8. EXTERIOR SITE LIGHTING

Goal:

Exterior lighting should be used to provide illumination for the security and safety of entry drives, parking, service and loading areas, pathways, courtyards and plazas, without intruding on adjacent properties. Site lighting shall be architecturally compatible and consistent in design between sites.

8.1 Fixture Design and Illumination Level

Policy:

Exterior light fixtures should be compatible and relate to the architectural character of the buildings on a site. Site lighting should be provided at the minimum level to accommodate safe pedestrian and vehicle movements, without causing any off-site glare.

Standards and Guidelines:

A. Poles and fixtures should be designed to be architecturally compatible with structures and lighting on adjacent properties. (G)
B. Poles and fixtures shall be compatible with all other fixtures on site. (S)
C. Illuminate all intersections with perimeter public roads with similar poles and fixtures used internal to the development. (G)
D. Select and locate all lighting fixtures to shield or confine light spread within a site’s boundaries. (S)
E. To facilitate security, specify lighting levels that are adequate for visibility, but not overly bright. All building entrances should be well-lighted. (G)
F. Use metal halide or other white light fixtures. High pressure sodium is not allowed in any application. (S)
G. Maximum height of all poles within landscaped and plaza areas is 20 feet, measured from grade. Poles within these areas may be set on pedestals no more than 8 inches in height. (S)

8.2 Decorative Architectural Lighting

Policy:

Special lighting that accents building features and creates visual interest is permitted in commercial developments, provided that design continuity is maintained among buildings.
Standards and Guidelines:

A. Lighting fixtures mounted directly on structures may be allowed when utilized to enhance specific architectural elements or to help establish scale or provide visual interest. (G)
B. “Wall paks” are permitted only in loading and service areas, and should be down-lit and shielded from view. (S)
C. Neon tubing is not acceptable as a building accent or to accentuate the building’s form. (S)
D. Integrate illuminators or fixtures used to light building mounted signage, building facades, or pedestrian arcades into a building’s architectural design. (G)
E. Consider highlighting entrances, art, terraces, and special landscape features. (G)

8.3 Parking Lot Lighting

Policy:

Parking lot lighting should be unobtrusive and provide safe light for orderly functions.

Standards and Guidelines:

A. Make all parking lot light fixtures similar in design for all surface parking areas. (S)
B. Select metal halide lighting with a concealed light source of the “cut-off” variety to prevent glare and “light trespass” onto adjacent buildings and sites. (S)
C. Provide separate, pedestrian scale lighting for all pedestrian ways through parking lots. (G)
D. Maximum height of parking lot poles is 24 feet measured from finished grade. (S)
E. Locate poles in medians wherever possible with a maximum base height of two (2) feet. (G)

8.4 Pedestrian Area Lighting

Policy:

Walkway lighting should be scaled to the pedestrian and should provide for safe use of pathways and pedestrian areas. Walks should be lighted for the safe passage of pedestrians as should areas which are dangerous if unlit, such as stairs, ramps, intersections, and underpasses.

Standards and Guidelines:

A. Use of lighted bollards or other low level fixtures is encouraged to identify pedestrian walkways and drop-off areas at entrances to buildings. (G)
B. Emphasize pedestrian-to-vehicle intersections with low level decorative street lights. (G)
C. Illuminate all primary walkways, steps or ramps along pedestrian routes. (G)
D. Incandescent or metal halide lamps are strongly encouraged. (G)
E. Use building mounted fixtures for walkways or plazas near buildings. (G)

8.5 Landscape Lighting

Policy:

Landscape lighting should enhance and complement, not overpower, the landscape materials.

Standards and Guidelines:

A. Design the landscape lighting to work for all seasons of the year and through the life of the landscape. (G)
B. Conceal fixtures where possible (ie. in trees, by landscape, behind rocks), control glare, and avoid extreme bright spots on the surrounding landscape. (G)

8.6 Site Security Lighting

Policy:

Security lighting is anticipated in some sites, but it should not negatively impact the site and building architecture as well as adjacent parcels.

Standards and Guidelines:

A. No light source (bulb) shall be directly visible from adjacent parcels. (S)
B. Provide only as much light/illumination as necessary to provide safety and security of the area. (G)

8.7 Light Intensity

Policy:

The light intensity levels within all areas should correspond to use and potential hazards.

Standards and Guidelines:

A. A photometric lighting plan is required for all proposed commercial developments to ensure adequate and appropriate light levels are provided for each site condition. (S)
B. The following levels of illumination should be maintained for each of the specific locations*: (G)
1) Building Entrances 5.0 footcandles
2) Sidewalks 2.0 footcandles
3) Bikeways 1.0 footcandles
4) Courts/Plazas/Terraces 1.5 footcandles
5) Ramps 5.0 footcandles
6) Stairways 5.0 footcandles
7) Underpasses 5.0 footcandles
8) Waiting Areas 1.0 footcandles
9) Parking Lots 1.0 footcandles
10) Roadways 1.5 footcandles

* Values given area in minimum average maintained horizontal, footcandles which are measured at the average point of illumination between brightest and darkest areas, 4'-5' above the ground surface. (Source: IES Lighting Handbook - 4th Edition).

C. Site lighting should provide consistent levels of illumination, avoiding pockets of very high or low levels of illumination. (G)
8. **EXTERIOR SITE LIGHTING**

**Goal:**
Exterior lighting should be used to provide illumination for the security and safety of entry drives, parking, service and loading areas, pathways, courtyards and plazas, without intruding on adjacent properties. Site lighting shall be architecturally compatible and consistent in design between sites.

8.1 **Fixture Design**

**Policy:**
Exterior light fixtures should be compatible and relate to the architectural character of the buildings on a site. Site lighting should be provided at the minimum level to accommodate safe pedestrian and vehicle movements, without causing any off-site glare.

**Standards and Guidelines:**

A. Poles and fixtures should be designed to be architecturally compatible with structures and lighting on adjacent properties. (G)

B. Poles and fixtures shall be compatible with all other fixtures on site. (S)

C. Illuminate all intersections with perimeter public roads with similar poles and fixtures used internal to the development. (G)

D. Select and locate all lighting fixtures to shield or confine light spread within a site’s boundaries. (S)

E. To facilitate security, specify lighting levels that are adequate for visibility, but not overly bright. All building entrances should be well-illuminated. (G)

F. Use metal halide or other white light fixtures. High-pressure sodium is not allowed in any application. (S)

G. Maximum height of all poles within landscaped and plaza areas is 20-feet, measured from grade. Pole pedestals (bases) are limited to a minimum of eight-inches in height. (S)

H. Decorative light fixtures, which are appropriately shielded, and provide visual interest, are allowed. (G)

8.2 **Parking Lot Lighting**

**Policy:**
Parking lot lighting should be unobtrusive and provide safe light for orderly functions.

**Standards and Guidelines:**

A. Make all parking lot light fixtures similar in design for all surface parking areas. (S)

B. Select lighting with a concealed light source of the ‘cut-off’ variety to prevent glare and ‘light trespass’ onto adjacent buildings and sites. (S)

C. Provide separate, pedestrian scale lighting for all pedestrian ways through parking lots. (G)
D. Maximum height of parking lot poles is 24-feet measured from finish grade. (S)
E. Locate poles in medians wherever possible with a maximum base height of 2-feet. (G)
F. ‘Wall packs’ are permitted only in loading and service areas, and shall be down-lit and fully shielded from view. (S)

8.3 Pedestrian Area Lighting

**Policy:**
Walkway lighting should be scaled to the pedestrian and should provide for safe use of pathways and pedestrian areas. Walks should be lighted for the safe passage of pedestrians, as should areas that are dangerous if unlit, such as stairs, ramps, intersections, and underpasses.

**Standards and Guidelines:**

A. Bollard light fixtures or other low-level fixtures are encouraged to identify pedestrian walkways and drop-off areas at entrances to buildings. (G)
B. Emphasize pedestrian-to-vehicle intersections with low-level decorative streetlights. (G)
C. Illuminate all primary walkways, steps or ramps along pedestrian routes. (G)
D. Incandescent or metal halide lamps are strongly encouraged. (G)
E. Use building mounted fixtures for walkways and plazas near buildings. (G)

8.4 Site Security Lighting

**Policy:**
Security lighting may be necessary on some sites, but it should not negatively impact the site and building architecture or adjacent parcels.

**Standards and Guidelines:**

A. No light source (bulb) shall be directly visible from adjacent parcels. (S)
B. Provide only as much light/illumination as necessary to provide safety and security of the area. (G)

8.5 Light Intensity

**Policy:**
The light intensity levels within all areas should correspond to use and potential hazards.

**Standards and Guidelines:**

A. A photometric lighting plan is required for all proposed industrial developments to ensure adequate and appropriate light levels are provided for each site condition. (S)
B. The following levels of illumination should be maintained for each of the specific locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Footcandles</th>
<th>Lumens/square meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Entrances</td>
<td>5.0</td>
<td>54</td>
</tr>
<tr>
<td>Sidewalks</td>
<td>2.0</td>
<td>22</td>
</tr>
<tr>
<td>Bikeways</td>
<td>1.0</td>
<td>11</td>
</tr>
<tr>
<td>Courts/Plazas/Terraces</td>
<td>1.5</td>
<td>16</td>
</tr>
<tr>
<td>Ramps</td>
<td>5.0</td>
<td>54</td>
</tr>
</tbody>
</table>
Stairways  5.0 footcandles  54 lumens/square meter
Underpasses  5.0 footcandles  54 lumens/square meter
Waiting Areas  1.0 footcandles  11 lumens/square meter
Parking Lots  1.0 footcandles  11 lumens/square meter
Roadways  1.5 footcandles  16 lumens/square meter

1 Values given area in minimum average maintained horizontal, footcandles (lumens/square meter) which are measured at the average point of illumination between brightest and darkest areas, 4’-5’ above the ground surface. (Source: IES Lighting Handbook - 4th Edition).
2 Metric conversion is provided for convenience only. Photometric plans must be submitted using imperial measurement values.

C. Site lighting should provide consistent levels of illumination, avoiding pockets of very high or low levels of illumination. (G)
D. Maximum 400-watt fixtures are permitted for parking lot pole lighting. (S)
E. Wall packs of a full cut-off and fully shielded design shall not exceed a maximum of 70-watts for man doors and 175-watts in loading areas. (S)

(END)
Policy: Site Furniture
Site furnishings, including bicycle racks, waste receptacles and light standards, are features of contemporary life in Louisville. The City has undertaken a downtown streetscape improvement project in which several of these features are included. In order to maintain the visual continuity within downtown, the same style of furnishings used for public improvements should be used in private endeavors as well.

G5. Site furniture should be simple in character.
1) Avoid any highly ornate design that would misrepresent the history of the area.
2) Benches, bike racks (which are strongly encouraged) and trash receptacles are examples of site furnishings that may be considered.
3) A bike rack may be located along a street front where space is available and a minimum clear walkway can be maintained.
4) Design of private furnishings should be consistent with public site furniture.

G6. Street lights within a project should be compatible with the City's streetscape design.
1) Designs which reflect the simple standards the City has used in its public streetscape improvements are encouraged.
2) Historic styles that are out of character with the history of Louisville are inappropriate because they could misrepresent the heritage of the community.

Policy: Public Art
While public art is a new feature to occur in the community, it enhances the quality of life and can contribute to one's appreciation of the natural and historic features of the area. The use of public art is therefore encouraged, particularly in larger private projects and in public places.

G7. The use of public art is encouraged.
1) Consider locating public art in a courtyard or at a building entrance where it may be viewed from the street.
2) Also consider installing public art along alley facades or in the sidewalk itself.
3) Art that is developed as an integral part of the architecture is also encouraged.

The use of public art is encouraged. Consider using public art in the sidewalk itself.
SITE DESIGN

Policy: Building Orientation
Traditionally, a building was oriented with its primary wall planes in line with the parcel’s property lines. Since most buildings were rectangular in form, this siting pattern helped reinforce the image of the town grid. These traditional patterns of building orientation should be maintained.

G8. Orient a new building parallel to its lot lines, similar to that of traditional building orientations.
1) The front of a primary structure shall be oriented to the street.
2) Buildings should have a clearly defined primary entrance. For example, provide a recessed entry way on a commercial storefront, or provide a porch on a residential type structure, to define its entry.

Policy: Exterior Lighting
The character and level of lighting is a special concern. It should be a subordinate element. Traditionally, exterior lights were simple in character. Most used incandescent lamps, which cast a color similar to that of daylight. These were relatively low in intensity and were shielded with simple shade devices. This overall effect should be continued.

G9. Exterior lights should be simple in character and similar in color and intensity to that used traditionally.
1) The design of a fixture should be simple in form and detail. Designs similar in character to those used traditionally are encouraged.
2) Lights along alleys should be utilitarian in design.
3) All exterior light sources should have a low level of luminescence. Lamps with a maximum equivalent of a 40 watt incandescent bulb (490 lumens) are preferred for site lighting. Lower intensities should be used in architectural fixtures such as step lights.

G10. Minimize the visual impacts of site and architectural lighting.
1) Prevent glare onto adjacent properties by using shielded and focused light sources that direct light onto the ground.
2) Un-shielded, high intensity light sources and those which direct light upward will not be permitted.
3) Shield lighting associated with service areas, parking lots and parking structures.
4) Avoid placing lights in highly visible locations, such as on the upper walls of buildings.