

Timothy Huey Director

- To: Dee F. Bruemmer, County Administrator
- From: Brian McDonough, Planning & Development Specialist
- Date: September 1, 2015
- Re: Public hearing on the Construction Permit Application of Tom Dittmer/Jeff Paulsen, d.b.a. J2T2, LLC for the expansion of an existing swine concentrated animal feeding operation located in the Part of the NE¼NE¼ of Section 17, T79N, R1E (Cleona Township).

The Iowa DNR submitted the Construction Permit Application to Scott County on August 27<sup>th</sup>. Scott County has 30 days from this receipt to submit comments and a recommendation on the application back to the IDNR. Notice of the receipt of application and notice of the public hearing on September 10<sup>th</sup> will be published in this week's North Scott Press and Quad City Times. The Board will hold a public hearing to accept any public comments on September 10<sup>th</sup>, and will consider a resolution recommending on the application on September 24<sup>th</sup>. This will allow the resolution and recommendation to be forwarded to the Iowa DNR on Friday, September 25<sup>th</sup> and within the required 30 day timeframe for review.

The request is for an expansion of an existing finishing hog operation. Approval of this request by the IDNR would allow for a doubling of the current capacity of this facility from 2,400 head of finishing hogs to 4,800 head, including the construction of a new confinement structure. Planning & Development staff will review the submitted Master Matrix and construction design statement for compliance. The Health Department will assist with review of the manure management plan.

Staff will also mail notice of the public hearing to surrounding property owners within 500 feet of the site. We will also report any public comments received to date at next week's Committee of the Whole and Thursday Board meetings. Prior to any Board action on September 24<sup>th</sup> staff will have conducted a site visit and will give a full review of the Master Matrix scoring.



Timothy Huey Director

### NOTICE OF PUBLIC HEARING TO BE HELD BY THE SCOTT COUNTY BOARD OF SUPERVISORS FOR THE REVIEW OF AN APPLICATION FOR A STATE CONSTRUCTION PERMIT FOR THE EXPANSION OF AN EXISTING CONCNETRATED ANIMAL FEEDING OPERATION

Public Notice is hereby given that the Scott County Board of Supervisors will hold a public hearing on **Thursday, September 10, 2015**, in the Board Room in the Scott County Administrative Center, 600 West fourth Street, Davenport, Iowa, during their regular meeting which starts promptly at **5:00 p.m.** 

The Scott County Board of Supervisors will review and hear public comments on the State of Iowa Construction Permit application of Thomas Dittmer and Jeff Paulsen, d.b.a. J2T2, LLC for the expansion of an existing swine finishing operation located in Part of the NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> of Section 17, T79N, R1E (Cleona Township).

The existing operation has a capacity of 2,400 head, or an animal unit capacity (AUC) of 960. This State Construction Permit would allow for a doubling of that capacity to 4,800 head at an AUC of 1920, including the construction of a new 240' x 80' wean to finish barn at the existing site. The new building would be constructed as a formed manure storage structure with an eight (8) foot deep concrete pit below the slatted floor.

A copy of the application is on file with the Scott County Planning and Development Department is available for review prior to the hearing during normal working hours 8:00 a.m. to 4:30 p.m., Monday through Friday. If you have questions or want further information please call or write the Planning and Development Department, 500 West Fourth Street, Davenport, Iowa 52801, 563-326-8643, or attend the hearing.

Written, faxed or emailed comments for the Board of Supervisors may be delivered or sent to the Scott County Planning and Development Department in advance of the public hearing. All comments will be forwarded to the Iowa Department of Natural Resources. The fax number for Scott County Planning and Development is 563-326-8257 and the email address is planning@scottcountyiowa.com

Timothy Huey Director



Timothy Huey Director

### PUBLIC NOTICE TO ALLOW FOR REVIEW AND COMMENT ON AN APPLICATION FOR A STATE CONSTRUCTION PERMIT FOR THE EXPANSION OF AN EXISTING CONCENTRATED ANIMAL FEEDING OPERATION

The Scott County Board of Supervisors have on file an application for a State of Iowa construction permit that has been submitted to the Iowa Department of Natural Resources for the expansion of an existing hog confinement feeding operation in Scott County.

Name of Applicant: Address	Thomas Dittmer/Jeff Paulsen, d.b.a. J2T2, LLC. 12090 240 <sup>th</sup> Street, Eldridge, IA 52748 & 23536 20 <sup>th</sup> Avenue, Stockton, IA 52769
Location of operation:	Part of the NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> , Section 17, T79N, R1E (Cleona Township)
Description of application:	There is an existing swine finishing operation at this location with a capacity of 2,400 head, or an animal unit capacity (AUC) of 960. This State Construction Permit would allow for a doubling of that capacity to 4,800 head at an AUC of 1920, including the construction of a new 240' x 80' wean to finish barn. The new building would be constructed as a formed manure storage structure with an eight (8) foot deep concrete pit below the slatted floor.
Examination:	The application for a State Construction Permit and associated manure management plan is on file with the Scott County Planning and Development Department located at 500 West 4 <sup>th</sup> Street, Davenport, Iowa and is available for review by the public during normal working hours 8:00 AM to 4:30 PM, Monday through Friday.
Comments:	Written, faxed or emailed comments for the Board of Supervisors may be delivered or sent to the Scott County Planning and Development Department until Friday, September 18, 2015 at 4:00 PM. All comments will be forwarded to the Iowa Department of Natural Resources. The fax number for Planning and Development is 563-326-8257 and the email address is planning@scottcountyiowa.com
Additional Information:	Timothy Huey, Planning Director 500 West 4 <sup>th</sup> Street Davenport, Iowa 52801 (563) 326-8643



### **Construction Design Statement (CDS)**

### Instructions:

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

### Section 1 - Information about the proposed formed manure storage structure<sup>3</sup>(s)

A) Information about the operation:

Name of operation:	J2T2 LLC					Facility ID No. :
Location:		NE	17	T79N-R01E	Cleona	Scott
	(1/4 1/4)	(1/4)	(Section)	(Tier & Range)	(Name of To	ownship) (County)

Description of the proposed formed manure storage structure<sup>3</sup>. Include dimensions (length, width, or diameter, depth). Indicate if it is aboveground or belowground; covered or uncovered, made of concrete or steel. If necessary attach more pages:

81'2" x 241'4" x 8' Deep, Belowground, Covered, Concrete Pit Foundation

Karst Determination: Go to http://www.iowadnr.gov, select the link to 'Environment' then click on 'Mapping and GIS'. then click on AFO Siting Atlas. Click on the red push pin icon to enter a legal description of the proposed location. Make sure the karst box is checked in the left legend. 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).
- D) Alluvial Soils Determination: Go to http://www.iowadnr.gov, select the link to 'Environment' then click on 'Mapping and GIS' then click on AFO Siting Atlas. Click on the red push pin icon to enter a legal description of the proposed location. Make sure the alluvial box is checked in the left legend. If you cannot access the map, or if you have questions about this issue, contact DNR Flood Plain at 1-866-849-0321. 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.

### Section 2 - Manure management plan:

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

by Tom Dilton JZTZ LLC by 1-14thm 8/25/15 Owner's Name (print)

<sup>&</sup>lt;sup>1</sup> To determine the AUC see the 'Manure Storage Indemnity Fee' (Form 542-4021) or the 'Construction Permit Application' (Form 542-1428), or visit <u>http://www.iowadnr.gov</u>

<sup>&</sup>lt;sup>2</sup> PE is a professional engineer licensed in the state of lowa or a NRCS-Engineer working for the USDA-Natural Resources Conservation Service (NRCS).

<sup>&</sup>lt;sup>3</sup> Formed manure storage structure means a covered or uncovered concrete or steel tank, including concrete pits below the floor.

<sup>&</sup>lt;sup>4</sup> Confinement feeding operation structure = A confinement building, a formed or unformed manure storage structure, or an egg washwater storage structure.

Section 3 - Construction design standards: The person responsible for constructing the formed manure storage structure(s)<sup>3</sup> must complete pages 2 to 5.

A) Liquid and semi-liquid manure: The proposed formed manure storage structure<sup>3</sup> 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<sup>3</sup> 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 2 for each formed manure storage structure<sup>3</sup> that have <u>different</u> dimensions. Complete all of the following information:

Number of buildings: 1 Building name: J2T2 LLC

Dimensions of proposed formed manure storage structure<sup>3</sup>

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

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 pages 7-8), 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<sup>3</sup> 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 pages 8-9) 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 9 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

	Pr	oposed vertical steel in wa	alls [see boxes "a" and "b",	abovej	Proposed
Description of reinforcing steel in walls	Walls where vehicles are <u>not</u> allowed within 5 feet (use Table D-1 ) <sup>a</sup>	All walls with pumpout ports and walls where vehicles are	Walls where vehicles are <u>not</u> allowed within 5 feet (use Table D-3 ) <sup>b</sup>	All walls with pumpout ports and walls where vehicles are	horizontal steel in walls (use Table D-5)
Grade 40, No. 4					12
Grade 40, No. 5					
Grade 60, No. 4				9	
Grade 60, No. 5					<u> </u>

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<sup>3</sup>, 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)<sup>3</sup>:

- 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.
- 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.

In lieu of the drain tile, a certification signed by a PE<sup>2</sup>, 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.
- 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):
   Image: 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.
- 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°, <u>OR</u>
  - 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 10). 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 10). 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.

- Concrete forms specifications (check the following box):
   All walls shall be formed with rigid forming systems and shall not be earth-formed.
- 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.
- 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.
- 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<sup>3</sup> 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)<sup>3</sup> at the operation:

Name of operation:	J2T2 LLC		County:	Scott
Owner's name:	J2T2 LLC			
will be constructed in	accordance with these	minimum requirements. Included with this certi	fication are:	
Pages 3 to 5 (a	policable sections)	age structure <sup>3</sup> that have different dimensions	Floodplains Dept	
Darrin Vittetoe		This Vittite		08-22-15
(Print r	name)	(Signature)		(Date)
Custom Builders Ir	10.	209 W. South St. Tipton, la. 52772		563-886-6196
(Com		(Address)		(Phone No.)
(See page 6 for mailing inst	tructions)			
into a known sin section:	khole the person res	ation: If "Yes" was checked in Section 1.C (page ponsible for constructing the formed manure st	orage struct	ure must also complete this
567 IAC 65.15(14)"c"	. Karst terrain—upgrad	led standards. If the site of the proposed forme	a manure su	rote standards set forth in
an area that exhibits	karst terrain or an a	rea that drains into a known sinkhole, the mi	d manure st	corage structures that stor
65.15(14)"a" or "b" s	shall apply. In addition	, the following requirements apply to all forme		orage structures that store
nondry or dry manure	e (check all of the follow	wing boxes):	formed mar	oure storage structure and
(1) A minim	ium 5-foot vertical se	paration distance between the bottom of a	o structure is	not designed by a PF or a
		ble rock is required if the formed manure storag	e structure is	shot designed by a re or a
NRCS engine	er.	e between the bottom of the proposed formed i	manura stora	ge structure and limestone
(2) If the vert	ical separation distanc	e between the bottom of the proposed formed i	nanuie store	Be su detare and intestorie

(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 liner material 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 or two test pits, equally spaced within 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) Groundwater monitoring shall be performed as specified by the department.

(5) 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)<sup>3</sup> at the above operation will be constructed according to these standards":

(Print name)	(Signature)	(Date)
(Company) (See page 6 for mailing instructions)	(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<sup>4</sup>. This page must be completed and signed by the person responsible for excavating the confinement feeding operation structure<sup>4</sup>:

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 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.

"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<sup>4</sup> at:

Name of operation:	County:
Owner's name:	
will not impede the drainage of established drainage tile lines w	which cross their property lines and if construction disturbs drainage
tile lines, I will take the necessary measures to reestablish dr	ainage and, upon completion of construction, file a statement that
those measures were taken to reestablish drainage."	

(Print name)	(Signature)	(Date)
(Company)	(Address)	(Phone No.)

Mailing Instructions: Mail only pages 1 to 5, and page 6 (if applicable) of this CDS according to the following:

 Operations not needing a construction permit (AUC<sup>1</sup> between 501 and 999 AU and constructing a formed manure storage structure<sup>3</sup>) but required to submit a manure management plan (MMP), at least <u>30 days</u> prior to beginning construction must file this CDS, the required karst and alluvial soils documentation requested in Section 1,C and 1,D (page 1) along with the required MMP documents and fees with the nearest DNR Field Office:

* 3	2 1	Field Office 1 909 W Main St Ste 4 Manchester, IA 52057 (563) 927-2640	Field Office 3 1900 N Grand Ave Spencer, IA 51301 (712) 262-4177	Field Office 5 7900 Hickman Rd Ste 200 Windsor Heights, IA 50324 (515) 725-0268
4		Field Office 2 2300 15th St SW Mason City, IA 50401 (641) 424-4073	Field Office 4 1401 Sunnyside Ln Atlantic, IA 50022 (712) 243-1934	Field Office 6 1023 W Madison Washington, IA 52353 (319) 653-2135

2. If a construction permit is required (AUC<sup>1</sup> = 1,000 AU or more and constructing a formed manure storage structure<sup>3</sup>), mail this CDS, the required construction application documents and fees, at least 90 days prior to beginning construction, to allow for all actions required by Iowa Iaw, to the AFO-Program (DNR Field Office 3, 1900 N Grand, Gateway North Ste E17, Spencer IA 51301). You must follow the instructions in the construction application form (DNR Form 542-1428).

If you have any questions regarding the concrete standards requirements and CDS, contact an engineer of the AFO- Program at 712-262-4177, the nearest DNR Field Office, or visit <u>http://www.iowadnr.gov/</u>.

Iowa DNR - AFO Siting

DWA OWA

🌸 Agriculture Drainage

Wells Operation

Well

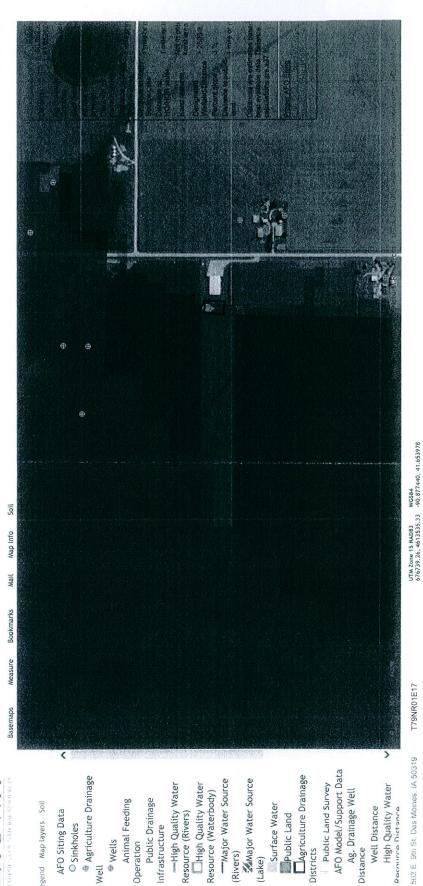
Legend Map layers Soil

AFO Siting Data

Sinkholes

AFO Sitin

Page 1 of 1



https://programs.iowadnr.gov/maps/afo/

proposed building

J272 LLC

AFO Model/Support Data

Public Land Survey Ag. Drainage Well High Quality Water

Well Distance

Distance

Agriculture Drainage

Districts

Surface Water

Public Land

-Major Water Source Major Water Source

(Rivers) (Lake)

High Quality Water Resource (Waterbody) Resource (Rivers)

Public Drainage Animal Feeding

Infrastructure

8/13/2015



Terry E. Branstad, Governor Kim Reynolds, Lt. Governor

### STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES CHUCK GIPP, DIRECTOR

August 17, 2015

J2T2 LLC C/O DARRIN VITTETOE CUSTOM BUILDERS, INC. 209 W. SOUTH STREET TIPTON, IA 52772

RE: <u>Proposed Confinement Feeding Operation; J2T2 LLC Facility; Flood Plain</u> <u>Determination (Unnamed Tributary to Mud Creek)</u> NE1/4 of the NE1/4 of Section 17, T79N, R01E; Scott County, Iowa (WR 82313)

Dear Mr. Vittetoe:

This letter is in response to your request for a flood plain determination for the above project. The Department has reviewed the information submitted and concludes that the proposed confinement animal feeding operation will not be located on the "one hundred year flood plain".

This letter only pertains to the determination of whether the project site is on the "one hundred year flood plain" according to 567 Iowa Administrative Code (IAC) 65.7(9), and **is not** final clearance for construction. <u>All other federal, state and local permits, clearances and approvals</u> <u>must be obtained prior to construction</u>. It is my understanding that the facility requires a construction permit from our Wastewater Permits Section because of the number of animal units. If you have not already done so, please contact Paul Petitti at 712-262-4177.

The owner is responsible for complying with all local, state and federal statutes, ordinances, rules and permit requirements applicable to the construction, operation and maintenance of the approved works. Please note that a Flood Plain Development Permit from the Department is not required according to 567 IAC 71, nor is an IDNR Sovereign Lands Construction Permit required. The project may require a Section 404 Permit from the Corps of Engineers, Rock Island District.

If you have any questions, please call me at 515-725-8347.

Sincerely

Andrew Jensen, P.E. Environmental Engineer Flood Plain Management & Dam Safety Section

Copies -IDNR FO #6 -Mr. Paul Petitti, Animal Feeding Operation Program, IDNR FO #3, -Mr. Ward Lenz; Rock Island District, U.S. Army Corps of Engineers; P.O. Box 2004; Rock Island, IL 61204-2004 (location map included)

### **Manure Management Plan Form Animal Feeding Operation Information**

Page 1

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

**क्रिसिक्** 

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.

							Date:	
me of operation: Jeff Pa	aulsen					Facili	ty ID No.	6692
cation of the operation	: 23580	20th Ave						
		(911 address)		+				
	Stock				IA		52769 (Zip)	)
		(Town)	'9N R 1E		(State) Cleor		(Zip)	Scott
<u>NE</u> 1/4 of the <u>NE</u> (1/4)		17 T 7 Section)	(Tier & Range)			nship Name)		(County)
vner and contacts of th	e animal fe	eding opera	ation:					
Owner J2T2 LLC						Phone	563-285-4006	
Address 12090 240th S	t. Eldridge,	IA 52748						
E-mail address (optional)						Cell	phone (optional)	
		T D:###				Phone	563-285-4006	
Contact person (if different	than owner)	Tom Dittmer				1 попе	303-203-1000	
Address 12090 240th S E-mail address (optional)	t. Eldridge,	IA 32740				Cell	phone (optional)	563-370-5129
E-mail address (optional)							1	
	~ .	• •	T			Dhone	563-285-4006	
Contract company (if applic	able) Grand	view Farms,	Inc.			Flione	303-285-4000	
Address 12090 240th S	t. Elariage,	IA 32/40						
		and the Constant design of the second se						
			``					
is manure managemen	t plan is fo	r: (check on	ne)		aviatio	- operation new	oumer	new operation
is manure managemen existing operation, not expandin	nt plan is fo	r: (check on	ne) on, expanding		existing	g operation, new	owner	new operation
existing operation, not expandin	ng <u>X</u>	r: (check on	on, expanding					new operation
is manure managemen existing operation, not expandin nstruction and Expans	ng <u>X</u>	r: (check on	ne) n, expanding 2011	_date o	of initia	I construction		new operation
existing operation, not expanding operation, not expanding operation and Expans	ng <u>X</u> sion Dates:	r: (check on existing operatio	n, expanding 2011	_date o	of initia II expa	I construction	1	new operation
existing operation, not expanding operation, not expanding operation and Expans	ng <u>X</u> sion Dates:	r: (check on existing operatio	n, expanding 2011	_date o	of initia II expa	I construction	1	
existing operation, not expandin	ng <u>X</u> sion Dates:	r: (check on existing operatio	n, expanding 2011	_date o	of initia II expa	I construction	1	new operation
existing operation, not expandin nstruction and Expans ————————————————————————————————————	ng <u>X</u> sion Dates: about live:	r: (check on existing operatio	n, expanding 2011 action and man	_date date date date date date date date	of initia II expa anag	Il construction Insions ement syste	m 7	8
existing operation, not expanding operation, not expanding operation and Expanse	sion Dates: about live: 2 Max # of animals	r: (check on existing operatio	n, expanding 2011 action and mai 3	_date ofdate	of initia II expa anag 5	al construction Insions ement syste	m 7 Days/yr Facility	8 Annual Manure
existing operation, not expanding operation, not expanding operation and Expanse Table 1. Information           1           Animal type/           Production phase <sup>a</sup>	sion Dates: about live: 2 Max # of	r: (check on existing operatio	n, expanding 2011 action and man	_date o _and a nure m 4 	of initia II expa anag 5 P <sub>2</sub> O <sub>5</sub> <sup>c</sup>	Il construction Insions ement syste 6 gal/space/dy <sup>d</sup>	m 7	8 Annual Manure Produced <sup>e</sup>
existing operation, not expanding operation, not expanding operation and Expanse	sion Dates: about live: 2 Max # of animals	r: (check on existing operatio	n, expanding 2011 action and mai 3	_ date ofdate ofdat	of initia II expand anag 5 $P_2O_5^{\circ}$	al construction Insions ement syste 6 gal/space/dy <sup>d</sup> 0.0	m 7 Days/yr Facility	8 Annual Manure Produced <sup>e</sup> 000
existing operation, not expanding operation, not expanding operation and Expanse Table 1. Information           1           Animal type/           Production phase <sup>a</sup>	sion Dates: about live: 2 Max # of animals	r: (check on existing operatio	n, expanding 2011 action and mai 3	_date o _and a nure m 4 	of initia II expa anag 5 P <sub>2</sub> O <sub>5</sub> <sup>c</sup>	Il construction Insions ement syste 6 gal/space/dy <sup>d</sup>	m 7 Days/yr Facility	8 Annual Manure Produced <sup>e</sup> 000 000
existing operation, not expanding mstruction and Expanse Table 1. Information 1 Animal type/ Production phase <sup>a</sup> Select production phase	sion Dates: about live: 2 Max # of animals	r: (check on existing operatio	n, expanding 2011 action and mai 3	_ date ofdate ofdat	of initia II expand anag 5 $P_2O_5^{\circ}$	al construction Insions ement syste 6 gal/space/dy <sup>d</sup> 0.0	m 7 Days/yr Facility	8 Annual Manure Produced <sup>e</sup> 000 000 000
existing operation, not expanding nstruction and Expanse Table 1. Information 1 Animal type/ Production phase <sup>a</sup> Select production phas	sion Dates: about live: 2 Max # of animals	r: (check on existing operatio	n, expanding 2011 action and mai 3	_date of _and a nure m 4 N° 0	of initia II expand anag $P_2O_5^{\circ}$ 0 0	al construction insions ement syste 6 gal/space/dy <sup>d</sup> 0.0 0.0	m 7 Days/yr Facility	8 Annual Manure Produced <sup>e</sup> 000 000
existing operation, not expandin nstruction and Expans Table 1. Information 1 Animal type/ Production phase <sup>a</sup> Select production phas Select phase Select phase Sele	ng X sion Dates: about live: 2 Max # of animals confined	r: (check on existing operatio	n, expanding 2011 action and man 3 orage Structure <sup>b</sup>	_date of and a and a and a 4 4 v^c 0	of initia II expand anag <b>5</b> $P_2O_5^{\circ}$ 0 0 0	al construction insions ement syste 6 gal/space/dy <sup>d</sup> 0.0 0.0 0.0 0.7	m 7 Days/yr Facility occupied 355	8 Annual Manure Produced <sup>e</sup> 000 000 000 1,209,600
existing operation, not expanding nstruction and Expanse Table 1. Information 1 Animal type/ Production phase <sup>a</sup> Select production phas • Select production phas • Select production phas • Wean/finish (dry feed)	mg X sion Dates: about live: 2 Max # of animals confined 4800	r: (check on existing operatio	n, expanding 2011 action and man 3 orage Structure <sup>b</sup> eep pit	_date of _and a _and a 	of initial anag 5 $P_2O_5^{\circ}$ 0 0 0 27	al construction insions ement syste 6 gal/space/dy <sup>d</sup> 0.0 0.0 0.0 0.7	m 7 Days/yr Facility occupied	8 Annual Manur Produced <sup>e</sup> 000 000 000 1,209,600
existing operation, not expandin nstruction and Expans Table 1. Information 1 Animal type/ Production phase <sup>a</sup> Select production phas Select phase Select phase Sele	mg X sion Dates: about live: 2 Max # of animals confined 4800	r: (check on existing operatio	n, expanding 2011 action and man 3 orage Structure <sup>b</sup> eep pit	_date of and a and a and a 4 4 v^c 0	of initial anag 5 $P_2O_5^{\circ}$ 0 0 0 27	al construction insions ement syste 6 gal/space/dy <sup>d</sup> 0.0 0.0 0.0 0.7	m 7 Days/yr Facility occupied 355	8 Annual Manur Produced <sup>e</sup> 000 000 1,209,600 1,209,600

### विमिषि

### 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)<sup>g</sup>

(identify this application scenario by letter)

Method to determine optimum crop yield<sup>b</sup> USDA Iowa Ag Statistics County yields

elds 👻 Tin

Timing of application Fall

Application loss factor

Page 2

0.98

Method of application Knifed in or soil injection of liquid manure If spray irrigation is used, identify method

### Table 2. Manure nutrient concentration

Manure Storage Structur	re(s) <sup>k</sup>	Deep pit			
Total N <sup>1</sup>	41		P <sub>2</sub> O <sub>5</sub>	27	
%TN Available 1st year	80%	2nd year	20%	3rd year	
Available N 1st year <sup>m</sup>	32.1	2nd year <sup>n</sup>	8.0	3rd year <sup>o</sup>	0.0

### Table 3. Crop usage rates<sup>p</sup>

lb/bu or lb/ton	N	P <sub>2</sub> O <sub>5</sub>
Corn	1.2 🔻	0.375
Soybean	3.8	0.8
Alfalfa	50	12.5
Other crop 🗸	0	0

\*Use blank space above to add crop not listed.

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

THN	te 4. Calculations for face based on milling	(al ways	requireu)			
1	<b>Applying Manure For</b> (crop to be grown) <sup>q</sup>		Corn 💌	Soybean 🔻	Com 🖵	Soybean 🔻
2	Optimum Crop Yield <sup>h</sup>	bu or ton/acre	235	57	235	57
3	P <sub>2</sub> O <sub>5</sub> removed with crop by harvest <sup>r</sup>	lb/acre	88.1	45.6	88.1	45.6
4	Crop N utilization <sup>s</sup>	lb/acre	282	217	282	217
<b>5</b> a	Legume N credit <sup>t</sup>	lb/acre	50.00	0	50	0
5b	Commercial N planned <sup>u</sup>	lb/acre	50	and and an all	50	ana talia ana ara
5c	Manure N carryover credit <sup>v</sup>	lb/acre		45.5	0.0	45.5
6	Remaining crop N need <sup>w</sup>	lb/acre	182	171	182	171
7	Manure rate to supply remaining N <sup>x</sup>	gal/acre	5662	5323	5662	5323
8	P <sub>2</sub> O <sub>5</sub> applied with N-based rate <sup>y</sup>	lb/acre	153	144	153	144

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

9	Commercial P <sub>2</sub> O <sub>5</sub> planned <sup>z</sup>	lb/acre				and provide the set
10	Manure rate to supply P removal <sup>aa</sup>	gal/acre	3264	1689	3264	1689
11	Manure rate for P based plan bb	gal/acre				
12	Manure N applied with P-based plan $^{\circ\circ}$	lb/acree	0	0	0	0

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

13Planned manure application rategal/acre56625662	13 Planned manure application rate <sup>dd</sup>	gal/acre	5662	5662	
---	--	----------	------	------	--

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.

(>5-10) Until December 31, 2008, P-based manure management while adopting practices to reduce P index to 5 or below.

(>10) No manure application until practices are adopted to reduce P index to 5 or below

**B** 

## Manure Management Plan Form

## Year by Year Manure Management Plan Summary

Page 3

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 <u>identical</u> 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 page 6.

## Crop year(s): 2014 and 2016 and 2018

	Correct Soil Test	for P <sup>ll</sup> (Yes	Yes	Yes	Yes	Yes	Yes																		
101	Planned Application	oal/field <sup>kk</sup>	0	1146704	0	0	140778	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1287482
6	Planned /	0		5513	0	0	5214																		be applied
8		HEL	Y	Y	Y	z	z																		could l
/		P index value <sup>ii</sup>	2.68	1.60	1.60	0.77	0.78																		is that
9	Own. rent.	lude 11) <sup>hh</sup>	-	Agreement-ever	Agreement-ever	Agreement-ever	Agreement-ever																		Total gallons that could be applied
L c	Acres	receiving manure <sup>gg</sup>	146	208	20	133	27				2														534
4		Planned Cron	Soybean	Corn	Soybean	Soybean	Corn																		re application
3		Mgt Id <sup>ff</sup>	CB2	CB2	CB2	CB3	CB1																		e app
		<u>1/4 of the 1/4 Sec T R</u> Townsip Name County Name	NW 16 79N 1E Cleona, Scott	NE, N1/2 SE E1/2 NW, NE SW 17 79N 1E Cleona,	NE, N1/2 SE E1/2 NW, NE SW 17 79N 1E Cleona,	NE 20 79N 1E Cleona, Scott	NW NW 21 79N IE Cleona, Scott																		Total acres available for manur
		Field Designation <sup>ee</sup>		Home Place	Home Place 20	I80 Paulsen	I80 East																		

**Manure Management Plan Form** 

(All of the second seco

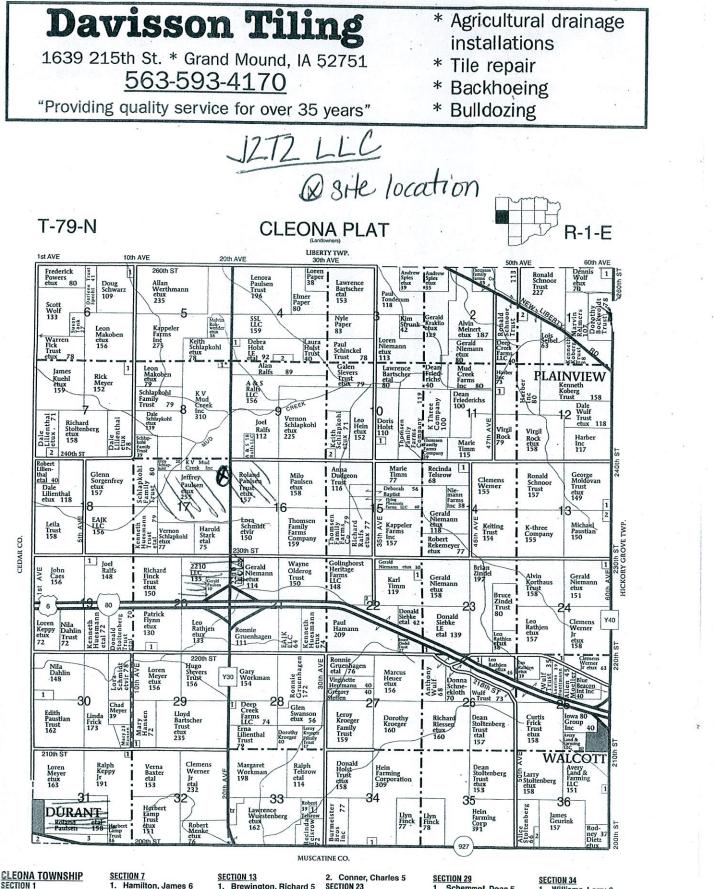
Year by Year Manure Management Plan Summary

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 <u>identical</u> 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 page 6.

## Crop year(s): 2013 and 2015 and 2017 and 2019

II	Lorrect Soil Test	for P <sup>ll</sup> (Yes	kk or No)	3 Yes	Yes	Yes	5 Yes	Yes																		V
10	Planned Application		gal/field <sup>kk</sup>	804898	0	110260	753046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1668204
6	Planned		gal/acre	5513	0	5513	5662	0																		he annlied
8		HEL	(N/N)	Υ	Υ	Y	Z	Z																		could
1		P index	value <sup>ii</sup>	2.68	1.60	1.60	0.77	0.78																		ne that
9	Own. rent.	agreement (include	length of agreement) hh	Agreement-ever	Agreement-ever	Agreement-ever	Agreement-ever	Agreement-ever																		Total gallons that could be applied
c	Acres	receiving	manure <sup>gg</sup>	146	208	20	133	27																		V C S
4		Planned	Crop	Corn	Soybean	Corn	Corn	Soybean																		lingtion
S		Mgt	Id <sup>#</sup>	CB2	CB2	CB2	CB3	CB1																		THE ON
2	eld Location	Townsip Name Country Name		NW 16 79N 1E Cleona, Scott	NE, N1/2 SE E1/2 NW, NE SW 17 79N 1E Cleona,	NE, N1/2 SE E1/2 NW, NE SW 17 79N 1E Cleona,	NE 20 79N 1E Cleona, Scott	NW NW 21 79N 1E Cleona, Scott																		Total acros available for manue analization
1		Field	Designation <sup>ee</sup>	East Farm	Home Place	Home Place 20	180 Paulsen	I80 East																		

Page 3



SECTION 1 1. Kramer, Duane 7

- 2 Marlof, Albert 12
- **SECTION 4**
- Kuehl, James 10
- 2 Schinckel Trust, Paul
- 21
- SECTION 6
- Samuels Trust, Marsha

SECTION 8

SECTION 10

Carmen 6

Brewington, Richard 5 Sorensen, Douglas 6 1. Lilienthal, Robert 9 SECTION 14 1. Rochholz, Kenneth 9 SECTION 19 1. Schlapkohl, Keith 5 1. Jacobse SECTION 20 1. Hamrighausen, Wegener, Lucas 8 1. Fick, Ronald 14 SECTION 22 1. Schueller, Daryl 8 SECTION 11 1. KV Mud Creek Inc 6

n, Sarah 5

SECTION 23 1. Meinert, Elaine 12 SECTION 24 Bolden, Eonell 5 SECTION 25 Rathjen, Leo 5 SECTION 26 1. Zindel, Brian 10 SECTION 28 1. Randall, Lee 5

SECTION 29 1. Schemmel, Dean 5 SECTION 30 1. Keppy, Loren 14 SECTION 31 Schemmel, Thomas 7 2. Durant Cemetery Assoc 5 3. Paulsen, Darwin 14 SECTION 33. 1. Nickerson, Gary 6

SECTION 34 1. Williams, Larry 6 SECTION 36 Taylor, Robert 6 2. Stoltenberg, Larry 11

SCOTT CO., IA

USDA NRCS hand the out a Contention here a

### Iowa Phosphorus Index

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

= Overall	٩	Index	0.77	0.78
charge	Tile/Sub		0.08	
ibsurface Re	STP	Factor =	0.08	0.08
Tile / Su	Flow	Factor x	1.00	
+	Runoff	₫	0.48	0.61
	P App	Factor ) =	0.04	0.04
Runoff	STP	actor +	0.30	0.30
	RCN	~	1.40	
+	ion	1		0.09
	Eros	L II	1	2
	It STP	x Factor	0.9	0.91
	Enrichmer	k Factor	1.10	1.10
Erosion	Buffer	Factor >	1.00	1.00
-		K SDR X	0.08	0.10
	Sediment	x Trap Factor x SDR x Factor >	1.00	1.00
	Gross	Erosion x		0.87
Field Number			180 paulsen	180 east



### lowa Phosphorus Index

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

Overall	٩	Index	2.68	1.60	
charge :	Tile/Sub	Ы	0.08	0.08	
subsurface Recharg	STP	Factor =	0.08	0.08	
- Tile / Su	Flow	Factor x	1.00	1.00	
+	Runoff	Ы	0.39	0.34	
	P App	Factor ) =	0.07	0.07	
Runoff	STP	actor +	0.22	0.18	
	RCN	Factor x ( )	1.40	1.40	
		ш			
	Erosion	F	2.20	1.18	
		H			
	STP	Factor	0.84	0.81	
	Enrichment	Factor >	1.10	1.10	
Erosion	Buffer E	Factor x	1.00	1.00	
u		SDR ×	0.43	0.43	
	Sediment	Erosion X Trap Factor X SDR X Factor X	1.00	1.00	
	Gross	Erosion x	5.60	3.10	
Field Number			East Farm	Home Farm	

•

}

### Jeff Paulsen Yield Calculation

### **180** Paulsen

		<b>Field Yield</b>	235	CB3	Sout of
	133.8		31386.9	002	5662 g/A
1119	0.3	240	72		
1118	7.3	233	1700.9		
133	3.3	210	693		
120b	81.7	235	19199.5		
119b	33.3	235	7825.5		
119	7.9	240	1896		
Soil type	Acres	Corn Yield	Bushels		

Soil type	9	Acres	Corn Yield	Bushels
11b		0	221	0
	119	10.5	240	2520
120b		0.8	235	188
	133	15.5	210	3255
		26.8		5963
			<b>Field Yield</b>	223

**Home Place** 

		<b>Field Yield</b>	231
	228.5		52700.5
1119	90.4	240	21696
1118	17.1	233	3984.3
420b	24.2	235	5687
160	2.1	180	378
133	23.3	210	4893
120c2	22.6	221	4994.6
120c	12.6	228	2872.8
120b	13.9	235	3266.5
11b	22.3	221	4928.3
Soil type	Acres	Corn Yield	Bushels

East Farm

		<b>Field Yield</b>	231
	154		35468.2
120c2	32.6	221	7204.6
120c	31.2	228	7113.6
120b	90	235	21150
Soil type	Acres	Corn Yield	Bushels

23 CBI 5214g/A

ld 231 CB2 5513g/A

### **Map Unit Legend**

	Scott County, Iowa (IA	163)	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
120B	Tama silty clay loam, 2 to 5 percent slopes	90.0	58.9%
120C	Tama silty clay loam, 5 to 9 percent slopes	30.2	19.8%
120C2	Tama silty clay loam, 5 to 9 percent slopes, moderately eroded	32.6	21.3%
Totals for Area of Intere	st	152.8	100.0%

231 bir yd. average yd.



	Scott County, Iowa (IA1	63)		
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
11B	Colo-Ely complex, 0 to 5 percent slopes	22.3	9.8%	
120B	Tama silty clay loam, 2 to 5 percent slopes	13.9	6.1%	
120C	Tama silty clay loam, 5 to 9 percent slopes	12.6	5.5%	
120C2	Tama silty clay loam, 5 to 9 percent slopes, moderately eroded	22.6	9.9%	
133	Colo silty clay loam, 0 to 2 percent slopes	23.3	10.2%	
160	Walford silt loam, 0 to 2 percent slopes	2.1	0.9%	
420B	Tama silty clay loam, benches, 2 to 5 percent slopes	24.2	10.6%	
1118	Garwin silty clay loam, benches, 0 to 2 percent slopes	17.1	7.5%	
1119	Muscatine silty clay loam, benches, 0 to 2 percent slopes	90.4	39.6%	
Totals for Area of Intere	st	228.5	100.0%	

### **Map Unit Legend**

231 pie average yeld



180 Paulsen

	Scott County, lov	va (IA163)		
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
119 240	Muscatine silty clay loam, 0 to 2 percent slopes	7.9	5.9%	
119в 235	Muscatine silty clay loam, 2 to 5 percent slopes	33.3	24.9%	
120B 235	Tama silty clay loam, 2 to 5 percent slopes	81.7	61.1%	
<sup>133</sup> 210	Colo silty clay loam, 0 to 2 percent slopes	3.3	2.5%	
1118 233	Garwin silty clay loam, benches, 0 to 2 percent slopes	7.3	5.5%	
1119 240	Muscatine silty clay loam, benches, 0 to 2 percent slopes	0.3	0.3%	
5040	Orthents, loamy	0.0	0.0%	
Totals for Area of Interest	1	133.8	100.0%	

### Map Unit Legend

lieb up



### Land Application Agreement

Agreed this date 8-25-15 between J2T2 LLC, herein known as "producer" and Jeff Paulsen, herein known as "landowner."

The producer will apply manure generated at swine production facilities located at: NE1/4 NE1/4 Section 17 T79N R1E Cleona Township, Scott County

The landowner acknowledges the use of 534 acres of land by the producer for the spreading of manure and such land is located at: NW1/4 section 16 (East Farm), NE1/4 & N1/2 SE1/4 & E1/2 NW1/4 & SW1/4 section 17 (Home Place and Home Place 20), NE1/4 section 20 (I80 Paulsen), NW1/4 NW1/4 section 21 (180 East). All located in Cleona Township, Scott County

This manure application agreement is for one year and will continue annually until a 120 day notice is given by one of the parties.

The manure will be applied in accordance with any and/or all conditions required by any and/or all of the confined feeding permits required or issued for this operation to the producer. The producer shall adhere to any and/or all of the set forth conditions for manure application on this parcel of land. The producer shall provide the following information to the landlord:

1. Manure tests results generated by an accredited testing facility.

2. Manure application logs documenting applied nutrients to this land.

The landowner shall provide the following information to the landlord:

- 1. Planned crop rotations.
- 2. Planned commercial fertilizer application.
- 3. Soil tests to meet producer MMP requirements.

Producer

Landowner

By: J2T2UC - Juff Parlon By: Jeff Parlo Date: 8-25-15 Date: 8-25-15

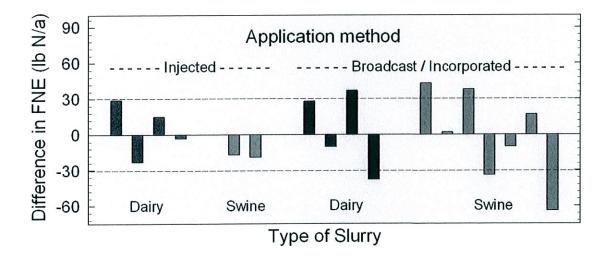
### **University of Minnesota Extension Fact Sheet**

### Nitrogen Availability from Liquid Swine and Dairy Manure: Results of On-Farm Trials in Minnesota

Manure nitrogen (N) availability depends on application method, as seen in general predictions by the University of Minnesota (UM Extension Bulletin WW-03553), because application method will influence ammonia loss (see Table 1). We evaluated the predictions of manure N availability on 13 Minnesota farms in 2005 and 2006 by measuring corn yield response to liquid swine and dairy manure. A short summary of results is presented here. Complete methods and results are found in UM Extension Bulletin 08583 of the same title.

Table 1. Predicted manure N loss and availability for the first and second year after application of dairy and swine manure. (Excerpted from UM Extension Bulletin WW-03553)

		Surface broadcast, followed by incorporation in			Direct injection	
Туре		12 hours	< 4 days	4 days	Sweep	Knife
- ) [-				% Total N		
Dairy	Loss	10	20	40	5	10
,	Year 1 availability	55	40	20	55	50
	Year 2 availability	25	25	25	25	25
Swine	Loss	10	30	50	5	15
	Year 1 availability	75	55	35	80	70
	Year 2 availability	15	15	15	15	15



**Results:** At individual sites, predictions for injected manure were more reliable than for broadcast-incorporated manure, since they were consistently within 30 lb N/acre of the measured fertilizer N equivalent. In contrast, more than one-half of the predictions for broadcast-incorporated manure were greater than 30 lb N/acre higher or lower than the measured value. (Columns in the figure that are above the zero line indicate that more manure N was available than predicted using Table 1; those under the zero line indicate that Table lover-predicted N availability.)

*Conclusion:* Predictions of N availability from injected liquid manure are more reliable than for broadcast-incorporated liquid manure. Direct injection by knives or sweeps is recommended to get the most predictable and highest value from manure N.



Home Place - Paulsen

### Inputs:

Soil: 420B Tama silty clay loam, benches, 2 to 5 percent slopes/Tama silty clay loam bench 100% Location: lowa\Scott County Slope length (horiz): 200 ft

Avg. slope steepness: 4.0 %

INALIAGEIIEII	vegerarion	rieid units	TIEID (# OI UTILS)
CMZ 04\c.Other Local Mgt Records\CB JPaulsen Corn,	Corn, grain	bushels	206.00
CMZ 04\c.Other Local Mgt Records\CB JPaulsen   Soybean, m	oybean, mw 30 in rows	pn	56.000

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

Soil loss erod. portion: 3.1 t/ac/yr Detachment on slope: 3.1 t/ac/yr Soil loss for cons. plan: 3.1 t/ac/yr Sediment delivery: 3.1 t/ac/yr Outputs: T value: 5.0 t/ac/yr

Crit. slope length: -- ft Surf. cover after planting: -- %

	Operation	Vegetation	Surf. res. cov. after op, %
nure injector, liquid	Manure injector, liquid low disturb.30 inch		88
Chisel, st. pt.	tt. pt.		41
Cultivator, field 6-12 in sweeps	12 in sweeps		24
Planter, double disk opnr	disk opnr	Corn, grain	21
Harvest, killing crop 50pct standing stubble	ct standing stubble		88
Ripper, intra row	a row		86
Planter, double disk opnr		Soybean, mw 30 in rows	85
Harvest, killing crop 30pct standing stubble	ct standing stubble		91



East Farm - Paulsen

### Inputs:

Soil: 120C2 Tama silty clay loam, 5 to 9 percent slopes, moderately eroded\Tama silty clay loam moderately eroded 100% Avg. slope steepness: 7.0 % Location: Iowa\Scott County Slope length (horiz): 200 ft

Management	Vegetation	Yield units	Yield (# of units)
CMZ 04/c.Other Local Mgt Records/CB JPaulsen	Corn, grain	bushels	195.00
CMZ 04\c.Other Local Mgt Records\CB JPaulsen Soybean, mw 30 in rows bu			

53.000

Contouring: b. absolute row grade 3 percent Strips/barriers: (none) Diversion/terrace, sediment basin: (none)

Adjust res. burial level: Normal res. burial Subsurface drainage: (none)

### Outputs:

Soil loss erod. portion: 5.6 t/ac/yr Detachment on slope: 5.6 t/ac/yr Soil loss for cons. plan: 5.6 t/ac/yr Sediment delivery: 5.6 t/ac/yr T value: 5.0 t/ac/yr

Surf. cover after planting: -- % Crit. slope length: 200 ft

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/15/0	Manure injector, liquid low disturb.30 inch		87
10/31/0	Chisel, st. pt.		40
4/22/1	Cultivator, field 6-12 in sweeps		23
5/5/1	Planter, double disk opnr	Corn, grain	20
10/20/1	Harvest, killing crop 50pct standing stubble		87
4/22/2	Ripper, intra row		85
5/10/2	Planter, double disk opnr	Soybean, mw 30 in rows	84
10/5/2	Harvest, killing crop 30pct standing stubble		06



### 180 East CB

ts: Location	Soil	Slope length (horiz)	Avg. slope steepness, %
USA\Iowa\Scott County	Scott County, Iowa\133 Colo silty clay loam, 0 to 2 percent slopes\Colo Silty clay loam occasionally flooded 95%	200	1.0

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\cb paulsen 2015	vegetations\Corn, grain	bushels	210.00
		bu	61.000

Contouring	Strips/barriers	Diversion/terrace, sediment basin	Subsurface drainage	Adjust res. burial level	General yield level	Rock cover, %
a. rows up-and-down hill	(none)	(none)	(none)	Normal res. burial	Set by user	0

### Outputs:

T	Soil loss erod.	Detachment on slope	Soil loss for	Sediment	Net C	Net K	Crit. slope	Surf. cover after
value	portion		cons. plan	delivery	factor	factor	length	planting, %
5.0	0.87	0.87	0.87	0.87	0.11	0.32	200	

Date	Operation	Vegetation	Surf. res. cov. after op, %
11/1/0	Manure injector, liquid high disturb.30 inch		37
11/1/0	Chisel, st. pt.		37
5/1/1	Disk, tandem heavy primary op.		11
5/1/1	Cultivator, field 6-12 in sweeps		11
5/1/1	Sprayer, pre-emergence		11
5/1/1	planter, double disk opnr	Corn, grain	11
6/7/1	Sprayer, post emergence and fert. tank mix		20
10/20/1	Harvest, killing crop 50pct standing stubble		88
5/10/2	Sprayer, pre-emergence		89
5/10/2	Planter, double disk opnr	Soybean, mw 30 in rows	89
6/7/2	Sprayer, post emergence		88
8/1/2	Sprayer, insecticide post emergence		71
10/10/2	Harvest, killing crop 20pct standing stubble		92

### FUEL USE EVALUATION:

I OLL OOL LIALOANS			
Fuel type for entire run	Equiv. diesel use for entire simulation	Energy use for entire simulation	Fuel cost for entire simulation, US\$/ac
(none)	9.7	1300000	0

### SCI and STIR Output

Soil conditioning index	SCI OM	SCI FO	SCI ER	Avg. annual slope	Wind & irrigation-induced erosion for SCI,
(SCI)	subfactor	subfactor	subfactor	STIR	t/ac/yr
0.600	0.79	0.39	0.66	62.1	0

The SCI is the Soil Conditioning Index rating. If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase under that system.

The STIR value is the Soil Tillage Intensity Rating. It utilizes the speed, depth, surface disturbance percent and tillage type parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation. STIR ratings tend to show the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes are evaluated for the entire cropping rotation as shown in the management description.



### 180 Paulsen CB

. .

Location	Soil	Slope length (horiz)	Avg. slope steepness, %
USA\Iowa\Scott County	Scott County, Iowa\119B Muscatine silty clay loam, 2 to 5 percent slopes\Muscatine Silty clay loam 95%	200	4.0

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\cb paulsen 2015	vegetations\Corn, grain	bushels	235.00
		bu	68.000

Contouring	Strips/barriers	Diversion/terrace, sediment basin	Subsurface drainage	Adjust res. burial level	General yield level	Rock cover, %
a. rows up-and-down hill	(none)	(none)	(none)	Normal res. burial	Set by user	0

### Outputs:

T	Soil loss erod.	Detachment on	Soil loss for	Sediment	Net C	Net K	Crit. slope	Surf. cover after
value		slope	cons. plan	delivery	factor	factor	length	planting, %
5.0	2.6	2.6	2.6	2.6	0.093	0.28	200	

Date	Operation	Vegetation	Surf. res. cov. after op, %
11/1/0	Manure injector, liquid high disturb.30 inch		40
11/1/0	Chisel, st. pt.		40
5/1/1	Disk, tandem heavy primary op.		12
5/1/1	Cultivator, field 6-12 in sweeps		12
5/1/1	Sprayer, pre-emergence		12
5/1/1	planter, double disk opnr	Corn, grain	12
6/7/1	Sprayer, post emergence and fert. tank mix		20
10/20/1	Harvest, killing crop 50pct standing stubble		91
5/10/2	Sprayer, pre-emergence		91
5/10/2	Planter, double disk opnr	Soybean, mw 30 in rows	91
6/7/2	Sprayer, post emergence		90
8/1/2	Sprayer, insecticide post emergence		74
10/10/2	Harvest, killing crop 20pct standing stubble		94

### FUEL USE EVALUATION:

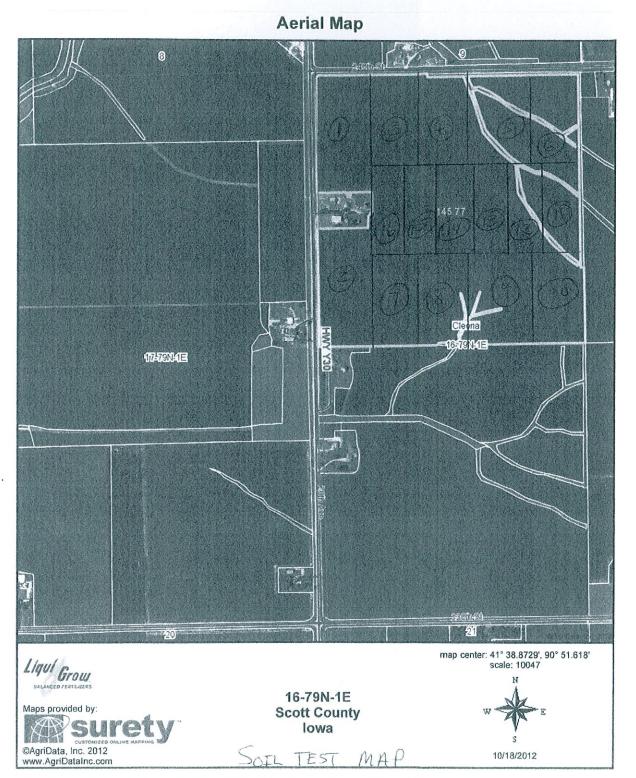
FULL OUL LIALOATIN	511.		
Fuel type for entire run	Equiv. diesel use for entire simulation	Energy use for entire simulation	Fuel cost for entire simulation, US\$/ac
(none)	9.7	1300000	0

### SCI and STIR Output

Soil conditioning index	SCI OM	SCI FO	SCI ER	Avg. annual slope	Wind & irrigation-induced erosion for SCI,
(SCI)	subfactor	subfactor	subfactor	STIR	t/ac/yr
0.540	0.97	0.39	-0.0061	62.1	0

The SCI is the Soil Conditioning Index rating. If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase under that system.

The STIR value is the Soil Tillage Intensity Rating. It utilizes the speed, depth, surface disturbance percent and tillage type parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation. STIR ratings tend to show the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes are evaluated for the entire cropping rotation as shown in the management description.



Field borders provided by Farm Service Agency as of 5/21/2008. Aerial photography provided by Aerial Photograpy Field Office.

JEFF PAULSEN - EAST FARM

http://www.suretymaps.com/reports/fsamap.aspx?datakey=895C29581ECDFA0505D2FF... 10/18/2012

REPORT NUMBER: 12-293-1211	Ag	ronology 10	
BACANCED FERTUZERS	- ag	ronology 10 Guide	
CLIENT: JEFF PAULSEN FARM LOCATION: EAST FARM		SUBMITTED BY: LIQUI GROW - WALCOTT DATE SUBMITTED: October 19, 2012 LAST CROP:	
LAB NUMBER: 24442208 SAMPLE NUMBER: 16 ANALYSIS DATE: October 23, 2012 FIELD NUMBER: LAT/LONG NUMBER:		YIELD: CROP ROTATION: YEAR 1 YEAR 2 YEAR 3 CROP: YIELD GOAL: PROGRAM:	
ACRES PER SAMPLE:		Alter Recommendations	
OIL ANALYSIS Test Results		SevereModerateSlightSatisfactoryExcellentDeficiencyDeficiencyDeficiencyLevelLevel	Excessive Level
Soil Acidity Soil or Water pH	6.8		
Buffer Index	-		
pluable Salts mmho roanic Matter Content %			
rganic Matter Content %			
nosphorus P <sub>1</sub> Weak Bray pp			
ydrogen % Base Saturation me otassium 3.6 % Base Saturation pp			
agnesium 17.8 % Base Saturation pp			
alcium 78.6 % Base Saturation pp			
odium - % Base Saturation pp			
ulfur ppi			
nc pp	m -		
anganese pp	m -		
ndd bu	n -		
оррег рр	m -		
oron pp	m -		
xcess Lime		Soil Type: 0 Sample Depth: 0-6 Sand (%) Silt (%)	Clay (%)
ation Exchange Capacity: meq/1	00g 15.7	Soil Map Unit: Soil Texture Analysis:	-
Fertilizer Recommendations	RECOM	MENDED NUTRIENT APPLICATIONSPOUNDS PER ACRE	CROP MAINTENANC
BY CROP	osphorus F P <sub>2</sub> O <sub>5</sub>	Calcium MagnesiumCalcium CarbonateZincManganeseIronCopperBoronK2OMgCaCO3SZnMnFeCuB	P <sub>2</sub> O <sub>5</sub> K <sub>2</sub> lbs. lb
REPARED BY:	overclassical states of the	ANALYTICAL	

Since weather, crop, soil and other conditions may vary, neither Twin State, Inc. nor the seller of Twin State, Inc. products makes any warranty whatsoever, express or implied, concerning Twin State, Inc. products, or any recommendations, suggestions or concepts, including, without limitations, any warranty of mechantability or fitness for a particular purpose. The user assumes all risk and responsibility for use, handling of product, recommendations or concepts, including of product, recommendations or concepts, and the product of the selfert of the self whether or not in accordance with directions, suggestions or recommendations.

LIGUIGEO FERTAZERS CLIENT: JEFF PAULSE FARM LOCATION: EAST FARM LAB NUMBER: 24442207 SAMPLE NUMBER: 15 ANALYSIS DATE: October 23, 20 FIELD NUMBER: LAT/LONG NUMBER:	DATE SUBMITTED: October 19, 2012 LAST CROP: YIELD: CROP ROTATION: YEAR 1 YEAR 2 YEAF		
ACRES PER SAMPLE:	Alter Recommendations		PRAUN
SOIL ANALYSIS Test Results	Severe Moderate Slight Satisfac Deficiency Deficiency Leve		re
Soil Acidity Soil or Water pH Buffer Index			
Soluable Salts mm	ios/cm -		
Organic Matter Content	% 3.1 <b> </b>		
Nitrate Nitrogen	pm -		
Phosphorus P1Weak Bray			
P2Strong Bray	pm 50 <b>2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2</b>		
Hydrogen % Base Saturation	leq		
Potassium 2.3 % Base Saturation	pm 157 👪 🗱 🗱 🛤 🛤 🛤 🗃 🗃 🗃 🖬 🖬 🖬 🗃		
Magnesium 16.8 % Base Saturation	pm 349 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		
Calcium 80.9 % Base Saturation	pm 2788 <b>2 2 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 </b>		
Sodium - % Base Saturation	p <mark>m -</mark>		
Sulfur	pm 17 18 18 18 18 18 18 18 18 18 18 18 18 18		
Zinc	pm -		
-	pm -		
	pm -		
-	pm -		
	pm -		
Excess Lime	Soil Type: 0 Sample Depth: 0-6	Sand (%) Silt (%) Clay (%	0)
Cation Exchange Capacity: me	100g 17.3 Soil Map Unit: Soil Texture Analysis: -	•   •   •	
Fertilizer Recommendations	RECOMMENDED NUTRIENT APPLICATIONSPOUNDS PER A	CRE CRC MAINTEN	
Nitrogen F BY CROP	osphorus Potassium Magnesium Carbonate Sulfur Zinc Manganese	Iron Copper Boron P2O5	K <sub>2</sub> Ib

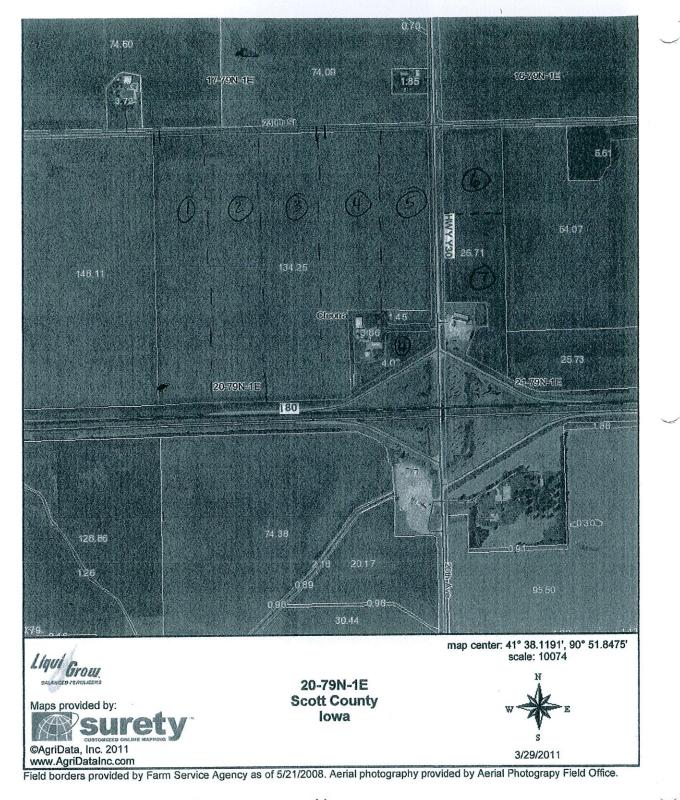
REPORT NUMBER: 12-293-1211		gronology 10 Guide	
Liqui Grow	1010 v		
BALANCED FERTILIZERS		Guide	
CLIENT: JEFF PAULS		SUBMITTED BY: LIQUI GROW - WALCOTT	
FARM LOCATION: EAST FARM		DATE SUBMITTED: October 19, 2012 LAST CROP:	
LAB NUMBER: 24442200	6	YIELD:	
SAMPLE NUMBER: 14 ANALYSIS DATE: October 23, 2	2012	CROP ROTATION: YEAR 1 YEAR 2 YEAR 3 CROP:	
FIELD NUMBER:		YIELD GOAL:	
LAT/LONG NUMBER:		PROGRAM:	
ACRES PER SAMPLE:		Alter Recommendations	WARRING STREET, STORE
SOIL ANALYSIS Test Results			essive evel
Soil Acidity Soil or Water pH	6.8		
Buffer Index	-		
	nmhos/cm -		
Organic Matter Content	% 3.2		
Nitrate Nitrogen Phosphorus	ppm -		
1 Vicar Dray	ppm 26		
P <sub>2</sub> Strong Bray	ppm 42		
Hydrogen % Base Saturation Potassium 2.2 % Base Saturation	meq ppm 137		
Magnesium 15.8 % Base Saturation	PP		
Calcium 82.0 % Base Saturation	FF		
Sodium - % Base Saturation	ppm -		
Sulfur	ppm 14		
Zinc	ppm -		
Manganese	ppm -		et al cartes
Iron	ppm -		
Copper	ppm -		
Boron	ppm -		
Excess Lime		provide a second s	lay (%)
Cation Exchange Capacity:	neq/100g 15.9	Soil Map Unit: Soil Texture Analysis:	-
Fertilizer Recommendations	RECOM		CROP NTENANCE
Nitrogen BY CROP N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium     Calcium     Zinc     Manganese     Iron     Copper     Boron       K2O     Mg     CaCO3     S     Zn     Mn     Fe     Cu     B	
PREPARED BY:		ANALYTICAL WOR	K BY:
Twin State, Inc. 3541 East Kimberly Road, Di	avenport, Iowa 52	807, Phone: 563-359-3624	

	JEFF PAULSEN EAST FARM 24442205 13		DATE SUBN LAST CROP ROT YIELD	TED BY: LIQUI ( MITTED: Octobe CROP: YIELD:	GROW - WALCO r 19, 2012			
ACRES PER SAMPLE:			FAC		Alter Recommend	lations		
SOIL ANALYSIS			Severe	Moderate	NAMES OF TRADES OF TAXABLE	Satisfactory	Excellent	Excessive
Test Results			Deficiency	Deficiency	Deficiency	Level	Level	Level
Soil Acidity Soil or Wat	er pH	6.6						
Buffer Inde	x	6.9	)					
Soluable Salts	mmho	os/cm -						
Organic Matter Content	9	6 3.0						
Nitrate Nitrogen	pp	m -						
Phosphorus P <sub>1</sub> Weak I	Bray pp	m 20						
P2Strong		m 28			80			and the second
Hydrogen 5.8 % Base								
Potassium 1.7 % Base								
Magnesium 16.8 % Base Calcium 75.7 % Base								
	Saturation pp							
Sulfur	pp							
Zinc	pp							
Manganese	pp	m -						
ron	pp	m -						
Copper	pp	m -						
Boron	pp	m -						
Excess Lime			Soil Type:	0 Sa	mple Depth:	0-6 Sand	(%) Silt (%)	Clay (%)
Cation Exchange Capacit	ty: meq/	00g 17.2	2 Soil Map Unit:	So	il Texture Analysis	s:	-	-
Fertilizer Recommendations		RECOM	MMENDED NUTR	IENT APPLICAT	TIONSPOUNDS	PER ACRE		CROP MAINTENAN
BY CROP	MicoBen	osphorus P <sub>2</sub> O <sub>5</sub>	Potassium Magne		Sulfur Zinc Man S Zn		opper Boron Cu B	P <sub>2</sub> O <sub>5</sub> lbs.

REPORT NUMBER: 12-293-1211		groi Gu	nnl	loa	N 4	10	1			
Liqui Grow	And A	S. CI		109	y l	9 L	9			
BALANCED FERTILIZERS		Gu	Ide							
CLIENT: JEFF PAULS FARM LOCATION: EAST FARM	SEN	SUBMIT	<u>TED BY:</u> LI MITTED: O	QUI GROW - ctober 19, 201	WALCOT					
LAB NUMBER: 24442204 SAMPLE NUMBER: 12 ANALYSIS DATE: October 23, 2 FIELD NUMBER: LAT/LONG NUMBER:		CROP RO YIEL	T CROP: YIELD: TATION: CROP: D GOAL: OGRAM:	YEAR 1	YEAR 2	YEAR	3			
ACRES PER SAMPLE:				Alter Re	commenda	ations				
SOIL ANALYSIS Test Results		Severe Deficiency	Modera Deficien	AT STORAT HIS MARKENED AND A STORAGE		atisfact Level		eilent vel	Excessive Level	
Soil Acidity Soil or Water pH	7.									
Buffer Index	-									
	nmhos/cm -									
Organic Matter Content	% 3.									
Nitrate Nitrogen Phosphorus	ppm -									
Phosphorus P1Weak Bray	ppm 2									
P2Strong Bray	ppm 3									
Hydrogen % Base Saturation	meq	and the second second								
Potassium 1.8 % Base Saturation	ppm 12									
Magnesium 18.0 % Base Saturation	ppm 39						a sector de la companya de la compa			
Calcium 80.2 % Base Saturation	ppm 29									
Sodium - % Base Saturation	ppm -									
Sulfur	ppm 12									
Zinc	ppm -									
Manganese	ppm -									
Iron	ppm -									
Copper Boron	ppm - ppm -									
Excess Lime	ppm -	Soil Type:	0	Sample De	epth:	0-6	Sand (%)	Silt (%)	Clay (%)	
	1eg/100g 18	0.1.1		Soil Textur			-	-	-	
Fertilizer Recommendations	RECO	MMENDED NUTF	RIENT APP	LICATIONS	POUNDS	PER AC	RE		CROP	
Nitrogen BY CROP N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium <sub>Magn</sub> K <sub>2</sub> O M	esium Cart	cium ponate Sulfur . CO <sub>3</sub> S		ianese I An	lron Copper Fe Cu	Boron B	P <sub>2</sub> O <sub>5</sub> lbs.	K <sub>2</sub> C Ibs.
PREPARED BY: Twin State, Inc. 3541 East Kimberly Road, Di This Agronology 10 Guide applies only to the	avenport, Iowa sample analyze	52807, Phone: 563-35 ed. Samples are retai	9-3624 ned a maximu	m of thirty days a	after analysis	i.		Midwe	WORK BY: est atories*	

BALANCED FERTILIZERS		gronology 10 Guide	
LAB NUMBER: 2444220 SAMPLE NUMBER: 11 ANALYSIS DATE: October 23, FIELD NUMBER: LAT/LONG NUMBER:	SEN A D3	SUBMITTED BY: LIQUI GROW - WALCOTT DATE SUBMITTED: October 19, 2012 LAST CROP: YIELD: CROP ROTATION: YEAR 1 YEAR 2 YEAR 3 CROP: YIELD GOAL: PROGRAM:	
CRES PER SAMPLE:		Alter Recommendations	des managers and a
OIL ANALYSIS Test Results		Severe Moderate Slight Satisfactory Excellent Deficiency Deficiency Level Level	Excessive Level
oil Acidity Soil or Water pH	7.1		
Buffer Index	-		
oluable Salts	mmhos/cm -		
rganic Matter Content	% 3.0		
trate Nitrogen nosphorus p Wook Brav	ppm -		
r1weak blay	ppm 21		
P <sub>2</sub> Strong Bray	ppm 32		
vdrogen % Base Saturation			
agnesium 1.7 % Base Saturation 18.6 % Base Saturation			
alcium 79.7 % Base Saturation	ppm 400 ppm 285		
odium - % Base Saturation	ppm 200		
ulfur	ppm 12		
nc	ppm -		
anganese	ppm -		
n	ppm -		
opper	ppm -		
oron	ppm -		
xcess Lime		Soil Type: 0 Sample Depth: 0-6 Sand (%) Silt (%)	Clay (%)
ation Exchange Capacity:	meq/100g 17.9	Soil Map Unit: Soil Texture Analysis:	-
Fertilizer Recommendations	RECO	IMENDED NUTRIENT APPLICATIONSPOUNDS PER ACRE	CROP MAINTENANC
Nitroge BY CROP N	n <sup>Phosphorus</sup> P <sub>2</sub> O <sub>5</sub>	Potassium     Calcium       Magnesium     Carbonate     Sulfur     Zinc     Manganese     Iron     Copper     Boron       K <sub>2</sub> O     Mg     CaCO-     S     Zn     Mn     Fe     Cu     B	P <sub>2</sub> O <sub>5</sub> K <sub>2</sub> lbs. lbs

whether or not in accordance with directions, suggestions or recommendations.



Soil Test Map

http://www.suretymaps.com/suretylm/reports/fsamap.aspx?datakey=765E9ED8FAECE65... 3/29/2011

		UUU	IOE					
	JERRYS DATE	BMITTED BY: I SOBMITTED: / LAST CROP: S	April 2, 2015					
LAB NUMBER:	27966583	YIELD:						
SAMPLE NUMBER: ANALYSIS DATE: FIELD NUMBER: LAT/LONG NUMBER:	April 6, 2015	P ROTATION: CROP: (IELD GOAL: PROGRAM:	YEAR 1 CORN - bu 220	YEAR 2 SOYBEANS - bu 60	YEAR 3 CORN - b 220			
ACRES PER SAMPLE:				Alter Recom	mendation	S		
SOIL ANALYSIS Test Results		Severe Deficiency	Moderat Deficien		Satisfact Leve		ellent evel	Excessive Level
Soil Acidity Soil or Wate	erpH 6.7							
Buffer Inde	x -						and the second	
Soluable Salts	mmhos/cm -							
Organic Matter Content	% 3.5							
Nitrate Nitrogen	ppm -							
Phosphorus P1-Weak B								
P2-Strong I	-							
Hydrogen % Base	Saturation meg							
Potassium 3.3 % Base								
Magnesium 16.1 % Base								
Calcium 80.6 % Base	(Br.							
No. of the second s	Saturation ppm -				A CARLES			
Sulfur	ppm 13							
Zinc	ppm -							
Manganese	ppm -							
Iron	ppm -							
Copper	- mqq							
Boron	ppm -							
Excess Lime		Soil Type:	0	Sample Depth:	0-6	Sand (%)	Silt (%)	Clay (%)
Cation Exchange Capacity	y: meq/100g 16.0		:	Soil Texture Analys		-	-	-
Fertilizer Recommendations	RECOMM	ENDED NUTRI	ENT APPLIC	ATIONS POUNDS	PERACRE			CROP

Recommendati	ons	an and the relation to the second									MAINTENANCE		
BY CROP		Nitrogen N	$\frac{Phosphorus}{P_2O_5}$	Potassium K <sub>2</sub> O	Magnesium Mg	Calcium Carbonate CaCO <sub>3</sub>	Sulfur S		janese Vin	lron Fe	Copper Boron Cu B	P <sub>2</sub> O <sub>5</sub> Ibs.	K <sub>2</sub> O lbs.
CORN - bu	220	215	-	65	-		16			1		58	82
SOYBEANS - bu	60			70	_		13				Í	43	84
CORN - bu	220	215	1000	65			16				States and	58	82

PREPARED BY:

Twin State, Inc. 3541 East Kimberly Road, Davenport, Iowa 52807, Phone: 563-359-3624 This Agronology 10 Guide applies only to the sample analyzed. Samples are retained a maximum of thirty days after analysis. Midwest Laboratories'

BY:

Since weather, crop, soil and other conditions may vary, neither Twin State, Inc. nor the seller of Twin State, Inc. products makes any warranty whatsoever, express or implied, concerning Twin State, Inc. products, or any recommendations, suggestions or concepts, including, without limitations, any warranty of mechantability or fitness for a particular purpose. The user assumes all risk and responsibility for use, handling of product, recommendations or concepts, whether or not in accordance with directions, suggestions or recommendations.

			5	VJ UI	IUC	80h				
	CLIENT: FARM LOCATION:	JEFF PAULSEN JERRYS	DATE S	MITTED BY: I COMITTED: / AST CROP: S	April 2, 2015					
	LAB NUMBER:	27966582	-	YIELD:						
	SAMPLE NUMBER: ANALYSIS DATE: FIELD NUMBER: LAT/LONG NUMBER:	April 6, 2015	YI	ROTATION: CROP: ELD GOAL: PROGRAM:	YEAR 1 CORN - bu 220	YEAR 2 SOYBEANS - bu 60	YEAR 3 CORN - b 220			
	ACRES PER SAMPLE					Alter Recon	nmendation	IS		
	SOIL ANALYSIS Test Results			Severe Deficiency	Modera Deficier	这个47至少人们,不是我们的自己的意思。他们在这个人的问题,在这个	Satisfact Leve	· 大学、大学学、大学学校、1997年代	ellent vel	Excessive Level
	Soil Acidity Soil or Wa	ater pH	6.5							
	Buffer Ind	lex	6.8							
	Soluable Salts	mmhos	/cm -							
	Organic Matter Content	%	3.1							
	Nitrate Nitrogen	ppn	n -							
	Phosphorus P1-Weak	Bray ppr	1 39							
	P2-Strong	g Bray ppn	n 56							
	Hydrogen 7.6 % Bas	se Saturation med	1.3							
	Potassium 2.7 % Bas	se Saturation ppn	n 176							
	Magnesium 17.8 % Bas	se Saturation ppn	361							
	Calcium 71.9 % Bas	se Saturation 🏾 ppn	n 2431							
	Sodium - % Bas	se Saturation ppr	1 -							
4	Sulfur	ppn	n 8							
	Zinc	ррп	n -							
	Manganese	ppm	1 -							
	Iron	ppm	י ר ר							
	Copper	ppn	1 -							
	Boron	nqq	ı -							
	Excess Lime	-		Soil Type:	0	Sample Depth:	0-6	Sand (%)	Silt (%)	Clay (%)
	Cation Exchange Capa	site u mod /4 C	00g 16.9	Soil Map Uni	+· []	Soil Texture Anal	Voie-			_

Recommendation	ons		RECOMMENDED NUTRIENT APPLICATIONSPOUNDS PER ACRE							MAINTENANCE				
BY CROP		Nitrogen N	Phosphorus $P_2O_5$	s Potassium K <sub>2</sub> O	Magnesium Mg	Calcium Carbonate CaCO <sub>3</sub>	Sulfur S	Zinc Manganes Zn Mn	e Iron Fe	Copper Cu	Boron B	P <sub>2</sub> O <sub>5</sub> lbs.	K <sub>2</sub> O Ibs.	
CORN - bu	220	215	-	90	-		23					58	82	
SOYBEANS - bu	60			95			19					43	84	
CORN - bu	220	215	-	90	1		23					58	82	

PREPARED BY:

Twin State, Inc. 3541 East Kimberly Road, Davenport, Iowa 52807, Phone: 563-359-3624 This Agronology 10 Guide applies only to the sample analyzed. Samples are retained a maximum of thirty days after analysis. **Midwest** Laboratories'

Since weather, crop, soil and other conditions may vary, neither Twin State, Inc. nor the seller of Twin State, Inc. products makes any warnaty whatsoever, express or implied, concerning Twin State, Inc. products, or any recommendations, suggestions or concepts, including, without limitations, any warranty of mechantability or fitness for a particular purpose. The user assumes all risk and responsibility for use, handling of product, recommendations, suggestions or concepts, whether or not in accordance with directions, suggestions or recommendations.

BY:

	11,352A52 <sup>4</sup> F (19797)	477545	-		<b>UU</b>							
CLIENT:		JEFF PAULS	EN	SUBN	WITED BY: L	IQUI GRO	)W - W/	LCOTT				
FARM LOC	CATION:	JERRYS	D	ATE SI	UBMITTED: A	April 2, 20'	15					
1.0	B NUMBER:	27966581		LA	YIELD:	DUIDLAN	0-00					
	E NUMBER:			ROP	ROTATION:	YEAR 1		YEAR 2	YEAR 3			
	YSIS DATE:					CORN - b	u so	YBEANS - bu	CORN - b	u		
FIEL	D NUMBER:			YIE	ELD GOAL:	220		60	220			
LAT/LON	IG NUMBER:			F	PROGRAM:			•				
ACRES PE	ER SAMPLE:							Alter Recon	nmendation	S		
SOIL ANAI Test R					Severe Deficiency	Mode	erate iency	Slight Deficiency	Satisfact Leve		ellent vel	Excessive Level
Soil Acidity	Soil or Wa	iter pH		6.8 I			63 163 86		( 🖬			
	Buffer Ind	ex		-								
Soluable S	alts	n	nmhos/cn	n -								
Organic Ma	atter Content		%	3.3								
Nitrate Nitro	ogen		ppm	-								
Phosphoru	s P1-Weak	Bray ·	ppm	58 I			<b>12 13 1</b> 3					
	P2-Strong	g Bray	ppm	77 1								
Hydrogen	% Bas	se Saturation	meq									
Potassium	3.2 % Bas	se Saturation	ppm	212					I			
Magnesiun	n 18.1 % Bas	se Saturation	₩ ppm	367								
Calcium		se Saturation	ppm	2652								
Jodium	- % Bas	se Saturation	ppm	-								
Sulfur			ppm	10								
Zinc			ppm									
Manganes	e		ppm	-								
Iron			ppm	-								
Соррег			ppm	-								
			ppm	-							ann a'	
Boron					p		NUMBER OF STREET	ample Depth:		Sand (%)	Silt (%)	
Boron Excess Lin	1e				Soil Type:	0	S	ample Depth.	0-6	Sand (%)	Sin (%)	Clay (%

Fertilizer Recommendation			RECOMMENDED NUTRIENT APPLICATIONSPOUNDS PER ACRE							MAINTE	The second s			
BY CROP		Nitrogen N	$\frac{Phosphorus}{P_2O_5}$	Potassium K <sub>2</sub> O	Magnesium Mg	Calcium Carbonate CaCO <sub>3</sub>	Sulfur S	Zinc Ma Zn	anganese Mn	e Iron Fe	Copper Cu	Boron B	P <sub>2</sub> O <sub>5</sub> lbs.	K <sub>2</sub> O Ibs.
CORN - bu	220	215	-	60			21			Torn &			58	82
SOYBEANS - bu	60	1	-	65			17					10.2	43	84
CORN - bu	220	215	-	60	-		21						58	82

ANALYTICAL WORK BY:

PREPARED BY:

Twin State, Inc. 3541 East Kimberly Road, Davenport, Iowa 52807, Phone: 563-359-3624 This Agronology 10 Guide applies only to the sample analyzed. Samples are retained a maximum of thirty days after analysis.

Midwest Laboratories'

Since weather, crop, soil and other conditions may vary, neither Twin State, Inc. nor the seller of Twin State, Inc. products makes any warranty whatsoever, express or implied, concerning Twin State, Inc. products, or any recommendations, suggestions or concepts, including, without limitations. any warranty of mechantability or fitness for a particular purpose. The user assumes all risk and responsibility for use, handling of product, recommendations or concepts, whether or not in accordance with directions, suggestions or recommendations.

Please staple check here

# Iowa Department of Natural Resources

# **Construction Permit Application Form Confinement Feeding Operations**

#### **INSTRUCTIONS:**

Prior to constructing, installing, modifying or expanding a confinement feeding operation structure<sup>1</sup>, answer questions 1-8 on Item 3, 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.

nay still apply ... Site address? 23580 20th Alence If a construction permit is not needed, some pre-construction requirements may still apply prior to the construction of a formed manure storage structure<sup>2</sup>. 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):
  - 66929 a) Facility ID No. (5 digit number):
  - October 2011 Date when the operation was first constructed: b)
  - October 2011 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.)

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

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

A)	Name of ope	eration: J2	12 LLC				
	00000000000000000000000000000000000000	NE	NE	17	T79N R1E	Cleona	Scott
		(1/4 1/4)	(1/4)	(Section)	(Tier & Range)	(Name of Township)	(County)
B)	Applicant inf	ormation:				-	
	Name:	Tom Ditt	1200.004		Title:	Partner	
	Address:	12090 2	40th St., Eld	ridge, IA	52748		
	Telephone:	563-285-	4006 Fax:		Email:		
C)	Person to co	and the second se		s applicatio	n (if different than appli	icant): Consultant	
	Name:	Carrie Ke			Title:	Consultant	
	Address:		opertown Rd	Daven	port IA 52806		
	Telephone:	515-979-	6954 Fax:		Email:	ctkeppy@netins.ne	t
	Enclose aeria all applicable 18 to 19, at th	separation of	listances, as requ	g showing t ested in Att	he proposed location of achment 1 (pages 11-1)	the confinement feeding o 2 or 14-15). See example o	peration structure <sup>1</sup> and f aerial photo on pages

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.

11/2014 cmc



<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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 <u>http://programs.iowadnr.gov/maps/afo/</u>. Agree to the disclaimer, then 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<sup>3</sup>, or constructing or modifying a confinement building that uses an unformed manure storage structure<sup>3</sup>.
- 2. Constructing, installing or modifying a confinement building or a formed manure storage structure<sup>2</sup> 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<sup>3</sup>, 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<sup>2</sup> 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<sup>3</sup> or egg washwater storage structure;
    - 2. The confinement feeding operation includes only confinement buildings and formed manure storage structures<sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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:

A 2400 head swine wean to finish barn will be built that is 81'2" x 241'4" with an eigth(8) foot deep

concrete pit below the slats. The barn will be built to the west of an existing barn.

- 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<sup>1</sup> 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 <u>1,667 AU or more</u>, 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.
  - 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<sup>1</sup> 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<sup>1</sup> is abandoned if the confinement feeding operation structure<sup>1</sup> 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<sup>1</sup> so that it cannot be used as a confinement feeding operation structure<sup>1</sup> 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.

Animal Species	a) Existing (Before permit				Total Prop After perm	osed AUC it)	
•	(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		1
Finished (Market) hogs	2400	0.4	960	2400	0.4	1920	Note: If the "Existing AUC"
Nursery pigs 15 lbs to 55 lbs		0.1			0.1		(column a) is 500 AU or less,
Sheep and lambs		0.1			0.1		enter the "Total proposed AUC"
Horses		2.0			2.0	1.	(column b) in the "New AU" (column c)
Turkeys 7lbs 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		<b>C)</b> New AU = b) - a):
Fish		0.001			0.001		d)
TOTALS:	a) Ex	isting AUC:	960	b) Tota	l proposed AUC	1920	
				(This is th	e AUC of the	e 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 After permit			
	(No. head) x	avg weight	= AWC	(No. head) x	avg weight	= AWC		
Slaughter or feeder cattle								
Immature dairy cattle								
Mature dairy cattle						1		
Gestating sows								
Farrowing sows & litter								
Boars								
Gilts								
Finished (Market) hogs								
Nursery pigs 15 lbs to 55 lbs								
Sheep and lambs								
Horses								
Turkeys 7lbs or more								
Turkeys less than 7 lbs								
Broiler/Layer chickens 3 lbs or more								
Broiler/Layer chickens less than 3 lbs								
Fish							c)	New AWC = b) - a
TOTALS:	a) Ex	isting AWC:		b) Tota	al proposed AWC:			
				(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<sup>1</sup> and AUC proposed. To determine which checklist to use, choose the option that best describes your confinement feeding operation:

- A) Formed manure storage structure<sup>2</sup>: The proposed confinement feeding operation structure<sup>1</sup> will be or will use a formed manure storage structure<sup>2</sup>. 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<sup>4</sup> 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<sup>4</sup> and a Professional Engineer (PE) is not required. Use Submittal Checklist No. 1 (page 10).

B) Display B) Display

#### **ITEM 6 – SIGNATURE:**

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

Signature of Applicant(s):

JZTZLIC by: fiffant Date: 8-25-15 JZTZLIC by In Orthme 8/25/15

#### MAILING INSTRUCTIONS:

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 <a href="http://www.iowadnr.gov/InsideDNR/DNRStaffOffices/EnvironmentalFieldOffices.aspx">http://www.iowadnr.gov/InsideDNR/DNRStaffOffices/EnvironmentalFieldOffices.aspx</a>.

<sup>&</sup>lt;sup>4</sup> Threshold requirements for an engineer apply to the construction of a formed manure storage structure<sup>2</sup>. 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).

<sup>11/2014</sup> cmc

#### **ITEM 7**

# 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
Jeff Paulsen	23536 20th Ave.	Stockton/IA	52769
Theresa Paulsen	23536 20th Ave.	Stockton/IA	52769
Tom Dittmer	12090 240th St.	Eldridge/IA	52748
Joni Dittmer	12090 240th St.	Eldridge/IA	52748

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

Location (1/4 1/4, 1/4, Section, Tier, Range, Township, County) City **Operation Name** None [There are no other confinements in Iowa in which the above listed person(s) has or have an interest]. See attached list

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

Tan Littme Jone Dittmen Date: 8-25-15 Signature of Applicant(s):

J2TZ LLC

Farm ID# Farm Name	Legal Despcription	Owner
59557 Walcott WF	NW SW Sec. 10 T78N R2E Blue Grass, Scott Co.	Tom and Joni
65381 TJ WF(Cline)	NW NW Sec. 13 T79N R2E Hickory Grove, Scott Co.	Tom and Joni
59556 Home Sow	SW SW Sec. 7 T79N R3E Sheridan, Scott Co.	Tom and Joni
66831 TJ West	NW NE Sec. 24 T79N R1W Farmington, Cedar Co.	Tom and Joni
67903 Pioneer WF	NE NE Sec. 25 T79N R1W Farminton, Cedar Co.	Pioneer WF, LLC
65037 DeWulf	SE SW Sec. 17 T80N R3E Winfield, Scott Co.	Tom and Joni
65036 Engler	SE NW Sec. 4 T79N R3E Sheridan, Scott Co.	Tom and Joni

**ITEM 8** 

# Manure Storage Indemnity Fee Form for Construction Permits

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

Credit fees to:	J2T2 LLC	
Name of operati	J2T2 LLC	
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. <u>Note</u>: 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

• <u>Example 2</u>: 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:

• 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

<u>Example 4</u>: 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.

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
	1	Poultry		x	\$ 0.04 =	
Less than 1,000 AU	2	Other		x	\$ 0.10 =	
	3	Poultry		x	\$ 0.06 =	
1,000 AU or more to less than 3,000 AU	4	Other	960	х	\$ 0.15 =	144.00
	5	Poultry		х	\$ 0.08 =	
3,000 AU or more	6	Other		х	\$ 0.20 =	

### Indemnity Fee Table:

### ITEM 8 (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: J2T2 LLC

Name of operation:

### INSTRUCTIONS:

- 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)

J2T2 LLC

- 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): \$

# SUMMARY:

<ul> <li>Manure Storage Indemnity Fee (see previous page)</li> <li>to be deposited in the Manure Storage Indemnity Fee Fund (474)</li> </ul>	\$ 144.00
- Total filing fees (see item 4 on this page) to be deposited in the Animal Agriculture Compliance Fund (473)	\$ 644.00
TOTAL DUE:	\$ 788.00

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 9** 

# 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:	J2T2 LL	0		Telephone:	563-370-5129	
Name of o	peration:	2T2 LLC				
Location:	NE	NE	17	T79N R1E	Cleona	Scott
vizionizio contratazio di 2014 di 1	(1/4 1/4)	(1/4)	(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<sup>1</sup> 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<sup>3</sup> or an egg washwater storage structure submit documentation required in Addemdum "A" of this construction application form.
- Attachment 3 Manure management plan.

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 <u>all</u> 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.

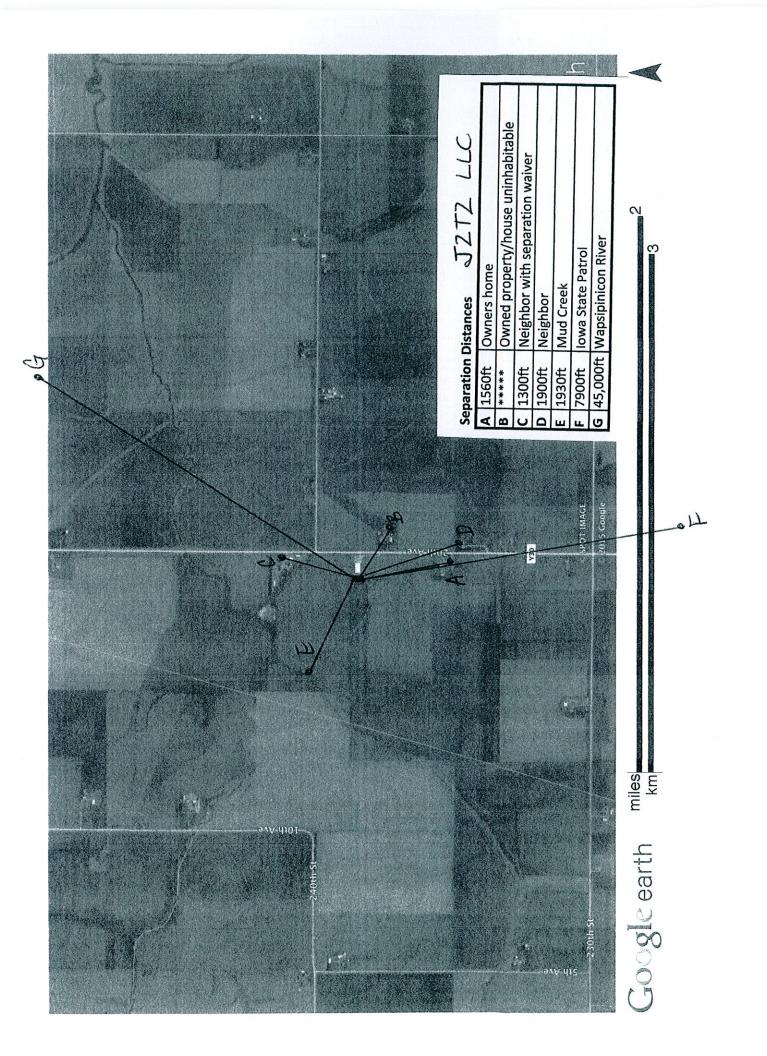
Counties participating in the master matrix: the county's master matrix evaluation and county's recommendation is required for the following cases:

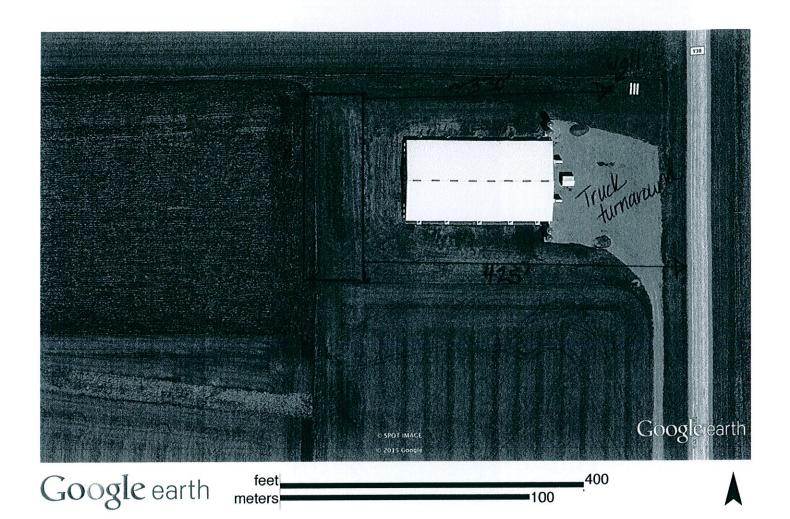
- A new confinement feeding operation that is applying for a construction permit
- An existing confinement feeding operation that was first constructed on or after April 1, 2002 that is applying for a construction permit.
- An existing confinement feeding operation that was first constructed prior to 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:

455.504. On benan of the board of super horizonen
COUNTY: Scot
NAME: Brian McDonough
TITLE: Plyning 3 Deve boment Specialist
(Member of the County Board of Supervisors or its designated official/employee)
Date: August 25, 20 15.
If you do not receive the courtesy reminder letter within a reasonable time, or if you have any questions, ple

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 <u>www.lowaDNR.gov</u>





JZTZ LLC