General Requirements: Automobile, bicycle and/or motorcycle parking facilities should be provided as directed by the project Program or Scope Statement. The design of each parking facility should satisfy the following general requirements:

Drainage: Adequate drainage should be provided for all parking facilities and should include green stormwater infrastructure. (see the Green Stormwater Infrastructure section within these Guidelines). These may include, but not be limited to, permeable pavements, bioswales, infiltration swales, and underground storage structures. Permeable pavements may be used in thinner infiltration strips, or for entire lot surfacing. A priority should be given to retaining water onsite as well as minimizing the rate of any remaining stormwater leaving the site.

Visibility: Good visibility should be maintained at each parking facility for functional as well as security reasons. Although the installation of low hedges around a parking facility is often desirable for aesthetic reasons, landscaping should be selected as to not impair visibility at vehicular entry points and pedestrian crossings.

Lighting: All parking facilities shall be well lit (see the Lighting, Exterior section within these Guidelines). Consideration for dual use of the lighting circuits for electric car charging stations for future or present use should be considered accounted for.

Landscaping: Landscaping should be incorporated into any design of automobile parking lots.

Sustainability: In addition to the drainage and lighting section above, F&S and other university stakeholders should be consulted for the potential inclusion of other sustainable design features, such as electric car charging stations, parking for car-share programs, and solar panel installations.

Automobile Parking Lots: The design of surface parking lots for automobiles should satisfy the following requirements:

Accessibility: Special provisions for people with disabilities are required in all new parking facilities and must comply with the requirements of the Illinois Accessibility Code.

Size/Configuration: Surface lots should be arranged with either double loaded bays of no less than 60 ft. from face to face of curbs or single loaded bays of no less than 42 ft. from face to face of curbs. Spaces should typically be 9 ft. wide except for end spaces, which should be at least 10 ft. wide.

Construction: Surface lots should all be constructed of either concrete or asphalt. Concrete surfaces should be no less than 8” thick on a 6” compacted crushed limestone (CA-10) base. Asphalt surfaces shall be no less than 3” thick on an 8” compacted crushed limestone (CA-10) base.

Curbs: Continuous perimeter curbing should be provided for each surface parking lot. Typically, perimeter curbs for concrete surface lots should be 6” rolled concrete curbs with 12” reinforced concrete gutters. Perimeter curbs for asphalt lots should be 6” rolled concrete curbs with 30” reinforced concrete gutters. In both cases, rolled curbs should be tied into adjacent reinforced concrete construction with steel reinforcing. Where head-in parking spaces are provided adjacent to perimeter curbing and adjacent to lawn, a 24” 6” thick reinforced concrete strip wide should be provided on the backside of the curb to serve as a bumper overhang area. The use of 5 ft. wide painted bumper zones is preferred to linear bumper curbs. When incorporating green stormwater infrastructure some designs may use a slotted curb design to allow for water infiltration into bioswales.

Landscaping – Planting Islands: Curbed planting islands should be used in the interior of surface lots. These islands provide shade for vehicles and pedestrians, assist in stormwater retention, add wildlife habitat, and add to the beautification of campus for students, staff and visitors. Typically, each planting island should be the size of two parking spaces, or roughly 20 x 20 ft. minimum. The perimeter of each planting island should be provided with a continuous 18” wide by 10” tall reinforced concrete mountable curb. Each landscaping island should include at least one tree. Parking bays should begin and end with a planting island. Continuous rows with more than 20
stalls should be broken up with a planting island and tree. Double bay parking should be broken up at the same rate of no more than 40 stalls without a planting island. Species should be selected from the Approved Plant List. See Exhibit 32 93 00-1, Approved Plant List. If used, understory plants should be less than 3’ in height as to not obstruct vehicular views. When used in as a bioswale, slotted curbs and salt tolerant native and sustainable plantings should be utilized.

**Landscaping – Perimeter:** The perimeter of parking lots with more than 5 parking spaces and fronting a public street or adjacent to private property shall have a minimum setback from the property line of fifteen (15) feet and shall have a minimum of one tree per thirty (30) feet, and a minimum of three shrubs per thirty (30) lineal feet. Species of trees and shrubs should be from the Approved Plant List. See Exhibit 32 93 00-1, Approved Plant List.

**Bollards:** Where appropriate, bollards should be provided at entry drives to the parking facility. The bollards at each drive should be equipped with the necessary hardware for attaching a chain for the purpose of controlling entry into the lot/structure. See Drawing 12 93 53-1, Fixed Bollard.

**Striping:** Parking spaces should be delineated by yellow traffic paint stripes that are a minimum of 4” wide.

**Meters/Signs:** Parking meter posts and sign standards shall be provided as directed by the project Program Statement. The F&S Parking Department should be contacted for specific direction regarding quantities and location/layout of each.

**Meter Post Specifications:** A standard meter post should be made from heavy galvanized pipe. The pipe should measure 2 3/8” O.D. and 2 1/16” I. D. The pipe should be set in a full concrete base 2 feet below grade. The finish elevation for the top of the pipe should be 3 feet above grade. The pipe should be checked for plumb before set in concrete. The concrete around the base of the pipe should be finished to drain water away from the base of the pipe.

**On-Street Vehicle Parking:** The F&S Transportation Demand Management and the Parking Department should be consulted prior to marking any parking spaces on University Streets. Parking on municipal streets should be replaced according to the respective municipal standards.

**Bicycle Parking:** Facilities for bicycle parking should satisfy the following requirements:

**Location/Configuration:** As much as possible, bicycle parking areas should be located and configured so as to provide close and convenient access to the University bicycle path system, on street bike paths, and building entries. Parking location should strive to be close to the entries and incorporated into the landscape, and not an afterthought. (See Drawing 32 17 23-1, Bicycle Parking – Double Loaded Bay for direction regarding typical dimensions and layout.)

**Construction:** Bicycle parking areas should be constructed on paved areas. Suitable materials include permeable pavers, permeable concrete or asphalt, or 8” thick reinforced concrete on a compacted crushed limestone (CA-10) base.

**Bicycle Racks:** See Drawing 12 93 13-1, Bicycle Rack Installation for bicycle rack construction details and Drawing 32 17 23-1, Bicycle Parking – Double Loaded Bay for bicycle rack layout guidelines.

**Motorcycle Parking:** Facilities for motorcycle parking should satisfy the following requirements:

**Location/Configuration:** As much as possible, motorcycle parking areas should be located and configured so as to provide convenient access to and from streets with minimal conflict with pedestrian and bicycle traffic. (See Drawing 32 17 23-2, Motorcycle Parking, Single Loaded Bay for direction regarding typical dimensions and layout.)

**Construction:** Motorcycle parking areas should be constructed of reinforced concrete of 8” minimum thickness on a compacted crushed limestone base.
Striping: Spaces should be delineated by 4” wide yellow traffic paint stripes (see Drawing 32 17 23-2, Motorcycle Parking, Single Loaded Bay).

Documentation and Submittals: The PSC shall review the project specific Required Phases & Minimum List of Deliverables and the Project Submittal Requirements.