Verification of County Receipt
For Manure Management Plans & Plan Updates

This form is for non-permitted operations that are submitting an original manure management plan (MMP) and all confinement feeding operations that must submit an annual updated MMP. This form is not for confinement feeding operations that are applying for a construction permit. (See the Construction Permit Application package for the Verification of County Receipt form used with construction permit applications.)

It must be submitted to the appropriate Department of Natural Resources (DNR) field office to indicate that the county where the confinement feeding operation is located, or will be located, has received a copy of the MMP. If manure is to be applied in additional counties, you must also submit this form indicating that a complete MMP or MMP annual update has been delivered to each of the counties where manure will be applied.

For the confinement feeding operation:

NAME OF OPERATION: JT Center Pork West 1++, LLC

OWNER: JT Center Pork West 1++, LLC

LOCATION: NW (¼ ¼) ¼ of the SW (¼) ¼ of Sec 04 (Section) T 80N (Tier) R 03W (Range) CENTER WEST (Township Name) CEDAR (County)

THIS SECTION IS TO BE COMPLETED BY THE COUNTY

COUNTY: Cedar

NAME: Megan Hamdorf

TITLE: Deputy Auditor

(Member of the County Board of Supervisors or designated official/employee)

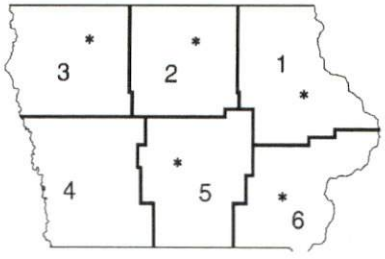
On April 21, 20 23, on behalf of the Board of Supervisors,

I received a complete copy of the:

☐ **Original manure management plan, OR**
☐ **Manure management plan annual update**

Attached are a revised page 2 from the permit and a letter from Latta Well Drilling regarding the soil borings.

Please send this signed and dated receipt to the DNR Field Office where the operation is located:



Field Office #1
909 West Main, Suite 4
Manchester, IA 52057
563-927-2640

Field Office #2
2300 15th St SW
Mason City, IA 50401
641-424-4073

Field Office #3
1900 N. Grand Ave
Spencer, IA 51301
712-262-4177

Field Office #4
1401 Sunnyside Lane
Atlantic, IA 50022
712-243-1934

Field Office #5
502 E 9th St
Des Moines IA 50319
515-725-0268

Field Office #6
1023 W Madison
Washington, IA 52353
319-653-2135

LATTA WELL & PUMP CORP

1051 Taylor Avenue
Wilton, IA 52778
(563) 732-3721
FAX (563) 732-3722
E-MAIL: lattawell@netwtc.net
Website: www.lattawell.com

Mark Latta
Kurt Hartman
Austen Stoll

April 17, 2023

RE: JR Pork Site
Sec 4 Center W Twp Cedar County

We drilled (2) holes in the designated area where the new building site is to be constructed.

In the first boring there was 29' from the original ground level of impervious clay above bedrock.

In the second boring there was 24' from the original ground level to muddy sand streak above the bedrock that was located 28' below the surface.

Sincerely
Latta Well & Pump

Mark Latta

Please staple check here

Iowa Department of Natural Resources

Construction Permit Application Form

Confinement Feeding Operations

Bell ✓
Kaufmann ✓
Barnhart ✓
Bixler
Gaul ✓

INSTRUCTIONS:

Prior to constructing, installing, modifying or expanding a confinement feeding operation structure[1], answer questions 1-8 on Item B, Section A (page 2), to determine if a construction permit is required. To calculate the animal unit capacity (AUC) of the operation, complete Table 1 (page 4). If a construction permit is required, complete the rest of the form, have the applicant(s) sign it on pages 5 and 6. Mail to the DNR (see address on page 5) this application form, documents and fees requested in Checklist No. 1 or 2 (pages 10-15). See item 5 (page 5), to determine which checklist to use.

If a construction permit is not needed, some pre-construction requirements may still apply prior to the construction of a formed manure storage structure[2]. See page 5 for additional DNR contact information.

THIS APPLICATION IS FOR:

1. ☒ A new confinement feeding operation
2. ☐ An existing confinement feeding operation *(answer all of the following questions):*
   a) Facility ID No. (5 digit number): _____
   b) Date when the operation was first constructed: _____
   c) Date when the last construction, expansion or modification was completed: _____

(Not needed if the confinement operation has previously received a construction permit from DNR.)

d) Is this also an ownership change? ☐ Yes ☒ No If yes box is checked additional fees apply. See page 8

ITEM 1 – LOCATION AND CONTACT INFORMATION ***(See page 17 for instructions and an example)*:**

A) Name of operation: JT Center Pork West 1++, LLC

Location:

NW	SE	04	T80N-R03W	Center W	Cedar
(¼ ¼)	(¼)	(Section)	(Tier & Range)	(Name of Township)	(County)

B) Applicant information:

Name: JT Center Pork West 1++, LLC Title: Owner

Address: 12090 240th St. Eldridge, IA 52748

Telephone: 563-285-4006 Fax: _____ Email: tom.dittmer@grandviewfarmsinc.com

C) Person to contact with questions about this application (if different than applicant):

Name: Tom Dittmer Title: Manager

Address: 12090 240th St. Eldridge, IA 52748

Telephone: 563-285-4006 Fax: _____ Email: tom.dittmer@grandviewfarmsinc.com

☒ Enclose aerial photo or engineering drawing showing the proposed location of the confinement feeding operation structure[1] and all applicable separation distances, as requested in Attachment 1 (pages 11-12 or 14-15). See example of aerial photo on pages 18 to 19, at the end of this form.

☐ I manage or am the majority owner of another confinement feeding operation located within 2,500 feet of the proposed site. Please contact the DNR AFO Program staff at (712) 262-4177 to verify site adjacency requirements.

[1] Confinement feeding operation structure = animal feeding operation structure (confinement building, manure storage structure or egg washwater storage structure) that is part of a confinement feeding operation. Manure storage structures include formed and unformed manure storage structures.
[2] Formed manure storage structure = covered or uncovered concrete or steel tanks, and concrete pits below the building.

ITEM 2 – SITING INFORMATION:

A) Karst Determination: Go to DNR AFO Siting Atlas at http://programs.iowadnr.gov/maps/afo/. Search for your site by either scrolling into your location or entering an address or legal description in the bottom search bar. Left click on the location of your proposed structure. Make sure the karst layer box is checked on the map layers. If you cannot access the map, or if you have questions about this issue, contact the AFO Engineer at (712) 262-4177. Check one of the following:

- ☐ The site is not in karst or potential karst. Print and enclose the map with the name and location of the site clearly marked.
- ☒ The site is in karst. The upgraded concrete standards of 567 IAC 65.15(14)"c" must be used. Refer to "Applicant's submittal checklist" on page 10 for karst documentation.
- ☐ The site is within 1,000 feet of a known sinkhole, Secondary Containment Barrier is required in accordance with 567 IAC 65.15(17).

B) Alluvial Soils Determination: Go to the AFO Siting Atlas as described above. Make sure the alluvial layer box is checked on the map legend. If you cannot access the map, or if you have questions about this issue, contact DNR Flood Plain at (866) 849-0321. Check one of the following:

- ☒ The site is not in alluvial soils. Print and enclose the map with the name and location of the site clearly marked.
- ☐ The site is in alluvial soils. You will need to submit a request for a flood plain determination from DNR Flood Plain (866) 849-0321. After receiving determination submit one of the following:
- ☐ Not in 100-year floodplain or does not require a flood plain permit. Include correspondence from the DNR Flood Plain Section.
- ☐ Requires flood plain permit. Include flood plain permit.
- ☐ Documentation has been submitted to determine site is not in alluvial soils. Refer to "Applicant's Submittal Checklist" on page 10 for alluvial soils documentation.

ITEM 3 – OPERATION INFORMATION:

A) A construction permit is required prior to any of the following:

1. ☐ Constructing or modifying any unformed manure storage structure[3], constructing or modifying a confinement building that uses an unformed manure storage structure[3], or increasing animal units in a confinement building that uses an unformed manure storage structure.
2. ☒ Constructing, installing or modifying a confinement building or a formed manure storage structure[2] at a confinement feeding operation if, after construction, installation or expansion, the AUC of the operation is 1,000 animal units (AU) or more. This also applies to confinement feeding operations that store manure exclusively in a dry form.
3. ☐ Initiating a change that would result in an increase in the volume of manure or a modification in the manner in which manure is stored in any unformed manure storage structure[3], even if no construction or physical alteration is necessary. Increases in the volume of manure due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
4. ☐ Initiating a change, even if no construction or physical alteration is necessary, that would result in an increase in the volume of manure or a modification in the manner in which manure is stored in a formed manure storage structure[2] if, after the change, the AUC of the operation is 1,000 AU or more. Increases in the volume of manure due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
5. ☐ Constructing or modifying any egg washwater storage structure or a confinement building at a confinement feeding operation that includes an egg washwater storage structure.
6. ☐ Initiating a change that would result in an increase in the volume of egg washwater or a modification in the manner in which egg washwater is stored, even if no construction or physical alteration is necessary. Increases in the volume of egg washwater due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
7. ☐ Repopulating a confinement feeding operation if it was closed for 24 months or more and if any of the following apply:
   1. ☐ The confinement feeding operation uses an unformed manure storage structure[3] or egg washwater storage structure;
   2. ☐ The confinement feeding operation includes only confinement buildings and formed manure storage structures[2] and has an AUC of 1,000 AU or more.
8. ☐ Installing a permanent manure transfer piping system, unless the department determines that a construction permit is not required.

[3] Unformed manure storage structure = covered or uncovered anaerobic lagoon, earthen manure storage basin, aerobic earthen structure.

B) In your own words, describe in detail, the proposed construction, expansion, installation, modification or repair being proposed in this project.(Must be completed) Attach additional pages if necessary:

The proposed construcation is of three(3) wean/finish hog barns, each 241'-4" long x 81'-2" wide x 8'-0" deep , below-ground, covered concrete manure storage. Pit fans to be located on 6'0" long x 6'0" wide x 8'0" deep pumpout ports. Water line will not enter building through manure storage structure. Each barn is planned to house 2400 head.

C) Master Matrix *(must check one)*. If any of boxes 1 to 3 are checked, the operation is required to be evaluated with the master matrix if the county, where the confinement feeding operation structure[1] is or would be located, has adopted a 'Construction Evaluation Resolution' (CER). Select the one that best describes your confinement feeding operation:

1. ☒ A new confinement feeding operation proposed in a county that has adopted a CER.
2. ☐ An existing operation constructed on or after April 1, 2002, in a county that has adopted a CER.
3. ☐ An existing operation constructed prior to April 1, 2002, with a current or proposed AUC of 1,667 AU or more, in a county that has adopted a CER.
4. ☐ None of the above. Therefore, the master matrix evaluation is not required.

D) Qualified Operation *(must check one)*. If any of boxes 1 to 4 are checked, the operation is also a 'qualified operation'. A qualified operation is required to use a manure storage structure that employs bacterial action which is maintained by the utilization of air or oxygen, and which shall include aeration equipment. However, this requirement does not apply if box 5 is checked. Select the one that best describes your confinement feeding operation:

1. ☐ A swine farrowing and gestating operation with an AUC of 2,500 AU or more. If the replacement breeding swine are raised and used at the operation, the animal units for those replacement animals do not count in the operations total AUC for the purpose of determining a qualified operation.
2. ☐ A swine farrow-to-finish operation with an AUC of 5,400 AU or more.
3. ☐ A cattle confinement feeding operation (including dairies) with an AUC of 8,500 AU or more.
4. ☐ Other confinement feeding operations with an AUC of 5,333 AU or more.
5. ☒ This is not a qualified operation because:
   a. ☒ It is below the limits shown on boxes 1 to 4.
   b. ☐ It includes a confinement feeding operation structure[1] constructed prior to May 31, 1995.
   c. ☐ It handles manure exclusively in a dry form (poultry).

ITEM 4 – ANIMAL UNIT CAPACITY (AUC) and, if applicable, ANIMAL WEIGHT CAPACITY (AWC):

A) Calculating AUC – Required for all operations

For each animal species, multiply the maximum number of animals that you would ever confine at one time by the appropriate factor, then add all AU together on Table 1 (page 4). Use the maximum market weight for the appropriate animal species to select the AU factor.

You must complete all applicable columns in Table 1. Use column a) to calculate the existing AUC, before permit for existing operations only. Use column b) to calculate the 'Total proposed AUC' (after a permit is issued) including new operations. The number obtained in column b) is the AUC of the operation and must be used to determine permit requirements. Use column c) to calculate the 'New AU' to be added to an existing operation. To calculate the indemnity fee (see page 7), also use column c), however, if the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in the "New AU" (column c).

In calculating the AUC of a confinement feeding operation, you must include the AUC of all confinement buildings which are part of the confinement feeding operation, unless a confinement building has been abandoned. A confinement feeding operation structure[1] is abandoned if the confinement feeding operation structure[1] has been razed, removed from the site of a confinement feeding operation, filled in with earth, or converted to uses other than a confinement feeding operation structure[1] so that it cannot be used as a confinement feeding operation structure[1] without significant reconstruction. Therefore, in Table 1, enter the animal unit capacity of all the confinement buildings, including those that are from an "adjacent" operation located within 2,500 feet. For more information, contact the AFO Program at (712) 262-4177.

Table 1. Animal Unit Capacity (AUC): **(No. HEAD) x (FACTOR) = AUC**

Animal Species	a) Existing AUC (Before permit)			b) Total Proposed AUC (After permit)		
	(No. Head)	x (Factor)	= AUC	(No. Head)	x (Factor)	= AUC
Slaughter or feeder cattle		1.0			1.0	
Immature dairy cattle		1.0			1.0	
Mature dairy cattle		1.4			1.4	
Gestating sows		0.4			0.4	
Farrowing sows & litter		0.4			0.4	
Boars		0.4			0.4	
Gilts		0.4			0.4	
Finished (Market) hogs	0	0.4	0	7200	0.4	2880
Nursery pigs 15 lbs to 55 lbs		0.1			0.1	
Sheep and lambs		0.1			0.1	
Goats		0.1			0.1	
Horses		2.0			2.0	
Turkeys 7 lbs or more		0.018			0.018	
Turkeys less than 7 lbs		0.0085			0.0085	
Broiler/Layer chickens 3 lbs or more		0.01			0.01	
Broiler/Layer chickens less than 3 lbs		0.0025			0.0025	
Ducks		0.04			0.04	
Fish 25 grams or more		0.001			0.001	
Fish less than 25 grams		0.00006			0.00006	
TOTALS:	a) Existing AUC:		0	b) Total proposed AUC:		2880

Note: If the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in the "New AU" (column c)

c) New AU = b) - a): 2880

(This is the AUC of the operation)

B) Calculating AWC - Only for operations first constructed prior to March 1, 2003

The AWC is needed for an operation that was first constructed prior to March 1, 2003, to determine some of the minimum separation distance requirements for construction or expansion.

The AWC is the product of multiplying the maximum number of animals that you would ever confine at any one time by their average weight (lbs) during the production cycle. Then add the AWC if more than one animal species is present (examples on how to determine the AWC are provided in 567 IAC 65.1(455B).)

If the operation was first constructed prior to March 1, 2003, you must complete all applicable columns in Table 2:

Table 2. Animal Weight Capacity (AWC): **(No. head) * (Avg. weight, lbs) = AWC, lbs**

Animal Species	a) Existing AWC (Before Permit)			b) Proposed AWC (After permit)		
	(No. head) x	avg weight	= AWC	(No. head) x	avg weight	= AWC
Slaughter or feeder cattle						
Immature dairy cattle						
Mature dairy cattle						
Gestating sows						
Farrowing sows & litter						
Boars						
Gilts						
Finished (Market) hogs						
Nursery pigs 15 lbs to 55 lbs						
Sheep and lambs						
Goats						
Horses						
Turkeys 7lbs or more						
Turkeys less than 7 lbs						
Broiler/Layer chickens 3 lbs or more						
Broiler/Layer chickens less than 3 lbs						
Ducks						
Fish 25 grams or more						
Fish less than 25 grams						
TOTALS:	a) Existing AWC:			b) Total proposed AWC:		

c) New AWC = b) - a):

(This is the AWC of the operation)

ITEM 5 – SUBMITTAL REQUIREMENTS Checklists No. 1 or 2 (pages 10-15) describe the submittal requirements, which are based on the type of confinement feeding operation structure[1] and AUC proposed. To determine which checklist to use, choose the option that best describes your confinement feeding operation:

A) ☒ **Formed manure storage structures**[2]: The proposed confinement feeding operation structure[1] will be or will use a formed manure storage structure[2]. Check one of the following boxes:

1. ☐ A swine farrowing and gestating operation with an AUC of 1,250 AU or more. Use Submittal Checklist No. 2 (page 13).
2. ☐ A swine farrow-to-finish operation with an AUC of 2,750 AU or more. Use Submittal Checklist No. 2 (page 13).
3. ☐ A cattle confinement feeding operation (including dairies) with an AUC of 4,000 AU or more. Use Submittal Checklist No. 2 (page 13).
4. ☐ Other confinement feeding operations with an AUC of 3,000 AU or more. Use Submittal Checklist No. 2 (page 13).
5. ☒ None of the above. Use Submittal Checklist No. 1 (page 10).

If any of boxes 1 to 4 are checked, the operation meets the threshold requirements for an engineer[4] and a Professional Engineer (PE), licensed in Iowa, is required. For these cases, use Submittal Checklist No. 2 (page 13).

If you checked box 5, your operation is below threshold requirements for an engineer[4] and a Professional Engineer (PE) is not required. Use Submittal Checklist No. 1 (page 10).

B) ☐ **Unformed manure storage structure**[3]: The proposed confinement feeding operation structure[1], will be or will use an unformed manure storage structure[3] or an egg washwater storage structure. A Professional Engineer (PE) licensed in Iowa must design and sign the engineering documents for any size of operation. Use Submittal Checklist No. 2 (page 13) and Addendum "A" (page 16).

ITEM 6- UTILIZING RURAL WATER SYSTEM FOR WATER SUPPLY

☐ The proposed facility will utilize rural water and the providing rural water system has been notified and is aware of the proposed increase in water use.

ITEM 7 – SIGNATURE:

I hereby certify that the information contained in this application is complete and accurate.

Signature of Applicant(s): JT Center Pork West 1st, LLC Date: 4-12-23

Tim Dutton Manager

MAILING INSTRUCTIONS: Mail two (2) copies

To expedite the application process, follow the submittal requirements explained in Checklist No. 1 or 2 (pages 10 to 16), whichever applies. Page 1 of this form should be the first page of the package. Mail all documents and fees to:

Iowa DNR
AFO Program
1900 N Grand Ave
Gateway North, Ste E17
Spencer, IA 51301

(Note: Incomplete applications will be returned to the sender.)

Questions

Questions about construction permit requirements or regarding this form should be directed to an engineer of the animal feeding operations (AFO) Program at (712) 262-4177. To contact the appropriate DNR Field Office, go to http://www.iowadnr.gov/fieldoffice.

[4] Threshold requirements for an engineer apply to the construction of a formed manure storage structure[2]. Operations that meet or exceed the threshold requirements for an engineer are required to submit engineering documents signed by a professional engineer licensed in the state of Iowa. Please refer to Checklist No. 2 (pages 13-15).

ITEM 8

Interested Parties Form
Confinement Feeding Operation

Interest means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly or indirectly through a spouse or dependent child, or both.

INSTRUCTIONS:

Please list all persons (including corporations, partnerships, etc.) who have an interest in any part of the confinement feeding operation covered by this permit application.

Full Name	Address	City/State	Zip
Tom Dittmer	12090 240th St.	Eldridge/IA	52748
Joni Dittmer	12090 240th St.	Eldridge/IA	52748
JT Center Pork West 1++ LLC	12090 240th St.	Eldridge/IA	52748

For each name above, please list below all other confinement feeding operations in Iowa in which that person has an interest. Check box "**None**", below, if there are no other confinement feeding operations in Iowa in which the above listed person(s) has or have an interest.

Operation Name	Location (¼ ¼, ¼, Section, Tier, Range, Township, County)	City
☐ **None** [There are no other confinements in Iowa in which the above listed person(s) has or have an interest].		
see attached page		

I hereby certify that the information provided on this form is complete and accurate.

Signature of Applicant(s): JT Center Pork West 1++, LLC — Date: 4-12-23

Tom Dittmer Mgr

ITEM 9

Manure Storage Indemnity Fee Form for Construction Permits

CASHIER'S USE ONLY
0474-542-474A-0431
Facility ID #
County

Credit fees to: JT Center Pork West 1++, LLC

Name of operation: JT Center Pork West 1++

INSTRUCTIONS:

1) Use the 'Total Proposed AUC' from column b), Table 1 (page 4), to select the appropriate fee line in the table below. The 'Total Proposed AUC' is the AUC of the operation.
2) Select the animal specie and row number (see examples). Enter the 'New AU' from column c), Table 1 (page 4). The 'New AU' is the number of AU to be added to an existing operation or being proposed with a new operation. **Note**: If the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in "New AU" (column c).
3) Multiply the 'New AU' by the appropriate 'Fee per AU'. The resulting number is the indemnity fee due.

- **Example 1**: An existing swine operation is expanding from an 'Existing AUC' of 1,000 AU to a 'Total Proposed AUC' of 1,800 AU, and has previously paid an indemnity fee for the existing 1,000 AU. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is between 1,000 AU and 3,000 AU; the animal specie is other than poultry; enter 800 AU in the 'New AU' column, row 4, and multiply it by $ 0.15:

  (800 AU) x ($ 0.15 per AU) = $ 120.00

- **Example 2**: An existing poultry operation is expanding from an 'Existing AUC' of 250 AU to a 'Total Proposed AUC' of 2,000 AU and has not paid the indemnity fee for animals housed in the existing buildings. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is between 1,000 AU and 3,000 AU; the animal specie is poultry and the indemnity fee has not previously been paid, enter 2,000 AU in the 'New AU' column on row 3, and multiply it by $0.06:

  (2,000 AU) x ($ 0.06 per AU) = $ 120.00

- **Example 3**: If you are proposing a new swine confinement feeding operation with a 'Total Proposed AUC' of 3,500 AU, enter 3,500 AU in the 'New AU' column, row 6 and multiply it by $ 0.20:

  (3,500 AU) x ($ 0.20 per AU) = $ 700.00

- **Example 4**: If you are applying for a construction permit but you are not increasing the AUC of the operation, and has previously paid the applicable indemnity for the animals housed in the existing buildings, there is no indemnity fee due ($ 0.00). If no indemnity fee is due, do not submit this page.

Indemnity Fee Table:

Total Proposed AUC (After Permit (from column B, Table 1)	Row	Animal species	New AU (from column C Table 1)	x	Fee per AU	Indemnity Fee
Less than 1,000 AU	1	Poultry		x	$ 0.04 =	
	2	Other		x	$ 0.10 =	
1,000 AU or more to less than 3,000 AU	3	Poultry		x	$ 0.06 =	
	4	Other	2880	x	$ 0.15 =	432.00
3,000 AU or more	5	Poultry		x	$ 0.08 =	
	6	Other		x	$ 0.20 =	

ITEM 9 (Cont.)

Filing Fees Form for Construction Permits

CASHIER'S USE ONLY
0473-542-473A-0431
0474-542-474A-0431
Facility ID #
County

Credit fees to: JT Center Pork West 1++, LLC

Name of operation: JT Center Pork West 1++

INSTRUCTIONS:

1. If the operation is applying for a construction permit enclose a payment for the following:
   ☒ Construction application fee $250.00.
   (Note: This fee is non-refundable)

2. A manure management plan must be submitted with a filing fee.
   ☒ Manure management plan filing fee $250.00
   (Note: This fee is non-refundable)

3. If this is a change in ownership then indemnity fees must also be paid on the current (existing) total AUC at the appropriate rate on page 7.
   ☐ Indemnity fee due to ownership change $ _____

4. Total filing fees: Add the fees paid in items 1, 2 and 3 (above): $ 500.00

SUMMARY:

- Manure Storage Indemnity Fee (see previous page) to be deposited in the Manure Storage Indemnity Fee Fund (474)	$	432.00
- Total filing fees (see item 4 on this page) to be deposited in the Animal Agriculture Compliance Fund (473)	$	500.00
TOTAL DUE:	$	932.00

Make check payable to: Iowa Department of Natural Resources or Iowa DNR; and send it along with the construction application documents (See Submittal Checklist No. 1 or 2, pages 10-15.) Note: Do not send this fee to the county.

ITEM 10

COUNTY VERIFICATION RECEIPT OF DNR CONSTRUCTION PERMIT APPLICATION

This form provides proof that the County Board of Supervisors has been provided with a complete copy of the construction permit application documents (everything except the fees) for the confinement feeding operation or a complete MMP has been provided to the County because manure will be applied in that county:

Applicant: JT Center Pork West 1++, LLC Telephone: 563-285-4006

Name of operation: JT Center Pork West 1++, LLC

Location:	NW	SW	04	T80NR3W	CENTER WEST	Cedar
	(¼ ¼)	(¼)	(Section)	(Tier & Range)	(Name of Township)	(County)

Documents being submitted to the county:

- ☒ Construction permit application form: submit items 1 to 9 (see Submittal Checklist No. 1 or 2)
- ☒ Attachment 1 - Aerial photos: Must clearly show the location of the proposed confinement feeding operation structure[1] and that all the separation distances are met, including those claimed for points in the master matrix (if applicable).
- ☒ Attachment 2 - Statement of design certification, submit any of the following (see Checklist No. 1 or 2):
  - ☒ Construction Design Statement form
  - ☐ Professional Engineer (PE) Design Certification form
  - ☐ Engineering report, construction plans and technical specifications
  - ☐ In addition, if proposing an unformed manure storage structure[3] or an egg washwater storage structure submit documentation required in Addemdum "A" of this construction application form.
- ☒ Attachment 3 - Manure management plan (MMP).
- ☒ Attachment 4 - Master Matrix (if required). You must include supporting documents (see Checklist No. 1 or 2)

THIS SECTION IS RESERVED FOR THE COUNTY

As soon as DNR receives a construction permit application, the DNR will fax your County Auditor a "Courtesy reminder letter" explaining what actions your County Board of Supervisors must complete and the deadlines.

Public Notice is required for **all** construction permit applications, including those applications not required to be evaluated with the master matrix and applications in counties not participating in the Master matrix.

Counties participating in the master matrix: the county's master matrix evaluation and county's recommendation is required for the following cases:

- A new confinement feeding operation that is applying for a construction permit
- An existing confinement feeding operation that was first constructed on or after April 1, 2002 that is applying for a construction permit.
- An existing confinement feeding operation that was first constructed prior to April 1, 2002 that is applying for a construction permit with an animal unit capacity (AUC) is 1,667 animal units (AU) or more.

I have read and acknowledge the county's duty with this construction permit application, as specified in 567 IAC 65.10 and Iowa Code 459.304. On behalf of the Board of Supervisors for:

COUNTY: Cedar

NAME: Megan Hamdorf

TITLE: Deputy Auditor

(Member of the County Board of Supervisors or its designated official/employee)

Date: April 14, 20 23.

If you do not receive the courtesy reminder letter within a reasonable time, or if you have any questions, please contact the animal feeding operations (AFO) Program at (712) 262-4177 or visit www.IowaDNR.gov

Farm ID#	Farm Name	Legal Despcription	CITY
59556	Home Sow	SW SW Sec. 7 T79N R3E Sheridan, Scott Co.	Eldridge
59557	Walcott WF	NW SW Sec. 10 T78N R2E Blue Grass, Scott Co.	Walcott
65036	Engler Farm WF LLC	SE NW Sec. 4 T79N R3E Sheridan, Scott Co.	Long Grove
65037	DeWulf Farm WF LLC	SE SW Sec. 17 T80N R3E Winfield, Scott Co.	Eldridge
65381	TJ WF LLC	NW NW Sec. 13 T79N R2E Hickory Grove, Scott Co.	Eldridge
66831	TJ West LLC	NW NE Sec. 24 T79N R1W Farmington, Cedar Co.	Durant
66929	J2T2 LLC	NE NE SEC. 17 T79N R1W Cleona, Scott Co.	Stockton
67903	Pioneer WF LLC	NE NE Sec. 25 T79N R1W Farminton, Cedar Co.	Durant
67907	BTD Holdings LLC	SW SE SEC 15 T81N R1E Spring Rock, Clinton Co.	Wheatland
68641	BTD Holdings LLC	SE SW SEC. 9 T80N R2W Center, Cedar Co.	Tipton
68688	JT Center Pork 2+	SW SE SEC. 22 T80N R2W Center, Cedar Co.	Tipton
68689	JT Center Pork 1	SE SE SEC. 33 T80N 2W Center, Cedar co.	Tipton
56977	JT Center Pork 3	NW NW Sec. 26 T80N R2W Center, Cedar Co.	Tipton
68979	JT Farmington Pork	NE NW Sec. 7 T79N R1W Farmington, Cedar Co.	Tipton
69557	JT Rochester Pork	NE NW Sec. 6 T79N R2W Rochester, Cedar Co.	Tipton
70068	JT Allens Grove Pork 1+	NE SE Sec. 32 T80N R2E Allens Grove, Scott Co.	Dixon
71346	JT Cleona Pork 1+	SW SW Sec. 8 T79N R1E Cleona, Scott Co.	Stockton
71366	JT Allens Grove Pork 2	SE SW Sec. 35 T80N R2E Allens Grove, Scott Co.	Dixon
71369	JT Fulton Pork	NE SW Sec. 16 T78N R1E Fulton, Muscatine Co.	Stockton
71432	JT Center Pork 4+	NE&SE NE Sec. 26 T80N R2W Center E, Cedar Co.	Tipton
58028	JT Inland Pork 1 LLC	NW 10 80N 1W Inland, Cedar	Bennett

Construction Design Statement (CDS)

Instructions:

1. This form is for new or expanding confinement feeding operations with an AUC[1] of more than 500 AU, not required to have a professional engineer (PE)[2], that are proposing to construct a formed manure storage structure[3].
2. Complete and submit Sections 1, 2 and 3 (pages 1 to 6).
3. Complete and submit Section 4 (page 6) only if you are applying for a construction permit and are constructing three or more confinement feeding operation structures[4].
4. Mail only pages 1 to 6, as instructed on page 6 and 7. Do not mail the remainder of this form.
5. If the site-specific design is sealed by a PE[2], do not use this CDS instead use DNR Form 542-8122.

Section 1 - Information about the proposed formed manure storage structure[3](s)

A) Information about the operation:

Name of operation: JT Center Pork West 1++ LLC Facility ID No.: _____

Location: NW (¼ ¼) SW (¼) 04 (Section) T80N, R03W (Tier & Range) CENTER WEST (Name of Township) CEDAR (County)

Provide latitude and longitude coordinates of the facility driveway at the right of way (ROW) line. Go to the DNR Siting Atlas and left click (to place a teardrop) at that location. The latitude and longitude coordinates appear in the info box. Print off this page, with the info box open (as shown on sample map on Page 7) and submit with CDS.

Latitude: 41.754314 Longitude (negative value) -91.210558

B) Description of the proposed formed manure storage structure[3]. Include dimensions (length, width, or diameter, depth). Indicate if it is aboveground or belowground; covered or uncovered, made of concrete or steel, address location of pit fans, if applicable, and address water line entry into buildings. If necessary attach more pages:

Three 81'2" x 241'4" Deep, Belowground, Covered, Concrete Pit Foundations

All Pit Fans Mounted to Concrete Pumpouts

No Water Entry Through Pit Wall

C) Utilizing Rural Water System and Domestic Sewage Disposal

- ☐ The proposed facility will utilize rural water and the providing rural water system has been notified and is aware of the proposed increase in water use.
- ☒ I understand that no domestic wastewater (toilets, showers, or sinks) or laundry facilities can be discharged to the manure storage structure.

D) Aerial photos: Aerial photos must be submitted that clearly show the location of all existing and proposed confinement feeding operation structures and show at least a one-mile radius around the structures. The photos must either show roads on the north and south or east and west sides of a section (so that a mile distance is apparent), or include a distance scale.

The photo(s) must show that the proposed structures comply with all statutory minimum required separation distances to the objects listed below:

- Residences (not owned by the permit applicant), churches, businesses, schools, public use areas
- Water wells (depends on type)
- Major water sources, wellhead or cistern of an agricultural drainage well or known sinkholes
- Water sources (other than major water sources) and surface intakes of an agricultural drainage well
- Designated wetlands
- Road right-of-way

The separation distance to each of the above objects must be noted with a straight line between the proposed structure(s) and the object. If any of the above objects is not located within one mile from the proposed structures, note the fact on the photo(s) or use additional pages. (Example: "No agricultural drainage wells within one mile.")

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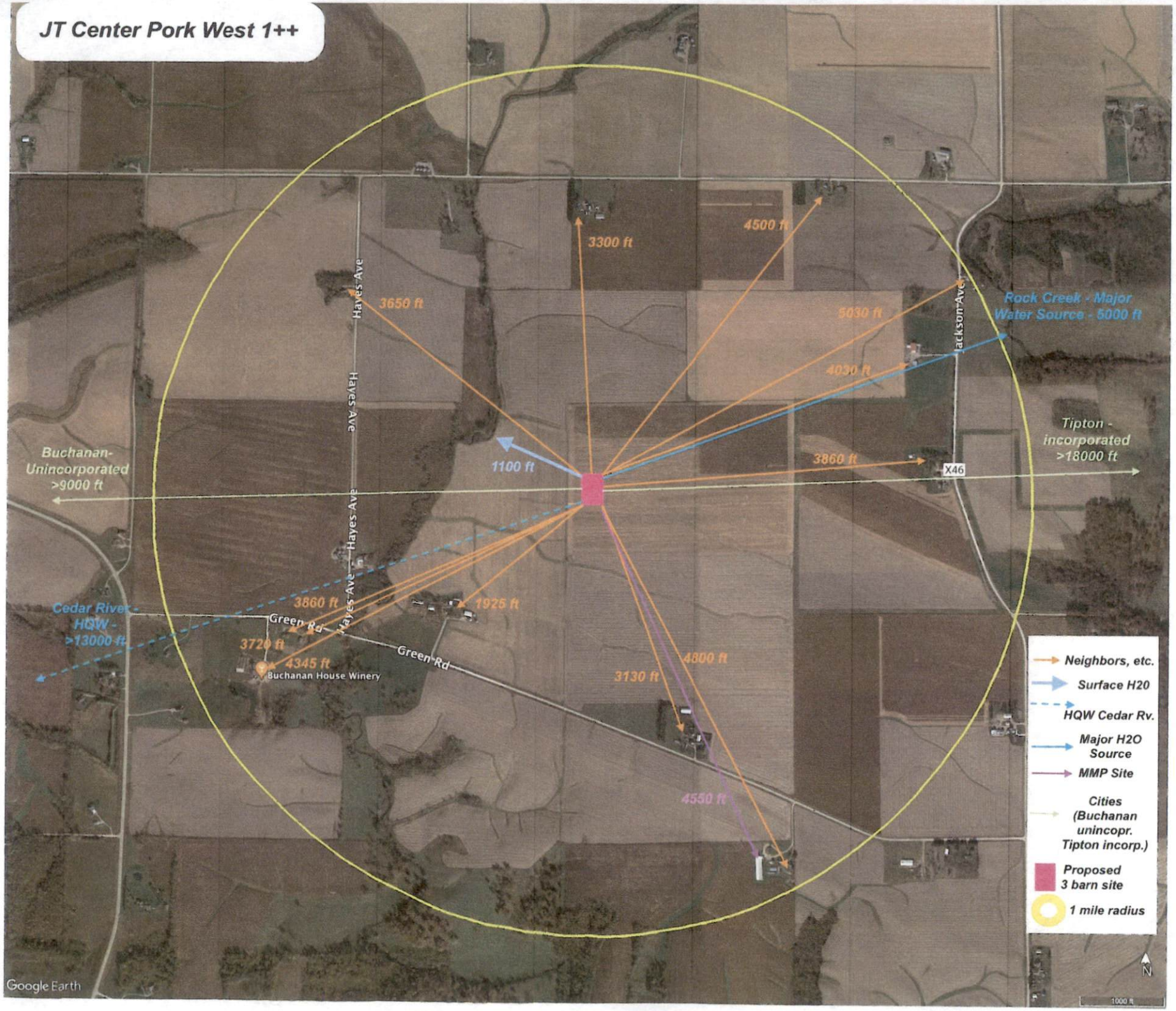
[1] To determine the AUC see the 'Manure Storage Indemnity Fee' (Form 542-4021) or the 'Construction Permit Application' (Form 542-1428), or visit http://www.iowadnr.gov

[2] PE is a professional engineer licensed in the state of Iowa or a NRCS-Engineer working for the USDA-Natural Resources Conservation Service (NRCS).

[3] Formed manure storage structure means a covered or uncovered concrete or steel tank, including concrete pits below the floor.

[4] Confinement feeding operation structure = A confinement building, a formed or unformed manure storage structure, or an egg washwater storage structure.


JT Center Pork West 1++
3300 ft
4500 ft
3650 ft
5030 ft
4030 ft
Rock Creek - Major Water Source - 5000 ft
Tipton - incorporated >18000 ft
Buchanan-Unincorporated >9000 ft
1100 ft
3860 ft
X46
Hayes Ave
Jackson Ave
Cedar River - HQW - >13000 ft
3860 ft
1925 ft
Green Rd
3720 ft
4345 ft
Buchanan House Winery
4800 ft
3130 ft
4550 ft
Neighbors, etc.
Surface H20
HQW Cedar Rv.
Major H2O Source
MMP Site
Cities (Buchanan unincopr. Tipton incorp.)
Proposed 3 barn site
1 mile radius
N
Google Earth


JT Center Pork West 1++
Rock Run Creek
truck turn around
Proposed barns
2400 ft to ROW
Green Rd
*The well will be at least 200 feet from the barns
*There are no known sinkholes ad grainage wells or designated wetlands within 1 mile
Google Earth
N

All separation distances that are not clearly in excess of the required minimum separation distance must be measured according to 567 IAC 65.11(9) using standard survey methods. Go to the DNR Fact Sheet Page on our website and select DNR fact sheet "Distance Requirements for Construction" to find the required separation distances. Or, go directly to the Minimum Separation Distances for Construction or Expansion of Confinement Feeding Operation Structures Form. An example aerial photo can be found on pages 18 to 19 of the AFO Construction Permit Application (DNR Form 542-1428), or at the previously listed link.

Note: If a master matrix is required, the photos must also show that the additional separation distances required for any points claimed in matrix criteria one through ten will be met for the objects listed above. Note the additional separation distance by drawing a straight line between the proposed structures and the matrix item.

E) Karst Determination: Go to DNR AFO Siting Atlas at http://programs.iowadnr.gov/maps/afo/. Search for your site by either scrolling into your location or entering an address or legal description in the bottom search bar. Left click on the location of your proposed structure. Make sure the karst layer box is checked on the map layers. If you cannot access the map, or if you have questions about this issue, contact the AFO Engineer at 712-262-4177. Check one of the following:

- ☐ The site is not in karst or potential karst. Print and enclose the map with the name and location of the site clearly marked.
- ☒ The Siting Atlas has indicated that the site is in karst. The upgraded concrete standards of 567 IAC 65.15(14)"c" must be used. Complete and sign Section 3.H (page 5).

F) Alluvial Soils Determination: Go to the AFO Siting Atlas as described above. Make sure the alluvial box is checked on the map layers. If you cannot access the map, or if you have questions about this issue, contact DNR Flood Plain at 866-849-0321. Check one of the following:

- ☒ The site is not in alluvial soils. Print and enclose the map with the name and location of the site clearly marked.
- ☐ If the site is in alluvial soils contact DNR Flood Plain at 866-849-0321. You will be required to submit a petition for a declaratory order if less than 1000 AU or request a flood plain determination if 1000 AU or greater. After receiving Flood Plain determination, submit one of the following:
- ☐ Include correspondence from the DNR showing the site is not in 100-year flood plain or does not require a Flood Plain permit.
- ☐ Include copy of the Flood Plain permit if a Flood Plain permit is required.

NOTE: You may not be in a flood plain per DNR, however in a County Flood Hazard Area and need a county permit.

Section 2 - Manure management plan:

☐ An original manure management plan (MMP) is enclosed with this form, even if a MMP was previously filed.

JT Center Park West 1st, LLC Tom Ditmer mgr	JT Center Park West 1st, LLC [signature] mgr	4-12-23
Owner's Name (print)	Owner's Signature	Date

Section 3 - Construction design standards:

The person responsible for constructing the formed manure storage structure(s)[3] must complete Section 3.

A) Liquid and semi-liquid manure: The proposed formed manure storage structure[3] will be (check one):

- A.1 ☒ A non-circular concrete tank, belowground, with walls laterally braced or below the building concrete pit designed according to 567 IAC Chapter 65, Appendix D.
- A.2 ☐ A non-circular concrete tank, belowground, walls designed according to MidWest Plan Service (MWPS), publication MWPS-36. Include design calculations.
- A.3 ☐ A circular concrete tank, walls designed according to MidWest Plan Service (MWPS), publication MWPS TR-9. Include design calculations.
- A.4 ☐ Will be made of steel, constructed aboveground according to the manufacturer's recommendations.

B) Dry manure: The proposed formed manure storage structure[3] will be (check one):

- B.1 ☐ An aboveground concrete tank, with walls designed according to MWPS-36. Include design calculations.
- B.2 ☐ Will be made of steel, constructed aboveground according to the manufacturer's recommendations.
- B.3 ☐ Will be a belowground or partially belowground concrete tank, with walls laterally braced designed according to 567 IAC Chapter 65, Appendix D or MWPS-36. Include design calculations.

C) **Details of the proposed design**: Submit an additional completed copy of this page 3 for each formed manure storage structure[3] that have <u>different</u> dimensions. Complete all of the following information:

Number of buildings: 3 Building name: JT Center West 1++

Dimensions of proposed formed manure storage structure[3]

	Length	Width	Height or depth	Wall thickness	Diameter (circular tanks only)
Feet	241	81	8	0	
Inches	4	2	0	9	

To determine the appropriate vertical steel in walls, first check one of the following boxes (must check one):

a. ☐ To use Tables D-1 and D-2 (on page 9), backfilling of walls shall be performed with gravel, sand, silt, and clay mixtures (less than 50 percent fines), with coarse sand with silt or clay (less than 50 percent fines), or cleaner granular material (see page 9 for the unified soils classification). You will need to submit a copy of a USDA soil survey map with the proposed location of the formed manure storage structures[3] clearly marked showing the unified soil classification; or a statement signed by a qualified organization or NRCS staff.

b. ☒ Use Tables D-3 and D-4 (on page 10) if backfilling of walls will be performed with soils that are unknown or with low plasticity silts and clays with some sand or gravel (50 percent or more fines); or fine sands with silt or clay (less than 50 percent fines); or low to medium plasticity silts and clays with little sand or gravel (50 percent or more fines); or high plasticity silts and clays (see page 10 for unified soils classification). You must use Tables D-3 and D-4 if you do not submit the soils information requested in box "a", above.

Maximum spacing of steel, in inches

Description of reinforcing steel in walls	Proposed vertical steel in walls [see boxes "a" and "b", above]				Proposed horizontal steel in walls (use Table D-5)
	Walls where vehicles are **not** allowed within 5 feet (use Table D-1)[a]	All walls with pumpout ports and walls where vehicles are allowed within 5 feet (use Table D-2)[a]	Walls where vehicles are **not** allowed within 5 feet (use Table D-3)[b]	All walls with pumpout ports and walls where vehicles are allowed within 5 feet (use Table D-4)[b]	
Grade 40, No. 4					12
Grade 40, No. 5					
Grade 60, No. 4				9	
Grade 60, No. 5					

D) **Aboveground tanks or partially aboveground tanks:** Liquid and semi-liquid manure (check the following box):

☐ If the proposed tank is to be constructed **<u>aboveground or partially aboveground</u>** and will have an external outlet or inlet below the liquid level, the tank will also be constructed according to the 567 IAC 65.15(20).

E) **Steel Tanks:** Certification that the tank will be constructed according to the tank manufacturer's specifications:

Name of tank manufacturer company: _____

Address: _____

Telephone: _____ Fax: _____

F) **Additional construction design standards:**

To determine the additional requirements set forth in 567 IAC 65.15(14) that would apply to the proposed formed manure storage structure[3], check any of the following 3 boxes based on the information entered on Sections 3.A or 3.B (page 2):

☒ If you checked boxes A.1, A.2, A.3 or B.3 (on page 2) **<u>all</u>** of the following 15 additional requirements apply. Complete the numbered items 1 to 15 (below).

☐ If you checked box B.1 (on page 2), only the requirements of numbered items 1, 3, 4, 5, 6, 8 and 12 apply and need to check those boxes (below).

☐ If you checked boxes A.4 or B.2 (on page 2) and the steel tank will have a concrete floor, only the requirements of numbered items 1, 2, 3, 4, 5, 8, 9, 12, apply and need to check those boxes (below).

Additional Requirements that will be followed during construction of the formed manure storage structure(s)[3]:

1. Site preparation (check the following box):
   ☒ The finished subgrade of a formed manure storage structure shall be graded and compacted to provide a uniform and level base and shall be free of vegetation, manure and debris. For the purpose of this subrule, "uniform" means a finished subgrade with similar soils.

2. Groundwater separation requirements (check one of the following boxes):
   ☒ When the groundwater table, as determined in 65.15(7)"c," is above the bottom of the formed structure, a drain tile shall be installed along the footings to artificially lower the groundwater table pursuant to 65.15(7)"b"(2). The drain tile shall be placed within 3 feet of the footings as indicated in Appendix D, Figure D-1, at the end of this chapter and shall be covered with a minimum of 2 inches of gravel, granular material, fabric or a combination of these materials to prevent plugging the drain tile. A device to allow monitoring of the water in the drainage tile lines installed to lower the groundwater table and a device to allow shutoff of the drainage tile lines shall be installed if the drainage tile lines do not have a surface outlet accessible on the property where the formed manure storage structure is located. **Perimeter tiles must be tied into existing tile, day light, or have an operating sump pump installed in tile riser. Perimeter tiles CANNOT dead end at riser or monitoring port.**

   ☐ In lieu of the drain tile, a certification signed by a PE[2], a groundwater professional certified pursuant to 567 Chapter 134, or a qualified staff from NRCS, is being submitted indicating that the groundwater elevation, according to 65.15(7)"c", is below the bottom of the formed structure.

3. Minimum as-placed concrete compressive strength (check the following box):
   ☒ All concrete shall have the following minimum as-placed compressive strengths and shall meet American Society for Testing and Materials (ASTM) standard ASTM C 94: 4,000 pounds per square inch (psi) for walls, floors, beams, columns and pumpouts and 3,000 psi for the footings. The average concrete strength by testing shall not be below design strength. No single test result shall be more than 500 psi less than the minimum compressive strength.

4. Cement and aggregates specifications (check the following box):
   ☒ Cementitious materials shall consist of Portland cement conforming to ASTM C 150. Aggregates shall conform to ASTM C 33. Blended cements in conformance with ASTM C 595 are allowed only for concrete placed between March 15 and October 15. Portland-pozzolan cement or Portland blast furnace slag blended cements shall contain at least 75 percent, by mass, of Portland cement.

5. Concrete consolidation and vibration requirements (check the following box):
   ☒ All concrete placed for walls shall be consolidated or vibrated, by manual or mechanical means, or a combination, in a manner which meets ACI 309.

6. Minimum rebar specifications: (check the following box):
   ☒ All rebar used shall be a minimum of grade 40 steel. All rebar, with the exception of rebar dowels connecting the walls to the floor or footings, shall be secured and tied in place prior to the placing of concrete.

7. Wall reinforcement placement specifications (check the following box):
   ☒ All wall reinforcement shall be placed so as to have a rebar cover of 2 inches from the inside face of the wall for a belowground manure storage structure. Vertical wall reinforcement should be placed closest to the inside face. Rebar placement shall not exceed tolerances specified in ACI 318.

8. Minimum floor specifications. Complete part a) and b):
   a) Floor thickness requirements (check the following box):
   ☒ The floor slab shall be a minimum of 5 inches thick. Nondestructive methods to verify the floor slab thickness may be required by the department. The results shall indicate that at least 95 percent of the floor slab area meets the minimum required thickness. In no case shall the floor slab thickness be less than 4½ inches.

   b) The floor slab reinforcement shall be located in the middle of the thickness of the floor slab (check one of the following boxes):
   ☒ Formed manure storage structures with a depth of 4 feet or more shall have primary reinforcement consisting of a minimum of #4 rebar placed a maximum of 18 inches on center in each direction placed in a single mat.
   ☐ Formed manure storage structure with a depth less than 4 feet shall have shrinkage reinforcement consisting of a minimum of 6 × 6-W1.4 × W1.4 welded wire fabric.

9. Minimum footing specifications (check the following box):
   ☒ The footing or the area where the floor comes in contact with the walls and columns shall have a thickness equal to the wall thickness, but in no case be less than 8 inches, and the width shall be at least twice the thickness of the footing. All exterior walls shall have footings below the frostline. Tolerances shall not exceed -½ inch of the minimum footing dimensions.

10. Requirement to connect walls to footings (check one of the following boxes):
   ☐ The vertical steel of all walls shall be extended into the footing, and be bent at 90°, OR
   ☒ A separate dowel shall be installed as a #4 rebar that is bent at 90° with at least 20 inches of rebar in the wall and extended into the footing within 3 inches of the bottom of the footing and extended at least 3 inches horizontally, as indicated in Appendix D, Figure D-1 (page 12). Dowel spacing (bend or extended) shall be the same as the spacing for the vertical rebar.
   ☐ As an alternative to the 90°bend, the dowel may be extended at least 12 inches into the footing, with a minimum concrete cover of 3 inches at the bottom, as indicated in Appendix D, Figure D-1 (page 12). Dowel spacing (bend or extended) shall be the same as the spacing for the vertical rebar.
   ☐ In lieu of dowels, mechanical means or alternate methods may be used as anchorage of interior walls to footings. Please submit structural calculations and details of this proposal.

11. Concrete forms specifications (check the following box):
   ☒ All walls shall be formed with rigid forming systems and shall not be earth-formed. Form ties shall be non-removable.

12. Curing of concrete requirements (check the following box):
   ☒ All concrete shall be cured for at least seven days after placing, in a manner which meets ACI 308, by maintaining adequate moisture or preventing evaporation. Proper curing shall be done by ponding, spraying or fogging water; or by using a curing compound that meets ASTM C 309; or by using wet burlap, plastic sheets or similar materials.

13. Construction joints and waterstops specifications (check the following box):
   ☒ All construction joints in exterior walls shall be constructed to prevent discontinuity of steel and have properly spliced rebar placed through the joint. Waterstops shall be installed in all areas where fresh concrete will meet hardened concrete as indicated in Appendix D, Figures D-1 and D-2, at the end of this chapter. The waterstops shall be made of plastic, rolled bentonite or similar materials approved by the department.

14. Backfilling of walls specifications (check the following box):
   ☐ Backfilling of the walls shall not start until the floor slats or permanent bracing have been installed. Backfilling shall be performed with material free of vegetation, large rocks or debris.

15. Additional design requirements (check the following box, if applicable):
   ☐ A formed manure storage structure with a depth greater than 12 feet shall be designed by a PE or an NRCS engineer.

G) Construction Certification: The person responsible for constructing the formed manure storage structure[3] must sign this page. Any change(s) to the specifications of the formed manure storage structure must be first approved by DNR:

"I hereby certify that I have read and understand the minimum design and construction standards of Iowa Code chapter 459, Subchapter III, and the 567 Iowa Administrative Code (IAC) 65.15(14) "Minimum concrete standards" or 567 IAC 65 (if other than concrete)." The proposed formed manure storage structure(s)[3] at the operation:

Name of operation: JT Center West 1++ County: Cedar

Owner's name: JT Center West 1++

will be constructed in accordance with these minimum requirements. Included with this certification are:

☒ Page 1-3, for each formed manure storage structure[3] that have different dimensions
☒ Pages 4 to 6 (applicable sections)
☒ Other documents (specify): Iowa DNR Alluvial and Karst Soils Maps

Randall D Shumaker		3/15/23
(Print name)	(Signature)	(Date)
Custom Builders of Tipton, Inc	209 W South St. Tipton, Ia 52772	(563) 357-3682
(Company)	(Address)	(Phone No.)

(See page 7 for mailing instructions)

H) **Upgraded Concrete Standards Certification:** If the site is in karst according to Section 1.D (page 2) the person responsible for constructing the formed manure storage structure must also complete this section:
567 IAC 65.15(14)"c". Karst terrain - upgraded standards. If the site of the proposed formed manure storage structure is located in an area that exhibits karst terrain or an area that drains into a known sinkhole, the minimum concrete standards set forth in 65.15(14)"a" or "b" shall apply. In addition, the following requirements apply to all formed manure storage structures that store nondry or dry manure (check all of the following boxes):

- ☒ (1) A minimum 5-foot vertical separation distance between the bottom of a formed manure storage structure and limestone, dolomite, or other soluble rock is required if the formed manure storage structure is not designed by a PE or an NRCS engineer. (The 5-foot separation must be a continuous profile of low permeability soil directly beneath the bottom of the formed manure storage structure.
- ☒ (2) If the vertical separation distance between the bottom of the proposed formed manure storage structure and limestone, dolomite, or other soluble rock is less than 5 feet, the structure shall be designed and sealed by a PE or an NRCS engineer who certifies the structural integrity of the structure. A 2-foot-thick layer of compacted clay soil shall be constructed underneath the floor of the formed manure storage structure. However, it is recommended that any formed manure storage structure be constructed aboveground if the vertical separation distance between the bottom of the structure and the limestone, dolomite, or other soluble rock is less than 5 feet.
- ☒ (3) In addition, in an area that exhibits karst terrain or an area that drains into a known sinkhole, a PE, an NRCS engineer or a qualified organization shall submit a soil exploration study based on the results from soil borings or test pits to determine the vertical separation between the bottom of the formed structure and limestone, dolomite, or other soluble rock. A minimum of two soil borings, equally spaced within each formed structure, or two test pits outside of each formed structure, are required. After soil exploration is completed, each soil boring and pit shall be properly plugged with concrete grout, bentonite, or similar materials.
- ☒ (4) Backfilling shall not start until the floor slats have been placed or permanent bracing has been installed, and shall be performed with material free of vegetation, large rocks, or debris.

"I have read and understand the upgraded concrete standards of IAC 65.15(14)"c", and certify that the proposed formed manure storage structure(s)[3] at the above operation will be constructed according to these standards":

Randall D Shumaker	Randall D Shumaker	03/15/23
(Print name)	(Signature)	(Date)
Custom Builders of Tipton, Inc	209 W South St. Tipton, Ia 52772	(563) 357-3682
(Company)	(Address)	(Phone No.)

Section 4 - Drainage Tile Certification: Required only if applying for a construction permit and constructing three or more confinement feeding operations structures[4]. This section must be completed and signed by the person responsible for excavating the confinement feeding operation structure[4]:

567 IAC 65.15(1) - Drainage tile removal for new construction of a manure storage structure. Prior to constructing a manure storage structure, other than storage of manure in an exclusively dry form, the site for the animal feeding operation structure shall be investigated for drainage tile lines as provided in this subrule. All applicable records of known drainage tiles shall be examined for the existence of drainage tile lines.

c. The applicant for a construction permit for a formed manure storage structure shall investigate for tile lines during excavation for the structure. Drainage tile lines discovered upgrade from the structure shall be rerouted around the formed manure storage structure to continue the flow of drainage. All other drainage tile lines discovered shall be rerouted, capped, plugged with concrete, Portland cement concrete grout or similar materials or reconnected to upgrade tile lines. Drainage tile lines installed at the time of construction to lower a groundwater table may remain where located. A device to allow monitoring of the water in the drainage tile lines and a device to allow shutoff of the drainage tile lines shall be installed if the drainage tile lines do not have a surface outlet accessible on the property where the formed manure storage structure is located.

"I certify that I have read and understand the requirements of 567 IAC 65.15(1)"c" and that to the best of my knowledge, information and belief, the proposed confinement feeding operation structures[4] at:

Name of operation: JT Center West 1++ County: Cedar

Owner's name: JT Center West 1++

will not impede the drainage of established drainage tile lines which cross their property lines and if construction disturbs drainage tile lines, I will take the necessary measures to reestablish drainage and, upon completion of construction, file a statement that those measures were taken to reestablish drainage."

Zach Pedersen	Zach Pedersen	03/15/23
(Print name)	(Signature)	(Date)
Pedersen Land Improvement	67 Spruce St. Tipton, Ia 52772	(319) 631-4349
(Company)	(Address)	(Phone No.)

(2) Consideration shall be given to internal and external loads including, but not limited to, lateral earth pressures, hydrostatic pressures, wind loads, and floor or cover, building and equipment loads.

(3) Each wall shall be braced laterally at the top of the wall.

(4) The walls shall be constructed above the groundwater table, or a drain tile shall be installed to artificially lower the groundwater table.

(5) Each wall that includes a pumpout port shall be constructed under the design consideration that vehicles will be operating within 5 feet of the wall as provided in Tables D-2 and D-4.

(6) Minimum wall thickness and minimum vertical steel reinforcement shall be in accordance with one of the following:

(a) Table D-1, if **all** of the following conditions are met:

1. There will be **NO VEHICLES** operating within 5 feet of the wall.
2. Backfilling is performed with **gravel, sand, silt, and clay mixtures (less than 50 percent fines), with coarse sand with silt or clay (less than 50 percent fines), or cleaner granular material** (see NRCS Conservation Practice Standard, "Waste Storage Facility," Code 313, Table 2, for description and unified classification or ASTM D 2488 and D 653).

APPENDIX D, TABLE D-1 [See footnote "a" on page 11]

Minimum Wall Thickness and Vertical Steel Reinforcement

Wall height (feet)	Wall thickness (inches)	Steel Grade			
		Grade 40		Grade 60	
		Bar	Space o.c. (inches)	Bar	Space o.c (inches)
4 or less	6	# 4	16.5	# 4	18.0
		# 5	18.0	# 5	18.0
4 or less	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
6	6	# 4	14.5	# 4	18.0
		# 5	18.0	# 5	18.0
6	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
8	8	# 4	9.5	# 4	13.5
		# 5	14.5	# 5	18.0
8	10	# 4	9.5	# 4	11.0
		# 5	15.0	# 5	17.0
10	8	# 4	6.5	# 4	9.5
		# 5	10.0	# 5	13.5
10	10	# 4	6.5	# 4	9.5
		# 5	10.0	# 5	15.0
12	10	# 4	5.0	# 4	7.5
		# 5	7.5	# 5	11.5

(b) Table D-2, if **all** of the following conditions are met:

1. There will be **VEHICLES** operating within 5 feet of the wall.
2. Backfilling is performed with **gravel, sand, silt, and clay mixtures (less than 50 percent fines), with coarse sand with silt or clay (less than 50 percent fines), or cleaner granular material** (see NRCS Conservation Practice Standard, "Waste Storage Facility," Code 313, Table 2, for description and unified classification or ASTM D 2488 and D 653).

APPENDIX D, TABLE D-2 [See footnote "a" on page 11]

Minimum Wall Thickness and Vertical Steel Reinforcement

Wall height (feet)	Wall thickness (inches)	Steel Grade			
		Grade 40		Grade 60	
		Bar	Space o.c. (inches)	Bar	Space o.c. (inches)
4 or less	6	# 4	16.5	# 4	18.0
		# 5	18.0	# 5	18.0
4 or less	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
6	6	# 4	10.5	# 4	15.5
		# 5	16.5	# 5	18.0
6	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
8	8	# 4	6.5	# 4	10.0
		# 5	10.5	# 5	16.0
8	10	# 4	8.5	# 4	11.0
		# 5	13.5	# 5	17.0
10	8	# 4	4.5	# 4	6.5
		# 5	7.0	# 5	10.5
10	10	# 4	5.0	# 4	7.5
		# 5	8.0	# 5	12.0
12	10	# 4	3.5	# 4	5.5
		# 5	5.5	# 5	8.5

(c) Table D-3, if **all** of the following conditions are met:

1. There will be **NO VEHICLES** operating within 5 feet of the wall.
2. Backfilling is performed with performed with **low plasticity silts and clays with some sand or gravel (50 percent or more fines); or fine sands with silt or clay (less than 50 percent fines); or low to medium plasticity silts and clays with little sand or gravel (50 percent or more fines); or high plasticity silts and clays** (see NRCS Conservation Practice Standard, "Waste Storage Facility," Code 313, Table 2, for description and unified classification or ASTM D 2488 and D 653).

APPENDIX D, TABLE D-3 [See footnote "b" on page 11]

Minimum Wall Thickness and Vertical Steel Reinforcement

Wall height (feet)	Wall thickness (inches)	Steel Grade			
		Grade 40		Grade 60	
		Bar	Space o.c. (inches)	Bar	Space o.c. (inches)
4 or less	6	# 4	16.5	# 4	18.0
		# 5	18.0	# 5	18.0
4 or less	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
6	6	# 4	10.5	# 4	15.5
		# 5	16.5	# 5	18.0
6	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
8	8	# 4	6.5	# 4	10.0
		# 5	10.5	# 5	16.0
8	10	# 4	9.0	# 4	11.0
		# 5	14.0	# 5	17.0
10	8	# 4	4.5	# 4	6.5
		# 5	7.0	# 5	10.0
10	10	# 4	5.0	# 4	7.5
		# 5	8.0	# 5	12.0
12	10	# 4	3.5	# 4	5.0
		# 5	5.5	# 5	8.0

(d) Table D-4, if **all** of the following conditions are met:

1. There will be **VEHICLES** operating within 5 feet of the wall.
2. Backfilling is performed with performed with **low plasticity silts and clays with some sand or gravel (50 percent or more fines); or fine sands with silt or clay (less than 50 percent fines); or low to medium plasticity silts and clays with little sand or gravel (50 percent or more fines); or high plasticity silts and clays** (see NRCS Conservation Practice Standard, "Waste Storage Facility," Code 313, Table 2, for description and unified classification or ASTM D 2488 and D 653).

APPENDIX D, TABLE D-4 [See footnote "b" on page 11]

Minimum Wall Thickness and Vertical Steel Reinforcement

Wall height (feet)	Wall thickness (inches)	Steel Grade			
		Grade 40		Grade 60	
		Bar	Space o.c. (inches)	Bar	Space o.c. (inches)
4 or less	6	# 4	16.5	# 4	18.0
		# 5	18.0	# 5	18.0
4 or less	8	# 4	12.0	# 4	13.5
		# 5	18.0	# 5	18.0
6	6	# 4	8.0	# 4	12.0
		# 5	12.5	# 5	16.5
6	8	# 4	9.5	# 4	13.5
		# 5	15.0	# 5	18.0
8	8	# 4	6.0	# 4	9.0
		# 5	9.0	# 5	11.5
8	10	# 4	6.0	# 4	9.0
		# 5	9.5	# 5	14.0
10	8	# 4	3.0	# 4	4.5
		# 5	4.5	# 5	7.0
10	10	# 4	4.5	# 4	6.5
		# 5	6.5	# 5	10.0
12	10	# 4	2.5	# 4	4.0
		# 5	4.0	# 5	6.0

(7) Minimum horizontal steel for a rectangular tank shall be selected and placed according to Table D-5, regardless of wall height, and shall be tied to the soil side of vertical steel:

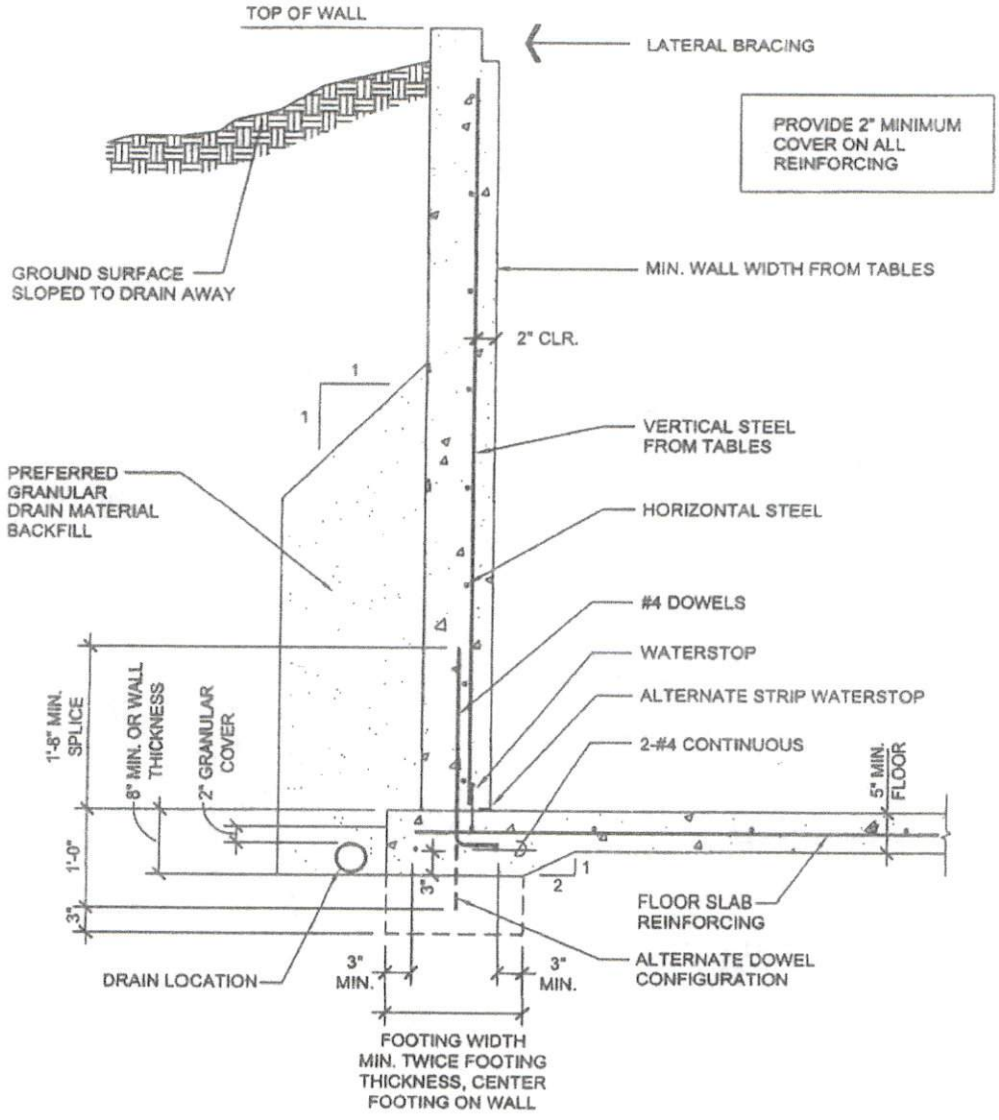
APPENDIX D, TABLE D-5

Horizontal Steel Reinforcement

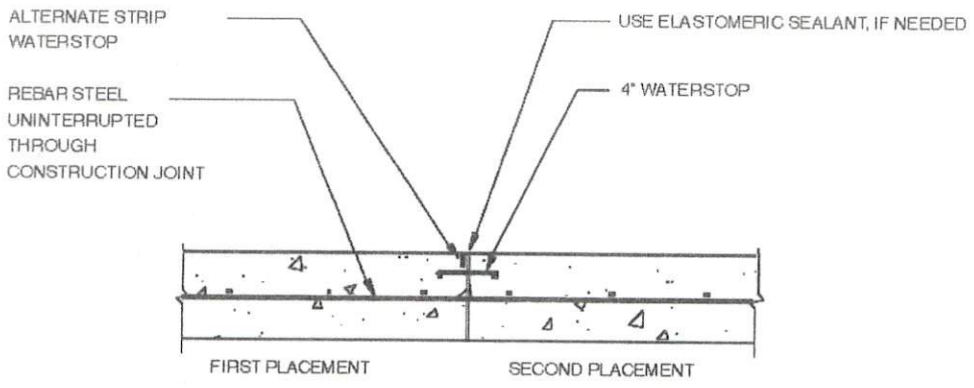
Wall thickness	Steel Grade			
	Grade 40		Grade 60	
	Bar	Space o.c. (inches)	Bar	Space o.c (inches).
6	# 4	16.5	#4	18.0
	# 5	18.0	# 5	18.0
8	# 4	12.0	# 4	13.5
	# 5	18.0	# 5	18.0
10	# 4	9.5	# 4	11.0
	# 5	15.0	# 5	17.0

[a]To use Tables D-1 and D-2, the backfilling of the walls will be performed with gravel, sand, silt, and clay mixtures (less than 50 percent fines), with coarse sand with silt or clay (less than 50 percent fines), or cleaner granular material. The "Unified Soil Classification" corresponds to: GP, GW, SP, SW, GM, GC, SW, SC, SM, SC-SM. You will need to submit a copy of a USDA soil survey map with the proposed location of the formed manure storage structures[3] clearly marked showing the unified soil classification; or a statement signed by a qualified organization or NRCS staff.

[b]Use Tables D-3 and D-4 if the soils to be used for backfilling the walls are unknown or performed with low plasticity silts and clays with some sand or gravel (50 percent or more fines); or fine sands with silt or clay (less than 50 percent fines); or low to medium plasticity silts and clays with little sand or gravel (50 percent or more fines); or high plasticity silts and clays. The "Unified Soils Classification" corresponds to: CL, ML, CL-ML, SC, SM, SC-SM. Tables D-3 and D-4 must be used, if a copy of a USDA soil survey map with the proposed location of the formed manure storage structures[3] clearly marked showing the unified soil classification; or a statement signed by a qualified organization or NRCS staff is not submitted.



567 IAC Chapter 65, Appendix D, Figure D-1 "Monolitic footing floor detail"



567 IAC Chapter 65, Appendix D, Figure D-2 "Wall and floor construction joint"

WELL RECORD FORM

PWSID# *or* PWTS No. _____ PWTS Permit No. _____ GeoSam WNumber *(IGS use only)* _____

Site Identification

Property owner Grandview Land LLC Other ID Well #1

Address off Green Rd City Tipton

Tenant _____

Well depth 31 ft Date completed 4 / 5 / 23

Location

County Cedar

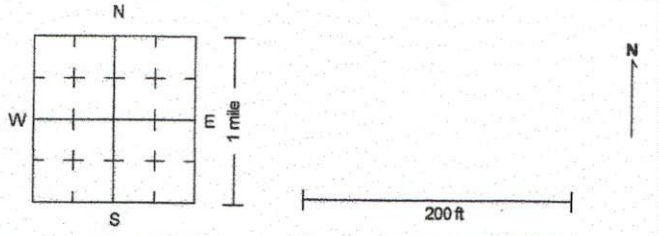
GPS coordinates (NAD83 datum)

41.7606590 Latitude -91.2096420 Longitude

☐ Decimal Degrees ☐ Degrees, Decimal Minutes ☐ Degrees, Minutes, Seconds

____ 1/4 of the ____ 1/4 of the ____ 1/4 of Sec 4 TWP 80 RNG 3 E W

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



Formation Log

From	To	Color	Hardness	Formation description
0	1	black		soil
1	5	gray		clay
5	13	brown		clay
13	29	gray		clay
29	31	tan		limestone
				(use additional sheets as needed)

Remarks (including depth of lost drilling fluids, materials, or tools)

Well Use

☐ Domestic ☐ Public supply ☐ Livestock

☐ Heat pump ☐ Commercial ☐ Irrigation

# of borehole(s) ____ ☐ Monitoring ☑ Other Karst

Drill Method

☑ Rotary ☐ Auger ☐ Cable ☑ Other _____

Hole size

6 inch from 0 ft to 31 ft

____ inch from ____ ft to ____ ft

hole size continued

____ inch from ____ ft to ____ ft

____ inch from ____ ft to ____ ft

Casing or Loop Pipe

Record all depth measurements from ground level (GL). Use + for above GL measurements.

Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
☐ Gravel packed				amount ____ variety ____		
☐ Seals/packers				type ____		
☐ Bottom capped with ____						

Casing Grout

Placement method ____

Type	Depth Top	Depth Bottom	Amount (vol/wt)

Pump Installation

Date ____/____/____

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ in Rated capacity _____ GPM

Water Information

Date ____/____/____

Static Water Level	Pumping Water Level	Yield	Duration
____ ft	____ ft	____ GPM	____ hrs

Water level measurement: ☐ Sonic ☐ Tape ☐ Airline ☐ E-line ☑ Estimate

Water yield measurement: ☐ Orifice ☐ Volumetric ☑ Estimate

Main water-supply zone from _____ ft to _____ ft below GL

Well Development

☑ Physical explain: _____

☐ Chemical explain: _____

Contractor

Company Latta Well & Pump

Address 1051 Taylor Ave, Wilton IA 52778

Driller Lucius Harvey Certification no. 11339

IGS IIHR Hydroscience & Engineering

Rev. 2017 The University of Iowa

See back for submittal information

DNR Form 542-8170

WELL RECORD FORM

PWSID# *or* PWTS No. _____ PWTS Permit No. _____ GeoSam WNumber *(IGS use only)* _____

Site Identification

Property owner Grandview Land LLC Other ID Well #2

Address off Green Rd City Tipton

Tenant _____

Well depth 30 ft Date completed 4 / 5 / 23

Location

County Cedar

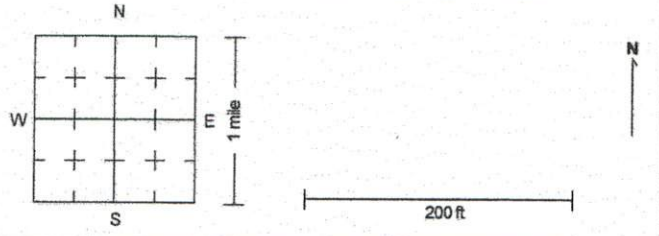
GPS coordinates (NAD83 datum)

41.7626330 Latitude -91.2092500 Longitude

☐ Decimal Degrees ☐ Degrees, Decimal Minutes ☐ Degrees, Minutes, Seconds

____ 1/4 of the ____ 1/4 of the ____ 1/4 of Sec 4 TWP 80 RNG 3 E W

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



Drill Method

☑ Rotary ☐ Auger ☐ Cable ☑ Other _____

Hole size

6 inch from 0 ft to 30 ft

____ inch from ____ ft to ____ ft

____ inch from ____ ft to ____ ft

hole size continued

____ inch from ____ ft to ____ ft

____ inch from ____ ft to ____ ft

Casing or Loop Pipe

Record all depth measurements from ground level (GL). Use + for above GL measurements.

Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen
				☐	☐	☐ slot size
				☐	☐	☐ slot size
				☐	☐	☐ slot size
				☐	☐	☐ slot size
				☐	☐	☐ slot size
☐ Gravel packed				amount ____ variety ____		
☐ Seals/packers				type ____		
☐ Bottom capped with ____						

Casing Grout

Placement method _____

Type	Depth Top	Depth Bottom	Amount (vol/wt)

Formation Log

From	To	Color	Hardness	Formation description
0	1	black		soil
1	5	gray		clay
5	14	brown		clay
14	15	gray		boulder
15	24	gray		clay
24	28	brown		sand & gravel
28	30	tan/brow		limestone
				(use additional sheets as needed)

Pump Installation

Date ___/___/___

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ in Rated capacity _____ GPM

Water Information

Date ___/___/___

Static Water Level	Pumping Water Level	Yield	Duration
____ ft	____ ft	____ GPM	____ hrs

Water level measurement: ☐ Sonic ☐ Tape ☐ Airline ☐ E-line ☑ Estimate

Water yield measurement: ☐ Orifice ☐ Volumetric ☑ Estimate

Main water-supply zone from _____ ft to _____ ft below GL

Well Development

☑ Physical explain: _____

☐ Chemical explain: _____

Remarks (including depth of lost drilling fluids, materials, or tools)

Well Use

☐ Domestic ☐ Public supply ☐ Livestock

☐ Heat pump ☐ Commercial ☐ Irrigation

# of borehole(s) ____ ☐ Monitoring ☑ Other Karst

Contractor

Company Latta Well & Pump

Address 1051 Taylor Ave, Wilton IA 52778

Driller Lucius Harvey Certification no. 11339

IGS IIHR Hydroscience & Engineering

Rev. 2017 The University of Iowa

See back for submittal information

DNR

DNR Form 542-8170

Soil boring map

Services Agencies Social

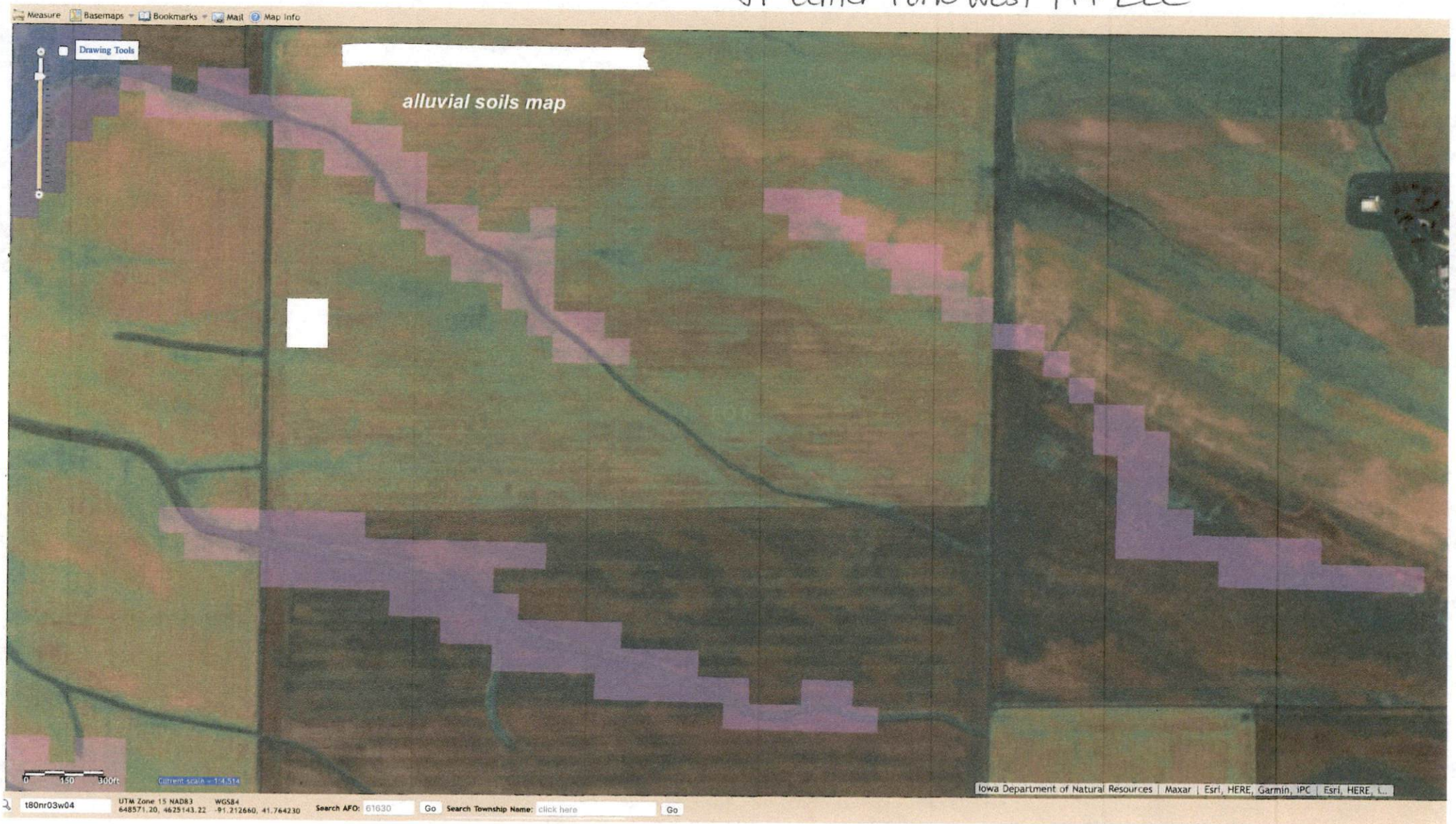
IOWA DEPARTMENT OF NATURAL RESOURCES

Measure Basemaps Bookmarks Mail Map Info

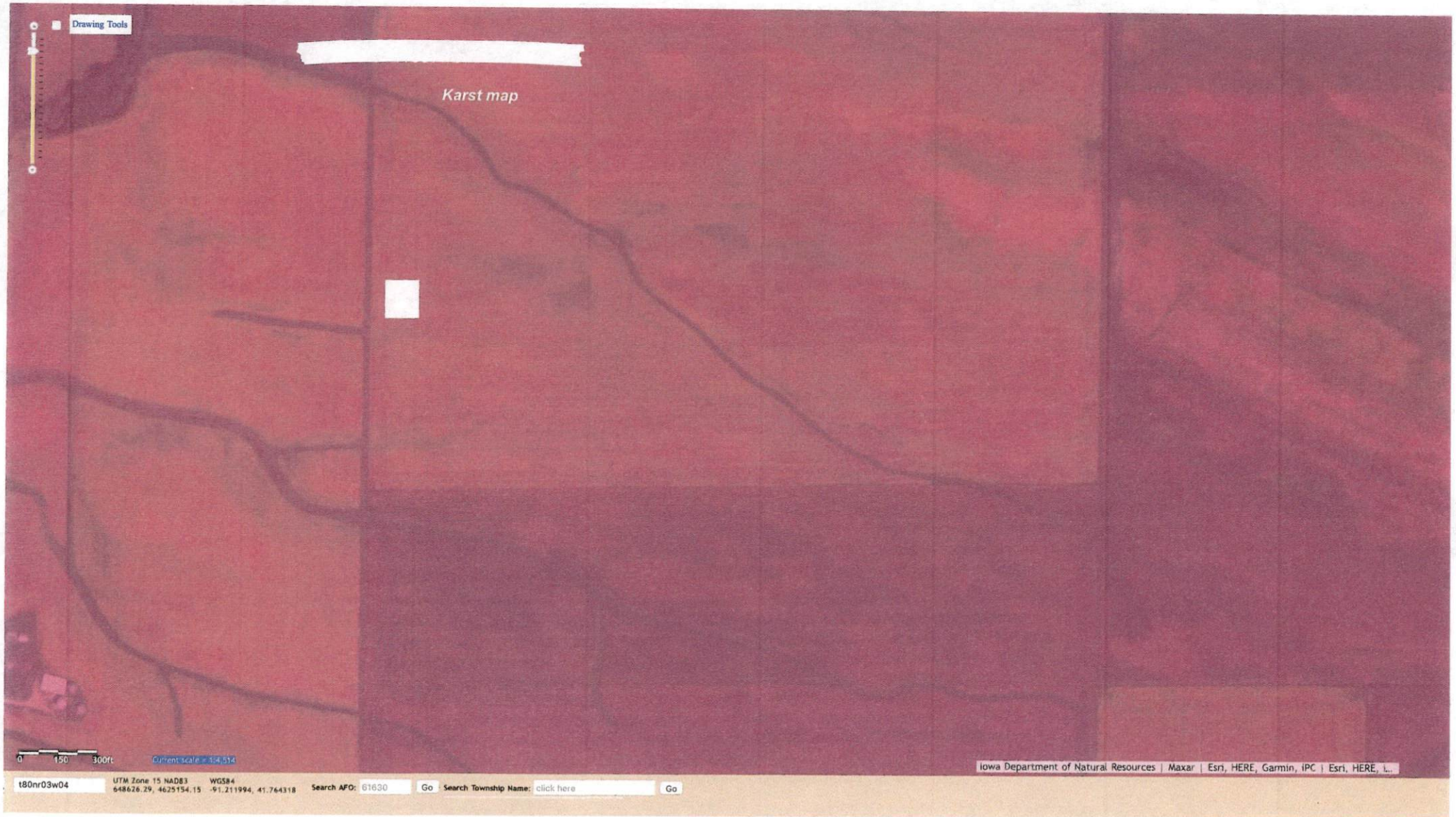
Map layers Legend

- [x] AFO Siting Data
  - [ ] Sinkholes (Year added to Atlas)
  - [ ] Sinkhole or Potential Karst
  - [ ] Ag Drainage Well
  - [ ] Wells
  - [x] Animal Feeding Operations
    - [x] Facilities
      - Active, Confinement
      - Active, Confinement/Livestc Truck Wash
      - Active, Confinement/Digeste
      - Active, Open Feedlot
      - Active, Open Feedlot/Livest Truck Wash/
      - Active, Confinement/Open Feedlot
      - Active, Confinement/Open Feedlot/Livestock Truck Wash
      - Active, Confinement/Open Feedlot/Digester
      - Active, Livestock Truck Wash
      - Active, AFO Digester
      - Inactive
  - [ ] Public Drainage Infrastructure
  - [ ] Drainage Districts
  - [ ] High Qty Wtr Resource (Rivers)
  - [ ] High Qty Wtr Resource (Waterbody)

JT Center Pork West I++ LLC



JT Center Pork West 1++ LLC



Manure Management Plan Form
Animal Feeding Operation Information

Instructions: Complete this form for your animal feeding operation. Footnotes are provided on page 4.

The information within this form, and the attachments, describes my animal feeding operation, my manure storage and handling system, and my planned manure management system. I (we) will manage the manure, and the nutrients it contains, as described within this manure management plan (MMP) and any revisions of the plan, individual field information, and field summary sheet, and in accordance with current rules and regulations. Deviations permitted by Iowa law will be documented and maintained in my records.

Signed: JT Center Park West 1++, LLC Tom Dittmer JT Center Park West 1++, LLC **Date:** 4-12-23
(Signature) (Print name) Tom Dittmer, Mgr

Name of operation: JT Center Park West 1++ **Facility ID No.** NA

Location of the operation: GREEN RD.
(911 address)

TIPTON (Town) IOWA (State) 52772 (Zip)

NW (1/4 1/4) 1/4 of the SW (1/4) 1/4 of Sec 4 (Section) T 80N (Tier & Range) R 03W CENTER WEST (Township Name) CEDAR (County)

Owner and contacts of the animal feeding operation:

Owner JT CENTER Park West 1++ LLC Phone 563-285-4006
Address 12090 240TH ST. ELDRIDGE, IA 52748
E-mail address (optional) TOM.DITTMER@GRANDVIEWFARMSLLC.COM Cell phone (optional)

Contact person (if different than owner) TOM DITTMER Phone
Address
E-mail address (optional) Cell phone (optional)

Contract company (if applicable) Phone
Address

This manure management plan is for: (check one)

___ existing operation, not expanding ___ existing operation, expanding ___ existing operation, new owner X new operation

Construction and Expansion Dates: 2023 date of initial construction
and all expansions

Table 1. Information about livestock production and manure management system

1	2	3	4	5	6	7	8
Animal type/ Production phase[a]	Max # of animals confined	Manure Storage Structure[b]	N[c]	P_2O_5[c]	gal/space/dy[d]	Days/yr Facility occupied	Annual Manure Produced[e]
Select production phase			0	0	0.0		000
Select production phase			0	0	0.0		000
Select production phase			0	0	0.0		000
Wean/finish (dry feed)	7200	DEEP PIT	47	22	0.7	350	1,764,000
						Total Gallons	**1,764,000**

Estimated annual animal production[f]: ~14,400 animals/year

Source of Manure Nutrient Content Data (standard tables, manure analysis, other): MANURE ANALYSIS FROM SIMILAR BARNS

Manure Management Plan Form

Determining Maximum Allowable Manure Application Rates

Instructions: Complete a worksheet for each unique combination of the following factors (crop rotation, optimum crop yield, manure nutrient concentration, remaining crop N need, method of application) that occurs at this operation. Complete form by filling in blanks, yellow-colored cells, and drop down menus. Gray shaded cells will calculate automatically. Footnotes are given on pages 4, 5 and 6.

Management Identification (Mgt ID)[f] CC) CORN- CORN

(identify this application scenario by letter)

Method to determine optimum crop yield[g] USDA Iowa Ag Statistics County yields

Timing of application SP OR FALL

Method of application[h] Knifed in or soil injection of liquid manure

Application loss factor 0.98

If spray irrigation is used, identify method[i]

Table 2. Manure nutrient concentration

Manure Nutrient Content (lbs/1000gal or lbs/ton)[j]					
Total N	47		P_2O_5	22	
%TN Available 1st year[k]	100%	2nd year		3rd year	
Available N 1st year[l]	46.1	2nd year[m]	0.0	3rd year[n]	0.0

Table 3. Crop usage rates[o]

lb/bu or lb/ton	N	P_2O_5
Corn	1.2	0.32
Soybean	3.8	0.72
Alfalfa	50	13
Other crop	0	0

*Use blank space above to add crop not listed.

Table 4. Calculations for rate based on nitrogen (always required)

			Corn	Corn	Corn	Corn
1	Applying Manure For (crop to be grown)[p]					
2	Optimum Crop Yield[g]	bu or ton/acre	220	220	220	220
3	P_2O_5 removed with crop by harvest[q]	lb/acre	70.4	70.4	70.4	70.4
4	Crop N utilization[r]	lb/acre	264	264	264	264
5a	Legume N credit[s]	lb/acre		0	0	0
5b	Commercial N planned[t]	lb/acre	50	50	50	50
5c	Manure N carryover credit[u]	lb/acre		0.0	0.0	0.0
6	Remaining crop N need[v]	lb/acre	214	214	214	214
7	Manure rate to supply remaining N[w]	gal/acre	4646	4646	4646	4646
8	P_2O_5 applied with N-based rate[x]	lb/acre	102	102	102	102

Table 5. Calculations for rate based on phosphorus (fill out only if P-based rates are planned)

9	Commercial P_2O_5 planned[y]	lb/acre				
10	Manure rate to supply P removal[z]	gal/acre	3200	3200	3200	3200
11	Manure rate for P based plan[aa]	gal/acre				
12	Manure N applied with P-based plan[bb]	lb/acree	0	0	0	0

Table 6. Application rates that will be carried over to page 3

13	Planned manure application rate[cc]	gal/acre	4646	4646	4646	4646

When applicable, manure application rates must be based on the P index value as follows:
(0-2) N-based manure management.
(>2-5) N-based manure management but P application rate cannot exceed two times the P removal rate of the crop schedule.
(>5-15) No manure application until practices are adopted to reduce P index to 5 or below.
(>15) No manure application.

Manure Management Plan Form

Year by Year Manure Management Plan Summary

Instructions: Complete this form for each of the next four growing seasons, to demonstrate sufficient land base to apply manure over multiple crop years. If this page is identical for multiple years (e.g. every other year), submit only once for the identical years, and indicate which years the form represents. Footnotes are given on

Crop year(s): 2023-2027

1	2	3	4	5	6	7	8	9	10	11
								Planned Application		
Field Designation [ee]	Field Location ___1/4 of the___ 1/4 Sec___ T___ R___ Townsip Name_______, County Name ______	Mgt Id [ff]	Planned Crop	Acres receiving manure[gg]	Own, rent, agreement (include length of agreement) [hh]	P index value [ii]	HEL (Y/N)[jj]	gal/acre	gal/field [kk]	Correct Soil Test for P[ll] (Yes or No)
Linn Farm	N1/2 NW 9, SW & SW NW 4, SE NE & E1/2 SE 5,	CC	Corn	445	Own	1.53	N	4646	2067470	Yes
	and NE NE 8 80N 03W Center West, Cedar Co.								0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
	Total acres available for manure application			445		Total gallons that could be applied			2067470	

CENTER WEST TOWNSHIP

SECTION 1

1	LITTLE, JEFFREY ISAAC ETAL	13.82
2	MARTENS, LARRY ALLEN	16.34
3	TIPTON MASONIC CEMETERY	6
4	MOORE, MICHAEL L ETAL	17.26

SECTION 2

1	LETT, EDWIN C ETAL	12.49
2	TIPTON MASONIC CEMETERY	9.5

SECTION 3

1	MEIER, JIMMY ETAL	7.1
2	HOMERDING, DANIEL T ETAL	18.69
3	LETT, BETTY A	13.84
4	FOSDYCK, VERNA L	15.39
5	SCHOTT, KENNETH D	23.73
6	GARDNER, LYLE	14.72

SECTION 4

1	DINGES, BRIAN L ETAL	6.03
2	MEIER, SHAWN A ETAL	14.67
3	HARGRAVE TRUST, PHILLIP D	47.31

SECTION 5E

1	DIRCKS TRUST, DIANE L	11.8
2	KIRKPATRICK, BRADLEY W ETAL	5.84
3	WETHINGTON, HARRY	40.29
4	CITY OF TIPTON	29.71
5	LAMP, KEITH L ETAL	25.52
6	BUNGE, MELISSA M ETAL	5.12

SECTION 6

1	NEBERGALL, BENJAMIN O	86.55

SECTION 7

1	SALSBERY, J JEFFERY ETAL	35.95
2	WEISROCK, CRAIG A ETAL	8.6
3	SCHROEDER, MITCHELL LEE ETAL	26.94
4	CHAPMAN, TERRY ETAL	11.31
5	REGENNITTER, ROGER A ETAL	17.83

SECTION 8E

1	ROGERS, JERRY E	18.89

SECTION 8W

1	WIECHERT, RONALD J	13.15
2	WEAVER, RANDALL A ETAL	24.95
3	LORENZ, ROBERT T ETAL	24.47
4	HOWARD, CAREY W ETAL	9.78
5	ZOUSEL, DWAYNE ETAL	12.24
6	CAIN, BILLY D ETAL	9.16
7	ANDERSON, SCOTT A ETAL	9.91
8	ANDERSON, ALEXANDER A ETAL	15.13
9	CAIN FAMILY TRUST	14.39
10	FREDERICK, NATHAN W ETAL	22.04
11	FALKERS, JOHN L ETAL	6.23
12	VOSS, JASON D ETAL	5.52

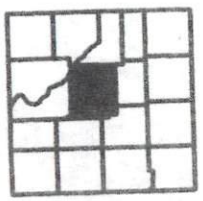
SECTION 9

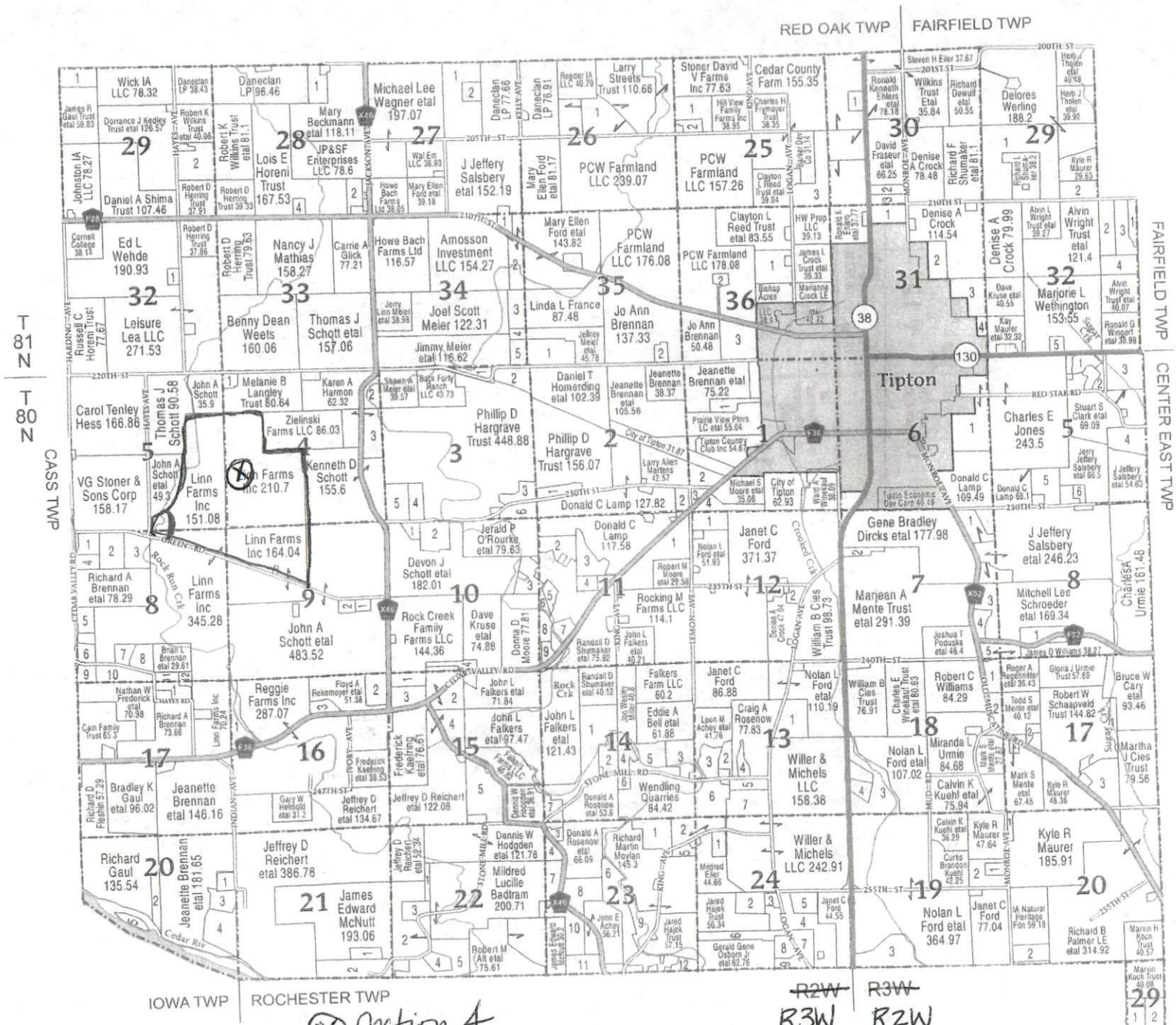
1	STOLBA, MICHELLE ETAL	5.17
2	WEAVER, RANDALL A ETAL	6.15

SECTION 10

1	WALSH, KELLY M	6.67
2	BURNS, ARLENE ETAL	24.64
3	PAUSTIAN CONSTRUCTION INC	19.38
4	SISSEL, JAMES L	8.63

SEE PAGE 64 FOR ADDITIONAL NAMES NOT LISTED ON MAP





USDA NRCS
Natural Resources Conservation Service

v. 1/22/2007

Iowa Phosphorus Index

Credits: Iowa State University
USDA National Soil Tilth Laboratory
USDA Natural Resource Conservation Service

Field Number	Erosion									Runoff					Tile / Subsurface Recharge			Overall
	Gross Erosion	x	Sediment Trap Factor	x	SDR	x	Buffer Factor	x	Enrichment Factor	x	STP Factor =	Erosion PI	RCN Factor	x (STP Factor +	P App Factor) =	Runoff PI	Flow Factor	x STP Factor =	Tile/Sub PI	P Index
Linn Farm -- NHEL	1.90		1.00		0.43		1.00		1.10		0.99	0.88	1.44	0.39	0.00	0.57	1.00	0.08	0.08	1.53

Manure analysis Fall 2022

NAME	Total N	P2O5	K2O
Addy E#1	52.4	23.7	39.7
Addy E#2	49.9	21.1	40.6
Addy E #3	49.9	25.4	39.7
Addy W#1	50.7	25.4	41.4
Addy W#2	45.6	23.7	43.1
Addy W#3	49.9	21.1	40.6
Duncan #1	47.3	27	39.7
Duncan #2	50.7	25.4	40.6
Duncan #3	47.3	23.7	38.9
Henzen #1	39.7	17.7	33.8
Henzen #2	49.9	19.4	32.1
Engler #1	38	15.2	32.1
Engler #2	43.1	31.3	33.8
Engler #3	38	17.7	32.1
DeCap #1	45.6	17.7	41.4
DeCap #2	45.6	25.4	43.9
DeCap #3	49.9	25.4	43.9
Murry Dbl E #1 East	38	4.2	33.8
Murry Dbl E #2 West	42.2	13.5	34.6
Murry W Single #1	63.4	27	40.6
Murry W Single #2	57.5	25.4	39.7
Neb #1	44.8	19.4	36.3
Neb #2	46.5	23.7	36.3
Neb #3	42.2	21.1	34.6
Neb #4	43.9	21.1	34.6
Paulsen #1	43.1	25.4	34.6
Paulsen #2	44.8	27	38
AVG.	47	22	38

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **ADDY E #1** Lab Number: **10209064** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.41 %	34.6	924	35	AOAC 2001.11	tat9 2022-11-28 06:53:38
ganic nitrogen	0.21 %	17.7	474	6	Calculation	Auto 2022-11-28 06:53:38
trogen (total)	0.62 %	52.4	1398	41	WC 055	tat9 2022-11-28 06:53:38
ıosphorus (as P2O5)	0.28 %	23.7	631	17	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
tassium (as K2O)	0.47 %	39.7	1060	36	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
ılfur (total)	0.07 %	5.9	158	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
ılcium (total)	0.19 %	16.0	428	11	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
agnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
dium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
pper (total)	136 ppm	1.15	30.7	0.80	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
n (total)	138 ppm	1.17	31.1	0.82	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
anganese (total)	33 ppm	0.28	7.44	0.20	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
nc (total)	204 ppm	1.72	46.0	1.20	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
isture	92.1 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:38
tal solids	7.90 %	668			Calculation	Auto 2022-11-28 06:53:38
tal salts	1.27 %	107	2860		Calculation	Auto 2022-11-28 06:53:38
	8.6 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:38

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **ADDY E #2** Lab Number: **10209065** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:38
ganic nitrogen	0.17 %	14.4	383	5	Calculation	Auto 2022-11-28 06:53:38
trogen (total)	0.59 %	49.9	1330	41	WC 055	tat9 2022-11-28 06:53:38
ıosphorus (as P2O5)	0.25 %	21.1	564	15	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
tassium (as K2O)	0.48 %	40.6	1080	36	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
ılcium (total)	0.16 %	13.5	361	9	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
agnesium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
dium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
pper (total)	116 ppm	0.98	26.2	0.69	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
n (total)	121 ppm	1.02	27.3	0.71	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
anganese (total)	29 ppm	0.24	6.54	0.17	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
nc (total)	183 ppm	1.55	41.3	1.08	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
isture	93.4 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:38
tal solids	6.60 %	558			Calculation	Auto 2022-11-28 06:53:38
tal salts	1.25 %	106	2820		Calculation	Auto 2022-11-28 06:53:38
H	8.6 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:38

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **ADDY E #3** Lab Number: **10209066** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:38
ganic nitrogen	0.17 %	14.4	383	5	Calculation	Auto 2022-11-28 06:53:38
trogen (total)	0.59 %	49.9	1330	41	WC 055	tat9 2022-11-28 06:53:38
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
otassium (as K2O)	0.47 %	39.7	1060	36	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
ılcium (total)	0.18 %	15.2	406	11	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
agnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
odium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
opper (total)	126 ppm	1.06	28.4	0.74	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
on (total)	130 ppm	1.10	29.3	0.77	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
anganese (total)	32 ppm	0.27	7.22	0.19	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
nc (total)	209 ppm	1.77	47.1	1.24	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
oisture	93.4 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:38
otal solids	6.60 %	558			Calculation	Auto 2022-11-28 06:53:38
otal salts	1.27 %	107	2860		Calculation	Auto 2022-11-28 06:53:38
H	8.6 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:38

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **ADDY W #1** Lab Number: **10209061** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:20
ganic nitrogen	0.18 %	15.2	406	5	Calculation	Auto 2022-11-28 06:53:20
trogen (total)	0.60 %	50.7	1353	41	WC 055	tat9 2022-11-28 06:53:20
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:20
otassium (as K2O)	0.49 %	41.4	1100	37	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:20
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
alcium (total)	0.17 %	14.4	383	10	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
agnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
odium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
opper (total)	132 ppm	1.12	29.8	0.78	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
on (total)	140 ppm	1.18	31.6	0.83	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
anganese (total)	33 ppm	0.28	7.44	0.20	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
nc (total)	221 ppm	1.87	49.8	1.31	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
oisture	92.8 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:20
otal solids	7.20 %	608			Calculation	Auto 2022-11-28 06:53:20
otal salts	1.28 %	108	2890		Calculation	Auto 2022-11-28 06:53:20
H	8.5 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:20

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **ADDY W #2** Lab Number: **10209062** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:20
·ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-11-28 06:53:20
trogen (total)	0.54 %	45.6	1218	39	WC 055	tat9 2022-11-28 06:53:20
ıosphorus (as P2O5)	0.28 %	23.7	631	17	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:20
ɔtassium (as K2O)	0.51 %	43.1	1150	39	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:20
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ılcium (total)	0.16 %	13.5	361	9	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ıgnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ɔdium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ɔpper (total)	126 ppm	1.06	28.4	0.74	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ɔn (total)	131 ppm	1.11	29.5	0.78	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ıanganese (total)	32 ppm	0.27	7.22	0.19	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ɔc (total)	212 ppm	1.79	47.8	1.25	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:20
ɔisture	94.0 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:20
ɔtal solids	6.00 %	507			Calculation	Auto 2022-11-28 06:53:20
ɔtal salts	1.29 %	109	2910		Calculation	Auto 2022-11-28 06:53:20
ł	8.6 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:20

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **ADDY W #3** Lab Number: **10209063** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:38
ganic nitrogen	0.17 %	14.4	383	5	Calculation	Auto 2022-11-28 06:53:38
trogen (total)	0.59 %	49.9	1330	41	WC 055	tat9 2022-11-28 06:53:38
ıosphorus (as P2O5)	0.25 %	21.1	564	15	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
otassium (as K2O)	0.48 %	40.6	1080	36	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:38
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
alcium (total)	0.15 %	12.7	338	9	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
agnesium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
odium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
opper (total)	119 ppm	1.00	26.8	0.70	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
on (total)	123 ppm	1.04	27.7	0.73	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
anganese (total)	29 ppm	0.24	6.54	0.17	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
nc (total)	195 ppm	1.65	44.0	1.16	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:38
oisture	92.6 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:38
otal solids	7.40 %	625			Calculation	Auto 2022-11-28 06:53:38
otal salts	1.24 %	105	2800		Calculation	Auto 2022-11-28 06:53:38
H	8.5 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:38

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **GEHRLS DUNCAN #1** Lab Number: **10209076** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:50
·ganic nitrogen	0.14 %	11.8	316	4	Calculation	Auto 2022-11-28 06:53:50
trogen (total)	0.56 %	47.3	1263	40	WC 055	tat9 2022-11-28 06:53:50
ıosphorus (as P2O5)	0.32 %	27.0	722	19	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:50
ɔtassium (as K2O)	0.47 %	39.7	1060	36	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:50
ılfur (total)	0.07 %	5.9	158	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ılcium (total)	0.18 %	15.2	406	11	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıgnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔdium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔpper (total)	126 ppm	1.06	28.4	0.74	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔn (total)	128 ppm	1.08	28.9	0.76	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıanganese (total)	32 ppm	0.27	7.22	0.19	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔc (total)	179 ppm	1.51	40.4	1.06	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔisture	91.8 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:50
ɔtal solids	8.20 %	693			Calculation	Auto 2022-11-28 06:53:50
ɔtal salts	1.27 %	107	2860		Calculation	Auto 2022-11-28 06:53:50
ł	8.0 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:50

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ɔronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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LONG GROVE IA 52756

Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **GEHRLS DUNCAN #2** Lab Number: **10209077** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-28 06:53:50
·ganic nitrogen	0.18 %	15.2	406	5	Calculation	Auto 2022-11-28 06:53:50
trogen (total)	0.60 %	50.7	1353	41	WC 055	tat9 2022-11-28 06:53:50
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:50
ɔtassium (as K2O)	0.48 %	40.6	1080	36	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:50
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ılcium (total)	0.17 %	14.4	383	10	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıgnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔdium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔpper (total)	124 ppm	1.05	28.0	0.74	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔn (total)	126 ppm	1.06	28.4	0.74	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıanganese (total)	31 ppm	0.26	6.99	0.18	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔc (total)	173 ppm	1.46	39.0	1.02	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ɔisture	91.8 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:50
ɔtal solids	8.20 %	693			Calculation	Auto 2022-11-28 06:53:50
ɔtal salts	1.27 %	107	2860		Calculation	Auto 2022-11-28 06:53:50
ł	8.0 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:50

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **GEHRLS DUNCAN #3** Lab Number: **10209078** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.41 %	34.6	924	35	AOAC 2001.11	tat9 2022-11-28 06:53:50
ganic nitrogen	0.15 %	12.7	338	4	Calculation	Auto 2022-11-28 06:53:50
trogen (total)	0.56 %	47.3	1263	39	WC 055	tat9 2022-11-28 06:53:50
ıosphorus (as P2O5)	0.28 %	23.7	631	17	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:50
ıtassium (as K2O)	0.46 %	38.9	1040	35	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:50
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ılcium (total)	0.16 %	13.5	361	9	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
agnesium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıdium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıpper (total)	118 ppm	1.00	26.6	0.70	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ın (total)	117 ppm	0.99	26.4	0.69	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
anganese (total)	28 ppm	0.24	6.31	0.17	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıc (total)	156 ppm	1.32	35.2	0.92	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:50
ıisture	93.6 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:50
ıtal solids	6.40 %	541			Calculation	Auto 2022-11-28 06:53:50
ıtal salts	1.22 %	103	2750		Calculation	Auto 2022-11-28 06:53:50
ł	8.3 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:50

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **HENZEN #1** Lab Number: **10209108** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.35 %	29.6	789	30	AOAC 2001.11	tat9 2022-11-30 13:40:42
ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-11-30 13:40:42
trogen (total)	0.47 %	39.7	1060	33	WC 055	tat9 2022-11-30 13:40:42
ıosphorus (as P2O5)	0.21 %	17.7	474	12	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
otassium (as K2O)	0.40 %	33.8	902	30	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ılfur (total)	0.05 %	4.2	113	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
alcium (total)	0.14 %	11.8	316	8	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
agnesium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
odium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
opper (total)	94 ppm	0.79	21.2	0.55	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
on (total)	106 ppm	0.90	23.9	0.63	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
anganese (total)	23 ppm	0.19	5.19	0.13	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
nc (total)	140 ppm	1.18	31.6	0.83	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
oisture	94.6 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:42
otal solids	5.40 %	456			Calculation	Auto 2022-11-30 13:40:42
otal salts	1.05 %	88.7	2370		Calculation	Auto 2022-11-30 13:40:42
H	7.8 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:42

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **HENZEN #2** Lab Number: **10209109** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.36 %	30.4	812	30	AOAC 2001.11	tat9 2022-11-30 13:40:42
·ganic nitrogen	0.23 %	19.4	519	7	Calculation	Auto 2022-11-30 13:40:42
trogen (total)	0.59 %	49.9	1330	37	WC 055	tat9 2022-11-30 13:40:42
ıosphorus (as P2O5)	0.23 %	19.4	519	14	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ɔtassium (as K2O)	0.38 %	32.1	857	29	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ılfur (total)	0.05 %	4.2	113	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ılcium (total)	0.15 %	12.7	338	9	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ıgnesium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔdium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔpper (total)	101 ppm	0.85	22.8	0.60	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔn (total)	115 ppm	0.97	25.9	0.68	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ıanganese (total)	27 ppm	0.23	6.09	0.16	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔc (total)	153 ppm	1.29	34.5	0.90	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔisture	93.5 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:42
ɔtal solids	6.50 %	549			Calculation	Auto 2022-11-30 13:40:42
ɔtal salts	1.05 %	88.7	2370		Calculation	Auto 2022-11-30 13:40:42
ł	7.6 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:42

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **INGLER #1** Lab Number: **10209087** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.33 %	27.9	744	28	AOAC 2001.11	tat9 2022-11-28 06:54:04
ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-11-28 06:54:04
trogen (total)	0.45 %	38.0	1015	31	WC 055	tat9 2022-11-28 06:54:04
ıosphorus (as P2O5)	0.18 %	15.2	406	11	AOAC 985.01 (mod)	Auto 2022-11-28 06:54:04
otassium (as K2O)	0.38 %	32.1	857	29	AOAC 985.01 (mod)	Auto 2022-11-28 06:54:04
ılfur (total)	0.05 %	4.2	113	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
alcium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
agnesium (total)	0.06 %	5.1	135	4	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
odium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
opper (total)	96 ppm	0.81	21.6	0.57	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
on (total)	100 ppm	0.84	22.6	0.59	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
anganese (total)	20 ppm	0.17	4.51	0.12	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
nc (total)	144 ppm	1.22	32.5	0.85	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
oisture	96.5 %				SM 2540 G-(1997)	tat9 2022-11-28 06:54:04
otal solids	3.50 %	296			Calculation	Auto 2022-11-28 06:54:04
otal salts	0.93 %	78.6	2100		Calculation	Auto 2022-11-28 06:54:04
H	8.4 S.U.				EPA 9045C *	tat9 2022-11-28 06:54:04

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ nual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar cronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **INGLER #2** Lab Number: **10209088** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.34 %	28.7	767	29	AOAC 2001.11	tat9 2022-11-28 06:54:04
ganic nitrogen	0.17 %	14.4	383	5	Calculation	Auto 2022-11-28 06:54:05
trogen (total)	0.51 %	43.1	1150	34	WC 055	tat9 2022-11-28 06:54:04
ıosphorus (as P2O5)	0.37 %	31.3	834	22	AOAC 985.01 (mod)	Auto 2022-11-28 06:54:05
tassium (as K2O)	0.40 %	33.8	902	30	AOAC 985.01 (mod)	Auto 2022-11-28 06:54:05
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
ılcium (total)	0.19 %	16.0	428	11	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
agnesium (total)	0.12 %	10.1	271	7	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
dium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
pper (total)	123 ppm	1.04	27.7	0.73	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
n (total)	134 ppm	1.13	30.2	0.79	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
anganese (total)	36 ppm	0.30	8.12	0.21	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
nc (total)	202 ppm	1.71	45.6	1.20	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:04
isture	94.4 %				SM 2540 G-(1997)	tat9 2022-11-28 06:54:04
tal solids	5.60 %	473			Calculation	Auto 2022-11-28 06:54:05
tal salts	1.13 %	95.5	2550		Calculation	Auto 2022-11-28 06:54:05
H	8.3 S.U.				EPA 9045C *	tat9 2022-11-28 06:54:04

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **INGLER #3** Lab Number: **10209089** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.33 %	27.9	744	28	AOAC 2001.11	tat9 2022-11-28 06:54:05
·ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-11-28 06:54:05
trogen (total)	0.45 %	38.0	1015	31	WC 055	tat9 2022-11-28 06:54:05
ıosphorus (as P2O5)	0.21 %	17.7	474	12	AOAC 985.01 (mod)	Auto 2022-11-28 06:54:05
ɔtassium (as K2O)	0.38 %	32.1	857	29	AOAC 985.01 (mod)	Auto 2022-11-28 06:54:05
ılfur (total)	0.05 %	4.2	113	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ılcium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ıgnesium (total)	0.07 %	5.9	158	4	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ɔdium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ɔpper (total)	98 ppm	0.83	22.1	0.58	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ɔn (total)	106 ppm	0.90	23.9	0.63	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ınganese (total)	22 ppm	0.19	4.96	0.13	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ıc (total)	149 ppm	1.26	33.6	0.88	AOAC 985.01 (mod)	tat9 2022-11-28 06:54:05
ɔisture	96.4 %				SM 2540 G-(1997)	tat9 2022-11-28 06:54:05
ɔtal solids	3.60 %	304			Calculation	Auto 2022-11-28 06:54:05
ɔtal salts	0.95 %	80.3	2140		Calculation	Auto 2022-11-28 06:54:05
ł	8.5 S.U.				EPA 9045C *	tat9 2022-11-28 06:54:05

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ɜronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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LONG GROVE IA 52756

Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **GERHLS DECAP #1** Lab Number: **10209110** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.42 %	35.5	947	36	AOAC 2001.11	tat9 2022-11-30 13:40:42
·ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-11-30 13:40:42
trogen (total)	0.54 %	45.6	1218	39	WC 055	tat9 2022-11-30 13:40:42
ıosphorus (as P2O5)	0.21 %	17.7	474	12	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ɔtassium (as K2O)	0.49 %	41.4	1100	37	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ılcium (total)	0.12 %	10.1	271	7	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ıgnesium (total)	0.07 %	5.9	158	4	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔdium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔpper (total)	106 ppm	0.90	23.9	0.63	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔn (total)	110 ppm	0.93	24.8	0.65	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ıanganese (total)	23 ppm	0.19	5.19	0.13	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔc (total)	176 ppm	1.49	39.7	1.04	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔisture	94.8 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:42
ɔtal solids	5.20 %	439			Calculation	Auto 2022-11-30 13:40:42
ɔtal salts	1.20 %	101	2710		Calculation	Auto 2022-11-30 13:40:42
ł	8.3 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:42

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ɔronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **GERHLS DECAP #2** Lab Number: **10209111** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.40 %	33.8	902	34	AOAC 2001.11	tat9 2022-11-30 13:40:42
·ganic nitrogen	0.14 %	11.8	316	4	Calculation	Auto 2022-11-30 13:40:42
trogen (total)	0.54 %	45.6	1218	38	WC 055	tat9 2022-11-30 13:40:42
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ɔtassium (as K2O)	0.52 %	43.9	1170	40	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:42
ılfur (total)	0.07 %	5.9	158	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ılcium (total)	0.18 %	15.2	406	11	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ągnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔdium (total)	0.11 %	9.3	248	7	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔpper (total)	133 ppm	1.12	30.0	0.78	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔn (total)	139 ppm	1.17	31.3	0.82	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ąnganese (total)	33 ppm	0.28	7.44	0.20	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔc (total)	226 ppm	1.91	51.0	1.34	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:42
ɔisture	92.9 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:42
ɔtal solids	7.10 %	600			Calculation	Auto 2022-11-30 13:40:42
ɔtal salts	1.31 %	111	2950		Calculation	Auto 2022-11-30 13:40:42
ł	8.2 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:42

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **GERHLS DECAP #3** Lab Number: **10209112** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.40 %	33.8	902	34	AOAC 2001.11	tat9 2022-11-30 13:40:43
ganic nitrogen	0.19 %	16.0	428	6	Calculation	Auto 2022-11-30 13:40:43
trogen (total)	0.59 %	49.9	1330	39	WC 055	tat9 2022-11-30 13:40:43
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:43
ɔtassium (as K2O)	0.52 %	43.9	1170	40	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:43
ılfur (total)	0.07 %	5.9	158	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ılcium (total)	0.17 %	14.4	383	10	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ıgnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ɔdium (total)	0.11 %	9.3	248	7	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ɔpper (total)	136 ppm	1.15	30.7	0.80	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ın (total)	140 ppm	1.18	31.6	0.83	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ınganese (total)	32 ppm	0.27	7.22	0.19	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ıc (total)	227 ppm	1.92	51.2	1.34	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:43
ɔisture	92.8 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:43
ɔtal solids	7.20 %	608			Calculation	Auto 2022-11-30 13:40:43
ɔtal salts	1.30 %	110	2930		Calculation	Auto 2022-11-30 13:40:43
ł	8.2 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:43

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
Grandview

ple ID: **Murry Double East #1 EAST** Lab Number: **10211145** Date Sampled: **2022-11-28**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.38 %	32.1	857	32	AOAC 2001.11	tat9 2022-12-15 14:56:23
ganic nitrogen	0.07 %	5.9	158	2	Calculation	Auto 2022-12-15 14:56:23
trogen (total)	0.45 %	38.0	1015	34	WC 055	tat9 2022-12-15 14:56:23
ıosphorus (as P2O5)	0.05 %	4.2	113	3	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:23
ɔtassium (as K2O)	0.40 %	33.8	902	30	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:23
ılfur (total)	0.03 %	2.5	67.6	1	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ılcium (total)	0.06 %	5.1	135	4	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
agnesium (total)	0.03 %	2.5	67.6	2	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ɔdium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ɔpper (total)	31 ppm	0.26	6.99	0.18	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ın (total)	34 ppm	0.29	7.67	0.20	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
anganese (total)	9 ppm	0.08	2.03	0.06	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ıc (total)	52 ppm	0.44	11.7	0.31	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ɔisture	97.2 %				SM 2540 G-(1997)	tat9 2022-12-15 14:56:23
ɔtal solids	2.80 %	237			Calculation	Auto 2022-12-15 14:56:23
ɔtal salts	0.95 %	80.3	2140		Calculation	Auto 2022-12-15 14:56:23
ł	7.8 S.U.				EPA 9045C *	tat9 2022-12-15 14:56:23

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
Grandview

ple ID: **Murry Double East #2 WEST** Lab Number: **10211146** Date Sampled: **2022-11-28**

		Pounds of Nutrient AR		Est. First Year		
	Analysis	per	per	Availability		
ımeter	As Received	1000 gal	acre-in	lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.38 %	32.1	857	32	AOAC 2001.11	tat9 2022-12-15 14:56:46
ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-12-15 14:56:46
trogen (total)	0.50 %	42.2	1128	36	WC 055	tat9 2022-12-15 14:56:46
ıosphorus (as P2O5)	0.16 %	13.5	361	9	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:46
otassium (as K2O)	0.41 %	34.6	924	31	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:46
ılfur (total)	0.04 %	3.4	90.2	1	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
alcium (total)	0.11 %	9.3	248	7	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
agnesium (total)	0.06 %	5.1	135	4	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
odium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
opper (total)	68 ppm	0.57	15.3	0.40	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
on (total)	76 ppm	0.64	17.1	0.45	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
anganese (total)	19 ppm	0.16	4.28	0.11	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
nc (total)	113 ppm	0.96	25.5	0.67	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:46
oisture	95.9 %				SM 2540 G-(1997)	tat9 2022-12-15 14:56:46
otal solids	4.10 %	346			Calculation	Auto 2022-12-15 14:56:46
otal salts	1.04 %	87.9	2340		Calculation	Auto 2022-12-15 14:56:46
H	7.6 S.U.				EPA 9045C *	tat9 2022-12-15 14:56:46

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ nual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
Grandview

ple ID: **Murry W Single #1** Lab Number: **10211143** Date Sampled: **2022-11-28**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.46 %	38.9	1040	39	AOAC 2001.11	tat9 2022-12-15 14:56:23
ganic nitrogen	0.29 %	24.5	654	9	Calculation	Auto 2022-12-15 14:56:23
trogen (total)	0.75 %	63.4	1691	47	WC 055	tat9 2022-12-15 14:56:23
ıosphorus (as P2O5)	0.32 %	27.0	722	19	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:23
otassium (as K2O)	0.48 %	40.6	1080	36	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:23
ılfur (total)	0.08 %	6.8	180	3	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
alcium (total)	0.21 %	17.7	474	12	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
agnesium (total)	0.12 %	10.1	271	7	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
odium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
opper (total)	156 ppm	1.32	35.2	0.92	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
on (total)	161 ppm	1.36	36.3	0.95	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
anganese (total)	40 ppm	0.34	9.02	0.24	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
nc (total)	235 ppm	1.98	53.0	1.39	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
oisture	89.3 %				SM 2540 G-(1997)	tat9 2022-12-15 14:56:23
otal solids	10.70 %	904			Calculation	Auto 2022-12-15 14:56:23
otal salts	1.37 %	116	3090		Calculation	Auto 2022-12-15 14:56:23
H	7.4 S.U.				EPA 9045C *	tat9 2022-12-15 14:56:23

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
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ple ID: **Murry W Single #2** Lab Number: **10211144** Date Sampled: **2022-11-28**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.47 %	39.7	1060	40	AOAC 2001.11	tat9 2022-12-15 14:56:23
ganic nitrogen	0.21 %	17.7	474	6	Calculation	Auto 2022-12-15 14:56:23
trogen (total)	0.68 %	57.5	1533	46	WC 055	tat9 2022-12-15 14:56:23
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:23
tassium (as K2O)	0.47 %	39.7	1060	36	AOAC 985.01 (mod)	Auto 2022-12-15 14:56:23
ılfur (total)	0.08 %	6.8	180	3	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
ılcium (total)	0.19 %	16.0	428	11	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
agnesium (total)	0.11 %	9.3	248	7	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
dium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
pper (total)	130 ppm	1.10	29.3	0.77	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
n (total)	140 ppm	1.18	31.6	0.83	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
anganese (total)	34 ppm	0.29	7.67	0.20	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
nc (total)	210 ppm	1.77	47.4	1.24	AOAC 985.01 (mod)	tat9 2022-12-15 14:56:23
isture	90.6 %				SM 2540 G-(1997)	tat9 2022-12-15 14:56:23
tal solids	9.40 %	794			Calculation	Auto 2022-12-15 14:56:23
tal salts	1.34 %	113	3020		Calculation	Auto 2022-12-15 14:56:23
H	7.5 S.U.				EPA 9045C *	tat9 2022-12-15 14:56:23

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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ADVANCED DECISION SERVICES
SCOTT MADDEN
14840 275ST
LONG GROVE IA 52756

Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **NEB #1** Lab Number: **10209123** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.39 %	33.0	879	33	AOAC 2001.11	tat9 2022-11-30 13:40:54
·ganic nitrogen	0.14 %	11.8	316	4	Calculation	Auto 2022-11-30 13:40:54
trogen (total)	0.53 %	44.8	1195	37	WC 055	tat9 2022-11-30 13:40:54
ıosphorus (as P2O5)	0.23 %	19.4	519	14	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:54
ɔtassium (as K2O)	0.43 %	36.3	970	33	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:54
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ılcium (total)	0.16 %	13.5	361	9	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıgnesium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ɔdium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ɔpper (total)	113 ppm	0.96	25.5	0.67	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ɔn (total)	109 ppm	0.92	24.6	0.64	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıanganese (total)	27 ppm	0.23	6.09	0.16	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıc (total)	176 ppm	1.49	39.7	1.04	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ɔisture	91.4 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:54
ɔtal solids	8.60 %	727			Calculation	Auto 2022-11-30 13:40:54
ɔtal salts	1.16 %	98.0	2620		Calculation	Auto 2022-11-30 13:40:54
ł	8.0 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:54

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **NEB #2** Lab Number: **10209124** Date Sampled: **2022-11-09**

		Pounds of Nutrient AR		Est. First Year		
	Analysis	per	per	Availability		
ımeter	As Received	1000 gal	acre-in	lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.38 %	32.1	857	32	AOAC 2001.11	tat9 2022-11-30 13:40:54
ganic nitrogen	0.17 %	14.4	383	5	Calculation	Auto 2022-11-30 13:40:54
trogen (total)	0.55 %	46.5	1240	37	WC 055	tat9 2022-11-30 13:40:54
ıosphorus (as P2O5)	0.28 %	23.7	631	17	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:54
ıtassium (as K2O)	0.43 %	36.3	970	33	AOAC 985.01 (mod)	Auto 2022-11-30 13:40:54
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
alcium (total)	0.16 %	13.5	361	9	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
agnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıdium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıpper (total)	114 ppm	0.96	25.7	0.67	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ın (total)	114 ppm	0.96	25.7	0.67	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
anganese (total)	29 ppm	0.24	6.54	0.17	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıc (total)	189 ppm	1.60	42.6	1.12	AOAC 985.01 (mod)	tat9 2022-11-30 13:40:54
ıisture	92.2 %				SM 2540 G-(1997)	tat9 2022-11-30 13:40:54
ıtal solids	7.80 %	659			Calculation	Auto 2022-11-30 13:40:54
ıtal salts	1.16 %	98.0	2620		Calculation	Auto 2022-11-30 13:40:54
ł	8.0 S.U.				EPA 9045C *	tat9 2022-11-30 13:40:54

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **NEB #3** Lab Number: **10209125** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.35 %	29.6	789	30	AOAC 2001.11	tat9 2022-11-30 13:41:01
·ganic nitrogen	0.15 %	12.7	338	4	Calculation	Auto 2022-11-30 13:41:01
trogen (total)	0.50 %	42.2	1128	34	WC 055	tat9 2022-11-30 13:41:01
ıosphorus (as P2O5)	0.25 %	21.1	564	15	AOAC 985.01 (mod)	Auto 2022-11-30 13:41:01
ɔtassium (as K2O)	0.41 %	34.6	924	31	AOAC 985.01 (mod)	Auto 2022-11-30 13:41:01
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ılcium (total)	0.15 %	12.7	338	9	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ıgnesium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ɔdium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ɔpper (total)	110 ppm	0.93	24.8	0.65	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ɔn (total)	113 ppm	0.96	25.5	0.67	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ıanganese (total)	29 ppm	0.24	6.54	0.17	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ıc (total)	189 ppm	1.60	42.6	1.12	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
ɔisture	92.4 %				SM 2540 G-(1997)	tat9 2022-11-30 13:41:01
ɔtal solids	7.60 %	642			Calculation	Auto 2022-11-30 13:41:01
ɔtal salts	1.08 %	91.3	2440		Calculation	Auto 2022-11-30 13:41:01
ł	7.9 S.U.				EPA 9045C *	tat9 2022-11-30 13:41:01

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar :ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **NEB #4** Lab Number: **10209126** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.36 %	30.4	812	30	AOAC 2001.11	tat9 2022-11-30 13:41:01
ganic nitrogen	0.16 %	13.5	361	5	Calculation	Auto 2022-11-30 13:41:01
trogen (total)	0.52 %	43.9	1173	35	WC 055	tat9 2022-11-30 13:41:01
ıosphorus (as P2O5)	0.25 %	21.1	564	15	AOAC 985.01 (mod)	Auto 2022-11-30 13:41:01
otassium (as K2O)	0.41 %	34.6	924	31	AOAC 985.01 (mod)	Auto 2022-11-30 13:41:01
ılfur (total)	0.06 %	5.1	135	2	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
alcium (total)	0.15 %	12.7	338	9	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
agnesium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
odium (total)	0.08 %	6.8	180	5	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
opper (total)	110 ppm	0.93	24.8	0.65	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
on (total)	114 ppm	0.96	25.7	0.67	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
anganese (total)	29 ppm	0.24	6.54	0.17	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
nc (total)	184 ppm	1.55	41.5	1.08	AOAC 985.01 (mod)	tat9 2022-11-30 13:41:01
oisture	91.8 %				SM 2540 G-(1997)	tat9 2022-11-30 13:41:01
otal solids	8.20 %	693			Calculation	Auto 2022-11-30 13:41:01
otal salts	1.09 %	92.1	2460		Calculation	Auto 2022-11-30 13:41:01
H	7.8 S.U.				EPA 9045C *	tat9 2022-11-30 13:41:01

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **PAULSEN #1** Lab Number: **10209069** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.39 %	33.0	879	33	AOAC 2001.11	tat9 2022-11-28 06:53:39
·ganic nitrogen	0.12 %	10.1	271	4	Calculation	Auto 2022-11-28 06:53:39
trogen (total)	0.51 %	43.1	1150	37	WC 055	tat9 2022-11-28 06:53:39
ıosphorus (as P2O5)	0.30 %	25.4	676	18	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:39
ɔtassium (as K2O)	0.41 %	34.6	924	31	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:39
ılfur (total)	0.07 %	5.9	158	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ılcium (total)	0.17 %	14.4	383	10	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ıgnesium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ɔdium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ɔpper (total)	123 ppm	1.04	27.7	0.73	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ɔn (total)	138 ppm	1.17	31.1	0.82	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ıanganese (total)	31 ppm	0.26	6.99	0.18	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ıc (total)	194 ppm	1.64	43.7	1.15	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
ɔisture	92.0 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:39
ɔtal solids	8.00 %	676			Calculation	Auto 2022-11-28 06:53:39
ɔtal salts	1.16 %	98.0	2620		Calculation	Auto 2022-11-28 06:53:39
ł	8.1 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:39

ɜt year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar ɜronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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Nutrient Land Application

For: (37510) ADVANCED DECISION SERVICES
GRANDVIEW FALL 22
HOG MANURE

ple ID: **PAULSEN #2** Lab Number: **10209070** Date Sampled: **2022-11-09**

ımeter	Analysis As Received	Pounds of Nutrient AR per 1000 gal	per acre-in	Est. First Year Availability lbs per 1000 gal	Method	Reviewer-Date
nmonium nitrogen (total)	0.38 %	32.1	857	32	AOAC 2001.11	tat9 2022-11-28 06:53:39
ganic nitrogen	0.15 %	12.7	338	4	Calculation	Auto 2022-11-28 06:53:39
trogen (total)	0.53 %	44.8	1195	37	WC 055	tat9 2022-11-28 06:53:39
ıosphorus (as P2O5)	0.32 %	27.0	722	19	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:39
otassium (as K2O)	0.45 %	38.0	1010	34	AOAC 985.01 (mod)	Auto 2022-11-28 06:53:39
ılfur (total)	0.07 %	5.9	158	2	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
alcium (total)	0.17 %	14.4	383	10	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
agnesium (total)	0.11 %	9.3	248	7	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
odium (total)	0.10 %	8.4	226	6	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
opper (total)	161 ppm	1.36	36.3	0.95	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
on (total)	143 ppm	1.21	32.2	0.85	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
anganese (total)	32 ppm	0.27	7.22	0.19	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
nc (total)	249 ppm	2.10	56.1	1.47	AOAC 985.01 (mod)	tat9 2022-11-28 06:53:39
oisture	92.9 %				SM 2540 G-(1997)	tat9 2022-11-28 06:53:39
otal solids	7.10 %	600			Calculation	Auto 2022-11-28 06:53:39
otal salts	1.21 %	102	2730		Calculation	Auto 2022-11-28 06:53:39
H	8.4 S.U.				EPA 9045C *	tat9 2022-11-28 06:53:39

st year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous year's application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/ ıual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, ar cronutrients. Spring soil test for residual nitrate - make accurate sidedress recommendations! Nitrogen availabilty will vary with methods of application and field conditions. The nitrogen availability values used on a manure managem n must comply with state regulations. These regulations vary from state to state.

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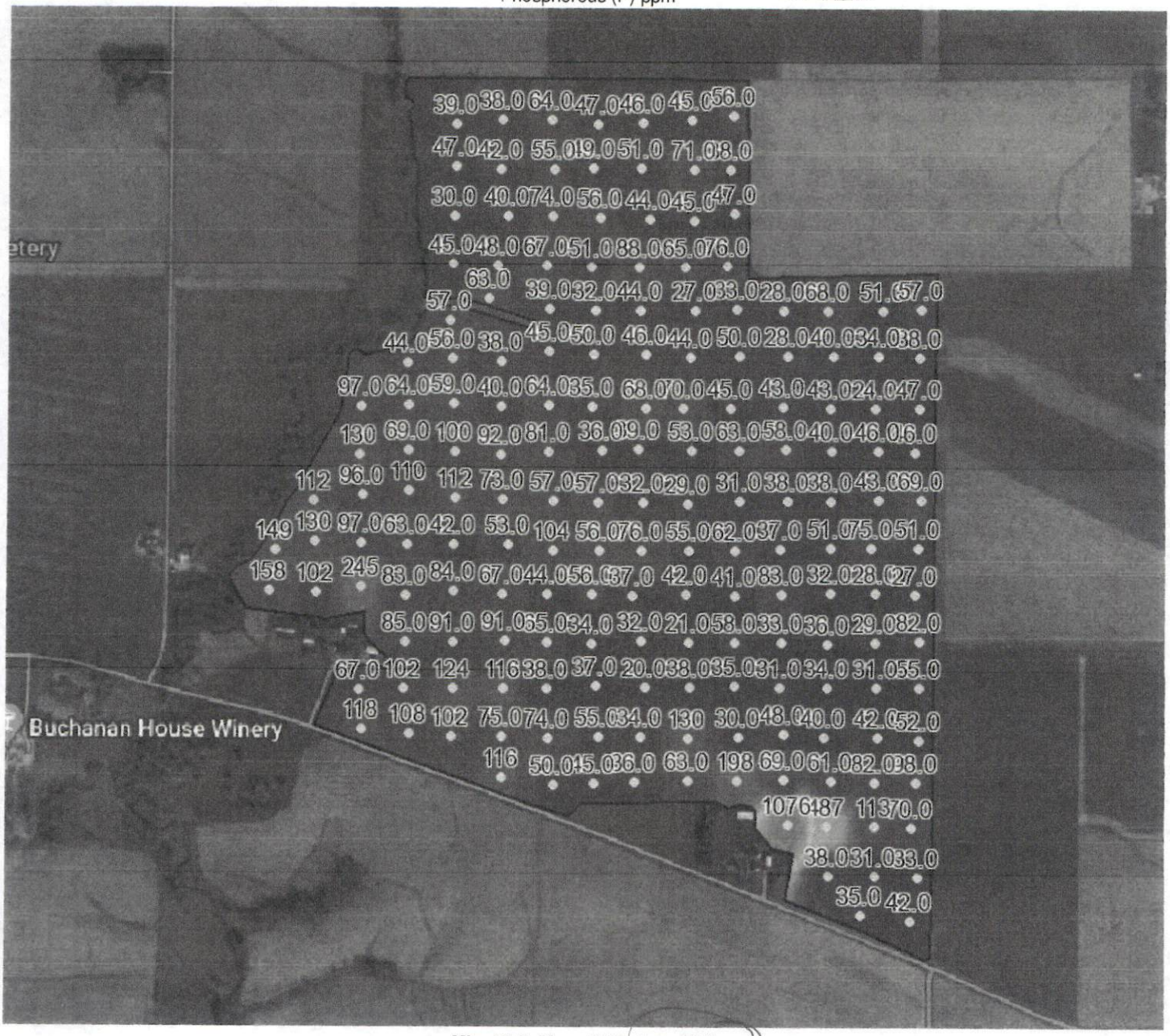
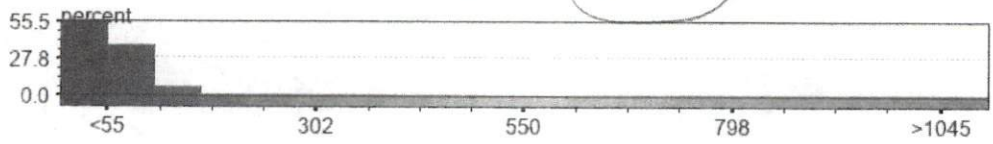
Grower: Grandview Farms Inc **Farm:** Linn **Field:** Linn **Zone:** Not Specified **Area:** 445.9 **Sample Date:** 2023-03-07

Phosphorous (P) ppm



Min: 20.0 **Max:** 1076 **Avg:** 68.5



USDA NRCS Natural Resources Conservation Service

RUSLE2 Profile Erosion Calculation Record

Linn Farm

Inputs:
Location: USA\Iowa\Cedar County
Soil: SSURGO\Cedar County, Iowa\120B Tama silty clay loam, 2 to 5 percent slopes\Tama Silty clay loam 95%
Slope length (horiz): 200 ft
Avg. slope steepness: 4.0 %

Management	*Vegetation*	*Yield units*	*# yield units, #/ac*
managements\CMZ 04\c.Other Local Mgt Records\DITTMERcorn grain;FC, st pt, disk, fcult, z4	vegetations\Corn, grain	bushels	232.00

Contouring: a. rows up-and-down hill
Strips/barriers: (none)
Diversion/terrace, sediment basin: (none)
Subsurface drainage: (none)
Adjust res. burial level: Normal res. burial

Outputs:
T value: 5.0 t/ac/yr
Soil loss erod. portion: 1.9 t/ac/yr
Detachment on slope: 1.9 t/ac/yr
Soil loss for cons. plan: 1.9 t/ac/yr
Sediment delivery: 1.9 t/ac/yr

Crit. slope length: 200 ft
Surf. cover after planting: 30 %
Avg. ann. total biomass removal: 0 lb/ac

Date	*Operation*	*Vegetation*	*Surf. res. cov. after op, %*
11/1/0	Fert applic. surface broadcast		96
11/1/0	Manure injector, liquid low disturb.30 inch		96
11/3/0	Chisel, st. pt.		67
11/3/0	Disk, tandem secondary and rolling basket		67
4/28/1	Seedbed finisher, fld cult, chop, spk har, rlng bskt		30
5/1/1	planter, double disk opnr	Corn, grain	30
5/3/1	Sprayer, pre-emergence		30
6/7/1	Sprayer, post emergence and fert. tank mix		22
10/20/1	Harvest, killing crop 50pct standing stubble		91

JT CENTER PORK WEST 1++ LLC

Master Matrix points table

Question	Score	Air	Water	Community
1				
2	30	12		18
3	30	12		18
4	10		10	
5	30	9		21
6	10	4		6
7	30		24	6
8	50	5	25	20
9	25	7.5	7.5	10
10	30		22.5	7.5
11				
12	30	27		3
13				
14				
15				
16				
17	30		27	3
18				
19	20			20
20	30			30
21				
22				
23	25			25
24	10			10
25	25		12.5	12.5
26	30	12	12	6
27				
28				
29	10		10	
30				
31	5	2		3
32	5	2		3
33				
34				
35	10		7.5	2.5
36				
37				
38				
39				
40				
41				
42				
43				
44				
TOTALS	**475**	**92.5**	**158**	**224.5**
	440	53.38	67.75	101.13 PASSING SCORE

APPENDIX C MASTER MATRIX

Proposed Site Characteristics

The following scoring criteria apply to the site of the proposed confinement feeding operation. Mark one score under each criterion selected by the applicant. The proposed site must obtain a minimum overall score of 440 and a score of 53.38 in the "air" subcategory, a score of 67.75 in the "water" subcategory and a score of 101.13 in the "community impacts" subcategory.

X. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest:
- * Residence not owned by the owner of the confinement feeding operation,
- * Hospital,
- * Nursing home, or
- * Licensed or registered child care facility.

	Score	Air	Water	Community
250 feet to 500 feet	25	16.25		8.75
501 feet to 750 feet	45	29.25		17.50
751 feet to 1,000 feet	65	42.25		22.75
1,001 feet to 1,250 feet	85	55.25		29.75
1,251 feet or more	100	65.00		35.00

(A) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.
(B) The department will award points only for the single building, of the four listed above, closest to the proposed confinement feeding operation.
(C) "Licensed child care center" – a facility licensed by the department of human services providing child care or preschool services for seven or more children, except when the facility is registered as a child care home.
(D) "Registered child development homes" - child care providers certify that they comply with rules adopted by the department of human services. This process is voluntary for providers caring for five or fewer children and mandatory for providers caring for six or more children.
(E) A full listing of licensed and registered child care facilities is available at county offices of the department of human services.

2. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest public use area.

cemeteries are > 1mile away

	Score	Air	Water	Community
250 feet to 500 feet	5	2.00		3.00
501 feet to 750 feet	10	4.00		6.00
751 feet to 1,000 feet	15	6.00		9.00
1,001 feet to 1,250 feet	20	8.00		12.00
1,251 feet to 1,500	25	10.00		15.00
1,501 feet or more	30	12.00		18.00

(A) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.
(B) "Public use area" - a portion of land owned by the United States, the state, or a political subdivision with facilities which attract the public to congregate and remain in the area for significant periods of time. Facilities include, but are not limited to, picnic grounds, campgrounds, cemeteries, lodges, shelter houses, playground equipment, lakes as listed in Table 2 of 567--Chapter 65, and swimming beaches. It does not include a highway, road right-of-way, parking areas, recreational trails or other areas where the public passes through, but does not congregate or remain in the area for significant periods of time.

3. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest:
- * Educational institution,
- * Religious institution, or
- * Commercial enterprise.

Buchanan House Winery is 4345 feet away (4345-2500ft=1845ft)

	Score	Air	Water	Community
250 feet to 500 feet	5	2.00		3.00

501 feet to 750 feet	10	4.00		6.00
751 feet to 1,000 feet	15	6.00		9.00
1,001 feet to 1,250 feet	20	8.00		12.00
1,251 feet to 1,500	25	10.00		15.00
1,501 feet or more	30	12.00		18.00

(A) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.
(B) The department will award points only for the single building, of the three listed above, closest to the proposed confinement feeding operation.
(C) "Educational institution" - a building in which an organized course of study or training is offered to students enrolled in kindergarten through grade 12 and served by local school districts, accredited or approved nonpublic schools, area educational agencies, community colleges, institutions of higher education under the control of the state board of regents, and accredited independent colleges and universities.
(D) "Religious institution" - a building in which an active congregation is devoted to worship.
(E) "Commercial enterprise" - a building which is used as a part of a business that manufactures goods, delivers services, or sells goods or services, which is customarily and regularly used by the general public during the entire calendar year and which is connected to electric, water, and sewer systems. A commercial enterprise does not include a farm operation.

4. Additional separation distance, above minimum requirement of 500 feet, from proposed confinement structure to the closest water source.

Rock Run Creek is 1100ft away (1100-500 ft= 600ft)

	Score	Air	Water	Community
250 feet to 500 feet	5		5.00	
501 feet to 750 feet	10		10.00	
751 feet to 1,000 feet	15		15.00	
1,001 feet to 1,250 feet	20		20.00	
1,251 feet to 1,500	25		25.00	
1,501 feet or more	30		30.00	

"Water source" - a lake, river, reservoir, creek, stream, ditch, or other body of water or channel having definite banks and a bed with water flow, except lakes or ponds without an outlet to which only one landowner is riparian.

5. Separation distance of 300 feet or more from the proposed confinement structure to the nearest thoroughfare.

2400 ft to ROW

	Score	Air	Water	Community
300 feet or more	30	9.00		21.00

(A) "Thoroughfare" - a road, street, bridge, or highway open to the public and constructed or maintained by the state or a political subdivision.
(B) The 300-foot distance includes the 100-foot minimum setback plus additional 200 feet.

6. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest critical public area.

all CPU areas are > 3000ft (2500ft + 500ft= 3000ft)

	Score	Air	Water	Community
500 feet or more	10	4.00		6.00

(A) All critical public areas as defined in 567--65.1(455B), are public use areas, and therefore subject to public use area minimum separation distances.
(B) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.

7. Proposed confinement structure is at least two times the minimum required separation distance from all private and public water wells.

Deep well = 100ft x 2 = 200 ft + (see aerial)

	Score	Air	Water	Community
Two times the minimum separation distance	30		24.00	6.00

Refer to Table 6 of 567--Chapter 65 for minimum required separation distances to wells.

8. Additional separation distance, above the minimum requirement of 1,000 feet, from proposed confinement structure to the closest:

* Agricultural drainage well,
* Known sinkhole, or
* Major water source. Major water source Rock Creek 5000 ft

	Score	Air	Water	Community
250 feet to 500 feet	5	0.50	2.50	2.00
501 feet to 750 feet	10	1.00	5.00	4.00
751 feet to 1,000 feet	15	1.50	7.50	6.00
1,001 feet to 1,250 feet	20	2.00	10.00	8.00
1,251 feet to 1,500 feet	25	2.50	12.50	10.00
1,501 feet to 1,750 feet	30	3.00	15.00	12.00
1,751 feet to 2,000 feet	35	3.50	17.50	14.00
2,001 feet to 2,250 feet	40	4.00	20.00	16.00
2,251 feet to 2,500 feet	45	4.50	22.50	18.00
2,501 feet or more	50	5.00	25.00	20.00

(A) The department will award points only for the single item, of the three listed above, that is closest to the proposed confinement feeding operation.
(B) "Agricultural drainage wells" - include surface intakes, cisterns and wellheads of agricultural drainage wells.
(C) "Major water source" - a lake, reservoir, river or stream located within the territorial limits of the state, or any marginal river area adjacent to the state which can support a floating vessel capable of carrying one or more persons during a total of a six-month period in one out of ten years, excluding periods of flooding. Major water sources in the state are listed in Tables 1 and 2 in 567--Chapter 65.

9. Distance between the proposed confinement structure and the nearest confinement facility that has a submitted department manure management plan. to the SE 4550 ft.

	Score	Air	Water	Community
Three-quarter of a mile or more (3,960 feet)	25	7.50	7.50	10.00

Confinement facilities include swine, poultry, and dairy and beef cattle.

10. Separation distance from proposed confinement structure to closest:
* High quality (HQ) waters,
* High quality resource (HQR) waters, or >13,000 ft to Cedar River HQW
* Protected water areas (PWA)

is at least two times the minimum required separation distance

	Score	Air	Water	Community
Two times the minimum separation distance	30		22.50	7.50

(A) The department will award points only for the single item, of the three listed above, closest to the proposed confinement feeding operation.
(B) HQ waters are identified in 567--Chapter 61.
(C) HQR waters are identified in 567--Chapter 61.
(D) A listing of PWAs is available at: http://www.iowadnr.gov/Recreation/CanoeingKayaking/StreamCare/ProtectedWaterAreas.aspx

11. Air quality modeling results demonstrating an annoyance level less than 2 percent of the time for residences within two times the minimum separation distance.

	Score	Air	Water	Community
University of Minnesota OFFSET model results demonstrating an annoyance level less than 2 percent of the time	10	6.00		4.00e

(A) OFFSET can be found at http://www.extension.umn.edu/agriculture/manure-management-and-air-quality/feedlots-and-manure-storage/offset-odor-from-feedlots/. For more information, contact Dr. Larry Jacobson, University of Minnesota, (612) 625-8288, jacob007@tc.umn.edu.
(B) A residence that has a signed waiver for the minimum separation distance cannot be included in the model.
(C) Only the OFFSET model is acceptable until the department recognizes other air quality models.

12. Liquid manure storage structure is covered. See CDS

	Score	Air	Water	Community
Covered liquid manure storage	30	27.00		3.00

(A) "Covered" - organic or inorganic material, placed upon an animal feeding operation structure used to store manure, which significantly reduces the exchange of gases between the stored manure and the outside air.

Organic materials include, but are not limited to, a layer of chopped straw, other crop residue, or a naturally occurring crust on the surface of the stored manure. Inorganic materials include, but are not limited to, wood, steel, aluminum, rubber, plastic, or Styrofoam. The materials shall shield at least 90 percent of the surface area of the stored manure from the outside air. Cover shall include an organic or inorganic material which current scientific research shows reduces detectable odor by at least 75 percent. A formed manure storage structure directly beneath a floor where animals are housed in a confinement feeding operation is deemed to be covered.

(B) The design, operation and maintenance plan for the manure cover must be in the construction permit application and made a condition in the approved construction permit.

X **13.** Construction permit application contains design, construction, operation and maintenance plan for emergency containment area at manure storage structure pump-out area.

	Score	Air	Water	Community
Emergency containment area	20		18.00	2.00

(A) The emergency containment area must be able to contain at least 5 percent of the total volume capacity of the manure storage structure.

(B) The emergency containment area must be constructed on soils that are fine-grained and have low permeability.

(C) If manure is spilled into the emergency containment area, the spill must be reported to the department within six hours of onset or discovery.

(D) The design, construction, operation and maintenance plan for the emergency containment area must be in the construction permit application and made a condition in the approved construction permit.

X **14.** Installation of a filter(s) designed to reduce odors from confinement building(s) exhaust fan(s).

	Score	Air	Water	Community
Installation of filter(s)	10	8.00		2.00

The design, operation and maintenance plan for the filter(s) must be in the construction permit application and made a condition in the approved construction permit.

15. Utilization of landscaping around confinement structure.

	Score	Air	Water	Community
Utilization of Landscaping	20	10.00		10.00

The design, operation and maintenance plan for the landscaping must be in the construction permit application and made a condition in the approved construction permit. The design should contain at least three rows of trees and shrubs, of both fast and slow-growing species that are well suited for the site.

16. Enhancement, above minimum requirements, of structures used in stockpiling and composting activities, such as an impermeable pad and a roof or cover.

	Score	Air	Water	Community
Stockpile and compost facility enhancements	30	9.00	18.00	3.00

(A) The design, operation and maintenance plan for the stockpile or compost structure enhancements must be in the construction permit application and made a condition in the approved construction permit.

(B) The stockpile or compost structures must be located on land adjacent or contiguous to the confinement building.

17. Proposed manure storage structure is formed See CDS

	Score	Air	Water	Community
Formed manure storage structure	30		27.00	3.00

(A) "Formed manure storage structure" -a covered or uncovered impoundment used to store manure from an animal feeding operation, which has walls and a floor constructed of concrete, concrete block, wood, steel, or similar materials. Similar materials may include, but are not limited to, plastic, rubber, fiberglass, or other synthetic materials. Materials used in a formed manure storage structure shall have the structural integrity to withstand expected internal and external load pressures.

(B) The design, operation and maintenance plan for the formed manure storage structure must be in the construction permit application and made a condition in the approved construction permit.

X **18.** Manure storage structure is aerated to meet departmental standards as an aerobic structure, if aeration is not already required by the department.

	Score	Air	Water	Community
Aerated manure storage structure	10	8.00		2.00

(A) Aerobic structure - an animal feeding operation structure other than an egg wash water storage structure which relies on aerobic bacterial action which is maintained by the utilization of air or oxygen and which includes

aeration equipment to digest organic matter. Aeration equipment shall be used and shall be capable of providing oxygen at a rate sufficient to maintain an average of 2 milligrams per liter dissolved oxygen concentration in the upper 30 percent of the depth of manure in the structure at all times.

(B) The design, operation and maintenance plan for the aeration equipment must be in the construction permit application and made a condition in the approved construction permit.

19. Proposed confinement site has a suitable truck turnaround area so that semitrailers do not have to back into the facility from the road see aerial

	Score	Air	Water	Community
Truck turnaround	20			20.00

(A) The design, operation and maintenance plan for the truck turn around area must be in the construction permit application and made a condition in the approved construction permit.

(B) The turnaround area should be at least 120 feet in diameter and be adequately surfaced for traffic in inclement weather.

20. Construction permit applicant's animal feeding operation environmental and worker protection violation history for the last five years at all facilities in which the applicant has an interest.

	Score	Air	Water	Community
No history of Administrative Orders in last five years	30			30.00

(A) "Interest" - means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly, indirectly through a spouse or dependent child, or both.

(B) An environmental violation is a final Administrative Order (AO) from the department of natural resources or final court ruling against the construction permit applicant for environmental violations related to an animal feeding operation. A Notice of Violation (NOV) does not constitute a violation.

X **21.** Construction permit applicant waives the right to claim a Pollution Control Tax Exemption for the life of the proposed confinement feeding operation structure.

	Score	Air	Water	Community
Permanent waiver of Pollution Control Tax Exemption	5			5.00

(A) Waiver of Pollution Control Tax Exemption is limited to the proposed structure(s) in the construction permit application.

(B) The department and county assessor will maintain a record of this waiver, and it must be in the construction permit application and made a condition in the approved construction permit.

X **22.** Construction permit applicant can lawfully claim a Homestead Tax Exemption on the site where the proposed confinement structure is to be constructed

- OR -

the construction permit applicant is the closest resident to the proposed confinement structure.

	Score	Air	Water	Community
Site qualifies for Homestead Tax Exemption or permit applicant is closest resident to proposed structure	25			25.00

(A) Proof of Homestead Tax Exemption is required as part of the construction permit application.

(B) Applicant includes persons who have ownership interests. "Interest" - means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly, indirectly through a spouse or dependent child, or both.

23. Construction permit applicant can lawfully claim a Family Farm Tax Credit for agricultural land where the proposed confinement feeding operation is to be located pursuant to Iowa Code chapter 425A.

	Score	Air	Water	Community
Family Farm Tax Credit qualification	25			25.00

Applicant includes persons who have ownership interests. "Interest" - means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly, indirectly through a spouse or dependent child, or both.

24. Facility size. 7200 hd x 0.4 = 2880 animal units

	Score	Air	Water	Community
1 to 2,000 animal unit capacity	20			20.00
2,001 to 3,000 animal unit capacity	10			10.00
3,001 animal unit capacity or more	0			0.00

(A) Refer to the construction permit application package to determine the animal unit capacity of the proposed confinement structure at the completion of construction.
(B) If the proposed structure is part of an expansion, animal unit capacity (or animal weight capacity) must include all animals confined in adjacent confinement structures.
(C) Two or more animal feeding operations under common ownership or management are deemed to be a single animal feeding operation if they are adjacent or utilize a common area or system for manure disposal. In addition, for purposes of determining whether two or more confinement feeding operations are adjacent, all of the following must apply:
  (a) At least one confinement feeding operation structure must be constructed on and after May 21, 1998.
  (b) A confinement feeding operation structure which is part of one confinement feeding operation is separated by less than a minimum required distance from a confinement feeding operation structure which is part of the other confinement feeding operation. The minimum required distance shall be as follows:
    (1) 1,250 feet for confinement feeding operations having a combined animal unit capacity of less than 1,000 animal units.
    (2) 2,500 feet for confinement feeding operations having a combined animal unit capacity of 1,000 animal units or more.

25. Construction permit application includes livestock feeding and watering systems that significantly reduce manure volume. see operation and maintenance

	Score	Air	Water	Community
Wet/dry feeders or other feeding and watering systems that significantly reduce manure volume	25		12.50	12.50

The design, operation and maintenance plan for the feeding system must be in the construction permit application and made a condition in the approved construction permit.

Proposed Site Operation and Manure Management Practices

The following scoring criteria apply to the operation and manure management characteristics of the proposed confinement feeding operation. Mark <u>one</u> score under each criterion that best reflects the characteristics of the submitted manure management plan.

26. Liquid or dry manure (choose only one subsection from subsections "a" - "e" and mark one score in that subsection). see MMP

		Score	Air	Water	Community
a.	Bulk dry manure is sold under Iowa Code Chapter 200A and surface-applied	15		15.00	
	Bulk dry manure is sold under Iowa Code Chapter 200A and incorporated on the same date it is land-applied	30	12.00	12.00	6.00
b.	Dry manure is composted and land-applied under the requirements of an approved department manure management plan	10	4.00	4.00	2.00
	Dry manure is composted and sold so that no manure is applied under the requirements of an approved department manure management plan	30	12.00	12.00	6.00
c.	Methane digester is used to generate energy from manure and remaining manure is surface-applied under the requirements of an approved department manure management plan	10	3.00	3.00	4.00
	After methane digestion is complete, manure is injected or incorporated on the same date it is land-applied under the requirements of an approved department manure management plan	30	12.00	12.00	6.00
d.	Dry manure is completely burned to generate energy and no	30	9.00	9.00	12.00

	remaining manure is applied under the requirements of an approved department manure management plan				
	Some dry manure is burned to generate energy, but remaining manure is land-applied and incorporated on the same date it is land applied	30	12.00	12.00	6.00

e.	Injection or incorporation of manure on the same date it is land-applied	30	12.00	12.00	6.00

(A) Choose only ONE line from subsection "a", "b," "c," "d," or "e" above and mark only one score in that subsection.
(B) The injection or incorporation of manure must be in the construction permit application and made a condition in the approved construction permit.
(C) If an emergency arises and injection or incorporation is not feasible, prior to land application of manure the applicant must receive a written approval for an emergency waiver from a department field office to surface-apply manure.
(D) Requirements pertaining to the sale of bulk dry manure under pursuant to Iowa Code chapter 200A must be incorporated into the construction permit application and made a condition of the approved construction permit.
(E) The design, operation and maintenance plan for utilization of manure as an energy source must be in the construction permit application and made a condition in the approved construction permit.
(F) The design, operation and maintenance plan for composting facilities must be in the construction permit application and made a condition in the approved construction permit.

X **27.** Land application of manure is based on a two-year crop rotation phosphorus uptake level.

	Score	Air	Water	Community
Two-year phosphorus crop uptake application rate	10		10.00	

(A) Land application of manure cannot exceed phosphorus crop usage levels for a two-year crop rotation cycle.
(B) The phosphorus uptake application rates must be in the construction permit application and made a condition in the approved construction permit.

X **28.** Land application of manure to farmland that has USDA Natural Resources Conservation Service (NRCS) approved buffer strips contiguous to all water sources traversing or adjacent to the fields listed in the manure management plan.

	Score	Air	Water	Community
Manure application on farmland with buffer strips	10		8.00	2.00

(A) The department may request NRCS maintenance agreements to ensure proper design, installation and maintenance of filter strips. If a filter strip is present but not designed by NRCS, it must meet NRCS standard specifications.
(B) The application field does not need to be owned by the confinement facility owner to receive points.
(C) On current and future manure management plans, the requirement for buffer strips on all land application areas must be in the construction permit application and made a condition in the approved construction permit.

29. Land application of manure does not occur on highly erodible land (HEL), as classified by the USDA NRCS.

	Score	Air	Water	Community
No manure application on HEL farmland	10		10.00	

Manure application on non-HEL farmland must be in the construction permit application and made a condition in the approved construction permit. see MMP

X **30.** Additional separation distance, above minimum requirements (0 or 750 feet, see below), for the land application of manure to the closest:

* Residence not owned by the owner of the confinement feeding operation,
* Hospital,
* Nursing home, or
* Licensed or registered child care facility.

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	3.25		1.75
Additional separation distance of 500 feet	10	6.50		3.50

(A) The department will award points only for the single building, of the four listed above, closest to the proposed confinement feeding operation.
(B) Minimum separation distance for land application of manure injected or incorporated on the same date as application: 0 feet.

(C) Minimum separation distance for land application of manure broadcast on soil surface: 750 feet.
(D) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.
(E) "Licensed child care center" – a facility licensed by the department of human services providing child care or preschool services for seven or more children, except when the facility is registered as a child care home.
(F) "Registered child development homes" - child care providers certify that they comply with rules adopted by the department of human services. This process is voluntary for providers caring for five or fewer children and mandatory for providers caring for six or more children.
(G) A full listing of licensed and registered child care facilities is available at county offices of the Department of Human Services

31. Additional separation distance, above minimum requirements (0 or 750 feet, see below), for land application of manure to closest public use area. see MMP

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	2.00		3.00

(A) "Public use area" - a portion of land owned by the United States, the state, or a political subdivision with facilities which attract the public to congregate and remain in the area for significant periods of time. Facilities include, but are not limited to, picnic grounds, campgrounds, cemeteries, lodges, shelter houses, playground equipment, lakes as listed in Table 2 in 567--Chapter 65, and swimming beaches. It does not include a highway, road right-of-way, parking areas, recreational trails or other areas where the public passes through, but does not congregate or remain in the area for significant periods of time.
(B) Minimum separation distance for land application of manure injected or incorporated on the same date as application: 0 feet.
(C) Minimum separation distance for land application of manure broadcast on soil surface: 750 feet.
(D) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.

32. Additional separation distance, above minimum requirements (0 or 750 feet, see below), for the land application of manure to the closest:
* Educational institution,
* Religious institution, or see MMP
* Commercial enterprise.

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	2.00		3.00

(A) Minimum separation distance for land application of manure broadcast on soil surface: 750 feet.
(B) Minimum separation distance for land application of manure injected or incorporated on same date as application: 0 feet.
(C) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.
(D) "Educational institution" - a building in which an organized course of study or training is offered to students enrolled in kindergarten through grade 12 and served by local school districts, accredited or approved nonpublic schools, area educational agencies, community colleges, institutions of higher education under the control of the state board of regents, and accredited independent colleges and universities.
(E) "Religious institution" - a building in which an active congregation is devoted to worship.
(F) "Commercial enterprise" - a building which is used as a part of a business that manufactures goods, delivers services, or sells goods or services, which is customarily and regularly used by the general public during the entire calendar year and which is connected to electric, water, and sewer systems. A commercial enterprise does not include a farm operation.

X **33.** Additional separation distance of 50 feet, above minimum requirements (0 or 200 feet, see below), for the land application of manure to the closest private drinking water well or public drinking water well - OR well is properly closed under supervision of county health officials.

	Score	Air	Water	Community
Additional separation distance of 50 feet or well is properly closed	10		8.00	2.00

(A) Minimum separation distance for land application of manure injected or incorporated on the same date as application or 50-foot vegetation buffer exists around well and manure is not applied to the buffer: 0 feet.
(B) Minimum separation distance for land application of manure broadcast on soil surface: 200 feet.
(C) If applicant chooses to close the well; the well closure must be incorporated into the construction permit application and made a condition in the approved construction permit.

X **34.** Additional separation distance, above minimum requirements, for the land application of manure to the closest:
* Agricultural drainage well,
* Known sinkhole,
* Major water source, or
* Water source

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	0.50	2.50	2.00
Additional separation distance of 400 feet	10	1.00	5.00	4.00

(A) "Agricultural drainage wells" - include surface intakes, cisterns and wellheads of agricultural drainage wells.
(B) "Major water source" - a lake, reservoir, river or stream located within the territorial limits of the state, or any marginal river area adjacent to the state, which can support a floating vessel capable of carrying one or more persons during a total of a six-month period in one out of ten years, excluding periods of flooding. Major water sources in the state are listed in Tables 1 and 2 in 567--Chapter 65.
(C) "Water source" - a lake, river, reservoir, creek, stream, ditch, or other body of water or channel having definite banks and a bed with water flow, except lakes or ponds without an outlet to which only one landowner is riparian.
(D) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.

35. Additional separation distance above minimum requirements, for the land application of manure, to the closest:
* High quality (HQ) water,
* High quality resource (HQR) water, or see aerial
* Protected water area (PWA).

	Score	Air	Water	Community
Additional separation distance of 200 feet	5		3.75	1.25
Additional separation distance of 400 feet	10		7.50	2.50

(A) HQ waters are identified in 567--Chapter 61.
(B) HQR waters are identified in 567--Chapter 61.
(C) A listing of PWAs is available at:
http://www.iowadnr.gov/Recreation/CanoeingKayaking/StreamCare/ProtectedWaterAreas.aspx.

X **36.** Demonstrated community support.

	Score	Air	Water	Community
Written approval of 100% of the property owners within a one mile radius	20			20.00

X **37.** Worker safety and protection plan is submitted with the construction permit application.

	Score	Air	Water	Community
Submission of worker safety and protection plan	10			10.00

(A) The worker safety and protection plan must be in the construction permit application and made a condition in the approved construction permit.
(B) The worker safety and protection plan and subsequent records must be kept on site with the manure management plan records.

X **38.** Applicant signs a waiver of confidentiality allowing public to view confidential manure management plan land application records

	Score	Air	Water	Community
Manure management plan confidentiality waiver	5			5.00

The waiver of confidentiality must be in the construction permit application and made a condition in the approved construction permit. The applicant may limit public inspection to reasonable times and places.

X **39.** Added economic value based on quality job development (number of full time equivalent (FTE) positions), and salary equal to or above Iowa department of workforce development median (45-2093)
-OR-
the proposed structure increases commercial property tax base in the county.

	Score	Air	Water	Community
Economic value to local community	10			10.00

The Iowa Department of Workforce Development regional profiles are available at http://www.iowaworkforce.org/centers/regionalsites.htm. Select the appropriate region and then select "Regional Profile."

X **40.** Construction permit application contains an emergency action plan.

	Score	Air	Water	Community
Emergency action plan	5		2.50	2.50

(A) Iowa State University Extension publication PM 1859 lists the components of an emergency action plan. The emergency action plan submitted should parallel the components listed in the publication.
(B) The posting and implementation of an emergency action plan must be in the construction permit application and made a condition in the approved construction permit.
(C) The emergency action plan and subsequent records must be kept on site with the manure management plan records.

X **41.** Construction permit application contains a closure plan.

	Score	Air	Water	Community
Closure Plan	5		2.50	2.50

(A) The closure plan must be in the construction permit application and made a condition in the approved construction permit.
(B) The closure plan must be kept on site with the manure management plan records.

X **42.** Adoption and implementation of an environmental management system (EMS) recognized by the department.

	Score	Air	Water	Community
EMS	15	4.50	4.50	6.00

(A) The EMS must be in the construction permit application and made a condition in the approved construction permit.
(B) The EMS must be recognized by the department as an acceptable EMS for use with confinement operations.

X **43.** Adoption and implementation of NRCS approved Comprehensive Nutrient Management Plan (CNMP).

	Score	Air	Water	Community
CNMP	10	3.00	3.00	4.00

The implementation and continuation of a CNMP must be in the construction permit application and made a condition in the approved construction permit.

X **44.** Groundwater monitoring wells installed near manure storage structure, and applicant agrees to provide data to the department.

	Score	Air	Water	Community
Groundwater monitoring	15		10.50	4.50

(A) Monitoring well location, sampling and data submission must meet department requirements.
(B) The design, operation and maintenance plan for the groundwater monitoring wells, and data transfer to the department, must be in the construction permit application and made a condition in the approved construction permit.

	Total Score	Air	Water	Community
	880	213.50	271.00	404.50
Score to pass	440	53.38	67.75	101.13
Total Points for JT Center Pork West 1++ LLC	475	92.5	158	224.5

IOWA MASTER MATRIX SUPPLEMENT

JT Center Pork West 1++ LLC

April 2023

This document will provide documentation, design information along with operation and maintenance (O&M) plans for items in the Master Matrix where points were gained.

Table 1. Summary table of matrix questions receiving points

Question #	Description	Actual
	Site Separation Distances	
2	public use area >2500 ft (Table 6)	>1mile to cemetery
3	school, church, business >2500ft	4345 ft to winery
4	Closest water source > 500ft	1100 ft to Rock Run Crk.
5	Thoroughfare > 300ft	2400ft to ROW
6	critical public area	>3000 ft to CPA
7	Distance from wells	All wells at least 200ft
8	drainage wells, sinkholes, major water sources	5000ft to Rock Creek
9	Other MMP site	4550 ft to SE
10	high quality/protected waters(>5000ft)	>13,000 ft to Cedar River
12	covered manure storage	design / O&M, CDS
17	formed manure storage structure	design / O&M, CDS
19	Truck turnaround	Design / O&M, permit
20	No administrative orders	personal statement
23	Family Farm Tax Credit qualification	personal statement
24	Facility Size	2880 au
25	Feed and water systems	design / O&M
26	Manure Injection or incorporation same day	O&M
29	No Manure Application to HEL land	NRCS maps
31	Manure App 200ft from public use area (cemetery)	See Permit package
32	Manure App 200ft from school, church, business. (winery)	See Permit package
35	Manure App 400ft from HQ waters or PWA (Cedar River)	See Permit package

12. Covered Manure Storage

This facility has deep pits for manure storage which are formed manure storages structures directly beneath a floor where animals are housed in a confinement feeding operation. The design is based upon the attached building drawings and specs from the builder. The structure will be maintained to ensure its structural integrity for its useful life.

17. Formed Manure Storage Structure

The deep pit manure storage is designed to be below floor storage. The concrete design for the structure will adhere to the specs outlined in the building plans to ensure the integrity of the structure.

- The storage structure will be measured for manure volume monthly to monitor the amount of manure being produced.
- The volume of manure will be recorded and records maintained on site.
- A visual inspection of the outer above ground perimeter will be made on a semi-annual basis to check for any structural challenges to the storage structure.
- The perimeter tile outside of the storage structure will be monitored monthly over 3 years to determine the average amount of water present.
- The drainage tile outside of the storage structure will be visually checked on a monthly basis to monitor for potential manure contamination by checking color.
- A sample of the water will be taken during the monthly check if the depth is significantly higher than average (1.5 times the average for the month).
- Foreign materials will not be added to the manure storage structure purposefully.
- Durable lids and caution signs will be used to cover the manure pump outs located along the sides of the structure.
- Proper fit and placement of lids will be checked monthly.

19. Proposed confinement site has a suitable truck turnaround area so that semitrailers do not have to back into the facility from the road. The truck turnaround will be a drive wide enough for semis to drive in off the road and will be able to pull through on a new drive to be constructed to connect the individual barn driveways.

    a. When there has been significant snowfall, the snow will be removed from the drive and turnaround to allow for safe entrance and exit of trucks.
    b. The structure of the turnaround will be maintained with aggregate 2" to 5" thick.

20. I have no history of Administrative Orders in the last five years related to environmental and worker protection.

23. I can lawfully claim a Family Farm Tax Credit for agricultural land where the proposed confinement operation is to be located pursuant to Iowa Code chapter 425A.

24. The total number of swine housed on site will be 7200 head which equals 2880 animal units. [7200 hd * 0.4 conversion factor = 2880 AU]

25. Feed and Water Systems

The feed and water systems to be used in this facility are intended to reduce feed and water wastage which could impact the manure storage. The feeders are dry feeders and the waterers are cup waterers.

- Feeders and waterers will be checked daily for proper operation.
- If the feeder or waterer is not in proper operation and is causing wasted feed or water it will be addressed appropriately by repair or adjustment.
- Measurement of manure volume in the storage pit will be used to track if there is an irregular amount of waste occurring.

26. Manure application by injection or incorporation on the same date it is land applied.

Manure will be injected or incorporated on the same date.

I believe the statements here to be true and agree to adhere to the specifications.

JT Center Park West 1++, LLC Tom Dittmer Mgr 4-12-23

JT Center Park West 1++ LLC Date

Tom Dittmer, Manager

Daily Checks

Feeders: _____ Checked and working appropriately
_____ Checked and adjustments made

Waterers: _____ Checked and working appropriately
_____ Checked and adjustments made

Monthly Checks

Date _____
Manure Depth _____
Drain Tile: Is water present? YES or NO
Approximate depth? _____ inches
Pumpout lids: Condition? GOOD FAIR NEEDS ATTENTION

Semi-annual Check

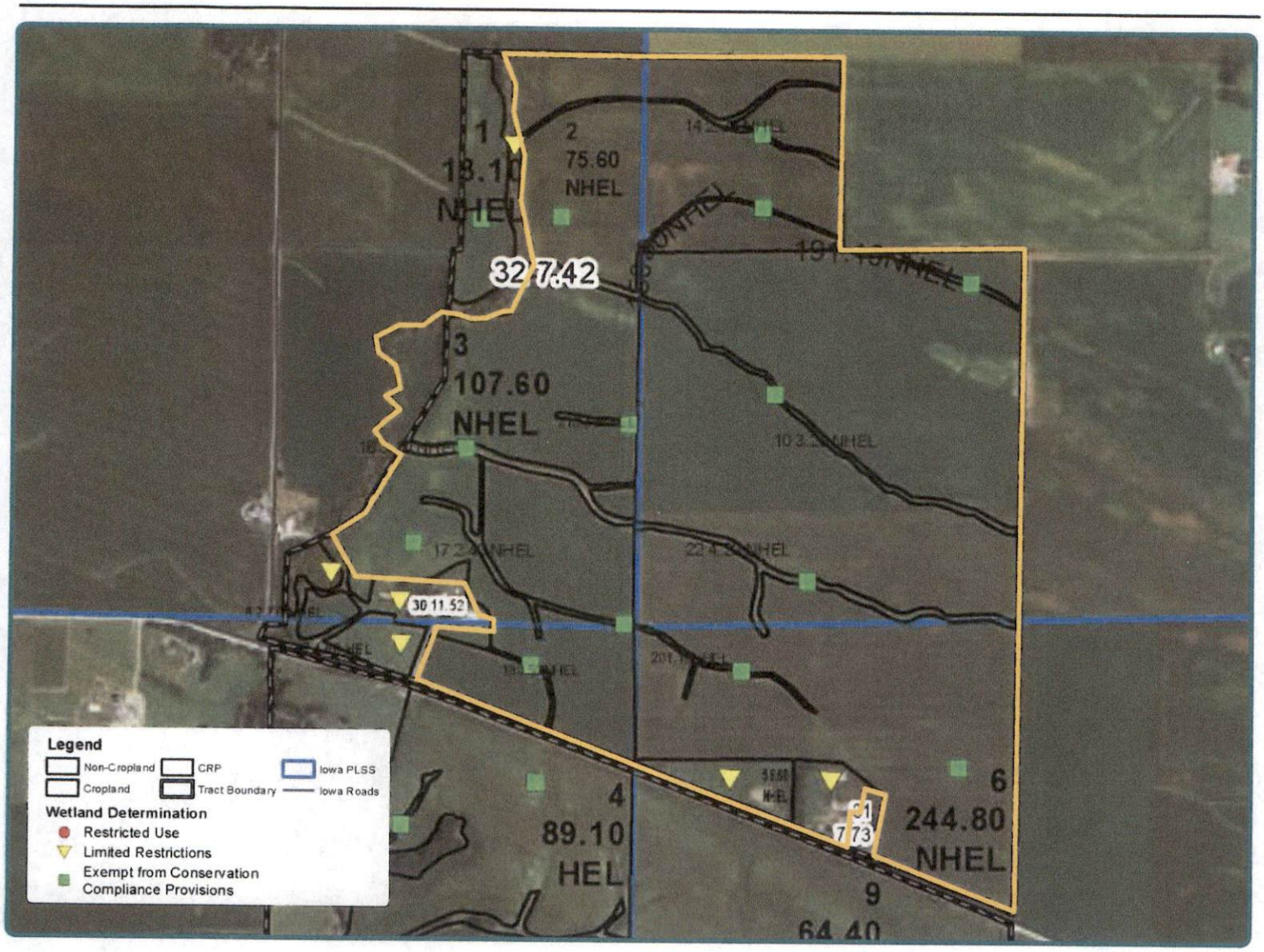
The outer above ground perimeter of manure storage:
_____ Normal as built
_____ Normal aging no problems
_____ Evidence of potential problems**
_____ Manure leakage**
**If either of these situations should occur, an engineer will be contacted to inspect for potential structural integrity issues. If there is evidence of manure leakage, DNR will be contacted.

Hertz Real Estate Services

Caring for You and Your Farm®

FSA Aerial

454.01 Est. FSA/Eff. Crop Acres



Land Description

Level to gently rolling.

Drainage

Natural with some tile. Contact agent for tile maps.

Buildings/Improvements

- Pole Machine Shed, 40' x 72', built in 1970
- Barn, 28' x 48', with lean-to, 24' x 48'
- Grain Bin, 14' x 11', 1,400 Bu
- Storage Bin, 36' x 25', 22,500 Bu, with aeration floor and 8" unload
- Cattle Shed, 56' x 120'
- Concrete Silo
- Hog House, 28' x 64'

Water & Well Information

Well is located west of the driveway.

Easement

Well and driveway are shared with the adjoining acreage. Please contact agent for copy of easement.

Comments

A productive Cedar County farm. Includes outbuildings and a small pasture.

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