

Article-7 Use Performance Standards

Division 7-1 General

Division 7-2 Rural Use Standards

Division 7-3 Residential Use Standards

Division 7-4 Public/Civic/Recreation Use Standards

Division 7-5 Commercial Use Standards

Division 7-6 Industrial Use Standards

A. General Standards.

- (1) The Administrator may require industrial uses to be conducted wholly within a completely enclosed building or within an area enclosed on all sides by a solid masonry wall, a uniformly painted solid board fence, or an evergreen hedge between six (6) and ten (10) feet in height.
 - (a) Public utilities requiring natural air circulation or other technical consideration necessary for proper operation may be exempt from this provision. This exception does not include storage of any materials.
- (2) Screening and landscaping shall be in accordance with Article 8, Community Design Standards.
 - (a) Where standards are provided in this Article they shall prevail over those in Article 8.

Section 7-6-1 Battery Energy Storage Facility (BESF)

Section 7-6-2 Data Center, Hyperscale and Enterprise¹

- A. **Applicability.**² This section shall apply to all **Enterprise and Hyperscale** Data Centers, as defined in this Ordinance, including high energy use facilities (HEUF), as provided by Code of Virginia § 15.2-2209.5.

(1) **Definitions.** *(To be provided in Article 11, shown here for drafting consideration)*

Data center. An enclosed facility, or part thereof, that houses information technology (IT) infrastructure for building, running, and delivering applications and services, and for storing and managing the data associated with those applications and services. This use includes, but is not limited to, housing virtualized IT infrastructure for the shared use of multiple companies and customers. This use may include redundant or backup power supplies **and/or generators**, redundant data communications connections, specialized environmental controls, and various security devices. See high energy use facilities.

Data center, enterprise. A data center less than 40,000 square feet, requiring up to 20 megawatts of power (20MW). Typically associated with a use such as universities, hospitals, banks, etc.

Data center, hyperscale. A data center larger than 40,000 square feet, requiring more than 20 megawatts of power (20MW) and often requiring a dedicated substation and transmission line.

- B. **Application Requirements.** In addition to applicable requirements of Article 3, Permits and Applications, the following shall be submitted as part of the initial application for a Rezoning and SUP:

(1) **Site Assessment.**³ Site assessments shall be submitted with the application and used by the County to assess:

(a) Consistency with the policies of the Nelson County Comprehensive Plan;

¹ Editor's Note: This section is provided as an example of data center standards for the County's consideration. This example expands upon what is provided in the draft ordinance document, in response to public comment received, and could be switched out with the existing Section 7-6-2 under direction of the County. The red text in this example highlights additional language that is not in the current draft ordinance (or where this example differs from the draft ordinance). Additionally, if the County desires to prohibit hyperscale, but allow enterprise, then hyperscale language can be removed.

² Editor's Note: Applicability was updated in accordance with [HB153](#).

³ Editor's Note: Site Assessments was updated in accordance with [HB153](#).

- (b) Compliance with the County's noise ordinances;
 - (c) Compliance with all provisions of this Ordinance; and
 - (d) Other applicable laws and regulations, if any.
- (2) **Utility Approval.** No Data Center shall be constructed until evidence has been given as part of the application that the owner and/or facility operator has been approved by the utility company.
 - (a) No new off-site transmission lines will be constructed for the purpose of serving the Data Center.
- (3) **Viewshed Analysis.** The purpose of a viewshed analysis is to evaluate and mitigate potential visual impacts of proposed Data Center development on designated scenic, historic, residential, or environmentally sensitive areas.
 - (a) A viewshed analysis is required at the time of application for all proposed Data Centers within 1,500 ft. of:
 - i. Conservation Districts;
 - ii. Agriculturally zoned properties;
 - iii. Residentially zoned or developed properties;
 - iv. Any local, state, or federal park; or
 - v. Registered historic sites.
 - (b) The viewshed analysis shall provide a three-dimensional (3D) visual simulation from at least one (1) vantage point along all property lines.
- (4) **Cooling System Information.** An air-based cooling system is required.
 - (a) The applicant shall demonstrate compliance with Chapter 12 of the Nelson County Code, in addition to the following:
 - i. Data centers shall provide evidence that an air-based cooling system sufficient to meet the needs of the data center will be established.
 - ii. Air-based cooling systems shall be designed to include sound mitigation measures such as anti-vibration mounts, sound-absorbing barriers, and/or acoustic insulation in addition to the requirements of Section 7-6-2, B. (5) Additional Noise Assessment Standards, and F., Landscaping, Buffering, and Screening.
- (5) **Water usage.**

- (a) The applicant shall submit an assessment of estimated water usage as part of the application.
 - i. Data centers shall not establish wells for any operations.
 - ii. The applicant shall present evidence that the data center will not have a negative impact on the public water and sewer system and capacity or service needs, even during times of drought.
- (6) **Site Assessments and Studies.**⁴ At the time of application for a new Data Center or where an applicant is seeking an expansion or modification of an already existing or approved facility and such expansion exceeds an additional 100 megawatts (100MW) or more of electrical power, the applicant for a Data Center shall perform and submit a site assessment to examine, to the extent known and practicable and within the timeline provided by the Code of Virginia § 15.2-2286.A.7:
 - (a) The sound profile of the Data Center on properties located within 500 feet of the Data Center property boundary;
 - (b) Any new or existing substations that will be used to serve the Data Center;
 - (c) The anticipated transmission voltage required to serve the Data Center;
 - (d) The anticipated impact of the proposed facility on ground and surface water resources, agricultural resources, parks, registered historic sites, and forestland on the subject parcel or on immediately contiguous land;
 - (e) Consistency with the policies of the Nelson County Comprehensive Plan;
 - (f) Compliance with the County's noise ordinances;
 - (g) Compliance with all provisions of this Ordinance; and
 - (h) Compliance with other applicable laws and regulations, if any.
- (7) **Additional Noise Assessment Standards.**⁵
 - (a) In addition to the required sound profile described in B. (4) Cooling System Information, for sites that abut property used or zoned for agricultural or residential purposes or a public park, the following noise studies must be prepared by a Commonwealth Licensed Professional Engineer verifying the maximum sound levels for the development:

⁴ Editor's Note: Site Assessments and Studies were updated in accordance with [HB153](#).

⁵ Editor's Note: Noise standards were updated in accordance with [HB153](#).

- i. A pre-construction study shall be submitted at the time of application evaluating the existing noise conditions prior to the development and model-predicted noise conditions resulting from the development.
 - ii. A post-construction study of noise conditions at the time of operations shall be submitted at least one (1) month but no more than 12 months after the issuance of the first Certificate of Occupancy for the development.
 - iii. Notwithstanding any provision to the contrary, if either the pre-construction or post-construction noise study demonstrates the development exceeds the maximum sound levels specified in Chapter 8, Article II. of the County Code as measured at the boundary abutting a property used or zoned for agricultural or residential purposes, or a public park, noise mitigation measures shall be required to secure conformance.
 - (b) Each study shall be accompanied by an affidavit or certificate signed by the Commonwealth Licensed Professional Engineer stating whether noise mitigation measures are required by the noise study. If mitigation measures are required, they shall be designed in compliance with the noise study and shown on the site plan. The Administrator has the authority to interpret and enforce the Pre- and Post-Construction Study and any necessary noise mitigation measures.
 - (c) All mechanical equipment, both on ground and roof-mounted equipment, shall be attenuated through sound mitigation measures including, but not limited to, sound muffling materials.
 - (d) Sound testing shall be limited to weekdays between 8:00 a.m. and 5:00 p.m.
- C. **Community Meeting.** Following application submission and at least 30 days prior to a public hearing held by the Planning Commission, a public community meeting shall be held by the applicant to give the community an opportunity to hear from the applicant and to ask questions regarding the proposed application. The meeting shall adhere to the following requirements:
- (a) The applicant shall inform the Administrator and adjacent property owners in writing of the date, time, and location of the meeting, at least 14 but no more than 21 days, in advance of the meeting date;
 - (b) The date, time, and location of the meeting shall be advertised sufficiently in prevalent news media sources to County residents by the applicant, at least 14 but no more than 21 days, in advance of the meeting date;

- (c) The meeting shall be held within the County, at a location open to the public with adequate parking and seating facilities that will accommodate persons with disabilities;
 - (d) The meeting shall give members of the public the opportunity to review application materials, ask questions of the applicant, and provide feedback; and
 - (e) The applicant shall provide the Administrator with a summary of any input received from members of the public at the meeting and copies of any written submissions from the public.
- D. **Emergency Access.** The owner or operator shall coordinate with the Nelson County Fire Marshall to provide materials, education, and/or training on how to safely respond to on-site emergencies. Emergency personnel shall be given a key or code to access the property.
- E. **Setbacks.**⁶ All principal and accessory structures⁷ shall be set back at least 200 ft. from any property line abutting a property used or zoned for residential purposes or a public park.
- F. **Landscaping, Buffering, and Screening.** All landscaping, buffering, and screening shall comply with Article 8, Community Design Standards, as well as the following:
- (1) A vegetated buffer 50 ft. in width shall be required along any property line abutting or across a road from a property used or zoned for agricultural or residential purposes, or a public park; for sites on which 70% or more of the existing open space or vegetated area is cleared for the development, the buffer shall be a minimum of 100 ft. in width.
 - (2) The buffer shall consist of an earthen berm that has a minimum height of six (6) ft. and a slope not steeper than 2:1 with plantings including a combination of large and understory deciduous trees, large and small evergreen trees, and ornamental trees and shrubs at a rate of 120 plants per 100 linear feet.
 - (a) A minimum of 40% of the plantings shall be large evergreen trees on minimum 20-foot centers.
 - (b) No more than 20% of the plantings shall be shrubs.

⁶ Editor's Note: Setbacks in this example are more concisely stated than the current draft ordinance.

⁷ Editor's Note: In the current draft ordinance the setback for accessory structures is 75 feet.

- (3) Power generators, cooling systems, storage facilities, and any other mechanical infrastructure necessary for Data Center operations shall be within an enclosed structure and screened from view from any adjacent street, use, or building.
 - (a) Ground mounted mechanical equipment is prohibited in front yards.
 - (b) Solid screening walls shall be constructed with a design, materials, details, and treatment compatible to those used on the nearest primary façade of a building but may include perforated surfaces as needed for ventilation of mechanical equipment.
- G. **Fencing.**⁸ Fencing of the property is permitted, provided that fencing within 35 ft. of a public street does not include **barbed wire** or other similar visible intrusion deterrence devices.
- H. **Annual Testing.** Noise testing as required in this Section shall be conducted annually and submitted to the Administrator no later than the first day of July of each calendar year for the life of the use.
 - (1) If the sound test finds that noise levels exceed 60 dBA as measured at the property line or 50 dBA as measured at the nearest neighboring dwelling or any additional standards and conditions associated with the use, the applicant will have 48 hours to mitigate the violation or operations will be suspended and the applicant shall cease the use until such time that the applicant can demonstrate the noise levels are in compliance with this Section.

Division 7-7 Miscellaneous Use Standards

Division 7-8 Accessory Use Standards⁹

Division 7-9 Temporary Use Standards

⁸ Editor's Note: The following from the current draft ordinance was deleted from this example: "Barbed wire shall be permitted, provided that fencing within 35 ft. of a public street does not include barbed wire or other similar visible intrusion deterrence devices."

⁹ Editor's Note: Permanent and Temporary Storage Containers were removed per staff comments 11/5/25.