

buffer for visual screening. Any berm must have a vegetative groundcover and side slopes sufficient to minimize erosion. If the berm(s) is (are) less than ten feet in height, trees not less than six (6) feet in height at the crown shall be planted on the berm(s) to supplement visual screening.

3. The boundary of the processing plant and storage yards shall be at least 1,000 feet from any residential use or zoning district.
4. The use shall be totally enclosed by a security fence or wall at least 8 feet high.
 - a. For Asphalt Plants, this requirement may be waived if the use is completely enclosed within a fireproof building.
5. All plans shall be reviewed by Fire and Emergency staff prior to approval to determine that existing services provide adequate protection for citizens.
6. Applicant shall be required to demonstrate the facility has secured or can secure prior to the commencement of earth disturbing activities to commence construction, all require permits from the State of North Carolina to operate including, but not limited to, an Air Quality Permit.

Sec. 5.13.3 CHEMICAL MANUFACTURING AND PROCESSING

(A) Standards of Evaluation for Special Use Permit:

1. All plans shall be reviewed by Fire and Emergency staff prior to approval to determine that existing services provide adequate protection for citizens.
2. The use shall be totally enclosed by a security fence or wall at least 8 feet high.
3. Access: Access shall be from a State maintained roadway.
4. All structures and storage areas shall be at least 1,000 feet from any residential use or zoning district.
5. Screening and Buffering: An area of land, not less than 50 feet in width, shall be provided along all boundaries of the affected land apart from permitted ingress and egress to public roadways. This buffer area may be left in a natural vegetative state if sufficient visual buffering is provided otherwise the buffer, where practicable, must be planted with trees, shrubs or plants that create a visual screen.

Sec. 5.13.4 Data centers²⁹⁹

- A. Data Centers existing prior to the adoption date of this Ordinance shall abide by the following standards:

²⁹⁹ Updated regulations for Data Centers to address off-site impacts.

1. Meet the setbacks for the district in which located;
2. Buffer strips shall be required on three (3) sides (rear and side lot lines) of lot, unless a corner lot, then buffer is not required on any side lot line adjacent to a street right-of-way lot line. The front of the lot, except for ingress/egress, shall have fifteen (15) feet of landscaping, vegetative or natural buffer area that would not pose a hazard for vehicular traffic, but creates a natural looking front (if opaque or semi-opaque screening is used then this can be used in place of the ten (10) feet of landscaping).³⁰⁰

B. Data centers developed after (Date of Adoption of this Ordinance) shall abide by the following standards:³⁰¹

1. MINIMUM LOT SIZE: There shall be no minimum lot size. The size of the parcel shall be related to the projects compliance with applicable standards noted herein.
2. PROHIBITION: Regardless of the base zoning designation, no data center shall be developed on a parcel of property located on a parcel designated as being within a Critical Watershed area as defined under State regulations.³⁰²
3. SETBACKS
 - a. Structures: No structure, including accessory structures, shall be within:
 - i. 150 feet from an external property line adjacent to a non-residentially zoned parcel of property;
 - ii. 500 feet from an external property line adjacent to a residentially zoned parcel of property.³⁰³
 - b. Parking areas: Regardless of adjacent zoning, no parking area shall be within 75 feet from an external property line.
 - c. Land Uses: Structures housing a data center shall not be located within 1,000 linear feet of an existing school, congregate care/adult care facility, retirement center, hospital, daycare center (adult or child), or place of worship.³⁰⁴

³⁰⁰ This is all existing language from the current Ordinance. NFOCUS had recommended more restrictive standards in 2022 with the original data center amendment, but the recommendation was deemed unnecessary.

³⁰¹ The following is what NFOCUS had originally suggested in 2022. Blue text references new standards requested by several County Commissioners.

³⁰² Placeholder used by NFOCUS to ensure we are addressing communities obligated to adopt/enforce State watershed standards. If this situation is not applicable within the community, we typically delete.

³⁰³ NFOCUS had originally recommended a 300 foot setback.

³⁰⁴ The separation standards should address and if we are only allowing in major industrial districts, this typically becomes a moot point. The standard was asked for by a client, and I include same in our model for local review/discussion.

COMMENTARY: The development of such land uses after the approval and/or development of a Data Center shall not be construed as making the operation a nonconforming land use per this Ordinance.

4. HEIGHT: Maximum Allowable Height: No structure shall exceed 60 feet in height.
5. LANDSCAPING AND SCREENING:
 - a. A minimum 50-foot opaque buffer shall be required around the perimeter of the property;
 - b. Fencing: An eight (8) foot tall privacy fence shall be erected outside the required land use buffer to provide additional screening and noise abatement.
 - c. Internal parking area and equipment screening shall be consistent with the standards of this Ordinance.
6. LIGHTING:
 - a. Outdoor lighting shall observe a maximum fixture height of 24 feet (measured from grade at the base of the fixture) and employ fully shielded (full cut-off) light fixture meeting a 1.0 foot candle limit at all property lines;
 - b. No outdoor lighting fixture shall be located within 50 feet of an external property line (regardless of adjacent zoning).
 - c. Building-mounted exterior lighting shall not project above the roof or top of the building it is mounted on.
7. NOISE: Operation(s) shall not exceed a maximum noise threshold of 65 dBA at all times as measured from all common property lines.³⁰⁵
 - a. AS part of permit submittal, applicant is responsible for submitting documentation detailing how the project shall comply with this requirement including, but not limited to, the submittal of a noise study prepared by an appropriately licensed acoustical engineer.
 - b. The study shall provide data for the measured A-weighting, C-weighting and Z-weighting and narrow band frequency analysis/tonal analysis.
 - c. The study shall include a noise contour map and shall be sealed and signed by the licensed acoustic engineer.

³⁰⁵ How does the County currently address noise issues (i.e., simple enforcement of the County noise ordinance by the Sheriff as an example). I typically recommend the applicant demonstrate they will meet the standard and we only investigate if there is a complaint.

- d. Sound created by any emergency generator shall be included within this analysis.
- e. Ambient noise/decibel levels shall be documented from all perimeter property lines of the subject property on which the data center is proposed.

8. UTILITY USAGE:³⁰⁶

- a. Public Utility Connection: All data centers shall be connected to a publicly maintained utility system (water and sewer). Under no circumstances may a data center utilize, or be connected to, well or surface water systems (i.e., lakes, rivers, ponds, etc.) or private septic systems including package treatment systems.³⁰⁷
- b. AS part of permit submittal, applicant is responsible for submitted documentation detailing:
 - i. Power and water capacity needs,
 - ii. Documentation from applicable public utility providers the use can be accommodated and shall not impact service provision to existing clients. As part of this documentation, the County shall require the utility provider to:
 1. Adequate capacity is available on existing supply lines and substation(s) to ensure there is or will be adequate electrical capacity available to serve the proposed use at peak operational levels while serving the needs of other utility users in the service area;
 2. Existing utility supply equipment and related infrastructure are sufficiently sized to safely accommodate the proposed use as well as existing utility users in the service area;
 3. The use will not cause electrical interference or fluctuations in line voltage on or off the premises; and
 4. Outline any utility system upgrades arising out of the development of a data center and timelines for addressing future development utility needs.

It is the policy of the County not to overly restrict the development of a data center based on the land uses utility

³⁰⁶ Rawls: I did like your comment on the 'attestation' concept and can include if the County wishes. This is the sample language I have recommended to clients.

³⁰⁷ NDOCUS had language prohibiting connection to private systems, but local elected officials requested a more definitive statement. NFOCUS has provided.

needs provided current utility operations can support the project without impacting existing clients.

- c. Utility systems shall be closed systems. If determined as necessary by the applicable utility provider, the operator of the data center may be required to re-treat water/wastewater before being introduced to the public utility system.
 - d. The County shall encourage and promote the adaptive use of renewable energy sources, specifically solar, to address the electrical needs of a data center.
 - e. Under no circumstances may a generator serve as the primary source of electricity for the land use. Generators shall only be utilized during power disruptions and shall meet the requirements of this Ordinance.
9. STORMWATER: Stormwater requirements shall comply with applicable local and State regulations as referenced within this Ordinance.
10. DECOMMISSIONING AND ABANDONMENT:³⁰⁸
- a. The cessation of operations for twelve (12) continuous months shall render a data center to be defunct and/or abandoned unless the property owner (or other responsible party with ownership interest) provides substantial evidence to the County of the intent to maintain and reinstate operation of the facility.
 - b. In such an event, the applicant or property owner must ensure the remaining technological hardware, infrastructure (e.g.: private on-site substations), fuels, and other hazardous materials (e.g.: biocides or other treatment chemicals) on the premises are properly disposed of and removed and pose no hazard to the public.
 - c. The property owner or operator of the data center must notify the County Manager's Office when the site is abandoned and when the site's hazardous materials are completely remediated within twelve (12) months of the final day of operations.
11. CONSULTANTS:
- a. Vance County shall retain a consultant or professional engineer to review application packets for new data centers. The consultant will review all application components (noise study, etc.) and make determinations and recommendations on relevant issues including, but not limited to:
 - i. Verification of the applicant's due diligence,
 - ii. Analysis of alternatives, and

³⁰⁸ Added at the request of the elected officials.

- iii. Compliance with state and federal rules and regulations.
- b. The applicant shall pay a fee (as determined by the consultant) as part of the application submittal and review process for the costs of the consulting services as incurred by Vance County.
- c. Vance County shall require any consultants to disclose potential conflicts of interest and to hold confidential any proprietary information supplied by the applicant. At the request of the applicant, the Planning Department shall arrange an informal consultation with the applicant to review the consultant's report prior to any formal action on the application.

Sec. 5.13.5 Sawmills

A. Standards for LI General Use Zoning District

1. Operations, including structures, storage areas, parking, and processing operations location on property adjacent to a residentially zoned parcel of property, or property used as a hospital, Care Facility, school, or Assembly Land Use, shall observe a 100 ft. setback from property lines.
2. An operations plan outlining the collection, storage, and disposal of waste including saw dust, wood scraps, and other debris. The operation plan for the site shall be approved by the Fire Marshal.
3. All parking areas shall be improved (i.e., asphalt or concrete). All storage areas shall be improved with an all-weather surface (i.e., asphalt, concrete, or gravel).
4. A Type C land use buffer, in accordance with Article 7 of the Ordinance, shall be installed along the perimeter of the property.
5. Operations shall not commence before 8:00 a.m. and shall cease by 6:00 p.m. Monday through Friday and 9:00 a.m. to 3:00 p.m. Saturday. No operations shall be permitted on Sunday.