

580.8 Outdoor Recreation/Sports Facility Lighting Requirements (PROPOSAL)

When an outdoor recreation/sports facility has illuminated playing fields/courts that, individually or cumulatively, exceed 10,000 square feet in area, and/or associated light poles that exceed 20 feet in height, the playing fields/courts shall be subject to the provisions of this Section. Other components of such facilities, to include, but not limited to, parking lots, administrative offices, restrooms, ticket sales, concession stands and bleachers or other spectator viewing areas, shall not be subject to this Section, but shall be subject to the provisions of Section 580 above.

1. The Applicant must submit a sports illumination plan prepared by a lighting professional that is certified by the National Council on Qualifications for the Lighting Professions (NCQLP) or a State licensed professional engineer, architect, landscape architect or land surveyor. The plan shall be designed in conformity with the “International Dark Sky Association - Criteria for Community-Friendly Outdoor Sports Lighting” and shall contain the following information:

- a. The boundaries, dimensions and total land area of the outdoor recreation/sports facility property at a designated scale of not less than one-inch equals fifty feet (1" = 50'). For proposed uses on large tracts of land where the lighted playing field/court occupies a small portion of the site, the boundaries, dimensions and total land area of just the lighted playing field/court with perimeter areas, as required by Par. 1B. below, shall be provided, at a designated scale of not less than one inch equals fifty feet (1" = 50'), with a graphic that depicts the location of the fields/courts in relation to the perimeter lot lines of the entire property.
- b. The location and limits of playing fields/courts, and associated perimeter areas so designated and illuminated for the safety and protection of the athletes and participants. The perimeter areas shall be determined and so indicated on the plan based on the type of playing surface and appurtenant facilities typically utilized only by the athletes, coaches and participants.
- c. The location, height and illustration of each style of all pole, building, and ground mounted lighting fixtures for the playing field/court. The height of the light poles shall be the minimum height required to obtain the performance standards set forth in this regulation and shall be permitted irrespective of the maximum height regulations for other “structures” in the zoning district.
- d. The manufacturer's specification data and technical drawings, including the luminaire lamp wattage; photometric data showing that the luminaire is fully shielded, including an electronic copy of the IES photometric file, or a reference to the file location on the manufacturer's web site. Manufacturer's photometric specification that the luminaire is rated IESNA Full Cutoff (FCO) is sufficient to show that it is fully shielded.
- e. A photometric plan of the proposed outdoor luminaries, showing the intensity of illumination expressed in foot-candles (fc) at ground level within the proposed playing field/court and associated perimeter area and at the boundaries of the lot on which the light poles are proposed, at such locations as are needed to adequately determine the level

of light trespass onto adjacent streets and abutting lots. The plan shall also include the following illumination information in a table format: Minimum; Maximum; Average; Average to Minimum and Maximum to Minimum.

- f. A visual impact study including calculations quantifying glare and light trespass in candela (cd) of the proposed outdoor luminaries, both within the proposed playing field/court and associated perimeter area and at the property boundaries of each abutting lot and street, measured horizontally five (5) feet above grade level.

2. The lighting for playing fields/court and associated perimeter areas shall meet the IESNA “Recommended Practice for Sports and Recreation Area Lighting” standards and shall not exceed the maintained average illuminance levels for each particular field/sport as follows:

Baseball/Softball Diamond	80 fc
Football/Soccer	60 fc
Lacrosse/Field Hockey/Rugby/ Cricket	60 fc
Tennis Courts	75 fc
Track & Field	60 fc

Average illuminance levels shall be measured horizontally three (3) feet above grade level and shall represent maintained lighting levels. The lighting levels beyond the playing field/courts and associated perimeter areas shall not exceed 1 fc at a distance of 150 feet from the edge of the proposed playing field/court and associated perimeter area, measured horizontally three (3) feet above grade level and shall represent maintained lighting levels. The lighting levels at the property boundaries of each abutting lot and street shall not exceed 0 fc, measured horizontally three (3) feet above grade level and shall represent maintained lighting levels.

3. All playing field/court lighting fixtures shall use full cut-off or directionally shielded lighting fixtures, aimed toward the playing field/court and shielded in directions away from the playing field/court so as to minimize glare and light trespass onto adjacent properties, which shall not exceed 1,000 cd at a distance of 150 feet from the edge of the proposed playing field/court and associated perimeter area and which shall not exceed 0 cd at the property boundaries of each abutting lot and street, measured horizontally five (5) feet above grade level.

4. The use of outdoor playing field/court lighting shall not be permitted between the hours of 10:00 PM and 7:00 AM.

5. The lighting system shall provide advanced controls and documentation for the following:

- a. Automatic and/or remote-control system via smartphone apps, or direct remote communication to the company facility responsible for handling the lighting controls, to enforce shut-off at locally established curfew time, not to be later than 10:00 PM.

- b. On-site manual and/or remote-control system shall also be provided to allow for the lights to be turned on or off at will (before curfew) to assure that only active sports fields are lighted.
- c. Readily accessible controls to implement uniform and variable adaptive illumination levels for different task lighting needs on field, e.g. class of play, competition athletics, sports practice, etc. Adaptive dimming shall be possible across the range of 25% to 100% of full illumination.

6. Special Permit Approval Criteria

In reviewing a special permit application under this section, the Commission shall making finding regarding the following factors:

- a. the effects of extended operational hours, such a noise, traffic, light trespass and celebratory behavior;
- b. the benefits that the additional hours of operation will provide;
- c. the degree to which the proposal minimizes adverse visual impacts;
- d. the extent to which the applicant has mitigated potential adverse effects;
- e. compliance with the lighting and pole standards and all of the provisions of this Section 580.8, including a determination as to whether the proposal would result in undue light trespass.

After completing a review of the Applicant's proposal and making findings based on the factors established in this section, the Commission may grant a Special Permit with or without specific conditions.