WORKING DRAFT (revised: 9/2/2022)

PART 509. DATA CENTER OPPORTUNITY ZONE OVERLAY DISTRICT

Sec. 32-509.01. Purpose and intent.

The Data Center Opportunity Zone Overlay District was created for the purpose of promoting development of data centers within areas of the County where there is existing infrastructure that could adequately support the proposed use. This district continues the County's efforts to attract and advance high-tech industrial development while limiting negative impacts to existing communities. The overlay is not intended or designed to be an exclusive area for the development of data centers in Prince William County.

Sec. 32-509.02. Establishment of a Data Center Opportunity Zone Overlay District.

1. A Data Center Opportunity Zone Overlay District may be established by the Board of County Supervisors on lands in proximity to high voltage transmission lines of 115kv or more and planned or zoned for office or industrial uses with districts that implement data centers.

2. A Data Center Opportunity Zone Overlay District shall be created and amended by ordinance upon resolution of the Board of County Supervisors. The boundaries shall be set using a map. Amendments to the map will be by Zoning Map Amendment. Amendments to the text will be by Zoning Text Amendment.

3. Said District shall overlay the existing zoning district. The regulations and requirements of the underlying zoning district and the Data Center Opportunity Zone Overlay District shall both apply, provided however, that when the regulations applicable to the Data Center Opportunity Zone Overlay District conflict with the development standards of an underlying zoning district, the Data Center Opportunity Zone Overlay District regulations shall apply.

Sec. 32-509.03. Site Design Standards.

The Site Design Standards are intended to help minimize the physical, environmental, and visual impacts of data centers on adjacent development. The following elements are the primary areas of regulation and guidance associated with the site development of data centers in Prince William County.

1. Building Placement & Orientation –

    a. Buildings shall orient primary facades, including visitor, staff and administrative functions, to primary adjacent roads.

    b. Loading docks and service entries of buildings shall not be visible from public rights-of-way. When possible, existing buildings may be used to screened loading docks. Where building locations do not offer screening, and in the case of phased development plans, screening of loading docks and service entries shall be demonstrated through the use of existing or proposed landscaping, fencing, walls and/or similarly effective methods.

2. Screening of Mechanical Equipment & Substations –

    a. Mechanical equipment and substations shall be screened from public and private rights-of-way and residentially zoned/planned properties using one or multiple of the following methods of screening:

        i. A principal building;

        ii. Existing vegetation that will remain on the property;

      iii. A visually solid fence, screen wall or panel, parapet wall, or other visually solid screen that shall be constructed of materials compatible with those used in the exterior construction of the principal building. These features will be at least 10 feet in height. Chain link fencing with slats is not permitted to satisfy this requirement.

      iv. Mechanical equipment and substations located in a manner found to have no adverse impact on adjacent roads and adjacent properties, as determined by the Planning Director, shall not be required to be screened.

b. Mechanical equipment, penthouses, and similar mechanical structures are integral to data center architecture and shall be adequately conceived of and screened from adjacent streets and rights-of-way. Data center parapets, or rooftop screening, shall fully screen rooftop equipment from view. Parapets and rooftop equipment screening are allowed to exceed the underlying zoning district's maximum building height by no more than 10 feet.

c. Power lines 34.5kV and below located along public and private rights of way shall be buried.

3. Buffer Yard Requirements

a. A buffer yard is required in order to screen the data center from adjacent residentially zoned or planned properties. In lieu of the buffer yard requirement in DCSM Section 800, any side/rear yard abutting property that is not planned or developed with industrial uses shall include one of the following:

      i. Commercial or office zoned/planned properties - A minimum 50-foot buffer. This may be achieved through existing mature landscaping or a landscaped earthen berm that screens the site. Berms should have a slope no steeper than 2:1 with a minimum height of six (6) feet and planted to a type C DCSM buffer standard.

      ii. Agricultural, residential, or mixed use zoned/planned properties - A minimum 100-foot buffer. This may be achieved through existing mature landscaping or a landscaped earthen berm that screens the site. Berms should have a slope no steeper than 2:1 with a minimum height of ten (10) feet and planted to a type C DCSM buffer standard.

      iii. Notwithstanding the requirements of this section, use of natural topography and preservation of existing vegetation, supplemented by new vegetation, if needed, or on the outside of a six foot tall solid fence, may be substituted for the above requirements when found by the Planning Director to provide visual screening from adjacent land uses at the density, depth, and height equivalent to the buffer yard with earthen berm.

b. The linear co-location of utilities shall not be located within buffer yards to protect the landscaping and the preservation of open space.

4. Fencing

    a. Fencing of the property is permitted, provided that fencing along public or private streets is not chain-link, with or without slated inserts, and does not include barbed wire or other similarly visibly intrusive deterrence device.

    b. Chain-link fencing or barbed wire fencing are prohibited along public or private street frontages. This fencing allowance does not relieve a property owner from complying with all fire and access code requirements.

    c. The Planning Director may allow for alternative compliance with this requirement.

5. Density and Height –

    a. Data Centers not adjacent to properties planned agricultural or planned/zoned residential or mixed use are required to develop at a minimum floor-area-ratio (FAR) of 0.4.

    b. Data Centers not adjacent to properties planned or zoned agricultural, residential, or mixed use are permitted to increase their FAR, up to 1.0 FAR and may exceed the maximum building height in their underlying zoning district by 20% provided all other development standards (excluding FAR limitations and height) for the underlying district are met.

Sec. 32-509.04. Building Design Standards.

Standards for building design in Prince William County will ensure a base level of architectural quality that positively contributes to the built environment. The standards address the following elements of building design for data centers.

1. Massing & Scale

    a. Buildings shall use broad, large-scale architectural gestures to provide variety and modulation in facade and massing as seen from public rights-of-way.

    b. Variation at the ground plane shall be provided to create transitions in scale and mass as viewed from public rights-of-way.

    c. Provide additive and subtractive shifts in the building footprint to reduce mass and scale and to provide outdoor amenity spaces for employees and visitors.

2. Entryways

    a. Each building shall provide a well-defined entry sequence for pedestrian and vehicular uses from the street to the building.

    b. Secondary entrances shall be easily accessible and convenient to building parking and delivery areas, but not be dominant.

    c. Building entries shall be located so that they are easily identifiable with convenient public access.

    d. Primary building entryways shall provide a minimum of two of the following elements (in addition to required building design elements):

        i. Overhangs

      ii.   Distinct Fenestration

      iii.   Variation in Massing and Scale

      iv.   Protected Entry

3. Fenestration / Windows

   a. Transparency shall be provided on facades of the building that face public rights-of-way—tinted glass is discouraged. Entries and primary corners should be transparent for safety, occupant wellbeing, and wayfinding.

   b. Office spaces associated with data centers shall be a minimum of 40% glazed on exterior wall. Data center spaces shall be a minimum of 15% glazed on exterior wall.

   c. Fenestration used as a method of breaking up large expanses of wall system (not as an associated office space) may use opaque glazing methods.

4. Exterior Colors & Materials

   a. Primary building facades shall use a neutral color palette and avoid high-contrast colors.

   b. Accent colors shall be selected to complement the dominant building color, and any color change should occur where changes in the building plane or recesses are provided.

   c. Colors shall not act as advertisements or billboards.

   d. Building exteriors shall use materials with texture and character.

   e. Changes in materials shall be reflected in massing and/ or offsets. The number of disparate materials should be limited to a maximum of three primary materials to avoid a busy appearance.

   f. All metal panels shall be fully engineered, architectural quality systems.

   g. Buildings shall incorporate materials defined below as "natural finish materials". A minimum of 50% of the entrance elevation shall consist of those materials defined as "natural finish" materials, and a minimum of 25% of the other elevations. "Natural finish materials" are defined as:

      i. Brick.

      ii. Concrete (both precast and cast-in-place).

      iii. Metal panels or anodized aluminum.

      iv. Glazing Systems.

5. Design elements should be used to enhance the overall expression of data center buildings, with an emphasis on the pedestrian experience—particularly at entryways. All buildings shall include at least 5 of the following architectural features:

   a. Overhang

   b. Canopy or Portico

   c. Recesses/Projections

   d. Arcade

   e. Raised corniced parapets over the entrance

   f. Tower Elements (at strategic locations)

   g. Variation in the roof line

Sec. 32-509.05. Sustainability Design Standards.

The development of data centers in Prince William County provides the opportunity for the County to meet goals associated with sustainability, combating climate change, and carbon neutrality. Standards related to site and building design provide guidance that will help meet these goals in the coming decades. However, the following measures should be incorporated to the maximum extent possible to ensure that the development of data centers is done in a sustainable manner that is consistent with the goals of the County.

1. Site Design Standards

   a. Minimize land disturbance and maximize on-site tree preservation by providing a tree preservation plan. As a part of the tree preservation plan submitted with the site plan a minimum of 10 percent of a site is required to be preserved as natural open space, unless other on and off -site mitigation is approved by the County.

   b. Reduce the heat island effect by minimizing impervious areas and enhanced landscaping.

   c. Incorporate permeable paving in parking areas.

   d. Reduce, control, and treat surface runoff through effective storm water practices that treat the quantity and quality of runoff.

   e. Provide bicycle parking in accordance with the DCSM.

   f. Use pervious pavement surfacing for parking lots.

   g. Aeration of water retention using solar power.

   h. Minimize habitat disturbance and provide wildlife corridors.

   i. Apply best practices for erosion control.

   j. Provide EV charging stations. Use LED exterior lighting.

   k. Minimize land disturbance.

2. Building Design Standards

   a. Recycle construction material waste.

   b. Incorporate heat reflective roofing.

   c. Use water efficiently, such as utilized closed loop water and cooling systems, to minimize the impact freshwater stock and encourage recycling water when possible.

   d. Use sustainable building materials in the construction of data centers.

   e. Enhance indoor environmental quality (IEQ) through the maximization of daylighting, ventilation and moisture control, and avoiding materials with high-VOC emissions.

   f. Use LED interior lighting.

   g. Provide LEED equivalent building standards.

   h. Capture and use 100% of reclaimed water.

   i. Trap and reuse heat sources to the maximum extent possible.

   j. Incorporate other innovative technologies to reduce power consumption.

Sec. 32-509.06. Noise Attenuation

1. All noise producing equipment associated with data center uses shall be screened by a solid wall and in such a way that noise does not reverberate off of adjacent solid surfaces and impact adjacent residential neighborhoods.

2. A noise study certified by a professional noise engineer shall be provided for data center uses adjacent to residential neighborhoods and demonstrate expected noise levels at abutting property lines. Noise from HVAC equipment shall be attenuated to meet the maximum noise levels in the Prince William County Noise Ordinance. No data center shall violate the Prince William County Noise Ordinance.

Sec. 32-509.07. Uses permitted by right.

All uses permitted by right in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District.

Data centers shall be permitted by right in the Data Center Opportunity Zone Overlay District in the O(L), O(H), O(M), O(F), M-1, M-2, and M/T zoning districts and in designated office or industrial land bays in the PBD and PMD district.

Sec. 32-509.08. Secondary uses.

All permitted secondary uses in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District.

Sec. 32-509.09. Uses permitted by Special Use Permit.

All permitted special uses in the underlying zoning district shall be permitted by special use permit in the Data Center Opportunity Zone Overlay District.

Sec. 32-509.10. Prohibited Districts.

Data centers shall be prohibited in agricultural, residential, PMR, B-2, B-3, and V districts.