



DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES

Planning Division

m e m o r a n d u m

TO: The Urbana Plan Commission

FROM: Robert Myers, AICP, Planning Manager

DATE: December 15, 2006

SUBJECT: Plan Case No. 2027-SU-06, Request by METCAD 9-1-1 for a Special Use Permit to construct a 285-foot tall public communications tower and equipment enclosures at 1905 E. Main Street for emergency service communications in the R-4, Medium Density Multiple Family Residential zoning district.

Introduction

This case is a request by METCAD 9-1-1 for a Special Use Permit to install a 285-foot tall communications tower with an equipment enclosure at 1905 E. Main Street in Urbana and located behind METCAD's existing 9-1-1 emergency communication center. The subject property is owned by Champaign County and is zoned R-4, Medium Density Multiple-Family Residential. METCAD 9-1-1 is the central dispatch center for emergency responders throughout Champaign County, including Urbana fire, police, and public works responders. In 2005, METCAD telecommunicators handled 350,647 telephone calls which resulted in approximately 151,489 dispatches of emergency equipment. The current system is 25 years old and is in the process of being upgraded to a new, state-of-the-art system. According to the applicants, the proposed tower is necessary because the existing tower structures are insufficient to support the weight of the new system equipment, and the location is critical to proper radio performance in the Urbana area.

The Zoning Ordinance Article XIII, Section XIII-1.R requires Special Use Permit approval for towers and equipment enclosures in R-4 zoning districts. Even though METCAD 9-1-1 is a cooperative effort between area governments, due to its height this project is not an exempted telecommunications facility under the Urbana Zoning Ordinance (Section XIII-1.D). Pursuant to the Urbana Zoning Ordinance, the Plan Commission must recommend approval or denial of the Special Use and forward it to City Council for action.

Background

METCAD 9-1-1 was established in 1979 as a consolidated dispatch center for emergency responders for Champaign, Urbana, and the University of Illinois. Since then it has grown to become the central emergency communications center for Champaign County, Illinois, contracting with some 30 emergency response agencies in the county for direct dispatch services. The lead agency is the City of

Champaign which uses METCAD for police and fire dispatch. The City of Urbana contracts with METCAD for police, fire, and Public Works dispatch. The University of Illinois Police, Champaign County Sheriff's Office, eight village police forces, 15 rural fire districts, and Champaign County Emergency Management Agency are the other agencies contracting for the service. METCAD has a staff of 24 telecommunicators and six administrative staff members. They are funded by contributions from member agencies as well as a 1.5 cent per month surcharge on each telephone line in Champaign County.

The essential aspect of METCAD's emergency response is reliable two-way radio communication. METCAD's radio system both assigns emergency calls from the public as well as allows responders to coordinate their operations. Their system is relied upon to function even when other communication systems fail.

METCAD's radio systems are about 25 years old. A new, state-of-the-art replacement system called MDICE (METCAD Digital Interoperable Communication Environment) is planned and under construction. MDICE will be able to support all of the agencies with capacity for future growth, provide improved performance over the current system, and will be compatible with State and Federal emergency communications systems. The system is being built by Motorola, Inc., an Illinois communications manufacturer based in Schaumburg. The west south, north, and central towers within the county are underway. The Special Use Permit request under consideration involves a 285-foot tower and equipment enclosure at their central dispatch center in Urbana. Construction and testing are expected to be completed by the second quarter of 2007. Public safety agencies would begin migrating to use of the new system in the summer of 2007.

The tower would be sited behind METCAD's existing building and approximately 300 feet south of E. Main Street. The tower would be located at the east end of METCAD's parking lot. METCAD already has a tower at this location which would eventually be replaced. The tower structure would be of lattice-type construction. A modular equipment building (12 feet by 16 feet) and a backup electrical generator would be located at the foot of the tower. Security would be provided by an 8-foot high chain link fence enclosing the immediate site (30 feet by 30 feet). The site plan shows four mature trees around the base which would remain.

Because METCAD's system is relied upon to function even when other communication systems fail, the tower is designed to meet extraordinary requirements to prevent structural failure. For example, the tower is designed to withstand 90 mile per hour winds even when coated with a half inch of radial ice.

Description of the Site and Surrounding Properties

The property under consideration for a Special Use Permit is located on Champaign County's east campus, and at the southeast corner of E. Main Street and Art Bartell Drive. The tower would be sited behind METCAD's existing building and approximately 300 feet south of E. Main Street. A wide range of public uses are located immediately to the south and extending to Washington Avenue. To the west is the current County nursing home (to be relocated), to the east is the Illinois Army National Guard operation. To the north across Main Street are single-family homes.

Zoning and Land Use Table

The following is a summary of surrounding zoning and land uses for the subject site:

Location	Zoning	Existing Land Use	Comprehensive Plan – Future Land Use
Subject Property	R-4 (Medium Density Multiple-Family Residential)	METCAD 9-1-1	“Institutional”
North	R-3 (Single and Two-Family Residential)	single-family homes	“Residential”
South	R-4 (Medium Density Multiple-Family Residential) and CRE (Conservation – Recreation - Education)	County Animal Control office, Humane Society, Juvenile Jail, and County Highway Dept. salt dome	“Institutional”
East	R-4 (Medium Density Multiple Family Residential)	Illinois Army National Guard	“Institutional”
West	R-6 (High Density Multiple-Family Residential)	County nursing home	“Industrial”

Comprehensive Plan Goals, Objectives and Policies

The proposed Special Use Permit has been reviewed under the goals and objectives contained in the 2005 Urbana Comprehensive Plan. The following goals and objectives relate to this case:

Goal 17.0 Minimize incompatible land uses.

Objectives

- 17.1 Establish logical locations for land use types and mixes, minimizing potentially incompatible interfaces, such as industrial uses near residential areas.
- 17.2 Where land use incompatibilities exist, promote development and design controls to minimize concerns.

Goal 37.0 Support the provision of municipal services to ensure a high level of safety and welfare for all Urbana residents.

Objectives

- 37.1 Ensure continued high levels of police and fire protection.

The City of Urbana 2005 Comprehensive Plan, Future Land Use Map 6, designates the future land use of the property in question as “Institutional”. The Comprehensive Plan describes this future land use designation as follows:

“Institutional. Institutional uses generally include public, quasi-public, and private uses, such as governmental, educational, medical, religious, or university facilities as well as cemeteries. Institutional uses may range from single buildings to campuses.”

The proposed tower is ancillary to the adjacent METCAD 9-1-1 communication center. METCAD is a quasi-public use which is supported by governments throughout Champaign County on a cooperative basis. The property is owned by Champaign County and is part of Champaign County’s east campus. METCAD falls within the Comprehensive Plan’s future land use designation at this site of “Institutional”.

Towers and Equipment Enclosures

The following zoning requirements relate directly to towers and equipment enclosures. It is important to note that these requirements are intended to respond to the rise of personal wireless service, competing telephone service providers, and the resulting proliferation of private towers and antennae being constructed throughout Urbana. Consequently, some required submittals and review standards are not applicable and have not been required for this review. For instance, the applicants are not being required to submit an evaluation of existing buildings taller than 35 feet within one-quarter mile of the proposed tower which could provide part of a network for signal transmission.

The Zoning Ordinance generally requires that towers in residential zoning districts be limited to no more than 50 feet in height in residential zoning districts (Section XIII-1.E.6), and furthermore that they be set back in residential districts equal to or greater than twice the tower height (Section XIII-1.E.5). The Zoning Ordinance explicitly allows the City Council to waive these particular requirements for good reason.

In terms of aesthetics, the Zoning Ordinance requires that the tower site, to the extent possible, be screened with live plantings and include evergreen vegetation with a minimum height of six feet. If a chain link fence is used, it must be screened with evergreen vegetation that will reach a height of six feet within one year of planting. This requirement can also be waived.

Inasmuch as the Urbana Building Safety Staff review the plans of any tower structure they accept the seal of a licensed engineer as a statement that the design is sound.

Discussion

Staff analysis

The petitioner states that this tower is necessary because the existing tower structures are insufficient to support the weight of the new system equipment, and that the location is critical for proper radio performance in the Urbana area. City staff takes these statements as fact given its location at the existing METCAD facility.

Once the specific site has been shown as necessary, and that collocation is not possible, the purpose of Special Use Permit review of towers in residential zoning districts is to ensure they are designed and located with reasonable care. The question for review in this instance is whether the placement of the tower and equipment enclosure as proposed in the site plan meets the intent of the Special Use provisions of the zoning code to not "... be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious to the public welfare." Although the property is residentially zoned, it is used for other purposes. There are no residences located within a radius of 285 feet of the tower, although the current County Nursing Home is located just beyond to the west. A new nursing home is currently under construction elsewhere on the County's east campus and residents are expected to be relocated in 2007. The existing nursing home is expected to be rehabilitated for office use.

Also of concern is the potential visual impact of the tower and equipment enclosure. At 285 feet tall, the tower will be visible from a distance, including by motors driving along Main Street and from residences on the north side of Main Street. The height will be offset by being located some 300 feet south of Main Street, its placement behind the METCAD building, and use of existing mature trees to visually screen its base from a distance. It should also be noted that there is an existing, shorter tower already located at this site.

General Tower Requirements

The Zoning Ordinance generally requires that towers in residential zoning districts be limited to no more than 50 feet in height (Section XIII-1.E.6), and that they be set back from any residential lot setback line equal to or greater than twice the tower height (Section XIII-1.E.5). However, the Ordinance explicitly allows the City Council to waive these particular requirements for good reason. City staff asserts that the reasons for varying from these requirements are as follows:

1. The site and surrounding areas are zoned residential, they are used for institutional rather than residential purposes.
2. To advance the goals of safeguarding the public in providing emergency communications quickly, effectively, and efficiently.
3. The tower would be located less than 285 feet from its parcel boundary (common with the Illinois Army National Guard) but would be necessary for the purposes of public safety and other public policy considerations. The tower height is necessary for providing the level of emergency communication necessary, and provide room for growth in the system, and the location is fixed based on being siting at the existing METCAD 9-1-1 facility.

The location preferences provided in Section XIII-1.F of the Zoning Ordinance do not apply because they pertain only to “personal wireless service facilities”.

Requirements for a Special Use Permit

According to Section VII-6 of the Urbana Zoning Ordinance, an application for a Special Use Permit shall demonstrate the following:

- 1. That the proposed use is conducive to the public convenience at that location.*

The proposed use is conducive to the public convenience because it is critical for the operation of METCAD which dispatches and provides communication for emergency responders throughout Champaign County.

- 2. That the proposed use is designed, located, and proposed to be operated so that it will not be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious to the public welfare.*

The proposed use should not pose a detriment to the district in which it is proposed to be located or any adjoining properties. The district in which it is located includes the Illinois Army National Guard building, the Humane Society, and County Animal Control office. Although the tower will be 285 feet in height, it will be located some 300 feet south of Main Street and located behind the existing METCAD building. The addition of a new tower and equipment enclosure would not be visually disharmonious with its surroundings and should not have a significant negative visual impact on the surrounding property.

- 3. That the proposed use conforms to the applicable regulations and standards of, and preserves the essential character of, the district in which it shall be located, except where such regulations and standards are modified by Section VII-7.*

Towers are permitted in the R-4 Medium Density Multiple Family Residential zoning district under Special Use Permit review. The proposed facility is designed to meet applicable regulations and standards of the Urbana Building Code as well as applicable Federal Communications Commission regulations. Should the Special Use Permit be granted, the petitioner will be required to obtain a building permit to erect the tower and equipment enclosure. The building permit application will be reviewed to demonstrate complete compliance with the provisions of the Special Use Permit as well as all other applicable codes and ordinances.

Additionally, Special Use Permits for towers must show that the base is securely fenced and that the facilities be visually screened with landscaping. The Plan Commission, however, can recommend to the City Council waiving the landscape screening requirements if the goals of the Zoning Ordinance would otherwise be better served (Section XIII-1.R.7). City staff recommends such a waiver based on the tower being located behind the existing METCAD building and within remaining mature trees, the largest being 36” in diameter.

Consideration

The Plan Commission shall determine whether the reasons set forth in the application, and the evidence adduced during the public hearing, justify the granting of the Special Use Permit, and whether the proposed use will be in harmony with the general purpose and intent of the Zoning Ordinance, and will not be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious or detrimental to the public welfare.

In addition, the Plan Commission shall make a recommendation to the City Council for or against the proposed special use, and may also recommend such additional conditions and requirements on the operation of the proposed use as are appropriate or necessary for the public health, safety, and welfare, and to carry out the purposes of the Zoning Ordinance, including but not limited to the following:

1. Regulate the location, extent, and intensity of such use;
2. Require adherence to an approved site plan;
3. Require landscaping and the screening of such use by means of fences, walls, or vegetation;
4. Stipulate a required minimum lot size, minimum yards, and maximum height of buildings and structures;
5. Regulate vehicular access and volume, and the design and location of parking and loading areas and structures;
6. Require conformance to health, safety, and sanitation requirements as necessary;
7. Regulate signs and outdoor lighting;
8. Any other conditions deemed necessary to affect the purposes of the Ordinance.

Summary of Findings

1. Towers are permitted in the R-4 Medium Density Multiple Family Residential zoning district under Special Use Permit review.
2. The purpose of Special Use permit review of towers in residential zoning districts is to ensure they

are designed and located with reasonable care.

3. The proposed use is conducive to the public convenience because it is critical for the dispatch and coordination of emergency responders throughout Champaign County.
4. The proposed use should not pose a detriment to the district in which it is proposed to be located or any adjoining properties. The tower is located on Champaign County's east campus along with other government uses, would be set back farther than its height from all streets and residences, and would be located behind METCAD's existing building.
5. The proposed facility is designed to meet applicable regulations and standards of the Urbana Building Safety Division as well as applicable Federal Communications Commission regulations.
6. The proposed use is compatible with the existing land use pattern of the general area.

Options

The Plan Commission has the following options for recommendations to the City Council regarding Plan Case No. 2027-SUP-06:

1. Recommend approval of the Special Use Permit request, without any additional conditions.
2. Recommend approval of the Special Use Permit request, with any conditions deemed appropriate or necessary for the public health, safety, and welfare, and to carry out the purposes of the Zoning Ordinance.
3. Recommend denial of the request for a Special Use Permit.

Staff Recommendation

Based on the evidence presented in the discussion above, and without the benefit of considering additional evidence that may be presented at the public hearing, staff recommends that the Plan Commission recommend **approval** of the proposed special use permit in Plan Case No. 2027-SUP-06 to the City Council as presented for the reasons articulated above **with the following conditions**:

1. The design, installation, and operation of the equipment enclosure and associated cellular equipment shall be in accordance with all applicable city, state, and Federal codes, ordinances, and regulations, including health and safety regulations required by the Federal Communications Commission.

And with the variations and waivers from standard Special Use Permit requirements for towers:

1. Variation from the 50 foot height limit for towers in R-4 zoning districts, to advance the goals of safeguarding the public and providing emergency communications quickly, effectively, and efficiently, as permitted in Section XIII-1.E.6 of the Zoning Ordinance.

2. Variation from property boundary setback requirements for towers in residential zoning districts equal to or greater than twice the tower height, based on public safety and welfare and other public policy considerations, as permitted in Section XIII-1.E.5 of the Zoning Ordinance. The tower would be located less than 285 feet from a parcel boundary in common with the Illinois Army National Guard.
3. A waiver from the landscape screening requirements for towers, as permitted in Section XIII-1.R.7, and based on the tower being located behind the existing METCAD building and among remaining mature trees.

Attachments: Exhibit A, Location Map
 Exhibit B, Zoning map
 Exhibit C, Existing Land Use on Aerial Photo map
 Exhibit D, Future Land Use Map
 Exhibit E, Site Plan
 Exhibit F, Plan View of Tower
 Exhibit G, Special Use Application

cc: METCAD 9-1-1
 Rex Mundt, Urbana Fire Chief
 Mike Bily, Urbana Police Chief

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Cases\2006\2027-SUP-06 METCAD tower\2027-SUP-06 pc memo.doc

Location Map

EXHIBIT "A"



0 250 500 1,000 Feet

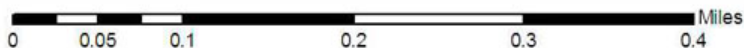
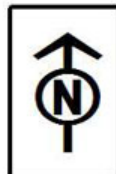
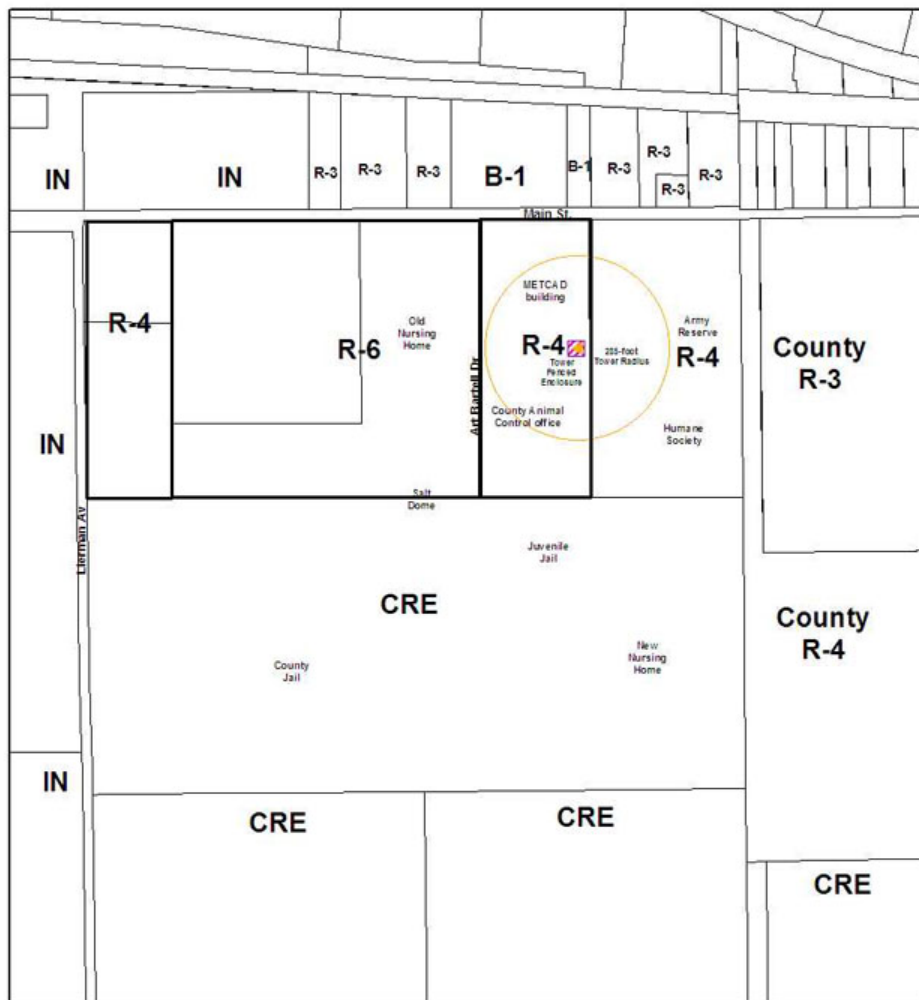


Plan Case: 2027-SU-06
Subject: Special Use Permit request to construct a 285-foot tall Public Communications Tower
Petitioners: METCAD
Location: 1905 East Main Street
Zoning District: R-4, Medium Density Multiple Family Residential

Prepared 12/06/06 by Community Development Services - pal

Zoning Map

EXHIBIT "B"



Plan Case: 2027-SU-06

Subject: Special Use Permit request to construct a 285-foot tall Public Communications Tower.

Petitioners: METCAD

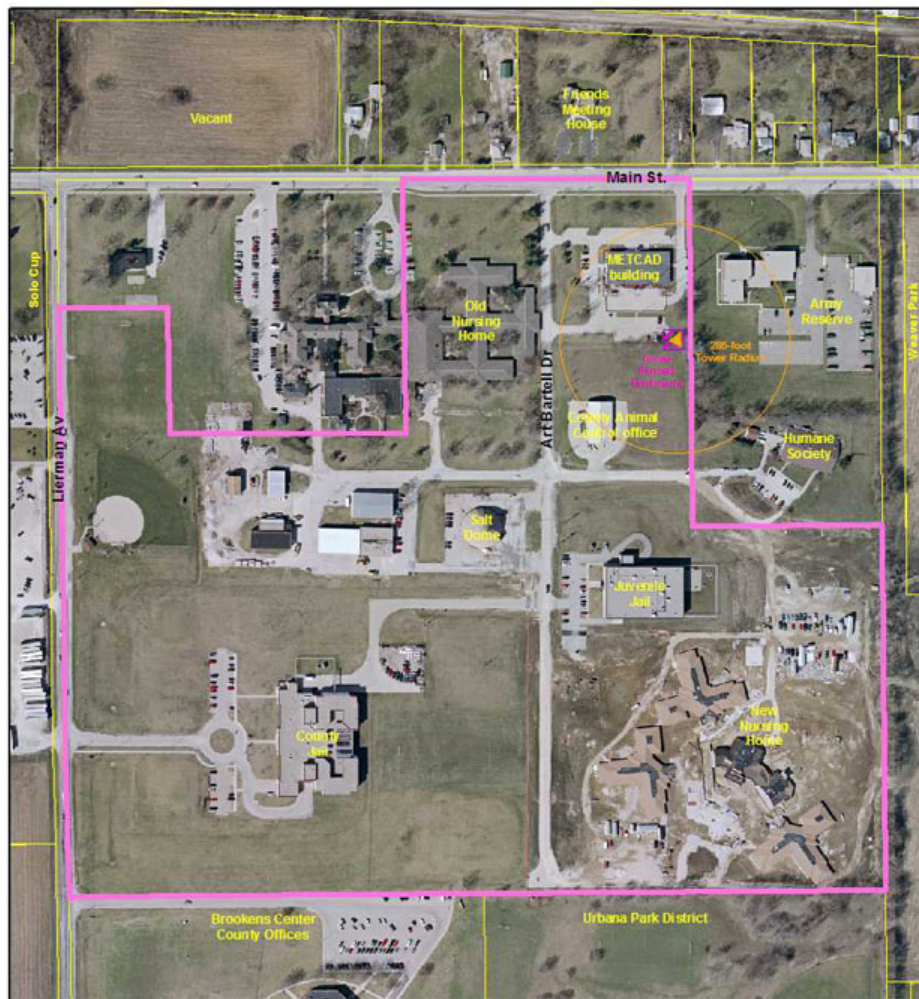
Location: 1905 East Main Street

Zoning: R-4, medium density multiple family residential zoning district

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Existing Land Use w Aerial Photo

EXHIBIT "C"



Plan Case: 2027-SU-06

Subject: Special Use Permit request to construct a 285-foot tall Public Communications Tower.

Petitioners: METCAD

Location: 1905 East Main Street

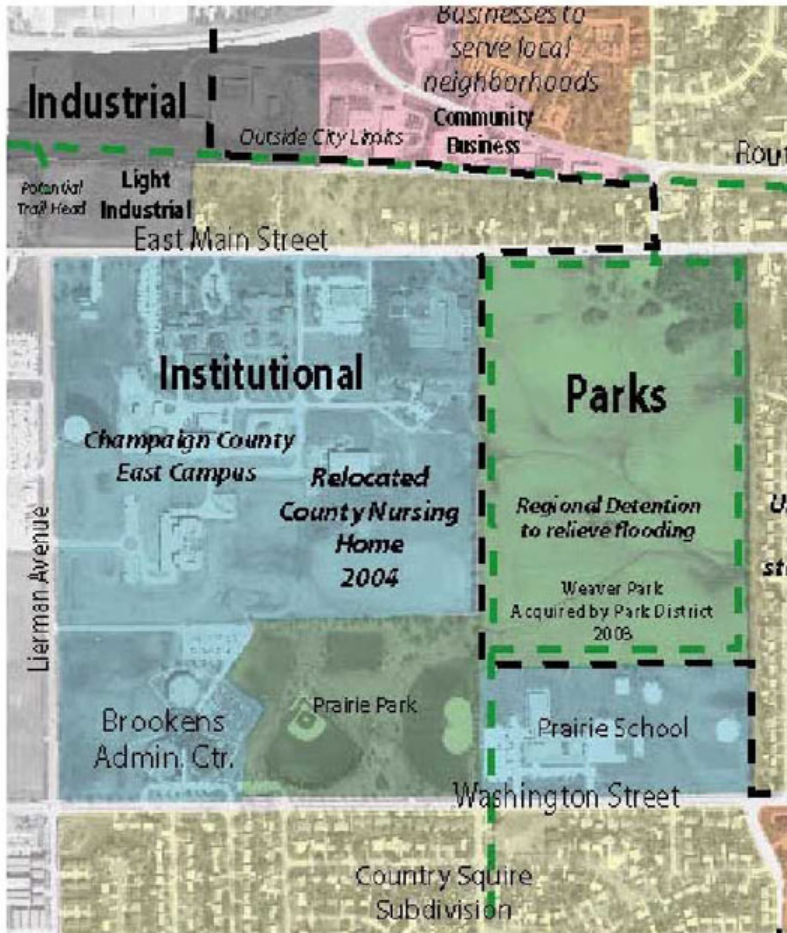
Zoning: R-4, medium density multiple family residential zoning district

Prepared 12/06/06 by Community Development Services - pal

Future Land Use Map

EXHIBIT "D"

Source: Comprehensive Plan Future Land Use
Map # 6, p. 77 - Detailed Section



Plan Case: 2027-SU-06

Subject: Special Use Permit request to construct a 285-foot tall Public Communications Tower.

Petitioners: METCAD

Location: 1905 East Main Street

Zoning: R-4, medium density multiple family residential zoning district

Prepared 12/06/06 by Community Development Services - pal