

(h) Where curbs and gutters are used and where the street is part of a designated bike route as indicated in the bicycle circulation part of the municipal master plan, the municipality may require that the cartway width be increased by one foot on each side of a street that uses a curb and gutter.

Amended by R.2000 d.480, effective December 4, 2000 (operative June 3, 2001).

See: 32 N.J.R. 2670(b), 32 N.J.R. 4277(a).

Added (h).

5:21-4.4 Shoulders

(a) Shoulders should be used instead of curbs when:

1. Shoulders are required by CAFRA;
2. Soil and/or topography make the use of shoulders preferable; and/or
3. To preserve rural character.

(b) Shoulders shall be provided in accordance with the requirements in Table 4.3 in N.J.A.C. 5:21-4.2.

(c) Shoulders shall be four feet wide, except for minor collector streets of high intensity with off-street parking, which shall be six feet wide on each side for all streets, and major collector streets of medium and high intensity, which shall be eight feet wide on each side for all streets. Shoulders shall be located within the right-of-way as shown in the following street illustrations.

(d) Shoulders shall be constructed of materials such as stabilized earth, gravel, crushed stone, bituminous treatment, or other forms of pavement which provide for vehicle load support. Shoulders along major collectors and shoulders along streets that are part of a designated bike path as indicated in the bicycle circulation portion of the municipal master plan shall be paved with asphalt pavement.

Amended by R.1999 d.374, effective November 1, 1999 (operative May 1, 2000).

See: 31 N.J.R. 477(a), 31 N.J.R. 3259(a).

Rewrote (c).

Amended by R.2000 d.480, effective December 4, 2000 (operative June 3, 2001).

See: 32 N.J.R. 2670(b), 32 N.J.R. 4277(a).

In (a) and (a)2, deleted "and/or drainage swales" preceding "preferable"; and in (d), inserted the last sentence.

Public Notice: Notice regarding the Publication of two Notices of Adoption in the December 16, 2002 New Jersey Register.

See: 34 N.J.R. 4343(a), 4412(a), 35 N.J.R. 219(b).

5:21-4.5 Sidewalks and graded areas

(a) Sidewalks and/or graded areas shall be required, depending on road classification and intensity of development, in accordance with the requirements set forth in Table 4.3 in N.J.A.C. 5:21-4.2.

(b) Sidewalks shall be provided where graded areas are specified in Table 4.3 when the conditions described in (b)1 or 2 below exist:

1. The minimum lot size in the development is smaller than one acre; and

i. The development or project is located within 2,500 feet of a train station, public or school bus route;

ii. The development or project is located within 2,500 feet of an existing recreational, business or retail use or a site where such use is permitted by existing zoning; or

iii. Where the proposed streets connect to or extend existing streets which have sidewalks on both sides; or

2. The minimum lot size in the development is smaller than two acres and the development is located within two miles of a school.

(c) Notwithstanding (b)1 and 2 above, sidewalks shall only be required on one side of rural streets or rural lanes and shall not be required in alleys.

(d) Sidewalks shall be placed parallel to the street, as shown in the street profile figures, unless an exception has been permitted to preserve topographical or natural features, or if required to provide visual interest, or unless the applicant shows that an alternative pedestrian system provides safe and convenient circulation (for example, in planned development).

(e) Sidewalks along streets with nonparallel parking shall be placed parallel to the street, and shall be placed so that sidewalks do not lead pedestrians between parked vehicles and the traveled way. This subsection shall not apply to driveways.

(f) Pedestrian-way easements at least 10-foot wide may be required by the municipal approving authority through the center of blocks more than 600-foot long. In providing circulation or access to schools, playgrounds, shopping, adjoining residential areas, or other community facilities, the municipality shall consider and may require pedestrian-way easements.

(g) Sidewalk width shall be four feet; wider widths may be necessary near pedestrian generators and employment centers. Where sidewalks abut the curb and cars overhang the sidewalk, widths shall be six feet. In high-density residential areas when sidewalks abut the curb, a sidewalk/graded area of at least six feet in width shall be required.

(h) Sidewalks and graded areas shall be constructed according to the specifications set forth in N.J.A.C. 5:21-4.18.

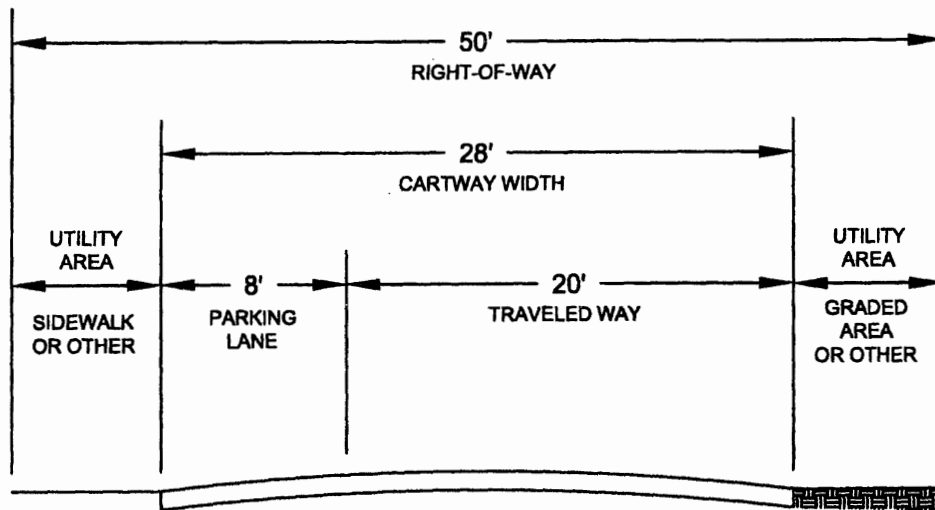
ILLUSTRATIONS OF STREET LAYOUTS FOLLOW:

Note: The individual components shown in the non-travel-way portion of the right-of-way such as utility areas, sidewalks, and graded areas are indicated for illustrative purposes only. Municipalities may vary the placement and

dimensions of these individual items, depending on utility company requirements and local practice and preferences. In addition, items such as shade trees may be accommodated within the total right-of-way widths indicated for each street type. Several street types are not illustrated because of the limited or various, as the case may be, design possibilities.

RESIDENTIAL ACCESS
(low intensity)

Illustration 1 of 14

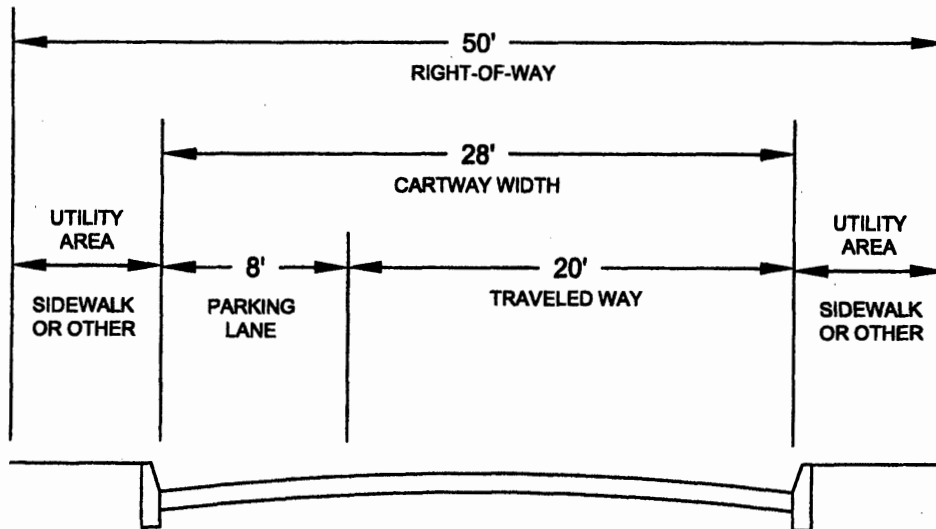


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	20 FEET
NUMBER OF PARKING LANES:	1
PARKING LANE WIDTH:	8 FEET
CARTWAY WIDTH:	28 FEET
CURB OR SHOULDER:	NONE
SIDEWALK OR GRADED AREA:	1 SW 1 GA
RIGHT-OF-WAY:	50 FEET

RESIDENTIAL ACCESS
 (high intensity with on-street parking
 and medium intensity)

Illustration 2 of 14

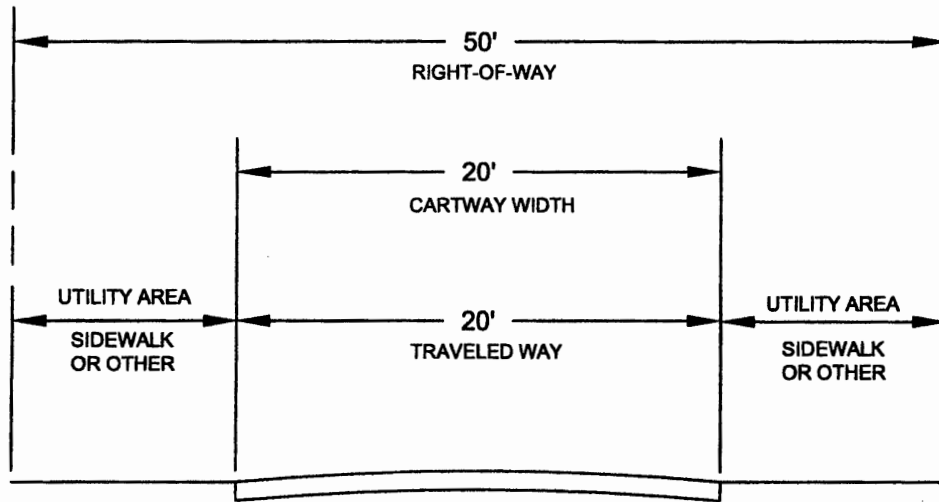


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	20 FEET
NUMBER OF PARKING LANES:	1
PARKING LANE WIDTH:	8 FEET
CARTWAY WIDTH:	28 FEET
CURB OR SHOULDER:	CURB
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

RESIDENTIAL ACCESS
 (high intensity with off-street parking)

Illustration 3 of 14

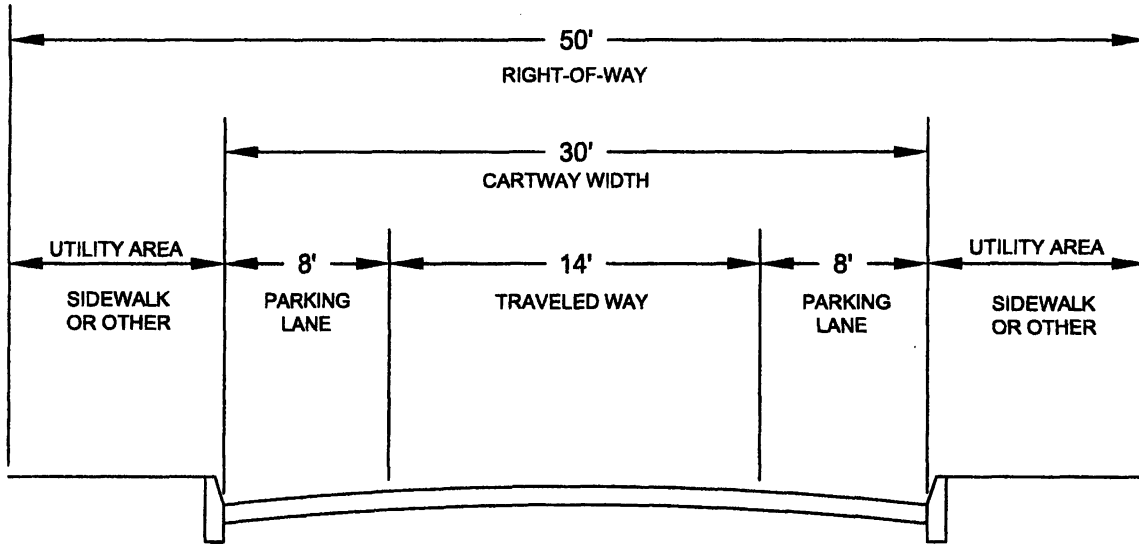


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	20 FEET
NUMBER OF PARKING LANES:	0
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	20 FEET
CURB OR SHOULDER:	NONE
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

**NEIGHBORHOOD
(all intensities)**

Illustration 4 of 14

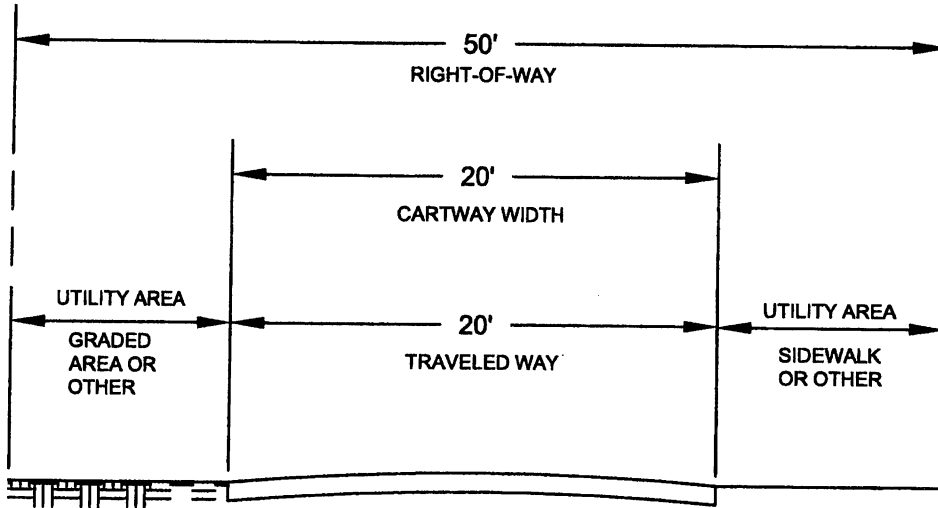


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	14 FEET
NUMBER OF PARKING LANES:	2
PARKING LANE WIDTH:	16 FEET
CARTWAY WIDTH:	30 FEET
CURB OR SHOULDER:	CURB
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

MINOR COLLECTOR
(low intensity with no parking)

Illustration 5 of 14

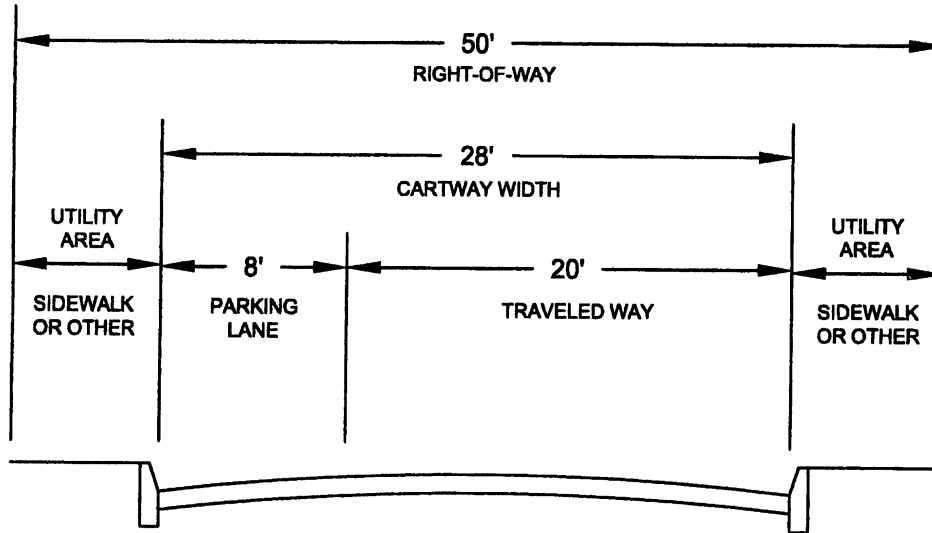


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	20 FEET
NUMBER OF PARKING LANES:	0
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	20 FEET
CURB OR SHOULDER:	NONE
SIDEWALK OR GRADED AREA:	1 SW 1 GA
RIGHT-OF-WAY:	50 FEET

MINOR COLLECTOR
 (low, medium, and high intensity
 with one parking lane)

Illustration 6 of 14

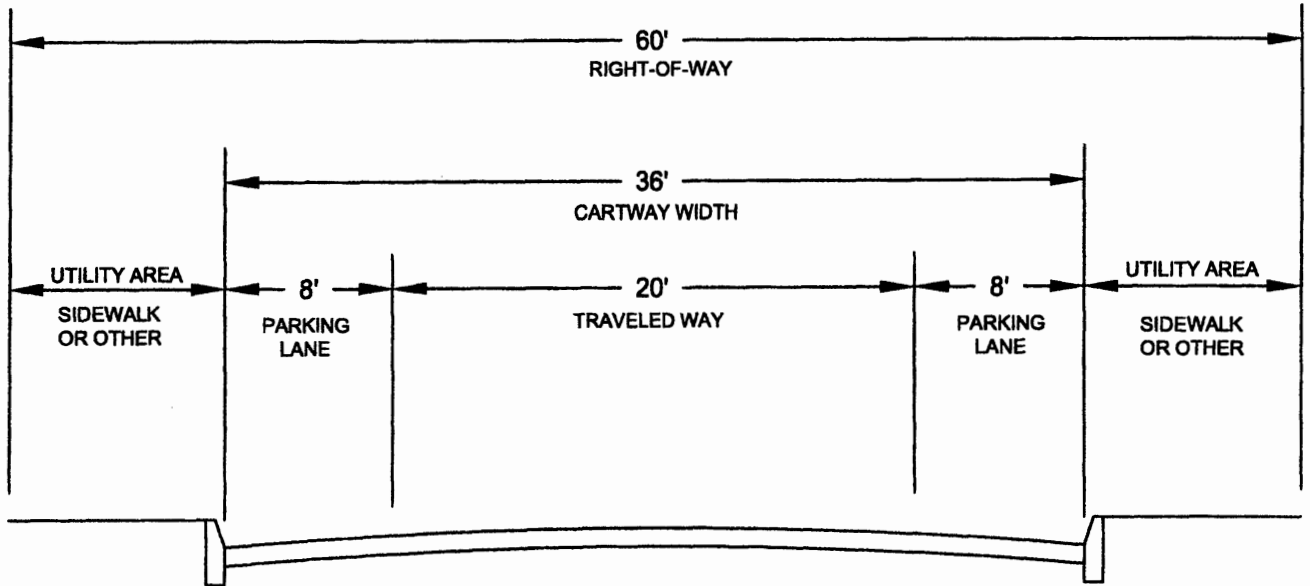


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	20 FEET
NUMBER OF PARKING LANES:	1
PARKING LANE WIDTH:	8 FEET
CARTWAY WIDTH:	28 FEET
CURB OR SHOULDER:	CURB
SIDEWALK OR GRADED AREA:	
low, one parking lane:	1SW, 1GA
medium, one parking lane:	2 SW
high, one parking lane:	2 SW
RIGHT-OF-WAY:	50 FEET

MINOR COLLECTOR
 (medium and high intensities
 with two parking lanes)

Illustration 7 of 14

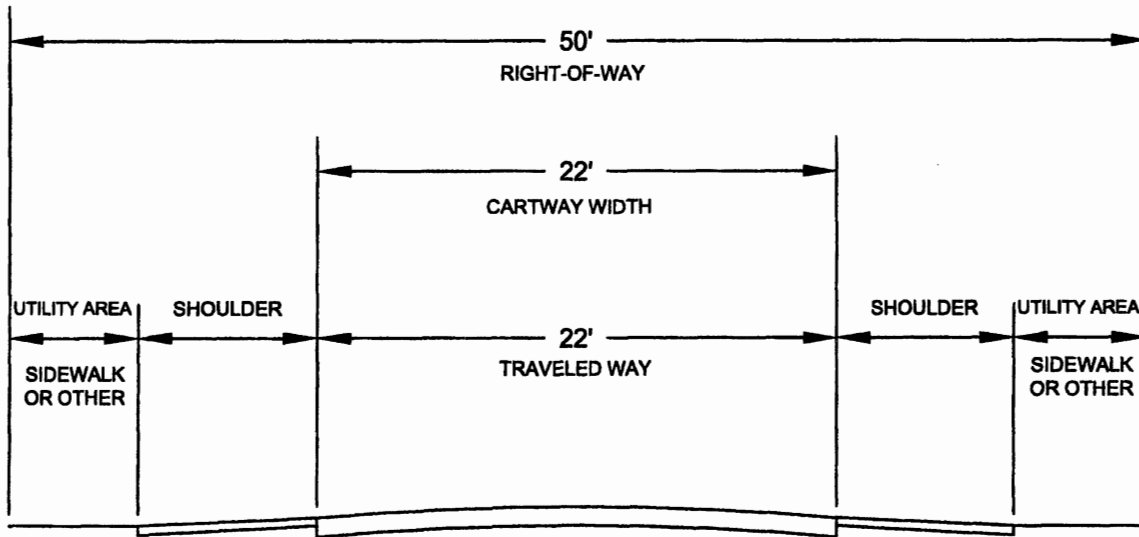


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	20 FEET
NUMBER OF PARKING LANES:	2
PARKING LANE WIDTH:	16 FEET
CARTWAY WIDTH:	36 FEET
CURB OR SHOULDER:	CURB
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	60 FEET

**MINOR COLLECTOR
(medium and high intensity
with off-street parking
and shoulders)**

Illustration 8 of 14

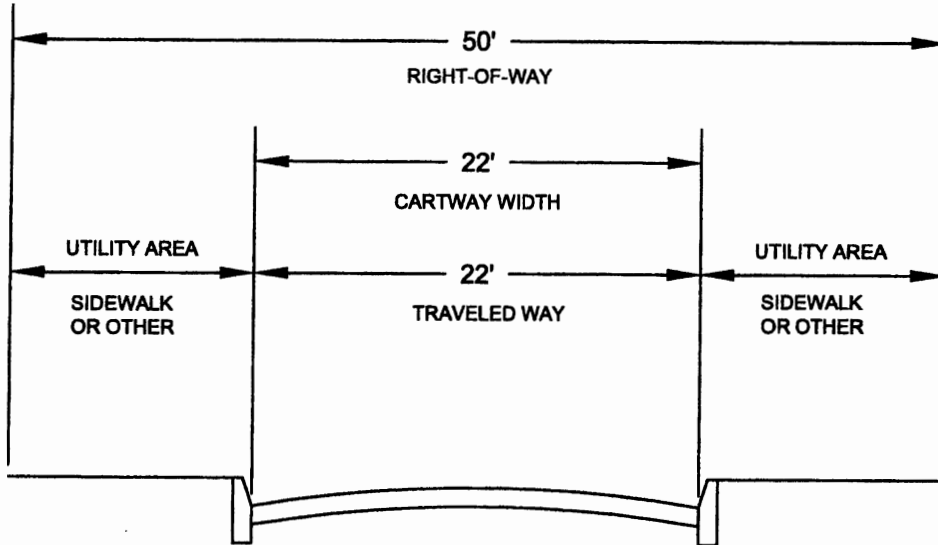


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	22 FEET
NUMBER OF PARKING LANES:	0
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	22 FEET
CURB OR SHOULDER:	SHOULDER
medium intensity:	4 FEET
high intensity:	6 FEET
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

MINOR COLLECTOR
 (medium and high intensity
 with off-street parking and curb)

Illustration 9 of 14

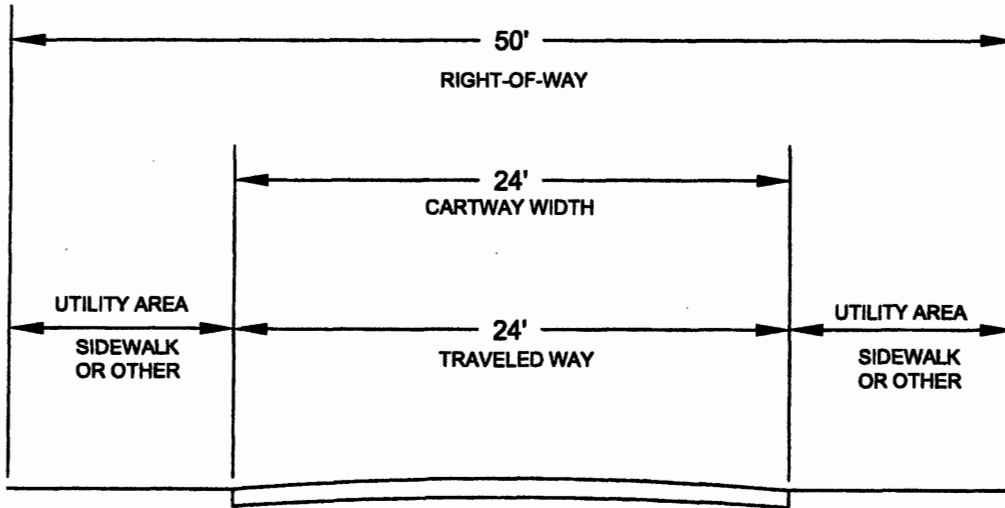


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	22 FEET
NUMBER OF PARKING LANES:	1
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	22 FEET
CURB OR SHOULDER:	CURB
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

**MAJOR COLLECTOR
(low intensity)**

Illustration 10 of 14

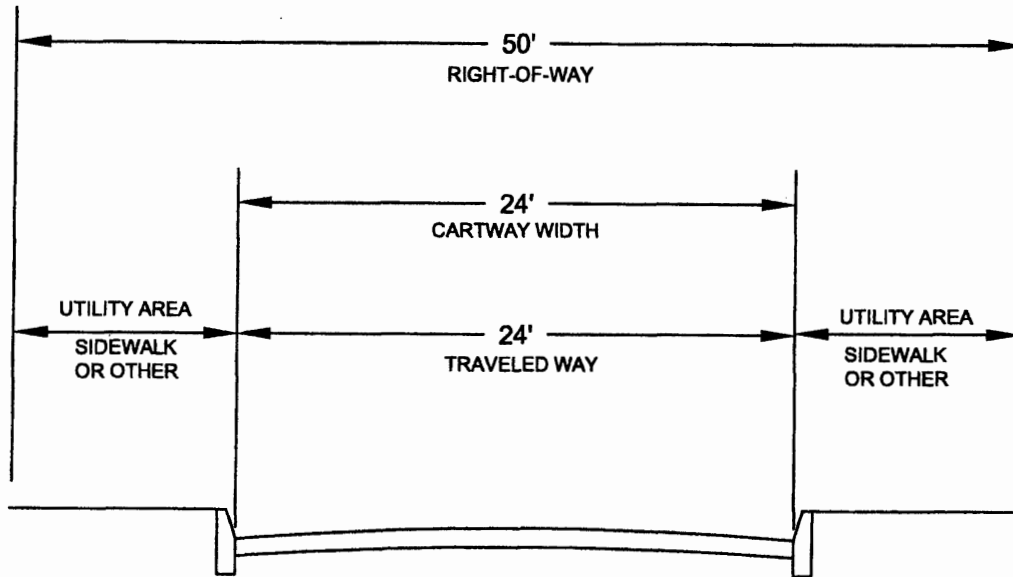


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	24 FEET
NUMBER OF PARKING LANES:	0
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	24 FEET
CURB OR SHOULDER:	NONE
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

MAJOR COLLECTOR
 (medium and high intensity with curb)

Illustration 11 of 14

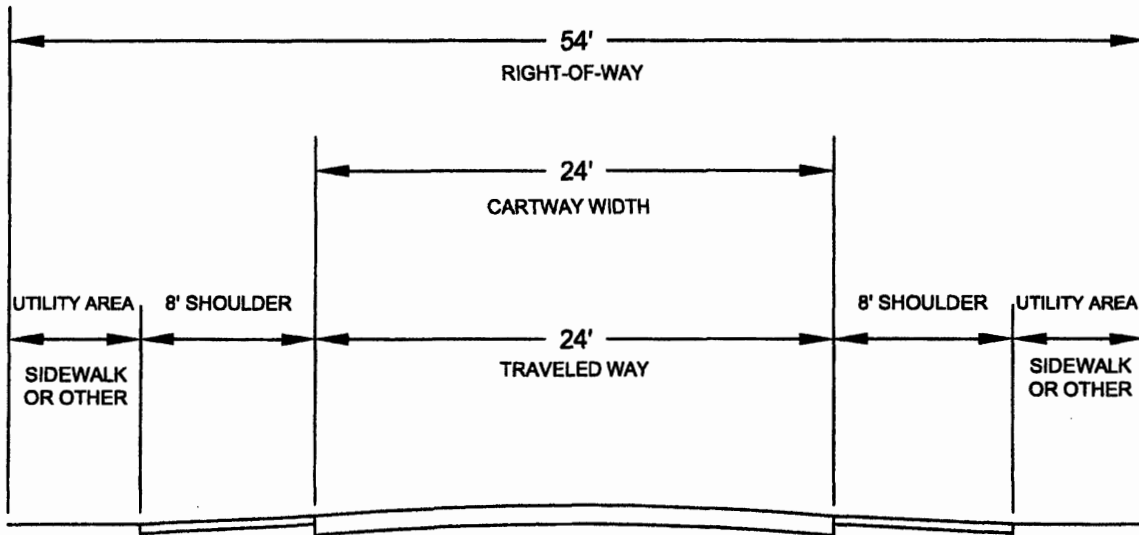


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	24 FEET
NUMBER OF PARKING LANES:	0
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	24 FEET
CURB OR SHOULDER:	CURB
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	50 FEET

MAJOR COLLECTOR
 (medium and high intensity
 with shoulders)

Illustration 12 of 14

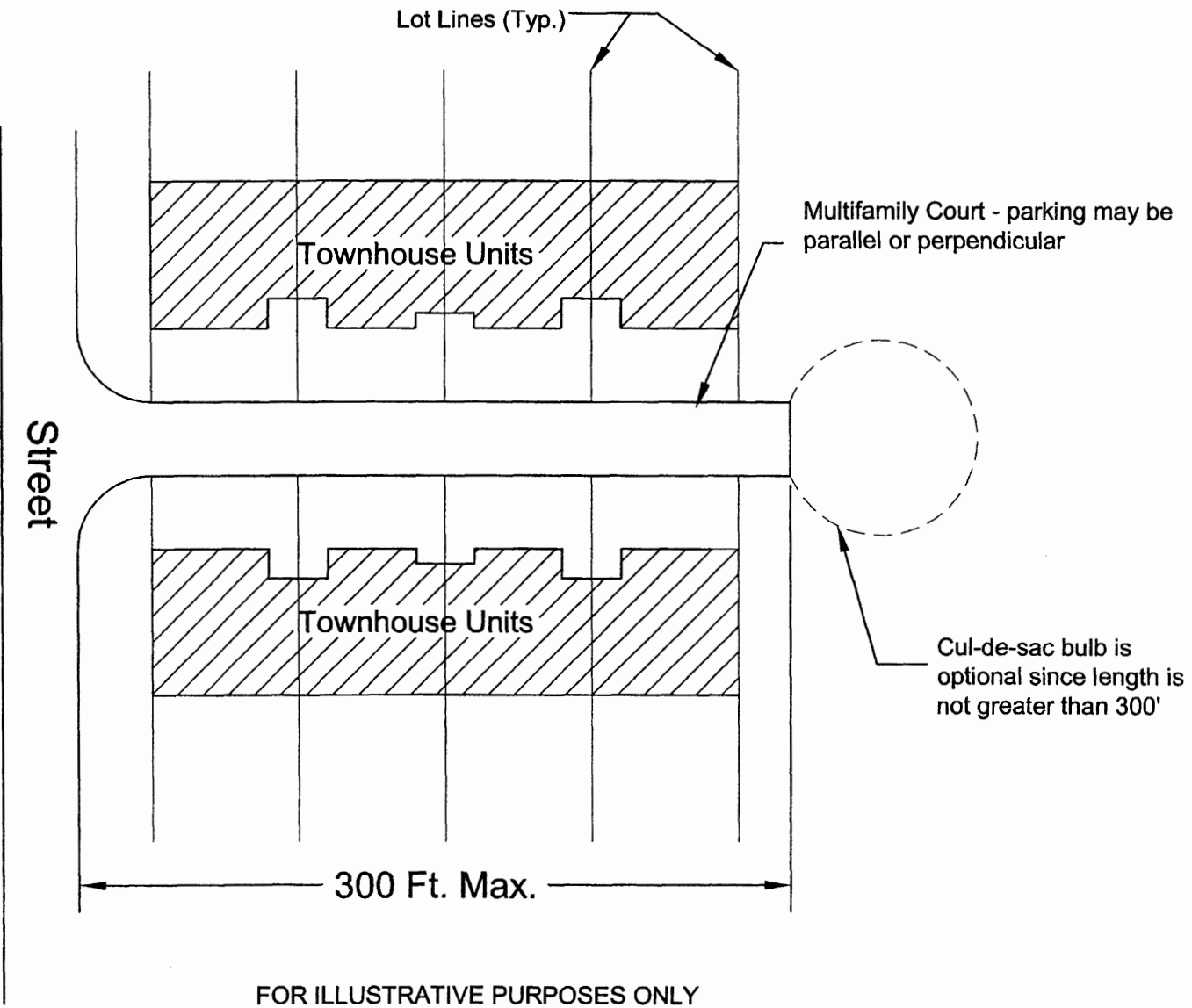


FOR ILLUSTRATIVE PURPOSES ONLY

TRAVELED WAY:	24 FEET
NUMBER OF PARKING LANES:	0
PARKING LANE WIDTH:	0 FEET
CARTWAY WIDTH:	24 FEET
CURB OR SHOULDER:	SHOULDER
SIDEWALK OR GRADED AREA:	2 SW
RIGHT-OF-WAY:	54 FEET

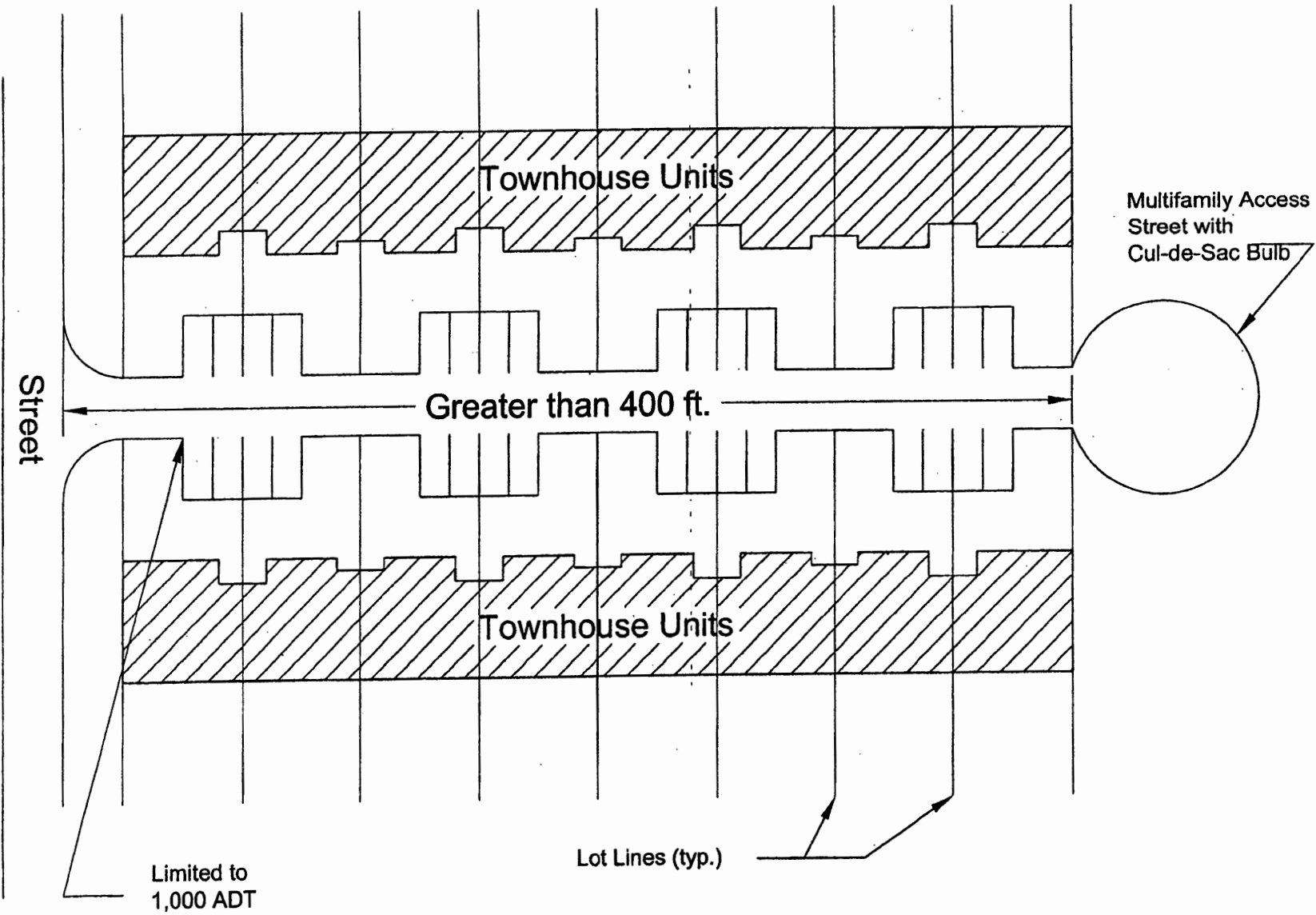
MULTIFAMILY COURT

Illustration 13 of 14



MULTIFAMILY
CUL-DE-SAC

Illustration 14 of 14



FOR ILLUSTRATIVE PURPOSES ONLY

Administrative correction.

See: 29 N.J.R. 1296(a).

Amended by R.1999 d.374, effective November 1, 1999 (operative May 1, 2000).

See: 31 N.J.R. 477(a), 31 N.J.R. 3259(a).

Public Notice: Special area standards.

See: 33 N.J.R. 897(a).

Amended by R.2002 d.399, effective December 16, 2002.

See: 34 N.J.R. 2615(a), 34 N.J.R. 4412(a).

Rewrote (b)1; added new (e); recodified former (e) through (g) as new (f) through (h); added Illustrations 13 and 14.

Public Notice: Notice regarding the Publication of two Notices of Adoption in the December 16, 2002 New Jersey Register.

See: 34 N.J.R. 4343(a), 4412(a), 35 N.J.R. 219(b).

5:21-4.6 Bikeways

(a) Separate bicycle paths and lanes shall be required only if such paths and lanes have been specified as part of a municipality's adopted master plan and/or official map.

(b) Bicycle lanes, where provided, shall be placed in the outside lane of a roadway, adjacent to the curb or shoulder. When on-street parking is permitted, the bicycle lane shall be between the parking lane and the outer lane of moving vehicles. Lanes shall be delineated with markings, preferably striping. Raised reflectors or curbs shall not be used.

(c) The construction of bikeways shall comply with the specifications set forth in N.J.A.C. 5:21-4.18.

5:21-4.7 Utility areas

(a) Utility mains shall be located within the right-of-way or within utility easements outside the right-of-way.

(b) Utility areas shall be planted with grass, ground cover, or treated with other suitable cover material.

Amended by R.1999 d.374, effective November 1, 1999 (operative May 1, 2000).

See: 31 N.J.R. 477(a), 31 N.J.R. 3259(a).

Rewrote (a).

5:21-4.8 Right-of-way and cartway

(a) The right-of-way shall be measured from lot line to lot line. Right-of-way requirements are shown in Table 4.3 in N.J.A.C. 5:21-4.2 and displayed graphically in the street illustrations in N.J.A.C. 5:21-4.5.

(b) The municipal approving authority may require the right-of-way and cartway widths of a new street that is a continuation of an existing street to be at least the same widths as the existing street.

(c) The right-of-way shall be of sufficient width to accommodate future development, as indicated by the municipal master plan.

(d) Where turning lanes are needed based on safety or capacity, additional right-of-way width, not to exceed the width and length of the turning lanes, may be required.

5:21-4.9 Street grade and intersections

Street grade and intersection design shall be constructed according to the specifications set forth in N.J.A.C. 5:21-4.19.

5:21-4.10 Pavement

(a) Street pavement thickness shall vary by street hierarchy, subgrade properties, and pavement type.

(b) Pavement design for rural, residential access, neighborhood, minor collector, and major collector streets shall conform to the specifications in N.J.A.C. 5:21-4.19.

5:21-4.11 Street and site lighting (Reserved)

5:21-4.12 Underground wiring

(a) All electric, telephone, television, and other communication facilities, both main and service lines servicing new developments, shall be provided by underground wiring within easements or dedicated public rights-of-way, installed in accordance with the prevailing standards and practices of the utility or other companies providing such services.

(b) Lots that abut existing easements or public rights-of-way, where overhead electric or telephone distribution supply lines and service connections have heretofore been installed, may be supplied with electric and telephone service from those overhead lines, but the service connections from the utilities' overhead lines shall be installed underground.

(c) Overhead lines may be permitted as an exception by the municipal approving authority in areas of severe geological conditions. The placement and alignment of the poles shall be designed to lessen the visual impact of overhead lines.

5:21-4.13 Street and traffic signs

(a) Design and placement of traffic signs included in "Manual on Uniform Traffic Control Devices for Streets and Highways" shall follow the requirements specified in "Manual on Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation and adopted by the N.J. Department of Transportation.

(b) At least two street name signs shall be placed at each four-way street intersection and one at each "T" intersection. Signs shall be placed so as not to obstruct sight distances and under light standards, if present, so that they are clearly visible. The design of street name signs should be: consistent, of a style appropriate to the community, of a uniform size and color, and erected in accordance with local standards.

(c) At signalized intersections, street signs shall be located on the overhead arm supporting the traffic signal, or otherwise suitably suspended over the intersection. Road-

way clearance shall be a minimum of 15 feet from the bottom of any sign or supporting equipment and the top of the paved surface.

5:21-4.14 Parking: number of spaces

(a) An adequate number of on-street and off-street parking spaces shall be required in all developments to accommodate residents and visitors. For projects containing dwelling units required by the New Jersey Uniform Construction Code's Barrier Free Subcode (N.J.A.C. 5:23-7) to be accessible, accessible parking spaces for people with disabilities shall be provided in accordance with the requirements of the Barrier Free Subcode and shall be considered part of the total number of required spaces.

(b) For residential developments, parking shall be provided, as set forth in Table 4.4 below. If applicant does not specify the number of bedrooms per unit, note "c" for each category in Table 4.4 shall apply for the parking requirement.

(c) Alternative parking standards to those shown in Table 4.4 shall be accepted if the applicant demonstrates these standards better reflect local conditions. Factors affecting minimum number of parking spaces include household characteristics, availability of mass transit, urban versus suburban location, and available off-site parking resources.

(d) Garage and driveway combinations shall be counted as follows:

1. Each garage car space shall be counted as 1.0 off-street parking space regardless of the dimensions of the driveway.
2. A one-car garage and driveway combination shall count as 2.0 off-street parking spaces, provided the driveway measures a minimum of 18 feet in length between the face of the garage door and the right-of-way.
3. A two-car garage and driveway combination shall count as 3.5 off-street parking spaces, provided a minimum parking width of 20 feet is provided for a minimum length of 18 feet as specified for a one-car garage and driveway combination.

(e) When housing is included in mixed-use development, a shared parking approach to the provision of parking shall be permitted.

(f) When, in the judgment of the local approving authority, on-street parking is available, then only that proportion of the parking requirement which is not available on the street shall be provided in off-street parking facilities. A length of 23 feet per on-street parking space shall be used in calculating the number of available on-street parking spaces.

TABLE 4.4
PARKING REQUIREMENTS FOR
RESIDENTIAL LAND USES^a

Housing unit type/size ^b	Parking requirement per dwelling unit
Single-Family Detached	
2 Bedroom	1.5
3 Bedroom	2.0
4 Bedroom	2.5 ^c
5 Bedroom	3.0
Two Family (Duplex)	"Single-Family Detached" values shall apply to each unit
Garden Apartment	
1 Bedroom	1.8
2 Bedroom	2.0 ^c
3 Bedroom	2.1
Townhouse	
1 Bedroom	1.8
2 Bedroom	2.3 ^c
3 Bedroom	2.4
High Rise	
1 Bedroom	0.8
2 Bedroom	1.3 ^c
3 Bedroom	1.9
Mobile Home	
1 Bedroom	1.8
2 Bedroom	2.0 ^c
Retirement Community	Values shall be commensurate with the most appropriate housing unit type and size noted above that the retirement community resembles.
Recreational Homes (owner occupied)	Values shall be commensurate with the most appropriate housing unit type and size noted above that the recreational homes (owner occupied) resemble.
Mid-Rise Apartment Assisted living	"Garden Apartment" values shall apply 0.50

Notes:
^aWhen determination of the required number of parking spaces results in a fractional space for the entire development, any fraction of one-half or less may be disregarded, while a fraction in excess of one-half shall be counted as one parking space.

^bRequirements for attached units (apartment/condominium/townhouse) include provisions for guest parking (0.5 spaces per dwelling unit). Guest parking must either be provided for on street or in common parking areas.

^cIf applicant does not specify the number of bedrooms per unit, this parking requirement shall apply.

Source: Modified and adapted from U.S. Department of Commerce, Bureau of the Census, Public Use File—New Jersey (cross-tabulation of vehicles by housing unit for units constructed 1975 to 1980).

Amended by R.1999 d.374, effective November 1, 1999 (operative May 1, 2000).

See: 31 N.J.R. 477(a), 31 N.J.R. 3259(a).

Rewrote (d); and in Table 4.4, deleted "offstreet" preceding "parking" in Note c.

Administrative correction.

See: 32 N.J.R. 684(b).

Amended by R.2000 d.480, effective December 4, 2000 (operative June 3, 2001).

See: 32 N.J.R. 2670(b), 32 N.J.R. 4277(a).

In Table 4.4, amended column headings and inserted requirement for assisted living.

Amended by R.2002 d.399, effective December 16, 2002.

See: 34 N.J.R. 2615(a), 34 N.J.R. 4412(a).

In Table 4.4, added "Two Family (Duplex)" and rewrote footnote b. Public Notice: Notice regarding the Publication of two Notices of Adoption in the December 16, 2002 New Jersey Register.

See: 34 N.J.R. 4343(a), 4412(a), 35 N.J.R. 219(b).

Administrative change.

See: 35 N.J.R. 1663(a).

5:21-4.15 Parking space size

Each off-street parking space shall measure nine feet in width by 18 feet in length. Parking spaces for people with disabilities shall be in accordance with the New Jersey Uniform Construction Code (N.J.A.C. 5:23) or the Americans with Disabilities Act, as applicable.

5:21-4.16 Parking lots

(a) Off-street parking lots shall be oriented to, and within a reasonable walking distance of, the buildings they are designed to serve.

(b) Access to parking lots shall be designed so as not to induce queues on travel ways, and to provide adequate pedestrian circulation and safety. There shall be adequate provision for ingress to and egress from all parking spaces to ensure ease of mobility, ample clearance, and safety of vehicles and pedestrians.

(c) The width of all aisles providing direct access to individual parking stalls shall be in accordance with the requirements specified in Table 4.5 below. Only one-way traffic shall be permitted in aisles serving single-row parking spaces placed at an angle other than 90 degrees.

TABLE 4.5
PARKING ANGLES AND AISLE WIDTHS

Parking angle (degrees)	Aisle width (feet)
30	12
45	13
60	18
90	24

(d) Where sidewalks occur in parking areas, parked vehicles shall not overhang or extend over the sidewalk unless an additional two feet of sidewalk width are provided to accommodate such overhang.

(e) Where sole access to dwelling units is via a parking lot, the following features shall be provided:

1. Designated fire lanes a minimum of 18 feet in width shall be required as provided for in the Uniform Fire Code.

2. Parking lots shall be provided with turning bays or other means of turning at intervals of not greater than 1,200 feet. Turning bays, such as hammerheads or other configurations, shall measure at least 18 feet by 60 feet, or provide equivalent maneuvering space.

3. Parking lots having more than 100 spaces shall have a minimum of two means of ingress and egress, or be provided with a divided-type entrance.

Amended by R.2002 d.399, effective December 16, 2002.
See: 34 N.J.R. 2615(a), 34 N.J.R. 4412(a).

In (a), substituted "lots" for "areas" following "Off-street parking"; added (e).

Public Notice: Notice regarding the Publication of two Notices of Adoption in the December 16, 2002 New Jersey Register.
See: 34 N.J.R. 4343(a), 4412(a), 35 N.J.R. 219(b).

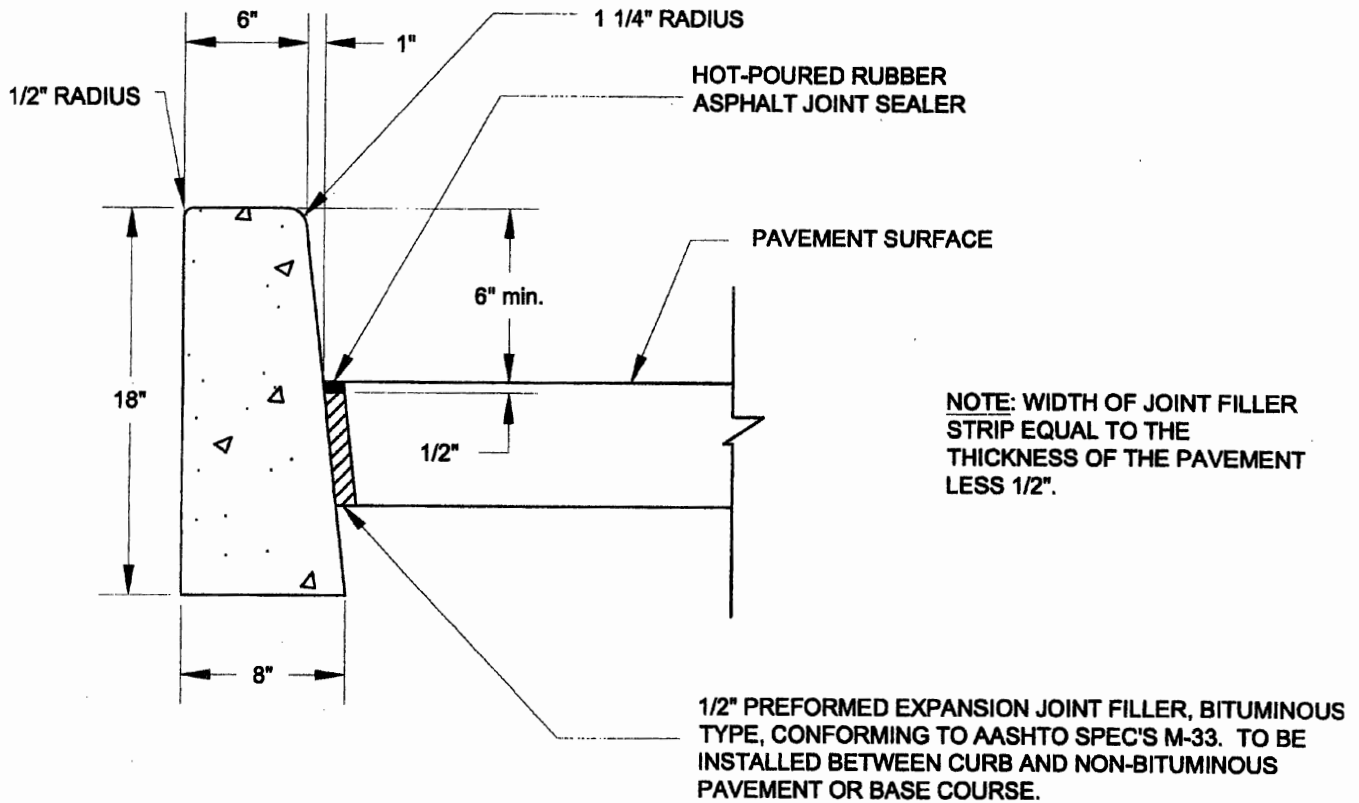
5:21-4.17 Curb construction standards

(a) Construction specifications for acceptable curb types of granite block and concrete are shown in Figure 4.1 below.

(b) The standard concrete curb section used shall be a maximum of 20 feet in length, with a scored joint every 10 feet. All concrete used for curbs or combination curbs and gutters shall be prepared in accordance with the requirements, by class of concrete, of the New Jersey Department of Transportation, *Standard Specifications for Road and Bridge Construction*, effective at the time of preparation. Where bituminous concrete pavement is used for the road surface, the curb and/or gutter shall be constructed first.

(c) Where drainage inlets are constructed but curbs are not required, curbing must be provided at least 10 feet on each side of the inlet, set back one foot from the extension of the pavement edge.

Figure 4.1
(1 of 6)



N.T.S.

NOTES: 1. CONCRETE TO BE NJDOT CLASS "B" (AIR ENTRAINED).

2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' - 0" APART AND SHALL BE FILLED WITH PREFORMED, BITUMINOUS-IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO M-213, RECESSED 1/4" FROM THE FRONT FACE AND TOP OF THE CURB.

3. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.

CONCRETE VERTICAL CURB