

SOUTH LEBANON TOWNSHIP

ORDINANCE NUMBER 340

AN ORDINANCE AMENDING ORDINANCE NUMBER 164 (SOUTH LEBANON TOWNSHIP SUBDIVISION LAND USE ORDINANCE) BY AMENDING CHAPTER FIVE (REQUIRED IMPROVEMENTS AND DESIGN STANDARDS), SECTION 5.09 (STREETS), BY ADDING A NEW SUBSECTION H PROVIDING FOR STANDARDS FOR AND CLASSIFYING OF PRINCIPAL ARTERIALS, MINOR ARTERIALS, AND MAJOR COLLECTOR ROADS; PROVIDING FOR DEFINITIONS; NUMBER OF DRIVEWAYS; ACCESS TO ROADWAYS; DRIVEWAY RADIUS, DRIVEWAY THROAT WIDTH, PROFILE, CHANNELIZING ISLANDS, AND LOCATION; SAFE SIGHT DISTANCE, DRIVEWAY SPACING, CORNER CLEARANCE, JOINT AND CROSS ACCESS, EXTENSION OF SERVICE ROADS, INTERNAL ACCESS TO OUTPARCELS, PEDESTRIAN CONNECTIONS, TEMPORARY DRIVEWAY, RIGHT TURN/DECELERATION LANE, AND LEFT TURN LANE, DESIGN AND CONSTRUCTION OF DRIVEWAYS ONTO ARTERIAL AND MAJOR COLLECTOR ROADS, AND REQUIREMENTS FOR SERVICE ROADS, DECELERATION LANES, AND INTERSECTION LEFT TURN LANES.

BE IT ORDAINED AND ENACTED by the Board of Supervisors of South Lebanon Township, and it is hereby ordained and enacted by the authority of the same as follows:

SECTION ONE. Chapter Five (Required Improvements and Design Standards) Section 5.09 (Streets) is hereby amended to add a new Subsection (H) establishing standards for the design and construction of driveways onto arterial and major collector roads, and requirements for service roads, deceleration lanes, intersection left turn lanes, right turn lanes to read as follows:

H. Standards for the Design and Construction of Driveways onto Arterial and Major Collector Roads, and Requirements for Service Roads, Deceleration Lanes, Intersection Left Turn Lanes, and Right Turn/Deceleration Lane.

These regulations, rules and standards for the proper design and construction of driveways onto arterial and major collector roads as well as requirements for service roads, deceleration lanes, intersection left turn lanes, in South Lebanon Township, Lebanon County, Pennsylvania shall be known, sited and referred to as the

ACCESS MANAGEMENT ORDINANCE for South Lebanon Township.

This access management ordinance is intended to promote safe and efficient traffic flow on higher order roadways within the Township of South Lebanon, while protecting the rights of abutting landowners to reasonable street access. By reducing the potential for crashes at access points along the corridor and avoiding future degradation of roadway capacity, these regulations serve to promote the public health, safety and welfare of the people of the Township of South Lebanon.

It is not intended by these access management regulations to repeal, abrogate, annul or interfere with any existing ordinances or enactments, or with any rule, regulation or permit adopted or issued thereunder, except insofar as the same may be inconsistent or in conflict with any of the provisions of this ordinance, provided that where this ordinance imposes greater restrictions that are required by the provisions of other such ordinance, enactment, rule, regulation or permit, then the provisions of this ordinance shall control. Furthermore, if a discrepancy exists between any regulations contained within this ordinance, the regulation which imposes the greater restriction shall apply.

These regulations shall pertain to all applications for subdivision and land development approval, or building permit, for lots with frontage along roadways classified as arterials or major collectors within South Lebanon Township. For the purposes of this ordinance, the following roadways are classified as follow:

Principal Arterials

US Route 422, including East Walnut Street from PA Route 897 to East Cumberland Street
US Route 322

Minor Arterials

PA Route 419
PA Route 897
State Drive (SR 2003)

Major Collectors

King Street (SR 2008)
East Evergreen Road and Rocherty Road (SR 2002)
South Lincoln Avenue from the Lebanon City line to Evergreen Road
Prescott Road (SR 2005)
Birch Road from East Walnut Street to South 14th Avenue
Fonderwhite Road from PA Route 897 to East Evergreen Road

Klein Avenue from PA Route 897 to State Drive
Wilhelm Avenue from Lincoln Avenue to Cornwall Road
Poplar Street from State Drive to Broad Street
South 14th Avenue from King Street to PA Route 897

The Township may grant a modification of the requirements of this ordinance if the Township concludes that the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modifications will not be contrary to the public interest and that the purpose and intent of this ordinance is observed.

Except for those criteria found within this ordinance, Pennsylvania Department of Transportation (PennDOT) criteria as found in Pennsylvania Code 441 shall govern the design of intersections of arterial and major collector roadways with private driveways and with other public roadways.

Definitions:

Access point - the location of the intersection of a highway, street or driveway with another highway or street.

ADT Volume - Average Daily Traffic volume, or the number of vehicles passing a single point on a roadway in a 24-hour period adjusted by day of the week and monthly factors.

Band width - the time elapsed between the passing of the first and last possible vehicles moving at the design speed through a coordinated traffic signal system. Band width is expressed as a percentage of the signal cycle in which vehicles on the major street receive a green indication.

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

Curblin opening -- the overall opening dimension at the curblin measured between the points of tangency of the driveway radius curbing exists or the maximum width of opening at the curblin/edge of the roadway if curbing does not exist.

Driveway - every entrance or exit used by vehicular traffic to or from properties abutting a public street or road. This term does not include proposed streets.

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

Driveway throat -- the section of a driveway between the highway right of way and the first internal intersecting driveway within the site.

High volume driveway - a driveway used or expected to be used by more than 1,500 vehicles per day.

Joint access driveway - a driveway connecting two or more contiguous sites to the public street system.

Low volume driveway - a driveway used or expected to be used by more than 25 but less than 750 vehicles per day.

Medium volume driveway - a driveway used or expected to be used by more than 750 but less than 1,500 vehicles per day.

Minimum use driveway - a residential, or other driveway which is used or expected to be used by not more than 25 vehicles per day.

Peak hour volume - the numbers of vehicles passing a single point during one hour during a defined peak period of a day, usually the morning or evening commuter peak or the Saturday shopping peak.

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

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.

Non-Conforming Driveways

Driveways that do not conform to the regulations in this ordinance, and were constructed before the adoption of this ordinance, 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 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.

Relationship to PennDOT Highway Occupancy Permit

Issuance of a PennDOT Highway Occupancy Permit (HOP) does not guarantee site plan approval by the Township nor does it deem the plan in conformance with this ordinance. The HOP submittal to PennDOT should not occur before approval to do so by the Township. However, upon request of the applicant or request of the Township, PennDOT may be brought into the Township review process to reconcile site design and access issues.

Number of Driveways

1. One driveway shall be permitted per property. Additional driveways shall be permitted if the applicant demonstrates that:

- a) The design is in the best interest of efficient traffic operations on the site, including but not limited to reducing delays at a single access point that would otherwise operate at worse than a Level of Service 'C' in rural areas and Level of Service 'D' in urban areas, and can improve safety;
- b) The frontage of the property is sufficient to permit multiple driveways in accordance with the below spacing requirements.
- c) All driveways on the property will be interconnected with an internal circulation network.

Access to Roadways

For properties that abut two or more roadways, the Township may restrict access to only one roadway, if all movements can be efficiently and safely accommodated on that roadway and if doing so serves the goal of managing the number of access points and thus better maintains mobility on the restricted roadway. For properties fronting a state roadway and local roadway, access can be restricted to the local roadway notwithstanding the ability to receive a Highway Occupancy Permit (HOP) from PennDOT for access to the state roadway.

Driveway radius

1. Following are the minimum and maximum driveway radii (in feet), as related to the posted speeds on the accessed street. Table 1 pertains to land uses with infrequent service by buses and combination trucks. Table 2 pertains to land uses which are regularly serviced by buses and combination trucks.

Table 1

| | Posted speed limit of street being accessed | | | |
|---------------|---|------|--------------------|------|
| | Less than 45 mph | | 45 mph and greater | |
| | Min. | Max. | Min. | Max. |
| Minimum Use | 5 | 15 | 10 | 25 |
| Low Volume | 10 | 15 | 15 | 25 |
| Medium Volume | 15 | 30 | 15 | 50 |
| High Volume | 30 | 50 | 40 | 50 |

Table 2

| | Posted speed limit of street being accessed | | | |
|---------------|---|------|--------------------|------|
| | Less than 45 mph | | 45 mph and greater | |
| | Min. | Max. | Minn. | Max. |
| Minimum Use | 35 | 50 | 40 | 55 |
| Low Volume | 35 | 50 | 45 | 55 |
| Medium Volume | 45 | 55 | 50 | 55 |
| High Volume | 45 | 55 | 50 | 55 |

2. In areas with regular pedestrian activity, landowners should use the minimum driveway radius provided.

3. Notwithstanding any of the above, the applicant shall prepare a truck circulation plan to document that the largest truck that will regularly service the site can be accommodated by the site circulation design and the access design.

Driveway throat width

1. Minimum and maximum dimensions for the width of driveways in the throat are provided below. Driveways shall be designed such that the opening at the curbline is no larger than necessary. The maximum desirable curbline opening is 50 feet.

2. The dimensions in the table assume one lane in each direction; engineering judgment should be used to determine appropriate dimensions for multi-lane driveways.

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

Driveway throat length

Following is the minimum length of driveways from the public street to an internal driveway or intersection:

| Driveway | Length |
|---------------|----------|
| Minimum use | 25 feet |
| Low volume | 50 feet |
| Medium volume | 120 feet |
| High volume | 150 feet |

An illustration of driveway radius, width and length is provided in the Appendix, Figure 1.

Driveway profile

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

1. The change in grade between the cross-slope of the connecting roadway or shoulder and the driveway shall not exceed 8%.
2. The driveway grade shall not exceed 8% within 10 ft. of the travel lane for minimum use driveways and within 40 ft. for low, medium and high volume driveways.
3. A 40-foot minimum vertical curve shall be used for a high volume driveway.

Driveway grade requirements where curbs and sidewalks are present:

1. The difference between the cross slope of the roadway and the grade of the driveway apron may not exceed 8%.
2. The driveway grade shall not exceed 8% within 10 feet of the travel lane for minimum use driveways and within 40 feet for low, medium and

- high volume driveways.
3. If the driveway grade would exceed 8% in the area between the curb and sidewalk, the street side of the sidewalk may be depressed to enable the driveway grade to stay within 8%.
 4. The sidewalk cross slope shall be no greater than 114 inch per foot. If the sidewalk cross slope exceeds 114 inch per foot, the entire sidewalk may be depressed. The longitudinal grade of the sidewalk may not exceed 2 inches per foot.

An illustration of driveway profile is provided in the Appendix, Figure 2.

Driveway Channelizing Islands

1. Where it is found necessary to restrict particular turning movements at a driveway due to the potential disruption to the orderly flow of traffic or as a result of sight distance constraints, the Township may require a raised channelization island.
2. Raised channelization islands shall be designed with criteria consistent with the latest edition of the AASHTO (American Association of State Highway Transportation Officials) publication, *A Policy on Geometric Design of Highways and Streets*.

Driveway Location

Driveways shall be located directly across from a public roadway or private driveway on the opposite side of an undivided roadway where feasible. If it is not possible to align driveways on opposite sides, the centerlines of access points should be offset by at least 150 feet. In no case shall left turns into the driveway be made across a left turn lane serving another driveway or street on the opposite side of the roadway.

Safe Sight Distance

1. Safe sight distance shall be available for all permitted turning movements at all driveways onto Township roads, and shall be documented on the site plans.
2. Pennsylvania Code Chapter 441, "Access to and Occupancy of Highways by Driveways and Local Roads," and PennDOT Pub. 70, "Guidelines for the Design of Local Roads and Streets," shall be referenced to determine minimum driveway and roadway intersection safe sight distance requirements.
3. All driveways and intersecting roadways shall be designed and located so that the sight distance is optimized to the degree possible without jeopardizing other requirements such as intersection spacing.
4. No waiver shall be permitted for this requirement.

An illustration of sight distance is provided in the Appendix, Figure

3.

Driveway Spacing

1. Driveway spacing is measured from the center of one driveway to the center of the next driveway, along the same side of the roadway.
2. The following driveway spacing standards are to be followed for arterial roadways and major collector roads:

| Posted Speed (mph) | Minimum Spacing (feet) |
|-----------------------|---------------------------|
| 30 | 200 |
| 35 | 250 |
| 40 | 300 |
| 45 | 360 |
| 50 | 425 |
| 55 | 490 |

3. If these driveway spacing standards cannot be met, a system of joint or cross access driveways, frontage roads or service roads may be required.
4. When possible, all driveways shall be located outside the limits of deceleration and acceleration lanes serving the adjacent driveway or intersection. The Township or PennDOT may require acceleration and deceleration lanes of adjacent driveways to be connected to form an auxiliary lane.
5. Pre-existing lots in residential zoning districts, which do not have sufficient lot frontage to meet the above driveway spacing standards, are permitted to install one driveway to serve single-family homes approved for construction.

Corner Clearance

1. Driveways on arterial and collector roadways shall meet the following spacing standards from intersecting roadways:

| Posted Speed (mph) | Minimum Spacing (feet) |
|-----------------------|---------------------------|
| 30 | 200 |
| 35 | 250 |
| 40 | 300 |
| 45 | 360 |
| 50 | 425 |
| 55 | 490 |

2. If minimum corner clearance standards cannot be achieved due to

constraints, the following shall apply in all cases:

- a. The driveway shall be sited as far from the corner as possible.
- b. The Township may require turn restrictions at the driveway if it is determined that the location of the driveway and particular ingress or egress movements will create safety or operational problems.
- c. The Township may require installation of joint or cross access driveways, or frontage or service roads.

Joint and Cross Access

1. The Township may require a joint or cross access driveway in order to achieve the above driveway spacing standards and the corner clearance standards, or on any property when possible in order to maintain efficient traffic flow on the abutting public roadway.
 - a. The Township shall waive this requirement if installing a joint or cross access driveway is not possible. In such cases, the property owner shall sign an agreement to close the permitted driveway and to seek to establish a joint or cross access driveway, if possible, when an adjoining property is developed or redeveloped.
2. Documentation that a joint or cross access driveway is not possible may include, but is not limited to:
 - a. Documentation that a good faith offer to develop a joint or cross access driveway was presented to adjacent property owners, but was declined;
 - b. Topographical conditions or other natural features, or insufficient front yard, that make it impracticable to develop joint or cross access.
3. If a joint or cross access is developed, the property owners shall:
 - a. Record an easement with the deed allowing cross access to and from other properties served by the driveway.
 - b. Record a joint agreement with the deed defining maintenance responsibilities of the property owners along the driveway.
 - c. Record an agreement with the municipality so that future access rights along the driveway are granted at the discretion of the municipality.

Extension of Service Road

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

Internal Access to Outparcels

For commercial and office developments comprised of more than one building site and under the same ownership at the time of application and consolidated for the purposes of development, the Township shall require that the development, including all outparcels, be served by an internal drive that is separated from the main roadway.

Outparcel access shall demonstrate safe, efficient ingress and egress and avoid queuing across other driveways and parking aisles.

Pedestrian Connections

Land uses generating more than 750 trips per day shall provide pedestrian connections from their side or rear yards to adjoining land uses when 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. This requirement may be waived for connections between major pedestrian generators and properties with single-family and two-family residences. These direct pedestrian connections shall be provided in addition to the installation of sidewalks along the front of the property.

Temporary Driveway

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.

Right Turn / Deceleration Lane

1. Development projects shall require a right turn deceleration lane on the major road at an unsignalized intersection under all of the following conditions:
 - a. When the posted speed on the road is greater than 40 mph;
 - b. The road has average daily traffic volumes of 5,000 or more; and
 - c. There are 40 or more right turns in the peak hour.
2. Following are the minimum deceleration lengths on roadways with a grade of 2% or less. These lengths include both the taper and the full-width deceleration lane:

| Speed (mph) | Deceleration Length (feet) |
|-------------|----------------------------|
| 35 | 220 |
| 40 | 275 |
| 45 | 360 |
| 50 | 425 |
| 55 | 510 |

- a. For roads with grades greater than 2%, the deceleration lengths shall be multiplied by the following factors:

| Slope | Upgrade | Downgrade |
|----------|---------|-----------|
| 3% to 4% | .9 | 1.2 |
| 5% to 6% | .8 | 1.35 |

3. Deceleration lanes are not required on roadways with a posted speed of 40 mph or less; however, where deceleration lanes are installed on such roadways, they should be at least the length indicated in the table.
4. Where the width of the roadway right-of-way is insufficient to permit construction of the right turn/ deceleration lane, the property owner shall provide any necessary right-of-way. Where the lot frontage is insufficient to permit installation of a deceleration lane of the recommended length, the property owner may be requested to set back the front curb for the length of the property if development on the adjacent property is eventually anticipated.

An illustration of a deceleration lane is provided in the Appendix, Figure 4.

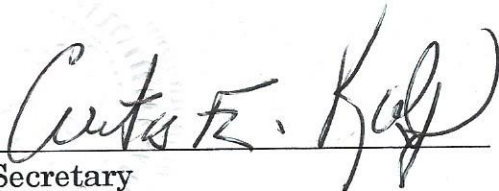
Left Turn Lane

Signalized intersections shall require the installation of a left-turn lane when a capacity analysis indicates that the operation of an intersection, approach, or movement will operate at Levels of Service 'E' or 'F' and the operation of the intersection, approach or movement can be improved with the installation of one or more left turn lanes.


SECTION TWO. This Ordinance shall become effective in five (5) days.

Adopted this 28th day of January, 2014.


ATTEST:


Secretary

BOARD OF SUPERVISORS OF
SOUTH LEBANON TOWNSHIP

BY: 
Chairman

BY: 
Vice-Chairman

BY: 
Member

APPENDIX

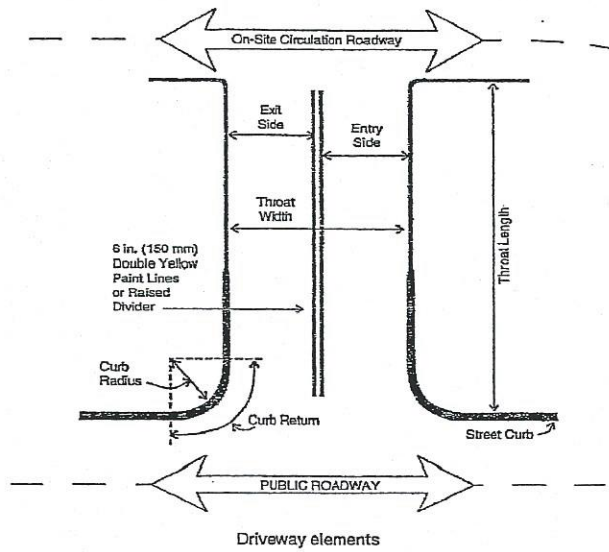


Figure 1.

Driveway Profile

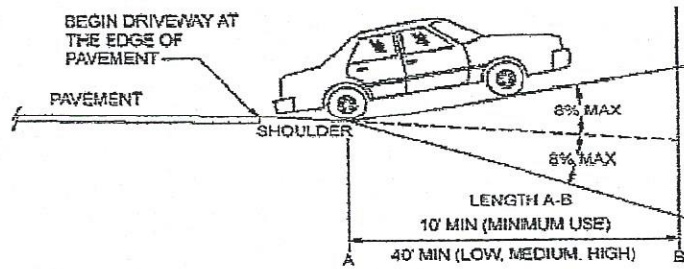


Figure 2.

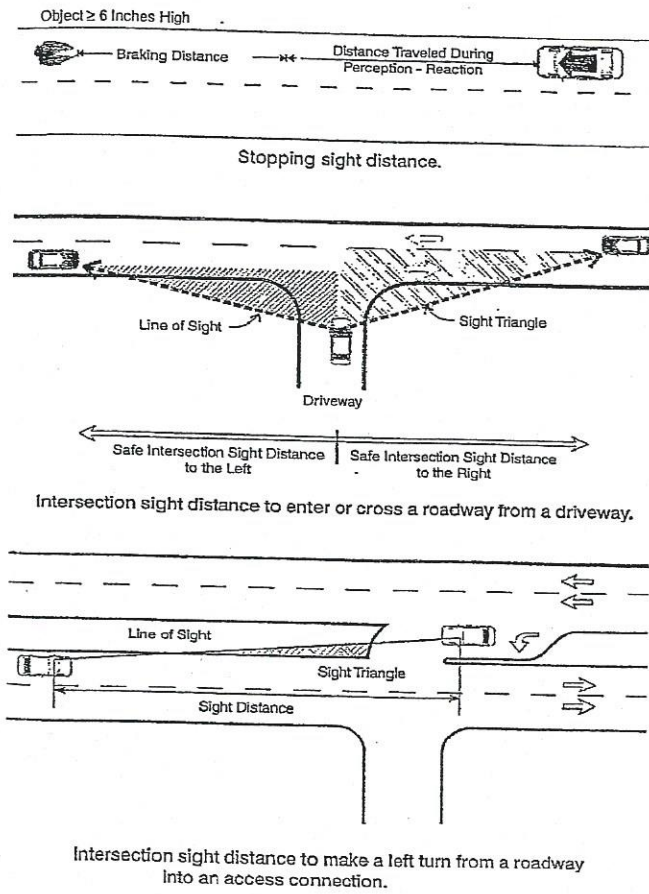


Figure 3.

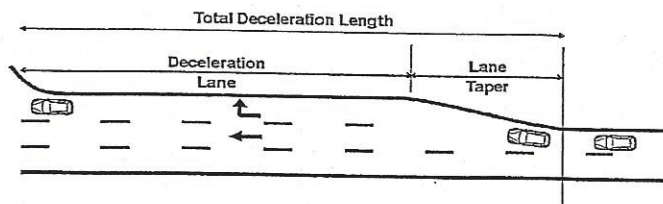


Figure 4.

