Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Biosolids Treatment Works Information

Treatment works name: Dovetail Energy, LLC		
Ohio NPDES permit #: 1IN00305		County: Greene
Mailing address: 1146 Herr Rd		
City: Fairborn	State: OH	Zip: 45324
Operator of record: Taylor Faecher		
Telephone number: (419) 253-5300		
Email address: info@renergy.com		

Certification Statement

1. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

2. I have read and understand Chapter 3745-40 of the Ohio Administrative Code (OAC) and I agree to beneficially use biosolids in accordance with all applicable beneficial use requirements and restrictions established in Chapter 3745-40 of the Ohio Administrative Code.

3. I agree to only beneficially use biosolids that have satisfied a pathogen reduction alternative and a vector attraction reduction option and have metals concentration below the pollutant ceiling concentrations as established in Chapter 3745-40 of the Ohio Administrative Code.

4. I agree to maintain all applicable records established in Chapter 3745-40 of the Ohio Administrative Code.

Signature _____ Date 8 / 17 / 17

This form shall be signed by the operator of record for the treatment works, be an original signature, not a copy, and must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

Owner Consent for Beneficial Use

[redacted]

Certification Statement

1. I agree to allow biosolids generated by the treatment plant identified on Form BUA-1 to be beneficially used on my property at agronomic rates.

2. I agree to allow federal, state and local regulatory staff access to the beneficial use site for the purposes of inspecting and authorizing the beneficial use site, beneficially using biosolids, and collecting and analyzing samples from the beneficial use site. I reserve the right to ask the above parties for proper identification at any time.

3. I certify that I am holder of legal title to the property described on application form BUA-5, or am authorized by the holder to give consent for the land application of biosolids, and that there are no restrictions to the granting of consent under this form.

[redacted]

9 / 2 / 17
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

[1] For purposes of this form, "beneficial use site owner" means the person who owns the legal rights to the proposed beneficial use site.

[2] In the event the owner of the beneficial use site changes, Form BUA-2 must be revised and resubmitted to Ohio EPA.

Beneficial Use Site Operator Consent for Beneficial Use

Exemption 6

Certification Statement

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.

Exemption 6

09 / 11 / 17
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

[1] For purposes of this form, "beneficial use site operator" means the person who plants, grows, harvests or otherwise manages feed crops, fiber crops, food crops or pasture land on the proposed beneficial use site.

[2] In the event the operator of the beneficial use site changes, Form BUA-3 must be revised and resubmitted to Ohio EPA.

Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Beneficial User Information

Beneficial user[1]: Dovetail Energy, LLC		
Contact person: Taylor Faecher		
Mailing address: 461 State Route 61		
City: Marengo	State: OH	Zip: 43334
Telephone number: (419) 253-5300		
Email address: info@renergy.com		

Certification Statement

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.

Taylor Faecher
Signature[2]

8 / 17 / 17
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

[1] For purposes of this form, the beneficial user means the person who sprays or spreads Class B biosolids onto the surface of the beneficial use site, injects below the surface of the beneficial use site, or incorporates into the soil of the beneficial use site, for the purpose of providing an agronomic benefit.

[2] In the event the beneficial user of the beneficial use site changes, Form BUA-4 must be revised and resubmitted to Ohio EPA.

Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Beneficial Use Site Information

Ohio EPA Site I.D. (Ohio EPA Use Only)

Field site I.D.: GRS-12-03

Beneficial use site location: Northeast of Yellow Springs on the North side of Hilt Rd

County: Greene | **Township**: Wilberforce

Latitude: 39.81704 | **Longitude**: -83.85074

Total acreage proposed for beneficial use: 94

Type of beneficial use to be performed:

Surface application ☐
Injection or immediate incorporation ■

Ground slope percent:

Less than 15%	■	15% to 19.9%	☐
Greater than 20%	☐		

Soil pH (s.u): 7.0

Soil phosphorus (mg/kg): __69.5_____

Bray Kurtz P1 ☐
Mehlich 3 ■

Bedrock depth (feet):

Type of crops to be grown:

Crop Type	Expected Yield
Corn	1 7 5
Soybeans	6 0
Wheat	
Pasture	
Hay	
Other:	

Soil Types:

Soil Unit Symbol	Soil Unit Name	Hydrologic Soil Group	Flooding Frequency Class
C e A	Celina Silt Loam, 0 to 2 percent slopes	C / D	N o n e
C e B	Celina Silt Loam, 2 to 6 percent slopes	C / D	N o n e
C r A	Crosby Silt Loam, Southern Ohio Till Plain, 0 to 2 percent slopes	C / D	N o n e
K o	Kokomo Silty clay loam, 0 to 2 percent	C / D	N o n e
M h B	Miamian Silt Loam, 2 to 6 percent slopes	C	N o n e
S o	S l o a n S i l t y C l a y L o a m	B / D	F r e q u e n t

Applicable isolation distances:

Type of Isolation Distance			
Surface waters of the state	■	Sinkhole/UIC class V drainage	☐
Occupied building	■	Private potable water source	☐
Medical care facility	☐		

Are any endangered species or endangered species habitats located on the beneficial use site?

☐ Yes	■ No

If "Yes" is marked, list the types of endangered species or endangered species habitat:

Have biosolids been beneficially used on the site since July 20, 1993?

☐ Yes	■ No

If "Yes" is marked, list the biosolids generators and years beneficial use occurred:

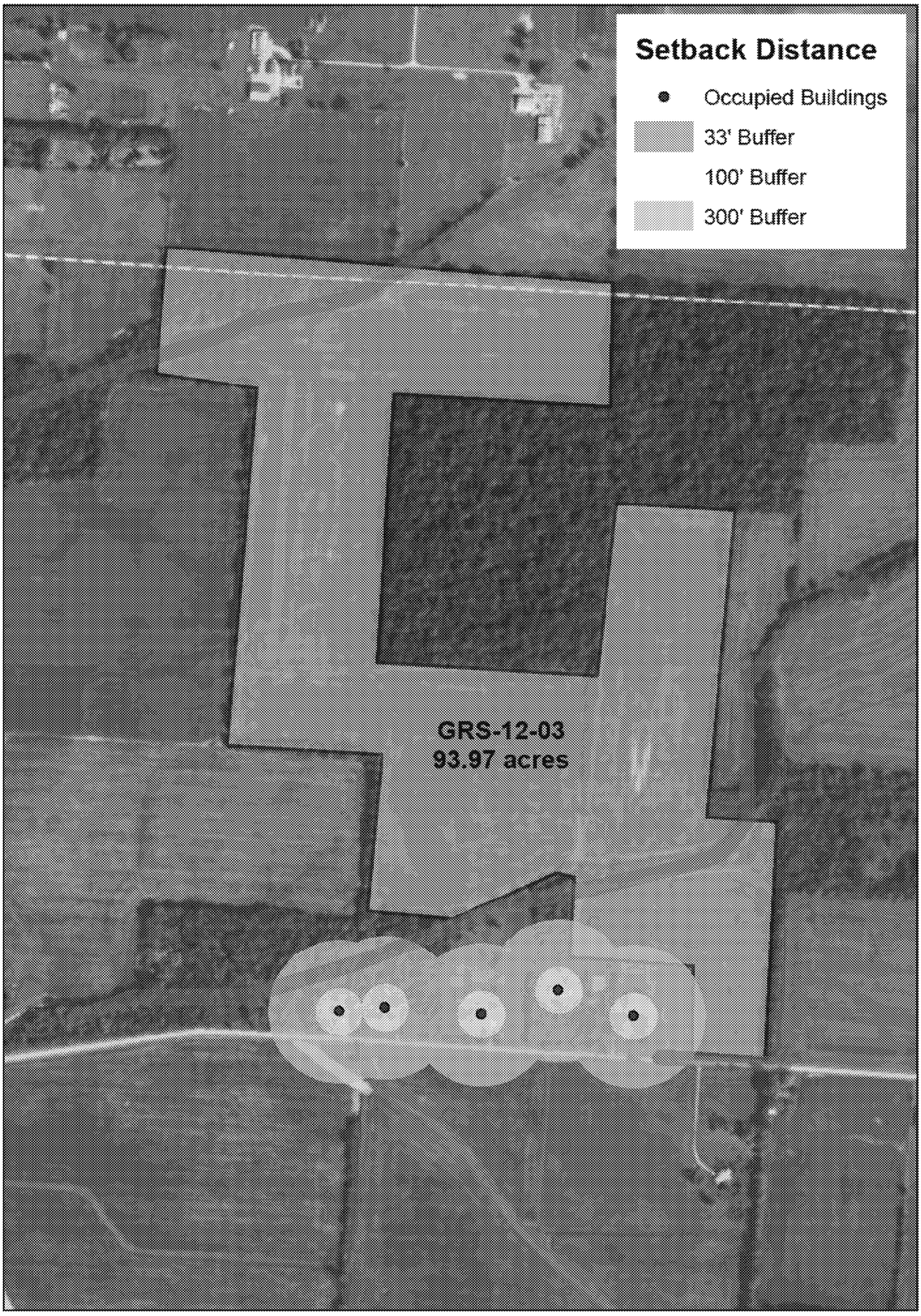
Generator	NPDES permit No.	Year of Beneficial Use

The application must also include all of the following:

- ☐ A soil map of the proposed beneficial use site;
- ☐ A frequency flood class map of the proposed beneficial use site;
- ☐ An aerial map of the proposed beneficial use site that clearly identifies the entrance of the beneficial use site from the nearest road and all applicable isolation distances as established in Chapter 3745-40 of the Ohio Administrative Code;
- ☐ A vicinity road map at or near the township level that clearly identifies the proposed beneficial use site with all roads labeled; and
- ☐ A copy of the most recent soil test results identified in this form.

Springfield-Beckley
Municipal Airport
AIRPARK OHIO
ECUMSEH
STATES
Young's Jersey Dairy
GBS 12-08
Springfield-Yellow Springs Rd
Old Clifton Rd
Antioch College
KILDEER
Clifton
Camp Hugh Taylor Birch
Clifton Gorge
State Nature
Preserve
Clifton
Rd Re
Google My Maps

GRS-12-03 Setback Distance

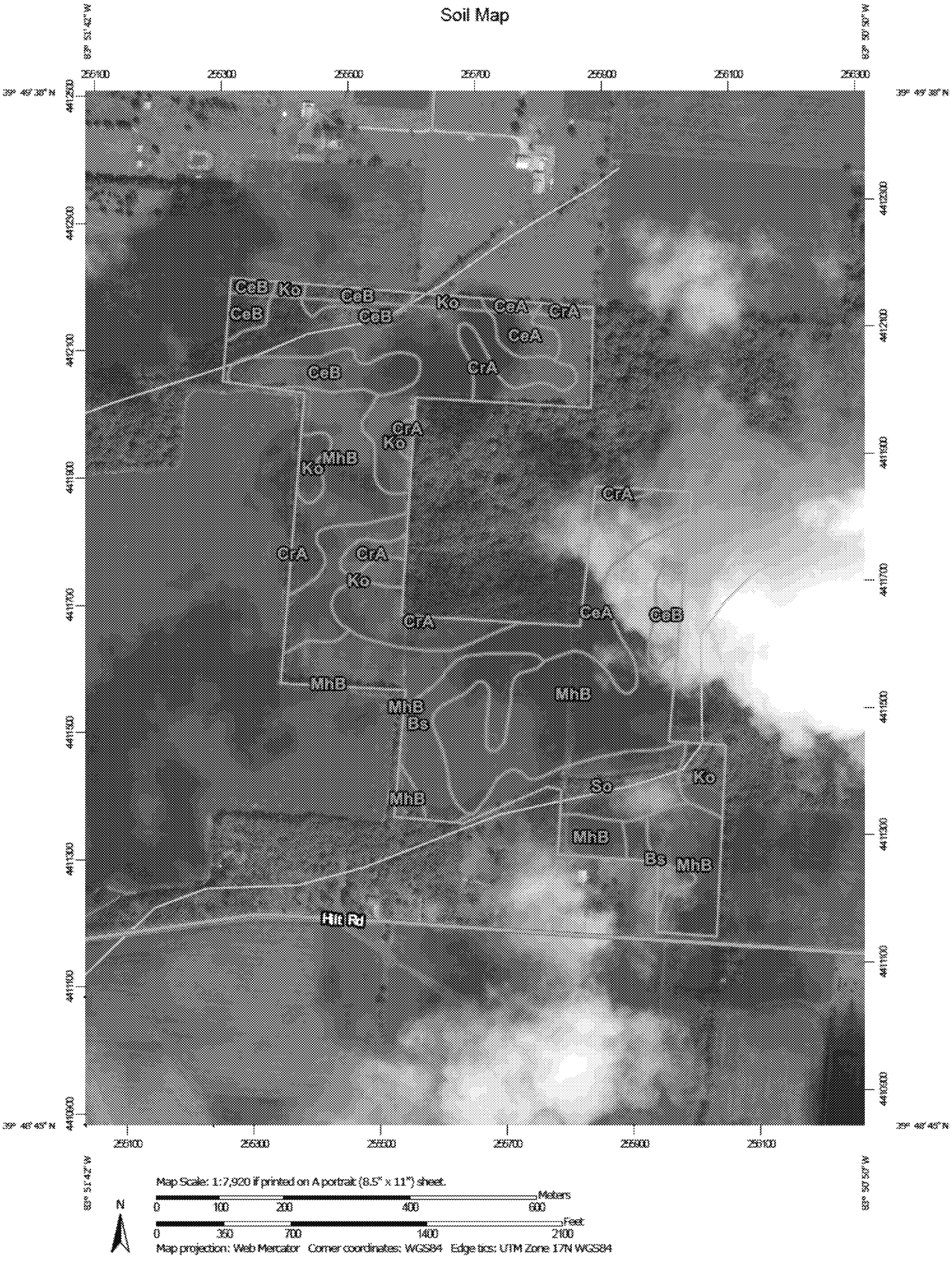


N

0 0.075 0.15 0.3 Miles

Setback Distance		
GRS-12-03		
Total Area: 93.79 acres		
Setbacks:		
	Residence - 300' Buffer	1.21 acres
	Residence - 100' Buffer	0 acres
	Surface Waters - 33' Buffer	3.02 acres
	Total Setback Area:	4.23 acres

Soil Map


CeB
Ko
CeA
CrA
MhB
Bs
So
Hin Rd
Map Scale: 1:7,920 if printed on A portrait (8.5" x 11") sheet.
Meters
0 100 200 400 600
Feet
0 350 700 1400 2100
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Map Unit Legend

Clark County, Ohio (OH023)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CeA	Celina silt loam, 0 to 2 percent slopes	0.4	0.4%
CeB	Celina silt loam, 2 to 6 percent slopes	1.3	1.4%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	0.4	0.4%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	0.8	0.9%
Subtotals for Soil Survey Area		**2.9**	**3.1%**
Totals for Area of Interest		**93.7**	**100.0%**

Greene County, Ohio (OH057)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	6.6	7.1%
CeA	Celina silt loam, 0 to 2 percent slopes	13.1	14.0%
CeB	Celina silt loam, 2 to 6 percent slopes	6.8	7.3%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	9.0	9.6%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	19.3	20.6%
MhB	Miamian silt loam, 2 to 6 percent slopes	30.2	32.3%
So	Sloan silty clay loam	5.7	6.1%
Subtotals for Soil Survey Area		**90.8**	**96.9%**
Totals for Area of Interest		**93.7**	**100.0%**

Map—Depth to Any Soil Restrictive Layer

Table—Depth to Any Soil Restrictive Layer

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Clark County, Ohio (OH023)				
Map unit symbol	**Map unit name**	**Rating (centimeters)**	**Acres in AOI**	**Percent of AOI**
CeA	Celina silt loam, 0 to 2 percent slopes	76	0.4	0.4%
CeB	Celina silt loam, 2 to 6 percent slopes	97	1.3	1.4%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	91	0.4	0.4%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	>200	0.8	0.9%
Subtotals for Soil Survey Area			**2.9**	**3.1%**
Totals for Area of Interest			**93.7**	**100.0%**

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Greene County, Ohio (OH057)				
Map unit symbol	**Map unit name**	**Rating (centimeters)**	**Acres in AOI**	**Percent of AOI**
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	>200	6.6	7.1%
CeA	Celina silt loam, 0 to 2 percent slopes	76	13.1	14.0%
CeB	Celina silt loam, 2 to 6 percent slopes	97	6.8	7.3%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	91	9.0	9.6%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	>200	19.3	20.6%
MhB	Miamian silt loam, 2 to 6 percent slopes	91	30.2	32.3%
So	Sloan silty clay loam	>200	5.7	6.1%
Subtotals for Soil Survey Area			**90.8**	**96.9%**
Totals for Area of Interest			**93.7**	**100.0%**

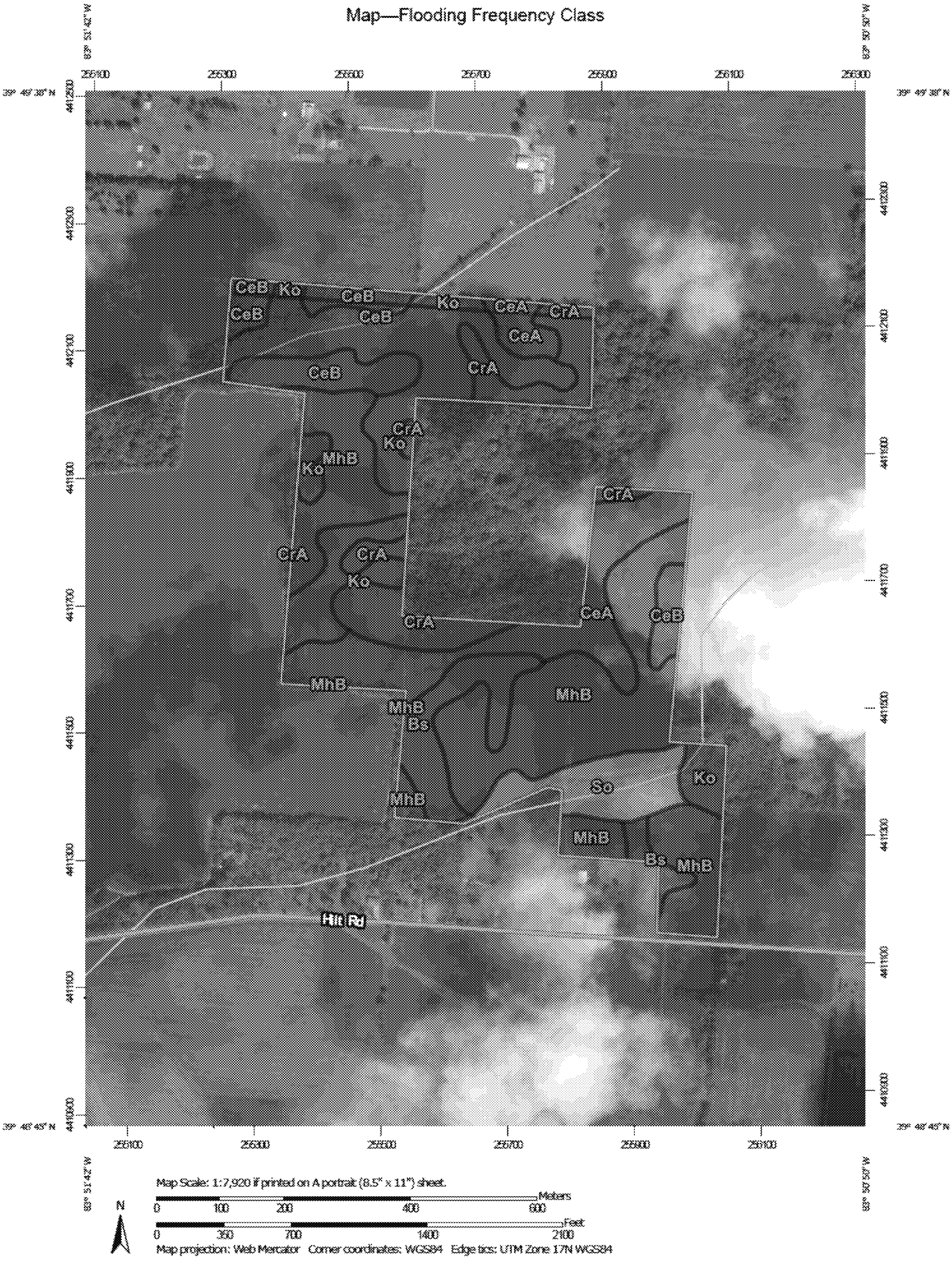
Map—Hydrologic Soil Group

Table—Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Clark County, Ohio (OH023)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
CeA	Celina silt loam, 0 to 2 percent slopes	C/D	0.4	0.4%
CeB	Celina silt loam, 2 to 6 percent slopes	C/D	1.3	1.4%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	C/D	0.4	0.4%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	C/D	0.8	0.9%
Subtotals for Soil Survey Area			**2.9**	**3.1%**
Totals for Area of Interest			**93.7**	**100.0%**

Hydrologic Soil Group— Summary by Map Unit — Greene County, Ohio (OH057)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	C/D	6.6	7.1%
CeA	Celina silt loam, 0 to 2 percent slopes	C/D	13.1	14.0%
CeB	Celina silt loam, 2 to 6 percent slopes	C/D	6.8	7.3%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	C/D	9.0	9.6%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	C/D	19.3	20.6%
MhB	Miamian silt loam, 2 to 6 percent slopes	C	30.2	32.3%
So	Sloan silty clay loam	B/D	5.7	6.1%
Subtotals for Soil Survey Area			**90.8**	**96.9%**
Totals for Area of Interest			**93.7**	**100.0%**

Map—Flooding Frequency Class



Table—Flooding Frequency Class

Flooding Frequency Class— Summary by Map Unit — Clark County, Ohio (OH023)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
CeA	Celina silt loam, 0 to 2 percent slopes	None	0.4	0.4%
CeB	Celina silt loam, 2 to 6 percent slopes	None	1.3	1.4%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	None	0.4	0.4%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	None	0.8	0.9%
Subtotals for Soil Survey Area			**2.9**	**3.1%**
Totals for Area of Interest			**93.7**	**100.0%**

Flooding Frequency Class— Summary by Map Unit — Greene County, Ohio (OH057)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	None	6.6	7.1%
CeA	Celina silt loam, 0 to 2 percent slopes	None	13.1	14.0%
CeB	Celina silt loam, 2 to 6 percent slopes	None	6.8	7.3%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	None	9.0	9.6%
Ko	Kokomo silty clay loam, 0 to 2 percent slopes	None	19.3	20.6%
MhB	Miamian silt loam, 2 to 6 percent slopes	None	30.2	32.3%
So	Sloan silty clay loam	Frequent	5.7	6.1%
Subtotals for Soil Survey Area			**90.8**	**96.9%**
Totals for Area of Interest			**93.7**	**100.0%**

lb/A

BROOKSIDE LABORATORIES, INC. 58251-12

SOIL AUDIT AND INVENTORY REPORT

Name Ringler Energy City Cardington State OH

Independent Consultant Brookside Consultants of Ohio, Inc. Date 9/18/2017

Sample Location	LINKHARDT RD		15	80			
Sample Identification							
Lab Number			0145-1	0146-1			
Total Exchange Capacity (ME/100 g)			11.06	15.99			
pH (H_2O 1:1)			6.9	7.2			
Organic Matter (360°C LOI) %			4.37	4.57			
Estimated Nitrogen Release		lb/A	94	96			
ANIONS	SOLUBLE SULFUR*	ppm	8	8			
PHOSPHORUS	MEHLICH III	lb/A P as P_2O_5	105	531			
		ppm of P	23	116			
	BRAY II	lb/A P as P_2O_5	82	802			
		ppm of P	18	175			
	OLSEN	lb/A P as P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	3174	4218			
		ppm	1587	2109			
	MAGNESIUM*	lb/A	500	1058			
		ppm	250	529			
	POTASSIUM*	lb/A	240	240			
		ppm	120	120			
	SODIUM*	lb/A	32	28			
		ppm	16	14			
BASE SATURATION PERCENT							
	Calcium	%	71.75	65.95			
	Magnesium	%	18.84	27.57			
	Potassium	%	2.78	1.92			
	Sodium	%	0.63	0.38			
	Other Bases	%	4.50	4.20			
	Hydrogen	%	1.50	0.00			
EXTRACTABLE MINORS							
	Boron* (ppm)		0.48	0.65			
	Iron* (ppm)		142	267			
	Manganese* (ppm)		64	69			
	Copper* (ppm)		1.53	2.83			
	Zinc* (ppm)		2.55	4.47			
	Aluminum* (ppm)		457	444			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable