



1956-2006

*Celebrating Fifty Years of Public Service*

**Item 5**



**MEMORANDUM**

**TO:** Metropolitan Planning Commission  
**FROM:** Mark Donaldson, Executive Director, Metropolitan Planning Commission  
**DATE:** March 1, 2007  
**SUBJECT:** Revised Employment Center Zoning District Text (File No. 7-C-06-OA)

---

**Recommendation: Approve the amendments to Article 5, Section 5.51 of the Knox County Zoning Ordinance (the EC Employment Center Zone).**

The revisions to the Employment Center (EC) Zoning District were prepared to create a use on review process and to improve standards for business/industrial park development. In the past, the Planned Commercial (PC) Zone has been used to allow such review. However, that zone is directed more to office, commercial services and light distribution centers than manufacturing uses, which are often primary uses in a business/industrial (EC) park.

The EC Zone includes an array of manufacturing uses, which could result in substantial differences in the scale of operations (for instance, a park which is directed to “high tech,” electronic and other light manufacturing uses as opposed to an automobile assembly plant). The use on review process will allow a range of uses while taking into account development standards for circulation, environmental and peripheral area concerns.

The EC Zone is still relatively new. No parcels have been rezoned to EC to date. Consequently, no existing tracts of land are affected by the proposed changes.



## 5.51 EMPLOYMENT CENTER ZONE (EC)

### 5.51.1 General Description.

This zoning district is intended to encourage development of business parks and other employment centers that will contribute to the future economic well being of Knox County; to provide standards and procedures that will minimize any conflicts or adverse impacts of these developments with other properties, public roads or facilities; to provide a zoning district for use in areas meeting the locational standards for industrial parks and technology based development contained in the Knoxville-Knox County General Plan; and to provide a zoning district that for business and technology park development that requires site plan review and complies with the requirements of the Farragut-Knoxville-Knox County Growth Policy Plan for limited industrial development in the Rural Area designated in this plan.

### 5.51.2 Uses Permitted.

Only the following uses will ~~may~~ be permitted in this district. Where North American Industry Classification System (NAICS) codes are indicated after permitted uses, the businesses listed under that classification in the United States Office of Management and Budget *North American Industry Classification System Manual, 1997 edition, and any subsequent edition*, shall ~~may~~ be permitted providing all other requirements of this ordinance are fulfilled. ~~The permitted uses in any proposal for development shall be identified through the process outlined in Section 5.51.7 (Administration).~~

- A. Construction and contracting, including
  - Building, developing and general contracting (NAICS 233)
  - Heavy construction (NAICS 234)
  - Special trades contractors (NAICS 235).
  
- B. Manufacturing, including
  - Food manufacturing (NAICS 311), excluding slaughter of animals and fat rendering

Beverage and tobacco product manufacturing (NAICS 312)  
Textile mills (NAICS 313)  
Textile product mills (NAICS 314)  
Apparel manufacturing (NAICS 315)  
Leather and allied product manufacturing (NAICS 316)  
Wood product manufacturing (NAICS 321)  
Printing and related support activities (NAICS 323)  
Pharmaceutical and medicine manufacturing (NAICS 3254)  
Plastics and rubber products manufacturing (NAICS 326)  
Fabricated metal product manufacturing (NAICS 332)  
Machinery manufacturing (NAICS 333)  
Computer and electronic product manufacturing (NAICS 334)  
Electrical equipment, appliance and component manufacturing (NAICS 335)  
Transportation equipment manufacturing (NAICS 336)  
Furniture and related product manufacturing (NAICS 337)  
Miscellaneous manufacturing (NAICS 339)

C. Wholesale trade, including  
Wholesale trade, durable goods (NAICS 421)  
Wholesale trade, non-durable goods (NAICS 422)

D. Transportation and warehousing, including  
Air transportation (NAICS 481)  
Rail transportation (NAICS 482)  
Water transportation (NAICS 483)  
Truck transportation (NAICS 484)  
Transit and ground passenger transportation (NAICS 485)  
Pipeline transportation (NAICS 486)  
Scenic and sightseeing transportation (NAICS 487)  
Support activities for transportation (NAICS 488)  
Postal service (NAICS 491)  
Couriers and messengers (NAICS 492)

Warehousing and storage (NAICS 493)

- E. Information, including
  - Publishing industries (NAICS 511)
  - Motion picture and sound recording industries (NAICS 512)
  - Broadcasting and telecommunications (NAICS 513)
  - Information services and data processing services (NAICS 514)
  
- F. Finance and insurance, including
  - Monetary authorities and banks (NAICS 521)
  - Credit intermediation and related activities (NAICS 522)
  - Securities, commodity contracts and other financial investments (NAICS 523)
  - Insurance carriers and related activities (NAICS 524)
  - Funds, trusts and other financial vehicles (NAICS 525)
  
- G. Real estate and rental and leasing, including
  - Real estate (NAICS 531)
  - Rental and leasing services (NAICS 532)
  - Lessors of other nonfinancial intangible assets, except copyrighted works (NAICS 533)
  
- H. Professional, scientific and technical services (NAICS 541)
  
- I. Management of companies and enterprises, including
  - Management of companies and enterprises (NAICS 551)
  - Administrative and support services (NAICS 561)
  
- J. Educational services, excluding elementary and secondary schools (NAICS 611)
  
- K. Health care and social assistance, including Hospitals (NAICS 622)
  
- L. Other services, except public administration, including

Support activities for agriculture and forestry (NAICS 115)  
Support activities for mining (NAICS 213)  
Repair and maintenance (NAICS 811)

M. Public administration, including  
Local, state and federal government offices and programs  
Space research and technology (NAICS 927)  
National security and international affairs (NAICS 928)

N. Commercial telecommunications towers, consistent with the requirements of the *Wireless Communications Facilities Plan (11/18/02)*, with any subsequent amendments, and Article 4, Section 4.92, of these regulations, if located more than 500 feet from a residence or a residential zone, or consistent with one of the following locational and design criteria:

1. Antenna or antenna support structures located on pre-approved sites owned by city, county, state or federal government.
2. Monopole towers less than 100 feet in height with low profile antennas that are no closer than 250% of the tower height to any residence.
3. Stealth towers, as defined by the *Wireless Communication Facilities Plan (11/18/02)*, or alternative tower structures less than 125 feet high and no closer than 250% of the tower height from any residence.
4. Monopole towers less than 150 feet high and no closer than 500% of the tower height to any residence or residential zoning district.
5. Towers and sites already specifically approved by the Planning Commission

~~as part of a network plan submitted by a provider.~~

- O. In an EC development, twenty percent (20%) of the land area may be set aside for retail commercial development, subject to the following conditions and requirements:
1. The overall EC development must include a minimum of 20 acres.
  2. Only the following retail commercial uses shall be permitted, provided that there shall be no sales, display or storage of merchandise outside of a fully enclosed building.
    - a. Drug stores.
    - b. Convenience stores, without gasoline pumps.
    - c. Restaurants, without drive-through facilities.
    - d. Sales of office supplies, office equipment and computers.
    - e. Employment services.
    - f. Hotels and motels
    - g. Accessory uses customarily incidental to any of the commercial uses listed in this section.
  3. The locations of commercial uses shall be integrated by means of access within the EC development.
  4. No use allowing the sale of beer for consumption on premises shall be located within five hundred (500) feet of any residential or agricultural zone.
- R. Other uses of the same general character as those listed in this section as permitted uses and deemed appropriate by the Planning Commission.

S. Child day care centers, consistent with the requirements of Section 4.91 of these regulations.

T. Adult day care centers, consistent with the requirements of Section 4.98 of these regulations.

U. Outdoor storage, subject to the following requirements:

1. Outdoor storage shall be fully screened on all sides by an opaque, ornamental or vegetative screen.

2. Outdoor storage must be an accessory use to a principal use on the same site.

#### ~~5.51.3 Uses Permitted on Review~~

~~A. Child day care centers, consistent with the requirements of Section 4.91 of these regulations.~~

~~B. Adult day care centers, consistent with the requirements of Section 4.98 of these regulations.~~

~~C. Commercial telecommunications tower, if the tower is located less than 500 feet from a residence or residential zone, and if the other locational and design criteria under Section 5.51.2 (P) above cannot be satisfied.~~

~~D. Outdoor storage, subject to the following requirements:~~

~~1. Outdoor storage shall be fully screened on all sides by an opaque, ornamental or vegetative screen.~~

~~2. Outdoor storage must be an accessory use to a principal use on the same site.~~



~~E. Developments requiring waivers as allowed under the following area regulations and site development standards:~~

- ~~1. Building height requirements, Section 5.51.5 (B).~~
- ~~2. Side and rear yard setbacks, Section 5.51.5 (C).~~
- ~~3. Landscaping requirements, Section 5.51.6 (C).~~
- ~~4. Signage requirements, Section 5.51.6 (E).~~

~~5.51.3 Effect of Overlay Zones.~~

- ~~A. Development in any TO (Technology Overlay district) shall also be approved by the Tennessee Technology Corridor Development Authority, or its successor. Within the TO district, all development must be approved through the use on review/development plan procedure as specified in section 6.50, or, where eligible, through the overall development plan procedure described in this section.~~
- ~~B. Development in any H (Historical Overlay district) shall also be approved by the Knox County Historical Zoning Commission, or its successor.~~

~~5.51.4~~ 3 Area Regulations

The following requirements shall apply to all uses permitted in this zone:

- A. Minimum Size Requirements
  1. Minimum size of an EC district: 5 acres, providing that smaller areas may be rezoned when they directly abut EC zoning, regardless of ownership.
  2. Minimum lot size: One (1) acre.

B. Height Regulations

1. No building shall be built to a height exceeding forty-five (45) feet, at the minimum required set back line.
2. No building shall exceed a height of thirty-five (35) feet, if located within 100 feet of a residential zone. However, for each additional foot of setback from the minimum setback line, the building height may be increased by one foot to a maximum of forty-five (45) feet

C. Setback Requirements

1. Front yard setback: a minimum of fifty (50) feet
2. Side yard setback: a minimum of fifty (50) feet
3. Rear yard setback: a minimum of fifty (50) feet

D. Maximum Lot Coverage

Main and accessory building footprints and loading platforms shall not cover more than fifty (50) percent of the lot area.

5.51.5 Site Development Standards.

The following standards will guide development in the EC district:

A. Off-street Vehicle Parking, Bicycle Parking and Sidewalks

1. As a supplement to the off-street parking requirements of Section 3.50, the following shall apply: ~~Off-street parking shall comply with the requirements of Section 3.50.~~

2. ~~The following additional parking requirements shall also apply to uses within an EC zoning district:~~

a. ~~No parking will be permitted on any street or drive, or any place other than the required off street parking spaces. Each Owner and Tenant shall be responsible for compliance by its employees and visitors with this requirement.~~

b. ~~Parking in the front of the building shall not cover more than half of the total area that comprises the minimum front setback.~~

a. No parking shall be located closer than fifty (50) feet from any public right-of-way, twenty-five (25) feet from any side property line, or twenty-five (25) feet from any rear property line. Parking for commercial uses as described in Section 5.51.2 (Q) may be located no closer than twenty-five (25) feet from any public right-of-way. The areas between roads and parking lots shall be landscaped with ground cover and one medium or large maturing tree for every 50 feet of the length of the road or lot line. (Tree species lists are available through the Planning Commission.)

b. The dimensions for required off-street parking spaces may be less than that required under Section 3.50, provided that those dimensions are approved in the development plan and established through the variance process.

~~c. All parking areas shall be paved and curbed in accordance with Knox County standards.~~

~~d. All parking areas must be designed in accordance with acceptable engineering practices provided in the "Institute of Transportation Engineers Parking Design Guide."~~

c. Where the business is located within a one-quarter (1/4) mile walk via sidewalks of a Knoxville Area Transit (KAT) stop, the number of required parking spaces shall may be reduced by 15 percent.

~~e. All other provisions of Section 3.50 shall apply.~~

2. Bicycle parking spaces on bicycle racks or in bicycle lockers, as defined by the *Knoxville Regional Bicycle Plan*, shall be ~~set aside according to the following:~~  
~~located near the entrances to all buildings within the park or development.~~

~~Minimum number of spaces for manufacturing uses in the EC zone: One (1) space per 5,000 square feet of floor area.~~

~~Minimum number of spaces for all other uses in the EC zone: One (1) space per 2,500 square feet of floor area.~~

3. Any EC development that is accessed by interior streets or easements shall include at a minimum sidewalks along one side of all streets or easements within the development.

B. Loading and Unloading Areas

1. All loading docks shall be located at the rear or side of buildings. Truck and trailer parking shall also be located at the rear or side of buildings. Where the size and/or shape of the building and property, or some physical characteristic of the property (i.e., topography, wetlands, sinkholes, etc.), make it infeasible to locate a loading dock at the rear of a building, the loading dock may be located at the side of a building providing that landscaping is used to screen the loading dock from neighboring properties and public rights-of-way.
2. All loading docks shall be set back and permanently screened, either by landscaping, berming or architectural screens, from neighboring properties and public view to minimize the effect of their appearance from neighboring building sites.
3. Vehicle maneuvering for loading and unloading shall not be permitted on abutting rights-of-way.

C. Landscaping

1. A landscaping plan shall be submitted as a part of any application for ~~administrative site plan use on review/development plan~~ approval. The species lists for recommended trees are available at the Metropolitan Planning Commission, or on its website ([www.knoxmpc.org](http://www.knoxmpc.org)). The following minimum standards shall apply:
  - a. Any required yard shall be landscaped with live vegetation of a nature normally found in residential areas ~~various sizes of~~

~~native trees. One large maturing tree and one medium or small maturing tree shall be provided per acre of required yard spaces.~~

- b. ~~All yard areas required under this section and other yards and open spaces existing~~ Grass or other natural ground cover shall be used in the required yard spaces. The majority of the area around buildings shall be landscaped with shrubs, and yards shall be maintained in such a manner as to provide a park-like setting for the district.

2. Parking areas:

- a. Parking areas shall contain one thousand (1,000) square feet of landscaping for every twenty thousand (20,000) square feet, or fraction thereof, of paved parking area.
- b. For each five thousand (5,000) square feet of parking area, or fraction thereof, a tree shall be provided that will obtain a minimum height of forty (40) feet at maturity.

3. Buffer yards ~~and other screening~~:

- a. Within the required building setback, a buffer yard shall be established along any property line that abuts a residential or agricultural zoning district. The Planning Commission may waive or reduce this requirement when there is no principal residential structure within 200 feet of said property line ~~consider~~ buffer

yards in relation to other zones as the site plan is considered.

- b. The following standards shall apply in buffer yards:

Minimum width: 25–100 feet (residential zones) and 50 feet (agricultural and open space zones)

Landscaping and screening: A screen, opaque to the height of six feet and consisting of any combination of a fence, wall, evergreen plants, or earth berms shall be provided within the buffer yard. A combination of medium and large evergreen trees and evergreen shrubs, which will provide an 80 percent screen at maturity from adjoining properties to a height of 45 feet, shall be planted in the buffer yard.

- c. Other sight obscuring screens shall be provided with the following minimum heights:

Refuse collection: One (1) foot height higher the refuse container

Loading areas: Eight (8) feet

Outdoor storage (where permitted): Six (6) feet

For these operations, adequate screening can be either natural or architectural material which obscures the line of sight from vehicles, pedestrians, and first story windows. Storage, loading and refuse container screening shall be of a material and design compatible with the overall architecture of the associated

structure. The trees and shrubs shall cover a minimum of 50% of the fence or architectural material in order to soften the screen.

d. Berms, which have a minimum height of three (3) feet at any point, are strongly encouraged as a technique to screen on-site activities and to provide a buffer between those activities and adjacent properties. Berms should vary in height to provide interest. The plan materials previously identified should be used in landscaping berms.

e. Existing trees that shall be conserved to create the buffer and other screening shall be identified on the landscaping plan.

4. The Planning Commission may approve a landscaping plan that differs from the minimum standards if the Commission finds that such plan meets the intent of this section.

5. The Department of Code Administration shall verify the installation of landscaping as shown on the approved landscaping plan prior to the issuance of a certificate of occupancy. Installation of planting materials may be delayed until the next planting season, in the event that literal compliance with the above standard would require plants to be installed.

#### D. Lighting

Lighting of all types shall be directed away from all residential or agricultural zoning districts, or any public rights-of-way. Locate lights to avoid glare or excessive light spillover



on adjacent sites and direct exterior lighting away from adjacent properties. Cut-off luminaires shall be used for all parking, road and security lights to reduce the amount of glare and light spillover.

E. Signage

Signs shall comply with the requirements of Section 3.90.12.

5.51.6 Administration

Within the EC (Employment Center) zone, no building or structure shall be erected or altered until and unless a written application and development plan for the contemplated development within said district has been filed with and approved by the Knox County Department of Code Administration Planning Commission. The plan and application shall be filed in accordance with the requirements of Article 6, Section 6.70 (Administrative Site Plan Review), of these regulations, and with the following additional requirements shall include the following:

A. A description of all operations proposed in sufficient detail to show that the proposed uses are within the intent of the EC zone as described in paragraph 5.51.1 and to indicate the effects of those operations in production of excessive auto and traffic congestion or problems of noise, glare, odor, sewerage, air pollution, water pollution, fire or safety hazards, or other factors detrimental to the health, safety and welfare of the area. See Section 4.10 (Performance Standards for Commercial and Industrial Uses.) In consideration of the difference in the scale of potential uses and their impact on the environment and the surrounding area, a list of the permitted uses shall be approved by the Planning Commission and recorded with the Knox County Register of Deeds prior to the issuance of any permits for the approved EC development.

B. Architectural, landscaping, lighting and signage

plans for the proposed development. These plans may be in the form of a design guideline document that is approved with the development plan and is used, via covenants, in developing individual sites or parcels.

- C. A development plan indicating the following: location of present and proposed buildings, loading docks, driveways, parking lots, other accessory uses, existing wooded areas, proposed landscaping, building and free-standing signs, and trash disposal areas.
- D. An estimate of the maximum number of employees contemplated for the proposed development and the number of employees per shift.
- E. A storm drainage plan which includes accurate existing and proposed water courses; the system of open channels, pipes, culverts, drains, inlets, catch basins, and similar facilities designed to handle storm water in times of rainstorms; the calculations used in the design of such systems; and the easements required in the construction and maintenance of the drainage system, consistent with the requirements of Section 6.11.

F. Any other information the Planning Commission may need to adequately consider the effect that the proposed uses may have upon the environment and on the cost of providing services to the area.

~~5.51.8 In administratively reviewing plans for specific sites, the Department of Code Administration shall approve any site plan that complies with the above referenced design standards and the requirements of the Knox County zoning and subdivision regulations. Anyone aggrieved by a decision of the Department of Code Administration may appeal such decision to the Board of Zoning Appeals, pursuant to Article 6, Section 6.60, of these regulations.~~

5.51.7 Following the approval of a development plan by the

Planning Commission, the Planning Commission staff may approve plans for individual sites or parcels. In administratively reviewing plans for specific sites or parcels, the staff shall approve any site plan that complies with the above referenced design guidelines document, the overall development plan approved by the Planning Commission, and the requirements of the Knox County zoning and subdivision regulations. MPC staff decisions may be appealed to the Planning Commission. Anyone aggrieved by a decision of the Planning Commission may appeal such decision to the Board of Zoning Appeals, pursuant to Article 6, Section 6.60, of these regulations.

- 5.51.8 The Metropolitan Planning Commission shall approve, approve with conditions, or deny applications for uses on review, as described in Section 5.51.3. this section and in compliance with relevant Knox County zoning and subdivision regulations.