Landscaping, Screening and Lighting Manual

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On October 26, 2009

Effective October 27, 2009

Landscaping, Screening, and Lighting Manual

Section 1 – Purpose

a. The purpose and intent of this Manual is to:

   1. Preserve and promote the health, safety, and general welfare of the public;

   2. Facilitate the creation of a convenient, attractive, and harmonious community;

   3. Conserve natural resources including adequate air and water;

   4. Conserve properties and their values;

   5. Preserve the character of an area by preventing harmful effects of potentially dissimilar uses; and

   6. Encourage the appropriate use of land.

b. More specifically this manual is intended to minimize the impact of dissimilar uses on adjoining or nearby uses by requiring a screen or buffer between the uses in order to lessen the impact of noise, dust, and other debris, motor vehicle headlight glare, or other artificial light intrusion, and other objectionable activities or impacts conducted on or created by an adjoining or nearby use.

c. Additionally, this manual is intended to require the landscaping of certain parking lots in order to:

   1. Reduce the harmful effects of wind and air turbulence, heat, and noise, and the glare of motor vehicle lights;

   2. Preserve underground water resources and to permit the return of precipitation to the ground water strata;

   3. Act as a natural drainage system and ameliorate storm water drainage problems;

   4. Reduce the level of carbon dioxide and return pure oxygen to the atmosphere;

   5. Prevent soil erosion;

   6. Provide shade; and

   7. Enhance the appearance of parking lots.

d. In addition, any applicable provisions of the Forest and Tree Preservation Ordinance, being Chapter 10.5 of the City Code, apply to this manual.

Section 2 – Applicability

The provisions of this manual apply to any development subject to the site plan review or Project Plan review provisions of Article 7 of the City's Zoning Ordinance.

Section 3 – Administration

The Chief of Planning is responsible for the administration of this manual.

Section 4 – Landscaping and Screening Standards

a. *Application of Standards* - The following standards apply to the preservation, installation, and maintenance of all landscaping, tree cover, screening, and barriers required by the provisions of this manual.

1. The planting and maintenance of all trees must be in accordance with the provisions of the Forest and Tree Preservation Ordinance.

2. Existing native vegetation which is suitable for use in compliance with the requirements of this manual, when supplemented so as to provide planting and screening in accordance with the purpose and intent of this manual, may and should be used as required planting.

b. *Landscaping Plan and Planting Requirements*

1. A landscape plan must be submitted as required by the provisions of Article 7 of the City's Zoning Ordinance and may be required for a level one (1) site plan as determined by the Chief of Planning.

2. The landscaping measures and tree cover required by this Section must be shown on such plan, and must be completed according to specifications prior to approval of any occupancy permit. The landscaping plan may incorporate the requirements of the Forest and Tree Preservation Ordinance, being Chapter 10.5 of the City Code.

3. The landscape plan must comply with the following:

(a) The plan must be drawn to the same scale as the related site plan, including dimensions and distances, but at least a minimum scale of one (1) inch equal 30 feet.

(b) The plan must include a north arrow and a location map.

(c) The plan must show:

(i) All trees to remain on the site, including type and size in DBH measurement;

(ii) All landscaping materials and tree covering and the plant material must be indicated in table form with their common and botanical names;

(iii) Existing and proposed contours of the site at a minimum five (5) foot contour interval;

(iv) Existing and proposed parking spaces or other vehicle areas, access aisles, driveways;

(v) Existing and proposed utilities with all associated easement locations including fire hydrants.

(vi) All existing and proposed lighting;

(vii) All amenities such as benches, trash cans, picnic tables, etc;

(viii) Existing and proposed sidewalks;

(ix) The location and height of any fences or hedges; and

(x) All buildings, including any overhangs or awnings,.

(d) The Plan must also include other information as requested by the Chief of Planning.

(e) The plan must integrate stormwater controls and treatment.

c. *Maintenance*

1. The owner, or owner's agent, is responsible for the maintenance, repair, and replacement of all landscaping materials and barriers as may be required by the provisions of this manual.

2. All plant material must be tended and maintained in a healthy growing condition, replaced when necessary and kept free of refuse, debris, and exotic and invasive plants.

3. Fences and walls must be maintained in good repair. Openings within the barriers may be required by the Chief of Planning for accessibility to an area for necessary maintenance.

4. As part of maintenance, the species of landscaping materials may be changed, so long as the resulting materials will meet the design and intent of the Forest and Tree Preservation Ordinance. Where such changes are proposed, a revised landscaping plan must be approved by the Chief of Planning and maintained in the file with the original project approval.

d. *Parking Lot Landscaping*

1. *Purpose of Internal Landscaping of Surface Parking Areas* – The minimum landscape requirements of this section are intended to alleviate adverse visual and environmental effects associated with parking facilities. The application of these standards will serve to improve compatibility and the attractiveness of such facilities, provide relief from unshaded paved areas, and minimize noise, glare, and lights associated with parking areas. In addition, these requirements will improve pedestrian safety, optimize traffic circulation patterns with better defined space, and will provide better definition of entrances and exits through the use of interior islands.

2. *Minimum Acceptable Standards* - The following requirements establish minimum acceptable standards for alleviating the visual and environmental problems associated with off-street parking facilities. Under the site plan review procedures of Article 7 of the City's Zoning Ordinance, the Planning Commission may require additional landscaping in order to ensure compatibility with adjacent properties.

(a) *Landscape Strip Area Adjoining a Street Right-Of-Way* - Parking facilities adjoining a street right-of-way must provide a landscaping strip at least 10 feet in width.

(i) This area must be planted with either shade or ornamental trees, depending on the site conditions and the Street Tree Master Plan except this area may be used for LID / bioretention measures (with underdrain) if that is more applicable, and planted with appropriate wetland species.

(ii) A minimum of one (1) tree for every 40 feet of lot frontage must be provided as well as an evergreen hedge planted with a minimum of 15 shrubs per 40 feet of lot frontage (no more than 30 inches in height above the street grade), a wall or fence, or other methods such as a change in grade or berm may reduce the shrub requirement by 50 percent to further reduce the visual impact of the parking facility.

(iii) For properties located in the MXTD or MXCD Zones, the minimum width requirement for a landscaping strip adjoining a street right-of-way may be reduced by 25 percent by the Planning Commission in order to achieve a better design solution through the provision of walls or fences in conjunction with landscaping.

(b) *Perimeter Landscape Area Adjoining Property Other Than a Street Right-of-Way* – Landscaped areas must be provided along the perimeter of a parking facility.

(i) The perimeter landscape strip must be at least seven (7) feet wide to allow for the planting of trees, but not less than the setback required in an adjoining Single Dwelling Unit Residential Zone.

(ii) Such area must contain a minimum of one (1) shade tree and 15 shrubs for every 40 feet of lot perimeter and, if space permits, must incorporate landscaped berms. The shrubs, berms or other treatment should be high enough to screen headlights from shining into adjoining properties.

(iii) Where appropriate, two (2) ornamental trees may be substituted for one (1) shade tree and one (1) evergreen tree may be substituted for five (5) shrubs.

(iv) For properties located in the MXTD or MXCD Zones, the width of a perimeter landscaping strip may be reduced by the Planning Commission in order to achieve a better design solution through the provision of walls or fences in conjunction with landscaping.

(c) *Internal Landscaping of Surface Parking Facility* - A minimum of five percent (5 percent) of the internal area of a surface parking facility must be landscaped with shade trees.

(i) The internal area of a parking facility is defined by the perimeter of the curbs or edge of paving and does not include drive aisles without parking on either side, sidewalks, through islands, areas within islands that contain utilities below, signs, or other landscaping.

(ii) The internal area includes all planting islands and corner areas within the facility.

(iii) The shade trees should be distributed in order to increase shade. Where possible, existing trees should be saved for this purpose.

(iv) For properties located in MXTD or MXCD Zones, the minimum internal landscaping requirements may be reduced by the Planning Commission.

(v) Where one (1) off-street parking area adjoins or abuts another parking area under different ownership or use, a landscaped planting strip not less than seven(7) feet wide must be provided.

(d) *Minimum Size of Planting Islands within Internal Landscape Area* – Within the interior of a surface parking facility, planting areas must be provided with shade trees and must be wide enough to protect the trees from a vehicle's swinging doors

and bumper overhang.

(i) Planting islands which are parallel to the sides of parking spaces must be a minimum of nine (9) feet wide and ten (10) feet in length.

(ii) Planting islands at the heads of parking spaces must be a minimum of ten (10) feet wide curb face to curb face.

(e) Type of Plant Material – Deciduous shade trees with ground cover or low shrubs must be used as the primary landscape material for parking areas. Use of tall shrubs or low branching trees which will restrict visibility should be avoided.

3. *Perimeter Landscaping in Residential Zones*- Parking in connection with any institutional or other nonresidential use must comply with the following:

(a) *Residential Zone Standards* - In the R-400, R-200, R-150, R-90, R-75, R-60, and R-40 Zones, the following standards apply to new, enlarged, or expanded parking facilities for all institutional uses or other nonresidential uses (see Land Use Table in Article 10) except Child Care Home:

(i) No off street parking space or off-street loading area or driveway can be located within ten (10) feet of a side or rear lot line where a lot abuts a lot or land that is zoned residential or is proposed in the Plan for residential use.

(ii) No off-street parking space or off-street loading area or driveway can be located within ten (10) feet of a side or rear lot line where a lot abuts a lot or land that is zoned residential or is proposed in the Plan for residential use.

(iii) The ten (10) foot setback area from the side or rear lot line shall be used as a buffer area, and appropriate landscaping or screening must be provided. The screening area must be improved with a variety of landscape plants to include at least one (1) shade tree and 15 shrubs per 35 feet of property line. Where appropriate, two (2) ornamental trees may be substituted for one (1) shade tree and one (1) evergreen tree may be substituted for five (5) shrubs. Walls or berms, at least three (3) feet high, or fencing of at least 75 percent of continuous opacity may reduce the amount of landscape plants by 50%. The screening area should include the planting of canopy trees at regular intervals.

(iv) In lieu of a buffer area, a substantial setback in excess of 20 feet from any adjoining residential use may be provided, but trees must still be planted every 35 feet along the property line.

(b) *Parking Facilities in Existence as of December 2003* - Parking facilities in existence as of December 15, 2003, are nonconforming. However, they may be maintained and repaired so long as the nonconformity is not increased.

(i) Modifications to the parking facility that decrease the nonconformity may be allowed, even though such modifications do not bring the entire facility into full compliance with the provisions of this section.

(ii) If any portion of a nonconforming parking facility is brought into compliance with the provisions of this section, the nonconformity for that portion cannot be re-established.

(c) *Waivers* - A waiver of the buffering and/or screening requirements of this section may be granted by the Board of Appeals or the Planning Commission, subject to such conditions as may be deemed appropriate to effectuate the purpose of this section, if:

(i) The Board of Appeals or the Planning Commission finds:

A. That alternative means of achieving the objectives of the buffering and screening requirements meet the objectives of this section, or

B. That compliance with the buffering and screening requirements cannot reasonably be met due to unique site conditions, or

C. That there exist unique safety or security concerns that would be unreasonably compromised by compliance with the buffering and/or screening requirements; or

D. The lot occupied by the requesting use is less than 7,500 square feet in size; or

E. The owners of 70 percent of the residential property immediately contiguous to the area of the requested waiver affirm, in writing, their support for a waiver of the buffering and/or screening requirements of this section. The residential property referenced in this subsection shall not include property in which the institutional use seeking the waiver has any ownership or other financial interest.

(ii) This waiver does not exempt the site from requirements of the Forest and Tree Preservation Ordinance of the City Code.

4. *Parking in Connection with a Major Home-Based Business Enterprise*

For any major home-based business enterprise, screening of any parking facility is required. Such screening must provide 100% opacity to any adjoining lot or parcel in a Single-Unit Detached Dwelling Zone. Such screening may consist of vegetation, fencing, or a combination of the two (2), as determined by the Board of Appeals in

considering the special exception for the home-based business enterprise. For purposes of this subsection, a parking facility consists of any off-street parking area containing six (6) or more parking spaces.

e. *References* – In addition to the regulations cited here, reference must also be made to the approved Forest and Tree Preservation Manual for the following: Approved Planting Details for Trees; City Tree Protection and Planting Notes; Species Restriction List.

Section 5 – Lighting Standards

a. *Purpose* – The purpose of this section is to establish outdoor lighting standards that protect the public from inefficient lighting, poorly shielded outdoor light sources, excessive glare, and excessive intensity of light in all areas of the City. The goal is to promote materials and installation techniques that will improve the nighttime visual environment and encourage energy conservation.

b. *Definitions* – Within this manual, the following terms have the definitions shown:

1. *Candela*: A standard unit of light intensity in a specific direction, equal to one (1) lumen per steridian.

2. *Color Rendering Index*: A method for describing the effect of a light source on the color appearance of objects compared to a reference light of the same color temperature.

3. *Efficacy*: The amount of lumens produced by a lamp or light source per unit of power, expressed as lumens per watt.

4. *Footcandle*: A unit of illuminance equal to one (1) lumen per square foot. This is the illuminance provided by a light source of one (1) candela at a distance of one (1) foot.

5. *Full-Cutoff* or *Full-Cutoff Light Fixture*: A light fixture that is designed to block the amount of light emitted from the fixture at certain angles in compliance with the IESNA "full-cutoff" or "full-cutoff light fixture" standard or another equivalent standard identified in regulations.

6. *Illuminance*: The amount of light falling on a unit area of surface (luminous flux per unit area), measured in footcandles.

7. *Initial Light Output*: The amount of light emitted by an outdoor light fixture when it is new, as identified in the manufacturer's specifications.

8. *Luminance*: The amount of light emitted by an outdoor light fixture or reflected by a surface, measured in candelas per square foot.

9. *Lumen*: One (1) unit of luminous flux. This is used to measure the amount of light emitted from a light source. One (1) lumen is equal to the amount of light emitted by a light source of one (1) spherical candela that falls on a one (1) square-foot surface located one (1) foot away.

10. *Off-Site Spill*: Light that falls beyond the boundary of the property on which a light fixture is located.

11. *Power Density*: The amount of electricity used to generate light per unit of area, expressed in watts per square foot.

12. *Steridian*: A three-dimensional analogue of an angle. For example, if one takes a sphere of unit radius, then a segment of one (1) steridian covers one quarter (1/4) of the surface area of the sphere.

c. *Glare Measurement Standards* – Illumination levels must be measured with a photoelectric photometer having a spectral response to that of the human eye, following the standard spectral luminous efficiency curve adopted by the International Commission on Illumination.

d. *Standards* – The following standards apply to all exterior lighting fixtures permitted after (date of adoption) regardless of zone or location within the City. All existing light fixtures that do not comply with these standards are nonconforming and subject to the provisions for development nonconformities set forth in Article 8 of the City's Zoning Ordinance.

1. All lights must be shielded in such a way as to direct all light towards the Earth's surface and away from reflective surfaces. Incidental decorative lighting may be directed towards the sky if approved by the Chief of Planning or the Planning Commission during the site plan review process.

2. Light fixtures of lamps must be shielded / shaded in such a manner as to direct the incident rays away from all adjacent property.

3. Lights on poles must not be taller than the building whose area they illuminate nor taller than fifteen feet, whichever is shorter.

4. All fixtures must meet the building code requirements.

5. Any facilities that require floodlighting may not arrange the light in such a way that it will shine towards a roadway, onto an adjacent residential property or a residential use property, or into the night sky.

6. All outdoor lighting fixtures must be aimed, located, and maintained so as not to produce disability glare.

7. High intensity light beams in the form of outdoor searchlights, lasers, or strobe lights are not permitted except as required by Federal, State, or local public safety regulations.

e. *Alternative Materials and Methods of Installation* – The provisions of this manual are not intended to prevent the use of any equipment, material, or method of installation not specifically prescribed by this manual provided the alternative has been approved by the Chief of Planning. The Chief of Planning may approve any such alternative provided that the proposed design provides the approximate equivalence to the specific requirements of this manual.

f. *Shielding and/or Aiming*

1. *Full Cut-Off Light Fixtures* - An outdoor light fixture with a total light output greater than 2,000 Lumens must:

(a) Be a full cut-off light fixture and installed and maintained level, without any upward or sideward tilt unless necessary to prevent off-site spill; and

(b) Comply with any other shielding or aiming requirement specified in regulations.

2. *Non Full Cut-Off Fixtures* - An outdoor light fixture with a total light output of 2,000 lumens or less that is not a full cut-off fixture must:

(a) Have a downward aim that does not exceed 45 degrees from vertical; and

(b) Comply with any other shielding or aiming requirement specified in regulations.

3. *Efficacy* – An outdoor fixture must have an efficacy equal to the greater of :

(a) Sixty lumens per watt;

(b) The efficacy required by the IECC if applicable; or

(c) The efficacy established in regulations based on nationally recognized standards of best practices.

4. *Color Renditions* – An outdoor light fixture must have a color rendering of at least 20.

5. *Power Density* – An outdoor lighting system must have a power density equal to the lesser of the power density:

(a) Required by the IECC, if applicable; or

(b) Established in regulations based on nationally recognized standards or best practices.

6. *Controls* – An outdoor light fixture must be turned off during daylight hours.

7. *Object Lighting* – Lighting used to illuminate flags, statues, signs, or any other objects mounted on a pole, pedestal, or platform, and spotlighting or floodlighting used for architectural or landscape purposes must consist of full cut-off or directionally shielded lighting fixtures that are aimed and controlled so that the directed lights are substantially confined to the object intended to be illuminated. Directional control shields must be used where necessary to limit stray light. In addition, such lighting must be shielded to protect motorists and pedestrians from glare.

8. *Construction Site*

   (a) All construction site lighting, with the exception of lighting that is used to illuminate the interiors of buildings under construction (provided for in the following paragraph) must use full cut-off or directionally shielded fixtures that are aimed and controlled so the directed light is substantially confined to the object intended to be illuminated. Directional control shields must be used where necessary to limit stray light.

   (b) Frosted light bulbs must be used to light the ten (10) foot outermost perimeter area of the interiors of the buildings under construction which contain five (5) or more stories.

   (c) For the purposes of this provision, a building is no longer considered under construction once exterior walls and windows are installed and permanent lighting replaces temporary lighting as the primary source of light.

9. *Commercial/Mixed-Use Areas*

   (a) For all non residentially developed lots which contain a minimum of four (4) parking lot light poles, parking lot lighting levels for ground surface parking lots and the top levels of parking decks or parking structures must be reduced by at least 50 percent of full operational levels within 30 minutes after the close of business. The reduced lighting level can be achieved by extinguishing at least 50 percent of the total number of pole mounted lamps, by dimming lighting levels to no more than 50 percent of the levels used during business or activity hours, or by some combination thereof; provided, however, that this provision does not require parking lot lighting levels to be reduced to less than 0.2 footcandles as measured horizontally at the surface on which the light pole is mounted.

(b) Outdoor lighting fixtures associated with service stations, service station/mini-marts and vehicle sale and ancillary service establishments are subject to the following:

(i) Service station and service station/mini-mart canopy lighting must not exceed a maintained lighting level of 30 footcandles under the canopy as measured horizontally at grade. However, a higher or lower maintained lighting level, not to exceed 50 footcandles may be specified by the Planning Commission in conjunction with the approval of a special exception and site plan. All underside canopy lighting must consist of full cut-off lighting fixtures.

(ii) Outdoor display area lighting used in conjunction with a vehicle sale, rental, and ancillary service establishment must not exceed a maintained lighting level of 30 footcandles as measured at grade. However a higher or lower maintained lighting level, not to exceed 50 footcandles, may be specially approved by the Board in conjunction with the approval of a site plan or special exception. For the purpose of this section, outdoor display areas include all display storage areas for vehicles offered for sale or rent and the associated travel lanes.

10. *Residential* - On lots which abut property that is residentially zoned and developed, vacant or homeowner's association open space, all outdoor lighting, to include light poles located on top of any parking deck or structures must be:

(a) Mounted at a height which is measured from grade to the bottom of the lighting fixture, including the height of the parking deck or structure when located on top of a parking deck or parking structure and is equal to or less than the value 3 + (D/3) where D is equal to the horizontal distance in feet from the light source to the nearest residential lot line extended vertically; or

(b) Equipped with supplemental opaque shielding on the residential property side of the lighting fixture to reduce glare caused by direct light source exposure.

11. *Recreational/Outdoor Facilities in All Zones*

(a) When an outdoor recreation/sports facility has illuminated playing fields/courts that, individually or cumulatively, exceed 10,000 square feet in area, and/or associated light poles that exceed 20 feet in height, the playing fields/courts are subject to the provisions of this section. Other components such as facilities to include, but not limited to, parking lots, administrative offices, restrooms, ticket sales, concession stands, and bleachers or other spectator viewing areas, are not be subject to this section, but are subject to Section 5, f, Shielding or Aiming provisions above, as applicable.

(b) A sports illumination plan must be prepared by a lighting professional that is certified by the National Council on Qualifications for the Lighting Professions (NCQLP) or a State

licensed professional engineer, architect, or land surveyor and must contain the following information:

(i) The boundaries, dimensions, and total land area of the outdoor recreation/sports facility property at a designated scale of not less than one inch equals fifty feet (1" = 50'). For the proposed uses on large tracts of land where the lighted playing field/court occupies a small portion of the site, boundaries, dimensions, and total land area of just the lighted playing field/court with perimeter areas, as required below must be provided, at a designated scale of not less than one inch equals fifty feet (1" = 50'), with a graphic that depicts the location of the fields/courts in relation to the perimeter lot lines of the entire property.

(ii) The location and limits of the playing fields/courts, must include a perimeter area. For baseball or softball fields, the perimeter area extends 30 feet in a direction perpendicular to the foul lines and away from the field. The perimeter area for rectangular playing fields, such as soccer, football, lacrosse, and field hockey, extends 20 feet from the side lines and 30 feet from the ends lines.

(iii) The location, height, and illustration of each style of all pole, building, and ground mounted lighting fixtures for the playing field/court.

(iv) A photometric diagram showing predicted lighting levels for the proposed playing field/court and associated perimeter area lighting.

(v) The lighting for playing field/courts and associated perimeter areas must comply with the maximum footcandle levels indicated for the specific uses listed in the table below, unless a lesser limit is specifically approved during site plan review in conjunction with the approval of a special exception or development plan. Footcandle measurements must be measured horizontally three (3) feet above grade level and must represent maintained lighting levels. The Chief of Planning will determine maximum permitted lighting levels for outdoor recreation/sports facilities which are not listed in the table below.

(vi) All playing field/court lighting fixtures must use full cut-off or directionally shielded lighting fixtures aimed toward the playing field/court and shielded in directions away from the playing field/court so as to minimize glare and light trespass onto adjacent properties.

(vii) The use of outdoor playing field/court lighting shall not be permitted between the hours of 11:00 p.m. and 7:00 a.m., unless other hours are specifically approved by the Planning Commission during site plan review, or by the Board of Appeals in the case of a special exception.

(viii) When a site plan approval is not required and the plan is submitted as a separate submission, five (5) copies of the plan must be submitted to the Chief of Planning for review and approval and shall be subject to a fee adopted by the Mayor and Council.

Recreation/Sport Facility Use	Specific Lighted Area	Footcandles (max.)
Archery Ranges	N/A	10
Baseball/Softball	Infield	60
	Outfield	40
Baseball/Professional	Infield	150
	Outfield	100
Baseball Hitting Ranges	N/A	50
Basketball, Volleyball	N/A	30
Field Hockey, Football, Soccer, Lacrosse, Track & Field	N/A	50
Go-cart Tracks	N/A	30
Golf-Courses	Tee Boxes, Greens	5
Fairways		3
Golf-Driving Ranges	Tree Boxes	20
	Fairways	3
	Greens	5
Golf-Miniature	N/A	20
Horse Riding Ridings/Show Areas	N/A	30
Ice Skating, Ice Hockey, Roller Skating Rinks	N/A	50
Swimming Pools	Pool Surface	10
	Pool Deck	30
Tennis Courts (College/High School)	N/A	60
Tennis Courts (Recreational)		40

12. *Exemptions* - The following are exempt from the provisions of this manual, provided that such fixtures, except for those set forth in Paragraphs 1 and 2 below, do not cause disability and glare:

(a) Lighting fixtures and standards required by the Federal Communications Commission, Federal Aviation Administration, Federal and State Occupational Safety and Health Administrations, or other federal, state, or county agencies to

include street lights within public right-of-way;

(b) Outdoor lighting fixtures required by law enforcement, fire, and rescue, the Maryland Department of Transportation or other emergency response agencies to perform emergency or construction repair work, or to perform nighttime road construction on major thoroughfares;

(c) Holiday lighting fixtures;

(d) Motion activated light fixtures located as follows:

(i) On lots developed with single-unit detached dwellings when such lighting fixtures emit initial lighting levels of 6,000 lumens or less, are extinguished within five (5) minutes upon cessation of motion and are aimed such that the lamp or light bulb portion of the lighting fixture is not visible at five (5) feet above the property boundary; or

(ii) On all other lots when such lighting fixtures are aimed such that the lamp or light bulb portion of the lighting fixture is not directly visible at five (5) feet above the property boundary; or

(iii) On lots developed with single-unit detached dwellings, outdoor lighting fixtures with initial light outputs of 2,000 lumens or less are not subject to the provisions of subsections i and ii above; and

(e) Fixtures owned and/or maintained by the City. Such fixtures should, to the extent possible, comply with the standards set forth herein, but are not considered nonconforming.

13. Application Procedures

(a) *Application to Include* - For any project where outdoor lighting is to be provided, the following must be provided at the time of application for special exception, site plan, or building permit, as the case may be.

(i) A photometric plan prepared by a lighting professional that is certified by the National Council on Qualifications for the Lighting Professions (NCQLP), or a State licensed professional engineer, architect, landscape architect or land surveyor and containing the following information:

A. The location and limits of the canopy for outdoor display area at a scale of not less than 1 inch equals fifty feet (1" = 50'); and

B. The location and height of all canopy lighting for service stations and service station/mini-marts and all pole, building, or ground mounted lighting fixtures for an outdoor display area at a vehicle sale, rental, and

ancillary service stations; and

(ii) A photometric diagram showing predicted maintained lighting levels produced by the proposed lighting fixture facilities.

(b) *Modifications/Amendment to Permit* - Should the applicant desire to substitute outdoor lighting fixtures or lamps to be installed on private property after a permit has been issued, the applicant must submit all changes to the Chief of Planning for approval, with adequate information to assure compliance with this manual.

14. *Complaints* - Any person may file a written complaint with the Chief of Planning alleging that an outdoor lighting system does not comply with this manual.

(a) Contents - A complaint must be in writing and contain:

(i) The name and address of the complainant;

(ii) The address and, if known, the name of the owner of the building, structure, or area that allegedly does not comply with this manual; and

(iii) A description of the alleged violation.

(b) Inspection - Within 30 days after receiving a complaint, the Chief of Planning must inspect the building, structure, or area to determine the validity of the complaint.

(c) Notice of Violation and Corrective Order -If the Department finds that a building, structure, or area does not comply with this manual, the provisions of Article 19, Enforcement, of the Zoning Ordinance will apply.

NOTE: Underlining indicates material added