



**MEETING AGENDA**  
The Town of Ridgeland  
**PLANNING COMMISSION**

Monday, April 13, 2026, 5:30 P.M.

**Town Hall, Council Chambers, 1 Town Hall, Ridgeland, SC 29936**

**STATEMENT OF MEDIA NOTIFICATION:** "In accordance with South Carolina Code of Laws, 1976, Section 30-4-80(d), as amended, all local media were duly notified of the time, date, place, and agenda of this meeting."

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- I. Call to Order: Pledge of Allegiance and Invocation by Chairman Frankie Denmark**
- II. Roll Call**
- III. Approval of Minutes:** January 12, 2026
- IV. Election of Officers**
  - 1. Chair Election
  - 2. Election of Vice-Chair
  - 3. Appointment of Secretary
- V. Old Business:**
  - 1. None
- VI. New Business:**
  - Projects:**
    - 1. Panchal Commercial located at 10312 South Jacob Smart Blvd [063-25-05-014, 037, & 039]  
Engineer of record Nathan Sturre, P.E.
  - Discussion Item:**
    - 1. Text amendments to the Town of Ridgeland Zoning Ordinance addressing architectural standards, window signs/curtains, and data centers.  
  
**Planning Commissions role:** Advisory to Council.  
**Action needed:** Recommendation to Council
- VII. Staff Comments:**
  - 1. Update from Staff - Town Council strategic goals
- VIII. Commissioner's Comments:**
- IX. Adjournment**



# Town of Ridgeland

Planning and Community Development

One Town Square – Post Office Box 1119 – Ridgeland, SC 29936

Phone: (843) 726-7516 Fax: (843) 726-7525

## SITE WORK APPLICATION

Pursuant to Section 6-29-1145 of the South Carolina Code of Laws, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this application?  Yes  No

The owner of the property is aware of and has authorized the proposed work as described in this application.  Yes  No

Applicant Name: Sturre Engineering c/o Nathan Sturre

Applicant Email: nathan@sturreengineering.com Applicant Phone #: 843.705.4748

Applicant Title:  Property Owner  Developer  Architect  Engineer  Contactor

Contractor Name: TBD State License Number: \_\_\_\_\_

Property Owner: Sumanlal & Mita Panchal Email: smnpanchal@yahoo.com

Project Address(es): 10312 S Jacob Smart Boulevard, Ridgeland, SC 29936

Parcel ID: 063-25-05-014 Flood Zone: X Elevation: \_\_\_\_\_

Total lot sq/ft: 29,432 Existing Impervious sq/ft: 0

New Impervious sq/ft: 10,588 Pervious sq/ft: 13,071

### Project

Description: The proposed project consists of the development of Parcels 063-25-05-014, 063-25-05-037 & 063-25-05-039. The site is zoned T4 and is approx. 0.69 acres in size. The proposed development includes a new access drive to Jacob Smart Boulevard, parking and associated infrastructure to accommodate a new office/retail structure in Ridgeland. Seventeen (17) parking spaces are proposed including one (1) van accessible parking space.

Site Work Cost: TBD

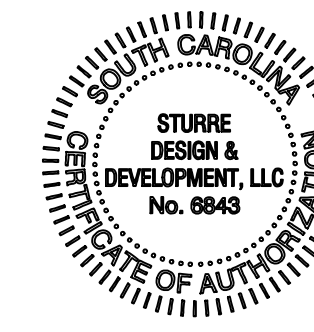
LIST BELOW EACH OF THE SUBCONTRACTOR(S) WHO WILL BE WORKING ON THE ABOVE MENTIONED JOB BY THE HOUR, THE JOB, OR BY THE CONTRACT:

NAME OF SUBCONTRACTOR	CONTACT INFORMATION	COST OF JOB
TBD		

**I UNDERSTAND, AS A PRIME CONTRACTOR OR OWNER, THAT I AM TO ENSURE THAT ALL SUBCONTRACTORS HAVE A CURRENT TOWN OF RIDGELAND BUSINESS LICENSE AND ARE REGISTERED WITH THE STATE (WHERE APPLICABLE) AND THAT ALL LICENSE FEES ARE PAID**

Applicant Signature: Nathan Sturre

Date: 01/16/2026



03/17/2026

ENGINEER OF RECORD

NATHAN STURRE, P.E.  
SC PE# 40266  
PO Box 2227  
Bluffton, SC 29910  
843.705.4748

SURVEYOR

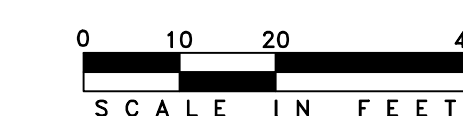
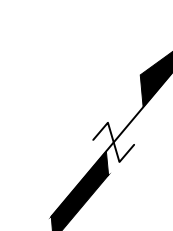
T-SQUARE SURVEYING  
WILLIAM SMITH, PLS  
PLS #26960  
PO DRAWER 330  
BLUFFTON, SC 29910

PREPARED FOR:

SUMAN & MITA PANCHAL

PROJECT:  
PANCHAL COMMERCIAL

HORIZ. DATUM:  
STATE PLANE, NAD83  
VERT. DATUM: NAVD88



PLAN

HORIZONTAL SCALE 1" = 20'

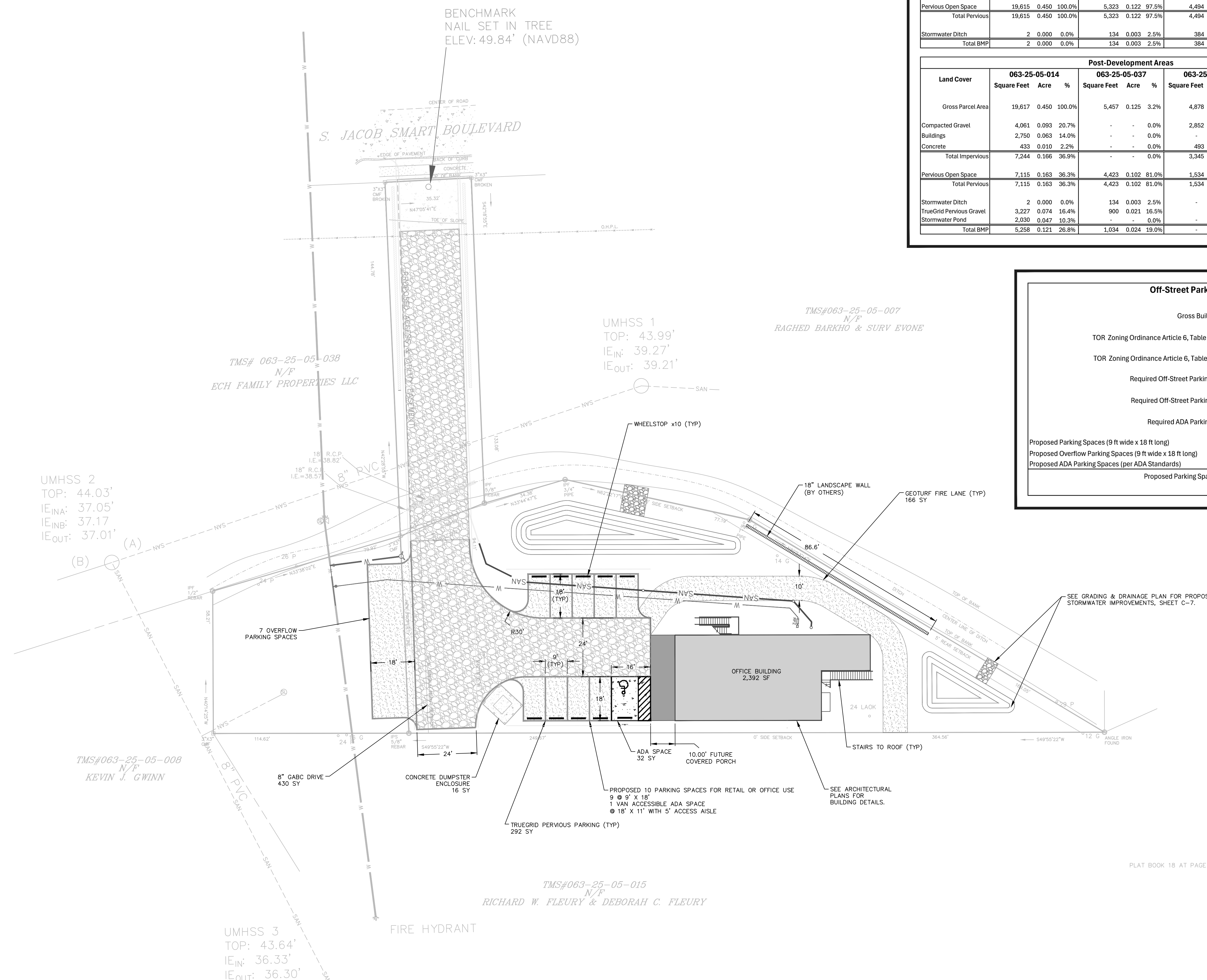


Land Cover	Pre-Development Areas											
	063-25-05-014			063-25-05-037			063-25-05-039			Total		
	Square Feet	Acre	%	Square Feet	Acre	%	Square Feet	Acre	%	Square Feet	Acre	%
Gross Parcel Area	19,617	0.450	100.0%	5,457	0.125	3.2%	4,878	0.112	100.0%	29,952	0.688	100.0%
Compacted Gravel	-	-	0.0%	-	-	0.0%	-	-	0.0%	-	-	0.0%
Buildings	-	-	0.0%	-	-	0.0%	-	-	0.0%	-	-	0.0%
Concrete	-	-	0.0%	-	-	0.0%	-	-	0.0%	-	-	0.0%
Total Impervious	-	-	0.0%	-	-	0.0%	-	-	0.0%	-	-	0.0%
Pervious Open Space	19,615	0.450	100.0%	5,323	0.122	97.5%	4,494	0.103	92.1%	29,432	0.676	98.3%
Total Pervious	19,615	0.450	100.0%	5,323	0.122	97.5%	4,494	0.103	92.1%	29,432	0.676	98.3%
Stormwater Ditch	2	0.000	0.0%	134	0.003	2.5%	384	0.009	7.9%	520	0.012	1.7%
Total BMP	2	0.000	0.0%	134	0.003	2.5%	384	0.009	7.9%	520	0.012	1.7%

Land Cover	Post-Development Areas											
	063-25-05-014			063-25-05-037			063-25-05-039			Total		
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Gross Parcel Area	19,617	0.450	100.0%	5,457	0.125	3.2%	4,878	0.112	100.0%	29,952	0.688	100.0%
Compacted Gravel	4,061	0.093	20.7%	-	-	0.0%	2,852	0.065	58.5%	6,913	0.159	23.1%
Buildings	2,750	0.063	14.0%	-	-	0.0%	-	-	0.0%	2,750	0.063	9.2%
Concrete	433	0.010	2.2%	-	-	0.0%	493	0.011	10.1%	926	0.021	3.1%
Total Impervious	7,244	0.166	36.9%	-	-	0.0%	3,345	0.077	68.6%	10,588	0.243	35.4%
Pervious Open Space	7,115	0.163	36.3%	4,423	0.102	81.0%	1,534	0.035	31.4%	13,071	0.300	43.6%
Total Pervious	7,115	0.163	36.3%	4,423	0.102	81.0%	1,534	0.035	31.4%	13,071	0.300	43.6%
Stormwater Ditch	2	0.000	0.0%	134	0.003	2.5%	-	-	0.0%	136	0.003	0.5%
TrueGrid Pervious Gravel	3,227	0.074	16.4%	900	0.021	16.5%	-	-	0.0%	4,127	0.095	13.8%
Stormwater Pond	2,030	0.047	10.3%	-	-	0.0%	-	-	0.0%	2,030	0.047	6.8%
Total BMP	5,258	0.121	26.8%	1,034	0.024	19.0%	-	-	0.0%	6,292	0.144	21.0%

Off-Street Parking		
Gross Building Area	2,392	Square Feet
TOR Zoning Ordinance Article 6, Table 7 (Office)	3 spaces per 1,000 sf	
TOR Zoning Ordinance Article 6, Table 7 (Retail)	4 spaces per 1,000 sf	
Required Off-Street Parking (Office)	7	Spaces
Required Off-Street Parking (Retail)	10	Spaces
Required ADA Parking Spaces	1	Space
Proposed Parking Spaces (9 ft wide x 18 ft long)	9	Spaces
Proposed Overflow Parking Spaces (9 ft wide x 18 ft long)	7	Spaces
Proposed ADA Parking Spaces (per ADA Standards)	1	Space
Proposed Parking Spaces Total	17	Spaces



PLAT BOOK 18 AT PAGE 114

REV #	DATE	DESCRIPTION
	03/17/2026	

SHEET NAME  
SITE IMPROVEMENTS  
PLAN PHASE 2

SHEET NO.  
C-7



03/17/2026

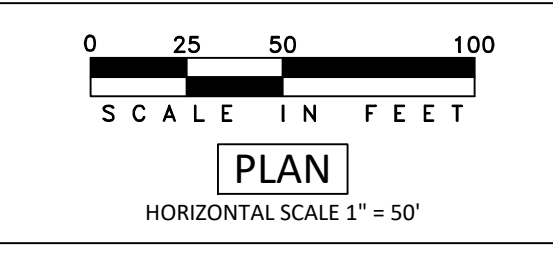
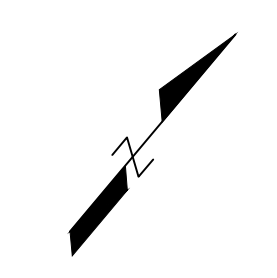
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PROJECT:  
PANCHAL COMMERCIAL

HORIZ. DATUM:  
STATE PLANE, NAD83  
VERT. DATUM: NAVD88



- SCDOT NOTES:
1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION FOR THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT).
  2. THE CONTRACTOR WILL BE REQUIRED TO HAVE ON SITE A COPY OF SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD DRAWINGS, LATEST EDITION.

REV #	DATE	DESCRIPTION



### 5.13 - ARCHITECTURAL STANDARDS.

5.13.1 The following architectural standards shall apply to all structures in the following transect zones: T2.5, T3, T4, T5, and SD-Exit 2.

#### 5.13.2 Walls—Materials.

- A. Walls shall be finished in wood clapboard (sealed with paint or stain), board and batten, cedar shingles, "hardie plank," stucco, or brick. ~~Walls may be finished in brick as approved by the CRC.~~ Walls for single family residential units may be finished in vinyl siding ~~on a case by case basis as approved by the CRC.~~ using a minimum thickness of 0.52".
- B. Foundation walls, and piers shall be parged block, smooth finished poured concrete, tabby, stucco or brick.
- C. Crawl space may be skirted with horizontal wood boards, or framed wood with not more than 1.5" spaces between boards or wood louvers. Lattice shall be installed between supports as approved by the CRC. Galvanized hardware cloth may be placed behind the lattice.
- D. Garden walls shall be stucco or brick. Gates in garden walls shall be wood or iron. Garden walls shall not be perforated with precast elements, but may accommodate pierced brick.
- E. Fences:

Cyclone (a.k.a. chain-link) fences are not permitted provided that the material is color coated with polyvinyl chloride (PVC) or polyester or equivalent to provide corrosion resistance and aesthetic appeal. Acceptable colors are black, green, or brown.

In front yards fences shall adhere to the following standards:

1. Must be of the picketed type and made of smooth cedar, or p.t. wood pickets; spacing between pickets shall not exceed 1.5".
2. Cannot exceed 3' in height.

All other fences shall adhere to the following standards:

1. Constructed of wooden boards or Polyvinyl chloride (PVC) with a rectangular section.
2. Fences may have stucco, brick, or tabby piers.
3. Wire fences are permitted if the posts are made of wood and the fence is evenly distributed with a growing vine native to the area, i.e., Carolina jessamine, Crossvine, American Wisteria, Carolina Jessamine, Maypop, and Trumpet Vine.
4. Privacy fences are allowed in rear yards only and are not to exceed 6' in height for residential uses. All fences shall be painted white, Charleston green, or stained.

- G. Retaining walls shall be built of stucco, brick, or tabby.

(Ord. No. 01-2011, 5-5-11)

#### 5.13.3 Walls—Configurations and techniques.

- A. Walls may be built of no more than two materials and shall only change material along a horizontal line, i.e. cedar shingles may be combined with wood siding when the material change occurs horizontally, (typical at floor line or a gable end), with the heavier material below the lighter. All the walls of a single building must be built of the same materials in the same configuration. Wood clapboard and shingles shall be horizontal. Board and batten may extend vertically.
- B. Siding shall be horizontal, maximum 6" to the weather. Board and batten may extend vertically.

- C. Boards with more than 6" to the weather shall show a 1" variation from one board to the next. Shingles shall be maximum 8" to the weather. Decorative shingles shall not be permitted.
- D. Stucco shall be smooth sand- or tabby-finished.
- E. Trim shall be minimum grade "B" trim lumber; and shall be 3.5" to 6" in width at corners and around opening, except at the front door, which may be any size (3.5" minimum) or configuration.
- F. Garden walls shall be minimum 8" thick and have a horizontal cap. Brick mortar joints shall be struck and no more than  $\frac{3}{8}$ " wide.
- G. ~~Fences on adjacent lots shall have different designs.~~
- H. Walls shall be one color for each story but may blend colors in sections.
- I. Colors: ~~Colors for all materials shall be selected from a master list approved by the CRC.~~ Rough siding shall be a dark color. Masonry, smooth siding and trim shall be a light color, which may or may not be the same as the wall color.
- J. Paints and stains: All exterior smooth wood shall be painted. Wood shingles may be left to age naturally, or shall be stained.

#### 5.13.4 Elements—Materials.

- A. Chimneys shall be finished with stucco or brick. Flues for pot belly stoves shall be metal with an appropriate lintel or jack arch.
- B. Piers and arches shall be made of stucco, brick, or tabby.
- C. Porches, columns, posts, spindles and balusters shall be made of wood. Porches may be enclosed with glass or screens for a maximum of 30% of their length; however glass enclosures are not permitted at frontages. Porch ceilings may be enclosed with painted wood; exposed joists shall be painted.
- D. Arcades in Zone T4 or T5 shall be metal or stucco, with wood or metal posts, railings, and balconies.
- E. Stoops shall be made of wood, brick, or concrete. If concrete, a stoop shall have brick or stucco cheek walls.
- F. Decks shall be located in rear yards only, elevated a maximum of 30' above grade and painted or stained (except walking surfaces which may be unpainted).
- G. ~~Awnings shall have a~~ with metal structures shall be covered with canvas or synthetic canvas. Metal awnings or wood and metal awnings are allowed.
- H. Metal elements shall be unpainted galvanized steel, anodized or ESP aluminum, or marine grade aluminum.
- I. Patios and stoops may have horizontal surfaces made of brick, or tabby.
- J. The following shall not be permitted: signs (on private property).

#### 5.13.5 Elements—Configurations and techniques.

- A. Chimneys shall be a minimum 2:1 proportion in plan and capped to conceal spark arresters. Fireplace enclosures and chimneys shall extend to the ground.
- B. Porch piers of masonry construction shall be no less than 12' × 12".
- C. Arches of masonry construction shall be no less than 12" in depth.
- D. Arcades and breezeways shall have vertically proportioned openings.
- E. Screen porches shall have screens framed in wood installed behind framed railings.
- F. Columns (the classical orders), if provided, shall be of the tuscan or doric orders with correct proportions or profiles according the American Vignola.

- G. Posts shall be no less than 6" × 6", except at outbuildings. Railings shall have horizontal top and bottom rails. Wood top rails shall be eased and bottom rails shall have a vertical section. Top and bottom rails shall be centered on the pickets. The opening between spindles and balusters shall not exceed 4".
- H. Balconies which cantilever shall be structurally supported by brackets.
- I. Signs attached to buildings shall be integral to the storefront, no larger than 18" in height and externally lit.
- J. Awnings shall be rectangular in shape with straight edges.
- K. Awnings may have side panels but shall not have a bottom soffit panel. Awnings shall not be backlit.
- L. Spotlights attached to building walls or roof eaves are only permitted in rear yards and illuminating cone shall not emit excess or direct light beyond property line.
- M. Wood elements must be painted or stained with an opaque or semi-solid stain, except walking surfaces which may be left natural.

#### 5.13.6 Roofs—Materials.

- A. Roofs shall be clad in wood shingles, (corrugated, 5 V crimp or standing seam) galvanized steel, galvalume or copper. Asphaltic or fiberglass shingles shall be architectural grade and shall be submitted for approval.
- B. ~~Gutters and downspouts, when used, shall be made of galvanized steel, copper (not copper-coated), anodized or ESP aluminum.~~
- C. Flashing shall be copper, lead or anodized aluminum.
- D. Copper roofs, flashing, gutters, and downspouts shall be allowed to age naturally (not painted or sealed).

#### 5.13.7 Roofs—Configurations and techniques.

- A. Principal roofs shall be a symmetrical gable or hip with a slope of 6:12 to 10:12.
- B. Ancillary roofs (attached to walls at the highest portion of the principal building) may be shed sloped no less than 2:12. Roofs on towers shall be flat or have a slope of 4:12 to 8:12.
- C. Flat roofs, including flat roofs on towers, shall be permitted only when occupiable and accessible from an interior room. Flat roofs shall have a railing or parapet wall no less than 36" high.
- D. Parapets shall be horizontal.
- E. Eaves shall be continuous. Eaves which overhang less than 8" shall have a closed soffit. Eaves which overhang more than 16" shall have exposed rafters. Eaves which overhang between 8" and 16" shall have either a closed soffit or exposed rafters. Rafter tails may not exceed 8" in depth.
- F. ~~Gutters shall be half round. Downspouts shall be round.~~
- G. Dormers shall be habitable, placed a minimum of 3' from side building walls and have gable or shed roofs with a slope to match the principal structure or shed roofs with a slope 3:12. Dormers shall not be excessively larger than windows, i.e. no siding at either side of windows. Dormer eaves and rake trim should be scaled down from primary eaves and rake trim proportions (66%).
- H. Skylights shall be flat and mounted so as not to be visible from any fronting street.

#### 5.13.8 Openings—Materials.

- A. Windows shall be made of wood (painted), vinyl or aluminum clad and shall be glazed with clear glass. All trim shall be no less than 3.5". Bay windows shall be made of trim lumber. Corner trim shall be no less than 4".

- B. Doors (including garage doors) shall be wood, ~~or metal, or aluminum.~~ Doors shall be painted or stained.
- C. Storefront shall be made of wood, or metal.
- D. Shutters shall be wood, PVC, painted, ~~operable and meet the width of the window when closed. and shall be sized and placed so as to equal the width that would be required to cover the window opening.~~ Operable shutters preferred.
- E. Security doors and window grilles must be approved.

5.13.9 Openings—Configurations and techniques.

- A. Windows rectangular single-, double-, or triple-hung, awning, fixed (under 2 sf), or operable casement types, with a square to vertical proportion. Transoms may be oriented horizontally with panes of vertical proportions. Multiple windows in the same rough opening shall be separated by a 4" minimum post. In masonry walls the centerline of the window sash shall align with the centerline of the wall.
- B. Window muntins shall be true divided light or simulated divided light windows or fixed on the interior and exterior surface and create panels of square or vertical proportion.
- C. Bay windows shall have a minimum of 3 sides and shall extend to the floor inside and to the ground outside, if located on the ground floor or, if not, be structurally supported by brackets.
- D. Storm windows and screens shall be integral with the window. Screens shall be made of brass, bronze, ~~or black~~ or grey vinyl.
- E. Front doors, including the entry door to the porch on side yard houses, shall be located on the frontage line. (Paired doors are not permitted at frontages. Windows in doors must be rectangular and vertically-oriented- if no additional windows are present on the front façade.)
- F. Doors shall be hinged. Doors, except garage doors, shall be constructed of planks or raised panels not flush with applied trim which express the construction technique.
- G. Garage doors facing a street frontage shall be a maximum of 10' in width. Garage doors facing an alley shall have a light fixture, ~~with an incandescent bulb activated by a photocell.~~ Garage doors shall be painted or stained. Storefronts shall be painted a dark gloss color.
- H.
- I. Stucco trim articulations shall be subject to approval by the CRC.
- J. ~~An accent color, for items such as the front door and shutters, may be used subject to approval from the CRC.~~

## 5.12 - SIGNAGE STANDARDS.

### 5.12.1 General to Zones T2, T2.5, T3, T4, T5, SD-Exit 21.

- A. There shall be no signage permitted additional to that specified in this section.
- B. The address number, no more than 6 inches measured vertically, shall be attached to the building in proximity to the principal entrance or at a mailbox.
- C. Architecturally compatible ground level signs shall not exceed 6' in height, 8' in length and 2' in width, and they shall be authorized by CRC.

### 5.12.2 Specific to Zones T2, T2.5, T3.

- A. Signage shall not be illuminated.

### 5.12.3 Specific to Zones T4, T5.

- A. Signage ~~shall~~ may be externally illuminated with downward cast lighting, except that signage within the shopfront glazing may be neon lit subject to the neon sign being approved by the CRC.

#### B. Window Signage Regulations (Signs and Decals)

The goal is to prevent cluttered, distracting, or low-quality storefronts.

- Transparency Requirements: A minimum of 50% of the window surface at pedestrian eye level (e.g., 3 to 7 feet above the sidewalk) shall remain transparent to allow views into the store.
- Sign Coverage Limit: Temporary and permanent signs, including vinyl letters and clings, shall cover no more than 25% of the total glassed area.
- Content Restrictions: Window graphics shall be professional, designed for brand visibility, and avoid excessive text.
- Allowed Types: High-quality, professional vinyl lettering, contour-cut decals, and perforated, one-way vision graphics are generally allowed.
- Prohibited Items: Handwritten signs, posters or poster paper, banners (unless for short-term, permitted events as allowed in Section 28.70 Special event signs), and large, opaque, or neon signs that cover the majority of the window.
- Placement: Signs shall be placed on the interior of the glass, preferably in the upper or lower corners, rather than centered, to maximize visibility through the window.

#### C. Window Curtains and Treatments

The goal is to maintain an engaging, "open" look while allowing for practical needs like privacy or sun protection.

- Prohibited Coverings: Blinds, curtains, heavy drapery, or aluminum foil that completely block the view from the street are prohibited.

- Permitted Treatments: If blinds or shades are necessary for sun protection, they must be consistent in color (typically neutral) and style with the building facade.
- Retail/Office Use: Offices or service businesses that require privacy (e.g., spas) should use frosted window film (which mimics etched glass) instead of curtains or blinds.
- Seasonal/Event Decor: Holiday decorations are permitted but shall be removed promptly after the season.

D. Design Guidelines and Compliance

- Compatibility: All treatments must be compatible with the architectural style of the building.
- Maintenance: Signs and window treatments must be kept in good repair. Faded, peeling, or damaged signs must be replaced or removed.
- Visibility & Lighting: Gooseneck reflectors or internal, high-quality lighting that illuminates the display (rather than blinding pedestrians) are encouraged to increase, not obscure, visibility.
- Non-Conforming Uses: Existing signs that do not meet these standards should be brought into compliance when a change in business ownership or occupancy occurs or when a new sign permit is requested.

5.12.4 Specific to Zones T2, T2.5, T3, T4.

- A. One blade sign for each business may be permanently installed perpendicular to the facade within the first layer. Such a sign shall not exceed a total of 8 square feet and shall clear 8 feet above the sidewalk.

5.12.5 Specific to Zone T5.

- A. Blade signs, not to exceed 10 square feet for each separate business entrance, may be attached to and should be perpendicular to the facade, and shall clear 8 feet above the sidewalk.
- B. A single external permanent sign band may be applied to the facade of each building, providing that such sign not exceed 3 feet in height by any length.
- C. Signs shall be made of wood or enameled steel.

5.12.6 Specific to Zone SD-Exit 21.

- A. All proposed signage shall be reviewed and approved by the CRC.

# Town of Ridgeland High-Intensity Data Processing Facility (Data Center) Regulation Ordinance

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# SECTION 1. TITLE, AUTHORITY, AND PURPOSE

## 1.1 Title

This Ordinance shall be known and may be cited as the:

**“Town of Ridgeland High-Intensity Data Processing Facility (Data Center) Regulation Ordinance.”**

---

## 1.2 Authority

This Ordinance is adopted pursuant to the authority granted to municipalities under the laws of the State of South Carolina, including but not limited to:

- The South Carolina Local Government Comprehensive Planning Enabling Act of 1994 (S.C. Code Ann. § 6-29-310 et seq. and § 6-29-710 et seq.); and
- The general police powers of the Town to protect the public health, safety, and general welfare.

The Town Council hereby exercises its authority to regulate land use, development intensity, and infrastructure impacts within its jurisdiction.

---

## 1.3 Purpose and Intent

The purpose of this Ordinance is to establish comprehensive and enforceable standards governing the siting, design, construction, and operation of High-Intensity Data Processing Facilities in order to:

(A) Protect Public Health, Safety, and Welfare

Safeguard residents and property owners from adverse impacts associated with high-intensity industrial-scale data processing operations, including but not limited to noise, environmental effects, infrastructure strain, and public nuisance conditions.

---

(B) Ensure Infrastructure Compatibility

Ensure that any proposed High-Intensity Data Processing Facility is compatible with the Town's existing and planned infrastructure systems, including water, sewer, electrical, transportation, and stormwater systems.

---

(C) Preserve Limited Water Resources

Protect the Town's limited municipal water supply and regional water resources by:

1. Preventing over-allocation or depletion of water resources;
  2. Prioritizing water availability for existing residents and businesses; and
  3. Preserving sufficient capacity to serve **approved and reasonably anticipated future growth**, including residential development.
- 

(D) Protect Planned and Approved Growth

Ensure that the development of High-Intensity Data Processing Facilities does not impair, displace, or constrain:

- Existing development; or
  - **Approved or reasonably projected future growth**, including but not limited to residential subdivisions, commercial development, and public infrastructure expansions.
- 

(E) Require Impact Internalization

Require applicants proposing High-Intensity Data Processing Facilities to fully internalize the costs and impacts of their operations, including:

- Infrastructure upgrades;
  - Environmental mitigation; and
  - Operational controls necessary to prevent adverse impacts on the Town and its residents.
-

---

**(F) Prevent Public Nuisance Conditions**

Prevent conditions that may constitute a public nuisance, including but not limited to:

- Continuous or low-frequency noise;
  - Excessive lighting or glare;
  - Visual incompatibility; and
  - Traffic and operational disturbances.
- 

**(G) Ensure Consistency with the Comprehensive Plan**

Ensure that all High-Intensity Data Processing Facilities are consistent with the goals, policies, and future land use vision of the Town of Ridgeland Comprehensive Plan, including:

- Managed and sustainable growth;
  - Preservation of community character; and
  - Protection of infrastructure capacity.
- 

**(H) Establish Objective and Defensible Standards**

Establish clear, objective, and enforceable standards that:

- Provide predictable criteria for applicants;
  - Enable consistent review by Town staff and decision-makers; and
  - Are legally defensible as reasonable, non-arbitrary exercises of municipal authority.
- 

## **SECTION 2. LEGISLATIVE FINDINGS**

The Town Council of the Town of Ridgeland hereby makes the following findings of fact, which form the basis for the adoption of this Ordinance:

---

## 2.1 Water Infrastructure Constraints

(A) The Town maintains a **limited municipal water and sewer system** with finite capacity.

(B) Regional water resources, including those provided by the Beaufort-Jasper Water and Sewer Authority, are **allocated to existing users and planned growth**, with limited or no uncommitted capacity available for high-intensity industrial uses.

(C) High-Intensity Data Processing Facilities may require substantial and continuous water use, particularly for cooling systems, which can place significant demands on available water resources.

---

## 2.2 Protection of Existing and Planned Growth

(A) The Town has approved and anticipates continued residential and commercial development, including **significant residential growth**.

(B) The preservation of water and infrastructure capacity for such development is essential to the Town's economic stability and long-term planning.

(C) The introduction of high-demand industrial uses that consume disproportionate resources may:

- Displace planned growth;
  - Delay infrastructure expansion; or
  - Require reallocation of limited resources.
- 

## 2.3 Electrical Infrastructure and Energy Demand

(A) High-Intensity Data Processing Facilities impose **extraordinary electrical demand**, often at scales comparable to large industrial users.

(B) Such demand may affect:

- Substation capacity;
- Transmission infrastructure; and
- Availability of power for existing and future users.

---

(C) The Town has a legitimate interest in ensuring that such demand does not adversely affect local or regional electrical systems.

---

## 2.4 Land Use and Community Character

(A) High-Intensity Data Processing Facilities are characterized by:

- Large-scale buildings;
- Industrial appearance; and
- Continuous operation.

(B) Such characteristics may be incompatible with:

- Existing neighborhoods;
  - Planned development patterns; and
  - The Town's desired community character.
- 

## 2.5 Noise and Operational Impacts

(A) Data centers generate continuous operational noise from:

- Cooling systems;
- Mechanical equipment; and
- Backup generators.

(B) Such noise may include **low-frequency and tonal components** that can:

- Travel long distances; and
- Create persistent disturbance to nearby residents.

(C) Without proper regulation and mitigation, such impacts may constitute a **public nuisance**.

---

## 2.6 Environmental and Nuisance Impacts

(A) Data centers may generate environmental and operational impacts, including:

- Air emissions from backup generators and vehicles;
- Glare and lighting impacts;
- Visual impacts due to building mass and scale; and
- Traffic impacts during construction and operation.

(B) These impacts must be evaluated and mitigated to protect surrounding properties and residents.

---

## 2.7 Limited Economic Offset

(A) High-Intensity Data Processing Facilities typically generate:

- Limited permanent employment relative to land use intensity; and
- Significant infrastructure demand.

(B) The Town has a legitimate interest in evaluating whether such uses provide sufficient public benefit relative to their impacts.

---

## 2.8 Need for Regulation

(A) The Town finds that unregulated development of High-Intensity Data Processing Facilities may:

- Adversely impact infrastructure capacity;
- Impair planned growth;
- Create nuisance conditions; and
- Affect environmental quality.

(B) The regulations contained in this Ordinance are:

- Reasonable;
  - Based on documented local conditions; and
  - Necessary to protect the public health, safety, and welfare.
-

---

## 2.9 Legal Basis

The Town Council finds that this Ordinance:

- Is rationally related to legitimate governmental interests;
  - Does not arbitrarily exclude lawful uses; and
  - Establishes objective standards for review and approval.
- 

## SECTION 3. DEFINITIONS

For the purposes of this Ordinance, the following terms shall have the meanings set forth below:

---

### 3.1 High-Intensity Data Processing Facility (Data Center)

A facility or group of facilities primarily used for the storage, management, processing, or transmission of digital data, including but not limited to server farms, cloud computing centers, and colocation facilities, characterized by:

- High electrical demand;
  - Continuous or near-continuous operation; and
  - Significant cooling and infrastructure requirements.
- 

### 3.2 Data Center Campus

A site containing one or more High-Intensity Data Processing Facilities, including associated buildings, infrastructure, substations, and support facilities operating as a coordinated development.

---

### 3.3 Closed-Loop Cooling System

A cooling system that recirculates water or coolant within a sealed or substantially closed system, minimizing or eliminating continuous withdrawal of potable water or groundwater for operational purposes.

---

### 3.4 Open-Loop or Evaporative Cooling System

A cooling system that relies on continuous withdrawal and consumption of water, including potable or groundwater, for heat rejection or evaporation during operation.

---

### 3.5 Groundwater Withdrawal

The extraction of water from subsurface aquifers or underground formations through wells or similar systems.

---

### 3.6 Renewable Energy

Energy derived from naturally replenishing sources, including but not limited to solar, wind, hydroelectric, or other sustainable energy resources.

---

### 3.7 Energy Impact Mitigation Plan

A document prepared by the applicant that:

- Quantifies projected electrical demand;
  - Identifies required infrastructure; and
  - Describes measures to offset or mitigate impacts on electrical systems.
- 

### 3.8 Environmental Impact Assessment (EIA)

A comprehensive, site-specific study prepared by qualified professionals evaluating the potential environmental, operational, and community impacts of a proposed facility, including mitigation measures.

---

### 3.9 Noise Attenuation

Engineering methods and design techniques used to reduce sound emissions, including but not limited to acoustic enclosures, barriers, berms, and equipment design.

---

### **3.10 Substation**

An electrical facility used to transform voltage levels and distribute electrical power within a transmission or distribution system.

---

### **3.11 Planned Growth**

Approved, permitted, or reasonably anticipated development within the Town, including but not limited to residential subdivisions, commercial development, and infrastructure expansion identified in:

- Approved development plans; or
  - The Town's Comprehensive Plan.
- 

### **3.12 Adverse Impact**

Any measurable or reasonably foreseeable negative effect on:

- Infrastructure capacity;
  - Environmental resources;
  - Public health or safety; or
  - The use and enjoyment of surrounding properties.
- 

### **3.13 Public Nuisance**

Any condition or activity that unreasonably interferes with the use and enjoyment of property by the public or nearby residents, including but not limited to excessive noise, light, odor, or operational disturbance.

---

### **3.14 Applicant**

Any person, entity, or organization submitting an application for approval of a High-Intensity Data Processing Facility under this Ordinance.

---

### 3.15 Facility Operator

The entity responsible for the ongoing operation, maintenance, and compliance of a High-Intensity Data Processing Facility.

---

## SECTION 4. APPLICABILITY, PERMITTING, AND BURDEN OF PROOF

---

### 4.1 Applicability

(A) The provisions of this Ordinance shall apply to all High-Intensity Data Processing Facilities, as defined herein, proposed within the jurisdiction of the Town of Ridgeland.

(B) No High-Intensity Data Processing Facility shall be established, constructed, expanded, or operated except in compliance with this Ordinance.

(C) The requirements of this Ordinance shall apply in addition to all other applicable federal, state, and local laws and regulations.

---

### 4.2 Use Classification

(A) High-Intensity Data Processing Facilities shall be permitted only by **Special Exception** within zoning districts designated by the Town as appropriate for such use.

(B) Approval of a Special Exception shall not be construed as a matter of right.

(C) The granting of approval shall be discretionary and shall be based upon a determination that all requirements of this Ordinance have been satisfied.

---

### 4.3 Burden of Proof

(A) The applicant shall bear the burden of demonstrating compliance with all provisions of this Ordinance.

---

(B) Such compliance shall be demonstrated by **clear and convincing evidence**, including but not limited to:

1. Technical studies;
2. Engineering reports;
3. Environmental analyses; and
4. Any other documentation required by the Town.

(C) Assertions, assumptions, or unsupported conclusions shall not be sufficient to meet this burden.

---

#### 4.4 Independent Grounds for Denial

(A) Each requirement of this Ordinance shall constitute an **independent and sufficient basis for denial** of an application.

(B) Failure to satisfy any single requirement shall be grounds for denial, regardless of compliance with other provisions.

(C) The Town shall have no obligation to approve an application that fails to fully meet all applicable standards.

---

#### 4.5 Conditions of Approval

(A) The Town may impose conditions of approval necessary to:

1. Ensure compliance with this Ordinance;
2. Mitigate identified impacts; and
3. Protect public health, safety, and welfare.

(B) Such conditions shall be binding upon the applicant and any successors or assigns.

---

#### 4.6 Ongoing Compliance

(A) Approval under this Ordinance shall require **continuous compliance** with all applicable standards.

(B) Failure to maintain compliance shall constitute a violation subject to enforcement under this Ordinance, including but not limited to:

- Fines;
- Suspension of operations; or
- Revocation of approval.

---

## SECTION 5. WATER SUPPLY AND COOLING REQUIREMENTS

---

### 5.1 Demonstration of Water Availability

(A) The applicant shall demonstrate the availability of a **legally committed, reliable, and sustainable water supply** sufficient to meet all operational demands of the proposed facility.

(B) Such demonstration shall include:

1. Identification of the source(s) of water;
2. Documentation of legal rights to such water;
3. Projected daily and peak demand; and
4. Long-term sustainability analysis.

---

### 5.2 Protection of Existing and Planned Growth

(A) The applicant shall demonstrate, by clear and convincing evidence, that the proposed facility's water use will not adversely impact:

1. **Existing users** of municipal or regional water systems; or
2. **Approved or reasonably projected future growth**, including but not limited to residential, commercial, and public infrastructure development.

(B) For purposes of this section, "planned growth" shall include:

- Approved developments;

- 
- Permitted subdivisions; and
  - Growth reasonably anticipated under the Town's Comprehensive Plan. *and/or already entitled.*

(C) Any uncertainty regarding impacts to existing or planned users shall be resolved in favor of **resource protection**.

---

### 5.3 Cooling System Requirements

(A) All High-Intensity Data Processing Facilities shall utilize **closed-loop cooling systems** or equivalent systems designed to minimize or eliminate continuous withdrawal of potable water or groundwater.

(B) Open-loop or evaporative cooling systems shall be prohibited unless the applicant demonstrates, by clear and convincing evidence, that:

1. No feasible closed-loop or equivalent alternative exists; and
2. The proposed system will not adversely impact water resources as defined in Section 5.2.

(C) The burden of proof for any exception shall rest entirely with the applicant.

---

### 5.4 Groundwater Withdrawal

(A) Any proposal involving groundwater withdrawal shall include a **hydrogeological study** prepared by qualified professionals.

(B) The study shall evaluate, at a minimum:

1. Aquifer capacity and recharge rates;
2. Drawdown impacts;
3. Effects on nearby wells and properties;
4. Impacts to wetlands, streams, and ecosystems; and
5. Long-term sustainability.

(C) The applicant shall demonstrate that groundwater use will not:

1. Deplete or degrade aquifer resources;
2. Adversely affect surrounding properties or users; or

3. Conflict with planned growth needs.

---

### 5.5 Third-Party Peer Review

(A) All water supply analyses, including hydrogeological studies, shall be subject to **independent third-party review**.

(B) Such review shall be:

1. Conducted by qualified experts selected or approved by the Town; and
2. Funded entirely by the applicant.

(C) The Town may rely on such review in evaluating compliance.

---

### 5.6 No Adverse Impact Standard

(A) Approval shall not be granted unless the applicant demonstrates that water use will result in **no adverse impact** as defined in Section 3.

(B) Any failure to conclusively demonstrate the absence of adverse impacts shall constitute grounds for denial.

---

### 5.7 Denial

Failure to satisfy any provision of this Section shall constitute **independent and sufficient grounds for denial** of the application.

---

## SECTION 6. ELECTRICAL INFRASTRUCTURE REQUIREMENTS

---

### 6.1 Location and Infrastructure Compatibility

(A) High-Intensity Data Processing Facilities shall be located in proximity to **existing electrical infrastructure**, including substations, capable of supporting the proposed load.

---

(B) The applicant shall demonstrate that the proposed location is appropriate for the scale of electrical demand.

---

## 6.2 Infrastructure Upgrades

(A) Any required upgrades to electrical infrastructure shall be:

1. Fully funded by the applicant; and
2. Designed to avoid adverse impacts on existing and planned users.

(B) No costs associated with such upgrades shall be borne by the Town or its residents.

---

## 6.3 Electrical Impact Study

(A) The applicant shall submit a detailed **Electrical Impact Study** prepared by qualified professionals.

(B) The study shall include:

1. Projected electrical demand (average and peak load);
2. Required infrastructure improvements;
3. Impact on substations and transmission systems; and
4. Effects on availability of power for existing and planned users.

---

## 6.4 Protection of Existing and Planned Users

(A) The applicant shall demonstrate, by clear and convincing evidence, that the proposed facility will not adversely impact:

1. Existing electrical service; or
2. The availability of electrical capacity for planned growth.

(B) Any uncertainty regarding such impacts shall be resolved in favor of protecting existing and future users.

## 6.5 Third-Party Peer Review

(A) The Electrical Impact Study shall be subject to independent third-party review.

(B) Such review shall be:

1. Conducted by experts selected or approved by the Town; and
  2. Funded by the applicant.
- 

## 6.6 No Adverse Impact Standard

(A) Approval shall not be granted unless the applicant demonstrates that the proposed facility will not:

1. Overburden existing infrastructure;
  2. Require reallocation of capacity from existing or planned users; or
  3. Create reliability concerns.
- 

## 6.7 Denial

Failure to meet any requirement of this Section shall constitute **independent and sufficient grounds for denial**.

---

# SECTION 7. ENERGY AND SUSTAINABILITY REQUIREMENTS

---

## 7.1 Purpose

The purpose of this Section is to ensure that High-Intensity Data Processing Facilities mitigate their significant electrical demand and associated impacts through the use of renewable energy, on-site generation, and operational efficiency measures.

---

---

## 7.2 Energy Impact Mitigation Plan

(A) The applicant shall submit a comprehensive **Energy Impact Mitigation Plan** prepared by qualified professionals.

(B) The Plan shall include, at a minimum:

1. Projected electrical demand, including:
  - Average load;
  - Peak load; and
  - Load variability;
2. Identification of all required electrical infrastructure, including substations and transmission upgrades;
3. Analysis of impacts on regional electrical systems, including impacts described in Section 6;
4. Description of all measures proposed to reduce, offset, or mitigate electrical demand.

---

## 7.3 Renewable Energy Requirement

(A) The applicant shall demonstrate that a substantial portion of the facility's electrical demand will be met through **renewable energy sources**.

(B) Acceptable methods may include:

1. On-site renewable energy generation;
2. Power purchase agreements (PPAs);
3. Participation in utility renewable energy programs; or
4. Equivalent mechanisms approved by the Town.

(C) The applicant shall quantify the percentage of energy derived from renewable sources and demonstrate that such sourcing is:

- Reliable;
- Contractually secured; and
- Sustainable over time.

---

## 7.4 On-Site Energy Generation and Storage

(A) The facility shall incorporate **on-site renewable energy generation and/or energy storage systems** to the maximum extent feasible.

(B) Such systems shall be designed to:

1. Reduce peak demand on the electrical grid;
2. Improve operational efficiency; and
3. Enhance system resilience.

(C) Any claim that on-site generation is infeasible shall be supported by **clear and convincing evidence**.

---

## 7.5 Backup Power Systems

(A) Backup generators shall be permitted only for emergency use and limited testing, as further regulated in Section 8.

(B) The applicant shall identify:

1. Number and type of generators;
2. Fuel type and storage; and
3. Expected operational parameters.

(C) The applicant shall demonstrate that generator use will not create adverse environmental or nuisance impacts.

---

## 7.6 Third-Party Peer Review

(A) The Energy Impact Mitigation Plan shall be subject to **independent third-party review**.

(B) The cost of such review shall be borne by the applicant.

---

---

## 7.7 No Adverse Impact Standard

(A) Approval shall not be granted unless the applicant demonstrates that the proposed facility will not:

1. Adversely impact regional electrical systems;
  2. Reduce availability of electrical capacity for existing or planned users; or
  3. Create reliability concerns.
- 

## 7.8 Denial

Failure to meet any requirement of this Section shall constitute **independent and sufficient grounds for denial**.

---

# SECTION 8. SITE DESIGN, PERFORMANCE, AND OPERATIONAL STANDARDS

---

## 8.1 Purpose

To ensure that High-Intensity Data Processing Facilities are designed and operated in a manner that minimizes impacts on surrounding properties and maintains compatibility with the Town's character and infrastructure.

---

## 8.2 Site Design Standards

### (A) Minimum Lot Size

- The minimum lot size shall be twenty-five (25) acres, unless otherwise approved by the Town based on demonstrated compatibility.
- 

### (B) Setbacks

1. Minimum of **200 feet** from any residential zoning district or residential use;
2. Minimum of **100 feet** from all other property lines.

---

**(C) Buffers and Screening**

1. A minimum **50-foot landscaped buffer** shall be provided along all property boundaries;
2. Where adjacent to residential uses, a minimum **100-foot enhanced buffer** shall be required, including:

- (a) Earthen berms with a minimum height of six (6) to eight (8) feet;
- (b) Double rows of evergreen vegetation; and
- (c) Opaque fencing or wall systems.

*(d) Native vegetation selected for this USDA Plant Hardiness Zone shall substantially comprise the plant material.*

---

### 8.3 Building Design Standards

**(A) Buildings shall incorporate architectural articulation, including:**

1. Variation in façade planes every 50–75 feet;
  2. Changes in materials, color, or texture; and
  3. Vertical and horizontal elements to reduce visual mass.
- 

**(B) The following shall be prohibited:**

1. Blank, uninterrupted walls exceeding 100 feet;
  2. Unfinished or highly reflective exterior materials.
- 

**(C) Acceptable materials shall include:**

- Brick;
  - Stone;
  - Finished concrete;
  - Architectural metal panels;
  - Other durable materials approved by the Town.
-

---

(D) All rooftop equipment shall be fully screened from view.

---

## 8.4 Noise Attenuation Standards

(A) Maximum allowable noise levels, measured at the property line:

1. **60 dBA** during daytime hours (7:00 AM – 10:00 PM);
  2. **50 dBA** during nighttime hours (10:00 PM – 7:00 AM).
- 

(B) Compliance shall be required on a **continuous, 24-hour basis**.

---

(C) The applicant shall submit:

1. A pre-construction acoustic study; and
  2. A post-construction verification study.
- 

(D) Required Noise Mitigation Measures

Facilities shall incorporate engineered noise attenuation measures, including but not limited to:

1. Acoustic enclosures for generators and equipment;
  2. Sound walls or barriers;
  3. Earthen berms designed for acoustic performance;
  4. Equipment orientation away from sensitive uses.
- 

(E) Low-Frequency and Tonal Noise

The applicant shall specifically address and mitigate:

- Low-frequency noise; and
  - Tonal noise components associated with cooling systems.
-

---

**(F) Generator Testing**

1. Routine testing shall be limited to daytime hours;
  2. Simultaneous testing of multiple generators shall be restricted unless approved by the Town.
- 

**8.5 Lighting Standards**

- (A) All exterior lighting shall utilize full cutoff fixtures.
- (B) Lighting shall be designed to prevent spillover beyond property lines.
- (C) All lighting shall be shielded and directed downward.
- 

**8.6 Sustainability and Environmental Design**

- (A) Facilities shall incorporate water efficiency measures consistent with Section 5.
- (B) Heat mitigation strategies shall be implemented, including:
- Reflective materials;
  - Landscaping; and
  - Heat dispersion design.
- 

**(C) Stormwater Management**

The applicant shall provide a stormwater management system that includes:

1. Detention and retention facilities;
  2. Runoff control measures;
  3. Protection of adjacent properties and waterways.
- 

**8.7 Operational Standards**

- (A) A construction traffic management plan shall be required.
- (B) Construction activities shall be limited to approved hours.

(C) Outdoor storage shall be prohibited unless fully screened.

---

## 8.8 Ongoing Compliance and Enforcement

(A) The Town may require periodic monitoring and testing.

(B) Failure to maintain compliance shall constitute a violation.

(C) Violations may result in:

- Fines;
  - Suspension of operations; or
  - Revocation of approval.
- 

(D) Non-compliance shall constitute **independent grounds for denial or revocation**.

---

## SECTION 9. EMERGENCY CONTACT AND RESPONSE REQUIREMENTS

---

### 9.1 Emergency Contact Information

(A) The applicant shall designate:

1. A primary emergency contact available 24/7;
  2. A secondary contact; and
  3. An on-site operations manager.
- 

(B) Contact information shall include:

- Name;
- Direct phone number;

- Email address.
- 

## 9.2 Availability

At least one contact shall be reachable at all times and capable of initiating corrective action.

---

## 9.3 Coordination with Emergency Services

The operator shall coordinate with local emergency responders and provide:

- Site access plans;
  - Hazard identification;
  - Emergency procedures.
- 

## 9.4 Incident Reporting

The operator shall notify the Town within **24 hours** of any incident involving:

- Environmental release;
  - Noise violations;
  - System failures;
  - Public safety risks.
- 

## 9.5 Updates

Emergency contact information shall be updated within **10 business days** of any change.

---

# SECTION 10. ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

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---

## 10.1 Requirement

(A) The applicant shall submit a comprehensive Environmental Impact Assessment (EIA).

(B) The EIA shall be prepared by qualified professionals.

---

## 10.2 Air Quality and Emissions

The EIA shall evaluate:

- Emissions from generators;
  - Vehicle and truck operations;
  - Construction activities.
- 

## 10.3 Public Nuisance Analysis

The EIA shall evaluate:

- Noise;
  - Glare and lighting;
  - Visual impacts;
  - Truck traffic and operations.
- 

## 10.4 Stormwater Management

The EIA shall include a detailed stormwater management plan addressing:

- Runoff;
  - Flooding;
  - Erosion;
  - Protection and preservation of existing wetlands and waterways.
-

## 10.5 Comprehensive Plan Consistency

The EIA shall demonstrate consistency with the Town's Comprehensive Plan, including:

- Land use compatibility;
  - Infrastructure capacity;
  - Growth management.
- 

## 10.6 Mitigation Plan

The applicant shall provide a detailed plan addressing:

- (A) Pre-construction impacts;
  - (B) Construction impacts;
  - (C) Post-construction operations.
- 

## 10.7 Third-Party Peer Review

- (A) The EIA shall be subject to independent third-party review.
  - (B) Costs shall be borne by the applicant.
- 

## 10.8 Burden of Proof

The applicant shall demonstrate, by clear and convincing evidence, that:

- Environmental impacts are minimized;
  - No public nuisance will result;
  - All mitigation measures are effective.
- 

## 10.9 Denial

Failure to adequately address any component of the EIA shall constitute **independent and sufficient grounds for denial.**

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## SECTION 11. APPLICATION REQUIREMENTS

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### 11.1 Complete Application Required

(A) No application for a High-Intensity Data Processing Facility shall be deemed complete unless all materials required by this Ordinance have been submitted.

(B) The Town may reject any application as incomplete if required information is missing, insufficient, or not prepared by qualified professionals.

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### 11.2 Required Submittals

The applicant shall submit, at a minimum, the following:

#### **(A) Water Supply Documentation (Section 5)**

1. Water source identification;
  2. Legal documentation of water rights or service commitments;
  3. Demand projections;
  4. Hydrogeological study (if applicable).
- 

#### **(B) Electrical Infrastructure Documentation (Section 6)**

1. Electrical Impact Study;
  2. Infrastructure upgrade plans;
  3. Load projections.
- 

#### **(C) Energy Impact Mitigation Plan (Section 7)**

1. Renewable energy sourcing strategy;
  2. On-site generation plans;
  3. Load mitigation measures.
-

**(D) Site Plan (Section 8)**

1. Property boundaries;
  2. Setbacks and buffers;
  3. Building layout;
  4. Equipment locations;
  5. Access and circulation.
- 

**(E) Noise Study (Section 8)**

1. Pre-construction acoustic analysis;
  2. Predicted operational noise levels;
  3. Proposed mitigation measures.
- 

**(F) Environmental Impact Assessment (Section 10)**

All required components as specified in Section 10.

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**(G) Emergency Contact Information (Section 9)**

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**(H) Any additional information required by the Town to evaluate compliance.**

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### **11.3 Professional Certification**

**(A) All studies and reports shall be prepared, signed, and sealed by qualified professionals where applicable.**

**(B) The Town may require additional certification or clarification.**

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## 11.4 Peer Review

(A) All required studies shall be subject to third-party peer review pursuant to Sections 5, 6, 7, and 10.

(B) The applicant shall bear all costs associated with such review.

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## 11.5 Applicant Responsibility

The applicant shall be solely responsible for demonstrating compliance with all requirements of this Ordinance.

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# SECTION 12. APPROVAL CRITERIA

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## 12.1 General Standard

Approval of a High-Intensity Data Processing Facility shall be granted **only if** the applicant demonstrates, by clear and convincing evidence, that all requirements of this Ordinance have been satisfied.

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## 12.2 Required Findings

The Town shall not approve an application unless it finds that:

### (A) Infrastructure Capacity

Adequate infrastructure exists or will be provided without adverse impact on:

- Existing users; and
  - Planned growth.
- 

### (B) Water Sustainability

The proposed facility complies with Section 5 and will not adversely impact:

- Water resources;

- Existing users; or
  - Planned development.
- 

### **(C) Electrical Compatibility**

The proposed facility complies with Section 6 and will not adversely affect:

- Electrical reliability; or
  - Availability of power for existing and future users.
- 

### **(D) Environmental Protection**

The applicant has demonstrated compliance with Section 10 and that:

- Environmental impacts are minimized; and
  - No public nuisance will result.
- 

### **(E) Site Compatibility**

The proposed facility complies with Section 8 and is compatible with:

- Surrounding land uses; and
  - Community character.
- 

### **(F) Comprehensive Plan Consistency**

The proposed facility is consistent with the Town's Comprehensive Plan.

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## **12.3 Conditions of Approval**

The Town may impose conditions necessary to:

- Ensure compliance;
- Mitigate impacts;
- Protect public welfare.

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## 12.4 No Obligation to Approve

Nothing in this Ordinance shall be construed to require approval of any application.

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# SECTION 13. DENIAL AUTHORITY

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## 13.1 Independent Grounds for Denial

Failure to satisfy **any provision** of this Ordinance shall constitute **independent and sufficient grounds for denial**.

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## 13.2 Insufficient Evidence

Applications may be denied where:

- Evidence is incomplete;
  - Analysis is inconclusive; or
  - Impacts cannot be fully evaluated.
- 

## 13.3 Uncertainty Standard

Any uncertainty regarding impacts to:

- Water resources;
- Infrastructure; or
- Public welfare

shall be resolved in favor of **denial**.

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## 13.4 Burden of Proof

Failure of the applicant to meet the burden of proof shall result in denial.

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## SECTION 14. ENFORCEMENT AND COMPLIANCE

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### 14.1 Inspections

The Town may conduct inspections to verify compliance with this Ordinance.

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### 14.2 Monitoring and Reporting

The Town may require:

- Periodic monitoring;
  - Submission of operational reports;
  - Verification of compliance with approved plans.
- 

### 14.3 Violations

Any failure to comply with this Ordinance or conditions of approval shall constitute a violation.

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### 14.4 Remedies

The Town may impose:

- Fines;
  - Stop-work orders;
  - Suspension of operations;
  - Revocation of approvals.
- 

### 14.5 Revocation

Approval may be revoked where:

- Conditions are violated;
  - Impacts exceed approved levels; or
  - Misrepresentation occurred in the application.
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## **SECTION 15. SEVERABILITY**

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If any section, subsection, sentence, clause, or provision of this Ordinance is held invalid or unconstitutional, such decision shall not affect the validity of the remaining portions.

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## **SECTION 16. EFFECTIVE DATE AND CODIFICATION**

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### **16.1 Effective Date**

This Ordinance shall take effect immediately upon adoption.

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### **16.2 Codification**

This Ordinance shall be incorporated into the Town of Ridgeland Code of Ordinances and zoning regulations.

# Proposed Data and Crypto Mining Center Ordinance - Draft

Recommended to first amend Section 24-31 (Land Use Table) to allow data centers in ID(Industrial) zoned areas of Edgefield County and subject to certain conditional regulations.

**Potential Conditional Use Regulations to be added to Chapter 24 in addition to being restricted to Industrial areas only.**

## Defined Terms of Edgefield County

**Closed loop system:** A system that constantly reuses and recycles an initial load of water within its operation, significantly reducing the draw on external water sources and minimizing wastewater discharge. A closed loop system shall not use evaporative cooling, and may consist of methods including, but not limited to, air-cooled (dry) cooling, rear door heat exchanger cooling, hybrid dry economizer cooling, direct-to-chip cooling, or immersion cooling.

**Data center:** A physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting technological applications and services, or for storing and managing the data associated with those technological equipment, applications, or services.

**Data Center, Campus:** A data center campus shall include a singular development that has more than one (1) data center with a total development area of a minimum of 500,000 square feet.

**Load:** The total power consumed by servers, storage, cooling, ventilation, generators, and other networking devices that operate within a data center site.

**Megawatt (MW):** The unit of measurement for electricity that is equivalent to one million watts. This is used to measure the total power consumption of data centers.

**Substations:** An electric system facility that converts higher voltages to lower voltages within or separate from a data center to generate sufficient power at maximum efficiency; can operate independently for a dedicated site once directly connected to a transmission line.

**Square footage, data centers:** The square footage of a data center shall include the total square footage of each floor in the data center development, the square footage of any supporting uses, and the square footage of any additional exterior equipment, such as substations, electrical yards, mechanical yards, and any other exposed equipment, located within property boundaries

**Crypto Mining** A crypto mining center (or farm) is a specialized, industrial-scale facility containing a large number of high-powered computers—usually Application-Specific Integrated Circuits (ASICs) or powerful GPUs—dedicated solely to validating blockchain transactions and generating new cryptocurrency units, such as Bitcoin. These centers operate 24/7, requiring significant, constant electricity for processing and intense cooling systems. Its purpose is primarily to solve complex cryptographic algorithms (Proof of Work) to earn cryptocurrency rewards.

**A. Permitted location**

1. Data centers shall only be permitted in ID (Industrial Zoned) areas and shall be specifically forbidden in un-zoned portions of the unincorporated areas of the County.
2. No Data Center shall be permitted within 1000 feet of a single or multi-family residence.
3. Data centers and Campus data centers shall provide a 20-foot-wide landscaped buffer. It shall be located around the data center development, and may be within the 100-foot transitional buffer. A minimum of one canopy tree shall be planted for every 30 feet of property frontage if the subject site abuts publicly accessible right-of-way or non-industrially zoned properties. These improvements may be located within the required 100-foot transitional buffer described in (Sec. 27-4.2.64 (B)5) if applicable
4. Distance shall be measured from the edge of any building, substation, drive, street, parking lot, structure or improvement to the nearest property line.

**B. Architectural and landscaping design requirements**

1. Where visible from a publicly accessible road or right-of-way, a Medium, Major, or Campus data center shall have a minimum of thirty (30) percent of the width of the front façade of any buildings at the ground level consist of fenestration. Decorative windows, architecturally glazed windows and painted or applied decorative murals shall be permitted to count towards fenestration requirements after ten percent (10%).
  - a) A mural shall be classified as a very large image, such as a painting, applied directly to a wall. Murals are signs that promote public art and shall not used for advertising.
2. A minimum of ten percent (10%) of the width of side and rear facades shall incorporate decorative windows or architecturally glazed windows.
3. The following materials shall not be utilized on the building façade: aluminum siding; corrugated steel; vinyl siding; plywood; pressed wood products; synthetic stucco; or unfinished concrete block.
4. All data centers shall have unified landscape and architectural elements.

**C. Operation requirements.**

1. Substations, electrical yards, mechanical yards, and any other exposed equipment shall not be located between the building and a publicly accessible road or right-of-way and shall be screened from any adjacent publicly accessible street, private street, trail, or park.
2. All lighting other than street and pedestrian scale lighting shall have "Dark Sky" design. There shall be no spillover from the fixture onto surrounding properties, including the street. All lights and poles shall have a permanent black finish.
3. All cooling and ventilation equipment within property boundaries shall operate on a closed-loop system.

4. All cooling, ventilation, and other external equipment used to operate the facility shall not be located between building and publicly accessible rights-of-way, unless located on the rooftop of any data center development or building within property boundaries.
5. Substations associated with the operation of a data centers shall be subject to the following requirements:
  - a) The substation shall be at least fifty (50) feet from the public right-of-way.
  - b) The substation shall be screened with a minimum eight (8) foot tall wall from any adjoining property or publicly accessible street.
  - c) The substation shall not involve the storage of vehicles or service equipment.

**Generator Maintenance requirements.**

1. Any generators on the property shall comply with U.S. Environmental Protection Agency (EPA) New Source Performance Standards (NSPS) of at least Tier 4 emission standards.

- a) Testing for these generators shall not exceed 10 hours per month.
- b) Testing for these generators shall only occur between the hours of 9:00 a.m. and 5:00 p.m.
- c) Generators shall be enclosed by a sound attenuation for noise reduction and to reduce pollution.

2. Except for generator testing or commissioning activities, generator use is limited to backup/emergency use only.

**D. Application requirements.**

1. All applications for a data center shall, in addition to any other application requirements of this code, provide the following information:

- a) Applicants shall provide a letter of intent from the relevant utility provider(s), confirming that preliminary coordination has occurred and that service to the proposed facility is technically feasible subject to final engineering review.
- b) Noise Impact Assessment: A Noise Impact Assessment shall be required as part of the permitting process for any proposed data center development and assessed at a distance of 500 feet from the data center development. The Noise Impact Assessment shall:

- i. Define the scope of the assessment, including the geographic area, the noise sources to be studied, and the specific objectives of the assessment for the proposed development.

- ii. Measure pre-operation ambient noise, or the existing background noise before any server equipment is installed, and provide acoustic mitigation strategies if noise level is proposed to exceed 60 dB during any hours of the day or night once equipment for data center development is in operation.

- c) Water Consumption and Sustainability Plan: A Water Consumption and Sustainability Plan shall address conservation and scarcity, outlining the total water requirement of

the data center, including cooling needs, and any strategies to reduce or mitigate excessive water usage. The plan shall demonstrate that the water usage shall not significantly strain the County's water supply.

d) **Energy Consumption and Sustainability Plan:** An Energy Consumption Sustainability Plan shall contain the estimated energy load before construction and the daily operational load once constructed. This assessment shall outline:

- i. Estimates of peak electricity demand and strategies for mitigating strain on local power infrastructure
- ii. Proposed improvements or alternatives to minimize the need for additional transmission lines and the designated power provider
- iii. The use of sustainable alternatives for on-site water or power generation, such as solar panels, rooftop cisterns, small-scale wind turbines, or other renewable energy sources which shall offset at least 10% of total power or water usage.
- iv. A decommissioning plan, in the event data infrastructure is not sold or transferred, for recycling all on-site electronic infrastructure through certified recyclers that follow Responsible Recycling (R2) Standard for Electronics Recyclers and/or e-Stewards® Standard for Responsible Recycling and Reuse of Electronic Equipment. An approved decommissioning plan shall be provided to the Planning Director for county records.

e. **Transmission Line Impact Assessment:** A Transmission Line Impact Assessment shall identify the need for new or upgraded transmission lines to meet the data center's electricity requirements. This assessment shall include the potential environmental impact on public land, including tree removal from county-owned land and rights-of-way. This plan shall also include information on the planned substation's location and shall show the screening mechanism(s), which shall include a minimum of an eight (8) foot tall decorative brick wall if potentially visible by the public.

f. Before final approval by Edgefield County all stormwater and environmental approvals from the South Carolina Department of Environmental Services will have to be submitted to the Planning Director.

2. **Additional Information:** Any additional information requested by Edgefield County's Planning Department shall be submitted before the application is deemed complete.

3. The owner and/or operator is required to submit an annual compliance report that details any changes to and continuation of all assessments submitted with an application demonstrating compliance and monitoring of all applications requirements and conditions of zoning to the County's Planning Director no later than the first of January of each year.

4. The burden of showing compliance with supplemental requirements and/or conditions of zoning is on the applicant and/or owner of the property or use.

**A. Decommissioning**

Upon the decommissioning of a Data or Crypto Mining Center, a detailed, documented approval from any and all applicable regulatory authority shall be provided to the Edgefield County Planning Director for review and record.