

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE CITY OF MISSION CODE OF ORDINANCES CHAPTER 110-TRAFFIC AND VEHICLES, ARTICLE 3, LOADING AND UNLOADING, ADDING SUBSECTION 110-437 THRU 441, QUEUING & INTERNAL CIRCULATION ROUTES, ESTABLISHING REGULATIONS FOR THE QUEUING OF VEHICLES IN NEW DEVELOPMENTS; PROVIDING REPEALER CLAUSE; PROVIDING SEVERABILITY CLAUSE; PROVIDING EFFECTIVE DATE; AND PROVIDING FOR PUBLICATION.

WHEREAS, The City of Mission is a home-rule municipality possessing the full power of local self-governance pursuant to Article XI, Section 5 of the Texas Constitution; and

WHEREAS, Pursuant to the laws of the State of Texas, including Section 51.001 of the Texas Local Government Code, the City Council has the authority to adopt an ordinance that, among other things, is good government peace or order of Mission; and

WHEREAS, the proper queuing of vehicles is important to regulate in new developments; and

WHEREAS, this ordinance amendment was reviewed and recommended by the Ordinance Review Committee; and

WHEREAS, The City Council of the City of Mission finds that it is in the best interest of the citizens of Mission to amend the Code of Ordinances as set forth below:

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MISSION, TEXAS, THAT:

SECTION 1: That the City of Mission Code of Ordinances, Chapter 110-Traffic and Vehicles, Article III -Loading and Unloading, be amended by adding Section 110-437 – Queuing & Internal Circulation Routes is hereby added the language as shown underlined as follows:

110 – 437 Queuing

Adequate storage space shall be provided for queuing on-site to prevent traffic queues spilling onto City right-of-way. Queuing area requirements for drive-through service lanes or queuing spaces are as follows:

- (a) Queuing spaces or queuing areas shall be designed in accordance with the following criteria for uses as required.
- (b) Queue spaces or queuing areas may not interfere with parking spaces, parking aisles, loading areas, internal circulation, or driveway access.
- (c) Each queue space shall consist of a rectangular area not less than 10 feet wide and 25 feet long. Queue spaces are not interchangeable with the required parking spaces.
- (d) A 12-foot-wide bypass lane may be required adjacent to queue lines to allow vehicles an opportunity to circumvent the drive-through activity and exit the site.
- (e) Queue areas and drive-through facilities shall be clearly identified with the appropriate signage and markings.
- (f) Queuing areas for service station islands and fuel dispensing pumps should be designed according to Figure 1. The minimum queuing requirement dimension is measured from the ends of the service island or protective bollards. By-pass lane(s) are required to provide on-site circulation. Parallel adjacent islands with three or more pumps on each island shall maintain a circulation aisle between queuing spaces or other obstructions.

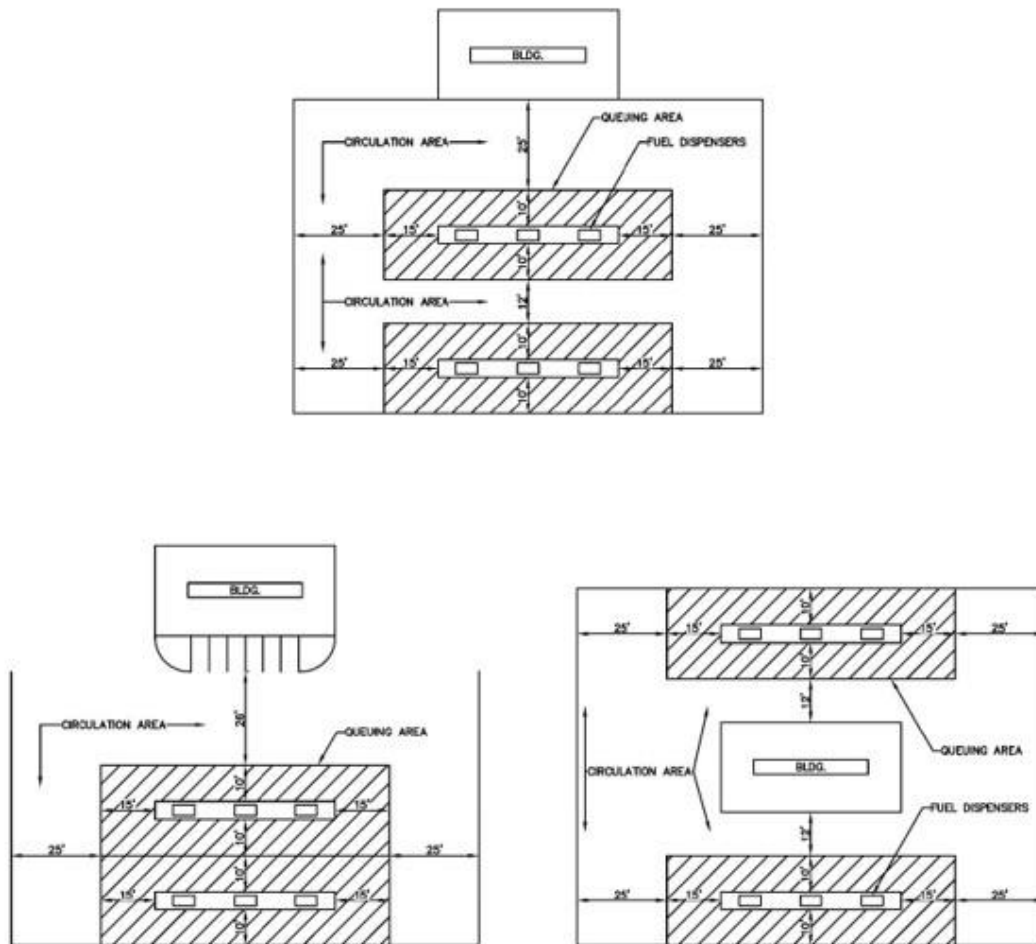


Figure 1 – Service Station Queuing & Internal Circulation Layout

- (g) Refer to Figure 2 for calculation of queue length required for a drive through facility.
- (h) Refer to Figure 3 for layout of queuing area and internal circulation routes on a site providing a drive through facility.
- (i) No queuing shall be allowed in the public street. This requirement shall apply to new public or private schools or to the expansion of existing public or private schools. The required queuing within the school property must be outside the school gate. To the extent possible, existing schools that expand or add to the structure will have to come into compliance.
- (j) The provided queue area on site shall be able to accommodate the peak AM or PM hour queue length for a facility. The peak queue length shall be calculated as follows, unless otherwise required by the City Engineer or applicable Director to follow the procedure in Section 110-438.
 - (1) The expected peak hour queue is assumed to be 10-15 % of all arriving vehicles during the AM or PM peak hour, whichever generates the higher number of trips. Refer to Table 1 for example calculations of queue length.
 - (2) The 10-15% AM or PM peak hour arriving vehicle shall be calculated using the current version of the Institute of Transportation Engineers (ITE) Trip Generation Manual. "AM Trips In" or "PM Trips In".

Land Use (ITE Code)	Fast Food (934)	Car Wash (948)	Coffee (937)	Bank (912)	Pharmacy (881)
10% of ITE Trip Generation (AM/PM Peak)	6	2	14	6	7
15% of ITE Trip Generation (AM/PM Peak)	9	3	20	9	11
All numbers based on 10 th Edition of ITE Trip Generation Manual. Use Latest Edition.					

Table 1 – Queue Length Samples from ITE Method

Below are the trip generation calculations for schools from the ITE Trip Generation Manual.

Table VII-4: School Storage Lengths		
Type	Student Population	Loop Drive Stacking Length
Elementary School	200-600	650-1,000 Linear Feet
	600-1,200	1,000-1,500 Linear Feet
Middle School	200-600	700-1,000 Linear Feet
	600-1,200	1,000-1,500 Linear Feet
High School	400-800	800-1,200 Linear Feet
	800-2,500	1,200-1,500 Linear Feet
*Note: • 1 Vehicle = 20 feet • **or a combination approved by The City of Mission equaling no less than 11 Vehicles		

VII-5 Shared Access

A. General

1. Shared Access points are required when the frontage of a property is insufficient for proper spacing of access point as depicted on Figure 2.
2. The property owner is required to record a common ingress/egress access easement with the plat allowing ingress/egress to properties that share access as determined by the City Engineer.
3. In the case where a subject property is being platted through which ingress/egress is necessary for another property to have access to public right-of-way, then the subject property shall record a common access easement allowing such other property to a shared access.
4. Use of such easement by other property owners shall be made contingent on such other owners' agreement to the shared maintenance responsibilities on a pro-rata basis, proportional to respective square footage of all properties having access to easement.

Trip Generation Calculation							
ITE Code	Description	Units		Adjacent		Generator	
				AM Peak	PM Peak	AM Peak	PM Peak
520	Elementary School	# of Students	0			0	0
520	Elementary School	GFA	10			31	35
522	Middle/Junior High	# of Students	0			0	0
522	Middle/Junior High	GFA	10			44	25
530	High School	GFA	10			31	21

per 1,000 sq

per 1,000 sq

Total
Trips

Adjacent		Generator	
0	0	105	81

Table VII-4 above shows the queuing requirements that will be used for schools based on the estimated number of students.

110-438 Alternative Queueing Analysis.

In lieu of the method identified in Section 110-437 (j), the expected peak hour queue shall be calculated through observation of comparable land use and building size for three sites within the City Limits. Observation and memorandum documenting results shall be done by a professional engineer licensed in the State of Texas.

Once the expected peak hour queue has been determined, the queue area shall be sized to accommodate the full length of the expected AM or PM peak hour queue using the following formula:

Equation 1 Expected AM or PM Peak Hour Queue Length = Expected Queue x 25 feet (25 feet is the assumed space for one queued vehicle)

The following Figure 2 illustrates the queue length calculation concept for a straight-line queue, and Figure 3 illustrates the queue length concept for a drive through facility type with a “building wraparound” configuration.

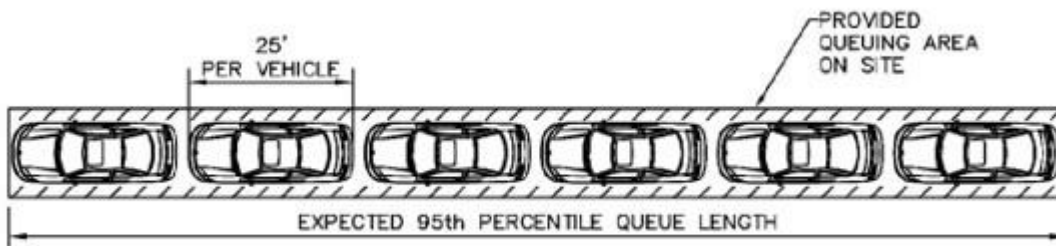


Figure 2 – Area for the 95th Expected Queue

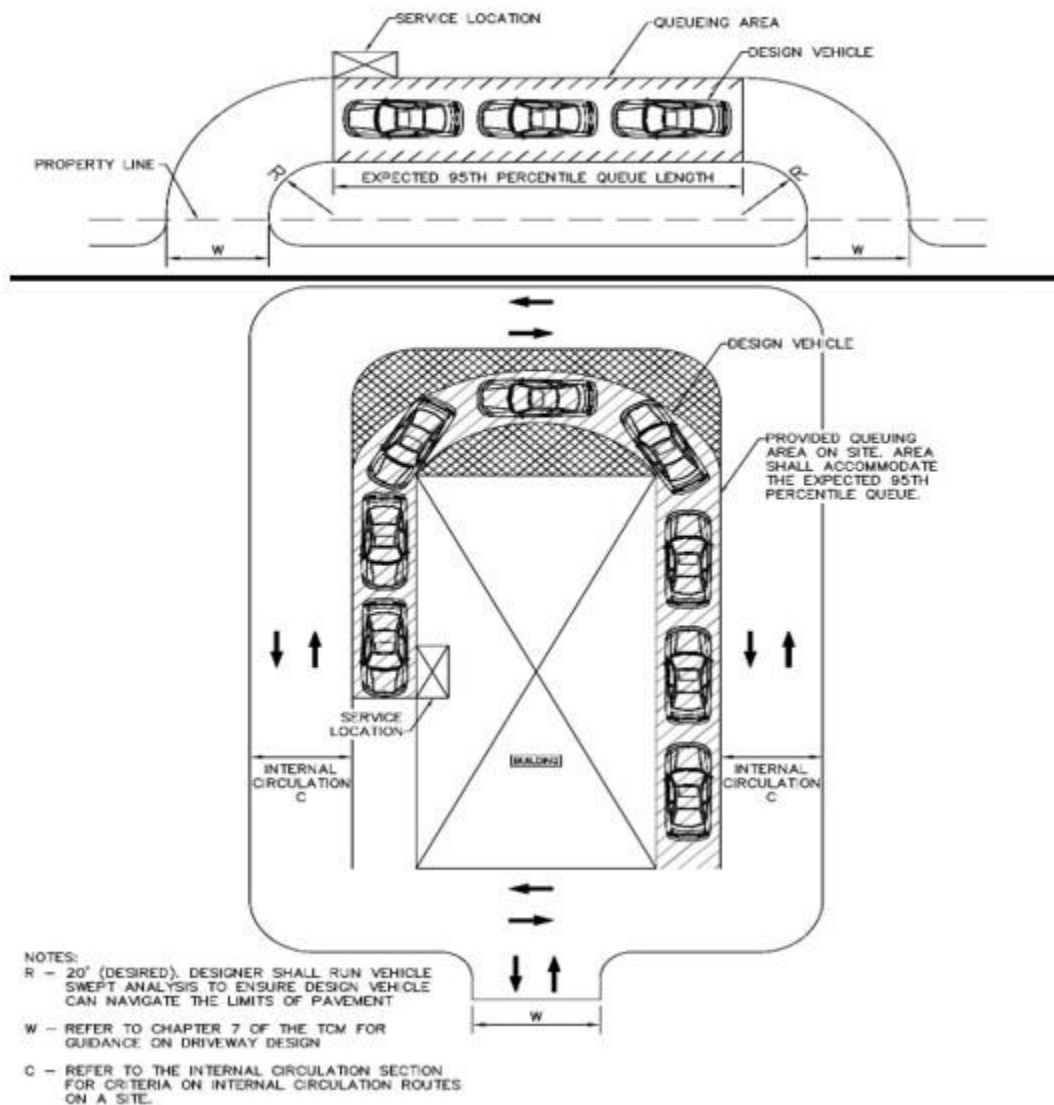


Figure 3 – Semicircular Drop-off Driveway & Drive Through Facility Queueing with Internal Circulation Layout

110-439 Internal Circulation Routes.

Internal circulation routes shall be designed in accordance with the following criteria:

- (a) Refer to Figure 4 for an overview of fire lanes and circulation lanes in off-street parking lots.
- (b) Internal circulation and fire lane grades must also be approved by applicable departments in addition to the Fire Department approval.
- (c) Signs and curb markings are required to indicate "No Parking – Fire Zone." Access aisles shall be designed with an appropriate 25 feet inside turning radius and 50 feet outside turning radius at turns to accommodate operational fire department apparatus. Refer to Figure 4 below.

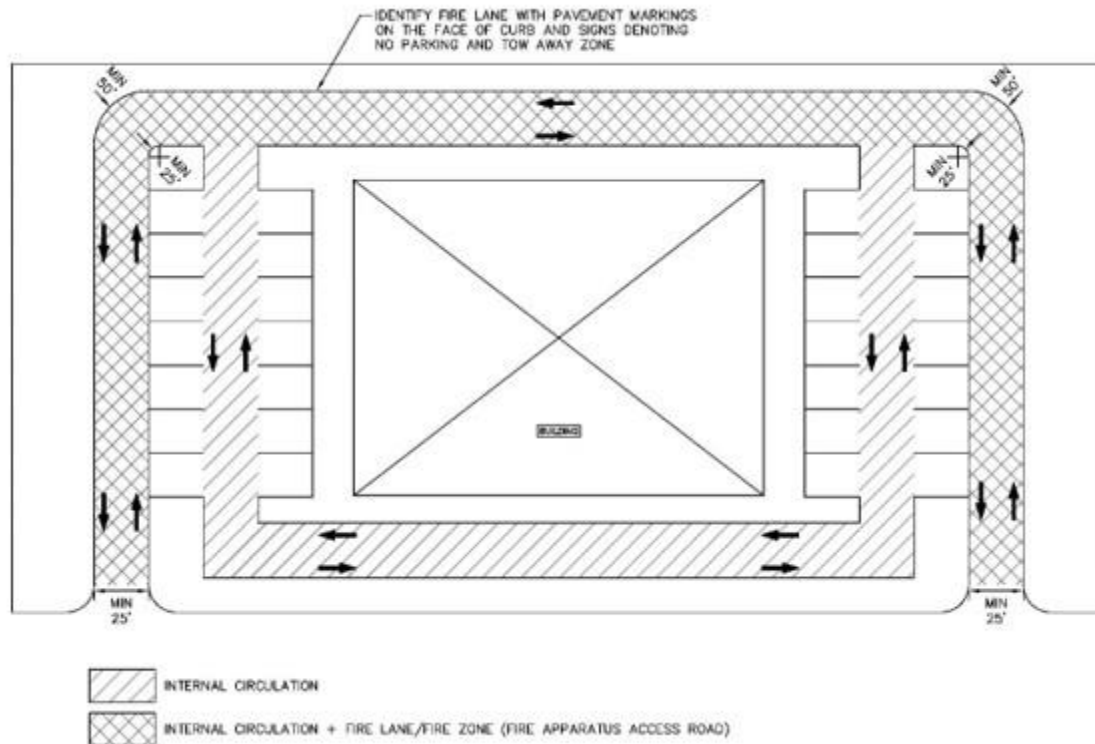


Figure 4 – Internal Circulation & Fire Lanes Layout

- (d) The minimum separation between the edge of the street pavement and the first conflict point within a parking area shall be determined according to the city standards to follow requirements for driveway throat lengths.
- (e) Entry driveways equipped with controlled access gates must provide a minimum of 40 feet of storage space measured from the gate to the property line. A different storage length may be required by the City Engineer or applicable Director if a study warrants. Additional storage space may be required if indicated by a Transportation Impact Analysis.
- (f) All semicircular drop-off driveways shall be designed to operate in one direction only. Figure 3 provides specific design criteria for semicircular drop-offs.
- (g) All internal circulation and queuing areas must be designed to accommodate the turning radii of the vehicles that will be using the site.
- (h) The minimum width for an internal drive or circulation aisle with no parking is 20 feet for two-way traffic and 10 feet for one-way traffic. Additional width, up to 25 feet, for two-way traffic and 15 feet for one-way traffic, may be required where traffic volumes are heavy or where obstructions or circuitous alignment necessitates a wider drive for clearance of turning vehicles. Fire Department access criteria must also be met.

110-440 Driveway Throat.

The driveway throat is the section beyond the driveway into the site. This area of the driveway is used for storage of vehicles by accessing and departing the site. The geometry of this area is highly dependent on the access capacity the property requires. The components that make up the driveway throat are explained in greater detail in the sections that follow.

110-441 Throat Storage Length.

The throat storage length for high volume access driveways is directly related to the number of parking spaces accessible by the driveway. To determine the throat storage length, the total number of parking spaces shall be divided by the number of driveways and refer to Table 2. The calculation shall be used on the proposed number of parking stalls for overall development or the number of parking spaces for an individual lot, whichever provides the more conservative ratio of parking stalls to driveways. This will ensure all departing cars can be stored adequately while waiting to exit the site. For reference the tables in the city infrastructure standards can be used.

Parking Spaces Per Driveway	Storage Required (ft)			
	Multi-Family or Commercial Land Use		Industrial Land Use	
	Left Turn Allowed			
	No	Yes	No	Yes
<25	30	30	30	30
25-50	30	40	30	40
51-100	30	40	40	40
101-200	40	80	40	60
More than 200	100	150	40	100

Table 2 – Minimum Throat Storage Length

- (a) Throat length is measured from the property line to an interruption point.
 - 1. An interruption point consists of the first intersecting aisle, internal driveway, or parking stall.
- (b) For minor driveways that do not access a parking lot, the length of the driveway must fully incorporate the length of one parked vehicle or 20 feet.
- (c) For sites with structured parking, the throat length may be reduced to 0 feet if queueing areas are demarcated to prevent turning conflicts for queued vehicles.

SECTION 2. REPEALER All ordinances or parts of ordinances in conflict herewith in are hereby repealed.

SECTION 3. SEVERABILITY If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and any remaining provision shall continue in effect notwithstanding the invalidity of such section, subsection, clause, phrase or portion.

SECTION 4. EFFECTIVE DATE This ordinance shall take effect immediately upon its passage and publication as required by law.

PASSED, APPROVED, AND ADOPTED THIS ____ day of _____, 2025, at a regular meeting of the City Council Elective Commission of the City of Mission, Texas at which a quorum was present, and which was held in accordance with the TEXAS GOVERNMENT CODE, CHAPTER 551.

CITY OF MISSION

Norie Gonzalez Garza, Mayor

ATTEST:

Anna Carrillo, City Secretary

APPROVED AS TO FORM:

Patricia A. Rigney, City Attorney

