

The Corporation of the Municipality of Whitestone

By-Law 16-2006

A Bylaw to Regulate Light Pollution

WHEREAS the Municipal Act, 2001, Revised Section 129 (1) authorizes municipalities to pass by-laws to prohibit and regulate outdoor illumination including indoor lighting that can be seen outdoors;

AND WHEREAS the Municipality of Whitestone permits the Council of the Municipality to pass by-laws for prohibiting or regulating outdoor light fixtures;

Now Therefore the Council of the Corporation of the Municipality of Whitestone Enacts as Follows:

1.0 General

1.1 Mission Statement

To afford every citizen of the Municipality of Whitestone the flexibility to engage in the pursuit of safe, inexpensive lighting practices for the purpose of commercial and private use without being impeded upon or impeding upon other citizens desiring a more pristine night time environment free from light pollution, waste, trespass, or clutter while providing night-time safety, security and productivity.

1.2 Purpose & Intent

1.2.1 The use of outdoor lighting is often necessary for adequate nighttime safety and utility, but common lighting practices can also interfere with other legitimate public concerns. Principal among these concerns are:

- 1) the degradation of the nighttime visual environment by production of unsightly and dangerous glare;
- 2) unnecessary waste of energy and resources in the production of too much light or wasted light;
- 3) interference in the use or enjoyment of property which is not intended to be illuminated at night; and
- 4) the loss of the often-neglected scenic view of the heavens due to increased urban sky-glow. It is hereby recognized that these different interests, those of safety and utility and those of aesthetic appearance, need not compete. Good modern lighting practices can provide adequate light for safety and utility without excessive glare or light pollution. In nearly all cases, careful attention to questions of when and where and how much nighttime lighting is needed, will lead to better lighting practice from all viewpoints.

1.2.2 Accordingly, it is the intent of this By-law to encourage lighting practices and systems which will minimize light pollution, glare, light trespass, and conserve energy while maintaining night-time safety, utility, security and productivity.

1.3 Conflicting Regulations:

In the event of conflict between the regulations set forth in this By-law and any other regulations applicable to the same area, the more stringent limitation or requirement shall govern.

1.4 Approved Materials and Methods of Construction or Installation/Operation:

The provisions of this By-law are not intended to prevent the use of any design, material or method of installation or operation not specifically prescribed by this By-law, provided any such alternate has been approved by the Planning & Development Committee and Council.

The Planning & Development Committee and Council may approve any such proposed alternate provided that such alternate:

1.4.1 provides at least equivalence to the applicable specific requirements of this By-law; and

1.4.2 is otherwise satisfactory and complies with the intent of this By-law.

2.0 Definitions

As used in this By-law, unless the context clearly indicates otherwise, certain words and phrases shall mean the following:

"Automatic Timing Device" means a device which automatically turns light fixtures or circuits on and off;

"Accessory building" means a detached building located on the same lot as the main building, the use of which is incidental or subordinate to that of the main building;

"Abandonment" means the discontinuation of use for a period of six months.

"Building" has the meaning ascribed to it in the Building Code Act, 1992, c. 23 as amended or any successor legislation;

"By-law Enforcement Officer" means all individuals from time to time appointed by Council of the Corporation as By-Law Enforcement Officers for the purpose of enforcing the provisions of this By-law;

"Chief Building Official" means the municipality's Chief Building Official;

"Development Project" means any residential, commercial, industrial or mixed use subdivision plan or individual building development or remodeling plan which is submitted to the municipality for approval.

"Designated Official" means the designated by Council of the Municipality to administer certain provisions of this By-law;

"Direct Illumination" means illumination resulting from light emitted directly from a lamp, luminary or reflector, not light diffused through translucent signs or reflected from other surfaces such as the ground or building.

"Dwelling Unit" means a suite operated as a housekeeping unit, used or intended to be used as a domicile by 1 or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

“Existing Outdoor Light Fixtures” means a light fixture, permanent or portable, used out of doors, that was in place before the passing of this By-Law including illumination or advertisement for:

1. buildings and structures
2. recreational areas
3. parking lot lighting
4. landscape and architectural lighting
5. billboards and other signs (advertising or other)
6. street lighting
7. product display area lighting
8. building overhangs and open canopies

“Fully Shielded Fixture” means that fixtures are shielded in such a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted.

"Grade" means, with reference to a Building or to an Outdoor Light Fixture affixed to a Building, the average level of proposed or finished ground adjoining the Building at all exterior walls and, when used with reference to an Outdoor Light Fixture affixed to a pole or to a structure other than a Building, means the average level of proposed or finished ground immediately surrounding such pole or structure other than a Building;

"Internally Illuminated Sign" means a Sign of which all or part of the external surface emits light received from an internal light source;

“Installed” means attached, or fixed in place, whether or not connected to a power source.

"Lamp" means an artificial source of light and includes a bulb or tube;

“Light Trespass” is spill light falling over property lines that illuminates adjacent grounds or buildings in an objectionable manner.

"Lane" means a public or a private means of access which affords a secondary means of access to an abutting property in addition to a Street or road;

"Light Fixture" means a complete artificial lighting unit consisting of one or more Lamps and ballasting, where applicable, together with parts designed to distribute the light, position and protect the Lamps and connect the Lamps to the power supply;

"Lot" means a parcel or tract of land:

- (a) which is a whole lot as shown on a registered plan of subdivision, but a registered plan of subdivision for the purpose of this definition does not include a registered plan of subdivision which has been deemed not to be a registered plan of subdivision under a by-law passed pursuant to Subsection 50(4) of the Planning Act or a predecessor thereof; or
- (b) which fronts on a Street and is a separate parcel of land without any adjoining lands being owned by the same owner or owners as of the date of passing of this By-law, or
- (c) the description of which is the same as in a deed which has been given consent pursuant to Section 50 of the Planning Act, or a predecessor thereof, but for the purpose of this definition, no parcel or tract of land ceases to be a lot by reason only of the fact that part or parts of it has or have been conveyed to or acquired by the Municipality, Her Majesty in Right of Ontario, Her Majesty in Right of Canada;

“Lumen” is the unit used to measure the actual amount of visible light, which is produced by a lamp as defined by the manufacturer.

“Luminary” means the complete lighting assembly, less the support assembly.

"Municipality" means The Municipality of Whitestone;

“Multi-class Lighting” means any outdoor lighting used for more than one purpose, such as security and decoration, when those purposes fall under the definitions for two or more lighting classes as defined for Class 1, 2 and 3 Lighting below.

“Motion sensing security lighting” means a fixture designed, and properly adjusted, to illuminate an area around a residence or other building by means of switching on a lamp when motion is detected inside the area or perimeter, and switching the lamp off when the detected motion ceases.

“Neon Lighting” means lighting using luminous gas filled tubes often formed into text, symbols or decorative elements. Neon Lighting includes tubes with typical diameters of 10 to 20 millimeters (.4 inch to .8 inch) filled with neon, argon, xenon, or other gasses and producing various colors of light. Not included are replaceable 3.81cm. diameter and 2.54 cm. diameter (1 inch diameter and 1.5 inch diameter or PL (Acompact@) fluorescent tubes.

"Outdoor Light Fixture" means a Light Fixture, permanent or portable, used or for use out of doors, includes illumination or advertisement for;

1. buildings and structures
2. recreational areas
3. parking lot lighting
4. landscape and architectural lighting
5. billboards and other signs (advertising or other)
6. street lighting
7. product display area lighting
8. building overhangs and open canopies
9. security lighting

“Class 1 Lighting” means all outdoor lighting used for but not limited to outdoor sales or eating areas, assembly or repair areas, advertising and other signs, recreational facilities and other similar applications where color rendition is important.

“Class 2 Lighting” means all outdoor lighting used for but not limited to illumination for walkways, roadways, equipment yards, parking lots and outdoor security where general illumination of the grounds is the primary concern.

“Class 3 Lighting” means any outdoor lighting used for decorative effects, including but not limited to architectural illumination, flag monument lighting, and illumination of trees, bushes, etc.

“Outdoor Recreation Facility” means an area designed for active recreation, whether publicly or privately owned, including but not limited to parks, baseball diamonds, soccer and football fields, golf courses, tennis courts and swimming pools and snow skiing, carried on in whole or in part outside a fully-enclosed Building and together with necessary accessory Buildings and structures or open areas not having a building, provided such activities are permitted under the zoning by-law.

"Owner" includes the registered owner of real property, the Person who owns a leasehold estate in real property, and any Person having control of real property, and also includes a Person the owner authorizes in writing to act on his or her behalf;

"Person" means any individual, partnership, joint venture, corporation or company, firm, association, society or other entity;

"Planning & Development Committee" is a committee comprising of all Members of Council and Members at Large appointed by Council to discuss planning related issues.

"Shielded" means that 98% of the lumens emitted from the Light Fixture are projected below an imaginary horizontal plane passing through the highest point on the fixture from which light is emitted;

"Sign" means any advertising device or notice and means any medium including its structure and any other component parts which is used or is capable of being used to attract attention to a specific subject matter;

"Street" means a public highway as defined by the Municipal Act and shall exclude a Lane or any private right-of-way or unopened road allowance or any street which is shown on a registered plan of subdivision which has been deemed not to be a registered plan of subdivision for the purposes of Subsection 50(3) of the Planning Act, or a predecessor thereof;

"Street Townhouse" means a Building divided vertically into three or more Dwelling Units, each of which shares a wall above Grade, and each of which has frontage on a Street.

"Security Lighting" is lighting designed to illuminate a property or grounds for the purpose of visual security. This includes fully shielded lighting designed to be left on during night time hours as well as motion sensing lighting fixtures.

"Temporary Lighting" means lighting which does not conform to the provisions of this By-law and which will not be used for more than one thirty (30) day period within a calendar year. Temporary lighting is intended for uses which by their nature are of limited duration; e.g. holiday decorations, civic events, or construction projects.

"Total Outdoor Light Output" means the maximum total amount of light, measured in lumens, from all outdoor light fixtures on a property. For lamp types that vary in their output as they age (such as high pressure sodium and metal halide), the initial output, as defined by the manufacturer, is the value to be considered.

"Unshielded Fixture" means a fixture that allows light to be emitted above the horizontal directly from the lamp or indirectly from the fixture or a reflector.

"Watt" is the unit used to measure the electrical power consumption (not the light output) of a lamp.

3.0 Application and Compliance

3.1 Appliance of By-law

3.1.1 Except as otherwise provided in this By-law, this By-law applies to all Outdoor Light Fixtures erected, installed or used in the Municipality of Whitestone in conjunction with:

- (a) commercial uses, including parking lots;
- (b) industrial uses;
- (c) institutional uses;

(d) recreational or athletic uses; or

(e) residential uses of five Dwelling Units or more on a single Lot.

3.1.2 All Outdoor Light Fixtures which produce light directly or indirectly by the combustion of natural gas or other fossil fuels, such as gas lamps, are exempt from the requirements of the By-law.

3.1.3 Nothing in this By-law prohibits the temporary display of incandescent lights, other than search lights, as part of the celebration of a religious or cultural event during a reasonable period of celebration of that event which reasonable period shall in no event extend for more than thirty days prior to the date of the event or celebration or thirty days after such date.

3.2 Compliance

3.2.1 No Person shall erect, install or use, or permit to be erected, installed or used, an Outdoor Light Fixture otherwise than in compliance with the provisions of this By-law.

4.0 Preferred Source: Commercial Lighting, Street, Public.

4.1 Due to their high energy efficiency, long life and spectral characteristics, low-pressure sodium (LPS) lamps are the preferred illumination source throughout the Municipality. Their use is encouraged for outdoor illumination whenever possible

5.0 Temporary Lighting Permits:

5.1 The Council may grant a permit for temporary lighting if all of the following conditions are met:

5.1.1 The purpose for which the lighting is proposed is not intended to extend beyond thirty (30) days;

5.1.2 The proposed lighting is designed in such a manner as to minimize light pollution as much as is feasible;

5.1.3 The proposed lighting will comply with the general intent of this By-law; and

5.1.4 The permit will be in the public interest.

5.2 The Council shall rule on the application within fifteen (15) business days from the date of submission of the request and notify the applicant in writing of his or her decision. The Council may grant one (1) renewal of the permit for an additional thirty (30) days if he or she finds that, because of an unanticipated change in circumstances, a renewal would be in the public interest. The Municipality is not authorized to grant more than one temporary permit and one renewal for the same property within one calendar year.

6.0 Permits and Development Plan Reviews:

6.1 Whenever a person is required to obtain a building or electrical permit for outdoor lighting or signage, a Conditional Use Permit, subdivision approval or any development plan approval by the Municipality, including all Municipal projects, or whenever a person requests annexation or rezoning, the applicant shall, as a part of said application, submit sufficient information to enable the Designated Official to determine whether the proposed lighting will comply with this By-law. All applications may be

subject to review and action by the Planning and Development Committee at the discretion of the Designated Official.

6.2 All applications, shall include the following:

- a) Site plan indicating the proposed location of all outdoor lighting fixtures;
- b) A description of each illuminating device, fixture, lamp, support and shield. This description may include, but is not limited to, manufacturers catalog cuts and drawings (including sections where required), lamp types and lumen outputs; and
- c) Such other information as the Designated Official may determine is necessary to ensure compliance with this By-law.
- d) If the Designated Official determines that the proposed lighting does not comply with this By-law, the permit shall not be issued or the plan approved.

7.0 Variances:

7.1 Any person desiring to install an outdoor lighting fixture in violation of this By-law may apply to Council for a minor variance from the regulation in question. Such variances shall be allowed only as provided by the Minor Variance Committee.

8.0 Nonconforming Uses:

8.1 Mercury vapor lamps in use for outdoor lighting on the effective date of this By-law shall not be so used after third reading and passage of the By-Law, April 11, 2006.

8.2 Bottom or side-mounted outdoor advertising sign lighting shall not be used after third reading and passage of the By-Law, April 11, 2006.

8.3 No outdoor lighting fixture or use which was lawfully installed or implemented prior to the enactment of this By-law shall be required to be removed or modified except as expressly provided herein; however, no modification or replacement shall be made to a nonconforming fixture unless the fixture thereafter conforms to the provisions of this By-law, except that identical lamp replacement is allowed.

8.4 Outdoor lighting fixture installed or implemented prior to the enactment of this By-Law should install deflectors that result in directing the light on their own property.

8.5 In the event that an outdoor lighting fixture is abandoned or is damaged to the point of requiring repairs for safe operation, the repaired or replacement fixture shall comply with the provisions of this By-law.

9.0 General Requirements Regarding Installation of Outdoor Light Fixtures

9.1 Shielding

9.1.1. Except as provided in Subsection 9.1.2, no Person shall erect, install, or use, or permit to be erected, installed or used, an Outdoor Light Fixture which is not Shielded.

9.1.2. The following Outdoor Light Fixtures are not required to be Shielded:

- (a) Outdoor Light Fixtures which are illuminance tube lighting containing neon, argon or krypton;
- (b) Outdoor Light Fixtures Illuminating Building entrance or exit doorways where such fixtures are incandescent fixtures with each fixture having light sources totaling not more than 150 watts and provided that there are not more than two fixtures lighting each entrance or exit doorway;
- (c) Outdoor Light Fixtures used exclusively for and in connection with the television broadcasting of events at Outdoor Recreational Facilities, but only while the television broadcasting is being carried on;
- (d) Outdoor Light Fixtures used exclusively for and in connection with the production of movies or commercials, but only while production is being carried on and provided that any permits required from the Corporation or any other governmental authority for the production of such movies or commercials have been obtained; and
- (e) Outdoor Light Fixtures used exclusively for and in connection with the presentation of concerts, plays or other non-athletic entertainment events in parks or on other lands owned by the Corporation and used for public purposes.

9.1.3. Where Outdoor Light Fixtures are required to be Shielded, no Person shall erect, install or use, or permit to be erected, installed or used, an Outdoor Light Fixture which is not of a design which allows the direction of light projection to be modified after installation unless the Outdoor Light Fixture is Shielded in all possible configurations of the fixture.

10.0 Wavelength Distribution

10.1 Except as provided in Subsection 5.2, no Person shall erect, install or use or permit to be erected, installed or used a Lamp or an Outdoor Light Fixture which includes or is designed to include a Lamp which is of a type other than:

- (a) incandescent;
- (b) low pressure sodium;
- (c) high pressure sodium;
- (d) carbon arc
- (e) halogen; or
- (g) mercury vapor sources shall be prohibited.

10.2 The provisions of Subsection 10.1 do not apply as follows;:

- (a) to Lamps or Outdoor Light Fixtures that illuminate areas used for the outdoor display of merchandise for sale, provided that the applicable zoning by-law and other applicable law permits such outdoor display of merchandise;
- (b) to Lamps or Outdoor Light Fixtures lighting Outdoor Recreational Facilities located 500 metres (1,640 ft..) from any navigable waterway, with the exception of the Municipal pavilion and

community centre at the corner of Hwy. 124 and Church Street in the Village of Dunchurch.

11.0 Prohibition

- 11.1 Outdoor floodlighting by flood light projection above the horizontal is prohibited.
- 11.2 All light fixtures which are required to be shielded shall be installed in such a manner that the shielding complies with the definition of fully shielded fixtures.
- 11.3 All light fixtures, including security lighting, except street lamps, shall be aimed or shielded so that the direct illumination shall be confined to the property boundaries of the source. Particular care is to be taken to assure that the direct illumination does not fall onto or across any public or private street or road. Motion sensing lighting fixtures shall be properly adjusted, according to the manufacturers instructions, to turn off when detected motion ceases.
- 11.4 No new mercury vapor light fixtures nor replacement equipment other than bulbs shall be sold or installed for use as outdoor lighting within the Municipality after the effective date of this By-law, and the use of mercury vapor light fixtures for outdoor lighting is prohibited after third reading and passage of the By-Law, April 11, 2006.
- 11.5 Search lights, laser source lights, strobe or flashing lights, motion or illusion lights or any similar high-intensity light shall not be permitted, except in emergencies by police and fire personnel at their direction or as permitted in subsection 9.1.2.
- 11.6 Class 1 lighting, including but not limited to, sales, service, commercial, assembly, repair, maintenance, and industrial areas, may only continue in operation until 10:00 p.m., or for as long as the area is in active use. This provision is not applicable to fixtures lawfully installed or implemented prior to the adoption of the By-law.
- 11.7 Class 2 lighting shall have no time restrictions except as specified by Council for new projects.
- 11.8 Class 3 lighting, except for flag pole lighting, must be extinguished after 10:00 PM or when the business closes, whichever is later, except that low-wattage holiday decorations may remain on all night from November 15 to January 15.
- 11.9 Multi-class lighting, except for security lights, must conform to the time limitations of the most strict class.
- 11.10 Lighting, in all cases, for all outdoor athletic fields, courts, tracks or ranges shall be considered Class 1. Lighting allowed in this subsection shall be subject to approval of the Planning and Development Committee. All events shall be scheduled so as to complete all activity by 10:00 PM. Illumination of the playing field, court, track or range shall be permitted after 10:00 PM only to conclude a scheduled event that was unable to conclude before 10:00 PM due to unusual circumstances. Fully Shielded lighting shall be required for fields designed for amateur, recreational or non-professional sports activity. For professional level sports facilities where fully shielded fixtures are not utilized, acceptable luminaries shall include those which:

- a) Are provided with internal or external glare control louvers, or both, and installed so as to minimize uplight and offsite light trespass as required and;
 - b) Are installed and maintained with aiming angles that permit no greater than two percent (2%) of the light emitted by each fixture to project above the horizontal.
- 11.11 Lighting for Outdoor Display Lots shall be considered Class I except as follows:
- a) All such lighting shall utilize fully shielded luminaries that are installed in a fashion that maintains the fully-shielded characteristics.
 - b) Lighting allowed in this subsection shall be subject to approval of the Planning and Development Committee.
- 11.12 Lighting for Service Station or similar canopies shall be considered Class 1 lighting. All luminaries shall be flush with the lower surface of canopies and utilize flat glass or plastic covers. The total light output used for illuminating service station canopies, defined as the sum of under-canopy initial bare-lamp outputs in lumens, shall not exceed forty (40) lumens per square foot of canopy. All lighting mounted under the canopy except internally illuminated signs, shall be included in the total. Fifty percent (50%) of the lumen output of all lamps mounted within or under a canopy, except internally illuminated signs, is included in the lumen caps in subsection 11.17.
- 11.13 Lighting used for all externally illuminated signs shall conform to all restrictions of this By-law, shall be fully shielded, and shall be turned off at 10:00 PM or when the business closes, whichever is later.
- 11.14 Outdoor internally illuminated advertising signs shall either be constructed with an opaque background and translucent letters and symbols or with a colored (not white, cream, off-white, yellow or other light color) translucent background, with either translucent or opaque letters and symbols. Opaque means only that the material must not transmit light from the internal illumination source: the color of such opaque backgrounds is not restricted by this section. Lamps used for internal illumination of such signs shall not be included in the lumens per net acre limit set in subsection 11.17. All illuminated signs shall be turned off at 10:00 PM or when the business closes, whichever is later.
- 11.15 All outdoor neon lighting shall be fully shielded and shall be turned off at 10:00 PM or when the business closes, whichever is later.
- 11.16 The requirements for lamp source and shielding of light emissions for outdoor light fixtures are as follows:

Shielding/Use Code: A = allowed, unshielded; F = allowed, fully shielded

**LAMP TYPE
SHIELDING**

Class 1, 2 and 3 lighting:

All lamp types above 2050 lumens (See Note 1)
F

All types below 2050 lumens
A (See Note 2)

All neon tube lighting
F

Lamps in Motion Sensing Security Lights
A

Note 1. Examples of lamp types of 2,050 lumens and below (the acceptability of a particular light is decided by its lumen output, not wattage. Check manufacturer's specifications):

1. 100 Watt Standard Incandescent and less
2. 100 Watt Midbreak Tungsten-Halogen (quartz) and less
3. 25 Watt T-12 Cool White Fluorescent and less
4. 18 Watt Low Pressure Sodium and less

Note 2. Lights shall be shielded whenever feasible to minimize light spilled into the night sky or adjacent properties. Unshielded lights (all types) are limited to a maximum of 5,500 lumens per net acre. Residential parcels and Development Projects containing one net acre or less are allowed 5,500 lumens of unshielded light (all Classes).

12.0 Mounting Height

12.1 Parking Lot Lighting Standards:

Lighting Standards (poles) shall be sized in such a manner that the top of any luminary does not exceed .6 metres (19ft. 8 inches) above adjacent grade, unless otherwise specified by the Planning & Development Committee for new Projects.

12.2 Residential

12.2.1 Except as provided in Subsection 6.2, no Person shall erect, install or use or permit to be erected, installed or used an Outdoor Light Fixture at a mounting height above the higher of:

- (a) 4.5 meters (14.76 ft.) above grade. Concrete pedestals shall not exceed .6 meters (24 inches) and shall be included in the overall height. Building mounted fixtures shall be located below the roof eaves and not exceed the height of the pole mounted fixture 4.5meters (14.76 ft.) whichever is lower.

Mounting height refers to the height of the Lamp, or the highest of the Lamps if there is more than one Lamp, forming part of the Outdoor Light Fixture.

12.3 There is no restriction on the mounting height of Outdoor Light Fixtures lighting Outdoor Recreational Facilities or Streets.

13.1 Automatic Timing Devices

13.1.1. No Person shall erect, install or use or permit to be erected, installed or used, Outdoor Light Fixtures in conjunction with uses described in paragraphs (a), (b), (c) and (d) of Subsection 2.1 unless a sufficient number of such Outdoor Light Fixtures are equipped with Automatic Timing Devices which turn off Outdoor Light Fixtures between 11:00

p.m. and sunrise the following day to satisfy the requirements of Section 11.

- 13.1.2. The Owners of real property on which Outdoor Light Fixtures have been equipped with Automatic Timing Devices shall maintain the Automatic Timing Devices in good state of repair and replace any Automatic Timing Devices which are damaged, destroyed or removed.

14.0 Fixture Type and Mounting

- 14.1. Directional lighting. Spot and flood lighting of walkways, driveways, yards and buildings are limited to a maximum of two fixtures of no more than 150 watts each and with a directional angle of no more than 30 degrees from a downward vertical axis and not directly illuminating any areas within 5 metres (16.4 ft.) of the side and rear property lines and 15 metres (49.2 ft.) of the front property line.
- 14.2. Fixture Type. For building mounted fixtures, the "Designated Official" shall insure that the proposed fixture type will be in scale with the building elevation on which it is to be installed. The Chief Building Official may refer this latter determination to the Planning & Development Committee.
- 14.3. Spacing of Fixtures. The distance separating lights shall be no less than 10 metres (32 ft. 9 inches).
- 14.4. Shielding. Where light fixtures are adjacent to residential properties, lighting fixtures shall by use of fixture cutoffs and/or use of optically controlled fixtures to eliminate light spillover and glare or directional aiming so as not to trespass beyond the 5 metre (16.4 ft.) set back from property lines, except as elsewhere permitted in this By-law.
- 14.5. Illuminance. Minimum lighting shall meet the requirements for safely navigating pathways, sidewalks, driveways and activity areas. Furthermore said light shall be directed in such a manner that any changes in evaluation of the walkway (i.e. steps or curbs) shall be illuminated such that said features are clearly discernible (without shadow).

15.0 Architectural and Landscape Lighting

- 15.1 The use of architectural or landscape lighting to highlight the unique features of a building and/or surrounding landscape treatment may be considered during the development review process. In order to consider whether such lighting should be approved, the following procedures and criteria have been prepared to assist in the consideration of such applications:
 - a) Architectural and landscape lighting. The consideration and approval of said type lighting shall be reviewed and approved by the "Designated Official". The "Designated Official" in considering such architectural and landscape highlighting shall determine whether the lighting satisfies the criteria in subsections (b) (c) (d) and (e).
 - (b) The lighting will illuminate an architectural feature or landscape feature that is unique to the particular project due to the use of materials, colors, or design characteristics which are not commonly found within the Municipality; and,
 - (c) The architectural lighting proposal will enhance the design of a project and is not solely used as an attraction getting device.

- (d) Location of fixtures. Highlighting fixtures may be located either on the building, on adjacent ground, and on ornamental standards. These fixtures are to be arranged such that they are not generally visible from the public.
- (e) Shielding for glare. Highlighting fixtures should be located and designed in such a manner that the actual lamp and reflector are shielded or louvered so that it is not seen from a normal public viewing area. It is especially important in areas where there is considerable vehicle and pedestrian traffic that direct glare be avoided.
- (f) Exposed string lighting regulations. Exposed string lighting is permitted subject to the following provisions:
 - (aa) Exposed string lighting shall be defined as low wattage lights with individual bulb receptacle connected by electrical wires that are exposed to the outside surface of a plant or building feature, more specifically said lights shall be defined as a commercially available maximum 2.8 watt system, designed for exterior installation and use. Lights which are blinking or chasing are not permitted.
 - (ab) Temporary exposed seasonal string lighting shall be permitted without permit during the period between the third Saturday of November and New Year's Day. Said lighting fixtures are to be removed by January 8th of each year.
 - (ac) Permanently exposed string lights are permitted in the CG (General Commercial), CT (Tourist Commercial), FM (Farm Market), and the CN (Neighborhood Commercial) Districts subject to the approval by the Planning Director provided that all of the following criteria are satisfied:
 - (1) Exposed permanent string lights shall be exclusively a white light with a clear bulb and are limited to the lighting of living landscape features (trees) if used in combination with other highlighting or pedestrian lighting fixtures within the immediate area.
 - (2) Exposed string lights shall be limited to designated outside dining or display areas and main pedestrian entry to a project site.
 - (3) Said lighting fixtures shall require an electrical permit for installation and shall be secured to the landscape feature with bands that will not puncture the skin of the plant.
 - (4) Applications for such lighting shall be limited to one per project and shall not involve an area greater than five (5) percent of the building square footage of a center/plaza nor more than fifteen (15) percent for a free-standing commercial building not part of a commercial center or plaza.
 - (5) Approval of applications shall be made by the "Designated Official" upon satisfactory compliance with the limitations and design parameters above. Said approval shall be conditioned to include compliance with all other applicable laws including Zoning By-laws. Failure to properly maintain the lights shall be subject to removal of said fixtures.
 - (ad) Applications for exposed string lights that are not consistent with the provisions of subsection (ac) above

shall be subject to the review and approval of the Planning and Development Committee.

16.0 Dock and Boathouse Lighting.

- 16.1 Pathway, dock and boathouse lighting shall not exceed .5 metres (1 ft. 7 inches) in height above the pathway, dock or boathouse deck surface if mounted on the decking and shall have no greater illumination than 40 watts per fixture and be equipped with a shroud to deflect the light below the horizontal elevation. Spacing of such fixtures shall not be less than 3 metres (9 ft 10 inches) from each other in any direction and not directly illuminating any areas within 5 metres (16.4 ft.) of the side and rear property lines.
- 16.2 No interior mounted light source within a boathouse shall be directed to the exterior through glazing or openings and shall be “shielded” to deflect the light below the horizontal elevation or in a manner that shields direct light emitting exposure of the fixture to the exterior. Exterior wall mounted boathouse lighting shall not exceed more than 2.5 metres (8 ft. 2 inches) above the boathouse main level deck surface or 2 metres (6.56 ft.) above the second level deck surface and be equipped with a light diffuser and “fully shielded” to deflect the light below the horizontal elevation. Equipped with a timer set no earlier than 6:00 a.m. and no later than 10:00 p.m. or a motion detector.

17.0 HOURS OF OPERATION

17.1 Turning Off Outdoor Light Fixtures

17.1.1 All Owners of property on which Outdoor Light Fixtures are erected, installed or used in conjunction with the uses shall ensure that those Outdoor Light Fixtures are turned off between 11:00 p.m. and sunrise (unless otherwise noted in this By-law) the following day except as follows:

- (a) Outdoor Light Fixtures may remain on to illuminate outdoor areas for security, or safety purposes provided all other requirements of this By-law are met.
- (b) where an outdoor recreational use in an Outdoor Recreational Facility continues after 11:00 p.m., Outdoor Light Fixtures required to be on in connection with that use are permitted, but only while that use continues;
- (c) where a concert, play or other entertainment event in a park or on other lands owned by the Municipality and used for public purposes takes place or continues after 11:00 p.m., Outdoor Light Fixtures required to be on in connection with that event are permitted, but only while the event takes place or continues; and
- (d) in an area which is used for commercial, industrial or institutional uses where such uses are carried on after 11:00 p.m. and personnel relevant to such uses are working on the premises, Outdoor Light Fixtures required to be on in connection with such uses are permitted, but only while such uses are carried on.

18.0 REPLACING EXISTING OUTDOOR LIGHT FIXTURES

18.1 Existing Outdoor Light Fixtures

- (a) Except as provided in paragraphs (b) and (c), Outdoor Light Fixtures existing and installed on a Lot prior to the effective date of this By-law are exempt from the provisions of this By-law save and except the provisions of Part 17 - Hours of Operation.
- (b) No Person shall modify or permit to be modified an Outdoor Light Fixture including an Existing Outdoor Light Fixture in a way which changes that fixture from a fixture which is Shielded to a fixture which is not Shielded or from a fixture which satisfies the requirements of this By-Law to a fixture which does not satisfy those requirements.
- (c) Where an Owner:
 - (i) constructs a Building on a Lot which is used or intended to be used for one or more purposes and on which there are Existing Outdoor Light Fixtures, and
 - (ii) in conjunction with that construction, replaces 50% or more of the Existing Outdoor Light Fixtures on the Lot or increases by 50% or more the number of Outdoor Light Fixtures existing on the Lot immediately prior to the effective date of this By-law,the Owner shall ensure that all Outdoor Light Fixtures on that Lot, including Existing Outdoor Light Fixtures, comply with all of the provisions of this By-law and if Existing Outdoor Light Fixtures are required to be replaced or modified to achieve compliance, the Owner shall replace or modify those Existing Outdoor Light Fixtures.

19.0 PLANS AND DOCUMENTS

19.1 Plans and Documents

19.1.1. Where a Person:

- (a) proposes to lay out and establish a commercial parking lot or proposes to construct a Building on a Lot used or intended to be used for one or more purposes, and
 - (b) proposes to install or erect Outdoor Light Fixtures in conjunction with such commercial parking lot or Building;
- that Person shall file with the Designated Official a lighting plan together with related documents and information to satisfy the Designated Official that the proposed lighting will comply with the provisions of this By-law.

19.1.2. The Submission shall contain, but shall not be limited to the following:

- (a) plans indicating;
 - (i) the location of all Buildings and structures on the property,

- (ii) the location, number, type, position, elevation and mounting height of all Outdoor Light Fixtures;
 - (iii) the number and location of Outdoor Light Fixtures to be equipped with Automatic Timing Devices; and
 - (iv) any building design or other features which may affect the nature, intensity or direction of light emission from Outdoor Light fixtures;
- (b) description of and background information regarding all Outdoor Light Fixtures, including;
- (i) power (in watts);
 - (ii) type of light source;
 - (iii) filtering, if any;
 - (iv) information evidencing whether or not Outdoor Light Fixtures are Shielded;
 - (v) information as to light distribution in the horizontal and vertical phase planes;
 - (vi) information as to light distribution in the horizontal plane between 11:00 p.m. and sunrise the following day; and
 - (vii) manufacturer's catalogue information and drawings; and
- (c) information regarding the design capability of the Outdoor Light Fixture to permit any change in the items referred to in paragraphs (a) and (b).

The above required plans and descriptions shall be sufficiently complete to enable the Designated Official to readily determine whether the requirements of this By-law will be complied with.

19.1.3. a) The Chief Building Official shall not issue a building permit for any construction in respect of which a lighting requirements is required pursuant to Ontario Building if the requirements have not been met and approved by the Designated Code Official.

b) When a lighting plan is required to be filed under this By-law in connection with the laying out and establishment of a commercial parking lot, Council of the Municipality or its Designated Official for granting site plan approval shall refuse to grant site plan approval for such development if the required lighting plan has not been filed and approved by the Designated Official.

19.1.4 No Person shall commence construction of any development referred to in Subsection 19.1.1. until the lighting plan has been filed and approved by the Designated Official or the Planning and Development Committee.

19.1.5 Where an approved lighting plan is required, no Person shall erect or install, or permit to be erected or installed, Outdoor Light Fixtures except in accordance with the approved lighting plan or a change application approved in accordance with paragraph (19.1.6).

19.1.6 If there is an approved lighting plan in place and a Person proposes to modify the approved lighting plan or to install Outdoor Light Fixtures otherwise than in accordance with the approved lighting plan (including any change in the type of Lamp shown on the approved plan) the applicant shall submit a change request to the Designated Official together with adequate information to evidence compliance with the requirements of this By-law.

20.0 COMPLIANCE ALTERNATIVES AND ADMINISTRATIVE EXEMPTIONS

20.1 Compliance Alternatives

20.1.1. The provisions of this By-law are not intended to prevent the use of any design, material or method of installation not specifically prescribed by this By-law, provided any such alternate design, material or method of installation has been approved by the Designated Official. The Designated Official may approve any such proposed alternative provided that he or she finds that it:

- (a) provides at least approximate equivalents to the applicable specific requirements of this By-law; and
- (b) is otherwise satisfactory and complies with the intent of this By-law.

20.2 Administrative Exemptions

20.3 Council of the Municipality may grant an exemption or minor variance from some or all of the provisions of this By-law upon the application of any Person if in the opinion of Council, compliance with the By-law is impracticable and the general intent and purpose of the By-law are maintained.

20.4 If the request for an exemption or minor variance is approved by council, a written record of the request and approval shall be kept by the Municipality and shall be open to public inspection.

21.0 INSPECTION AND OFFENCES

21.1 Inspectors

21.1.1. All By-law Enforcement Officers hereby are appointed inspectors for the enforcement of this By-law.

21.2 Entry

21.2.1 For the purpose of determining whether there is compliance with this By-law, an inspector may have access to or enter any land, Building or structure governed by this By-law between the hours of 8:00 am and 6:00 p.m. and may conduct an inspection.

21.2.2. No inspector may enter a Building or structure that is also a dwelling without the consent of the occupant or without first obtaining and producing a warrant.

21.2.3. An inspector conducting an inspection shall produce identification issued by the clerk of the Municipality upon request.

21.3 Powers on Inspection

21.3.1 Any inspector conducting an inspection may inspect the land, Building or structure and may question a Person on matters relevant to the inspection.

21.3.2 No Person shall hinder or obstruct an inspector lawfully conducting an inspection under this Act.

21.4 Application for Warrant

21.4.1 An inspector may apply to a Justice of the Peace for a warrant if:

- (a) the inspector has been denied access or entry to any land, Building or structure;
- (b) the inspector has been instructed or directed to leave any land, Building or structure; or
- (c) the inspector has been obstructed in the conduct of the inspection.

21.5 Offence and Penalty

21.5.1 Whenever in this By-law there is a duty imposed upon any Person and such Person fails to perform such duty, such Person is guilty of an offence under this By-law and upon conviction is liable to a maximum fine as established pursuant to the Provincial Offences Act, or any successor legislation.

21.5.2. Without limiting any other provision of this By-law and in addition thereto, any Person who otherwise contravenes the provisions of this By-law is guilty of an offence and upon conviction is liable to a maximum fine as established pursuant to the Provincial Offences Act, or any successor legislation.

22.0 MISCELLANEOUS

22.1 Citation

22.1.1 This By-law may be cited as the "Light Pollution By-law".

Notwithstanding any other provisions in this By-law, nothing in this By-law shall have the effect of requiring outdoor lighting, which provides a lower level that would endanger public safety or security.

23.0 General

23.1.1 The division of this By-law into parts, sections, subsections, paragraphs and subparagraphs and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this By-law.

23.1.2 If any provision of this By-law or the application thereof to any Person or circumstance is invalid, this invalidity shall not affect other provisions or application of this By-law which can be given effect without the invalid provision or application, and to this end the provisions of this By-law are severable.

23.1.3 Upon receipt of a complaint, Council recommends that the By-Law Enforcement Officer provide information to the owner of the “Light Pollution By-Law” and suggest ways and means to address the complaint.

24.0 Effective Date

24.1 This By-law shall come into effect upon third reading and passage of the By- law.

Read a First and Second time this 11th day of April, 2006.

Mayor Bill Church

CAO-Clerk Liliane Nolan

Read a Third time and **Passed, Signed and Sealed** this 11th day of April, 2006.

Mayor Bill Church

CAO-Clerk Liliane Nolan