



VILLAGE OF HOFFMAN ESTATES PLANNING AND ZONING COMMISSION STAFF REPORT

PROJECT NUMBER: TA22-0001
PROJECT NAME: DATA CENTER TEXT AMENDMENTS
REQUEST: TEXT AMENDMENTS - ZONING CODE
APPLICANT: VILLAGE OF HOFFMAN ESTATES
PZC MEETING DATE: MARCH 2, 2022
PUBLIC HEARING: YES
STAFF ASSIGNED: KEVIN ANDERSON, ASSOCIATE PLANNER

REQUESTED MOTION

Approval of Text Amendments amending Section 9-2-1, Definitions, Section 9-3-3, Fences, Article 9-7, Office Districts, Article 9-8, Business Districts, and Article 9-9, Manufacturing Districts, of the Hoffman Estates Municipal Code (Data Centers).

BACKGROUND

On December 13, 2021, the Planning, Building and Zoning Commission directed staff to proceed with drafting text amendments to the Zoning Code regarding data centers and related items. Staff proposes text amendments to the Village's Zoning Ordinance from time to time to keep the Code aligned with current business practices and development trends. These text amendments can help market the Village to certain uses and provide guidance to potential business owners.

Staff is currently proposing text amendments to the Village's Zoning Code to more specifically allow data centers as either a permitted or special use in certain districts. The proposed text amendments would not alleviate the Village's Site Plan Review process and any new structures or significant remodeling of existing structures would be required to go through a full review process, including any required public meetings.

Data centers, in general terms, are centralized networked computer servers which provide digital data storage and processing. Data centers have become increasingly necessary for both commercial and personal data storage and there are several in the Chicago area existing or under construction.

In May 2021, the Village approved a data center use for Microsoft in the M-2 Manufacturing District. While the specific "data center" term is not explicitly stated within the permitted use listing, it was interpreted that the use was permitted as it is generally consistent with some of the more generic manufacturing type uses listed in the M-2 district, which is a common approach for zoning review. This project is under construction.

Subsequent to the Microsoft approval, there have been several other data center developers exploring possible sites within the Village in different zoning districts. Often during the site selection process, developers and brokers are looking for definitive Zoning Code language to identify in which district a data center may locate. Based on the current

Code language, data centers can only be interpreted to be permitted in the M-2 zoning district, yet there are several other districts where a data center use may be appropriate. In addition to clarifying the code for the benefit of staff, brokers, and developers, the intent of the proposed text amendments is to respond to the development community and make it clear to potential investors that data centers are permitted in Hoffman Estates.

ANALYSIS

Economic Impacts

Data center uses are unique commercial uses in that they generate very little traffic and activity for their size, while also having a significant positive financial impact through property and utility taxes. These benefits make it desirable for the Village to attract data centers to appropriate parcels within the Village. Having clear language in the Zoning Code will communicate to the development community that these are desirable uses and will identify where they are preferred from a zoning perspective.

Land Use Impacts

The proposed text amendments would allow data centers as a permitted use within five specific zoning districts: the O-3, O-5, B-4, M-1, and M-2 districts. Data centers comply with the legislative intent of these districts and are compatible with the list of permitted uses in each. Parcels in these districts are typically larger lot sizes and are usually segregated from residential uses. It is expected that data centers could operate in these areas without having a negative impact on other uses in the district. For reference, the Microsoft project under construction is zoned M-2.

The proposed text amendments would also make data centers a special use in the C-MU district. By its nature, the C-MU district is mixed use and may contain residential as well as commercial uses in proximity to one another. Due to the potential proximity to other uses such as retail and/or residential, staff believes it is appropriate for data centers to be a special use in the C-MU district to ensure they are carefully scrutinized within the given context and will not impose a negative impact on surrounding uses.

Unique site plan requirements that can be part of a data center development typically include a need for significant security fencing, screening of large cooling equipment, and potentially the need for new electricity power lines or a substation on or near the site. The Village's in-depth Subdivision Code Site Plan requirements would be enforced to sufficiently address all these factors, which are summarized below:

Traffic: The overall traffic impact from data centers should be minimal. Compared to other Manufacturing, Business and Office uses, there are far fewer employees per square foot at data centers since computer servers, not personnel, occupy the majority of the structures. Data centers have limited deliveries (in and out), limited customer interactions on site, and are not open to the public.

Ancillary Equipment: Data centers use a significant amount of energy to cool and operate server systems. It would not be uncommon for these types of uses to need their own substation and/or power generation on site. There are typically redundant backup power generators at these facilities and most facilities are designed to withstand a disaster. As proposed in the new "Data Center" definition, ancillary uses such as power and cooling equipment, electrical substations, transformers, and security apparatus would be permitted as part of the data center. Adequate visual screening of ancillary equipment would be evaluated and required through the detailed site plan review process.

Utilities: Depending on the power needs and type of cooling systems used, data center development will likely require significant on- and off-site electrical, sanitary and water utility improvements to accommodate the development. System availability and upgrades, including Village water and sewer and ComEd power transmission, would be evaluated comprehensively as part of the detailed site plan review process for this type of development.

Noise: Generators and cooling equipment generate noise that must be evaluated through the site plan review process to ensure acceptable sound attenuation is achieved. It is important to note that within all commercial districts in the

Village there are a set of Performance Standards which must be observed (§9-3-11-B). These performance standards regulate issues such as noise, vibrations, odor, glare and dust. Data centers would be required to operate within these standards.

Security: Security is an important component of data center construction and could include physical infrastructure on the property such as manned or unmanned security structures, traffic gates, perimeter fencing, cameras, and lighting. The proposed definition of a data center would include these ancillary items under the umbrella of the permitted use.

Fencing

The Zoning Code currently requires a seven-foot fence for all non-residential uses abutting a residential zone. The Code also restricts fencing in Business, Office and Manufacturing districts to seven feet in height to screen utility and ancillary equipment. The intent of these regulations are to provide privacy and a buffer for residents and security for commercial properties.

Since security is a large component of data center operations, it is anticipated that development of these uses would require a security fence that is greater than the permitted seven-foot fence in conjunction with any site plan. For reference, the Microsoft data center received approval as part of their final site plan to allow an eight-foot security fence. Other recent examples of the Village approving security fences in excess of the Code requirements include the ComEd substation on Pembroke Avenue and Adesa auto auctions on Beverly Road.

To provide flexibility for data centers and other commercial uses that require security and screening fencing beyond the currently permitted seven feet, staff is proposing text amendments that would permit security and screening fences up to eight feet in height in non-residential districts.

PROPOSED TEXT AMENDMENTS

In Exhibit A attached hereto, you will find the proposed text amendments to the following Sections:

1. Amend Section 9-2-1 (Definitions) of the Zoning Code to add a definition for “Data Center”;
2. Amendment to add “Data Center” as a permitted use in certain districts:
 - 9-7-3 (O-3 Office and Research Tollway),
 - 9-7-6 (O-5 Office District),
 - 9-8-5 (B-4 Business District),
 - 9-9-1 (M-1 Manufacturing District),
 - 9-9-2 (M-2 Manufacturing District);
3. Amendment to add “Data Center” as a Special Use to Section 9-8-3 (C-MU Commercial Mixed Use District);
4. Amend Sections 9-3-3-C-1 and 9-3-3-C-12 to allow fences for commercial properties to be up to eight feet in height.

TEXT AMENDMENT STANDARDS - Section 9-1-17

The Planning and Zoning Commission shall not recommend the adoption of a proposed amendment unless it finds that the adoption of such amendment is in the public interest and is not solely for the interest of the petitioner.

Text amendments to the Zoning Code involve changes to the regulations that apply to all properties in the Village as a whole. The Zoning Code text amendments meet the Standards set forth in the Zoning Code, and were developed with consideration of the entire Village holistically.

NOTIFICATION

The public notice was published in the Daily Herald 15 days prior to the hearing. No objections have been received.

Attachment: Exhibit A: Proposed Text Amendments

Exhibit A
Proposed Text Amendments
Data Centers - Definitions, Permitted and Special Uses, and Fence Regulations

Definitions

Add “Data Center” definition alphabetically to Section 9-2-1 “Definitions”:

Data Center: A facility used to house and operate networked computer systems for the maintenance, storage, processing, and routing of data, including related office and warehouse activities and infrastructure support equipment including but not limited to: power and cooling equipment, electrical substations, transformers, and security apparatus. A Data Center may include multiple structures on one or more contiguous lots which are developed and operated as a unit.

Permitted Use

Add “Data Center” as a listed permitted use in the following Code Sections:

9-7-3-B-2. (O-3 Office):

g. Data Center

9-7-6-B-2. (O-5 Office and Research Tollway):

x. Data Center

9-8-5-B-2. (B-4 Business):

c. Data Center

9-9-1-B-2. (M-1 Manufacturing):

f. Data Center

9-9-2-B-2. (M-2 Manufacturing):

f. Data Center

Special Use

Add “Data Center” as a listed special use in the following Code Sections:

9-8-3-B-3. (C-MU Commercial Mixed Use):

I. Data Center

9-8-3-C-3. (C-MU Commercial Mixed Use):

I. Data Center

Exhibit A
Proposed Text Amendments
Data Centers - Definitions, Permitted and Special Uses, and Fence Regulations

Fence Regulations

Modify the following existing fence regulations to permit a fence up to eight feet in height for non-residential uses:

9-3-3-C-1. No fence shall be erected in excess of six (6) feet above ground level or grade level, except as outlined in Section 9-3-3-A-1 and 2, and that fences ~~seven (7)~~ **eight (8)** feet above ground or grade level may be erected **for commercial uses in** areas zoned **for Manufacturing, Business, and Office** ~~B-3, B-4, and O-5~~ provided that the height limitations contained herein shall not apply to shrubs or hedges on interior or rear lot lines.

9-3-3-C-12. Within all zoning districts, excluding one-family detached and two-family residential districts, enclosure fences to screen service and utility areas (such as HVAC, mechanical equipment, utility services, **storage yards, data centers, manufacturing uses,** or satellite antennas) **and/or to provide security** shall not exceed ~~seven~~ **eight (8)** feet in height unless a higher fence to provide adequate screening and security is specifically approved by the Village Board as part of the development review process outlined in the Subdivision Code.