

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 "sinkhole or potential 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 potential karst. Print and enclose the map with the name and location of the site clearly marked.
 - ☐ The site is in potential karst. The karst requirements of 567 IAC 65.7 must be used. Refer to "Applicant's Submittal Checklist No. 1 or 2" on page 11 or 14 for karst documentation.
 - ☐ The site is within 1,000 feet of a known sinkhole, Secondary Containment Barrier is required in accordance with 567 IAC 65.108(11).
- B) One Hundred Year Floodplain Determination:** Go to the AFO Siting Atlas as described above. Make sure the one hundred year floodplain 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:
- ☐ Not in 100-year floodplain of a major water source. Print off the floodplain map with proposed confinement structure and submit with the application. You may not be in a floodplain per DNR, however you may be in a County Flood Hazard Area and need a county permit.
 - ☐ Include a copy of the Flood Plain permit if a Flood Plain permit is required. Elevations are in NAVD 88 datum for sites with alluvial soils or floodplain requirements. Assistance with floodplain permitting can be done through the Iowa DNR PERMT tool at <https://programs.iowadnr.gov/PERMT/>.

ITEM 3 - OPERATION INFORMATION

- A)** A construction permit is required prior to any of the following:
- ☐ 1. Constructing or modifying any unformed manure storage structure³, constructing or modifying a confinement building that uses an unformed manure storage structure³, or increasing manure production in a confinement building that uses an unformed manure storage structure.
 - ☐ 2. Constructing, installing or modifying a confinement building or a formed manure storage structure² 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 structure³, 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 structure² 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. Purchasing or acquiring an adjacent animal feeding confinement operation if after acquisition the animal unit capacity of the operation is 1,000 animal units or more.
 - ☐ 6. Constructing or modifying any egg washwater storage structure or a confinement building at a confinement feeding operation that includes an egg washwater storage structure.
 - ☐ 7. 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.
 - ☐ 8. 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 structure³ or egg washwater storage structure;
 - ☐ 2. The confinement feeding operation includes only confinement buildings and formed manure storage structures² and has an AUC of 1,000 AU or more.
 - ☐ 9. Installing a permanent manure transfer piping system, unless the department determines that a construction permit is not required.
 - ☐ 10. Initiating a remedial change, upgrade, replacement, or construction when directed by the Department.

³Unformed 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:

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 structure¹ 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 structure¹ constructed prior to May 31, 1995, with no expansion.
 - ☐ c. It handles manure exclusively in a dry form (poultry).
 - ☐ d. It is an egg washwater storage structure.
 - ☐ e. It is a confinement feeding operation that processes manure using an anaerobic digester system.

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 c) to calculate the 'New AU' to be added to an existing operation. To calculate the indemnity fee (see page 8), also use c), however, if the "Existing AUC" (column a) is 500 AU or less, or this is a change in ownership, enter the "Total proposed AUC" (column b) in the "New AU" (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 structure¹ is abandoned if the confinement feeding operation structure¹ 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 structure¹ so that it cannot be used as a confinement feeding operation structure¹ 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 engineer at 712-262-4177.

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

Animal Species	a) Existing AUC (#s Before permit)			b) Total Proposed AUC (#s After permit is issued)		
	(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		0.4			0.4	
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:	<input type="text"/>		b) Total proposed AUC:	<input type="text"/>

(This is the AUC of the operation)

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

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

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.

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: <input type="text"/>			b) Total proposed AWC: <input type="text"/>		

(This is the AWC of the operation)

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

ITEM 5 - SUBMITTAL REQUIREMENTS

Checklists No. 1 or 2 (pages 11-17) describe the submittal requirements, which are based on the type of confinement feeding operation structure¹ and AUC proposed. To determine which checklist to use, choose the option that best describes your confinement feeding operation:

- ☐ **A) Formed manure storage structures²:** The proposed confinement feeding operation structure¹ will be or will use a formed manure storage structure². 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 14).
 - ☐ 2. A swine farrow-to-finish operation with an AUC of 2,750 AU or more. Use Submittal Checklist No. 2 (page 14).
 - ☐ 3. A cattle confinement feeding operation (including dairies) with an AUC of 4,000 AU or more. Use Submittal Checklist No. 2 (page 14).
 - ☐ 4. Other confinement feeding operations with an AUC of 3,000 AU or more. Use Submittal Checklist No. 2 (page 14).
 - ☐ 5. None of the above. Use Submittal Checklist No. 1 (page 11).

If any of boxes 1 to 4 are checked, the operation meets the threshold requirements for an engineer⁴ and a PE, licensed in Iowa, is required. For these cases, use Submittal Checklist No. 2 (page 14).

If you checked box 5, your operation is below threshold requirements for an engineer⁴ and a PE is not required. Use Submittal Checklist No. 1 (page 11).

- ☐ **B) Unformed manure storage structure³:** The proposed confinement feeding operation structure¹, will be or will use an unformed manure storage structure³ 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 14) and Addendum "A" (page 17).

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): _____ Date: _____

MAILING INSTRUCTIONS:

To expedite the application process, follow the submittal requirements explained in Checklist No. 1 or 2 (pages 11 to 17), 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 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 the AFO engineer at 712-262-4177. To contact the appropriate DNR Field Office, go to iowadnr.gov/fieldoffice.

⁴Threshold requirements for an engineer apply to the construction of a formed manure storage structure². Operations that meet or exceed the threshold requirements for an engineer are required to submit engineering documents signed by a PE licensed in the state of Iowa. Please refer to Checklist No. 2 (pages 14-17).

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. and their respective ownership percentages) who have an interest in any part of the confinement feeding operation covered by this permit application.

Full Name (%)	Address	City/State	Zip

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].

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

Signature of Applicant(s): _____ Date: _____

ITEM 9

Manure Storage Indemnity Fee Form for Construction Permits

CASHIER'S USE ONLY

0474-542-474A-0431

Facility ID #

County

Credit fees to: _____

Name of operation: _____

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 species and row number (see examples). Enter the 'New AU' from 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, or this is a change in ownership, enter the "Total proposed AUC" (column b) in "New AU" (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 species is other than poultry; enter 800 AU in the 'New AU' column, row 4, and multiply it by \$ 0.15:

$$(800 \text{ AU}) \times (\$0.15 \text{ per AU}) = \$120.00$$
 - **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 species 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:

$$(2,000 \text{ AU}) \times (\$0.06 \text{ per AU}) = \$120.00$$
 - **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:

$$(3,500 \text{ AU}) \times (\$0.20 \text{ per AU}) = \$700.00$$
 - **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, enter zeroes in the table.

$$(0 \text{ AU increase}) = \$0.00$$
 - **Example 5:** If you are the new owner of an existing swine operation and you are expanding from an 'Existing AUC' of 1,800 AU to a 'Total Proposed AUC' of 3,600 AU. You have never paid an indemnity fee for this facility. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is 3,000 AU or more; the animal species is other than poultry; enter the 'Total Proposed AUC' of 3,600 AU in the 'New AU' column, row 6, and multiply it by \$0.20:

$$(3,600 \text{ AU}) \times (\$0.20 \text{ per AU}) = \$720.00$$

Indemnity Fee Table:

Total Proposed AUC (After Permit) (from column B, Table 1)	Row	Animal species	New AU (from 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		x	\$ 0.15 =	
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: _____

Name of operation: _____

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

NOTE: If this application is also a change in ownership then indemnity fees must also be paid on the current (existing) total AUC at the appropriate rate on page 8.

SUMMARY:

- Manure Storage Indemnity Fee (see total from page 8) to be deposited in the Manure Storage Indemnity Fee Fund (474)	\$ _____
- Total filing fees (see item 3 on this page) to be deposited in the Animal Agriculture Compliance Fund (473)	\$ <u>500.00</u>
TOTAL DUE:	\$ _____

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 11-17.) 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: _____ Telephone: _____

Name of operation: _____

Location: _____
($\frac{1}{4}$ $\frac{1}{4}$) ($\frac{1}{4}$) (Section) (Tier & Range) (Name of Township) (County)

Documents being submitted to the county:

- ☐ Construction permit application form: submit items 1 to 10 (see Submittal Checklist No. 1 or 2)
- ☐ Attachment 1 - Aerial photos: Must clearly show the location of the proposed confinement feeding operation structure¹ 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
 - ☐ PE Design Certification form
 - ☐ Engineering report, construction plans and technical specifications
 - ☐ In addition, if proposing an unformed manure storage structure³ or an egg washwater storage structure submit documentation required in Addendum "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)

Revised Documents: ☐ Application ☐ CDS ☐ Matrix ☐ MMP ☐ Other _____

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 65.105 and Iowa Code 459.304. On behalf of the Board of Supervisors for:

COUNTY: _____

NAME: _____

TITLE: _____

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

Date: _____, 20____.

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) engineer at 712-262-4177 or visit www.iowaDNR.gov

APPLICANT'S SUBMITTAL CHECKLIST NO. 1

**For operations below threshold requirements for an engineer⁴
(Using formed manure storage² and not required to have a PE)**

To expedite the review process, please ensure that the construction permit application form is the first page of the application package. For more information, visit: www.iowaDNR.gov and select the dropdown to "Environmental Protection" select "Animal Feeding Operations" and then "AFO Forms" or contact the AFO engineer at 712-262-4177.

Mail one (1) copy of the entire construction permit application package, with completed items 1-10 (see checklist below), including Attachments 1 to 3, and if applicable Attachment 4. A hard copy of attachment 3 is not required if submitted electronically. Follow mailing instructions given on page 6. Incomplete applications or those submitted with incorrect fees will be returned to the sender. Do not submit this checklist. An additional electronic copy of all documents submitted to the AFO engineer via email would be appreciated.

Submit items in the following order:

CONSTRUCTION PERMIT APPLICATION FORM

- ☐ **Item 1. Location - completed (page 1). See page 18 for instructions and example on location.**
- ☐ **Item 2. Siting Information - enclose the necessary documentation requested on page 2:**
 - A) Karst documentation (page 2):**
 - ☐ The site is not in potential karst. Enclose the Siting Atlas Map, with the name and the footprint of the operation clearly marked.
 - ☐ The site is in potential karst. The karst requirements of 567 IAC 65.7 must be followed. You must also include copy of soils study and soil corings performed by a PE, an NRCS qualified staff person or a qualified organization. A well record or boring (by a certified well driller, NRCS qualified staff, or PE) from within 200 feet of the site showing over 5 feet of unconsolidated material above the bedrock surface may be sufficient for the karst requirements.
 - B) One Hundred Year Floodplain documentation (page 2):**
 - ☐ The site is not in the one hundred year floodplain of a major water source. Enclose the Siting Atlas Map, with the name and footprint of the operation clearly marked.
 - ☐ Include a copy of the Flood Plain permit if a Flood Plain permit is required. Elevations are in NAVD 88 datum for sites with alluvial soils or floodplain requirements. Assistance with floodplain permitting can be done through the Iowa DNR PERMT tool at <https://programs.iowadnr.gov/PERMT/>.
- ☐ **Item 3. Operation Information - completed (pages 2-3)**
- ☐ **Item 4. Calculating Animal Unit Capacity and, if applicable, Animal Weight Capacity (pages 4-5)**
 - ☐ **Animal Unit Capacity** - complete all applicable columns of Table 1 (page 4).
 - ☐ **Animal Weight Capacity** (if applicable) - complete all applicable columns of Table 2 (page 5).
- ☐ **Item 5. Submittal requirements - completed (page 6)**
- ☐ **Item 6. Utilizing Rural Water (page 6)**
- ☐ **Item 7. Signature - applicant must sign the form (page 6)**
- ☐ **Item 8. Interested Parties Form - completed (both sections) and signed (page 7)**
- ☐ **Item 9. Fee Forms**
 - ☐ Indemnity Fee Form (page 8)
 - ☐ Filing Fee Form (page 9)
 - ☐ Check with correct fee stapled to front of application form. Make check payable to "Iowa DNR."
- ☐ **Item 10. County Verification Receipt - completed, dated and signed (page 10).** Note: if manure will be applied in a county other than the county in which the site is located, an additional copy of the manure management plan must be submitted to the other county and a verification of receipt must be submitted.

Attachments

- ☐ **Attachment 1 - 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) or 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 of the proposed structures, note the fact on the photo(s) or use additional pages. (Example: "No agricultural drainage wells within one mile.")

All separation distances that are not clearly in excess of the required minimum separation distance must be measured according to 567 IAC 65.106(9) using standard survey methods. Go to the DNR [AFO Fact Sheet page](#) and select "Construction" and then "Separation Distance Tables" to find the required separation distances. An example aerial photo can also be found on pages 18-19.

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.

- ☐ **Attachment 1 "b" - Written waivers** (if applicable): If the required separation distance to a house, church, business, school, or public use area cannot be met, a waiver from the affected landowner may be obtained. If the required separation distance to the right-of-way cannot be met, a waiver from the state or the political subdivision may be obtained. Waivers must be recorded in the recorder's office of the county to become effective. A copy of the recorded written waiver must be submitted with the application.

- ☐ **Attachment 1 "c" - Secondary containment barrier:** As provided in Iowa Code section 459.310, the separation distance requirements to a major water source; wellhead, cistern of an agricultural drainage well; known sinkhole; water sources (other than major water sources); surface intakes of an agricultural drainage well and designated wetland do not apply if the confinement feeding operation structure¹ is proposed with a secondary containment barrier that meets the requirements of 567 IAC 65.108(11). Contact the AFO engineer at 712-262-4177 for more information.

- ☐ **Attachment 2. Statement of design certification** - Submit one of the following:
- ☐ Construction Design Statement (on DNR form 542-8068), completed and signed, if the formed manure storage structure² is not designed and sealed by a PE; OR
 - ☐ PE Design Certification (on DNR form 542-8122), completed and signed, if the formed manure storage structure² will be a site specific design sealed by a PE. This form is to be used in lieu of a CDS for a confinement feeding operation that is below threshold engineering requirements⁴ and that is not in karst (see Item 2, A).

- ☐ **Attachment 3. Manure Management Plan** (on DNR Form 542-4000), completed and signed addressing all the requirements set forth in the 567 IAC Chapter 65. However, if the operation is or will be selling all of their dry manure under Iowa Code chapter 200 or 200A, a completed and signed DNR Form 542-8069 must be filed instead.

- ☐ **Attachment 4. Master Matrix** (must check one) is required to evaluate a construction permit application in any of the following cases:
- ☐ 1. A new confinement feeding operation proposed in a county that has adopted a 'Construction Evaluation Resolution' (CER).
 - ☐ 2. An existing confinement feeding operation constructed on or after April 1, 2002, in a county that has adopted a CER.
 - ☐ 3. An existing confinement feeding 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.

If master matrix is required, submit all of the following documents as requested in 567 IAC 65.1(2)“i”:

- ☐ Completed Master matrix, and its supporting documents:
- ☐ A design, operation and maintenance plan is required if points are claimed for each of the following items: 12, 13, 14, 15, 16, 17, 18, 19, 25, 26“b”, 26“c”, 26“d” or 44.
- ☐ A supporting document must be included if points are claimed for each of the following items: 7, 11, 21, 22, 26“a”, 26“e”, 27, 28, 29, 30, 31, 32, 33, 34, 37, 38, 40, 41, 42 or 43.
- ☐ All other master matrix items for which points are being claimed, should have supporting documents.

Information about other permits that may be required:

- An NPDES permit for a combined operation may also be required, if your animal feeding operation has animals in confinement and open lots. For more information, see DNR Form No. 542-1427, posted in the DNR’s AFO website or visit the Environmental Protection Agency (EPA)’s web site.
- A National Pollutant Discharge Elimination System (NPDES) General Permit #2 is required for stormwater discharges from related construction activities at sites that disturb one acre or more of soil. This includes the clearing, grading and excavation of the confinement feeding operation structures and phased construction. For more information contact the Storm Water Program at 515-217-0875 or on the [DNR Stormwater page](#).
- A water use permit is required for the withdrawal or diversion of more than 25,000 gallons per day of water. Water purchased from municipal or rural water systems is excluded. For more information, contact Water Supply Engineering at 515-725-0336 or on the [DNR Water Allocation & Use page](#).

APPLICANT'S SUBMITTAL CHECKLIST NO. 2

**For operations that meet or exceed threshold requirements for an engineer⁴
(Using formed manure storage² and required to have a PE);
or operations utilizing unformed manure storage³ or egg washwater storage**

To expedite the review process, please ensure that the construction permit application form is the first page of the application package. For more information, visit www.iowaDNR.gov and select the dropdown "Environmental Protection" select "Animal Feeding Operations" and then "AFO Forms" or contact the AFO engineer at 712-262-4177.

Mail one (1) copy of construction permit application form, completed items 1-10 (see checklist below), Attachments 1 and 2, and if applicable, Attachment 4 and Addendum A" (page 17). Mail one (1) copy of the manure management plan, Attachment 3, or submit an electronic version via email to the AFO engineer. Follow mailing instructions given on page 6. Incomplete applications or those submitted with incorrect fees will be returned to the sender. Do not include this checklist. An additional electronic copy of all documents submitted to the AFO engineer via email would be appreciated.

Submit items in the following order:

Construction Permit Application Form

- ☐ **Item 1. Location - completed (page 1). See page 18 for instructions and example on location.**
- ☐ **Item 2. Siting Information - enclose the necessary documentation requested on page 2:**
 - A) **Karst documentation (page 2):**
 - ☐ The site is not in potential karst. Enclose the Siting Atlas Map, with the name and the footprint of the operation clearly marked.
 - ☐ The site is in potential karst. The karst requirements of 567 IAC 65.7 must be followed. You must also include copy of soils study and soil corings performed by a PE, an NRCS qualified staff person or a qualified organization. A well record or boring (by a certified well driller, NRCS qualified staff, or PE) from within 200 feet of the site showing over 5 feet of unconsolidated material above the bedrock surface may be sufficient for the karst requirements.
 - B) **One Hundred Year Floodplain documentation (page 2):**
 - ☐ The site is not in the one hundred year floodplain of a major water source. Enclose the Siting Atlas Map, with the name and footprint of the operation clearly marked.
 - ☐ Include a copy of the Flood Plain permit if a Flood Plain permit is required. Elevations are in NAVD 88 datum for sites with alluvial soils or floodplain requirements. Assistance with floodplain permitting can be done through the Iowa DNR PERMT tool at <https://programs.iowadnr.gov/PERMT/>.
- ☐ **Item 3. Operation Information - completed (pages 2-3)**
- ☐ **Item 4. Calculating Animal Unit Capacity and, if applicable, Animal Weight Capacity (pages 4-5)**
 - ☐ **Animal Unit Capacity** - complete all applicable columns of Table 1 (page 4).
 - ☐ **Animal Weight Capacity** (if applicable) - complete all applicable columns of Table 2 (pages 4-5).
- ☐ **Item 5. Submittal requirements -completed (page 6)**
- ☐ **Item 6. Utilizing Rural Water (page 6)**
- ☐ **Item 7. Signature - applicant must sign the form (page 6)**
- ☐ **Item 8. Interested Parties Form - completed (both sections) and signed (page 7)**
- ☐ **Item 9. Fee Forms**
 - ☐ Indemnity Fee Form (page 8)
 - ☐ Filing Fee Form (page 9)
 - ☐ Check with correct fee stapled to front of application form. Make check payable to "Iowa DNR."
- ☐ **Item 10. County Verification Receipt - completed, dated and signed (page 10).** Note: if manure will be applied in a county other than the county in which the site is located, an additional copy of the manure management plan must be submitted to the other county and a verification of receipt must be submitted.

ATTACHMENTS:

- ☐ **Attachment 1 - Engineering drawing:** An engineering drawing 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 engineering drawing(s) 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 engineering drawing(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) or 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 of the proposed structures, note this fact on the drawings or use additional pages. (Example: "No agricultural drainage wells within one mile.")

All separation distances that are not clearly in excess of the required minimum separation distance must be measured according to 567 IAC 65.106(9) using standard survey methods. Go to the DNR [AFO Fact Sheet page](#) and select "Construction" and then "Separation Distance Tables" to find the required separation distances. An example of the required aerial photo can also be found on pages 18-19.

Note: If a master matrix is required, the engineering drawings 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.

- ☐ **Attachment 1 "b" - Written waivers:** If the required separation distance to a house, church, business, school, or public use area cannot be met, a waiver from the affected landowner may be obtained. If the required separation distance to the right-of-way cannot be met, a waiver from the state or the political subdivision may be obtained. Waivers must be recorded in the recorder's office of the county to become effective. A copy of the recorded written waiver must be submitted with the application.
- ☐ **Attachment 1 "c" - Secondary containment barrier:** As provided in Iowa Code section 459.310, the separation distance requirements to a major water source; wellhead, cistern of an agricultural drainage well; known sinkhole; water sources (other than major water sources); surface intakes of an agricultural drainage well and designated wetland do not apply if the confinement feeding operation structure¹ is proposed with a secondary containment barrier that meets the requirements of 567 IAC 65.108(11). Contact the AFO engineer at 712-262-4177 for more information.
- ☐ **Attachment 2 - Engineering report, engineering plans, and technical specifications:** Prepared and sealed by a PE licensed in the state of Iowa or an NRCS engineer:
- ☐ **Engineering report** must describe: proposed confinement feeding operation structures¹ and its manure control system; animal unit capacity and animal capacity; daily and yearly manure production estimates; volume of manure storage requirements and storage provided. Include a statement certifying that the proposed confinement feeding operation structures¹ comply with the design standards of Iowa Code section 459 and 567 IAC 65.
- ☐ **Engineering plans** must show all dimensions (plan view and cross sectional views as needed) for each proposed confinement feeding operation structure¹, including a USGS topographic map that shows the location of the confinement feeding operation structures¹. Plans must show the following:
- For a formed manure storage structure², compliance with 567 IAC 65.108(10) "Minimum concrete standards."
 - For an unformed storage structure³ or an egg washwater storage structure, see "Addendum A" (page 17).
- ☐ **Technical specifications** that address the applicable design requirements of 567 IAC 65.
- ☐ **Drainage tile certification** statement (signed by a PE or NRCS engineer), if constructing three (3) or more confinement feeding operation structures¹, indicating that the proposed confinement feeding operation structures will not impede the

drainage of established drainage tile lines which cross your property boundary lines, unless measures are taken to reestablish the drainage prior to completion of construction.

☐ **Attachment 3. Manure Management Plan (on DNR Form 542-4000):** completed and signed addressing all the requirements set forth in the 567 IAC Chapter 65. However, if the operation is or will be selling all of their dry manure under Iowa Code chapter 200 or 200A, a completed and signed DNR Form 542-8069 must be filed instead.

☐ **Attachment 4. Master Matrix** (must check one) is required to evaluate a construction permit application in any of the following cases:

- ☐ 1. A new confinement feeding operation proposed in a county that has adopted a 'Construction Evaluation Resolution' (CER).
- ☐ 2. An existing confinement feeding operation constructed on or after April 1, 2002, in a county that has adopted a CER.
- ☐ 3. An existing confinement feeding 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.

If master matrix is required, submit all of the following documents as requested in 567 IAC 65.1(2)"i":

- ☐ Completed Master matrix, and its supporting documents:
- ☐ A design, operation and maintenance plan is required if points are claimed for each of the following items: 12, 13, 14, 15, 16, 17, 18, 19, 25, 26"b", 26"c", 26"d" or 44.
- ☐ A supporting document must be included if points are claimed for each of the following items: 7, 11, 21, 22, 26"a", 26"e", 27, 28, 29, 30, 31, 32, 33, 34, 37, 38, 40, 41, 42 or 43.
- ☐ All other master matrix items for which points are being claimed, should have supporting documents.

Information about additional requirements that may apply:

- A "Qualified Operation" shall only 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, a confinement feeding operation is not required to provide aeration if the operation has a confinement feeding operation structure constructed prior to May 31, 1995, if the operation handles manure exclusively in a dry form, or is a confinement feeding operation that processes manure using an anaerobic digester system. A confinement feeding operation is a "Qualified Operation" if any of the following boxes are checked:
 - ☐ 1. A swine farrowing and gestating operation with an AUC of 2,500 AU or more.
 - ☐ 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.

Contact the AFO engineer at 712-262-4177 for additional information on the aeration requirements that must be included with the engineering documents.

Information about other permits that may be required:

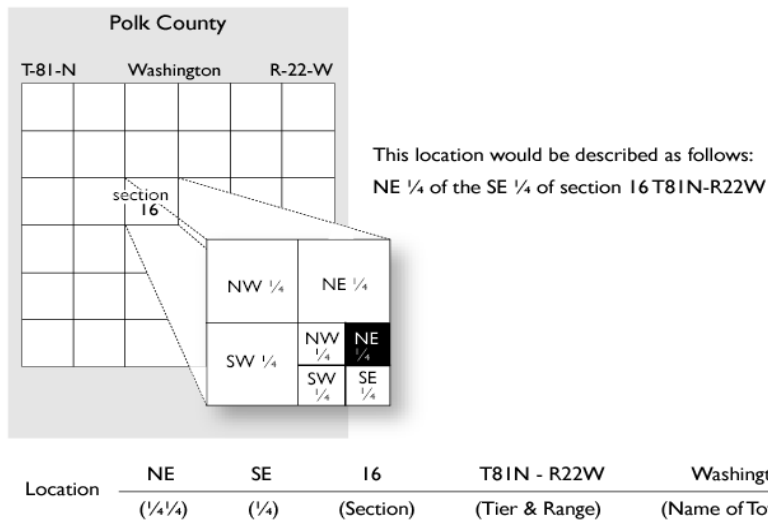
- An NPDES permit for a combined operation may also be required, if your animal feeding operation has animals in confinement and open lots. For more information, see DNR Form No. 542-1427, posted in the DNR's AFO website or visit the Environmental Protection Agency (EPA)'s web site.
- A National Pollutant Discharge Elimination System (NPDES) General Permit #2 is required for stormwater discharges from related construction activities at sites that disturb one acre or more of soil. This includes the clearing, grading and excavation of the confinement feeding operation structures and phased construction. For more information contact the Storm Water Program at 515-217-0875 or on the [DNR Stormwater page](#).
- A water use permit is required for the withdrawal or diversion of more than 25,000 gallons per day of water. Water purchased from municipal or rural water systems is excluded. For more information, contact Water Supply Engineering at 515-725-0336 or on the [DNR Water Allocation & Use page](#).

ADDENDUM "A" FOR APPLICANT'S USE ONLY
Additional information required for unformed manure storage³
Or egg washwater storage

If the confinement feeding operation proposes to construct, expand or modify an unformed manure storage structure³ or an egg washwater storage structure; the following information is required:

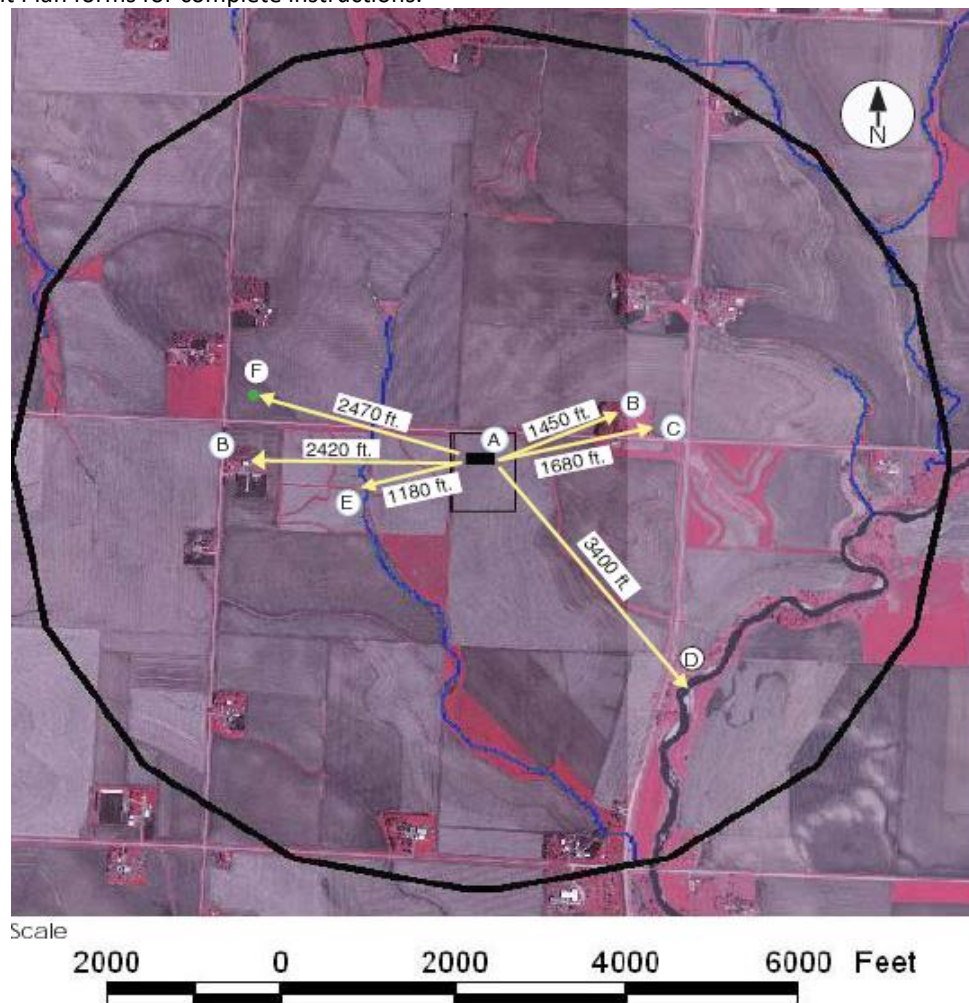
- ☐ 1. Soil exploration report that meets the requirements of 567 IAC 65.108(5) must be submitted, and the results of ground water determination that meets 65.108(6)"a" to "c" must be included. Soil corings shall be obtained by a method that identifies the continuous soil profile and must include at least the following information:
 - ☐ a. A minimum of four intact continuous core samples: one to be located within a 50 feet radius of each of the four bottom corners of the unformed manure storage structure³ or egg washwater storage structure. If the point of deepest excavation is at a point other than a corner, an additional coring shall be located at the point of deepest excavation.
 - ☐ b. One coring shall be obtained at least 25 feet below the lagoon/basin bottom elevation.
 - ☐ c. All other corings shall penetrate to a depth of at least 10 feet below the lagoon/basin bottom.
 - ☐ d. The seven-day water level in core holes shall be reported and the well construction details shall be identified.
 - ☐ e. The location and surface elevation of all corings shall be identified.
 - ☐ f. All corings have been properly plugged, upon abandonment.
 - ☐ g. PE certification on the soils exploration report.
- ☐ 2. If a permanent artificial groundwater lowering system as provided in 567 IAC 65.108(6)"b", is being proposed for the unformed manure storage structure³ or egg washwater storage structure, detailed engineering plans and calculations that show it will effectively lower the GW table, must be submitted for review and approval.
- ☐ 3. A minimum separation of 2 feet must be maintained between the proposed bottom elevation of the unformed manure storage structure³ or egg washwater storage structure and the groundwater table; or a synthetic liner must be installed. Submit detailed engineering plans, including cross sectional and longitudinal views.
- ☐ 4. Construction of an unformed manure storage structure³ or egg washwater storage structure on an area that exhibits karst (as defined in 567 IAC 65.1(1)) is prohibited in accordance to 567 IAC 65.7(4).
- ☐ 5. Construction of an unformed manure storage structure³ or egg washwater storage structure on the 100-year flood plain of a major water source is prohibited in accordance to 567 IAC 65.9(1).
- ☐ 6. Flooding Protection is provided in accordance to 567 IAC 65.9.
- ☐ 7. The proposed seal of the unformed manure storage structure³ or egg washwater storage structure shall not allow a seepage that exceeds 1/16 inch/day at the design depth in accordance to 567 IAC 65.108(7).
- ☐ 8. Earthen manure storage basins constructed after June 19, 2024, must have enough manure storage capacity for eight (8) months in accordance with 567 IAC 65.108(4).
- ☐ 9. The proposed liner of the unformed manure storage structure³ or egg washwater storage structure shall be in accordance to 567 IAC 65.108(8). Submit detailed engineering plans.
- ☐ 10. The proposed anaerobic lagoon is being proposed to meet 567 IAC 65.108(9). Submit detailed engineering plans and calculations.
- ☐ 11. Berm erosion control measurements for the proposed unformed manure storage structure³ or egg washwater storage structure meet or exceed 567 IAC 65.108(8)"g". Submit detailed engineering plans.
- ☐ 12. Mail one (1) copy of the information requested in this Addendum, at the address indicated on page 6.


For questions or for more information, visit: www.iowadnr.gov/afo or contact the AFO engineer at 712-262-4177.

Example of location information for Items 1 and 10:

DNR Example Aerial Photo and Map
Showing Separation Distances for Construction or Expansion of Confinements

Instructions: Please indicate the scale of the aerial photo or map. Please label and show the distances to the objects that have a required separation distance. Indicate a one-mile radius from the proposed site. See the Construction Permit Application and Manure Management Plan forms for complete instructions.



Key for Aerial Photo 1	
	Confinement Building
A	Site and building location.
B	Distances to nearest residences – 1450 and 2420 ft. (No business, school, church or public area within one mile)
C	Distance to nearest private well – 1680 ft.
D	Distance to a major water source – 3400 ft.
E	Distance to a water source – 1180 ft.
F	Distance to nearest sinkhole - 2470 ft.
There are no ag drainage wells, surface intakes of ag drainage well or designated wetlands within one mile of the site.	

Map 1: Small Scale Map to Show Road ROW Separation Distance

If the map scale with the one-mile radius is too small to show some distances, you can add an extra label, or draw a map with a different scale. For example, see below.

