

ARTICLE 7

PARKING, LOADING. AND ACCESS MANAGEMENT

Section 7.01 Purpose.

The purpose of this Article is to protect water quality and the capacity of drainage and stormwater management systems; to limit the number of off-street parking spaces and amount of impervious surfaces that may be permitted on a parcel of land or accessory to a use or building; to establish flexible minimum and maximum standards for off-street parking and loading; and to promote the use and development of shared parking facilities and cross-access between sites.

Section 7.02 Scope.

Off-street parking, stacking, and loading spaces shall be provided in all districts whenever any structure is constructed, altered, or enlarged; a new land use is established; an existing use is replaced by a new use (change of use); or an existing use is expanded or increased in intensity. Such spaces shall be provided in accordance with the provisions of this Article, subject to approval per Section 12.01 (Site Plan Review).

Section 7.03 General Standards.

The following general standards shall apply to all off-street parking and loading facilities:

A. Location of Spaces.

Off-street parking spaces shall be located within 300 feet of a primary building entrance for the use to which such spaces are accessory. Off-street parking facilities may be located within required yard setbacks, subject to provision of adequate screening per Section 8.05A (Parking Lot Screening).

B. Use.

Any area once designated as required off-street parking, stacking, and loading spaces shall not be changed to any other use, unless adequate spaces meeting the standards of this Article have first been provided at another location acceptable to the Planning Commission.

Use of off-street parking, stacking, and loading facilities shall be further subject to the following:

1. No commercial activity or selling of any kind shall be conducted within required parking areas, except as part of a permitted temporary use.
2. Parking lots and loading areas shall not be used for parking of inoperable vehicles, outside storage of any equipment, products or materials, or dumping of refuse.

3. Parking of an operable motor vehicle shall not exceed a continuous period of more than 48 hours. Repairs, servicing or display of vehicles for sale shall be prohibited.
4. No person shall park any motor vehicle on any private property without the authorization of the owner, holder, occupant, lessee, agent or trustee of such property. Ownership shall be shown of all lots intended for use as parking by the applicant.

C. Shared Facilities.

The development and use of a parking or loading facility shared between two (2) or more contiguous uses shall be permitted where peak activity for each use will occur at different periods of the day or week. Shared facilities shall be subject to acceptance by the Planning Commission of a signed shared facility agreement between the property owners. Where shared parking facilities are provided, the number of parking spaces shall not be less than eighty percent (80%) of the sum of the minimum requirements for the various individual uses specified in Section 7.05 (Schedule Of Required Parking by Use), nor more than the sum of the maximum requirements for the various individual uses, as follows:

$$\begin{aligned} \text{Minimum Shared Parking Requirement} &= (\text{minimum for use A} + \text{minimum for use B}) \times 80\% \\ \text{Maximum Shared Parking Requirement} &= (\text{minimum for use A} + \text{minimum for use B}) \times 133\% \end{aligned}$$

Section 7.04 Residential Parking Standards.

Off-street parking spaces for single-and two-family (duplex) dwellings shall consist of an accessory driveway, garage, parking strip or bay, or combination thereof, subject to the following:

1. Parking spaces shall be located on the same zoning lot as the principal dwelling.
2. Parking spaces shall not be used for storing of commercial vehicles exceeding one (1) ton in capacity. The storage of merchandise, display of motor vehicles for sale or repair of vehicles exceeding one (1) ton capacity (other than a resident's private vehicles) shall be prohibited.

Section 7.05 Schedule Of Required Parking by Use.

The minimum number of required off-street parking spaces for an individual use shall be determined in accordance with the following:

A. Parking Calculations.

Where a use is not specifically mentioned in this Article, the Planning Commission shall apply the standards for a similar listed use. Where calculations determining the number of required parking spaces result in a fractional space, any fraction up to and including one-half (1/2) shall be disregarded, and any fraction over one-half (1/2) shall be rounded-up to the next highest whole number.

B. Minimum and Maximum Parking Requirements.

1. **Minimum required spaces.** Off-street parking, stacking, and loading spaces shall be provided in accordance with the minimum requirements of Section 7.05C (Schedule Of Required Parking by Use). The Planning Commission may require any use to provide parking spaces above the required minimum, up to the maximum permitted by this Section.

2. **Maximum permitted parking spaces.** The maximum amount of off-street parking permitted for any use shall not exceed one hundred thirty three percent (133%) of the minimum parking requirements of this Section. This requirement shall not apply to single-family or two-family dwellings, nor to spaces reserved for off-site uses as part of an off-site parking facility agreement per Section 7.09A (Off-Site Parking Facilities).

C. Schedule Of Required Parking by Use.

USE	PAVING REQUIRED?	MINIMUM REQUIRED PARKING
ANIMAL AND AGRICULTURAL USES		
Farm-Based Tourism or Entertainment Facilities	No	One (1) per four (4) seats or eight (8) feet of benches, based upon the maximum seating capacity of the primary assembly space; or one (1) per four (4) persons allowed within the maximum capacity of the facility.
Greenhouses Nurseries, and Garden Centers	No	Five (5), plus one (1) per on-duty employee based upon maximum employment shift, plus one (1) per 300 square feet of usable floor area for any offices or other accessory uses.
Farm Markets and Feed Stores	No	One (1) per 400 square feet of usable floor area, plus one (1) per on-duty employee based upon maximum employment shift.
Veterinary clinics, Kennels, and Animal Shelters	No	One (1) per 500 square feet of usable floor area, plus one (1) per on-duty employee based upon maximum employment shift.
RESIDENTIAL USES		
Accessory Apartments	No	One (1) per dwelling unit, plus any required spaces for the dwelling.
Adult Foster Care Small and Large Group Homes, State Licensed Residential Facilities, and Other Managed Residential Facilities	Yes	One (1) per resident sleeping room, plus one (1) per on-duty employee based upon maximum employment shift.

C. Schedule Of Required Parking by Use.

USE	PAVING REQUIRED?	MINIMUM REQUIRED PARKING
Bed and Breakfast Inns	No	One (1) per guest sleeping room, plus any required spaces for the dwelling.
Family and Group Child Day Care Homes, and Adult Foster Care Family Homes	No	One (1) per on-duty employee based upon maximum employment shift, plus any required spaces for the dwelling.
Manufactured Housing Parks	No	Two (2) per dwelling.
Multiple-Family Housing	Yes	One and one-half (1.5) per dwelling unit with up to two bedrooms, and two (2) per three-bedroom or larger dwelling unit.
Two-Family or Duplex Dwellings	No	
Nursing and Convalescent Homes, Assisted Living Facilities, and Dependent Elderly Housing	Yes	One (1) per two (2) dwelling units or per four (4) beds, plus one (1) per on-duty employee based upon maximum employment shift.
Senior Housing and Independent Elderly Housing	Yes	One (1) per dwelling unit, plus one (1) per on-duty employee based upon maximum employment shift.
Single Family Dwellings, Detached	No	Two (2) per dwelling.
OFFICE AND SERVICE USES		
Banks and Financial Institutions	Yes	One (1) per 300 square feet of usable floor area.
Barber Shops, Beauty Salons, and Nail Care	No	One (1) per service chair or station, plus one (1) per on-duty employee based upon maximum employment shift.
Funeral Homes or Mortuaries	No	One (1) per four (4) persons allowed within the maximum building occupancy.
Hospitals	Yes	One (1) per four (4) beds, plus one (1) per on-duty employee based upon maximum employment shift.
Medical, Osteopathic, Chiropractic, Optical or Dental Offices, Clinics, Urgent Care Centers or Rehabilitation Centers	Yes	One (1) per on-duty employee based upon maximum employment shift, plus one (1) per examination or treatment room.
Massage Therapists	No	

C. Schedule Of Required Parking by Use.

USE	PAVING REQUIRED?	MINIMUM REQUIRED PARKING
Offices for Professional, Executive, or Administrative Uses, Attorneys, Accountants, Realtors, Architects, Insurance and Similar Occupations	Yes	One (1) per 300 square feet of usable floor area.
Video Rental Establishments	Yes	One (1) per 150 square feet of usable floor area.
Workshops, Showrooms, Studios or Offices of Photographers, Skilled Trades, Decorators, Artists, Upholsterers, Tailors, Taxidermists and Similar Businesses, or for Repair and Service of Bicycles, Electronics, Small Appliances, Furniture, Shoes and Similar Items.	No	One (1) per 400 square feet of usable floor area.
COMMUNITY USES		
Institutional Uses	Yes	One (1) per four (4) seats or eight (8) feet of benches, based upon the maximum seating capacity of the primary assembly space; or One (1) per on-duty employee based upon maximum employment shift, plus one (1) per four (4) persons allowed within the maximum building occupancy.
Child Care or Day Care Centers, and Child Caring Institutions	Yes	One and one-half (1.5) per six (6) children of state licensed or authorized capacity, plus one (1) per on-duty employee based upon maximum employment shift.
Fire and Police Stations	Yes	One (1) per on-duty employee based upon maximum employment shift, plus any required spaces for storage of vehicles.
Government Offices	Yes	One (1) per 300 square feet of usable floor area.
Health Club or Fitness Center	No	One (1) per four (4) persons allowed within the maximum building occupancy, or one (1) per 300 square feet of usable floor area.
Recreation Facilities, Indoor	No	
Recreation Facilities, Outdoor	No	One (1) per 7,500 square feet of gross land area.

C. Schedule Of Required Parking by Use.

USE	PAVING REQUIRED?	MINIMUM REQUIRED PARKING
COMMERCIAL USES		
Big Box COMMERCIAL USES	Yes	One (1) per 200 square feet of usable floor area.
Car washes	Yes	Two (2), plus one (1) per on-duty employee based upon maximum employment shift, plus six (6) stacking spaces per service lane and two (2) for post-wash detailing.
Drive-in or Drive-through Facilities	Yes	Two (2) per service window, booth, cubicle or stall, plus six (6) stacking spaces per service lane.
Gasoline Service Stations	Yes	One (1) per on-duty employee based upon maximum employment shift, plus one (1) per fueling location, plus one (1) stacking space per two (2) fueling locations.
Hotels	Yes	One (1) per occupancy unit, plus one (1) per on-duty employee based upon maximum employment shift.
Laundromat and Dry Cleaners	Yes	One (1) per six (6) washing or drying machines, or one (1) per 300 square feet of usable floor area.
Manufactured Housing Sales	Yes	One (1) per 1,000 square feet of outdoor sales or display area.
Motor Vehicle Service Centers or Repair Stations	Yes	One (1) per on-duty employee based upon maximum employment shift, plus one (1) per service bay, plus one (1) stacking space per service bay.
Outdoor Sales or Display Areas	No	
Restaurants and Food Service Establishments, Carry-Out Only	Yes	One (1) per 200 square feet of usable floor area, plus one (1) per on-duty employee based upon maximum employment shift.
Restaurants, and Food Service Establishments, with Dine-In Seating	Yes	One (1) per four (4) seats, based upon the maximum seating capacity, plus one (1) per on-duty employee based upon maximum employment shift.
Retail Stores and COMMERCIAL USES not otherwise listed in this table	Yes	One (1) per 250 square feet of usable floor area.

C. Schedule Of Required Parking by Use.

USE	PAVING REQUIRED?	MINIMUM REQUIRED PARKING
Showroom or Sales Office (indoor only) for Sales or Rentals of Automobiles, Recreational Vehicles, Boats, Equipment, Machinery or Similar Durable Goods	Yes	One (1) per 500 square feet of usable floor area of the sales room, plus one (1) per on-duty employee based upon maximum employment shift.
Tavern, Pub, Brewpub, Cocktail Lounge or Night Club	Yes	One (1) per three (3) persons allowed, based upon the maximum seating capacity of the primary assembly space, plus one (1) per on-duty employee based upon maximum employment shift.
INDUSTRIAL, RESEARCH AND LABORATORY USES		
INDUSTRIAL, RESEARCH, AND LABORATORY USES not otherwise listed in this table – established for a known user.	Yes	Five (5), plus one (1) per on-duty employee based upon maximum employment shift, plus one (1) per 300 square feet of usable floor area for any offices or other accessory uses.
INDUSTRIAL, RESEARCH, AND LABORATORY USES not otherwise listed in this table – established on speculation, or where the end user or number of anticipated employees is not known.	Yes	Five (5), plus one (1) per 2,000 square feet of usable floor area for the industrial, research or laboratory use, plus one (1) per 300 square feet of usable floor area for any offices or other accessory uses.
Outdoor Storage of Goods, Products, Equipment, Machinery, Lumber, Landscaping and Building Supplies or Similar Items	Yes	One and one-half (1.5) per on-duty employee based upon maximum employment shift, plus one (1) per 300 square feet of usable floor area for any offices or other accessory uses.
Outdoor Storage, Dismantling or Recycling of Motor Vehicles, Recreational Vehicles, Boats, Manufactured Houses and Similar Items	Yes	
Recycling Collection Facilities & Composting Centers	Yes	
Self-Storage Warehouses	Yes	Two (2) for the caretaker’s dwelling, plus one (1) per 300 square feet of usable floor area in the principal building.

C. Schedule Of Required Parking by Use.

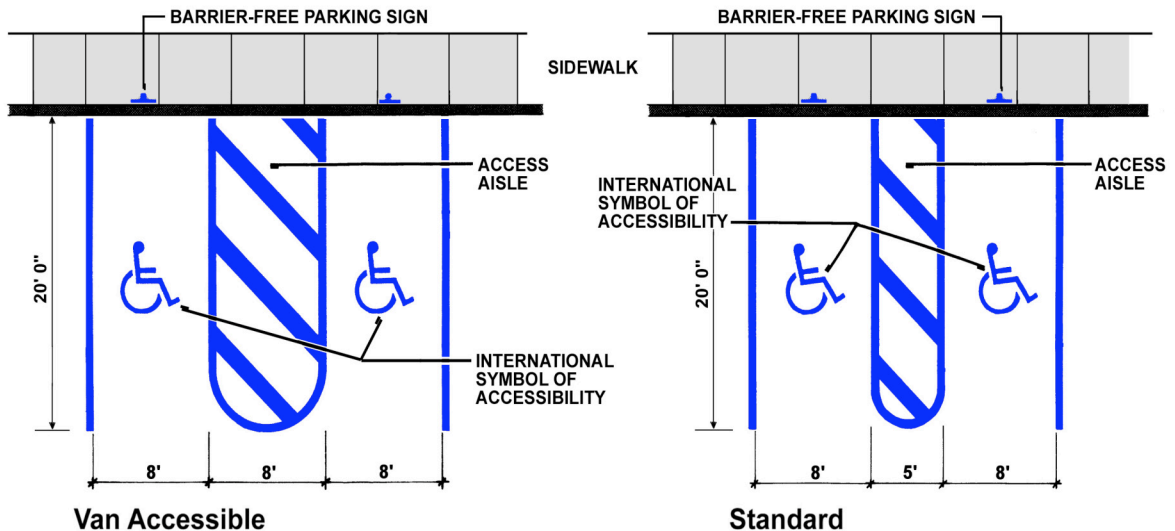
USE	PAVING REQUIRED?	MINIMUM REQUIRED PARKING
TEMPORARY, SPECIAL EVENT AND OTHER USES		
Adult Entertainment Uses	Yes	One (1) per 200 square feet of usable floor area.
Racetracks	Yes	One (1) per 4,000 square feet of gross land area occupied by the use, or one (1) per three (3) persons allowed within the maximum occupancy load that the facilities are designed to accommodate.

Section 7.06 Design Requirements.

Off-street parking facilities designed, constructed, and maintained in accordance with the following:

A. Barrier-Free Parking Requirements.

Barrier-free parking spaces signed and striped shall be provided at conveniently accessible locations within each parking lot, in accordance with the State Construction Code enforced by Gladwin County, and the following:



Barrier-Free Parking Space Layout

NUMBER OF PARKING SPACES PROVIDED	MINIMUM NUMBER OF BARRIER-FREE SPACES REQUIRED	VAN ACCESSIBLE PARKING SPACES REQUIRED	ACCESSIBLE PARKING SPACES REQUIRED
Up to 25	1	1	0
26 to 50	2	1	1
51 to 75	3	1	2
76 to 100	4	1	3
101 to 150	5	1	4
151 to 200	6	1	5
201 to 300	7	1	6
301 to 400	8	1	7
401 to 500	9	2	7
501 to 1,000	2% of total parking provided in each lot	1 out of every 8 accessible spaces	7 out of every 8 accessible spaces
1,001 and over	20 plus 1 per 100 spaces over 1,000	1 out of every 8 accessible spaces	7 out of every 8 accessible spaces

B. Screening.

Landscaping and screening shall be provided for all parking and loading facilities in accordance with the provisions of Section 8.05A (Parking Lot Screening).

C. Exterior Lighting.

Where provided, exterior lighting shall comply with the standards of Article 10 (Exterior Lighting).

D. Ingress/Egress.

Adequate means of ingress and egress shall be provided for all parking and loading facilities by means of clearly limited and defined drives, curb cuts, and maneuvering lanes. Backing directly onto a road or using a road for maneuvering between parking rows shall be prohibited. Driveways and aisles for any off-street parking area built to accommodate more than 20 vehicles shall comply with the following requirements:

1. **Aisle width and length.** Drive aisles in off-street parking areas shall be at least 20 feet wide. Drive aisles shall not exceed 300 feet in length without a break in circulation.
2. **Driveway configuration.** Each driveway shall be a minimum of 12 feet and a maximum of 15 feet in width per direction. Lanes for entering and exiting traffic shall be clearly marked on the pavement. The driveway shall include an on-site stacking area. The driveway shall intersect the abutting street at a 90 degree angle.

3. **Deceleration lane.** Where the posted speed limit for a public thoroughfare is greater than 30 miles per hour, a driveway opening onto the thoroughfare shall be served by a right turn deceleration lane that is at least 200 feet long in advance of the driveway.

E. Pavement.

Off-street parking facilities shall be paved in accordance with the construction and design standards established by the Township, and the following:

1. **Gravel surface.** Where Section 7.05 (Schedule Of Required Parking by Use) does not require that parking areas be paved, they shall be surfaced with a material that provides a durable, smooth and dustless surface, and shall be graded to drain and dispose of all collected surface water within a reasonable time.
2. **Paved surface.** Where Section 7.05 (Schedule Of Required Parking by Use) requires parking areas to be paved, they shall be paved with concrete, plant mixed asphalt or similar materials. All parking areas shall be graded and provided with adequate drainage to dispose of all collected surface water within a reasonable period of time. Paving shall consist of either six (6) inches of cement concrete, or two (2) inches of asphalt surface laid over a base of crushed stone with a compacted thickness of six (6) inches.

F. Stacking Spaces.

Where required by this Article, stacking spaces for drive-through facilities shall be ten (10) feet wide by 20 feet long. Stacking spaces shall not intrude into any road right-of-way or maneuvering lane for an off-street parking lot.

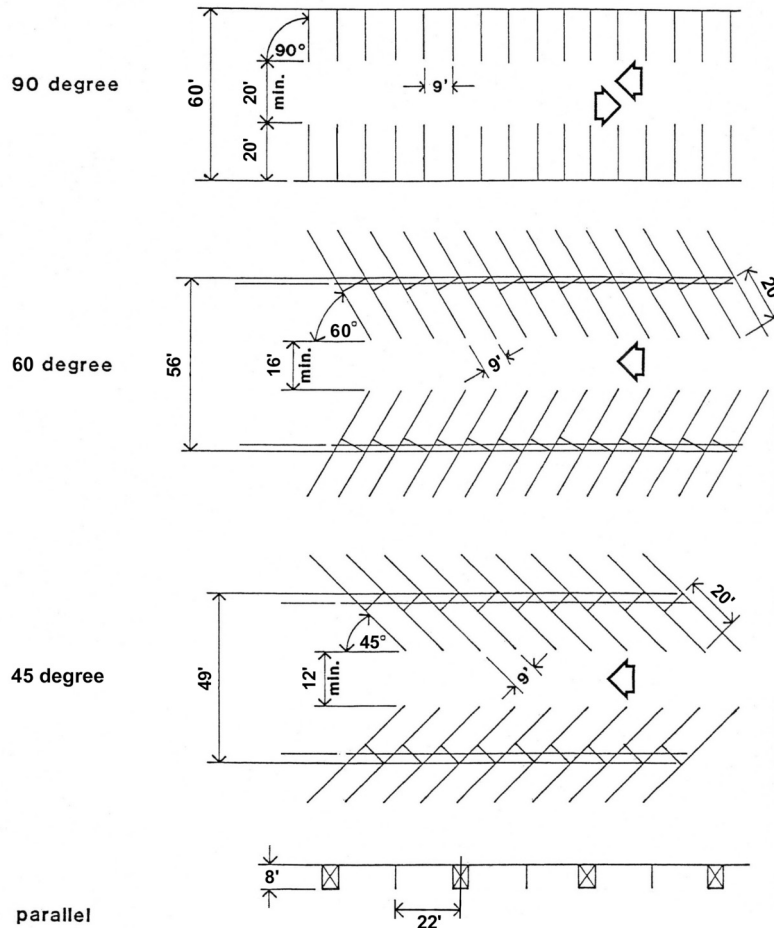
G. Grading and Drainage.

Driveways and other parking areas shall be graded and drained to dispose of surface waters in accordance with the construction and design standards established by the Township. Surface water shall not be permitted to drain on to adjoining lots or to sheet flow across a public road, except in accordance with a drainage plan approved by the Township.

H. Parking Layout.

The layout of off-street parking shall be in accordance with the following minimum requirements:

PARKING PATTERN (degrees)	MANEUVERING LANE WIDTH	PARKING SPACE WIDTH	PARKING SPACE LENGTH	WIDTH OF MANEUVERING LANE PLUS TWO ROWS
0° (parallel)	24 feet (two-way)	8 feet	22 feet	40 feet
45°	12 feet (one-way)	9 feet	20 feet	49 feet
60°	16 feet (one-way)	9 feet	20 feet	56 feet
90°	20 feet (two-way)	9 feet	20 feet	60 feet



Parking Layout

Section 7.07 Construction.

Construction or alteration of off-street parking lots shall be in accordance with an approved site plan, and shall be subject to review and approval of a zoning permit by the Zoning Administrator.

1. Proof of any necessary permits from Gladwin County or other agency with jurisdiction shall be provided to the Township.
2. Plans for parking lots shall indicate existing and proposed grades, drainage, surfacing and base materials, and the proposed parking layout.
3. In the event that required paving cannot be completed because of cold or inclement weather, the Township may require submittal of a performance guarantee to ensure completion of all required improvements per the approved site plan, in accordance with Section 1.09 (Fees and Performance Guarantees).

Section 7.08 Off-Street Loading.

To avoid undue interference with public use of dedicated road and alley rights-of-way, adequate space shall be provided for loading and unloading activities associated with any use involving the receipt or distribution of vehicles, materials or merchandise, subject to the following:

A. General Standards.

The following shall apply to loading and unloading areas in all zoning districts:

1. **Setbacks.** Loading spaces shall be set back a minimum of 50 feet from any residential district or use, except where enclosed within a building or screened to the satisfaction of the Planning Commission, in accordance with Section 8.04 (Methods of Screening and Buffering).
2. **Hard surface required.** Loading spaces shall be paved with a surface providing the equivalent load strength of nine (9) inches of concrete.
3. **Dimensions of loading spaces.** Each loading space shall be at least ten (10) feet wide and 25 feet long. If roofed, a loading space must have at least 15 feet of vertical clearance. Where a use involves semi-trucks making deliveries on a daily basis, or requires that semi-trailers will be parked in the space for more than one (1) hour at any time, the loading space shall be at least 60 feet long.
4. **Location of loading spaces.** Loading spaces shall be located within or immediately adjacent to the building to be served, and they shall be arranged so that maneuvering of trucks using the space does not take place on a public road.

B. District Standards.

The minimum size or number of required loading spaces shall be based on the gross floor area of a building or addition as follows:

1. **COMMERCIAL USES.** Buildings used for retail sales or food service establishments shall include one (1) off-street loading space for every 6,000 square feet of usable floor area or fraction thereof.
2. **INDUSTRIAL, RESEARCH, AND LABORATORY USES.**
 - a. Buildings up to and including 20,000 square feet of gross floor area shall provide at least one (1) space.
 - b. Buildings more than 20,000 square feet in area, but less than 50,000 square feet shall provide a minimum of two (2) spaces.
 - c. Buildings 50,000 square feet and greater shall provide three (3) spaces plus one (1) space for each additional 50,000 square feet or fraction thereof.

Section 7.09 Modification of Standards.

Limited modifications to the standards of this Article shall be permitted, subject to the following:

A. Off-Site Parking Facilities.

Required parking facilities accessory to non-residential uses in any zoning district may be located off-site (on other than the same zoning lot as the use served), subject to the following:

1. Required parking shall be located within 500 feet of a primary building entrance for the use.
2. Use of off-site parking spaces within a residential zoning district shall be prohibited.
3. A written agreement shall be drawn to the satisfaction of the Township Attorney and executed by all parties concerned assuring the continued availability of the off-site parking facilities for the use they are intended to serve.

C. Exceeding Maximum Number of Required Spaces.

The Planning Commission may require any use to provide parking spaces above the required minimum, up to the maximum permitted by this Section. Exceeding the maximum parking space requirements shall be prohibited, except where the Planning Commission determines that additional parking is necessary to accommodate the use on a typical day of operation, based upon evidence supplied by the applicant.

D. Deferment of Parking Spaces.

Where an applicant demonstrates to the satisfaction of the Planning Commission that the minimum required number of parking spaces is excessive, the Planning Commission may approve the construction of a lesser number of parking spaces, provided that the deferred parking is shown on the site plan and set aside as open space. Deferred parking spaces shall be constructed in accordance with the approved site plan upon written request by the Township after the Zoning Administrator has documented three (3) incidents of problem parking on the site.

E. Modification of Loading Space Requirements.

The Planning Commission may modify or waive the requirement for off-street loading areas, upon determining that adequate loading space is available to serve the building or use, or that provision of such loading space is unnecessary or impractical to provide.

F. Other Circumstances.

The Planning Commission may modify or waive off-street parking requirements under any of the following circumstances:

1. A combination of off-street parking spaces and on-street spaces adjacent to the lot can effectively accommodate the parking needs of a given use without negatively impacting traffic safety or adjacent uses.

2. Sufficient evidence has been provided by the applicant to demonstrate that an alternative parking standard would be more appropriate for the type, scale or intensity of the use.

Section 7.10 Maintenance.

All parking and loading areas shall be maintained in accordance with the provisions of this Article, an approved site plan and the following:

1. Alterations to an approved parking or loading facility that are not in accordance with an approved site plan shall be considered a violation of this Ordinance.
2. All parking areas, perimeter landscaped areas, and required screening shall be kept free from tall grass, weeds, trash, and debris. Surfacing, curbing, lighting fixtures, signage, and related appurtenances shall be kept in good repair.

Section 7.11 Driveway Spacing Standards.

The purpose of this Section is to protect the substantial public investment in the Township's road system by preserving the traffic capacity of existing roads. It is the further intent of this Article to promote safe and efficient travel within the Township; minimize disruptive and potentially hazardous traffic conflicts; establish efficient standards for driveway spacing and the number of driveways; and ensure reasonable vehicular access to properties, though not always the most direct access.

Each parcel in the C-1 (Local Commercial), C-2 (Highway Commercial), and IND (Industrial) Districts shall have no more than one (1) driveway entrance and exit opening to a public road for each 300 feet of frontage or fraction thereof. Where more than one (1) driveway is allowed, the driveways shall be located at least 150 feet apart. No driveway shall be located within 30 feet of a lot boundary, or within 50 feet of a road intersection.

Section 7.12 Traffic Impact Studies.

Where authorized by this Ordinance or determined necessary by the Planning Commission, a traffic impact study (TIS) shall be prepared by an applicant to determine the potential future traffic conditions on the adjacent roadways once a proposed use is established or development is completed. The Township may utilize its own traffic consultant to review the TIS, with the cost of the review being borne by the applicant per Section 1.09 (Fees and Performance Guarantees).

The results of the TIS shall be used in the final design of access points and internal circulation and may identify necessary off-site road improvements. At a minimum, the TIS shall meet standards of the Michigan Department of Transportation (MDOT) handbook entitled Evaluating Traffic Impact Studies. The Planning Commission may modify the TIS requirements or scope based upon site and use location and conditions.

At a minimum, the TIS shall include the following:

1. An analysis of existing traffic conditions or site restrictions using current data.

2. Projected trip generation at the subject site or along the subject service drive based on the most recent edition of the Institute of Transportation Engineers' *Trip Generation* manual. The Township may approve use of other trip generation data if based on recent studies of at least three (3) similar uses within similar locations in Michigan.
3. Illustrations of current and projected turning movements at access points, including identification of potential impacts of the development on the operation of the abutting roads. Capacity analysis shall be based on the most recent edition of the of the Transportation Research Board's *Highway Capacity Manual*, and shall be provided in an appendix to the TIS.
4. Description of the internal vehicular circulation and parking system for passenger vehicles and delivery trucks, as well as the circulation system for pedestrians, bicycles and other users.
5. Prediction of the peak-hour operational conditions at site driveways and road intersections affected by the development.
6. Justification of need, including statements describing how any altered or additional access points will meet the intent of this Article, not preserve public safety and road capacity, and be consistent with the adopted master transportation plans for the Township, county or state road authorities.
7. Qualifications and documented experience of the author in preparing traffic impact studies in Michigan. The preparer shall be either a registered traffic engineer (P.E.) or a transportation planner, with at least three (3) years of experience preparing traffic impact studies in Michigan. If the TIS involves geometric design, the study shall be prepared or supervised by a registered engineer with adequate experience in traffic engineering.

