



# Town of Cedar Lake

## Lighting Ordinance

- A. **Intent and Purpose.** The purpose of this Ordinance is to protect the health, safety and welfare of the public by recognizing the need for buildings, roadways and sites to be illuminated for safety, security and visibility for pedestrians and motorists balanced against the often harmful effects associated with the use of outdoor lighting. This Ordinance provides standards for various forms of lighting that will: reduce light pollution and light trespass from light sources onto adjacent properties; enhance customer and employee safety, contribute to improving visibility by required illuminated areas to have uniform light; and curtail the degradation of the nighttime visual environment.
- B. **Applicability.** All outdoor lighting installed after the date of effect of this Ordinance shall comply with these requirements. This includes, but is not limited to, new lighting, replacement lighting, or any other lighting whether attached to structures, poles, the earth, or any other location, including lighting installed by a third party. The Town Engineer, or Town designee, may review or inspect any building or site to determine compliance with requirements under this Ordinance. Whenever a person is required to obtain a building permit from the Town, the Applicant shall submit sufficient information to enable the Town Engineer, or Town designee, and/or Plan Commission to determine whether the proposed lighting will comply with this Ordinance.
- C. **Street Lighting Standards.** All developments and subdivisions which include residential or collector roadways shall meet the following minimum standards for providing public street lighting:
1. All subdivisions and developments shall submit public improvement and development plans that incorporate a proposed street lighting system to the Town. The street lighting plan shall show the location and direction of the pole plus mast and the proposed routing of the electric cable and duct.
  2. An LED type Cobra head style luminaire, shall be placed at all intersecting public streets, which intersect w/major county or state highways and/or major streets.
  3. An LED type Cobra head style luminaire, shall be placed at all cross or "T" intersections and at the end of streets and cul-de-sacs. An LED type luminaire shall be placed at mid block of all blocks, at a distance not to exceed five hundred feet (500') between installations. An LED type luminaire shall also be placed at all major curves in street alignment.
  4. Mounting height shall be a minimum of twenty-five feet (25'), and not exceed thirty feet (30') for all poles, except by approval from the Plan Commission.
  5. All electric cable shall be placed underground in a unit duct. Each light shall have a single feed from the light standard to the point of connection to NIPSCO electric lines. The single feed shall run through an above grade secondary electrical pedestal disconnect (Advanced Pedestals, Inc. [API] 10x14) or equal. The feed disconnect should have a buss inline link w/crimp terminals and watertight rubber boots (IA0512) or equal in the disconnect pedestal. The feed line from NIPSCO pedestal to API secondary disconnect pedestal shall be piped with rigid PVC conduit (schedule 40) with two (2) 90 degree elbows.
  6. For developments where access to individual NIPSCO pedestals have limited access, the use of a centrally located lighting controller will be allowed. The controller shall be powered by one single point electric service at 120/240V, 1Ø, 3 wire underground service. The lighting controls shall be installed within a ground mounted NEMA 3R, green painted aluminum Type 3 lockable cabinet. The individual light standards shall be connected to the lighting controller via alternating branch circuits. The control shall consist of a mechanically held contactor which is automatically controlled

via controller mounted photocell with a manual Hand-Off-Auto switch and individual branch circuits. Various controls shall be as shown in the standard details.

7. After completion of the street lighting system, all subdivisions and developments shall submit to the Town Engineer, or Town designee, a set of "As Built" drawings, showing the routing of electric cable, mounting height, bracket length, luminaire wattage and the locations of the light standards, disconnect pedestal, and point of connection to NIPSCO. The Town Engineer, or Town designee, shall inspect the system for conformance to the standards set out in this document. The Town Engineer, or Town designee, may accept the system after all the deficiencies are corrected, or may accept strictly "luminaire maintenance" until such time when the underground utilities are accepted. If the Town Engineer, or Town designee, accepts strictly the luminaire maintenance, the project developer shall be responsible for any other deficiencies in the street lighting system.

D. **Light Standards and Bracket.**

1. The complete standard shall be the type manufactured by the Hubbard Aluminum Pole Company (HAPCO) Company or a physically equivalent type approved by the Town Engineer, or Town designee, and shall meet all the requirements of these standard specifications. The pole size, bracket size, and applicable catalog/part numbers are to be clearly shown on the street light plans and also within manufacturer catalog cut sheets. The mounting heights shall not exceed thirty feet (30') for all subdivisions.
2. Each light standard shall be a one-piece, seamless, round tapered tube of aluminum alloy 6063, hollow shaft, with attached bracket arm and all accessories described herein. The pole shall have a 0.188" wall thickness. The pole shall be fully heat-treated along its entire length post-welding of the base flange, to produce the required T6 temper.
3. Welding shall be done by the inert gas shielded metal arc method with consumable electrode. Aluminum alloy 4043 electrode shall be used.
4. The base flange for the attachment of the shaft to the foundation shall be a one-piece cast socket of aluminum. The flange shall be joined to the shaft by means of complete circumferential welds, externally at the top of the flange and internally at the bottom of the shaft tube. The bolt holes shall be capable of containing 1" anchor bolts with a specific bolt circle diameter of 11-1/2". The base shall have an opening of such size as will permit easy entry of all conduit.
5. An ornamental cap of aluminum alloy shall be provided with each shaft. The cap shall be fastened to the shaft by means of a stainless steel screw.
6. The pole shaft shall include a 4" by 6" reinforced handhole centered 18" above the bottom of the shaft. Handholes are to be located 90 degrees clockwise from the plane of the bracket arm as viewed from the top. The opening for the handhole shall be oval in shape and measure 4" by 6", with the major dimension along the vertical axis. The hole in the shaft wall shall be reinforced with a frame of aluminum alloy 356-T6, which shall project slightly beyond the wall interior and be completely joined to the interior and exterior of the shaft with a fillet of which the minimum size shall be 5/16". The opening shall be protected by a snug-fitting cover attached with two stainless steel hex head screws. The external contour of the reinforcing frame and cover shall be curved to conform to the roundness of the shaft. The cover shall have a surface finish similar to the shaft.
7. Each pole shall contain an internal lug with a 3/8" diameter hole for the purpose of attaching a grounding connector.
8. The bracket arm shall be the truss type of design with an upper and lower member joined near the luminaire end of the arm and braced with a vertical strut. The upper member shall be the continuous or wiring member and shall be a tapered tube ovalized at the pole shaft end with the

major dimension of the oval in the horizontal plane. Tube nominal wall thickness shall be 1/8". The lower member shall be standard circular pipe. Both upper and lower members shall be attached to the pole shaft with 1/4" thick wrought, curved plates. Plates shall be welded to the members. The upper attachment shall be made with four 1/2" aluminum bolts, nuts and lock washers. The lower attachment shall be made with two 3/8" Aluminum bolts and blind nuts. Blind nuts shall be factory-installed in the pole shaft. Wiring at the upper attachment shall be through a grommeted 1-1/4" diameter hole. The material of the main bracket members and their attachment plates shall be aluminum alloy 6063-T6. The bracket arm shall incorporate a 2" pipe size slip-fitter tenon at least 6" long.

9. The bracket arm shall be of such length as will provide for the attaching of a light fixture twelve (12) feet from the shaft at all pole locations, on all equipment and materials.
10. The Foundation Anchor Bolts shall have a set of four threaded 1"-8NC stainless steel anchor bolts, minimum 40" in length with a 12" minimum length of hot-dipped galvanizing at the threaded end, shall be provided for anchoring the base to the concrete foundation. The bolts shall include a 4" right angle hook at the unthreaded end and 6" of thread on the threaded end. A galvanized nut, lock washer and flat washer shall be supplied with each anchor bolt. Four anchor bolt covers of aluminum and stainless steel screws with nylon backing used for corrosion protection for their attachment shall be provided.
11. All pole mounting material shall be either aluminum or stainless steel. No mixing of dissimilar metals will be allowed. Pole base plates shall be welded cast aluminum to accept the foundation anchor bolt hardware.
12. The pole shaft shall be provided with a satin finish accomplished by mechanical rotary grinding. The bracket arms shall be provided with a satin etched finish. All materials shall be clean, free from dents and gouges. No surface preparation or painting of any type shall be performed on the assembly components at the time of installation.
13. Raceway openings shall be free from burrs and rough edges that may be injurious to the installer and wiring and shall be fitted with a rubber grommet.
14. In areas where breakaway devices are required, these devices shall be by means of breakaway couplings and aluminum shrouds or transformer bases.

E. **Luminaire, LED Type, Mast Arm Mounted, Residential**

*LED Lighting Requirements for Residential Roadways  
Performance Criteria*

<b>LUMINAIRE REQUIREMENTS</b>	
Maintenance	Toolless Entry Gasketed and Sealed and UL Listed for Wet Locations
Light Source & Drivers	Restriction of Hazardous Substance (RoHS) and Design Lights Consortium (DLC) Compliant
Operating Temperatures	-20°C to +40°C
Internal Connections & Components	Preassembled and Prewired Using Modular Electrical Connections
Minimum Life Expectancy	100,000 Hours
Voltage Fluctuations	+ or – 10%
Housing Finish Color	Gray, ASTM Rating of Six per D1654 after 1000 Hours
Tenon Nominal Pipe Size (Inches)	2"
Maximum Luminaire Weight (lb)	75 lb.
Nominal Luminaire EPA (ft <sup>2</sup> )	40 ft <sup>2</sup>
Nominal Input Voltage (V)	120V or 240V
ANSI Vibration Test Level	Level 1 (Normal)
Identification	External Labeling per ANSI C136.15 & 22
Optics	Type 3, Flat Glass
Mounting Method	Swivel-tenon/Mast Arm
Driver	Control Signal Interface
Nominal BUG Ratings	B3-U0-G3
Make/Model of LED Lighting Manufacturer(s)	GE, Cree, AEL, Eaton, Leotek or Equal
Make/Model of LED Driver(s)	Advance, Philips or Equal
Dimmability	<input checked="" type="checkbox"/> Dimmable <input type="checkbox"/> Not dimmable
Electrical Immunity System Failure	No Possible Disconnect
Thermal Management	No Moving Parts
Warranty Period (yr)	10 Year
Buy America Compliance	NEMA listed company (provide copy of compliance document)
Design Lights Consortium Compliance	Yes (Provide documentation verifying product listing on DLC's website)
<b>PARAMETERS</b>	
Lamp Lumen Depreciation	0.70
Initial Input Power (W)	170W
Maintained Input Power (W)	170W
Initial LED Drive Current (mA)	530 min.
Maintained LED Drive Current (mA)	530 min.
CCT (K)	4000
S/P ratio	0.9

F. **Luminaire, LED Type, Mast Arm Mounted, Commercial and Collector**

*LED Lighting Requirements for Commercial/Collector Roadways  
Performance Criteria*

<b>LUMINAIRE REQUIREMENTS</b>	
Maintenance	Toolless Entry Gasketed and Sealed and UL Listed for Wet Locations
Light Source & Drivers	Restriction of Hazardous Substance (RoHS) and Design Lights Consortium (DLC) Compliant
Operating Temperatures	-20°C to +40°C
Internal Connections & Components	Preassembled and Prewired Using Modular Electrical Connections
Minimum Life Expectancy	100,000 Hours
Voltage Fluctuations	+ or – 10%
Housing Finish Color	Gray, ASTM Rating of Six per D1654 after 1000 Hours
Tenon Nominal Pipe Size (Inches)	2"
Maximum Luminaire Weight (lb)	75 lb.
Nominal Luminaire EPA (ft <sup>2</sup> )	40 ft <sup>2</sup>
Nominal Input Voltage (V)	120V or 240V
ANSI Vibration Test Level	Level 1 (Normal)
Identification	External Labeling per ANSI C136.15 & 22
Optics	Type 3, Flat Glass
Mounting Method	Swivel-tenon/Mast Arm
Driver	Control Signal Interface
Nominal BUG Ratings	B3-U0-G3
Make/Model of LED Lighting Manufacturer(s)	GE, Cree, AEL, Eaton, Leotek or Equal
Make/Model of LED Driver(s)	Advance, Philips or Equal
Dimmability	<input checked="" type="checkbox"/> Dimmable <input type="checkbox"/> Not dimmable
Electrical Immunity System Failure	No Possible Disconnect
Thermal Management	No Moving Parts
Warranty Period (yr)	10 Year
Buy America Compliance	NEMA listed company (provide copy of compliance document)
Design Lights Consortium Compliance	Yes (Provide documentation verifying product listing on DLC's website)
<b>PARAMETERS</b>	
Lamp Lumen Depreciation	0.63
Initial Input Power (W)	200W max.
Maintained Input Power (W)	200W max.
Initial LED Drive Current (mA)	530
Maintained LED Drive Current (mA)	530
<sup>G</sup> CCT (K)	4000
<sup>G</sup> S/P ratio	0.9

G. **Foundation.**

1. **Pole Foundation.** Pole foundations shall be constructed with a reinforced concrete foundation with dimensions required by the type of soil as shown on the soil tests and borings. Details below indicate minimums for concrete foundation construction.
  - a. Foundations shall include a cage made of #3 and #5 reinforcing bars. The cage shall be 16" in diameter. There shall be six #5 bars, five feet in length, welded to six #3 bars which shall be spaced 12" O.C. and shall be formed into a 16" diameter circle.
  - b. Foundations shall also contain a 5/8" dia. by 10' length grounding rod and shall be attached to the internal grounding lug located within the pole by clamps and suitable gauge electrical grounding wire.
2. **Materials.** In areas where conventional concrete foundations cannot be utilized, the use of metal "Helix" type foundations may be utilized with written approval from the Town Engineer, or Town designee. The details below identify the materials required.
  - a. Anchor bolts, nuts and washers shall comply with requirements of ASTM A307. Anchor bolt hooks shall be made by hot-bending the bolt shank. The anchor bolt, nut & washer shall be treated by hot-dipped galvanizing in accordance with ASTM A153. The raceway shall be a 2" straight conduit of rigid plastic.
  - b. Metal pole foundations shall be in accordance with INDOT Standard Specifications, Section 807 latest edition. The length of the Helix foundation shall be as recommended by the manufacturer and soil conditions.
3. **Construction Method.**
  - a. The foundation excavation shall be made by drilling with an auger. The foundation shall be cast-in-place and allowed to cure for at least fourteen (14) days prior to erecting the light pole standard. Concrete may be deposited against the soil. However, if soil conditions require use of a liner to form the hole, the liner may be withdrawn as the concrete is placed, with the approval of the Town Engineer, or Town designee. The top of the foundation shall be struck-off level, to preclude the use of shims or other leveling material, in order to allow plumb placement of the light standard on the foundation surface.
  - b. Metal pole foundation installation shall be in accordance with INDOT Standard Specifications, latest edition.

H. **Electric Cable 600 Volt, Plastic Insulated Materials.**

The electric cable shall comply with the ASTM Standards (latest edition) Designation Number and shall comply with the Insulated Power Cable Engineers Association Standards cited by the paragraph or table number in Insulated Power Cable Engineers Association (IPCEA) Pub. S-61-402 (latest edition).

1. **Conductors.** The conductors shall be in accordance with INDOT Standard Specifications, latest edition, and shall be a minimum of No. 10 AWG size using Cross-Linked Polyethylene (XLP) or Ethyl Propylene Rubber (EPR) in the light standard. When not within the light standard, the wire shall be a minimum of No. 6 AWG using XLP or EPR. Conductors of No. 8 AWG size, XLP or EPR – Underground Service Entrance (USE) and smaller shall be stranded annealed copper wire that complies with ASTM B-3. Conductors of No. 6 AWG size and larger shall be stranded annealed copper wire complying with ASTM B-8. Conductors shall be of different colors to designate hot and neutral wires. Preferred colors are black, red and white.
2. **Fuses.** The wiring in the light standard shall have a 10 amp in-line fuse, Bussman Type Model No.

FNM-10 (or equal), and shall use an inline breakaway fuse holder with crimp terminals and watertight rubber boots. The neutral shall have a Bussman identified solid neutral fuse holder and crimp terminals with rubber boots.

3. **Unit Duct.** The electric cable shall be in accordance with INDOT Standard Specifications, latest edition. The unit duct shall be one (1) piece without splices. The unit duct may be formed by extruding it over the insulated conductors. The unit duct shall have a smooth inner bore which does not adhere to conductor insulation.
4. **Construction Methods.** The electric cable shall be continuous (no splicing) between the service connection and disconnect pedestal, lighting controller and light standard, and between the disconnect pedestal and light standard, and shall be contained within the plastic unit duct. The duct shall extend one foot into the light standard and the cable shall be long enough for the splices to be withdrawn 18" from the pole handhole. All electric cable and electric cable unit duct shall be buried a minimum depth of 30" below finished grade.
5. **Splicing of 600 Volt Cable and Wire (In Light Standard).** This specification covers splicing of insulated electric cable and wire. Compliance with the ASTM Standards is required, which Standards are cited by the ASTM Designation Number.
6. **Taped Splices. (Only allowed with prior approval from the Town, or Town designee)** A taped splice shall mean a splice of pigtail construction made with a spring connector, rubber tape, and plastic/vinyl tape of the following description and construction:
  - a. **Connector.** The spring connectors shall be made of spring steel and plated with zinc or similar corrosion resistant coating. The connectors shall employ the expandable spring principle and shall insure positive mechanical and electrical connection under all temperature and load conditions.
  - b. **Rubber Tape.** The rubber tape shall be of 0.75-inch width and 0.030-inch thickness that complies with ASTM D119.
  - c. **Vinyl-Plastic Tape.** The vinyl plastic tape shall be similar to that manufactured by 3M Corporation as SCOTCH Super 33+ Vinyl Plastic Electrical Tape or equal. The vinyl plastic tape shall be 0.75-inch width and 0.0070-inch thickness with an adhesive coating on one surface. The tape shall exhibit properties as prescribed by ASTM D1000 and tape flammability shall be in accordance with ASTM D568.
  - d. **Alternate Taped Splice.** A taped splice shall also mean a splice of pigtail construction made with a split-bolt connector wrapped in vinyl tape, followed by rubber tape, then finally with vinyl tape using the following criteria:
    1. There shall be no exposed or bare electrical wire within the light standard, with the exception of the grounding cable. All exposed cable wire within a splice shall be fully taped.
    2. Sufficient torque shall be exerted on the bolting assembly to insure positive electrical connection under all temperature and load conditions.
    3. No insulating paint of any type shall be allowed.
- I. **Vibratory Plowing.** The cable duct shall be directly buried by a vibratory plowing method to a minimum depth of thirty inches (30"). Cable unit duct shall not be buried to a depth exceeding forty-eight inches (48").

J. **Granular Trench Backfill.** At locations indicated by the Town Engineer, or Town designee, a trench shall be constructed to accommodate the cable duct or unit duct, and shall be backfilled with granular material. The contractor or developer shall furnish the backfill material and shall appropriately dispose of all surplus backfill materials.

1. **Construction Methods.** The trench shall be excavated in a manner to prevent cave-in and at a depth no less than thirty inches (30") and no greater than forty-eight inches (48"). Excavated material shall be withdrawn and placed at a sufficient distance to prevent excavated material from self-returning into the trench. The width of the trench shall be at least six inches (6"). Where the cable duct enters the light standard foundation or a rigid steel conduit, the bottom of the trench shall be built-up in order to provide a smooth directional run of the cable duct.
  - a. The cable duct shall be placed in the bottom of the trench after all existing loose granular material has been removed, and any existing protruding granular material stones has been removed or bedded with granular backfill material as directed by the Town Engineer, or Town designee.
  - b. The trench shall be backfilled by placing granular material in uniform layers not exceeding six inches (6") in depth (loose/un-compacted measure). The granular material in each deposited layer shall be thoroughly compacted to a density equal to the existing ground or as approved by the Town Engineer, or Town designee, in such a manner as not to damage the cable duct and/or wiring.
  - c. No granular material greater than two-inches maximum dimension shall be allowed in any layer of the backfill placement.
  - d. No sod, frozen material, or any foreign material which, by decay or otherwise, would cause settlement, shall be placed as backfill material. Deleterious substances, such as, but not limited to, coal, lignite, shells, clay lumps cemented/concrete particles shall not exceed five percent (5%) by weight in any one (1) sample of backfill material.
  - e. Any material excavated from the trench may be used as backfill provided it does not conflict with the above and the material is approved by the Town Engineer, or Town designee. However, if the material in question has been excavated from the roadway base course, sub-base or subgrade, replacement material must be granular trench backfill, regardless of what material has been excavated from the trench.

K. **Acceptance of Street Lighting System.**

1. Once the street lighting system has been initially installed according to the specifications set forth in this Section, the Town Engineer, or Town designee, shall, upon the request of the developer, inspect the system and prepare a list of items for repair (i.e. a "punch list"). The punch list shall be provided to the developer, or their designee, and when the appropriate repairs have been made, the Town shall accept the lighting system for maintenance only. The developer shall still be responsible for the lighting system and shall therefore be responsible for any damage due to construction, including cable hits and pole knock-downs. The Town shall accept the lighting system when the development is formally accepted in letter form, as written by the Town.
2. During the punch list creation, the Town shall recognize that one (1) splice on each cable is necessary between the light standard and connection to NIPSCO electrical system. This splice is allowed as a result of cable cut due to construction. If the cable has been cut for other reasons (e.g. accidental cable hit) and requires more than one (1) splice per cable run, the cable and duct shall be replaced in its entirety from the NIPSCO disconnect pedestal to the light standard or from the NIPSCO disconnect pedestal or transformer to the lighting controller.



L. **Off-Street Parking and Site Areas.**

1. All lighting used to illuminate off-street parking and site areas shall be so shielded or otherwise optically controlled so as to provide glareless illumination in such a manner as not to create a nuisance on adjacent property.
2. Off-street parking and site areas with lighting shall limit light spillage onto adjacent property. Maximum horizontal foot-candles as given off by the neighboring property as measured in the following districts shall not exceed:

	Foot Candles	Lux
Single-family districts	.1	1.0
Multiple-family residential districts	.2	2.0
Business districts	0.5	5.0
Light industrial districts	1.0	10.0
Park, school and institutional districts	2.5	25

3. All luminaires erected shall not exceed 25 feet above ground level:
  - a. Shall be full cut off optically control sharp cut-offs, as approved by the Town engineer; and
  - b. Shall not be installed with diffusing refractors; and
  - c. Shall maintain an average to minimum illumination of 3:1 or less; and
  - d. Shall be of translucent materials and not transparent materials, as approved by the Town Engineer.

4. All off-street parking and site areas shall be lighted using horizontal foot-candles and uniformity ratios as listed below:

a. **Off-Street Lights**

	Multi-family	Industrial	Commercial
Horizontal foot-candles	1.2	1.6	2.0
Uniformity Ratio (Avg/Min)	3:1	3:1	3:1

5. **Submittal Requirements.** The following information must be included for all site plan submissions which include any new exterior lighting:

- a. **Photometric Plan** showing the location of all outdoor lighting fixtures, including but not limited to freestanding pole fixtures, building mounted and canopy light fixtures on the site and building elevations. A photometric grid overlaid on the proposed site plan (with property boundaries) indicating the light intensity throughout the site (in footcandles). Measurements must be at ground level and shown at a minimum ten feet (10') spacing;
- b. **Engineering Details** of all proposed lighting fixtures;
- c. **Manufacturer Specification Sheets** for the type of fixture being proposed including but not limited to the total lumen output, type of lamp, distribution type, method of shielding and any other details that demonstrate compliance with this Ordinance;
- d. Use of proposed fixture; and
- e. Any other information deemed necessary by the Town Engineer, or Town designee, in accordance with the intent and purpose of this Ordinance.

M. **Commercial Sign Lighting.** All commercial sign lighting shall adhere to the INDOT Outdoor Advertising Control Manual, latest edition and the following:

1. **Static Sign Lighting:**

**Non-Conforming Sign Lighting Structures**

- a. Signs which contain, include or are illuminated by any flashing, intermittent or moving light or lights are prohibited except for Changeable Message Signs and for those signs giving public service information such as time, date, temperature, weather or similar information.
- b. Signs which are not effectively shielded to prevent beams or rays of light from being directed at any portion of the traveled ways of the highways in the control area and which are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle, or which otherwise interferes with any driver's operation of a motor vehicle are prohibited.
- c. No sign shall be illuminated as to obscure or interfere with the effectiveness of an official traffic sign, device or signal.
- d. All such lighting shall be subject to any other provisions relating to lighting or signs presently applicable to all highways under the jurisdiction of the state.
- e. Illumination shall not be added to Non-Conforming Signs.
- f. Bench signs used as outdoor advertising must comply with lighting standards of this section.

2. **Changeable Message Signs:** All Changeable Message Signs and Electronic LED Signs shall not exceed 0.3 footcandles (fc) at night or over ambient light conditions when measured at the recommended distance based on the sign size below. Photometric calculations must be submitted to verify the criteria is met.

AREA OF SIGN Sq.Ft.	MEASUREMENT Distance (Ft.)
10	32
15	39
20	45
25	50
30	55
35	59
40	63
45	67
50	71
55	74
60	77
65	81
70	84
75	87
80	89
85	92
90	95
95	97
100	100
110	105
120	110
130	114
140	118
150	122
160	126

AREA OF SIGN Sq.Ft.	MEASUREMENT Distance (Ft.)
170	130
180	134
190	138
200	141
220	148
240	155
260	161
280	167
300	173

Conditions under which Changeable Message Signs may be used are as follows:

- a. A sign owner shall not convert a conforming sign to a Changeable Message Sign without the approval of INDOT and/or the Town of Cedar Lake. Approval may be sought by requesting a variance from the Town.
- b. Only a conforming sign structure may be converted to a Changeable Message Sign upon approval from the Town and must meet INDOT requirements. A non-conforming sign structure may not be modified to a Changeable Message Sign under any circumstances.
- c. A Changeable Message Sign shall only be constructed as one (1) of the following:
  - 1) A single-face sign.
  - 2) A back-to-back structure.

Note: V shaped structures and stacked or side-by-side signs are not allowed under this Section.

- d. The Owner shall provide the Town with a contact person and phone number for every permitted Changeable Message Sign. The contact person must have the ability and authority to make modifications to the display and lighting levels should the need arise. The Town may direct the permit holder to disable the Changeable Message Sign:
  - 1) In cases of emergency; or
  - 2) When the contact is not responsive within a reasonable period of time.
- e. If the Town determines that the Changeable Message Sign:
  - 1) Impairs the vision of the driver of any motor vehicle; or
  - 2) Otherwise interferes with the operation of a motor vehicle;

Then upon request from the Town, the Owner of the Changeable Message Sign shall take appropriate action within twelve (12) hours. Failure to remedy the problem within twelve (12) hours may be cause for revocation of the sign permit.

- f. A Changeable Message Sign shall contain a default design that will freeze the sign in a dark or blank position if a malfunction occurs.
- g. No Changeable Message Signs shall be located within three hundred feet (300') of any building used primarily as a residence, unless the Owner of the building consents in writing to such sign.

- N. **Public Utility Installed Lighting.** Lighting installed by public utilities will be reviewed on a case-by-case basis to determine how the preferred fixtures and all appurtenances comply with this Ordinance. At minimum, the public utility should submit for review manufacturer cut sheets for each item required for installation of the lighting system. These items shall include but not be limited to the following: Equipment, project specific with model numbers and sizes; Luminaires; Light Poles; Mast Arms; Foundations;

Underground Wiring; Fusing and Fuse Kits; and Pole wiring. All lighting locations should comply with approved engineering site plans. Specific items approved for installation should be installed on the subject project site and not be substituted without previous written permission from the Town Engineer, or Town designee. Deviating from previously approved lighting items and/or plans may require removal and prevent acceptance of the entire lighting system.

- O. **Other Uses.** For uses not specifically listed in this Ordinance, but determined to be of a type, use, and or intensity that may be harmful to achieving the purpose of this Ordinance, the Town Engineer, or Town designee, depending on the purpose of the lighting, shall classify the lighting into one (1) of the categories noted above. Lighting of a decorative nature will be reviewed on a case-by-case basis. Requirements of this Ordinance may be waived for decorative lighting based on the use, location, and need of the installation.
- P. **Prohibited Outdoor Lighting.** Signs or lights that contain oscillating, rotating, flashing, lasers, intermittent or moving light or lights, except the following:
1. Signs or lights which give public service information including but not limited to time, weather, date and temperature and multiple message signs with displays that change not more frequently than once every ten (10) seconds.
  2. Illuminated poles supporting business or brand identification signs inside business areas with constant illumination and color and in which the only movement is a slow rotation of the entire body of the sign so as to be visible from all directions.
  3. On premise signs which comply with the multiple message designation.
- Q. **Exemptions.** The following are exempt from the lighting requirements of this Ordinance, provided that they have no glare or other harmful effects on adjoining streets or properties:
1. Holiday Decorations;
  2. Window Displays;
  3. Underwater lighting commonly found in swimming pools and other water features;
  4. Lighting for Public Monuments and Statuary;
  5. Temporary Lighting for theatrical, television, performance areas, construction sites, or other events approved by the Town;
  6. Lighting that is necessary during emergency conditions; and
  7. Decorative yard and/or landscape lighting.
- R. **Definitions.** Definitions and terms used in this Ordinance shall be defined by the Illumination Engineering Society of North America, latest edition.
- S. **Waiver.** Request for a waiver from requirements of this Ordinance may be initiated by written application, which specifically denotes what provisions of this Ordinance relief is being sought. The Application for waiver will be considered and approved by the Plan Commission. The Plan Commission may grant waivers of the requirements of this Ordinance in cases where it is demonstrated that a hardship exists on the property whereby the full requirements of this Ordinance are impractical to implement. The Plan Commission may impose conditions when approving a written request.

- T. **Enforcement and Non-Conforming.** All existing luminaire installations used for outdoor lighting that do not presently comply with the requirements of this Ordinance will be considered legal non-conforming. In the event that a cumulative total of fifty percent (50%) or more of the non-conforming luminaires or their supporting structures are changed, replaced (excluding routine maintenance and bulb/driver replacement or equal light output), or relocated, then all of the luminaire installations must be removed and comply with the current requirements of this Ordinance. The Town or Town designee is hereby authorized to inspect luminaries and lighting installations to determine compliance with the applicable provisions of this Ordinance.