewer systems and wastewater treatment facilities which are to be dedicated to the public, review and approval of design plans, maintenance plan, financial management plan, and specifications shall be by the applicable Municipal Agency or Authority in accordance with their Rules and Regulations. Review and approval of plans and specifications by the Township and/or applicable Municipal Authority shall be part of the Preliminary Subdivision or Land Development Plan process. A feasibility study to show the possibility for connection to the public sewer system is required at the Preliminary Plan stage. Review and approval of the wastewater treatment facility by the Township is required for Preliminary Plan approval. Final Plan approval will not be granted until the developer submits copies of all applicable permits from PA DEP and other applicable government agencies, as necessary."

Section 9. The Franklin Township Subdivision and Land Development Ordinance is amended by the addition of Article IV.I "Transportation" as follows:

"ARTICLE IV.1
TRANSPORTATION

"4.101 Street and Highway Design Standards

A. General Standards

1. The finished elevation of proposed streets shall not be more than one (1) foot below the Regulatory Flood Elevation. The Township may require profiles and elevations of streets to ensure compliance. Drainage structure openings shall be sufficient to discharge flood flows without unduly increasing flood elevations or creating a backwater situation onto adjacent properties.

2. Proposed streets, including functional classification, shall be planned considering the existing street system, topographical conditions, public convenience in terms of fire protection and pedestrian traffic, probable volumes of traffic, existing and proposed use of land on abutting properties, and future development extensions of the street systems.

3. No street shall terminate into a dead end. Any street dead ended for access to adjoining property or because of authorized staged construction shall be provided with a temporary cul-de-sac and the use shall be guaranteed to the public until such time as the street is continued. Temporary cul-de-sacs should be designed in accordance with this Ordinance.

4. When a subdivision abuts or contains an existing or proposed arterial streets, the Township may require a marginal access street, reverse frontage, reduction of the number of intersections, and/or separation of local from through traffic or other treatment which will provide protection for abutting properties.

5. Residential streets shall be so laid out as to discourage through traffic; however, the arrangement of streets shall provide for continuation of existing or platted streets and for proper access to adjoining undeveloped tracts suitable for future development.

6. The streets shall be properly located and built with regard to the proposed traffic functions, including the minimization of through-traffic on minor streets and the protection of major street capacities from excessive marginal access.

7. The proposed street system shall extend existing or recorded streets at the same width or at widths required by the Ordinance as determined by the Township, but in no case at less than the required minimum width.

8. The Township, following completion of a traffic impact study, may require multiple accesses to a development. Where a proposed subdivision or land development is provided access by a single street, the Township may require a boulevard style entrance.

9. Applicants for a subdivision or land development abutting a state route shall be responsible for obtaining approval of any proposed improvements, and for obtaining a PA DOT Highway Occupancy Permit.

10. Prior to Final Plan approval, applicants shall certify that title to any street right-of-way is unencumbered by any liens or other obligations and that no prior right-of-way has been granted.

11. In the event that a private street is proposed, in addition to complying with all Township design and construction standards for public streets, the Developer will be required to submit for approval and record with the approved Final Plan, an agreement outlining the responsibilities for perpetual maintenance of the private street, which also shall release the Township of any liability regarding maintenance and acceptance of dedication. The applicant shall in addition, provide for an easement enabling the Township to perform emergency maintenance in the event that the property owner should fail to do so and shall establish a procedure whereby the Township shall be able to assess the cost of such emergency maintenance upon the landowner. However, in no case shall the Township be obligated to undertake any maintenance on these private roads. In addition, the Township requires an as-built plan, improvement bonding, surety, and inspection in accordance with the procedures of this Ordinance.

B. Roadway Functional Classification.
Functional classifications as indicated and defined in the Northern York County Regional Comprehensive Plan are arterial, major collector, minor collector and local. Franklin Township recognizes that functional classification on a local level can be considered different than at a regional level and this recognizes alleys as a classification for determining design criteria.

The functional classification for proposed or existing streets shall be determined by the Township Engineer following consultation with the Township Traffic Engineer.

C. Street Width

1. Minimum street right-of-way and cartway widths shall be as follows:

Road Classification	Required Right-of-way (ft.)	Total Cartway Width (ft.) (1)	Designated Parking Lanes
Arterial	Criteria to be as determined by Township with minimum 60 foot required right-of-way, 40 foot cartway width and no parking lanes.		
Major Collector Collector	60' 60'	32' 28'	None None
Minor/Local	50' 50' 50'	24' 30' 34'	None One Side Two Side
Boulevard (3)	60' (4)	12-14' (2)	None
Alley	20'	12'	None

(1) Final width to be a recommended by the Township Engineer.
(2) 2-Lanes of 12-14 feet width, each separated by a 10 foot width median. Cartway or lane width to be 12-feet for Minor Street and 14-feet for a Collector Street.
(3) Median to be maintained by the developer, property owner or HOA.
(4) Final right-of-way is determined by the Township.

2. Provisions for additional street width or shoulder (right-of-way, cartway, or both) may be required when determined to be necessary by the Township to facilitate for aspects such as:

a. In the case of a plan for a land development fronting on an existing public road of improper right-of-way width, the developer shall provide any required dedication of land for widening the existing right-of-way to meet the minimum right-of-way standard as specified above. The right-of-way to be dedicated shall be measured from the centerline of the existing roadway.

b. In the case of a land development fronting on an existing public road of improper cartway width, the Township shall require the developer to improve the roadway to meet the minimum cartway standard as specified above. The developer shall also improve shoulders, gutters, berms, curbing, or other standards. The Board of Supervisors in lieu of requiring such improvements at the time of subdivision shall require the payment of a fee to be placed in a road improvement fund to finance road construction in the future. The fee shall be based on an estimate prepared by the Township Engineer.

c. Public safety and convenience.

d. Traffic in commercial and industrial areas and in areas of high density.

e. Where topographical conditions require excessive cuts and fills.

f. When curbs will not be required.

g. To accommodate on-street parking.

h. To accommodate bicycle lanes (5-ft minimum width).

In the case where conditions warrant alternate design standards, the design may be required to consider the parameters as a function of design speed. Alternate design standards may be referenced from either AASHTO or PennDOT.

D. Street Grades

The grades of streets shall not be less than the minimum or more than the maximum requirements listed below:

TYPES OF STREETS	MINIMUM GRADE	MAXIMUM GRADE
Arterial streets	As determined by the Township after consultation with PennDOT.	
Major Collector/ Collector Streets	1.0%	7.0%
Minor/local streets & Alleys	1.0%	10.0%
Intersections	1.0%	4.0% (for 100' from intersection)

1. In all differential grades exceeding one percent (1%) for a distance of one hundred (100) feet, vertical curves shall be used in changes of grade and shall be designed for proper sight distance.

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

3. On permission of the Township, minor street grade under special topographic conditions may exceed ten percent (10%) for distances less than one hundred (100) feet provided the grade does not in any case exceed twelve percent (12%).

4. Standards for minimum and maximum grade refer to both positive and negative grades.

5. All streets shall be designed so as to provide for the discharge of surface water from the right-of-way. The slope of the crown on a street shall not be less than one-fourth (1/4) of an inch per foot and not more than three-eighths (3/8) of an inch per foot, as determined by the Township Engineer. Where a curve is banked to reduce lateral vehicular acceleration as required by the design speed of the road, the required crown is eliminated. Adequate facilities shall be provided at all low points along the street and other points necessary to intercept runoff.

E. Horizontal Curves

1. Where connecting streets lines deflect from each other at any one point, the lines must be connected with a true, circular curve. Horizontal curves must be justified by a traffic engineering analysis and shall be based on a corrected maximum proposed speed limit. The minimum radius of the centerline for the curve shall be as follows:

TYPE OF STREET	MINIMUM RADIUS
Arterial	As determined following completion of traffic studies and consultation with PennDOT and the Traffic Engineer.
Major Collector/Collector	300 feet
Minor/Local	200 feet

2. Straight portions of the street shall be tangent to the beginning or end of curves. Except for minor streets, there shall be a tangent of at least one hundred (100) feet between reverse curves. For curves on arterial streets (or as otherwise determined by the Township Engineer), proper super-elevation must be provided as required by the Township or the PennDOT. Broken-back curves shall be avoided.

3. The Township may require that Sight Easements be provided in order to maintain adequate stopping sight distances.

4. The Township may require that the development be provided with speed limit signs in which speeds have been determined by the required engineering studies to be recommended for the horizontal curve design.

F. Vertical Curves

1. Vertical curves are required where the algebraic difference exceeds one percent (1%) or as determined by the Township Engineer.

2. Proper sight distance shall be provided with respect to vertical road alignments. The minimum sight distance measured along the centerline from three point five (3.5) feet to height of an object point five (0.5) feet above grade shall be as follows:

TYPE OF STREET	SIGHT DISTANCE
Arterial	As required by PennDOT design criteria for the posted speed.
Major Collector/Collector	400 feet
Minor/Local	250 feet
Alley	100 feet

G. Cul-De-Sac Streets

1. Cul-de-sac streets designed to be permanent shall not exceed five hundred (500) feet in length measured from the centerline of the intersecting street to the centerpoint of said cul-de-sac and shall not furnish access to more than 20 dwelling units. If a cul-de-sac street intersects another cul-de-sac street, the maximum total length of the sum of the streets shall not exceed one thousand (1,000) feet.

2. A paved turnaround meeting the minimum dimensions of one hundred (100) foot paved and one hundred twenty (120) foot right of way shall be provided. Dimension and/or layout is subject to change where in the opinion of the Township a revised dimension and/or layout is necessary for reasons of safety, maintenance, accessibility, construction, etc.

3. Temporary cul-de-sacs shall be designed to standards of permanent cul-de-sacs.

4. Where required, a designated area shall be shown for disposal of snow. Such area shall be provided with an easement acceptable to the Township.

5. All cul-de-sac circles shall be graded to create a center high point with all flow directed toward its edges.

6. In the design of cul-de-sacs, special consideration shall be given to the requirements of satisfactory fire protection and plans shall be reviewed by the local fire department.

7. The Township may require collector street design criteria be followed pending consultation with the local emergency service personnel.

H. Loop Roads

1. In the case of a proposed loop road the maximum length, measured along its centerline from the intersection of a public street to the beginning of the loop, shall be five hundred (500) feet.

2. The loop portion of the road from the point of intersection shall be a maximum of one thousand six hundred (1,600) feet.

3. In the design of loop roads, special consideration shall be given to the requirements of satisfactory fire protection and plans shall be reviewed by the local fire department.

4. Loop roads cannot be connected to other loop roads.

5. The Township may require collector street design criteria be followed pending consultation with the local emergency service personnel.

6. A maximum of twenty (20) dwelling units can be accessed from a loop road.

I. Intersections

1. No intersection shall involve the junction of more than two (2) streets.

2. Right-angle intersections shall be used wherever possible. In no instance, however, shall streets intersect at an angle of less than seventy-five (75) degrees or more than one hundred five (105) degrees. Intersections of two arterial streets shall be subject to PennDOT standards.

3. Intersections shall be improved on all sides by leveling areas. Such leveling areas shall have the minimum length of one hundred (100) feet (measured from the intersection of the centerlines) within which no grade shall exceed a maximum of four percent (4%). Where a through street exists or is proposed, the 4% leveling area may be waived pending review of the Township Engineer.

4. All streets intersecting a state road (US, PA or SR) shall be subject to the approval of the PennDOT.

5. Proper sight lines shall be provided and maintained at all intersections. Measured along the street centerline, there must be a clear sight triangle of seventy-five (75) feet. Where either of the two (2) streets is a collector street a clear sight triangle of one hundred (100) feet shall be required and where either of the two (2) streets is an arterial, a clear sight triangle of one hundred fifty (150) feet shall be required. Within such triangles, no vision-obstructing object shall be permitted. No building or construction other than utility poles, mail receptacles approved by the U.S. Postal Service, street lights, street signs, or traffic signs, shall be permitted within such triangles. Whenever a portion of such line occurs behind the building setback line, such portion shall be shown on the plan and shall

be considered a building setback line.

6. Design of curb or edge of pavement shall take into account such conditions as type of turning vehicles, likely speeds of traffic, angle of turn, number of lanes, and whether parking is permitted, etc.; however, curb or edge of pavement shall not be less than the following for the most restrictive roadway class at the intersection:

INTERSECTION	**CURVE RADIUS**
Minor/Local with Minor/Local Street	25 Feet
Minor/Local with Collector	30 Feet
Collector with Collector	35 Feet

7. Street intersection spacing shall be based on a traffic engineering analysis and shall be a function of street classification and proposed design speed limit. The following table contains minimum recommended intersection spacing. Such traffic engineering analysis shall be prepared in accordance with ITE Traffic Engineering Handbook recommendations and shall be subject to the review of the Township Engineer or Township Traffic Engineer. Minimum distance between intersections shall be as follows:

Type of Intersection (Distance in Feet)

	Arterial/ Arterial	Arterial/Collector or Minor	Collector/ Collector	Collector/Minor	Minor/Minor (3) (4)
Min. Distance Separation (1)	800	800	600	500	250
Min Distance Separation (2)		Must be in alignment		500	250

(1) Minimum distance between centerlines of intersections.
(2) Minimum centerline separation for streets where intersections are on direct opposite sides of the intersecting street.
(3) Internal development street intersections.
(4) Minor street is consistent with local classification.

8. Where determined to be necessary due to speed considerations, clear sight triangle side may increase. Increased values shall be in accordance with PennDOT or AASHTO Standards.

9. Safe sight distances shall be provided at all intersections. Standards for design shall comply with the intersection sight distance criteria presented in *A Policy on the*

Geometric Design of Highways and Streets by AASHTO.

J. Slope of Banks Along Streets

1. The slope of banks along streets measured perpendicular to the street shall be no steeper than the following:

   a. One (1) foot of vertical measurement for three (3) feet of horizontal measurement for fills.

   b. One (1) foot of vertical measurement for two (2) feet of horizontal measurement for cuts.

   c. Such slopes shall be suitably planted with perennial grasses or other vegetation to prevent erosion and minimize maintenance.

K. Partial and Half-Streets

The dedication of half-streets at the perimeter of new developments is prohibited, except to complete existing half-streets.

L. Names of Streets

Names of new streets shall not duplicate or approximate existing or platted street names, or approximate such names by the use of suffixes such as "lane, "court", or "avenue". In approving the names, consideration shall be given to existing or platted street names within the postal delivery district served by the local post office. New streets shall bear the same name or number of any continuation or alignment with an existing street. All street names shall be subject to Township and U.S. Postal Service approval.

M. Reserve Strips

Controlling access to streets by reserve strips is prohibited except where their control is definitely placed in the Township under control approved by the Township. A reserve strip is a parcel of ground in separate ownership separating a street from other adjacent properties or from another street.

N. Alleys

1. Alleys are permitted in single family, detached or semi-detached residential development to provide access to the rear of lots that have frontage on public minor, collector, or arterial streets.

2. While the use of dead end alleys is generally discouraged, where alleys dead end, they shall be provided with a Township approved turn-around and shall be subject to maximum cul-de-sac street length requirement.

3. Alleys shall be permitted provided that they are not proposed to be dedicated to the Township and that the developer must make adequate provision for the perpetual maintenance of the alley. The applicant shall in addition, provide for an easement enabling the Township to perform emergency maintenance in the event that the property owner should fail to do so and shall establish a procedure whereby the Township shall be able to assess the cost of such emergency maintenance upon the landowner. However, in no case shall the Township be obligated to undertake any maintenance on these private alley ways.

O. Alternate Design Criteria for Low-Volume Roads

1. Subject to the recommendation of the Township Engineer, the following alternate criteria may be permitted for minor/local streets located within proposed subdivisions and land developments in which the streets are not proposed to be dedicated to the Township. These streets shall generally have an estimated ADT (average daily traffic) volume of two hundred fifty (250) vehicles per day or less. The proposed ADT shall be determined by a traffic impact study. The applicant shall in addition, provide for an easement enabling the Township to perform emergency maintenance in the event that the property owner should fail to do so and shall establish a procedure whereby the Township shall be able to assess the cost of such emergency maintenance upon the land owner. However, in no case shall the Township be obligated to undertake any maintenance on these private alley ways. Alternate standards must be supported by AASHTO or other recognized standard. The following standards shall apply:

   a. For greater speeds a specific design and traffic study shall be submitted for review and recommendation by the Township Engineer.

		Design Speed (mph)			
		15	20	25	30
Minimum Cartway Width	(no parking)	20'	20'	20'	20'
	(parking 1-side)	28'	28'	28'	28'
	(parking 2-sides)	34'	34'	34'	34'
Minimum Centerline Radius		45'	90'	165'	260'
Safe-Stopping Sight Distances		80'	115'	155'	200'
Minimum Rate of Vertical Curvature	(Sag)	10	17	26	37
	(Crest)	3	7	12	19
Curb Radii		15'	15'	15'	15'

2. Cul-de-sacs without center islands shall have a turn-around diameter of sixty (60) feet while cul-de-sacs with center islands shall have a minimum diameter of ninety (90) feet and minimum travel lanes of twenty (20) feet. Rights-of-way shall extend a minimum of ten (10) feet from the edge of pavement.

3. Design criteria not specifically addressed in this section shall be in accordance with the general road design standards set forth in this Ordinance.

4. Provisions for additional street width (right-of-way, cartway, shoulders etc.) may be required when determined to be necessary by the Township in specific cases for:

   a. Public safety and convenience.

   b. Traffic in commercial and industrial areas and in high-density residential development.

   c. Widening of existing streets where the width does not meet the requirements of the preceding paragraphs.

   d. Where topographic conditions require excessive cuts and fills.

   e. When curbs are required

4.102 Off Street Parking

A. Off street vehicular parking facilities shall be provided in accordance with the Franklin Township Zoning Ordinance.

B. The following additional standards shall apply:

   1. Multi-Family, Commercial, and Industrial Parking Facilities shall be adequately illuminated if designed for use by more than eight (8) cars after dusk.

      a. All outdoor illumination shall have intensities and uniformity ratios consistent with the standards in the current edition of the Lighting Handbook and/or Recommended Practices of the Illumination Engineering Society of North America (ISENA). Illumination levels shall be defined as maintained horizontal footcandles on the task and average illumination values shall not exceed minimum values by more than the product of the minimum value and the specified ISENA uniformity ratio for the activity in question.

      b. Glare control shall be achieved primarily through the use of such means as fixture cutoffs, shields, and baffles and appropriate application of fixture mounting height, wattage, aiming angle, and fixture placement. Outdoor illumination shall be installed so that the glare or reflection visible from a street or residence adjacent to the property being illuminated shall not be greater than 0.1 foot candle at the property or boundary line.

2. Multi-Family, Commercial, and Industrial Parking Facilities shall be surfaced with a bituminous or concrete paving material.

3. All Multi-Family, Commercial, Public, and Industrial uses shall provide handicapped parking spaces by the applicable regulatory agency or by the Americans with Disabilities Act.

4. For uses which are not addressed in the Zoning Ordinance, the required parking spaces shall be based on a study as prepared by the developer and approved by the Township Engineer. The study shall address the following:

   a. The type of use and estimated number of trips generated during peak conditions (inbound and outbound).

   b. Estimated parking duration per vehicle (turnover rate).

   c. Based on estimated number of trips generated and average parking duration per trip, calculate the number of spaces required. In addition one space shall be provided for every two employees working during the maximum shift.

5. The minimum isle width for 90 degree parking shall be twenty five (25) feet. For angled parking, isle width shall be as approved by the Township Engineer.

4.103 Traffic Impact Studies

A. Purpose and Intent:

The impact of new traffic from proposed land developments is an important aspect of assessing the overall impacts of new development in the Township. All new land developments will generate new traffic. Some land developments may generate enough traffic to create congestion and/or substantially increase the level of travel delay experienced by existing users of the Township's transportation system. Corrective measures may be necessary to mitigate the transportation impacts of proposed land developments. These corrective measures could include new roads, traffic signals, turn lanes, and other intersection improvements. Traffic impact studies will allow the Township to better determine the transportation demands of development proposals and provide for reduction of adverse impacts on the transportation system.

B. Objectives:

The Township finds that requiring a traffic impact study for proposed developments that meet certain thresholds of applicability will help to achieve the following objectives:

1. Identify the amount of additional traffic that would be generated by the development;

2. Assess the impacts of the development on the operational performance of the Township's

roadway system;

3. Determine the ability of the Township's current roadway system to accommodate the additional traffic demands of the development;

4. Determine the improvements necessary, if any, to accommodate the additional traffic associated with the new development;

5. Ensure safe and reasonable traffic conditions on streets after the development is complete;

6. Protect the substantial public investment in the street system; and

7. Provide information relevant to comprehensive planning, transportation planning, transit planning, and the provision of programs and facilities for traffic safety, road improvements, transportation demand management, pedestrian access, and other transportation system considerations.

C. Short Title:

This Section shall be known and may be cited as the Traffic Impact Studies.

D. Definitions:

HORIZON YEAR - The horizon year shall be five years beyond the opening year of the proposed development.

INTERNAL TRIPS - Trips that are made within a multi-use or mixed-use development, by vehicle or by an alternate mode, such as walking.

LEVEL OF SERVICE (LOS) - A quantitative and qualitative measure defined by the "Highway Capacity Manual", latest edition of how well traffic flows on a given roadway or intersection. Level of Service relates to such factors as highway width, number of lanes, percentage of trucks, total traffic volume, turning movements, lateral clearances, grades, sight distance, capacity in relation to volume, travel speed, and other factors which affect the quality of flow. Level of Service is typically summarized by letter grades described as follows:

Level "A" is a condition with low traffic volumes, high speeds, and free-flow conditions.
Level "B" is a condition with light traffic volumes, minor speed restrictions, and stable flow.
Level "C" is a condition with moderate traffic volumes, where speed and maneuvering are restricted to a limited degree by the amount of traffic.
Level "D" is a condition with heavy traffic operating at tolerable speeds, although temporary slowdowns in flow may occur.
Level "E" is a condition of very heavy flow and relatively low speeds. Under Level "E" the traffic is unstable and short stoppage may occur.
Level "F" is a condition of extremely heavy flow, with frequent stoppage and very slow speeds.

It is an unstable traffic condition under which traffic often comes to a complete halt.

LOCAL TRIP GENERATION STUDY - A study by a qualified professional of a minimum of three comparable developments of similar land use and development characteristics which provides empirical data on the actual number of trips entering and exiting said development(s) during the applicable peak hours.

NEW TRIPS - Total vehicle trips, minus pass-by trips, minus internal trips, if applicable.

PASS-BY TRIPS - Vehicle trips which are made by traffic already using the adjacent roadway and entering the site as an intermediate stop on the way to another destination.

PEAK HOURS OF ADJACENT STREET TRAFFIC - The highest hourly volumes of traffic on the adjacent streets (four consecutive fifteen minute intervals) on a typical weekday between 7:00 a.m. to 9:00 a.m and/or between 4:00 pm to 6:00 pm.

OPENING YEAR – The opening year of the development is defined as the anticipated year when all phases of the development have been completed.

QUALIFIED PROFESSIONAL - For purposes of conducting traffic impact studies as may be required by this Section, a qualified professional shall mean a registered professional engineer with experience in traffic engineering.

SITE GENERATED PEAK HOUR - The highest hourly volume of traffic entering and exiting a development site. This peak may coincide with the peak hour of adjacent street traffic or occur at other times such as mid-day, late evening, or during the weekend.

TRAFFIC IMPACT STUDY - An analysis and assessment, conducted by a qualified professional, that assesses the effects that traffic related to a proposed land development will have on the transportation network in a community or portion thereof. Traffic impact studies vary in their range of detail and complexity depending on the type, size, and location of the proposed development.

TRIP - A single or one-directional travel movement with either the origin or destination of the trip inside the study site.

TRIP GENERATION - An estimate of the number of vehicle trips that will be generated due to the new development, which is calculated based on the type and amount of land uses in the proposed development and professionally accepted trip generation data for each such land use. Trip generation may be expressed on an average daily or peak hour basis.

E. Thresholds of Applicability:

A traffic impact study shall be required for any land-development proposal, subdivision, and/or change in use which is expected to generate fifty (50) or more new trips during any peak hour or five hundred (500) or more new trips during an average day. The estimated number of trips shall be determined in accordance with this Section.

The Township reserves the right to require a traffic impact study for developments generating less than fifty (50) new trips during any peak hour in cases where traffic deficiencies exist in the area of the proposed development.

F. Exemptions:

1. A land development proposal may be exempted from the traffic impact study requirement if a prior traffic impact study for the subject property has been submitted to the Township within the previous two-years and the proposed development is substantially similar to that for which the prior traffic impact study was conducted.

G. Scoping Meeting:

Prior to beginning a traffic impact study (as directed), the applicant or its representative must schedule a scoping meeting with the appropriate representatives of the Township. The purpose of this scoping meeting is to discuss the availability of site-specific information concerning the development, available traffic counts from other studies, boundaries of the study area, time periods of study, and pending developments located nearby that may influence travel patterns within the study area. Representatives of adjoining municipalities may be invited to the scoping meeting if the boundary of the study area as defined by this Section crosses the Township boundary.

The applicant shall submit the following information to the Township at least two weeks prior to the Scoping Meeting:

1. A brief description of the proposed project in terms of location, type, and intensity of land-use.

2. A map of the study area defined in accordance with the requirements of this Section.

3. Projected site generated traffic volumes determined in accordance with the requirements of this Section for average daily traffic, the peak hours of adjacent street traffic, and the peak hour of generation.

H. Time Periods of Study:

At a minimum, the traffic impact study must provide all the analyses identified by this Section for the morning and afternoon peak hours of adjacent street traffic during a typical weekday. Proposed retail developments must also provide all the analyses identified by this Section for the Saturday peak hour of generation. Proposed developments expected to have site-generated peak hour(s) that differ from the peak hours of adjacent street traffic must also include all the analyses identified by this Section for the peak hour(s) of the generator. Examples of these types of developments include, but are not limited to, elementary schools, high schools, movie theaters, churches, and stadiums. The time periods of study shall be established during the Scoping Meeting required by this Section.

I. Definition of Study Area:

The traffic impact study area shall include all major streets and intersections expected to accommodate fifty (50) or more new trips during any peak hour or five hundred (500) or more new trips during an average day. Major streets shall include all roadways with a functional classification other than local road or residential street. Major intersections shall include all junctions other than those involving only local roads or residential streets. The study area for all traffic impact studies shall include the driveway access points between the development and the external roadway system.

J. Required Contents of a Traffic Impact Study:

The traffic impact study must evaluate the adequacy of the existing transportation system to serve the proposed development and identify the expected impacts of the proposed development on the transportation system. The traffic impact study must provide adequate information for Township staff to evaluate the development proposal and, when appropriate, recommend conditions of approval.

The qualified professional preparing the traffic impact study is encouraged to coordinate preparation with local staff and staff from other jurisdictions, as appropriate, to ensure that all necessary components are included in the traffic impact study and to reduce revision and review time.

The traffic impact study shall include at least the following minimum components:

1. Title Page. The title page shall list the name of the proposed development, the location of the proposed development, the name of the applicant, and the name of the qualified professional that prepared the study.

2. Certification. The traffic impact study shall be signed and sealed by a qualified professional. The seal shall be affixed to the title page.

3. Executive Summary. The executive summary shall describe the location and composition of the proposed land development, discuss the major findings of the traffic impact analysis, and list the recommendations of the qualified professional.

4. Table of Contents. The table of contents shall provide a page number listing of the major components of the traffic impact study.

5. Location Map. A location map shall illustrate the place of the proposed development and the location of intersections within the study area as defined by this Section.

6. General Site Description. The site description shall include the existing and proposed land uses, current zoning, size of the proposed development, number/location of access points onto the surrounding roadway system, construction phasing, and completion date of the proposed land development. A conceptual site plan of the proposed development shall be included in the traffic impact study.

7. Internal Transportation System. The traffic impact study shall describe the transportation system located within the proposed development site. This description shall include vehicular ingress and egress locations, existing or proposed internal roadways including the widths of cartway, widths of right-of-way, parking conditions, traffic channelization, traffic control devices, bicycle accommodations, and pedestrian accommodations.

8. External Transportation System. The traffic impact study shall describe the entire external roadway system within the study area defined by this Section. For major streets within the study area, this description shall include identification of route number, right-of-way widths, cartway widths, shoulder widths, presence/absence of curbing, Township functional classification, State functional classification, regional connectivity, posted speed limits, 85th percentile operating speed, roadside conditions, and pavement conditions. For major intersections within the study area, this description shall include a description of the intersection layout, number of lanes, approach gradient, lane-use control, type of traffic control, and traffic signal timing parameters. Where applicable, traffic signal permit plans shall be obtained from the PennDOT and included in an Appendix to the traffic impact study. A sketch depicting existing conditions shall be provided in the traffic impact study for all roadways and intersections within the study area.

9. Nearby Development. The traffic impact study shall list and provide a brief description of other planned, pending, partially built-out, vacant, and/or partially occupied land developments within the study area that have received municipal land development approval. These nearby developments shall be identified during the Scoping Meeting required by this Section. All nearby developments listed in this section shall be included in the future-year traffic projections for the study area.

10. Programmed Roadway Improvements. The traffic impact study shall list and describe any roadway improvements that have been scheduled with guaranteed funding by either the Township or the PennDOT for construction by the project horizon year. This information shall be identified during the Scoping Meeting required by this Section. The programmed roadway improvements listed in this section shall be included in the future-year level-of-service analyses of the study area.

11. Existing Traffic Conditions. The traffic impact study shall identify existing traffic conditions for all roadways and intersections in the study area. The existing traffic data, including the traffic volumes for average daily traffic, peak hours of adjacent street traffic, and peak hour(s) of the generator, if applicable, shall be field collected by experienced personnel. Traffic counts for the weekday peak hours of adjacent street traffic and the weekday peak hour(s) of the generator shall be collected on a Tuesday, Wednesday, or Thursday during a week that does not include a federal and/or state holiday. The traffic impact study shall illustrate the existing traffic volumes on a schematic turn movement diagram of the study area.

    The traffic counts shall be reflective of the year of when the report was prepared. Traffic counts between one and three years old may be used if factored to the current year using

an appropriate growth rate for the area in question. Traffic counts older than three years shall not be used in the traffic impact study.

Seasonal adjustment of traffic counts is required when the study area is located within or near a major tourist destination. The seasonal adjustment factor shall adjust the field-collected traffic counts from the off-peak observed value to the expected value during the highest month of the peak season. In no case shall the seasonal adjustment factor be used to adjust the field-collected traffic counts to a lesser value.

The traffic impact study shall provide a discussion of the balance of the existing traffic counts between adjacent intersections. Potential mid-block sinks and sources of traffic shall be identified to justify any imbalance or the existing traffic counts shall be balanced to the higher of the observed values.

12. Trip Generation. The traffic impact study shall estimate trip generation for the proposed development based on the publication "Trip Generation" published by the Institute of Transportation Engineers (ITE), most recent edition. The independent variable selected for the calculation of trip generation shall be based on the procedures of "Trip Generation Handbook" by ITE, most recent edition. The method of calculation of trip generation (by weighted average rate, by equation, or by local data) shall also be based on the procedures of the "Trip Generation Handbook". If local data collection is required, the local data must be collected based on the procedures of the "Trip Generation Handbook" at a minimum of three similar sites and be presented in a manner that is verifiable by the Township.

    For retail developments, the traffic impact study shall estimate pass-by trips based on the procedures of the "Trip Generation Handbook" by ITE, most recent edition. The qualified professional must provide justification for any assumptions related to the estimate of pass-by trips, particularly in cases where the "Trip Generation Handbook" does not provide applicable data for the land-use or time period in question.

    For multi-use developments containing a mixture of retail, office, and/or residential uses, the traffic impact study shall estimate the number of internal trips following the procedures of the "Trip Generation Handbook" by ITE, most recent edition. The total amount of internal trips for any one land-use within the multi-use site to/from all other land-uses of each type (retail, residential, or office) within the multi-use site shall be limited to the applicable internal capture rate presented in "Trip Generation Handbook" for each type of land-use pairing. The qualified professional must provide justification for any assumptions related to the estimate of internal trips, particularly in cases where the "Trip Generation Handbook" does not provide applicable data for the time period in question.

    For developments expected to generate more than thirty (30) trucks per day, the trip generation data shall include separate figures for trucks. The level-of-service analyses, signal warrant analyses, auxiliary turn lane analyses, and other applicable analyses must incorporate the forecasted truck trip generation

If phased development is proposed, a trip generation estimate shall be provided for the amount of development completed at the end of each phase.

The applicant may adjust the trip generation for a proposed development to account for the implementation of travel demand management strategies, pedestrian accomodations, bicycle accomodations, and transit accomodations. The application of these modification factors shall follow the procedures documented in *Policies and Procedures for Transportation Impact Study* by PennDOT.

13. Trip Distribution and Assignment. The traffic impact study shall estimate trip distribution based on one of the procedures suggested in the publications "Transportation and Land Development" by ITE, latest edition and "Transportation Impact Analysis for Site Development" by ITE, latest edition. The qualified professional may follow other methods for trip distribution/traffic assignment with the Township's approval. Supporting data and calculations must be provided in the traffic impact study for verification of the trip distribution pattern.

    When the site has more than one access driveway, logical routing, and possibly multiple paths should be used to obtain realistic driveway volumes. A multi-use development may require more than one distribution and coinciding assignment for each land-use type.

    Trip distribution for pass-by trips shall follow the procedures of the "Trip Generation Handbook" by ITE, latest edition. The amount of pass-by trips routed into the development site from any adjoining roadway shall be limited to twenty five (25) percent of the non-site related traffic volume on that roadway.

    For developments expected to generate more than thirty (30) truck trips per day, the study shall include separate trip distribution figures for trucks. For the level-of-service analyses, the percentage of heavy vehicles by approach shall be recalculated to include the expected trucks that would be generated by the development. The traffic volume entries for the trucks in the traffic signal warrant analyses and auxiliary turn lane analyses required by this Section shall be adjusted to passenger car equivalents in accordance with the "Highway Capacity Manual", latest edition.

14. Forecast Pre-Development Traffic Volumes. The traffic impact study shall provide opening year and horizon year forecasts of average daily traffic and peak hour traffic volumes for pre-development conditions. This forecast shall follow the build-up method recommended in "Transportation Impact Analysis for Site Development" by ITE, latest edition. Regional travel growth shall be estimated by adjusting existing through traffic volumes within the study area (un-related to specific land developments within the study area) by a growth rate reflective of the type of roadways within the study area. The growth rate referenced in this step shall be reflective of regional changes in travel growth from a minimum history of five years or as defined in the York County Regional Travel Demand Model. Traffic related to the nearby developments within the study area shall be identified from available traffic impact studies or estimated following the procedures of this Section. The forecasted traffic volumes without development would equate to the

sum of existing traffic, expected change in traffic due to regional growth, and expected traffic related to nearby developments.

The traffic impact study shall illustrate the forecasted pre-development traffic volumes on schematic turn movement diagrams of the study area.

15. Forecast Traffic Volumes With the Development. The traffic impact study shall provide opening year and horizon year forecasts of average daily traffic and peak hour traffic volumes for development conditions. This forecast shall follow the build-up method recommended in "Transportation Impact Analysis for Site Development" by ITE, latest edition. The forecasted traffic volumes with development would equate to the sum of existing traffic, expected change in traffic due to regional growth, expected traffic related to nearby developments, and expected traffic from the development site.

    The traffic impact study shall illustrate the forecasted traffic volumes with development on schematic turn movement diagrams of the study area.

16. Level-of-Service Analysis, Baseline Conditions. The traffic impact study shall provide a level-of-service analysis for all roadways and key intersections within the study area for all applicable peak hours for existing conditions, opening year conditions without new traffic associated with the proposed development, opening year conditions with new traffic associated with completed phases of the proposed development, horizon year conditions without new traffic associated with the proposed development, and horizon year conditions with traffic associated with full build-out of the proposed development. The level-of-service analysis shall reference the methodologies presented in the current edition of the Transportation Research Board's "Highway Capacity Manual". The qualified professional shall utilize the most recent edition of any computer software implementations of the Highway Capacity Manual.

    The analysis of the baseline level-of-service conditions shall be based on the current geometric and traffic conditions unless otherwise specified by this Section. Traffic signal timings shall be optimized in a manner that minimizes overall intersection delay for all future year conditions. Programmed roadway improvements within the study area shall be considered for the level-of-service analyses of future year conditions, if scheduled for implementation by the future year under consideration. Any deviations from the default values suggested by the Highway Capacity Manual for ideal saturation flow rate, lane utilization, lost time, critical gap, follow-up time, etc. must be fully justified by the qualified professional in a manner that the Township can verify. Analysis parameters such as the peak hour factor and percentage of heavy vehicles shall be referenced by approach from the existing traffic counts taken within the study area. The peak hour factor for movements that directly enter the development site via an access driveway shall be set at 0.9. Unless otherwise specified by this Section, percent heavy vehicles for movements that directly enter the development site via an access driveway shall be set at 2 percent.

    The results of the levels-of-service analysis shall be summarized in tabular form and identified on schematic diagrams for all roadways within the study area and for all lane-

groups, approaches, and overall averages at all intersections within the study area.

17. Impact Identification. The traffic impact study shall identify the locations where traffic related to the proposed development has impacted level-of-service (LOS)/travel delay within the study area. Level-of-service (travel delay if LOS F) must not deteriorate below a condition worse than pre-development level-of-service. A change in average travel delay of least 10 seconds per vehicle must occur along any roadway, lane-group, approached, or intersection average before the level-of-service is determined to have been impacted.

18. Mitigation Analysis. The traffic impact study shall suggest roadway improvements to mitigate any identified impacts that have occurred within the study area. Level-of-service must be restored to pre-developed conditions. The 10-second change in travel delay variance for establishing an impact is not applicable to the mitigation analysis. A level-of-service analysis with the proposed mitigation shall be provided for all roadways and key intersections within the study area to demonstrate the effectiveness of the suggested roadway improvements. The level-of-service analysis shall reference the methodologies presented in the current edition of the Transportation Research Board's "Highway Capacity Manual,". The qualified professional shall utilize the most recent edition of any computer software implementations of the Highway Capacity Manual. Any deviations from the default values suggested by the Highway Capacity Manual for ideal saturation flow rate, lane utilization, lost time, critical gap, follow-up time, etc. must be fully justified by the qualified professional in a manner that the Township can verify. Analysis parameters such as the peak hour factor and percentage of heavy vehicles shall be referenced by approach from the existing traffic counts taken within the study area. The peak hour factor for movements that directly enter the development site via an access driveway shall be set at 0.9. Unless otherwise specified by this Section, percent heavy vehicles for movements that directly enter the development site via an access driveway shall be set at 2 percent.

    The results of the mitigation analysis shall be summarized in a tabular comparison of pre-development level-of-service and with development level-of-service with proposed mitigation. The results of the mitigation analysis shall also be shown on schematic diagrams for all roadways within the study area and for all lane-groups, approaches, and overall averages at all intersections within the study area.

19. Preferred Level-of-Service Analysis – The traffic impact study shall suggest roadway improvements to provide a preferred level-of-service "C" along all roadways, lane-groups, approaches, and intersection averages within the study area for horizon year conditions with development. A level-of-service analysis with the proposed improvements to provide preferred level-of-service shall be provided for all roadways and key intersections within the study area to demonstrate the effectiveness of the suggested roadway improvements. The level-of-service analysis shall reference the methodologies presented in the current edition of the Transportation Research Board's "Highway Capacity Manual,". The qualified professional shall utilize the most recent edition of any computer software implementations of the Highway Capacity Manual. Any deviations from the default values suggested by the Highway Capacity Manual for

ideal saturation flow rate, lane utilization, lost time, critical gap, follow-up time, etc. must be fully justified by the qualified professional in a manner that the Township can verify. Analysis parameters such as the peak hour factor and percentage of heavy vehicles shall be referenced by approach from the existing traffic counts taken within the study area. The peak hour factor for movements that directly enter the development site via an access driveway shall be set at 0.9. Unless otherwise specified by this Section, percent heavy vehicles for movements that directly enter the development site via an access driveway shall be set at 2 percent.

The results of the preferred level-of-service analysis shall be summarized in a tabular comparison of pre-development level-of-service and with development level-of-service with proposed improvements to provide preferred level-of-service. The results of the mitigation analysis shall also be shown on schematic diagrams for all roadways within the study area and for all lane-groups, approaches, and overall averages at all intersections within the study area.

20. Proportional Impact Analysis – The traffic impact study shall identify the proportional impact of development traffic on all roadway and intersections within the study area. The proportional impact shall be calculated based on the change of the critical volume to capacity ratio between pre-development and with development conditions during the horizon year.

21. Traffic Signal Warrant Analysis. The traffic impact study shall provide a traffic signal warrant analyses for all unsignalized intersections within the study area. The warrant analysis shall consider all of the vehicular volume-based conditions listed in the the Manual on Uniform Traffic Control Devices, current edition and the applicable publications of the PennDOT. The warrant analysis shall include all applicable peak hours for existing conditions, opening year conditions without new traffic associated with the proposed development, opening year conditions with new traffic associated with completed phases of the proposed development, horizon year conditions without new traffic associated with the proposed development, and horizon year conditions with traffic associated with full build-out of the proposed development. If signal warrants are satisfied, a left-turn lane/left-turn phase warrant analysis shall be prepared based on procedures detailed by the PennDOT in Publication 149.

22. Queue Analysis. The traffic impact study shall provide a comparison of existing queue storage characteristics within the study area to the projected 95th percentile queue lengths for all applicable peak hours for existing conditions, opening year pre-development conditions, opening-year with development conditions, horizon year pre-development conditions, horizon year post development conditions, opening year with development conditions with suggested mitigation, and horizon year with development conditions with suggested mitigation. The applicant shall identify any improvements necessary to the queue storage characteristics of the study area to prevent gridlock and queue spill back conditions. The method used to identify the 95th percentile queue lengths is subject to Township approval.

23. Auxiliary Turn Lane Analysis. The traffic impact study shall provide auxiliary turn lane analyses for the major street approaches to the proposed access points of the development with the external roadway system. Storage length requirements for warranted right-turn and left-turn lanes shall be determined in accordance with PennDOT criterian and at a minimum must accommodate the 95th percentile queue. The method used to evaluate auxiliary turn lane warrants is subject to Township approval.

24. Sight Distance. The traffic impact study shall identify available sight distance at each proposed access point between the development and the external roadway system. The traffic impact study shall provide a table that compares the available sight distance to the Township's requirements as specified in the Subdivision and Land Development Ordinance and the criteria of the DOT as detailed in Title 67 of the Pennsylvania Code.

25. Improvement Sketches. The traffic impact study must provide sketches of any roadway improvements suggested to satisfy the requirements of this Section. The sketches shall show the improvements on a preliminary engineering drawing at a scale of one inch equals twenty five feet (1"=25'). The drawing must depict proposed lane configurations, lane widths, cartway widths, approach gradient, types of traffic control, right-of-way widths, utility locations, etc. A cost estimate for implementing the suggested improvements shall also be provided.

26. The *Northern York County Region Comprehensive Plan Transportation Amendment* has established a Synchro™ traffic analysis model for the US Route 15 corridor. When the study area of a transportation impact study is adjacent to, or includes part the US Route 15 Synchro model, the Township will provide the developer with an electronic copy of the existing model. The developer shall update the Synchro model to accurately reflect the various traffic condition scenarios required as part of the transportation impact study submission. The developer shall also provide the updated/amended model in electronic format to the Township with each revision of the transportation impact study, including any revisions required by PennDOT.

K. Costs and Fees:
The Township assumes no liability for any costs of time delays (either direct or consequential) associated with the preparation and review of traffic impact studies. The applicant shall reimburse the Township for all costs related to review of the traffic impact study. No permits for construction or occupancy of a development shall be issued until the applicant reimburses the Township for all such fees.

L. Submittal and Review of Study:
The applicant for the proposed development or the qualified professional shall submit five (5) paper copies of the traffic impact study to the Township for review. The level-of-service worksheets shall also be submitted to the Township on digital media in the software format used for the level-of-service analysis. The Township, at its discretion, may hire a qualified professional to review the traffic impact study. The Township at its discretion may also submit copies of the report to applicable review agencies including, but not limited to the DOT, the county planning department, adjacent municipalities, the school district and/or metropolitan/rural planning organization. The traffic impact study will be considered a

public report and will be made available for public review.

M. Coordination with the PennDOT.
For developments where the PennDOT has required a traffic impact study, the traffic impact study shall follow the more restrictive requirements of PennDOT or this Ordinance. The Township shall be copied on all correspondence with PennDOT.

4.104 Access Management

A. Purpose, Intent and Consistency with other Ordinances

1. Purpose
The purpose of this Access Management section is to promote safe and efficient traffic flow on Township and State roads in Franklin Township, while providing abutting landowner reasonable street access. By reducing the potential for crashes at access points along the corridor and avoiding future degradation of roadway capacity, this section serves to promote the public health, safety and welfare of the residents of Franklin Township.

2. Application of Regulations
This section shall apply to all applications, including, but not limited to, subdivision and land development approval, access/driveway permits, Highway Occupancy Permit or building permits, for lots with frontage along Township and State roads within Franklin Township.

Except for the criteria found within this section, the Pennsylvania Department of Transportation (PennDOT) criteria as found in Pennsylvania Code, Title 67, Chapter 441 shall govern the design of intersections of State roads with private driveways and other public streets.

3. Compatibility with Other Requirements
Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure permits or approvals for activities regulated by any other code, law, regulation or ordinance.

B. This ordinance shall apply to all roadways within Franklin Township and to all properties which abut these roadways.

C. Requirements for a Driveway Connection

1. Application(s) for a driveway permit shall be submitted to the Township Road Master pursuant to the Franklin Township Driveway and Street Excavation Ordinance.

2. Residential.
Access to any public street or highway for a proposed residential use shall be governed by the Franklin Township Driveway and Street Excavation Ordinance and the following:

a. Within ten (10) feet of a street right-of-way line, a driveway may not exceed twenty (20) feet in width nor be less than ten (10) feet in width.

b. The number of driveways on a street frontage may not exceed one (1) per lot or tract unless circumstances prove that a second access is justified. Additional access points must be approved by the Township Board of Supervisors.

c. Where a driveway enters a bank through a cut, the shoulders of the cut may not exceed fifty percent (50%) in slope within twenty five (25) feet of the point at which the drive intersects the street right-of-way.

d. All driveways shall have a minimum safe sight distance in accordance with the PennDOT Rules and Regulations. Furthermore, all driveways which access Township roads shall be required to obtain a driveway permit from Franklin Township.

e. Width, turning radius, and slope requirements shall conform to chapter 441 of the PennDOT rules and regulations.

f. The minimum angle between the centerline of the driveway and the street shall be not less than sixty-five (65) degrees.

g. A clear sight triangle of seventy five (75) feet along the street and driveway centerline and ten (10) feet into the driveway shall be maintained. Permanent obstructions other than mailboxes and utility poles shall be prohibited.

h. All accesses shall be provided with a drainage culvert or gutter/swale as may be directed by the Roadmaster. The stormwater management plan for a proposed development (where required by the Roadmaster, Township Engineer or Township) shall include calculations for sizing of driveway culverts. Drainage structures within the PennDOT right-of-way (where applicable) shall be subject to the review and approval of the PennDOT.

i. To prevent drainage and erosion problems and to minimize future maintenance, access driveways shall be surfaced with a stabilized material within the public street right-of-way. Where access is to a paved roadway, driveways shall be surfaced with Bituminous or Concrete material within the legal right-of-way.

j. Driveways shall be constructed so that motorists are not required to back on to the roadway.

k. Driveway access shall be provided to the street of lesser classification when there is more than one (1) street classification involved.

l. Driveways shall not be located within three (3) feet of a property line unless it is a joint use driveway.

m. Driveways accessing a major collector or arterial road are subject to additional criteria contained in this Article.

n. All design standards of the PennDOT as may be amended, are hereby incorporated into this Ordinance.

3. Multi-family, Commercial and Industrial.
Driveways to any public street or highway in the case of a multifamily, commercial and industrial development shall at a minimum conform to the standards for residential driveways, with the exception that all multifamily, commercial and industrial drives shall be paved (at full width) meeting the design criteria of the Franklin Township Driveway and Street Excavation Ordinance. Additional standards shall be as follows:

a. All access ways to any public street or highway shall be located at least two hundred (200) feet from the intersection of any two street right-of-way lines, unless more restrictive standards apply in this ordinance, and shall be designed in a manner conducive to safe ingress and egress. Where practicable, exits shall be located on minor, rather than major streets or highways.

b. No design shall be approved which is likely to create a traffic hazard which has the potential to endanger public safety. Safety requirements which may be imposed in such a review shall include traffic control devices, acceleration or deceleration lanes; turning lanes, traffic and lane markings, and signs. The developer shall be responsible for the construction of any such traffic control devices which shall meet PennDOT approval.

c. All design standards of the PennDOT as may be amended, are hereby incorporated into this Ordinance.

d. A clear sight triangle, meeting the requirements of the Street and Highway Standards section of this Ordinance, shall be provided.

4. Standards for design and construction shall be as per the requirements of this ordinance and the Franklin Township Driveway Ordinance.

D. Definitions:

85th Percentile Speed - The speed, in miles per hour, that is exceeded by only 15 percent of the drivers traveling on a section of highway.

95th Percentile Queue Length - The queue exceeded at some point during 5 percent of the signal cycles.

Acceleration Lane - A speed-change lane, including tapered areas, that enables a vehicle entering a roadway to increase its speed to a rate at which it can more safely merge with through traffic.

Access Point - The location of an intersection, whether existing or proposed, of a street or driveway with a Township or State Road. The access point is considered to be the centerline of a

street or driveway at its intersection with the centerline of said Township or State road.

Access Point Spacing -The measurement from one access point to the next access point measured along the centerline of the Township or State Road.

ADT Volume -The total number of motor vehicles traveling on a road or street during an average weekday, other than Friday, Saturday or Sunday.

Auxiliary Lane - The portion of the roadway adjoining the through lane that is used for speed change, turning, storage for turning, deceleration, acceleration, weaving, and other purposes supplementary to through traffic movement.

Average Daily Traffic (ADT) - The total volume of traffic during a number of whole days (more than one day) and less than one year divided by the number of days in that period.

Corner Clearance - The distance along the edge of the traveled way measured from the closest edge of pavement of the intersecting roadway to the closest edge of pavement of the nearest access connection.

Cross Access Drive -A service driveway providing vehicular access between two or more contiguous sites so that the driver need not re-enter the public street system.

Curbline Opening -The overall opening dimension at the curbline measured between the points of tangency of the driveway radii if curbing exists or the maximum width opening at the edge of the roadway if curbing does not exist.

Design Speed - The maximum safe speed that can be maintained over a section of roadway when conditions are so favorable that the design features of the road govern.

Driveway - Every entrance or exit used by vehicular traffic to or from properties abutting a highway. The term includes proposed streets, lanes, alleys, courts, and ways. [67 PA Code Chapter 441].

Driveway Radius -The radius of the curb or pavement at the intersection of the public roadway and the driveway.

Driveway Throat – The distance measured along the centerline of the driveway from the edge of the intersecting roadway to the edge of the first access point.

Functional Area - The area beyond the physical intersection of two controlled access facilities that comprises decision and maneuver distance, and the required vehicle storage lengths.

High Volume Driveway - A driveway used or expected to be used by more than 1,500 vehicles per day. [67 PA Code Chapter 441]

Internal Circulation Road – Roadways constructed within a land-development to accommodate traffic movements to and from a driveway.

Interchange - A grade-separated system of access to and from highways that includes directional ramps for access to and from the crossroads.

Local Road - Every public highway other than a state highway. The term includes existing streets, lanes, alleys, courts, and ways. [67 PA Code Chapter 441] Not specifically referencing a local/minor classification.

Low Volume Driveway - A driveway used or expected to be used by more than 25 but less than 750 vehicles per day. [67 PA Code Chapter 441] This term is not meant as a functional classification.

Medium Volume Driveway - A driveway used or expected to be used by more than 750 but less than 1,500 vehicles per day. [67 PA Code Chapter 441]

Minimum Use Driveway - A residential or other driveway that is used or expected to be used by not more than 25 vehicles per day. [67 PA Code Chapter 441]

Offsite Improvements - Those public capital improvements that are not onsite improvements and that serve the needs of more than one development.

Onsite Improvements - All improvements constructed on the applicant's property, or the improvements constructed on the property abutting the applicant's property necessary for ingress and egress to the applicant's property, and required to be constructed by the applicant pursuant to any municipal ordinance, including, but not limited to, the municipal code, subdivision and land development ordinance, planned residential development regulations, and zoning ordinance.

Out parcel - A lot that is adjacent to the roadway that interrupts the frontage of another lot.

Peak Hour Volume -The number of vehicles passing a single point during one hour within a defined period of a day, usually the morning or evening commuter peak or the Saturday shopping peak hour (i.e., early afternoon peak hour).

PennDOT Highway Occupancy Permit (HOP) -The permit issued by PennDOT to approve any construction, including streets and driveways, within all PennDOT rights-of-way.

Pre-Existing Driveway - Permitted driveways in place at the time of the adoption of this ordinance that do not conform to the standards herein.

Right-of-Way Preservation - The acquisition of an area of land, through dedication or easement, needed to accommodate the future widening of the roadway.

Road Improvement - The construction, enlargement, expansion, or improvement of public highways, roads, or streets.

Service Road – A road that runs parallel to a higher-speed road, and which provides access to all abutting land uses. The service road feeds the higher speed road at appropriate points of access.

Safe Stopping Sight Distance - The distance required by a driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the roadway becomes visible. It includes

the distance traveled during driver perception-reaction time and the vehicle braking distance.

Signal Progression - The timing of a series of traffic signals to provide a progressive movement of traffic at a planned rate of speed through the signalized intersections without stopping.

Storage Length - Lane footage needed for a right or left turn lane to store the maximum number of vehicles likely to accumulate during a peak period of travel.

Taper - The widening of the roadway to allow the redirection or transition of vehicles into or around an auxiliary lane.

E. Non-conforming Driveways

1. Driveways that do not conform to this section and have been constructed before the adoption of these standards shall be considered legal nonconforming driveways. However, nonconforming driveway(s) shall be reconstructed to comply with this Ordinance if there is a change in use or intensity of the land use, such that the use of the access increases peak hour or ADT volume by ten (10) percent or more and by 100 daily trips, based on the latest edition of *Trip Generation* published by the Institute of Transportation Engineers or upon other data approved by the Township. The existing and proposed number of daily trips must be included on the site plan.

2. Franklin Township may require the closure of an existing non-conforming driveway if the parcel has access to another street or can gain access from a shared access driveway or cross-access drive.

3. Any existing farm/field driveway may be continued provided it is to be used for and limited to agricultural purposes. Any modification to this use shall require the driveway conform to the standards of Franklin Township.

F. Relationship to PennDOT Highway Occupancy Permit (HOP)

1. Issuance of a PennDOT Highway Occupancy Permit (HOP) does not guarantee issuance of a building permit nor does it guarantee land development or subdivision plan approval by Franklin Township, nor does it deem the plan in conformance with the Franklin Township Subdivision and Land Development Ordinance. The HOP submission to PennDOT should not occur without review and consent to do so by Franklin Township. Preliminary discussions with PennDOT may occur at the request of Franklin Township, to reconcile site design and access issues. In the case of a pre-existing driveway, a change of use on the property may require a revised HOP if the proposed new use will generate daily trips in excess of the PennDOT trip thresholds.

2. For properties that have frontage along U.S. Route 15 and other streets, Franklin Township may prohibit access to U.S. Route 15, if all movements can be efficiently and safely accommodated on the other street or streets, based on design standards contained in the Franklin Township Subdivision and Land Development Ordinance. Access may be restricted to the Township street despite the ability to receive a Highway Occupancy Permit (HOP) from PennDOT for access onto U.S. Route 15.

G. Number of Driveways

1. Only one access shall be permitted per property.

2. An additional access or accesses shall be permitted if the applicant demonstrates that an additional access or additional accesses are necessary to accommodate traffic to and from the site and it can be achieved in a safer and more efficient manner. Additional access must be approved by the Board of Supervisors.

3. The Township may restrict access to "*right turn only*" ingress and egress to another State maintained road or local road if safe and efficient movements cannot be accommodated.

4. For a property that abuts two or more roadways, the Township may restrict access to only that roadway that can more safely and efficiently accommodate traffic.

5. If the Township anticipates that a property may be subdivided and that the subdivision may result in an unacceptable number or arrangement of driveways, or both, the Township shall require the property owner to enter into an access covenant to restrict future access drives.

6. No access shall be permitted onto US Route 15 for any parcel that currently has frontage on any other state or municipal roadway.

7. Where otherwise not prohibited by this section, any access onto US Route 15 shall be restricted to right-turn access and egress from US Route 15.

H. Corner Clearance.

1. Corner clearance shall meet the following driveway spacing standards that are desirable for arterial and major collector roads:

   a. US Route 15: 600 feet

   b. Arterial: 400 feet

   c. Major Collectors: 200 feet

2. Access shall be provided to the roadway where corner clearance requirements can be achieved.

3. If the minimum driveway spacing standards cannot be achieved due to constraints, the following shall apply in all cases:

   a. There shall be a minimum 10-foot tangent distance between the end of the intersecting roadway radius and the beginning radius of a permitted driveway.

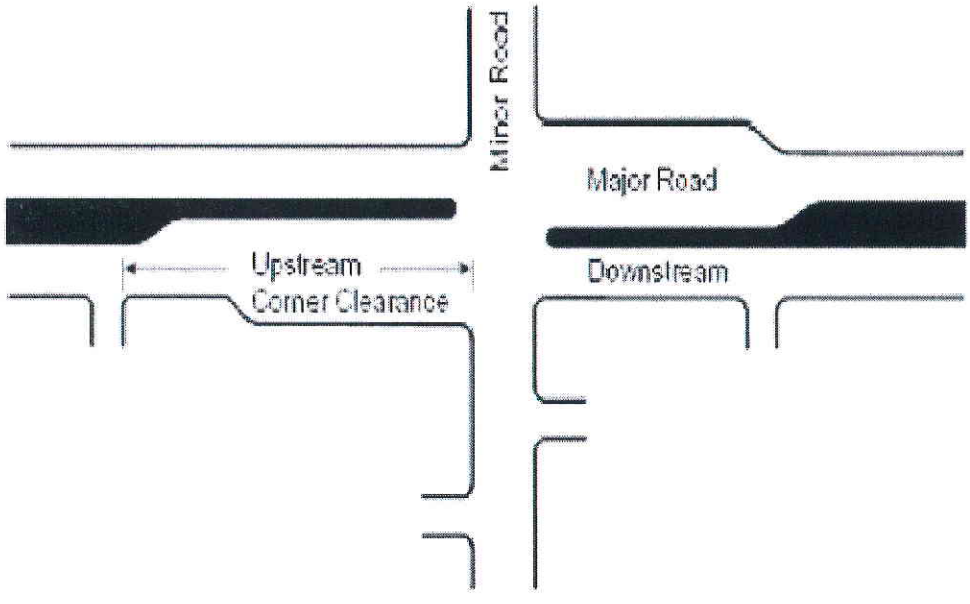
   b. The distance from the nearest edge of cartway of an intersecting roadway to the beginning radius of a permitted driveway shall be a minimum of 30 feet.

4. If no other reasonable access to the property is available, and no reasonable alternative is identified, the driveway shall be located the farthest possible distance from the intersecting roadway. In such cases, directional connections (i.e., right in/right out only, right in only or right out only) may be required.

5. The Township shall require restrictions at the driveway if the municipal engineer determines that the location of the driveway and particular ingress or egress movements will create safety or operational problems.

6. No access shall be located within the storage area or taper of an auxiliary turn lane.

Upstream Corner Clearance



Source: TRB Access Management Manual, 2003.

I. Safe Stopping Sight Distance

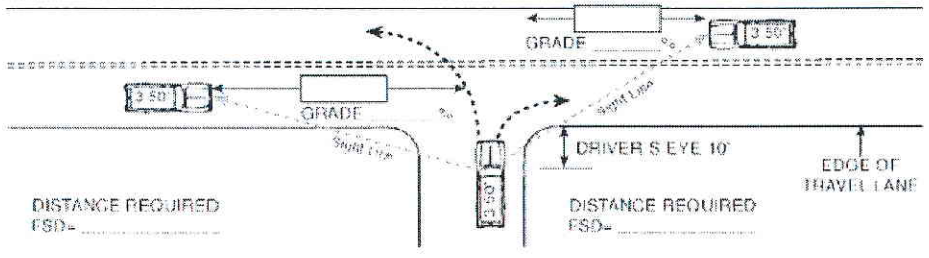
1. Safe stopping sight distance (SSSD) shall be required for all permitted turning movements at all driveways or streets intersecting with Township and State Roads and the required and available SSSD's shall be documented on the site plan.

2. The Pennsylvania Code, Title 67, Chapter 441, "Access to and Occupancy of Highways by Driveways and Streets," as it may be amended from time to time and PennDOT Publications 70, Guidelines for the Design of Local Highways and Streets, as it may be amended from time to time, shall be referenced on the site plan to determine minimum driveway and street intersection safe stopping sight distance requirements. The stricter requirement shall apply.

   A clear sight triangle of seventy five (75) feet along the street and driveway centerline

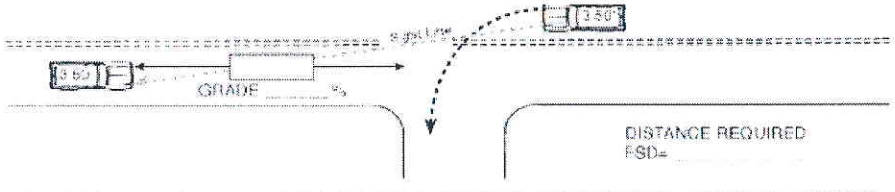
and ten (10) feet into the driveway shall be maintained. Permanent obstructions other than mailboxes, utility poles, and road signage shall be prohibited.

Sight Distances to the Left & Right of the Driveway



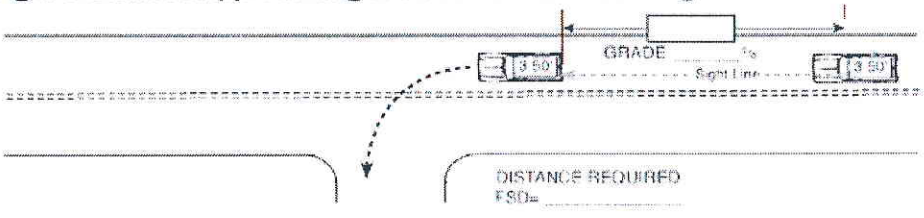
THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.

Sight Distance to an Approaching Vehicle from a Vehicle Turning Left into the Driveway



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

Sight Distances Approaching the Rear of a Left Turning Vehicle



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.

Source: TRB Access Management Manual, 2003.

J. Driveway Channelization

1. For high and medium volume driveways, channelization islands and medians shall be used where required to separate conflicting traffic movements into specified lanes to facilitate orderly movements for vehicles and pedestrians.

2. Where it is found to be necessary to restrict particular turning movements at a driveway, due to the potential disruption to the orderly flow of traffic or a result of sight distance constraints, the Township may require a raised channelization island.

3. Raised channelization islands shall be designed with criteria consistent with the latest AASHTO publication entitled A Policy on Geometric Design of Highways and Streets.

K. Joint and Cross Access.

1. The Township may require a joint driveway in order to achieve the following driveway spacing standards that are desirable for arterial and major collector roads or in order to

maintain efficient traffic flow on US Route 15:

a. US Route 15: 600 feet

b. Arterial: 400 feet

c. Major Collectors: 200 feet

2. Adjacent non-residential properties shall provide a joint or cross access driveway to allow circulation between sites wherever feasible along roadways classified as major collectors or arterials in accordance with the functional classification contained in the adopted Township comprehensive plan. The following shall apply to joint and cross access driveways:

   a. The driveway shall have a design speed of 10 mph and have sufficient width to accommodate two-way traffic including the largest vehicle expected to frequently access the properties.

   b. A circulation plan that includes coordinated or shared parking shall be required.

   c. Features shall be included in the design to make it visually obvious that cross access is provided between the abutting properties.

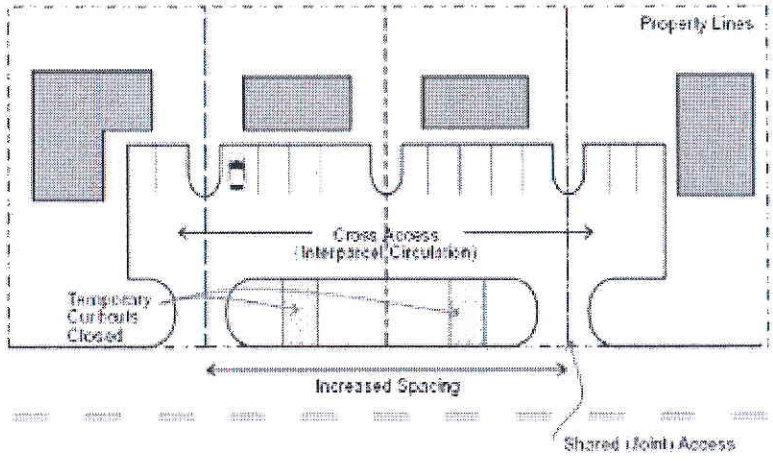
3. The property owners along a joint or cross access driveway shall:

   a. Record a cross access easement as part of the deed allowing cross access to and from other properties served by the driveway.

   b. Record an agreement with the Township so that future access rights along the driveway shall be granted at the discretion of the Township and the design shall be approved by the municipal engineer.

   c. Record a joint agreement with the deed defining the maintenance responsibilities of each of the property abutting the driveway.

Joint Driveways and Cross Access



Source: TRB Access Management Manual, 2003.

L. Access to Outparcels.

1. For industrial and commercial (including office developments) under the same ownership and consolidated for the purposes of development or phased developments comprised of more than one building site, the Township shall require that the development be served by an internal road that is separated from the main roadway.

2. All access to outparcels shall be internalized using the internal roadway.

3. The driveways for outparcels shall be designed to allow safe and efficient ingress and egress movements from the internal road.

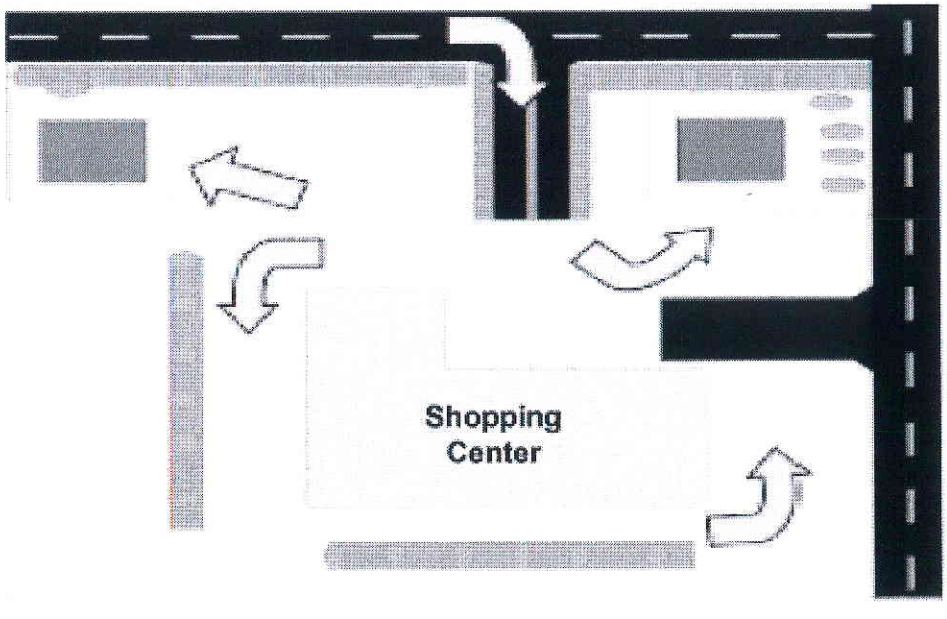
4. The internal circulation roads shall be designed to avoid excessive queuing across parking aisles.

5. The design of the internal road shall be in accordance with all other sections of this ordinance.

6. All necessary easements and agreements as required shall be met.

7. The Township may require an access covenant to restrict an outparcel to internal access only.

Internal Access to Outparcels



Source: TRB Access Management Manual, 2003.

M. Driveway Throat Length:
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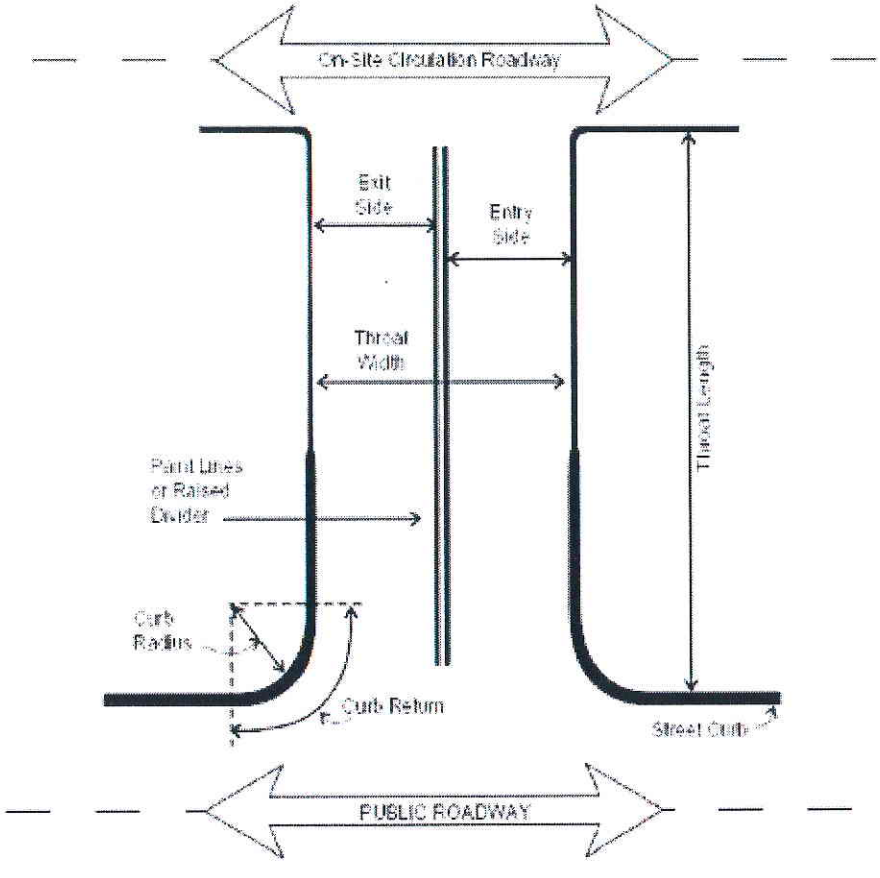
* Or as Specified by the Township Engineer/Penn DOT

Diagram Displaying Driveway Throat Length, Width, and Radius



Source: TRB Access Management Manual, 2003.

N. Driveway Throat Width

1. For driveways without curb:

   a. A minimum use driveway shall have a minimum width of 10 feet and a maximum width of 20 feet.

b. Minimum and maximum dimensions for the width of low and median volume driveways are provided in the following table.

	One-way	Two-way
Min.	10 feet	20 feet
Max.	24 feet	28 feet

c. The design of high volume driveways shall be based on analyses to determine the number of required lanes. Lane widths shall be a minimum of 11-feet and a maximum of 12-feet.

2. For driveways with curb, two feet should be added to the widths described in this Ordinance.

3. The Township may require additional driveway width to provide turning lanes for adequate traffic flow and safety.

4. The Township may require that the driveway design include a median to control turning movements. Where medians are required or permitted, the minimum width of the median shall be four feet to provide adequate clearance for signs.

O. Driveway Radius.

1. Following are the minimum and maximum driveway radii (in feet), as related to the posted speeds on the accessed street. The first table pertains to land uses with infrequent service by buses and combination trucks, the next table pertains to land uses which are regularly serviced by buses and combination trucks.

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* Or as Specified by the Township Engineer/Penn DOT

2. The driveway radius value should be selected from the above tables for all land uses, even those serviced on a regular basis by buses and combination trucks.

3. Not withstanding any of the above, the applicant shall prepare a truck circulation plan to document that the largest truck which will regularly service the site can be accommodated by the site circulation design and the access design.

4. For all driveways, the radii shall provide the greater of the minimum width described previously or the required width needed to accommodate the largest vehicle expected to frequently use the driveway.

5. Except for joint driveways, no portion of a driveway radius may be located on or along the frontage of an adjacent property.

6. Turning templates shall be provided where required to demonstrate the suitability of the

driveway radius.

P. Driveway Profile

1. Driveway grade requirements where curb is not present on the intersecting street:

   a. Shoulder slopes vary from four percent to six percent. When shoulders are present, the existing shoulder slope shall be maintained across the full shoulder width.

   b. The change in grade between the cross slope of the connecting roadway or shoulder and the driveway shall not exceed eight percent.

   c. The driveway grade shall not exceed eight percent within 10 feet of the edge of travel lane for minimum use driveways and within 40 feet for low, medium, and high volume driveways. In no instance shall slope exceed 8% within fifteen (15) feet of the street right of way line.

   d. A 40-foot minimum vertical curve should be used for a high volume driveway.

2. Driveway grade requirements where curbs and sidewalks are present:

   a. The difference between the cross slope of the roadway and the grade of the driveway apron may not exceed eight percent.

   b. The driveway grade shall not exceed eight percent within fifteen (15) feet of the edge of travel lane for minimum use driveways and within 40 feet for low, medium, and high volume driveways.

   c. If a planted area exists between the sidewalk and curb, the following shall apply:

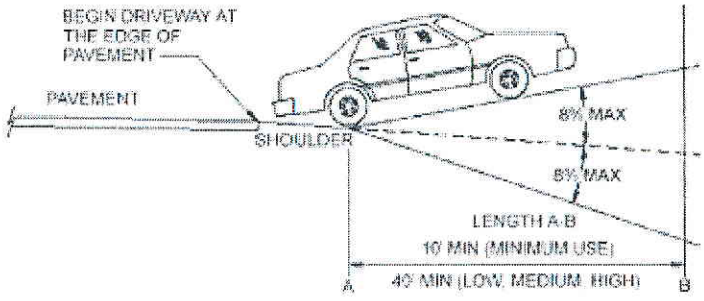
      (1) The grade of the planted area shall not exceed eight percent.

      (2) If the driveway grade would exceed eight percent in the area between the curb and the sidewalk, the outer edge (street side) of the sidewalk may be depressed to enable the driveway grade to stay within eight percent. A maximum sidewalk cross slope of eight percent must be maintained.

      (3) If the sidewalk cross slope exceeds two percent, the entire sidewalk may be depressed. The longitudinal grade of the sidewalk may not exceed six percent.

3. Although site conditions may not allow strict adherence to these guidelines in this ordinance, every effort should be made to design and construct the safest and most efficient access onto the municipal or state roadway.

Driveway Profile



Source: TRB Access Management Manual, 2003.

Q. Auxiliary Lanes separate turning vehicles from through traffic, thus they increase capacity and improve operations at intersections. They reduce the potential for rear-end crashes and interference or disruption of the flow of through traffic.

1. Warrants

   a. Auxiliary turn lanes shall be provided at locations where the warranting criteria described in the Traffic Impact Studies section of the Subdivision and Land Development Ordinance is satisfied.

   b. Auxiliary turn lanes shall also be required when a capacity analysis shows unacceptable LOS, and the operation of the intersection can be improved by the installation of one or more auxiliary turn lanes. Refer to the Traffic Impact Studies section of the Subdivision and Land Development Ordinance for capacity analysis criteria.

   c. An auxiliary left turn lane shall be required if the visibility to the rear of a vehicle stopped to turn left into the proposed access does not meet minimum sight distance requirements and no alternative is available or at all signalized intersections.

   d. An auxiliary right-turn lane shall be provided on US Route 15, Arterial and any Major Collector Road at locations where access is proposed and permitted by this Ordinance. Deceleration distance in accordance with AASHTO publication, *"A Policy on Geometric Design of Highways and Streets"* shall be provided for right-turn lanes onto US Route 15.

   e. Required storage length for warranted auxiliary turn lanes shall be the maximum of the 95th percentile queue length or the PennDOT storage length criteria as described in the Traffic Impact Studies section of the Subdivision and Land Development Ordinance.

   f. Where a right turn is required or proposed on the minor road or driveway (stop controlled) approach to an intersection, the design of the turn lane shall incorporate a channelized island to prevent queued traffic in the right-turn lane from blocking the

sight lines of traffic in adjoining travel lanes.

g. The desirable width for an auxiliary right turn lane is 14 feet with curb and 12 feet without curb. The minimum width of right turn lanes shall be 13 feet with curb and 11 feet without curb. If not curbed, shoulders shall be designed in accordance with PennDOT 3R criteria found in PennDOT Publication 13M: Design Manual Part II.

h. The desirable width for auxiliary left turn lanes is 12 feet. The minimum width shall be 10 feet, unless the percent of trucks will exceed five percent, then 11 feet shall be the minimum width.

i. The taper length for auxiliary turn lanes shall be provided in accordance with AASHTO publication A Policy on Geometric Design of Highways and Streets.

j. For right-turn lanes proposed on US Route 15, deceleration distance in accordance with AASHTO publication, *"A Policy on Geometric Design of Highways and Streets"* shall be provided.

k. The 85th percentile speed shall be used for the retrofit of existing deceleration or right turn lanes. The design speed of the roadway shall be used for the design of auxiliary lanes for new roads.

2. Acceleration Lane

a. An acceleration lane shall be provided for right-turn access onto US Route 15, Arterial and any Major Collector Road at locations where such an access is proposed and permitted by this Ordinance.

b. An acceleration lane may be required on other roadways where operating speeds are in excess of 40 mph and where access points are located a sufficient distance apart to permit the installation of acceleration lanes.

c. The design length and width for acceleration lanes shall follow criteria found in the latest edition of *"A Policy on Geometric Design of Highways and Streets"* and shall conform to PennDOT requirements on state maintained highways.

R. Driveway Spacing.

1. Driveway spacing is measured from the end of one driveway radius to the beginning of the next driveway radius.

2. The following driveway spacing is required for all driveways associated with new subdivisions or land developments. If existing lots or other Township Ordinances do not allow a driveway to meet this requirement, then the property owner (subdivider or developer) will need to show why this requirement can not be met and locate the driveway in an area approved by the Township.

a. US Route 15: 600 feet

b. Arterial: 400 feet

c. Major Collector: 200 feet

3. Driveways shall be aligned with other driveways and roadways on the opposite side of the intersecting roadway on arterials and major collector roads in order to meet spacing requirements.

4. If these driveway spacing standards cannot be met, a system of joint or cross access driveways, frontage roads, or service roads may be required.

S. Signalized Intersection Spacing.

1. Proposed traffic signals shall be located a minimum of 1,000 feet from adjacent signalized intersections.

2. A coordinated traffic signal system is required where the spacing between adjacent traffic signals is 2,000 feet or less.

3. Warrant for the signalization of an intersection shall be justified by PennDOT Publication 212, Official Traffic-Control Devices, and the Manual of Uniform Traffic Control Devices (MUTCD), with Franklin Township concurrence, through a formal municipal resolution to maintain and operate the traffic signal in accordance with the Permit issued by PennDOT.

4. If a driveway or local road requires signalization and will be located within an existing coordinated traffic signal system, the traffic signal must be incorporated in the system.

T. Driveway Clearance from Interchange Ramps

1. A driveway shall not be permitted on or within an interchange ramp.

2. A driveway shall not be permitted within 100 feet in areas classified as urban by PennDOT or 300 feet in areas classified as rural by PennDOT from either the end of a ramp radius or the intersecting edge of the pavement of the ramp speed change lane to the beginning of the access radius.

U. Frontage/Service Roads

1. Franklin Township encourages the construction of frontage/service roads for vehicular access to parcels adjoining US Route 15. The Township may require this type of access configuration to promote preserve the safety and capacity of US Route 15.

2. The Township may require the construction of a frontage or service road to maintain the driveway and traffic signal spacing requirements and corner clearance requirements contained in this ordinance.

3. New developments that abut an existing service or frontage road must take access to the service or frontage road. Access to the arterial or collector road will be permitted only if

driveway and intersection spacing requirements are met and a traffic impact study, shows that it is necessary to maintain levels of service, and safety is not compromised. The traffic study shall be conducted in accord with the Townships applicable guidelines and requirements presented in the Traffic Impact Studies Section of the Subdivision and Land Development Ordinance, as amended.

4. Frontage roads and service roads shall be designed in accordance with the most recent editions of PennDOT Publication 13M, Design Manual Part II and A Policy on Geometric Design of Highways and Streets, AASHTO.

5. The Township may require developers to extend a service road through the subject property when doing so will result in fewer access points directly accessing the higher order roadway.

V. Pedestrian Connections

1. Land uses shall provide pedestrian connections from their front, side or rear yards to adjoining land uses wherever possible. The intent of this section is to shorten pedestrian trips between abutting major pedestrian generators, such as shopping centers and multi-family residential developments. These direct pedestrian connections shall be provided in addition to the installation of sidewalks along the front of the property.

W. Temporary Driveway

1. A land owner shall request a permit from the Township for establishing a temporary driveway onto any public roadway in order to engage in farming activities, sales of produce, or any other permitted activity. The land owner shall erect a pull-away sign or other temporary sign to mark the location of the driveway.

4.105 Street Construction and Appurtenances

All streets shall be graded at full right-of-way width and paved to the grades and dimensions drawn on the plans, profiles, and cross-sections approved by the Township. Before establishing finished subgrade and paving the street surface, the Developer must install all required underground utilities. Specifications for the construction of streets shall be in accordance with the following:

A. Street Construction
All construction materials and methods for improvements as required under this Section shall be in accordance with the Standards and Specifications as adopted by Franklin Township, PennDOT Specifications Publication 408, as amended, and roadway construction (RC) drawings.

B. Street Lights
The need for street and intersection lighting shall be reviewed as part of a proposed subdivision and land development plan which involve streets or parking lots.

For subdivisions or land development involving ten (10) or more lots or dwelling units with an average lot size or area per dwelling unit of fifteen thousand (15,000) square feet or less, street lights shall be installed such that the intersection will be illuminated to the right-of-way line and extend to the end of the turning radia of each intersection road.

In lieu of or addition to street lights, the Township may require the developer to install individual property lights in the ratio of one (1) to each lot. In evaluation of these criteria, the total number of lots projected at build-out must be considered.

Intersection lighting shall be such that the entire extent of the intersection to the end of the radii or stop bar.

The Township may at its discretion require a design plan be provided by an experienced lighting designer. Complete detail drawings including pole mounting, dimension and type, fixture type, and wattage shall be provided for review and approval of the Township. The Township may also require a photometric print of the proposed lighting.

Unless otherwise agreed upon or approved, the lighting system shall be made part of the development association or property owners responsible for ownership, operation and maintenance. All systems shall be designed and constructed so that the local electric utility authority may enter into agreement for maintenance of the structure(s).

Each light shall be controlled to operate continuously from dusk to dawn. They shall be shielded or erected in accordance with the Township Zoning Ordinance.

C. Street and Other Signage
Where deemed necessary by the Township, street and other signage shall be required for developments. Signs shall be placed at intersections and other locations as required by the Township. Signage placement, specifications for placement, installation and maintenance shall be subject to Township approval and shall meet the requirements of the Federal Highway Administration Manual of Uniform Traffic Control Devices (MUTCD) and PennDot's Publication 212, Official Traffic Control Devices, as directed by the Township Engineer or Roadmaster.

A tabular and graphic representation of signage shall be on the plans including reference to required specifications. All traffic studies which are required for the justification of signage shall be prepared and submitted with the subdivision or development plan.

Speed limit signs should be placed at intervals determined to be enforceable by the jurisdictional police department.

D. Street Trees
The Township requires that street trees be considered for all developments. Following consideration, the Township may require street tree planting in which case planting shall conform to the following specifications:

1. Street trees shall be planted by the developer at intervals of between fifty (50) feet and

seventy (70) feet along both sides of all streets of the subdivision.

2. The trees shall be located between the right-of-way and building setback line a minimum of five (5) feet from the right-of-way. No trees shall be planted between the sidewalk and curb.

3. Each tree shall be at least eight (8) feet in height and a diameter of at least one and one-half (1 and 1/2) inches.

4. The type of tree shall be noted on the plans and shall be subject to the review and approval of the Township.

5. Individual lot owners shall be responsible for future maintenance of trees. The developer is responsible until expiration of financial security.

6. Trees shall not be planted until the finished grading has been completed.

4.106 Curbs and Gutters

A. Curbs and gutters shall be installed on both sides of any proposed street to be included in a proposed subdivision or development. Curbs may also be required on existing streets where curbs are necessary to control the flow of surface water and regulate traffic.

B. Curbs and gutters shall be provided and constructed in accordance with the Standards and Specifications as adopted by Franklin Township.

C. Curbs may also be required within multi-family and non-residential developments.

D. Where a driveway enters a street and as directed by the Township an approved depressed curb section shall be installed. When curbing is to be removed to construct a driveway, the length of the curbing to be removed shall be carried to the nearest expansion joint. If such a joint is more than five (5) feet from the end of the curb removal, the section shall be neatly sawcut.

E. Curb cut ramps shall be provided at street intersections and at locations as required by the Americans with Disabilities Act of 1990, as most recently amended. Whenever possible, the ramp design shall not direct pedestrians to the center of intersections. The plan shall include drawings and reference to applicable regulations and criteria. A certification of installation by a professional engineer or land surveyor is required where directed by the Township.

F. In the event that curbing is not required:

1. Drainage swales with dimensions approved by the Township Engineer.

2. Shoulders to separate the cartway and the drainage swale with additional right-of-way.

3. A maintenance agreement to be provided and made part of the approved plan whereby

the developer agrees that the individual property owners will be responsible for perpetual maintenance of drainage swales.

4.107 Sidewalks

A. Sidewalks shall be required meeting Township and PennDOT specifications for proposed subdivisions or developments. In any proposed subdivision or land development with an average lot size or area per dwelling unit of fifteen thousand (15,000) square feet or less, or where any subdivision is immediately adjacent to or within one thousand (1000) feet of any existing or recorded subdivision having sidewalks, sidewalks shall be installed on each side of the street in accordance with Township requirements.

   In other proposed subdivisions or developments, the Township may allow alternate pedestrian paths, usually on a trail. Design and installation of alternate pedestrian walkways shall be as recommended by the Township Engineer and Planning Commission.

B. Sidewalks shall be provided and constructed in accordance with the Standards and Specifications as adopted by Franklin Township.

C. Sidewalks shall be placed within the right-of-way of the street and shall extend in width from the right-of-way line toward the curb line.

D. Sidewalks must be at least four (4) feet wide. In the vicinity of shopping centers, schools, recreation areas and other such facilities, sidewalks must be at least five (5) feet wide and be located within the street right-of-way.

E. The Township may require the installation of sidewalks, at its sole discretion, where in the opinion of the Township pedestrian safety and/or mobility would be better served by the installation of sidewalks. In certain circumstances it may be desirable that an alternative method of pedestrian circulation be substituted for standard sidewalk construction. These alternative methods can include the installation of walking paths, greenways, bike paths, trails, or similar modes of non-vehicular circulation. In these instances the Developer may submit a site plan depicting the location, layout, dimensions, and any other criteria deemed necessary by the Township to evaluate the request for an alternative method. The Township shall review the submitted material and determine if the proposed alternative is acceptable.

F. If proposed sidewalk is to replace existing sidewalk, the existing sidewalk shall be removed completely. All debris resulting from this process shall become the property of the contractor and shall be disposed of properly.

G. The plans shall clearly note that perpetual maintenance and repair/replacement shall be the responsibility of the property owner."

Section 10. Article V "Improvements and Construction Requirements" is hereby amended by the deletion of the following sections:

501 "Streets"

502 "Curbs and Gutters"

503 "Sidewalks"

Section 11. Article V "Improvements and Construction Requirements", Section 506 "Storm Drainage Systems and Stormwater Management" of the Franklin Township Subdivision and Land Development Ordinance are hereby amended by substitution to read as follows:

Submission of plans, design and construction of storm drainage and stormwater management facilities shall be in accordance with the Township's Stormwater Management Ordinance as may be adopted pursuant to the York County IWRP (Act 167 Plan), Franklin Township Construction Specifications, requirements of this ordinance where applicable, PennDOT Publication 408 and Roadway Construction (RC) standards and shall be subject to review, approval, and inspection of Franklin Township and the Township Engineer.

Section 12. Severability.

In the event that any provision, section, sentence, clause or part of this Ordinance shall be held to be invalid, such invalidity shall not affect or impair any remaining provision, section, sentence, clause or part of this Ordinance or other ordinances affected by this Ordinance, it being the intent of Franklin Township that such remainder shall be and shall remain in full force and effect.

Section 13. Repealer.

All other ordinances, parts of ordinances or parts of resolutions inconsistent herewith shall be and the same expressly are repealed.

Section 14. Effective Date.

This Ordinance shall be effective at 12:01 A.M. on the 6th day following the adoption hereof by the Board of Supervisors of the Township of Franklin.

ENACTED AND ORDAINED this 13th day of June, 2012.

ATTEST:

FRANKLIN TOWNSHIP
BOARD OF SUPERVISORS

_____
Nancy Zentmeyer, Secretary

By: _____
Donald Lerew, Chairman

By: _____
John Shambaugh, Vice-Chairman

By: _____
Naomi Decker, Supervisor

By:_____
Edward Campbell, Supervisor

By:_____
John Holder, Supervisor

EXHIBIT F

Franklin Township Road Classification Chart

Arterial Streets
Route 15
Baltimore Pike (Route 194)

Major Collector Streets
Franklin Church Road
South Mountain Road

Collector Streets
Barrens Church Road
Bethel Church Road
Big Dam Road
Brittany Lane
Cabin Hollow Road
Capital Hill Road
Central View Road
Century Lane
Clear Springs Road
Clear View Road
Coffeetown Road
County Line Road
Franklintown Road
Gameland Road
Glenwood Road
Greenhouse Road
Hickory Road
Hidden Creek Road (minor/collector street)
Lake Lea Drive
Locust Grove Road
Lost Hollow Road
Range End Road
Ridge Drive
Rocky Ridge Road
Scotch Pine Road
Spring Drive
Stone Head Road
Stoney Run Road
Twin Hills Road
Union Church Road
Water Street
Western Road
Whiskey Spring Road
Willow Glen Road (minor/collector street)

Minor/Local Streets
Bypass Road
Chain Saw Road
Chestnut Hill Road
Circle Drive
Franklin Hills Road
Furman Road
Ken-Lin Drive
Little John Drive
Mary Drive
May Drive
Miller Street
Robin Hood Road
St. George Drive
Stephanie Drive
Tuckahoe Road