

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Christensen Swine-Sheffield)
(Property Identification Number) **PCB 015-**
07-26-400-001)) **(Tax Certification**
) **Water)**

NOTICE

Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite. 11-500
Chicago, Illinois 60601

Christensen Swine
c/o Terry Feldmann
P.O. Box 11
Sheffield, IL 61361

Steve Santarelli
Illinois Department of Revenue
101 West Jefferson
Post Office Box 19033
Springfield, Illinois 62794

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board an **APPEARANCE AND THE RECOMMENDATION** of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION
AGENCY

By: Vera Herst
Vera Herst
Assistant Counsel
Division of Legal Counsel

DATED: July 15, 2014

Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
(217) 782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Christensen Swine-Sheffield
(Property Identification Number
07-26-400-001)

)
) **PCB 015-**
) **(Tax Certification**
) **Water)**

A P P E A R A N C E

The undersigned, as one of its attorneys, hereby enters an APPEARANCE on behalf of Respondent, Illinois Environmental Protection Agency.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: Vera Herst
Vera Herst
Assistant Counsel
Division of Legal Counsel

DATED: July 15, 2014
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
(217)782-5544

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Christensen Swine-Sheffield)
(Property Identification Number) PCB 015-
07-26-400-001) (Tax Certification
) Water)

RECOMMENDATION

The Illinois Environmental Protection Agency ("Illinois EPA") hereby files its Recommendation pursuant to Section 125.204 of the regulations of the Illinois Pollution Control Board, 35 Ill. Adm. Code 125.204.

1. On December 17, 2013, the Illinois EPA received a request from Christensen Swine (log number TC-25-13, Exhibit A) for an Illinois EPA recommendation regarding the tax certification of water pollution control facilities pursuant to 35 Ill. Adm. Code 125.204.

2. The applicant's address is: Christensen Swine
4752 1950 Ave.
Sheffield, IL 61361

3. The proposed water pollution control facilities in this request are located at Section 26, 4, T17N, R6E of 4th PM in Bureau County, at the above street address and consist of the following:

Livestock waste management facilities consisting of one concrete manure pit (approximately 277 ft. x 71.16 ft. x 10 ft. deep) with 6 concrete manure pump out pits (approximately 6 ft. x 6 ft. x 11 ft. each) and the portion of concrete slotted flooring over the manure pit; one concrete manure pit (approximately 96 ft. x 50 ft. x 8 ft. deep) with 10 PVC tubes for manure pump out and the portion of concrete slotted flooring over the manure pit.

These livestock waste management facilities are used to collect, transport and/or store livestock wastes prior to cropland application, and are further described in Exhibit A.

4. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2012), defines "pollution control facilities" as:

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“any system, method, construction, device or appliance appurtenant thereto or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: (a) eliminating, preventing, or reducing air or water pollution ...or (b) treating, pretreating, modifying or disposing of any potential solid, liquid or gaseous pollutant which if released without treatment, pretreatment modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property.”

5. Pollution control facilities are entitled to preferential tax treatment, 35 ILCS 200/11-5.

6. Based on the information in the application and the purpose of the facilities, it is the Illinois EPA’s engineering judgment that the described facilities may be considered “pollution control facilities,” pursuant to 35 Ill. Adm. Code 125.200(a), with the primary purpose of eliminating, preventing, or reducing water pollution, or as otherwise provided in 35 Ill. Adm. Code 125.200, and are eligible for tax certification from the Board.

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WHEREFORE, the Illinois EPA recommends that the Board issue the requested tax certification.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: Vera Herst
Vera Herst
Assistant Counsel
Division of Legal Counsel

Dated: July 15, 2014
Illinois Environmental Protection Agency
1021 North Grand Ave. E.
P.O. Box 19276
Springfield, Illinois 62794-9276
217/782-5544

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STATE OF ILLINOIS
COUNTY OF SANGAMON

)
)
)
)
)

PROOF OF SERVICE

I, the undersigned attorney at law, hereby certify that on July 15, 2014, I served true and correct copies of an **APPEARANCE AND THE RECOMMENDATION**, upon the persons and by the methods as follows:

[1st Class U.S. Mail]

Steve Santarelli
Illinois Department of Revenue
101 West Jefferson
Post Office Box 19033
Springfield, Illinois 62794

[1st Class U.S. Mail]

Terry Feldmann
Christensen Swine
P.O. Box 11
Sheffield, IL 61361

[Electronic Filing]

Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite. 11-500
Chicago, Illinois 60601

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

/s/ Vera Herst
Assistant Counsel
Division of Legal Counsel
1021 North Grand Avenue East
P.O. Box 19276-
Springfield, Illinois 62794-9276
217.782.5544
217.782.9143 (TDD)

THIS FILING IS SUBMITTED ON RECYCLED PAPER



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217)782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

Memorandum

To: Charles Gunnarson, Division of Legal Counsel

From: Al Keller, Manager, Permit Section

Date: June 26, 2014

Re: Christensen Swine - Sheffield
Recommendation of Tax Certification
Log # TC-25-13
Property Identification # 07-26-400-001

The Bureau of Water received a request on December 17, 2013 from Christensen Swine for an Illinois EPA recommendation regarding the tax certification of water pollution control facilities pursuant to 35 Il. Adm. Code 125.204. We offer the following recommendation.

The water pollution control facilities in this request include the following:

Christensen Swine
4752 1950 N. Avenue
Sheffield, IL 61361

Section 26, Township 17N, Range 6E of the 4th PM in Bureau County.

Livestock waste management facilities consisting of one concrete manure pit (approximately 277 ft. x 71.16 ft. x 10 ft. deep) with 6 concrete manure pump out pits (approximately 6 ft. x 6 ft. x 11 ft. each) and the portion of concrete slotted flooring over the manure pit; one concrete manure pit (approximately 96 ft. x 50 ft. x 8 ft. deep) with 10 PVC tubes for manure pump out and the portion of concrete slotted flooring over the manure pit.

These livestock waste management facilities are used to collect, transport and/or store livestock wastes prior to cropland application.

These facilities are further described in the enclosed applications and supporting documents.

Based on the information included in this submittal, it is our engineering judgment that the above proposed facilities may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing water pollution, or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. The Bureau of Water therefore recommends that the Board issue the requested tax certification for these facilities.

If you have any questions regarding the above, please contact Thaddeus Fought at 217/782-0610.

SAK:TJF:TC-25-13.docx

cc: Tax Cert File

Watershed Unit Tax Certification Review Sheet

Project Name: Christensen Swine
Reviewer: Thaddeus Fought
Log No.: TC-25-13

Location: Sheffield
Date: _____
Type: Agchem
 Livestock

Applicant: Christensen Swine
PO Box 11
Sheffield IL 61361
815-866-3491

Contact: Terry Feldmann (Maurer-St)
Phone: 309/693 7615

Facility: Christensen Swine
4752 1950 N. Ave.
Sheffield IL 61361

Property ID: 07-26-400-001

Legal Description: Section 26, T17N, R6E of T16 4th PM

County: Bureau

Date Control Devices Installed: 6/25/12

Provided Fair Cash Value: \$616,400

Signature: N. Peter Christensen

Title: owner

Wastes: Livestock waste is applied to cropland.
 Agrichemical rinsate and spillage is recycled through the facility and/or land applied.
 Other: _____

Physical Description of Pollution Control Devices:

• one concrete manure pit (277 ft x 71ft 2in. x 10ft deep) w/ concrete slats and 6 concrete pumpout pits (each 6ft x 6ft x 11ft deep)

• one concrete manure pit (96 ft x 50 ft x 8 ft deep) w/ concrete slats and 10 PVC pumpout tubes

Other: _____

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)

POLLUTION CONTROL FACILITY

AIR WATER

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
P. O. Box 19276, Springfield, IL 62794-9276

This Agency is authorized to request this information under Illinois Revised Statutes, 1979, Chapter, 120, Section 502a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

FOR AGENCY USE

File No.	Date Received	Certification No.	Date	
Sec. A APPLICANT	Company Name <i>Christensen Swine</i>		<i>Terry L. Feldmann, PE</i>	
	Person Authorized to Receive Certification <i>N. Peter Christensen</i>		Person to Contact for Additional Details <i>Maurer-Schutz 3116 N. Arroyo LN</i>	
	Street Address <i>PO Box 11</i>		Street Address <i>Peoria, IL</i>	
	Municipality, State & Zip Code <i>Sheffield, IL 61361</i>		Municipality, State & Zip Code <i>309-693-7615</i>	
	Telephone Number <i>815 866 3481</i>		Telephone Number	
	Location of Facility Quarter Section <i>26</i> Township <i>17N-Gold</i> Range <i>6E PM 4+E</i>		Municipality	Township
	Street Address <i>4752 1950 N Ave Sheffield, IL</i>		County <i>Bureau</i>	Book Number
	Property Identification Number <i>07-26-400-001</i>		Parcel Number	
	Sec. B MANUFACTURING OPERATIONS	Nature of Operations Conducted at the Above Location <i>Swine facility</i>		
Water Pollution Control Construction Permit No.		Date Issued		
NPDES PERMIT No.		Date Issued	Expiration Date	
Air Pollution Control Construction Permit No.		Date Issued		
Air Pollution Control Operating Permit No.		Date Issued		
Sec. C MANUFACTURING PROCESS	Describe Unit Process <i>N/A</i>			
	Materials Used in Process <i>N/A</i>			
Sec. D POLLUTION CONTROL FACILITY DESCRIPTION	Describe Pollution Abatement Control Facility <i>attached</i>			

RECEIVED
DEC 17 2013
IEPA
BOWWPC/PERMIT SECTION

Sec. E	(1) Nature of Contaminants or Pollutants		
CONTAMINANTS		Material Retained, Captured or Recovered	
	Contaminant or Pollutant	DESCRIPTION	DISPOSAL OR USE
	<u>manure</u>	<u>manure</u>	<u>field application for crop nutrients</u>
ACCOUNTING DATA	(2) Point(s) of Waste Water Discharge		
	<u>no discharge</u>		
		Plans and Specifications Attached	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	(3)	Are contaminants (or residues) collected by the control facility?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	(4)	Date installation completed <u>4/25/12</u> status of installation on date of application <u>complete</u>	
	(5)	a. FAIR CASH VALUE IF CONSIDERED REAL PROPERTY:	\$ <u>666,400</u>
		b. NET SALVAGE VALUE IF CONSIDERED REAL PROPERTY:	\$
		c. PRODUCTIVE GROSS ANNUAL INCOME OF CONTROL FACILITY:	\$
		d. PRODUCTIVE NET ANNUAL INCOME OF CONTROL FACILITY:	\$
		e. PERCENTAGE CONTROL FACILITY BEARS TO WHOLE FACILITY VALUE:	% <u>41</u> (<u>252,724</u>)
Sec. F	SIGNATURE		
	The following information is submitted in accordance with the Illinois Property Tax Code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code.		
		<u>owner</u>	
	Signature	Title	
Sec. G	INSTRUCTIONS FOR COMPILING AND FILING APPLICATION		
	General: Separate applications must be completed for each control facility claimed. Do not mix types (water and air). Where both air and water operations are related, file two applications. If attachments are needed, record them consecutively on an index sheet.		
INSTRUCTIONS	Sec. A	Information refers to applicant as listed in the tax records and the person to be contacted for further details or for inspection of facilities. Define facility location by street address or legal description. A plat map location is required for facilities located outside of municipal boundaries. The property identification number is required.	
	Sec. B	Self-explanatory. Submit copies of all permits issued by local pollution control agencies. (e.g. MSD Construction Permit)	
	Sec. C	Refers to manufacturing processes or materials on which pollution control facility is used.	
	Sec. D	Narrative description of the pollution control facility, indicating that its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility. State permit number, date, and agency issuing permit. A narrative description and a process flow diagram describing the pollution control facility. Include a listing of each major piece of equipment included in the claimed fair cash value for real property. Include an <u>average</u> analysis of the influent and effluent of the control facility stating the collection efficiency.	
	Sec. E	List air contaminants, or water pollution substances released as effluents to the manufacturing processes. List also the final disposal of any contaminants removed from the manufacturing processes. Item (1) - Refers to pollutants and contaminants removed from the process by the pollution control facility. Item (2) - Refers to water pollution but can apply to water-carried wastes from air pollution control facilities. Submit drawings, which clearly show (a) Point(s) of discharge to receiving stream, and (b) Sewers and process piping to and from the control facility. Item (3) - If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value in dollars reclaimed by sale or reuse of the collected substances. State the cost of reclamation and related expense. Item (4) - State the date which the pollution control facility was first placed in service and operated. If not, explain. Item (5) - This information is essential to the certification and assessment actions. This accounting data must be completed to activate project review prior to certification by this Agency.	
	Sec. F	Self-explanatory. Signature must be a corporate authorized signature.	
		Submit to:	Attention:
		Illinois EPA P.O. Box 19276 Springfield, IL 62794-9276	AI Keller Permit Section Division of Water Pollution Control
			Donald E. Sutton Permit Section Division of Air Pollution Control

Pete Christensen Swine facility

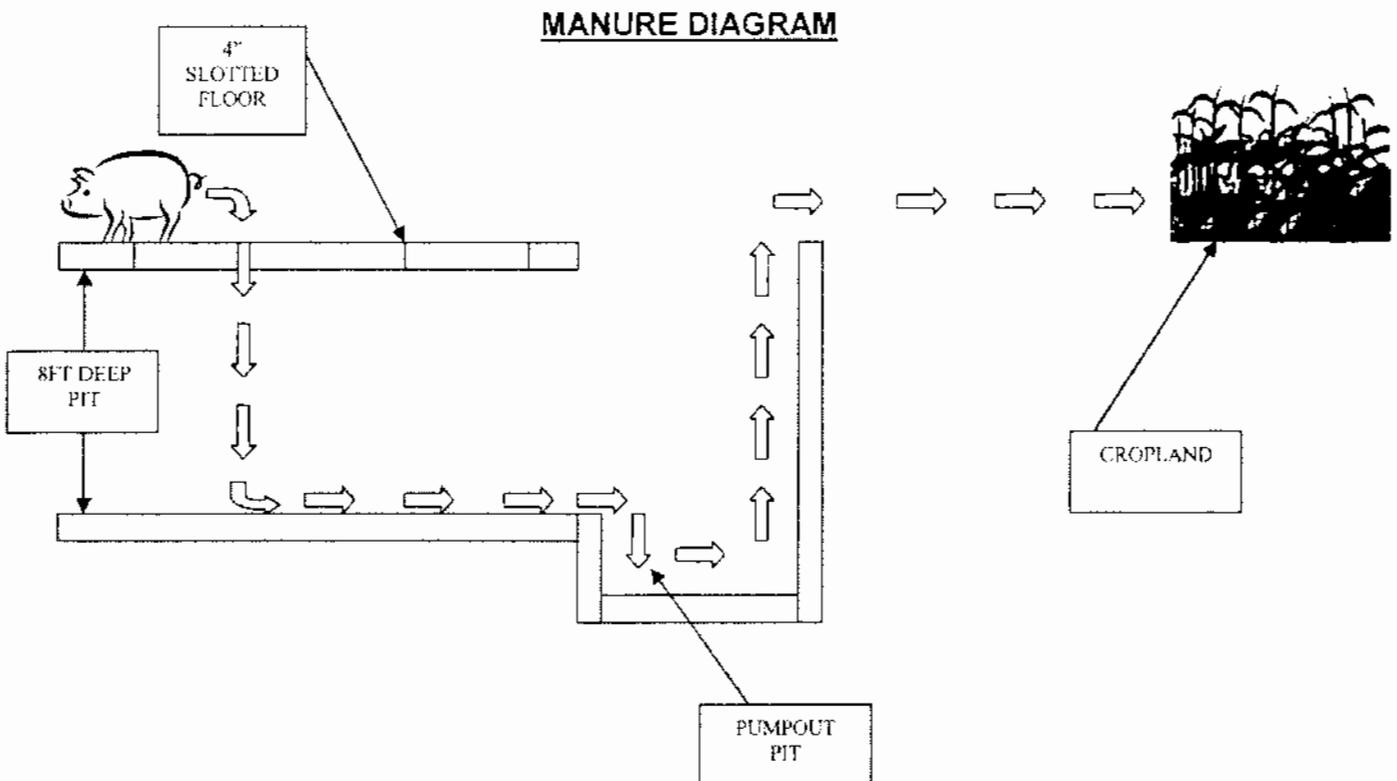
The facility consists of two barns: Building 1 - 277'x 71'-2" swine building with 10ft deep concrete storage pit and Building 2 - a 96'x 50' swine building with 8ft deep concrete storage pit. Precast concrete slotted floors enable excreta and wastewater to fall through and accumulate in the below floor pit. Building 1 has 6 pumpout pits (3 along each sidewall) that collect manure and allow manure transfer through a hose to be pumped for field application. Building 2 has 10 pumpout tubes that allow manure transfer through a hose to be pumped for field application.

Building 1 has an animal capacity of 2400 head of wean-finish swine. Building 2 has an animal capacity of 500 head of grow-finish swine.

Building 1 has an 10ft deep pit that consists of a 4" thick slab and 8" thick pit walls. The walls have footings that are 9" thick and 2'-0" wide. Columns within the pit are 14" in diameter, 9'-2" tall and supported by 40"x40" square footings. The columns support 8"x10"x12ft long precast concrete floor beams. The floor beams support a 4" thick precast concrete slotted gang slat floor. Each pumpout pit is 6'-0" x 6'-0" with 8" thick walls. Footings around the pumpout pit walls measure 1'-6" by 9 inches thick. The recessed sump area is 3'-10"x 5'-4" x 11" deep.

Building 2 has an 8ft deep pit that consists of a 4" thick slab and 8" thick pit walls. The walls have footings that are estimated to be 9" thick and 2'-0" wide. Columns within the pit are 12" in diameter, 7'-2" tall and supported by 40"x40" square footings. The columns support 8"x10"x12ft long precast concrete floor beams. The floor beams support a 4" thick precast concrete slotted gang slat floor. The pumpout tubes are PVC pipes thru the pit walls.

The facility protects ground and surface water by providing collection and storage of livestock waste for about 365 days. Subsequently, the waste may be applied agronomically to cropland under proper soil and weather conditions for safe use.

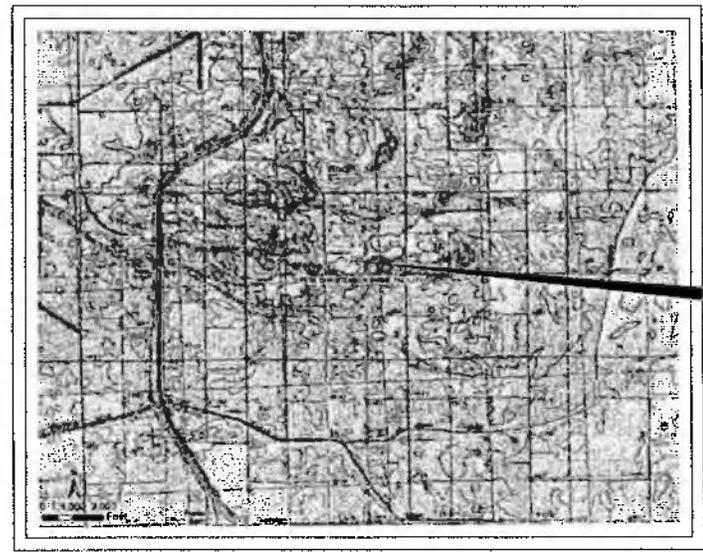


CONSTRUCTION PLANS FOR PETE CHRISTENSEN BUREAU COUNTY, ILLINOIS

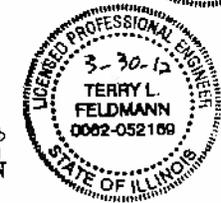


INDEX TO SHEETS

SHEET NO.	DESCRIPTION
	COVER SHEET
C1	FARMSTEAD PLAN
C2	SITE LAYOUT PLAN
S1	CONCRETE PLAN
S2	PIT SECTIONS
S3	WALL SECTIONS
S4	COLUMN AND MISC. DETAILS
S5	PUMP/OUT DETAILS
S6	TYPICAL CONCRETE DETAILS
S7	PRECAST FLOOR MEMBERS HDG SLAT, INC.



BRYAN A. SWANSON, P.E. SE
PE NO. 081-006716
EXP. DATE 11/30/2012

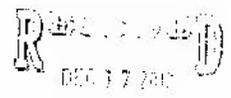


TERRY L. FELDMANN, P.E.
PE NO. 0002-052169
EXP. DATE 11/30/2013



BUREAU COUNTY

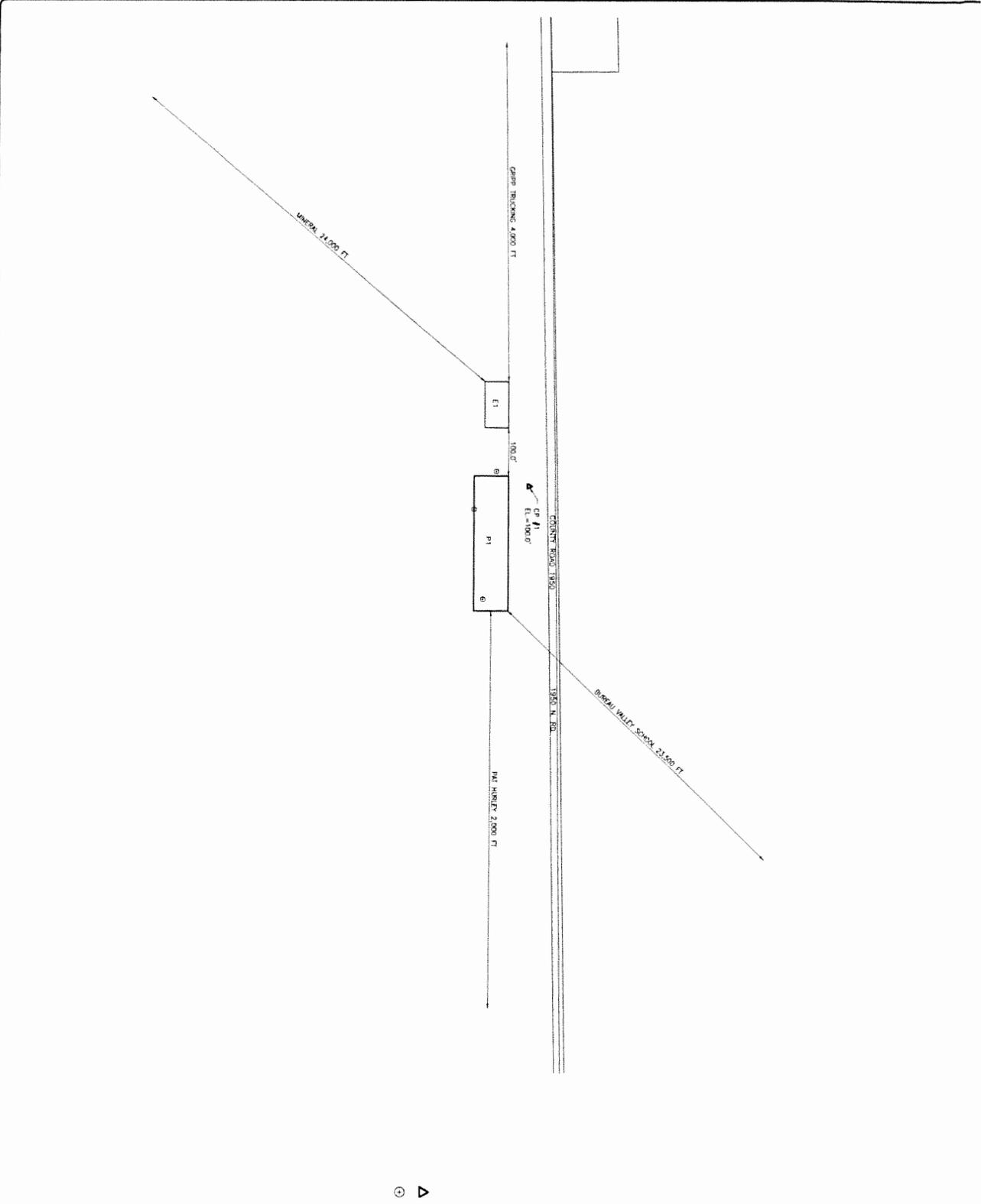
PLANS PREPARED BY:



MSI PROJECT NO. 23811027.02

S:\23811027\2011 project numbers\23811027.02 (Pete Christensen)\Drawings\CD COVER_CIVIL.dwg

TULITE
800.892.0123
SE 1/4, SEC 26
T. 17N., R. 6E., 4TH P.M.
BUREAU COUNTY



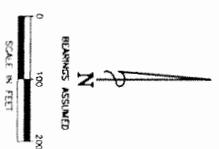
EXISTING FACILITY DETAILS	
ITW	FACILITY DESCRIPTION
E1	SWINE FINISHER BARN

PROPOSED FACILITY DETAILS	
ITW	FACILITY DESCRIPTION
P1	SWINE FINISHER BARN

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DEC 17 2013

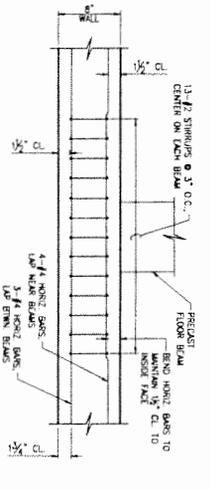
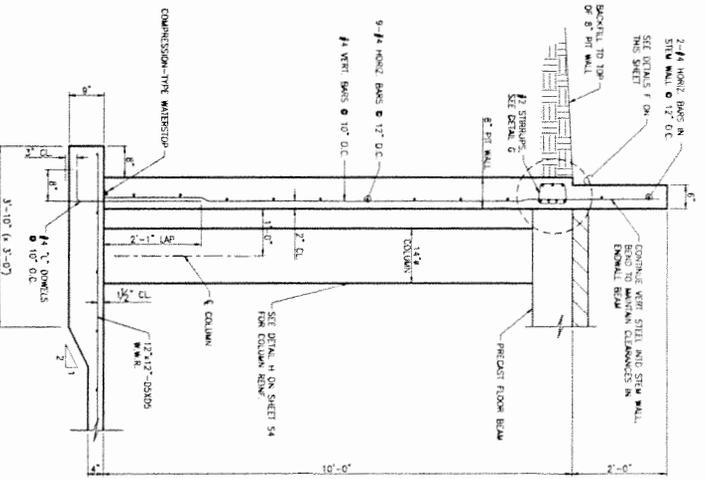
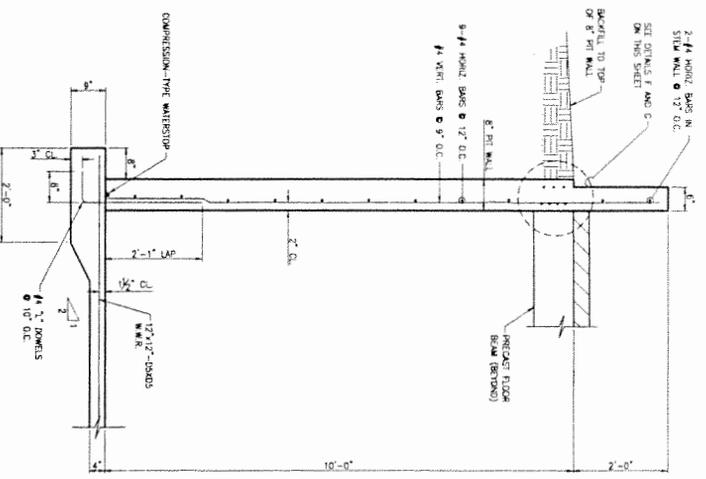
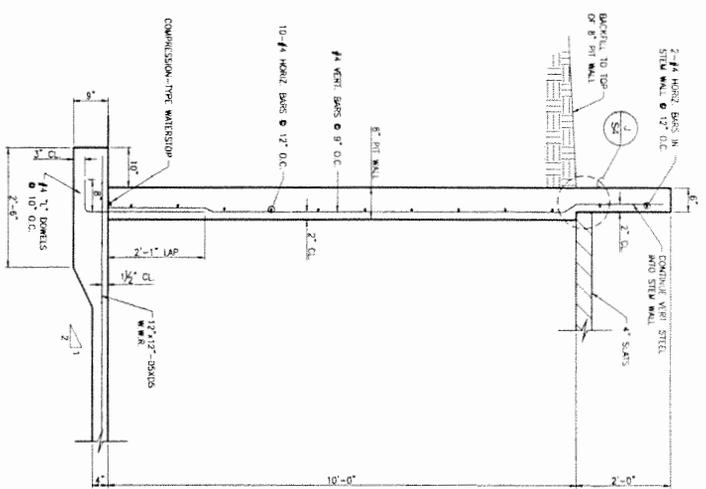
BOVANA, PERRY & ASSOCIATES
SURVEYORS

- LEGEND**
- ▲ TEMPORARY CONTROL POINTS
 - ⊕ SOIL BORINGS



SCALE VALID ONLY ON
22"x34" SIZE PLANS

<p>C1</p>	<p>PETE CHRISTENSEN</p>	<p>FARMSTEAD PLAN</p>	<p>MAURER-STUTZ ENGINEERS & SURVEYORS</p> <p>1125 NORTH HARVEY DRIVE FT. PALM, FLORIDA 33411 (407) 944-1111 FAX (407) 944-7918 1125 NORTH HARVEY DRIVE FT. PALM BEACH, FLORIDA 33411</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	DESCRIPTION						
	NO.	DATE		DESCRIPTION									
<p>PROJECT NO. 2013-001-00</p>	<p>DATE 07/15/2013</p>	<p>PROJECT SWINE FINISHER BARN</p>	<p>SCALE AS SHOWN</p>										



- SHEET NOTES
1. TAKE CARE TO BACKFILL TO WITHIN TWO FEET OF TOP OF FIN WALL'S BEND TO PUTTING LOAD IN THE TAKE SET PRECISE SLOPE AND BEAMS AND BENT ALL RESULTING GAPS PRIOR TO BACKFILLING.
 2. DO NOT VARY DEPTH OF BACKFILL MORE THAN 6" FROM SPECIFIED DEPTH.
 3. DO NOT ALLOW HEAVY EQUIPMENT WITHIN 5' OF FIN WALLS EXCEPT AT PAVEMENT.
 4. REFER TO WRITTEN SPECIFICATIONS FOR SOIL COMPACTION DENSITY.
 5. SEE SHEET S6 FOR CONCRETE BAR AND LAP SPACING DETAILS.

SCALE VALID ONLY ON 22 X 34 SIZE PLANS

SCALE VALID ONLY ON 22 X 34 SIZE PLANS

S3

PETE CHRISTENSEN

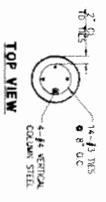
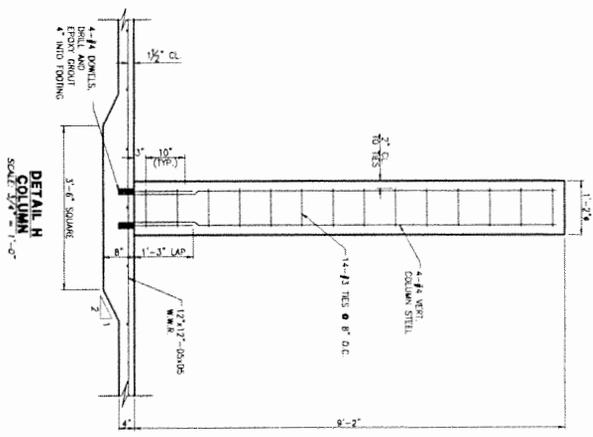
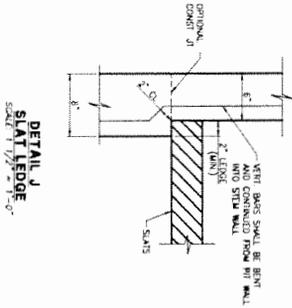
WALL SECTIONS

SWINE FINISHER BARN

MAURER-STUTZ
ENGINEERS SURVEYORS

2014 NORTH PARKWAY DRIVE | P.O. BOX 1111111 | DEPT. EAST AND STREET | CAUNTON, MINN. 55009
PH: 763-444-1111 FAX: 763-444-1111
A MINN. PROFESSIONAL DESIGN FIRM LICENSE #2484-0001A
MEMBER WITH YOU BY DESIGN™

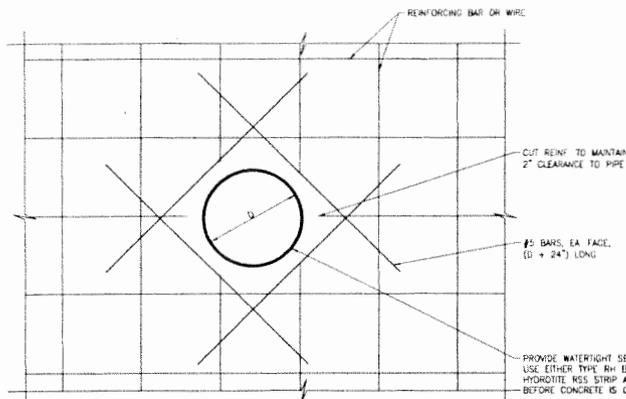
NO.	REVISIONS



- SHEET NOTES:**
1. SEE SPECIFICATIONS FOR EPOXY GROUT MATERIAL AND INSTALLATION REQUIREMENTS.
 2. ANY SPALLING, HONEYCOMBING, OR DELAMINATION OF THE CONCRETE AT THE SLAT EDGE SHALL BE REPAIRED USING AN EPOXY REPAIR WORKING TO MAINTAIN A FLAT 2" WIDE FINISHING LEVEL FOR THE SLATS.

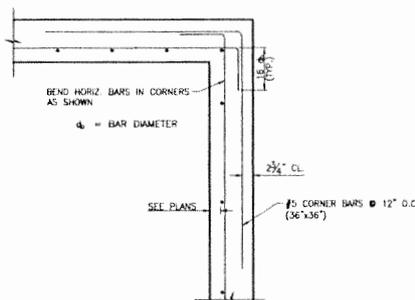
SCALE: VERTICAL SIZE ONLY ON 22 1/2 x 34" SIZE PLANS

PROJECT: SWINE FINISHER BARN SHEET: COLUMN AND MISC. DETAILS DATE: 08/15/2013	DRAWN BY: PETE CHRISTENSEN CHECKED BY:	MAURER-STUTZ ENGINEERS SURVEYORS 1000 WEST GARDEN DRIVE, SUITE 100, P.O. BOX 100, BENTON, MISSOURI 64301 PHONE: (660) 442-1111 FAX: (660) 442-1112 WWW.MS-SURV.COM	REVISIONS NO. DATE DESCRIPTION
	SCALE: VERTICAL SIZE ONLY ON 22 1/2 x 34" SIZE PLANS S4		PROJECT: SWINE FINISHER BARN SHEET: COLUMN AND MISC. DETAILS

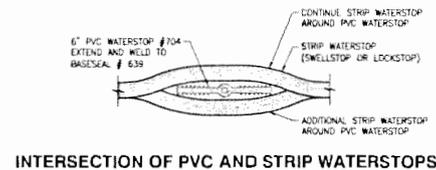


TYP. PENETRATION DETAIL
N.T.S.

NOTE:
CORED OPENINGS ARE NOT PERMITTED.



TYP. CORNER DETAIL
N.T.S.



INTERSECTION OF PVC AND STRIP WATERSTOPS
N.T.S.

SLAB DIMENSIONS		
T	A	B
4"	1 1/2"	2"
5"	1 1/2"	2"
6"	2"	2 1/2"

T - SLAB THICKNESS
A - CLEARANCE TO SLAB REINFT.
B - LOCATION OF CENTERBULB WATERSTOP

BARRETT NOTES:

- INSTALL VERTICAL CONSTRUCTION/CONTROL JOINTS IN WALLS OR CURBS TO MATCH SLAB CONSTRUCTION OR CONTROL JOINTS. SEE CONCRETE PLAN FOR JOINT SPACING.
- INTERSECT AND SEAL "WELD" WATERSTOPS PER MANUFACTURER BETWEEN WALLS AND SLABS TO PROVIDE A CONTINUOUS WATERTIGHT SEAL AROUND THE TANK.
- DO NOT EXTEND REINFORCEMENT THROUGH CONTROL JOINTS UNLESS DETAILED OTHERWISE.
- INSTALL ALL WATERSTOPS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- A PLASTIC SLEEVE MAY BE USED AS AN ALTERNATIVE TO USING A GREASED SMOOTH DOWEL (e.g. GREENSTREAK SPEED DOWEL).
- REINFORCING STEEL SHALL BE TIED W/ WIRE AT INTERSECTING POINTS WITH OTHER BARS AS NECESSARY TO SECURE AGAINST DISPLACEMENT.
- ALL REINFORCING STEEL SHALL BE CONNECTED TO FORM AN EQUAL POTENTIAL PLANE PER NEC REQUIREMENTS. USE EMBEDDED CONDUITS ACROSS JOINTS WHERE STEEL IS INTERRUPTED.

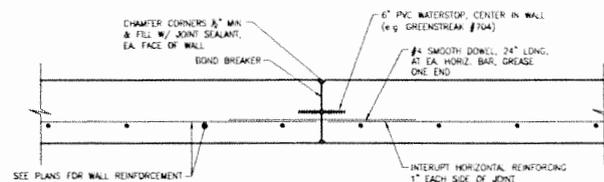
LAP SPLICE NOTES:

- HORIZONTAL BAR LAP SPLICES IN WALLS AND SLABS SHALL BE STAGGERED A MINIMUM THREE FEET SUCH THAT NO MORE THAN EVERY THIRD BAR IS SPLICED AT ANY ONE LOCATION.
- WIRE TIES SHALL BE USED EVERY 12" ALONG A LAP SPLICE.
- LAP SPLICE LENGTHS SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

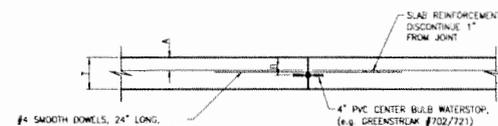
LAP SPLICE LENGTH			
BAR SIZE	SLAB *	WALL-HORIZ.	WALL-VERT.
#3	15"	24"	18"
#4	19"	33"	25"
#5	24"	41"	31"
#6	29"	49"	37"
#7	42"	71"	54"
#8	48"	81"	62"
#9	54"	91"	70"

* 4000 psi CONCRETE
** WIRE SPACING + 2"

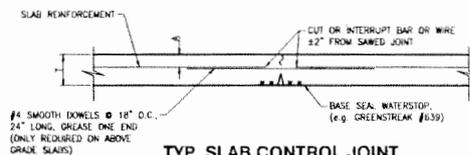
STANDARD HOOK LENGTH	
BAR SIZE	LENGTH
#3	6"
#4	8"
#5	10"
#6	1'-0"
#7	1'-2"
#8	1'-4"
#9	1'-6"



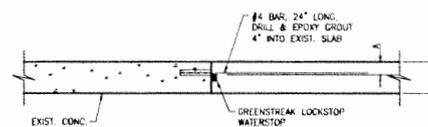
TYP. WALL CONSTRUCTION/CONTROL JOINT
N.T.S.



TYP. SLAB CONSTRUCTION JOINT
N.T.S.



TYP. SLAB CONTROL JOINT
N.T.S.



TYP. CONSTRUCTION JOINT TO EXIST. SLAB
N.T.S.

PROJECT NO.	23811027.02
DATE	MARCH 5, 2012
SCALE	AS SHOWN
DESIGNED BY	MAURER-STUTZ
CHECKED BY	MAURER-STUTZ
IN CHARGE	MAURER-STUTZ
DATE	MARCH 5, 2012
PROJECT NO.	23811027.02
SCALE	AS SHOWN

MAURER-STUTZ
ENGINEERS & SURVEYORS
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PHONE: 303.733.1100
FAX: 303.733.1101
WWW.MS-SURV.COM

TYPICAL CONCRETE DETAILS

SWINE FINISHER BARR

PETE CHRISTENSEN

DESIGNED BY
MAURER-STUTZ
CHECKED BY
MAURER-STUTZ
IN CHARGE
MAURER-STUTZ
DATE
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SCALE VALID ONLY ON
22"x34" SIZE PLANS

