



United City of Yorkville

651 Prairie Pointe Drive

Yorkville, Illinois 60560

Telephone: 630-553-4350

www.yorkville.il.us

PLANNING AND ZONING

COMMISSION AGENDA

Wednesday, August 9, 2023

7:00 PM

Yorkville City Hall Council Chambers

651 Prairie Pointe Drive

Meeting Called to Order: 7:00 p.m.

Roll Call:

Previous meeting minutes: July 12, 2023

Citizen's Comments

Public Hearings

1. **PZC 2023-10** United City of Yorkville, Kendall County, Illinois, petitioner, is proposing a text amendment to Chapter 6: Permitted and Special Uses in the Zoning Ordinance to identify “data center”, “refrigerated warehouse (cold storage)”, and “battery uses” as permitted uses within the M-1 Limited Manufacturing and M-2 General Manufacturing districts. This text amendment will provide definitions for the establishment and operation of such uses in these zoning districts. Additionally, an amendment to Table 10.16.03 in Chapter 16: Off-Street Parking and Loading in the Zoning Ordinance related to the uses is proposed.

Unfinished Business

New Business

1. **PZC 2023-10** United City of Yorkville, Kendall County, Illinois, petitioner, is proposing a text amendment to Chapter 6: Permitted and Special Uses in the Zoning Ordinance to identify “data center”, “refrigerated warehouse (cold storage)”, and “battery uses” as permitted uses within the M-1 Limited Manufacturing and M-2 General Manufacturing districts. This text amendment will provide definitions for the establishment and operation of such uses in these zoning districts. Additionally, an amendment to Table 10.16.03 in Chapter 16: Off-Street Parking and Loading in the Zoning Ordinance related to the uses is proposed.

Action Item:

Text Amendment

2. **PZC 2023-11** Jefferey D. Milroy on behalf of Milroy Farms, LLC, is requesting to renew its current special use permit, approved in 2014, for the operation of a compost facility on approximately 39.87 acres at 1270 E. Beecher Road in unincorporated Kendall County.

Action Item:

1.5 Mile Review

Additional Business

1. City Council Action Updates

- a. **PZC 2022-02** Turning Point Energy, LLC, petitioner, has filed applications with the United City of Yorkville, Kendall County, Illinois, requesting rezoning approval, special use authorization, and variance approval to construct a solar farm on the 54-acre parcel generally located east of Cannonball Trail and north of the Burlington Northern Santa Fe railroad line within the Bristol Ridge Planned Unit Development. The petitioner is requesting to rezone the parcel from the R-2 Single-Family and R-2 Duplex PUD to the A-1 Agricultural District, special use permit approval for a solar farm land use, and variance approval to decrease the minimum distance between the ground and the solar panels from ten (10) feet to a minimum height of two (2) feet.

Action Item

Rezone, Special Use, Variance

- b. **PZC 2022-03** Turning Point Energy, LLC, petitioner, has filed applications with the United City of Yorkville, Kendall County, Illinois, requesting rezoning approval, special use authorization, and variance approval to construct a solar farm on the 42-acre parcel generally located east of Cannonball Trail and south of Galena Road within the Bristol Ridge Planned Unit Development. The petitioner is requesting to rezone the parcel from the R-2 Single-Family and R-3 Townhome PUD to the A-1 Agricultural District zoning, special use permit approval for a solar farm land use, and variance approval to decrease the minimum distance between the ground and the solar panels from ten (10) feet to a minimum height of two (2) feet.

Action Item

Rezone, Special Use, Variance

- c. **PZC 2023-04** Trinity Church United Methodist, petitioner, has filed an application with the United City of Yorkville, Kendall County, Illinois, requesting sign variance approval to move their three (3) existing nonconforming onsite signs to new locations on the property due to the future widening of Bridge Street by the Illinois Department of Transportation. The property is located at 2505 Boomer Lane at the southeast corner of the Cannonball Trail and Illinois Route 47 (Bridge Street) intersection, in Yorkville, Illinois.

Action Item

Sign Variance

Adjournment

PLANNING & ZONING COMMISSION

City Council Chambers

651 Prairie Pointe Drive, Yorkville, IL

Wednesday, July 12, 2023 7:00pm

Meeting Called to Order

Chairman Jeff Olson called the meeting to order at 7:00pm, roll was called and a quorum was established.

Roll Call

Deborah Horaz-yes, Greg Millen-yes, Jeff Olson-yes, Richard Vinyard-yes, Danny Williams-yes

Absent: Rusty Hyett, Reagan Goins

City Staff

Krysti Barksdale-Noble, Community Development Director

Other Guests

Lynn Dubajic Kellogg, City Consultant

Chris Vitosh, Vitosh Reporting Service

Jim Rorie, Trinity Church United Methodist

Bob Boyd, Trinity Church United Methodist

Jason Cooper, Kimley-Horn

Tom Huddleston, Huddleston McBride

Adam Beal, Turning Point Energy

Mr. Kyle Barry, McGuire Woods LLP

Scott Osborn, Turning Point Energy

Emily Kahanic, Kimley-Horn

Previous Meeting Minutes June 14, 2023

The minutes were approved as presented on a motion and second by Commissioners Williams and Horaz, respectively.

Roll call: Millen-yes, Olson-yes, Vinyard-yes, Williams-yes, Horaz-yes. Carried 5-0.

Citizen's Comments None

Public Hearings

There were two Public Hearings scheduled for this meeting, however, the second one, My Bristol Dream Events, was not able to submit their documents in time for this meeting and therefore, will not be heard tonight. Mr. Olson explained the procedure for the Hearing and swore in those who would give testimony.

At approximately 7:04pm a motion was made and seconded by Mr. Vinyard and Mr. Williams, respectively to open the Public Hearing. Roll call: Millen-yes, Olson-yes, Vinyard-yes, Williams-yes, Horaz-yes. Carried 5-0. Mr. Olson read the case description.

1. **PZC 2023-04** Trinity Church United Methodist, Petitioner, has filed an application with the United City of Yorkville, Kendall County, Illinois, requesting sign variance approval to move their three (3) existing non-conforming on-site signs to new locations on the property. This is due to the future widening of Bridge Street by the Illinois Department of Transportation. The property is located at 2505 Boomer Lane at the southeast corner of the Cannonball Trail and Illinois Route 47 (Bridge Street) intersection, in Yorkville, Illinois.

(See Court Reporter's Transcript of proceedings)

A motion was made by Commissioners Vinyard and Williams, respectively, at approximately 7:06pm to close the Public Hearing. Roll call: Millen-yes, Olson-yes, Vinyard-yes, Williams-yes, Horaz-yes. Carried 5-0.

Ms. Noble said there are 3 signs existing at the location and IDOT had requested they move the signs as part of the Rt. 47 widening. The church could keep the signs as legal non-conforming for 5 years, but they are now asking for the variance to keep the signs as they are. Staff is not opposed and the public was notified with no negative feedback. Chairman Olson read the general standards and sign variance standards. The Petitioner would like their replies to the standards to be part of the official record.

Action Item

Variance Request

It was moved by Commissioner Vinyard to approve the variance request PZC 2023-04 and it was seconded by Commissioner Williams who read the motion as follows: In consideration of testimony presented during a Public Hearing on July 12, 2023 and approval of the findings of fact, the Planning and Zoning Commission recommends approval of a request to vary the sign regulations contained in Section 10-20-8-A-1 and Section 10-20-8-B of the United City of Yorkville Zoning Ordinance as stated in a staff memorandum dated June 6, 2023 for the property commonly known as 2505 Boomer Lane.

Roll call: Olson-yes, Vinyard-yes, Williams-yes, Horaz-yes, Millen-yes. Carried 5-0.

2. **PZC 2023-06** Elizabeth Chapa dba My Bristol Dream Events. Documents not submitted for Hearing, not being presented at this meeting.

Unfinished Business

Items #1 and 2 were discussed simultaneously.

1. **PZC 2023-02** Turning Point Energy, LLC, petitioner, has filed applications with the United City of Yorkville, Kendall County, Illinois, requesting rezoning approval, special use authorization and variance approval to construct a solar farm on the 54-acre parcel generally located east of Cannonball Trail and north of the Burlington Northern Santa Fe railroad line within the Bristol Ridge Planned Unit Development. The petitioner is requesting to rezone the parcel from the R-2 Single-Family and R-2 Duplex PUD to the A-1 Agricultural District, special use permit approval for a solar farm land use and variance approval to decrease the

minimum distance between the ground and the solar panels from ten (10) feet to a minimum height of two (2) feet.

2. **PZC 2023-03** Turning Point Energy, LLC, petitioner, has filed applications with the United City of Yorkville, Kendall County, Illinois, requesting rezoning approval, special use authorization and variance approval to construct a solar farm on the 42-acre parcel generally located east of Cannonball Trail and south of Galena Road within the Bristol Ridge Planned Unit Development. The petitioner is requesting to rezone the parcel from the R-2 Single-Family and R-3 Townhome PUD to the A-1 Agricultural District zoning, special use permit approval for a solar farm land use and variance approval to decrease the minimum distance between the ground and the solar panels from ten (10) feet to a minimum height of two (2) feet.

Attorney Mr. Kyle Barry asked to address these cases together. He said they came before this Commission in May and many questions were raised about the projects, so he gave a brief presentation to address some of the issues. Mr. Jason Cooper of Kimley-Horn said they have updated the site plan and pushed the panel locations farther from the road. He asked if a buffer would be needed. Mr. Cooper's staff said the cost estimates were increased to allow for inflation, a glare study was redone showing no issues with minor modifications including a 5% change in the resting position for the panels, a pollution plan was submitted and erosion will be controlled during construction.

Mr. Barry addressed a blanket easement request from the city which he said did not seem necessary for decommissioning. The Agricultural Impact Mitigation Agreement that was required includes language that accomplishes what an easement would. The other issue he had is that the easement would encumber the title to the property. He said the city would acquire a property interest and it would be inappropriate.

Ms. Noble provided a response to the information presented by Mr. Barry and Mr. Cooper. She said it has been standard procedure to request blanket easements which gives the right to enter if the project is defunct. The language in the agreement mentioned above only allows to draw down funds, not enter the property. Ms. Noble said the blanket easement has been done with other recent solar projects. Mr. Barry said he did not think other subdivisions were required to enter into the Mitigation Agreement and doing it as an easement is inappropriate—he suggested doing it in another way rather than by title encumbrances which could affect financing. He proposed a narrow license giving the right to enter, triggered by abandonment.

Mr. Olson said if the blanket easement is a requirement, the Commission would recommend that. He also commented on other items including decommissioning and drainage. He does not agree with the decommissioning plan and thinks the revised 3% inflation rate is more appropriate than the proposed amount, however, he feels that should be doubled. Mr. Cooper said Covid has reduced inflation and suggested 3%. Mr. Olson said the Commissioners would recommend the City Council discuss the rate for the special use.

Regarding drainage for site #105, Tom Huddleston of Huddleston Drainage Company, said this parcel was going to be a subdivision at one time for which they did a drainage study. He said the drainage tiles can be re-routed, they will maintain the existing agricultural land and also improve/maintain the land so it can be returned to ag when the project decommissions. Ms. Horaz asked who oversees this aspect and Mr. Huddleston replied a study will be provided and is contingent on the building permit.

It was noted by Ms. Noble that the entry points for both sites have been adjusted to consider requests from the County Highway Commissioner and that the setback of panels on #105 from the nearest residential unit be changed to 830 feet from 530 feet.

Ms. Horaz recommended that one particular planting-- allium (Latin name *cernuum*) be excluded from the list as the bulbs multiply greatly. This will be included as a recommendation to the special use.

Chairman Olson read the standards for the rezoning, special use and variance.

MOTIONS FOR PZC 2023-02 BRISTOL RIDGE SOLAR FARM 105

SPECIAL USE: Motion by Mr. Williams, second by Mr. Vinyard to approve.

Motion read by Ms. Noble: In consideration of testimony presented during a Public Hearing on May 10, 2023 and discussion of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council a request for Special Use authorization to construct a freestanding solar energy system, or solar farm, contingent upon approval of annexation agreement amendment for the Bristol Ridge Development by the City Council, for a property generally located north of the Burlington Northern Santa Fe railroad line and east of Cannonball Trail, subject to staff recommendations in a memo dated July 5, 2023 and further subject to the removal of allium as a proposed plant in the landscaping plan and an increase in the inflation rate for the decommissioning schedule, above the 3% which is recommended by staff.

Roll call: Vinyard-yes, Williams-yes, Horaz-yes, Millen-yes, Olson-yes. Passed 5-0.

REZONING: Motion by Mr. Williams, second by Mr. Vinyard to approve.

Motion read by Mr. Vinyard: In consideration of testimony presented during a Public Hearing on May 10, 2023 and discussion of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council a request for rezoning from R-2 Single-Family and R-2D Duplex PUD (Bristol Ridge) to A-1 Agricultural District for the purpose of constructing a freestanding solar energy system, or solar farm, contingent upon approval of annexation agreement amendment for the Bristol Ridge Development by the City Council, for a property generally located north of the Burlington Northern Santa Fe railroad line and east of Cannonball Trail.

Roll call: Williams-yes, Horaz-yes, Millen-yes, Olson-yes, Vinyard-yes. Passed 5-0.

VARIANCE: Motion by Mr. Vinyard, second by Mr. Williams to approve.

Motion read by Mr. Williams: In consideration of testimony presented during a Public Hearing on May 10, 2023 and discussion of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council a request for variance from Section 10-19-7-D of the Yorkville Municipal Code to reduce the minimum clearance

between the lowest point of a freestanding solar panel and the surface on which the system is mounted from ten feet to two feet, contingent upon approval of annexation agreement amendment for the Bristol Ridge Development by the City Council, for a property generally located north of the Burlington Northern Santa Fe railroad line and east of Cannonball Trail.

Roll call: Horaz-yes, Millen-yes, Olson-yes, Vinyard-yes, Williams-yes. Passed 5-0.

MOTIONS FOR PZC 2023-03 BRISTOL RIDGE SOLAR FARM 106

SPECIAL USE: Motion by Mr. Vinyard, second by Mr. Williams to approve.

Motion read by Mr. Williams: In consideration of testimony presented during a Public Hearing on May 10, 2023 and discussion of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council a request for Special Use authorization to construct a freestanding solar energy system, or solar farm, contingent upon approval of annexation agreement amendment for the Bristol Ridge Development by the City Council, for a property generally located south of Galena Road and east of Cannonball Trail, subject to staff recommendations in a memo dated July 5, 2023 and further subject to removal of allium as a proposed plant material in the landscape plan and the increase of the inflation rate above 3% as recommended by staff.

Roll call: Millen-yes, Olson-yes, Vinyard-yes, Williams-yes, Horaz-yes. Passed 5-0.

REZONING: Motion by Mr. Williams, second by Mr. Vinyard to approve.

Motion read by Mr. Vinyard: In consideration of testimony presented during a Public Hearing on May 10, 2023 and discussion of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council a request for rezoning from R-2 Single-Family and R-3 Townhome PUD (Bristol Ridge) to A-1 Agricultural District for the purpose of constructing a freestanding solar energy system, or solar farm, contingent upon approval of annexation agreement amendment for the Bristol Ridge Development by the City Council, for a property generally located south of Galena Road and east of Cannonball Trail.

Roll call: Horaz-yes, Millen-yes, Olson-yes, Vinyard-yes, Williams-yes. Passed 5-0.

VARIANCE: Motion by Mr. Vinyard, second by Mr. Williams to approve.

Motion read by Mr. Williams: In consideration of testimony presented during a Public Hearing on May 10, 2023 and discussion of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council a request for variance from Section 10-19-7-D of the Yorkville Municipal Code to reduce the minimum clearance between the lowest point of a freestanding solar panel and the surface on which the system is mounted from ten feet to two feet, contingent upon approval of annexation agreement amendment for the Bristol Ridge Development by the City Council, for a property generally located south of Galena Road and east of Cannonball Trail.

Roll call: Millen-yes, Olson-yes, Vinyard-yes, Williams-yes, Horaz-yes. Passed 5-0.

New Business:

1. **PZC 2023-04 Trinity Church** (see details under Public Hearings)

2. PZC 2023-06 Elizabeth Chapa, My Bristol Dream Events

Documents not submitted, case not heard at this meeting.

Additional Business None

Adjournment

There was no further business and the meeting was adjourned at 7:41pm on a unanimous voice vote.

Respectfully submitted by
Marlys Young, Minute Taker



United City of Yorkville
800 Game Farm Road
Yorkville, Illinois, 60560
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Fax: 630-553-7575
Website: www.yorkville.il.us

APPLICATION FOR SIGN VARIANCE

SIGN VARIANCE STANDARDS

WAS THE SIGN ERECTED LEGALLY WITH A SIGN PERMIT?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
ARE THERE LIMITED AVAILABLE LOCATIONS FOR SIGNAGE ON THE PROPERTY?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
DOES THE SIGN FACE A STREET WITH A FORTY (40) MILE PER HOUR OR HIGHER SPEED LIMIT?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
IS THE SIGN ON A STREET WITH TWENTY THOUSAND (20,000) OR HIGHER VEHICLE TRIPS PER DAY?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
IS THE SIGN ON A WALL FACING A PUBLIC RIGHT-OF-WAY WITHOUT A PUBLIC ENTRANCE?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
WOULD THE SIGN BE BLOCKED BY EXISTING OR REQUIRED LANDSCAPING?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

PLEASE STATE THE VARIANCE REQUESTED AND THE CITY ORDINANCE INCLUDING THE SECTION NUMBERS TO BE VARIED:

10-20-8-A(1) Permitted Signs; Agricultural and Residential Zoning Districts: Freestanding identification or business signs.

Sign 1 - Increase maximum height from 5 feet to 7 feet; increase maximum sign area for a message board sign from 50% to 54%

Sign 2 - Increase the number of permitted monument signs from one (1) to two (2); Increase the maximum height from 5 feet to 5 feet 3 inches.

10-20-8-B Temporary Signs

Permit a banner sign as a temporary sign in the residential district according to the standards set in Section 10-20-9-B.

PLEASE STATE HOW THE PROPOSED VARIATION WILL NOT IMPAIR AN ADEQUATE SUPPLY OF LIGHT AND AIR TO ADJACENT PROPERTY, OR SUBSTANTIALLY INCREASE THE CONGESTION IN THE PUBLIC STREETS, OR INCREASE THE DANGER TO THE PUBLIC SAFETY, OR SUBSTANTIALLY DIMINISH OR IMPAIR PROPERTY VALUES WITHIN THE NEIGHBORHOOD:

Signs have been moved due to IDOT expansion and in conformance with their requirements. Parcel is large and signs will not impede any light or airflow.

PLEASE CONFIRM THE PROPOSED VARIATION IS CONSISTENT WITH THE OFFICIAL COMPREHENSIVE PLAN AND OTHER DEVELOPMENT STANDARDS AND POLICIES OF THE CITY.

This variance is consistent with the comprehensive plan and meets the standards for commercial signage within Yorkville.



United City of Yorkville
800 Game Farm Road
Yorkville, Illinois, 60560
Telephone: 630-553-4350
Fax: 630-553-7575
Website: www.yorkville.il.us

APPLICATION FOR SIGN VARIANCE

SIGN VARIANCE STANDARDS

PLEASE DESCRIBE THE COST TO THE PETITIONER OF COMPLYING WITH THE SIGN ORDINANCE REQUIREMENTS:

Signs had to be moved due to IDOT right of way and IDOT required their placement where they are now located. Combining or changing the signs was never the church's intention as we were content with their location and function.

IF THERE ARE ANY UNIQUE PHYSICAL CHARACTERISTICS OF THE PROPERTY, PLEASE DESCRIBE THEM BELOW:

No unique characteristics but IDOT needed the space where the original signs were located.

PLEASE STATE HOW THE GRANTING OF THE VARIATION WILL NOT BE DETRIMENTAL TO THE PUBLIC WELFARE OR INJURIOUS TO OTHER PROPERTY OR IMPROVEMENTS IN THE NEIGHBORHOOD IN WHICH THE PROPERTY IS LOCATED:

Signs are in similar style and size to existing signs. A variation will not change what has previously been a complying use.

PLEASE STATE HOW THE PARTICULAR SURROUNDINGS, SHAPE OR TOPOGRAPHICAL CONDITIONS OF THE SPECIFIC PROPERTY INVOLVED, A PARTICULAR HARDSHIP TO THE OWNER WOULD RESULT, AS DISTINGUISHED FROM A MERE INCONVENIENCE, IF THE STRICT LETTER OF REGULATIONS WAS CARRIED OUT:

The hardship we have faced is the taking by IDOT of our property for their use of Bridge Street widening. This has required us to move our signs against our will according to their specifications.



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800 Game Farm Road
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APPLICATION FOR SIGN VARIANCE

SIGN VARIANCE STANDARDS

PLEASE STATE HOW THE CONDITIONS UPON WHICH THE APPLICATION FOR A VARIATION IS BASED ARE UNIQUE TO THE PROPERTY FOR WHICH THE VARIATION IS SOUGHT AND ARE NOT APPLICABLE, GENERALLY, TO OTHER PROPERTY WITHIN THE SAME ZONING CLASSIFICATION:

This is a result of the IDOT taking.

PLEASE STATE HOW THE ALLEGED DIFFICULTY OR HARDSHIP IS CAUSED BY THIS TITLE AND HAS NOT BEEN CREATED BY ANY PERSON PRESENTLY HAVING AN INTEREST IN THE PROPERTY:

The signs were considered legally nonconforming by the code as they were installed prior to the current standards. The only reason for moving the signs was due to the IDOT taking. Also, we are a non residential use within the R-1 district and are not a dwelling.

AGREEMENT

I VERIFY THAT ALL THE INFORMATION IN THIS APPLICATION IS TRUE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONSULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT SCHEDULED COMMITTEE MEETING.

I UNDERSTAND ALL OF THE INFORMATION PRESENTED IN THIS DOCUMENT AND UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN FAULT AND I MUST THEREFORE FOLLOW THE REQUIREMENTS OUTLINED ABOVE.

PETITIONER SIGNATURE

3-29-2023

DATE

OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUE THE APPROPRIATE ENTITLEMENTS ON THE PROPERTY.

OWNER SIGNATURE

DATE

**THIS APPLICATION MUST BE
NOTARIZED PLEASE NOTARIZE HERE:**

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UNITED CITY OF YORKVILLE
YORKVILLE, ILLINOIS

PLANNING AND ZONING COMMISSION
PUBLIC HEARING

651 Prairie Pointe Drive
Yorkville, Illinois

Wednesday, July 12, 2023
7:00 p.m.

PRESENT:

Mr. Jeff Olson, Chairman,
Ms. Deborah Horaz,
Mr. Richard Vinyard.
Mr. Danny Williams,
Mr. Greg Millen.

ALSO PRESENT:

Ms. Krysti Barksdale-Noble, Community
Development Director;
Ms. Marlys Young, Minute Taker.

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I N D E X

WITNESS:

PAGE

BOB LLOYD

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1 (WHEREUPON, the following
2 proceedings were had in public
3 hearing:)

4 CHAIRMAN OLSON: There are two public
5 hearings scheduled for tonight's Planning and
6 Zoning Commission meeting; one of them, however,
7 we are not hearing tonight, the request for Chapa
8 d/b/a as My Bristol Dream Events, did not get
9 their information in in time for the meeting, so
10 we won't be actually hearing that tonight. If
11 anybody was waiting for that, take it easy, no
12 hard feelings.

13 What we are hearing tonight is PZC
14 2023-04 Trinity Church United Methodist, their
15 petition for sign variance.

16 The purpose tonight of this hearing
17 is to invite testimony from members of the public
18 regarding the proposed request that is being
19 considered before the Commission tonight.

20 Public testimony from persons
21 present who wish to speak may be for or may be
22 against the request or to ask questions of
23 petitioner regarding the request being heard.

24 Those persons wishing to testify

1 tonight are asked to speak clearly, one at a
2 time, and state your name, who you represent.
3 You are also asked to sign in at the podium if
4 you haven't done it already.

5 If you plan to speak during
6 tonight's public hearing tonight as a petitioner
7 or a member of the public, please stand now,
8 raise your right hand, and repeat after me.

9 (Witnesses sworn.)

10 CHAIRMAN OLSON: Thank you. You may be
11 seated. All right.

12 The order of tonight for how we do
13 this during public hearing will be as follows:
14 The petitioner will make the individual
15 presentation for what they are presenting, and
16 then those who wish to speak in favor of the
17 request will speak and then those who wish to
18 speak in opposition to the request may speak.

19 So with that out of the way, may I
20 have a motion, please, to open the public hearing
21 on petition PZC 2022-04 (sic), Trinity Church
22 United Methodist?

23 MR. VINYARD: So moved.

24 MR. WILLIAMS: Second.

1 CHAIRMAN OLSON: Roll call vote on the
2 motion, please.

3 MS. YOUNG: Yes. Millen.

4 MR. MILLEN: Yes.

5 MS. YOUNG: Olson.

6 CHAIRMAN OLSON: Yes.

7 MS. YOUNG: Vinyard.

8 MR. VINYARD: Yes.

9 MS. YOUNG: Williams.

10 MR. WILLIAMS: Yes.

11 MS. YOUNG: And Horaz.

12 MS. HORAZ: Yes.

13 CHAIRMAN OLSON: All right. The public
14 hearing up for discussion tonight is as follows:
15 Trinity Church United Methodist has filed an
16 application with the United City of Yorkville,
17 Kendall County, Illinois, requesting sign
18 variance approval to move their three existing
19 non-conforming on-site signs to new locations on
20 the property due to the future widening of Bridge
21 Street by the Illinois Department of
22 Transportation.

23 The property is at 2505 Boomer Lane
24 at the southeast corner of Cannonball Trail and

1 Route 47 in Yorkville, Illinois.

2 Is the petitioner for PZC 2024-04
3 (sic), Trinity Church, present and prepared to
4 make their presentation?

5 (No response.)

6 CHAIRMAN OLSON: Is this our Zoom
7 person?

8 MS. NOBLE: He's right there. Did you
9 want to go to the podium and just introduce
10 yourself?

11 BOB LLOYD,
12 having been first duly sworn, testified from the
13 podium as follows:

14 MR. LLOYD: Hi. I'm Bob Lloyd from
15 Trinity Methodist Church, chairman of the
16 trustees, and we never intended to move the
17 signs, but IDOT is widening Route 47 and we --
18 they acquired our land along there, the western
19 section of our property, so we had to move the
20 signs that were in their right-of-way, and they
21 came out and pinpointed where we had to put our
22 signs.

23 Is there any more questions or
24 anything you wanted to talk about? Okay. Thank

1 you.

2 MS. NOBLE: That's all.

3 CHAIRMAN OLSON: Thank you. All right.
4 Is there anyone who wishes to speak in favor of
5 the sign variance approval request?

6 (No response.)

7 CHAIRMAN OLSON: Is there anyone who
8 wishes to speak in opposition?

9 (No response.)

10 CHAIRMAN OLSON: All right. Seeing as
11 there are none, do we have any questions from the
12 Commissioners for the petitioner right now?

13 (No response.)

14 CHAIRMAN OLSON: Okay. Since all
15 testimony regarding this petition has been taken,
16 may I have a motion, please, then to close the
17 taking of testimony in the public hearing?

18 MR. VINYARD: So moved.

19 MR. WILLIAMS: Second.

20 CHAIRMAN OLSON: Roll call vote on the
21 motion, please, ma'am.

22 MS. YOUNG: Yes. Millen.

23 MR. MILLEN: Yes.

24 MS. YOUNG: Olson.

1 CHAIRMAN OLSON: Yes.

2 MS. YOUNG: Vinyard.

3 MR. VINYARD: Yes.

4 MS. YOUNG: Williams.

5 MR. WILLIAMS: Yes.

6 MS. YOUNG: Horaz.

7 MS. HORAZ: Yes.

8 CHAIRMAN OLSON: All right. The public
9 hearing portion of tonight's meeting is closed.

10 (Which were all the proceedings had
11 in the public hearing portion of
12 the meeting.)

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1 STATE OF ILLINOIS)
2) SS.
3 COUNTY OF LASALLE)

4 I, Christine M. Vitosh, a Certified Shorthand
5 Reporter, do hereby certify that I transcribed
6 the proceedings had at the public hearing and that
7 the foregoing, Pages 1 through 9 inclusive, is a
8 true, correct and complete computer-generated
9 transcript of the proceedings had at the time and
place aforesaid.

10 I further certify that my certificate annexed
11 hereto applies to the original transcript and
12 copies thereof, signed and certified under my
13 hand only. I assume no responsibility for the
14 accuracy of any reproduced copies not made under
15 my control or direction.

16 As certification thereof, I have hereunto set
17 my hand this 21st day of July, A.D., 2023.

18
19 Christine M Vitosh

20 Christine M. Vitosh, CSR
21 Illinois CSR No. 084-002883
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PZC - Public Hearing - July 12, 2023

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Vitosh Reporting Service

815.993.2832 cms.vitosh@gmail.com



Memorandum

To: Economic Development Committee
From: Krysti J. Barksdale-Noble, Community Development Director
CC: Bart Olson, City Administrator
Date: July 26, 2023
Subject: **PZC 2023-10 Energy Industrial Uses – Zoning Text Amendment**
Identifying “Data Center”, “Refrigerated Warehouse (Cold Storage)” and
“Battery Uses” as permitted uses in all Manufacturing Zoned Districts

Background & Request:

As the Economic Development Committee is aware, there is a trend in industrial users seeking expansive tracks of land near rail and interstate road transportation to construct hyper-scaled energy related buildings. Recently, Green Door Nexus, purchaser of the Lincoln Prairie property, has an interested party exploring the site for such uses as data centers, refrigerated warehouses (cold storage) and battery uses (such as electrical vehicle battery manufacturing, charging, and storage). They have approached the City about amending the Zoning Code to explicitly permit these uses within the manufacturing district. With the recent amendment to the City’s Comprehensive Plan in 2020 to designate all the properties along the northern Eldamain Road corridor for manufacturing, staff is seeking to improve upon and refine the Zoning Ordinance to address and regulate these emerging modern land uses while remaining competitive with the surrounding communities.

Therefore, staff is proposing to amend the text of the zoning ordinance to define and identify “Data Centers”, “Refrigerated Warehouse (Cold Storage)”, and “Battery Storage Uses” as permitted uses in the M-1 Limited Manufacturing and M-2 General Manufacturing Districts. Additionally, Table 10.16.03 in Chapter 16 of the Zoning Ordinance will be amended to regulate the minimum number of off-street parking spaces needed for these type of Energy Industrial Uses”. These proposed changes are planned to be incorporated into the draft of the Unified Development Ordinance (UDO), Green Door Nexus has requested that the text amendment run separately and parallel to the UDO review to safeguard from any potential delays in the approval process of the UDO.

Research:

The following is independent research staff conducted related to each of the proposed uses and the zoning implications and impacts to be considered.

Data Centers

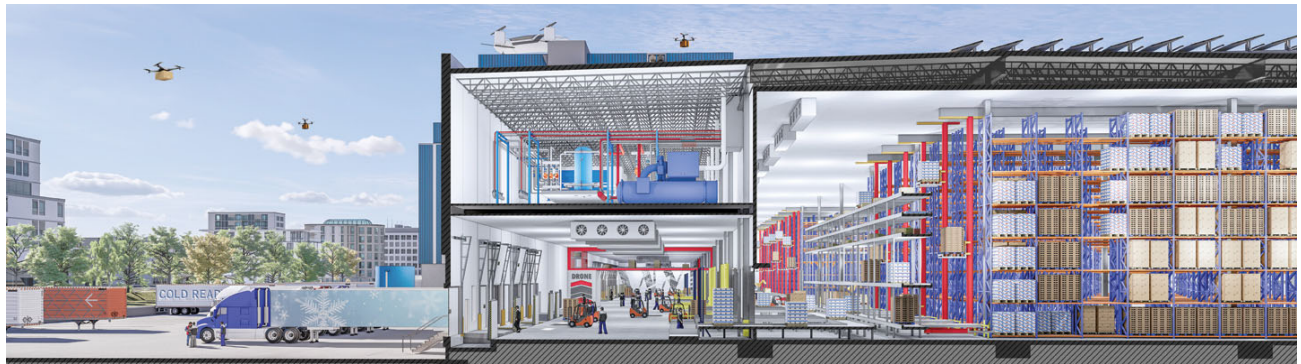
Data Centers are mega-sized structures housing networked computer system servers for data storage, processing, and distribution. According to the June 2022 edition of *Zoning Practice* published by the American Planning Association, “[f]rom the exterior, data centers and crypto-currency mining facilities may be physically indistinguishable from many commercial or light industrial uses. However, the operational characteristics of these facilities are



typically quite distinct... [and] from a planning perspective, the most noteworthy characteristics relate to their electricity and water use, noise production, enhanced security needs, and low employment densities.”

Refrigerated Warehouses (Cold Storage)

Refrigerated Warehouses, commonly known as Cold Storage, are facilities that primarily store highly perishable items such as (food, candles, film/artwork, plants, cosmetics, pharmaceuticals, and certain textiles). Cold Storage, while not a typical industrial use by itself, since no processing occurs, is generally used to prolong, and preserve the shelf life of a food or product, without compromising its nutritive or chemical properties. The most common need for cold storage warehousing is from third-party logistic providers who will store and ship goods on behalf of the producer.



Battery Storage Uses

According to the U.S. Department of Energy, energy storage systems, usually batteries, are essential for all electric vehicles, plug-in hybrid electric vehicles (PHEVs), and hybrid electric vehicles (HEVs). The types of batteries used in these energy storage systems are lithium-ion (cellphones, laptops, etc.); nickel-metal hybrid (computer and medical equipment); lead-acid and ultracapacitors (electric vehicles). As electronic vehicles (EV) become increasingly common, the need for battery manufacturing, charging, recycling, and storage uses will expand.



Proposed Text Amendment:

Staff is recommending the following revisions to the Zoning Ordinance regarding Data Center, Refrigerated Warehouse (Cold Storage), and Battery Uses:

1. Amend the Permitted and Special Uses Table in Section 10-06-04 to identify “***Data Center***”, “***Refrigerated Warehouse (Cold Storage)***”, and “***Battery Uses***” as permitted uses in the M-1 Limited Manufacturing and M-2 General Manufacturing districts.
2. Amend Section 10-2-3 of the Zoning Ordinance to include the following definitions:

Data Center: “A facility comprised of networked computers, storage systems, and computing infrastructure which organizations use to assemble, process, store and disseminate data. Cryptocurrency centers, which use networked computers, storage systems, and computing infrastructure to manage the flow of digital or virtual currencies, shall be included in the definition.”

Refrigerated Warehouse (Cold Storage): “A facility which is artificially or mechanically cooled in order to maintain the integrity and quality of perishable goods.”

Battery Storage Uses: “A use that enables battery manufacturing, charging, recycling, warehousing, storage, and related uses. This may also include uses that derive energy from renewable sources, such as wind and solar power, to be collected, stored, and then released for later use to an electric grid, power plant or private user.”

3. Amend the Minimum Off-Street Parking Requirements Table 10.16.03 in Chapter 16 of the Zoning Ordinance to identify “Energy Industrial Uses - Data Center, Refrigerated Storage (Cold Storage), and Battery Storage Uses”. Further, staff recommends the Data Center and Battery Storage Uses shall have a minimum parking requirement of twenty (20) spaces for buildings over 70,000 square feet in area based upon the uniqueness of the operational features of these uses which typically do not generate highly staffed employees on site. Refrigerated Storage (Cold Storage) will meet the parking standards for general industrial uses.

Staff Recommendation

Staff recommends **approval** of the proposed text amendment in order for the current City Code to address current development trends and be prepared to meet the needs of future developments.

Proposed Motion for Amendment:

In consideration of testimony presented during a Public Hearing on August 9, 2023 and discussions conducted at that meeting, the Planning and Zoning Commission recommends approval to the City Council a request for a text amendment to Chapter 6: Permitted and Special Uses in the Zoning Ordinance to identify “data center”, “refrigerated warehouse (cold storage)”, and “battery uses” as permitted uses within the M-1 Limited Manufacturing and M-2 General Manufacturing districts and an amendment to Table 10.16.03 in Chapter 16: Off-Street Parking and Loading in the Zoning Ordinance related to the uses is proposed, as recommended in a staff memo dated July 26, 2023, and further subject to {insert any additional conditions of the Planning and Zoning Commission}...

Attachments:

1. Public Hearing Notice
2. Section 10-2-3 Definitions (redline)
3. Section 10-6-0 Uses Tables (redline)

4. Table 10.16.03 Minimum Off-Street Parking Requirements (redline)
5. *APA Zoning Practice*, Practice Data Centers, published June 2022
6. Logistics Brew by Stockarea, “What Is Cold Storage & How Does Cold Storage Work?”
7. Grid-Scale Battery Storage (www.greeningthegrid.org)

PUBLIC NOTICE
NOTICE OF PUBLIC HEARING
BEFORE
THE UNITED CITY OF YORKVILLE
PLANNING AND ZONING COMMISSION
PZC 2023-10

NOTICE IS HEREWITH GIVEN THAT the United City of Yorkville, Kendall County, Illinois, petitioner, is proposing a text amendment to Chapter 6: Permitted and Special Uses in the Zoning Ordinance to identify “data center”, “refrigerated warehouse (cold storage)”, and “battery uses” as permitted uses within the M-1 Limited Manufacturing and M-2 General Manufacturing districts. This text amendment will provide definitions for the establishment and operation of such uses in these zoning districts. Additionally, an amendment to Table 10.16.03 in Chapter 16: Off-Street Parking and Loading in the Zoning Ordinance related to the uses is proposed.

NOTICE IS HEREWITH GIVEN THAT the Planning and Zoning Commission for the United City of Yorkville will conduct a public hearing on said application on Wednesday, August 9, 2023 at 7 p.m. at the Yorkville City Hall Council Chambers, located at 651 Prairie Pointe Drive, Yorkville, Illinois 60560.

The public hearing may be continued from time to time to dates certain without further notice being published.

All interested parties are invited to attend the public hearing and will be given an opportunity to be heard. Any written comments should be addressed to the United City of Yorkville Community Development Department, City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois, and will be accepted up to the date of the public hearing.

By order of the Corporate Authorities of the United City of Yorkville, Kendall County, Illinois.

JORI BEHLAND
City Clerk

Auction house: A structure, area, or areas within a building used for the public sale of goods, wares, merchandise, or equipment to the highest bidder.

Automobile rental: Leasing or renting of automobiles, motorcycles and light trucks and vans, including incidental parking and servicing of vehicles for rent or lease. This definition excludes commercial truck and trailer rental.

Automobile repair: Engine rebuilding or major reconditioning of worn or damaged motor vehicles or trailers; collision service, including body, frame or fender straightening or repair and painting of vehicles including incidental repairs, replacement of parts, and motor service to automobiles. Automobile repair excludes repair to semi-trucks as defined in this section.

Bakery, retail: An establishment primarily engaged in the retail sale of baked products. The products may be prepared either on- or off-site.

Bakery, wholesale: A bakery in which there is permitted the production and/or wholesaling of baked goods, excluding retail bakery.

Bank: A building for the custody, loan, or exchange of money, for the extension of credit and for facilitating the transmission of funds. This definition includes credit unions, savings and loan facilities, payday loans, personal loan agencies.

Basement: That portion of a building that is partly or completely below grade.

Battery Storage Uses: A use that enables battery manufacturing, charging, recycling, warehousing, storage, and related uses. This may also include uses that derive energy from renewable sources, such as wind and solar power, to be collected, stored, and then released for later use to an electric grid, power plant or private user.

Bed and breakfast inn (B&B): A private, owner/operator occupied residence with guestrooms, providing overnight accommodations and a morning meal for compensation to transients/travelers. A bed and breakfast inn is operated primarily as a business.

Billiard parlor: A business establishment for a principal use as a billiard facility.

Block: A tract of land bounded by streets or, in lieu of a street or streets, by public parks, cemeteries, railroad rights-of-way, bulkhead lines or shorelines of waterways or corporate boundary lines of municipalities.

Boat sales and rental: A marine retail sales and service use in which boats are rented or sold.

Boat storage: A facility where boats are stored including indoor and outdoor. Outdoor facilities shall be enclosed by an opaque fence or wall a minimum six feet (6') in height.

Bowling alley: A business establishment with a principal use for the sport of tenpin bowling which may include incidental food services.

Brewery: An establishment that engages in the manufacture of beer as such terms are defined in the Liquor Control Act of 1934, as amended, and has obtained a liquor license from the City.

Brewpub: A restaurant-brewery that brews beer primarily for sale in the restaurant and/or bar and is dispensed directly from the brewery's storage tanks. Total production capacity shall not exceed one hundred fifty-five thousand (155,000) gallons per calendar year.

Buffer: A strip of land, including landscaping, berms, walls, and fences, that is located between land uses of different character and is intended to physically and visually separate one use area from another.

Buildable area: The space remaining on a building lot after the minimum yard requirements of this title have been complied with.

Building: Any structure with substantial walls and roof securely affixed to the land and entirely separated on all sides from any other structure by space or by walls in which there are not communicating doors, windows or

Datum point: Any reference point of known or assumed coordinates from which calculation or measurements may be taken.

Data Center: A facility comprised of networked computers, storage systems, and computing infrastructure which organizations use to assemble, process, store and disseminate data. Cryptocurrency centers, which use networked computers, storage systems, and computing infrastructure to manage the flow of digital or virtual currencies, shall be included in the definition.

Daycare facility: Any childcare facility licensed by the State Department of Children and Family Services (DCFS) which regularly provides daycare for less than twenty-four (24) hours per day for more than three (3) children under the age of twelve (12) in a facility other than a family home, 225 ILCS 10/2.09.

Daycare facility, adult: Any facility, public or private, regulated by the State of Illinois in accordance with the Older Adult Services Act which provides care for less than twenty-four (24) hours per day for older adults (seniors) such as nutritious meals, planned program of activities, and social and health related services.

Daycare facility, part day: Any facility licensed by the State Department of Children and Family Services (DCFS) and which is conducted by a church, religious organization or social service agency in which individual children are provided care, on an intermittent basis, for up to ten (10) hours per seven (7) day week. Any facility which provides intermittent care for up to ten (10) hours per seven (7) day week shall not provide such care for more than eight (8) hours in any given day during the seven (7) day week. Any facility which provides intermittent care for up to ten (10) hours per seven (7) day week shall provide at least one (1) caregiver per twenty (20) children, 225 ILCS 10/2.10.

Daycare home, group: Any in home childcare service licensed by the State Department of Children and Family Services (DCFS) which regularly provides care for less than twenty-four (24) hours per day for more than three (3) and up to a maximum of sixteen (16) children under the age of twelve (12) in a family home. The number of children allowed includes the family's natural or adopted children and all other persons under the age of twelve (12), 225 ILCS 10/2.20.

Daycare, in home: Any in home childcare service licensed by the State Department of Children and Family Services (DCFS) which regularly provides care for less than twenty-four (24) hours per day for more than three (3) and up to a maximum of twelve (12) children under the age of twelve (12) in a family home. The term does not include facilities which receive only children from a single household, 225 ILCS 10/2.09.

Decibel (dB): A unit of measurement of the intensity (loudness) of sound. Sound level meters which are employed to measure the intensity of sound are calibrated in "decibels".

Density, gross: A ratio of the total number of dwelling units on a site, divided by the total acreage of the site, to include streets, schools, parks, etc., expressed as dwelling units per acre.

Density, net: A ratio of the total number of dwelling units on a site, divided by the number of acres used exclusively for a residential type acreage not to include schools, parks, streets, etc., expressed as dwelling units per acre.

Department store: A retail business which is conducted under a single owner's name wherein a variety of unrelated merchandise and services are housed enclosed and are exhibited and sold directly to the consumer for whom the goods and services are furnished.

Displacement (Earth): The amplitude or intensity of an earthborn vibration measured in inches. The displacement or amplitude is one-half (½) the total earth movement.

District: A section or part of the unincorporated portion of the City for which the use regulations are uniform.

Drive-through service establishment: A business or establishment which provides all or some of its services through a building opening or window to its patrons who remain in their vehicles.

Recreational camp private: An establishment consisting of permanent buildings used periodically by an association of persons where seasonal accommodations for recreational purposes are provided only to the members of such association and not to anyone who may apply.

Recreational vehicle: Any type of vehicle used primarily for recreational pleasure or bearing recreational vehicle registration license plates. Examples include, but are not limited to, motor homes, boats, snowmobiles, and all-terrain vehicles.

Refrigerated Warehouse (Cold Storage): "A facility which is artificially or mechanically cooled in order to maintain the integrity and quality of perishable goods."

Refuse: All waste products resulting from human habitation, except sewage.

Religious institution, large: A building, having four hundred (400) or more seats or larger than eight thousand (8,000) square feet of total gross floor area, wherein persons regularly assemble for religious worship and which is maintained and controlled by a religious body organized to sustain public worship, together with all accessory buildings and uses customarily associated with such primary purpose. Includes church, synagogue, temple, mosque or other such place for worship and religious activities.

Religious institution, small: A building, having four hundred (400) or fewer seats or no larger than eight thousand (8,000) square feet of total gross floor area, wherein persons regularly assemble for religious worship and which is maintained and controlled by a religious body organized to sustain public worship, together with all accessory buildings and uses customarily associated with such primary purpose. Includes church, synagogue, temple, mosque or other such place for worship and religious activities.

Resale dealer: Any individual, firm, corporation or partnership engaged in the business of operating a business for profit which buys, sells, possesses on consignment for sale or trades jewelry, stamps, audio-video equipment or any precious metals which may have been previously owned by a consumer; or which derives more than thirty-five percent (35%) of its gross receipts from the sale, consignment for sale, pledge or trade of any goods, wares or merchandise which have previously been owned by a consumer, including, but not limited to, furniture, appliances, clothing, automobile accessories, books or metals, whether in bulk or manufactured state.

- A. The term "resale dealer" shall include, but not be limited to, businesses commonly known as swapshop operators, stamp dealers, coin dealers and jewelers that purchase and resell items from persons other than dealers and suppliers and engage in disassembling, melting and otherwise altering jewelry. The term "resale dealer" shall not include pawnbrokers.
- B. The fact that any business does any of the following acts shall be prima facie proof that such business is a resale dealer:
 - 1. Advertise in any fashion that it buys or sells used items. Such advertisements shall include, but not be limited to, media advertisements, websites, telephone listings, and signs whether in the exterior or interior of business.
 - 2. Devotes a significant segment or section of the business premises to the purchase or sale of used items.

Research laboratory: A building or group of buildings in which are located facilities for scientific research, investigation, testing or experimentation, but not facilities for the manufacture or sale of products, except as incidental to the main purpose of the laboratory.

Residence: The act or condition of residing or dwelling in a place.

Rest home: See definition of *Nursing home*.

Restaurant: Any land, building or part thereof where meals are provided for compensation, including a cafe, cafeteria, coffee shop, lunchroom, drive-in stand, tearoom and dining room, and including the serving of alcoholic beverages when served with and incidental to the serving of meals, where permitted.

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2. See section 10-6-1, "Special Conditions", of this chapter.

(Ord. 2014-73, 11-25-2014; amd. Ord. 2015-32, 6-9-2015; Ord. 2015-33, 6-9-2015; Ord. 2016-35, 4-26-2016; Ord. 2017-02, 1-24-2017; Ord. 2017-32, 5-23-2017; Ord. 2019-08, 1-29-2019; Ord. 2019-13, 2-26-2019; Ord. 2022-22, § 3, 6-14-2022)

**TABLE 10.06.04
MANUFACTURING USES**

Use Category	Zoning Districts															
	Ag	Open Space		Residential						Business					Manufacturing	
	A-1	OS-1	OS-2	E-1	R-1	R-2	R-2D	R-3	R-4	O	B-1	B-2	B-3	B-4	M-1	M-2
Any assembly, production, manufacturing, testing, repairing or processing that can and does operate in compliance with performance standards ¹	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Aggregate materials extraction, processing and site reclamation (stone and gravel quarries)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S
Bakery (wholesale - retail component special use)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Battery Uses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Blacksmith or welding shop	S	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Data Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Manufacturer of firearms and ammunition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P

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Medical cannabis cultivation center and dispensaries ¹	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S
<u>Refrigerated Warehouse (Cold Storage)</u>	=	=	=	=	=	=	=	=	=	=	=	=	=	=	P	P
Research laboratories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Wholesaling and warehousing - local cartage express facilities - not including motor freight terminal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P

P = Permitted use	S = Special use	- = Not permitted use
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Notes:

1. See section 10-6-1, "Special Conditions", of this chapter.

**TABLE 10.06.05
TRANSPORTATION USES**

Use Category	Zoning Districts															
	Ag	Open Space		Residential						Business					Manufacturing	
	A-1	OS-1	OS-2	E-1	R-1	R-2	R-2D	R-3	R-4	O	B-1	B-2	B-3	B-4	M-1	M-2
Airport	S	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S
Bus or truck garage or streetcar house	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Bus or truck storage yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Marina	-	-	S	-	-	-	-	-	-	-	-	S	S	S	S	S
Motor freight terminals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	S

7. **Lighting:** Any lighting used to illuminate off-street parking areas shall be directed away from residential properties and public highways in such a way as not to create a nuisance. The City of Yorkville promotes the "dark sky" concept. Lighting fixtures should be full cutoff, and the use of wall packs on buildings should be minimized.

The average foot-candle intensity should be two to two and one-half (2.0—2.5) foot-candles. The average to minimum light intensity ratio should be no more than six to one (6:1), and the maximum to minimum light intensity ratio should be no more than twenty to one (20:1). The lighting intensity at the property line shall be zero foot-candles.

8. **Signs:** Directional and regulatory signs/markings only are permitted on parking areas.
9. **Repair and service:** No motor vehicle repair work of any kind shall be permitted in conjunction with accessory off-street parking facilities provided in a residence district.

The sale of gasoline and motor oil in conjunction with accessory off-street parking facilities is not permitted in any residence district.

- E. **Location:** Off-street parking spaces may be located in any yard defined by this title.

The location of off-street parking spaces in relation to the use served shall be as prescribed hereinafter. All distances specified shall be walking distances between such parking spaces and a main entrance to the use served.

1. **Residence district:** Parking spaces accessory to dwellings shall be located on the same zoning lot as the use served. Spaces accessory to uses other than dwellings may be located on a lot adjacent to, or directly across a street or alley from the lot occupied by the use served, but in no case at a distance in excess of three hundred feet (300') from such use.
2. **Business and manufacturing districts:** All required parking spaces shall be within one thousand feet (1,000') of the use served, except for spaces accessory to dwelling units (except those located in a transient hotel) which shall be within three hundred feet (300') of the use served. However, no parking spaces accessory to a use in a business or manufacturing district shall be located in a residence district unless authorized by the Board of Appeals in accordance with this title.

- F. **Number of spaces:** The minimum requirements for the number of spaces needed for a certain use is shown in Table 10.16.03 of this section. At the time of permit review, the Zoning Administrator will assign the development a use category. If the category does not fit one of the descriptions in Table 10.16.03 of this section, then the Zoning Administrator has the right to determine the amount of off-street parking needed for the building, structure, or use.

**TABLE 10.16.03
MINIMUM OFF-STREET PARKING REQUIREMENTS**

Use	Minimum Spaces Required
Residential uses:	
Single-family dwelling unit	2 per dwelling unit
Multi-family dwelling unit:	
Dwelling units with 1,000 square feet or less	2 per dwelling unit
Dwelling units with 1,001 square feet or more	2 per dwelling unit
Accessory dwelling unit	1 per dwelling unit
Elderly housing	0.5 per dwelling unit

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Lodging places:	
Bed and breakfast	1 per lodging unit plus 1 space for permanent residence
Motel, hotel, boarding house	1 per lodging unit
Commercial uses:	
Bulk retail: building materials, appliances, home furnishings, and similar large items	1 per 1,000 square feet of floor area
Commercial services	3 per 1,000 square feet of floor area
Eating and drinking establishments	3 per 1,000 square feet of floor area
Gas stations	No minimum
General office (including banks)	2 per 1,000 square feet of floor area
General retail: grocery stores, convenience stores, specialty retail and shops	3 per 1,000 square feet of floor area
Indoor recreation	2 per 1,000 square feet of floor area
Mortuary or funeral home	1 per 5 seats
Personal services	3 per 1,000 square feet of floor area
Theater, auditorium, or stadium	1 per 4 seats
Vehicle repair	2 per 1,000 square feet of floor area
<i>Energy Industrial Uses:</i>	
<i>Battery Storage</i>	
Less than 70,000 square feet	Minimum 20 parking spaces
More than 70,001 square feet	0.3 per 1,000 square feet of floor area
<i>Data Center</i>	
Less than 70,000 square feet	Minimum 20 parking spaces
More than 70,001 square feet	0.3 per 1,000 square feet of floor area
<i>Refrigerated Warehouse (Cold Storage)</i>	
Less than 150,000 square feet	0.5 per 1,000 square feet of floor area
More than 150,001 square feet	0.3 per 1,000 square feet of floor area
<i>Industrial uses:</i>	
Miniwarehouse, self-service storage	1 per 45 storage units plus 1 per employee of the largest shift
<i>Storage, warehouse, wholesale establishment:</i>	
Less than 150,000 square feet	0.5 per 1,000 square feet of floor area
More than 150,001 square feet	0.3 per 1,000 square feet of floor area
<i>Community services, institutional uses and public uses:</i>	
Elementary and junior high school	1 per classroom
High school	0.25 per student plus 1 per staff
Hospitals, sanatoriums, and other institutional uses	1 per 2 beds, plus 1 per 2 employees and 1 per doctor

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PRACTICE DATA CENTERS



Zoning for Data Centers and Cryptocurrency Mining

By David Morley, AICP

Data centers are the physical facilities where the internet lives. Fundamentally, they consist of networked computer systems used for data storage and processing, along with supporting equipment, such as batteries, back-up power generators, and cooling devices. Modern data centers are the direct descendants of the, so-called, *telecom hotels* that began springing up in downtowns in the late 1990s to accommodate the rapid expansion of the commercial internet and, before that, of automated telephone exchange facilities that made it possible to place land-line telephone calls across a city, the nation, or the world (Evans-Cowley 2002).

An emerging segment of the data center market consists of facilities dedicated in whole or part to “mining” cryptocurrency. A cryptocurrency is a decentralized digital currency that uses encrypted data strings to denote individual units, or coins, and a peer-to-peer database known as a blockchain to maintain a secure ledger of transactions. Several of the most popular cryptocurrencies, most notably Bitcoin, require extremely complex computations to verify each transaction and add a record, or block, for that transaction to the blockchain. Whoever verifies a transaction first receives a new cryptocurrency coin as a reward. While, theoretically, anyone with a computer server can “mine” new coins by helping to verify these transactions, large-scale cryptocurrency mining requires a massive amount of computing power.

This article explores the reasons why cities, towns, and counties may wish to define and regulate data centers and cryptocurrency mining as distinct uses in their zoning codes and provides a summary of contemporary approaches. It begins with a brief overview of the factors that drive demand for data centers or cryptocurrency mines in particular locations before examining the key planning issues that may merit special attention through zoning and posing a series of questions to guide code drafting.



Chad Davis / Flickr (CC BY 2.0)

➡ A hyperscale Google data center in Council Bluffs, Iowa.

The article concludes with short profiles of local zoning approaches that may serve as models for others.

DEMAND DRIVERS

Industry analysts predict sustained growth in data center construction in the coming years (Dunbar and Bonar 2021). This includes demand for larger and larger “hyperscale” data centers as well as more widely distributed “edge” data centers (Sowry et al. 2018). Data center developers (or operators) are attracted to sites with low latency to end users and dependable and affordable electricity.

While data centers have historically been clustered around major internet access points, information technology companies, and government employment centers, the proliferation of cloud computing and the internet of things is pushing demand out to network edges. This means more data centers in smaller metropolitan and nonmetropolitan areas.

Big technology companies are likely to continue looking for sites that can accommodate new, large single-story structures. But

operators that specialize in leasing space in the same facility to multiple companies (i.e., collocated data centers) may be more open to infill sites and existing structures, especially if those sites have access to fiber optic infrastructure.

Data centers use a lot of electricity (see below) to power processing and storage hardware and to keep that hardware cool. The amount of electricity (and often water) needed for cooling is higher in warm, humid climates than in cool, dry areas. Consequently, holding other factors equal, developers favor locations with low electricity rates and cooler climates. Furthermore, because these facilities operate continuously, developers are also looking for sites that are less vulnerable to natural hazards.

Cryptocurrency miners are also looking for locations with cheap electricity and low hazard risk; however, dedicated mining facilities are not concerned about proximity to customers and are less likely to invest in backup power. While there seems to be a widespread consensus that data centers are essential to global communications and the global economy, cryptocurrency miners

have a more limited “social license” to operate. Widespread concerns about the energy use of mines and the limited utility of the coins they produce has led some countries, including China, to ban Bitcoin mining. Consequently, many cryptocurrency miners are relocating to the U.S. (Obando 2022).

PLANNING ISSUES

From the exterior, data centers and cryptocurrency mining facilities may be physically indistinguishable from many commercial or light industrial uses. However, the operational characteristics of these facilities are typically quite distinct from those of surrounding land uses. From a planning perspective, the most noteworthy characteristics relate to their electricity and water use, noise production, enhanced safety and security needs, and low employment densities.

They Use a Lot of Electricity (and Water)

In 2020, data centers used between 200 and 250 terawatt hours (TWh) of electricity, accounting for approximately one percent of global consumption (IEA 2021). While the total consumption has grown steadily along with global power demand, this ratio has held relatively constant over the past 20 years as efficiency improvements have proportionally offset increased demand from data centers. However, this pattern is unlikely to hold as growth in streaming video, online gaming, cloud computing, machine learning, virtual reality, and the internet of things begins to outstrip efficiency improvements.

The figures above exclude cryptocurrency mining. Bitcoin miners alone used an estimated additional 60 to 70 TWh in 2020. According to Cambridge University, if Bitcoin was country, it’s annual electricity consumption would be slightly higher than that of Poland or Malaysia (2022).

Data center and cryptocurrency mining equipment also generates a tremendous amount of waste heat, which must be dissipated by fans or absorbed by a cooling medium to avoid hardware damage and ensure efficient operations. Many data centers and cryptocurrency mines use water as a cooling medium. Water is also necessary for most forms of electricity production. In aggregate, a medium-sized data center typically uses more water each year than two 18-hole golf courses (Mytton 2021).

They Can Be Noisy

Inside a data center or cryptocurrency mine server room, the noise can make it difficult to carry on a conversation at a normal volume. While most data centers and large cryptocurrency mines incorporate construction and soundproofing techniques that ensure this server noise isn’t audible outside of the building, air conditioner compressors mounted on the roof or on ground near these facilities can generate noise that carries across property lines.

In some contexts, vegetation or other structures may rapidly attenuate this sound. In others, the sound may travel over long distances. Obviously, the degree to which these sounds constitute nuisance “noise” depends on surrounding land uses and ambient noise levels. The problem is typically most acute when data centers or mines are near residences.

They Have Enhanced Safety and Security Needs

Data centers typically aim to run continuously, and any outage or downtime can threaten business operations. Furthermore, data centers house expensive, highly specialized hardware, and many handle sensitive data. Consequently, most data centers incorporate enhanced safety and security features, such as gated access points, fencing, or bright lighting, to prevent unauthorized access and to minimize the likelihood of disruption.

Cryptocurrency mines have similar safety and security needs, with two key distinctions. First, miners want to maintain network access, but the stakes are lower

than for data centers because an outage wouldn’t negatively affect any other services or users. Second, cryptocurrency mines generally aren’t receiving any clients and have little incentive to draw attention to themselves with fencing or lighting.

They Have a Low Employment Density

Data centers typically have far fewer workers per square foot than professional offices or light industrial facilities (Tarczynska 2016). And cryptocurrency mines generally have even lower employment densities than data centers. For some communities, data centers (and potentially cryptocurrency mines) are highly desirable from an economic development perspective because they often generate a large property tax surplus that can subsidize more service-intensive land uses, such as single-family homes. Others, however, are reluctant to devote too much commercial or light industrial space to uses that generate few jobs.

ZONING CONSIDERATIONS

Any community interested in regulating data centers and cryptocurrency mining through zoning should consider three key questions:

1. Do these uses need new use definitions?
2. Where should these uses be permitted?
3. Do these uses need special development or performance standards?

Do They Need New Use Definitions?

New land uses don’t necessarily require new use definitions in the local zoning code. It depends, in part, on whether the use fits



➡ The roof of eBay’s Topaz data center in South Jordan, Utah.

neatly under a broader use category or is substantially like another defined use. And it depends on whether treating the new use the same as this use category or other similar use would be likely to generate negative effects on nearby properties or the community as a whole.

Many communities have defined data centers (or some closely analogous term) as a distinct use in their zoning codes. These definitions typically reference the general function of the facility and the degree to which it is occupied by computer systems and related equipment. For example, Anne Arundel County, Maryland, defines *data storage center* as “a facility used primarily for the storage, management, processing, and transmission of digital data, which houses computer or network equipment, systems, servers, appliances, and other associated components related to digital data storage and operations” (§18-1-101.(44)).

Comparatively fewer communities have defined cryptocurrency mining as a distinct use. Many of these definitions focus on the specialized purpose of the facility, often with references to other newly defined terms, such as *high density load* or *server farm*, that clarify its distinct characteristics. For example, Moses Lake, Washington, specifies that *cryptocurrency mining* often uses more than 250 kilowatt-hours per square foot each year (§18.03.040).

Where Should They Be Permitted?

Communities that choose to regulate data centers or cryptocurrency mines as distinct uses may permit these uses either by right or with a discretionary use permit (i.e., conditional, special, or special exception use permits) in one or more existing base or overlay zoning districts. Alternatively, they may elect to establish a new special-purpose base or overlay zoning district for either use.

Many communities permit data centers and cryptocurrency mines either by right or with a discretionary use permit in commercial and industrial districts. While data centers and mines can fit in a wide range of existing commercial or industrial buildings, purpose-built facilities are often single-story structures with large floorplates.

Given that they generally have few employees and visitors, these uses may not be appropriate in ground-floor street-frontage spaces in pedestrian-oriented

EXAMPLES OF DEFINED USES

Jurisdiction	Defined Uses
Alpharetta, GA	Data center (§1.4.2)
Anne Arundel County, MD	Data storage center (§18-1-101.(44))
Fairfax County, VA	Data center (§9103)
Frederick County, MD	Critical digital infrastructure facility (§1-19-11.100)
Moses Lake, WA	Cryptocurrency mining; Data center/server farm/cluster (§18.03.040)
Pitt County, NC	Data processing facility (large scale) (§15)
Plattsburgh, NY	Commercial cryptocurrency mining; Server farm; High density load service (LL 6-2018)
Prince George’s County, MD	Qualified data center (§27-2500)
Prince William County, VA	Data center (§32-100)
Somerville, MA	Data center (§9.8.b)
Vernal, UT	Data center (§16.04.173)
Wenatchee, WA	Cryptocurrency mining; Data center (§10.08)

commercial areas. Wenatchee, Washington, addresses this issue by permitting data centers and cryptocurrency mines by right in multiple pedestrian-oriented commercial districts, with a simple stipulation that they cannot occupy “grade level commercial street frontage” (§10.10.020).

A new special-purpose zoning district can help steer data centers or cryptocurrency mines toward corridors or other subareas that have suitable utility infrastructure. When adopted as floating zones, special districts can also provide an extra layer of review for large projects that may cover dozens or hundreds of acres.

Prince William County, Virginia, added a Data Center Opportunity Zone Overlay District to its zoning code in 2016 (§32-509). The county has mapped this overlay to more than 70 percent of its industrially zoned land. The overlay permits data centers and includes design standards for these facilities; however, it does not otherwise modify the existing use permissions for underlying districts.

Do They Need Special Development or Performance Standards?

Communities that decide to regulate data centers or cryptocurrency mines as distinct uses may choose to adopt use-specific standards that modify or supplement other relevant universal or district-specific development or performance standards. This approach can help communities target standards to the distinct features of these uses

to address specific community concerns.

Use-specific standards can help minimize reliance on discretionary approvals and improve the consistency of local decisions. Without these standards, local officials may be more likely to require all data centers and cryptocurrency mines to obtain a discretionary use permit, and they may be more likely to adopt wildly varying conditions of approval for substantially similar proposals.

Communities that have adopted use-specific standards for data centers and cryptocurrency mines often establish building design and buffering or screening requirements to minimize the visibility or improve the appearance of these facilities from public streets or nearby properties. Other common standards address environmental performance, including noise and light pollution, and evidence of electric utility approval.

POTENTIAL MODEL APPROACHES

It would be difficult to find a community with more experience with data centers than Loudon County, Virginia. And the county’s approach to zoning for data centers serves as a potential model for other communities with suitable sites and sufficient infrastructure to accommodate data center development. In contrast, Missoula County, Montana, was one of the first local jurisdictions to craft zoning regulations for cryptocurrency mining operations. And its emphasis on mitigating the potential climate impacts represents a different type of potential model.

Loudon County, Virginia

Northern Virginia's Data Center Alley, primarily clustered around Routes 7 and 267 in Loudon and Fairfax Counties is the largest data center market in the world (Fray and Koutsaris 2022). Its combined power consumption capacity is more than 1.6 gigawatts (GW), nearly twice as much as the next largest market. And within Data Center Alley, Loudon County has the highest concentration of data centers. As of October 2021, data centers occupied more than 25 million square feet, with another 4 million square feet in development (LCDED 2022).

Several important factors have driven demand for data center development in Loudon County. It is home to the Equinix internet exchange, one of the largest internet access points in the world and a successor to Metropolitan Area Exchange, East, the first

U.S. exchange. The county has abundant (and redundant) fiber optic infrastructure, relatively cheap power, and sufficient water. Additionally, it has a high concentration of skilled technology workers and businesses that support the data center industry.

By the year 2000, there was already an emerging data center cluster in Loudon County. However, the county did not define and regulate data centers as a distinct use in its zoning code until 2014 (ZOAM 2013-0003). According to Acting Planning & Zoning Director James David, prior to this, the county defined data centers as commercial offices.

The latest version of the county's zoning ordinance permits data centers by right in Planned Office Park, Research and Development Park, Industrial Park, and General Industrial districts and as a special exception use in Commercial Light Industry

districts. New data centers (without vested rights) must comply with a set of use-specific standards governing façade design, screening of mechanical equipment, exterior lighting, pedestrian and bicycle facilities, and landscaping, buffering, and screening (§5-664).

According to David, these standards are intended to improve the aesthetics of data centers, minimize visibility from nearby residential areas, and ensure continuous sidewalk and trail networks. Overall, they represent a light-touch approach that has, so far, worked well for a county with enormous demand for data centers and relatively modest competition for space from other commercial and industrial uses.

However, in February 2022, county officials directed staff to research regulatory options to prevent new data centers in the

EXAMPLES OF USE-SPECIFIC STANDARDS FOR DATA CENTERS AND CRYPTOCURRENCY MINING

Jurisdiction	Use-Specific Standards
Alpharetta, GA	Requires evidence of compliance with noise standards; specifies exterior lighting fixture design; establishes minimum building height; requires building façade design elements; establishes other fencing, screening, and landscaping requirements to minimize visibility from adjacent roads and properties (§2.7.2.1)
Anne Arundel County, MD	Establishes minimum lot size and setbacks; prohibits residences on the same lot; establishes limit on outdoor storage (§18-10-119)
Fairfax County, VA	Requires all equipment to be enclosed within a building; establishes maximum floor area by zoning district (§4102.6.A)
Frederick County, MD	Establishes criteria for reducing setbacks; specifies building design standards; specifies landscaping, screening, and buffering requirements; clarifies parking, loading, signage, and lighting standards; establishes criteria for private roads; establishes noise and vibration standards (§1-19-8.402)
Moses Lake, WA	Clarifies review process for business license; prohibits container storage; requires evidence of electrical utility approval; requires evidence of electrical permit and inspection; establishes environmental performance standards, addressing noise, heat, and electric and magnetic fields; limits amount of exposed equipment on facades (§18.74)
Pitt County, NC	Limits height; requires separation from sensitive uses; requires noise study and compliance with noise standards; requires underground wiring; requires security fencing and vegetative screening; requires evidence of electrical utility approval; clarifies signage standards; requires notification of abandonment (§8(UUUU))
Plattsburgh, NY	Requires fire suppression and mitigation techniques; limits internal ambient temperature and the direct release of heat on colder days; establishes permissible noise levels (LL 6-2018)
Prince George's County, VA	Requires building façade design elements; specifies exterior lighting fixture design; requires screening for security fencing and limits fence height; requires compliance with landscape manual; clarifies applicable off-street parking standard; clarifies signage standards; requires an acoustical study; specifies additional site, locational, and noticing requirements for facilities in rural residential districts (§27-5102(e)(4)(B))
Somerville, MA	Establishes special review criteria related to aesthetic impacts and employment opportunities (§9.8.b)
Vernal, UT	Requires fencing and structural screening for electrical generators; requires noise mitigation plan for facilities near residential zones or existing hotels or motels (§16.20.250)
Wenatchee, WA	Clarifies review process for business license; prohibits container storage; requires evidence of electrical utility approval; requires evidence of electrical permit and inspection; clarifies blank wall limitation standards; requires an affidavit verifying operating sound levels (§18.48.310)

Route 7 corridor. While data center demand remains high in this area, the county's comprehensive plan designates most of this corridor as Suburban Mixed Use, which envisions a compact, pedestrian-friendly mix of commercial, residential, cultural, and recreational uses. Furthermore, the existing electricity network infrastructure is insufficient to accommodate the existing demand for new data centers (LCDED 2022).

The county is working on its first complete overhaul of its zoning code since 1993. And it intends to incorporate any new regulations for data centers into the new code, which officials hope to adopt by the end of 2022.

Missoula County, Montana

In April 2019, Missoula County, Montana, adopted an interim zoning resolution that established a cryptocurrency mining overlay (Resolution No. 2019-026). The county had one large cryptocurrency mine already, and its low electricity rates and cool climate made it an attractive area for prospective miners. While a few other jurisdictions had already defined cryptocurrency mining in their zoning codes, Missoula County appears to be the first to explicitly position its zoning approach as a response to climate change.

According to county planner Jennie Dixon, AICP, local officials originally took an interest in regulating cryptocurrency mining as a distinct use after multiple complaints of noise from cooling fans at an existing Bitcoin mine operating out of a former sawmill in unincorporated Bonner. Soon, though, the county expanded its focus to include energy consumption and electronic waste.

Montana law only authorizes interim zoning in the case of an emergency involving "public health, safety, morals, or general welfare" (§76-2-206). Dixon says the Intergovernmental Panel on Climate Change's 2018 Special Report on *Global Warming of 1.5°C* helped justify climate change as a local emergency that warranted interim zoning to mitigate greenhouse gas emissions (and other potential environmental impacts) from cryptocurrency mining.

The interim zoning regulations defined cryptocurrency mining as a distinct use and created a Cryptocurrency Mining Overlay Zone, mapped to the entire unincorporated geographic extent of the county (which includes some un-zoned areas). The overlay



Google Earth

➡ The heart of Northern Virginia's Data Center Alley in Ashburn, Virginia.



Google Earth

➡ The former Bonner sawmill in Missoula County, Montana, was once home to the HyperBlock cryptocurrency mine.

restricted cryptocurrency mining operations to industrial districts and required operators to obtain a discretionary use permit if the mine was adjacent to a residential district or within 500 feet of a residential property boundary. These regulations also required all mining operations to verify that all electronic waste be handled by a licensed recycling firm and that all electricity use be offset by new renewable energy production.

Caroline Lauer, the county's Sustainability Program Manager, stresses the importance of this last requirement. If cryptocurrency miners purchased existing supplies of renewable energy, it could actually displace existing utility customers to dirtier sources. While most of the county's

electricity comes from hydropower, coal accounts for much of the remainder.

Missoula County's 2016 *Growth Policy* plan includes an objective to "reduce the county's contribution to climate change" (4.1) and lists policies that promote alternative energy development (4.1.3) and reduce energy use and waste generation as implementation actions (4.1.6). A day before it adopted the interim cryptocurrency mining regulations, the county further strengthened its policy rationale by adopting a joint commitment with the City of Missoula to achieve 100 percent clean electricity use by 2030.

County officials extended the interim zoning for another year in 2020 before adopting the same regulations as a permanent zoning amendment in March 2021 (§1.04

& \$5.05). According to Dixon, the Bonner mine ceased operations during the interim zoning period, but not because of the county's zoning. It declared bankruptcy two days after the "Black Thursday" Bitcoin crash in March 2020, leaving the tribal-owned independent power producer that provided its electricity with a \$3.7 million unpaid bill (Rozen 2020).

CONCLUSIONS

The rapid rise in data center development has coincided with dramatic decreases in the costs of producing solar and wind power. This, in combination with a growing trend toward clean power commitments among technology companies, has blunted some of

the climate impacts of an increased demand for data storage and processing.

The increased digitalization of life virtually guarantees that data centers will continue proliferating in strategic locations across the country (Gomez and DeAngelis 2022). Soon, communities may start seeing a sharp increase in interest in very small edge data centers that could fit in underutilized commercial spaces or even be collocated with other telecommunications infrastructure, such as small cell facilities, in public rights-of-way (Sowry et al. 2018).

The future of cryptocurrency mining facilities is less certain. Bitcoin and other energy-intensive cryptocurrencies are facing social pressure to transition to more

energy-efficient transaction verification methods, and several existing cryptocurrencies already use these methods. However, we are still at the very beginning of the cryptocurrency story. While this form of currency currently exists primarily as a speculative investment vehicle, this could change rapidly if valuations stabilize and large numbers of goods and service providers accept cryptocurrencies for payment.

Not every community will see the value in defining data centers or cryptocurrency mines as distinct uses in their zoning codes. Nevertheless, doing so can give local jurisdictions a leg up when it comes to signaling preferences to developers and operators and minimizing or mitigating potential adverse impacts.

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HOW DOES YOUR ZONING
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6

What Is Cold Storage & How Does Cold Storage Work?

By Kriti Gupta



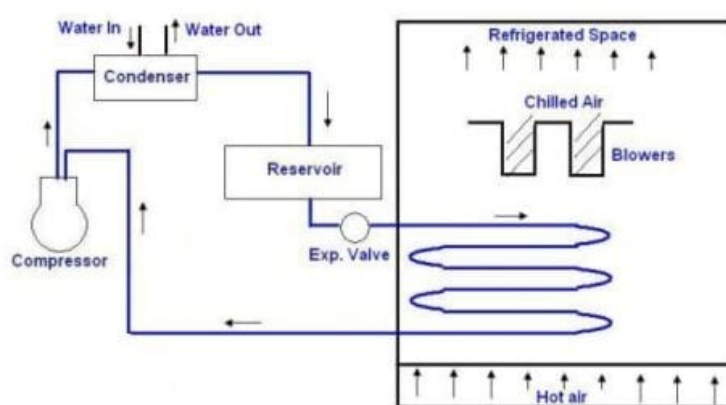
Cold storage is a facility that primarily stores food items that are short-lived and highly likely to get spoilt under normal conditions. These may include fruits, vegetables, fish, meat etc. These food items are stored under optimum temperature (primarily low) and humid environment as required for individual items. Almost all cold storage rooms are designed such that these properties are pre-configured based on what is being stored. Some cold rooms are made such that these properties are adjustable.

Construction and Working of a Cold Storage Plant

A cold-storage facility works on a refrigeration system which helps maintain an adequate temperature and environment as per the specifications of each item being stored. These are the main components of a cold storage room:

- **Compressor** – It is the main component that runs the cold room. It is the only device that needs the energy to run. The compressor consumes almost all the power in a cold room. It is used to raise the temperature and pressure of the refrigerant vapour coming out of the Evaporator. As the pressure is increased, the boiling point increases and the compressor can condense the refrigerant (for example, ammonia) at the temperature of the condenser.
- **Condenser** – It is required to remove the heat from the refrigerant and the circulating water. It carries out phase change of the condenser from gas to liquid at high temperature and pressure. The condenser acts as a heat sink, and its heat exchange efficiency determines the efficiency of the cold storage plant.
- **Receiver** – The high-pressure liquid condensate is stored here. It is here that the refrigerant comes after phase change from the condenser. After it has reached the receiver component, the liquid refrigerant goes to the expansion valve to decrease the temperature and pressure.
- **Expansion Valve** – It reduces the temperature and pressure of the refrigerant using a throttling device. The throttling process occurs through friction and there is a change in the temperature and pressure of the refrigerant. Its pressure changes from that in the Receiver to that in the Evaporator.
- **Evaporator** – The cyclic process that decreases the temperature of the items stored takes place here. It takes heat from the storage compartment or atmosphere that is supposed to be cooled. This heat is then used to vaporize the liquid refrigerant. This way, the food items are cooled and preserved.
- **Blowers** – The cooled air is spread across the room through the convection process, thus, achieving the desired temperature of the room.

In short, the refrigerant's boiling point is reduced by increasing its temperature and pressure by the compressor. Heat is removed from the refrigerant as it is changed from gaseous to the liquid state by the condenser. Now the refrigerant is transferred to the reservoir for storage. Further, the refrigerant is moved to an expansion valve to reduce the temperature and pressure in the liquid state. The last step takes place in the Evaporator, where the heat from the surroundings is used to change the refrigerant again to a gaseous state, thus causing the cooling effect. The blower circulates this cool air.



Uses of Cold Storage

Cold storage is essentially meant for storing items that need specific low-temperature surroundings. There is a misconception that cold rooms can store only food items this way. However, cold rooms can store the following items:

1. **Food Items** – Several industries use cold storage services to preserve food items. Restaurants, food outlets, supermarkets and grocery shops are a few of these industries. These industries may require domestic fridges, entire cold rooms or blast freezers based on the type of item being stored and the customers' needs. Blast freezers are needed to keep a large number of food items for long periods.
2. **Candles** – In hot and humid climates, candles and similar items made of wax-like substances must be stored in a cold space. Melting will ruin these items

and cause financial losses to the candle-making industries, raising the need for cold storage facilities.

3. **Films and Artwork** – Film-makers can stop camera films from getting ruined by storing them in cold temperatures. Not all but many people still use this method when films need to be stored for longer periods. Old art pieces especially need controlled temperature in their storage spaces as the paint may start to peel off the canvas.
4. **Plants** – Cold temperatures keep plants healthy, primarily decorative plants. Florists and ornamental flower companies especially need these facilities to store flowers whose stems have been cut.
5. **Cosmetics** – Lipsticks, Mascaras, Nail paints etc., may get ruined in high temperatures due to melting at higher temperatures. Thus, while storing them for long durations, companies need to have optimum temperature in the warehouse.
6. **Pharmaceuticals** – Pharmaceutical companies that deal with medicines use cold storage warehouses very often to store syrups, injections, etc. and protect them from denaturation. Cold temperature prevents them from getting ruined by contamination.
7. **Textiles** – Textile companies that deal with organic cloth material such as fur, skin or wool always need cold storage facilities in their warehouse. This is because these materials can rot under high temperatures. It will make them unfit for use. Dry cleaners also make use of cold storage facilities.

Types of Cold Storage Systems

1. **Refrigerated containers** – It is the primary and efficient type of cold storage facility. They can be used for a small number of items that need optimum temperature storage. Further, workers can easily move them from one place to another.
2. **Blast Freezers and Chillers** – These meet large storage requirements that need the items to be chilled when they reach the customer. High-end restaurants and similar companies use these.
3. **Cold rooms** – These can be both refrigerants and blast freezers based on the requirement, except that they are much larger and in the form of entire rooms.

4. **Pharmaceutical grade cold storage warehouse** – These are warehouses that have the cold storage technologies inbuilt with them. Used in hospitals and medical facilities, they are specially used to store blood, certain vaccines and biopharmaceuticals.
5. **Plant attached cold storage warehouse** – When producers wish to keep the cold rooms within their factories, such facilities are built. Conveyor belts are used to send intermediary goods or finished products to cold storage. This makes it an on-site service.
6. **Dedicated custom cold storage warehouse facilities** – It includes companies that have specific cold storage needs and need customized cold rooms. Instead of building entire cold rooms, they can get made one personally by 3PL logistic services or warehousing solution companies.

Benefits of Cold Storage Systems

1. Multiple variations

Most cold storage units have temperature-adjustable modes and are airtight as well. This protects the material inside from extreme temperature changes that may occur in the environment. Further, moisture content can also be regulated using a dehumidifier to dry out the surroundings as required. A cold storage unit can be converted to any of these from a cold room to a blast freezer.

2. All specifications are customizable

Each cold room can be built of a particular dimension and feature specification. Even the shape of a cold room can be customized. Based on what is to be stored, the correct refrigeration system can be chosen. Many times, a freezing temperature is not required for all goods. In such a case, a cold room can keep your goods cold and dry. Mobile cold rooms are also available now.

3. Acts as extra storage

Whenever space is not available for storing items in general, cold rooms themselves can be used. They keep almost all food items safe, and their temperature can be regulated along with the moisture. Items that especially need to be kept away from moisture can be stored here when the monsoon arrives. This way, whenever there are extra orders, the lack of space can be compensated.

4. **It can be used for backup during a power outage**

In case of power cuts, items stored in coolers and fridges can be moved to the cold storage area. This will prevent those items from getting ruined. The cold room will meet their optimum temperature requirement. The airtight nature helps maintain the cool environment for a longer duration. This will help keep the food items safely. Further, wire racks can be added, which will be kept empty if such a situation arises.

5. **Reduction in waste saves money**

As cold rooms preserve food items for long durations, they help in reducing wastage. This way, instead of unused goods being spoilt and thrown away, they can be stored for more time. Many restaurants preserve food after preparing it in frozen form; such a facility is provided through cold rooms. These are used when there is a supply crunch. This benefit also helps save the money that the company may have spent on buying extra items in place of the spoilt ones.

Problems associated with Cold Storage

1. **Negative impact on equipment and operator**

Most cold rooms have adverse effects on the equipment placed inside. For example, as soon as a product will be removed from the cold room for palletization, it will gain moisture. This will spoil the product hence causing wastage anyway. Further, the person operating the cold rooms is often exposed to such artificial cold temperatures that harms their joints, bones, and overall health. Also, battery operated parts within a cold storage unit have extremely low power efficiency, reducing by almost 50% than at room temperature. In order to deal with these issues, palletization can be done within the cold room, and insulation kits can be provided to the workers of the cold room. Seals should be placed on batteries that make them resistant to extreme temperature changes.

2. **Each good has different requirements**

More than one product needs cold storage; however, each may not need the same temperature for storage. Moisture requirements will also differ for each kind of item. This creates an issue as a single temperature setting will be beneficial for only a few things. For example, vegetables need to be stored at 13°C, meat at -2°C, dairy products at 1°C and ice creams at -23°C. Thus all items

don't need to be frozen. Further, even the transportation requirements from the cold room may differ for each item. 3PL logistic services can be used to store different types of goods as they have such facilities.

3. They may be energy inefficient

Many studies have proven that cold storage facilities are often energy inefficient. This is caused even by the slightest error in insulation. Doors need to be of high quality, or the entire cold room may become ineffective. This means that there has to be minimal exposure to the outside environment. Only if these requirements are met can the cold room work well. Thus, well-built walls and doors preferably made of puff panels will help make the cold room energy efficient.

Frequently Asked Questions (FAQs)

Q: Can I use my forklift inside the containers?	+
Q. Can I store items after more processing occurs?	+
Q: How spacious are the containers?	+
Q. Are these rooms fireproof?	+

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Grid-Scale Battery Storage

Frequently Asked Questions

What is grid-scale battery storage?

Battery storage is a technology that enables power system operators and utilities to store energy for later use. A battery energy storage system (BESS) is an electrochemical device that charges (or collects energy) from the grid or a power plant and then discharges that energy at a later time to provide electricity or other grid services when needed. Several battery chemistries are available or under investigation for grid-scale applications, including lithium-ion, lead-acid, redox flow, and molten salt (including sodium-based chemistries).¹ Battery chemistries differ in key technical characteristics (see [What are key characteristics of battery storage systems?](#)), and each battery has unique advantages and disadvantages. The current market for grid-scale battery storage in the United States and globally is dominated by lithium-ion chemistries (Figure 1). Due to technological innovations and improved manufacturing capacity, lithium-ion chemistries have experienced a steep price decline of over 70% from 2010-2016, and prices are projected to decline further (Curry 2017).

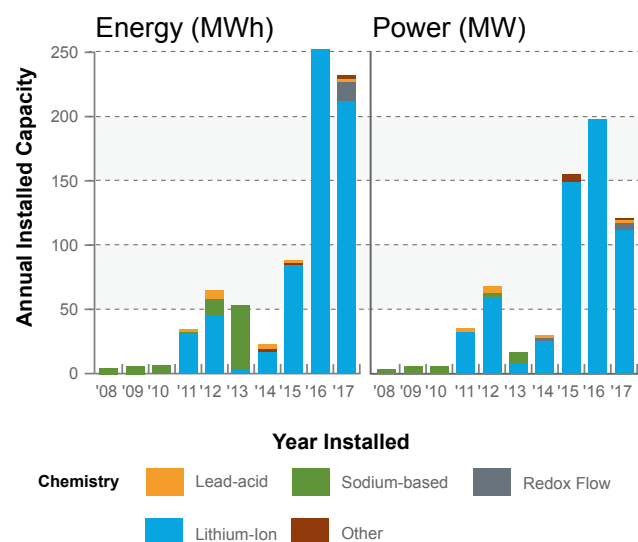


Figure 1: U.S. utility-scale battery storage capacity by chemistry (2008-2017). Data source: U.S. Energy Information Administration, Form EIA-860, [Annual Electric Generator Report](#)

Increasing needs for system flexibility, combined with rapid decreases in the costs of battery technology, have enabled BESS to play an increasing role in the power system in recent years. As prices for BESS continue to decline and the need for system flexibility increases with wind and solar deployment, more policymakers, regulators, and utilities are seeking to develop policies to jump-start BESS deployment.

Is grid-scale battery storage needed for renewable energy integration?

Battery storage is one of several technology options that can enhance power system flexibility and enable high levels of renewable energy integration. Studies and real-world experience have demonstrated that interconnected power systems can safely and reliably integrate high levels of renewable energy from variable renewable energy (VRE) sources without new energy storage resources.² There is no rule-of-thumb for how much battery storage is needed to integrate high levels of renewable energy. Instead, the appropriate amount of grid-scale battery storage depends on system-specific characteristics, including:

- The current and planned mix of generation technologies
- Flexibility in existing generation sources
- Interconnections with neighboring power systems
- The hourly, daily, and seasonal profile of electricity demand, and
- The hourly, daily, and seasonal profile of current and planned VRE.

In many systems, battery storage may not be the most economic resource to help integrate renewable energy, and other sources of system flexibility can be explored. Additional sources of system flexibility include, among others, building additional pumped-hydro storage or transmission, increasing conventional generation flexibility, and changing operating procedures (Cochran et al. 2014).

1. For information on battery chemistries and their relative advantages, see Akhil et al. (2013) and Kim et al. (2018).

2. For example, Lew et al. (2013) found that the United States portion of the Western Interconnection could achieve a 33% penetration of wind and solar without additional storage resources. Palchak et al. (2017) found that India could incorporate 160 GW of wind and solar (reaching an annual renewable penetration of 22% of system load) without additional storage resources.

What are the key characteristics of battery storage systems?

- **Rated power capacity** is the total possible instantaneous discharge capability (in kilowatts [kW] or megawatts [MW]) of the BESS, or the maximum rate of discharge that the BESS can achieve, starting from a fully charged state.
- **Energy capacity** is the maximum amount of stored energy (in kilowatt-hours [kWh] or megawatt-hours [MWh])
- **Storage duration** is the amount of time storage can discharge at its power capacity before depleting its energy capacity. For example, a battery with 1 MW of power capacity and 4 MWh of usable energy capacity will have a storage duration of four hours.
- **Cycle life/lifetime** is the amount of time or cycles a battery storage system can provide regular charging and discharging before failure or significant degradation.
- **Self-discharge** occurs when the stored charge (or energy) of the battery is reduced through internal chemical reactions, or without being discharged to perform work for the grid or a customer. Self-discharge, expressed as a percentage of charge lost over a certain period, reduces the amount of energy available for discharge and is an important parameter to consider in batteries intended for longer-duration applications.
- **State of charge**, expressed as a percentage, represents the battery's present level of charge and ranges from completely discharged to fully charged. The state of charge influences a battery's ability to provide energy or ancillary services to the grid at any given time.
- **Round-trip efficiency**, measured as a percentage, is a ratio of the energy charged to the battery to the energy discharged from the battery. It can represent the total DC-DC or AC-AC efficiency of the battery system, including losses from self-discharge and other electrical losses. Although battery manufacturers often refer to the DC-DC efficiency, AC-AC efficiency is typically more important to utilities, as they only see the battery's charging and discharging from the point of interconnection to the power system, which uses AC (Denholm 2019).

What services can batteries provide?

Arbitrage: Arbitrage involves charging the battery when energy prices are low and discharging during more expensive peak hours. For the BESS operator, this practice can provide a source of income by taking advantage of electricity prices that may vary throughout the day. One extension of the energy arbitrage service is **reducing renewable energy curtailment**. System operators and project developers have an interest in using as much low-cost, emissions-free renewable energy generation as possible; however, in systems with a growing share of VRE, limited flexibility of conventional generators and temporal mismatches between renewable energy supply and electricity demand (e.g., excess wind

generation in the middle of the night) may require renewable generators to curtail their output. By charging the battery with low-cost energy during periods of excess renewable generation and discharging during periods of high demand, BESS can both reduce renewable energy curtailment and maximize the value of the energy developers can sell to the market. Another extension of arbitrage in power systems without electricity markets is **load-leveling**. With load-leveling, system operators charge batteries during periods of excess generation and discharge batteries during periods of excess demand to more efficiently coordinate the dispatch of generating resources.

Firm Capacity or Peaking Capacity: System operators must ensure they have an adequate supply of generation capacity to reliably meet demand during the highest-demand periods in a given year, or the peak demand. This peak demand is typically met with higher-cost generators, such as gas plants; however, depending on the shape of the load curve, BESS can also be used to ensure adequate peaking generation capacity. While VRE resources can also be used to meet this requirement, these resources do not typically fully count toward firm capacity, as their generation relies on the availability of fluctuating resources and may not always coincide with peak demand. But system operators can improve VRE's ability to contribute to firm capacity requirements through pairing with BESS. Pairing VRE resources with BESS can enable these resources to shift their generation to be coincident with peak demand, improving their capacity value (see text box below) and system reliability.

Firm Capacity, Capacity Credit, and Capacity Value are important concepts for understanding the potential contribution of utility-scale energy storage for meeting peak demand.

Firm Capacity (kW, MW): The amount of installed capacity that can be relied upon to meet demand during peak periods or other high-risk periods. The share of firm capacity to the total installed capacity of a generator is known as its **capacity credit (%)**.³

Capacity Value (\$): The monetary value of the contribution of a generator (conventional, renewable, or storage) to balancing supply and demand when generation is scarce.

Operating Reserves and Ancillary Services: To maintain reliable power system operations, generation must exactly match electricity demand at all times. There are various categories of operating reserves and ancillary services that function on different timescales, from subseconds to several hours, all of which are needed to ensure grid reliability. BESS can rapidly charge or discharge in a fraction of a second, faster

3. See Mills and Wiser (2012) for a general treatment on the concept of capacity credit.

than conventional thermal plants, making them a suitable resource for short-term reliability services, such as Primary Frequency Response (PFR) and Regulation. Appropriately sized BESS can also provide longer-duration services, such as **load-following and ramping** services, to ensure supply meets demand.

Transmission and Distribution Upgrade Deferrals: The electricity grid's transmission and distribution infrastructure must be sized to meet peak demand, which may only occur over a few hours of the year. When anticipated growth in peak electricity demand exceeds the existing grid's capacity, costly investments are needed to upgrade equipment and develop new infrastructure. Deploying BESS can help defer or circumvent the need for new grid investments by meeting peak demand with energy stored from lower-demand periods, thereby reducing congestion and improving overall transmission and distribution asset utilization. Also, unlike traditional transmission or distribution investments, mobile BESS installations can be relocated to new areas when no longer needed in the original location, increasing their overall value to the grid.

Black Start: When starting up, large generators need an external source of electricity to perform key functions before they can begin generating electricity for the grid. During normal system conditions, this external

electricity can be provided by the grid. After a system failure, however, the grid can no longer provide this power, and generators must be started through an on-site source of electricity, such as a diesel generator, a process known as black start. An on-site BESS can also provide this service, avoiding fuel costs and emissions from conventional black-start generators. As system-wide outages are rare, an on-site BESS can provide additional services when not performing black starts.

Table 1 below summarizes the potential applications for BESS in the electricity system, as well as whether the application is currently valued in U.S. electricity markets (Denholm 2018). Figure 2 shows the cumulative installed capacity (MW) for utility-scale storage systems in the United States in 2017 by the service the systems provide.

Where should batteries be located?

Utility-scale BESS can be deployed in several locations, including: 1) in the transmission network; 2) in the distribution network near load centers; or 3) co-located with VRE generators. The siting of the BESS has important implications for the services the system can best provide, and the most appropriate location for the BESS will depend on its intended-use case.

In many cases, a BESS will be technically capable of providing a broad range of services in any of the locations described in the next section. Therefore, when siting storage, it is important to analyze the costs and benefits of multiple locations to determine the optimal siting to meet system needs. Considering all combinations of services the BESS can provide at each potential site will provide a better understanding of the expected revenue streams (see [What is value-stacking?](#)) and impact on the grid.

In the Transmission Network

BESS interconnected to the transmission system can provide a broad range of ancillary and transmission-related services. These systems can be deployed to replace or defer investments of peaking capacity, provide operating reserves to help respond to changes in generation and demand, or they can be used to defer transmission system upgrades in regions experiencing congestion from load or generation growth. Figure 3 below shows the configuration of a utility-scale storage system interconnected at the transmission substation level.

In the Distribution Network Near Load Centers

Storage systems located in the distribution network can provide all of the services as transmission-sited storage, in addition to several services related to congestion and power quality issues. In many areas, it may be difficult to site a conventional generator near load in order to provide peaking capacity, due to concerns about emissions or land use. Due to their lack of local emissions and their scalable nature, BESS systems can be co-located near load with fewer siting challenges than conventional generation. Placing storage near load can reduce transmission and distribution losses and relieve congestion, helping defer transmission and distribution upgrades. Distribution-level BESS systems can also provide local power quality services and support improved resilience during extreme weather events.

Most storage systems in the United States provide operating reserves and ancillary services. Despite this current focus, the total U.S. market for these services is limited, and utility-scale storage may begin providing more firm and peak capacity in the near future.

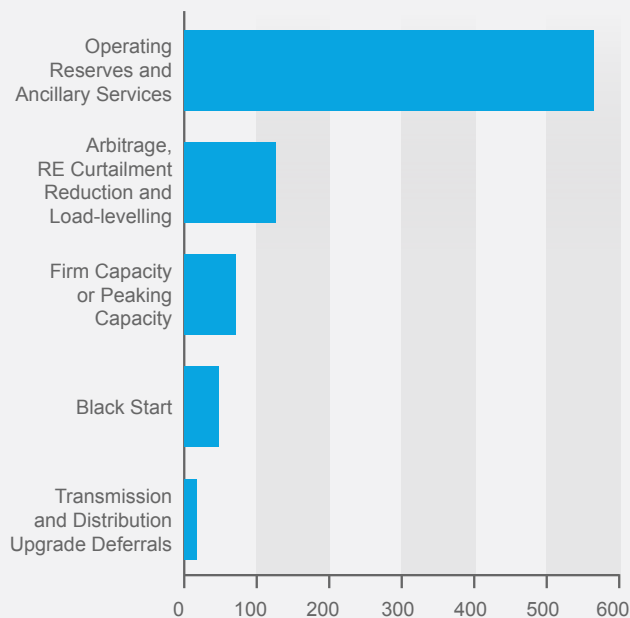


Figure 2: U.S. Utility-scale battery storage capacity by service. Data source: U.S. Energy Information Administration, Form EIA-860, [Annual Electric Generator Report](#)

Table 1: Applications of Utility-Scale Energy Storage

Application	Description	Duration of Service Provision	Typically Valued in U.S. Electricity Markets?
Arbitrage	Purchasing low-cost off-peak energy and selling it during periods of high prices.	Hours	Yes
Firm Capacity	Provide reliable capacity to meet peak system demand.	4+ hours	Yes, via scarcity pricing and capacity markets, or through resource adequacy payments.
Operating Reserves			
• Primary Frequency Response	Very fast response to unpredictable variations in demand and generation.	Seconds	Yes, but only in a limited number of markets.
• Regulation	Fast response to random, unpredictable variations in demand and generation.	15 minutes to 1 hour	Yes
• Contingency Spinning	Fast response to a contingency such as a generator failure.	30 minutes to 2 hours	Yes
• Replacement/ Supplemental	Units brought online to replace spinning units.	Hours	Yes, but values are very low.
• Ramping/Load Following	Follow longer-term (hourly) changes in electricity demand.	30 minutes to hours	Yes, but only in a limited number of markets.
Transmission and Distribution Replacement and Deferral	Reduce loading on T&D system during peak times.	Hours	Only partially, via congestion prices.
Black-Start	Units brought online to start system after a system-wide failure (blackout).	Hours	No, typically compensated through cost-of-service mechanisms.

Co-Located with VRE Generators

Renewable resources that are located far from load centers may require transmission investments to deliver power to where it is needed. Given the variable nature of VRE resources, the transmission capacity used to deliver the power may be underutilized for large portions of the year. A BESS can reduce the transmission capacity needed to integrate these resources and increase the utilization of the remaining capacity by using storage to charge excess generation during periods of high resource availability and discharge during periods of low resource availability. The same BESS can be used to reduce the curtailment of VRE generation, either due to transmission congestion or a lack of adequate demand, as well as provide a broad range of ancillary services.

What is value-stacking? What are some examples of value-stacking opportunities and challenges?

BESS can maximize their value to the grid and project developers by providing multiple system services. As some services are rarely called for (i.e., black start) or used infrequently in a given hour (i.e., spinning reserves), designing a BESS to provide multiple services enables a higher overall battery utilization. This multi-use approach to BESS is known as **value-stacking**. For example, a BESS project can help defer the need for new transmission by meeting a portion of the peak demand with stored energy during a select few hours in the year. When not meeting peak demand, the BESS can earn revenue by providing operating reserve services for the transmission system operator.

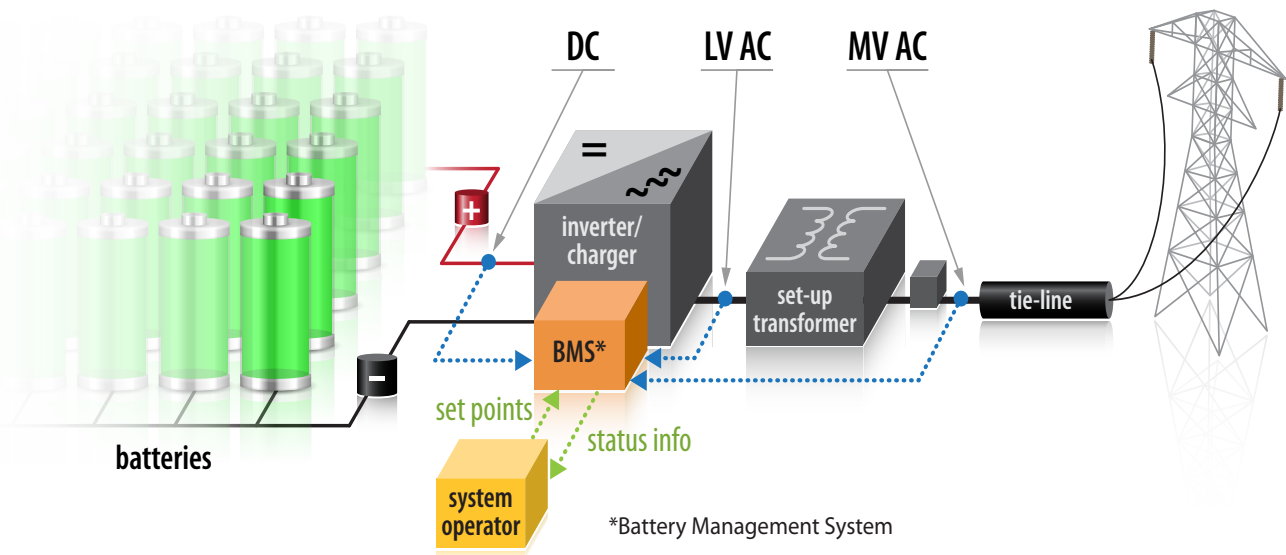


Figure 3: Key components of BESS interconnected at the transmission substation level. LV AC represents a low-voltage AC connection, while MV AC represents a medium-voltage AC connection.⁴ Source: Denholm (2019)

Some system services may be mutually exclusive depending on the BESS design (e.g., a short duration storage device used to supply regulating reserves would have limited value for deferring transmission or distribution upgrades). Even if a BESS is technically capable of providing multiple services, the additional cycling of the battery (charging and discharging) may degrade the battery and shorten its lifetime and economic viability. Finally, a BESS can only provide a limited duration of any set of services before it runs out of charge, which means batteries must prioritize the services they provide.

Regulators have a variety of options to enable BESS to maximize its economic potential through value-stacking. For example, the California Public Utilities Commission (CPUC) developed categories of services BESS can provide based on their importance for reliability and location on the grid, as well as 12 rules for utilities when procuring services from BESS (CPUC 2018). The CPUC rules:

- Dictate that BESS projects can only provide services at the voltage level to which they are interconnected or higher, but not lower⁵;
- Prioritize reliability services over non-reliability services and ensure storage cannot contract for additional services that would interfere with any obligation to provide reliability services;
- Require that a BESS project comply with all performance and availability requirements for services it provides and that noncompliance penalties be communicated in advance;
- Require that a BESS project inform the utility of any services it currently provides or intends to provide; and
- Take measures to prevent double compensation to BESS projects for services provided.

These CPUC rules are just one example of how regulators can help ensure BESS projects can select the most cost-effective combinations of services to provide without negatively impacting the reliability of the grid.

How are BESS operators compensated?

BESS operators can be compensated in several different ways, including in the wholesale energy market, through bilateral contracts, or directly by the utility through a cost-of-service mechanism. In a wholesale energy market, the BESS operator submits a bid for a specific service, such as operating reserves, to the market operator, who then arranges the valid bids in a least-cost fashion and selects as many bids as necessary to meet the system's demands. If the BESS operator's bid is selected and the BESS provides the service, the operator will receive compensation equal to the market price. This process ensures transparent prices and technology-agnostic consideration; however, many services are currently not available in the market, such as black start or transmission and distribution upgrade deferrals. Alternatively, BESS operators can enter into bilateral contracts for services directly with energy consumers, or entities which procure energy for end-consumers. This process does not ensure transparency and contracts can differ widely in both prices and terms. Finally, some BESS are owned directly by the utilities to whom they provide services, such as upgrade deferrals. In these cost-of-service cases, the utility pays the BESS operator at the predetermined price and recovers the payments through retail electricity rates. In some jurisdictions, however, BESS may be prevented from extracting revenues through both wholesale markets and cost-of-service agreements (Bhatnagar et al. 2013).

4. ANSI C84.1: Electric Power Systems and Equipment—Voltage Ratings (60 Hz) defines a low-voltage system as having a nominal voltage less than 1 kV and medium voltage as having a nominal voltage between 1 kV and 100 kV.

5. BESS interconnected at the distribution level can provide distribution or transmission level services, but BESS interconnected at the transmission level can only provide transmission-level services.

How does the value of batteries change with renewable energy deployment and increased VRE penetration?

The amount of renewable energy on the grid can influence the value and types of the services provided by a BESS. Increased levels of renewable energy may increase the need for frequency control services to manage increased variability and uncertainty in the power system. Increased levels of VRE penetration can also change the shape of the net load, or the load minus the VRE generation, influencing BESS projects that provide load following, arbitrage, peaking capacity, or similar services.

Models of the California system have shown a strong relationship between solar PV deployment and BESS' ability to replace conventional peaking capacity, also known as the BESS capacity credit (Denholm and Margolis 2018). As the shape of the load curve affects the ability of storage to provide peaking capacity, resources such as PV that cause load peaks to be shorter will enable shorter duration batteries, which are less expensive, to displace conventional peaking capacity.

Initially, low levels of PV penetration may flatten the load curve, reducing BESS' ability to cost-effectively offset the need for conventional peaking plants.⁶ At higher levels of solar PV penetration, however, the net load curve becomes peakier, increasing the ability and value of BESS to reduce peak demand. Figure 4 illustrates how increasing levels of PV generation change the shape of the net load, causing it to become peakier. The shaded areas above and under the net load curves indicate BESS charging and discharging, while the text boxes show the amount of net load peak reduction (MW) and the total amount of energy met by BESS during the net load peak (MWh).

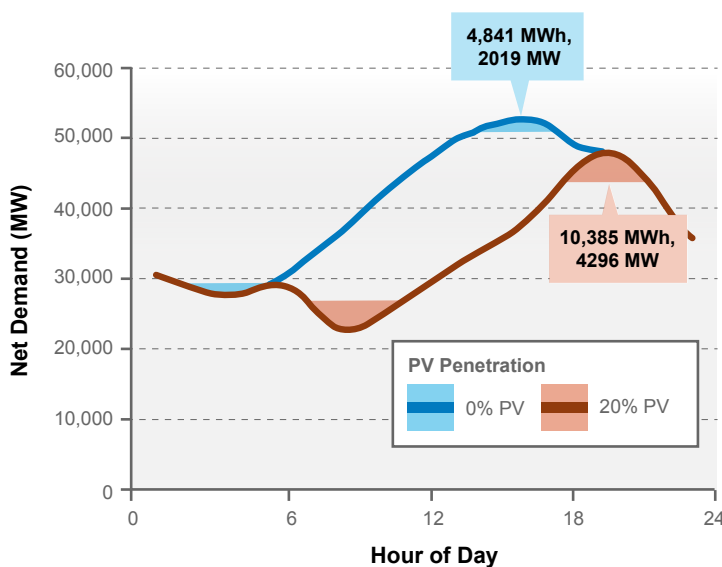


Figure 4: Change in California net load shape due to PV.
Adapted from Denholm and Margolis (2018)

What are the key barriers to BESS deployment?

Barriers to energy storage deployment can be broadly grouped into three different categories: regulatory barriers, market barriers, and data and analysis capabilities.

1. Regulatory Barriers

- **Lack of rules and regulations to clarify the role of BESS.**

Although storage may be technically able to provide essential grid services, if no regulations or guidelines explicitly state that storage can provide these services, utilities and market operators may be unwilling to procure services from BESS. Furthermore, without a guarantee that services provided by a BESS project will be compensated, storage developers and financing institutions may be unwilling to make the necessary capital investments. Federal Energy Regulatory Commission (FERC) Order 841 addressed this issue in U.S. wholesale markets and directed market operators to develop rules governing storage's participation in energy, capacity, and ancillary service markets. Among other requirements, the rules must ensure open and equal access to the market for storage systems, taking into consideration their unique operating and technical characteristics (FERC 2018).

- **Restrictions or lack of clarity around if and how storage can be used across generation, transmission, and distribution roles.**

The variety of different services storage can provide often cuts across multiple markets and compensation sources. For instance, frequency regulation may be compensated in a wholesale market, but transmission or distribution investment deferrals may be compensated as a cost of service by the utility or system operator. In some jurisdictions, providing services across different compensation sources is restricted by regulation. Limiting the services batteries can provide based on where the service is provided or how it is compensated can influence how often they are utilized and whether they remain an economic investment (Bhatnagar 2013).

2. Market Barriers

- **Lack of markets for system services.** A lack of markets for services that batteries are uniquely suited to provide can make it difficult for developers to include them as potential sources of income when making a business case, deterring investment. For example, in most U.S. Independent System Operator (ISO) markets, generators are currently expected to provide inertial and governor response during frequency excursions without market compensation. Although BESS can provide the same services, currently there is no way for BESS to seek market compensation for doing so. Furthermore, the price formation for a service may have evolved for conventional generators, meaning the presence

6. This is demonstrated by Denholm and Margolis (2018) for the California system.

of batteries in the market could distort prices, affecting storage systems and conventional generators alike (Bhatnagar 2013).

- **Lack of discernment in quality and quantity of services procured.** For some services, such as frequency regulation, the speed and accuracy of the response is correlated to its overall value to the system. Battery systems can provide certain services much faster and more accurately than conventional resources, which may not be reflected in compensation for the service. Markets can provide fair compensation to BESS by aligning compensation schemes with the quality of service provided, as is mandated by FERC Order 755, which requires compensation for frequency regulation that reflects “the inherently greater amount of frequency regulation service being provided by faster-ramping resources” (FERC 2011). Similarly, BESS can be uniquely suited to provide up- or down-regulation, given their larger operating range over which to provide regulating reserves (due to their lack of a minimum stable level and ability to provide up- and down-regulation in excess of their nameplate capacity, based on whether they are charging or discharging) (Denholm 2019). These unique features of BESS are not necessarily reflected in the procurement requirements and compensation of such services, diminishing BESS’ economic viability.

3. Data and Analysis Capabilities

Battery storage systems are an emerging technology that exhibit more risk for investors than conventional generator investments. These risks include the technical aspects of battery storage systems, which may be less understood by stakeholders and are changing faster than for other technologies, as well as potential policy changes that may impact incentives for battery deployment. Given the relatively recent and limited deployment of BESS, many stakeholders may also be unaware of the full capabilities of storage, including the ability of a BESS to provide multiple services at both the distribution and transmission level. At the same time, traditional analysis tools used by utilities may be inadequate to fully capture the value of BESS. For example, production cost models typically operate at an hourly resolution, which does not capture the value of BESS’ fast-ramping capabilities. The gaps in data and analysis capabilities and lack of adequate tools can deter investments and prevent battery storage from being considered for services that can be provided by better understood conventional generators (Bhatnagar et al. 2013).

What are some real-world examples of batteries providing services and value-stacking?

There are several deployments of BESS for large-scale grid applications. One example is the Hornsdale Power Reserve, a 100 MW/129 MWh lithium-ion battery installation, the largest lithium-ion BESS in the world, which has been in operation in South Australia since December 2017. The Hornsdale Power Reserve provides two distinct services: 1) energy arbitrage; and 2) contingency spinning reserve. The BESS can bid 30 MW and 119 MWh of its capacity directly into the market

for energy arbitrage, while the rest is withheld for maintaining grid frequency during unexpected outages until other, slower generators can be brought online (AEMO 2018). In 2017, after a large coal plant tripped offline unexpectedly, the Hornsdale Power reserve was able to inject several megawatts of power into the grid within milliseconds, arresting the fall in grid frequency until a gas generator could respond. By arresting the fall in frequency, the BESS was able to prevent a likely cascading blackout.

Another example of value-stacking with grid-scale BESS is the Green Mountain Power project in Vermont. This 4 MW lithium-ion project began operation in September 2015 and is paired with a 2 MW solar installation. The installation provides two primary functions: 1) backup power and micro-grid capabilities; and 2) demand charge reductions. The solar-plus-storage system enables the utility to create a micro-grid, which provides power to a critical facility even when the rest of the grid is down. The utility operating the BESS also uses it to reduce two demand charges: an annual charge for the regional capacity market and a monthly charge for the use of transmission lines. Sandia National Laboratories estimated that reducing the annual demand charge for a single year saved the utility over \$200,000 (Schoenung 2017).

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www.greeningthegrid.org | www.nrel.gov/usaid-partnership

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Memorandum

To: Economic Development Committee
From: Krysti J. Barksdale-Noble, Community Development Director
CC: Bart Olson, City Administrator
Date: August 1, 2023
Subject: **PZC 2023-11– Kendall County Petition 23-26**
Milroy Farm – 1270 E. Beecher Road - 1.5 Mile Review (Special Use)

SUMMARY:

Staff has reviewed a request from Kendall County Planning and Zoning Department along with the subsequent documents attached. This property is located within one and a half miles of the planning boundary for Yorkville, allowing the City the opportunity to review and provide comments to Kendall County. The petitioner, Jefferey D. Milroy on behalf of Milroy Farms, LLC, is requesting to renew its current special use permit, approved in 2014, for the operation of a compost facility on approximately 39.87 acres in unincorporated Kendall County. The current special use authorization is set to expire in Kendall County on December 1, 2023. If approved, the new special use will expire on December 1, 2033. The petitioner is not seeking to continue the compost facility on the adjacent (east) approximately 18-acre parcel located within Yorkville's corporate boundary, which was required to be decommissioned on or by March 2, 2024, per a Settlement Agreement with the City. Additionally, the petitioner states the compost facility will not be run by the previous operator, Green Organics. The subject property is located at 1270 E. Beecher Road which is generally located on the east side of E. Beecher Road and approximately 0.5 miles south of Galena Road.



Approved Special Use in 2014

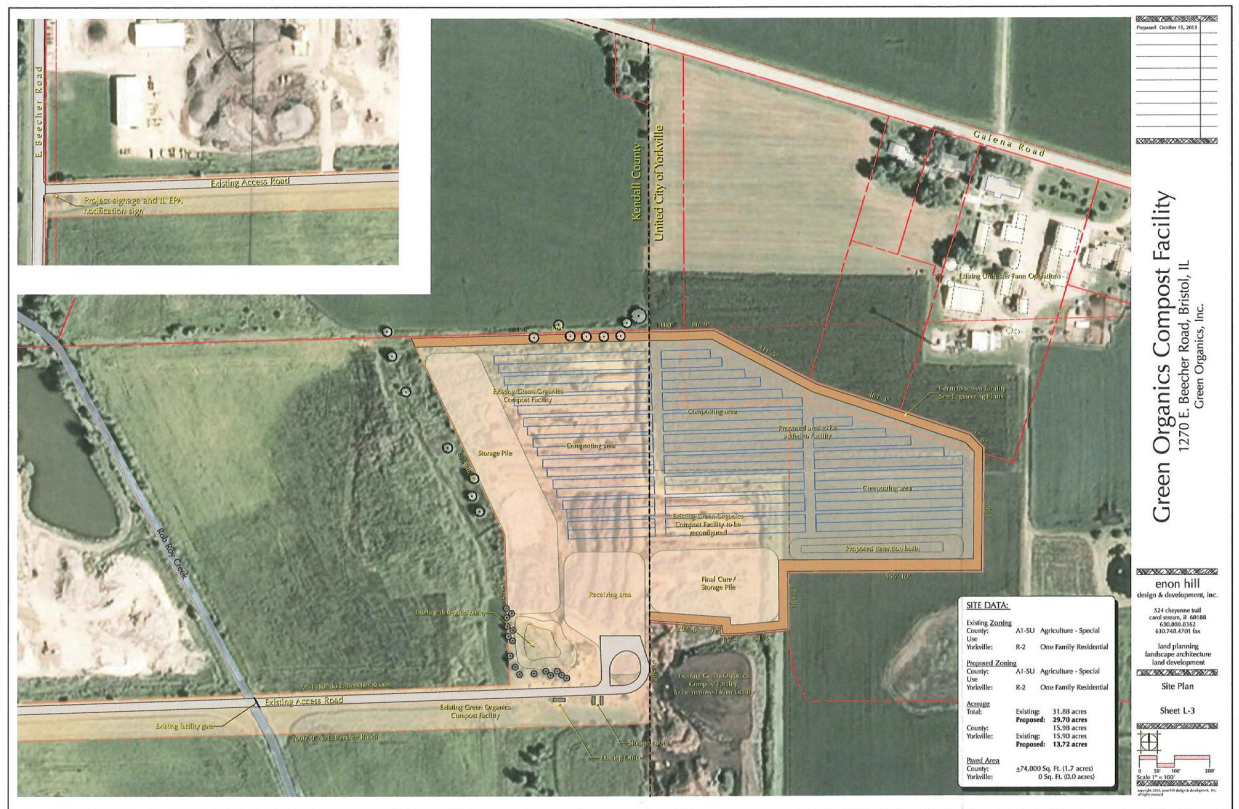


Proposed Special Use Area

DEVELOPMENT BACKGROUND:

A compost facility has operated in this area on approximately 58 acres of adjacent parcels in Kendall County since 1993 and in the City of Yorkville since 1999. The portion of the parcel in Yorkville was subsequently entitled for residential land uses as part of the Westbury East Village Subdivision in 2004. Once the downturn in the economy happened in late 2009, no dwelling unit were ever built in the subdivision and the compost operator sought to reconfigure the layout of the facility to increase the amount of permitted food and landscape materials processed on the site. Therefore, in January 2014, the City approved an amendment to the Westbury East Village Annexation Agreement to allow the expanded operation for a period of five (5) years. The petitioner was also granted a special use permit, with conditions, by Kendall County to operate the compost facility on the subject property in March 2014. The approved

layout for the compost facility on both Kendall County and City of Yorkville parcels are depicted as follows:



Since that time, the property's daily operations were conducted by a secondary organization, Midwest Materials, and several complaints related to odor from the site were received by the City. Upon the expiration of the five (5) year term for operating the compost facility in 2019, Green Organics challenged the date for decommissioning and the City entered into arbitration. A settlement agreement was reached in 2020 established a final termination date for the compost facility on the City's side as March 2, 2024. The city has been informed the decommissioning of the compost operation on the parcel within the City has begun.

REQUEST SUMMARY:

The petitioner is proposing to renew it recently expired special use with Kendall County for the continued operation of a compost facility on approximately 39.87 acres. The composting operation will consist of the processing of food scraps and landscape waste. The site plan provided illustrates several 25-foot-wide windrows separated by 10-foot driving aisles. The site also has one (1) final cure storage area, one (1) grinding and blending concrete pad, and one (1) receiving pad. There will also be a 420 square foot trailer on site for office/employee use. The landscape waste will be received between the hours of 7:00 am and 4:00 pm, Monday through Fridays, and 7:00 am until 12:00 pm on Saturdays. The petitioner has indicated the composting facility will not be run by the former operator, Green Organics or Midwest Materials, but by the current owner Milroy Farms.

As proposed, the renewed special use will be for a period of 10 years, until December 1, 2033, with the option to seek renewal by Kendall County prior to July 1, 2033. Upon termination of the special use, the compost facility will be decommissioned, and site converted back to farming within five (5) months, including the removal of materials, grading, seeding and the removal of all structures. Kendall County planning staff has proposed conditions for the special use permit related to noise, odor, water/soil sampling, truck weight, off-site debris and other operational recommendations listed in the attached memorandum from Matt Asselmeier, Senior Planner, for Kendall County.

STAFF ANALYSIS:

Due to the parcel's proximity to Yorkville's municipal boundary and its potential effect to adjacent Yorkville properties/development, staff spoke with the petitioner and Kendall County regarding the following special use recommendations:

1. A thirty-foot (30') wide buffer with a berm at least three feet (3') in height and consisting of two (2) shade trees, five (5) evergreen trees, and three (3) ornamental trees per one hundred (100) linear feet of buffer; they favored a minimum fifteen (15') foot wide buffer.
2. Odor control regulations including using an ASTM certified portable olfactometer, notification by the County to the property owner/business operator within two (2) business days of findings, and a requirement that the property owner/business operator respond within five (5) business days of receiving the notice with corrective action steps. Yorkville's performance standards related to odor were submitted to the County.
3. A condition that the property owner/business operator submit a written response within seven (7) days of receiving a complaint for a non-odor violation outlining steps taken to correct the issue of the complaint.
4. The submission of a detailed decommissioning plan.
5. A requirement that notification of operation management changes and contact information be updated annually with the County.

The petitioner was agreeable to certain landscaping requirements. This includes a 15-foot wide and 3-foot-tall berm near the eastern property line, nearest to the Yorkville parcel, consisting of pines, fir and/or shade trees spaced no further than 40-feet apart. Additionally, the petitioner agreed to the submission of a decommissioning plan and the request regarding a change of management and updated contact information.

However, Kendall County staff has concerns with the requested procedure for enforcement of odor control, as it currently contradicts the County's voluntary compliance policy and the handling of their Zoning Ordinance violations. The County does not own an olfactometer and proposes to handle odor on the site by having the petitioner adhere to odor control strategies such as maintaining proper carbon-to-nitrogen ratios, maintaining moisture levels, and sufficient turning of compost piles to enhance decomposition.

At Kendall County's ZPAC meeting held August 1, 2023, the recommendation was favorable with a requirement that the operator track wind conditions daily and add odor control amendment to mulch if they have to turn it on days when the wind blows in the direction of Yorkville. Additionally, the County's Health Department was not supportive of the City's requested olfactometer requirement.,

YORKVILLE'S COMPREHENSIVE PLAN:

Yorkville's 2016 Comprehensive Plan designation for this property is Estate/Conservation Residential (ECR). This future land use is intended to provide flexibility for residential design in areas of Yorkville that can accommodate low-density detached single-family housing, but also include sensitive environmental and scenic features that should be retained and enhanced. This land use classification is characterized by conventional neighborhoods with detached housing on large lots and serves as a transition from suburban neighborhoods to agricultural zones. This designation is also used as a holding designation for areas without the needed infrastructure to support traditional development (e.g., public utilities and roadways).

The current land use of an agricultural/compost facility is not consistent with Yorkville's Comprehensive Plan land use designation for this property. However, if approved by Kendall County, the proposed special use does not require a change to the City's Comprehensive Plan's future land use designation as the proposed special use does have an expiration date of December 1, 2033. The trend in

development in this area at time will dictate if the compost facility use would be appropriate, should the petitioner apply for renewal of the special use at that time.

STAFF COMMENTS

Staff has reviewed the request for special use renewal for the compost facility and still has some specific concerns related to the odor control regulations. **Staff would recommend** that in the event the City of Yorkville receives an odor complaint, the City can reach out directly to the property owner and Kendall County's Solid Waste Coordinator and receive a response in writing as to how the odor will be/was mitigated within seven (7) business days.

Staff is seeking input from the Planning and Zoning Commission as the one-and-a-half-mile review allows for the City to make comments and requests to the petitioner and County prior to their public meetings. This review will also be brought to the City Council at the August 22, 2023 meeting. This item was delivered to the City on July 19, 2023.

PROPOSED MOTION

In consideration of the proposed mile and half review of Kendall County Petition 23-26 for special use permit request for a compost facility at the property commonly known as 1270 E. Beecher Road, the Planning and Zoning Commission recommends the City Council to (object or not to object) to the request.

ATTACHMENTS

1. Application with Attachments



DEPARTMENT OF PLANNING, BUILDING & ZONING

111 West Fox Street • Room 203

Yorkville, IL • 60560

(630) 553-4141

Fax (630) 553-4179

Petition 23-26**Jefferey D. Milroy on Behalf of Milroy Farms, LLC****A-1 Special Use Permit for Composting of Landscape and Food Waste****INTRODUCTION**

On March 19, 2014, through Ordinance 2014-04, the County Board granted a special use permit, with conditions for the operation of a composting facility at the subject property. Ordinance 2014-04 required the property owner to submit a renewal prior to July 1, 2023, or the special use permit would expire on December 1, 2023. The property owner submitted the required renewal on June 30, 2023.

The subject property has operated as a composting facility since 1993.

The Petitioners are requesting the special use permit for the approximately thirty-nine point eight-seven (39.87) acres located in the unincorporated area. They are not renewing the special use permit for operations inside the United City of Yorkville. This reduces operations from approximately fifty-eight (58) acres.

The Host Community Agreement also expires in 2023. The Planning, Building and Zoning Committee met on July 10, 2023, to discuss renewing the agreement. They requested additional information regarding the amount of and types of materials coming into and out of the property.

Green Organics is no longer associated with the property.

The application materials are included as Attachment 1. Ordinance 2014-04 is included as Attachment 2. The plat of survey is included as Attachment 3. The business plan, including the site plan and landscaping plan, is included Attachment 4. The decommissioning plan is included as Attachment 5.

SITE INFORMATION

PETITIONERS: Jefferey D. Milroy on Behalf of Milroy Farms, LLC

ADDRESS: 1270 E. Beecher Road, Bristol

LOCATION: East Side of E. Beecher Road Approximately 0.5 Miles South of Galena Road on the East Side of the Road



Approved Special Use in 2014



Proposed Special Use Area

Bristol: Na-Au-Say

PARCEL: 02-08-100-006

LOT SIZE: 40 +/- Acres

EXISTING LAND USE: Agricultural/Composting Facility

ZONING: A-1 with a Special Use Permit

LRMP:	Future Land Use	Suburban Residential (Max. 1.00 DU/Acre) and Mixed Use Business Along Beecher Road (County) Estate/Conservation Residential (Yorkville)
	Roads	E. Beecher is a Local Road maintained by Bristol Township.
	Trails	There is a proposed trail on E. Beecher Road.

Floodplain/ Wetlands	There are no floodplains on the property. There is a wetland on the extreme on the northwest corner of the property.
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REQUESTED ACTIONS: Special Use Permit for a Composting Facility

APPLICABLE REGULATIONS: Section 7:01.D – A-1 Special Uses
Section 13:08 – Special Use Procedures

SURROUNDING LAND USE

Location	Adjacent Land Use	Adjacent Zoning	Land Resource Management Plan	Zoning within ½ Mile
North	Agricultural	A-1 (County)	Suburban Residential (County) Estate/Conservation Residential (Yorkville)	A-1 (County) R-3 Planned Unit Development (Yorkville)
South	Agricultural	A-1 SU and M-2 (County)	Suburban Residential and Mixed Use Business (County) Estate/Conservation Residential (Yorkville)	A-1 SU and M-2 (County)
East	Agricultural	R-2 Planned Unit Development and R-2, R-4, B-3 Planned Unit Development (Yorkville)	Urban Area (County) Estate/Conservation Residential (Yorkville)	Various Residential Planned Unit Developments (Yorkville)
West	Manufacturing	M-2 and M-3 SU (County)	Suburban Residential and Mixed Use Business (County) Estate/Conservation Residential (Yorkville)	A-1, A-1 SU, M-1, M-2, and M-3 SU (County)

The A-1 SU to the south was for gravel mining. The M-3 SU to the west was for asphalt production.

PHYSICAL DATA

ENDANGERED SPECIES REPORT

EcoCAT Report was submitted on June 22, 2023. The Mottled Sculpin and Rusty Patch Bumble Bee were in the vicinity. The Illinois Department of Natural Resources recommended that work that disturbs the ground or removes flowering plants be done between October 1st and April 1st. If work occurred outside of the dates listed, a Rusty Patch Bumble Bee survey be conducted by a qualified biologist, with the results forward to the Illinois Department of Natural Resources. The consultation also noted that coordination with the United States Fish and Wildlife Service may be necessary. The consultation also contained suggestions for lighting. The consultation was closed if the recommendations related to the Rusty Patch Bumble Bee were implemented, see Attachment 1, Pages 19-25.

As of the date of this memo, the Petitioner was not agreeable to either recommendation related to the Rusty Patch Bumble Bee.

NATURAL RESOURCES INVENTORY

The NRI Application was submitted on June 20, 2023. The LESA score was 175, indicating a low level of protection, see Attachment 1, Pages 12-18.

ACTION SUMMARY

BRISTOL TOWNSHIP

Petition information was sent to Bristol Township on July 19, 2023.

UNITED CITY OF YORKVILLE

Prior to formal application submittal, Staff contacted Yorkville regarding potential comments on the application. Yorkville requested the following items:

1. A thirty foot (30') wide buffer with a berm at least three feet (3') in height and consisting of two (2) shade trees, five (5) evergreen trees, and three (3) ornamental trees per one hundred (100) linear feet of buffer; they favored a minimum fifteen (15') foot wide buffer.
2. Odor control regulations including using an ASTM certified portable olfactometer, notification by the County to the property owner/business operator within two (2) business days of findings, and a requirement that the property owner/business operator respond within five (5) business days of receiving the notice with corrective action steps. Yorkville's performance standards related to odor were submitted to the County.
3. A condition that the property owner/business operator submit a written response within seven (7) days of receiving a complaint for a non-odor violation outlining steps taken to correct the issue of the complaint.
4. The submission of a detailed decommissioning plan.
5. A requirement that notification of operation management changes and contact information be updated annually with the County.

Staff has concerns regarding the requested procedure of enforcement because the requested method presently contradicts the County's current voluntary compliance policy and the regular procedures for handling alleged violations in the Zoning Ordinance. Also, the County does not presently own an olfactometer. Lastly, Illinois Environmental Protection Agency regarding complaints.

Yorkville's email and Staff's response were included as Attachment 6.

The Petitioner was agreeable to certain landscaping, the submission of a decommissioning plan, the request regarding change of management and updated contact information.

Petition information was sent to the United City of Yorkville on July 19, 2023.

BRISTOL-KENDALL FIRE PROTECTION DISTRICT

Petition information was sent to the Bristol Kendall Fire Protection District on July 19, 2023.

GENERAL INFORMATION

Per Section 7:01.D.20 of the Kendall County Zoning Ordinance, composting businesses can be special uses on A-1 zoned property subject to the following conditions:

1. The facility shall meet all Illinois Environmental Protection Agency requirements as identified in Title 35, Subtitle G, Chapter 1, Subchapter 1, Part 830, Standards for compost facilities.
2. Operational personnel shall be present on site during all hours which the facility is open for the receipt of landscape waste.

3. The hours during which landscape waste may be received shall be 7:00am to 4:00pm Monday through Friday and 7:00am to 12:00 noon Saturday. Processing operations shall cease after each day's receipts have been processed and placed in windrows, not to exceed three (3) additional hours.
4. The decibel levels at the property line shall not exceed Illinois Pollution Control Board standards.
5. A locked gate shall restrict vehicle access during closed hours except that a "lock-box" shall allow access to emergency vehicles.
6. Water samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
7. Soil samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
8. Authorized Kendall County personnel shall be allowed on site during business hours for inspection and testing.
9. The facility operator shall send up-to-date copies of the State permit and related documents including Operational Plan, Surface water management Plan, Pest Control Plan, Site Drawing, and an Annual Report to the County Solid Waste Coordinator.
10. Truck weights shall be limited to seventy-three thousand, two hundred eighty (73,280) pounds.
11. The operator shall provide weight receipts to Kendall County.
12. Off-site debris and trash generated by the site must be cleaned-up daily on surrounding properties with the owner's permission.
13. Other conditions as appropriate for the particular facility.

The Petitioner is agreeable to conditions 1-12.

BUSINESS OPERATIONS

When the special use permit was originally granted in the 1990s, they were originally allowed to process one hundred fifty thousand (150,000) cubic yards of source separated landscape materials. This number was increased to one hundred seventy-five thousand (175,000) cubic yards in 2014.

Starting in 2010, the facility was allowed to accept food scraps.

The site plan (Attachment 4, Page 3) shows several twenty-five foot (25') wide windrows. These windrows are separated by ten foot (10') foot driving aisles. No information was provided regarding the height of the windrows.

Bulk agent storage areas separate the east and west windrow areas.

The site plan shows one (1) final cure storage area, one (1) grinding and blending concrete pad, and one (1) receiving pad. No information was provided regarding the dimensions of these areas.

As noted previously, the hours when landscape waste can be received are between 7:00 a.m. and 4:00 p.m. on Mondays through Fridays and 7:00 a.m. until Noon on Saturdays. Processing operations may continue for a maximum three (3) additional hours.

As noted in the Decommissioning Plan (Attachment 5), the site will be converted back to farming within five (5) months, this includes the removal materials, grading, seeding, and removal of all structures.

No information was provided regarding the number of employees at the property.

The use has been at the property since 1993.

There have not been any founded complaints against the property in recent years.

BUILDINGS AND BUILDING CODES

One (1) approximately four hundred twenty (420) square foot office trailer is shown on the plan near the southeast corner of the site.

ENVIRONMENTAL HEALTH

The property is served by a well and septic. The well is located at the southeast corner of the property.

The Petitioner is agreeable to the requirements related to water samples and soil samples, inspection and testing, and submitting copies of the State permit, operational plan, surface water management plan, pest control plan, site drawings, annual report, and decommissioning plan. The Petitioner is also agreeable to providing weight receipts to Kendall County.

The Solid Waste Coordinator shall maintain a log of complaints received on the facility.

Sampling schedules are noted on in the Business Plan (Attachment 4, Page 6).

Though not shown on the site plan, a dumpster is located on the property. The business plan (Attachment 4, Page 2) notes a requirement to clean-up offsite debris and trash daily on surrounding properties.

NICOR possesses an easement north of the existing driveway.

Overhead utilities run from E. Beecher Road to the office trailer.

STORMWATER

The property drains to the south and west.

One (1) existing detention basin is shown on the site plan north of parking area. The site plan also shows one (1) proposed detention basin southwest of the western windrows. One twenty-five foot (25') wide drainage swale is shown west of the western windrows. No information was provided regarding the dimensions of the detention basins or the depth of the drainage swale.

The Petitioners submitted an application for a stormwater management permit. WBK submitted comments in a letter dated July 15, 2023, included as Attachment 7. To date, Staff is waiting for comments from the Petitioner regarding WBK's comments.

ACCESS

Per the site plan (Attachment 4, Page 3), the subject property has an asphalt drive to E. Beecher Road.

The Petitioner is agreeable to the truck weight restriction contained in the Kendall County Zoning Ordinance.

PARKING AND INTERNAL TRAFFIC CIRCULATION

According to the site plan (Attachment 4, Page 3), one (1) parking area was shown north of the office trailer and one (1) handicapped accessible parking space was shown east of the office trailer. No information was provided regarding the total number of parking stalls.

The site plan shows one (1) truck turn around area.

LIGHTING

No information was provided regarding lighting. Because of the small number of parking spaces, a photometric plan was not required.

SIGNAGE

According to the business plan (Attachment 4, Page 4), one (1) existing sign is located on the property. The sign is not illuminated. The information on the sign is required per Illinois Environmental Protection Agency rules.

One (1) additional no trespassing sign is located on the interior gate.

SECURITY

According to the site plan (Attachment 4, Page 3), there is a fence along the western and northern sides of the property. There is also a fifteen foot (15') wide buffer between the eastern property line and the berm. The business plan (Attachment 4, Pages 1 and 5) references a locked gate. The gate is locked during closed hours, but a lock box is available for emergency response vehicles.

LANDSCAPING

Per the site plan (Attachment 4, Page 3), one (1) fifteen foot (15') wide berm is shown near the eastern property line. A twenty-five foot (25') wide berm is shown near the western and northern property lines. Per the business plan (Attachment 4, Page 2), the eastern berm will be three feet (3') in height. Landscaping consisting of pines, fir, and/or shade trees will be planted at spacing not to exceed forty feet (40') apart. Seedling will be a minimum of six inches (6") in height and will be planted within one (1) year of the issuance of the special use permit. The business plan also references maintaining the existing plantings on the berm and ditch and existing landscaping. No information was provided regarding plantings on the western or northern berms or the composition of the existing landscaping and plantings on the property.

NOISE CONTROL

Per the business plan (Attachment 4, Page 1), noise levels cannot exceed Illinois Pollution Control Board standards.

ODORS

The business plan (Attachment 4, Page 2) references odor control strategies generally. Illinois Environmental Protection Agency rules requires operators of composting facilities to prepare an odor minimization plan. Staff has requested a copy of this plan.

RELATION TO OTHER SPECIAL USES

This is the only property to have a special use permit for a composting facility in unincorporated Kendall County.

FINDINGS OF FACT

Before preparing a Findings of Fact, Staff would like to review the stormwater information, pest control plan, and odor control plan and obtain comments from ZPAC members.

§ 13:08.J of the Zoning Ordinance outlines findings that the Zoning Board of Appeals must make in order to recommend in favor of the applicant on special use permit applications. They are listed below in *italics*. Staff has provided findings in **bold** below based on the recommendation:

The establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

The special use will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood. The Zoning classification of property within the general area of the property in question shall be considered in determining consistency with this standard. The proposed use makes adequate provisions for appropriate buffers, landscaping, fencing, lighting, building materials, open space and other improvements necessary to insure that the proposed use does not adversely impact adjacent uses and is compatible with the surrounding area and/or the County as a whole.

Adequate utilities, access roads and points of ingress and egress, drainage, and/or other necessary facilities have been or are being provided.

The special use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the County Board pursuant to the recommendation of the Zoning Board of Appeals.

The special use is consistent with the purpose and objectives of the Land Resource Management Plan and other adopted County or municipal plans and policies.

RECOMMENDATION

Staff would like additional information before issuing a recommendation. The general conditions and restrictions would be as follows:

1. The facility shall comply with the conditions as they are listed in the applicable sections of the Kendall County Zoning Ordinance related to the composting of landscape waste and food waste, subject to the following:
 - a. The facility shall meet all Illinois Environmental Protection Agency requirements as identified in the applicable sections of the Kendall County Zoning Ordinance.
 - b. Operational personnel shall be present on site during all hours which the facility is open for the receipt of landscape waste.
 - c. The hours during which landscape waste may be received shall be 7:00 a.m. to 4:00 p.m. on Monday through Fridays and 7:00 a.m. to Noon on Saturdays. Processing operations shall cease after each day's receipts have been processed and placed in windrows, not to exceed three (3) additional hours.
 - d. The decibel levels at the property line shall not exceed Illinois Pollution Control Board standards.
 - e. Water samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
 - f. Soil samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
 - g. Authorized Kendall County personnel shall be allowed on site during business hours for inspection and testing.
 - h. The facility operator shall send up-to-date copies of the State permit and related documents including Operational Plan, Surface Water Management Plan, Pest Control Plan, Site Drawing, and an Annual Report to the County Solid Waste Coordinator.
 - i. Truck weights shall be limited to seventy-three thousand, two hundred eighty (73,280) pounds.
 - j. The operator shall provide weight receipts to Kendall County.
 - k. Off-site debris and trash generated by the site must be cleaned-up on a daily basis on surrounding properties with the owner's permission.
 - l. Implement strategies to manage potential odor issues such as maintaining proper carbon to-nitrogen ratios, maintaining moisture levels, and sufficient turning of compost piles to enhance decomposition.

- m. Install water spraying systems or dust suppression equipment at critical points of dust generation. Regularly monitor moisture content and use sprinkler systems or misters to dampen the compost as needed.
- 2. The facility will be permitted to take in one hundred seventy-five thousand (175,000) cubic yards of source-separated landscape materials (i.e. brush, leaves, tree trimmings and grass).
- 3. The site shall be developed substantially in accordance with the site plan (Attachment 4, Page 3) and the site plan shall be kept on file as "Exhibit A" attached hereto.
- 4. As noted on the site plan, a fifteen foot (15') buffer and a berm will be provided between the composting area and the United City of Yorkville's boundary. The berm will be at least fifteen feet (15') wide and three feet (3') high. The buffer landscaping will be composed primarily of pine, fir, and/or shade trees planted at spacing not to exceed forty feet (40') apart. Seedlings will be a minimum of six inches (6") in height. Specimen seedlings will be planted and the berm will be constructed within one (1) year of issuance of the special use permit ordinance. The Kendall County Planning, Building and Zoning Committee may grant an extension to the deadline to install the berms and landscaping.
- 5. The facility operator shall maintain existing plantings on the berm and ditch.
- 6. The facility operator shall maintain the security gate, signage, and landscaping as indicated on "Exhibit B" (Attachment 4, Pages 4 and 5) attached hereto. The locked gate shall restrict vehicle access during closed hours except that a "lock-box" shall allow access to emergency vehicles.
- 7. The facility operator shall maintain a sampling schedule as shown on "Exhibit C" (Attachment 4, Page 6) attached hereto dated March 11, 2008.
- 8. The County Solid Waste Coordinator shall maintain a log of complaints received on the facility.
- 9. This special use Ordinance shall expire on December 1, 2033, and the petition for renewal shall be made prior to July 1, 2033.
- 10. If any Illinois Environmental Protection Agency (IEPA) violations or citations are received by the site operator/manager and/or parcel owner/manager they need to be submitted to the County Solid Waste Coordinator within thirty (30) days.
- 11. The operator of the business allowed by the special use permit shall follow the Decommissioning Plan (Attachment 5) as described in Exhibit D. The operator shall assume all of the responsibilities assigned to Green Organics in the plan. The Decommissioning Plan shall be kept on file in the site trailer office per EPA requirements and will be accessible to the Kendall County Health Inspector. The operator of the business allowed by the special use permit shall update the Kendall County Health Department within thirty (30) days of changes to the Decommissioning Plan.
- 12. The operator of the business allowed by the special use permit shall notify the Kendall County Planning, Building and Zoning Department within thirty (30) days of changes in operation manager. In addition, the operator of the business allowed by this special use permit shall provide contact information of the management operator annually by July 1st.
- 13. The operator of the business allowed by the special use permit shall ensure a host community agreement is in existence with the County prior to operations.
- 14. Ordinance 2014-04 and all previous special use permits and amendments to special use permits related to the operation of composting facility on the subject property are hereby repealed in their entirety.
- 15. None of the vehicles or equipment parked or stored on the subject property related to the business allowed by the special use permit shall be considered agricultural vehicles or agricultural equipment.
- 16. All of the vehicles and equipment stored on the subject property related to the business allowed by the special use permit shall be maintained in good condition with no deflated tires and shall be licensed if

required by law.

17. Any structures constructed, installed, or used related to the business allowed by this special use permit on the property shall not be considered for agricultural purposes and must secure applicable building permits.
18. The owners and operators of the business allowed by this special use permit acknowledge and agree to follow Kendall County's Right to Farm Clause.
19. The property owner and operator of the business allowed by this special use permit shall follow all applicable Federal, State, and Local laws related to the operation of this type of business.
20. Failure to comply with one or more of the above conditions or restrictions could result in the amendment or revocation of the special use permit.
21. If one or more of the above conditions is declared invalid by a court of competent jurisdiction, the remaining conditions shall remain valid.
22. This special use permit shall be treated as a covenant running with the land and are binding on the successors, heirs, and assigns as to the same special use conducted on the property.

ATTACHMENTS

1. Application Materials (Including Petitioner's Findings of Fact, NRI Application, and EcoCat)
2. Ordinance 2014-04
3. Plat of Survey
4. Business Plan (Including Site Plan)
5. Decommission Plan
6. Pre-Application Emails with United City of Yorkville
7. July 15, 2023, WBK Comment Letter



DEPARTMENT OF PLANNING, BUILDING & ZONING

111 West Fox Street • Yorkville, IL • 60560
(630) 553-4141 Fax (630) 553-4179

APPLICATION

PROJECT NAME Milroy Farms LLC FILE #: _____

Kendall Composting Permit

NAME OF APPLICANT (Including First, Middle Initial, and Last Name) Jefferey D. Milroy		
CURRENT LANDOWNER/NAME(s) Milroy Farms LLC		
SITE INFORMATION ACRES 39.8752	SITE ADDRESS OR LOCATION 1270 E. Beecher Road, Bristol Township, IL	ASSESSOR'S ID NUMBER (PIN) 02-08-100-006
EXISTING LAND USE Composting Special Use	CURRENT ZONING A1 Special Use	LAND CLASSIFICATION ON LRMP East side is mixed business and west side is rural estate residential
REQUESTED ACTION (Check All That Apply):		
<input checked="" type="checkbox"/> SPECIAL USE <input type="checkbox"/> MAP AMENDMENT (Rezone to _____) <input type="checkbox"/> VARIANCE <input type="checkbox"/> ADMINISTRATIVE VARIANCE <input type="checkbox"/> A-1 CONDITIONAL USE for: _____ <input type="checkbox"/> SITE PLAN REVIEW <input type="checkbox"/> TEXT AMENDMENT <input type="checkbox"/> RPD (<input type="checkbox"/> Concept; <input type="checkbox"/> Preliminary; <input type="checkbox"/> Final) <input type="checkbox"/> ADMINISTRATIVE APPEAL <input type="checkbox"/> PRELIMINARY PLAT <input type="checkbox"/> FINAL PLAT <input type="checkbox"/> OTHER PLAT (Vacation, Dedication, etc.) <input checked="" type="checkbox"/> AMENDMENT TO A SPECIAL USE (<input checked="" type="checkbox"/> Major; <input type="checkbox"/> Minor)		
PRIMARY CONTACT Jefferey Milroy	PRIMARY CONTACT MAILING ADDRESS [REDACTED]	PRIMARY CONTACT EMAIL [REDACTED]
PRIMARY CONTACT PHONE # [REDACTED]	PRIMARY CONTACT FAX # [REDACTED]	PRIMARY CONTACT OTHER # (Cell, etc.) [REDACTED]
ENGINEER CONTACT Jefferey Milroy	ENGINEER MAILING ADDRESS [REDACTED]	ENGINEER EMAIL [REDACTED]
ENGINEER PHONE # [REDACTED]	ENGINEER FAX # [REDACTED]	ENGINEER OTHER # (Cell, etc.) [REDACTED]
I UNDERSTAND THAT BY SIGNING THIS FORM, THAT THE PROPERTY IN QUESTION MAY BE VISITED BY COUNTY STAFF & BOARD/ COMMISSION MEMBERS THROUGHOUT THE PETITION PROCESS AND THAT THE PRIMARY CONTACT LISTED ABOVE WILL BE SUBJECT TO ALL CORRESPONDANCE ISSUED BY THE COUNTY.		
I CERTIFY THAT THE INFORMATION AND EXHIBITS SUBMITTED ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT I AM TO FILE THIS APPLICATION AND ACT ON BEHALF OF THE ABOVE SIGNATURES. THE APPLICANT ATTESTS THAT THEY ARE FREE OF DEBT OR CURRENT ON ALL DEBTS OWED TO KENDALL COUNTY AS OF THE DATE OF THE APPLICATION.		
SIGNATURE OF APPLICANT [REDACTED]		DATE <u>6/29/2023</u>

FEE PAID:\$ _____

CHECK #: _____

¹Primary Contact will receive all correspondence from County

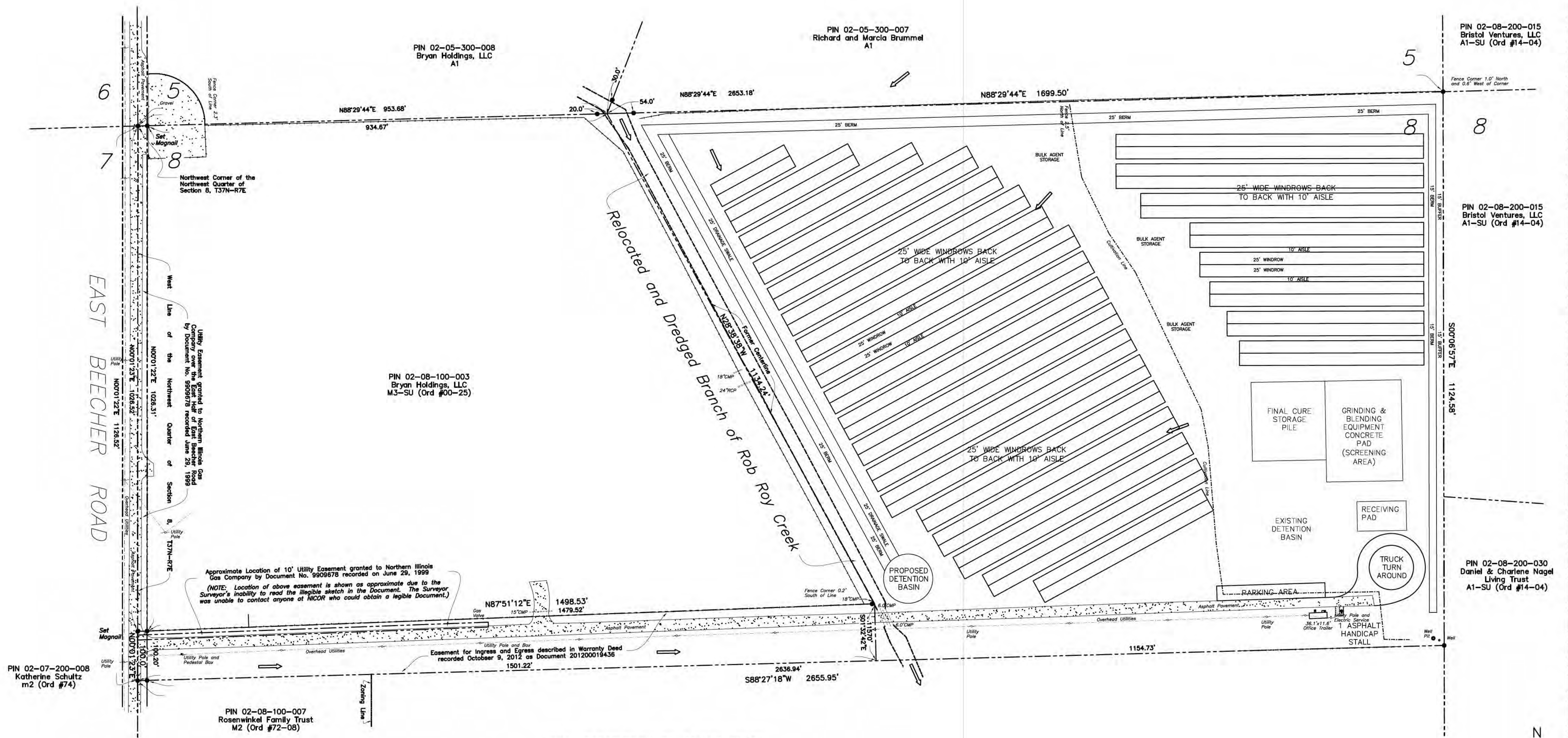
²Engineering Contact will receive all correspondence from the County's Engineering Consultants

Date Stamp Here If
Checklist Is Complete

Detailed Description Of Proposed Use Business Plan

1. The facility shall comply with the conditions as they are listed in the applicable sections of the Kendall County Zoning Ordinance: Composting of landscape waste and food waste, subject to the following:
 - a. The facility shall meet all Illinois Environmental Protection Agency requirements as identified in the applicable sections of the Kendall County Zoning Ordinance.
 - b. Operational personnel shall be present on site during all hours which the facility is open for the receipt of landscape waste.
 - c. The hours during which landscape waste may be received shall be 7:00am to 4:00pm Monday through Friday and 7:00am to 12:00 noon Saturday. Processing operations shall cease after each day's receipts have been processed and placed in windrows, not to exceed three (3) additional hours.
 - d. The decibel levels at the property line shall not exceed Illinois Pollution Control Board standards.
 - e. A locked gate shall restrict vehicle access during closed hours except that a "lock-box" shall allow access to emergency vehicles.
 - f. Water samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
 - g. Soil samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
 - h. Authorized Kendall County personnel shall be allowed on site during business hours for inspection and testing.
 - i. The facility operator shall send up-to-date copies of the State permit and related documents including Operational Plan, Surface water management Plan, Pest Control Plan, Site Drawing, and an Annual Report to the County Solid Waste Coordinator.
 - j. Truck weights shall be limited to 73,280 pounds.
 - k. The operator shall provide weight receipts to Kendall County.

- l. Off-site debris and trash generated by the site must be cleaned-up on a daily basis on surrounding properties with the owner's permission.
 - m. Other conditions as appropriate for the particular facility. (*Amended 6/26/2023*)
 - n. Decommissioning plan shall be kept on file in the site trailer office per EPA requirements and will be accessible to the Kendall County Health Inspector.
 - o. Implement strategies to manage potential odor issues such as maintaining proper carbon-to-nitrogen ratios, maintaining moisture levels, and sufficient turning of compost piles to enhance decomposition.
 - p. Install water spraying systems or dust suppression equipment at critical points of dust generation. Regularly monitor moisture content and use sprinkler systems or misters to dampen the compost as needed.
 - q. A 15' buffer and a berm will be provided between the composting area and the Village of Yorkville. This berm will be at least 15' wide by 3' high. The buffer landscaping will be composed primarily of pine, fir, and/or shade trees planted at spacing not to exceed 40' apart. Seedlings will have a minimum of 6" in height. Specimen seedlings will be planted and the berm will be constructed within one year of issuance of the Composting Ordinance.
- 2. The facility will be permitted to take in 175,000 cubic yards of source-separated landscape materials (i.e. brush, leaves, tree trimmings and grass).
 - 3. The site plan shall be kept on file as "Exhibit A" attached hereto.
 - 4. The facility operator shall maintain existing plantings on the berm and ditch.
 - 5. The facility operator shall maintain the security gate and landscaping as indicated on "Exhibit B" attached hereto.
 - 6. The facility operator shall maintain a sampling schedule as shown on "Exhibit C" attached hereto dated March 11, 2008.
 - 7. The County Solid Waste Coordinator shall maintain a log of complaints received on the facility.
 - 8. This special use Ordinance shall expire on December 1, 2033 and the petition for renewal shall be made prior to July 1, 2033.
 - 9. If any Illinois Environmental Protection Agency (IEPA) violations or citations are received by the site operator/manager and/or parcel owner/manager they need to be submitted to the County Solid Waste Coordinator within 30 days.



Jeff Milroy

PIN: 02-08-100-006

1270 East Beecher Road
Yorkville, Illinois 60560

39.8752 Acres

A-1 SU

A-1 SU

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

That part of the Northwest Quarter of Section 8, Towns

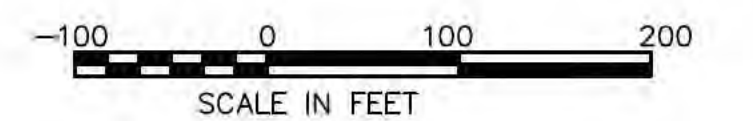
Meridian, being described as follows: Commencing at the Northwest Corner of said Quarter Section; thence North 88°22'18" East along the North Line of said Northwest Quarter, 953.68 feet to a point in the center of said branch of the Rob Roy Creek, thence continuing North 89°29'44" East along said North Line, 1699.50 feet to the Northeast Corner of said Northwest Quarter; thence South 00°06'57" East along the East Line of said Northwest Quarter, 1124.58 feet; thence South 88°27'18" West, 2655.95 feet to a point on the West Line of said Northwest Quarter that is 1126.52 feet Southerly from the Northwest Corner of said Northwest Quarter; thence North 00°12'42" East along said Southerly Line, 1001.66 feet to a point North 14°51'12" East 1001.66 feet from the center line of said branch of Rob Roy Creek; thence North 28°38'38" West along said center line, 11324.24 feet to the point of beginning in Bristol Township, Kendall County, Illinois and containing 39.8752 acres.

The Subject property is located in

flood hazard determined to be outside the 0.2% annual chance floodplain) as shown on FEMA Flood Insurance Rate Map Panel No. 17093C0036G with an effective date of February 4, 2009.

The National Wetlands Inventory

(R2UBHx) in the relocated and dredged branch of Rob Roy Creek.





MIDWEST
MATERIAL
MANAGEMENT
(847) 426-6354
- COMPOST FACILITY -
OPERATING HOURS: BY APPOINTMENT ONLY
MATERIALS ACCEPTED: LANDSCAPE WASTE
"COMRI CERTIFIED" COMPOST AVAILABLE
COMPLAINTS CONCERNING THIS FACILITY CAN BE
MADE TO: STEVE BERGUND: 847-426-6354 OR
BUREAU OF LAND, ILINOS ENVIRONMENTAL PROTECTION
AGENCY SPRINGFIELD, ILINOS: 217-524-3300
MAILING ADDRESS: 2014 N. STATE ST. HAMPSHIRE, IL 60140



March 11, 2008

Mr. Joseph Mazza
[REDACTED]



Dear Mr. Mazza:

You requested confirmation of the sampling schedule that is used by Analytical Chemistry & Environmental Services, Inc. (AC&E Services, Inc.) at your compost facility in Bristol, Illinois.

The compost is tested according to 35 Illinois Administration Code (IAC) Section 830.507(a) for each 5000 tons shipped.

The well at the site is tested once per year in May in accordance with your current permit. The soil is tested once per year in September. Two composite soil samples are taken; one in the detention pond at the west side of the facility and one taken at the end of the windrows at the south end of the property. The testing is performed in accordance with your current permit.

I hope this answers your questions concerning your current testing requirements. If any further help is needed, do not hesitate to contact us.

Regards,

[REDACTED]
Terese M. Laciak
President

EXHIBIT C

TML/cab

cc: Steven B. Curatti, Director of Environmental Health, Kendall County

Legal Description of Milroy Farms LLC Parcel Parcel 02-08-100-006

That part of the Northwest Quarter of Section 8, Township 37 North, Range 7 East of the Third Principal Meridian, being described as follows: Commencing at the Northwest Corner of said Quarter Section; thence north $88^{\circ} 29' 44''$ East along the North Line of said Northwest Quarter, 953.68 feet to a point in the center line of a branch of Rob Roy Creek for the point of beginning; thence continuing North $88^{\circ} 29' 44''$ East along said North Line, 1699.50 feet to the Northeast Corner of said Northwest Quarter; thence South $00^{\circ} 06' 57''$ East along the East Line of said Northwest Quarter, 1124.58 feet; thence South $88^{\circ} 27' 18''$ West, 2655.95 feet to a point on the West line of said Northwest Quarter; that is 1126.52 feet Southerly of the Northwest Corner of said Northwest Quarter; thence North $00^{\circ} 01' 23''$ East along said West line, 100.0 feet; thence North $87^{\circ} 51' 12''$ East, 1498.53 feet to a point in the center line of a branch of Rob Roy Creek; thence North $28^{\circ} 38' 38''$ West along said center line, 1134.24 feet to the point of beginning in Bristol Township, Kendall County, Illinois.



WARRANTY DEED

① ~~XXXXXX~~

201200018002

DEBBIE
GILLETTE
KENDALL COUNTY, IL

RECORDED: 9/19/2012 12:29 PM
WD: 916.75 RHSPS FEE: 10.00
PAGES: 4

Prepared by:
Craig Hasenbalg
Dickson & Hasenbalg

GRANTOR:
AURORA BLACKTOP, INC.

Subsequent Tax Bills To:

GRANTEE:
MILROY FARMS, LLC, Jeff Milroy

THE GRANTORS, AURORA BLACKTOP, INC., an Illinois corporation, under and by virtue of the laws of the State of Illinois, and duly authorized to transact business in the State where the following described real estate is located, of the Village of Bristol, County of Kendall, and State of Illinois, for and in consideration of TEN AND NO/100 (\$10.00) DOLLARS, in hand paid, and other good and valuable consideration, receipt of which is hereby duly acknowledged, conveys and warrants to GRANTEE: MILROY FARMS, LLC, an Illinois limited liability company, whose mailing address is: [REDACTED] ALL RIGHT, TITLE AND INTEREST IN AND TO the following described real estate to-wit:

Legal description attached hereto as Exhibit A

Parcel Identification No: 02-08-100-006
Commonly known as: 39.8752 Acres, Farmland, located in Bristol Township, Kendall County, IL

Together with the hereditaments, tenements and appurtenances thereunto belonging.

This Deed and conveyance is subject to easements and restrictions of record, if any, roadways, rights of adjoining owners to the uninterrupted flow of any streams which may cross the land, right of way for drainage tiles, ditches, feeders, and laterals, and general taxes for the year 2012 and subsequent.

TO HAVE AND TO HOLD the same unto said Grantee, and its or its heirs and assigns forever hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

DATED this 31ST day of August, 2012

AURORA BLACKTOP, INC., an Illinois Corporation

By: [REDACTED]

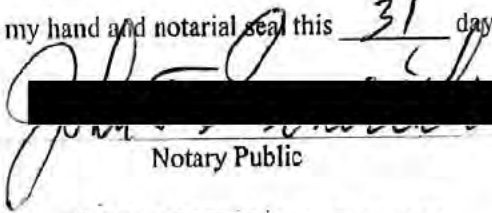
Mall Tax
Certification Title Business, LLC
[REDACTED]

2012-204034

STATE OF ILLINOIS)
) SS
COUNTY OF KANE)

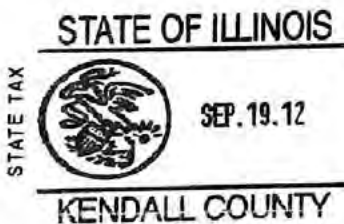
I, the undersigned, a Notary Public in and for said County and State aforesaid, DO HEREBY CERTIFY that CRAIG NASENBALG me this day in person, and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal this 31 day of Aug. 2012


Notary Public



p:\home\pc\craig\abt.auction\geneva construction\dcad.parcel.2.docx



COUNTY OF KENDALL
REAL ESTATE TRANSFER TAX
\$ 289.25 W

KENDALL COUNTY DISCLOSURE OF BENEFICIARIES FORM

1. Applicant Milroy Farms LLC
 Address [REDACTED]
 City [REDACTED] State [REDACTED] Zip [REDACTED]
2. Nature of Benefit Sought Special Use Permit
3. Nature of Applicant: (Please check one)
 - ☐ Natural Person (a)
 - ☐ Corporation (b)
 - ☐ Land Trust/Trustee(c)
 - ☐ Trust/Trustee (d)
 - ☒ Partnership (e)
 - ☐ Joint Venture (f)
4. If applicant is an entity other than described in Section 3, briefly state the nature and characteristics of the applicant:

5. If your answer to Section 3 you have checked letter b, c, d, e, or f, identify by name and address each person or entity who is a 5% shareholder in case of a corporation, a beneficiary in the case of a trust or land trust, a joint venture in the case of a joint venture, or who otherwise has proprietary interest, interest in profits and losses or right to control such entity:

NAME	ADDRESS	INTEREST
Jefferey D Milroy	[REDACTED]	50%
Lilianna D Milroy	[REDACTED]	50%

6. Name, address, and capacity of person making this disclosure on behalf of the applicant:

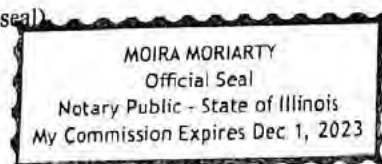
Jefferey Milroy, Manager, [REDACTED]

VERIFICATION

I, [REDACTED], being first duly sworn under oath that I am the person making this disclosure on behalf of the applicant, that I am duly authorized to make the disclosure, that I have read the above and foregoing Disclosure of Beneficiaries, and that the statements contained therein are true in both substance and fact.

Subscribed and sworn to before me this 20 day of June, A.D. 2023

(seal)



[REDACTED]

RECEIVED
6/21/23

**Kendall County Soil & Water
Conservation District**

7775A Route 47, Yorkville, Illinois 60560 • (630)553-5821 extension 3



www.kendallswcd.org

NATURAL RESOURCE INFORMATION (NRI) REPORT APPLICATION

Petitioner: Milroy Farms LLC

Contact Person: Jefferey Milroy

Address: [REDACTED]

City, State: [REDACTED]

Phone Number: [REDACTED]

Email: [REDACTED]

Please select: How would you like to receive a copy of the NRI Report? ☒ Email ☐ Mail

Site Location & Proposed Use

Township Name Bristol Township

Township T37 N, Range R7E E, Section(s) 8

Parcel Index Number(s) 02-08-100-006

Project or Subdivision Name Milroy Farms Composting Permit

Number of Acres 39.87

Current Use of Site A-1 Special Use

Proposed Use A-1 Special Use

Proposed Number of Lots N/A

Proposed Number of Structures N/A

Proposed Water Supply Well (existing)

Proposed type of Wastewater Treatment N/A

Proposed type of Storm Water Management Retention Pond (existing)

Type of Request

☐ Change in Zoning from _____ to _____

☐ Variance (Please describe fully on separate page)

☒ Special Use Permit (Please describe fully on separate page)

Name of County or Municipality the request is being filed with: Kendall County, IL

In addition to this completed application form, please including the following to ensure proper processing:

- ☒ **Plat of Survey/Site Plan** - showing location, legal description and property measurements
- ☒ **Concept Plan** - showing the locations of proposed lots, buildings, roads, stormwater detention, open areas, etc.
- ☒ If available: topography map, field tile map, copy of soil boring and/or wetland studies
- ☒ **NRI fee** (Please make checks payable to Kendall County SWCD)

The NRI fees, as of July 1, 2010, are as follows:

Full Report: \$375.00 for five acres and under, plus \$18.00 per acre for each additional acre or any fraction thereof over five.

Executive Summary Report: \$300.00 (KCSWCD staff will determine when a summary or full report will be necessary.)

Fee for first five acres and under \$ 375.00

Additional Acres at \$18.00 each \$ _____

Total NRI Fee \$ 75.00

NOTE: Applications are due by the 1st of each month to be on that month's SWCD Board Meeting Agenda. Once a completed application is submitted, please allow 30 days for inspection, evaluation and processing of this report.

I (We) understand the filing of this application allows the authorized representative of the Kendall County Soil and Water Conservation District (SWCD) to visit and conduct an evaluation of the site described above. The completed NRI report expiration date will be 3 years after the date reported.

[Signature]
Petitioner or Authorized Agent

June 20, 2023

Date

This report will be issued on a nondiscriminatory basis without regard to race, color, religion, national origin, age, sex, handicap or marital status.

FOR OFFICE USE ONLY

NRI# 2307 Date initially rec'd 6/21/23 Date all rec'd _____ Board Meeting _____

Fee Due \$ 75.00 Fee Paid \$ _____ Check # _____ Over/Under Payment _____ Refund Due _____



July 13, 2023

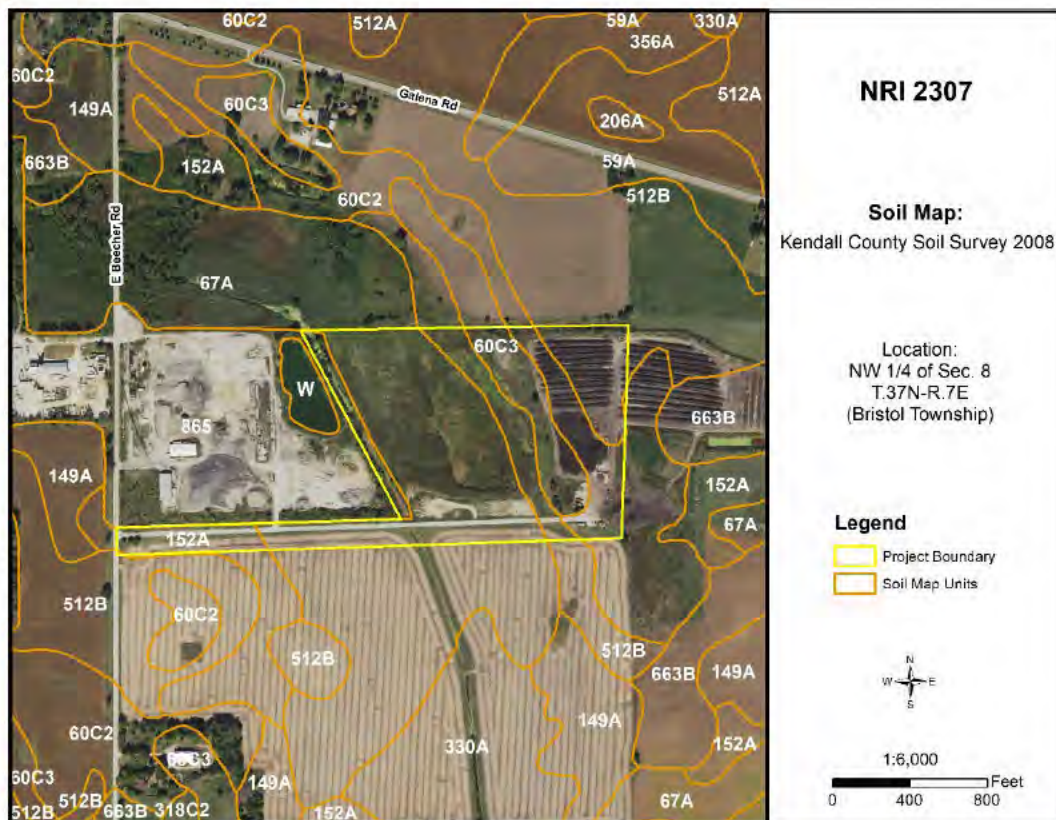
Jefferey Milroy

Dear Mr. Milroy,

The Kendall County Soil & Water Conservation District (SWCD) received a Natural Resources Information Report (NRI) Application for a special use permit renewal petition on parcel 02-08-100-006 filed with Kendall County. The site is an existing EPA composting facility that accepts yard and food waste from the surrounding area. The petitioner is proposing an approximate 17-acre expansion of the composting operation on the western half of the parcel with the addition of a future detention basin. The project site is located at 207 E Beecher Rd, Bristol, IL 60512 in the northwest quarter of Section 8, Township 37N (Bristol Township), Range 7E of the 3rd Principal Meridian. The site is zoned A1-SU Agricultural Special Use. After reviewing the application and supporting documents, it was determined that a *full NRI Report is not necessary at this time* for the proposed project.

The Kendall County SWCD has reviewed the 39.87-acre project site and would like to note the following natural resource considerations:

- The site currently contains an existing 17-acre composting area, detention basin, truck turn-around, and parking area. According to the property owner, the site is tile drained.



- The 2008 Soil Survey for Kendall County as maintained by the United States Department of Agriculture – Natural Resource Conservation Service (USDA-NRCS) contains soil maps and descriptions for soil types throughout the county. The exhibit above shows the soil map, and the table below shows the soil map units that are present within the project site. Please note this information does not replace the need for site specific soil testing.

Soil Map Unit	Acreage	Percent of Parcel
60C2 La Rose silt loam, 5-10% slopes, eroded	5.1	12.9%
60C3 La Rose clay loam, 5-10% slopes, severely eroded	4.7	11.8%
67A Harpster silty clay loam, 0-2% slopes	18.5	46.4%
152A Drummer silty clay loam, 0-2% slopes	2.3	5.7%
512B Danabrook silt loam, 2-5% slopes	7.8	19.5%
865 Pits, gravel	1.5	3.8%

- Soil survey interpretations are predictions of soil behavior for specified land uses and specified management practices. These interpretative ratings help engineers, planners, and others to understand how soil properties influence behavior when used for nonagricultural uses. They are based on the soil properties that directly influence the specified use of the soil. Each soil map unit has limitations for a variety of land uses. The table below shows the soil limitations for uses including food-processing waste, farm and garden composting, and shallow excavations. It is important to remember that soils do not function independently of each other. The behavior of a soil depends upon the physical properties of adjacent soil types, the presence of artificial drainage, soil compaction, and its position in the local landscape.

Soil Type	Food-Processing Waste	Farm & Garden Composting Facility	Shallow Excavations
60C2 & 60C3	<u>Very Limited:</u> Dense layer; Slow water movement; Depth to saturated zone	<u>Somewhat Limited:</u> Slope; Low strength; Wetness; Low precipitation; Extreme soil temperatures	<u>Very Limited:</u> Depth to saturated zone; Dusty; Unstable excavation walls
67A	<u>Very Limited:</u> Ponding; Depth to saturated zone; Leaching	<u>Very Limited:</u> Low strength; Wetness; Ponding; Low precipitation; Seepage	<u>Very Limited:</u> Ponding; Depth to saturated zone; Dusty; Unstable excavation walls
152A	<u>Very Limited:</u> Ponding; Depth to saturated zone; Leaching; Slow water movement	<u>Very Limited:</u> Low strength; Wetness; Ponding; Low precipitation	<u>Very Limited:</u> Ponding; Depth to saturated zone; Dusty; Unstable excavation walls; Too clayey
512B	<u>Somewhat Limited:</u> Depth to saturated zone; Slow water movement	<u>Somewhat Limited:</u> Low strength; Wetness; Slope; Extreme soil temperatures; Low precipitation	<u>Somewhat Limited:</u> Depth to saturated zone; Dusty; Unstable excavation walls
865	N/A	N/A	N/A

- The information provided in the table below provides further detail regarding the following:
 - Drainage Class: Refers to the frequency and duration of wet periods under similar conditions to those under which the soil formed.
 - Hydrologic Soil Groups: Soils have been classified into four (A, B, C, D) hydrologic groups based on runoff characteristics due to rainfall. If a soil is assigned to a dual hydrologic group (A/D, B/D or C/D), the first letter is for drained areas and the second letter is for undrained areas. Group A soils have a high infiltration rate, low runoff potential and high rate of water transmission. Group B soils have a

moderate infiltration rate and rate of water transmission. Group C soils have a slow infiltration rate and rate of water transmission. Group D soils have a very slow infiltration rate, high runoff potential and a very slow rate of water transmission.

- Hydric Soils: A hydric soil is one that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile that supports the growth or regeneration of hydrophytic vegetation. Soils with hydric inclusions have map units dominantly made up of non-hydric soils that may have inclusions of hydric soils in the lower positions on the landscape. Of the soils found onsite, two are hydric (67A Harpster silty clay loam and 152A Drummer silty clay loam) and three are non-hydric (60C2 La Rose silt loam, 60C3 La Rose clay loam, and 512B Danabrook silt loam).
- Prime Farmland: Prime farmland is land that has the best combination of physical and chemical characteristics for agricultural production. Prime farmland soils are an important resource to Kendall County and some of the most productive soils in the United States occur locally. Of the soils found onsite, three are designated as prime farmland (67A Harpster silty clay loam, 152A Drummer silty clay loam, and 512B Danabrook silt loam). Two of the soils are designated as farmland of statewide importance (60C2 La Rose silt loam and 60C3 La Rose clay loam), and one is designated as non-prime farmland (865 Pits, gravel).

Map Unit	Drainage Class	Hydrologic Group	Hydric Designation	Prime Farmland
60C2 & 60C3	Moderately Well Drained	C	Non-Hydric	Farmland of Statewide Importance
67A	Poorly Drained	B/D	Hydric	Prime Farmland if Drained
152A	Poorly Drained	B/D	Hydric	Prime Farmland if Drained
512B	Moderately Well Drained	C	Non-Hydric	Prime Farmland
865	N/A	N/A	N/A	Not Prime Farmland

- The information provided in the table below provides further detail regarding soil water features:
 - Surface Runoff: Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based upon slope, climate and vegetative cover and indicates relative runoff for very specific conditions (it is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal).
 - Water Table: Water table refers to a saturated zone in the soil and the data indicates, by month, depth to the top (upper limit) and base (lower limit) of the saturated zone in most years. These estimates are based upon observations of the water table at selected sites and on evidence of a saturated zone (grayish colors or mottles (redoximorphic features)) in the soil. Note: A saturated zone that lasts for less than a month is not considered a water table.
 - Ponding: Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Duration indicated as brief means ponding typically occurs for a period of 2-7 days. Frequency indicated as non means ponding is not possible and frequent means that it occurs, on average, more than once in 2 years (chance of ponding is more than 50% in any year).
 - Flooding: Flooding is temporary inundation of an area caused by overflowing stream, runoff from adjacent slopes, or tides. Water standing for short periods after rainfall or snowmelt is not considered flooding. Water standing in swamps and marshes is considered ponding rather than flooding.

Map Unit	Surface Runoff	Water Table	Ponding	Flooding
60C2	High	<u>February – April</u> Upper Limit: 2.0'-3.5' Lower Limit: 2.2'-4.0'	<u>January – December</u> Frequency: None	<u>January – December</u> Frequency: None
60C3	Medium	<u>February – April</u> Upper Limit: 2.0'-3.5' Lower Limit: 2.2'-4.0'	<u>January – December</u> Frequency: None	<u>January – December</u> Frequency: None
67A	Negligible	<u>January – May</u> Upper Limit: 0.0'-1.0' Lower Limit: 6.0'	<u>January – May</u> Surface Depth: 0.0'-0.5' Duration: Brief (2-7 days) Frequency: Frequent	<u>January – December</u> Frequency: None
152A	Negligible	<u>January – May</u> Upper Limit: 0.0'-1.0' Lower Limit: 6.0'	<u>January – May</u> Surface Depth: 0.0'-0.5' Duration: Brief (2-7 days) Frequency: Frequent	<u>January – December</u> Frequency: None
512B	Low	<u>February – April</u> Upper Limit: 2.0'-3.5' Lower Limit: 3.0'-5.0'	<u>January – December</u> Frequency: None	<u>January – December</u> Frequency: None
865	N/A	N/A	N/A	N/A

- This site is located on slopes of approximately 0-10%. The site lies within the Fox River Watershed (Rob Roy Creek sub watershed).
- Based on an in-office review of the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) for Kendall County, Community Panel No. 17093C0030G (effective date February 4, 2009), it does not appear that this parcel is located within the 100-year floodplain. It is mapped as Zone X, an area of minimal flood hazard. Additionally, based upon review of the U.S. Fish & Wildlife Service's National Wetlands Inventory Map, a riverine waterway (tributary to Rob Roy Creek) is present along the western edge of the project site. To determine the presence of wetlands, a wetland delineation specialist, who is recognized by the U.S. Army Corps of Engineers, should determine the exact boundaries and value of the wetlands.
- If construction is to occur onsite, a soil erosion and sediment control plan should be prepared and implemented in accordance with both Kendall County and Illinois EPA requirements. The Illinois Urban Manual can be used as a reference for proper selection and implementation of onsite soil erosion and sediment control practices to ensure that soil is properly maintained onsite from project initiation to completion.
- The Land Evaluation Site Assessment (LESA) system, a land use planning tool, assists decision-makers in Kendall County in determining the suitability of a land use change and/or a zoning request. Specifically, the LESA system is designed to facilitate decision making by providing a rational process for assisting local officials in making farmland conversion decisions through the local land use process. It provides a technical framework to numerically rank land parcels based on local resource evaluation and site considerations. The LESA system was developed by the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) and takes into consideration local conditions such as physical characteristics of the land, compatibility of surrounding land uses, and urban growth factors. The LESA system is a two-step procedure that includes Land Evaluation (LE) and Site Assessment (SA). The Land Evaluation is based on soils of a given area that are rated and placed in groups ranging from the best to worst suited for a stated agriculture use such as cropland and forestland. The best group is assigned a value of 100 and all other groups are assigned lower values (94, 87, 79, etc.). The Land Evaluation is based on data from the USDA Kendall County Soil Survey. The Site Assessment is numerically evaluated according to important factors that contribute to the quality of the site. Each factor

selected is assigned values in accordance with the local needs and objectives. The overall score is based on a 300-point rating scale.

Land Evaluation Computation

Soil Type	Value Group	Relative Value	Acres	Product (Relative Value x Acres)
60C2	5	82	5.1	418.2
60C3	6	69	4.7	324.3
67A	2	94	18.5	1,739.0
152A	1	100	2.3	230.0
512B	2	94	7.8	733.2
865	8	0	1.5	0.0
Totals			39.9	3,444.7
LE Calculation			(Product of relative value / Total Acres) $3,444.7 / 39.9 = 86.3$	
LE Score			LE = 86	

The Land Evaluation score for this site is 86 out of a possible 100 points, indicating that the soils are well-suited for agricultural uses since the Land Evaluation score is above 80.

Site Assessment Computation

A.	Agricultural Land Uses	Points
	1. Percentage of area in agricultural uses within 1.5 miles of site. (20-10-5-0)	10
	2. Current land use adjacent to site. (30-20-15-10-0)	15
	3. Percentage of site in agricultural production in any of the last 5 years. (20-15-10-5-0)	10
	4. Size of site. (30-15-10-0)	15
B.	Compatibility / Impact on Uses	
	1. Distance from city or village limits. (20-10-0)	0
	2. Consistency of proposed use with County Land Resource Management Concept Plan and/or municipal comprehensive land use plan. (20-10-0)	10
	3. Compatibility of agricultural and non-agricultural uses. (15-7-0)	0
C.	Existence of Infrastructure	
	1. Availability of public sewage system. (10-8-6-0)	8
	2. Availability of public water system. (10-8-6-0)	8
	3. Transportation systems. (15-7-0)	7
	4. Distance from fire protection service. (10-8-6-2-0)	6
	Site Assessment Score:	89

The Site Assessment score for this site is 89 out of a possible 200 points. The Land Evaluation value (86) is added to the Site Assessment value (89) to obtain a LESA Score of 175. The table below shows the level of protection for the proposed project site based on the LESA Score.

LESA Score Summary

LESA SCORE	LEVEL OF PROTECTION
0-200	Low
201-225	Medium
226-250	High
251-300	Very High



The overall LESA Score for this site is 175 indicating a low level of protection for the proposed project site. Note: Selecting the project site with the lowest total points will generally protect the best farmland located in the most viable areas and maintain and promote the agricultural industry in Kendall County.

If you have any questions, please contact our office at (630) 553-5821 extension 3.

Sincerely,

A black rectangular box redacting the signature of Alyse Olson.

Alyse Olson
Resource Conservationist

CC Jefferey Milroy, Milroy Farms LLC

Matt Asselmeier, Kendall County Planning, Building, & Zoning

Robert Walker, Bristol Township



Applicant: Jeff Milroy
 Contact: Jeff Milroy
 Address: [REDACTED]

IDNR Project Number: 2317303
 Date: 06/22/2023
 Alternate Number: 2317170

Project: Milroy Farms Composting
 Address: 1270 East Beecher Road, Yorkville

Description: Special use permit renewal for operating a compost facility.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Mottled Sculpin (*Cottus bairdii*)

Rusty Patched Bumble Bee (*Bombus affinis*)

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:

37N, 7E, 5

37N, 7E, 8



IL Department of Natural Resources Contact

Kyle Burkwald
 217-785-5500
 Division of Ecosystems & Environment

Government Jurisdiction

Kendall County
 Matthew Asselmeier
 111 West Fox Street
 Yorkville, Illinois 60560

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

IDNR Project Number: 2317303

**EcoCAT Receipt****Project Code** 2317303**APPLICANT****DATE**

Jeff Milroy

6/22/2023

Jeff Milroy
[REDACTED]**DESCRIPTION****FEE****CONVENIENCE FEE****TOTAL PAID**

EcoCAT Consultation

\$ 125.00

\$ 2.81

\$ 127.81

TOTAL PAID**\$ 127.81**

Illinois Department of Natural Resources
 One Natural Resources Way
 Springfield, IL 62702
 217-785-5500
dnr.ecocat@illinois.gov



Illinois
Department of
**Natural
Resources**

JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

June 23, 2023

Jeff Milroy
Milroy Farms
[REDACTED]
[REDACTED]

**RE: Milroy Farms Composting
Consultation Program
EcoCAT Review #2317303
Kendall County**

Dear Mr. Milroy:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed action consists of operating a compost facility in Yorkville, IL.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

State Listed

Mottled Sculpin (*Cottus bairdii*)

State and Federally Listed

Rusty Patched Bumblebee (*Bombus affinis*)

Due to the project scope and proximity to protected resources the Department recommends the following actions be taken to avoid adversely impacting listed species in the vicinity of the project:

Rusty Patched Bumblebee

- 1) The Department recommends that work which disturbs the ground or may remove flowering plants be done between October 1 and April 1 to avoid potential impacts.
- 2) If these dates cannot be accommodated, the Department recommends a Rusty Patched Bumble Bee survey be performed by a qualified biologist.
 - a) Survey results and methods should be forwarded to the Department for review and concurrence.

Please note that due to the federal status of the Rusty Patched Bumblebee, and its potential occurrence in the project area, coordination with the U.S. Fish and Wildlife Service may be necessary and is separate from this consultation and Illinois State regulations.

Given the above recommendations are adopted the Department has determined that impacts to these protected resources are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

This letter does not serve as permission to take any listed or endangered species. As a reminder, no take of an endangered species is permitted without an Incidental Take Authorization or the required permits. Anyone who takes a listed or endangered species without an Incidental Take Authorization or required permit may be subject to criminal and/or civil penalties pursuant to the *Illinois Endangered Species Act*, the *Fish and Aquatic Life Act*, the *Wildlife Code* and other applicable authority.

The Department also offers the following conservation measures be considered to help protect native wildlife and enhance natural areas in the project area:

If temporary or permanent lighting is required, the Department recommends the following lighting recommendation to minimize adverse effects to wildlife:

- All lighting should be fully shielded fixtures that emit no light upward.
- Only “warm-white” or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) should be used to minimize blue emission.
- Only light the exact space with the amount (lumens) needed to meet facility safety requirement.
- If LEDs are to be used, avoid the temptation to over-light based on the higher luminous efficiency of LEDs.

If erosion control blanket is to be used, the Department also recommends that wildlife-friendly plastic-free blanket be used around wetlands and adjacent to natural areas, if not feasible to implement project wide, to prevent the entanglement of native wildlife.

Please contact me with any questions about this review.

Sincerely,

A black rectangular redaction box covering the signature of Kyle Burkwald.

Kyle Burkwald
Impact Assessment Section
Division of Real Estate Services and Consultation
Office of Realty & Capital Planning
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
Kyle.Burkwald@Illinois.gov
Phone: (217) 785-4984

Matt Asselmeier

From: Burkwald, Kyle <Kyle.Burkwald@Illinois.gov>
Sent: Friday, July 14, 2023 11:10 AM
To: Matt Asselmeier
Cc: Seth Wormley; Latreese Caldwell; Hayes, Bradley
Subject: [External]RE: 1270 E Beecher, Bristol Township, Kendall County

CAUTION - This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Matt,

Apologies for the delay, I recently accepted a new position within the Department and am no longer a part of the Impact Assessment section.

However, to answer your questions, the recommendations are not required to be adhered to by law, they are best recommendations to avoid a Take of the listed species. Failure to adhere though may result in an increased likelihood of a Take of an endangered species as defined in Part 1075 of the *Illinois Endangered Species Act*.

If you have any further questions or concerns please contact Brad Hayes.

Sincerely,
Kyle Burkwald
Illinois Department of Natural Resources
Division of Forestry
Mobile: (217) 299-7324
Desk: (217) 785-4984

From: Matt Asselmeier <masselmeier@kendallcountyil.gov>
Sent: Friday, July 14, 2023 10:48 AM
To: Burkwald, Kyle <Kyle.Burkwald@Illinois.gov>
Cc: Seth Wormley <swormley@kendallcountyil.gov>; Latreese Caldwell <LCaldwell@kendallcountyil.gov>
Subject: [External] RE: 1270 E Beecher, Bristol Township, Kendall County

Kyle:

Did you have an opportunity to review this email?

Thanks,

Matthew H. Asselmeier, AICP, CFM
Director
Kendall County Planning, Building & Zoning
111 West Fox Street
Yorkville, IL 60560-1498
PH: 630-553-4139
Fax: 630-553-4179

Attachment 1, Page 26
Please fill out the following findings of fact to the best of your capabilities. §13:08.J of the Zoning Ordinance outlines findings that the Zoning Board of Appeals shall consider in rendering a decision, but is not required to make an affirmative finding on all items in order to grant a **special use**. They are as follows:

That the establishment, maintenance, and operation of the special use will not be detrimental to, or endanger, the public health, safety, morals, comfort, or general welfare. An experienced operator, Jesse C. Sexton, will be managing operations and running the site.

The operation is permitted and controlled by the EPA and inspected by the health department and they have not found anything to endanger the public health, safety, morals, comfort or general welfare during Jesse C. Sexton's tenure.

That the special use will not be substantially injurious to the use and enjoyment of other properties in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood. The Zoning classification of property within the general area of the property in question shall be considered in determining consistency with this standard. The proposed use shall make adequate provisions for appropriate buffers, landscaping, fencing, lighting, building materials, open space and other improvements necessary to insure that the proposed use does not adversely impact adjacent uses and is compatible with the surrounding area and/or the County as a whole.

The new management team of Jesse C. Sexton, William J. Coleman, Jefferey D Milroy, and Lilianna D. Milroy will incorporate as the new site operator. Jesse is well known to neighbors and local officials and ran the site without complaints regarding odors, debris, or dust. The site will be run orderly and squared away. No other operator will be assigned to this operation without approval of the management team.

That adequate utilities, access roads and points of ingress and egress, drainage, and/or other necessary facilities have been or are being provided.

The special use will not be adding any new utilities or roadways to the property. They will use the current access point onto Beecher Road which has a gate which will be closed unless the operation is open. Any new proposed detention basins will be provided under the Storm-water permit application.

That the special use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the County Board pursuant to the recommendation of the Zoning Board of Appeals

The special use conforms to all applicable regulations of the A-1 Special use district.

That the special use is consistent with the purpose and objectives of the Land Resource Management Plan and other adopted County or municipal plans and policies.

This operation existed before the Land Resource Management Plan existed and the plan calls for the area to be residential which it could be when/if this operation ever ceases to exist.

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#13-26

ORDINANCE NUMBER 2014 - 04

GRANTING A MAJOR AMENDMENT TO A SPECIAL USE FOR
GREEN ORGANICS INC. AT 1270 EAST BEECHER ROAD

WHEREAS, Green Organics, Inc., Milroy Farms LLC and Bristol Ventures LLC has filed a petition for a major amendment to their Special Use within the A-1 Agricultural Zoning District for a 58 acre property located on the east side of Beecher Road about 0.5 miles south of Galena Road, commonly known as 1270 E. Beecher Road, (PIN# 02-08-100-006, part of PIN# 02-08-200-015, part of PIN# 02-08-200-018, part of PIN# 02-08-200-019 and part of PIN# 02-08-200-022), in Bristol Township; and

WHEREAS, said petition is to amend their existing special use permit to continue operation of their regional compost facility at 1270 E. Beecher Road modifying the site plan to eliminate about 10.5 acres, add about 9.5 acres northeast in the City of Yorkville and seek new conditions on property; and

WHEREAS, said property is currently zoned A-1 Agricultural with an existing Special Use for operation for a landscape waste composting site; and

WHEREAS, the County Board of Kendall County, Illinois did grant the petitioner said request for as Ordinance 1993-19 on October 19, 1993; and

WHEREAS, the County Board of Kendall County, Illinois did grant the petitioner said request for a renewal as Ordinance 1997-13 on August 19, 1997; and

WHEREAS, the County Board of Kendall County, Illinois did grant the petitioner said request for a renewal as Ordinance 2000-18 on April 18, 2000; and

WHEREAS, the County Board of Kendall County, Illinois did grant the petitioner said request for a renewal as Ordinance 2008-17 on May 20, 2008; and

WHEREAS, the Zoning Administrator and/or deputies did grant the petitioner a minor amendment to the existing special use to allow the facility to begin accepting and processing food waste as Ordinance 10-25-11 on October 25, 2011; and

WHEREAS, said special uses will continue on the property; and

WHEREAS, said property is legally described as:

PARCEL 1

THAT PART OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 37 NORTH, RANGE 7
EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING DESCRIBED AS FOLLOWS:

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COMMENCING AT THE NORTHWEST CORNER OF SAID QUARTER SECTION; THENCE NORTH 88 DEGREES 29 MINUTES 44 SECONDS EAST ALONG THE NORTH LINE OF SAID NORTHWEST QUARTER 953.68 FEET TO A POINT IN THE CENTER LINE OF A BRANCH OF THE ROB ROY CREEK FOR THE POINT OF BEGINNING; THENCE CONTINUING NORTH 88 DEGREES 29 MINUTES 44 SECONDS EAST ALONG SAID NORTH LINE 1699.46 FEET TO THE NORTHEAST CORNER OF SAID QUARTER SECTION; THENCE SOUTH 0 DEGREES 07 MINUTES 06 SECONDS EAST ALONG THE EAST LINE OF SAID QUARTER SECTION 1124.58 FEET; THENCE SOUTH 88 DEGREES 27 MINUTES 18 SECONDS WEST 2655.97 FEET TO A POINT ON THE WEST LINE OF SAID QUARTER SECTION THAT IS 1126.52 FEET SOUTH OF THE NORTHWEST CORNER OF SAID SECTION; THENCE NORTH 0 DEGREES 01 MINUTES 23 SECONDS EAST ALONG SAID WEST LINE 100.00 FEET; THENCE NORTH 87 DEGREES 51 MINUTES 12 SECONDS EAST 1498.53 FEET TO A POINT IN THE CENTER OF SAID ROB ROY CREEK; THENCE NORTH 28 DEGREES 38 MINUTES 38 SECONDS WEST ALONG SAID CREEK, 1134.24 FEET TO THE POINT OF BEGINNING, IN THE TOWNSHIP OF BRISTOL, KENDALL COUNTY, ILLINOIS
PIN: 02-08-100-006

PARCEL 2

THAT PART OF THE NORTHEAST QUARTER OF SECTION 8 IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE NORTH 87 DEGREES 36 MINUTES 31 SECONDS EAST, ALONG THE NORTH LINE OF SAID NORTHEAST QUARTER, 187.01 FEET; THENCE SOUTH 61 DEGREES 46 MINUTES 39 SECONDS EAST, 332.00 FEET; THENCE SOUTH 71 DEGREES 34 MINUTES 14 SECONDS EAST, 463.00 FEET; THENCE SOUTH 45 DEGREES 09 MINUTES 49 SECONDS EAST, 58.00 FEET; THENCE SOUTH 00 DEGREES 33 MINUTES 15 SECONDS WEST, 356.00 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 46 SECONDS WEST, 541.26 FEET TO A POINT ON A LINE 400.00 FEET EAST OF, AND PARALLEL WITH, THE WEST LINE OF SAID NORTHEAST QUARTER; THENCE SOUTH 01 DEGREE 14 MINUTES 06 SECONDS EAST, ALONG SAID LINE, 171.42 FEET; THENCE ALONG THE SOUTH LINE OF A PARCEL OF LAND WITH PARCEL IDENTIFICATION NUMBER 02-08-200-015 FOR THE NEXT FOUR CALLS; SOUTH 83 DEGREES 45 MINUTES 54 SECONDS WEST, 130.42 FEET, MORE OR LESS; SOUTH 86 DEGREES 27 MINUTES 54 SECONDS WEST, 65.30 FEET; NORTH 08 DEGREES 04 MINUTES 41 SECONDS WEST, 23.88 FEET; NORTH 87 DEGREES 04 MINUTES 28 SECONDS WEST, 202.52 FEET, MORE OR LESS, TO A POINT 850.00 FEET SOUTHERLY OF THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER, AS MEASURED ALONG THE WEST LINE THEREOF; THENCE NORTH 01 DEGREE 14 MINUTES 06 SECONDS WEST, ALONG SAID WEST LINE, 850.00 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS, AND CONTAINING 13.72 ACRES, MORE OR LESS.

WHEREAS, all procedures required by the Kendall County Zoning Ordinance were followed including notice for public hearing, preparation of the findings of fact, and recommendation for approval by the Special Use Hearing Officer on December 9, 2013; and

WHEREAS, the findings of fact were approved as follows:

That the establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare. The operation is controlled by the EPA and inspected regularly by the Health Department and have not found anything to endanger the public health, safety, morals, comfort, or general welfare.

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*That the special use will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood. The Zoning classification of property within the general area of the property in question shall be considered in determining consistency with this standard. The proposed use shall make adequate provisions for appropriate buffers, landscaping, fencing, lighting, building materials, open space and other improvements necessary to insure that the proposed use does not adversely impact adjacent uses and is compatible with the surrounding area and/or the County as a whole. **The operation has been open since 1993 with some minor debris issues a long time ago and since then there have been no complaints or issues. The newer water park exists less than a mile away to the east and still there have been no complaints about affecting the area properties.***

*That adequate utilities, access roads and points of ingress and egress, drainage, and/or other necessary facilities have been or are being provided. **The special use will not be adding any new utilities, roadways or drainage to the property. They will use the current access point onto Beecher Road which has a gate which will be closed unless the operation is open.***

*That the special use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the County Board pursuant to the recommendation of the Hearing Officer. **The special use conforms to all applicable regulations of the A-1 Special use district.***

*That the special use is consistent with the purpose and objectives of the Land Resource Management Plan and other adopted County or municipal plans and policies. **This operation existed before the Land Resource Management Plan existed and the plan calls for the area to be residential which it could be when/if this operation ever ceases to exist.***

WHEREAS, the Kendall County Board has considered the findings and recommendation of the Hearing Officer and finds that said petition is in conformance with the provisions and intent of the Kendall County Zoning Ordinance; and

WHEREAS, this special use shall be treated as a covenant running with the land and is binding on the successors, heirs, and assigns of the property owner as to the same special use conducted on the property; and

NOW, THEREFORE, BE IT ORDAINED, that the Kendall County Board hereby repeals Kendall County Ordinances #93-17, #97-13, #00-18, #08-17 and #10-28-11 in their entirety and hereby grants approval of a major amendment to their existing special use zoning permit to continue operation of their regional compost facility at 1270 E. Beecher Road modifying the site plan to eliminate about 10.5 acres, add about 9.5 acres northeast in the City of Yorkville subject to the following conditions:

1. The facility shall comply with the conditions listed in Section 7.01.D.15 (composting of landscape waste and food waste) of the Zoning Ordinance:
 - Composting of landscape waste and food waste, subject to the following:
 - a. The facility shall meet all Illinois Environmental Protection Agency requirements as identified in Title 35, Subtitle G, Chapter 1, Sub-chapter 1, Park 830, Standards for compost facilities.
 - b. Operational personnel shall be present on site during all hours which the facility is

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- open for the receipt of landscape waste.
- c. The hours during which landscape waste may be received shall be 7:00am to 4:00pm Monday through Friday and 7:00am to 12:00 noon Saturday. Processing operations shall cease after each day's receipts have been processed and placed in windrows, not to exceed three (3) additional hours.
- d. The decibel levels at the property line shall not exceed Illinois Pollution Control Board standards.
- e. A locked gate shall restrict vehicle access during closed hours except that a "lock-box" shall allow access to emergency vehicles.
- f. Water samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
- g. Soil samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
- h. Authorized Kendall County personnel shall be allowed on site during business hours for inspection and testing.
- i. The facility operator shall send up-to-date copies of the State permit and related documents including Operational Plan, Surface water management Plan, Pest Control Plan, Site Drawing, and an Annual Report to the County Solid Waste Coordinator.
- j. Truck weights shall be limited to 73,280 pounds.
- k. The operator shall provide weight receipts to Kendall County.
- l. Off-site debris and trash generated by the site must be cleaned-up on a daily basis on surrounding properties with the owner's permission.
- m. Other conditions as appropriate for the particular facility. *(Amended 6/20/2006)*
- 2. The facility will be permitted to take in 175,000 cubic yards of source-separated landscape materials (i.e. brush, leaves, tree trimmings and grass)
- 3. The site plan shall be kept on file as "Exhibit A" attached hereto
- 4. The facility operator shall maintain plantings on the berm and ditch.
- 5. The facility operator shall maintain the gate and landscaping as indicated on "Exhibit B" attached hereto
- 6. The facility operator shall maintain a sampling schedule as shown on "Exhibit C" attached hereto dated March 11, 2008.
- 7. The County Solid Waste Coordinator shall maintain a log of complaints received on the facility.
- 8. This special use Ordinance shall expire on December 1, 2023 and the petition for renewal shall be made prior to July 1, 2023.
- 9. If any Illinois Environmental Protection Agency (IEPA) violations or citations are

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received they need to be submitted to the County Solid Waste Coordinator within 30 days.


Failure to comply with the terms of this ordinance may be cited as a basis for amending or revoking this special use permit.

IN WITNESS OF, this ordinance has been enacted on March 19th, 2014.

Attest:



Debbie Gillette
Kendall County Clerk



John Shaw
Kendall County Board Chairman

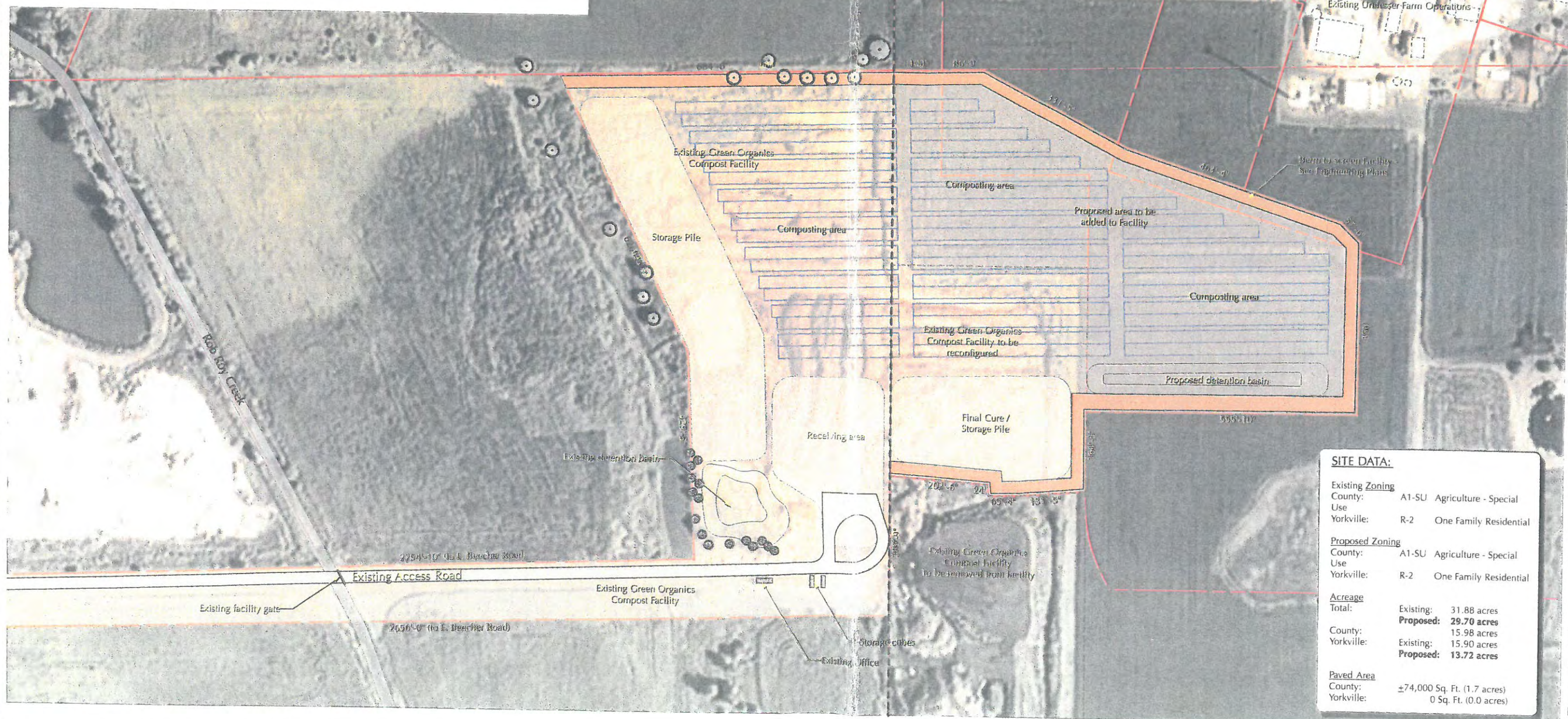
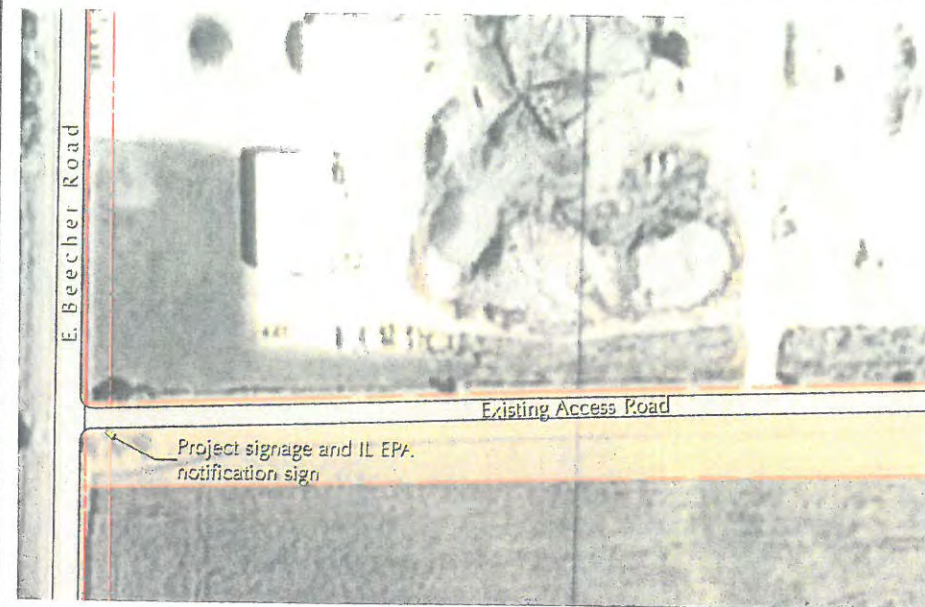


EXHIBIT A

Prepared: October 15, 2013

Green Organics Compost Facility
 1270 E. Beecher Road, Bristol, IL
 Green Organics, Inc.

SITE DATA:

Existing Zoning	
County:	A1-SU Agriculture - Special
Use:	
Yorkville:	R-2 One Family Residential
Proposed Zoning	
County:	A1-SU Agriculture - Special
Use:	
Yorkville:	R-2 One Family Residential
Acreage	
Total:	Existing: 31.88 acres Proposed: 29.70 acres
County:	15.98 acres
Yorkville:	Existing: 15.90 acres Proposed: 13.72 acres
Paved Area	
County:	±74,000 Sq. Ft. (1.7 acres)
Yorkville:	0 Sq. Ft. (0.0 acres)

enon hill
 design & development, inc.

524 cheyenne trail
 carol stream, il 60188
 630.800.8362
 630.748.4701 fax

land planning
 landscape architecture
 land development

Site Plan

Sheet L-3

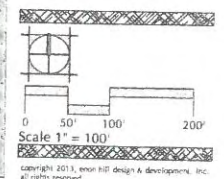
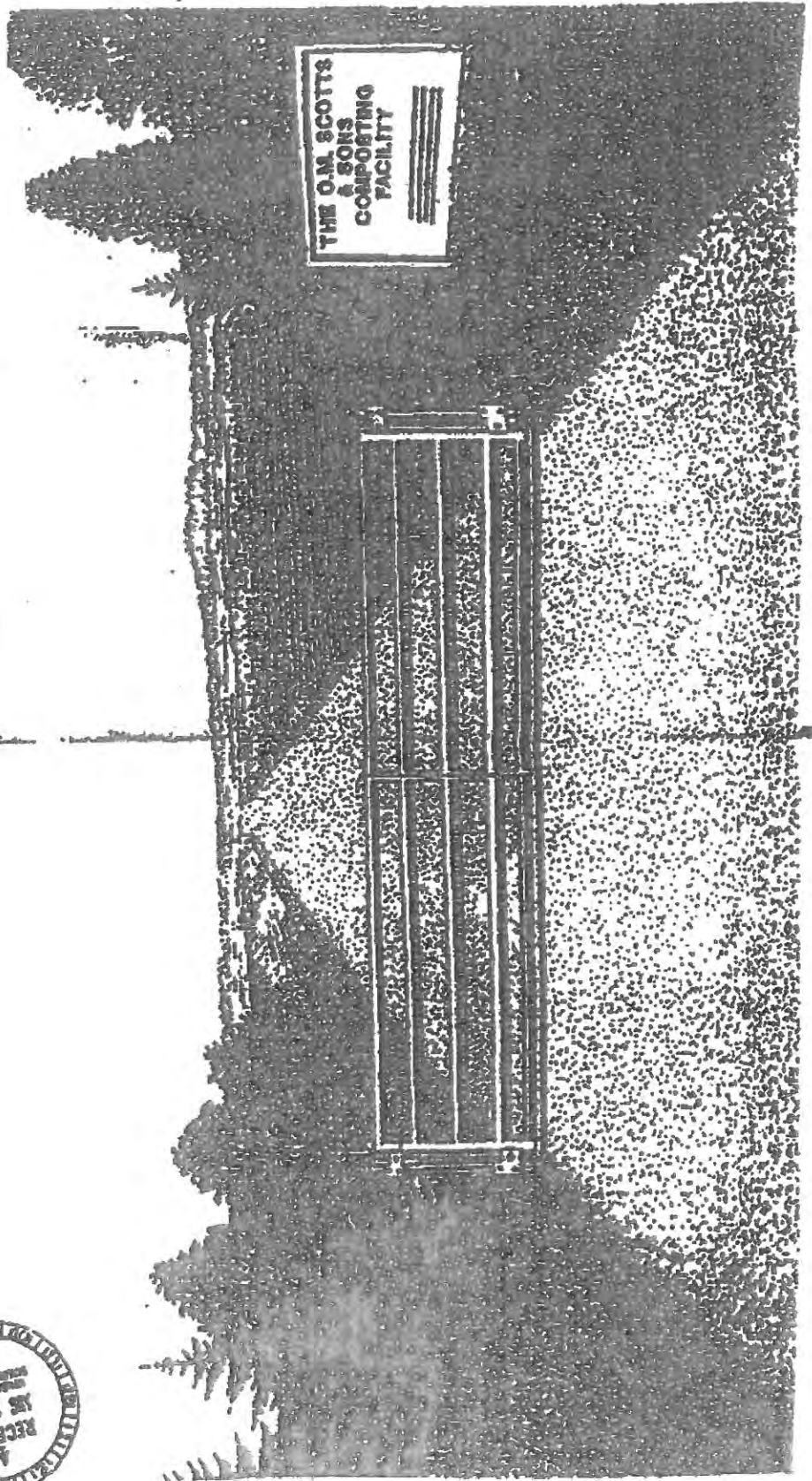


EXHIBIT B



March 11, 2008

Mr. Joseph Mazza
Green Organics
290 Main Place
Carol Stream, IL 60188



Dear Mr. Mazza:

You requested confirmation of the sampling schedule that is used by Analytical Chemistry & Environmental Services, Inc. (AC&E Services, Inc.) at your compost facility in Bristol, Illinois.

The compost is tested according to 35 Illinois Administration Code (IAC) Section 830.507(a) for each 5000 tons shipped.

The well at the site is tested once per year in May in accordance with your current permit. The soil is tested once per year in September. Two composite soil samples are taken; one in the detention pond at the west side of the facility and one taken at the end of the windrows at the south end of the property. The testing is performed in accordance with your current permit.

I hope this answers your questions concerning your current testing requirements. If any further help is needed, do not hesitate to contact us.

Regards,

A handwritten signature in black ink, appearing to read "Terese M. Laciak". The signature is fluid and cursive, with a long horizontal line extending to the right.

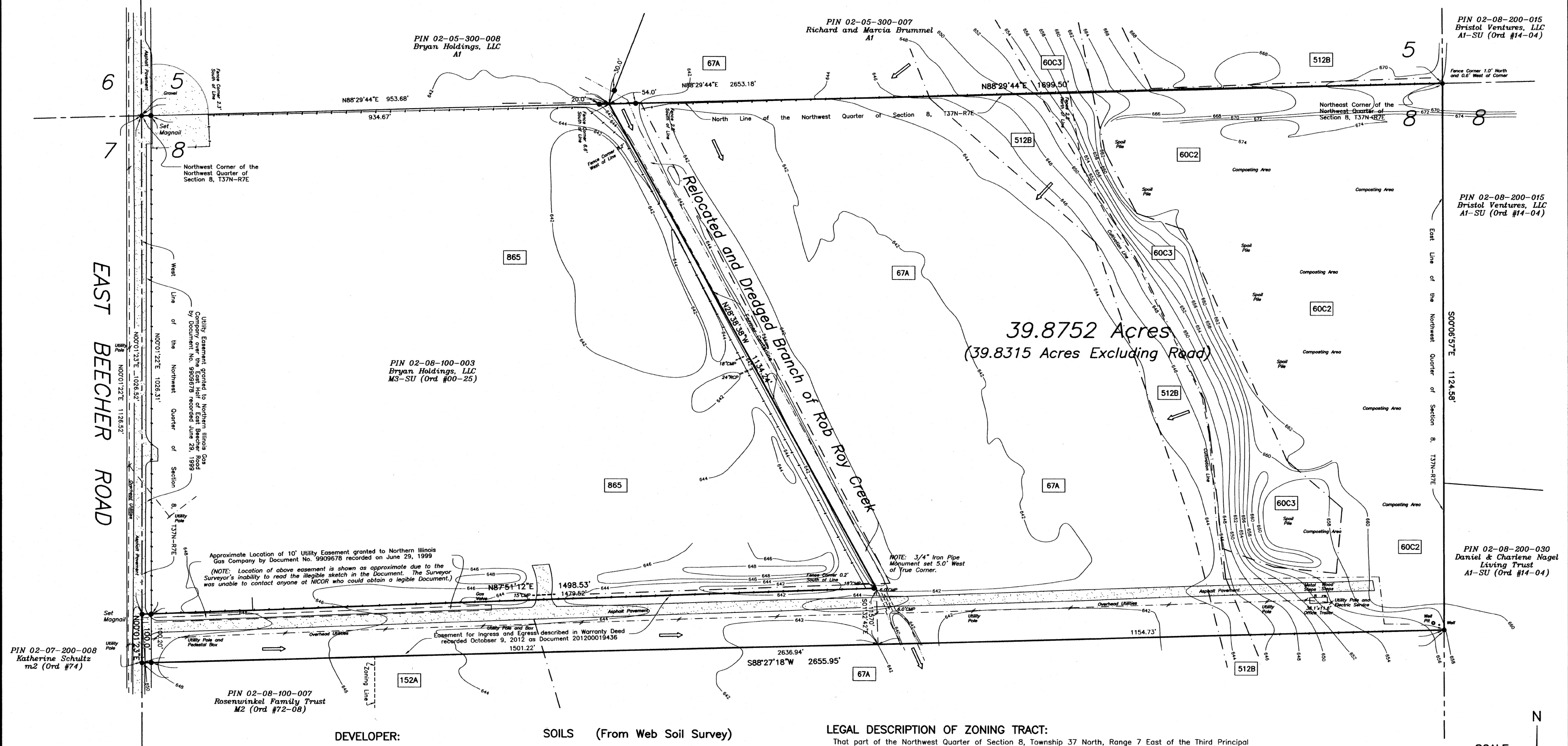
Terese M. Laciak
President

EXHIBIT C

TML/cab

cc: Steven B. Curatti, Director of Environmental Health, Kendall County

ZONING PLAT OF PART OF THE NORTHWEST QUARTER OF SECTION 8, T37N-R7E, 3rd PM BRISTOL TOWNSHIP KENDALL COUNTY ILLINOIS

**DEVELOPER:**

Jeff Milroy
Milroy Farms, LLC

PROPERTY LOCATION:

PIN: 02-08-100-006
1270 East Beecher Road
Yorkville, Illinois 60560

AREA OF ZONING TRACT:

39.8752 Acres

PRESENT ZONING:

A-1 SU

PROPOSED ZONING:

A-1 SU

SOILS (From Web Soil Survey)

60C2	La Rose Silt Loam, 5-10% slopes, eroded
60C3	La Rose Silt Loam, 5-10% slopes, severely eroded
67A	Harpster Silty Clay Loam, 0-2% slopes
152A	Drummer Silty Clay Loam, 0-2% slopes
512B	Danabrook Silt Loam, 2-5% slopes
865	Gravel Pits

NOTE: Elevation contours taken from Kendall County GIS 2018 Contour Map.

LEGAL DESCRIPTION OF ZONING TRACT:

That part of the Northwest Quarter of Section 8, Township 37 North, Range 7 East of the Third Principal Meridian, being described as follows: Commencing at the Northwest Corner of said Quarter Section; thence North 88°29'44" East along the North Line of said Northwest Quarter, 953.68 feet to a point in the center line of a branch of Rob Roy Creek for the point of beginning; thence continuing North 88°29'44" East along said North Line, 1699.50 feet to the Northeast Corner of said Northwest Quarter; thence South 00°06'57" East along the East Line of said Northwest Quarter, 1124.58 feet; thence South 88°27'18" West, 2655.95 feet to a point on the West Line of said Northwest Quarter that is 1126.52 feet Southerly of the Northwest Corner of said Northwest Quarter; thence North 00°01'23" East along said West Line, 100.0 feet; thence North 87°51'12" East, 1498.53 feet to a point in the center line of a branch of Rob Roy Creek; thence North 28°38'38" West along said center line, 1134.24 feet to the point of beginning in Bristol Township, Kendall County, Illinois and containing 39.8752 acres.

FLOODPLAIN STATEMENT:

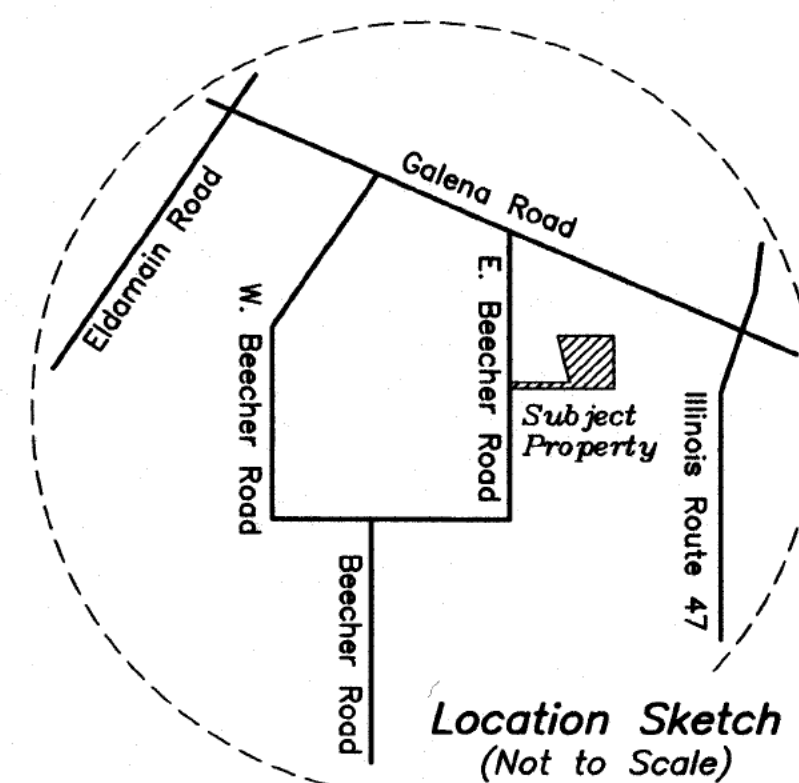
The Subject property is located in Zone X (areas of minimal flood hazard determined to be outside the 0.2% annual chance floodplain) as shown on FEMA Flood Insurance Rate Map Panel No. 17093C0036G with an effective date of February 4, 2009.

WETLANDS STATEMENT:

The National Wetlands Inventory Map depicts Riverine wetlands (R2UBHx) in the relocated and dredged branch of Rob Roy Creek.

SCALE
1"=100'

- Indicates Iron Stake Found
- Indicates Iron Stake Set
- Indicates Line of Fence
- X Indicates Cross in Concrete
- - - Indicates Soils Boundary
- + 630.53 Indicates Spot Elevation
- 630 - Indicates Contour Elevation
- △14" Indicates Tree Location and Size
- Indicates Direction of Drainage



1107B South Bridge Street
Yorkville, Illinois 60560
Telephone (630)553-1580

Philip D. Young and Associates, Inc.
LAND SURVEYING - TOPOGRAPHIC MAPPING - Lic.#184-002775

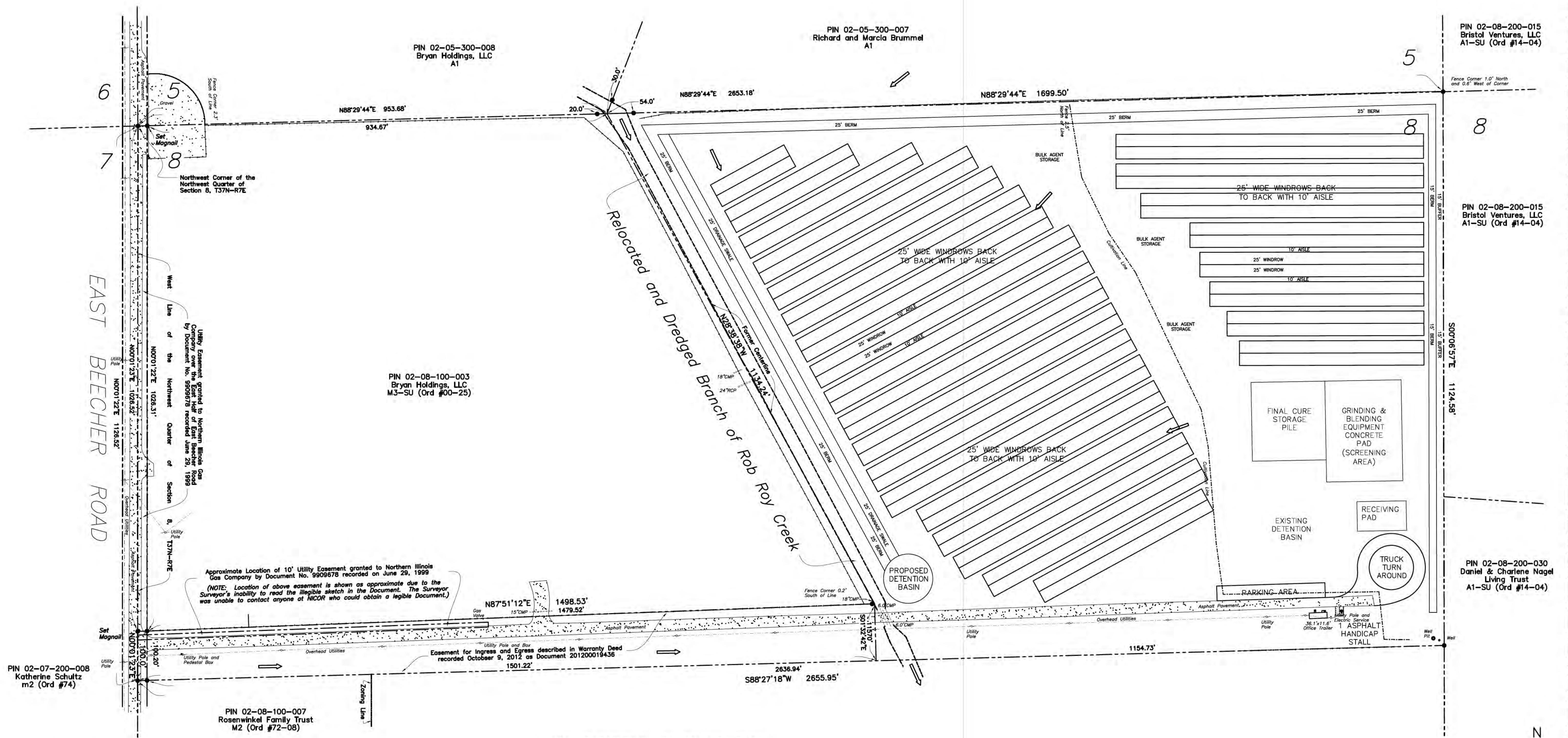
JOB NO. 23073
JOB NAME MILROY
DWG FILE 23073
REVISION DATE

June 13, 2023

Detailed Description Of Proposed Use Business Plan

1. The facility shall comply with the conditions as they are listed in the applicable sections of the Kendall County Zoning Ordinance: Composting of landscape waste and food waste, subject to the following:
 - a. The facility shall meet all Illinois Environmental Protection Agency requirements as identified in the applicable sections of the Kendall County Zoning Ordinance.
 - b. Operational personnel shall be present on site during all hours which the facility is open for the receipt of landscape waste.
 - c. The hours during which landscape waste may be received shall be 7:00am to 4:00pm Monday through Friday and 7:00am to 12:00 noon Saturday. Processing operations shall cease after each day's receipts have been processed and placed in windrows, not to exceed three (3) additional hours.
 - d. The decibel levels at the property line shall not exceed Illinois Pollution Control Board standards.
 - e. A locked gate shall restrict vehicle access during closed hours except that a "lock-box" shall allow access to emergency vehicles.
 - f. Water samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
 - g. Soil samples shall be taken by an independent testing service and analyzed by an independent laboratory. The locations, methods and frequency of sampling and testing shall be approved by the Kendall County Environmental Health Department Director. The test results shall be sent to the Environmental Health Department within forty-five (45) days of sampling.
 - h. Authorized Kendall County personnel shall be allowed on site during business hours for inspection and testing.
 - i. The facility operator shall send up-to-date copies of the State permit and related documents including Operational Plan, Surface water management Plan, Pest Control Plan, Site Drawing, and an Annual Report to the County Solid Waste Coordinator.
 - j. Truck weights shall be limited to 73,280 pounds.
 - k. The operator shall provide weight receipts to Kendall County.

- l. Off-site debris and trash generated by the site must be cleaned-up on a daily basis on surrounding properties with the owner's permission.
 - m. Other conditions as appropriate for the particular facility. (*Amended 6/26/2023*)
 - n. Decommissioning plan shall be kept on file in the site trailer office per EPA requirements and will be accessible to the Kendall County Health Inspector.
 - o. Implement strategies to manage potential odor issues such as maintaining proper carbon-to-nitrogen ratios, maintaining moisture levels, and sufficient turning of compost piles to enhance decomposition.
 - p. Install water spraying systems or dust suppression equipment at critical points of dust generation. Regularly monitor moisture content and use sprinkler systems or misters to dampen the compost as needed.
 - q. A 15' buffer and a berm will be provided between the composting area and the Village of Yorkville. This berm will be at least 15' wide by 3' high. The buffer landscaping will be composed primarily of pine, fir, and/or shade trees planted at spacing not to exceed 40' apart. Seedlings will have a minimum of 6" in height. Specimen seedlings will be planted and the berm will be constructed within one year of issuance of the Composting Ordinance.
- 2. The facility will be permitted to take in 175,000 cubic yards of source-separated landscape materials (i.e. brush, leaves, tree trimmings and grass).
 - 3. The site plan shall be kept on file as "Exhibit A" attached hereto.
 - 4. The facility operator shall maintain existing plantings on the berm and ditch.
 - 5. The facility operator shall maintain the security gate and landscaping as indicated on "Exhibit B" attached hereto.
 - 6. The facility operator shall maintain a sampling schedule as shown on "Exhibit C" attached hereto dated March 11, 2008.
 - 7. The County Solid Waste Coordinator shall maintain a log of complaints received on the facility.
 - 8. This special use Ordinance shall expire on December 1, 2033 and the petition for renewal shall be made prior to July 1, 2033.
 - 9. If any Illinois Environmental Protection Agency (IEPA) violations or citations are received by the site operator/manager and/or parcel owner/manager they need to be submitted to the County Solid Waste Coordinator within 30 days.



Jeff Milroy

PIN: 02-08-100-006

1270 East Beecher Road
Yorkville, Illinois 60560

39.8752 Acres

A-1 SU

PROPOSED ZONING
A-1 SH

That part of the Northwest Quarter of Section 8, Towns

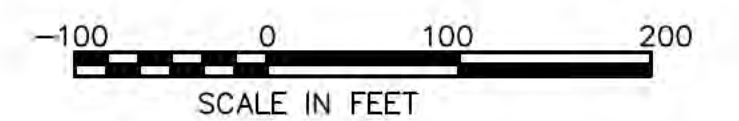
Meridian, being described as follows: Commencing at the Northwest Corner of said Quarter Section; thence North 88°29'44" East along the North Line of said Northwest Quarter, 953.68 feet to a point in the center of the branch of Roy Creek; thence South 88°29'44" East along said branch of Roy Creek, 1699.50 feet to the Northeast Corner of said Northwest Quarter, thence South 00°06'57" East along the East Line of said Northwest Quarter, 1124.58 feet; thence South 88°27'18" West, 2655.95 feet to a point on the West Line of said Northwest Quarter that is 1126.52 feet Southerly of the Northwest Corner of said Northwest Quarter; thence North 00°01'23" East along said West Line, 1475.21 feet to the Northwest Corner of said Northwest Quarter, thence South 88°27'18" West, 1475.21 feet to the Northwest Corner of said Northwest Quarter, thence North 88°28'38" West along said center line, 113.24 feet to the point of beginning in Bristol Township, Kendall County, Illinois and containing 39,875.2 acres.

The Subject property is located i

flood hazard determined to be outside the 0.2% annual chance floodplain) as shown on FEMA Flood Insurance Rate Map Panel No. 17093C0036G with an effective date of February 4, 2009.

The National Wetlands Inventory

(R2UBHx) in the relocated and dredged branch of Rob Roy Creek.





MIDWEST
MATERIAL
MANAGEMENT
(847) 426-6354
- COMPOST FACILITY -
OPERATING HOURS: BY APPOINTMENT ONLY
MATERIALS ACCEPTED: LANDSCAPE WASTE
"COMRI CERTIFIED" COMPOST AVAILABLE
COMPLAINTS CONCERNING THIS FACILITY CAN BE
MADE TO: STEVE BERGLUND: 847-426-6354 OR
BUREAU OF LAND, ILLINOIS ENVIRONMENTAL PROTECTION
AGENCY, SPRINGFIELD, ILLINOIS: 217-524-3300
MAILING ADDRESS: 219 N. STATE ST. HAMPSPERE, IL 60140



March 11, 2008

Mr. Joseph Mazza
[REDACTED]



Dear Mr. Mazza:

You requested confirmation of the sampling schedule that is used by Analytical Chemistry & Environmental Services, Inc. (AC&E Services, Inc.) at your compost facility in Bristol, Illinois.

The compost is tested according to 35 Illinois Administration Code (IAC) Section 830.507(a) for each 5000 tons shipped.

The well at the site is tested once per year in May in accordance with your current permit. The soil is tested once per year in September. Two composite soil samples are taken; one in the detention pond at the west side of the facility and one taken at the end of the windrows at the south end of the property. The testing is performed in accordance with your current permit.

I hope this answers your questions concerning your current testing requirements. If any further help is needed, do not hesitate to contact us.

Regards,

[REDACTED]
Terese M. Laciak
President

EXHIBIT C

TML/cab

cc: Steven B. Curatti, Director of Environmental Health, Kendall County

**Green Organics, Inc.
Kendall County, Illinois
Yard Debris Composting Facility
Normal and Pre-Mature Closure Plan**

The information contained herein describes the procedures and activities to perform normal closure of the Green Organics yard debris composting facility located at 1270 E. Beecher Rd. in Bristol Illinois 60512. Both normal and pre-mature closures are limited by the amount of time needed for complete composting of material (item 1). Complete composting takes no less than three months. During this time, composted debris will be shipped and sold to customers as before. Thus, these figures are a maximum cost of closure and a pre-mature closure plan is not any different from a normal closure plan. The land would be used for the farming of food crops or seeded, as necessary. The description and cost for each procedure/activity is defined below:

Description	Quantity	Unit	Unit Cost	Cost	Time to Complete	Comments
Complete composting and removal of remaining material	43000	cy	\$0.65	\$28,000	3 months	Assume three months operation to complete compost. Assume 50% of material - sold from facility and 50% of material shipped to customer (i.e. pay for hauling)
Disposal of non-compostables	10	cy	\$30	\$300	1 day	Assumes one dumpster. Includes cost to haul and dispose at licensed landfill facility
Regrade and level composting pad for farming	23	acre	\$1,000	\$23,000	.5 months	Assumes regrading to original elevations
Seeding - Class 7 Seed	23	acre	\$300	\$7,000	.25 months	Includes seeding and erosion control
Return control of land to owners for farming	1	LS	\$1,000	\$1,000	.5 months	
Total				\$60,000	4.25 months	

Yard debris or cured compost that cannot be removed from the site will be prepared for incorporation into the soil at the site, and, incorporated into the soil in accordance with State of Illinois Regulations for application of yard waste for agricultural use. The incorporation rate will not exceed the amount specified for the grasses or crops planted on the site.

Grading and leveling of the soil will be performed in accordance with agricultural Best Management Practices (BMP) to minimize soil erosion and/or soil loss.

All structures, signs and equipment used in the composting operation and for closure of the site will be removed once closure has been completed. Green Organics will notify the Illinois EPA of the closure within ninety days of the beginning of closure activities, or sooner if required by law. Once closure had been completed, Green Organics will notify the Illinois EPA within five business days that the closure has been completed.

Matt Asselmeier

From: Krysti Barksdale-Noble <knoble@yorkville.il.us>
Sent: Friday, June 9, 2023 9:57 AM
To: Matt Asselmeier
Cc: Latreese Caldwell; Seth Wormley; bolson@yorkville.il.us; Michelle Lagrotta; Peter Ratos
Subject: RE: [External]RE: Green Organics Question

Good Morning Matt,

Thanks for the follow-up. Please see the responses to your questions below in green.

From: Matt Asselmeier <masselmeier@kendallcountyil.gov>
Sent: Friday, June 9, 2023 8:28 AM
To: Krysti Barksdale-Noble <knoble@yorkville.il.us>
Cc: Latreese Caldwell <LCaldwell@kendallcountyil.gov>; Seth Wormley <swormley@kendallcountyil.gov>; Bart Olson <BOlson@yorkville.il.us>; Michelle Lagrotta <mlagrotta@gkwwlaw.com>
Subject: RE: [External]RE: Green Organics Question

Krysti:

Here are my comments/questions/responses to your concerns:

1. Do you have any specific description of what you would like to see in the landscape buffer (i.e. types of vegetation, height of vegetation, replacement schedule, etc.)?
Yes, ideally it would be a buffer similar to the City's transition yard between non-residential and residential which is a thirty foot (30') wide buffer yard with a berm at least three feet (3') in height and consisting of two (2) shade trees, five (5) evergreen trees and three (3) ornamental trees per one hundred (100) linear feet of buffer yard. I know 30 feet might not be possible, but somewhere in the realm of 15-30 feet.
2. If we require them to install vegetation, the County will likely give them a deadline to plant the required vegetation. The timing of the issuance of the special use permit and the amount of landscaping required to be installed will play a role in determining the length of the deadline.
3. The County does not have specific standards based on odor. The applicant would have to follow applicable IEPA and federal regulations. Understood.
4. Does Yorkville own an ASTM certified field olfactometer? Yes. Pete Ratos can provide you or Brian the specs. I would have to check to see if any County department owns such a device. OK.
5. IEPA regulations require the existence of an odor control plan. We could require that a dedicated odor control plan be submitted as part of a special use permit application. Please do.
6. While I am not opposed to having the notification and violation procedures that you propose, these are not the normal procedures that the County uses for violation notification/correction/enforcement. I do have concerns that someone could accuse the County of having different investigative and due process procedures for one type of special use permit compared with other special uses. Understood, but we have received multiple complaints in the past and have a detailed procedure for notice and violation in place was helpful in gaining compliance. I would also say that each special use is different and the nature of the special use criteria warrant conditions made on a case-by-case basis.
7. I am not opposed to having a detailed decommissioning plan with the items you requested for inclusion. Great.
8. I am not opposed to a requirement of notification of operation management change and contact information updated annually. We likely would set a deadline for notifying the County of changes and set an annual deadline (i.e. July 1st) of updating contact information. Understood.

9. In any conditions included in the special use permit, we likely will use the phrase "operators of the use allowed by the special use permit" rather than naming a specific entity like Green Organics or Midwest Materials. Understood.
10. Has anyone associate with the property contacted Yorkville regarding this special use permit renewal? No one has been in contact with me directly. The property owners and several of the consultants they appear to be working with were advised to contact Yorkville as part of their due diligence prior to submitting a special use permit application.
11. Does Yorkville have any desire to annex this property? Undetermined at this time. Would be a City Council policy decision. One of the conversations with the applicant indicated they were considering placing community solar panels on the property. Also, they indicated that the requested renewal of the special use permit might be 10 years. Interesting. In all likelihood, Yorkville will become home rule in the next 10 years and Yorkville might have greater regulatory power over this type of use as a home rule municipality compared to the powers granted to a non-home rule county.
12. Does Yorkville need any easements or right-of-way dedications as part of the special use permit? Undetermined. I will check with the City Engineer. When do you anticipate having a submittal?
13. Do you have any objections if I share the information in these emails with the prospective applicant? No, I do not.

Thanks,

Matthew H. Asselmeier, AICP, CFM
 Director
 Kendall County Planning, Building & Zoning
 111 West Fox Street
 Yorkville, IL 60560-1498
 PH: 630-553-4139
 Fax: 630-553-4179

From: Krysti Barksdale-Noble <knoble@yorkville.il.us>
Sent: Thursday, June 8, 2023 5:41 PM
To: Matt Asselmeier <masselmeier@kendallcountyil.gov>
Cc: Latreese Caldwell <LCaldwell@kendallcountyil.gov>; Seth Wormley <swormley@kendallcountyil.gov>; bolson@yorkville.il.us; Michelle Lagrotta <mlagrotta@gkwwlaw.com>
Subject: RE: [External]RE: Green Organics Question

Hello Matt,

Thank you for the email. Yes, there are a few concerns the City has if the special use is renewed by the County. They are as follows:

1. Buffering from adjacent City parcels
 - a. The City is interested seeing landscape buffering along the eastern boundary of the County parcels to ensure future development on the City's side is screened as much as possible.
2. Does the County have performance standards regarding odors?
 - a. The City has strict performance standards and response time to complaints regarding odor and has specific language in the settlement agreement that we would like to see added as part of the County's special use conditions. They are:
 - i. Method of Odor Testing: The method used to perform any such odor testing will be by measuring and quantifying the odor in the ambient air in the area/location within the City of Yorkville that the complaint stems from using an ASTM certified portable odor detecting and measuring device known as a field olfactometer.
 - ii. Notification: No later than two (2) business days after performing any such odor testing, the County will send Green Organics and Midwest written notice of its findings including the

following information: the date and time the complaint was made; the area/location within the City of Yorkville that the complaint stems from; the outdoor temperature, wind condition, and ambient air reading from an ASTM certified field olfactometer device measured in said area/location on the date the complaint was made and as close to the time of the complaint as reasonably possible; and all such other information that is relevant to the complaint and the County's investigation of the same.

iii. Violation: In the event that the field olfactometer device measurement from any such odor testing exceeds that threshold set forth in the ASTM Standard of Practice E679-91, Green Organics and/or Midwest shall take steps to immediately correct the conditions that are causing the odor. Additionally, within five (5) business days of receiving written notice of the County's findings, Midwest shall send the County a written response, including a description of any steps taken by Green Organics and/or Midwest to correct the conditions complained of.

1. In the event that any County Ordinance violation or any such complaint received by the County is related to conditions other than odor, Green Organics and/or Midwest shall take steps to immediately correct any such conditions that are determined reasonably to be a violation of the City's ordinances.
2. Within seven (7) days of receiving any such complaint/potential County Ordinance violation, Midwest shall send the County a written response, including a description of any steps taken by Green Organics and/or Midwest to correct the conditions complained of.

b. City's Performance Standards for odor can be found here:

https://library.municode.com/il/yorkville/codes/code_of_ordinances?nodeId=TIT10ZO_CH13MADI_ART_CPEST_10-13C-4OD

3. Require a detailed decommissioning plan (site plan, timing of decommissioning, restoration plans, etc.) because the plans the City has received for decommissioning are not detailed.
4. Notification of operation management change and contact information updated annually.

Hope this helps. Let me know if you need any clarification of the information provided herein.

Best Regards,

Krysti J. Barksdale-Noble, AICP
(she/her)
Community Development Director
United City of Yorkville



651 Prairie Point Drive
Yorkville, Illinois 60560
☎ (630) 553-8573
📞 (630) 742-7808
🌐 www.yorkville.il.us

From: Matt Asselmeier <masselmeier@kendallcountyl.gov>

Sent: Thursday, June 8, 2023 2:14 PM

To: Krysti Barksdale-Noble <knoble@yorkville.il.us>

Cc: Latreese Caldwell <LCaldwell@kendallcountyl.gov>; Seth Wormley <swormley@kendallcountyl.gov>; Bart Olson



July 15, 2023

Mr. Matt Asselmeier
Kendall County Planning, Building, & Zoning
111 West Fox Street
Yorkville, IL 60560-1498

Subject: 1270 E Beecher Road
WBK Project 19-102.BN

Dear Mr. Asselmeier:

We have received and reviewed the following information for the subject project:

- Stormwater Management Permit prepared by Jeff Milroy dated June 29, 2023 received July 6, 2023.
- Site Plan prepared by Tebrugge Engineering dated June 29, 2022, and received July 6, 2023.
- Plat of Survey prepared by Phillip D Young and Associates dated June 13, 2023 and received July 6, 2023.


The following comments require resolution prior to plan approval and our recommendation for issuance of a stormwater permit. Based on the information provided with this submittal these comments may not be comprehensive and should only be considered the initial review response to documents provided.

1. Provide a project narrative addressing drainage impacts and permit requirements.
2. Determine off-site flows tributary to the property and how they will be conveyed and facilitated by the project.
3. Significant drainage area is tributary to the north line of the project. Utilize streamstats to determine tributary area, design flow values for 100 year event and whether the flow is contained within the banks of the existing channel or result in overbank flooding. The limits of 100 year event conveyance is necessary to determine the adequacy of the proposed plan.
4. Provide a grading plan for the proposed swale drainage features noted on the plan.

5. Provide a cross section and design water surface elevations for proposed swales. Provide drainage calculations supporting the design of drainage swales.
6. Provide a landscape or restoration plan for the swales based on swale flow velocities.
7. Provide a grading and landscape plan for the screening berms denoted on the plan.
8. USACE determination of creek jurisdiction is necessary prior to County permit approval.
9. Depict the existing stormwater basin on the property and describe how the proposed project will impact the basin. Identify existing and proposed tributary areas.
10. Provide a grading plan for the proposed detention basin as well as a utility plan and outlet details. Provide hydrograph routing for the basin to determine adequacy of the design.
11. Define the surface for parking areas and other “pads” denoted on the plans. Provide dimensions for all parking, pads, truck access routes noted on the plan.
12. Clarify if the asphalt creek crossing is existing or proposed. Also clarify if drainage culverts are existing or proposed. Verify the ability of the roadway and culvert facilities to convey 100 year flows within banks or result in an overbank flooding condition.
13. Depict erosion control measures. Determine if an NPDES NOI is necessary.

The applicant's design professionals are responsible for performing and checking all design computations, dimensions, details, and specifications in accordance with all applicable codes and regulations, and obtaining all permits necessary to complete this work. In no way does this review relieve applicant's design professionals of their duties to comply with the law and any applicable codes and regulations, nor does it relieve the Contractors in any way from their sole responsibility for the quality and workmanship of the work and for strict compliance with the permitted plans and specifications. If you have any questions or comments, please contact us at (630) 443-7755.

Sincerely,


Greg Chismark PE
WBK Engineering, LLC