SOUTHERN GEORGIA REGIONAL COMMISSION

MODEL ORDINANCE FOR CRYPTOCURRENCY AND DATA MINING

RESOLUTION

ORDINANCE No.____
PROVIDING REGULATIONS FOR CRYPTOCURRENCY AND
DATA MINING

WHEREAS, [local government] is permitted by Georgia state law to exercise zoning powers, pursuant to Title 36, Chapter 66, Official Code of Georgia Annotated, as amended;

NOW, THEREFORE, BE IT ORDAINED that the [Mayor and Council/Board of County Commissioners] of [local government], hereby adopts the following provisions:

Chapter/Article/Division______CRYPTOCURRENCY AND DATA MINING

1. Purpose

An ordinance of [local government], providing definitions relating to cryptocurrency and data mining and standards to protect the public health, safety, and welfare and avoid unintended impacts on resources and adjacent uses.

By enacting this ordinance, it is the intent of [local government] to:

- 1. Enable the development of Cryptocurrency Mining and Data Centers, to the extent possible, in areas where any potential adverse effects on the community will be minimized.
- 2. Ensure that adequate capacity is available on the applicable electrical power supply lines and substations to serve both the Cryptocurrency Mining and Data Centers and to serve the other needs of the service area consistent with the normal projected local growth envisioned by the local energy provider(s).

2. **Definitions**

Cryptocurrency. A digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank.

Cryptocurrency Data Center. Leased or owned boundaries of floor space devoted to the operating data processing equipment for Commercial Cryptocurrency Mining; excludes spaces for commercial offices, storage, shipping and receiving, warehousing, or any other space that is not electronic processing.

Commercial Cryptocurrency Mining. The commercial process by which cryptocurrency transactions are verified and added to the public ledger, known as the block chain, and also the means through which new units of cryptocurrencies are released, through the use of server farms or data centers employing data processing equipment. Any equipment requiring a High-Density Load Service, for a server farm or data center, will constitute a commercial cryptocurrency mining operation.

Cryptocurrency Server Farm. Three or more interconnected computers housed together in a single facility whose primary function is to perform cryptocurrency mining or associated data processing.

High Density Load Service. The provision of electrical service where the requested load density has, for any monthly billing period, either an average power demand in excess of 300 kilowatts, OR an average power density in excess of 250 kilowatt-hours per year per data center square foot, equivalent to 35.064 square feet per kilowatt, at 100% load factor.

3. Applicability

- **3.1.** This ordinance shall apply to all commercial cryptocurrency mining operations installed, constructed, or modified after the effective date of this Ordinance.
- **3.2**. Commercial cryptocurrency mining operations in place before the effective date of this ordinance shall not be required to meet the requirements of this ordinance unless replacement, alteration, or expansion of operation thereon is requested.
- 3.3 All commercial cryptocurrency mining operations shall be designed, erected, and installed following all applicable local, State, and Federal codes, regulations, and standards.

4. Standards for Commercial Cryptocurrency Mining Operations

- 4.1 All principal and accessory structures used for cryptocurrency mining operations, server farms, and/or data centers, shall be arranged, designed and constructed to be harmonious and compatible with the site and with the surrounding properties. If pre-fabricated, preengineered or modular structures are installed, the followed standards are required:
 - 1. All structures shall have concrete foundations.
 - 2. All exterior facades shall have muted earth tone colors, and shall not be defective, decayed or corroded.
 - 3. If intermodal shipping containers are utilized such installation shall comply with the requirements of the most recent edition of Industrialized Building Rules and Bulletins of the Georgia Department of Community Affairs.
- 4.2 The operations shall not cause the dissemination of vibration or noise in excess of the maximum environmental noise level established by City/County Code of Ordinances Chapter , Article .
- 4.3 The operators shall not cause, allow, or permit the operation of any source of sound which creates at an occupied residential building or defined sensitive receiver, as may exist at the time of the issuance of a certificate of completion or occupancy, a sound level that exceeds a daytime continuous sound level of 50 dBA or a nighttime continuous sound level of 45 dBA, for any 15 minute measurement interval unless otherwise permitted.
- 4.4 The operators shall not cause, allow, or permit the operation of any source of sound which creates a pure tone where the one-third (1/3) octave band sound pressure level in the band of interest exceeds the arithmetic average of the sound-pressure levels for the two adjacent one-third octave bands by the corresponding decibel (dB(Flat)) values as follows:
 - a. 5 dB for center frequencies of 500 Hertz and above,
 - b. 8 dB for center frequencies between and including 160 and 400 Hertz, and
 - c. 15 dB for center frequencies less than or equal to 125 Hertz.
 - d. A pure tone shall be deemed present by measurement.
- 4.5 For permitting and compliance purposes, measurements shall be performed using a calibrated Type 1 Sound Level Meter, configured to log and record 1/3 octave flat-weighted equivalent sound pressure levels, and A-weighted equivalent level (Leq), slow time weighting, with a 15-miunute averaging interval. Measurements shall be made proximate to, but no closer than, 100 feet from an occupied residential structure or other designated sensitive receiver. Transient background sounds must be excluded from the measurement period by post-processing or other means. Compliance is indicated if the noise solely generated by the operator cannot be discriminated from the equivalent-continuous background sound pressure level, or if the noise levels solely generated by the operator otherwise conform to the requirements of Section 4.3 and Section 4.4.

- 4.6 Prior to the issuance of a certificate of completion or occupancy, a report with noise level test results shall be submitted for approval by the applicant from a qualified acoustical professional for the purpose of demonstrating compliance.
- 4.7 A noise reduction barrier or device may be required at the discretion of the Zoning Administrator when it is conclusive that noise level tests to not conform to Sections 4.3 and 4.4.
- 4.8 Terminology as used herein related to acoustic levels and measurements follow American National Standard ANSI S12.9: "Quantities and Procedures for Description and Measurement of Environmental Sound Part 1: Basic Quantities and Definitions," and ANSI S12.9: "Quantities and Procedures for Description and Measurement of Environmental Sound. Part 3: Short-term measurements with an observer present".
- 4.9 The limitations of Section 4.3 and Section 4.4 herein shall not apply to any residential or sensitive receiver that is established after the date of issuance of a certificate of completion or occupancy for the applicant's operation.
- 4.10 The equipment used in any Commercial Cryptocurrency Mining operation shall be housed in a metered, electrically grounded, and pre-engineered metal-encased structure with a fire rating designed to resist an internal electrical fire for at least 30 minutes. The containment space shall contain baffles that will automatically close in the event of fire independent of a possible electric system failure.
- 4.11 Any use or activity producing air, dust, smoke, glare, exhaust, heat, or humidity in any form shall be carried on in such a manner that it is not perceptible at or beyond the property line.
- 4.12 Any use of ISO shipping containers or similar as housing, whether horizontally combined or independent of other structures for the commercial cryptocurrency mining operation, shall not be vertically combined to exceed a height greater than nine (9) feet.
- 4.13 Each Commercial Cryptocurrency Mining operation shall provide a 24-hour emergency contact signage visible at the access entrance. Signs shall include company name if applicable, owner/representative name, telephone number, and corresponding local power company and telephone number.
- 4.14 All cryptocurrency mining operations shall meet the requirements of Sections ______, and _____ of Article ____ of this code with regard to buffers and screening which shall be applicable to the perimeters of the building or construction footprints, except for areas of ingress and egress into the site.
- 4.15 Prior to approval of the certificate of completion or occupancy, the applicant shall provide written verification from the electrical service provider stating the following:

- 4.16 Adequate capacity is available on the applicable supply lines and substation to ensure that the capacity available to serve the other needs of the service area is consistent with the normal projected load growth envisioned by the provider;
- 4.17 Utility supply equipment and related electrical infrastructure are sufficiently sized and can safely accommodate the proposed use;
- 4.18 The use will not cause electrical interference or fluctuations in line voltage on and off the operating premises; and
- 4.19 Prior to approval of the certificate of completion or occupancy, the applicant shall provide the City/County with written verification that the electrical work has passed a third-party final inspection.
- 4.20 Any Commercial Cryptocurrency Mining operation that is not operated for a continuous period of 12 months and for which there are no applications pending for permitted use of the structure at the end of such 12-month period, shall be considered abandoned, whether or not the owner or operator intends to make use of the device(s). The owner of an abandoned server farm or data center, and the owner of the property where the abandoned server farm and data center are located shall be under a duty to remove such facilities. If such facilities are not removed within a reasonable time, not to exceed three months, after receipt of notice from the governing authority notifying the owner(s) of such abandonment, the governing authority may remove such facilities and place a lien upon the property for the costs of removal. The governing authority may pursue all legal remedies available to it to insure that abandoned device(s) are removed. Delay by the governing authority in taking action shall not in any way waive the governing authority's right to take action.

5. Application and Approval

5.1.	No Commercial Cryptocurrency Mining operation may be developed without site plan
	review and verification by the City/County that all requirements within this ordinance are
	met. Commercial Cryptocurrency Mining operations are allowable uses within the
	following zoning districts:

6. Appeal

6.1. If the owner of a Commercial Cryptocurrency Mining operation is found to violate the provisions of this Ordinance, appeals should be made in accordance with the established procedures of the local government code.

7. Effectiveness, Interpretation, Separability

7.1. This Ordinance shall become effective immediately upon its adoption.

- **7.2.** All other portions, parts and provisions of the Zoning Ordinance of [local government], as heretofore enacted and amended, shall remain in force and effect.
- **7.3.** All Ordinances, or parts of Ordinances, in conflict herewith are replaced.
- **7.4**. If any part of this Ordinance conflicts with any other applicable federal, state, or local regulation, the more restrictive regulation shall control.
- **7.5.** If any section, clause, portion or provision of this Ordinance is found unconstitutional, such invalidity shall not affect any other portion of this Ordinance.