## **ARTICLE XI**

## OFF-STREET PARKING 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 TO BUILDINGS: Whenever the intensity of use of any building, structure, or premises shall be increased through addition of dwelling units, gross floor area, seating capacity, 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: All off-street parking facilities shall be located on the same lot or zoning lot as the building served, except for the following:
  - 1. 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 zoning administrator, 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.
  - 2. Where single, two, or multi-family dwellings, which are permitted herein, 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 Section 11.0 of this ordinance.

- 3. 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.
- 4. In the MX zones, the location of off-street parking may be determined by the Master Development Plan Process.
- D. COLLECTIVE PARKING PROVISION: Collective off-street parking facilities may be provided, however, such facilities shall be no less than the sum of such facilities as would otherwise be individually required.
- E. DRIVEWAY PROVISIONS: Except for Residential (R-1) Zones, parking lots or areas adjacent to streets, roads, highways, or deeded right-of-ways, 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 blocks 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. A minimum of two (2) parking spaces for each single-family residential unit shall be provided.

No single-family residential driveway width at street, road, highway, or deeded right-of-way junctions shall be less than nine (9) feet nor more than twenty (20) feet, excluding curb radius, providing that this width may be increased if sufficient proof can be demonstrated after review and approval of the zoning administrator.

F. APPROVAL OR MODIFICATION OF CURB CUTS REQUIRED: Detailed plans shall be submitted to the city, 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 on that portion of the Kenton County Comprehensive Plan, as it pertains to Crestview Hills, the city 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 eight hundred (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 eight hundred (800) feet apart will not impede the movement of traffic flow along said major street, then the city may vary these requirements accordingly.

- G. DRIVEWAYS NOT COMPUTED AS PART OF PARKING LOT: Entrances, exits, or driveways shall not be computed as any part of a required parking lot or area.
- H. OFF-STREET PARKING SPACE AND ACCESS DRIVES DEFINED: For the purposes of this ordinance, one (1) parking space shall be a minimum of one hundred and sixty-two (162) square feet in area, exclusive of access drives or aisles, and shall be a minimum of nine (9) feet in width and eighteen (18) feet in length. Parking spaces within a garage or parking deck shall be one hundred seventy-one (171) square feet in area, and be a minimum of nine (9) feet in width and nineteen (19) feet in depth. Such parking space shall have a vertical clearance of at least seven (7) feet. Each parking space shall be approximately dimensioned for automobile parking. All parking lots shall be laid out with the following minimum aisle or access widths:
  - 1. Ninety (90) degrees (perpendicular) parking -- Twenty-four (24) feet (either one or two way circulation)
  - 2. Sixty (60) degree (angle) parking -- Eighteen (18) feet (one way circulation only)
  - 3. Forty-five (45) degree (angle) parking -- Thirteen (13) feet (one way circulation only)
  - 4. Thirty (30) degree (angle) parking -- Eleven (11) feet (one way circulation only)
  - 5. 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 restrictive aisle or access width requirements shall prevail.

- 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, providing 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, excepting that required for single and two-family development, 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 driveway entrances and exits, 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, 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. SURFACING OF NEW OFF-STREET PARKING: All new off-street parking facilities, available for public use, shall be surfaced with asphalt concrete or portland cement concrete and shall be designed and constructed in accordance with the standards and procedures herein established.
  - 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. Pavement thickness required shall be determined from Table 11-1 of this ordinance 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.

#### 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. duly authorized or its 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:
  - Aggregates may be crushed or uncrushed (aa) 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. addition, the sand equivalent of the aggregate shall not be less than 25 when tested in accordance with AASHO 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 <u>+</u> 3% % Asphalt <u>+</u> .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, AASHO 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.

#### 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, AASHO 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 soilcement will be covered effectively during this period.

Sufficient protection from freezing shall be given the soilcement for seven days after its construction and until it has hardened. (7) Surfacing: Asphaltic concrete shall be applied to the soilcement 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).
  - (4) Maximum Slump four (4) inches.
- e. Strength of Concrete The concrete shall attain a minimum expected strength of concrete at 28 days of 3,500 pounds per square inch compressive strength and/or 550 pounds per square inch flexural strength "modulus of rupture".
  - f. Air Entrainment

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

#### 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 (AASHO-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.

**SECTION 11.1 SPECIFIC OFF-STREET PARKING REQUIREMENTS:** The amount of off-street parking space required for uses, buildings, or additions 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. Unless otherwise stated herein, 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.

| T١ | /F | ÞΕ | S | $\cap$ | F | П | 2 | ES |
|----|----|----|---|--------|---|---|---|----|
|    |    |    |   |        |   |   |   |    |

## REQUIRED NUMBER OF SPACES

|    | TTPES 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 at largest shift.             |
| D. | Beauty parlor and 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 offices                 | 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.                                       |

## 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 the shift of largest employment, plus one (1) parking space per doctor.

 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
- A. One (1) parking space per each resident capacity of the structure, plus one (1) parking space per owner or operator, plus one (1) parking space per employee.
- B. In addition to the parking required in A., above, parking will be required for the non-resident membership of the organization, as follows:

One (1) parking space for each fifty (50) square feet of the largest floor area used for assembly, social activity, or dining; or one (1) parking space for each on hundred (100) square feet of the total of all floor area used for assembly, social activity, and dining; or one (1) parking space for each non-resident member anticipated in the fraternity membership, whichever is greater.

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

M. Establishments for sale and consumption on the premises of alcoholic beverages, food, and refreshments, or for take home food services

- N. Fire stations
- O. Hospitals

- P. Laundromats
- Q. Libraries, museums, and art galleries

#### REQUIRED NUMBER OF SPACES

Two (2) parking spaces for each dwelling unit.

One (1) parking space for each two (2) employees on shift of largest employment plus one parking space for each:

- 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. Forty (40) square feet of gross floor area or two (2) seating accommodations, based on maximum seating capacity, whichever is greater, in a combination restaurant:
- Two (2) seating accommodations, based on maximum seating capacity, in a sitdown restaurant.

One (1) parking space for each person on duty on largest shift.

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 the shift of largest employment, plus one (1) parking space per doctor.

One (1) parking space for each two (2) washing machines.

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.

#### REQUIRED NUMBER OF SPACES

## R. Medical offices and/or clinics

One (1) parking space for each two hundred (200) square feet of gross floor area plus 5 overflow spaces for buildings less than 30,000 g.s.f. and 10 overflow spaces for buildings greater than 30,000 g.s.f.

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 leasable area.

U. Post offices

One (1) parking space for each four hundred (400) square feet of gross floor area, plus one (1) parking space for each two (2) employees on shift of largest employment.

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.

#### REQUIRED NUMBER OF SPACES

- W. Retail and personal service stores
- Four and one-quarter (4-1/4) parking spaces for each one thousand (1,000) square feet of gross leasable area.
- 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

- Four and one-quarter (4-1/4) parking spaces For each one thousand (1,000) square feet of gross leasable area.
- AA. Stadium and sports arenas
- 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.
- BB. Theaters, auditoriums, churches, and places of assembly with fixed seats
- 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.

#### REQUIRED NUMBER OF SPACES

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

One (1) parking space for each sleeping room or suite, 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.

TABLE 11-1

THICKNESS REQUIREMENTS OF SURFACE AND BASE COURSES FOR AUTOMOBILE AND TRUCK PARKING FACILITY PAVEMENTS<sup>1</sup>

| Type Of    | Soil                        | Thickness Of Surface And Base - Inches<br>Asphalt Base |     |               |  |
|------------|-----------------------------|--|-----|---------------|--|
| Vehicle    | Classification <sup>2</sup> | •  |     | Granular Base |  |
| Automobile | A                           | 1-4  | 2-4 | 3-4           |  |
| Parking    | B                           | 1-5  | 2-5 | 3-6           |  |
| Facilities | C                           | 1-6  | 2-6 | 3-8           |  |
| Truck      | A                           | 1-6  | 2-6 | 4-6           |  |
| Parking    | B                           | 1-7  | 2-7 | 4-8           |  |
| Facilities | C                           | 1-8  | 2-8 | 4-10          |  |

- 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 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

# Percent Passing By Weight

| 0:        | A amb alt O am anata |                  |           |            | Asphalt  |              |  |  |
|-----------|----------------------|------------------|-----------|------------|----------|--------------|--|--|
| Sieve     |                      | Asphalt Concrete |           |            |          | Treated Base |  |  |
| Size      | 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      |  |  |