## **ARTICLE IV**

### GENERAL REGULATIONS

**SECTION 4.0 PURPOSE:** Except as herein provided, general regulations shall apply to all zones.

**SECTION 4.1 REDUCTION IN BUILDING SITE AREA:** Except as herein provided, no lot, in any zone, may be reduced in area below the minimum lot area as specified herein for the zone within which said lot is located, except where such reduction has been brought about by the expansion or acquiring of rights-of-way for a street. If, however, by some means (e.g., misinterpretation of law, erroneous lot descriptions, etc.) the lot area is reduced below the minimum required lot area as specified herein for the zone, all of the uses and structures contained on the remaining portion of the area shall be subject to compliance with all other provisions of this ordinance. In the event that the uses and structures cannot comply in such circumstances, the property owner shall seek relief from the Board of Adjustment, as provided for in Article XV of this ordinance.

## SECTION 4.2 FRONTAGE ON CORNER LOTS AND DOUBLE FRONTAGE LOTS:

On lots having frontage on more than one street, the minimum front yard depth shall be provided on at least one street frontage, with the other frontage having a minimum of one-half the required minimum front yard depth, except that when such lots abut an arterial street, as herein defined, the minimum front yard depth shall be provided for each street frontage.

## SECTION 4.3 APPLICATION OF ZONING REGULATIONS

- A. Except as herein provided, no structures or land shall be used for any purpose other than that permitted in the zone in which such structures or land is located or is to be located.
- B. Except as herein provided, every structure hereafter erected shall be located on a lot, as herein defined, and in no case shall there be more than one (1) principal structure on one (1) lot. Within the Urban Service Area, the creation of any proposed flag lots must be submitted as part of a preliminary and final plat. No identification plats shall be permitted to allow the creation of flag lots. Flag lots shall be permitted only within areas proposed for development which are greater than three (3) acres, and only if the creation of the flag lots are necessary because of geometric, topographic, or other natural features.
- C. Except as herein provided, or approved by the Board of Adjustment, accessory structures and uses shall not be permitted within any front yard or minimum required side yard in any zone. Accessory structures and uses may be permitted to extend into the minimum required rear yard, as defined herein, in all zones, provided that such structures are set back from the rear lot line a minimum of ten (10) feet, and minimum required side yard clearances are maintained. Location of off-street parking, loading and/or unloading areas, fences, and signs, shall be governed by their respective sections, as provided for herein. Accessory structures shall be no more than fifty (50) percent of the total gross

floor area of the principal structure or a maximum coverage of ten (10) percent of the available yard area in which said structure is to be located, whichever is greater.

- D. Permitted Obstructions in Minimum Required Yards: Except as herein provided, the following shall not be considered to be obstructions when located in the minimum required yards specified:
  - 1. In All Minimum Required Yards Driveways, providing they are not closer than one (1) foot to the property line to which they run approximately parallel to, except that in the event that a common driveway will be used to serve two (2) or more lots, then driveways may be permitted to abut the property line; steps, four (4) feet or less above grade, projecting not more than four (4) feet into the minimum required yards which are necessary for access to a lot from a street or alley; fire escapes and chimneys, projecting not more than thirty (30) inches into the minimum required yards; arbors and trellises, flag poles, bird baths, trees, plants, shrubberies, ornaments, utility poles and wires, and outdoor furniture.
  - 2. In Minimum Required Front Yards Bay windows, projecting three (3) feet or less into the minimum required front yard; overhanging eaves and gutters, projecting not more than three (3) feet into the minimum required front yard; air conditioning equipment, awnings, and canopies, extending not more than six (6) feet into the minimum required front yard.
  - 3. In Minimum Required Rear Yards Bay windows, overhanging eaves, gutters, and air conditioning equipment, projecting not more than six (6) feet into the minimum required rear yard; awnings and canopies, provided they do not extend more than ten (10) feet into the minimum required rear yards; uncovered porches, decks, or patios, provided they are less than three feet above grade.
  - 4. In Minimum Required Side Yards Air conditioning equipment, excluding compressor for central air conditioning unit, overhanging eaves, gutters, awnings, and canopies, projecting not more than thirty (30) inches into the minimum required side yard, but never closer than three (3) feet to the side lot line; uncovered porches, decks, or patios, provided they are less than three feet above grade.
- E. Except as herein provided, there shall not be more than one accessory building constructed or erected on a lot in any residential zone.

## SECTION 4.4 EXCEPTIONS AND MODIFICATIONS

#### A. EXCEPTIONS TO HEIGHT LIMITS

1. The height limitations of this ordinance shall not apply to such things as church spires, various types of towers, smoke stacks, other related structures, and necessary mechanical appurtenances provided their construction is in accordance

with existing or hereafter adopted ordinances of the legislative body, and is acceptable to the Federal Aviation Agency and the Federal Communication Commission.

B. OTHER EXCEPTIONS: Service stations shall be constructed so that the centerlines of the pumps shall be at least twenty-five (25) feet from any street right-of-way line.

## C. FRONT YARD VARIANCE

- 1. Where the average depth of existing front yards within three hundred (300) feet of the lot in question and within the same block front, is greater than the minimum front yard depth required by this ordinance, the minimum required front yard depth on such lot shall be modified to be the average depth of said existing front yards.
- 2. In any residential zone, no front yard shall be required to exceed the average depth of existing front yards on the same side of the street within the same block, when fifty-one (51) percent or more of the lots within that block are improved with residential buildings, provided that in no case shall a front yard depth be less than twelve (12) feet.
- D. SIDE YARD VARIANCE: Where a nonconforming lot of record exists in any residential zone, no side yard shall be required to exceed the average width of existing side yards with the side having the least width, on the same side of the street within the same block, when fifty-one (51) percent or more of the lots within that block are improved with residential buildings; provided that no side yard width shall be less than five (5) feet, except as authorized by the Board of Adjustment.

## E. EXCEPTION TO MINIMUM FRONTAGE, AREA AND YARD REGULATIONS

- 1. In any subdivision of an existing or proposed development, in any multi-family or commercial zones described herein, zoning, building, and occupancy permits may be issued in the following circumstances, for lots which do not abut a minimum frontage along a dedicated right-of-way, or lots with a lot area, yard areas, or yard sizes which are less than the minimums therefore required by the area and height regulations established herein for the zone in which such development is located:
  - a. A development plan conforming to the provisions of Article XV of this ordinance, including all existing and proposed lot and yard areas and sizes in the development, is reviewed and approved by the Planning Commission.
  - b. The area of the total development of which such lot is a part, is not less than the minimum total area required for such a development in the zone in which it is located.

- c. The density of the total development of which such lot is a part, is not greater than the maximum density allowed for such a development in the zone in which it is located.
- d. Such lot abuts upon areas within such development, which are either used or proposed for use in common by, or for the benefit of, the owners or tenants of such lot and other lots or areas abutting upon such common area, hereinafter identified and referred to as "benefited abutting property", according to the provisions of legally enforceable agreements or land use restrictions, approved by the Planning Commission and recorded in the office of the County Clerk of Kenton County, Kentucky, which include provisions that:
  - (1) Specifically identify such common areas by a metes and bounds description thereof.
  - (2) Specifically identify the owners of such common areas by name and address, and which identify and establish the obligation and duty of such owners, jointly and severally, to cause such common areas and all improvements thereon, including, without limitation, all motor vehicle access drives and parking areas, pedestrian walkways, other paved surfaces, signs, recreational facilities and open spaces, and other aesthetic and environmental amenities, to be maintained and repaired at least to the extent required by any and all governmental agencies having jurisdiction thereof, or any use or activity conducted thereon.
  - (3) Specifically identify the owners of the benefited abutting property by name and address, and the joint and several obligation thereof to pay a proportionate part of all costs of the aforedescribed maintenance and repair of such common areas and the improvements thereon, secured by a lien therefore in favor of the owners of the common areas upon that portion of the benefited abutting property in which they have an ownership interest.
  - Specifically identify and establish a legally enforceable right of the city and its successors to enter upon such common areas, through officers, agents, servants, employees and independent contractors thereof, and cause to occur thereon the aforedescribed maintenance and repair of such common areas and the improvements thereon, at the joint and several cost and expense of the owners of any interest in the benefited abutting property, with the payment thereof secured by a lien in favor of the city upon such common areas benefited abutting property.
  - (5) Identify and establish a legally enforceable right of the owners of each lot or parcel of real estate in such development which does not abut upon a dedicated right-of-way to a paved and unobstructed right-of-way and easement from each of such lots across, over and through such common areas, for motor vehicles and pedestrian access thereto from a dedicated right-of-way.

#### SECTION 4.5 TRAFFIC STUDY REGULATIONS

#### A. PURPOSE

The purpose of a Traffic Impact Study (TIS) is to protect the function of the highway system while providing appropriate access to the proposed development. The objectives of a TIS are to:

- 1. Determine the appropriate location, spacing, and design of access points necessary to serve the proposed development and minimize impact to the public transportation system.
- 2. Determine the extent of improvements to the adjacent and nearby roadway system necessary to maintain a satisfactory level of service and safety.
- B. NEED FOR A TRAFFIC IMPACT STUDY: Traffic impact study shall be required when the full build out potential of the proposed development requesting access meets any or all of the criteria identified below. The full build out potential shall be defined as the complete development of available land for which proposed or future connections are accommodated in the development plan as required in the Kenton County Subdivision Regulations. Future development shall be assumed to be that which is identified and recommended by the comprehensive plan.
  - 1. The proposed development is expected to generate greater than 100 trips per hour during its peak hour of operation based on trip generation estimates according to the most recent edition of the institute of Transportation Engineers (ITE) Trip Generation Manual methodologies.
  - 2. The proposed access location does not meet applicable Access Control Regulations as set forth in Section 11.3.
  - 3. The access plan proposes a change in the traffic control on a public street including:
    - a. Installation, removal or relocation of a stop or yield signs on an existing public street.
    - b. Installation, removal or relocation of a traffic signal installation.
    - c. Changes in the timing and/or phasing of an existing traffic signal or signal system.
  - 4. When a proposed development does not meet the conditions of Sections 4.5, B., 1., 2., or 3, above, but is deemed necessary by staff, a TIS may be required due to congested locations identified in previous studies or plans, the presence of high crash locations identified by the Kentucky Transportation Cabinet (KYTC) or OKI, or proximity to major planned roadway improvements in the area.

- 5. In the case where a Traffic Impact Study has already been completed as part of the approval process, an addendum to the original report will be required under the following circumstances:
  - a. The original report was completed more than 2 years prior to the initial construction phase of the development.
  - b. A change in the site plan, or proposed land use has caused the generated vehicle trips per hour to increase or modified the proposed road or access configuration.
  - c. There have been major roadway improvements or significant changes in development in the area since the original approval or major changes in traffic flow as determined by Staff. Major roadway improvements involve any improvements that have an effect on the roadway capacity or have caused any changes in traffic flow patterns. This may include construction of new traffic control, change in cross-section of the roadway or significant changes in the roadway network.
- C. STUDY AREA: The following sections identify the minimum study area to be addressed by a Traffic Impact Study. Staff may adjust the minimum study area as appropriate to the development size, specific site conditions and/or local and regional issues and policies. The applicant may extend the minimum study areas described below to demonstrate potential benefits of the proposed access plan to the community.
  - 1. When a development meets the criteria established in Section 4.5, B., 1., due to traffic volumes, the study area for the TIS shall include all proposed access points to the development and shall include the first signalized access points in all directions, on the adjacent roadway network, within a 2 mile radius of the proposed site. Unsignalized access points adjacent to the proposed access points shall also be included.
  - 2. When a development meets the criteria established in Section 4.5, B., 2., due to access control deviations, the study area for the TIS shall include all proposed access points to the development, and shall include all access points on both sides of the street within the distance specified by the applicable regulation, from the proposed access point, which does not meet the spacing standard.
  - 3. When a development meets the criteria established in Section 4.5, B., 3., due to modifications to traffic control, the study area for the TIS shall include 1) all access points to the proposed development, 2) all unsignalized access points adjacent to the proposed access points and 3) all controlled access points on the adjacent roadway network in all directions, within a two mile radius of the proposed site.
  - 4. When Staff determines that the signal modification will affect the operation of a coordinated signal system, the study area shall include all affected signals within the system. A coordinated signal system may be considered to be affected when:

- a. The proposed signal would require a different cycle length than currently in use to attain an acceptable LOS as defined in Subsection E.
- b. The proposed signal would require adjustment of existing intersection offsets to attain acceptable corridor performance as defined in Section 5.
- 5. When a TIS is required by staff as outlined in Section 4.5, B., 5., the study area shall be established to address the specific issues for which the study was required.

### D. STUDY REQUIREMENTS

- 1. Analysis Scenarios
  - a. The TIS shall examine the before and after conditions within the study area to a degree sufficient to document the operational and safety impacts of the proposed development and access plan. The before and after conditions shall be termed the "No Build" and "Build" conditions.
  - b. The No Build condition shall include existing traffic volumes forecasted to the appropriate analysis year, existing roadway geometry and all applicable traffic control devices. The No Build analysis shall include any traffic generated by proposed adjacent developments as well as any planned and funded improvements within the study area. The No Build condition shall also include any Transportation System Management (TSM) improvements, such as signal timing and/or phasing optimization and reconfiguration of existing lane uses that may improve the operation of the transportation system.
  - c. The Build condition will include No Build traffic volumes plus site generated traffic and any access improvements proposed with the development.
  - d. No Build and Build analysis shall be conducted for the anticipated year of opening and a design year assuming a 10 year horizon. Opening year Build analysis should only include that portion of development which is anticipated to be completed at opening. Design year analysis should include the full build-out potential of the development. In the event that the full build-out of the development is anticipated to extend beyond the 10-year horizon, the design year shall be the anticipated year of full build-out.
  - e. All scenarios evaluated should include analysis of the weekday AM and PM peak hours. The applicant should work with staff to determine whether the peak hour of the development or the peak hour of the adjacent street traffic should be analyzed to evaluate the worst-case scenario. When a proposed development is anticipated to generate a high volume of traffic during non-traditional peaks, such as a noon peak, late night or weekend peak period, these periods should also be examined. The need to study additional periods of operation shall be at the discretion of staff.

#### 2. Data Collection

The data collection efforts for the study shall be consistent with the level of analysis required. At a minimum this shall include 2-hour turning movement counts conducted in 15-minute intervals at all study intersections for all peak periods examined. When traffic patterns are affected by the presence of non-traditional peaks such as school trips, the peak hour turning movement count shall be expanded to include both peak periods. The peak hours should be determined by a 24-hour count of the adjacent street traffic on a typical weekday, i.e. Tuesday, Wednesday or Thursday. Previously collected data and traffic volumes may be used in the analysis at the discretion of staff.

#### 3. Future Traffic Volumes

Future traffic volumes used to evaluate the opening year (if different from existing year) and design year conditions shall be determined by applying an appropriate growth rate to reflect anticipated changes in demand on the roadway network. This growth rate shall be determined from comparison of historical traffic volumes in the study area. More intensive methods of forecasting traffic volumes, such as socio-economic analysis and the use of travel demand models may also be used to determine future traffic growth rates.

# 4. Trip Generation and Distribution

Trips generated by the proposed development shall be calculated using the most current edition of the ITE Trip Generation Manual methodologies. Trips generated by the development should be distributed onto the public roadway network consistent with existing traffic patterns in the area, identified by origin destination studies of adjacent developments or traffic counts of adjacent roadways. This methodology may be replaced with more refined trip distribution approaches derived from market research studies, travel demand models, or other methodologies at the discretion of staff.

## 5. Operational analysis

Operational analysis shall be conducted for all intersections within the study area for all analysis scenarios identified in Section 4.5, D., 1. At a minimum, operational analysis shall include, but is not limited to:

a. Intersection level of service (LOS) analysis for all intersections in the study area. LOS analysis should be consistent with Highway Capacity Manual (HCM)/Highway Capacity Software (HCS) methodologies for unsignalized and signalized intersections. Roundabout analysis shall utilize RODEL/ARCADY analytical procedures. Analysis results should be summarized with LOS and delay by lane group and intersection totals. For Roundabout analysis, LOS shall be determined using both signalized and unsignalized HCM thresholds.

Analysis shall be evaluated using the following parameters unless justified by additional study at the discretion of staff.

- (1) Peak Hour Factor (PHF) = 0.90
- (2) Lost Time = 2.0 sec
- (3) No right turns on red (RTOR)
- (4) HCS arrival type = 3
- (5) Yellow and red clearance intervals shall be calculated based on ITE recommended procedures.
- (6) Pedestrian phases and minimum clearance times shall be accommodated for all potential pedestrian crossings.
- (7) Where applicable the minimum green time per phase shall be equal to or greater than the minimum pedestrian clearance time.
- b. Queuing analysis shall be conducted for all controlled movements in the study area. Queuing analysis should report 95th percentile queues for all scenarios and periods examined, and identify any conflicts between adjacent queues and/or queues and permitted turning movements.
- c. Turn lane analysis shall be conducted for all unsignalized access points to the proposed development. This analysis shall determine if a right or left-turn lane is warranted at a location to improve operations or safety and shall identify the proper length of turn lane to accommodate any storage or deceleration requirements. Turn lane analysis shall be conducted in accordance with KYTC design and permit standards.
- d. Signal warrant analysis shall be conducted for all existing and proposed traffic signals providing access to the development. Signal warrant analysis shall also be required before any existing traffic signal is removed. Signal warrant analysis shall be conducted in accordance with most recent version of the Manual on Uniform Traffic Control Devices (MUTCD).
- e. When a TIS is required under the conditions of Section 4.5, B,. 3., corridor level analysis shall also be provided. Corridor analysis shall estimate average travel speed along each contiguous street or street(s) in the study area, and shall include all controlled access points in the study area defined in Section 4.5, B,. 3. Corridor analysis shall be conducted using the latest version of Synchro software.

## 6. Safety Analysis

When the study area includes a corridor or intersection which has been identified as a high accident location by KYTC or OKI staff, safety analysis shall be conducted and included in the TIS. Safety analysis shall be conducted using the three most recent years of crash data available. Engineering judgment should be used when reviewing and analyzing existing crash patterns in areas where improvements have been implemented within the period of the crash data. At a minimum safety analysis shall include but is not limited to:

- a. Determination of crash rates for the subject location
- b. Statistical analysis of crash data by time, light conditions, day of week, pavement conditions, crash type and contributing factors.
- c. Development of crash diagrams based on crash reports. This should also include analysis of the roadway environment to identify factors which may contribute to significant recurring crashes at the location.
- d. Identification and analysis of potential impacts associated with site traffic and/or the proposed access plan on the existing crash patterns.

#### E. MITIGATION:

- 1. When a proposed development and/or access plan is shown to result in an unacceptable Level of Service, or significantly deteriorate the operations of adjacent access points or corridors, the applicant shall identify the extent of mitigation improvements necessary to offset the impact of the development.
- 2. Mitigation improvements may include, but are not limited to, modification to signal systems, construction of turn lanes or medians, access roads, shared access drives, etc. When mitigation improvements are proposed analysis shall be conducted for the Build condition for the year of opening and the design year with the proposed improvements. This analysis shall be consistent with and in addition to the No Build and Build analysis required in Section 4.5, D.
- 3. Operational Thresholds: The following provisions shall be used to define thresholds for acceptable operational performance for the Build condition within the study area:
  - a. At existing intersections the intersection LOS shall not be lower than the No Build LOS. Individual turning movements at the intersection shall not operate at LOS E or F. In such cases where individual turning movements are shown to operate at LOS E or F under the No Build condition, the turning movement delay shall not increase.
  - b. Proposed intersections shall operate at intersection LOS C or better. No individual turning movements may operate at LOS E or F.
  - c. On existing corridors, as identified in Section 4.5, D., 5., e., the average travel speed of the corridor shall not be less than 75 percent of the No Build travel speed.
  - d. On proposed corridors, as defined in Section 4.5, D., 5., e., the average travel speed shall not be less than half of the allowable speed limit.
- 4. Alternative Analysis: In addition to traditional roadway improvements the applicant shall identify other alternatives capable of reducing the impact associated with the proposed development. At a minimum this shall include the following.

- a. At any proposed signalized or four-way stop controlled intersection a modern roundabout shall also be evaluated. This evaluation shall include the determination of the conceptual footprint of the roundabout and operational analysis as identified in Section 4.5, D., 5., a.
- b. Any opportunities for incorporation of transit or alternative modes of transportation into the development or connection to existing modal facilities shall also be identified. At a minimum this shall include identification of the size, type location and frequency of existing or proposed modal facilities.

#### F. ADMINISTRATION

1. Responsibility for the Traffic Impact Study
The completion of the TIS is the responsibility of the developer/applicant of the subject property. The report shall be completed by a Professional Engineer, licensed within the Commonwealth of Kentucky, with previous experience and knowledge in traffic operations and analytical studies. Each report shall contain the stamp, signature and date of the responsible engineer.

## 2. Pre-Study Meeting

- a. It is required that a pre-study meeting be conducted prior to starting a Traffic Impact Study. The applicant will be required to provide 1) a conceptual layout of the proposed subdivision/development 2) an aerial of the proposed site including proposed access points and 3) a map of the roadway network within a 2 mile radius surrounding the proposed site, to enable meaningful decisions by staff at the meeting. At this meeting the following parameters of the TIS will be determined:
  - (1) Study Area
  - (2) Trip Generation Approval
  - (3) Distribution Percentage Approval
  - (4) Background and Build-out Study Year
  - (5) Adjacent developments
  - (6) Traffic Growth Rates
  - (7) Future Highway Projects in Study Area
  - (8) Operational Analysis Parameters
- b. Any potential issues regarding the report should be discussed at the prestudy meeting. Following the meeting, staff will prepare a memo of understanding summarizing the conclusions and parameters established in the pre-study meeting that shall be used to complete the study.
- c. It is the responsibility of the applicant to schedule this meeting prior to submission. Pre-study meetings shall be scheduled with staff at least 1 week in advance.
- d. If a pre-report meeting is not conducted, the report may not be accepted.

#### 3. Documentation

The results of the Traffic Impact Study shall be documented in the Traffic Impact Study. This report should contain:

- a. Summary of proposed development
- b. Data collection methodologies
- c. Summary of existing traffic conditions
- d. Raw Traffic Data (may be included in appendix)
- e. Trip Generation Calculations and Summary
- f. Trip Generation/Distribution Methodology (shall include graphics showing existing traffic volumes, generated trips and total trips for all scenarios).
- g. Adjacent developments included in the background traffic
- h. Traffic/safety analysis methodologies
- i. Summary of traffic analysis results
- j. Full Output/Calculations from traffic/safety analysis (may be included in appendix)
- k. Summary of recommended improvements
- l. Concept plan showing proposed improvements. Concept plan shall show proposed improvements over aerial (if available) to a measurable scale not greater than 1'' = 100'.

#### SECTION 4.6 LIGHTING REGULATIONS

- A. PURPOSE: The purpose of these regulations is to protect and promote the public health, safety and welfare by establishing standards and a process for review of exterior lighting. Lighting regulations are intended to accomplish the following:
  - 1. To provide safe roadways for motorists, cyclists and pedestrians, and ensure that sufficient lighting can be provided where needed to promote safety and security;
  - 2. To control glare and spillover of outdoor light onto adjacent properties;
  - 3. To curtail the degradation of the nighttime visual environment;
  - 4. To bring non-conforming lighting into conformance with this section.
- B. REQUIREMENT FOR REVIEW OF PROPOSED LIGHTING: Any application requiring either a Stage I or Stage II Development Plan review and approval shall be accompanied by a master exterior lighting plan. This plan provides the information necessary to determine whether the proposed lighting is in conformance with the purposes and requirements of this section. A master exterior lighting plan submitted under this section shall include:

- 1. The location and number of all proposed lighting fixtures (including lighting for pedestrian areas and exterior wall packs), to include distances from rights of way, interior drives, and buildings.
- 2. The specifications for all proposed lighting fixtures to include photometric data, and designation as Illuminating Engineering Society of North America (IESNA) full cut-off fixtures (i.e. no light output emitted above 90 degrees at any lateral angle around the fixture).
- 3. The proposed mounting height and design details of all exterior lighting fixtures.
- C. EXCEPTIONS: No unshielded or clear glass luminaries shall be allowed; all exterior lighting shall use full cut-off luminaries with the light source downcast and fully shielded, with the following exceptions:
  - 1. Floodlights with external shielding shall be angled provided that no light is directed above a thirty (30) degree angle measured from the vertical line from the center of the light extended to the ground, and only if the luminaire does not cause glare or light to shine on adjacent property or public rights-of-way.
  - 2. Holiday lighting is allowed from November 1st to March 15th.
  - 3. Sensor activated luminaires, provided:
    - a. It is located in such a manner as to prevent glare and light trespass onto properties of others or into a public right-of-way;
    - b. The luminaire is set to only go on when activated and to go off within five minutes after activation has ceased;
    - c. The luminaire shall not be triggered by activity off the subject property.
  - 4. All temporary emergency lighting needed by the Fire and Police Departments, or other emergency services.
  - 5. Lighting for flags provided the flag is a United States of America or State of Kentucky official flag and the maximum lumen output is one thousand three hundred (1,300) lumens. Flags may be taken down at sunset to avoid the need for lighting. The external beam shall minimize light trespass and/ or glare.
  - 6. Lighting of radio, communication and navigation towers; provided the owner or occupant demonstrates that the Federal Aviation Administration (FAA) regulations can only be met through the use of lighting that does not comply with this Article.
  - 7. Luminaires used for playing fields and courts provided all other provisions of this section are met and the light is used only while the field or court is in use.

8. Outdoor sales and gas station canopies must utilize canopy lights that are fully recessed into the canopy or are fully shielded by the canopy.

C.	ILLUMINATION LEVELS:	Outdoor lighting shall	meet the following standards:

	Maximum permitted	Maintained	Maximum
	illumination at the	Average	permitted
	Property Line (See	Illumination at	height of
	Note a.)	the Site (See	Luminaire (See
		Note b.)	Note c.)
Lighting in commercial /industrial/ institutional zones	0.5 FC (0.2 when adjoining a single or two family residential uses or zone and all roadways)	2.0 FC	20 feet
Lighting in multi-family residential zones	0.2 FC	0.6 FC	12 feet

#### Notes:

- a. The maximum permitted illumination is calculated in foot candles (FC) at the property line at ground level. Lighting levels must be measured in foot candles with a direct reading, portable light meter.
- b. The maintained average illumination is calculated in foot candles on the pavement area of the site. In no case shall the level of illumination be less than 0.2 foot candles in parking and pedestrian areas.
- c. As measured from ground level to their tallest point. All luminaries utilized shall be full cut-off type fixtures.

## SECTION 4.7 REGULATIONS CONCERNING DESIGN AND CONSTRUCTION OF

**IMPROVEMENTS:** Any proposed development requiring the construction of streets (including curb and gutters), sidewalks, sewers (sanitary and storm), water lines, or other public improvements, which does not constitute a subdivision, as herein defined, shall be required to be designed and constructed in accordance with the applicable articles and sections of the Subdivision Regulations, unless specifically waived by the planning commission.