ORDINANCE NO. 19-5-19

AN ORDINANCE AMENDING THE VILLAGE CODE OF THE VILLAGE OF HAWTHORN WOODS – ADDING CHAPTER 19, OUTDOOR LIGHTING; AMENDING TITLE 9, SECTION 9-6A-4, EXTERIOR LIGHTING RESTRICTED; AMENDING TITLE 9, SECTION 9-6A1-4, EXTERIOR LIGHTING RESTRICTIONS; AMENDING TITLE 9, SECTION 9-6B-4, CONDITION OF USE; AMENDING TITLE 9, SECTION 9-7-6, DESIGN STANDARDS AND REQUIRED IMPROVEMENTS; AMENDING TITLE 9, SECTION 9-9A-3 PICTORIAL EXHIBITS; AMENDING TITLE 9, SECTION 9-9A-6, STREETSCAPE/LANDSCAPE ELEMENTS; AMENDING TITLE 9, SECTION 9-9A-7, SIGNS; AMENDING TITLE 9, SECTION 9-9B-3, SPECIAL USES; AMENDING TITLE 9, SECTION 9-9B-4, EXTERIOR LIGHTING RESTRICTIONS; AMENDING TITLE 9, SECTION 9-9C-4, EXTERIOR LIGHTING RESTRICTIONS; AMENDING SECTION 9-11-3, ADDITIONAL REGULATIONS, PARKING; AMENDING TITLE 9, SECTION 9-12-3, GENERAL REQUIREMENTS; AMENDING TITLE 9, SECTION 9-12-9, SIGNS ON PROPERTY ADJACENT TO U.S. ROUTE 12 AND OTHER U.S. HIGHWAYS DESIGNATED AS FEDERAL AID PROGRAM HIGHWAYS; AMENDING TITLE 9, SECTION 9-13-8, GLARE; AMENDING TITLE 9, SECTION 9-15-7, STANDARDS; AND AMENDING TITLE 2, SECTION 2-2-6, CERTIFICATES OF APPROVAL

WHEREAS, the Village of Hawthorn Woods, as applicant, filed an application for an amendment to the Zoning Ordinance of the Village of Hawthorn Woods, Title 9 of the Village Code; and,

WHEREAS, Notice of Public Hearing on said amendment to the Village of Hawthorn Woods Zoning Ordinance was published in the Daily Herald newspaper, on or about August 10, 2019, all as required by the statutes of the State of Illinois and the ordinances of the Village of Hawthorn Woods; and,

WHEREAS, a Public Hearing was conducted by the Planning, Building and Zoning Commission (PB&Z) of the Village of Hawthorn Woods on August 27, 2019, pursuant to said Notice, all as required by the statutes of the State of Illinois and the ordinances of the Village of Hawthorn Woods; and,
WHEREAS, at said Public Hearing, the applicant provided testimony in support of the proposed amendment to the Village of Hawthorn Woods Zoning Ordinance, and all interested parties had an opportunity to be heard; and,

WHEREAS, the Mayor and Board of Trustees of the Village of Hawthorn Woods have received the recommendations of the PB&Z as set forth in the PB&Z minutes and by this reference, are incorporated herein.

BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Hawthorn Woods, Lake County, Illinois, as follows:

SECTION ONE: That Title 9, Chapter 19 of the Village Code of the Village of Hawthorn Woods entitled "OUTDOOR LIGHTING" is hereby added as follows:

"...

Chapter 19
OUTDOOR LIGHTING

9-19-1: PURPOSE AND APPLICABILITY:
9-19-2: DEFINITIONS:
9-19-3: GENERAL REQUIREMENTS:
9-19-4: NON-RESIDENCE ZONING DISTRICT ILLUMINATION STANDARDS:
9-19-5: RESIDENCE ZONING DISTRICT ILLUMINATION STANDARDS:
9-19-6: LIGHTING BY SPECIAL PERMIT ONLY:
9-19-7: EXISTING LIGHTING AND CONFORMANCE:
9-19-8: PROCEDURAL REQUIREMENTS:
9-19-9: APPEALS FOR VARIATION:
9-19-10: ENFORCEMENT AND PENALTIES:

9-19-1: PURPOSE AND APPLICABILITY:

A. The purpose of this Chapter is to provide regulations for outdoor lighting that will:

1. Permit the use of outdoor lighting that does not exceed the minimum levels specified in IES recommended practices or this Chapter 19 for night-time safety, utility, security, productivity, enjoyment, and commerce.

2. Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light.
3. Curtail light pollution, reduce skyglow and improve the nighttime environment.

4. Help protect the natural environment from the adverse effects of night lighting.

5. Conserve energy and resources to the greatest extent possible.

B. All zoning lots in all existing zoning districts and in all zoning districts that shall be created after the effective date of this Chapter 19 shall comply with the provisions of this Chapter 19 unless specifically exempted herein.

C. For organization and clarity, references are made within this Chapter 19 to non-residence zoning districts (Section 9-6 – Section 9-9C) and residence zoning districts (Section 9-5). These zoning districts are defined in Section 9-4.

9-19-2: DEFINITIONS:

ABANDONMENT: Discontinuance in the usage of a lighting installation, or portion thereof, with no intention to resume the usage of such lighting. A lighting installation or portion thereof that has not been operated for a period of 180 days or longer shall be abandoned.

ARCHITECTURAL LIGHTING: Outdoor lighting directed at buildings, facades, structures, monuments, and other architectural features.

BACKLIGHT: For an exterior luminaire, lumens emitted in the quarter sphere below horizontal and in the opposite direction of the intended orientation of the luminaire. For luminaires with symmetric distribution, backlight will be the same as front light.

BILLBOARD: A surface whereon advertising matter is set in view conspicuously and which advertising does not apply to premises or any use of premises wherein it is displayed or posted.

BUG: A luminaire classification system that classifies backlight (B), up light (U) and glare (G).

BUILDING LIGHTING: All luminaires mounted on or used to illuminate the exterior of a building, including any luminaires under the roofline.

CANOPY: A roofed structure that is open on at least three sides and typically provides protection from the sun or weather, which is associated with the sale of commercial goods or services.

CANOPY LIGHTING: All luminaires mounted to and used to illuminate the area under a canopy.

CORRELATED COLOR TEMPERATURE: Specification of the color appearance of the light emitted by a lamp, relating its color to the color of light from a reference source when heated to a temperature, measured in degrees Kelvin (K).

CURFEW: A time defined by the authority when outdoor lighting is reduced or extinguished.

EMERGENCY EGRESS LIGHTING: A battery-backed lighting device designed to come on automatically when a building experiences a power failure or emergency.

FULLY SHIELDED: A light fixture constructed and mounted such that all light emitted by the fixture, either directly from the lamp or indirectly by reflection or refraction from any part of the light fixture, is
projected below the horizontal. If the lamp, any reflective surface, or lens cover (clear or prismatic) is visible when viewed from above or directly from the side, from any angle around the fixture, the fixture is not fully shielded.

GLARE: A visual disturbance produced by a distinct light source within the visual field that is sufficiently brighter than the level to which the eyes are adapted.

HARDSCAPE: Permanent hardscape improvements to the site including parking lots, drives, entrances, curbs, ramps, stairs, steps, medians, walkways and non-vegetated landscaping that is 10 feet or less in width.

ILLUMINANCE: The amount of visible light, as measured in lumens, falling onto a unit of surface area, correlating to the perception of brightness by the human eye.

INSTALLED HEIGHT: The height above average finished grade of the lowest point on an installed luminaire.

KELVIN: A unit increment of temperature and is used as a color temperature scale of a light bulb (symbol "K").

LAMP: The source of light being emitted from a luminaire, such as a bulb.

LANDSCAPE LIGHTING: Outdoor lighting directed at trees, shrubs, plants, flower beds, fountains, gardens, and other natural or landscaped features.

LIGHT: Electromagnetic radiation within a range of wavelengths enough for visual perception by the normal, unaided human eye.

LIGHTING INSTALLATION: An arrangement of one or more luminaires, including any mounting hardware, brackets, and supporting structures.

LOW VOLTAGE LANDSCAPE LIGHTING: Landscape lighting powered at less than 15 volts and limited to luminaires having a rated initial luminaire lumen output of 525 lumens or less.

LUMEN: The unit used to measure the amount of light which is produced by a lamp.

LUMINAIRE: An individual lighting assembly, including the lamp and any housings, reflectors, globes, lenses, shields or other components designed to block or distribute light.

MANUFACTURER'S CUT SHEET: A description of each luminaire identified in the site plan, including the manufacturer, part number, model number, a photograph or catalog cut, correlated color temperature (CCT), photometric data verifying any compliance requirements specified within this Chapter 19, light output in initial lumens, shielding or glare reduction devices, lamp type, on/off control devices and the location of each luminaire as identified in the site plan.

MOTION-ACTIVATED SENSOR: A sensor which causes a luminaire to become illuminated automatically upon the presence of motion or infrared radiation or a combination thereof within its field of view.

NEON LIGHT: Brightly colored light generated by using electric current to excite a gas or gas mixture (including neon, argon, helium, or other gases) typically contained in a tube which can be bent into various forms for use as decoration or signs. For the purposes of this Part 20, fluorescent tubes are not considered neon light.
NONCONFORMING USE: Any use which was legally established prior to the effective date of this Chapter 19, or subsequent amendment to it, and which would not be permitted to be established as a new use in the zone in which it is located by the regulations of this Chapter 19.

ORGANIZED SPORTING EVENT: A prearranged sports or recreational event involving at least one group or team with a published roster and schedule.

OUTDOOR ATHLETIC FIELD: An open outdoor field, court, or track or similar facility used for athletic activity or playing sports such as baseball, soccer, football, tennis, skate park, volleyball, and basketball.

OUTDOOR LIGHTING: Light generated from an indoor or outdoor source that provides illumination to a surface, building, sign, structure, device, or other outdoor feature which is visible to an observer located outdoors.

PARKING LOT LIGHTING: All luminaires used to illuminate the parking lot.

PHOTOMETRIC PLAN: An illuminance grid plan for multi-fixture lighting installations that demonstrates compliance with all applicable requirements set forth in this Chapter 19.

SEARCHLIGHT: A lighting installation designed to project a high-intensity beam of approximately parallel rays of light that is typically used to sweep the sky for promotional purposes.

SINGLE-PURPOSE EMERGENCY EGRESS LIGHTING: A battery-backed lighting device designed to come on automatically when a building experiences a power failure or emergency. A single-purpose fixture can only be used for the sole purpose of emergency egress lighting. It shall not be considered as exempt from the provisions of this Chapter 19 when used as a dual-purpose fixture.

STREET LIGHTING: One or more luminaires or light installations designed to illuminate a public roadway or intersection.

TEMPORARY HOLIDAY DECORATION LIGHTING: Festoon type lights, limited to small individual bulbs on a string, where the spacing of bulbs is not closer than three inches and where the output per bulb is no greater than 15 lumens. Lighting installed and operated for periods not to exceed 60 days, completely removed and not operated again for at least 30 days. Temporary lighting may not exceed 90 days annually.

TEMPORARY LIGHTING: Lighting installed and operated for periods not to exceed 60 days, completely removed and not operated again for at least 30 days. Temporary lighting may not exceed 90 days annually.

UPLIGHT: Lighting applications which direct light above a horizontal plane.

VARIATION: A dispensation permitted on individual parcels or property as a method of alleviating unnecessary hardship by allowing a reasonable use of the building, structure or property, which, because of unusual or unique circumstances, is denied by the terms of this Part 20.

VEHICLE SERVICE STATION (GAS STATION): Any building or premises used for dispensing or offering for sale automotive fluids or oils, having pumps and underground storage tanks; also, where battery, tire, and other similar services are rendered, but only if rendered wholly within a building. Automobile service stations shall not include the sales or storage (new or used) of automobiles, trailers, or other vehicles. Automobile service stations shall include mini-marts as a special use.
ZONING LOT: A parcel of land, composed of one or more recorded lots or a parcel of land described by metes and bounds, that is of sufficient size to meet the minimum district requirements of this Chapter 19 and having frontage on an improved public or private street, and which is designated by its owner or developer as a tract of land to be used, developed, or built upon as a unit, under a single ownership or control.

9-19-3: GENERAL REQUIREMENTS:

A. All outdoor lighting in conformance with the provisions of this Chapter, applicable Electrical and Energy Codes, and not to exceed the minimum levels specified by IES recommended for nighttime safety, utility, security, productivity, enjoyment, and commerce shall be warranted by the Village of Hawthorn Woods upon review and approval.

B. Except as described below, all outdoor lighting installed after the date of effect of this Chapter 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 any third party.

1. Exceptions:

   a) Lighting within public right-of-way or easement for the principal purpose of illuminating streets or roads. No exemption shall apply to any lighting within the public right-of-way or easement when the purpose of the luminaire is to illuminate areas outside the public right-of-way or easement, unless regulated by requirements set forth within this Chapter 19.

   b) Lighting for public monuments and statuary.

   c) Lighting solely for signs (lighting for signs is regulated by Section 9-12).

   d) Repairs to existing luminaires not exceeding 25% of total installed luminaires.

   e) Temporary lighting for theatrical, television, performance areas and construction sites, including portable lighting temporarily used for maintenance or repair that is not deemed by the Village to create a nuisance or hazard.

   f) Underwater lighting in swimming pools and other water features.

   g) Temporary holiday decoration lighting.

   h) Emergency response lighting used by police, fire-fighting, emergency management, or medical personnel at their discretion as long as emergency medical services asserts that the emergency continues to exist.

   i) Lighting required by Village, county, state, or federal law, including single-purpose emergency egress lighting.

   j) Low voltage landscape lighting controlled by an automatic device that is set to turn the lights off at one hour after the site is closed (non-residence zoning district) or 10:00 p.m. (residence zoning district).
k) Decorative yard lighting characterized by a fossil fuel source.

l) Lighting for special events approved by the Village upon approval of Chief Operating Officer

m) Outdoor recreation and/or athletic fields provided the following conditions are met:

1) Illuminating Engineering Society (IES) lighting guidelines (RP-6) are followed according to the appropriate class of play.

2) Field lighting is provided exclusively for illumination of the surface of play and viewing stands, and not for any other applications. Off-site impacts of the lighting will be limited to the greatest practical extent possible.

3) A maximum installed height of 50 feet shall be permitted for light of outdoor recreation and/or athletic fields on public property in all zoning districts.

C. Lighting controls shall be provided that automatically extinguish all outdoor lighting when enough daylight is available using a control device or system such as a photoelectric switch, astronomic time switch or equivalent functions from a programmable lighting controller, building automation system or lighting energy management system, all with battery or similar backup power or device.

1. Exceptions:

   a) Lighting under canopies.

   b) Lighting for tunnels, parking garages, garage entrances, and similar conditions.

D. Outdoor lighting (including, but not limited to, parking lot, area, architectural lighting, landscape, etc.) on any zoning lot within a non-residence zoning district is permitted to be illuminated between one-half hour before sunset and 10:00 p.m. or one hour after the close of business based on normal hours of operation, whichever is later. Thereafter, for safety purposes, lighting is permissible for all-night lighting at full power if the property owner presents their case to the Village on why the zoning lot can not comply with the curfew requirements set forth within this Chapter 19. During non-permitted outdoor lighting hours, no luminaire shall exceed its light output exhibited during permitted outdoor lighting hours.

1. Exceptions:

   a) Street lighting located at traffic safety related intersections or cul-de-sacs are permitted to be illuminated between one-half hour before sunset and one-half hour after sunrise.

   1) Street lighting located elsewhere is not permitted unless determined it is required for safety concerns and upon review and approval of the Village or its designee. If safety conditions warrant as determined by the Chief of Police or his/her designee, lighting is permissible for all-night lighting only at those designated areas. Street lighting is permissible at a total light output not greater than 30% of the total light output between 10:00 p.m. and one-half hour before sunrise.
2) Street lighting elsewhere in the Village is to only be illuminated one-half hour before sunset and 10:00 p.m. and one-half hour before sunrise and one-half hour after sunrise.

b) Apart from landscape lighting, lighting for residential properties including multiple residential properties not having common areas.

c) When the outdoor lighting consists of only one luminaire.

d) Lighting for steps, walkways and building entrances required by Code.

e) Lighting levels must be maintained if ordered by the Village.

f) Motion activated lighting.

g) Businesses that are open for 24 hours.

h) Lighting governed by a special use permit in which times of operation are specifically identified.

i) Outdoor recreation and/or athletic fields

1) Outdoor lighting of the outdoor athletic field of an organized event on public property that is in progress at the close of permitted outdoor lighting hours shall be allowed to remain illuminated until 30 minutes after the conclusion of the event but no later than 10:00 p.m. Thereafter, for an additional 30 minutes, lighting is permissible at a total light output not greater than 30% of the total light output from all outdoor lighting of a recreation and/or athletic field for additional tasks other than active play (e.g. field maintenance). No outdoor lighting of the outdoor athletic field for any sport or recreational purpose shall be initiated after 10:00 p.m.

2) Lighting controls shall be provided to prevent outdoor lighting of a recreation and/or athletic field to accidentally remain on overnight using a control device or system such as an astronomic time switch or equivalent function from a programmable lighting controller, building automation system or lighting energy management system, all with battery or similar backup power or device.

E. Any luminaire's light source which is used for outdoor lighting within a non-residence zoning district or residence zoning district shall have a correlated color temperature (CCT) not to exceed 3000K.

F. Any luminaire with a light output exceeding 1,000 initial luminaire lumens which is used for outdoor lighting within a non-residence zoning district or residence zoning district shall have necessary shielding and/or beam-angle control and/or shall be installed in the proper orientation to achieve fully shielded performance with respect to a horizontal plane. Any luminaire less than 1,000 initial luminaire lumens do not require shielding.
1. If a motion-activated sensor that illuminates the luminaire for no more than 5 minutes upon activation is used, however, said luminaire shall have a light output of up to 2,000 initial luminaire lumens.

G. Any luminaire which is used for uplighting within a non-residence zoning district or residence zoning district shall have necessary beam-angle control and/or shall be aimed substantially to confine the directed light to the object intending to be illuminated. Uplighting shall only be permitted for landscape lighting, architectural lighting, flag lighting, and lighting of ground-mounted signs (Section 9-12). Uplighting shall meet the following requirements:

<table>
<thead>
<tr>
<th>Uplighting Application</th>
<th>Maximum Inclination</th>
<th>Maximum Light Output (Lumens)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Lighting</td>
<td>60°</td>
<td>1,000 (up to 45°)</td>
</tr>
<tr>
<td>Architectural Lighting</td>
<td>45°</td>
<td>800 (up to 60°)</td>
</tr>
<tr>
<td>Flag Lighting</td>
<td>60°</td>
<td>1,000 (up to 45°)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>800 (up to 60°)</td>
</tr>
</tbody>
</table>

H. Except for street lighting, light emitted from outdoor lighting within a non-residence zoning district or residence zoning district shall be mitigated onto adjacent properties via maximum allowable backlight, up light and glare (BUG) ratings defined on a manufacturer's cut sheet:

1. A luminaire may be used if it is rated equivalent or lower in number for all ratings B, U, G.

a) Allowed backlight (B) rating:

1) For property lines that abut public walkways, bikeways, plazas, and parking lots, the property line may be 5 feet beyond the actual property line for purpose of determining compliance. For property lines that abut public roadways and public transit corridors, the property line may be the centerline of the public roadway or public transit corridor for the purpose of determining compliance.

2) A luminaire located no greater than two mounting heights from the property line shall not exceed a backlight (B) rating of B4.

3) A luminaire less than two mounting heights but greater than one mounting height from the property line and oriented so that the backlight portion of the light output is perpendicular to the property line of concern shall not exceed a backlight (B) rating of B3.

4) A luminaire less than one mounting heights but greater than ½ mounting height from the property line and oriented so that the backlight portion of the light output is perpendicular to the property line of concern shall not exceed a backlight (B) rating of B2.

5) A luminaire less than ½ a mounting height from the property line and oriented so that the backlight portion of the light output is perpendicular to the property line of concern shall not exceed a backlight (B) rating of B0.

b) Allowed up light (U) rating:
1) Any luminaire within a non-residence zoning district or residence zoning district shall not exceed an uplight (U) rating of U0 or emit no light above the horizontal plane (90°) unless otherwise stated herein.

c) Allowed glare (G) rating:

1) A luminaire less than two mounting heights but greater than one mounting height from the property line and oriented so that the backlight portion of the light output is perpendicular to the property line of concern shall not exceed a glare (G) rating of G1.

2) A luminaire less than one mounting heights but greater than ½ mounting height from the property line and oriented so that the backlight portion of the light output is perpendicular to the property line of concern shall not exceed a glare (B) rating of G0.

3) A luminaire less than ½ a mounting height from the property line and oriented so that the backlight portion of the light output is perpendicular to the property line of concern shall not exceed a glare (G) rating of G0.

2. Luminaires equipped with adjustable mounting devices permitting alteration of luminaire aiming shall not be permitted.

I. For the purpose of this Chapter 19, the initial luminaire lumens (absolute photometry) of a solid-state luminaire, such as an LED is defined on a manufacturer's cut sheet. Other luminaires tested with relative photometry will have initial luminaire lumens which can be calculated by multiplying initial lamp lumens by the luminaire efficiency.

J. Any luminaire used for street lighting shall be a fully shielded LED light source in correlated color temperature (CCT) not to exceed 3000K as measured in degrees Kelvin and shall be installed in the proper orientation to achieve fully shielded performance with respect to a horizontal plane at all public and private streets. Said luminaire, as well as any poles, brackets, supports, and mounting hardware, shall be reviewed by the Village.


   a) Recommended Illuminance Values for Street Lighting:
<table>
<thead>
<tr>
<th>Street</th>
<th>Pedestrian Conflict Area</th>
<th>Illuminance (fc)</th>
<th>Uniformity Ratio</th>
<th>Veiling Luminance Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>High</td>
<td>1.7</td>
<td>3.0</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collector</td>
<td>High</td>
<td>1.2</td>
<td>4.0</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>High</td>
<td>0.9</td>
<td>6.0</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major/Major Intersection</td>
<td>High</td>
<td>3.4</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major/Collector Intersection</td>
<td>High</td>
<td>2.9</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major/Local Intersection</td>
<td>High</td>
<td>2.6</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collector/Collector Intersection</td>
<td>High</td>
<td>2.4</td>
<td>4.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collector/Local Intersection</td>
<td>High</td>
<td>2.1</td>
<td>4.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local/Local Intersection</td>
<td>High</td>
<td>1.8</td>
<td>6.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalks</td>
<td>-</td>
<td>0.2-0.5</td>
<td>4.0</td>
<td>-</td>
</tr>
<tr>
<td>Pedestrian Walkways or Bikeways</td>
<td>-</td>
<td>0.5</td>
<td>4.0</td>
<td>-</td>
</tr>
</tbody>
</table>

9-19-4: NON-RESIDENCE ZONING DISTRICT ILLUMINATION STANDARDS:

A. The total light output from all luminaires (shielded and unshielded) used for outdoor lighting in a non-residence zoning district where a property has no more than 10 parking spaces (including handicapped accessible spaces) shall not exceed 630 lumens per parking space. Lighting installations located under canopies shall only contribute to 50% toward this limit. Any luminaire with a light output exceeding 1,000 initial luminaire lumens shall have necessary shielding and/or beam-angle control and/or shall be installed in the proper orientation to achieve fully shielded
performance with respect to a horizontal plane. All unshielded luminaires shall only contribute 10% toward this limit.

B. The total light output from all luminaires (shielded and unshielded) used for outdoor lighting in a non-residence zoning district where a property has more than 10 parking spaces (including handicapped accessible spaces) shall not exceed 2½ lumens per square foot of hardscape. Lighting installations located under canopies shall only contribute to 50% toward this limit. Any luminaire with a light output exceeding 1,000 initial luminaire lumens shall have necessary shielding and/or beam-angle control and/or shall be installed in the proper orientation to achieve fully shielded performance with respect to a horizontal plane. All unshielded luminaires shall only contribute 10% toward this limit.

1. When lighting intersections of site drives and public streets or roadways, a total of 600 square feet for each intersection may be added to the actual site hardscape area to provide for intersection lighting.

2. Additional allowances for sales and service facilities:
   
a) Outdoor Sales Lot - 8 lumens per square foot
   
   1) This allowance is lumens per square foot of uncovered sales lots used exclusively for the display of vehicles or other merchandise for sale, and may not include driveways, parking or other non-sales areas. To use this allowance, luminaires must be within two mounting heights of sales lot area.

b) Outdoor Sales Frontage - 1,000 lumens per linear foot

   1) This allowance is for lineal feet of sales frontage immediately adjacent to the principal viewing location(s) and unobstructed for its viewing length. A corner sales lot may include two adjacent sides provided that a different principal viewing location exists for each side. In order to use this allowance, luminaires must be located between the principal viewing location and the frontage outdoor sales area.

c) Drive-Up Windows - 4,000 lumens per drive-up window

   1) Luminaires must be within 20 feet horizontal distance of the center of the window in order to use this allowance.

d) Vehicle Service Station - 8,000 lumens per fuel pump

   1) This allowance is lumens per installed fuel pump.

e) No more than two allowances may be used per site.

C. The installed height of any luminaire used for outdoor lighting in a non-residence zoning district, except for street lighting, shall not exceed 25 feet above average finished grade to the lowest point on the installed luminaire.

D. Except as otherwise stated herein, any luminaire used for outdoor lighting in a non-residence zoning district which emits light directed at a building or other outdoor feature shall be located at
or above the top of said object and be aimed and controlled so that the direction of all emitted light is at or below horizontal and the directed light is substantially confined to the object intended to be illuminated.

9-19-5: RESIDENCE ZONING DISTRICT ILLUMINATION STANDARDS:
A. The total light output from all luminaires (shielded and unshielded) used for outdoor lighting in a residence zoning district shall not exceed 10,000 lumens per net acre. All unshielded luminaires shall only contribute 10% toward this limit.

1. Additional restrictions for residence zoning district illumination:
   a) Any shielded luminaire may not exceed 1,260 lumens.
   b) One unshielded luminaire at the main entry may not exceed 630 lumens.
   c) Any other unshielded luminaire, excluding main entry, may not exceed 315 lumens.
   d) Low voltage landscape lighting aimed away from adjacent properties may not exceed 525 lumens per luminaire.
   e) Landscape lighting aimed away from adjacent properties may not exceed 1,000 lumens per luminaire subject to Section 9-19-3 of this Chapter 19.
   f) Fully shielded directional flood lighting aimed so that direct glare is not visible from adjacent properties may not exceed 1,260 lumens per luminaire.
   g) Lighting installed with a vacancy sensor may have a light output of up to 2,000 initial luminaire lumens where the sensor extinguishes the lights no more than 5 minutes after the area is vacated.

B. The installed height of any luminaire used for outdoor lighting in a residence zoning district shall not exceed 20 feet above average finished grade to the lowest point on the installed luminaire.

9-19-6: LIGHTING BY SPECIAL PERMIT ONLY:
A. The following high intensity and special purpose lighting are prohibited from being installed or used except by special use permit granted by Chief Operating Officer for temporary use:

1. Temporary lighting in which any single luminaire exceeds 20,000 initial luminaire lumens or the total lighting load exceeds 160,000 lumens.
2. The use of a laser light source.
3. The use of searchlights.
4. The use of flickering, flashing, blinking, scrolling or rotating lights and any illumination that changes intensity.
5. The use of neon light to accent buildings, architectural features, polished or glass exterior surfaces or to attract attention.
6. Architectural lighting of any portion of a building or structure with a polished or glass exterior surface that uses uplighting.

7. The use of upward-directed lighting, except as otherwise permitted herein.

B. To obtain such a permit, applicants shall demonstrate:

1. The proposed lighting installation has sustained every reasonable effort to mitigate the effects of light on the environment and surrounding properties, supported by a signed statement describing the mitigation measures.

2. Employs lighting controls to reduce or extinguish lighting at a project specific curfew time to be established in the permit.

C. The Village shall review each such application. A permit may be granted if, upon review, the Village believes that the proposed lighting will not create unwarranted glare, sky glow, or light trespass and meets curfew requirements set forth within this Chapter 19.

9-19-7: EXISTING LIGHTING AND CONFORMANCE:

A. Any existing luminaire or lighting installation used for outdoor lighting in either residence zoning district or non-residence zoning district that does not presently comply with the requirement of this Chapter 19 shall be considered a nonconforming use. On or before December 31, 2029, all lighting for existing uses shall comply with this Chapter 19.

B. Whenever there is a new use of a property or the use on the property is changed, all outdoor lighting on the property shall be brought into compliance with this Chapter 19 before the new or changed use commences.

C. If any of the following criteria occur for a nonconforming luminaire or light installation existing in either residence zoning district or non-residence zoning district that does not presently comply with the requirement of this Chapter 19, then the luminaire or light installation shall be required to comply with this Chapter 19 or must be removed within a time set by the Village (90 days minimum):

1. The luminaire is producing glare that is deemed by the Village to create a hazard or nuisance.

2. A luminaire is changed or replaced (excluding routine maintenance or light source replacement of equal lumens output), except if it is part of a parking lot lighting installation that consists of multiple identical luminaires on one pole.

3. The supporting structure for the luminaire is changed or replaced, except if it is part of a parking lot lighting installation that consists of multiple identical luminaires on one pole.

4. The use of a luminaire or light installation is resumed after a period of abandonment of 180 days or more.
5. Site improvements or building additions which result in an increase in parking spaces, gross floor or hardscape area, dwelling units with a single improvement or cumulative improvements equal to or greater than 25% of the original infrastructure shall require full compliance with this Chapter 19.

6. If a cumulative total of 25% or more of the nonconforming luminaires or their supporting structures are changed, removed, replaced (excluding routine maintenance or light source replacement of equal lumens output), or relocated for any of the following lighting categories:
   
   a) Parking lot lighting.
   
   b) Building-mounted lighting.
   
   c) Landscape lighting.
   
   d) Canopy lighting.

Then full compliance is required within that lighting category and in compliance with this Chapter 19 regarding the whole site.

**9-19-8: PROCEDURAL REQUIREMENTS:**

A. For development applications within a residence zoning district or non-residence zoning district where outdoor lighting is required or proposed, or for properties subject to Section 9-19-7 of this Chapter 19, photometric plans shall be submitted to the Village for review and approval.

B. During the preliminary approval process, a photometric plan is required, which shall indicate the location of each existing and proposed luminaire, the installed height of said luminaires, and the overall lumens and area of the entire zoning lot. The plan shall also indicate any existing luminaires; specify the location of said luminaires and the installed height of said luminaires. All luminaires shall be noted on a luminaire schedule, which must be submitted as a part of the plan submission. Additionally, manufacturer's cut sheets including the BUG rating must be submitted for each fixture. The plan shall include a calculation of the lumens per square foot or per parking space if less than 10 spaces on site.

C. If any revisions occur to the photometric plan or to any luminaires between the preliminary and final development approval process, the Village must be notified. A revised photometric plan and manufacturer's cut sheets must also be submitted. Any revisions to any luminaires shall be noted on a luminaire schedule, which must be submitted as a part of the revised plan submission.

D. During the final approval process, a photometric plan which shows all site lighting must be submitted. This includes all exterior building lighting, parking lot lighting and landscape lighting. The plan shall indicate the location of each existing and proposed luminaire, the installed height of said luminaires, and the overall lumens and area of the entire zoning lot. All luminaires shall be noted on a luminaire schedule, which must be submitted as a part of the plan submission. The plan shall also indicate any existing luminaires, specify the location of said luminaires and the installed height of said luminaires. Additionally, manufacturer's cut sheets including the BUG rating must be submitted for each fixture. The plan shall include a calculation of the lumens per square foot or per parking space if less than 10 spaces on site.
E. Post-approval alterations to photometric plans or intended substitutions for approved lighting equipment shall be submitted to the Village for review and approval, with all plan submission requirements set forth within this Chapter 19, prior to installation.

F. The Village shall have the right to conduct a post-installation inspection to verify compliance with the requirements of this Chapter 19 and, if appropriate, to require remedial action at the expense of the applicant.

9-19-9: APPEALS FOR VARIATION:

A. Requests for variation from the requirements of this Chapter 19 shall be initiated by written application which seeks to vary the provisions of this Chapter 19. The application requesting variation shall be accompanied by a fee equal to the fee charged for a zoning variation (Section 9-6-10) and shall be submitted to the Village Clerk who will forward such application to the Zoning Board of Appeals for processing in accordance with applicable statutes of the State of Illinois and the provisions of this Chapter 19. The application shall indicate the specific provisions of this Chapter 19 which the applicant seeks to vary. A public hearing shall be conducted in accordance with the provisions of Section 9-16-7, as they pertain to and concern public hearings and variations. All recommendations and findings of the Zoning Board of Appeals on variations arrived at after the hearing shall be accompanied by findings of facts specifying the reason or reasons for recommending the approval or disapproval of the variation, and the decision of the Village Board shall be final and subject to judicial review only in accordance with applicable statutes of the State.

9-19-10: ENFORCEMENT AND PENALTIES:

A. Any such persons who is duly appointed as a Code Enforcement Officer are hereby authorized to inspect luminaires and lighting installations in all zoning districts subject to this Chapter 19 to determine compliance with the applicable provisions and, if necessary, to issue notices of violation to the owner, operator or entity responsible for maintenance of the luminaire or lighting installation, if the luminaire or lighting installation fails to comply with the provisions of this Chapter 19.

B. The notice of violation shall set forth an appropriate time period of not less than 90 days for compliance. In the event the violation is not corrected within the time limits set forth in the notice of violation, proceedings to enforce compliance with the provisions of this Chapter 19 shall be initiated and conducted in accordance with and pursuant to the provisions of Section 1-4.

C. Any person, firm, corporation or business entity who or which violates any provision of this Chapter 19 shall be subject to a fine as provided in Section 1-4-1 not less than $100 and not more than $750 for each separate offense. A separate offense shall be deemed committed on each day a violation occurs or continues to occur.

..."
SECTION TWO: That Title 9, Section 9-6A-4 of the Village Code of the Village of Hawthorn Woods entitled “EXTERIOR LIGHTING RESTRICTED” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...“ Exterior lighting shall be in accordance with the provisions outlined in Section 9-12 and Section 9-19.”

SECTION THREE: That Title 9, Section 9-6A1-4 of the Village Code of the Village of Hawthorn Woods entitled “EXTERIOR LIGHTING RESTRICTIONS” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...“ Exterior lighting shall be in accordance with the provisions outlined in Section 9-12 and Section 9-19.”

SECTION FOUR: That Title 9, Section 9-6B-4.E of the Village Code of the Village of Hawthorn Woods is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...“ E. Exterior lighting shall be in accordance with the provisions outlined in Section 9-12 and Section 9-19.”

SECTION FIVE: That Title 9, Section 9-7-6.N of the Village Code of the Village of Hawthorn Woods entitled “Illumination” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...“ N. Illumination: Exterior lighting fixtures shall be so installed in accordance with the provisions outlined in Section 9-12 and Section 9-19.”

SECTION SIX: That Title 9, Section 9-9A-3 of the Village Code of the Village of Hawthorn Woods entitled “PICTORIAL EXHIBITS” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:
SECTION SEVEN: That Title 9, Section 9-9A-6.E.3 - 7 of the Village Code of the Village of Hawthorn Woods entitled “Lighting” is hereby deleted in its entirety and, the following language shall be substituted:

"...” 3. Exterior lighting shall be in accordance with the provisions outlined in Section 9-12 and Section 9-19.”

SECTION EIGHT: That Title 9, Section 9-9A-7.J of the Village Code of the Village of Hawthorn Woods entitled “Illumination” is hereby deleted in its entirety thereof and, the following language shall be substituted:

"...” J. Illumination: Signs shall be illuminated in accordance with the provisions outlined in Section 9-12.”

SECTION NINE: That Title 9, Section 9-9B-3.D.2 and 3 of the Village Code of the Village of Hawthorn Woods is hereby deleted in its entirety and, the following language shall be substituted:

"...” 2. Signs shall be illuminated in accordance with the provisions outlined in Section 9-12.

3. Reserved.”

SECTION TEN: That Title 9, Section 9-9B-4 of the Village Code of the Village of Hawthorn Woods entitled “EXTERIOR LIGHTING RESTRICTIONS” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

"...” Exterior lighting shall be in accordance with the provisions outlined in Section 9-12 and Section 9-19.”

SECTION ELEVEN: That Title 9, Section 9-9C-4 of the Village Code of the Village of Hawthorn Woods entitled “EXTERIOR LIGHTING RESTRICTIONS” is hereby deleted in its
entirety and in lieu thereof, the following language shall be substituted:

"..." Exterior lighting shall be in accordance with the provisions outlined in Section 9-12 and Section 9-19."

SECTION TWELVE: That Title 9, Section 9-11-3.H.4 of the Village Code of the Village of Hawthorn Woods entitled “Lighting” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

"..." 4. Lighting: Any lighting used to illuminate off street parking areas shall be in accordance with the provisions outlined in Section 9-19."

SECTION THIRTEEN: That Title 9, Section 9-12-3.C.1 and 2 of the Village Code of the Village of Hawthorn Woods entitled “Lighting and Color” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

"..." 1. Luminance levels for sign operation shall not exceed 100 candelas per square meter as measured from the brightest element of the sign’s face. A written certification from the sign manufacturer shall be provided by the manufacturer that the light intensity has been factory pre-set so it shall not exceed 100 candelas per square meter.

2. Any luminaire which is used for up lighting within a non-residence zoning district or residence zoning district shall have necessary beam-angle control and/or shall be aimed substantially confine the directed light to the object intending to be illuminated. Up lighting shall meet the following requirements for ground-mounted, non-internally illuminated signs:

<table>
<thead>
<tr>
<th>Uplighting Application</th>
<th>Maximum Inclination</th>
<th>Maximum Light (Lumens)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign Lighting</td>
<td>45°</td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

3. Except as otherwise stated herein any luminaire on any zoning lot which emits light at a sign shall be located at or above the top of said sign and be aimed and controlled so that the direction of
all emitted light is at or below horizontal and the directed light is substantially confined to the object intended to be illuminated.

4. On any zoning lot within a non-residence zoning district a sign is permitted to be illuminated a half hour before sunrise and 10:00 p.m. or one hour after the close of business based on normal hours of operation, whichever is later.”

SECTION FOURTEEN: That Title 9, Section 9-12-9.E.3. of the Village Code of the Village of Hawthorn Woods is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...” 3. Except as otherwise stated herein signs shall be illuminated in accordance with the provisions outlined in subsection 9-12-3C of this Title.”

SECTION FIFTEEN: That Title 9, Section 9-13-8 of the Village Code of the Village of Hawthorn Woods entitled “GLARE” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...” In any district, any operation or activity producing glare at night shall be conducted so that direct and/or indirect illumination shall be mitigated onto adjacent properties in accordance with the provisions outlined in Section 9-19.”

SECTION SIXTEEN: That Title 9, Section 9-15-7.D.2.k. of the Village Code of the Village of Hawthorn Woods is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

...” k. Outdoor lighting shall be so designed in accordance with the provisions outlined in Section 9-19.”

SECTION SEVENTEEN: That Title 2, Section 2-2-6.C.2.k. of the Village Code of the Village of Hawthorn Woods is hereby deleted in its entirety and in lieu thereof, the following
language shall be substituted:

"..." k. Exterior lighting, when used, shall enhance the building design and the adjoining landscape. Lighting standards and fixtures shall be of a design and size in accordance with Title 9, Chapter 19: Outdoor Lighting."

SECTION EIGHTEEN: That Title 2, Section 2-2-6.C.3.g. of the Village Code of the Village of Hawthorn Woods entitled “Exterior Lighting” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

"..." g. Exterior Lighting: Exterior lighting shall be part of the architectural concept. Fixtures, standards, mailboxes and all exposed accessories shall be harmonious with building design and in accordance with Title 9, Chapter 19: Outdoor Lighting."

SECTION NINETEEN: That Title 2, Section 2-2-6.C.4.f. of the Village Code of the Village of Hawthorn Woods entitled “Exterior Lighting” is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

"..." f. For lighting and color of signs see Section 9-12."

SECTION TWENTY: That Title 2, Section 2-2-6.C.5.d. of the Village Code of the Village of Hawthorn Woods is hereby deleted in its entirety and in lieu thereof, the following language shall be substituted:

"..." Lighting in connection with miscellaneous structures and street hardware shall meet the criteria applicable to site, landscape, buildings and signs as outlined in Title 9, Chapter 19: Outdoor Lighting and Chapter 12: Signs."

SECTION TWENTY-ONE: That all ordinances and resolutions, or parts thereof, in conflict with the provisions of this Ordinance are, to the extent of such conflict, expressly repealed.
SECTION TWENTY-TWO: That this Ordinance shall be in full force and effect from and after its passage and approval as provided by law.

The foregoing Ordinance was adopted by a roll call vote as follows:

AYES: Kaiser, Hopix, Rico, Corrigan, Dimaggio, Davis

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0

APPROVED: Joseph Mancino, Mayor

ATTEST: Donna Lobaito, Village Clerk

PASSED: Sept. 23, 2019

APPROVED: Sept. 23, 2019

PUBLISHED: Sept. 24, 2019