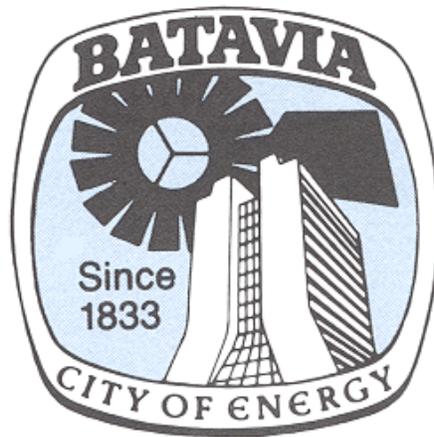


## SECTION 3

### COMMERCIAL SITE DESIGN



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# SECTION 3 COMMERCIAL SITE DESIGN

## 3.1 GENERAL DESIGN CRITERIA

This section covers the City of Batavia standards for site engineering for non-residential developments and apartments. Design elements that are incorporated into this section include parking areas, vehicular and pedestrian access, and drainage. Stormwater detention requirements are provided in Section 9 of this manual.

The City of Batavia follows the standards of the Institute of Transportation Engineers (ITE) for parking lot design unless otherwise adopted by the City Zoning Code. Reference is made to the Institute of Transportation Engineers (ITE) publication Guidelines for Parking Facility Location and Design, latest edition.

## 3.2 SITE ACCESS

### 3.2.1 Commercial Driveway Geometrics

Commercial driveways designed for one-way traffic flow shall not exceed 18 feet in width measured at the property line. Commercial driveways designed for two-way traffic flow shall have a minimum width of 24 feet and shall not exceed 40 feet in width measured at the property line. This width dimension is measured between the face of curbs. Administrative design review approval is required for driveways wider than 40 feet.

The minimum turning radius for commercial driveways, measured along the curb return, shall be 15 feet. A right- in/right-out driveway access should have a 50-foot radius, measured along the curb return.

The angle between the curb line of the street and the centerline of a full access driveway shall not be less than 90 degrees unless approved by the City Engineer.

### 3.2.2 Commercial Driveway Safety Standards

No commercial driveways shall be permitted into any parking lot or other facility which is designed in such a way as to make it necessary for exiting vehicles to back onto the street.

No driveway will be permitted into any facility which would require and/or allow a vehicle to drive or maneuver on the sidewalk area in any manner other than to cross it.

No driveway will be permitted for the purpose of allowing vehicles to park on the

public right-of-way.

In no case shall a driveway be constructed in such a way as to present a hazard to pedestrians or traffic on the public right-of-way.

In no case shall an object located within the right-of-way be permitted to obscure the vision of drivers of motor vehicles. Items in the right-of-way, within the required 30-foot sight triangle, shall be limited in height to no greater than 36 inches, including shrubs, ornamental grasses and tree branches.

### **3.2.3 Commercial Driveways on Arterial Streets**

Any driveway onto an arterial street represents a potential impediment to traffic and/or a safety hazard. For this reason, access onto arterial streets shall be limited both in number of driveways and location, and may be granted only after review of the overall land development plan and traffic study for the project. Design criteria as established in this section represent minimum standards. Where hardships are demonstrated through the variance process, exceptions to the minimum standard will be considered on a project-by-project basis. The use of cross-access easements or frontage roads are preferable alternatives to additional driveways on arterial streets.

#### **3.2.3.1 Minimum Spacing**

Driveways shall be located as far apart as practical. A minimum of 400 feet between centerlines of driveways on arterial streets (major and minor) should be sought. Any deviation from this standard can be requested for consideration through the variance process.

#### **3.2.3.2 Minimum Distance from Intersections**

Driveway placement shall always be designed to maximize the distance from the nearest intersections. Along arterial streets, a full-access driveway shall be a minimum of 250 feet from an intersecting public street. This distance is measured from the near edge of the intersection to the centerline of the driveway. Right-in/right-out driveways may be located closer, provided that they do not cause operational problems at the intersection. Any deviation from this standard can be requested for consideration through the variance process.

### **3.2.4 Commercial Driveways on Collector and Local Streets**

#### **3.2.4.1 Location**

Driveways on collector and local streets shall be located in accordance with the following:

- a) The distance from the end of the driveway curb cut to the

prolongation of the nearest intersecting street property line shall not be less than 20 feet on the near side of the intersection and not less than 10 feet on the far side.

- b) The distance from the end of the driveway curb cut to the end of the intersecting street curb return shall not be less than 5 feet.
- c) The distance from the end of the driveway curb cut to the nearest crosswalk shall not be less than 5 feet.
- d) The distance between driveways, measured at the curb line of the street, shall not be less than 20 feet.
- e) Where bus stops exist at locations where driveways are desired, the minimum allowable distance between driveways, measured at curb line of the street, shall be 40 feet.

No driveway shall be constructed which enters a public street within the limits of an intersection, with the limits of the intersection being defined as the area included within the prolongation of the lateral boundary lines of two or more streets or highways which join one another at an angle whether or not one such street or highway crosses the other.

At intersections where a separate right-turn lane exists, no driveway shall be constructed where the edge of the turning lane taper pavement is greater than 5 feet from the edge of the through pavement.

### **3.3 PARKING LOTS**

#### **3.3.1 Required Number of Parking Spaces**

Refer to Section 4-2 of the Zoning Code, Title 10 of the City Code.

#### **3.3.2 Stall and Aisle Dimensions**

Parking stall dimensions shall be 9 feet wide by 19.0 feet in length, or as otherwise demonstrated to be in accordance with Tables in Section 4.205 of the City of Batavia Zoning Code.

Minimum drive aisle widths are established in Tables in Section 4.205 of the Zoning Code.

#### **3.3.3 Parking Lot Island Requirements**

Islands are required at the ends of all parking rows and at intermediate locations to provide shade trees and landscaping in accordance with Section 4.211.B

of the Zoning Code.

### **3.3.4 Parking Lot Pavement**

All parking lots constructed in the City of Batavia must have a paved surface and a minimum pavement structural number of 3.0. The structural coefficients for pavement design are as follows:

<b>STRUCTURAL MATERIAL</b>	<b>COEFFICIENT (per inch)</b>
Hot-Mix Asphalt Surface	0.40
Hot-Mix Asphalt Binder	0.33
Hot-Mix Asphalt Base Course	0.23
Aggregate Base Course (CA-6)	0.11
Aggregate Sub-base (CA-1)	0.11

### **3.3.5 Boundary Controls**

All parking lots shall have B6.12 concrete curb and gutter around the perimeter.

### **3.3.6 Drainage**

Storm sewers which serve parking lots shall be designed to accommodate the 10-year storm event without surcharging out of the rim. The maximum depth of ponding in parking lots is 1 foot. This applies in the event that all storm sewers are blocked and surface overflows must be used to drain the lot.

## **3.4 LIGHTING**

The City has developed exterior lighting standards to control glare and obtrusive light while maintaining a safe and secure environment for pedestrians and property. These standards are incorporated into Design Manual Section 8. For private parking lot reference Zoning Code Section 4.211.B.

## **3.5 PEDESTRIAN ACCESS**

All commercial sites shall be designed so that sidewalks or other delineated pedestrian routes are available to provide pedestrian access continuity between the public sidewalk adjacent to the site and the main entrance to the building.

## **3.6 LANDSCAPING**

Parkway landscaping, perimeter landscaping, parking lot landscaping and refuse area screening shall be required as specified in Chapter 4.211.B and Chapter 4.3 of the City Zoning Code, City Code Title 7 Chapter 2A of or as otherwise specified and approved in a required landscape plan.

### **3.7 BARRIER-FREE ACCESSIBILITY**

All commercial sites shall comply with the accessibility requirements of the Illinois Accessibility Code, as amended; the provisions of Title 9 (Building Regulations) of the City of Batavia Municipal Code, as amended.

To ensure compliance with the requirements referenced above, the following guidelines should be considered in the site design for new construction of commercial projects (and may not apply for additions, alterations, or historic preservation):

An accessible route should be provided from accessible parking and passenger loading zones to an accessible entrance. Accessible routes shall be constructed with a maximum slope (< 2%) and be free from obstacles.

The cross slope of sidewalks should be kept at a minimum (¼":1 foot) as necessary for drainage.

Sidewalks should be flush with grass areas on either side.

Sidewalks should be 5 feet wide, minimum, to allow two wheelchairs to pass. In high pedestrian traffic areas, such as the Central Business District, Downtown Mixed Use District, Downtown Historic District, sidewalks should be 10 feet wide.

Where passenger loading zones are provided, an adjacent access aisle should be provided where the sidewalks are flush with the pavement.

Entrance areas near the door should have a nearly flat area to allow for proper drainage to avoid ponding and icing.

All power door pedestals with push plates should be clear of the door swing, typically 5 feet from the door.

Accessible entrances should be considered for secondary entrance points in addition to the main entrance.

Accessible parking stalls should be closest to both the main and auxiliary entrances, to provide maximum access for persons with disabilities.

Accessible parking stalls should be constructed with minimal slopes (¼":1 foot).

Wheel stops shall not be used in any parking stall unless approved by the City Engineer.

The sidewalk adjacent to accessible parking stalls should be flush with the pavement.

Accessible parking spaces shall be appropriately designated through signage and striping. Signs shall be vertically mounted on a post or wall at front center of the parking space, no more than 5 feet horizontally from the front of the parking space and set a minimum of 4 feet from finished grade to the bottom of the sign.