PLANNING & ZONING MEETING AGENDA

Thursday, October 17, 2024 | 6:00 p.m.

Eldridge City Hall | 305 N 3rd Street

1. Call to Order and Roll Call
2. Approval of the Minutes from the September 19, 2024, Meeting
3. Consideration of approval of Stone Brook 3rd Addition replat of Outlot A
4. Consideration of approval of Solar Ordinance
5. Adjournment

Next Meeting: TBD

AGENDA

Eldridge Planning and Zoning Commission
September 19, 2024, 6:00 p.m., Eldridge City Hall

Minutes

The Eldridge Plan and Zone Commission met in open session in Eldridge City Hall at 6:00 p.m. on September 19, 2024. The meeting was called to order at 6:02 p.m. by Chairman Karl Donaubauer. Present were Karl Donaubauer, Jennifer Vittorio, Dean Ferguson and Scott LaPlante. Brad Merrick arrived at 6:26 p.m. Mike Martin was absent. Also present were Jeff Martens and Terry Harbour.

The minutes from the July 18, 2024, meeting was presented for approval. Donaubauer had a small change and amended minutes will be posted. Motion by Ferguson to approve the minutes as amended. Seconded by Vittorio. Motion carried 4-0 by voice vote.

Martens presented a draft solar ordinance for review by the Commission. The Commission discussed the ordinance and made a few recommendations for changes. Martens said he would check with the airport about the wording on the section concerning construction near them. No action was taken. Martens will present a revised version of the ordinance at the next meeting.

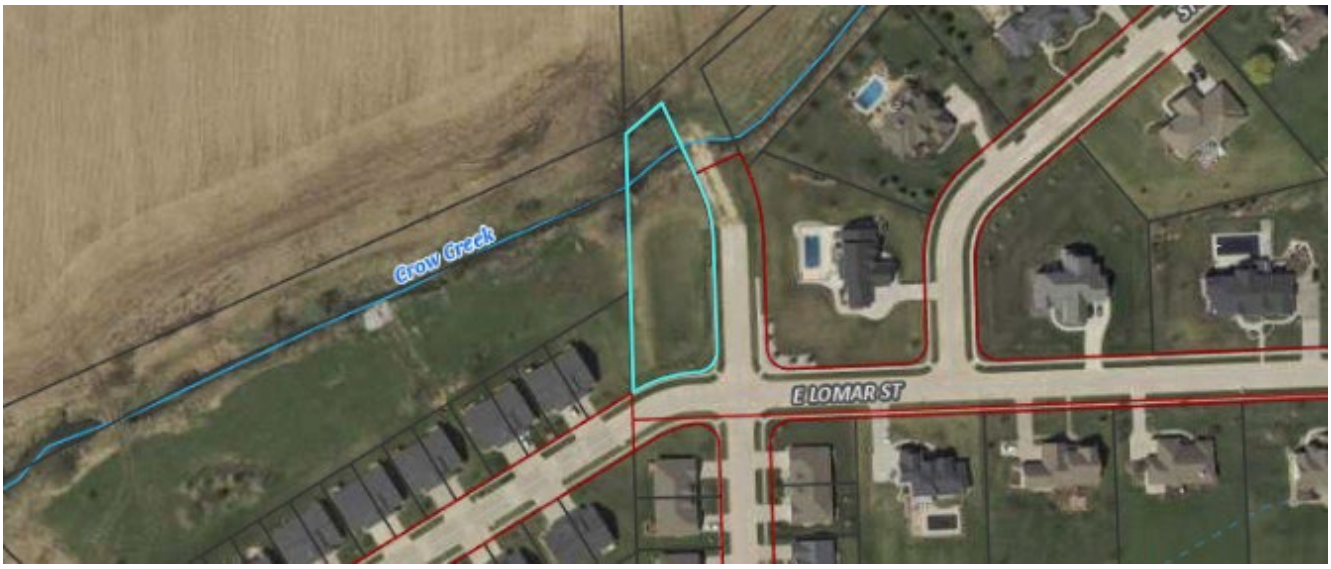
Ferguson made a motion to adjourn the meeting at 7:49 p.m. Seconded by LaPlante. Motion carried 5-0 by voice vote.

To: Planning and Zoning Commission
From: Jeff Martens, Assistant City Administrator
Re: Stone Brook 3rd Addition
Date: 10/17/24

SBK, LLC, owned by Paul Boffeli, has submitted the attached Final Plat Application subdividing an outlot in Stone Brook Addition. The plat is also attached.

The City was informed the reason for this subdivision is to separate the creek from the detention pond portion of the outlot so the detention pond can be turned over to the HOA.

Below is a screenshot of the lot:



Emailed to Jeff Martens 9/9/24

AGENDA

Final Plat Application - City of Eldridge

Name of Subdivision: Stone Brook 3rd Addition

Number of lots in subdivision: 2 **Current Zoning:** R3

Who should be contacted regarding this plat: Kevin Cox of Townsend Engineering
Phone Number: 563-386-4236
Email Address: kevin@townsendengineering.net

Name of Developer: SBK, LC
Developer's contact: Paul Boffeli
Address: 1805 State Street., Bettendorf, IA 52722
Phone Number: 563-355-2022
Email Address: paulb@buildtosuitinc.com

Name of Engineer preparing construction drawings: Townsend Engineering
Address: 2224 E. 12th St., Davenport, IA 52803
Phone Number: 563-386-4236
Email Address:

Name of land surveyor preparing plat: Jerry D. Rogers of Townsend Engineering
Address: 2224 E. 12th St., Davenport, IA 52803
Phone Number: 563-386-4236
Email Address: kevin@townsendengineering.net

Name of person preparing legal documents:
Address:
Phone Number:
Email Address:

Filing fee included with this application: $ 100.00

The following shall be filed with this application:

A. Ten (10) copies of the final plat
B. One (1) copy reduced to 11x17
C. Four (4) copies of the construction drawings
D. Two (2) copies of the legal documents
E. Filing Fee
F. One (1) PDF copy of the final plat and construction drawings

Filing Fee Paid $ 100 **Date Filed:** 9/11/2024

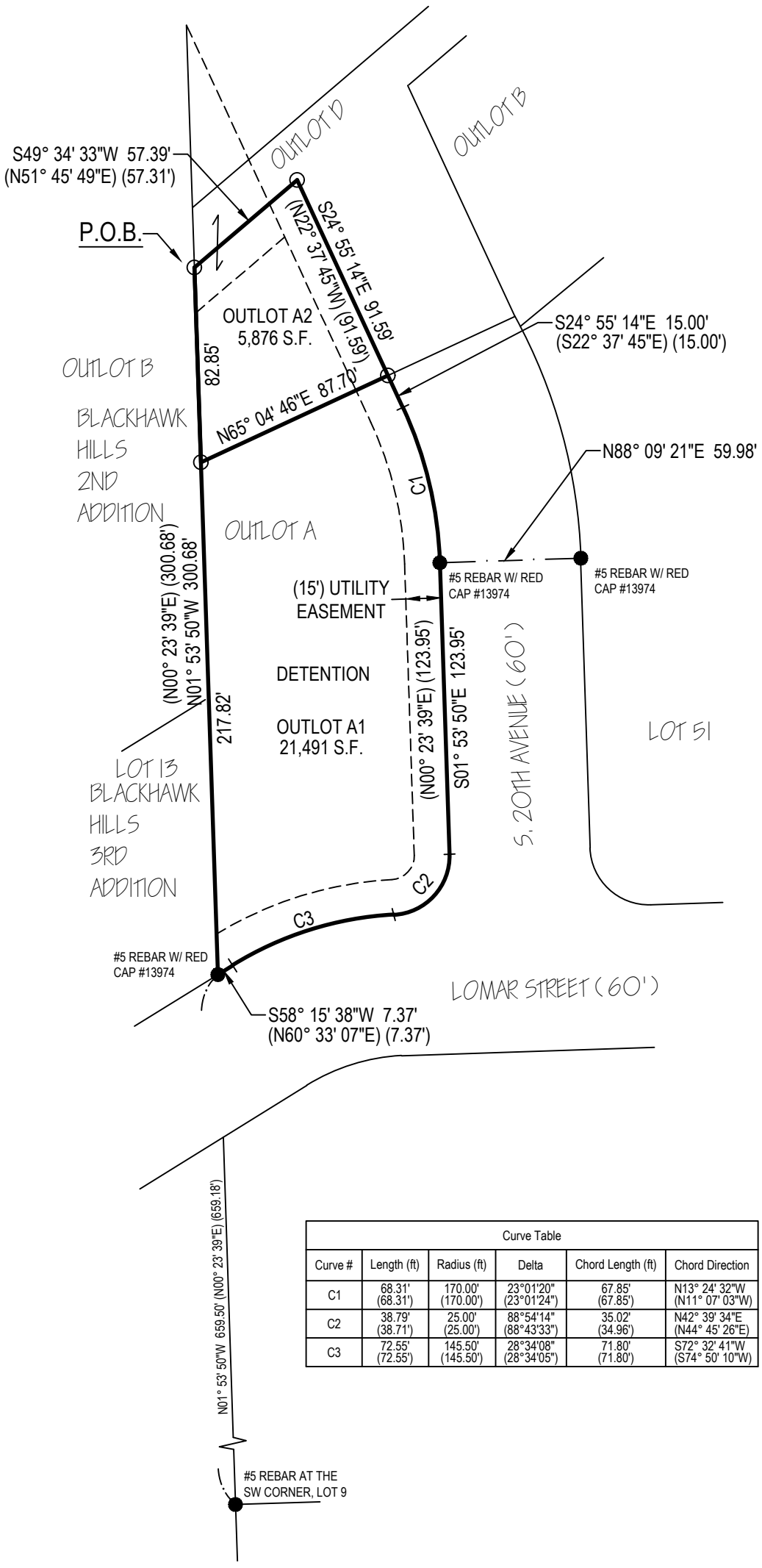
PREPARED BY / RETURN TO: Townsend Engineering, 2224 E. 12th Street, Davenport, Iowa 52803 (563) 386-4236

FINAL PLAT

STONE BROOK 3RD ADDITION

BEING A REPLAT OF OUTLOT A OF STONE BROOK FIRST ADDITION TO THE CITY OF ELDRIDGE, SCOTT COUNTY, IOWA.

AGENDA



Curve Table					
Curve #	Length (ft)	Radius (ft)	Delta	Chord Length (ft)	Chord Direction
C1	68.31' (68.31')	170.00' (170.00')	23°01'20" (23°01'24")	67.85' (67.85')	N13° 24' 32"W (N11° 07' 03"W)
C2	38.79' (38.71')	25.00' (25.00')	88°54'14" (88°43'33")	35.02' (34.96')	N42° 39' 34"E (N44° 45' 26"E)
C3	72.55' (72.55')	145.50' (145.50')	28°34'08" (28°34'05")	71.80' (71.80')	S72° 32' 41"W (S74° 50' 10"W)

NOTES

1. ALL STREET RIGHTS OF WAY TO BE DEDICATED TO THE CITY OF ELDRIDGE.

2. SIDEWALKS WILL BE INSTALLED ON THE FRONT OF ALL LOTS AT THE TIME WHEN REQUESTED BY CITY..

3. ALL LOTS WILL BE CONNECTED TO THE PUBLIC WATER SUPPLY SYSTEM OF ELDRIDGE.

4. AN UNDERGROUND UTILITY EASEMENT ACROSS THE FRONT OF ALL LOTS TO BE GRANTED TO THE CITY OF ELDRIDGE, IOWA AND TO OTHER PUBLIC UTILITY COMPANIES

5. BLANKET UNDERGROUND EASEMENTS GRANTED TO RESPECTIVE UTILITY COMPANY FOR SEWER, WATER, GAS, ELECTRIC, TELEPHONE AND CABLE T.V. SERVICES TO INDIVIDUAL STRUCTURES WITHIN THE LOT WHERE THE STRUCTURE IS LOCATED. BLANKET EASEMENTS FOR STREET LIGHTING WITHIN THE SUBDIVISION.

6. ALL IMPROVEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST CITY OF ELDRIDGE STANDARD SPECIFICATIONS.

7. ALL DISTANCES SHOWN ARE IN FEET AND DECIMAL PARTS THEREOF.

8. PART OF THE SUBDIVISION LIES WITHIN THE 1% ANNUAL CHANCE SPECIAL FLOOD HAZARD AREA AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP #19163C0215G, EFFECTIVE DATE MARCH 23, 2021.

9. PROPERTY IS ZONED R-3, MULTIPLE FAMILY RESIDENTIAL DISTRICT.

10. OUTLOT A1 IS TO BE OWNED AND MAINTAINED BY H.O.A. OF STONE BROOK FIRST ADDITION. OUTLOT A2 IS TO BE OWNED AND MAINTAINED BY THE OWNER OF OUTLOT D, STONE BROOK FIRST ADDITION.

APPROVED BY:
CITY OF ELDRIDGE, IOWA

BY: _____

DATE: _____ ATTEST: _____

CITY PLAN & ZONE COMMISSION

BY: _____ DATE: _____

_____ DATE: _____
MIDAMERICAN ENERGY
APPROVED SUBJECT TO ENCUMBRANCES OF RECORD BY MIDAMERICAN

_____ DATE: _____
CITY OF ELDRIDGE
ELECTRIC & WATER UTILITY

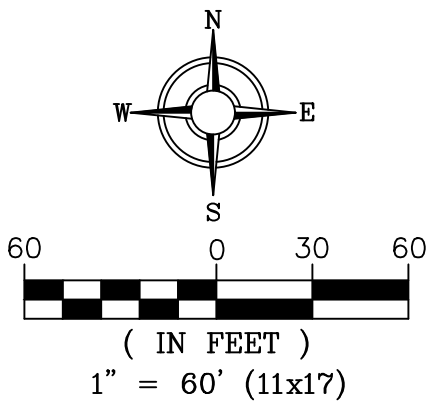
_____ DATE: _____
CENTRAL SCOTT
TELEPHONE CO.

_____ DATE: _____
MEDIACOM

THE MEASURED BEARINGS SHOWN HEREON ARE BASED ON THE US STATE PLANE COORDINATE SYSTEM, IOWA SOUTH ZONE (1402) GEOID 12A, NAD 83 (2011) EPOCH 2010.00.

LEGEND:

DEED DIMENSION = (0.00')
FIELD DIMENSION = 0.00'
MONUMENTS FOUND:
AS NOTED =
MONUMENTS SET:
#5 REBAR W/ PINK CAP #8860 =
BOUNDARY LINE =
FENCE LINE =
EASEMENT LINE =
SETBACK LINE=
SECTION LINE=



LICENSED LAND SURVEYOR
JERRY D. ROGERS
8860
IOWA

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.

_____
JERRY D. ROGERS Date
Iowa License Number: 8860
My license renewal date is December 31, 2025
Pages or sheets covered by this seal: 1

TOWNSEND ENGINEERING
CIVIL STRUCTURAL LAND DEVELOPMENT
563 386.4236 office 386.4231 fax
2224 East 12th Street, Davenport, IA 52803

DATE: 7/31/2024

DRAWN BY: KLC
CHECKED BY: JDR
LOCATION S:\BOFELLI\STONE BROOK OUTLOT A

NO.	REVISIONS: DESCRIPTION	DATE

PROJECT
PLAT OF SURVEY
STONE BROOK OUTLOT A
ELDRIDGE, IA

PREPARED FOR:
SBK, LC
1805 STATE STREET
BETTENDORF, IA 52722

SHEET NO.
1 OF 1

TITLE D CHAPTER 12
SOLAR ENERGY SYSTEMS

1.00 PURPOSE.

The purpose of this chapter is to allow safe, effective, and efficient use of solar energy conversion systems, and to establish permitted uses for them within the City.

2.00 DEFINITIONS.

For purposes of this chapter, the following terms are defined:

A. "Solar energy system" means a device, array of devices, or structural design feature, the purpose of which is to provide for generation of electricity from sunlight, or the collection, storage, and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating. Installation types are:

   1. "Building-integrated" means an integral part of a principal or accessory building. Building-integrated systems include, but are not limited to, photovoltaic or hot water systems that are contained within roofing materials, windows, skylights, and awnings.

   2. "Ground-mount" means a solar energy system mounted on a rack or pole that rests on or is attached to the ground and not a roof or exterior wall of a building. Ground-mount systems can be either accessory or principal uses.

   3. "Roof-mount" means a solar energy system mounted on a rack that is fastened to or ballasted on a building roof. Roof-mount systems can be either accessory or principal uses.

   4. "Parallel roof-mount" means a roof-mount solar energy system in which the solar panels are installed parallel to the roof underneath and no more than 12" from the surface of the roof. A parallel roof-mount system must not extend beyond the roof surface underneath it.

   5. "Wall-mount" means a solar energy system mounted on the side of a principal or accessory building usually, but not always, for the purpose of providing direct supplemental space heating by heating and recirculating conditioned building air.

B. "Solar farm" means a commercial facility that converts sunlight into electricity by means of photovoltaics (PV) for the primary purpose of wholesale sales of generated electricity. A solar farm is the principal land use for the parcel on which it is located.

C. "Solar garden" means a commercial solar-electric (photovoltaic) array that provides retail electric power (or a financial proxy for retail power) to multiple households or businesses residing or located off-site from the location of the solar energy system. A community solar system/solar garden is a principal use.

D. "Solar resource" means a view of the sun from a specific point on a lot or building that is not obscured by any vegetation, building, or object for a minimum of four hours between the hours of 9:00 a.m. and 3:00 p.m. Standard Time on all days of the year.

E. "Solar access" means unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

3.00 PERMITTED ACCESSORY USE.

Solar energy systems shall be allowed as an accessory use in all zoning districts where structures of any sort are allowed, subject to certain requirements as set forth below.

A. Height. Solar energy systems must meet the following height requirements for accessory use:

1. Building or roof-mounted solar energy systems shall not exceed the maximum allowed height of a structure in any zoning district.

2. Ground or pole-mounted solar energy systems shall not exceed 12 feet in height when oriented at maximum vertical tilt. Taller structures shall be considered as a use on review.

B. Set-back. Solar energy systems must meet the accessory structure setback requirements for the zoning district and primary land use associated with the lot on which the system is located and shall only be in rear yards.

1. Roof or Building-Mount Solar Energy Systems. In addition to the building setback, the collector surface and mounting devices for roof-mounted solar energy systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a back yard exposure. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building-integrated systems and are regulated as awnings.

2. Ground-Mount Solar Energy Systems. Ground-mounted solar energy systems may not extend into the side yard or rear setback when oriented at maximum horizontal design tilt.

C. Location and Visibility.

1. Building-Integrated and Wall-Mount Solar Energy Systems. Building-integrated and wall-mount solar energy systems shall be allowed regardless of whether the system is visible from the public right-of-way, provided the building component in which the system is integrated or mounted meets all required setback, land use, and performance standards for the district in which the building is located. The color of the solar collectors is not required to be consistent with other building materials.

2. Roof-Mount Solar Energy Systems. Roof-mount solar energy systems shall not be restricted for aesthetic reasons if the system is not visible from the closest edge of any public right-of-way other than an alley. Roof-mounted systems that are visible from the nearest edge of the street frontage right-of-way shall not have the highest finished pitch steeper than the roof pitch on which the system is mounted and shall be no higher than 12 inches above the roof. The color of the solar collectors is not required to be consistent with other roofing materials.

3. Ground-Mount Solar Energy Systems. Except as indicated in other parts of this chapter, ground-mount solar energy systems shall be treated as an accessory structure and shall be subject to the requirements of an accessory structure. A ground-mount solar energy system shall not be located in the front yard or side yard of a lot. The City may require screening where it determines there is a clear community interest in maintaining a viewshed.

4. Reflectors. No solar energy system using an external reflector to enhance solar production shall be installed within the City limits.

5. Solar energy systems shall have non-reflective and neutral color with no advertising or logos on system panels or supporting structure other than a small identification of the manufacturer.

D. Coverage. Roof or building-mount solar energy systems shall provide roof access paths as required in the International Fire Code or the International Residential Code as they apply to the structure. Ground-mount systems shall be exempt from impervious surface calculations if the soil under the collector is maintained in vegetation and is not compacted. Foundations, gravel, and compacted soils are considered impervious.

E. Historic Buildings. Solar energy systems on historically designated buildings shall be installed only as allowed by the U.S. Department of Interior.

F. Site Plan Approvals and permits.

1. Building permit and plan approval required. All solar energy systems require a building permit from the city and shall provide a site plan for review.

2. Site plans shall be accompanied by a scale horizontal and vertical (elevation) drawing. The drawings must show the location of the system on the building or on the property for a ground-mounted system, including property lines, and the property setbacks. In addition, they shall indicate the height of the installation at maximum tilt and the ground footprint at minimum tilt, along with a description of the ground cover to be used under the system.

3. Site plans that meet the design requirements of this chapter shall be granted administrative approval by the Zoning Officer and shall not require Planning and Zoning Commission review. Administrative approval does not indicate compliance with the Building Code or Electric Code.

G. Approved Solar Components. Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating.

H. Compliance with Building Code. All solar energy systems shall be consistent with all *Eldridge and State Building Codes*, and solar thermal systems shall comply with HVAC-related requirements of the *Energy Code*.

I. Compliance with all Eldridge and State Electric Codes. All photovoltaic systems shall comply with the *Eldridge and State Electric Code*.

J. Compliance with Eldridge and State Plumbing Code. Solar hot water systems shall comply with applicable *Eldridge and State Plumbing Code* requirements.

K. Utility Notification. All solar energy systems that connect with an electric circuit serviced by the local electric utility (grid-tied systems) shall comply with the interconnection requirements of the electric utility. Systems not so connected (off-grid systems) are exempt from this requirement.

4.00 PRINCIPAL USES.

A. Solar Garden. The City permits the development of community solar gardens, subject to the following standards and requirements:

1. Rooftop Solar Gardens. Subject to the requirements of this Chapter, rooftop solar gardens are a permitted use in all districts.

2. Ground-Mount Solar Gardens. Ground-mount community solar energy systems must be less than two acres in total size, and are a permitted use in all districts. The City may require screening where it determines there is a clear community interest in maintaining a viewshed.

3. Interconnection. An interconnection agreement must be in place with the local electric utility before work commences on installation of a solar garden.

4. Dimensional Standards. All structures must comply with set-back, height, and coverage limitations for the district in which the system is located.

5. Site Security. A solar garden located wholly or partly within the City limits must be surrounded by a fence that meets National Electric Code (NEC) guidelines. The City encourages the project operator or owner to invest in fencing that facilitates movement of pollinators. All gates must always be locked unless personnel are on site. All components must be located at least four feet from the fence.

6. Other Standards. Ground-mount systems must comply with all required standards for structures in the district in which the system is located.

7. Ground Cover. The City encourages (but does not require) owners of ground-mount solar gardens to plant the land underneath the solar collectors in pollinator friendly wildflowers. Such plantings must be maintained in such a way that they do not go to weeds or become predominately grass but afford passers-by a predominantly flower view during blooming season. Such plantings shall be considered flower beds and shall be exempt from the mowing requirements of Title B, Chapter 9. If wildflowers are not planted, the land underneath the collectors must be neatly maintained in compliance with Title B, Chapter 9 of the Code of Ordinances.

8. Building Permit and Site Plan Review. Development of a solar garden inside the City limits requires the issuance of a building permit and site plan review. Principle use solar arrays must be designed by an Iowa licensed design professional.

9. Decommissioning. The City requires that, as part of the construction permit application, a decommissioning plan shall be submitted to ensure that the facilities are properly removed after their useful life. Decommissioning of the solar garden must occur in the event it (or a majority part of it) is not in use for 12 consecutive months decommissioning must be complete in the next 12 months. The plan shall include provisions for removal of all structures and foundations, restoration of the soil and vegetation, and a plan ensuring financial resources will be available to fully decommission the site. Disposal of the solar panels, racks, and foundations must meet state requirements applicable at the time of decommissioning. The City will require the posting of a bond, letter of credit, or the establishment of an escrow account to ensure proper decommissioning.

B. Solar Farm: The City permits the development of solar farms, subject to the following standards and requirements:

1. Development. A solar farm may be developed only on land zoned SA-Suburban Agricultural and I-1 Light Industrial Districts at the time of the development is a permitted use in these districts.

2. Building Permit. Development of a solar farm inside the City limits requires the issuance of a building permit.

3. Stormwater and NPDES. If the City has stormwater management, erosion, or sediment control provisions, or NPDES permit requirements at the time of the development, solar farms shall be subject to those requirements.

4. Ground Cover and Buffer Areas. Ground around and under solar arrays and in project buffer areas shall be planted and maintained in perennial vegetated ground cover, and meet the following standards:

   (a) Topsoil shall not be removed during development unless it is part of a remediation effort.

   (b) Soils shall be planted and maintained in perennial vegetation to prevent erosion, manage run off, and build soil. Seeds may include a mix of grasses and wildflowers, but shall be predominantly wildflowers, ideally native to the region that will result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening. Seed mixes and maintenance practices should be consistent with recommendations made by qualified natural resource professionals such as those from the Iowa Department of Natural Resources, Scott County Soil and Water Conservation Service, or the Natural Resource Conservation Service. Plant material must not have been treated with systemic insecticides, particularly neonicotinoids. Such plantings must be maintained in such a way that they do not go to weeds or become predominantly grass but afford passers-by a predominantly flower view during blooming season. Such plantings shall be considered flower beds and shall be exempt from the mowing requirements of Title B, Chapter 9. If wildflowers are not planted, the land underneath the collectors must be neatly maintained in compliance with Title B, Chapter 9. In lieu of meeting the above vegetation requirements in a SA-Suburban Agriculture District agrivoltaics crops can be planted instead.

   (c) The City may require screening where it determines there is a clear community interest in maintaining a viewshed.

5. Foundations. A qualified engineer shall certify that the foundation and design of the solar panels' racking, and support is within accepted professional standards, given local soil and climate conditions.

6. Other Standards and Codes. All solar farms shall be in compliance with all applicable local, State, and federal regulatory codes, including the *Eldridge and State Building Code*, as amended; and the *National Electric Code*, as amended.

7. Power and Communication Lines. Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the City in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the City's consulting engineer.

8. Site Security. A solar farm located wholly or partly within the City limits must be surrounded by a fence that meets National Electric Code (NEC) guidelines. The City encourages the project operator or owner to invest in fencing that facilitates movement of pollinators. All gates must always be locked unless personnel are on site. All components must be located at least four feet from the fence.

9. Building Permit. Development of a solar farm inside the City limits requires the issuance of a building permit.

10. Site Plan Required. A detailed site plan for both existing and proposed conditions must be submitted, showing location of all solar arrays, other structures, property lines, rights-of-way, easements, zoning districts, service roads, floodplains, wetlands and other protected natural resources, topography, electric equipment, and all other characteristics requested by the City. The site plan shall be reviewed by City Staff and the City Engineer and then approved by resolution by City Council.

11. Aviation Protection. For solar farms located within 500 feet of an airport or within approach zones of an airport, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or most recent version adopted by the FAA.

12. Agricultural Protection. Solar farms must comply with site assessment or soil identification standards that are intended to protect agricultural soils. Demonstrating co-location of agricultural uses (agrivoltaics) on the project site is allowed in SA-Suburban Agriculture Districts.

13. Decommissioning. A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of the installation must occur if a majority of the solar panels are not in use for 12 consecutive months. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation, and a plan ensuring financial resources will be available to fully decommission the site. Disposal of the solar panels, racks, and foundations must meet State requirements applicable at the time of decommissioning. The City shall require the posting of a bond, letter of credit, or the establishment of an escrow account to ensure proper decommissioning.