CHAPTER 9: VEHICULAR ACCESS CONTROL

9.00 Introduction and Goals

9.01 Administration

9.02 Standards

9.00 INTRODUCTION AND GOALS

City streets serve two purposes that are often in conflict – moving traffic and accessing property. The higher the volume and speed of traffic on a street, the more that access to the street reduces safety and traffic flow. On streets where it is important to maintain higher traffic volume and/or speed, the City must regulate access to maintain the function of the street. Lower traffic volume and lower speed streets are less impacted, so less regulation is required. All individual properties need some form of street access, but it must not come at the expense of the travelling public. This chapter's goals are:

A. To promote and ensure the safety of the motoring public using City streets.

B. To preserve an acceptable level of service of "C", or better, on City streets, as defined by the Transportation Research Board (TRB) Highway Capacity Manual.

C. To minimize conflicts between vehicles traveling on City streets and vehicles entering and leaving property.

D. To regulate safe and reasonable access from City streets to abutting property and to provide sufficient spacing between access points to minimize interference with traffic using adjacent facilities.

E. To prohibit the use of a City street as a portion of the internal circulation system of abutting properties.

F. To establish reasonable standards and design specifications for access facility improvements.

G. To establish reasonable requirements for performance and maintenance guarantees to ensure the proper construction of required improvements and to ensure that required improvements are completed in an expeditious manner in accordance with accepted engineering and geometric standards and specifications.

9.01 ADMINISTRATION

A. All new subdivisions and construction projects requiring driveway permits in the City and within the 1-1/2 mile extra territorial jurisdiction (ETJ) shall be designed in compliance with these standards.

B. A permit from the City is required:

1. To construct a new driveway.

2. To reconstruct an existing driveway.

3. To continue to use an existing driveway when the zoning classification of the corresponding property has changed.

4. If internal site reconfiguration substantially changes the volume or intensity of traffic using the driveway.

5. For other changes that substantially change the volume, intensity or type of traffic using the driveway, as determined by the City Engineer.

C. IDOT permits are required for access to streets within the City of Peoria under IDOT jurisdiction.

D. Peoria County Highway permits are required for access onto streets w within the City of Peoria under Peoria County jurisdiction.

E. Traffic signals shall be installed by the developer at private access points that meet warrants for traffic signals, or are projected to meet warrants within two years of the time of occupation or at full buildout, and are approved by the City Engineer. An agreement between the developer and the City for operation, maintenance, rehabilitation and utility payments is required. Note: IDOT or other jurisdictions may have different installation timing requirements or conditions.

F. The City Engineer may grant exceptions to the standards for reasonable cause, including infill development conditions and other unusual situations.

G. When a driveway requires work on City right-of-way, all associated costs of that work shall be paid by the developer or person holding the driveway permit.

9.02 STANDARDS

A. Referenced Standards (all latest editions):

1. American Association of State Highway and Transportation Officials (AASHTO) – Policy on Geometric Design of Highways and Streets (green book).

2. Transportation Research Board (TRB) – Highway Capacity Manual.

3. Institute of Traffic Engineers (ITE) – Trip Generation Manual.

4. Institute of Transportation Engineers (ITE) – Traffic Engineering Handbook.

5. Federal Highway Administration (FHA) – Manual on Uniform Traffic Control Devices (MUTCD)

6. Illinois Department of Transportation (IDOT) – Illinois Manual for Uniform Traffic Control Devices.

7. IDOT – Bureau of Design and Environment Manual.

8. City of Peoria Municipal Code.

9. Relevant standards contained elsewhere in this Manual.

B. General Guidelines:

No access to streets in the City or the ETJ shall be constructed without the approval of the City Engineer, or designee. Locations and configurations shall be designed to accepted engineering standards, which shall consider, but not be limited to the following items:

1. *Functional classification of the street being accessed, as defined on the City of Peoria Thoroughfare Map*:

a. Arterial streets:

i. No direct private access except as approved by the City Engineer.

ii. Access streets shall be located at 1/4 mile or greater intervals, to achieve only three intermediate access points per mile.

iii. Access points on opposite sides of the street shall be aligned with each other, unless approved by the City Engineer. In all cases the driveway access points will be designed to avoid conflicting left turning traffic from the City street.

iv. Reasonable consideration will be given to direct access to properties at locations within the older sections of the City.

b. Collector streets:

i. Access allowed by permit, with some restrictions. In all cases the driveway access points will be designed to avoid conflicting left turning traffic from the City street.

ii. On commercial and industrial area streets with 20 year projected ADT's over 10,000, new access points will be allowed only at arterial spacing, or as shown by approved traffic study to have minimal impact on the street being accessed.

c. Local streets: Access allowed by permit, with minimal restrictions.

d. Alley: Access allowed by permit, with minimal restrictions, except where it is necessary to prevent commercial traffic in residential areas.

2. Traffic generation: The amount of traffic being generated by the site taking access shall be estimated by the owner/developer. Trip generation rates shall be taken from the ITE Trip Generation Manual, (most recent edition), or alternate study information, if approved by the City Engineer. Large traffic generators may be required to provide future traffic projections from the Tri-County Travel Demand Model.

3. *Sight distances:* All non-signalized access points, including streets, except those controlled by all-directional stop signs, shall have adequate sight stopping distance. Sight distance measurements shall assume the driver's line of sight is 3.5 ft. high and 15 ft. from the pavement edge and the sighted object is 4.25 ft. high in the center of the nearest traffic lane at the AASHTO sight stopping distance. Additionally, all street intersections shall have at least 25 ft. sight triangles along right-of-way lines as required by City of Peoria Code, through which drivers can see objects in the street. Additional sight triangle distance may be required if conditions warrant. All sight clear zones are to be extended from the minimum needed for the sight stopping distance to 9 ft. above the gutter line.

4. *Throat length:* Driveways shall be designed and constructed with adequate space between the edge of the street and the point on the site where vehicles either park or may encounter cross traffic. Design drawings and calculations shall verify that traffic entering a site is not likely to be forced to wait on the street for space in the driveway to become available. The minimum driveway length is 40 ft., except in residential developments.

5. *Driveway geometry:*

   a. Driveways shall be designed so that vehicles may enter and exit on the paved driveway surface without difficulty.

   b. Driveways onto arterials and non-residential collectors shall be designed so that the design user vehicle can make a right turn entry without swinging into an adjacent lane.

   c. Driveways shall be designed to accommodate internal queued traffic without causing vehicles to wait on the public street to enter the site.

   d. Residential driveways measured at any point on the property line shall not exceed 15 feet for a single driveway, 20 feet for a double or joint driveway, or 30 feet for a triple driveway. The minimum width at the property line shall be ten feet unless waived by the Director of Public Works. (Additional information can be found in City Code Section 26-208).

   e. Commercial / industrial driveways shall not exceed 35 ft. wide at the tangent to the curb radii, (at the throat). Commercial / industrial driveways in excess of 35 ft. wide may be approved by the City Engineer, if the owner can demonstrate the following, as found in City Code Section 26-209:

      1. The owner has made efforts to minimize the required driveway widths while meeting code requirements.

      2. The requested driveway width is the minimum width necessary as illustrated by the vehicular turning movement of the largest vehicle requiring access to the site.

6. *Driveway spacing*:

   a. Driveways shall be spaced at adequate distances from intersections to mitigate conflicting with traffic using the intersection. Lateral clearance distance shall consider classification and volume of street, and type and volume of the driveway.

      b. Driveways shall be separated far enough from adjacent driveways to prevent interaction with each other being a safety issue to traffic on the street. Specific case shall be made to design driveway access points to avoid conflicting left turning traffic from the City street.

   c. Multiple driveways on single lots are discouraged. They may be permitted if they improve traffic impacts on the street over a single entrance, or if the lot is large enough that they have no impact on street traffic. Shared driveways are encouraged. The following requirements shall be used to determine the number of driveways permitted for single parcels of land, as per City Code Section 26-209:

      1 For parcels of land with a frontage of 65 feet or less, one driveway approach will be permitted.

      2 For parcels of land with a frontage greater than 65 feet but less than 125 feet, one two-way driveway or two one-way driveways will be permitted.

3 For parcels of land with a frontage greater than 125 feet but less than 200 feet, two two-way driveways will be permitted.

4 For parcels of land with a frontage greater than 200 feet, one additional two-way driveway will be permitted for each additional 300 feet of frontage.

d. Driveways shall be set back from side yard lines so that the flare or end of the radius of the driveway does not overlap the side property line extended to the curb line, except in cul-de-sac bulbs or other short-radius curves. Where driveways are serving separate freestanding buildings, except in short-radius curves, driveways shall be at least 6 ft. away from the side yard line, unless arrangements have been made to handle the side yard stormwater drainage without routing it onto the driveway.

7. *Internal circulation:*

a. Other than for one and two family residential development, all site development plans taking access to a City street shall include design information showing planned traffic circulation patterns on the site. The City Engineer may require changes from the planned site configurations to improve internal circulation that appears to cause problems to traffic on the City street.

b. In commercial zoning, adjacent properties along collector and arterial streets shall provide connections to allow direct movements between properties without re-entering the public street when feasible.

8. *Median opening spacing:*

a. Local streets – openings are allowed wherever accesses are taken, as approved by the City Engineer. Local aesthetics may be taken into consideration.

b. Collector streets – new openings are prohibited in commercial and industrial areas unless the developer proves to the reasonable satisfaction of the City Engineer that they will not adversely impact traffic flow or safety.

c. Arterial streets – openings are not allowed, except at street intersections, and may be restricted at unsignalized street intersections if the City Engineer finds they will adversely impact traffic flow or safety.

9. Acceleration/Deceleration lanes

The City Engineer may require the owner/developer to provide acceleration lanes, deceleration lanes or left turn bays, which are judged necessary to provide for proper traffic flow or safety on City streets.

C. Traffic Impact Analyses (TIA's)

1. *TIA's are required to be prepared by the site developer in the following situations:*

a. Developments that can be expected to generate more than 100 new peak-hour vehicle trips on the adjacent street per ITE Trip Generation Manual.

b. Developments of less than 100 new peak-hour trips in problem areas such as high accident locations, congested areas or other areas of critical local concern to the City.

c. Any changes that will increase the site traffic generation by more than 15% if more than 100 peak-hour trips are involved.

d. Any change that will cause the directional distribution of traffic to change by more than 20% where site traffic generation can be expected to ultimately be over 100 peak-hour trips.

e. On any incomplete project when the original TIA is more than two years old.

f. When an agreement between the developer and the City requires cost sharing contributions to major roadway improvements.

g. Any other situation where the City Engineer believes it is important to understand the impact of traffic from the new development on its surrounding area.

h. As stated in the City Code Appendix B Zoning Ordinances Article 3.1.f (12) Traffic Generation Managed

2. *The TIA shall be performed by a professional engineer licensed in Illinois who is prequalified for traffic studies by IDOT and approved by the City and shall include the following information:*

a. Introduction.

b. Existing conditions.

c. Proposed site use(s), including buildings, parking, internal circulation patterns and other factors that affect traffic on and adjacent to the site.

d. Site-generated ADT and design hourly traffic volumes at fully built status.

e. Site trip distribution and traffic origin / destination assignments.

f. Existing and projected traffic volumes on the adjacent roadway system (at 20-year horizon, unless otherwise approved).

g. Traffic accident history on adjacent streets.

h. Capacity analysis, consistent with methods identified in the Transportation Research Board's Highway Capacity Manual, on the adjacent street system, including lanage, signals, pedestrian movements and other relevant factors. Analysis shall be performed with and without the development traffic. Commercially available software such as Synchro, HCM, Cinema, etc., may be used with the approval of the City Engineer.

i. Traffic improvement recommendations.

j. Signalization warrants, if applicable.

k. Site plan(s).

l. Conclusions and summary of findings, which should address:

   i. The adequacy of site access.
   ii. The impact of the specific development on the surrounding area.
   iii. The suitability of on-site circulation and parking.
   iv. Projected traffic volumes on individual roadway segments.
   v. Projections of turn movements at individual intersections or access drives.
   vi. Considerations given to possible alternatives.

m. The level of detail of items “a” through “l” depends on the nature of the development, but they are intended to:

   i. Provide developers with recommendations for site selection, site transportation planning, and anticipated traffic impacts.
   ii. Provide the City with information on which to base decisions about permits and approvals.