OR-2017-01-01

AN ORDINANCE AMENDING CHAPTER 151, SECTIONS 151.016 DEFINITIONS AND 151.165 OFF-STREET PARKING, LOADING AND STACKING

WHEREAS, this amendment was heard by the Village of Marvin, Village Council in a public meeting on January 3, 2017.

NOW, THEREFORE, be it Ordained by the Village Council for the Village of Marvin that:

Section 1. The Code of Ordinance, Section 151.016 is amended to replace and/or include the following definitions:

§151.016 DEFINITIONS

COMMERCIAL VEHICLE. Any motor vehicle or trailer typically used for business, industrial, office or institutional purposes or having painted thereon or affixed thereto a sign identifying a business, industry office of institution or a principal product or service of such. Agricultural equipment used as part of a permitted agricultural principal use shall not be considered a commercial vehicle.

DEVELOPMENT STANDARD. A regulation establishing a protocol for how land or an aspect of land development, may progress in association with a particular project or a particular district within the Village of Marvin and its planning jurisdiction.

DRIVE AISLE. A vehicular access way located within an off-street parking area or vehicular use area which serves individual parking stalls and driveways.

DRIVEWAY STEM. The portion of a driveway between the State Highway System public roadway and the internal roadway network or area where parking maneuvers occur.

FIXTURE. A gas-powered, battery-powered, solar-powered or electrically powered device that is secured to a wall, ceiling, pole, or post that is used to hold one or more lamps (or jets) and is intended to emit light.

HIGH VOLUME GENERATOR. A land use or development that has an average daily traffic greater than one thousand (1000) vehicles per day per the most recently published Trip Generation Manual, published by the Institute of Traffic Engineers (ITE).

INTERNAL ROADWAY NETWORK. An internal circulation system within larger developments that allow vehicular travel within the property.

LOADING DOCK / LOADING BAY. A platform that is part of a facility's service area, which provides direct access between a delivery truck and a facility's storage area, storage room or freight elevator during loading and unloading.

LOADING SPACE / LOADING ZONE. A space reserved for a vehicle used for the loading and/or unloading of goods or commodities inclusive of space allocated to loading dock or loading bay and the pavement surrounding area required and used for maneuvering a delivery vehicle. Any area containing a loading space shall also be considered part of a Service Area.

MASONRY. A construction method that stacks masonry units, such as stones or bricks, and binds them with mortar to form a wall; materials shall include brick, stone, natural or cultured stone, limestone, marble, or granite, split-face block or architectural concrete.

PARKING COURT. A smaller area of parking located within a larger area of parking, consisting of no more than thirty-six (36) spaces defined by one or more of the following: a continuous, landscaped parking median, a minimum of twenty (20) feet long, a landscaped perimeter parking island, a pedestrian-use area of approximately eight hundred (800) square feet, or an architected, principal building with foundation landscaping.

PARKING LOT. An unenclosed area for the use and storage of motor vehicles including parking spaces, parking lot driving aisles, vehicle storage and queuing areas, and off-street loading areas.

PRIMARY ACCESS DRIVEWAY. Each driveway providing vehicular ingress and egress across land fronting the State Highway System.

RIGHT-OF-WAY, PUBLIC. The land, including roadways, that lies within legally defined property boundaries whose title vests in the State or the municipality and is designated or intended for public purposes.

SERVICE AREA. An area which contains one or more of the following: trash collection device(s); refuse container(s); loading and unloading area; outdoor shipping and receiving area; temporary, interim storage of shipped or received product; outdoor repair areas; safety equipment; wall-mounted equipment; utility equipment; or mechanical and electrical equipment, etc.

STACKING LANE. An area of stacking spaces and driving lane provided for vehicles waiting for drive-through service that is physically separated from other traffic and pedestrian circulation on the property being developed.

VEHICULAR USE AREAS. All vehicular parking areas, stacking areas, queue lanes, methods of vehicular ingress and egress, internal aisles and loading spaces within an *INTERNAL ROADWAY NETWORK*.

Section 2. The Code of Ordinance Section 151.165 is hereby stricken and replaced with the following:

§151.165 OFF-STREET PARKING, LOADING AND STACKING

(A) **Purpose.** These standards are provided to assure proper and uniform development of off-street parking areas and loading areas throughout the Village; to relieve traffic congestion in the streets; to encourage pedestrian activity; to encourage the use of bicycles for transportation; to minimize detrimental effects of off-street parking and loading areas on adjacent properties and on the environment. Furthermore, this section establishes design and development standards so parking areas are safe, functional, low impact, adequately landscaped, and properly screened.

(B) **Applicability**. This section establishes the minimum standards for the amount, location, development and design of off-street parking, off-street loading, drive-through lanes and vehicular stacking. Additionally, requirements have been provided for bicycle parking and accessibility parking requirements.

(C) **Parking & Circulation Plans**.

(1) ***Approval for Parking Lots.*** Parking lots of five (5) or more parking spaces, for non-residential uses, or uses in a conditional district, shall be reviewed in accord with a development application. Notwithstanding, Specific Site design, landscaping and signs in parking lots shall receive Design Review and Approval, pursuant to §151.215. Parking and circulation plans shall include the following information to establish evidence in support of the findings in this section:

(a) The number of parking spaces required for each land use

(b) The total number of parking spaces required and provided

(c) The number of accessible car spaces required and provided

(d) The number of bicycle parking spaces required and provided

(e) Delineations and percentage of areas devoted to landscaping and screening

(f) For multi-family residential projects, the distribution and proximity of parking spaces in relation to residential entrances

(g) For non-residential projects, the location access driveways and related permits.

(h) For Conservation developments, or non-residential developments, connections to greenways, public sidewalks or an outline of Internal Pedestrian Network plans per applicable ordinances.

(i) Additional information required by the Zoning Administrator, Planning Board or Village Council.

(2) ***Review Authority***. In approving Specific Site Design plans for parking lots, the Design Review Authority must find that:

(a) The proposed off-site parking lot is permitted within the applicable district and that it complies with the standards and intent of all of applicable provisions of the Zoning Ordinance;

(b) The proposed off-site parking spaces would be consistent with the goals, objectives, policies, and programs of the Land Use Plan and other adopted land use policy documents.

(3) ***Conditions of Approval***. In approving a parking lot site design, the Design Review Authority may impose reasonable and necessary conditions relating to development, location, and operation regarding on-and off-site improvements, and operation of the facility, which shall ensure that:

(a) Access to the site is adequate to accommodate the proposed off-site parking and the traffic that the facility would reasonably generate;

(b) The design, location, size, and operating characteristics of the proposed off-site parking are compatible with the existing and future land uses on-site and in the vicinity of the subject property;

(c) The establishment, maintenance, or operation of the proposed parking at the location proposed does not endanger, jeopardize, or otherwise constitute a menace to the public convenience, health, interest, safety, or general welfare of persons residing or working in the neighborhood of the proposed parking lot or structure;

(d) Where the off-site parking spaces are new and in close proximity to residential uses, especially bedroom windows, they are designed and operated to comply with the Village's noise standards and Land Use Plan, and with proper consideration for headlight impacts in compliance with the Lighting Ordinance.

(e) Any proposed drive-through use will not generate excessive traffic on the site and surrounding public streets.

(4) ***Post Approval Procedures***.

(a) *Expiration and Extension.* To ensure continued compliance with the provisions of this section, each approved Parking Lot Permit shall expire twenty-four (24) months from the effective date of approval, unless otherwise specified in the condition of approval. If no modifications or alterations have occurred to the premises, which might otherwise change parking requirements the approval shall be automatically extended each year.

(b) *Revocation.* A Parking Lot approval may be revoked or modified with seven (7) days' notice if activities are found to be non-compliant with any provision in the ordinance. Penalties shall be imposed in accord with §151.099.

(D) ***General Provisions***.

(1) ***Meaning of Terms and Words***. For the purposes of interpreting regulations outlined herein, the terms 'parking lot', 'parking area' or 'vehicular use area', may be interchangeably used and shall refer to all off-street parking spaces, drive aisles, stacking lanes, vehicular means of ingress and egress, access drives, loading spaces and areas, waste collection areas and service areas.

(2) ***Maintenance***. Vehicular use area surfaces shall be kept in good condition and parking space demarcations shall be kept clearly visible and distinct. Landscaping within parking lots must be properly irrigated, maintained and replaced in accord with §151.046. Parking facilities shall be continually maintained in compliance with the approved site plan and/or permits and shall be free of litter and debris at all times.

(3) ***Availability***. Parking and loading spaces shall be marked, maintained, and permanently available for the use they are intended to serve. Owners, lessees, tenants, or persons having control of the parking or loading spaces shall not prevent, prohibit or restrict the utilization of parking and loading spaces.

(4) ***Appropriate Use***. Required off-street parking areas shall be used exclusively for the temporary parking of vehicles and shall not be used for the sale, lease, display, repair, or storage of vehicles, trailers, boats, campers, mobile homes, merchandise, or equipment, or for any other use not authorized by the provisions of this section. Living or sleeping in any vehicle or trailer is not permitted. Carts or kiosks, which sell items in parking lots are also prohibited.

(5) ***Inoperable Vehicles and Equipment Storage***. Inoperable vehicles or trailers without current registration may not be located adjacent to a public or private right-of way. The vehicle shall be stored entirely within an enclosed structure or located in the rear yard so that it is screened by the principal building. No such vehicle or trailer shall be parked or stored on residential property less than one acre. Fabric and prefabricated metal carports are prohibited. Commercial vehicles in residential areas must be parked in accord with requirements of subparagraph (E).

(6) ***Vehicular Activity Beyond the Lot***. Vehicular use activity shall not extend beyond the site's property line onto adjoining property without authorization. If infringement is required onto another lot, the site owner shall obtain a written easement or other irrevocable right to park, maneuver or stack vehicles upon the adjoining party's property along with permission to maintain, repair, make and remove improvements without limitation. The site property owner and the owner of the adjoining property shall execute the letter of permission. The document shall be registered and recorded against the title of the site and the adjoining property before the commencement of vehicular activity and/or the construction of improvements. The recorded document must be in a form acceptable to the Village Attorney.

(7) ***Phased Parking Lot Development***. For developments with multiple phases of development, a phasing plan must identify all current and future parking lot requirements. Parking areas shall be constructed as required to meet the development's build-out schedule. Any area of a site that will remain undeveloped, or developed in phases, must be properly graded, landscaped and maintained in between each development phase pursuant to §151.046.

(8) ***Landscaping and Screening***. All vehicular use areas providing parking space for five (5) or more vehicles shall be landscaped and screened and meet all applicable street yard and buffer yard requirements set forth herein and as outlined in §151.046. Landscaping plans must be provided and specific site and landscape design shall receive Design Review and Approval, pursuant to §151.215.

(9) ***Lighting Plans***. Parking areas designed to accommodate five (5) or more vehicles, or for roadways for any nonresidential use, conditional district, new public area or pedestrian-oriented space must comply with all standards of Chapter 152, Lighting. Specific Site & Design Plans, delineating parking lot lighting, shall receive Design Review and Approval, pursuant to §151.215.

(E) **Residential Off-Street Parking Requirements**.

(1) ***Dwelling Unit Parking***. Parking for residential uses shall be provided in accord with Table 1 and all other applicable ordinances in the Marvin Code.

(2) ***Dwelling Units and Guest Parking.*** Any residential development which is not developed in accord with the density outlined in the R-Marvin District shall provide guest parking pursuant to recommendations outlined in Table 1. Visitor parking may be provided in a designated parking court or through parking inlets when roads are widened beyond typical regulations to accommodate parallel parking spaces (See Figure 1). When parking is provided in this manner, parking shall not be permitted in the roadway parallel to the outer island. Parking shall only be permitted within parking inlets.

Figure 1: Visitor Parking

Acceptable Model for Inlet Style Guest Parking.

(3) ***Commercial Vehicles in Residential Areas.***

(a) *General Provisions.* For purposes of interpreting this section, the phrase "commercial vehicle" shall include either self-propelled vehicles or vehicles that are not self-propelled, such as utility trailers and other types of trailers designed or used to store or haul equipment, or materials or a combination of the two types.

(b) The parking and storage of a commercial vehicle, as defined in §151.016, that exceed seven (7) feet in height or twenty (20) feet in length are prohibited in all residential districts.

(c) *Limitations on Smaller Commercial Vehicles.* Commercial vehicles less than seven (7) feet tall or less than twenty (20) feet long, may be parked in residential districts subject to the following conditions:

1. *Commercial Vehicles in Residential Development.* No more than one commercial vehicle, meeting the permitted dimensions herein, may be parked on the residential lot. Any such vehicle must be owned and used by a resident of such lot.

2. *Commercial Vehicle: Self-Propelled.* Any self-propelled commercial vehicle must be parked on a clearly delineated residential driveway and may not be parked in the public street.

3. *Commercial Vehicle: Not Self-Propelled.* Any commercial vehicle, which is not self-propelled, pursuant to §151.016, must also be parked in an enclosed garage, accessory building or rear yard and screened from view from the street.

4. *Commercial Vehicle with Graphics.* A commercial vehicle that meets the dimensions herein, having a sign or graphic attached to or painted on the vehicle that exceeds ten (10) square feet in area, must be parked in an enclosed garage, accessory building or rear yard.

(d) *Age-Restricted Developments.* No commercial vehicle, of any size, is permitted to park on the street or residential driveway in an age-restricted development for more than (4) four hours, except that a commercial vehicle meeting the permitted dimensions herein that is being used for maintenance, may be parked in an area specifically designated for commercial vehicles.

(e) *Moving Vehicles.* A rental moving van or truck may only park in residential zoning districts for the purposes of loading or unloading personal belongings for the lot at which it is parked.

Such vehicles may not be parked in the residential development for more than three (3) consecutive nights.

(f) *Emergency and Service Vehicles.* Emergency response vehicles, road and utility repair and maintenance vehicles, delivery trucks, and similar vehicles used for emergency situations, repair of public infrastructure, or for the delivery of goods and services are exempt from this parking limitation while they are needed on the site.

(g) *Active Construction Sites.* Commercial and construction vehicles and equipment at an active development site or active construction staging area are exempt from this parking restriction. However, said vehicles must be promptly removed from the site upon the completion of site work and construction.

(h) *Parking Restrictions on Service Drives.* Where a service road is adjacent to a residentially zoned area, parking restrictions apply to the side of the service road that is adjacent to the residential area, except as otherwise provided in section. This allows prohibiting commercial parking on that side of the street, which is zoned for a use other than residential to further the residential character of the abutting community. However, restrictions do not apply to commercial vehicles temporarily parked while performing work or service.

(i) *Enforcement.* The provisions of this ordinance shall be enforced pursuant to the penalties outlined in §151.999.

(F) **Non-Residential Off-Street Parking Requirements.**

(1) ***Driveways and Lot Access.***

(a) *Driveway Permit Approval from NCDOT.* In order to protect the storage needs of the site and the operational needs of the driveway/street intersection, a protected driveway stem of a sufficient length shall be required. NCDOT has the authority and responsibility to require a sufficient protected stem length when Primary Access Driveways extend from an NCDOT right-of-way. The length of the protected stem will be determined from the maximum vehicle storage required for the anticipated vehicular volumes.

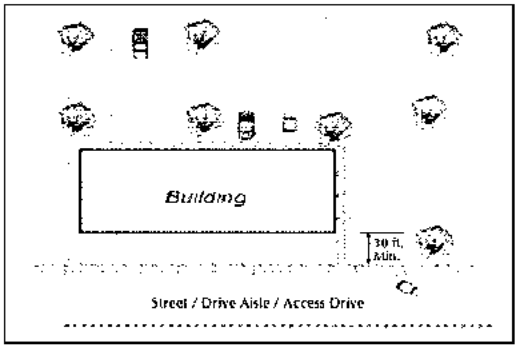
(b) *Protected Stem Lengths for Developments with Internal Roadway Networks.*

1. Notwithstanding the above, any development with an Internal Roadway Network, shall require a protected stem that is a minimum of one hundred (100) feet. The length of the protected storage shall be measured one hundred (100) feet from the near edge of the right-of-way. However, the minimum length of the protected stem shall be increased at the discretion of the Village Engineer after considering uses and expected trip generation counts on the site. No crossing or turning shall be permitted within the first one hundred (100) feet and no parking space may be located along the protected stem (See Figure 11).

2. For developments with an Internal Roadway Network, a protected transition distance must be provided between any Primary Access Drive or Major Drive Aisle and parking spaces or drive-through lanes within the lot. A transition distance of no less than twenty-five (25) feet must be provided from the driveway approach to the nearest parking space, parking island or parking median (See Figure 3).

(c) *Protected Driveway Transitions for Single-Lot Developments.* Non-residential, single-establishment developments, without an Internal Roadway Network or located directly off of a public right-of-way, shall provide a protected transition distance of no less than thirty (30) feet. Fuel Stations, if permitted, shall provide a distance of fifty (50) feet in accord with Figure 18 of this section. A greater distance may be required for certain uses at the sole discretion of the Village Engineer.

Figure 2: Driveway Approach



Model of Acceptable Driveway Approach Transitions

(d) *Driveway Angles.* Driveways located in required yards shall be situated at an angle of approximately ninety (90) degrees to the public or private street to which they connect.

(e) *Minimum Driveway Curb Radii.*

1. A minimum radius of twenty-five (25) feet to the back of curb shall be required where residential streets intersect.

2. A minimum radius of thirty (30) feet measured to the back of curb shall be required where non-residential traffic is expected or for a nonresidential Internal Roadway Network. However, larger radii may be required to accommodate turning movements of larger vehicles, at the discretion of the Village Engineer.

3. A minimum radius of fifty (50) feet or more shall be required on any route expected to be traversed by multi-axel commercial vehicles and where collectors, thoroughfares or boulevard streets intersect.

4. *Village Adopted Standards.* If installation instructions exist within the Village Engineering Standards and Procedures Manual for the installation of driveway curb radii within a non-residential development or private roads, then the curb radii shall comply with the construction standards therein. Otherwise, the standards herein shall apply.

(2) ***Parking Lot Surfacing.***

(a) *Surfacing.* Parking spaces, driveways, and maneuvering areas shall be paved, permanently maintained and properly drained. Except in zones designed for agricultural uses, all parking spaces, loading spaces, and driveways shall be hard surfaced with durable asphalt, concrete or Portland cement concrete surfacing on a suitably prepared base. Parking spaces and driveways accessory to single-family and duplex dwellings need not be surfaced with a more durable type of surfacing than what exists on the access street. Driveways and aisles designated for fire access must be capable of supporting fire apparatus (minimum 50,000 pounds).

(b) *Temporary Parking.* If an unimproved or gravel surface is permitted for a temporary or seasonal use, such gravel shall be removed and the off-street parking area shall be returned to its prior condition immediately upon cessation of the temporary or seasonal use.

(c) *Village Adopted Standards.* If installation instructions exist within the Village Engineering Standards and Procedures Manual for surfacing and paving within private developments, surfacing and paving shall comply with the construction standards therein. Otherwise, the standards herein shall apply.

(3) ***Slopes and Grading.***

(a) *Grading and Surfacing.* All parking lots and vehicular use areas (e.g. parking, maneuvering, circulation, and loading areas) must be graded and surfaced with asphalt or concrete that will protect against potholes, erosion, and dust. The Zoning Administrator may authorize an exception to this requirement for temporary parking associated with a special event or short-term, seasonal activity.

(b) *Driveways Grades and Parking Areas.* The grades of driveways and parking areas shall comply with the following requirements:

1. Driveways shall not exceed a maximum grade of fifteen (15) percent measured along the driveway centerline. Where there is a change in the slope of the driveway, it shall be demonstrated that vehicles will be able to pass over the change in slope without interference with an average vehicle's undercarriage.

2. Cross-grades shall be designed for slower stormwater flow and to direct stormwater toward landscaping, bio-retention areas, or other water collection/treatment areas.

3. Parking lot grades should be limited to a minimum grade of one (1) percent slope and a maximum grade of seven (7) percent slope to ensure proper drainage.

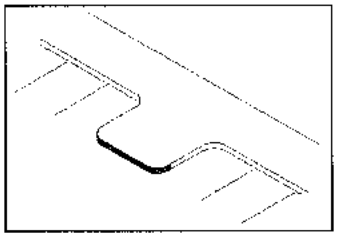
4. The Zoning Administrator and Village Engineer may adjust the parking lot slopes and driveway slope standards during Design Review and Approval.

(c) *Village Adopted Standards.* If standards exist within the Village Engineering Standards and Procedures Manual for slopes and grades within a private development, the grading and slopes shall comply with the construction standards therein. Otherwise, the standards herein shall apply.

(4) ***Curbs, Wheel Guards and Barriers.***

(a) *Parking Lot Curbing.* Parking spaces and the perimeter of parking areas with five (5) or more parking spaces, shall be defined by concrete curbs at least one and one half (1.5) feet high and one and one half (1.5) inches wide. Portland Cement concrete curbs shall be provided between vehicular use areas and landscaped areas. Parking islands, parking medians, and landscape strips, which create a frame around parking spaces shall also be constructed using concrete curbs.

Figure 3: Parking Lot Perimeter Curbs



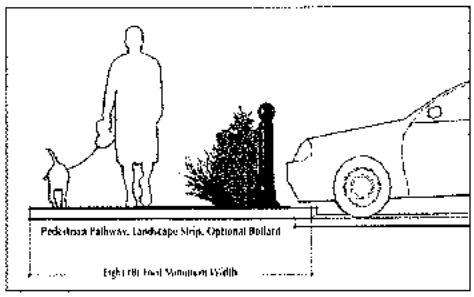
A Model of Acceptable Continuous Parking Perimeter Curb.

(b) *Curbs and Wheel Guards.* All parking spaces on the interior of a parking lot must be provided with either wheel guards or curbs. Where no concrete curbing is provided for a parking space, concrete wheel guards shall be provided to protect public sidewalks, landscaping, buildings and other structures.

(c) *Bollards and Barriers.* Suitable curbs and bollards shall be provided in front of any building or use where patron seating or children gathering areas are situated adjacent to a parking strip. They shall also be used to prevent vehicles from infringing into pedestrian areas or areas where

vehicles are not permitted. Bollards shall be designed so they complement the development's design and fulfill their purpose (See Figure Set 4).

Figure Set 4: Bollards and Barriers

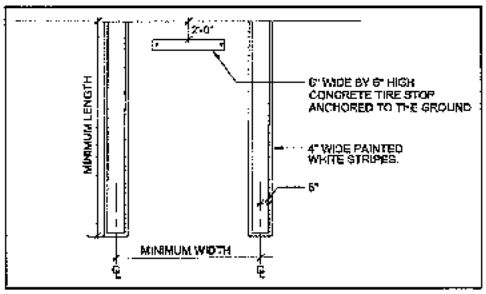


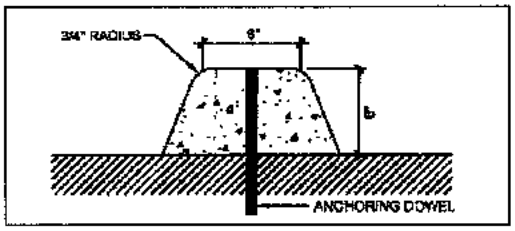
Model of Acceptable Barriers Uses to Protect Pedestrian Walkways.

(d) *Village Adopted Standards.* If additional installation instructions exist within the Village Engineering Standards and Procedures Manual for curbs and bollards within a private development, then bollards and curbs shall also comply with the construction standards therein. Otherwise, the standards herein shall apply.

(e) *Wheel Guard Construction & Material.* Wheel Guards shall be made from concrete (See Figure Set 5.) Wheel Guards must be a minimum of six (6) inches wide by six (6) inches in height. When required, concrete Wheel Guards shall be located two (2) feet from the front of a parking space. If curbs are not provided, concrete wheel guards shall also be provided when parking spaces abut buildings or other structures.

Figure Set 5: Wheel Guards and Parking Lot Space Design





Model of Acceptable Parking Space Striping and Wheel Guard Dimensions and Location

(5) ***Parking Lot Connections and Cross Access.***

(a) Adjoining parking lots serving non-residential uses shall be interconnected according to the following standards:

1. At least one connection 'stub' road shall be provided at all lot lines coincident for at least sixty (60) feet.

2. All connection(s) shall be at least twenty (20) feet wide and permit two-way vehicular circulation.

3. The connection(s) shall align with any previously established connection(s) on an adjacent property.

4. The connection(s) shall have a slope of no greater than fifteen (15) percent.

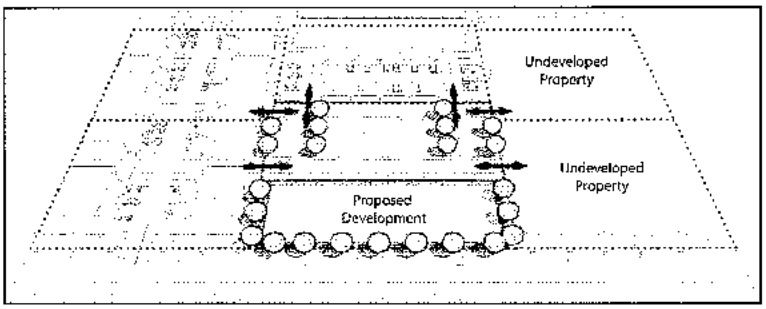
5. The connection(s) shall not be placed where a building on an adjacent property would hamper traffic movements within the parking lot.

6. The connection(s) shall be placed in an area which will not require the removal of significant natural features such as wetlands or trees with a caliper of six (6) inches or more.

7. An easement for ingress and egress to adjacent lots through the connection(s) shall be recorded by the property owner with the Union County Register of Deeds in the form of an easement plat.

8. In the event these conditions create an undue hardship, or if such connections would create undesirable traffic flow, the Zoning Administrator may modify or adjust the connection requirements as appropriate.

Figure 6: Cross Access and Parking Lot Connections



Cross Access and Parking Lot Connections.

(6) ***Stormwater Drainage and Runoff Treatment.***

(a) *Parking Area Drainage.* Where parking facilities are paved with concrete or asphalt, such facilities must provide a drainage system along the periphery of the parking lot.

(b) *Village Adopted Standards.* Drainage and runoff treatment within parking lots shall comply with construction standards within any Engineering Standards and Procedures Manual adopted by the Village of Marvin. If a standard within the manual contradicts a construction requirement outlined herein, the standard within the manual shall be considered the definitive standard.

(7) ***Circulation and Maneuverability.***

(a) *Visibility.* Visibility shall be assured for pedestrians, cyclists, and motorists entering individual parking spaces, circulating within a parking facility, and entering or leaving a parking facility.

(b) *Entering and Exiting.* Off-street parking and loading areas shall be provided with sufficient maneuvering room so that all vehicles may enter and exit from a public or private street by forward motion only. Vehicles shall have the ability to park and un-park without moving another vehicle. This standard does not apply to parking areas serving single-family dwelling units served by individual driveways.

(c) *Maneuvering on the Lot.* Parking and loading facilities must be designed and constructed so that all maneuvering in and out of parking and loading spaces can take place entirely within the property lines of the lot.

(d) *Encroachment.* It is prohibited to use landscape areas, public streets, sidewalks, alleys, or public use realms for parking or maneuvering in and out of parking spaces, except in conjunction with single-family dwelling unit driveways. Off-street parking areas shall be

designed so parked vehicles will not encroach upon sidewalks or strike against or damage utilities, walls, vegetation or other structures.

(e) *Service Vehicles*. Parking lots shall be designed so sanitation, emergency, and other public service vehicles are able to provide service without backing unreasonable distances or making other dangerous or hazardous turning movements.

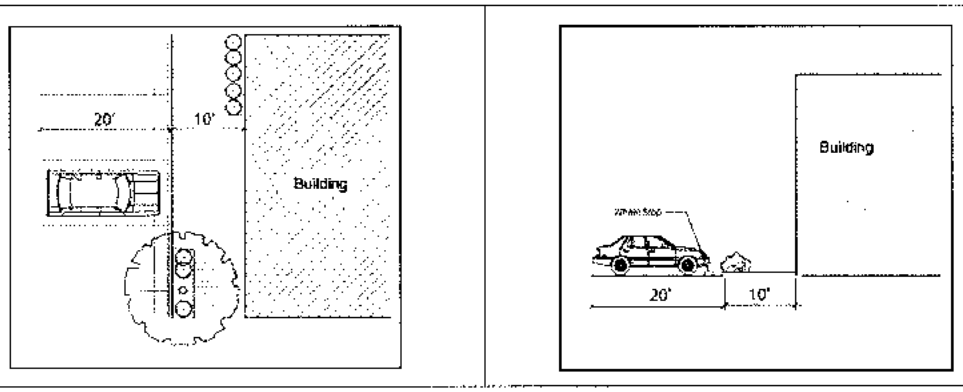
(f) *Shopping Carts*. All retail uses larger than 25,000 sq. ft. GLA shall be provided with a cart control system and ensure required parking spaces and movement corridors are not encroached on by haphazardly placed shopping carts. Cart corrals should be designed so that carts do not roll out of corrals and into vehicular use areas.

(8) ***Separating Parking Areas from Buildings.***

(a) *Parking Separation from On-Site Buildings*. Parking aisles or parking spaces shall not directly abut buildings, structures or fences. The following requirements shall apply:

1. *Parking Separation from Primary Facades.* All vehicular use areas shall be separated at least ten (10) feet from building façades, measured from the back of curb, to allow room for six (6) foot wide sidewalks, along with four (4) foot wide landscaping, consisting of either foundation plantings, planter boxes or sidewalk greenstrips as required between the building and the vehicular use area (See Figure Set 7).

Figure Set 7: Parking Separation from Facades

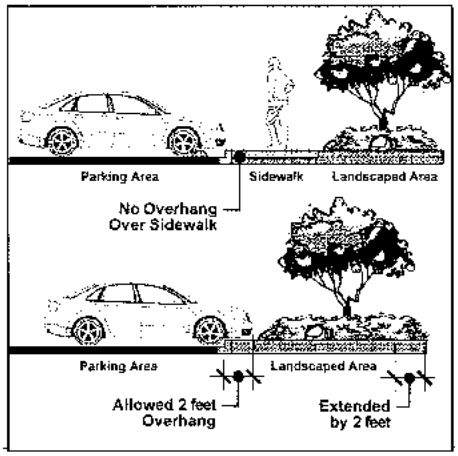


Model of Acceptable Separation between Buildings and Parking Spaces.

2. *Parking Separation from Secondary Facades.* Parking areas must also be separate from side and rear exterior building walls by walkways a minimum of six (6) feet wide.

3. *Parking Spaces Adjacent to Pedestrian Walkways*. Notwithstanding the above, no part of a parked vehicle shall extend beyond the parking area boundary and intrude upon a pedestrian pathway or overhang landscaping. Parking spaces adjacent to pedestrian walkways shall be equipped with wheel guards or the walkway must be extended by two (2) feet (See Figure 8).

Figure Set 8: Parking Adjacent to Sidewalks and Landscaping



Model of Acceptable Use of Curbs & Wheel Guard for Walkways and Landscaping.

(9) ***Striping and Directional Indicators***.

(a) *Parking Stall Striping*. Except in the case of temporary parking lots or parking lots with fewer than five (5) parking spaces, all parking spaces must be clearly striped with white, four (4) inch wide stripes. Striping must clearly identify parking spaces and distinguish them from adjoining walkways and drive aisles.

(b) *Directional Arrows and Signs*. Circulation aisles, approach lanes, turning areas and maneuvering areas shall be clearly marked with directional arrows and lines to ensure safe and efficient flow of vehicles, as required. However, markings and signs shall receive Design Review and Approval, pursuant to §151.215.

(c) *Directional Signage*. The Zoning Administrator or Design Review Authorities may require the installation of traffic signs or directional arrows to ensure the safe and efficient flow of vehicles in a parking facility. Design Review Authorities shall review directional signs, pursuant to §151.215.

(d) *Identifying Special Stalls*. Accessible parking stalls and loading spaces shall also be identified by marking, symbols or lettering with signs and/or surface pavement paint.

(G) **Parking Space Requirements**.

(1) ***Sufficient Number***. All developments shall provide a sufficient number of parking spaces to accommodate the number of vehicles likely to be attracted to the development. However, in an effort to minimize impervious surfaces that can cause stormwater quantity and quality problems, the number of parking spaces needed should not be based upon rare seasonal peak demands.

(2) ***Expansion or Change in Use***. When the use of the property changes, additional off-street parking and loading facilities shall be provided to meet the parking demands of the new use or occupancy. When the number of parking and loading facilities required for the new use exceeds the number of spaces required for the original use, parking facilities shall be amended to meet the requirements of this section.

(3) ***Parking Space Placement***. Off-street parking and vehicular use areas shall be located on the same parcel or lot for the use that the parking serves. No parking space dedicated to a non-residential use shall be located more than one hundred thirty (130) feet away from the primary building entrance of

that use.

(4) ***Computation***. The number of off-street parking spaces required by Table 1 shall be considered the minimum necessary for each use to preserve public health, safety, and welfare.

(a) *Fractions*. When calculations of the number of required parking spaces results in a fraction, the number of minimum spaces shall be rounded up to the next whole number.

(b) *Parking Based on Seating*. When the standards use seating as a unit of measurement, all calculations shall be based on design capacity of the areas used for seating. If fixed seats are not provided, the total amount of seating shall be the occupancy limit for the room pursuant to applicable building codes. Where parking is determined based on the number of seats provided, parking shall be based on the number of fixed seats. Where fixed seats provided are either benches or bleachers, each twenty (20) linear inches of the bench or bleacher shall be considered a seat.

(c) *Parking Based on Area*. When standards use the amount of square footage in buildings as a unit of measurement, all calculations shall be based on gross floor area (GFA). The term or form 'sf.' shall mean "gross square feet" and refers to total building floor area, unless otherwise specified. The term or form 'du.' shall mean "dwelling unit". The term 'fa' shall mean "floor area".

(d) *Parking Based on Students, Staff and/or Occupants*. The following measurement rules shall be used when a unit of measurement is dependent on a certain number of persons: The number of students shall be determined based on the maximum rate of enrollment. The number of employees shall be determined based on the total number of employees during the shift of greatest employment. When the number of persons cannot be determined by the preceding rules, the number of persons shall be determined based on the maximum capacity permitted pursuant to the County Fire Marshal's office or any measurement that is applicable and results in the greatest number of required spaces.

(e) *Conditional Use Permits*. The term or form 'CUP' shall mean "Conditional Use Permit", obtained through processes outlined in §§151.100 151.109.

(f) *Uses Not Listed*. The number of parking spaces required for uses not specifically listed in Table 1 may be determined by a parking study. Alternatively, parking requirements shall be determined by the most recent edition of the ITE Parking Generation Manual.

(g) *Parking Determined by Parking Study*. When required, a parking study shall analyze a minimum of three (3) similar uses in the area over the course of at least two (2) weeks, including peak hours. The study shall be conducted by an independent, traffic engineer registered by the State of North Carolina, in accord with instructions provided by Village engineers and staff. The study shall bear the stamp of that engineer. Prior to Council approval, the Prior to Council approval, the Village shall be reimbursed by the subdivider for all costs associated with engineering and/or consulting services required with respect to review and study of the submitted Application.

Table 1: Off-Street Parking Requirements	
Land Use	**Parking Spaces Required**
Residential Uses	
Single-Family Dwellings (Attached and Detached) and Two-Family Dwellings	2 per du. in a garage for units with up to 4 bedrooms; 3 per du. in a garage; for units with 5+ bedrooms.
Second Dwelling Unit, if permitted	1 per second dwelling unit; a minimum of 2 enclosed per site (in accord with the primary unit) as determined by a CUP
Live/Work Units	2 per unit; plus customer parking as determined by a CUP
Visitor Parking	1 guest space for every 2 dwelling units
Retail Trade Uses	
Appliance and Furniture Store	1 for every 250 sf. of fa.
Retail Sales (single tenant)	1 per 200 sf.
Shopping Centers	The number of spaces required shall be the sum of all spaces required for all individual uses within the shopping center.
Visitor Accommodations	
Hotels/Motels	1 per guest room; plus 1 per every 3 employees; and Any spaces required for additional, associated uses
Transportation, Communications, And Infrastructure Uses	
Communication Facilities	1 per 500 sf.
Business, Financial, and Professional	
Financial Institutions and Related Services	1 per 200 sf.
Offices - Business or Corporate	1 per 250 sf. plus 1 per employee
Offices - Medical	1 per 200 sf.; plus 1 per employee
Eating and Drinking Establishments	
Bars, Lounges, Nightclubs, and Taverns	1 per 100 sf.
Catering Services	1 per 400 sf.
Catering Services	1 per 400 sf.
Restaurant, Coffee Shop, w/o Drive-through	2 per 150 sf.
Restaurant, Coffee Shop, w/ Drive-through	1 per 100 sf.
Restaurant, Fast food, w/ Drive-through	1 per 100 sf.
Restaurant, Fast food, without Drive-through	1 per 100 sf.
Restaurant, Outdoor Dining and Seating (incl. patio and accessory areas open to the public)	1 per 200 sf. of fa. for the portion exceeding 200 sf.; or 20% of the indoor dining fa.; whichever is less; and 3 spaces regardless of size
Restaurant, Sit-down - under 2,000 sf.	1 per 100 sf.
Restaurant, Sit-down - 2,000 sf. and over	1 per 100 sf. up to 2,000 sf.; plus 1 per 200 sf. thereafter (if no license for alcohol exists); or 1 per 150 sf. thereafter (if a license for alcohol exists)
Outdoor Dining or Seating (incl. Patio and / or Accessory seating areas open to the public)	1 per 200 sf.
Service Uses - General	
Animal Grooming / Boarding / Kennels	1 per 400 sf.; plus 4 per each doctor and each employee
Cemeteries	1 per employee; plus spaces on private internal roads
Libraries	1 per 250 sf.
Postal and Mailing Services	1 per 200 sf.; plus 1 per employee
Studio - Art, Dance, Martial Arts, Music	1 per 250 sf.

Vehicle Repair and Services	
Automobile Washing/Detailing	4 spaces minimum; plus 1 per employee; plus stacked parking for 5 times the number of available washing bays.
Fuel Station with Convenience Store	1 per 200 sf. of building area
Vehicle Repair (General and Limited)	1 per 400 sf.; plus 1 per service bay
Veterinary Services	1 per 400 sf.

Care Uses	
Assisted Living	As required by conditional use permit
Adult Day Care - Small (6 or fewer)	Spaces required for dwelling unit only
Adult Day Care - Large (7 or more)	2 per site for drop-off and pick-up purposes (in addition to any spaces required for dwelling units)
Day Care Facility	1 per employee; plus 1 space for every 5 children; plus A minimum of 5 spaces; plus stacking area requirements
Medical-Related and Social Services	
Hospitals	Parking as determined by a CUP through a parking study
Medical and Dental Clinics	1 per 200 sf.
Outpatient Surgery/Care Facilities	1 per 250 sf.
Residential Care Facility	1 per every 6 beds; plus 1 per employee
Other Uses	
Temporary Uses	As required per §151.051, Temporary Use Permits
Assembly/Meeting Facilities	1 per every 5 fixed seats; or 1 per 100 sf. of fa. used for assembly; without fixed seating, 20 linear inches of bench shall be considered a fixed seat
Colleges	1 per 3 day-time students; plus 1 per employee
Recreation and Entertainment Uses	Parking as determined by a CUP through a parking study
Elementary and Intermediate Schools (K-8)	2 per classroom; plus 1 per 350 sf. of office / admin. area
Game Arcade, Internet Café	1 per every 2 computer terminals; or 1 per 200 sf.; whichever is greater
Health/Fitness Facilities	1 per 200 sf.
High Schools	6 per classroom; plus 1 per 350 sf. of office / admin. area
Museums	1 per 300 sf.
Places of Religious Assembly	1 per 5 fixed seat; or 1 per 100 sf. of fa. used for assembly; without fixed seating 20 linear inches of bench shall be equal to a fixed seat, plus Spaces required for each ancillary use (e.g., day care, etc.)
Trade Schools and Business Colleges	1 per 5 fixed seat; plus 1 per employee; plus 1 per 100 sf. of fa. used for assembly without fixed seating

(11) **Parking Stall and Aisle Requirements**.

(1) *Parking Stall and Parking Aisle Dimensions.*

(a) *Parking Space Dimensions*. Parking spaces in parking lots shall comply with the minimum dimension requirements in Table 2 and 3, however additional widths may be required when parking spaces abut walls, fences, planters, sidewalks or other obstructions.

(b) The Zoning Administrator or Village Engineer may require greater aisle widths where slopes or other obstructions are encountered.

(c) Any parking space adjoined on either side of its longer dimension by a fence, wall, partition, column, post, or similar obstruction, shall have its minimum width increased by at least ten (10) inches on the side of the obstruction.

Table 2: Minimum Parking Stall and Lot Dimensions

General Parking Stall Dimensions

Length	**Width**
20 feet, including bumper overhang.[1]	10 ft.

One-Way Traffic and Double-Loaded Aisle Widths

Parking Angle (Degrees)	**Curb Length**	**Interior Stall Depth, with Bumper Overhang**	**Perimeter Stall Depth, with Bumper Overhang**	**Interior Aisle Width**
90-degrees	10 ft.	20 ft.	20 ft.	NA
60-degrees	10 ft. 5 in.	19 ft. 7 in.	21 ft. 10 in.	19 ft.
45-degrees	12 ft. 8 in.	18 ft. 10 in.	20 ft. 6 in.	15 ft.

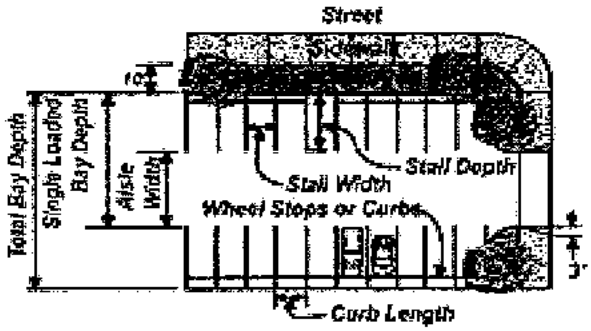
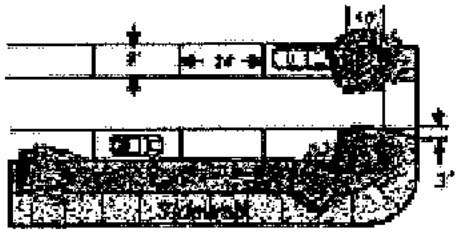
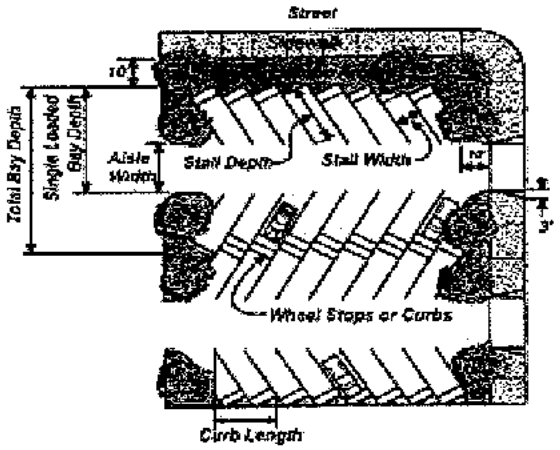
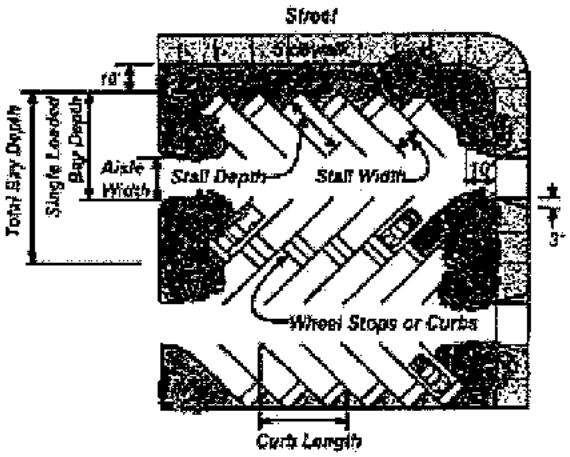
Two-Way Traffic and Double-Loaded Aisle

Parking Angle (degrees)	**Curb Length**	**Interior Stall Depth, with Bumper Overhang**	**Perimeter Stall Depth, with Bumper Overhang**	**Interior Aisle Width**
90-degrees	10 ft.	20 ft.	20 ft.	24 ft.
60-degrees	10 ft. 5 in.	19 ft. 7 in.	21 ft. 10 in.	24 ft.
45-degrees	12 ft. 8 in.	18 ft. 10 in.	20 ft. 6 in.	24 ft.

Parallel Parking Spaces

Parking Angle (Degrees)	**Stall Width**	**Interior Stall Depth**	**Perimeter Stall Depth, with Bumper Overhang**	**Aisle Width (Travel Lane)**
N.A.	9 ft.	24 ft.	N.A.	12 ft. - One-way traffic 16 ft. - Two-way traffic

[1] **General Parking Stall Dimension requirements include curb or bumper overhang of approximately 2-feet.**

Table 3: Parking Stall and Lot Diagrams	
Parking Diagrams	
90-Degree Angle Parking	180-Degree Angle Parking
	
60-Degree Angle Parking	45- Degree Angle Parking
	

(d) *Parking Spaces and Vehicular Overhang.* Continuous concrete curbing shall be provided for parking spaces located adjacent to fences, walls, property lines, landscaped areas, and structures. Individual wheel stops may be provided in lieu of continuous curbing when the parking is adjacent to a landscaped area and the drainage is directed to the landscaped area. The length of the parking space and use of wheel guards shall be implemented in a manner that assures vehicle overhang will avoid contact with abutting objects such as landscaping, irrigation, or walls and pedestrian walkways.

(e) *Parking Spaces Adjacent to Objects.* The width of a parking space shall be increased by two (2) feet when adjacent to landscaping, parking islands, medians, pedestrian walkways, fences, walls, or planters, however no space is required to exceed the General Parking Stall Dimension Requirements.

(f) *Fire Access Aisles.* Designated fire access aisles must comply with the County's Fire Code and/or the Fire Authority having jurisdiction. Minimum unobstructed fire access width is twenty-four (24) feet. Vertical clearance minimum is thirteen (13) feet and six (6) inches. However, the Fire Authority that has jurisdiction in the Village may require greater dimensions.

(g) *Truck Aisles.* Access aisles for multiple-axle trucks in commercial and industrial projects shall be a minimum width of forty (40) feet for projects with a gross floor area of 10,000 square feet or greater or where the design of the project includes a loading dock. Truck movement templates (e.g. turning radii elements, including wheel paths, which define the needed width of pavement

edge and which must be clear from obstructions above curb height) shall be included on the site plan to indicate turning conditions.

(h) *Parking Spaces in a Dead-End Aisle.* Where a ninety (90) degree stall is the last stall on the end of a dead-end aisle, the aisle shall be extended three (3) feet beyond the end of the stall.

(I) Off-Street Parking Lot Design.

(1) *Applicability.* Off-street parking in the Village must be designed and constructed in accordance with the following design standards.

(2) *General Provisions.*

(a) *Visually and Functionally Segmented Parking Pavement.* Parking shall be visually and functionally segmented into smaller parking courts to reduce the visual and environmental impact of parking lots.

(b) *Large, Expansive Parking Lots.* Large, expansive off-street parking lots, uninterrupted by landscaping and pedestrian spaces, are strictly prohibited. More than one hundred fifty (150) parking spaces shall be separated by a private or public street, a primary, pedestrian travel way, a landscaped pedestrian plaza or substantive, useable, furnished green space.

(c) *Distinct Traffic Routes.* Parking lot perimeter islands, a minimum of ten (10) feet wide, shall be established around the parking lot perimeter. Parking lot medians and interior islands shall be appropriately located throughout the parking facility to create parking sub-areas and to help establish distinct patterns of traffic flow.

(d) *Parking Courts.* Uninterrupted areas of parking shall be restricted to no more than thirty-six (36) spaces. More than thirty-six (36) parking spaces shall be separated by a parking lot perimeter island or a continuous, parking lot median, at least nine (9) feet wide.

(e) *Architectural Breaks.* Buildings, including outparcel buildings, shall also be designed and located in a manner that physically separate one field of parking from another.

(f) *Pedestrian Spaces.* Visual and physical breaks shall also be accomplished through the use of pedestrian walkways, pedestrian-oriented spaces and pedestrian scaled lighting, pursuant to all applicable Marvin Codes.

(g) *Landscaping and Screening.* Off-street parking consisting of more than five (5) spaces shall require landscaping around the perimeter of the parking lot and the interior of the parking lot. Off-street Parking landscape and screening requirements are delineated in §151.046.

(h) *Cement Curbs and Landscaping.* Landscape islands and medians shall be curbed with Portland Cement Concrete barrier curbs a minimum of one and one half (1.5) feet wide. When adjacent to landscaping, and if no wheel guard is provided, the curbs or sidewalk must be widened by two (2) feet to protect landscaping from overhanging vehicles.

(3) ***Parking Lot Design Requirements.*** The following parking lot design standards correspond to letters depicted in Figure 11, 12 and 13 and are design standards applicable to nonresidential-use parking lots. The characteristics of a site may determine which standards are relevant, however all standards are expected to be implemented on a site when practical.

(a) *Vehicular Use Areas in Rear and Side Yards.* Parking lots, stalls and other vehicular use areas like drive aisles, stacking lanes, loading areas, and service areas shall be placed to the rear or side of buildings, away from primary street frontages and intersecting public rights-of-way (See Figure 11, 12 and 13).

(b) *Parking Behind Building Facade Lines.* Parking and vehicular use areas (including stacking lanes, loading areas and service areas) may not be located between the building and the public

right-of-way and may not be placed in front of a building façade line (See Figure 12 and 13).

(c) *Perimeter Landscaping and Screening.* In addition to street trees, parking lot perimeter islands shall be established around the perimeter of parking areas and contain trees and evergreen landscaping to screen vehicles, loading areas and service areas from view from the roadway (See Figure 11, 12 and 13).

(d) *Parking Lot Landscaping.* Provide consolidated, landscaped areas, like continuous medians or pedestrian rest areas, to soften the impact of parking pavement (See Figure Set 10). Consider landscape spaces as opportunities to provide green, on-site stormwater management facilities or bio-retention drainage opportunities (See Figure 11 and 12).

(e) *Small Parking Courts.* Parking lots shall be visually and functionally segmented into smaller parking courts where no more than thirty-six (36) spaces are established without a landscape break, including a continuous, nine (9) feet wide medians, pedestrian walkways (Figure Set 10 and 16) or a pedestrian plaza, etc. (See Figure 11, 12 and 13).

(f) *Orientation of Parking Rows.* Parking shall be arranged in rows, which are perpendicular to the main building entrance(s) to support safe pedestrian movement toward the building (See Figure 11 and 13).

(g) *Number of Parking Spaces per Row.* No more than eight (8) parking spaces shall be established without a landscaped, interior parking island and a shade tree. No more than thirty-two (32) parking spaces in a row shall be established between well landscaped terminal islands (See Figure 11 and 13).

(h) *Parking Along Major Routes.* To reduce potential conflicts between vehicular and pedestrian movements, no parking spaces shall be located within the one hundred (100) foot clear stem area of a primary access driveway. Parking shall be prohibited along primary access drives, major drive aisles and in front of building entrances or service areas (See Figure 11, 12 and 13).

(i) *Pedestrian Routes.* Direct and clearly delineated pedestrian routes shall be provided to and from parking areas, business entrances, pedestrian rest areas and public sidewalks, utilizing differentiated materials where crossings intersect with vehicular pavement. (See Fig. 11, 12 & 13).

(j) *Accessible Spaces / Loading Spaces.* Accessible parking spaces shall be provided approximate to building entrances in accordance with applicable accessibility laws and provisions outlined in applicable Marvin Codes. Directly adjacent to all accessible spaces, a clear, direct travelway shall be provided, originating directly from the accessible parking space to primary business entrances. Short-term loading spaces shall be provided with clear, direct travelways located approximate to service entrances (See Figure 11, 12 and 13).

(k) *Masonry, Screening Wall.* A high quality, masonry screening wall, and/or planted buffers should be provided between incompatible uses (See Figure 12).

(l) *Bicycle Racks.* Bicycle parking located near the main entrance. A canopy should be provided when a retail site is larger than 100,000 sq. ft. or when practical (See Figure 13).

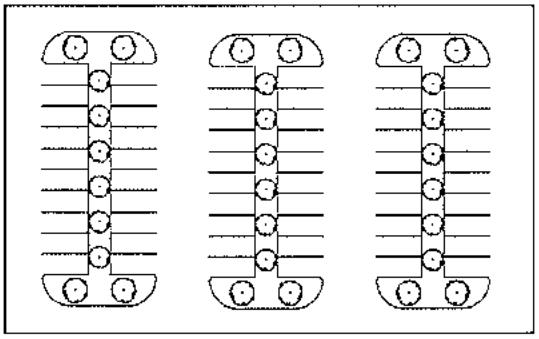
(m) *Coordinated Lighting Scheme.* Coordinated lighting schemes should be coordinated with landscaping and ensure that parking areas and pedestrian walkways are well-lit (Figure 11 and 13).

(n) *Buffers and Setbacks.* All vehicular use areas for non-residential uses shall be at least one hundred (100) feet from any residentially zoned lot line, unless district regulations state otherwise (Figure 12).

(o) *Continuous, Median Islands.* Landscape medians are required for all parking lots that have more than one parking bay. The parking median island shall be at least eight (8) feet wide and landscaped with evergreen turf, live ground cover and canopy trees planted every twenty-five (25)

feet on center. Trees shall be evenly distributed and shall adhere to all requirements outlined in Chapter 93 (See Figure 10).

Figure Set 10: Continuous, Parking Lot Medians



Continuous, Landscaped Median Island for each Odd-Numbered, Double Row of Parking.

Figure 11: Off-Street Parking Lot Design

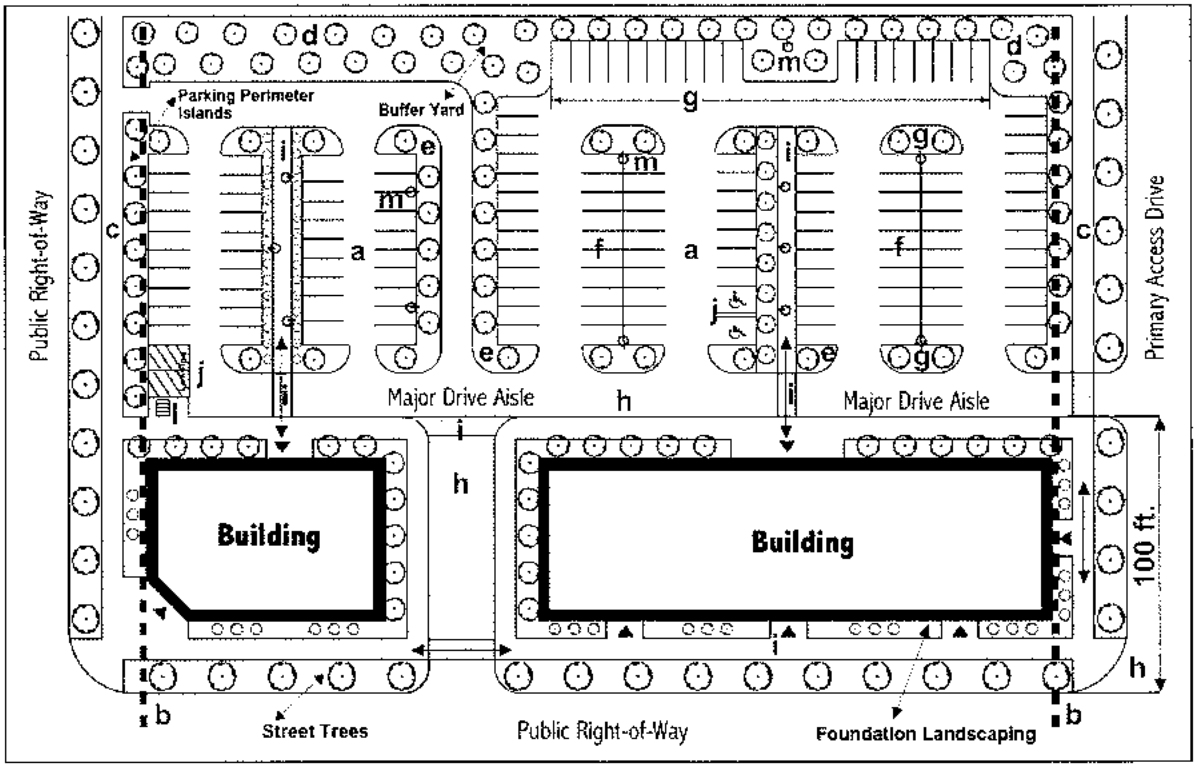
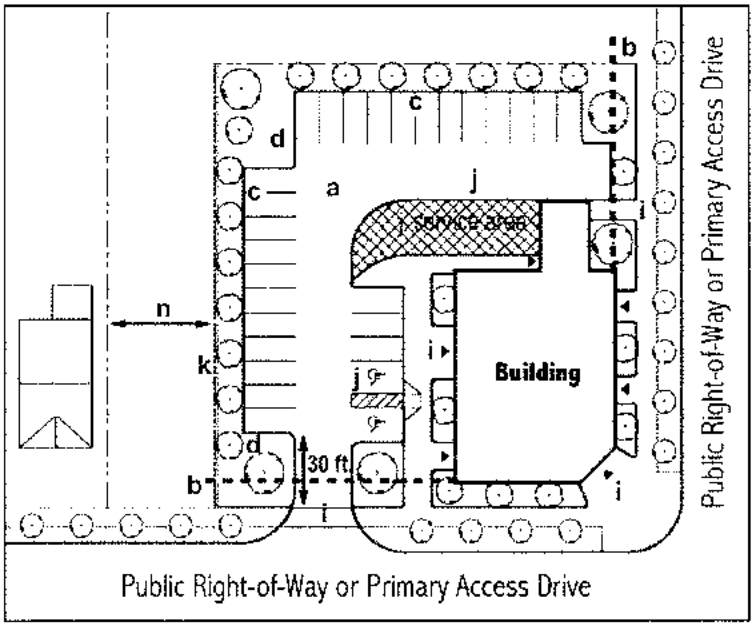


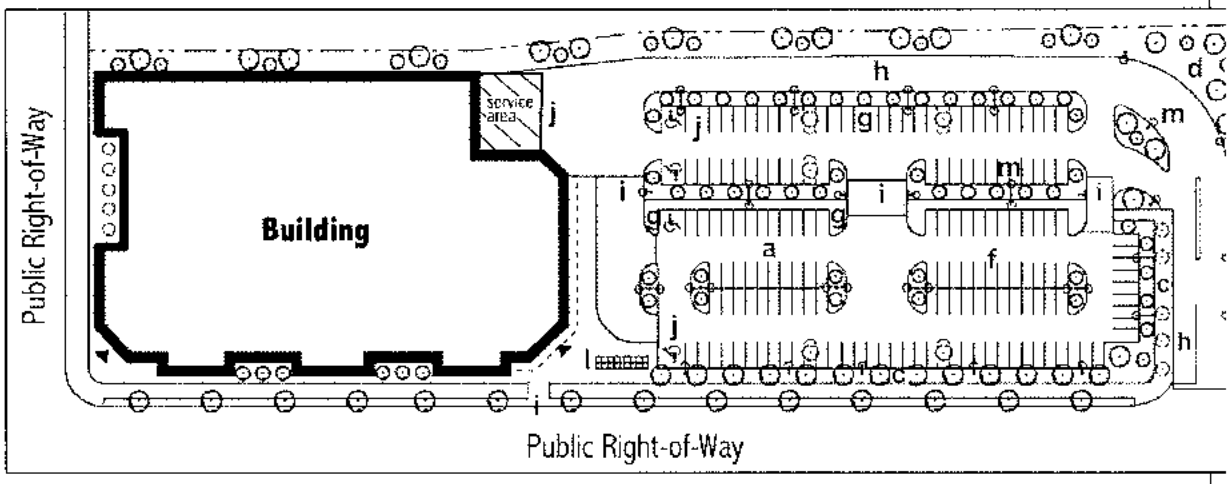
Diagram Illustrating Certain Required Off-Street Parking Design Standards.

Figure 12: Parking on a Corner Site



Model of Acceptable Nonresidential Parking Lot Design on a Corner Site.

Figure 13: Parking on a Long, Narrow Site



Model of Acceptable Nonresidential Parking Lot Design on a Long, Narrow Site.

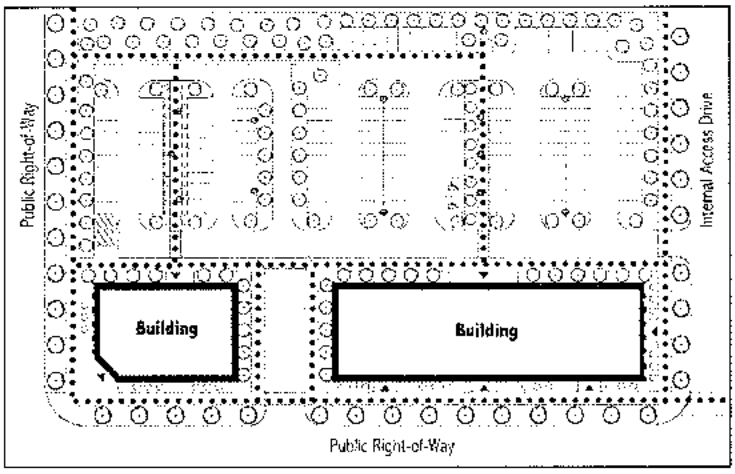
(J) Parking Lots and Internal Pedestrian Networks.

(1) ***Coordinating Landscaping and Pedestrian Improvements.***

(a) *Safe and Direct Pedestrian Network.* Off-street parking areas should be designed to minimize breaks in the pedestrian environment along streets in the Internal Roadway Network, within a multi-building development. Pedestrian routes should create safe, direct and comfortable passage between the different buildings and land uses. Such sidewalk and walkway improvements must be coordinated with the layout and design of required landscape improvements. The Design Review

Authority is authorized to allow modifications in the design of lot landscaping, when such modifications are necessary to accommodate the required pedestrian improvements between buildings and uses (See Figure 14).

Figure 14: Internal Pedestrian Network



Internal Pedestrian Network between Buildings in and around Development.

(2) ***Pedestrian Circulation Plans.***

(a) Separate vehicular and pedestrian circulation system plans shall be provided. The width, number, and orientation of pedestrian routes should match the anticipated flow of pedestrian traffic expected to occur for the site.

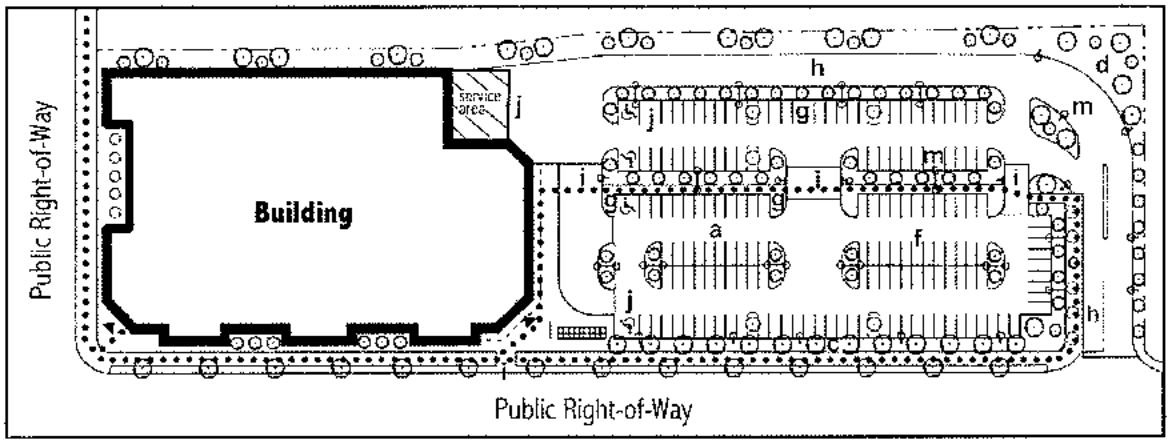
(b) A pedestrian circulation plan shall layout pedestrian routes designed to accommodate pedestrians and implements used by pedestrians, including items such as strollers, mobility aids, shopping carts, etc.

(c) Pedestrian access and travel shall be separate and distinct from driveways, yet thoughtfully integrated into the Internal Roadway Network. Pedestrian circulation plans shall be delineated in Specific Site & Design Plans and subject to Design Review and Approval, pursuant to §151.215.

(3) ***Internal Pedestrian Network Connections and Standards.***

(a) *Pedestrian Connections to Public Sidewalks Right-of-Ways.* Pedestrian pathways from the site must be provided to sidewalks along adjacent right-of-ways at a ratio of one (1) pathway for each vehicular Primary Access Drive entrance to the site. Therefore, if two Access Driveways have been provided for the site, at least two (2) Pedestrian Access Paths points must be provided that connect to a principal building on the site (See Figure 15).

Figure 15: Connections to Pedestrian Sidewalks



A Model of Pedestrian Connections Between Developments and Public Sidewalks.

(b) *Clear, Continuous Pedestrian Routes.* Parking areas for commercial and mixed-use developments must have clear, continuous, distinct and dedicated pedestrian routes and access to and from principal areas of the site. Pedestrian routes and connections shall be developed to fulfill the following requirements:

1. Routes to and from primary building entrance of all buildings on the site; and

2. Routes around or through the parking lot; and

3. Routes to all public spaces or pedestrian rest areas in the development; and

4. Routes at least ten (10) feet wide along each principal building façade; and

5. Routes to public sidewalks along the site perimeter using the shortest practical distance; and

6. Routes to the interior of the site from public sidewalks and along primary access drives.

(c) *Pedestrian Route Development Standards.* Pedestrian routes and connections shall be developed in accord with the following standards:

1. Pedestrian walkways shall be constructed to provide an unobstructed path using pedestrian-friendly materials per paragraph (J)(5) of this section.

2. Pedestrian walkways shall be a minimum width of six (6) feet and separated from drive aisle pavement by a standard curb, unless a wider width is specified.

3. Pedestrian-scale lighting shall be provided to illuminate and define the route.

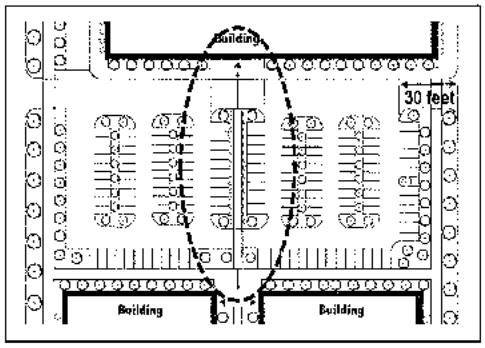
4. A minimum three (3) foot wide planting strip shall be established on one, or both sides of a pedestrian walkway unless a wider width is specified.

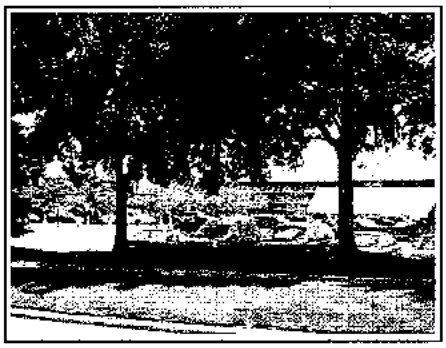
5. Where pedestrian pathways intersect with vehicular pavement, a pedestrian crossing shall be provided using attractive, differentiated paving materials pursuant to paragraph (J)(5).

(4) ***Pedestrian Connections in Large Parking Lots.***

(a) *Pedestrian Walkways within Parking Medians.* The following shall apply to parking lots containing more than one-hundred and fifty (150) parking spaces. When more than four (4) rows of parking are located within a parking area, the fifth row of parking shall be designed to include a pedestrian walkway. The pedestrian walkway shall be no less than six (6) feet wide, and flanked by two (2), four (4) foot wide landscape strips. Pedestrian-oriented lighting shall be installed. Landscaping shall be in accord with §151.046 (See Figure Set 16).

Figure Set 16: Walkway within Parking Lot Medians





Parking Lot Walkway within Continuous Parking Median.

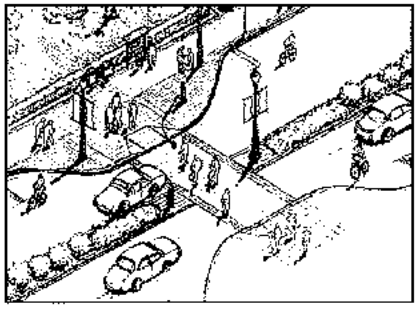
(5) ***Protecting Pedestrian Movement through Parking Areas.***

(a) *Pedestrian-Friendly Materials*. Materials used in pedestrian-oriented spaces shall be attractive, durable and slip-resistant. Materials must be compatible in terms of themes, colors, textures and patterns with a development project's design. Surfaces in pedestrian circulation areas shall be constructed from materials that provide a hard, stable surface and permit comfortable maneuverability for people of all abilities.

(b) *Pedestrian Walkways Separating Parking from On-Site Buildings*. All vehicular use areas shall be separated at least ten (10) feet from building façades by sidewalks and landscaping in accord with §151.165(F)(8).

(c) *Where Pedestrian Pathways Intersect Drive Aisles*. Wherever a pedestrian pathway crosses vehicular pavement the pathway shall be made identifiable with a grading change at required curbs, curb ramps, the installation of colored, textured pavers or stamped surface material. The material used must clearly differentiate the pedestrian pathway from vehicular areas. Unless otherwise specified, primary crossings shall be at least six (6) feet wide.

Figure Set 17: Crosswalk and Vehicular Intersections



Pedestrian Pathways Intersecting with Parking Aisles, Major Drive Aisles and Access Drives

(K) **Vehicular Stacking**.

(1) ***Applicability & General Provisions***. In addition to meeting the off-street parking and loading requirements of this section, all uses which generate vehicular stacking of automobiles or vehicles in a queuing line, shall comply with the requirements of this section.

(a) *Interpreting Terms.* For the purposes of interpreting regulations outlined herein, the terms 'queue lane', 'queuing lane', 'drive-through lane' or 'stacking lane' may be interchangeably used and shall refer to a drive-through lane as defined in §151.016.

(b) *Restaurants with Drive-through Lanes.* For the purposes of interpreting the standards of this section, any drive-through use which serves food or beverages, shall be considered a Drive-through Restaurant.

(c) *Design Review & Approval.* The Design Review Authorities shall review and approve Specific site design plans, individual buildings, landscaping and signs in accord with the provisions of §151.215. This shall include the approval of drive-through lane design and its integration into the site plan. When considering a site plan for a use which incorporates a drive-through window and a stacking lane, the Design Review Authority shall find the following:

1. The drive-through use will not substantially increase vehicular traffic on residential streets.

2. The use will not substantially lessen the usability of the property or an adjacent property by interfering with pedestrian traffic.

3. The use will not create traffic hazards to pedestrians.

4. The site is adequate in size and shape to accommodate said use and to accommodate all of required improvements, including but not limited to, stacking lane length, parking, equipment, buffer yards, screening, landscaping and other required improvements.

5. The use will not substantially lessen the usability and suitability of adjacent or nearby non-residential or residential uses.

(d) *Uses Not Listed.* The number of stacking spaces required for uses not specifically listed in Table 4 may be determined by a queue study.

(e) *Parking Determined by Parking Study.* The queue study shall analyze a minimum of three (3) similar uses in the area over the course of at least two (2) weeks and count stacking requirements over peak hours. The study shall be conducted by an independent, traffic engineer registered by the State of North Carolina, in accord with instructions provided by Village engineers and staff. Village staff and Village Engineers. The study shall bear the stamp of the engineer. Prior to Council approval, the Prior to Council approval, the Village shall be reimbursed by the subdivider for all costs associated with engineering and/or consulting services required with respect to review and study of the submitted Application.

(2) ***Stacking Space Requirements.***

(a) *Stacking Space Requirements.* A structure with a single drive-through lane shall accommodate the minimum number of vehicle stacking spaces per lane for the use specified in Table 4.

(b) *Drive-through Lanes & Parking Space Calculations.* The installation of a drive-through lane and associated improvements shall not reduce the number of required parking spaces below the minimum required for the use.

(c) *Length of Each Stacking Space.* Each vehicle stacking space in a drive through lane shall be a minimum of twenty (20) feet in length.

(d) *Stacking Space Allotment.* A minimum of four (4) stacking spaces must be established between the pick-up window and the order box for any Drive-through Restaurant.

(e) *Width & Drive-through Lane Radius.* The minimum drive-through lane width shall be in accord with requirements outlined in Table 4. Any curve within a drive-through lane shall have a minimum twenty-five (25) foot interior curve radius.

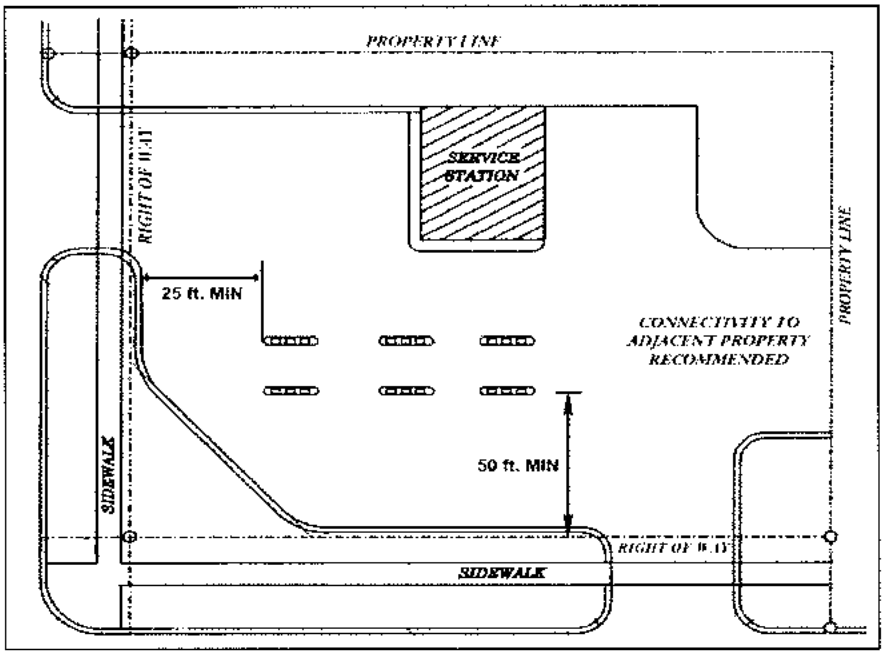
(f) Design Review Authorities shall have the ability to reduce the number of stacking spaces by up to two (2) spaces for food and beverage establishments with a drive-through stacking lane.

Table 4: Drive-through Stacking Space Regulation Requirements

Land Use	Minimum Stacking Spaces Required	Point from which Queuing Length shall be Measured.	Total Queue Length Required	Lane Width
Bank, Teller Lane (Each)	4	Teller Window	80 feet	10 feet
Bank, ATM (Each)	3	Teller Machine	60 feet	10 feet
Restaurant, w/ Drive-through	12	Service Window	240 feet	12 feet
Restaurant, Fast-food, w/ Drive-through	12	Service Window	240 feet	12 feet
Coffee Shop	13	Service Window	260 feet	12 feet
Pharmacy	5	Service Window	100 feet	10 feet
Day Care Centers.	6		120 feet	12 feet
Service Station, When pump islands are parallel to the pavement edge.	25 ft. min. (See Figure 18)	Between the pump islands and the driveway		
Service Station, When pump islands are not parallel to the pavement edge.	50 ft. min. (See Figure 18)	Between the pump islands and the driveway		
Unlisted Uses	** See below.			

* A minimum of four (4) stacking spaces shall be provided between the pick-up window and the order box.
** Requirement for uses not listed must be determined by conducting a queuing study by a qualified traffic engineer.

Figure 18: Stacking for Fuel Station Fuel Pumps



Stacking Setback Requirements for Fuel Station Pumps, per Table 04.

(3) ***Stacking Requirements for Additional Uses.***

(a) *Uses Utilizing Drop-Off and Pick-Up Loops.* All public and private schools, day care centers, institutional uses, places of worship, and other places of assembly shall provide off-street passenger drop-off and pick-up facilities. Stacking lanes used for passenger pick-up and drop-off purposes shall be designed to do the following:

1. To allow vehicles to maneuver in and out of the drop-off spaces without backing onto the drop-off lane, parking circulation aisles, alleys, or public streets;

2. To allow for one-way traffic flow and not require passengers to cross circulating traffic in order to enter the use or building; and,

3. Provide a separation from the circulating traffic by a raised median or sidewalk and landscaping, special paving surface or other feature.

4. Stacking lanes used for passenger pick-up and drop-off purposes and their pedestrian access, must be covered to protect pedestrians from the elements. Any structure used for protecting the passenger pick-up and drop-off area shall be consistent with principal buildings in terms of quality, color, textures and materials, and receive Design Review and Approval, pursuant to §151.215.

(b) *Schools.* Drop-off and pick-up areas for public and private schools shall be designed to accommodate, at a minimum, five (5) automobile queuing spaces and five (5) bus queuing spaces for every fifty (50) students, when buses are employed for student transportation. When a queuing study is conducted, the minimum queuing facilities indicated by the study shall be provided. Bus and passenger vehicle drop-off and pick-up areas shall be separated.

(c) *Day Care Centers.* Drop-off and pick-up areas for day care centers shall be designed to accommodate six (6) feet automobile queuing spaces. Applicable to a clearly designated area assigned for student drop-off and pick-up.

(d) *Institutions, Places of Worship / Assembly.* Drop-off and pick-up areas shall be designed to accommodate one (1) stacking space for every fifty (50) seating spaces in the largest assembly room. When stacking spaces for buses are also required, the following minimum standards shall apply:

1. Ten (10) automobile stacking spaces and two (2) bus stacking spaces, or
2. Each one (1) automobile stacking space shall require one quarter (0.25) of a bus stacking space.

(e) *Entry Control Devices.* For land uses that require an entry transaction or have service attendants, gates or other entry control devices, the vehicle stacking shall be of adequate length so that entering vehicles do not stack back onto a public right-of-way, adjacent lots, or block driveways, intersections, drive aisles or rights-of-way. No portion of a parking area, attendant booth, gates, signing or parking activity shall encroach upon a public right-of-way.

(4) ***Maneuverability.***

(a) *Imposition on Adjacent Property and Lots.* Vehicular use activity shall not extend beyond the site's property line onto adjoining property without authorization, pursuant to §151.165(A)(3).

(b) *Stacking Lanes to be Separate from Parking Spaces.* Stacking lanes shall not occupy the same pavement area required for parking spaces or drive aisles. Stacking lanes shall be separated from other on-site circulation traffic. Spaces reserved for queuing spaces should utilize differentiated paving surfaces along with surface pavement markings to delineate the stacking lane.

(c) *Imposition on Parking Aisles and Spaces.* Vehicle stacking lanes shall function independent of parking lot aisles. No part of a stacking lane shall be located such that a motor vehicle entering and leaving the lane may potentially block, impede or interfere with the use of parking spaces or drive aisles on the facilities' lot or any area surrounding the lot.

(5) ***Design and Development Standards.***

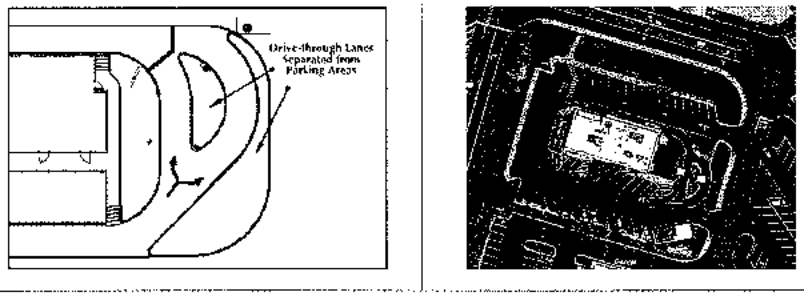
(a) *Setbacks from Residential Property.* Stacking lanes shall be a minimum of one hundred (100) feet away from residentially zoned property and shall be subject to all required screening and buffers, pursuant to §151.046.

(b) *Drive-through Lane Placement on the Lot.* Drive-through service windows and stacking lanes may not be placed adjacent to public rights-of-way or in corners where public rights-of-way intersect. Drive-through service windows and stacking lanes shall be placed to the side or rear of building frontages.

(c) *Circulation Lane.* Drive aisles and stacking lanes may not be installed between the building and a right-of-way. Any proposal which includes such a provision would, at a minimum require superior site design and a fifteen (15) foot buffer yard along the right-of-way and considered at the sole discretion of Design Review Authorities, pursuant to §151.215 (See Figure 21).

(d) *Drive-through Lanes per Use.* A Drive-through restaurant shall have no more than one, continuous stacking lane or drive-through lane. Design Review Authorities may consider a drive-through lane design whereby two stacking lanes merge into a single stacking lane for the same business. However, such a configuration shall only be considered if all screening, landscaping and design standards are met and the design alternative will provide better pedestrian access and safety (See Figure 19).

Figure Set 19: Merging Drive-through Lanes



Two Stacking Lanes Merging into a Single Stacking Lane

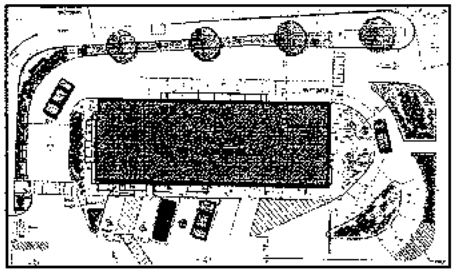
(e) *Number of Drive-through Uses.* If permitted, no more than one (1) use within an outparcel may utilize a stacking lane and drive-through service window. Any multi-tenant building shall have no more than one (1) tenant with a stacking lane and drive-through window, except that a Financial Institution may have up to two stacking lanes.

(f) *Drive-through Lane Delineation.* To improve safety and visibility, a drive-through lane shall be delineated and differentiated from surrounding drive aisles and parking lot areas using a combination of landscaped medians, pavement markings and pavement texture and color differentiation and landscaping required pursuant to §151.046. In cases where a drive-through lane runs parallel with a drive-by lane or drive aisle, the two lanes shall be separated by a landscaped parking median (See Figure Set 20).

(g) *General Screening Requirements.* All stacking lanes shall be screened from view from public right-of-ways, primary access drives, major drive aisles and any adjacent residential property in accord with §151.046. Pursuant to §151.046, additional landscaping shall also be required around menu boards and along drive-through lanes.

(h) *Design Review and Approval.* Design Review and Approval of specific site design, architecture, landscaping screening and signs for all aspects of a stacking lane and drive-through service are required, pursuant to §151.215. No deviation shall be permitted from these provisions.

Figure Set 20: Drive-through Lane Landscaping



A Model of Acceptable Drive-through Lane Landscaping and Delineation.

(6) ***Vehicular Stacking and Pedestrian Access.***

(a) *Drive-through Lanes & Pedestrian Access Considerations.*

1. The design, layout and location of Vehicular Stacking Lanes must not interfere with pedestrian access to parking spaces, primary public business entrances, amenities or seating areas in a way that is unsafe.

2. Pedestrians must be provided with clear lines of sight to vehicles entering and exiting a drive-through lane.

3. Pavement markings must clearly define vehicular areas and movement so pedestrians can anticipate vehicular activity and maneuver safely around it.

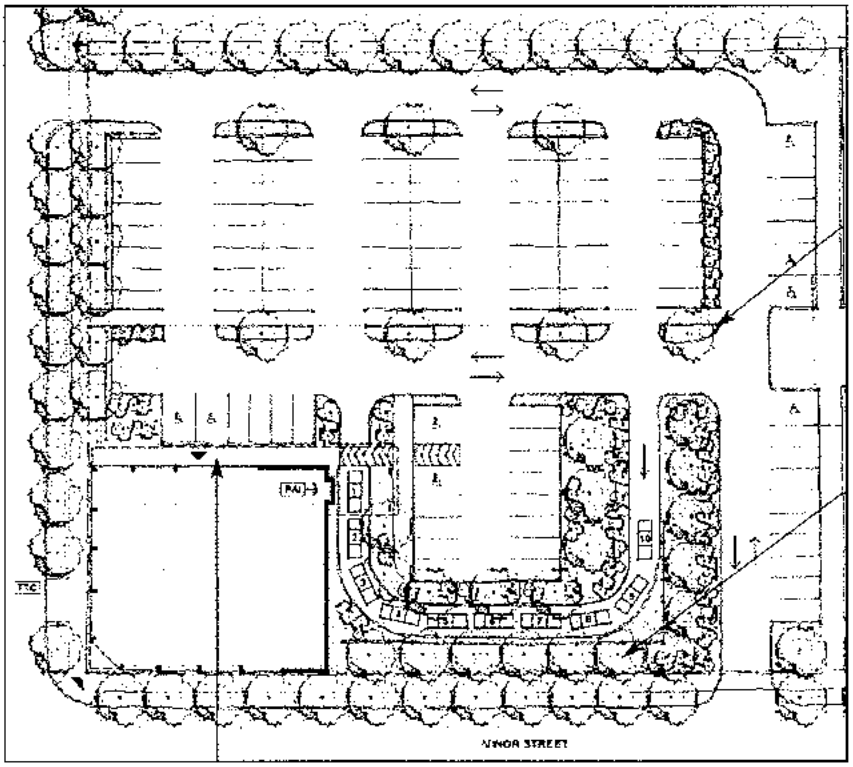
4. Pedestrians should be able to enter the main door of the building from the parking lot without crossing through the middle of stacked vehicles.

5. At a minimum, every effort must be made to place the Primary Public Business Entrance as far away as possible from drive-through lane entrances and exits, particularly the pick-up window of a drive-through lane.

6. A minimum length of twenty-five (25) feet must be provided between the primary public entrance and the drive-through pick-up window for any restaurant with a drive-through window.

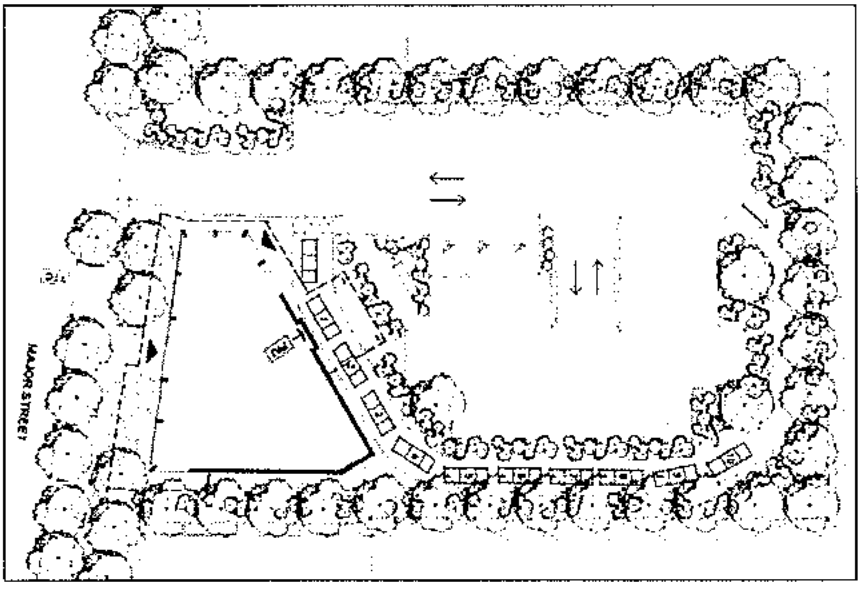
7. Drive-through configurations should be considered as outlined in the figures below.

Figure 21: Sample Drive-through Design A



A Model of Acceptable Drive-through Lane Designs with Pedestrian Access.

Figure Set 22: Sample Drive-through Design B



A Model of Acceptable Drive-through Lane Designs with Pedestrian Access.

(7) ***Stacking Lane Design Regulations***.

(a) *Outdoor Dining Areas*. Drive-through lanes shall not be located adjacent to outdoor patio or eating areas.

(b) *Menu Board Speakers*. Menu board speakers should be located to protect adjoining residential areas from excessive noise. Speaker noise levels measured at the drive-through site property line shall not exceed applicable noise standards as set forth in Chapter 96.

(c) *Headlight Glare*. Drive-through lanes shall be shielded in a manner approved by the Village to eliminate vehicle headlight glare into adjoining land and on-coming traffic approaching the drive-through site property.

(d) *Vehicle Emissions*. Drive-through lanes shall be designed, located, and constructed in a manner approved by the Village to avoid trapping vehicle emissions in a confined space.

(e) *Drive-through Lane & Signs*. The Zoning Administrator or Design Review Authorities may require signs or pavement demarcations to illustrate the entry and exit points of any drive-through lane. All such signs and markings shall be reviewed and approved by the Design Review Authorities pursuant to §151.215.

(f) *Drive-through Use Canopy*. Any drive-through window canopy must be architecturally consistent with the façade of the principal building in terms of architectural themes, textures, color and materials. The canopy shall be subject to Design Review and Approval, pursuant to §151.215.

(L) **Off-Street Loading**.

(1) ***General Provisions***. Off-street loading and unloading areas must be provided in accordance with this section in order to accommodate the delivery or shipment operation of businesses, institutions and nonresidential establishments in a safe and convenient manner.

(a) *Interpreting Terms and Words*. A loading area shall be inclusive of the designated loading space reserved for parked delivery vehicle use, any loading dock or bay, and any surrounding pavement area which is required for maneuvering delivery vehicles expected to utilize the loading space. A loading space or loading area shall also be considered a Service Area pursuant to §151.016.

(2) ***Maneuverability and Circulation***.

(a) *Applicability to Off-Street Loading*. Off-street loading areas and spaces are subject to the same provisions outlined for parking areas and vehicular use areas, pursuant to §151.165(D).

(b) *Safe Maneuverability and Visibility*. The commercial site must be designed so vehicles intended to use loading facilities can maneuver safely and conveniently to and from a public right-of-way. The loading area must be designed to assure clear visibility is maintained for pedestrians, cyclists, and motorists entering into and circulating within the vicinity of an off-street loading area.

(c) *Maneuvering on the Lot of Use*. Parking and loading facilities must be designed and constructed so that all maneuvering in and out of loading spaces takes place entirely within the property lines of the lot.

(d) *Entering and Exiting; Forward Moving Maneuverability*. Off-street loading areas shall be provided with sufficient maneuvering room so that all vehicles can enter and exit from a public or private street by forward motion only and so that an automobile may be parked and un-parked without moving a delivery vehicle or other automobile.

(e) *Encroachment.* Off-street loading areas shall be designed so delivery vehicles will not encroach upon sidewalks, or strike against or damage utility, wall, vegetation or structure. The use of required landscape areas, public streets, sidewalks, alleys, or other public rights-of-way or public use realms for parking or for maneuvering in and out of off-street loading area are prohibited.

(3) ***Loading Space Requirements.***

(a) *Use of Off-Street Loading Spaces.* Spaces allocated to any off-street loading spaces and required surrounding vehicular maneuvering space shall not be used to satisfy the requirements of off-street parking spaces. Loading spaces may not be used as outdoor storage facilities.

(b) *Site Designed to Accommodate Over-sized Vehicle Activity.* Off-street loading areas shall be designed such that any area needed to maneuver a vehicle, into or out of a loading zone, shall be located entirely on the same lot as the use it serves.

(c) *Off-Street Loading to be Sufficient.* The loading space must be of sufficient size to accommodate the number, types and sizes of vehicles used for loading and unloading activities. Off-street loading areas and drive aisles serving the loading area, shall be designed with adequate widths and turning radii so delivery vehicles of probable size can provide service without backing-out unreasonable distances or making other dangerous or hazardous turning movements. Adequate space to accommodate the turning radii of trucks and trailers, shall exclude the need to use any typical parking spaces, pedestrian walkways, storage and dumpster areas.

(d) *Off-Street Loading Zone Table.* The following table indicates the number and size of loading spaces required to satisfy the standards set forth in this subsection. The Zoning Administrator may require more loading or unloading spaces based if he or she determines additional loading spaces are required to insure safe and convenient shipping and delivery to buildings on a site.

(e) *Computation.* When determination of the number of off-street loading spaces required by this schedule results in a requirement of a fractional loading space, any fraction of one-half or less may be disregarded, while a fraction in excess of one-half shall be counted as a full loading bay.

Table 5 - Off-Street Loading Requirements per Use and Size of Use

Specific Land Use Type	**Size:** *(Square feet of gross floor area)*	**Required Number and Size of Loading and Unloading Spaces**	
		Type A 12 feet x 25 feet	**Type B 12 feet x 50 feet**
Office, Restaurant, Hotel or Motel	10,000 - 99,000	1	0
	100,000 - 149,999	0	1
	150,000 and over	0	2
Retail Establishments Shopping Centers and Industrial uses	0 - 4,999	1	0
	5,000 - 19,999	0	1
	20,000 - 49,999	0	2
	50,000 -79,999	0	3
	80,000 - 99,999	0	4
	100,000 - 149,999	0	5
	150,000 and over	0	6

(4) ***Design and Development Standards***.

(a) *Proximal Location Requirements.* Loading and unloading spaces shall be located a minimum of one hundred (100) feet from residential property. Distances shall be measured from the closest edge of the loading berth to the property line of the residential property.

(b) *On-site Location Requirements.* To alleviate unsightly appearances, off-street loading spaces in all zoning districts shall be placed in rear yards or side yards. Loading areas may not be placed between the principal building and a public right of way. Whenever practical, loading spaces shall be located behind a principal building so that their entire length is within the rear yard and screened from public view by the principal building.

(c) *Surfacing.* The construction design of all off-street loading docks and any area necessary for their access shall be capable of bearing the weight of anticipated delivery vehicles. A concrete surface shall be required for each loading dock, which serves a dock, ramp or elevator.

(d) *Dimensions.* Loading spaces shall provide fourteen (14) feet of vertical clearance and meet the dimension requirement prescribed in Table 5.

(e) *Lighting.* Loading areas shall have lighting capable of providing adequate illumination for security and safety. Lighting standards shall be energy-efficient and in scale with the height and use of adjacent structures.

(f) *Loading doors and gates.* Loading bays and roll-up doors shall be painted to blend with the walls of the exterior façade.

(g) *Screening.* Loading areas shall be screened in accord with §151.046.

(h) *Striping.* Loading areas shall be striped to delineate the loading space and identify the space for "loading only." The striping shall be permanently maintained by the property owner/tenant in a clear and visible manner at all times.

(i) *Loading Ramps, Bays and Docks.* Plans for loading ramps, bays docks and truck wells shall be accompanied by a profile drawing showing the ramp, ramp transitions and overhead clearances. Plans shall be subject to Design Review and Approval, pursuant to §151.215.

(j) *Design Approval.* Off-street loading area design, landscaping and screening plans shall be outlined within Specific Site & Design Plans and Design Review and Approval, pursuant to §151.215.

(M) **Accessible Parking**.

(1) ***Accessible Parking Space Requirements.*** Accessible parking spaces shall be provided in compliance with Table 6 and shall be identified with aboveground signs as specified in the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices and the specifications of the North Carolina Department of Transportation.

Table 6 - Accessible Parking Space Requirements				
Total Parking Spaces Provided	**Min. No. of Accessible Spaces Required**	**Minimum Number Required By Type**		
		Regular (8 ft. + 5 ft.)	**Van** (8 ft. + 8 ft.)	**Side-Loading Van**
1 to 025	1	0	1	0
26 to 050	2	1	1	0
51 to 075	3	2	1	0
76 to 100	4	3	1	0
101 to 150	5	3	2	0
151 to 200	6	4	2	0
201 to 300	7	5	2	0
301 to 400	8	6	2	0
401 to 500	9	6	2	1
501 to 1000	2% of total	Required total less van spaces	1 in 4 total accessible spaces	1 for every 3 van spaces
1001 and Over	20 plus 1 for each 100 over 1000	Required total less van spaces	1 in 4 total accessible spaces	1 for every 3 van spaces
Note: Refer to 4.1.2(5) of the Americans with Disabilities Act (ADA) and 4.1.2(5)(d) for medical care facilities				

(2) ***Design and Development Standards.***

(a) All accessible signs must conform to the Manual of Uniform Traffic Control Devices (MUTCD).

(b) All twelve (12) by eighteen (18) inch signs for accessible spaces must be mounted so they are seven (7) feet from ground grade to the bottom edge of the sign face.

(c) Accessible parking spaces serving a particular building shall be located on the shortest route of travel, which shall be accessible from adjacent parking to an accessible entrance. Clear, direct travelways shall be provided from directly adjacent to accessible spaces to the primary business entrance(s) served by the accessible spaces.

(d) In buildings with multiple accessible entrances with adjacent parking, the accessible parking spaces must be dispersed and located closest to the accessible entrances. In parking facilities that do not serve a particular building, accessible parking must be located on the shortest route of travel to an accessible pedestrian entrance of the parking facility with a minimum six (6) foot wide sidewalk.

(e) Parking access aisles must be part of an accessible route to the building or facility entrance. Two accessible parking spaces may share a common access aisle.

(f) Persons using the accessible spaces must not be required to cross a travelway or maneuver behind a backing vehicle to reach the access aisle or accessible route to the building entrance.

(g) Accessible parking spaces may not be located adjacent to storm drains or stormwater retention facilities.

(h) Accessible parking spaces and access aisles shall be located where the slope of finished grade in any direction does not exceed two (2) percent per foot.

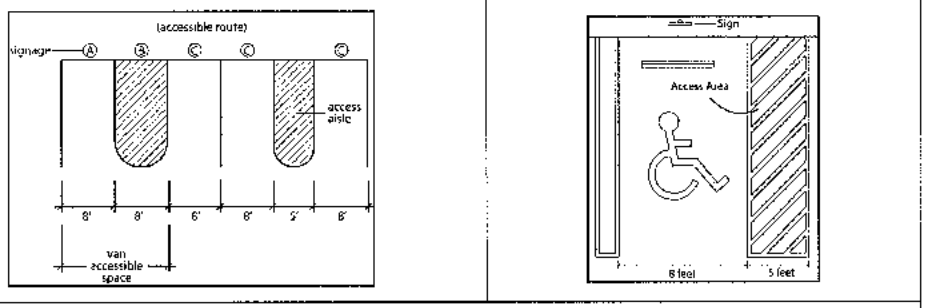
(i) Ramps to accessible walks and paths shall not encroach into parking areas except ramps at the interior end of a parking space, which may encroach into the loading area provided it does not

impede a person with disabilities to access their vehicle.

(j) Curbs and or wheel stops shall be installed to prevent vehicles from projecting over the sidewalks and pathways.

(k) Garages or parking areas shall maintain a minimum vertical clearance of eight (8) feet and two (2) inches for access to all accessible parking spaces.

Figure Set 23: Accessible Parking



A Depiction of Acceptable Accessible Parking Space Design Standards.

(N) **Bicycle Parking.**

(1) ***General Provisions***

(a) *Bicycle Spaces Required.* Table 7 establishes the minimum bicycle parking requirements for use groups and specific uses that typically generate significant amounts of traffic including bicycle traffic. No bicycle parking is required for residential uses except in the case of Conditional Districts or Major Subdivisions with common recreation areas. Newly constructed and residential tracts and non-residential tracts, and residential uses shall provide bicycle parking in accordance with the provisions of this section.

Table 7: Bicycle Parking Space Requirements

Use Group	Specific Use Types	Minimum Bike Parking
Public / Institutional Uses	Libraries, Museums, Public Parks, Hospitals, Post Office	1 bike parking space per 15 parking spaces
Residential Subdivisions	Club houses, recreational buildings or facilities and other amenity area or facilities	1 bike parking space per 15 parking spaces
Assembly Uses	Churches, Public and Private Schools, Auditoriums, Stadiums	1 bike parking space per 15 parking spaces
Entertainment Uses	Skating Rinks, golf Courses, Theaters, Health Clubs	1 bike parking space per 20 parking spaces
Retail and Business Services	Convenience stores, Shopping Centers, Restaurants	1 bike parking space per 25 parking spaces
Employment Uses	Offices, Industrial Services, Manufacturing	1 bike parking space per 25 parking spaces

(b) No use is required to provide more than twenty-five (25) bicycle parking spaces.

(c) The Zoning Administrator is authorized to waive or modify the number of bicycle parking spaces required for a specific use when the applicant demonstrates to the satisfaction of the Zoning Administrator that the number of spaces required by this section is not necessary because of the

building's occupancy or the characteristics of the building's patrons or customers.

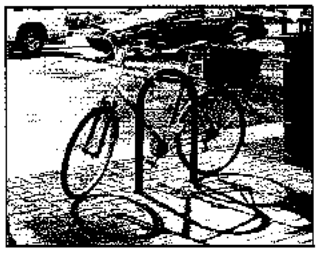
(d) Required bicycle parking spaces must be provided in bicycle parking racks and each bike space must have minimum dimensions of two (2) feet in width for each bicycle, by six (6) feet in length and a minimum overhead clearance of seven (7) feet. Racks must be affixed securely to the ground or building.

(e) One bicycle parking space shall consist of a floor area at least two (2) feet wide and six (6) feet long, served by an aisle at least five (5) feet wide for bicycle spaces which are not divided into individual lockers or racks.

(f) Bicycle racks must be high quality, inverted "U"-type construction in a finish consistent with the themes of a development project. It shall be designed and constructed so a bicycle can be securely locked with a user-supplied padlock (See Figure 24). Alternative designs may be required or considered by the Design Review Authorities.

(g) A use that is required to provide more than ten (10) bicycle parking spaces may use up to two (2) required vehicle parking spaces for bicycle parking spaces.

Figure 24: Bicycle Racks



Preferred Bicycle Rack: Inverted 'U' - Shaped Rack

(2) ***Bicycle Parking Space Demarcation***. Bicycle parking design shall also be:

(a) Clearly designated for bicycle parking.

(b) Separated from motor vehicle parking areas and driveways by a barrier, such as a curb, rail, or bollard.

(c) Be located in a manner, which will minimize the possibility of vehicles striking parked bicycles.

(3) ***Placement on the Site***. Bicycle spaces shall be situated at ground level and located as follows:

(a) No farther than one hundred (100) feet from the visitors' entrance and be readily visible.

(b) As close and conveniently accessible to the use or building entrances as is the closest vehicle space, with the exception of accessible parking spaces.

(c) As close to the building entrances as is practical while maintaining a minimum bicycle access aisle of five (5) feet and without interfering with pedestrian access.

(4) ***Permissible Reductions***. The number of bicycle spaces in lots of twenty (20) or more spaces may be reduced by two (2) if the developer provides a bicycle rack and a secure parking area for at least ten (10) bicycles.

Adopted this 3rd day of January, 2017.

Joseph E. Pollino Jr., Mayor

ATTEST:

Melody A. Graham, Clerk

VILLAGE OF MARVIN
SEAL
N. C.