

Exhibit A

Sahuarita Outdoor Lighting Code 2004 Edition

Section 1. Purpose and Intent. *The purpose of this code is to preserve the relationship of the residents of Sahuarita to their unique desert environment through protection of access to the dark night sky. Intended outcomes include continuing support of astronomical activity and minimizing wasted energy, while not compromising the safety, security, and well-being of persons engaged in outdoor nighttime activities.*

It is the intent of this Code to control the obtrusive aspects of excessive and careless outdoor lighting usage while preserving, protecting, and enhancing the lawful nighttime use and enjoyment of any and all property. It is recognized that portions of properties may be required to be unlit, covered, or have reduced lighting levels in order to allow enough lumens in the lighted areas to achieve light levels in accordance with nationally recognized recommended practices.

Section 2. Conformance with Applicable Codes. *All outdoor illuminating devices shall be installed in conformance with the provisions of this Code, the Building Code, the Electrical Code, and the Sign Code of the Authorizing Jurisdiction as applicable and under appropriate permit and inspection.*

Section 3. Applicability

3.1 New Uses, Buildings and Major Additions or Modifications.

3.1.A *The requirements of this Outdoor Lighting Code apply to any and all new and major additions to land uses, developments, buildings, or structures.*

3.1.B *If a major addition occurs on a property, the entire property shall comply with the requirements of this Code. For purposes of this section, the following are considered to be major additions:*

- 1. Additions of 25 percent or more in terms of additional dwelling units, gross floor area, seating capacity, or parking spaces, either with a single addition or with cumulative additions subsequent to the effective date of this provision.*
- 2. Single or cumulative modification or replacement of outdoor lighting fixtures legally installed constituting 25 percent or more of the actual lumens for the property, no matter the actual amount of lighting already on a non-conforming site, constitutes a major addition for purposes of this section. Where existing outdoor lighting is modified or replaced and the resulting lighting fixture has less lumen capacity than the previously existing fixture, the lumen capacity of the modified or*

replaced fixture shall not be included in the lumen calculations for determining a major addition, but the total of non-conforming lighting shall not be increased.

3.2 Minor Additions. *Additions or modifications greater than 10 percent but less than 25 percent to existing uses shall require the submission of a complete inventory and site plan detailing all existing and any proposed new outdoor lighting. Any new lighting on the site shall meet the requirements of this Code with regard to shielding and lamp type; the total amount of lighting after the modifications are complete shall not exceed that on the site before the modification, or that permitted by this code, whichever is larger.*

3.3 Change of Use. *Whenever the use of any existing building, structure, or premises is changed to a new use, all outdoor lighting shall be reviewed and brought into compliance with this Code before the new use commences.*

3.4 Resumption of Use after Abandonment. *If a property or use with non-conforming lighting is abandoned as defined in Section 4.20, then all outdoor lighting shall be reviewed and brought into compliance with this Code before the use is resumed.*

Section 4. Definitions. *Unless the context clearly indicates otherwise, certain words and phrases used in this Code mean the following:*

Abandonment of Use. *See Use, Abandonment of*

4.1 Class 1 Lighting. *All outdoor lighting used for, but not limited to, outdoor sales or eating areas, entrance canopies on retail buildings, assembly (mechanical) or repair areas, advertising and other signs, recreational facilities, amphitheaters and other similar applications where color rendition is important to preserve the effectiveness of the activity. Designation of lighting as Class 1 requires a finding by the Authorizing Jurisdiction of the essential function of color rendition for the application.*

4.2 Class 2 Lighting. *All outdoor lighting used for, but not limited to, illumination for walkways, roadways, equipment yards, parking lots and outdoor security where general illumination for safety or security of the grounds is the primary concern.*

4.3 Class 3 Lighting. *Any outdoor lighting used for decorative effects including, but not limited to, architectural illumination, flag and monument lighting, and illumination of landscaping.*

4.4 Development Project. *Any residential, commercial, industrial or mixed use subdivision plan or development plan which is submitted to the Jurisdiction for approval or for permit.*

4.5 Direct Illumination. Illumination resulting from light emitted directly from a lamp or luminaire, not light diffused through translucent signs or reflected from other surfaces such as the ground or building faces.

4.6 Display Lot or Area. Outdoor areas where active nighttime sales activity occurs and where accurate color perception by customers is required. To qualify as a display lot, one of the following specific uses must occur: automobile sales, assembly lots, swap meets, airport and automobile fueling areas. Uses not on this list must be approved as a display lot use by the Authorizing Jurisdiction.

4.7 Full Cutoff Light Fixture (FCO). A luminaire where no candela occurs at or above an angle of 90 degrees above the nadir. This applies to all lateral angles around the luminaire. Such candela information shall be as determined by a photometric test report from a nationally recognized independent testing laboratory and as certified by the manufacturer. Any structural part of the luminaire providing this cutoff angle shielding shall be permanently attached.

4.8 Installed. The attachment, or assembly fixed in place, whether or not connected to a power source, of any outdoor light fixture.

4.9 Lighting Areas. All lighting areas discussed below shall be as defined on the Pima County Lighting Area Map.

4.9.A "Lighting Area E1b" includes the circular area twenty-five miles in radius the center of which is the summit of Mount Hopkins.

4.9.B "Lighting Area E1a" are special areas around astronomical observatories and include all areas within 15 miles of the summit of Kitt Peak and 12.5 miles of the summit of Mount Hopkins, and those areas within any national park, monument, or forest boundary. In these areas, the preservation of a naturally-dark environment, both in the sky and in the visible landscape, is considered of paramount concern.

4.9.C A property located in more than one of the Lighting Areas described under the above Sections 4.9.A and 4.9.B shall be considered to be only in the more restrictive Lighting Area.

4.10 Lumen. Unit of luminous flux; used to measure the amount of light emitted by lamps.

4.11 Luminaire. The complete lighting assembly, less the support assembly. For purposes of determining total light output from a luminaire lighting assembly which includes multiple unshielded or full cutoff lamps on a single pole or standard shall be considered as a single unit. Two or more units with lamps less than 3 feet apart shall be considered a single luminaire.

4.12 Multi-Class Lighting. Any outdoor lighting used for more than one purpose, such as security and decoration, such that its use falls under the definition of two or more classes as defined for Class 1, 2 and 3 Lighting.

4.13 Net Acreage. The remaining ground area after deleting all portions for proposed and existing public streets within a development, parcel, or subdivision.

4.14 Opaque. Opaque means that the material shall not transmit visible light.

4.15 Outdoor Light Fixture. An outdoor illuminating device, outdoor lighting or reflective surface, lamp or similar device, permanently installed or portable, used for illumination or advertisement. Such devices shall include, but are not limited to:

1. street lighting;
2. parking lot lighting;
3. building and structural lighting;
4. landscape lighting;
5. recreational lighting;
6. billboards and other signs (advertising or otherwise);
7. product display area lighting;
8. building overhangs and open canopies;
9. security lighting;
10. searchlight, spotlight, flood lights, and laser lights.

4.16 Outdoor Light Output, Total. The total amount of light, measured in lumens, from all outdoor light fixture lamps, is calculated as follows:

4.16A For lamp types that vary in light output as they age (such as fluorescent and high intensity discharge lamps), the mean lumen output, as defined by the lamp manufacturer, shall be the lumen value used.

4.16B The total light output of each outdoor light fixture shall be based on the largest lamp that the outdoor light fixture is rated to accommodate. For the purpose of compliance with this section, the largest lamp rating for fluorescent and high intensity discharge fixtures shall be based on the installed ballast rating.

4.17 Outdoor Recreation Facility. An area designed for active recreation, whether publicly or privately owned, including, but not limited to baseball, soccer, football, golf, tennis, swimming pools, and race tracks of any sort.

4.18 Person. Any individual, tenant, lessee, owner, or any commercial entity including but not limited to firm, business, partnership, joint venture or corporation.

4.19 Temporary Lighting. Lighting which does not conform to the provisions of this ordinance and which will not be used for more than one thirty (30) day period within a calendar year, with one thirty (30) day extension. Temporary lighting is intended for

uses which by their nature are of limited duration; for example holiday decorations, civic events or construction projects.

4.21 Use, Abandonment of. *The relinquishment of a property, or the cessation of a use or activity by the owner or tenant for a period of six months, excluding temporary or short term interruptions for the purpose of remodeling, maintaining, or otherwise improving or rearranging a facility. A use shall be deemed abandoned when such use is suspended as evidenced by the cessation of activities or conditions which constitute the principal use of the property.*

4.21 Curfew. *A time established for listed lighting systems to be automatically extinguished.*

Section 5. Total Outdoor Light Output and Shielding Requirements. *The tables in this section give requirements of the total light output permitted per acre for the different lighting areas and the fixture shielding requirements for class of lighting, lamp type, and lighting area. These requirements shall be met for all lighting installations subject to this code.*

5.1 Total Outdoor Light Output. *Total outdoor light output shall not exceed the lumen limits given in Table 5.1. In the table, Total means the sum of shielded and unshielded light.*

5.1.A *For determining compliance with Section 5.1, the total lumens is the sum of the following:*

- 1. One hundred percent of the lumens from outdoor light fixtures installed on grade, on poles, and installed on the top or sides of buildings or other structures.*
- 2. Fifty percent of the lumens from underwater light fixtures unless the fixture is aimed at an angle of less than 45 degrees above the horizontal, in which case the calculated lumens is calculated at 10 percent of the rated lumens.*

5.1B *Outdoor lighting fixtures shall not be counted in determining the total light output when they are full cut off light fixtures installed under canopies, building overhangs, or roof eaves.*

**Table 5.1 Maximum Total Outdoor Light Output Requirements
Lumen Caps: Mean Lumens per Net Acre (4)**

Lighting Area (Defined in Section 4.9)			
		<i>E1b(5)</i>	<i>E1a(5)</i>
	Commercial and Industrial - Option 1 (1)(2)(Mostly LPS)		
	<i>Total (FCO LPS, plus FCO non-LPS)</i>	48,000	18,000
	<i>Limit on non-LPS FCO</i>	3,000	3,000
	<i>Limit on unshielded component, LPS or Non-LPS lighting</i>	3,000	0
	Commercial and Industrial - Option 2 (1)(2)(FCO for all lighting)		
	<i>All lighting must be FCO</i>	25,000	12,500
	<i>Limit on unshielded component</i>	0	0
	Commercial and Industrial - Option 3 (1)(2)(FCO for most lighting)		
	<i>Total (FCO plus unshielded)</i>	12,500	12,500
	<i>Limit on unshielded component</i>	3,000	0
	All Residential zoning (3)(4)		
	<i>Total (FCO plus unshielded)</i>	12,000	12,000
	<i>Limit on unshielded component</i>	3,000	3,000

Notes to Table 5.1:

- (1) Use any one of the three options, 1, 2, or 3 for the entire property.
- (2) This refers to all land-use zoning classifications for multiple family uses, commercial, and industrial sites.
- (3) This refers to all residential land-use zoning, including all densities and types of housing, such as single family detached and duplexes.
- (4) If LPS is used for residential lighting, then the total lumens in the table, for all areas, can be increased by 50 percent of FCO LPS lighting. For example, in Area E1b, the total lumens could be 18,000 of FCO LPS including 3,000 of non-LPS (which could include 3,000 of non-FCO).
- (5) In addition to the lumen caps given in the table above, the maximum footcandle level under any canopy in Lighting Area E1a shall not exceed 30 lumens per square foot nor in Area E1b 55 lumens per square foot maximum designed average maintained illuminance.
- (6) Flood or spot lamps shall be aimed no higher than 45 degrees to the horizontal (half-way between straight down and straight to the side) when the source is visible from any adjacent residential property.
- (7) Seasonal decorations using unshielded low-wattage incandescent lamps (not exceeding 7 watts) shall be allowed from Thanksgiving to January 15.
- (8) All Class 3 lighting shall be extinguished between 11:00 p.m. (or when the business closes, whichever is later) and sunrise.
- (9) Unshielded fixtures (not FCO) shall not exceed 3,000 lumens each.

5.2 All light fixtures that are required to be shielded shall be installed in such a manner that the shielding is effective as described in the definitions in Section 4 for full cutoff fixtures.

5.3 In the shielding requirements of Section 5.1, all light fixtures on the residential side of commercial property adjacent to residential property shall be full cutoff and shall be a maximum of 10 feet above grade at the property line and no higher than a line rising 20 degrees above the 10 feet until 100 feet from the property line. All outdoor lighting within one mounting height of residential areas shall have internal house-side shields. In addition, all residential and commercial luminaires shall be full cutoff within 25 feet of adjacent residential property lines.

5.4 Multi-class lighting must conform to the shielding and timing restrictions, if any, that apply to the most restrictive included class.

Section 6. Outdoor Advertising Signs.

6.1 External illumination for on-site signs shall conform to all provisions of this Code. In particular, such lighting shall be treated as Class 1 lighting and shall conform to the lamp source, shielding restrictions, and lumen caps of Section 5.

6.2 Electrical illumination of outdoor advertising off-site signs is prohibited.

6.3 Outdoor internally-illuminated advertising signs shall not be counted towards the lumen cap and shielding requirements described in Section 5.1. Outdoor internally illuminated advertising signs constructed with an opaque or colored background and translucent text and symbols are strongly preferred so as to reduce any potential detrimental effects due to these type of signs.

6.4 Illumination for all advertising signs, both externally-illuminated and internally-illuminated, shall be turned off at the curfew times listed in Table 6.4 or when the business activities cease, whichever is later. The means of controlling the specific "off" curfew shall be by a 24 hour timing device that includes stand-by power to maintain the time and program for a minimum of 6 (six) hours.

Table 6.4 Illuminated Sign Curfews

	E1b	E1a
Lighting Area	E1b	E1a
Commercial and Industrial Zoning or Land Use	11 p.m.	Not Allowed
All Residential Zoning or Land Use	9 p.m.	Not Allowed

Notes to Table 6.4: “Land Use” refers to the predominant use of land surrounding the parcel on which the sign is located.

Section 7. Special Uses.

7.1. Recreational Facilities.

7.1.A All site lighting not directly associated with the athletic playing areas shall conform to the lighting standards described in this ordinance, including but not limited to the lamp type and shielding requirements of Section 5.2 and the lumens per acre limits of Section 5.1.

7.1.B Lighting for athletic fields, courts or tracks shall be considered Class 1 (Color Rendition), and shall be exempt from the lumens per acre limits of Section 5.1. All such lighting shall utilize full cutoff luminaires that are installed in a fashion that maintains the full cutoff characteristics unless certified by a registered engineer that such shielding is impractical. Every such lighting system design shall be certified by a registered engineer as conforming to all applicable restrictions of this ordinance. Where full cutoff fixtures are not utilized, acceptable luminaires shall include those which:

1. Are provided with internal and/or external glare control louvers and installed so as to limit direct uplight to less than 5 percent of the total lumens exiting from the installed fixtures and minimize offsite light trespass.
2. Are installed and maintained with minimum aiming angles of 25 degrees downward from the horizontal. Said aiming angle shall be measured from the axis of the luminaire maximum beam candlepower as certified by an independent testing agency.

7.1.C All events shall be scheduled so as to complete all activity before the curfew listed in Section 7.1. Illumination of the playing field, court or track shall be permitted after the curfew only to conclude a scheduled event that was unable to conclude before the curfew due to unusual circumstances. No

recreational lighting is permitted in area E1a. The means of controlling the specific “off” curfew shall be by a 24 hour timing device that includes stand-by power to maintain the time and program for a minimum of 6 (six) hours. Timing device for Recreational Facilities may include a manual override setting which returns to the established program within 2 (two) hours.

Table 7.1 Sports Facility and Display Lot Curfews		
Lighting Area		
	E1b, or c	E1a
	10 p.m.	Not allowed

7.2 Outdoor Display Lots

- 7.2.A** All site lighting not directly associated with the display areas shall conform to the lighting standards described in this ordinance, including but not limited to the lamp type and shielding requirements of Section 5.2 and the lumens per acre limits of Section 5.1.
- 7.2.B** Lighting for display lots shall be considered Class 1 (Color Rendition), and is exempt from the lumens per acre limits of Section 5.1. All such lighting shall utilize full cutoff luminaires that are installed in a fashion that maintains the full cutoff characteristics. Every such lighting system design shall be certified by a registered lighting or electrical engineer as conforming to all applicable restrictions of this ordinance.
- 7.2.C** Class 1 display lot lighting exceeding the lumens per acre cap of Section 5.1 shall be turned off at the curfew times listed in Section 7.1 or within thirty minutes after closing of the business, whichever is later.
- 7.2.D** Class 2 display lot lighting is permitted for security and safety lighting and is exempt from the turn-off requirements of Section 7.1.

Section 8. Submission of Plans and Evidence of Compliance with Code

8.1 Submission Contents. The applicant for any permit required by any provision of the laws of this jurisdiction in connection with proposed work involving outdoor lighting fixtures shall submit (as part of the application for permit) evidence that the proposed work shall comply with this Code. The submission shall contain but shall not necessarily be limited to the following, all or part of which may be part or in addition to the information required elsewhere in the laws of this jurisdiction upon application for the required permit:

1. *Plans indicating the location on the premises, and the type of illuminating devices, fixtures, lamps, supports, reflectors, and other devices.*
2. *Description of the illuminating devices, fixtures, lamps, supports, reflectors, and other devices and the description may include, but is not limited to catalog cut sheets by manufacturers and drawings (including sections where required).*
3. *Photometric data, such as that furnished by manufacturers, or similar showing the angle of cutoff or light emissions. Photometric data need not be submitted when the full cutoff performance of the fixture is obvious to the reviewing official.*
4. *When a submittal includes a statement by a registered design professional that the existing site lighting is being modified less than 10%, it shall not be necessary to comply with paragraph 6 below in this Section.*
5. *When submittal includes a statement by a registered design professional that the design is in accordance with this code, the requirements of sub-paragraphs 2 and 3 above shall not apply.*
6. *A schedule on the plans to confirm compliance with the Lumen Cap per Table 5.1, which includes the following information:*
 - a. *Each exterior luminaire type with the mean lumens for that type, the quantity of each type and whether the luminaire is FCO or unshielded.*
 - b. *The total of FCO and unshielded mean lumens for the parcel.*
 - c. *A statement of the Lighting Area, the size of the permitted parcel, and the maximum allowed FCO and unshielded mean lumens.*
7. *A note indicating if Special Inspection, per Section 16, is required.*

8.2 Additional Submissions. *The above required plans, descriptions and data shall be sufficiently complete to enable the plans examiner to readily determine whether the requirements of this Code will be met. If such plans, descriptions and data cannot enable this ready determination, by reason of the nature or configuration of the devices, fixtures, or lamps proposed, the applicant shall additionally submit as evidence of compliance such certified reports of tests as will enable this ready determination, provided that these tests shall have been performed and certified by a recognized testing laboratory.*

8.3 Subdivision Plat Certification. *If any subdivision proposes to have installed street or other common or public area outdoor lighting, the final plat shall contain a statement certifying that the applicable provisions of this Code will be adhered to.*

8.4 Lamp or Fixture Substitution. *Should any outdoor light fixture or the type of light source therein be changed after the permit has been issued, a change request must be submitted to the design professional and building official for his/her approval, together with adequate information to assure compliance with this code, which must be received prior to substitution.*

Section 9. Approved Materials and Methods of Construction or Installation/Operation. *The provisions of this Code are not intended to prevent the use of any design, material, or method of installation or operation prescribed by this Code.*

See Section 105 of the Administrative Code of this Jurisdiction.

Section 10. Prohibitions.

10.1 Mercury Vapor Lamp Fixtures and Lamps. *The installation, sale, offer for sale, lease or purchase of any mercury vapor lamp for use as outdoor lighting is prohibited.*

10.2 Laser Source Light. *The use of laser source light or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizontal is prohibited.*

10.3 Searchlights. *The operation of searchlights for advertising purposes is prohibited between 10:00 p.m. and sunrise the following morning.*

Section 11. Temporary Exemption.

11.1 Request; Renewal; Information Required. *Any person may submit a written request, on a form prepared by the Jurisdiction, to the Jurisdiction for a temporary exemption request. A temporary exemption shall contain the following information:*

- 1. Specific exemption or exemptions requested;*
- 2. Type and use of outdoor light fixture involved;*
- 3. Duration of time of the requested exemption;*
- 4. Type of lamp and lamp lumens;*
- 5. Total wattage of lamp or lamps and number of lamps to be used;*
- 6. Proposed location on premises of the outdoor light fixture(s);*
- 7. Previous temporary exemptions, if any, and addresses of premises thereunder;*
- 8. Physical size of outdoor light fixture(s) and type of shielding provided;*
- 9. Such other data and information as may be required by the Building Official.*

11.2 Approval; Duration. *The Jurisdiction shall have five business days from the date of submission of the request for temporary exemption to act, in writing, on the request. If approved, the exemption shall be valid for not more than thirty days from*

the date of issuance of the approval. The approval shall be renewable at the discretion of the Building Official upon a consideration of all the circumstances. Each such renewed exemption shall be valid for not more than thirty additional days.

11.3 Disapproval; Appeal. *If the request for temporary exemption is disapproved, the person making the request will have the appeal rights provided in Section 13.*

Section 12. Other Exemptions.

12.1 Nonconformance:

12.1.A. *Bottom-mounted outdoor advertising sign lighting shall not be used.*

12.1.B. *All other outdoor light fixtures lawfully installed prior to and operable on the effective date of the ordinance codified in this chapter are exempt from all requirements of this Code. There shall be no change in use or lamp type, or any replacement or structural alteration made, without conforming to all applicable requirements of this Code. Further, if the property is abandoned, or if there is a change in use of the property, the provisions of this code will apply when the abandonment ceases or the new use commences.*

12.2 *Neon lighting is exempt from the requirements of Section 5.1 and 5.2 when used for sign lighting, but not for other uses. Natural gas lighting is exempt from all requirements of this code.*

Section 13. Alternate Materials and Methods of Construction, Installation/Operation and Appeals

13.1 *The provisions of this Code are not intended to prevent the use of any design, materials or method of installation or operation not specifically prescribed by this Code, provided any such alternate has been approved. The Building Official may approve any such proposed alternate provided he finds that it:*

- 1. Provides at least approximate equivalence to the applicable specific requirements of this Code; and*
- 2. Is otherwise satisfactory or complies with the intent of this Code; and*
- 3. Has been designed or approved by a registered lighting or electrical engineer and is supported by calculations showing that the design submitted meets that intent of the code. This section shall not have the effect of waiving the lumen caps and shielding requirements of Sections 5.1 and 5.2.*

13.2 Appeals. *Any person substantially aggrieved by any decision of the Building Official made in administration of this Code has the right and responsibilities of appeal to the Advisory/Appeals Board of this Jurisdiction.*

Section 14. Law Governing Conflicts. *Where any provision of federal, state, county, or city statutes, codes, or laws conflict with any provision of this code, the most restrictive shall govern unless otherwise regulated by law.*

Section 15. Enforcement and Penalty. *Any violation of this code, or any portion of this code, shall be considered a civil violation and is subject to penalties not to exceed the amount of the maximum fine for a Class 2 misdemeanor in accordance with A.R.S. 11-808. Each day of continuance of the violation constitutes a separate violation. Maximum fines are \$750.00 for individuals and \$10,000.00 for corporations, associations, labor unions or other legal entities. Enforcement procedures shall be pursuant to those established by each Authorizing Jurisdiction.*

Section 16. *Not Used*

Section 17. Severability. *If any of the provisions of this Chapter or the application thereof is held invalid, such invalidity shall not affect other provisions or applications of the Chapter which can be given effect, and to this end, the provisions of this Chapter are declared to be severable.*

Section 18. Conditional Use Permit. *The lumen cap provisions of this code, in Table 5.1, may be altered, varied, or modified by the issuance of a conditional use permit following a Type I procedure in accordance with the Conditional Use Procedures of Chapter 18.97 of the Town of Sahuarita Zoning Code upon a finding by the Planning and Zoning Commission that such alteration, variance, or modification is necessary for the proposed use of the subject property because of increased security requirements, public safety, or public need and that the purpose and intent of this code are reasonably accommodated. In addition to the applicable notice requirements of Section 18.97.030 of the Town of Sahuarita Zoning Code, written notice shall be given to the Tucson/Pima County/Marana Outdoor Lighting Committee or its successor or equivalent and to owners of property within one thousand feet of the subject property.*