

ARTICLE XI

OFF-STREET PARKING AND ACCESS CONTROL REGULATIONS

In all zones, off-street parking facilities for the storage or parking of motor vehicles for use of occupants, employees, and patrons of the building hereafter erected, altered, or extended, and all uses of the land after the effective date of this ordinance, shall be provided and maintained as herein prescribed. However, where a building permit has been issued prior to the date of adoption of this ordinance, and provided that construction has not begun within ninety (90) consecutive calendar days of such effective date, off-street parking facilities in the amounts required by this ordinance shall prevail.

SECTION 11.0 GENERAL REQUIREMENTS

- A. COMPUTATION OF PARKING SPACES: In determining the number of parking spaces required, if such spaces result in fractional parts thereof, the number of said spaces required shall be construed to be the next highest whole number.
- B. ADDITIONAL PARKING SPACES TO BE PROVIDED: Whenever the intensity of use of any building, structure, or premises shall be increased through addition of dwelling units, gross floor area, seating capacity, change of use, or other units of measurement specified herein, additional parking spaces shall be provided in the amounts hereafter specified for that use, if the existing parking space is inadequate to serve such increase in intensity of use.
- C. LOCATION OF OFF-STREET PARKING FACILITIES
 - 1. Off-street parking facilities (subject to additional restrictions according to screening requirements in Section 9.17, and other requirements of this ordinance) shall be located as follows:
 - a. Single-Family Residential Zones - (R-RE and R-1): Off-street parking may be permitted in driveways in the front, side, and rear yards, provided all requirements of this ordinance are met. Additionally, off-street parking located in the rear yard shall be set back a minimum of ten (10) feet from the rear lot line. No off-street parking area, located in the front yard in a single-family residential zone, may exceed four hundred (400) square feet (two parking spaces) except, however, the zoning administrator may allow additional off-street parking spaces to be located thereon, provided that: (1) the additional parking spaces will not cause the ratio of

unpaved area to paved area (parking and driveway areas) in the front yard to be less than 3:1; and (2) a plan of the proposed parking area is submitted and approved by the zoning administrator; and (3) all other requirements of this ordinance are met.

- b. Multi-Family Residential Zones - (R-3): Off-street parking shall be permitted only in side or rear yards, provided that off-street parking facilities shall be set back a minimum of ten (10) feet from the rear lot line. Off-street parking may be permitted in required front yards, if approved according to the approved development plan or site plan.
 - c. PUD, RCD Zones: Off-street parking shall permitted according to approval of a final development plan.
 - d. NC, NSC, DTM-1, DTM-2, and I-4 Zones: Off-street parking may be permitted in minimum required front, side, and rear yards, provided that all off-street parking facilities shall be set back a minimum of five (5) feet from any street right-of-way lines.
2. All off-street parking facilities shall be located on the same lot or zoning lot as the building served, except for the following:
- a. Multi-family dwellings where permitted in this ordinance, and any use permitted in an industrial zone may supply off-street parking within three hundred (300) feet from such lot or zoning lot served, upon approval of the planning commission, providing that such off-street parking is located within the same zone as the establishment being served and that off-street parking requirements of this ordinance are complied with at all times. Further, the applicant must also show sufficient proof that such off-street parking facilities would be impossible to provide the required off-street parking space, as required herein, on the same lot or zoning lot or contiguous to the same lot or zoning lot as the building being served.
 - b. Where single, two or multi-family dwellings which are permitted herein and are existing at the time of adoption of this ordinance, occupy a lot of such size that off-street parking could not be provided on the same lot or zoning lot as the use being served, said off-street parking may be permitted to locate within a distance not to exceed three hundred (300) feet from said dwelling or dwellings

upon approval of the zoning administrator. In addition, said off-street parking lot shall be located in the same zone as the use being served and constructed in accordance with requirements of this ordinance.

- c. Off-street parking as required for "conditional uses" permitted in the Residential (R) Zones, may be permitted to locate on another lot or zoning lot than the building or use being served is located, when approved by the Board of Adjustment, provided that said parking is located within reasonable walking distance of the use or building being served and available at all times without restrictions for said purposes.
- D. **COLLECTIVE PARKING PROVISION:** Collective off-street parking facilities may be provided, however, the area for such parking facilities shall not be less than would otherwise be individually required.
- E. **DRIVEWAY PROVISIONS:** Except for Residential (R-RE and R-1) Zones, parking lots or areas adjacent to streets, roads, highways, or deeded rights-of-way shall have driveways or openings not less than twelve (12) feet in width and no more than forty-eight (48) feet in width at the curb, excluding curve radius. These curb cuts shall be so located as to minimize traffic hazards and congestion. All such parking lots or areas shall have a protective wall or bumper block around each parking lot and said parking lots shall be so designed that all vehicles leaving the facility will be traveling forward to approaching traffic. In the case of R-RE and R-1 Residential Zones, no driveway width at the street right-of-way junction shall be less than nine (9) feet, nor more than twenty (20) feet, excluding curb radius, providing that this width may be increased if it can be determined, after review and approval of the zoning administrator, that said additional width will not impede the flow of traffic.
- F. **APPROVAL OR MODIFICATION OF CURB CUTS REQUIRED:** Detailed plans shall be submitted to the Planning Commission, or its duly authorized representative, in the form of a site plan as regulated by Section 9.19 of this ordinance, for approval of all curb cuts, driveway openings, including modifications thereto, before a permit may be obtained therefore.

For the purpose of minimizing the interference of traffic and congestion on the major street system as identified in the city's comprehensive plan, the Planning Commission shall limit the number of curb cuts along said streets. The number of curb cut intersections with major streets shall be spaced at a distance of not less than 800 feet apart. Access to abutting properties fronting on said major streets

shall be provided by a frontage or service road connecting to the curb cut intersection. If the developer can show sufficient proof in the form of a development plan that spacing of curb cuts less than 800 feet apart will not impede the movement of traffic flow along said major street, then the Planning Commission may vary these requirements accordingly.

- G. DRIVEWAYS NOT COMPUTED AS PART OF REQUIRED PARKING LOT: Entrances, exits, or driveways shall not be computed as any part of a required parking lot or area, except in the case of the R-RE and R-1 Zones, where access driveways may be used for parking and designed in accordance with the requirements of this ordinance.

H. DESIGN AND LAYOUT OF OFF-STREET PARKING AREAS

1. Size Of Off-Street Parking Spaces - For the purposes of this ordinance, one (1) parking space shall be a minimum of nine (9) feet in width and eighteen (18) feet in length, exclusive of access drives or aisles. Such parking space shall have a vertical clearance of at least seven (7) feet.
2. Width Of Access Drives - All off-street parking areas shall be laid out with the following minimum aisle or access drive widths:
 - a. Ninety (90) degrees (perpendicular) parking -- Twenty-two (22) feet (either one or two way circulation)
 - b. Sixty (60) degree (angle) parking -- Fifteen (15) feet (one way circulation only)
 - c. Forty-five (45) degree (angle) parking -- Twelve (12) feet (one way circulation only)
 - d. Thirty (30) degree (angle) parking -- Eleven (11) feet (one way circulation only)
 - e. Zero degree (parallel) parking -- Twelve (12) feet (one way circulation)

When any combination of these types of parking is used (facing the same aisle) the most restricted aisle or access drive width requirements shall prevail. In addition, a two (2) foot overhang may be permitted on the external sides of a parking area.

If the width of the parking space is increased over nine (9) feet, the drive aisle width can be decreased proportionally (two (2) foot width in drive aisle per one (1) foot increase in space width) except that a drive aisle for two-way traffic may not be decreased below twenty (20) feet in width and a drive aisle for one-way traffic may not be decreased below eleven (11)

feet in width.

- I. OFF-STREET PARKING SPACE TO BE USED FOR PARKING ONLY: Any vehicle parking space shall be used for parking only. Any other use of such space, including repair work or servicing of any kind, other than in an emergency, or the requirement of any payment for the use of such space, shall be deemed to constitute a separate commercial use in violation of the provisions of this ordinance.
- J. NO BUILDING TO BE ERECTED IN OFF-STREET PARKING SPACE: No building of any kind shall be erected in any off-street parking lot except a parking garage containing parking spaces equal to the requirements set forth in this section of the ordinance or a shelter house/booth for a parking attendant, provided the number of required spaces are not reduced.
- K. OFF-STREET PARKING SPACE SHALL NOT BE REDUCED: The required parking area on any lot, as set forth and designated in this ordinance, shall not be reduced or encroached upon in any manner.
- L. PARKING PLAN APPROVAL REQUIRED: Plans for all parking lot facilities, including parking garages, shall be submitted to the zoning administrator for review and for compliance with the provisions of this ordinance and such other pertinent ordinances of the city. Such plans shall show the number of spaces and arrangements of parking aisles, location of access points onto adjacent streets, provisions for vehicular and pedestrian circulation, location of sidewalks and curbs on or adjacent to the property, utilities, location of shelters for parking attendant, locations of signs, typical cross-sections of pavement, including base and subbase in accordance with Article XI, Section 11.0, M., of this ordinance, proposed grade of parking lot, storm drainage facilities, location of lighting facilities, and such other information or plans as the circumstances may warrant.
- M. PAVING OF NEW OFF-STREET PARKING: All new off-street parking facilities shall be paved with asphalt concrete or Portland Cement concrete and shall be designed and constructed in accordance with the standards and procedures herein established. If the driveway is longer than 100 feet and located in the R-1B, R-1C, R-1D, R-1D1, R-1E, R-1F or R-1G Zones, the first 100 feet is required to be paved and the remaining length of the driveway may be laid with gravel. If the driveway is longer than 100 feet and located in the A-1, R-RE, or R-1A Zones, the first 20 feet is required to be paved and the remaining length may be laid with gravel.

1. ASPHALT CONCRETE PAVEMENT

a. General Design Requirements

- (1) Asphalt concrete pavements shall consist of specified thickness of asphalt concrete surface course and a base course, or courses, all constructed on prepared subgrade. Required pavement thickness shall be determined from Table 1 of the appropriate subgrade soil and traffic use.
- (2) Paved areas shall be so designed and constructed that water will quickly drain from the surface and be conducted away from the area through approved systems. Transverse and/or longitudinal slopes of not less than 5/8 inch in 10 feet shall be provided. For large paved areas, approved catch basins and storm drainage systems shall be provided.
- (3) When the pavement includes a granular base, and the pavement is not constructed over granular subgrade, perimeter subsurface drainage shall be provided to prevent lateral flow of water into the base course and to provide for removal of seepage water that may enter the base.
- (4) Successive layers of the pavement shall be offset from the edge of the underlying layer a distance equal to the course thickness of the lower layer, except when abutting existing construction. When the asphalt layers of the pavement abut a building foundation, barrier curb, or similar vertical surface, the abutting surface shall be heavily painted with asphalt prior to construction of the asphalt course. The surface course shall be finished 1/4 inch above adjacent flush construction to permit proper compaction.

b. Construction Materials and Procedures

- (1) Subsurface Drainage
 - (a) Drainage tile, 6 inch perforated tile or other approved types of similar capacity, where required by the planning commission, or its duly authorized representative, shall be bedded at a depth of not less than 12 inches below the bottom elevation of the granular base course. Aggregate for bedding and backfill shall all pass a 3/8 inch sieve and have not more than 5 percent passing a No. 200 sieve. The

slope of subsurface drains shall be not less than 6 inches per 100 feet. All such drains shall be properly connected to outlet drains or to open ditches.

- (b) All catch basins, in pavement with granular base, shall be constructed with weep holes, at subbase level, to provide for drainage of seepage water from the granular layer. Weep holes shall be constructed of pipe, or other material, having an opening not less than 1.5 inches clear opening. Suitable provision shall be made to prevent clogging of the opening. Three or more weep holes shall be suitably located around the perimeter of each catch basin.
- (2) Base courses shall consist of one or more of the following materials. Construction procedures shall conform to the requirements applicable to the base course selected.
- (a) Asphalt Concrete Base Course - Materials and construction shall conform to the current requirements of the Kentucky Bureau of Highways' Specifications for Asphalt Concrete Base Course, Class I, except as noted herein.
 - (aa) Composition requirements of the mixture shall conform to the gradation limits for asphalt concrete base course I or II, set forth in Table 11-2 of this ordinance. Asphalt content used shall fall within the range shown and shall be approved by the planning commission, or its duly authorized representative.
 - (bb) Uncrushed gravel and natural sand may be used as aggregate, provided all other requirements of the specification are complied with.
 - (b) Asphalt Treated Base Course - Materials and construction procedures shall conform to the following requirements:
 - (aa) Aggregates may be crushed or uncrushed material conforming to the gradation

requirements, shown in Table 11-2 of this ordinance, for either Base III or Base IV. The aggregate shall be composed of hard durable particles and shall contain no more than a total of 5 percent deleterious substances. In addition, the sand equivalent of the aggregate shall not be less than 25 when tested in accordance with AASHTO Designation: T 176-56. The contractor shall set a single gradation and asphalt content, within the specified limits, as the job mix formula to be used on the project. This formula must be approved by the planning commission, or its duly authorized representative, prior to use. Gradation and asphalt content may vary during construction within the following tolerances.

% Passing 3/4" or 3/8" Sieve	+ 10%
% Passing No. 8 Sieve	+ 8%
% Passing No. 50 Sieve	+ 6%
% Passing No. 100 Sieve	+ 3%
% Asphalt	+ .4%

- (bb) Other construction requirements shall conform to those specified by the Kentucky Bureau of Highways' for Asphalt Concrete, except that a gradation unit on the plant shall not be required provided the aggregate can be controlled by other means to produce a consistently uniform gradation.
- (c) Crushed Stone Base Course
 - (aa) Crushed stone base course shall conform to all the current requirements of the Kentucky Bureau of Highways for Dense Graded Aggregate Base Course.
- (3) Asphalt Concrete Surface Course - Materials and construction shall conform to the current requirements of the Kentucky Bureau of Highways for Asphalt Concrete Surface, Class I. Surface course mixture composition may conform to requirements of either Surface Course I or II, as set forth in

Table 11-2 of this ordinance. Minimum course thickness shall be as stated in Table 11-1 of this ordinance.

(4) Asphalt Prime and Tack Coat

- (a) Asphalt Prime shall conform to the Kentucky Bureau of Highways' requirements for Cutback Asphalt Emulsion Primer, Type L. Prime shall be applied to the surface of granular base course at a rate of 0.20 to 0.40 gallons per square yard, as directed by the city engineer, in conformance with requirements of the referred to specification.
- (b) Tack Coat shall consist of SS-1h, meeting the current requirements of the Kentucky Bureau of Highways. It shall, when directed by the planning commission, or its duly authorized representative, be diluted with equal parts of water. Application equipment and procedure shall conform to the requirements of the Kentucky Bureau of Highways for Tack Coats. Tack coat shall be applied, upon direction of the planning commission, or its duly authorized representative, to the surface of asphalt courses that have become dusty or dry from traffic use before the subsequent course could be placed or in other circumstances when the planning commission, or its duly authorized representative, so directs.

2. Soil - Cement Base Course (with Asphalt Concrete Surface

- a. Description: Soil-cement base course shall consist of soil and cement uniformly mixed, moistened, compacted, finished, and cured in accordance with the specifications herein, and it shall conform to the lines, grades, thickness, and typical cross section shown on the plans.
- b. Materials
 - (1) Cement: Cement shall comply with the latest specifications for cement, AASHTO M85, M151, or ASTM C150, C175, C205, or Federal SS-C192b, SS-C-218 for the type specified. One cubic foot of portland cement shall be considered to weigh 94 pounds and 1 bbl. of cement shall be

considered to weigh 376 pounds.

- (2) Water: Water shall be free from substances deleterious to the hardening of the soil-cement.
- (3) Soil: Soil shall consist of the material existing in the area to be paved, of approved selected soil, or of a combination of these materials proportioned as directed. The soil shall not contain gravel or stone retained on a 3 inch sieve or more than 45 percent retained on a No. 4 sieve.

c. Construction Methods

- (1) Preparation: Unsuitable soil or material shall be removed and replaced with acceptable soil. The subgrade shall be firm and able to support without displacement the construction equipment and the compaction hereinafter specified. Soft or yielding subgrade shall be corrected and made stable, before construction proceeds.
- (2) Pulverization: The soil shall be pulverized that, at the completion of moist-mixing, 100 percent by dry weight passes a 1 inch sieve, and a minimum of 80 percent passes a No. 4 sieve, exclusive of gravel or stone retained on these sieves.
- (3) Cement Application, Mixing, and Spreading: Mixing of the soil, cement, and water shall be accomplished either by the mixed-in-place or the central-plant-mixed method.

No cement or soil-cement mixture shall be spread when the soil or subgrade is frozen or when the air temperature is less than 40 degrees F. in the shade.

The percentage of moisture in the soil, at the time of cement application, shall not exceed the quantity that will permit a uniform and intimate mixture of soil and cement during mixing operations; and it shall not exceed the specified optimum moisture content for the soil-cement mixture.

Any soil-and-cement mixture that has not been compacted and finished shall not remain undisturbed for more than 30 minutes. The soil-cement base course shall have a thickness of not less than 6 inches.

- (4) **Compaction:** At the start of compaction, the percentage of moisture in the mixture and in unpulverized soil lumps, based on oven-dry weights, shall not be below or more than two percentage points above the specified optimum moisture content, and shall be less than that quantity which will cause the soil-cement mixture to become unstable during compaction and finishing. The specified optimum moisture content and density shall be determined in the field by a moisture-density test, AASHTO T134-57 or ASTM D558-57, on representative samples of soil-cement mixture obtained from the area being processed.

Prior to the beginning of compaction, the mixture shall be in a loose condition for its full depth. The loose mixture then shall be uniformly compacted to the specified density within two hours. During compaction operations, shaping may be required to obtain uniform compaction and required grade and cross section.

- (5) **Finishing:** After compaction, the surface of the soil-cement shall be shaped to the required line, grades, and cross section. If necessary, during shaping operations, the surface of the base shall be lightly scarified to remove any tire imprints or smooth surfaces left by equipment. The resulting surface shall then be compacted to the specified density. Rolling shall be supplemented by broom-dragging if required.

The moisture content of the surface material must be maintained at not less than its specified optimum moisture content during finishing operations. Surface compaction and finishing shall be done in such a manner as to produce, in not longer than two hours, a smooth dense surface free of compaction planes, cracks, ridges, or loose material.

Any portion of the soil-cement that has a density of five pounds or more below that specified shall be corrected or replaced to meet these specifications.

- (6) **Curing:** After the soil-cement has been finished as specified herein, it shall be protected against drying for seven days by the application of bituminous material. The curing material

shall be applied as soon as possible but not later than 24 hours after the completion of finishing operations. The finished soil-cement shall be kept continuously moist until the curing material is placed.

The bituminous material specified shall be uniformly applied to the surface of the completed soil-cement at the rate of approximately 0.2 gallon per square yard with approved heating and distributing equipment.

At the time the bituminous material is applied the soil-cement surface shall be dense, shall be free of all loose and extraneous material, and shall contain sufficient moisture to prevent penetration of the bituminous materials. Water shall be applied in sufficient quantity to fill the surface voids of the soil-cement immediately before the bituminous curing material is applied.

The curing material shall be maintained by the contractor during the seven day protection period so that all of the soil-cement will be covered effectively during this period.

Sufficient protection from freezing shall be given the soil-cement for seven days after its construction and until it has hardened.

- (7) Surfacing: Asphaltic concrete shall be applied to the soil-cement base course, as regulated in Section 11.0, M., Subsection 1., b., (3) of this ordinance.

3. Concrete Parking Area

a. General Requirements - Thickness of concrete parking shall be:

- (1) A minimum of five (5) inches for passenger cars and panel or pickup truck parking.
- (2) A minimum of six (6) inches for driveways accommodating light trucks and for light truck parking.
- (3) A minimum of seven (7) inches for heavier commercial or industrial needs.

b. General Requirements - Concrete mix (for areas subject to freeze-thaw conditions):

- (1) Minimum Cement Content - 564 lb./cu.yd. of concrete (6 U.S. bags).
- (2) Maximum Size of Aggregate - 1-1/2 inches.
- (3) Maximum Water Content - 0.49 lb./1 lb. of cement (5.5 gal./bag).

Maximum Size Aggregate (inches)	Entrained Air (Percent)
1-1/4	5 + 1
3/4, 1	6 + 1
3/8, 1/2	7-1/2 + 1

- (4) Maximum Slump - four (4) inches.
- (5) Air Entrainment

c. Construction Procedures:

- (1) All soft and yielding material and other portions of the subgrade which will not compact readily when rolled or taped, shall be removed and replaced with suitable material, placed and compacted. The subgrade shall be thoroughly compacted with suitable equipment so as to have uniform density at moisture contents of not less than standard optimum (AASHTO-T98).
- (2) Longitudinal joint spacing shall not exceed 12.5 feet.
- (3) Transverse joint spacings shall be at regular intervals of twenty (20) feet.
- (4) All transverse construction joints shall a depth equal to one-

fourth of the pavement thickness.

- (5) Form offsets at radius points shall be at least two (2) feet.
- (6) Pavement joints must be continuous through the curbs.
- (7) Where curbs are required, they shall be cast integrally.
- (8) The pavement shall be struck-off, consolidated, and finished, to the grades shown on the plans. All catch basins and manhole castings shall be boxed out and separated from the pavement with expansion joint material. All except premolded or sawed joints shall be edged with a tool having a maximum radius of 1/8 inch. Sawed and formed joints shall be cleaned and sealed before opening to traffic. Final surface texture shall be that obtained with a burlap drag. Curing shall be that obtained with a uniform coverage of white membrane curing compound or by seven-day coverage of white polyethylene or waterproof paper. The completed pavement shall be closed to traffic seven (7) days.

N. DESIGN AND MAINTENANCE

- 1. Screening and Landscaping: All open automobile parking areas containing more than four (4) parking spaces shall be effectively screened on each side adjoining or fronting on any property situated in a residential zone by a solid wall, fence, or densely planted compact hedge, as regulated by Section 9.17 of this ordinance. Ground cover shrubs and trees shall be located and maintained so as to not interfere with vehicular and pedestrian traffic on the property or with sight distance clearance at entrances and exits.
- 2. Lighting: Any lighting used to illuminate off-street parking areas shall be directed away from adjoining properties in such a way as not to create a nuisance.
- 3. Ingress and egress to parking areas shall be limited to driveway entrances and exits specified in parking area plans, as approved by the zoning administrator. Each required parking space shall be connected with a deeded right-of-way (by means of adequate aisles, as required in Section 11.0, H.) which offers adequate ingress and egress for automobiles.
- 4. Parking lots, garages, and storage areas shall be so designed and

constructed so that all maneuvering into and out of each parking space takes place entirely within property lines of lots, garages, and/or storage areas.

TABLE 11-1

**THICKNESS REQUIREMENTS OF SURFACE AND BASE COURSES FOR
AUTOMOBILE AND TRUCK PARKING FACILITY PAVEMENTS⁽¹⁾**

Type Of Vehicle	Soil Classification(2)	Thickness Of Surface And Base - Inches		
		Asphalt Base		Granular Base
		Type I or II	Type III or IV	
Automobile Parking Facilities	A	1-4	2-4	3-4
	B	1-5	2-5	3-6
	C	1-6	2-6	3-8
Truck Parking Facilities	A	1-6	2-6	4-6
	B	1-7	2-7	4-8
	C	1-8	2-8	4-10

(1) Thickness of surface and base is shown for each soil classification and street classification. The first number indicates the minimum thickness of asphalt concrete which may be comprised of asphalt concrete surface course, Type I or II, if the surface course does not exceed two (2) inches. When surface thickness is more than two (2) inches, asphalt concrete Base I or II, as specified in Table 11-2, may be used for all but the upper one (1) inch wearing course which must be asphalt concrete surface course I or II, as specified in Table 11-2. The second figure indicates the thickness of base course of the type indicated. For example, 1-4 indicates one (1) inch surface and four (4) inches base.

(2) Soils are classified into three (3) groups indicating their relative effectiveness as subgrade.

- A Granular soils that drain well; sand, gravel, or combination of sand and gravel.
- B Silty clays, or lean clays, that retain considerable strength when wet. These are average subgrade soils.
- C Heavy clay soils that lose most of their strength when wet.

TABLE 11-2
COMPOSITION LIMITS FOR ASPHALT MIXTURES

SIEVE SIZE	Percent Passing By Weight					
	Asphalt Concrete			Asphalt Treated Base		
	Base I	Base II	Surface I	Surface II	Base III	Base IV
1 1/2"	100	-	-	-	100	-
1"	85-100	100	-	-	-	-
3/4"	-	80-100	-	-	70-100	100
1/2"	50-80	-	100	100	-	-
3/8"	-	54-76	80-100	-	40-80	70-100
No. 4	30-50	37-57	55-75	75-95	-	-
No. 8	25-45	25-45	35-60	60-85	25-60	40-100
No. 16	15-35	15-35	25-50	45-70	-	-
No. 50	5-20	5-20	9-21	15-40	5-30	15-50
No. 100	3-10	3-10	5-14	5-25	3-15	5-25
No. 200	-	-	3-7	4-10	-	-
% Asphalt	3.5-6.0	4.0-7.0	5.0-8.0	6.0-9.0	3.5-6.0	4.0-8.0

SECTION 11.1 SPECIFIC OFF-STREET PARKING REQUIREMENTS: The amount of off-street parking space required for uses, buildings, or additions, and changes in intensity of uses thereto, shall be determined according to the following requirements, and the space, so required, shall be stated in the application for a zoning and building permit and shall be reserved for such use. Where more than one use is located in the same building each individual use shall be in accordance with the off-street parking requirements of this section of the ordinance.

TYPES OF USES	REQUIRED NUMBER OF SPACES
A. Airport, railroad passenger stations and bus terminal	One (1) parking space for each four (4) seating accommodations for waiting passengers, plus one (1) parking space for each two (2) employees on shift of largest employment.
B. Automobile laundries	One (1) parking space for each employee, plus one (1) space per owner or manager, and reservoir space equal to five (5) times the capacity of the facility.
C. Automobile Service stations	One (1) parking space for each gas pump island, plus two (2) parking spaces for each working bay, plus one (1) parking space for each employee on shift of largest employment.
D. Beauty parlor and/or barber shops	Two (2) parking spaces per barber and/or beauty shop operator.
E. Bowling establishments	Five (5) parking spaces for each lane, plus one (1) parking space for each two (2) employees on shift of largest employment.
F. City and/or county government	One (1) parking space for each two hundred (200) square feet of gross floor area.
G. Commercial or trade schools	One (1) parking space for each two (2) students, based on design capacity of the school, plus one (1) parking space for each employee.

TYPES OF USES	REQUIRED NUMBER OF SPACES
H. Convalescent homes, nursing homes, rest homes, homes for the aged, and orphanages	One (1) parking space for each two (2) beds, plus one (1) parking space for each two (2) employees or staff members, including nurses, on shift of largest employment, plus one (1) parking space per doctor.
I. Dance halls, pool and billiard halls, and exhibition halls without fixed seats	One (1) parking space for each one hundred (100) square feet of floor area used for dancing or assembly, or one (1) parking space for each four (4) persons, based on design capacity, whichever is greater, plus one (1) parking space for each two (2) employees on shift of largest employment.
J. Dormitories, Fraternities, Sorority Houses, and other group housing	One (1) parking space per each two (2) residents, plus one (1) parking space per owner or operator, plus one (1) parking space per employee, or one (1) parking space for each two (2) seats for membership meetings, whichever is greater, based on design capacity.
K. Dwellings: One-Family Two-Family	Two (2) parking spaces. Four (4) parking spaces, with individual access for each dwelling unit.
L. Dwellings: Multi-Family	One (1) parking space for every one (1) bedroom dwelling unit and two (2) parking spaces for every dwelling unit with two (2) or more bedrooms.

TYPES OF USES	REQUIRED NUMBER OF SPACES
M. Establishments for sale and consumption on the premises of alcoholic beverages, food, refreshments, or for take home food service	One (1) parking space for each two (2) employees on shift of largest employment plus one parking space for each: <ul style="list-style-type: none">A. Thirty (30) square feet of gross floor area in a drive-in restaurant;B. One hundred forty (140) square feet of gross floor area in a carry-out restaurant;C. One hundred (100) square feet of gross floor area or two (2) seating accommodations, based on maximum capacity, whichever is greater, in a combination restaurant;D. Two (2) seating accommodations, based on maximum seating capacity, in a sit-down restaurant.
N. Fire stations	One (1) parking space for each person on duty on largest shift.
O. Hospitals	One (1) parking space for each two (2) beds, plus one (1) parking space for each two (2) employees or staff members, including nurses, on shift of largest employment, plus one (1) parking space per doctor.
P. Laundromats	One (1) parking space for each two (2) washing machines.
Q. Libraries, museums, and art galleries	One (1) parking space for each four (4) seats in rooms for public assembly or one (1) parking space for each fifty (50) square feet of gross floor area for use by the public, whichever is greater, plus one (1) parking space for each two (2) employees on shift of largest employment.

TYPES OF USES	REQUIRED NUMBER OF SPACES
R. Medical offices and/or clinics	Five (5) parking spaces for each practitioner, plus one (1) parking space per each two (2) employees, or one (1) parking space for each two hundred (200) square feet of gross floor area in the building, plus one (1) parking space for each two (2) employees, whichever is greater.
S. Mortuaries or funeral homes	One (1) parking space for each four (4) seats in the main chapel or public assembly area, based on maximum seating capacity, plus one (1) parking space for each funeral vehicle and employee, or in the case of no fixed seats, one (1) parking space for each fifty (50) square feet of floor area in parlor or service rooms, or one (1) parking space for each four (4) persons, based on design capacity of the building, whichever is greater, plus one (1) parking space for each funeral vehicle and employee.
T. Offices for professional, business, and financial, real estate, and business purposes, other than medical offices and/or clinics	One (1) parking space for each two hundred fifty (250) square feet of gross floor area
U. Post offices	One (1) parking space for each two hundred (200) square feet of gross floor area, plus one (1) parking space for each two (2) employees on shift of largest employment, plus one (1) parking space for each vehicle operating from the premises.

TYPES OF USES	REQUIRED NUMBER OF SPACES
V. Private clubs, boarding houses, and lodge halls	One (1) parking space for each guest sleeping room, or one (1) parking space for each four (4) fixed seats in the main assembly area, whichever is greater, plus one (1) parking space for each two (2) employees, or in the case of no fixed seats, one (1) parking space for each two (2) employees.
W. Retail and personal service stores	One (1) parking space for each one hundred twenty-five (125) square feet of gross floor area.
X. Schools – elementary, junior high, and equivalent, private or parochial schools	One (1) parking space per teacher and administrator or one (1) space for each four (4) seats in the auditorium, stadium, and other places of assembly or facilities available to the public, based on maximum seating capacity, whichever is greater.
Y. Schools – senior high, trade and vocational, colleges and universities, and equivalent, private or parochial	Six (6) parking spaces for each room to be used for class instruction or administrative offices, or one (1) parking space for each four (4) seats in the auditorium, stadium, and other places of assembly or facilities available to the public, based on maximum seating capacity, whichever is greater.
Z. Shopping centers	One (1) parking space for each four (4) seats, based on maximum seating capacity, plus one (1) parking space for each two (2) employees on shift of largest employment.
AA. Stadium and sports arenas	One (1) parking space for each four (4) seats, based on maximum seating capacity, plus one (1) additional parking space for each two (2) employees on shift of largest employment.

TYPES OF USES	REQUIRED NUMBER OF SPACES
BB. Theaters, auditoriums, churches, and places of assembly with fixed seats	One (1) parking space per four (4) people in designed capacity of building, or one (1) parking space per one hundred (100) square feet in main auditorium or assembly area, whichever is greater, plus one (1) parking space for each two (2) employees on shift of largest employment.
CC. Theaters, auditoriums, churches, and places of assembly without fixed seats	One (1) parking space per four (4) people in designed capacity of building, or one (1) parking space per one hundred (100) square feet in main auditorium or assembly area, whichever is greater, plus one (1) parking space for each two (2) employees on shift of largest employment.
DD. Tourist homes, cabins, motels or hotels, excluding areas used for meeting rooms and places of assembly	One (1) parking space for each sleeping room or suit, plus one (1) parking space for each two (2) employees on shift of largest employment.
EE. Industrial establishments, including manufacturing, research, and testing laboratories	Two (2) parking spaces for each three (3) employees – the total number of parking spaces being the total number of employees on any two (2) consecutive shifts having the largest number of employees, based on design capacity, plus one (1) parking space for each company vehicle operating from the premises.
FF. Wholesale establishments, warehouses, and storage buildings	One (1) parking space for each employee, plus one (1) parking space for each company vehicle operating from the premises.

SECTION 11.2 ACCESS CONTROL REGULATIONS

In order to promote greater safety of passage between highway and land, improve the convenience and ease of movement of travelers on the highway, permit reasonable speeds and economy of travel, and increase and protect the capacity of the highway, the location and design of access points shall be in accordance with the following access control requirements. These requirements shall apply to all arterial and collector type streets, as identified in the adopted comprehensive plan.

- A. PROVISION OF RESERVED TURNING LANES: At those access points where vehicles turning to and from the arterial and collector streets will affect the roadway capacity, reserved turn lanes shall be constructed by the developer.
- B. PROVISION OF FRONTAGE ROAD: Where possible, provision for the construction of a frontage road shall be made. However, access to the arterial or collector streets via an intersecting street or a common driveway shall be investigated if such a design is not reasonable.
- C. COORDINATION OF ACCESS POINTS: Major Access points on opposite sides of the arterial and collector streets shall be located opposite each other, otherwise turning movement restrictions may be imposed by the planning commission or zoning administrator, whichever is applicable. In addition, in order to maximize the efficient utilization of access points, access drives shall be designed, located, and constructed in a manner to provide and make possible the coordination of access with, and between, adjacent properties developed (present or future) for similar uses. As a condition of approval for construction, use, or reuse of any access road, the zoning administrator may require that unobstructed and unencumbered access, in accordance with the provisions of this ordinance, be provided from any such access point to adjacent properties.
- D. SPACING RESTRICTIONS FOR SIGNALIZED ACCESS POINTS: Access points which will warrant signalization shall be spaced a minimum distance of one quarter (1/4) mile apart. The exact location of the signal light shall be determined by a traffic engineering study which shall at least account for the following variables:
 - 1. Speed
 - 2. Traffic signal phasing
 - 3. Traffic signal cycle length
 - 4. Roadway geometrics
 - 5. Accident experience

Provision for all turning movements to maintain the design capacity of the roadway shall be required.

- E. SIGHT DISTANCE: The location of access points shall comply with safe sight distance requirements, as provided in Table 1. The centerline of all access points shall intersect as nearly at a ninety (90) degree angle as possible, but in no case shall the angle of intersection be less than seventy-five (75) degrees or greater than one hundred five (105) degrees, unless approved by the planning commission or zoning administrator, whichever is applicable, due to certain exceptional conditions.
- F. LOCATION OF UNSIGNALIZED ACCESS POINTS
1. Arterial Streets
 - a. Unsignalized access points shall be spaced a minimum distance of six hundred (600) feet apart. Turning restrictions and/or reserved lanes may be required.
 - b. One (1) access point per existing tract will be permitted. However, if the spacing requirements for a direct access point onto an arterial street (as provided in F., 1., a., above) cannot be met, then an access point may be located on a frontage road, or on an intersecting local street, or share a common driveway that meets the spacing requirements. In order for the intersecting local street or frontage road to function properly, access onto them should be controlled as follows:
 - (1) Access points onto local streets intersecting an arterial street shall be spaced a minimum distance of one hundred (100) feet, measured from point of curb return to point of curb return, from the arterial street.
 - (2) In areas zoned to permit commercial, industrial, or multi-family residential uses, access points from adjacent properties onto frontage roads, shall be no less than one hundred (100) feet, measured from point of curb return to point of curb return, from intersections of the frontage road with local or collector streets.
 - c. Where the frontage of a tract is greater than five hundred (500) feet an additional access point may be permitted. However, the type of access will depend on the spacing requirements in F., 1., a.

(1) If the frontage of the tract is large enough, then at least one (1) of the access points may have direct access onto the arterial street, provided the spacing between the adjacent access points meet the requirements of Section F., 1., a., and all other requirements of this section of the ordinance. In the case where the frontage allows only one (1) point of direct access, due to spacing restrictions as provided herein, the second access point will be via a frontage road, or an intersecting local street, or share a common driveway that meets the spacing restrictions, as provided along the arterial street.

d. If a tract of land has no means of access that would meet the requirements of this section of the ordinance, one (1) access point shall be provided. However, all such access points shall be considered a temporary right-of-way and may be terminated, reduced, limited to certain turning movements, or caused to be relocated by the zoning administrator at such time as the particular use served by the access point changes and/or the property is otherwise provided an alternate means of access via a frontage road, or an intersecting local street, or sharing of a common driveway. Provisions for the construction of a frontage road, restricted turning movements, or other improvements, may be required, as a condition to approval, in order to minimize the number of access points and congestion to the adjacent street. In all cases where said access points are classified as temporary, such designation shall be duly noted on the plot plan or site plan submitted for a zoning permit and also upon the deed of the property in question.

2. Collector Streets

a. On two-lane roadways, one (1) access point per existing tract will be allowed. However, if the frontage is greater than five hundred (500) feet, an additional access point may be permitted. Furthermore, the minimum spacing between adjacent access points on this type of facility shall be one hundred (100) feet, measured from point of curb return to point of curb return, except in the case where the street intersects another collector street or arterial street, then said access points shall be spaced a minimum of three hundred (300) feet from the intersection.

b. On multi-lane roadways, the spacing is dependent on whether or

not a barrier median exists (prohibiting left-turn movements). If a barrier median exists, access points may be spaced as close as three hundred (300) feet. However, certain turning movements will be prohibited. If a barrier median does not exist, then the minimum spacing of access points shall be six hundred (600) feet. In addition, some turning movements may be prohibited.

- c. One (1) access point per existing tract will be allowed. However, if the spacing requirements for a direct access point, as provided in F., 2., a., cannot be met, then an access point may be located on a frontage road, or on an intersecting street, or share a common driveway that meets the spacing requirements.
- d. If a tract of land has no means of access that would meet the requirements of this section of the ordinance, one (1) access point shall be provided. However, all such access points shall be considered a temporary right-of-way and may be terminated, reduced, limited to certain turning movements, or caused to be relocated by the zoning administrator at such time as the particular use served by the access point changes and/or the property is otherwise provided an alternate means of access via a frontage road, or an intersecting local street, or sharing of a common driveway. Provisions for the construction of a frontage road, restricted turning movements, or other improvements, may be required, as a condition to approval, in order to minimize the number of access points and congestion to the adjacent street. In all cases where said access points are classified as temporary, such designation shall be duly noted on the plot plan or site plan submitted for a zoning permit and also upon the deed of the property in question.

G. WIDTH OF ACCESS POINTS

- 1. In single-family residential zones, no access point width shall be less than nine (9) feet nor more than twenty (20) feet. In all other zones, access points shall not be less than twelve (12) feet nor more than forty-eight (48) feet in width. The width shall be as measured from the point of curb return to point of curb return, or edge of pavement if no curb exists, excluding the curb radius.
- 2. The zoning administrator may modify (enlarge or reduce) the width to provide for a more efficient and safe channelization and/or flow of traffic.

- H. EXCEPTIONS TO ACCESS POINT REQUIREMENTS: Where situations develop that may require special treatment, the requirements as provided in Section 11.2, A. - G., may be varied, provided that a traffic engineering report is prepared by a qualified traffic engineer, establishing that the special treatment will have no adverse effects on the roadway safety and capacity.
- I. ACCESS POINT PROBLEM AREAS: If, after special study, it is determined that the type of use or activity proposed would have an adverse effect on the safety and capacity of the adjacent roadway, the access point spacing requirements, as contained in this section, may have to be increased in order to adequately solve the traffic movement.
- J. APPROVAL OF ACCESS POINTS REQUIRED: Plans for all access points, and modifications thereto (including plans to use existing access points where a change of use for any tract of land would generate more traffic than the previous use, thus producing an adverse effect on the adjacent roadway), shall be submitted to the zoning administrator and Planning and Development Services of Kenton County staff, at a scale not less than 1 inch = 100 feet. No action of approving or rejecting these plans by the zoning administrator shall be taken until a review and recommendation of said plans has been made by Planning and Development Services of Kenton County staff. Such plans shall show the location of all access points, and access points within six hundred (600) feet in either direction. The proposed access point shall include typical cross-sections of pavement, the base and subbase, proposed grade, and storm drainage, and such other information or plans as the circumstances may warrant. If such access points are being located in conjunction with off-street parking and/or loading and unloading facilities, then said plans shall also include parking and off-street loading and/or unloading plans, in accordance with Sections 11.0 and 12.0 of this ordinance.
- K. APPROVAL OF ACCESS POINTS ALONG STATE MAINTAINED ROUTES BY KENTUCKY DEPARTMENT OF TRANSPORTATION: A copy of the Plans for all access points to be constructed along a state maintained route shall also be submitted to the Kentucky Department of Transportation for review and approval during the same time as plans are submitted to the zoning administrator, as provided for in Section 11.2. No access point plans shall be approved, or permits issued, for construction by the zoning administrator, until said access point plans have been approved by the Kentucky Department of Transportation.

TABLE 1A

SIGHT DISTANCE FOR VEHICLES EXITING FROM ACCESS POINTS ONTO ADJACENT ROADS
see Figure 1A

VEHICLE TYPE	20 MPH				30 MPH				40 MPH				50 MPH				60 MPH			
	2 lane		4 or 6 lane		2 lane		4 or 6 lane		2 lane		4 or 6 lane		2 lane		4 or 6 lane		2 lane		4 or 6 lane	
	DL	DR	DL	DR	DL	DR	DL	DR	DL	DR	DL	DR	DL	DR	DL	DR	DL	DR	DL	DR
Passenger Car	150	130	130	130	360	260	220	260	530	440	380	440	740	700	620	700	950	1050	950	1050
Truck	300	200	200	200	500	400	400	400	850	850	850	850	1600	1600	1600	1600	2500	2500	2500	2500

Notes:

D=Distance along major road from access point to allow vehicle to enter safely.

Figures given are measured from a vehicle ten (10) feet back of the pavement edge.

Figures given are in feet.

Values are for urban conditions. On rural streets, distances are to be increased by ten (10) percent to allow for greater reaction time.

The sight distances apply when street grades are zero (0) percent to three (3) percent, either up or down. When an upgrade is steeper than three (3) percent, adjustments are to be made to compensate for the longer time required to reach the speed of highway traffic. The time is less than shown when the highway is descending. Adjustment factors apply to grades only in that portion of the road between the access points and the downstream point at which a vehicle emerging from the access points has been able to accelerate to within ten (10) miles per hour of the route speed.

When the street, in the section to be used for acceleration after leaving the access point, ascends at three (3) percent to four (4) percent, then sight distances in the direction of approaching ascending traffic are to be increased by a factor of 1.4. When the access point ascends at five (5) percent to six (6) percent, sight distances should be increased by a factor of 1.7.

When the street, in the section to be used for acceleration after leaving the access point, descends at three (3) percent to four (4) percent, then sight distances in the direction of approaching descending traffic are to be reduced by a factor of 0.6. If the road descends at five (5) percent to six (6) percent, sight distances should be reduced by a factor of 0.5.

When the criteria for sight distances to the right cannot be met, the need can be eliminated by prohibiting left turns by exiting vehicles.

TABLE 1B

LEFT TURN SIGHT DISTANCE FOR VEHICLES ENTERING ACCESS POINTS
see Figure 1B

VEHICLE TYPE	20 MPH			30 MPH			40 MPH			50 MPH			60 MPH		
	2 Lane	4 Lane	6 Lane	2 Lane	4 Lane	6 Lane	2 Lane	4 Lane	6 Lane	2 Lane	4 Lane	6 Lane	2 Lane	4 Lane	6 Lane
Passenger Car	150	160	170	230	250	270	370	390	420	520	550	580	700	740	780
Truck	260	260	300	400	400	480	570	620	670	810	880	950	1000	1100	1200

Notes:

S=Sight distance along major route to safely turn left into access point.

Figures given are measured from a vehicle ten (10) feet back of the pavement edge.

Figures given are in feet.

Values are for urban conditions. On rural streets, distances are to be increased by ten (10) percent to allow for greater reaction time.

The sight distances apply when street grades are zero (0) percent to three (3) percent, either up or down. When an upgrade is steeper than three (3) percent, adjustments are to be made to compensate for the longer time required to reach the speed of highway traffic. The time is less than shown when the highway is descending. Adjustment factors apply to grades only in that portion of the road between the access points and the downstream point at which a vehicle emerging from the access points has been able to accelerate to within ten (10) miles per hour of the route speed.

When the street, in the section to be used for acceleration after leaving the access point, ascends at three (3) percent to four (4) percent, then sight distances in the direction of approaching ascending traffic are to be increased by a factor of 1.4. When the access point ascends at five (5) percent to six (6) percent, sight distances should be increased by a factor of 1.7.

When the street, in the section to be used for acceleration after leaving the access point, descends at three (3) percent to four (4) percent, then sight distances in the direction of approaching descending traffic are to be reduced by a factor of 0.6. If the road descends at five (5) percent to six (6) percent, sight distances should be reduced by a factor of 0.5.

When the criteria for sight distances to the right cannot be met, the need can be eliminated by prohibiting left turns by exiting vehicles.

FIGURE 1A

SIGHT DISTANCE FOR VEHICLES EXITING FROM ACCESS POINTS
refer to Table 1A

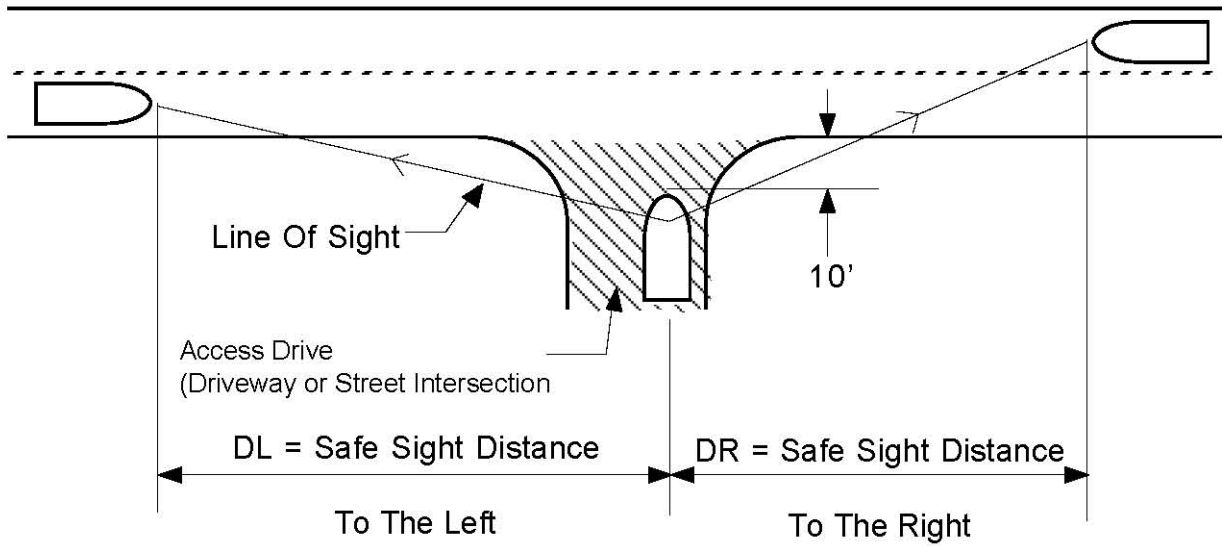


FIGURE 1B

LEFT TURN SIGHT DISTANCE FOR VEHICLES ENTERING ACCESS POINTS
refer to Table 1B

