

## Final Report of the Floyd County Ordinance Working Group

The Floyd County Board of Supervisors approved Resolution 42-23 on November 6, 2023, to explore amending Ordinance No. 2011-2. On November 20, 2023, the Board of Supervisors approved Resolution 44-23, which placed a moratorium on the acceptance of applications and the issuance of permits for utility-scale wind energy systems. The moratorium was extended by the Board until June 30, 2025, through Resolution Nos. 09-24 (May 20, 2024), 20-24 (June 28, 2024), 26-24 (September 23, 2024), 31-24 (December 16, 2024), and 10-25 (March 17, 2025).

On November 7, 2024, the Floyd County Board of Supervisors voted 3-0 to establish the working group. The Board of Supervisors voted 3-0 for the following individuals to be part of the working group:

- Louis Lavorato, mediator, former Chief Justice of the Iowa Supreme Court
- Boyd Campbell, supervisor, Floyd County
- Thomas Reavely, attorney, representing the Floyd County Board of Supervisors
- Todd Prichard, Floyd County Attorney
- Samantha Norris, attorney, representing Marble Ridge Wind Energy LLC
- John Robbins, senior planner, NIACOG

Each member of the group signed an agreement to mediate, the form of which is attached as Exhibit 1. The Floyd County Supervisors approved the agreement on November 7, 2024.

The group met in person on the following dates: November 27, 2024, December 9, 2024, January 14, 2025, January 20, 2025, March 3, 2025, and May 14, 2025.

Mr. Lavorato, the mediator, did not vote on any language or terms. Mr. Prichard and Mr. Robbins declined to vote on any language or terms.

The group unanimously agreed that it would not consider or discuss any language relating to battery energy storage system permitting requirements.

The group was unable to unanimously agree on the terms of an ordinance for wind energy conversion systems in Floyd County. Exhibit 2 is a redlined ordinance, which indicates the group's suggested revisions as well as terms upon which no agreement could be reached, and includes the votes cast and positions taken on the disputed items. Unless noted as described above, the redlined language was agreed upon unanimously by those who voted (Mr. Campbell, Mr. Reavely, Ms. Norris).

Maps illustrating both the agreed-upon and the unsettled potential setbacks were prepared by Jessy Willadsen and are attached as Exhibit 3. The group agreed that potential

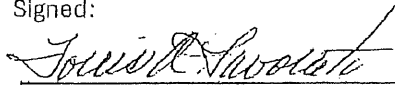
setbacks related to Conservation Reserve Enhancement Program land cannot be mapped due to lack of publicly available information necessary to create such maps and setbacks. The group also agreed that it was not possible to map the potential waiver distances of 1000' or 1800', which represent the county's initial position and its final position, respectively.

To aid in understanding the numerous terms and progress made by the working group, a chart summarizing the various setbacks and restrictions, either proposed or agreed-upon, starting from the recommendations of the planning and zoning commission, and including a pre-working group settlement offer from Marble Ridge Wind Energy LLC, is attached as Exhibit 4.

The group unanimously approved this document and attachments as its final report and agreed that Supervisor Campbell would present the final report at a Board of Supervisors meeting following the group's conclusion. The members of the working group may elect to provide public comments on the report and the results of the working group after Supervisor Campbell presents the final report.

Dated: June 17, 2025

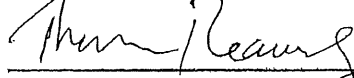
Signed:



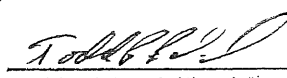
Louis Lavorato, mediator



Boyd Campbell, Floyd County Supervisor



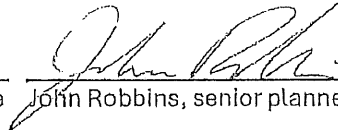
Thomas Reavely, attorney for the Floyd County Board of Supervisors



Todd Prichard, Floyd County Attorney



Samantha Norris, attorney for Marble Ridge Wind Energy LLC



John Robbins, senior planner, NIACOG





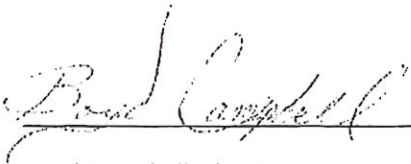
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Todd Prichard, Floyd Co. Attorney



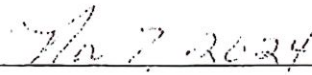
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Boyd Campbell, Floyd Co. Board of Supervisors  
*elect*



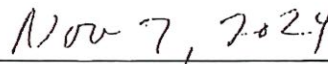
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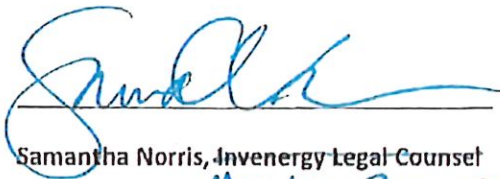
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Thomas Reavely, Whitfield & Eddy Law



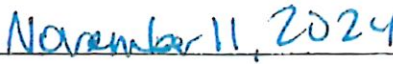
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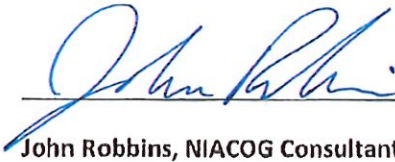
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Samantha Norris, Invenergy Legal Counsel  
*Member, BrownWink law firm  
and Counsel for Invenergy*



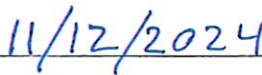
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John Robbins, NIACOG Consultant



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4.3. Commercial Wind Energy Conversion System (C-WECS): Also referred to as a Large Wind Energy System A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of more than six hundred (600) kilowatts (kW) and which is intended for the primary purpose of wholesale or retail sales of generated electricity.

5.4. Conservation Area: Includes Wildlife Management Areas as designated by the Iowa DNR or federal government. An area of land under ownership of Floyd County or other local jurisdiction, the State of Iowa, or the US government that is protected and that cannot be built on or used for certain purposes.

6.5. Decommissioning Funds Agent: A person, who is not the development owner, operator, or applicant, who is responsible for maintaining and releasing all decommissioning funds.

7.6. Decommissioning Funds: Funds in the form of a performance bond, escrow account, surety bond, letter of credit, corporate guarantee, or other form of financial assurance that is approved by the Zoning Administrator that are set aside for the sole purpose of decommissioning a development after the end of its useful life.

8.7. Non-Participating Owner. Any landowner except those on whose property has or is proposed to have all or a portion of a development project located on it pursuant to an agreement with a developer or operator or except those that agree to participate as part of a development pursuant to an agreement with a developer or operator.

9.8. Operator: The entity responsible for the day-to-day operation and maintenance of a specific land use.

10.9. Participating Owner: Any landowner whose property has or is proposed to have all or a portion of a development project located on it pursuant to an agreement with a developer or operator. An owner may participate in a development pursuant to an agreement to become a participant with a developer or operator.

11.10. Repowering: The replacement of generation equipment at an existing project site or the installation of new parts or equipment to an existing renewable energy facility or battery energy storage system (BESS) facility in order to increase energy production, reduce load, increase service capacity, or extend the useful life of the facility.

12.11. Small Battery Energy Storage System (S-BESS): One or more devices attached to or located inside or outside of the principal building footprint, assembled together, capable of storing energy in order to supply electrical energy to serve primarily the energy needs onsite.

13.12. Small Wind Energy Conversion System (S-WECS): Also referred to as a Small Wind Energy System. A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than six hundred (600) kilowatts (kW) and which is intended to primarily reduce onsite consumption of utility-supplied electricity.

~~14.13.~~ Substation. An electrical construction designed to collect and modify electrical energy on the electrical utility grid system.

~~15.14.~~ Wind Energy Conversion System (WECS): A wind turbine electrical generating facility comprised of an aggregation of parts, including the base, tower, generator, rotor, blades, supports, guy wires, and accessory equipment, such as battery banks, in such configuration as necessary to convert the kinetic energy of wind into electrical energy. The energy may be used onsite or distributed into the electrical grid.

~~16.15.~~ Wind Farm: One or more wind turbine generators, which are connected to the electrical transmission grid or local distribution grid. Wind farms shall include but are not limited to wind turbine generators, operations and maintenance buildings, meteorological towers, electrical collector systems, transmission and feeder lines, communications, service roads, battery energy storage systems (BESS), and substations. The project area of a wind farm shall include all lots or contiguous lots of all participating landowners.

~~17.16.~~ Wind Turbine Generator: Also referred to as a “Wind Turbine,” A device designed to extract kinetic energy from the wind and supply it in the form of electrical energy that is connected to the electrical transmission grid or local distribution grid and includes but is not limited to the nacelle, blade or rotor, tower, and pad transformer, if any.

- a. Blade and Rotor Hub: An element of a wind turbine, which acts as a part of an airfoil assembly, thereby extracting through rotation, kinetic energy directly from the wind.
- b. Ground Clearance: The vertical distance between the surface of the tower foundation and the lowest point of the turbine rotor plane.
- c. Hub Height: The vertical distance between the surface of the tower foundation and the center of the turbine hub, where the blades are attached.
- d. Foundation: The tower support structure, above and/or below grade that supports the entire weight of the wind turbine generator.
- e. Nacelle: A cover housing that houses all of the generating components in a wind turbine, including the generator, gearbox, drive train, and brake assembly.
- f. Total Height: The vertical distance between the surface of the tower foundation and the highest point of the turbine rotor plane at the tip of the blade.
- g. Tower: The support structure, above grade, that supports the nacelle and rotor assembly.

**SECTION 2.** Sub-Section VII (X) is hereby repealed and replaced to read as follows:

X. Exceptions and Variations of Use, Height, and Area Regulations. The district regulations as set forth in this sub-section shall qualify or supplement, as the case may be, the district regulations appearing elsewhere in this Ordinance.

- (1) Public, semi-public or public service buildings, hospitals, institutions, or schools, when permitted in a district, may be erected to a height not exceeding sixty (60) feet, and Religious Institutions and temples may be erected to a height not exceeding seventy-five (75) feet if the building is set back from side and rear yard lines heretofore established an additional foot for each two (2) feet of building height above the height limit otherwise imposed in the district in which the building is located.

- (2) Single-family and two-family dwellings may be increased in height by not more than ten (10) feet when the side and rear yards are increased over the yard requirements of the district in which they are located by not less than ten (10) feet, but they shall not exceed three (3) stories in height.
- (3) Chimneys, cooling towers, grain silos, elevators, bulkheads, fire towers, monuments, wind turbine generators, meteorological towers, stacks, stage towers, or scenery lofts, tanks, water towers, ornamental towers and spires, Religious Institution steeples, radio towers or necessary mechanical apparatus, may be erected to any safe height not in conflict with existing or hereafter adopted regulations of Floyd County, Iowa or regulations as required by the Federal Aviation Administration (FAA).
- (4) Accessory buildings may be built in a required rear yard, set back sixty (60') feet from the front yard lot line, but shall not occupy more than thirty (30) percent of the rear yard. However, this regulation shall not be interpreted to prohibit the construction of a four hundred forty (440) square foot garage in a rear yard, provided all yard setbacks can be maintained.
- (5) No basement shall be occupied for dwelling purposes unless at least one (1) story of the house above the basement has been completed. This variation is not to be construed to prohibit earth-sheltered subterranean dwellings.
- (6) Every part of a required yard shall be open to the sky, unobstructed except for accessory buildings in the rear yard and except for the ordinary projections of sills, belt course, cornices, cantilevers, bay windows and ornamental features projecting not to exceed twenty-four (24) inches.
- (7) For the purpose of side yard requirements, a two-family group house or multiple dwelling shall be considered as one building occupying one lot.
- (8) Temporary buildings that are used in conjunction with construction work only may be permitted in any district during the period the work is under way, but such temporary buildings shall be removed upon the completion of the construction work as determined by the Administrative Officer.
- (9) More than one (1) industrial, commercial, multiple dwelling, or institutional building may be erected upon a single lot or tract in a district permitting these uses, but the yards and open spaces required around the boundaries of the lot or tract shall not be encroached upon by any such buildings nor shall there be any change in the intensity of use regulations.
- (10) The Board of Adjustment shall review, may modify, and may, by special permit, issue a special exemption to the following uses. Said use may be located in any zoning district but otherwise restricted by other provisions of this Ordinance:
  - a. Municipal, state, or federal government buildings.
  - b. Commercial, amusement, or recreational development for temporary periods.

(11) In any district, in which a single-family dwelling and its customary accessory building may be erected on a lot of record or remnant site a single—family dwelling may be constructed provided the yard area (minimum of one and one half (1.5) acre) and setback requirements are met.

**SECTION 3.** Section VIII. Use Regulations for ‘A’ Agricultural District is hereby amended as follows:

- A. Add the following under Sub-Section VIII(B) “Permitted Accessory Uses:” 6. Small Battery Energy Storage Systems (S-BESS)
- B. Repeal and replace Sub-Section VIII(F)(27) with the following: 27. Commercial Wind Energy Conversion Systems (C-WECS) or Wind Farm
- C. Add the following under Sub-Section VIII(F) “Conditional Uses:”  
~~Commercial Battery Energy Storage Systems (C-BESS)~~  
32. Small Wind Energy Conversion Systems (S-WECS)

**SECTION 4.** Section IX. Use Regulations for ‘R-1’ Low Density Residence District is hereby amended as follows:

- A. Add the following under Sub-Section IX(B) “Permitted Accessory Uses:” 11. Small Battery Energy Storage Systems (S-BESS)
- B. Repeal and replace Sub-Section IX(G)(4) under “Conditional Uses” with the following: 4. Small Wind Energy Conversion Systems (S-WECS)

~~C. Add the following under Sub-Section IX(G) under “Conditional Uses:”  
19. Commercial Battery Energy Storage Systems (C-BESS), provided the use is co-located with a substation~~

**SECTION 5.** Section X. Use Regulations for ‘R-2’ Moderate Density Residence District is hereby amended as follows:

- A. Add the following under Sub-Section X(B) “Permitted Accessory Uses:”  
10. Small Battery Energy Storage Systems (S-BESS)
- B. Repeal and replace Sub-Section X(G)(4) under “Conditional Uses” with the following:  
4. Small Wind Energy Conversion Systems (S-WECS)

~~C. Add the following under Sub-Section X(G) under “Conditional Uses:”  
19. Commercial Battery Energy Storage Systems (C-BESS), provided the use is co-located with a substation~~

**SECTION 6.** Section XI. Use Regulations for ‘R-MH’ Residential Mobile Home District is hereby amended as follows:

- A. Add the following under Sub-Section XI(C) “Accessory Buildings or Uses:”  
19. Small Battery Energy Storage Systems (S-BESS)

B. Repeal and replace Sub-Section XI(D)(1) under “Conditional Uses” with the following:

1. Small Wind Energy Conversion Systems (S-WECS)

~~C. Add the following under Sub-Section XI(D) under “Conditional Uses”:~~

- ~~7. Commercial Battery Energy Storage Systems (C-BESS), provided the use is co-located with a substation~~

**SECTION 7.** Section XIII. Use Regulations for ‘C-1’ Commercial District is hereby amended as follows:

A. Add the following under Sub-Section XIII(B) “Accessory Buildings or Uses”:

4. Small Battery Energy Storage Systems (S-BESS)

B. Repeal and replace Sub-Section XIII(C)(2) under “Conditional Uses” with the following:

2. Small Wind Energy Conversion Systems (S-WECS)

~~C. Add the following under Sub-Section XIII(C) under “Conditional Uses”:~~

- ~~6. Commercial Battery Energy Storage Systems (C-BESS), provided the use is co-located with a substation~~

**SECTION 8.** Section XIV. Use Regulations for ‘C-R’ Commercial-Recreation District is hereby amended as follows:

A. Add the following under Sub-Section XIV(B) “Permitted Accessory Uses”:

2. Small Battery Energy Storage Systems (S-BESS)

B. Repeal and replace Sub-Section XIV(E)(8) under “Conditional Uses” with the following:

8. Small Wind Energy Conversion Systems (S-WECS)

~~C. Add the following under Sub-Section XIV(E) under “Conditional Uses”:~~

- ~~10. Commercial Battery Energy Storage Systems (C-BESS), provided the use is co-located with a substation~~

**SECTION 9.** Section XV. Use Regulations for ‘I-1’ Light Industrial District is hereby amended as follows:

A. Add the following under Sub-Section XV(A) “Permitted Uses”:

39. Small Battery Energy Storage Systems (S-BESS)

B. Repeal and replace Sub-Section XV(B)(6) under “Conditional Uses” with the following: 6. Small Wind Energy Conversion Systems (S-WECS)

C. Add the following under Sub-Section XV(B) “Conditional Uses”:

9. Wind Farm or Commercial Wind Energy Conversion Systems (C-WECS)  
~~Commercial Battery Energy Storage Systems (C-BESS)~~

**SECTION 10.** Section XVI. Use Regulations for ‘I-2’ Heavy Industrial District is hereby amended as follows:

- A. Add the following under Sub-Section XVI(A) “Permitted Uses:”
  - 20. Small Battery Energy Storage Systems (S-BESS)
- B. Repeal and replace Sub-Section XVI(B)(6) under “Conditional Uses” with the following: 6. Small Wind Energy Conversion Systems (S-WECS)
- C. Add the following under Sub-Section XVI(B) “Conditional Uses:”
  - 9. Wind Farm or Commercial Wind Energy Conversion Systems (C-WECS)
  - ~~Commercial Battery Energy Storage Systems (C-BESS)~~
  - ~~10.~~

**SECTION 11.** Section XXI is hereby repealed and replaced to read as follows:

**SECTION XXI.  
SUPPLEMENTARY CONDITIONAL USE REGULATIONS**

Intent: The regulations set forth in this Section, or elsewhere in this Ordinance that are applicable, shall apply to the conditional uses listed in this Section. It is recognized that certain uses possess characteristics of such unique and special form as to make impractical their being included automatically in any class of use as set forth in the various districts established by this Ordinance; therefore, these uses shall be subject to certain conditions and standards set forth in this Section.

Conditional Use Permits: The Board of Adjustment may, by Conditional Use Permit after public hearing, authorize the location of any of the following structures or uses in the districts and according to the regulations specified below. In approving any conditional use, the Board of Adjustment may prescribe appropriate conditions and safeguards; however, a conditional use permit may not be granted for a use in a zoning district from which it is not specifically granted by the provisions of this Ordinance. In addition, Conditional Use Permits in connection with which a violation occurs shall be subject to revocation or modification by the Board of Adjustment. All requests for Conditional Use Permit shall follow all procedures and meet all requirements established in Sub-Section XXIII(F) and as specified for specific conditional uses as specified in this Section and within all applicable districts and provisions of this Ordinance.

A. Commercial Wind Energy Systems (C-WECS). C-WECS requirements shall apply to all “Large Wind Energy Systems” or as part of a “Wind Farm” as defined and is a conditional permitted use in the ‘A’ Agricultural, the ‘I-1’ Light Industrial, and ‘I-2’ Heavy Industrial Districts and subject to the following conditions:

- 1. Procedure. All requests for Conditional Use Permit for C-WECS or Wind Farm shall conform to the following procedures in addition to the regular procedures for conditional use:
  - a. Pre-application meeting. At a minimum of ninety (90) days prior to making application, the applicant shall meet with the Zoning Administrator and County Engineer to discuss the applicant’s plans and identify any potential concerns in advance of filing the formal application.
  - b. Period of Review. Once submitted, the Planning and Zoning Office shall have a period not exceeding 15 business days to review that all required documentation has been submitted with the application. If all required materials have been submitted,

the Zoning Administrator shall provide formal acceptance to the applicant stating the application includes all required documentation and is officially accepted. If any required documentation has not been submitted with the application, the Zoning Administrator shall provide notification to the applicant that the application is not accepted and note any deficiencies with said application or documentation.

Upon formal acceptance of the application, staff shall have a period not to exceed ninety (90) days to review the application for all requirements. The first public hearing shall be scheduled prior to the end of the ninety (90) day period of review. The Zoning Administrator shall provide a copy of the application to the following local officials for review:

- Floyd County Conservation Director and Conservation Board
- Floyd County Engineer
- Floyd County Auditor
- Floyd County Emergency Management Coordinator
- Northeast Iowa Regional Airport Chairman
- Other relevant personal as determined by the Zoning Administrator

c. Public Information Meeting. A minimum of thirty (30) days and a maximum of ninety (90) days prior to the first scheduled public hearing, the applicant shall host a public information meeting about the proposed C-WECS development. The meeting shall be held in Floyd County at a place adequate in size to serve the anticipated attendance.

The meeting shall be advertised in all official county newspapers of record once a week for the two weeks prior to the meeting. The ad in the newspaper shall be a minimum size of 1/4 page. The ad shall include as a minimum the name of the proposed project, a contact person for the proposed project, the location of the proposed project, the time and place of the meeting, and a description of the proposed project.

Notice shall be given by ordinary mail to all property owners located within one (1) mile of the project area for the proposed C-WECS development a minimum of seven (7) days prior to the meeting. Said notice shall also be provided to the Planning and Zoning Office in advance of said meeting to be posted to the County website and social media, as applicable.

The applicant shall provide documentation to the Zoning Administrator that all of these requirements have been met.

d. Planning and Zoning Commission. Prior to the public hearing before the Board of Adjustment, a public hearing shall be held before the Floyd County Planning and Zoning Commission for study and recommendation to the Board of Adjustment. Notice for said hearing shall follow all required procedures for the Planning and Zoning Commission under Iowa Code 335 and this Ordinance.

e. Public Hearing Notification. Notice for all required public hearings shall be given by ordinary mail to all property owners located within one (1) mile of the project area for the proposed C-WECS development.

- f. Building Permit. Upon granting of a Conditional Use Permit, a Building Permit shall be required as provided for in Section XXII of this Ordinance for each wind turbine, meteorological tower, substation, and any other structure or location, including laydown yards, associated with the C-WECS development prior to construction.
2. Application. A minimum of ten (10) physical copies and a digital copy of the application and all application materials shall be submitted to the Planning and Zoning Office for any proposed wind farm or C-WECS structures. In making application for a Conditional Use Permit, the applicant shall file the following in addition to the application and required fees:
- a. A project development description and operation plan including the number of wind turbines using a sequential numbering system identifying each individual wind turbine generator, type, name plate generating capacity, total height, hub height, blade length, ground clearance, means of interconnection with the electrical grid, and a description of potential impacts on any nearby C-WECS development and wind resources on adjacent properties. Said plan shall also describe all regular maintenance procedures and schedules.
- b. Site plan(s) showing the following:
- (1) Location and GPS coordinates of each proposed wind turbine generator or C-WECS structure;
  - (2) Project development area;
  - (3) Property lines;
  - (4) All associated equipment and infrastructure, including substations, battery energy storage systems (BESS), meteorological towers, access roads, laydown yards, turnout locations, electrical cabling or transmission lines, or other associated equipment or infrastructure;
  - (5) Setbacks from all nonparticipating property lines, road right-of-way, railroad right-of-way, utility lines, pipelines, communication towers, and other wind turbine generators;
  - (6) Distance from all dwellings and occupied buildings, including RV/travel-trailer parks, within ~~one thousand, eight hundred (1,800)~~ feet of each proposed wind turbine;
  - (7) Distance from all wildlife management areas (WMA), conservation areas, and public parks, ~~and RV/travel-trailer parks~~ within ~~one thousand eight hundred (1,800)~~ feet of each proposed wind turbine;
  - (8) If applicable, the location of the FEMA regulated special flood hazard area (100-year floodplain or area with 1% chance of flooding in a given year).
- c. If the applicant is not the site owner, written authorization from the site owner or evidence of lease agreement.
- d. A list of all property owners within one (1) mile of the project area, including name, property location, and last known mailing address.

Commented [A1]: See setback table

Commented [A2]: See setback table

- e. Engineer's certification(s) of wind turbines from manufacturer, including the manufacturer's recommended safety setbacks
  - f. Evidence that all permits and approvals required by any other governmental entity, including the FAA and FCC, have been obtained, or, if all such permits and approvals cannot practicably be obtained prior to the public hearing, the written acknowledgement by the applicant that any Conditional Use Permit granted will be contingent upon the applicant obtaining all such permits and providing conclusive evidence thereof to the Zoning Administrator, as the latter may require.
  - g. An acoustical analysis conducted by an independent third party.
  - h. A shadow flicker analysis conducted by an independent third party.
  - i. Decommissioning Plan.
  - j. Emergency Response Plan.
  - k. Certificate of Liability Insurance.
  - l. Evidence of financial security in connection with decommissioning requirements.
  - m. Description and examples of all warning signs and devices.
  - n. Evidence of request and application for FAA approval and FCC licensure for use of aviation detection lighting systems (ADLS) and ADLS equipment documentation, as applicable.
  - o. Evidence or affidavit of all setback waiver easement agreements, if applicable. One agreement may contain multiple waivers.
  - p. Evidence or affidavit of all shadow flicker waiver easement agreements, if applicable. One agreement may contain multiple waivers.
  - q. Evidence or affidavit of all sound waiver easement agreements, if applicable. One agreement may contain multiple waivers.
  - r. Documentation of city approval for wind turbines within one (1) mile of an incorporated city limits, if applicable
3. Safety, Design, and Siting Requirements.
- a. Color and Finish. Wind turbines shall be of a non-reflective color, such as white or grey. Blades may be black in order to facilitate de-icing. Finishes shall be matte or non-reflective. The design of any buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening, and landscaping that will blend the C-WECS to the natural setting and existing environment.

- b. Anti-Icing Detection System. All wind turbines shall be equipped with anti-icing detection sensors, and the applicant, owner, or operator shall ensure that all wind turbines are programmed to automatically stop when ice is detected. Wind turbines shall not be permitted to operate until free of ice and danger of ice throw has passed.
- c. Tower Configuration. All wind turbines, which are a part of the C-WECS development, shall be installed with a tubular, monopole-type tower. Meteorological towers shall include highly visible markings consistent with Appendix A of the FAA's Advisory Circular for Obstruction Marking and Lighting. Meteorological towers may be guyed. For all guyed towers, visible and reflective objects, such as orange cable balls, plastic sleeves, or reflectors, shall be placed on the guyed-wire anchor points and along the outer and innermost guyed-wires. Visible fencing shall be installed around anchor points of guyed wires.
- d. Lighting. Tower lighting shall comply with FAA requirements but be the least intrusive type possible for nearby residents. Red strobe lights shall be used during nighttime illumination to reduce impacts on neighboring uses and migratory birds. No red pulsating incandescent lights shall be used. Exceptions may be made for meteorological towers, where concerns exist relative to aerial spray applicators.
- Aviation detection lighting systems (ADLS) if approved by the FAA and FCC, shall be used for tower lighting using a radar-based detection system. The applicant shall provide a description of the proposed lighting system with the application. The applicant shall provide evidence of request for use of ADLS with the FAA and for FCC licensure at the time of application and shall otherwise provide documentation in the case the use of ADLS is denied by the FAA or FCC. ~~ALDS~~ ADLS shall be used in accordance with applicable FAA and/or FCC rules.
- e. Signage. All signs shall be prohibited other than the manufacturer or installer's identification sign and appropriate warning or safety signs. A sign shall be placed in a highly visible location of each C-WECS structure that identifies a name and phone number of whom to contact in case of emergency. Signs indicating the 911 rural address of each C-WECS structure or grouping of C-WECS structures shall be placed at the driveway access. The cost of all address signs shall be at the expense of the applicant or developer.
- f. Climbing Apparatus and Unauthorized Access. All external climbing apparatus for C-WECS shall be located at least fifteen (15) feet above the ground. All access doors to wind turbines and electrical equipment shall be locked or fenced, as appropriate, to prevent entry by unauthorized persons.
- g. Minimum Ground Clearance. The rotor blade tip of any wind turbine shall, at its lowest point, have a ground clearance of no less than thirty (30) feet.
- h. Total Height and Number Limitations.
- (1) No wind turbine generator, meteorological tower, or tower for ADLS shall be taller than specified in a Determination of No Hazard by the FAA. Said

determination shall be filed with the Zoning Administrator prior to the issuance of a Building Permit.

(2) No wind turbine generator, meteorological tower, or tower for ADLS systems shall be taller than as accepted by the Board of Adjustment, based on the recommendations and findings of the Northeast Iowa Regional Airport Chairman. The Chairman's recommendations and findings must be based on and limited to the definition of "airport hazard" in Iowa Code § 329.1(2) and the Chairman shall not unreasonably deny recommend denial of any wind turbine generator, meteorological tower, or tower for ADLS systems unless there is an "airport hazard" that cannot be avoided.

(3) No wind turbine generator or meteorological tower shall be taller than ~~450~~600'.

(4) Substations, buildings, or other CWECS structures shall comply with the height requirements of the respective district.

(5) There ~~will~~shall be a limit of ~~70~~70 turbines in Floyd County. This includes the existing MidAmerican ~~project~~C-WECS project development.

Commented [A3]: Campbell, Reavely: 90, Norris: 100

h. Impact to Safe Airport Operations. The application shall be reviewed by the Northeast Iowa Regional Airport Chairman for impact to the safe operations of aircraft for the Northeast Iowa Regional Airport and any other public-use or private-use airport, as defined in Iowa Code Section 329.1(1) (or as amended) and Iowa Administrative Code 761—720.2 (or as amended), that have been officially registered with the FAA Master Record for a minimum of one (1) year. Said review shall be conducted for any proposed C-WECS development located within a five (5) mile radius surrounding the Northeast Iowa Regional Airport and a three (3) mile radius around any other airport located within Floyd County as described above.

The Chairman shall make a recommendation in writing to the Board of Adjustment for approval, conditional approval, or denial based on findings for impact to the safe operations of aircraft and applicable airports. The Chairman's recommendations and findings must be based on and limited to the definition of "airport hazard" in Iowa Code § 329.1(2) and the Chairman shall not unreasonably recommend denial of deny any wind turbine generator, meteorological tower, or tower for ADLS systems unless there is an "airport hazard" that cannot be avoided. It is recommended that the applicant coordinates with the Chairman in advance of making application to the County and have any potential safety or operational impacts resolved.

i. Braking Systems. The design and installation of all braking systems must conform to current and applicable industry standards. All wind turbines shall be equipped with a redundant braking system. This includes both aerodynamic over-speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for over-speed protection.

- j. Transmission Lines. All transmission lines or feeder lines installed as part of a C-WECS shall be buried to minimum depth of four (4) feet. Transmission lines or high capacity electrical lines from substations transferring cumulative energy resources from a C-WECS shall not be required to be buried.
- k. Emergency Response Plan. The C-WECS development applicant, owner, or operator shall submit a copy of the site plan(s) of the C-WECS development and Emergency Response Plan to the Floyd County Emergency Management Coordinator and applicable local first responders. Said plan shall contain response procedures to be followed in the event of a fire, personal injury, or other emergency at a C-WECS development and procedures and schedules for conducting drills of these procedures and for training local first responders on the contents of the plan and appropriate response procedures. The plan shall contain twenty-four (24) hour emergency contact information for the C-WECS development.
- l. Emergency Response Training. The applicant shall contact and develop a training program for emergency response in consultation with the Floyd County Emergency Management Coordinator and local first responders. At the discretion of the Floyd County Emergency Management Coordinator, the C-WECS development operator ~~may~~ shall be required to provide training sessions or ~~standard~~ necessary emergency equipment to local first responders.
- m. Waste Disposal. Solid and hazardous wastes, including but not limited to crates, packaging materials, damaged or worn parts, as well as used oils and lubricants, shall be removed from the site promptly and disposed of in accordance with all applicable local, state, and federal regulations. The C-WECS development applicant or owner shall work with the Iowa Waste Exchange to identify end users for any component recycling materials as necessary, consistent with the Decommissioning Plan and including any decommissioned C-WECS components during any repowering. Mass storage of decommissioned components shall be prohibited within Floyd County except for the purpose of recycling components using a local business within the County.
- n. Signal Interference. The applicant shall minimize and mitigate any interference with electromagnetic communications, such as radio, telephone, or television signals, caused by any C-WECS. The applicant shall notify all communication tower operators within five miles of the proposed C-WECS location upon application.

o. Setbacks. Setbacks shall be regulated as follows:

(1) <u>Setback Requirements</u> . All	<u>Setback Requirement</u>
Non-participating property line	<del>1,800</del> X feet or 3.5 x's the total height, whichever is greater
Dwelling or occupied building, RV/travel-trailer park	<del>2,500</del> X feet or 5.0 x's the total height, whichever is greater; waivable to <del>1,000</del> X feet
Road right-of-way	<del>200</del> 115% of the total height
Railroad right-of-way	115% of the total height
Utility lines or pipeline	115% of the total height
<u>Publicly owned</u> <del>Public</del> park, conservation area, or Wildlife Management Area	<del>Follow DNR recommendations: Public lands 1 mile; 40+ acres grassland, forest, or wetland — 1/2 mile</del> 4.5x height
Known Bald Eagle Nests (active)	<del>5</del> 1 miles
Known Bald Eagle Nests (unknown activity)	<del>3</del> 1 miles
Commercial feed operation, Livestock Facilities, <u>including open feed lots per IDNR definition, as</u>	<del>3x the total height; waivable to 1,000'2,500 feet or 5.0 x's the total height, whichever is greater</del>
Incorporated city limits	<del>2 miles or as approved by applicable City, whichever is lesser</del> 1.5 miles; can be waived by a city
Cemeteries	<del>1,800</del> 1,500 feet or <del>3.5</del> 2.25-x's the total height, whichever is greater
Existing Sinkholes	<del>1,000</del> 750 feet + engineer's certification re: site

**Commented [A4]:** Campbell, Reavely: 1200; Norris: 900

**Commented [A5]:** Campbell, Reavely: 2250; Norris 1850

**Commented [A6]:** Campbell, Reavely: 1800; Norris: 1000

(2) Setbacks for Other C-WECS Structures. Meteorological towers shall be setback a minimum of 115% of the total overall height of the tower from all non-participating property lines, buildings, road right-of-way, railroad right-of-way, or utility lines, as measure from the center point of the tower base to the closest point of the protected location or structure. Substation, buildings, and other associated C-WECS structures shall comply with the setback requirements of the respective district.

(3) Setbacks to Incorporated City Limits. Any C-WECS proposed within one and a half~~two~~ (1.5~~2~~) miles from an incorporated city limits shall be approved by the City Council of the applicable city. Otherwise, the setback requirement of any C-WECS from an incorporated city limits shall be ~~two~~one and a half (1.5~~2~~) miles.

(4) Setback Waivers. C-WECS may be closer than the respective setback standards upon agreement with an affected property owner. However, in no instance shall a C-WECS be permitted to be closer than ~~1,000~~X feet from the closest portion of a dwelling or occupied building, or closer than 1000 feet from animal feeding operation. Said agreement shall be in the form of a setback waiver easement

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agreement and officially recorded in the Floyd County Recorder's Office. Evidence or affidavit of any applicable setback waiver easement agreement shall be provided at the time of application.

- (5) Minor Setback Modifications. After approval and issuance of a Conditional Use Permit but prior to the issuance of a Building Permit for a C-WECS structure or wind turbine, the applicant may make request to the Zoning Administrator in writing for a minor location adjustment of no greater than fifty (50) feet from the originally approved location without requirement of submitting a new application. At the time of request, the applicant shall provide an amended site plan as required at the time of application to the Zoning Administrator.

The Zoning Administrator shall verify any requested minor location modification meets all setback requirements. The Zoning Administrator shall approve said minor location modification if all setback requirements are met. Any location modification of a C-WECS structure or wind turbine greater than fifty (50) feet from the originally approved location shall require a new application as required in this Ordinance.

p. Sound. Sound shall be regulated as follows:

- (1) Maximum Sound Levels. Audible noise shall not exceed ~~forty-five~~ (54) decibels (dBA) at the closest portion of any dwelling or occupied building. Sound levels, however, may be exceeded during short-term events out of anyone's control, such as utility outages and/or severe windstorms.
- (2) Pre-Construction Acoustical Analysis. Upon application and at the applicant's expense, the applicant shall conduct a pre-construction acoustical analysis conducted by a qualified, independent third party demonstrating compliance with sound requirements. Said acoustical analysis shall assume maximum anticipated conditions with no obstruction to sound waves.
- (3) Sound Waivers. C-WECS may exceed maximum sound levels upon agreement with an affected property owner. Said agreement shall be in the form of a sound waiver easement agreement and officially recorded in the Floyd County Recorder's Office. Evidence or affidavit of any applicable sound waiver easement agreement shall be provided at the time of application.

q. Shadow Flicker. Shadow flicker shall be regulated as follows:

- (1) Maximum Shadow Flicker Levels. Shadow flicker produced by any C-WECS under normal operating conditions, shall not exceed thirty (30) hours per year at the closest portion of any dwelling or occupied building.
- (2) Pre-Construction Shadow Flicker Analysis. Upon application and at the applicant's expense, the applicant shall conduct a pre-construction shadow flicker analysis conducted by a qualified, independent third party demonstrating

compliance with shadow flicker requirements. Said shadow flicker analysis should assume maximum anticipated conditions with no obstructions to a cast shadow.

(3) Shadow Flicker Waivers. C-WECS may exceed maximum shadow flicker standards upon agreement with an affected property owner. Said agreement shall be in the form of a shadow flicker waiver easement agreement and officially recorded in the Floyd County Recorder's Office. Evidence or affidavit of any applicable shadow flicker waiver easement agreement shall be provided at the time of application.

r. ~~Fire Suppression Safety from Hazards. Turbine models shall be designed to International Electrotechnical Commission (IEC) Standard 61400 or a more updated standard if published by the IEC. All wind turbine generators and substations shall be equipped with operation automatic fire suppression systems. The fire suppression systems shall be designed appropriate to the materials and conditions present in the wind turbine generators or substation. Alarm signals from detection systems shall be transmitted to a central station, proprietary, or remote station service to a constantly attend location. Alarm and fire protection systems shall be installed in accordance with state and federal standards and inspected by a state fire marshal prior to operation. Such fire suppression equipment shall be tested and verified operational on an annual basis by personnel certified for such validation by an independent third party.~~

#### 4. Infrastructure and Land Use Protection Requirements.

a. Contact Person and Change of Ownership. The C-WECS development applicant, owner, or operator shall provide and maintain a phone number, electronic mailing address, and physical mailing address and identify a responsible person for the Zoning Administrator to contact when needed. Said information shall be provided to the Zoning Administrator and kept current with the Planning and Zoning Office. Any granted Conditional Use Permit for a C-WECS development is transferrable to any future owner of said C-WECS development and subject to all requirements of this Ordinance and the granted permit. The applicant and any future C-WECS development owner shall provide notification to the Zoning Administrator prior to a change of ownership of any C-WECS. Any future owner or operator must shall acknowledge in writing that it will be bound by the terms of the ordinance.

b. Roads. Prior to construction, the applicant shall enter into agreement with Floyd County and shall meet all of the following requirements at a minimum, in addition to all requirements of the Floyd County Engineer's Office:

(1) The applicant shall develop a construction plan identifying proposed construction routes, intersection modifications, or other necessary road right-of-way modifications. Construction routes shall be used as directed and approved by the Floyd County Engineer. The Floyd County Engineer shall approve all road, road right-of-way, and intersection modifications for construction purposes prior to construction.

- (2) The applicant shall conduct a pre-construction survey, at its expense and in coordination with the Floyd County Engineer, to determine existing road, road right-of-way, and bridge conditions. The survey shall include photographic or video documentation and shall be provided to the Floyd County Engineer prior to construction.
  - (3) The applicant shall be responsible for restoring and paying for any damage to road, road-right-of-way, and bridges to pre-construction or better condition.
  - (4) The applicant shall be responsible for making reasonable efforts to apply dust control on applicable gravel-surfaced roads or at construction sites to prevent fugitive dust from becoming a nuisance as regulated by Iowa Code, Chapter 657 (or as amended) and Iowa Administrative Code 567—Chapter 23.3 (or as amended).
  - (5) The applicant shall be responsible to obtain all oversize permits as required by the Floyd County Engineer and/or State of Iowa.
- c. Drainage Infrastructure. Prior to construction, the applicant shall follow all established procedures of Floyd County and state law regarding public drainage infrastructure and right-of-way that may be affected by a proposed C-WECS. The C-WECS development applicant, owner, or operator shall be responsible for the immediate repair of any damage to drainage infrastructure resulting from the construction, operation, or maintenance of a C-WECS.
- d. Discontinuation and Decommissioning. The following requirements and procedures shall apply to any permitted C-WECS:
- (1) Decommissioning Plan. A decommissioning plan shall be submitted with the application. The plan shall include removal of wind turbines, buildings, cabling, electrical components, access roads, foundations, and all applicable accessory equipment to a minimum depth of six (6) feet below ground, and any other associated facilities as determined by the Zoning Administrator.
- Decommissioning shall detail the activities and methods for removal of all applicable C-WECS infrastructure and plans for recycling and waste disposal of all materials. Records shall be kept of all removal activities and methods occurring during decommissioning.
- Tower removal by “drop” or letting a turbine fall to the ground shall be prohibited to minimize the overall affected area from removal activities. The C-WECS development applicant, ~~or~~ owner, or operator shall work with the Iowa Waste Exchange to identify end users for recycling materials. Mass storage of decommissioned components shall be prohibited within Floyd County except for the purpose of recycling components using a local business within the County.

- (2) Decommissioning Follow-Up. Upon completion of decommissioning activities, the Zoning Administrator shall verify that all decommissioning activities have been completed as approved in the Decommissioning Plan with any incomplete items noted. All records pertaining to decommissioning shall be retained in Planning and Zoning Office. All concrete wind turbine foundations of a size greater than three hundred (300) cubic feet left below grade, regardless of depth, shall be noted in the decommissioning records and officially recorded as an easement with the Floyd County Recorder's Office.
- (3) End of Useful Life. The C-WECS development applicant, ~~or owner, or operators~~ shall, at its expense, complete decommissioning of the C-WECS development or individual wind turbines, within one (1) year after the end of the useful life of ~~the said C-WECS development~~ or individual wind turbines. The C-WECS development or individual wind turbine shall be presumed to be at the end of its useful life if less than two hundred thousand (200,000) kilowatt-hours of electricity is generated for a continuous period of one (1) year unless the development owner or operator is granted an extension by the Board of Adjustment.
- (4) Remediation of C-WECS. Disturbed earth resulting from the decommissioning of any C-WECS or wind turbine site shall be returned to its preconstruction state, unless the Participating Landowner requests in writing that the access roads or other land surface areas not be restored.
- (5) Cost Estimate of Decommissioning. An independent Licensed Engineer shall be retained to estimate the total cost of decommissioning of the C-WECS development and associated facilities or wind turbine site. Said estimates shall be submitted to the Zoning Administrator with the initial application and every fifth year thereafter.
- i. The C-WECS development owner or operator shall post and maintain decommissioning funds in an amount equal to the total estimated decommissioning costs. Prior to any grading or construction, fifty percent (50%) of the total estimate decommissioning costs shall be provided. Prior to the completion of construction, the remaining fifty percent (50%) of the total estimated decommissioning costs shall be posted to the decommissioning fund. The decommissioning fund shall be maintained at one-hundred ~~and ten~~ percent (~~110~~) of the total estimated decommissioning costs with any increase of the total estimated decommissioning costs as may be updated every fifth year.
  - ii. Decommissioning funds shall be maintained in the form of cash, certificate of deposit, performance bond, escrow account, surety bond, letter of credit, corporate guarantee, or other form of financial assurance as agreed to by the Zoning Administrator. Any financial document evidencing the maintenance of the decommissioning funds shall include provisions for releasing the funds to Floyd County in the event decommissioning is not completed in a timely manner. Decommissioning funds as may otherwise be required by the Iowa

Utilities Commission shall be considered sufficient, provided that such funding meets the requirements of this Section.

(6) Failure to Complete Decommissioning. If neither the C-WECS development owner nor operator completes decommissioning within the periods described above, then the decommissioning fund agent shall release the decommissioning funds to Floyd County, and the Zoning Administrator shall take necessary measures to complete decommissioning. The funds shall be released to Floyd County after a thirty (30) day written notice is provided to the decommissioning fund agent indicating the decommissioning has not occurred within the applicable time period.

(7) Release of Decommissioning Funds. The decommissioning fund agent shall release the decommissioning funds to the C-WECS development owner or operator, as applicable, when the C-WECS development owner or operator has demonstrated, and the Zoning Administrator concurs that decommissioning has been satisfactorily completed; or upon written approval of the Zoning Administrator to continue the decommissioning plan and complete decommissioning.

e. Repowering. Prior to repowering any permitted C-WECS development or wind farm, the permit holder shall submit a repowering plan(s) to the Zoning Administrator for review via a building permit review as established in Section XXII of this Ordinance. The Zoning Administrator may issue a building permit under the existing Conditional Use Permit if the repowering plan results in no material change of greater than twenty-five percent (25%) of the total C-WECS structures and wind turbine generators in the components or design elements originally permitted. A repowering event does not include replacement or maintenance of C-WECS as previously approved due to weather damage, equipment failure, or a force majeure event.

It shall be considered a material change in the event any wind turbine generator or C-WECS structure is moved from its originally constructed location or increases in total height. The repowering plan(s) shall include updated information for some or all of the reports and plans required to demonstrate compliance under this Ordinance, or as otherwise determined necessary by the Zoning Administrator. In conducting the review required by this Section, the Zoning Administrator may engage and consult with any necessary third party. No material change shall result in any increased non-conforming structure resulting from an amendment to this Ordinance, except as otherwise permitted by a formal waiver easement agreement as otherwise permitted under this Ordinance with an affected property owner.

In the event a plan or plans to repower a permitted C-WECS development or wind farm materially changes greater than twenty-five percent (25%) of the total C-WECS structures and wind turbine generators of a previously approved project, the permit holder shall apply for a new Conditional Use Permit as provided for in this Ordinance.

f. Liability Insurance. There shall be maintained a current general liability policy covering bodily injury and property damage (resulting from negligence, equipment failure, and/or

natural disasters) with limits of at least ~~twenty-X~~ million dollars (~~\$20,000,000X~~) per occurrence and ~~twenty-X~~ million dollars (~~\$20,000,000X~~) in the aggregate. Certificates shall be made available to Floyd County upon application.

**Commented [A8]:** Campbell, Reavely: \$20m/\$20m; Norris: \$10m, \$10m.

g. Wildlife Monitoring and Mitigation Plan (WMMP).

(1) The Applicant shall submit a WMMP to minimize risk to avian and bat species during the construction and operation phases of the project. The purpose and procedures shall be designed to ensure:

i. Impacts to wildlife, including avian and bat species, are minimized;

ii. Project-related actions comply with federal and state wildlife regulations;

iii. Adequate implementation training is provided to the construction contractor and operations and maintenance staff;

iv. A demonstration of coordination between the project developers, operators, and wildlife agencies including Iowa Department of Natural Resources (IDNR).

(2) The WMMP shall include, at a minimum, a narrative including the following:

i. A summary of relevant local, state, and federal regulations

ii. Site characterization

iii. A summary of the results of all field studies within the C-WECS project area documenting wildlife, current habitat suitability, and a prediction of any anticipated project impacts. A baseline study of the avian and bat habitat within the project boundary and a 2-mile perimeter outside the project boundary. It shall be conducted by a third-party licensed professional.

iv. Preconstruction/construction avoidance and minimization measures

a. Post construction avian and bat fatality monitoring will be conducted by a third-party licensed professional following completion of the project construction phase. Methods agreed upon with relevant agencies will be communicated to the County.

a-b. upgrades or repowering of the existing C-WECS project should be evaluated to determine if changes to the existing avoidance and minimization measures are necessary to potential impacts to avian and bat species. Changes to mitigation procedures resulting from this process will be a

will be communicated to the County.

## 5. Complaint Procedures

- (1) Contact Person and Complaint Log. The C-WECS development applicant, owner, or operator shall provide and maintain a phone number, electronic mailing address, and physical mailing address and identify a responsible person for the public to contact with inquiries and complaints throughout the life of the project. This information shall be provided to the Zoning Administrator upon request and updated as necessary. A complaint log shall be maintained and provided to the Zoning Administrator upon request. It shall document the date and subject matter of the complaint, the name of the person making the complaint, if known, and what steps were taken to investigate and address the complaint.
- (2) Mitigation Efforts. Upon receipt of an initial complaint, the Zoning Administrator shall refer an affected property owner to the contact person assigned by the C-WECS development applicant, owner, or operator for public inquiries and complaints. The complainant and the C-WECS development applicant, owner, or operator shall make a good faith effort to work together to come to an agreeable solution. The C-WECS development applicant, owner, or operator shall make reasonable efforts to mitigate the issue.
- (3) Enforcement and Penalties for Violation. Violations of this Section shall be enforced in accordance with Articles XXIV and XXV of this Ordinance. Violation of the provisions of this Section includes failure to comply with any of the requirements, failure to comply with a correction or corrective order, and violations of any other conditions and safeguards established herein.

~~B. Commercial Battery Energy Storage Systems (C-BESS). C-BESS shall be a conditional permitted use in the 'A' Agricultural, 'I-1' Light Industrial, and 'I-2' Heavy Industrial Districts and are subject to the following conditions:~~

- ~~1. Application. In making application for a Conditional Use Permit, the applicant shall file the following in addition to the application and required fees:
  - ~~a. Project Description~~
  - ~~b. Site Plan showing location of the C-BESS development, associated equipment, and transmission lines and showing closest setback and separation distances. If applicable, the location of the FEMA regulated special flood hazard area (100-year floodplain or area with 1% chance of flooding in a given year) shall also be shown.~~
  - ~~c. Operation and Maintenance Plan~~
  - ~~d. Equipment specification sheets, diagrams, and engineering certifications~~
  - ~~e. Landscaping Plan~~
  - ~~f. Emergency Response Plan~~~~

- ~~g. Decommissioning Plan~~
- ~~h. Evidence or affidavit of all sound waiver easement agreements, if applicable~~
- ~~2. Setbacks and Siting. C-BESS shall be subject to the following setback and siting requirements:~~
  - ~~a. All components of C-BESS shall be a minimum of fifty (50) feet from non-participating property lines, road right-of-way, and railroad right-of-way.~~
  - ~~b. If the C-BESS development is to be installed in conjunction with a Commercial Solar Energy System (C-SES) development, the C-BESS shall be sited so as to be located within the interior of said development with the banks of solar panels lying between the battery energy storage system and the edges of the development.~~
- ~~3. Height. C-BESS shall comply with the building height limitations for principal structures of the zoning district in which it is located.~~
- ~~4. Fencing. C-BESS, including all mechanical equipment, shall be enclosed by an eight (8) foot tall fence with a self-locking gate to prevent unauthorized access unless housed in a dedicated use building and not interfering with ventilation or exhaust ports.~~
- ~~5. Vegetative Screening. In an effort to mitigate any potential negative effects and reduce the visual impact of the facility, the perimeter of the facility shall be landscaped to create a visual screen from neighboring properties. A landscaping plan shall be submitted with the application. Landscaping shall be installed around the exterior perimeter of the use area and fencing in accordance with the following:~~
  - ~~a. The landscaping buffer shall preferably use trees, shrubs, grasses, and forbs that are native to Iowa, or where appropriate, may include naturalized and non-invasive species.~~
  - ~~b. The landscaping buffer shall use a combination of trees and plants to provide a vegetative screen. Trees shall be at least six (6) feet tall within three (3) years of installation, and shall have a minimum mature height of twelve (12) feet or the height of any fencing, whichever is taller. Landscaping shall be evaluated under leaf-on conditions.~~
  - ~~c. The planning area shall extend no further than fifty (50) feet beyond the outside of the use area, including the security fence.~~
  - ~~d. At the discretion of the Board of Adjustment, the minimum mature height of vegetative screening may be modified where the applicant can show good cause or practical difficulty.~~

e. ~~If the C-BESS is being constructed within the landscaping buffer of a larger project, the Board of Adjustment may waive or modify the requirements in this sub-section specific to C-BESS.~~

6. ~~Safety. The C-BESS development shall comply with the following safety standards:~~

a. ~~Signage. The C-BESS development shall have signage in compliance with ANSI Z535 and shall include the type of technology associated with the C-BESS, any special hazards associated, the type of suppression system installed in the area of C-BESS, and 24-hour emergency contact information, including reach-back phone number.~~

~~As required by the National Electric Code, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.~~

b. ~~Minimum Clearance. Areas within ten (10) feet of the C-BESS shall be clear of combustible vegetation or other combustible materials or growth.~~

e. ~~Fire and Safety Compliance. The applicant shall be responsible in meeting all standards of the National Fire Protection Association (NFPA) and applicable state and federal fire and safety requirements, including but not limited to NFPA 1, NFPA 70, NFPA 855, and the National Electrical Code (NEC).~~

d. ~~Emergency Response Plan. The C-BESS development applicant, owner, or operator shall submit a copy of the site plan of the C-BESS development and Emergency Response Plan to the Floyd County Emergency Management Coordinator and applicable local fire departments. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and local first responders. The emergency operations plan shall include the following information:~~

i. ~~Twenty-four (24) hour emergency contact information for the C-BESS development.~~

ii. ~~Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.~~

iii. ~~Procedures for inspection and testing of associated alarms, interlocks, and controls.~~

iv. ~~Procedures to be followed in response to notifications from the battery energy storage system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.~~

~~v. Procedures and schedules for conducting drills of said procedures and for training local first responders on the contents of the plan and appropriate response procedures.~~

~~e. Emergency Response Training. The applicant shall contact and develop a training program for emergency response with the Floyd County Emergency Management Coordinator and local first responders. At the discretion of the Floyd County Emergency Management Coordinator, the C-BESS development owner or operator may be required to provide training sessions or standard emergency equipment to local first responders.~~

~~7. Operations and Maintenance Plan. The applicant shall describe the ongoing maintenance schedule and operations for the C-BESS development as well as the general upkeep of the equipment.~~

~~8. Roads. Prior to construction, the applicant shall enter into agreement with Floyd County and shall meet all of the following requirements at a minimum, in addition to all requirements of the Floyd County Engineer's Office:~~

~~a. The applicant shall develop a construction plan identifying proposed construction routes, intersection modifications, or other necessary road right-of-way modifications. Construction routes shall be via paved roads to the extent feasible. However, the applicant shall use construction routes as directed by the Floyd County Engineer. The Floyd County Engineer shall approve all road, road right-of-way, and intersection modifications for construction purposes prior to construction.~~

~~b. The applicant shall conduct a pre-construction survey, at its expense and in coordination with the Floyd County Engineer, to determine existing road, road right-of-way, and bridge conditions. The survey shall include photographic or video documentation and shall be provided to the Floyd County Engineer prior to construction.~~

~~c. The applicant shall be responsible for restoring and paying for any damage to road, road right-of-way, and bridges to pre-construction or better condition.~~

~~d. The applicant shall be responsible for making reasonable efforts to apply dust control on applicable gravel surfaced roads or at construction sites to prevent fugitive dust from becoming a nuisance as regulated by Iowa Code, Chapter 657 (or as amended) and Iowa Administrative Code 567—Chapter 23.3 (or as amended).~~

~~e. The applicant shall be responsible to obtain all oversize permits as required by the Floyd County Engineer.~~

~~9. Drainage Infrastructure. Prior to construction, the applicant shall follow all established procedures of Floyd County and state law regarding public drainage infrastructure and right of way that may be affected by a proposed C-BESS. The C-BESS development applicant, owner, or operator shall be responsible for the immediate repair of any damage to drainage infrastructure resulting from the construction, operation, or maintenance of a C-BESS.~~

~~10. Sound. The one-hour average noise generated by the C-BESS components and associated ancillary equipment shall not exceed a noise level of 50 decibels (dBA) as measured from the nearest point of any dwelling or occupied building. Applicants may submit equipment and component manufacturer noise ratings at the time of application to demonstrate compliance. If the ambient sound pressure level exceeds 50 decibels (dBA), the standard shall be the ambient LEQ (equivalent continuous sound pressure level) plus five (5) decibels (dBA).~~

~~a. At the discretion of the Board of Adjustment, the applicant may be required to provide a baseline noise evaluation study completed by a board-certified professional by the Institute of Noise Control Engineering (INCE), or an appropriately licensed professional engineer (PE) prior to construction of the proposed C-BESS development.~~

~~b. To document decibel level if there is a complaint on an operational system, at the discretion of the Zoning Administrator, the owner or operator shall commission a report providing operating sound pressure level measurements from a reasonable number of sampled locations at the outside wall of the nearest dwelling or occupied buildings to demonstrate compliance with this standard. Said report shall be completed by a board-certified professional by the Institute of Noise Control Engineering (INCE) or an appropriately licensed professional engineer (PE).~~

~~c. C-BESS may exceed maximum sound levels upon agreement with an affected property owner. Said agreement shall be in the form of a sound waiver easement agreement and officially recorded in the Floyd County Recorder's Office. Evidence or affidavit of any applicable sound waiver easement agreement shall be provided at the time of application.~~

~~11. Discontinuation and Decommissioning. The following requirements and procedures shall apply to any permitted C-BESS:~~

~~a. Decommissioning Plan. A decommissioning plan shall be submitted with the application. The plan shall include removal of batteries, buildings, cabling, electrical components, roads, foundations, and all applicable accessory equipment and any other associated facilities as determined by the Zoning Administrator.~~

- ~~b. End of Useful Life. The C-BESS development applicant, operator, or owner shall, at its expense, complete decommissioning of the C-BESS development, within twelve (12) months after the end of its useful life. The C-BESS development shall be presumed to be at the end of its useful life if no electricity is stored for a continuous period of one (1) year unless the development owner or operator is granted an extension by the Board of Adjustment.~~
- ~~c. Remediation of C-BESS. The property on which the C-BESS development is located shall be returned to its preconstruction state, unless the participating landowner requests in writing that the access roads or other land surface areas not be restored.~~
- ~~d. Cost Estimate of Decommissioning. An independent licensed engineer shall be retained to estimate the total cost of decommissioning the C-BESS development and associated facilities. Said estimates shall be submitted to the Zoning Administrator with the initial application and every fifth year thereafter.~~
- ~~i. — The C-BESS development owner or operator shall post and maintain decommissioning funds in an amount equal to the total estimated decommissioning costs. Prior to the completion of construction, one hundred percent (100%) of the total estimated decommissioning costs of the total decommissioning costs shall be posted to the decommissioning fund. The decommissioning fund shall be maintained at one hundred percent (100%) of the total estimated decommissioning costs with any increase of the total estimated decommissioning costs as may be updated every fifth year.~~
- ~~ii. — Decommissioning funds shall be maintained in the form of cash, certificate of deposit, performance bond, escrow account, surety bond, letter of credit, corporate guarantee, or other form of financial assurance as agreed to by the Zoning Administrator. Any financial document evidencing the maintenance of the decommissioning funds shall include provisions for releasing the funds to the County in the event decommissioning is not completed in a timely manner. Decommissioning funds as may otherwise be required by the Iowa Utilities Board shall be considered sufficient, provided that such funding meets the requirements of this Section.~~
- ~~e. Failure to Complete Decommissioning. If neither the C-BESS development owner nor operator completes decommissioning within the periods described above then the decommissioning fund agent shall release the decommissioning funds to the County and the Zoning Administrator shall take necessary measures to complete decommissioning. The funds shall be released to the County after a thirty (30) day written notice is provided to the Decommissioning Fund Agent indicating the decommissioning has not occurred within the applicable period.~~

~~f. Release of Decommissioning Funds. The decommissioning fund agent shall release the decommissioning funds to the C-BESS development owner or operator, as applicable, when the C-BESS owner or operator has demonstrated, and the Zoning Administrator concurs, that decommissioning has been satisfactorily completed; or upon written approval of the Zoning Administrator to continue the decommissioning plan and complete decommissioning.~~

~~12. Contact Person and Change of Ownership. The C-BESS development applicant, owner, or operator shall provide and maintain a phone number, electronic mailing address, and physical mailing address and identify a responsible person for the Zoning Administrator to contact when needed. Said information shall be provided to the Zoning Administrator and kept current with the Planning and Zoning Office. Any granted Conditional Use Permit for a C-BESS development is transferrable to any future owner of said C-WECSBESS development. The applicant and any future owner shall provide notification to the Zoning Administrator upon change of ownership of any C-BESS.~~

**SECTION 12. REPEALER.** All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed.

**SECTION 13. SEVERABILITY.** If any section, provision or part of this Ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the Ordinance as a whole or any section, provision, or part thereof not adjudged invalid or unconstitutional.

**SECTION 14. SAVING.** The Floyd County Zoning Ordinance (Ordinance 2011-2) shall remain in full force and effect, save and except as amended by this Ordinance.

**SECTION 15. EFFECTIVE DATE.** This Ordinance shall be in effect after its final passage, approval, and publication as provided by law.

Motion was made by Supervisor \_\_\_\_\_ and seconded by Supervisor \_\_\_\_\_ that the foregoing Ordinance be adopted.

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Absent/Not Voting:

Date of First Consideration: \_

Date of Second Consideration:

Date of Third Consideration:

Ordinance adopted this \_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Chair, Board of Supervisors  
Floyd County, Iowa

I hereby certify that the foregoing is a full, true, and complete copy of the Ordinance as full, true, and complete as the same remains on file and of Record in my office.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of the Auditor's Office in Charles City, Iowa, this \_\_\_ day of \_\_\_\_\_, 2024.

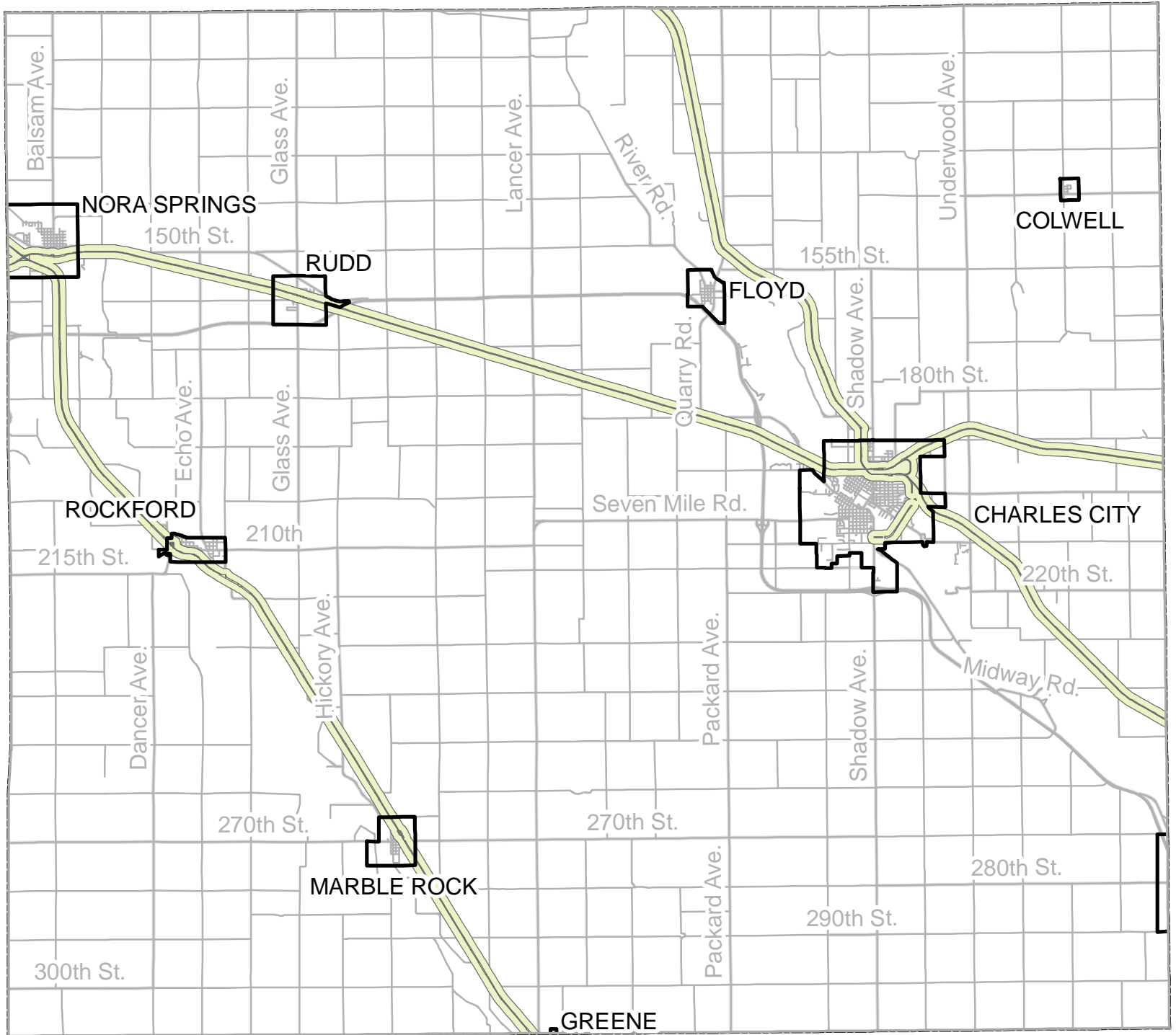
\_\_\_\_\_  
Gloria Carr, Auditor  
Floyd County, Iowa



Floyd County  
Buffer Map  
RR ROW

690 Foot  
Buffer

Map Printed  
1/23/2025



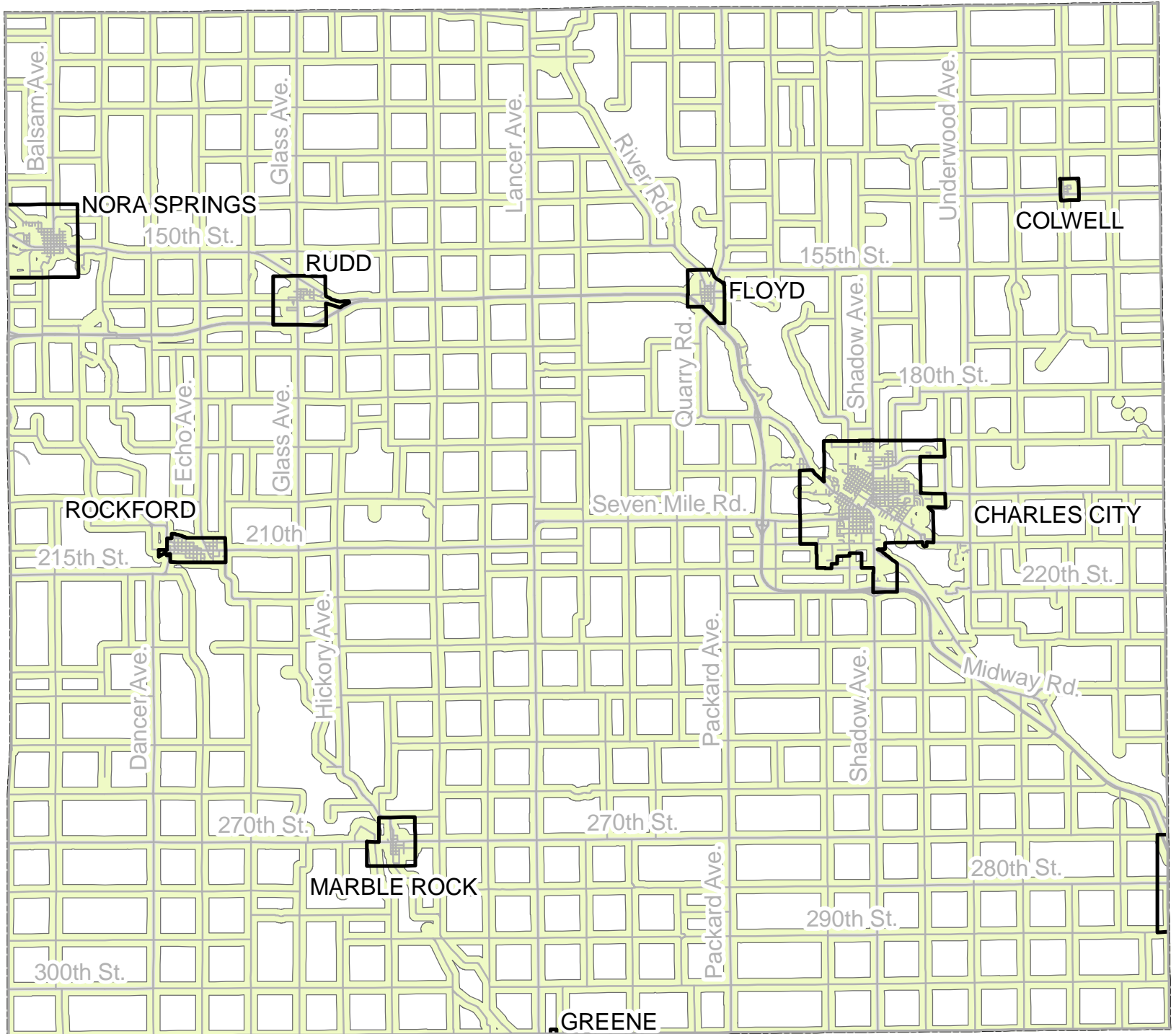
**Legend**

- County Line
- City Limits
- railroad\_row
- RR ROW Buffer 690Ft
- Roads
- Primary Roads

Floyd County  
Buffer Map  
Road ROW

690 Foot  
Buffer

Map Printed  
1/23/2025



**Legend**

- County Line
- City Limits
- Roads
- Primary Roads
- Road ROW Buffer 690Ft

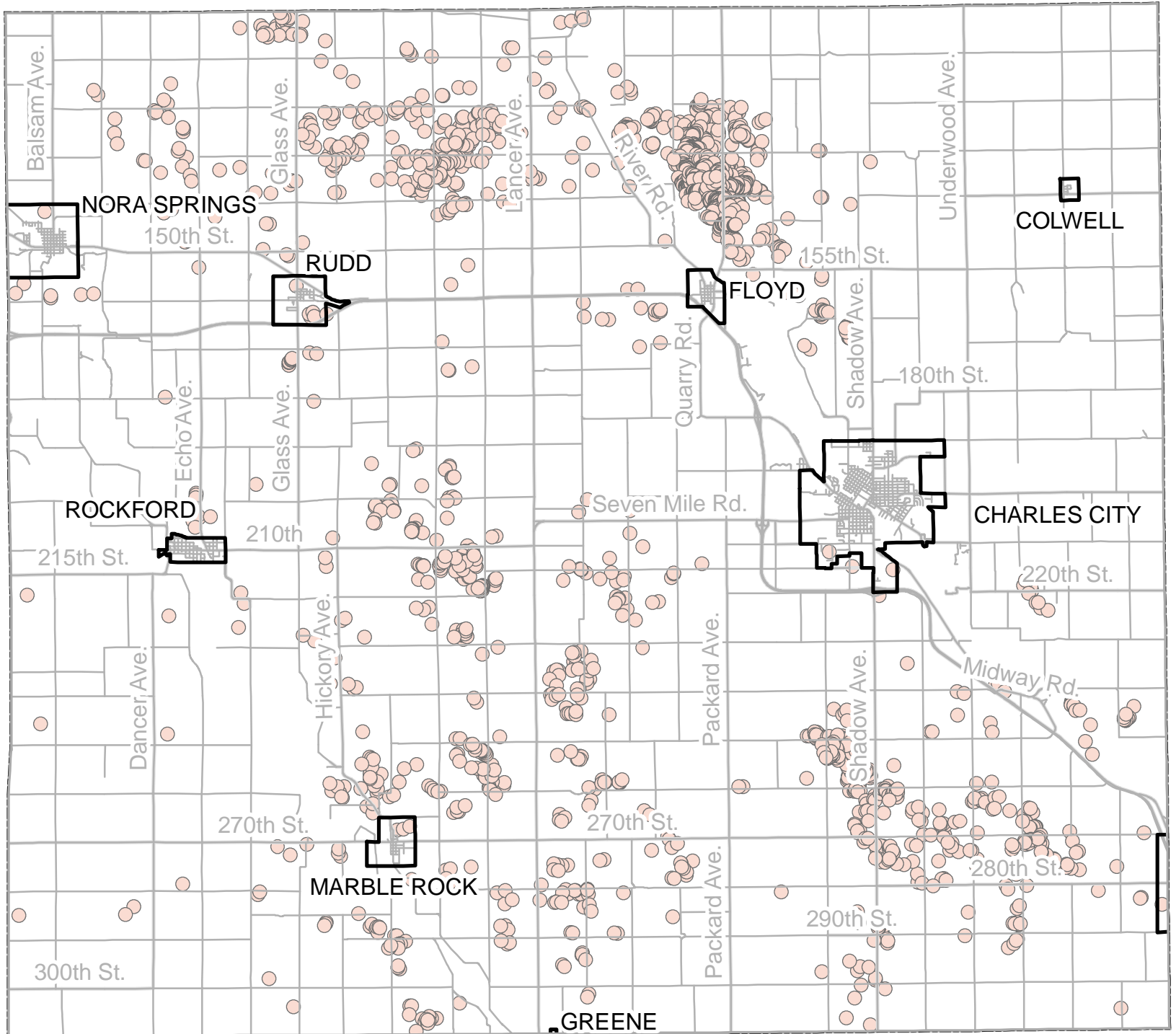
# Floyd County Buffer Map Sinkholes

750 Foot  
Buffer

Map Printed  
12/31/2024

## Legend

- County Line
- City Limits
- Roads
- Primary Roads
- Sinkhole Point Buffer 750 Ft









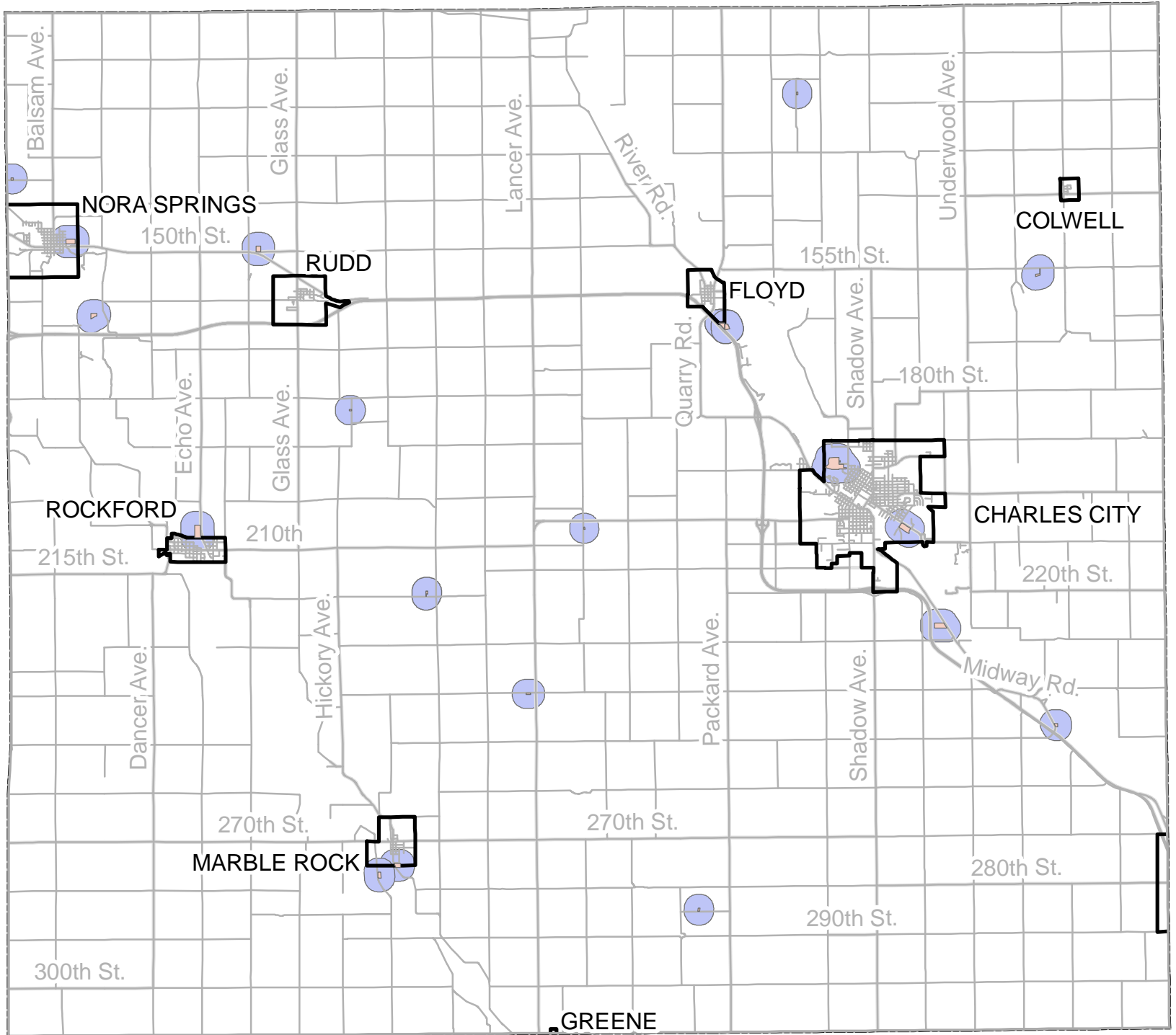
# Floyd County Buffer Map Cemetery

1500 Feet  
Buffer

Map Printed  
12/31/2024

## Legend

-  Cemetery Polygon
-  County Line
-  City Limits
-  Roads
-  Primary Roads
-  Cemetery Buffer 1500 Ft

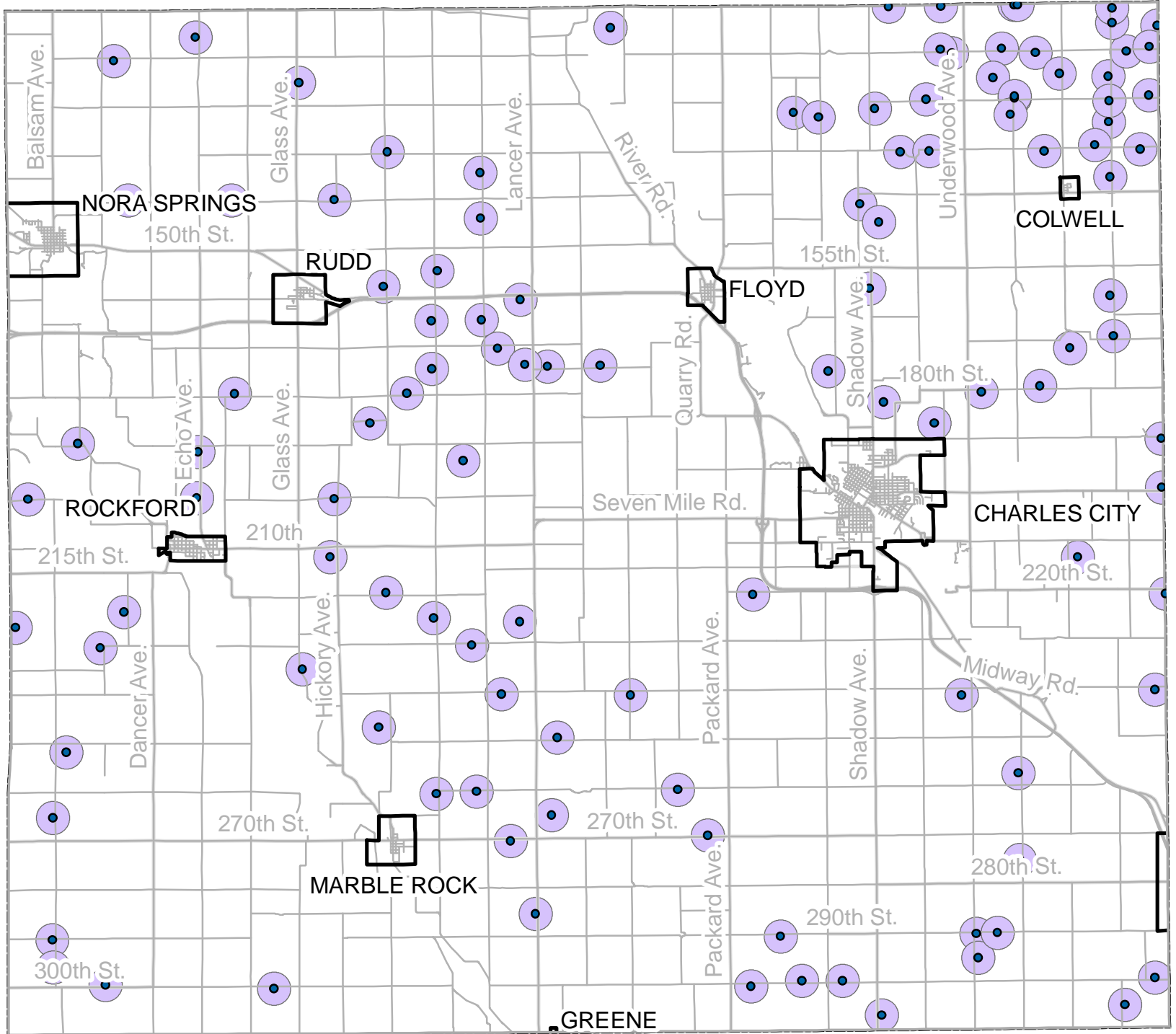


# Floyd County Buffer Map AFO's

1800 Foot  
Buffer

Map Printed  
1/23/2025

- Legend**
- Animal Feeding Operations FC
  - County Line
  - ▭ City Limits
  - Roads
  - Primary Roads
  - AFOs Buffer V2 1800FT

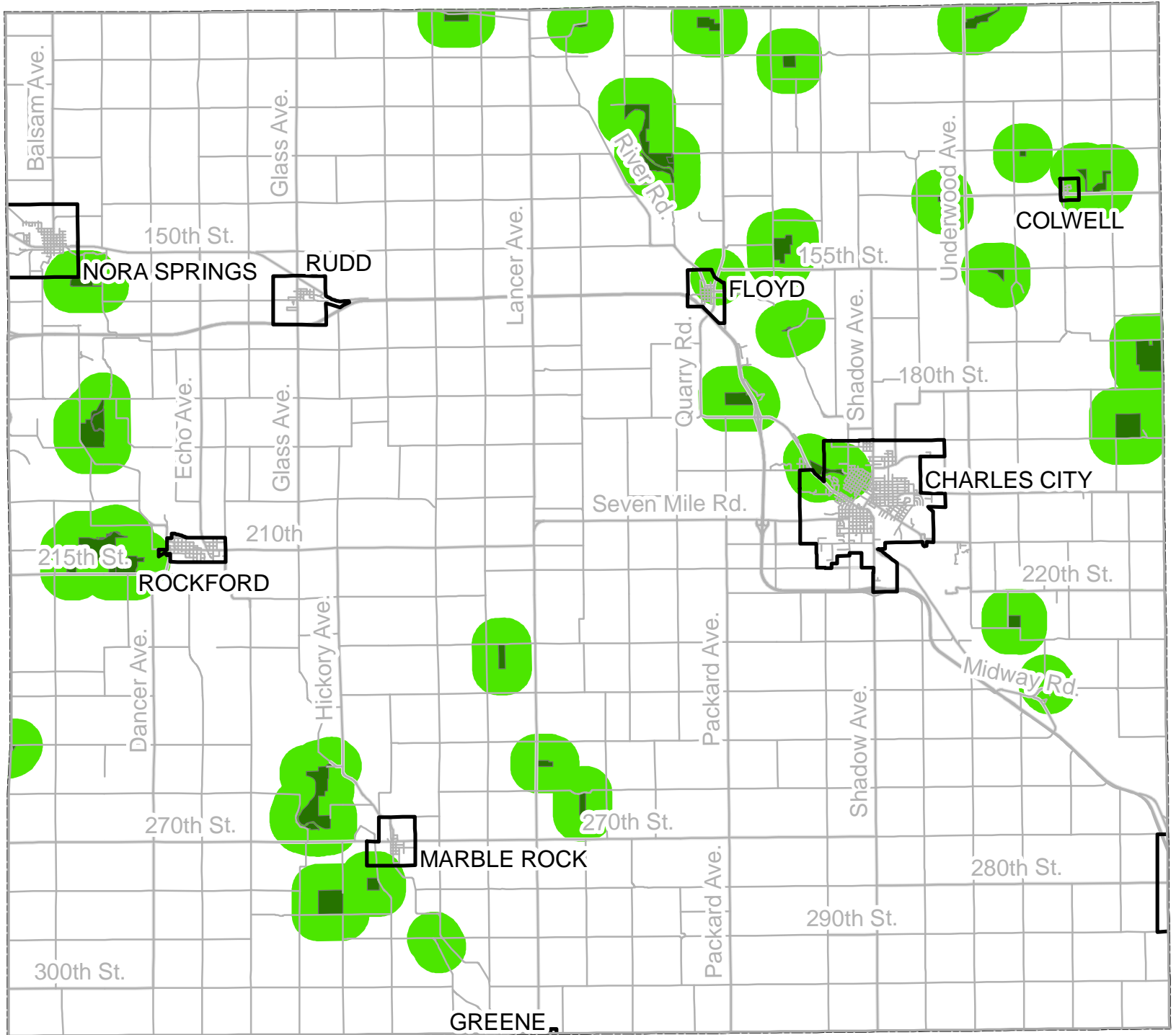


# Floyd County Buffer Map Conservation Areas

2700 Feet  
Buffer

Map Printed  
1/23/2025

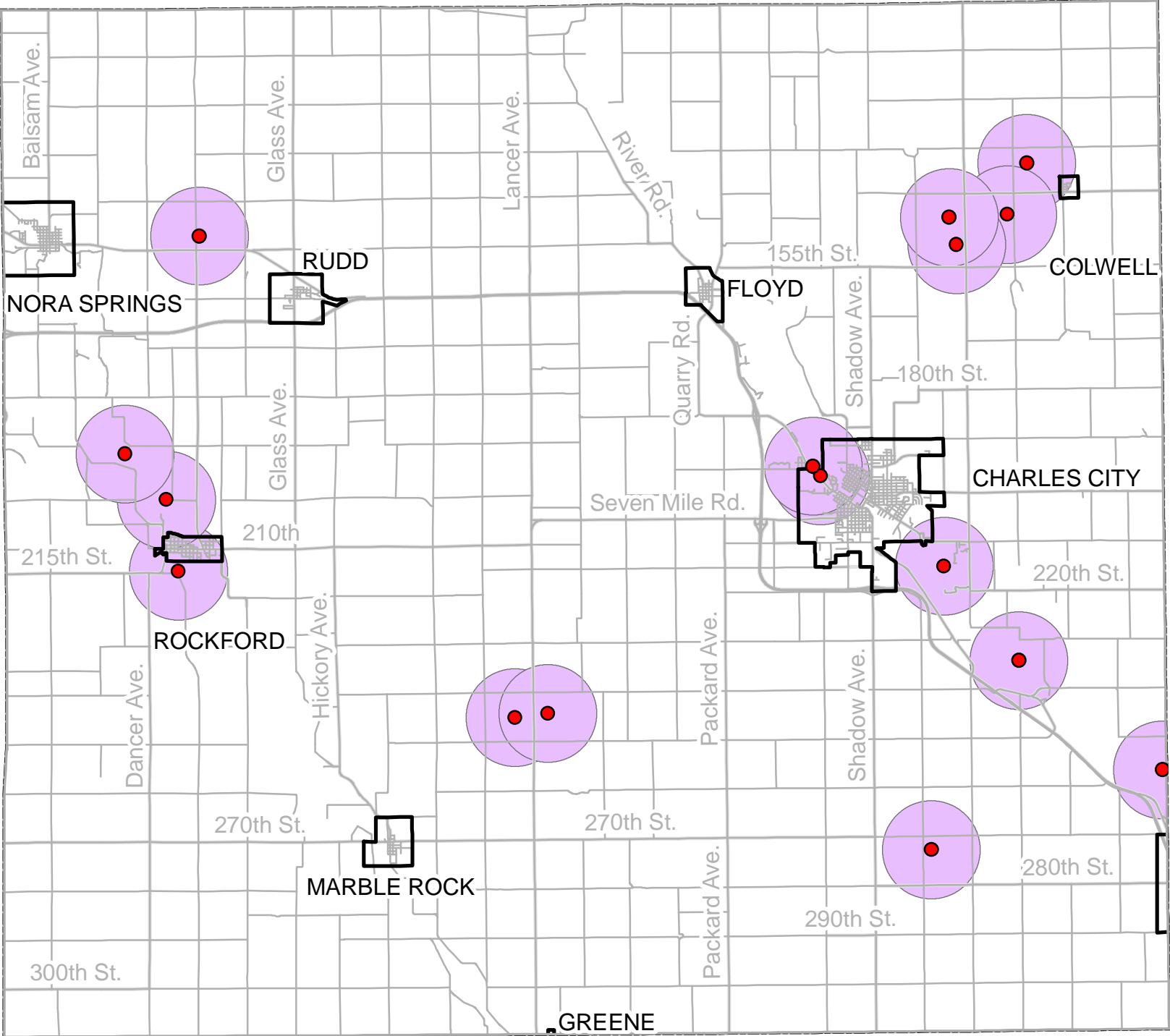
- Legend**
- County Line
  - City Limits
  - Roads
  - Primary Roads
  - Conservation Polygon
  - Conservation Areas Buffer 2700 Ft



# Floyd County Buffer Map Eagles Nest

One Mile  
Buffer

Map Printed  
12/31/2024

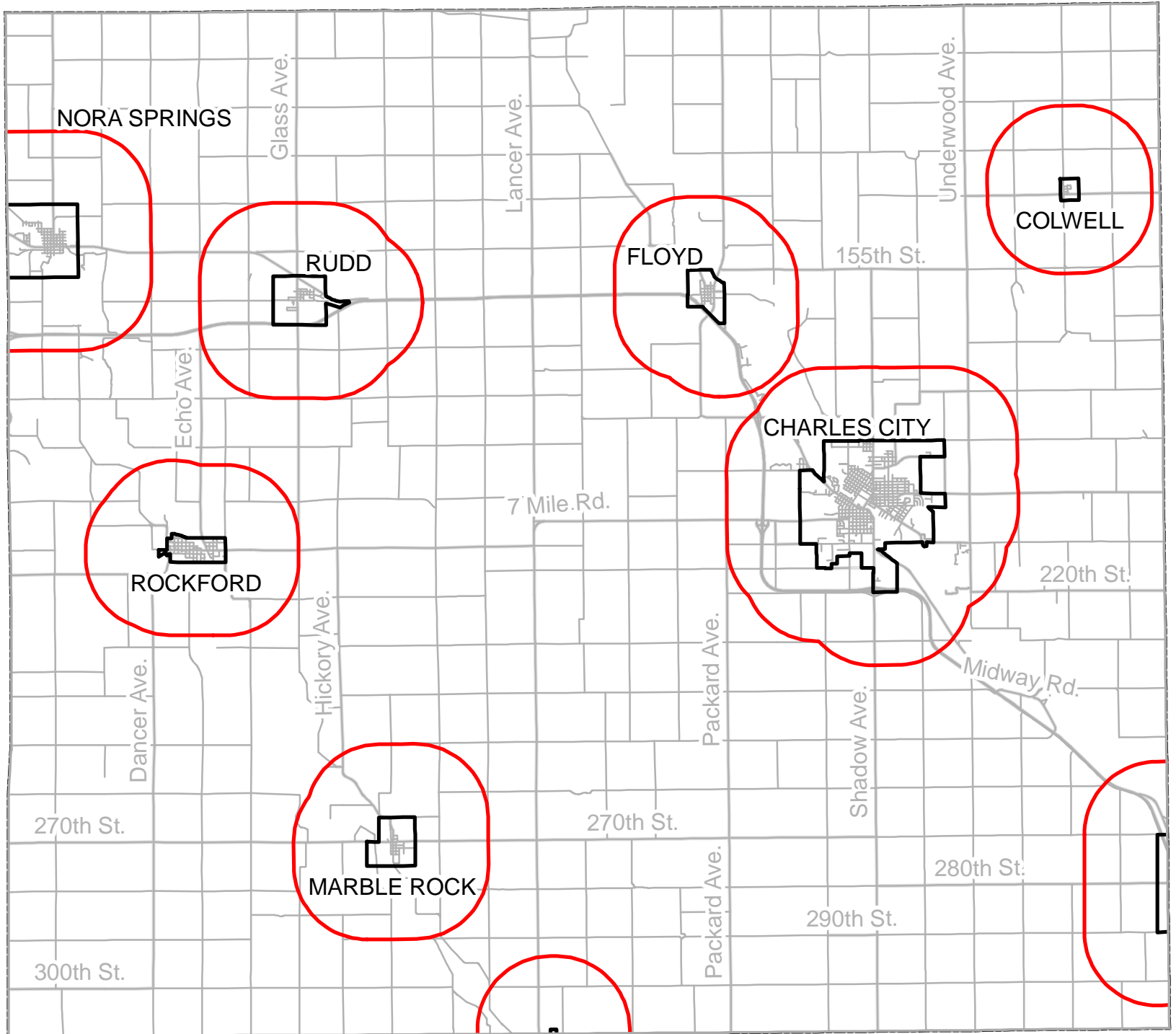


- Legend**
- Eagles Nest Point
  - County Line
  - City Limits
  - Roads
  - Primary Roads
  - Eagles Nest Buffer 1 Miles

# Floyd County Buffer Map City Limits

One and 1/2  
Mile Buffer

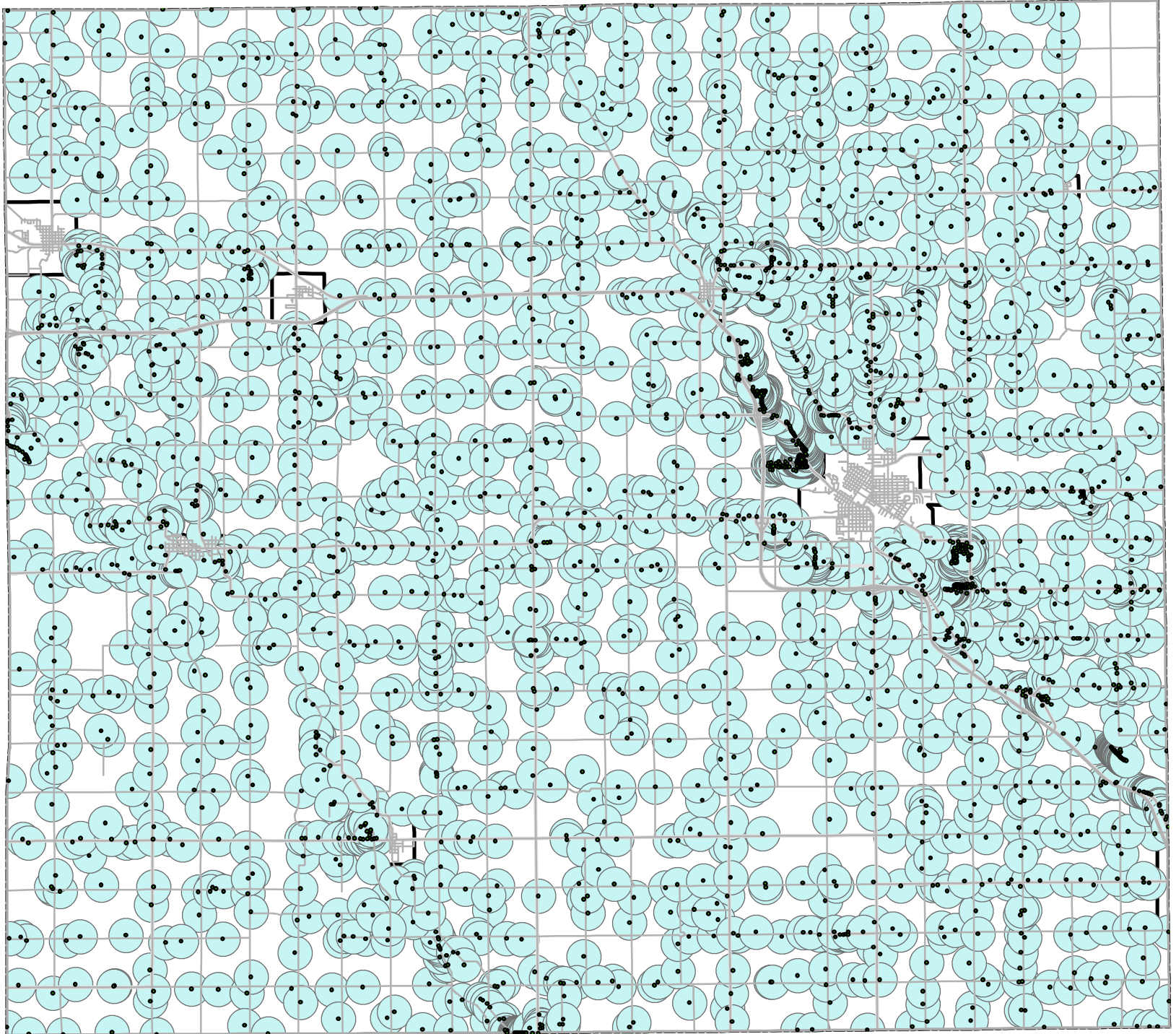
Map Printed  
12/31/2024



Floyd County  
Buffer Map  
Occupied  
Buildings

Buffer  
1850 Feet

Map Prepared  
1/23/2025



**Legend**

- Occupied Buildings Point 20241231
- County Line
- Roads
- Primary Roads
- Occupied\_Buildings\_Buffer\_V2\_1850\_Ft
- City Limits







