BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Christensen Swine-Sheffield	)
(Property Identification Number	) **PCB 17-**
07-26-400-001)	) **(Tax Certification)**
	)

NOTICE

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

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

Peter Sheffield
P.O. Box 11
Sheffield, Illinois 61361

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board an **APPEARANCE and 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: September 22, 2016

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	) **PCB 17-**
07-26-400-001)	) **(Tax Certification)**
	)

APPEARANCE

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: September 22, 2016

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

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Christensen Swine-Sheffield	)
(Property Identification Number	) **PCB 17-**
07-26-400-001)	) **(Tax Certification)**
	)

RECOMMENDATION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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 ("Board"), 35 Ill. Adm. Code 125.204.

1. On December 11, 2015, the Illinois EPA received a request from Christensen Swine-Sheffield (log number TC-32-15, 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 facility's address is:

Christensen Swine
4752 1950 N. Ave
Sheffield, IL 61361

The proposed water pollution control facilities in this request are located in Section 26, Township 17N, Range 6E of the 4th P.M. in Bureau County, at the above street address and consist of the following:

One concrete manure pit (approximately 277 ft. x 71 ft. x 10 ft. deep) with 8 concrete manure pump out pits (approximately 6 ft. x 6 ft. x 10 ft. each) and the portion of concrete slotted flooring over the manure pit; and one livestock mortality management facility consisting of one roofed concrete composting structure (approximately 96 ft. x 26 ft. x 6 ft. deep) consisting of six 16 ft. x 26 ft. bins for the purposes of composting dead swine.

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

3. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2014), and Section 125.200(a) of the Board's regulations, 35 Ill. Adm. Code 125.200(a), define "pollution control facilities" as:

> 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: eliminating, preventing, or reducing air or water pollution …or 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.

4. In order to receive preferential tax treatment as pursuant to 35 ILCS 200/11-5 (2014), pollution control facilities must be certified as such by the Board, 35 ILCS 200/11-20 (2014) and 35 Ill. Adm. Code 125.200(a).

5. Upon receipt of a tax certification application, the Illinois EPA must file a recommendation on the application with the Board, 35 Ill Adm. Code 125.204(a).

6. Based on the information in the application and the purpose of the facility, 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.

7. Additional facilities in this request are:

Livestock waste management facilities consisting of one concrete manure pit (approximately 277 ft. x 71 ft. x 10 ft. deep) with 6 concrete manure pump out pits (approximately 6 ft. x 6 ft. x 10 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) and the portion of concrete slotted flooring over the manure pit.

These are also described in Exhibit A.

8. The IEPA has determined that these additional facilities were granted the requested tax certification by the Pollution Control Board on July 24, 2014 (a copy of PCB 15-9 Tax Certification –Water) is attached as Exhibit B.

WHEREFORE, the Illinois EPA recommends that the Board grant the requested tax certification to the facilities described in (3) above; and deny the requested tax certification to the facilities described in (7) above. The applicant has 35 days after the date of service to file a petition with the Board to contest this recommendation (35 Ill. Adm. Code 125.204).

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: _____
Vera Herst
Assistant Counsel
Division of Legal Counsel

Dated: September 22, 2016

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

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR

Memorandum

To: Charles Gunnarson, Division of Legal Counsel

From: Al Keller, Manager, Permit Section

Date: AUG 0 8 2016

Re: Christensen Swine – Sheffield
Recommendation of Tax Certification
Log # TC-32-15
Property Identification # 07-26-400-001

The Bureau of Water received a request on December 11, 2015 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. Ave.
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 ft. x 10 ft. deep) with 6 concrete manure pump out pits (approximately 6 ft. x 6 ft. x 10 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) and the portion of concrete slotted flooring over the manure pit; one concrete manure pit (approximately 277 ft. x 71 ft. x 10 ft. deep) with 8 concrete manure pump out pits (approximately 6 ft. x 6 ft. x 10 ft. each) and the portion of concrete slotted flooring over the manure pit; and one livestock mortality management facility consisting of one roofed concrete composting structure (aproximately 96 ft. x 26 ft. x 6 ft. deep) consisting of six 16 ft. x 26 ft. bins for the purposes of composting dead swine.

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 Faught at 217/782-0610.

SAK:TJF:TC-32-15.docx

cc: Tax Cert File

Watershed Unit Tax Certification Review Sheet

Project Name: Christensen Swine
Reviewer: [illegible]
Log No.: TC-32-15

Location: Sheffield
Date: 7/29/16
Type:
- ☐ Agchem
- ☒ Livestock

Applicant: Peter Christensen
PO Box 11
Sheffield, IL 61361
815-[illegible]

Contact: Jason Olmstead
Phone: 309-[illegible]

Facility: Christensen Swine
4757 1950 N. Ave.
Sheffield, IL 61361

Property ID: 07-26-400-001

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

County: Bureau

Date Control Devices Installed: ≈1999 to 7/9/2015

Provided Fair Cash Value: No - not on new form

Signature: 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 71 ft x 10 ft deep) w/ 6 concrete pumpouts (each 6 ft x 6 ft) and concrete slatted floor
- One concrete manure pit (96 ft x 50 ft x 8 ft deep)
- One concrete manure pit (277 ft x 71 ft x 10 ft deep) w/ 8 concrete pumpouts (each 6 ft x 6 ft) and concrete slatted floor
- One concrete dead swine compost facility (96 ft x 26 ft x 6 ft deep) consisting of 6 bins (each 16 ft x 26 ft) w/ roof

Other:

Illinois Environmental Protection Agency

TC-32-1

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Application for Certification (Property Tax Treatment)
Pollution Control Facility

FOR AGENCY USE ONLY			
File Number:		Date Rec'd:	
Certification Number:		Date:	

Facility Type (check one): ☐ Air ☒ Water

This form is to be used for any application for certification of property tax treatment for a pollution control facility for air or water from the Illinois EPA. Separate applications must be completed for each control facility claimed. Do not mix types (air and water). Where both air and water operations are related, file two applications.

If attachments are needed, record them consecutively on an index sheet.

You may complete this form online, save a copy locally, print, sign and submit it to:

Illinois EPA
Attention: Ray E. Pilapil, Permit Section
Division of Air Pollution Control
1021 North Grand Avenue East, P.O. Box 19276
Springfield, IL 62794-9276

Illinois EPA
Attention: Al Keller, Permit Section
Division of Water Pollution Control
1021 North Grand Avenue East, P.O. Box 19276
Springfield, IL 62794-9276

I. Applicant Information:

Company Name: Christensen Swine

Person Authorized to Receive Certification	N. Peter Christensen	Person to Contact for Additional Details	Jason E. Olmstead, PE
Street Address:	P.O. Box 11	Street Address:	Maurer-Stutz, Inc. 3116 Dries Ln., Ste 100
City:	Sheffield State: IL	City:	Peoria State: IL
Zip:	61361 Phone: 815.866.3481	Zip:	61604 Phone: 309.693.7615
Email Address:		Email Address:	

II. Facility Information:

Facility Location: Quarter Section: 26 Township: 17N Range: 6E

Municipality: Township: Gold

Note: A plat map location is requested for facilities located outside of municipal boundaries.

Address: 4752 1950 N Ave City: Sheffield

State: IL Zip Code: 61361 County: Bureau Book Number:

Property Index Number: 07-26-400-001

Note: The Property Index Number is the numerical reference used to identify a parcel of real property for assessment and taxation purposes.

Manufacturing Operations Information:

Nature of Operations Conducted at the Above Location:

Swine Facility

Permit Information:

WPC Construction Permit Number: Date Issued:

NPDES Permit Number: Date Issued: Exp. Date:

APC Construction Permit Number: Date Issued:

APC Operating Permit Number: Date Issued: Exp. Date:

Note: Submit copies of all relevant permits issued by local pollution control agencies. (e.g. MSD Construction Permit)

This Agency is authorized to request this information under 415 ILCS 5/4(b)(2012) Disclosure of this information is voluntary and no penalties will result from the failure to provide the information. However, the absence of the information could prevent your application from being processed or could result in denial of your application.

Point(s) of Waste Water Discharge:

Identify the location of the discharge to the receiving stream. This will typically refer to a source of water pollution but can include water-carried wastes from air pollution control facilities.

Plans and Specifications Attached ☑ Yes ☐ No

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.

Are contaminants (or residues) collected by the control facility? ☑ Yes ☐ No

Note: If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value dollars reclaimed by the sale or reuse of the collected substances. State the cost of reclamation and related expense.

Project Status:

Date Installation Completed: 7/8/2015

Provide the date the pollution control facility was first placed into service and operated. If not, explain.

See attached Sheet

Status of installation on date of application:

Completed

III. Verification and 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.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

N. Peter Cristensen — Printed Name:

Owner — Title:

For incorporated entities, signature should be from an authorized corporate representative.

N. Peter Cristensen — Signature:

12-9-15 — Date:

Pete Christensen Swine facility

The facility consists of three barns:

Building 1 - 277' x 71'-2" swine building with 10ft deep concrete storage pit. (Installed 2013)
Building 2 - 96' x 50' swine building with 8ft deep concrete storage pit. (Installed prior to 1998)
Building 3 - 277'-4" x 71'-2" swine building with 10ft deep concrete storage pit. (Installed 2015)
Building 4 - 96'-8" x 26'-8" swine mortality swine composting building with concrete walls and floor and wood roof structure. (Installed 2015)

All buildings have Precast concrete slotted floors enable excreta and wastewater to fall through and accumulate in the below floor pit. Buildings 1 and 3 each have 6 pump-out 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 pump-out tubes that allow manure transfer through a hose to be pumped for field application.

Buildings 1 and 3 each have 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 (E2) has a 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 pump-out 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 (E1) 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 pump-out tubes are PVC pipes thru the pit walls.

Building 3 (P1) has a 10ft deep pit that consists of a 5" 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 pump-out pit is 6'0" x 6'-0" with 8" thick walls. Footings around the pump-out pit walls measure 1'-6" by 9 inches thick. The recessed sump area is 3'-10"x 5'-4" x 11" deep.

Building 4 (P2) has six concrete composting bins that consist of a 5" thick slab and 8" thick walls. The walls have footings that are10" thick and 3'-0" wide. The composting facility is covered by a gable style roof structure (P5) that consists of wood trusses and columns anchored to the top of the concrete walls.

The facilities protect the 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.

MAURER-STUTZ
ENGINEERS SURVEYORS
3116 N. Dries Lane, Suite 100
Peoria, IL 61604
TEL 309-693-7615
FAX 309-693-7616

PROJECT: Pete Christensen
PROJECT NO.: 23811027.01
BY: CSK DATE: 12/10/2015

LETTER OF TRANSMITTAL

TO: Illinois EPA
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, IL 62702

SUBJECT: Property Tax
Treatment

ATTENTION: Al Keller, Permit Section

TRANSMITTING:		BY:	
X	Herewith		Messenger
	Under Separate Cover		Mail
			UPS X

ENCLOSED:		FOR:	
	Prints		Approval X
	Specifications		Your Files X
	Shop Drawings		Your Signature
X	Copies		Distribution
	Other		Per Your Request

COPIES:	DESCRIPTION:
1	Application for Certification (Property Tax Treatment) Pollution Control Facility

REMARKS: Al,

Enclosed is the above listed application for Christensen Swine.

If you have any questions, please call.

cc: Peter Christensen, MSI File

FROM: Jason E. Olmstead, P.E.
Agricultural Services Engineer

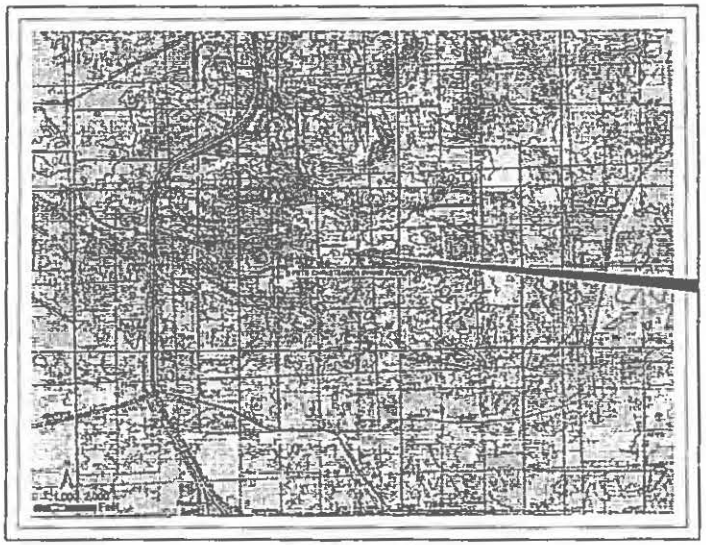
CONSTRUCTION PLANS FOR

PETE CHRISTENSEN

BUREAU COUNTY, ILLINOIS

PROJECT LOCATION

INDEX TO SHEETS



PROJECT SITE

BUREAU COUNTY

STATE OF ILLINOIS
4-2-12
BRYAN A. SWANSON
081-006716
PEORIA, IL
LICENSED STRUCTURAL ENGINEER

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

LICENSED PROFESSIONAL ENGINEER
3-30-12
TERRY L. FELDMANN
0062-052169
STATE OF ILLINOIS

TERRY L. FELDMANN, PE
PE NO. 0062-052169
EXP. DATE 11/30/2013

N

Call Before You Dig
JULIE
800.892.0123

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

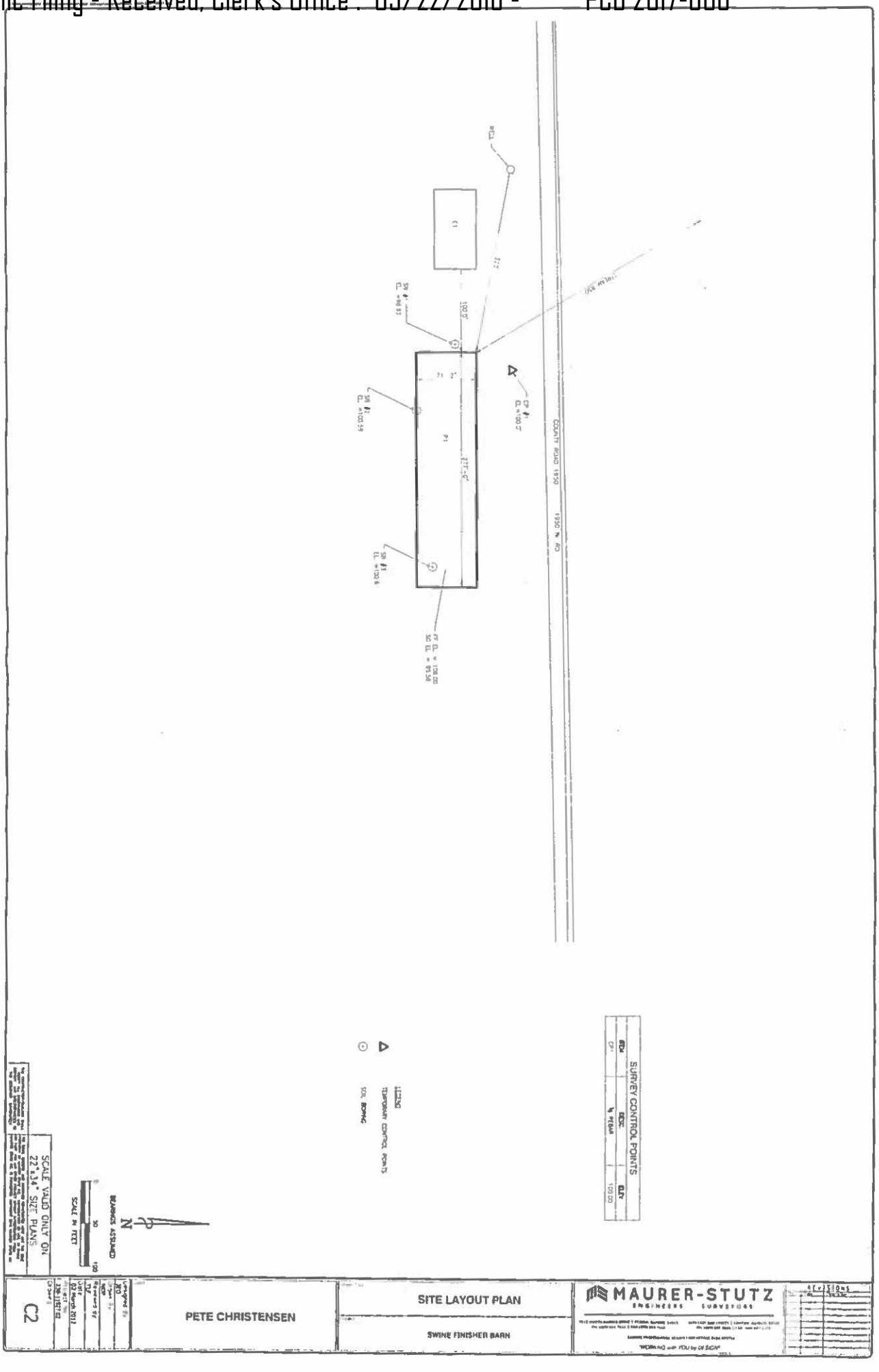
PLANS PREPARED BY:

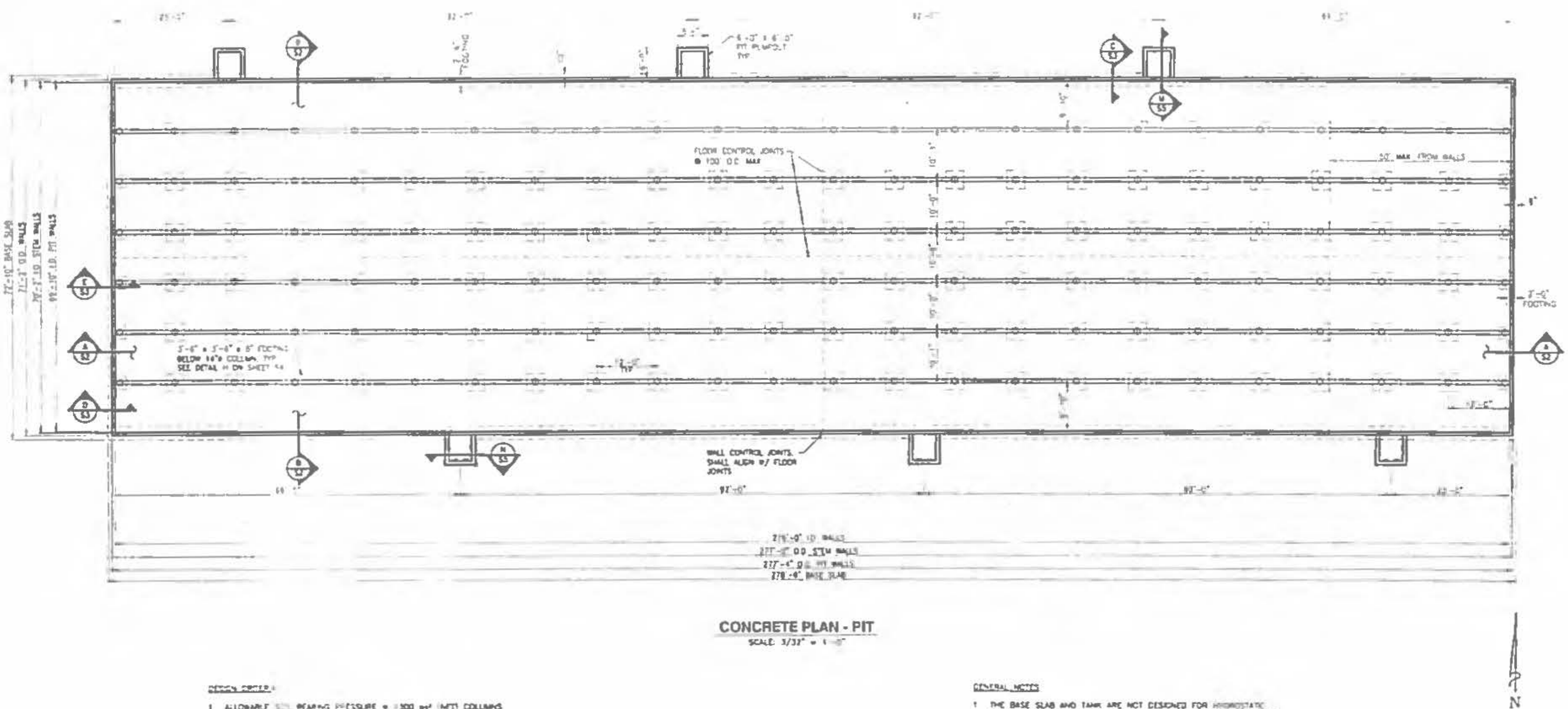
MAURER-STUTZ
ENGINEERS SURVEYORS

MSI PROJECT NO. 23811027.02

S:\238\2011 project numbers\23811027.02 (Pete Christensen)\Drawings\CD COVER_Civil.dwg

PROPOSED FACILITY DETAILS
EXISTING FACILITY DETAILS
TEMPORARY CONTROL POINTS
SOIL BORING
BEARINGS ASSUMED
SCALE VALID ONLY ON 22"x34" SIZE PLANS
SCALE IN FEET
PETE CHRISTENSEN
FARMSTEAD PLAN
SWINE FINISHER BARN
MAURER-STUTZ
ENGINEERS SURVEYORS
C1


COUNTY ROAD 1950
1950 N. RD
SURVEY CONTROL POINTS
SCALE VALID ONLY ON 22"x34" SIZE PLANS
SCALE IN FEET
BEARINGS ASSUMED
N
PETE CHRISTENSEN
SITE LAYOUT PLAN
SWINE FINISHER BARN
MAURER-STUTZ
ENGINEERS
SURVEYORS
C2



CONCRETE PLAN - PIT

SCALE: 3/32" = 1'-0"

DESIGN CRITERIA

1. ALLOWABLE SOIL BEARING PRESSURE = 1300 psf (NET) COLUMNS; 2100 psf (GROSS) WALLS.
2. MIN. 28-DAY CONCRETE COMPRESSIVE STRENGTH (f'c) = 4000 psi.
3. REINFORCEMENT BARS – F_y = 60,000 psi (GRADE 60)
4. FLOOR LIVE LOAD = 57.5 psf (FINISHER PIGS)
5. ROOF SNOW LOAD = 25 psf
6. SOIL LATERAL PRESSURE (EFFECTIVE FLUID PRESSURE) = 60 psf/ft.
7. SOIL UNIT WEIGHT = 110 pcf
8. FLUID DENSITY = 62 pcf
9. SUBGRADE FRICTION FACTOR = 0.3 (SAND)
10. PRECAST MANUFACTURER: HOG SLAT, INC
11. PROJECT LOCATION: BUREAU CO., ILLINOIS

GENERAL NOTES

1. THE BASE SLAB AND TANK ARE NOT DESIGNED FOR HYDROSTATIC PRESSURES OR UPLIFT. MAINTAIN THE GROUND WATER TABLE BELOW THE TOP OF THE BASE SLAB.
2. CONTROL OR CONSTRUCTION JOINTS SHALL BE LOCATED A MINIMUM 8" FROM COLUMN FOOTINGS AND 3'-0" FROM PUMPOUT OPENINGS.
3. VERIFY ROUGH OPENINGS AND LOCATIONS OF DOORS PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL ENSURE THE WATER-TIGHTNESS OF THE PIT BY PROPER INSTALLATION AND TERMINATION OF THE WATER STOPS AND JOINT DETAILS AS SHOWN IN THESE PLANS AND PER THE MANUFACTURER'S RECOMMENDATIONS.
5. NO CONDUITS (ELECTRICAL, FRESH WATER, ETC.) SHALL PENETRATE THE PIT WALLS BELOW THE SLATS.
6. SEE CIVIL DRAWINGS SHEETS C1 OR C2 FOR TOP OF SLAB ELEVATIONS.

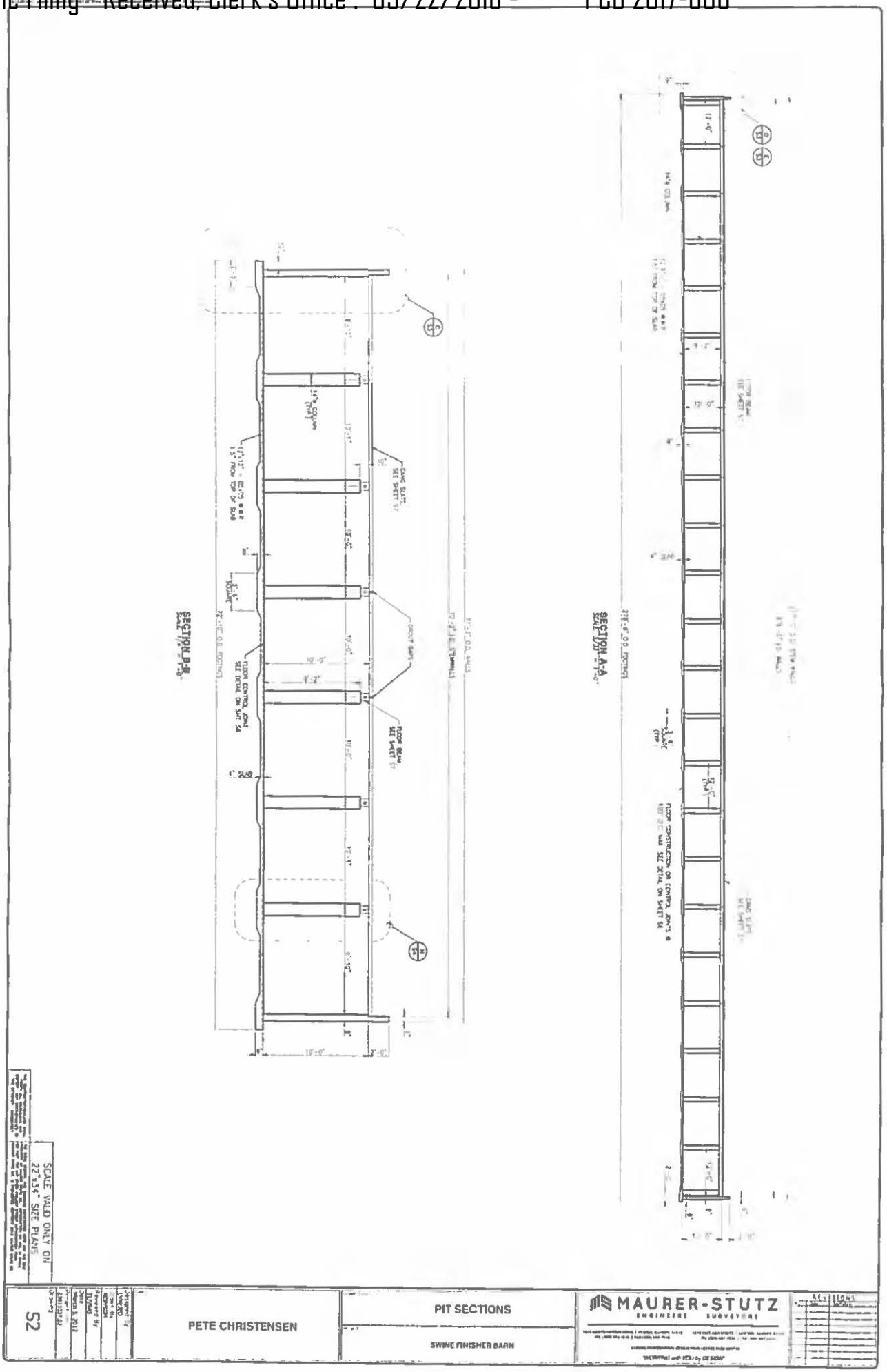
SCALE VALID ONLY ON 22"x34" SIZE PLANS

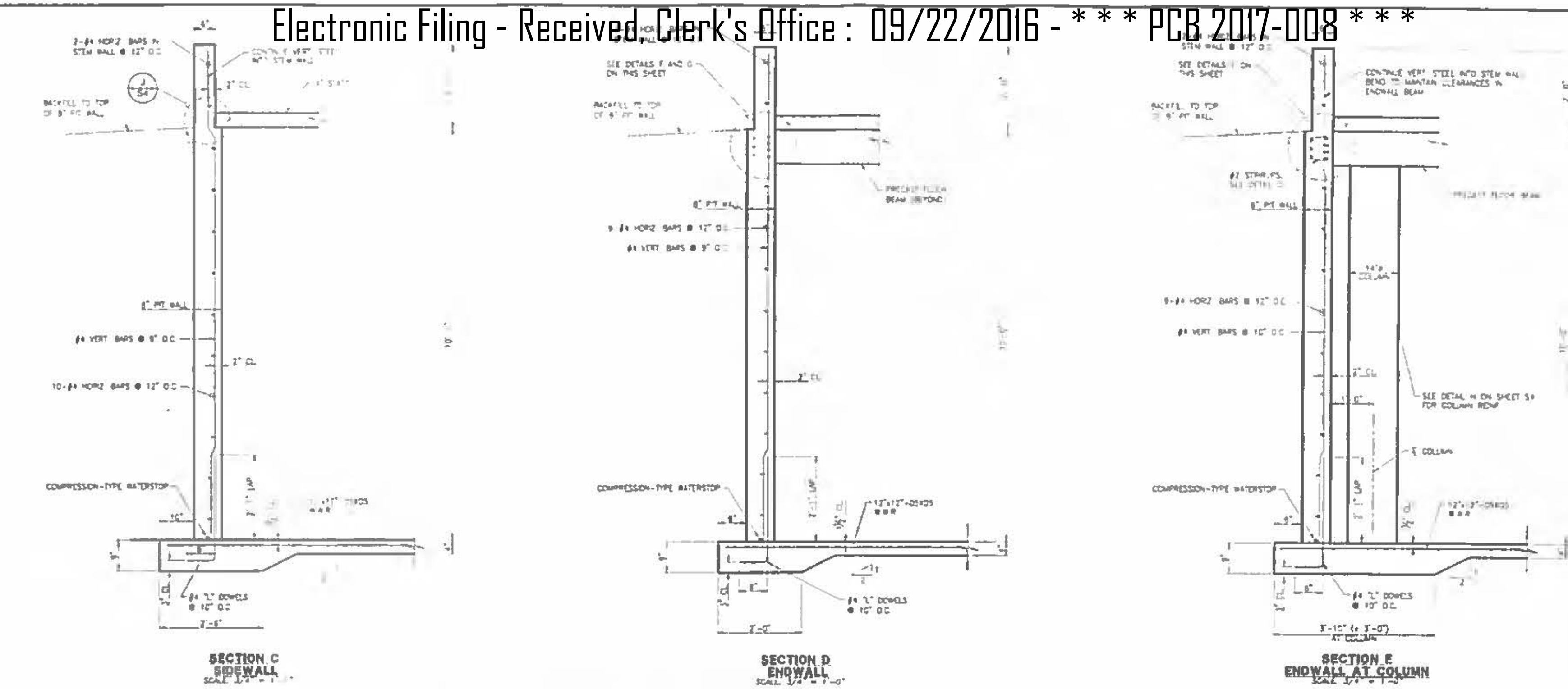
MAURER-STUTZ
ENGINEERS SURVEYORS

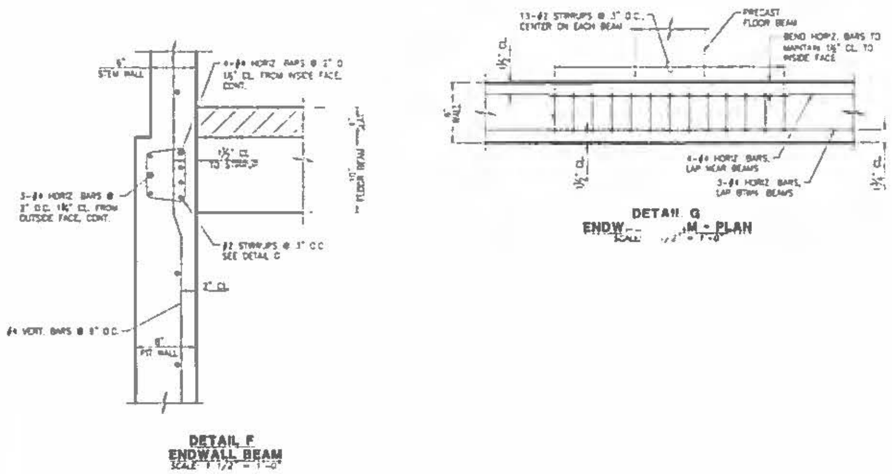
CONCRETE PLAN
SWINE FINISHER BARN

PETE CHRISTENSEN

Designed By	LWV/KO
Drawn By	MOP/SCM
Reviewed By	TLF/BAS
Date	March 5, 2012
Project No.	23811927.22
Drawing	S1


SECTION B-B
SECTION A-A
SCALE VALID ONLY ON 22"x34" SIZE PLANS
S2
PETE CHRISTENSEN
PIT SECTIONS
SWINE FINISHER BARN
MAURER-STUTZ
ENGINEERS SURVEYORS





SHEET NOTES.

1. TANK MUST BE BACKFILLED TO WITHIN TWO FEET OF TOP OF PIT WALLS PRIOR TO PUTTING LIQUID IN THE TANK. SET PRECAST SLATS AND BEAMS AND GROUT 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 PIT WALLS EXCEPT AT PUMPOUT.
4. REFER TO WRITTEN SPECIFICATIONS FOR SOIL COMPACTION DENSITY.
5. SEE SHEET S6 FOR CORNER BAR AND LAP SPLICE DETAILS.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ
ENGINEERS SURVEYORS

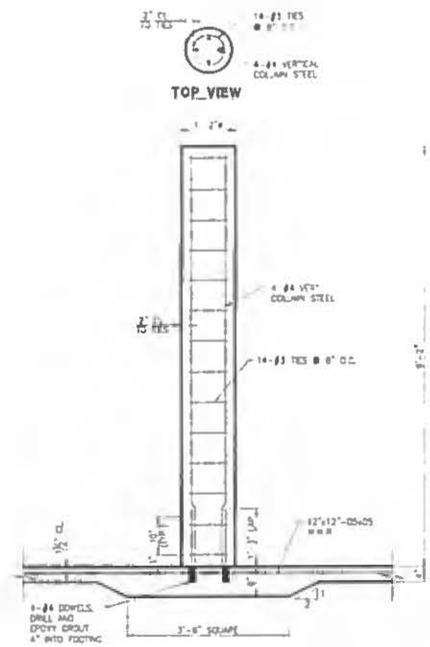
WALL SECTIONS

SWINE FINISHER BARN

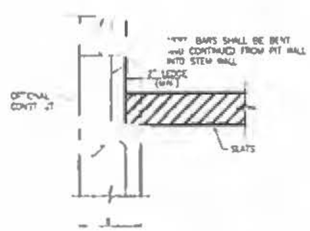
PETE CHRISTENSEN

Designed by
Drawn by
Reviewed by
TLF/BAS
Date
March 5, 2012

S3



DETAIL H
COLUMN



DETAIL J
SLAT LEDGE

SHEET NOTES.

1. SEE SPECIFICATIONS FOR EPOXY GROUT MATERIAL AND INSTALLATION REQUIREMENTS
2. ANY SPALLING, HONEYCOMBING, OR DELAMINATION OF THE CONCRETE AT THE SLAT LEDGE SHALL BE REPAIRED USING AN EPOXY REPAIR MORTAR TO MAINTAIN A FULL 2" WIDE BEARING LEDGE FOR THE SLATS

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ
ENGINEERS SURVEYORS

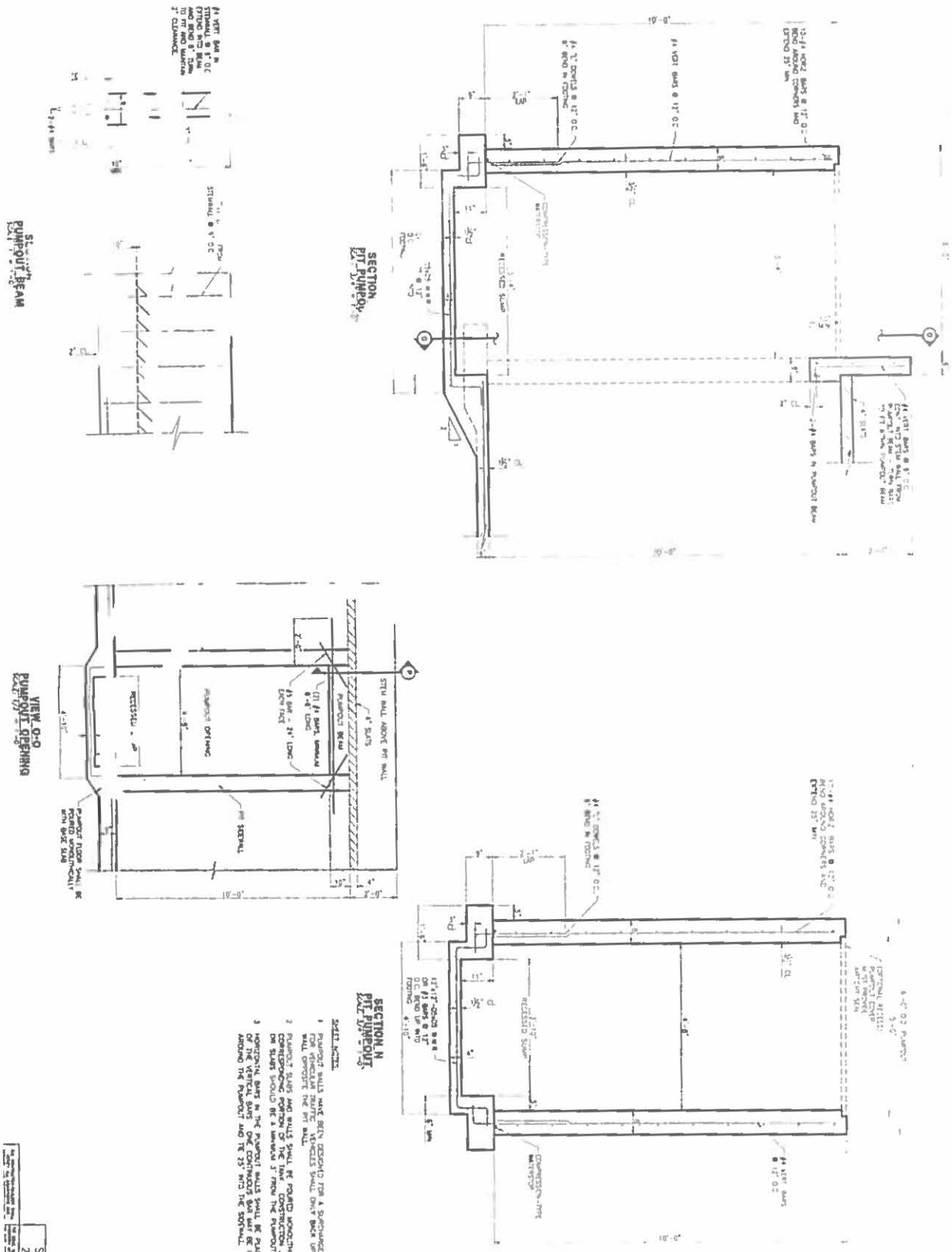
COLUMN AND MISC. DETAILS

SWINE FINISHER BARN

PETE CHRISTENSEN

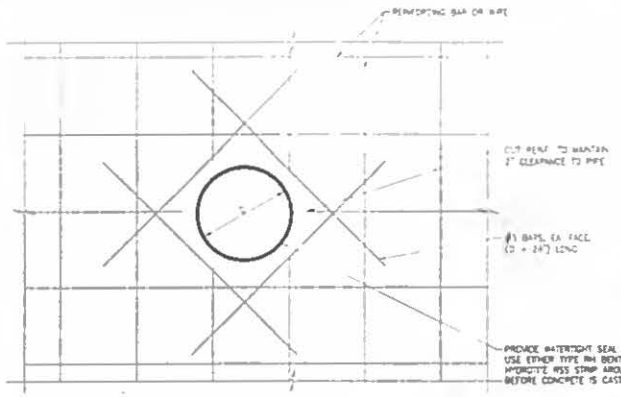
Date: March 5, 2012

Drawing: S4



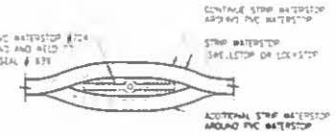
SCALE VALID ONLY ON 22"x34" SIZE PLANS

S5	PETE CHRISTENSEN	PUMPOUT DETAILS	MAURER-STUTZ ENGINEERS SURVEYORS
		SWINE FINISHER BARN	



TYP. PENETRATION DETAIL

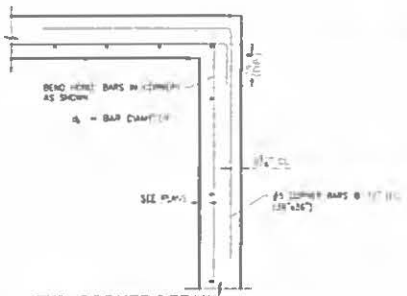
NOTE: CORED OPENINGS ARE NOT PERMITTED



INTERSECTION OF PVC AND STRIP WATERSTOPS

SLAB DIMENSIONS		
T	A	B
4"	1½"	2"
5"	1½"	2"
6"	2"	2½"

T = SLAB THICKNESS
A = CLEARANCE TO SLAB REINF
B = LOCATION OF CENTERBULB WATERSTOP



TYP. CORNER DETAIL

SHEET NOTES:

1. INSTALL VERTICAL CONSTRUCTION/CONTROL JOINTS IN WALLS OR CURBS TO MATCH SLAB CONSTRUCTION OR CONTROL JOINTS. SEE CONCRETE PLAN FOR JOINT SPACING.
2. INTERSECT AND SEAL "WELD" WATERSTOPS PER MANUFACTURER BETWEEN WALLS AND SLABS TO PROVIDE A CONTINUOUS WATERTIGHT SEAL AROUND THE TANK.
3. DO NOT EXTEND [illegible] CEMENT THROUGH CONTROL JOINTS UNLESS DETAILED OTHERWISE.
4. INSTALL ALL [illegible] STOPS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. A PLASTIC SLEEVE MAY BE USED AS AN ALTERNATIVE TO USING A GREASED SMOOTH DOWEL (i.e. GREENSTREAK SPEED DOWEL)
6. REINF[illegible] SHALL BE TIED W/ WIRE AT INTERSECTING POINTS WITH OTHER BARS AS NECESSARY TO SECURE AGAINST DISPLACEMENT.

STEEL SHALL SHALL BE CONNECTED TO FORM AN EQUAL POTENTIAL PLANE PER NEC REQUIREMENTS. USE EMBEDDED CONDUITS ACROSS JOINTS WHERE STEEL IS INTERRUPTED.

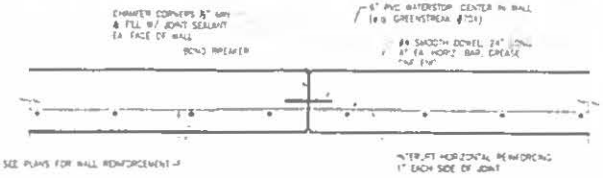
[illegible] SPLICES IN WALLS AND SLABS SHALL BE STAGGERED A MINIMUM [illegible] SUCH THAT NO MORE THAN EVERY THIRD BAR IS SPLICED AT ANY ONE LOCATION.

2. WIRE TIES SHALL BE USED EVERY 12" ALONG A LAP SPLICE.
3. LAP SPLICE LENGTHS SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED)

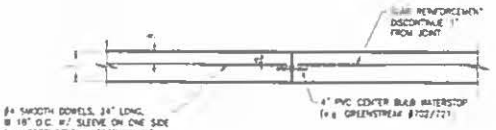
LAP SPLICE LENGTH			
BAR SIZE	SLAB *	WALL-HORIZ.	WALL-VERT
##	in		
#3	15"	24"	1[illegible]
#4	19"	33"	25"
#5	24"	41"	31"
#6	29"	48"	37"
#7	42"	71"	54"
#8	48"	81"	62"
#9	54"	91"	70"

* 4000 psi CONCRETE
** WIRE SPACING = 2"

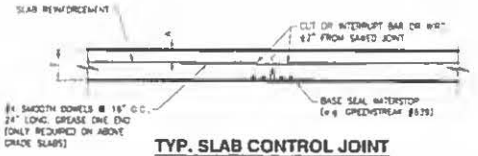
STANDARD HOOK LENGTH	
	LENGTH
#4	8"
#5	10"
#6	1'-0"
#7	1'-2"
#8	1'-4"
#9	1'-6"



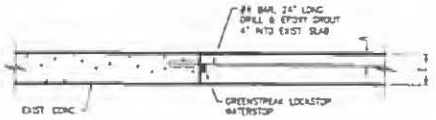
TYP. WALL CONSTRUCTION CONTROL JOINT



TYP. SLAB CONSTRUCTION JOINT



TYP. SLAB CONTROL JOINT



TYP. CONSTRUCTION JOINT TO EXIST. SLAB

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ ENGINEERS SURVEYORS

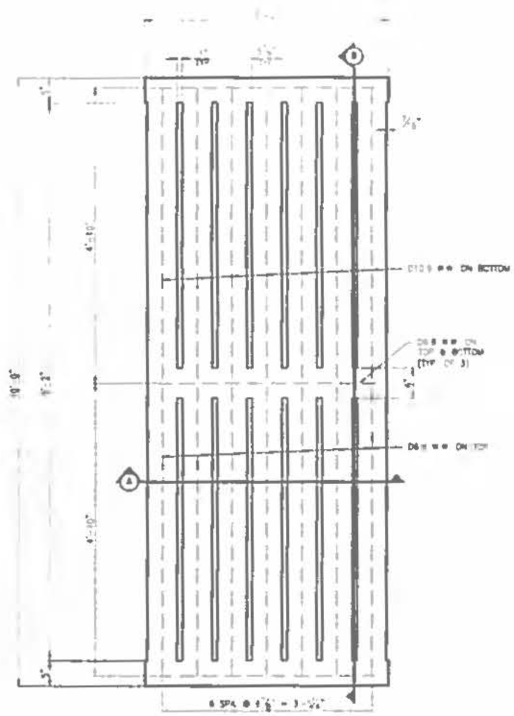
TYPICAL CONCRETE DETAILS

SWINE FINISHER BARN

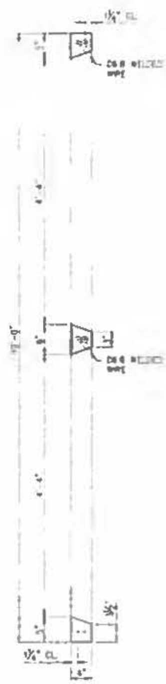
PETE CHRISTENSEN

Designed By:
Drawn By:
NEWTON
Approved By:
Date:
Project No.

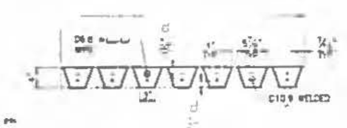
S6



10' FINISHER SLAT



SECTION B



SECTION A

DESIGN CRITERIA:

CONCRETE STRENGTH: f'c = 6,000 psi

REINFORCEMENT: fy = 80,000 psi
(ASTM A496 OR ASTM A497)

WEIGHT: 1383 lbs (CALCULATED)

DEAD = 34.0 psf (UNIFORM FLOOR LOAD)
19.5 lb/ft. (PER INDIVIDUAL SLAT)

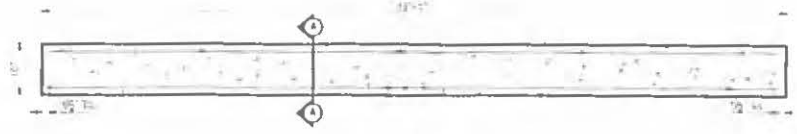
LIVE = 57.5 psf (UNIFORM FLOOR LOAD)
125 lb/ft. (INDIVIDUAL SLAT SPAN)
62.5 lb/ft. (GANG SLAT – FULL SPAN)
(LOADING PER ASABE STANDARD EP 378.3 FOR PIGS)

2" MIN. BEARING LENGTH AT EACH END FOR FULL WIDTH OF SLAT

ALL CONCRETE AND REBAR DETAILS SHALL CONFORM TO ACI 318

MAX. AGGREGATE SIZE = ½"

THIS SLAT HAS BEEN CHECKED [illegible] THE WEIGHT OF A 3" THICK CONCRETE TOPPING [illegible] THIS LOADING CONDITION ONLY COMBINES [illegible] UNIFORM LIVE LOAD CASE DUE TO THE LOAD DISTRIBUTION CAPABILITIES OF THE TOPPING.



12" FLOOR BEAM

DESIGN CRITERIA:

CONCRETE STRENGTH: f'c = 5,000 psi

REINFORCEMENT: fy = 60,000 psi
(ASTM A615, GRADE 60)

SUPERIMPOSED FACTORED LOAD = 1342 lb/ft
(1.2 x DEAD + 1.6 x LIVE)

3" MINIMUM BEARING LENGTH AT EACH END OF BEAM FOR FULL WIDTH OF BEAM. TOTAL BEARING LENGTH AT BOTH ENDS COMBINED SHALL BE GREATER THAN 8"

ALL CONCRETE AND REBAR DETAILS SHALL CONFORM TO ACI 318

SECTION A-A

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ
ENGINEERS SURVEYORS

PRECAST FLOOR MEMBERS
HOG SLAT, INC.

SWINE FINISHER BARN

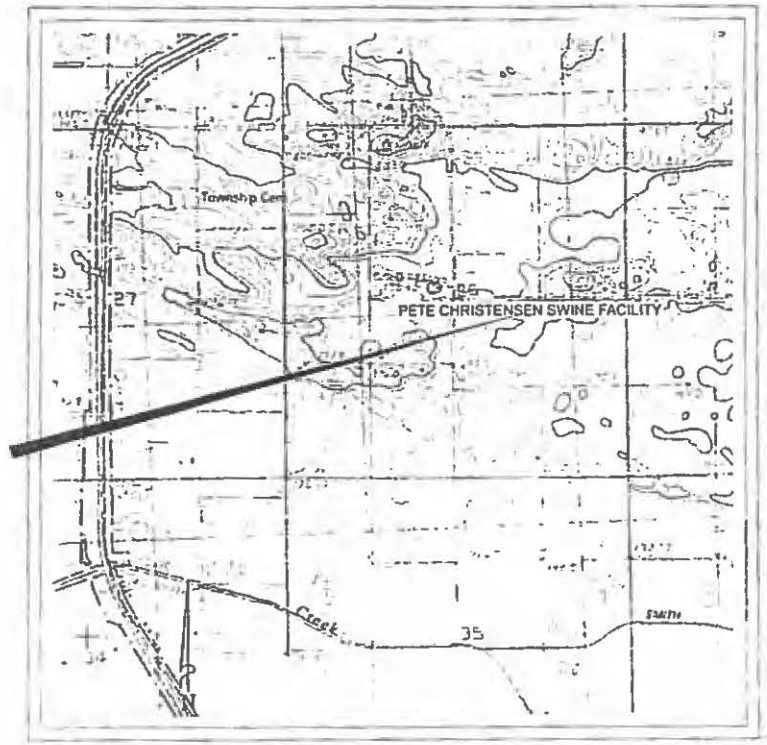
PETE CHRISTENSEN

Designed By	LVH/JED
Drawn By	NDP/SDH
Reviewed By	TLZ/BAS
Date	March 5, 2012
Project No.	2081107.02
Drawing	S7

CONSTRUCTION PLANS FOR

PETE CHRISTENSEN
SWINE FACILITY IMPROVEMENTS

INDEX TO SHEETS



BRYAN A. SWANSON, PE, SE
SE NO. 081-006716
EXP. DATE 11/30/2016

SHEETS COVERED BY THIS SEAL:
SF100-SF705, SC100-SC500, S700

"TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, JUDGEMENT, AND BELIEF, THESE BASIC CONSTRUCTION DRAWINGS AND SPECIFICATIONS MEET APPLICABLE NRCS STANDARDS."

JASON E. OLMSTEAD, PE
PE No. 062-062795
EXP. DATE 11/30/2019

SHEETS COVERED BY THIS SEAL:
C101-C501, SW501
SF100-SF705, SC100-SC500, S700
S0-S6

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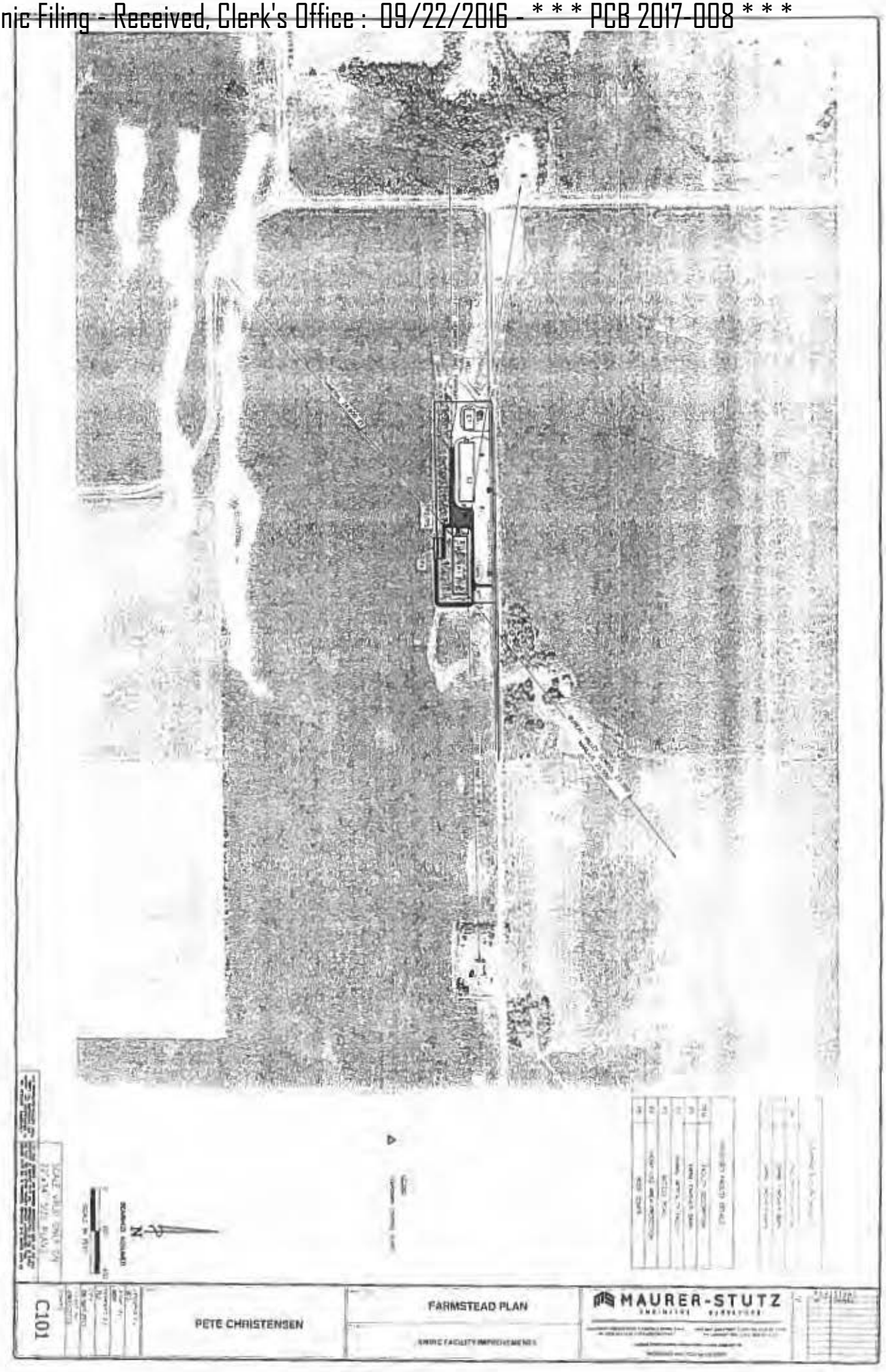
BUREAU COUNTY, IL

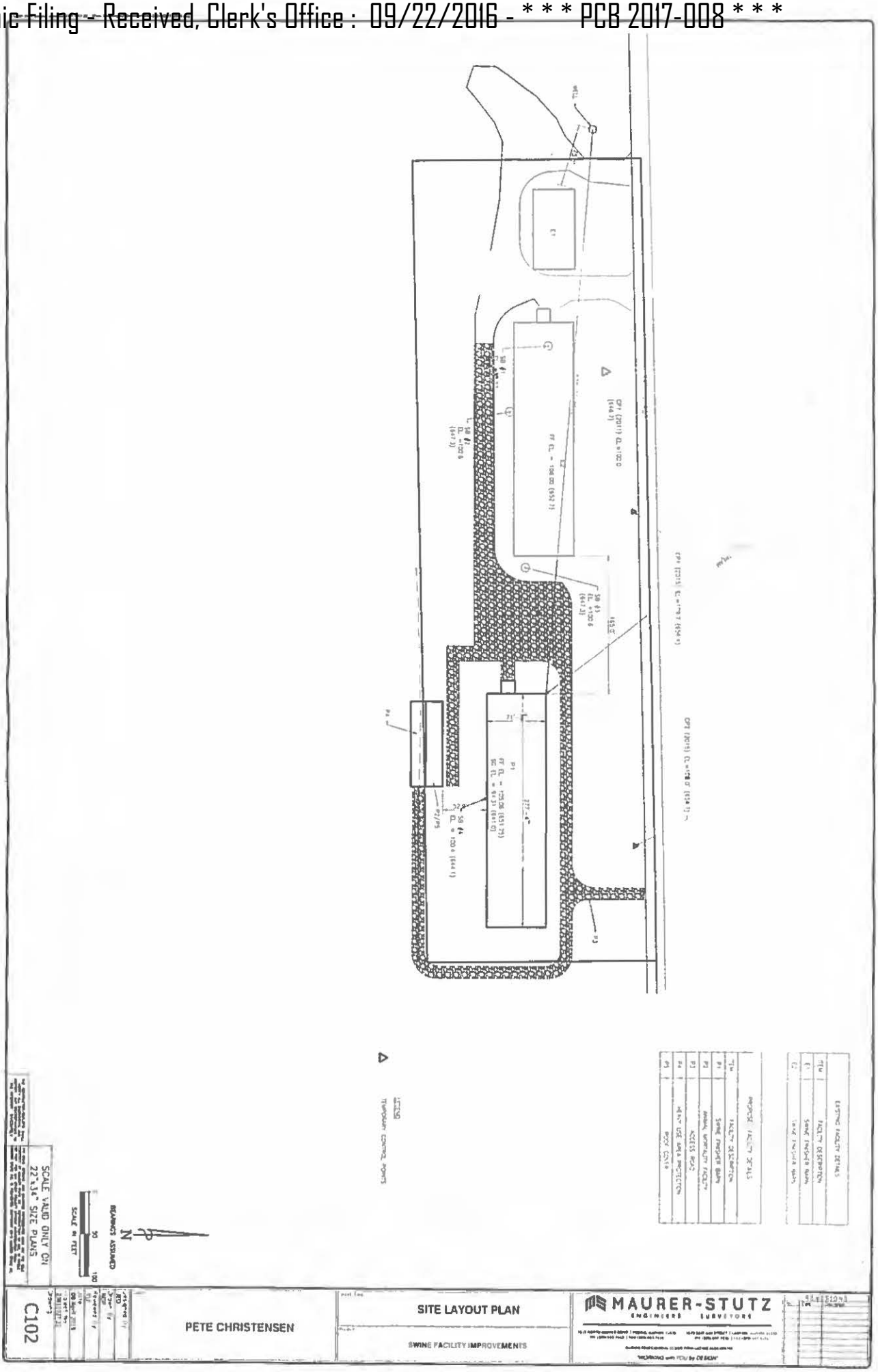
PLANS PREPARED BY:

MAURER-STUTZ
ENGINEERS SURVEYORS

MSI PROJECT NO. 23811027.22

S:\23811027.22 [Pete Christensen]\Drawings\New Details\00 C701R 2.dwg


C101
PETE CHRISTENSEN
FARMSTEAD PLAN
MAURER-STUTZ



SCALE VALID ONLY ON 22"x34" SIZE PLANS

SCALE IN FEET

BEARINGS ASSUMED

N

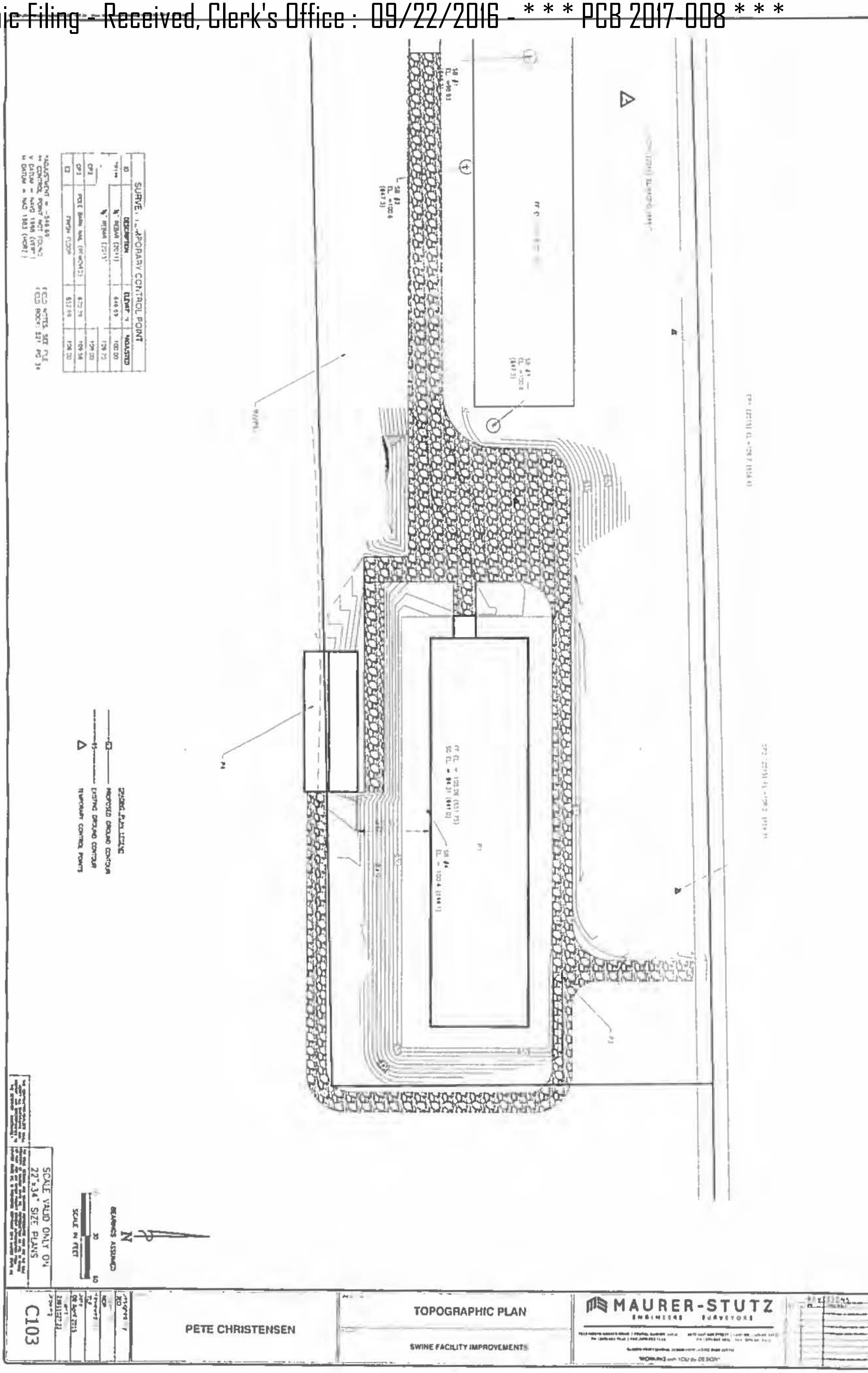
PETE CHRISTENSEN

SITE LAYOUT PLAN

SWINE FACILITY IMPROVEMENTS

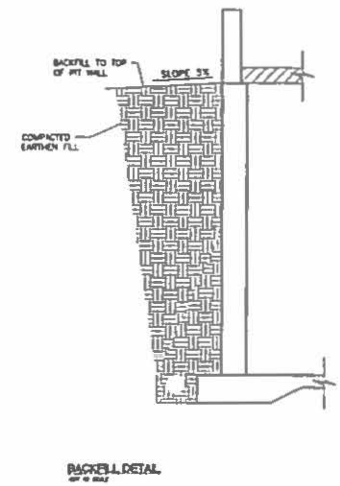
MAURER-STUTZ ENGINEERS SURVEYORS

C102


TOPOGRAPHIC PLAN
SWINE FACILITY IMPROVEMENTS
PETE CHRISTENSEN
MAURER-STUTZ
ENGINEERS SURVEYORS
C103

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS IN A MANNER APPROVED BY THE UTILITY OWNER.
2. CONTRACTOR SHALL COORDINATE CONNECTIONS, RELOCATIONS AND ADJUSTMENTS OF ALL UTILITIES LOCATED IN THE PUBLIC RIGHT OF WAY WITH THE RESPECTIVE UTILITY OWNER(S).
3. WHEN EXCAVATING UNDER EXISTING UTILITIES, CONTRACTOR SHALL SUPPORT THE EXISTING UTILITY UNTIL BACKFILL AND COMPACTION ARE COMPLETE. BACKFILL AT THESE CROSSINGS SHALL CONSIST OF MECHANICALLY COMPACTED SELECTED GRANULAR MATERIALS TO FINISHED GRADE. CONTRACTOR MAY USE FLOWABLE FILL IN LIEU OF SELECT GRANULAR FILL, BUT NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. UNLESS OTHERWISE INDICATED, EXISTING SURFACE TOPOGRAPHY AND DRAINAGE SHALL NOT BE ALTERED BY CONSTRUCTION. CONTRACTOR SHALL RESTORE TO ORIGINAL CONDITION ANY DRAINAGE FEATURE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCIES PRIOR TO BORING AND/OR JACKING UNDER RAILROADS, STREETS, COUNTY AND TOWNSHIP ROADS, OR STATE HIGHWAYS AND COMPLY WITH ALL REQUIREMENTS OF THE CONTROLLING AGENCY INCLUDING ANY PROVISIONS IN APPLICABLE PERMITS, ETC. COSTS FOR COORDINATION SHALL BE INCIDENTAL TO THE CONTRACT.
6. PRIVATE DRIVEWAYS SHALL NOT BE COMPLETELY CLOSED WITHOUT 24 HOUR PRIOR NOTIFICATION OF DRIVEWAY OWNER.
7. IN GENERAL, THE LIMITS OF SELECT GRANULAR BACKFILL AND GRANULAR CRADLE MATERIAL INSTALLATION HAVE NOT BEEN SHOWN. REFER TO THE SPECIFICATIONS AND STANDARD DETAILS ON THE DRAWINGS FOR BACKFILL AND CRADLE MATERIAL SPECIFICATIONS, INSTALLATION PROCEDURES AND COMPACTION REQUIREMENTS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING ALL AS-BUILT DRAWINGS TO THE OWNER AND ENGINEER WITHIN 30 DAYS OF SUBSTANTIAL COMPLETION. THE CONTRACTOR SHALL KEEP ONE SET OF PLANS UPON WHICH ALL "REVISIONS" OR "VARIATIONS" ARE NOTED IN RED PENCIL. THIS SET SHALL BE TURNED OVER TO THE ENGINEER AT THE END OF THE PROJECT, AS A CONDITION PRECEDENT TO ISSUANCE OF FINAL CERTIFICATE FOR PAYMENT.
9. ALL REMOVAL ITEMS SHALL BE FULL-DEPTH SAW CUT, UNLESS OTHERWISE NOTED.
10. ANY DAMAGE TO STREETS DUE TO THE CONTRACTOR'S OPERATIONS (I.E., INCREASED TRUCK TRAFFIC, HEAVY EQUIPMENT TRAFFIC, ETC.) SHALL BE REPAIRED TO THE SATISFACTION OF, AND AT NO EXPENSE TO, THE OWNER OF THE DAMAGED PAVEMENT STRUCTURE. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED UNDER THIS CONTRACT FOR SUCH REPAIRS.
11. IN ACCORDANCE WITH PUBLIC ACT 96-1416, WHICH AMENDS THE ENVIRONMENTAL PROTECTION ACT CONCERNING GENERAL CONSTRUCTION OR DEMOLITION DEBRIS, THE CONTRACTOR SHALL NOT CONDUCT ANY GENERATION, TRANSPORTATION OR RECYCLING OF CONSTRUCTION OR DEMOLITION DEBRIS, CLEAN OF GENERAL OR UNCONTAMINATED SOIL GENERATED DURING CONSTRUCTION, REMODELING, REPAIR, AND DEMOLITION OF UTILITIES, STRUCTURES AND ROADS THAT IS NOT COMMINGLED WITH ANY WASTE, WITHOUT THE MAINTENANCE OF DOCUMENTATION IDENTIFYING THE HAULER, GENERATOR, PLACE OF ORIGIN OF THE DEBRIS OR SOIL, THE WEIGHT OR VOLUME OF THE DEBRIS OR SOIL, AND THE LOCATION, OWNER AND OPERATOR OF THE FACILITY WHERE THE DEBRIS OR SOIL WAS TRANSFERRED, DISPOSED, RECYCLED OR TREATED. THIS DOCUMENTATION MUST BE MAINTAINED BY THE CONTRACTOR FOR THREE (3) YEARS. NEW CERTIFICATIONS ARE ADDED INCLUDING OWNER AND PROFESSIONAL ENGINEER.



BACKFILL DETAIL

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ ENGINEERS SURVEYORS

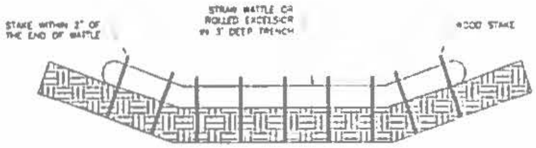
GENERAL NOTES AND CIVIL DETAILS

SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

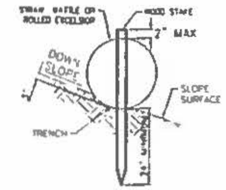
JRO
NDP
TLF
08 April 2015
13011027.22

C501

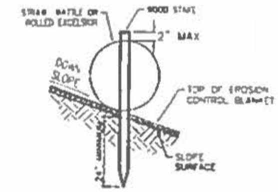


NOTES
1 OVERLAP MINIMUM IS THE DIAMETER OF THE ROLL
2 4' SPACING FOR STRAW WATTLES
3 3' SPACING FOR ROLLED EXCELSIOR
4 OR ACCORDING TO MANUFACTURES SPECIFICATIONS

STRAW WATTLE / ROLLED EXCELSIOR DITCH CHECK ELEVATION VIEW
NOT TO SCALE



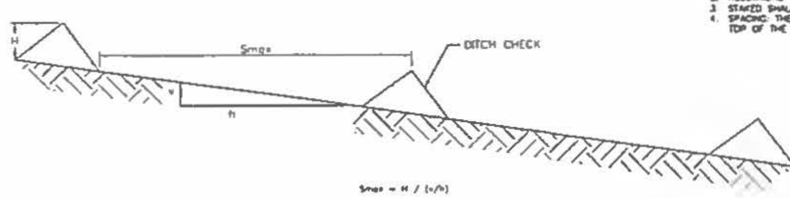
STRAW WATTLE / ROLLED EXCELSIOR ANCHOR DETAIL - BARE SOIL
NOT TO SCALE



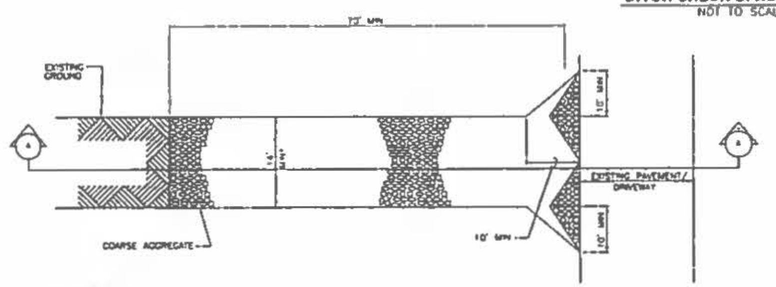
STRAW WATTLE / ROLLED EXCELSIOR ANCHOR DETAIL - W/ BLANKET
NOT TO SCALE

NOTES.
1. ENDS OF WATTLES OR ROLLED EXCELSIOR SHALL BE TURNED AT LEAST 6" UPSLOPE.
2. RECOMMEND STAKES ARE 1 1/8" WIDE X 1 1/8" THICK X 30" LONG.
3. STAKED SHALL NOT EXTEND ABOVE STRAW WATTLE MORE THAN 2"
4. SPACING: THE TOE OF THE UPSTREAM DITCH CHECK SHALL CREATE THE A HORIZONTAL LINE WITH THE TOP OF THE DOWNSTREAM DITCH CHECK.

SILT FENCE DITCH CHECK	
% SLOPE	MAX SPACING, FT
6	30
5	40
4	50
3	65
2	100
1	200
0.5	200

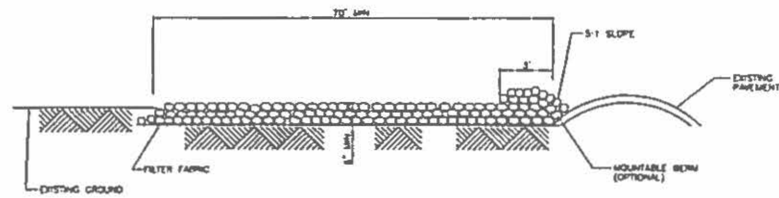


DITCH CHECK SPACING DETAIL
NOT TO SCALE



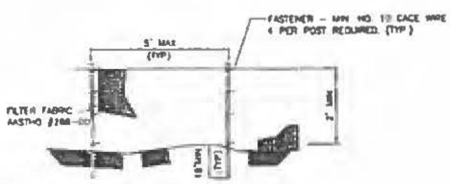
* MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS OPERATION

STABILIZED CONSTRUCTION ENTRANCE DETAIL (PLAN VIEW)
NOT TO SCALE

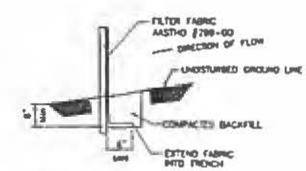


STABILIZED CONSTRUCTION ENTRANCE DETAIL (SECTION A-A)
NOT TO SCALE

SILT FENCE	
% SLOPE	MAX SPACING, FT
25	50
20	75
15	125
10	175
<10	200



SILT FENCE ELEVATION VIEW
NOT TO SCALE



SILT FENCE ANCHOR DETAIL
NOT TO SCALE

NOTES.
1 TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3 FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ

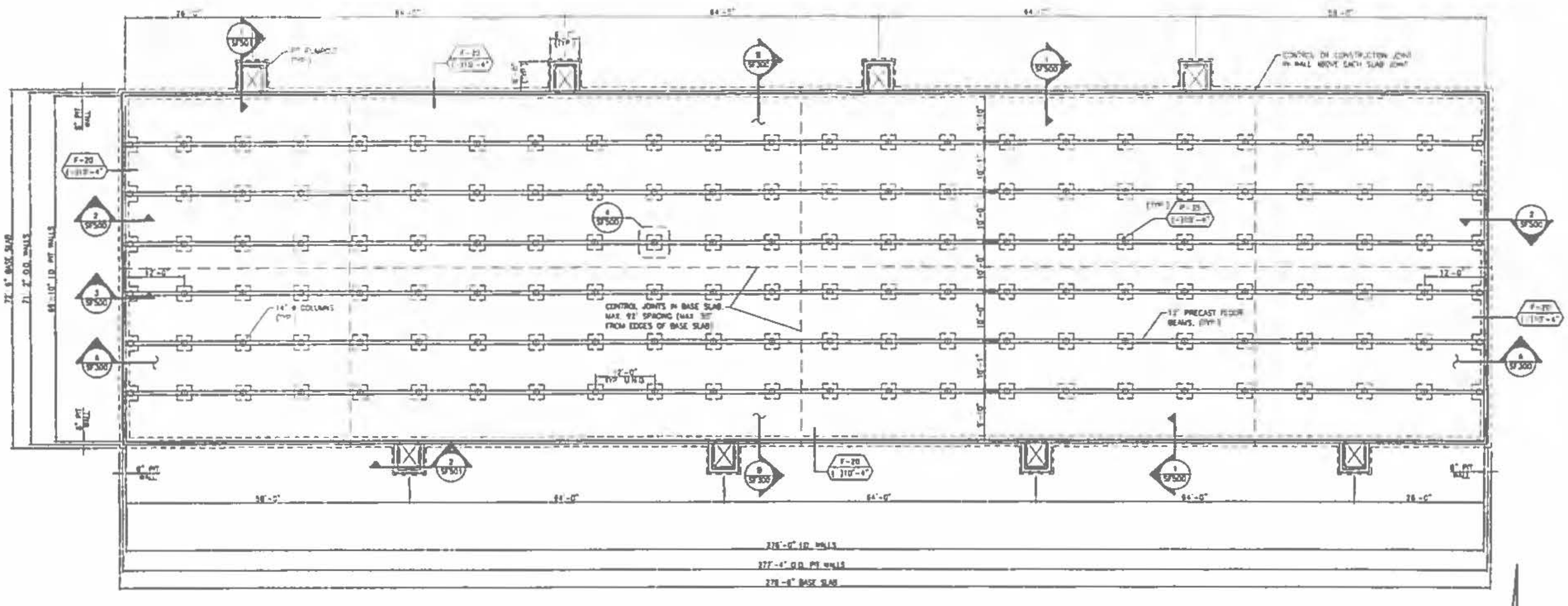
STORMWATER EROSION CONTROL DETAILS

SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

28 April 2015

SW501



CONCRETE PLAN

SCALE 3/32" = 1'-0"

DESIGN CRITERIA

1. CONCRETE $f'c$ = 4,000 psi
2. REINFORCEMENT f_y = 60,000 psi
3. ALLOWABLE SOIL BEARING PRESSURE = 1500 psf (NET), COLUMNS = 1700 psf (NET), WALLS
4. FLOOR DEAD LOAD = 38.8 psf (SLATS)
5. FLOOR LIVE LOAD = 57.5 psf (FINISHER PIGS)
6. ROOF SNOW LOAD = 20 psf
7. LATERAL SOIL PRESSURE = 60 psf/ft
8. SUBGRADE FRICTION FACTOR = 0.9 (SAND)
9. LOCATION BUREAU CO., ILLINOIS

PLAN NOTES

1. THE TANK AND BASE SLAB ARE NOT DESIGNED FOR HYDROSTATIC PRESSURES OR BUOYANCY. MAINTAIN THE GROUND WATER TABLE BELOW THE TOP OF THE BASE SLAB.
2. THE CONTRACTOR SHALL ENSURE THE WATER-TIGHTNESS OF THE PIT BY PROPER INSTALLATION AND DETAILING OF THE WATERSTOPS AND JOINT DETAILS AS SHOWN IN THESE PLANS AND PER THE MANUFACTURER'S RECOMMENDATIONS.
3. WATERSTOPS SHOWN IN THESE PLANS SHALL BE AS FOLLOWS:
   - COMPRESSION TYPE WATERSTOP – GREENSTREAK SWELLSTOP OR EQUAL.
   - BASE SEAL WATERSTOP – GREENSTREAK #639 OR EQUAL.
   - PVC WATERSTOP – GREENSTREAK #702, #704, OR EQUAL AS SHOWN.
4. CONTROL OR CONSTRUCTION JOINTS SHALL BE PROVIDED IN THE SLAB AND WALLS AS SHOWN IN THE PLAN VIEW AND IN ACCORDANCE WITH THE DETAILS ON SHEET S700. DO NOT LOCATE JOINTS WITHIN 6" OF A COLUMN FOOTING OR WITHIN 3'-0" FROM A PUMPOUT.
5. WALL JOINTS IN THE ENDWALL SHALL BE CONSTRUCTION JOINTS WITH ALL HORIZONTAL BARS CONTINUOUS OR LAP SPLICED ACROSS THE JOINT.
6. SEE SHEET SF300 FOR BASE SLAB THICKNESS AND REINFORCEMENT.
7. FOOTINGS SHALL BE CENTERED ON THE RESPECTIVE WALL OR COLUMN UNLESS SHOWN OTHERWISE.
8. TOP OF FOOTING ELEVATIONS SHOWN RELATIVE TO FINISH FLOOR ELEVATION (TOP OF SLATS) = 0'-0". SEE CIVIL SHEETS FOR FINISH FLOOR ELEVATION.
9. OTHER THAN AT THE PIT PUMPOUTS, THE TANK WALLS ARE NOT DESIGNED FOR VEHICULAR SURCHARGE PRESSURE. DO NOT ALLOW VEHICLES OR HEAVY EQUIPMENT WITHIN 5' OF THE TANK WALLS EXCEPT AT THE PUMPOUTS.
10. NO CONDUITS (ELECTRICAL, FRESH WATER, ETC.) SHALL PENETRATE THE PIT WALLS BELOW THE SLATS.
11. TANK MUST BE BACKFILLED TO WITHIN TWO FEET OF TOP OF PIT WALLS PRIOR TO PUTTING LIQUID IN THE TANK. SET PRECAST SLATS AND BEAMS AND GROUT ALL RESULTING GAPS PRIOR TO BACKFILLING.
12. BACKFILL SHALL BE PLACED TO ELEVATION (-)10'-4". DO NOT VARY DEPTH OF BACKFILL MORE THAN 6" FROM SPECIFIED DEPTH.
13. REFER TO WRITTEN SPECIFICATIONS FOR SOIL COMPACTION DENSITY.

WALL FOOTING SCHEDULE

(TYPICAL FOOTING MARKER: MARK / ELEV. TOP OF FOOTING)

MARK	WIDTH	DEPTH	LONG. REINF.	TRANS. REINF.	REMARKS
F-20	2'-0"	9"	-	-	

PAD FOOTING SCHEDULE

(TYPICAL FOOTING MARKER: MARK / ELEV. TOP OF FOOTING)

MARK	WIDTH	LENGTH	DEPTH	LONG. REINF.	TRANS. REINF.	REMARKS
P-35	3'-6"	3'-6"	9"	-		

SCALE VALID ONLY ON 22"x34" SIZE PLANS

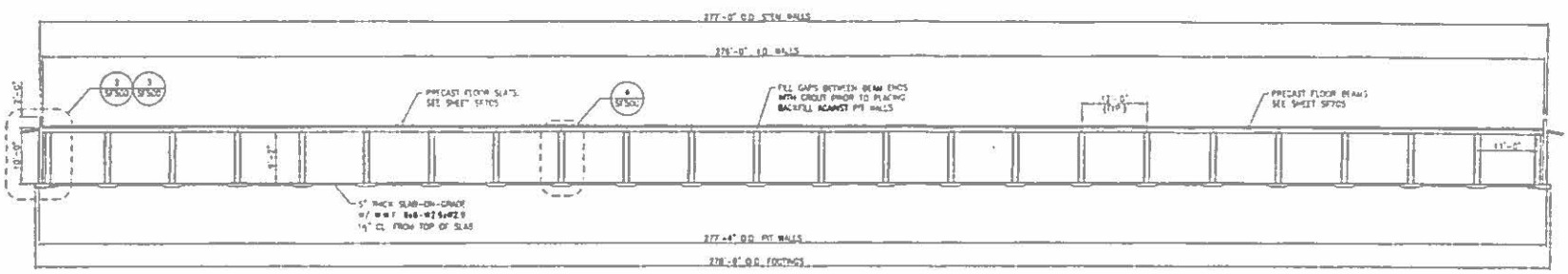
MAURER-STUTZ ENGINEERS SURVEYORS

PIT PLAN VIEW FINISHER BARN

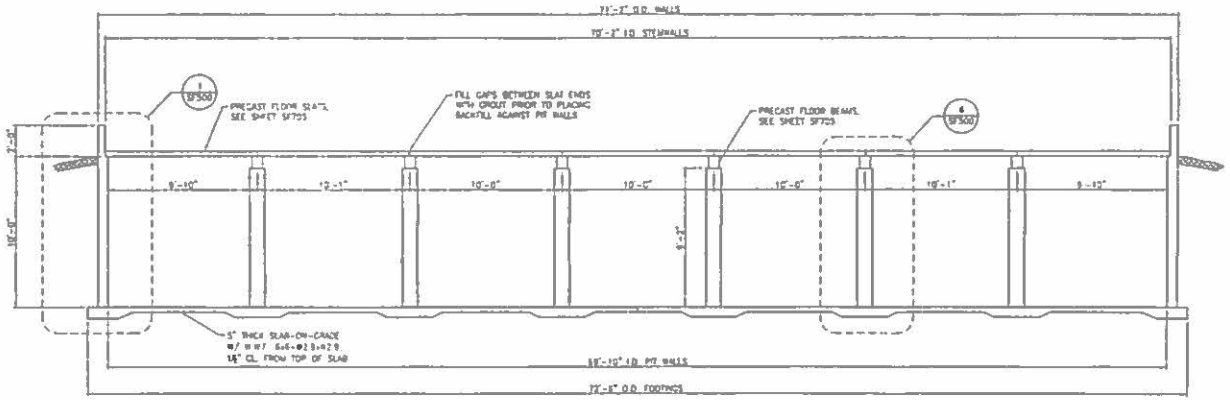
SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

Designed By: CHJ
Drawn By: LVH
Reviewed By: BAS
Date: May 6, 2015
Project No: 120111927.22
Drawing: SF100



A LONGITUDINAL PIT SECTION
SCALE 3/16" = 1'-0"



B PIT CROSS SECTION
SCALE 1/4" = 1'-0"

SHEET NOTES:

1. SEE SHEET SF100 FOR SLAB AND WALL CONTROL JOINT LOCATIONS.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

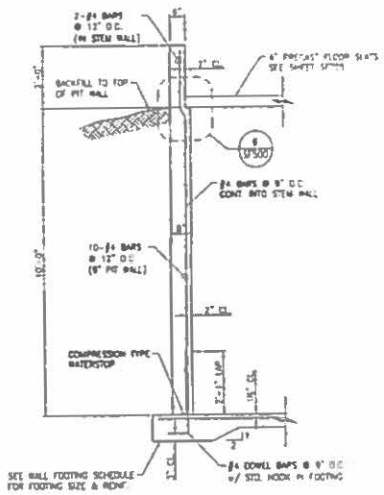
MAURER-STUTZ ENGINEERS SURVEYORS

PIT SECTIONS
FINISHER BARN

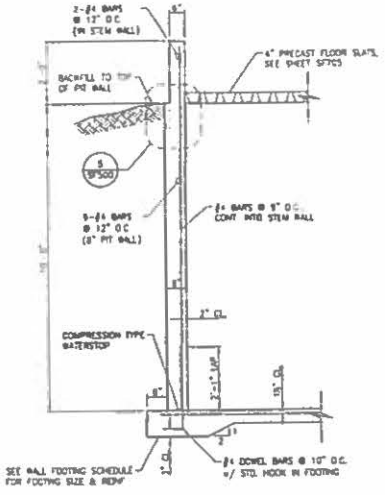
SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

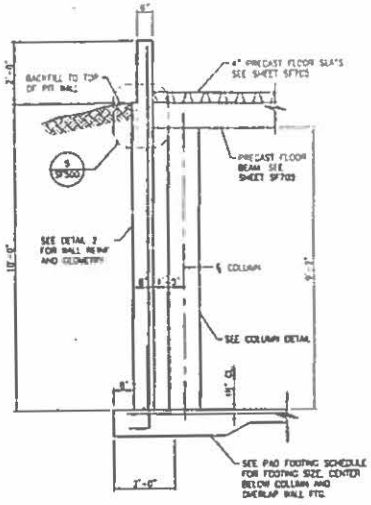
Designed By: CJB
Drawn By: LMH
Reviewed By: BAS
Date: May 4, 2015
Project No: 2501162732
Drawing: SF300



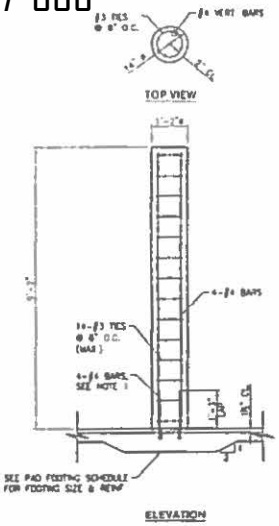
1 TYP. SIDE WALL SECTION
SCALE 1/2" = 1'-0"



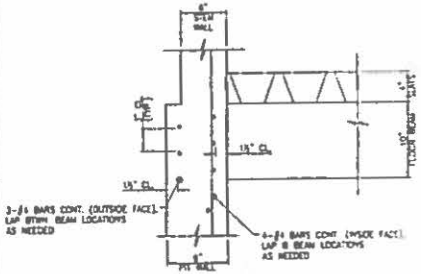
2 TYP. END WALL SECTION
SCALE 1/2" = 1'-0"



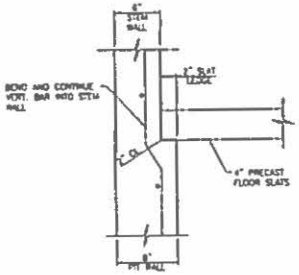
3 END WALL SECTION @ COLUMN
SCALE 1/2" = 1'-0"



4 TYP. COLUMN DETAIL
SCALE 1/2" = 1'-0"



5 END WALL BEAM
SCALE 1 1/2" = 1'-0"



6 SLAT LEDGE DETAIL
SCALE 1 1/2" = 1'-0"

SHEET NOTES:

1. DRILL AND EPOXY GROUT BARS 4" INTO CONCRETE SLAB OR WALL AS SHOWN. SELECT EPOXY MATERIAL TO OBTAIN MINIMUM 500 lbs. TENSION AND 500 lbs. SHEAR CAPACITIES. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL EPOXY GROUT MATERIAL AND INSTALLATION REQUIREMENTS.
2. ANY SPALLING, HONEYCOMBING, OR DELAMINATION OF THE CONCRETE ALONG THE SLAT BEARING LEDGE SHALL BE REPAIRED USING AN EPOXY REPAIR MORTAR TO MAINTAIN A FULL 2" WIDE BEARING LEDGE FOR THE SLATS.
3. NO HORIZONTAL CONSTRUCTION JOINTS SHALL BE PERMITTED IN THE PIT WALLS BELOW THE SLATS.
4. SEE SHEET ST00 FOR TYPICAL CORNER BAR AND LAP SPLICE DETAILS.
5. SEE SHEET SF300 FOR BASE SLAB THICKNESS AND REINFORCEMENT.
6. INCREASE CLEARANCE TO SLAB REINF. BELOW EXTERIOR WALLS AS NECESSARY FOR PROPER PLACEMENT OF WATERSTOP.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

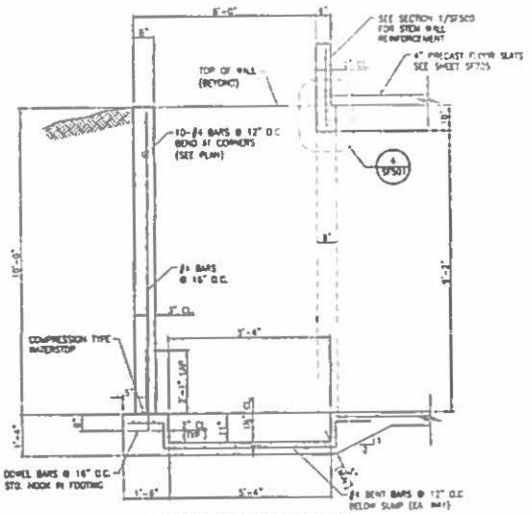
MAURER-STUTZ ENGINEERS SURVEYORS

PIT WALL AND COLUMN DETAILS FINISHER BARN

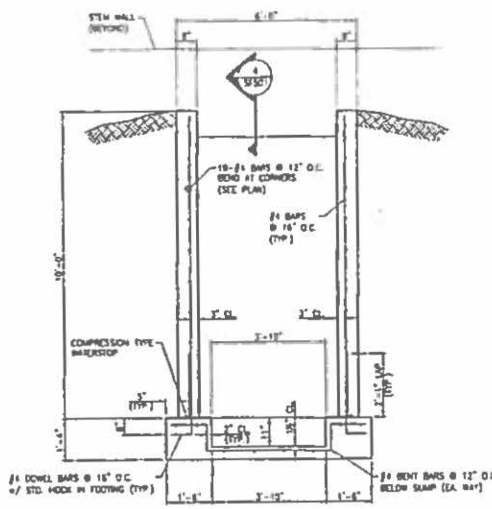
SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

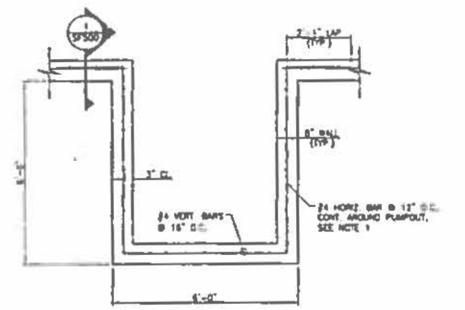
Designed By: DCB
Drawn By: LMK
Reviewed By: BAS
Date: May 4, 2015
Project No: 13M11027.32
Drawing: SF500



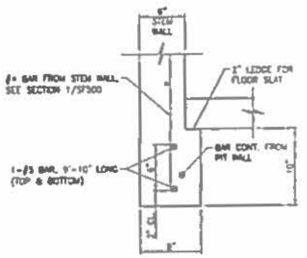
1 PIT PUMPOUT SECTION
SCALE: 1/2" = 1'-0"



2 PIT PUMPOUT SECTION
SCALE: 1/2" = 1'-0"



3 PIT PUMPOUT - PLAN
SCALE: 1/2" = 1'-0"



4 PUMPOUT LINTEL DETAIL
SCALE: 1 1/2" = 1'-0"

SHEET NOTES

1. "CONT." HORIZONTAL BARS AROUND PUMPOUT MAY BE SPLICED AT MID-LENGTH ALONG ANY OF THE SIDES. PROVIDE LAP SPLICE PER DETAIL ON SHEET S700. LAPS NEED NOT BE STAGGERED IN PUMPOUT
2. CORNER DETAILS FROM SHEET S700 NEED NOT APPLY AROUND THE PUMPOUTS.
3. HORIZONTAL LINTEL REINFORCEMENT BARS SHALL BE CENTERED ON THE PUMPOUT.
4. THE PUMPOUT SLAB AND SUMP PIT SHALL BE POURED MONOLITHICALLY WITH THE REST OF THE SURROUNDING BASE SLAB. THE PUMPOUT WALLS SHALL BE POURED MONOLITHICALLY WITH THE ADJACENT PIT WALLS.
5. MAINTAIN MIN. 1½" CLEARANCE FROM ENDS OF REINFORCEMENT BARS TO THE FORMED FACE OF CONCRETE WALLS

SCALE VALID ONLY ON 22"x34" SIZE PLANS

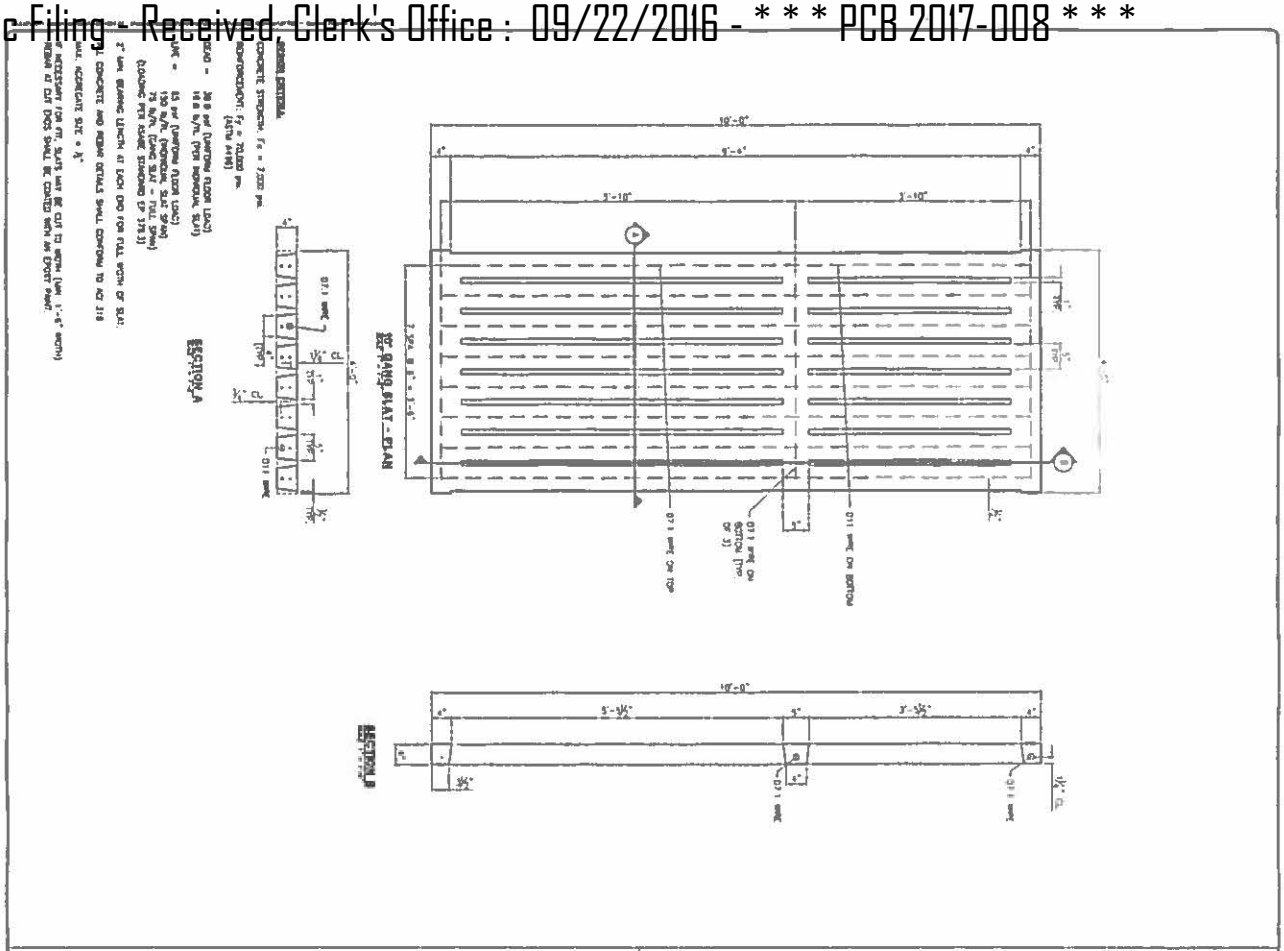
MAURER-STUTZ
ENGINEERS SURVEYORS

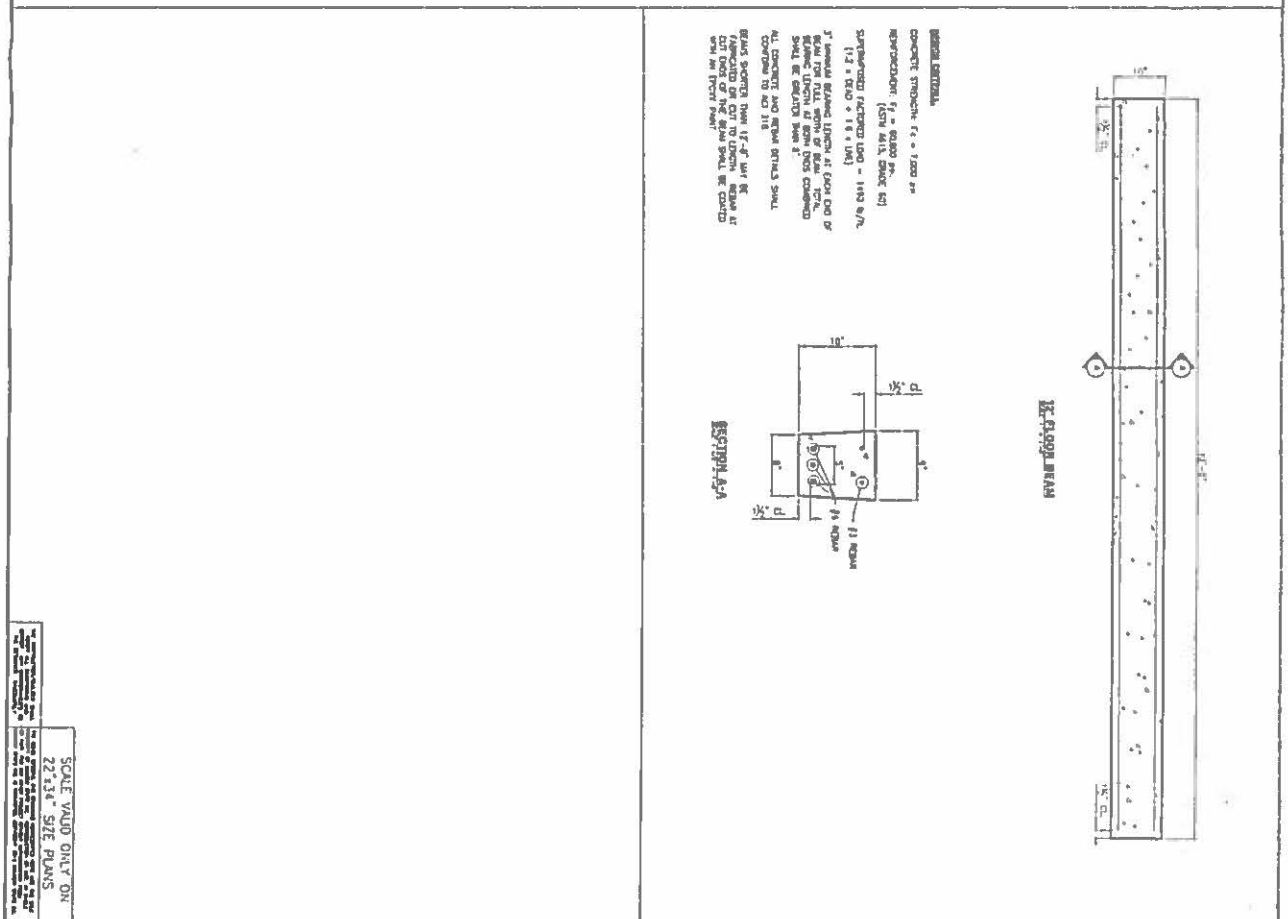
PIT PUMPOUT DETAILS
FINISHER BARN

SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

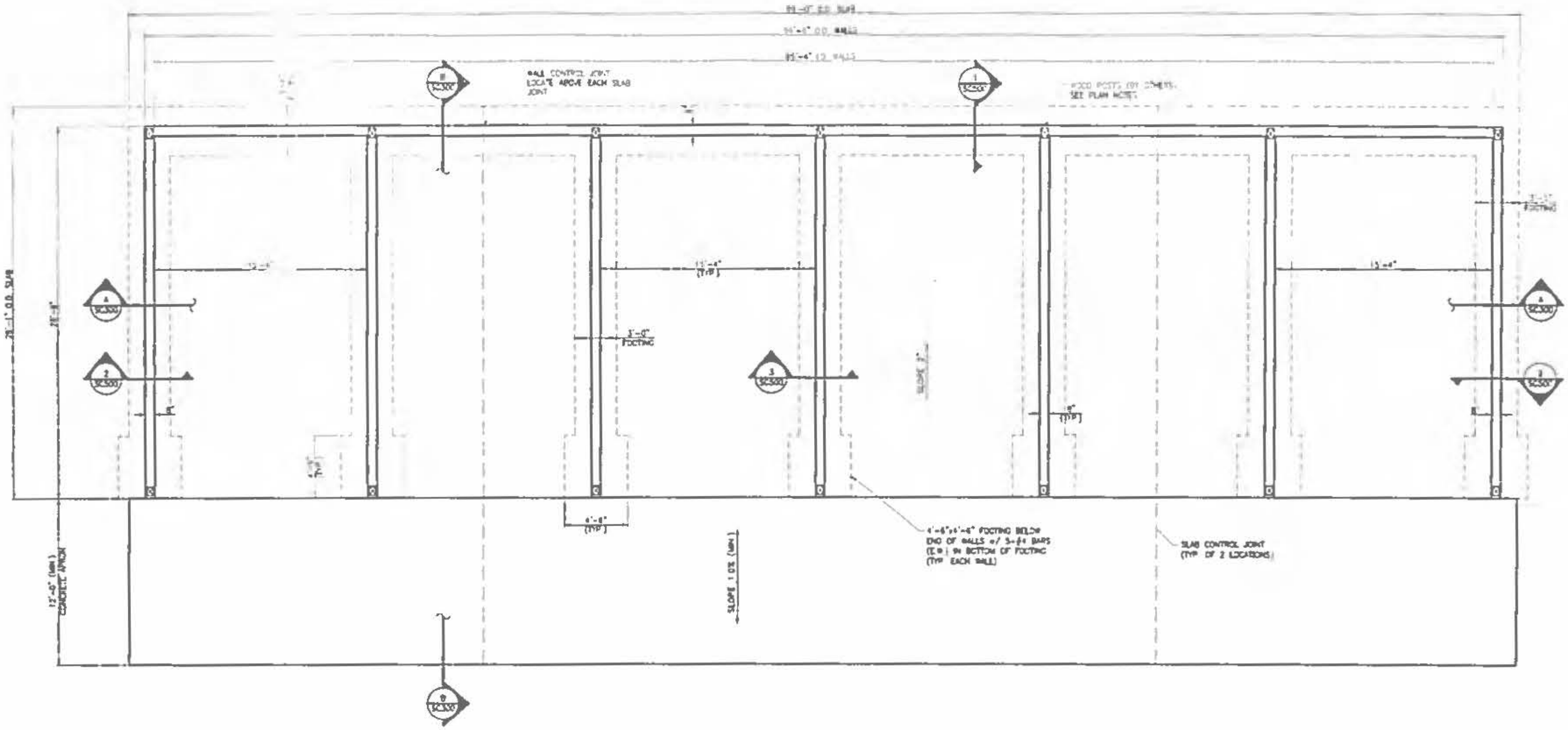
Designed By	CHB
Drawn By	LWH
Reviewed By	SAS
Date	May 6, 2015
Project No	23011027.32
Drawing	SF501





SCALE VALID ONLY ON 22"x34" SIZE PLANS

SF705	PETE CHRISTENSEN	PRECAST FLOOR MEMBERS CUSTOM PRECAST, INC.	MAURER-STUTZ ENGINEERS SURVEYORS	
		SWINE FACILITY IMPROVEMENTS		



CONCRETE PLAN

SCALE 1/4" = 1'-0"

DESIGN CRITERIA

1. CONCRETE: F'c = 4,000 psi
2. REINFORCEMENT: Fy = 60,000 psi
3. ALLOWABLE SOIL BEARING PRESSURE = 1700 psf
4. SUBGRADE FRICTION COEFFICIENT = 0.9 (SAND)
5. COMPOST DENSITY = 50 pcf
6. COMPOST LATERAL FORCE = 40 psf/ft
7. SOIL LATERAL FORCE = 60 psf/ft
8. LOCATION: BUREAU COUNTY, ILLINOIS

PLAN NOTES

1. THE CONTRACTOR SHALL ENSURE THE WATER-TIGHTNESS OF THE SLAB AND WALLS BY PROPER INSTALLATION AND DETAILING OF THE WATERSTOPS AND JOINT DETAILS AS SHOWN IN THESE PLANS AND PER THE MANUFACTURER'S RECOMMENDATIONS.
2. WATERSTOPS SHOWN IN THESE PLANS SHALL BE AS FOLLOWS:
   - COMPRESSION TYPE WATERSTOP – GREENSTREAK SWELLSTOP OR EQUAL.
   - BATE SEAL WATERSTOP – GREENSTREAK #539 OR EQUAL.
   - " ATERSTOP – GREENSTREAK #702, #704, #721 OR EQUAL AS SHOWN.
3. ROL JOINTS SHALL BE PROVIDED IN THE SLAB AND WALLS AS SHOWN IN THE PLAN VIEW AND IN ACCORDANCE WITH THE DETAILS ON SHEET S700.
4. SEE SHEET SC300 FOR SLAB THICKNESS AND REINFORCEMENT.
5. FOOTINGS SHALL BE CENTERED ON THE RESPECTIVE WALL UNLESS SHOWN OTHERWISE.
6. THE WOOD POSTS SHALL BE ANCHORED TO THE TOP OF THE CONCRETE WALLS IN ACCORDANCE WITH THE BUILDING DESIGNER'S PLANS.
7. REFER TO WRITTEN SPECIFICATIONS FOR SOIL COMPACTION DENSITY.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ
ENGINEERS SURVEYORS

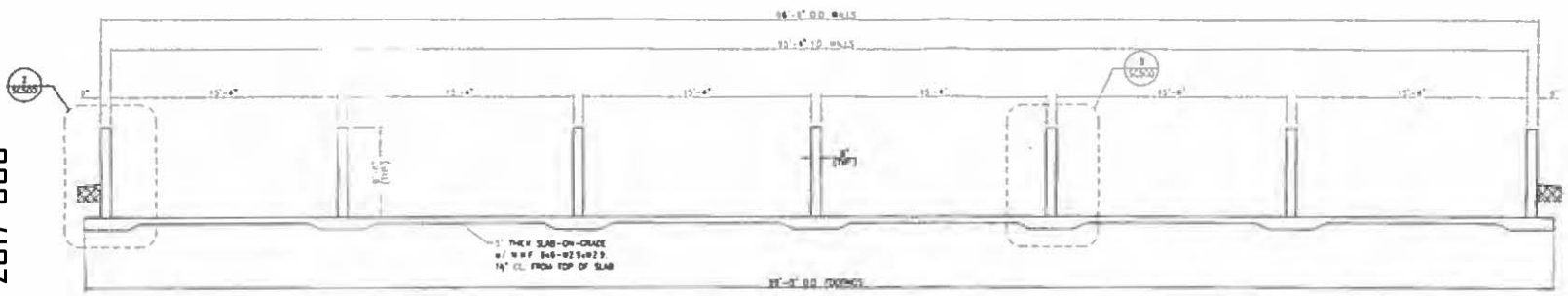
FOUNDATION PLAN
COMPOSTER

SWINE FACILITY IMPROVEMENTS

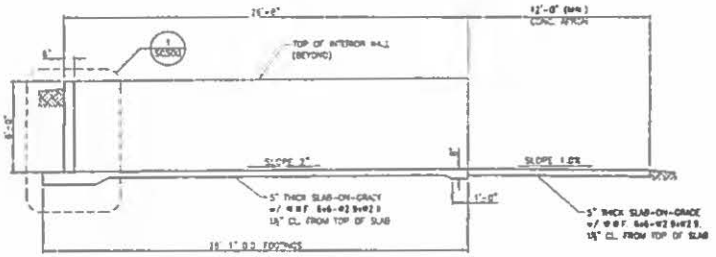
PETE CHRISTENSEN

Date: May 4, 2016

SC100



A LONGITUDINAL SECTION
SCALE: 1/4" = 1'-0"



B CROSS SECTION
SCALE: 1/4" = 1'-0"

SHEET NOTES:

1 SEE SHEET SC100 FOR SLAB AND WALL CONTROL JOINT LOCATIONS.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

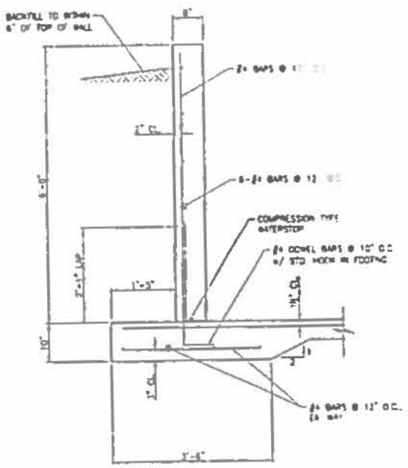
MAURER-STUTZ ENGINEERS SURVEYORS

CONCRETE SECTIONS COMPOSTER

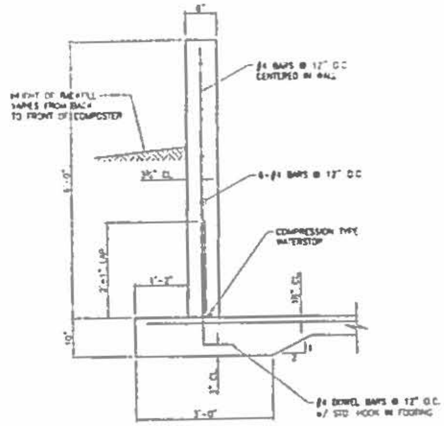
SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

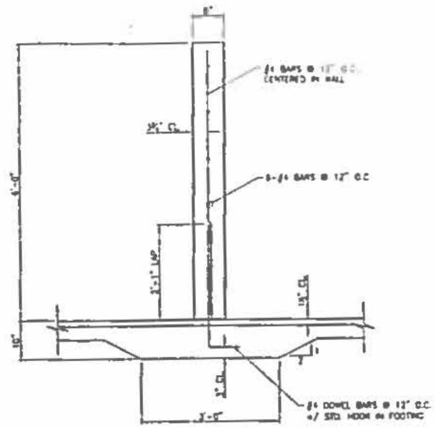
Designed By: LMH
Drawn By: LMH
Reviewed By: BAS
Date: May 4, 2015
Project No: 2015192.22
Drawing: SC300



(1) BACK WALL SECTION
SCALE 3/4" = 1'-0"



(2) SIDE WALL SECTION
SCALE 3/4" = 1'-0"



(3) TYP. INTERIOR WALL SECTION
SCALE 3/4" = 1'-0"

SHEET NOTES

1. SEE SHEET S700 FOR TYPICAL CORNER BAR AND LAP SPLICE DETAILS.
2. SEE SHEET SC300 FOR BASE SLAB THICKNESS AND REINFORCEMENT.

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ
ENGINEERS SURVEYORS
"WORKING with YOU by DESIGN"

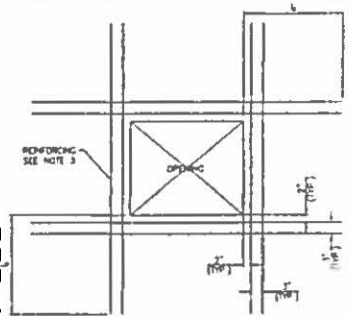
WALL DETAILS
COMPOSTER

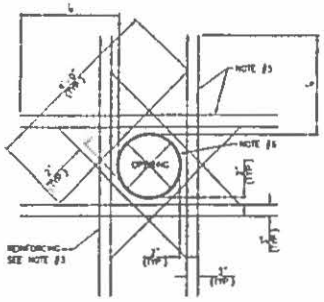
SWINE FACILITY IMPROVEMENTS

PETE CHRISTENSEN

Designed By: LVH
Drawn By: LVH
Reviewed By: BAS
Date: May 4, 2015
Project No: [illegible]
Drawing:

SC500

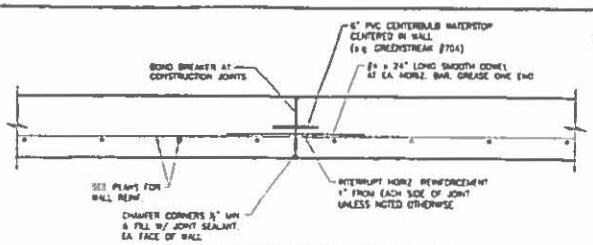




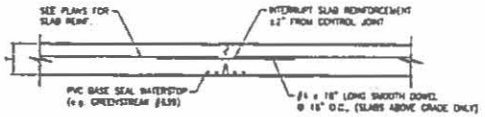
NOTES:

1. FOR OPENINGS WITH NO DIMENSIONS GREATER THAN 24" PROVIDE ADDITIONAL REINF AS SHOWN AND NOTED THESE DETAILS.
2. FOR OPENINGS WITH ANY DIMENSIONS GREATER THAN 24", PROVIDE ADDITIONAL REINF AS BILLED ON DRAWINGS. IF ADDITIONAL REINF NOT BILLED ON DRAWINGS PROVIDE ADDITIONAL REINF AS SHOWN AND NOTED THESE DRAWINGS.
3. SIZE AND NUMBER OF LAYERS OF ADDITIONAL REINF TO BE THE SAME AS REINF IN SLAB OR WALL ADJACENT TO THE OPENING. TYPICAL FOUR SIDES EXCEPT AS SHOWN OR NOTED ON DRAWINGS PROVIDE ONE-HALF OF THE INTERRUPTED BAR OR MIN OF TWO BARS EACH SIDE OF OPENING
4. CORED OPENINGS ARE NOT PERMITTED
5. SUPPLEMENTAL REINFORCEMENT FOR WALL PENETRATIONS ONLY.
6. PROVIDE WATERTIGHT SEAL AROUND PIPE. USE EITHER TYPE WH BENTONITE OR HYDROACTIVE RSS STRIP AROUND PIPE BEFORE CONCRETE IS CAST.
7. ALL SUPPLEMENTAL REINFORCING SHALL BE CENTERED ON OPENINGS
8. FOR $\frac{3}{4}$" SEE DEVELOPMENT LENGTH TABLE.

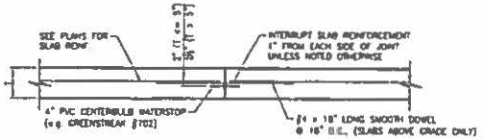
TYP. PENETRATION DETAIL
N.T.S.



WALL CONSTRUCTION/CONTROL JOINT
N.T.S.



SLAB CONTROL JOINT
N.T.S.



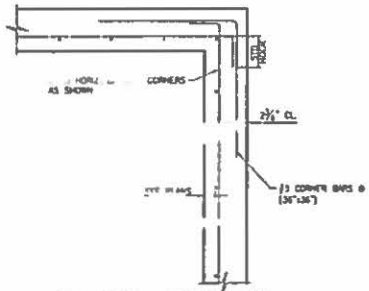
SLAB CONSTRUCTION JOINT
N.T.S.

BASIC NOTES:

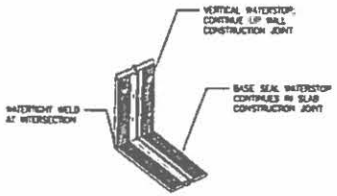
1. INSTALL VERTICAL CONSTRUCTION/CONTROL JOINTS IN WALLS OR CURBS TO MATCH SLAB CONSTRUCTION OR CONTROL JOINTS. SEE PLAN VIEWS FOR JOINT SPACING.
2. INTERSECT AND SEAL ("WELD") WATERSTOPS PER [illegible] BETWEEN WALLS AND SLABS TO PROVIDE A CONTINUOUS WATERTIGHT SEAL.
3. DO NOT EXTEND REINFORCEMENT THROUGH CONTROL JOINTS UNLESS [illegible] OTHERWISE.
4. INSTALL ALL WATERSTOPS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. A PLASTIC SLEEVE MAY BE [illegible] AS AN ALTERNATIVE TO [illegible] A GREASED SMOOTH DOWEL (e.g. GREE[illegible] COATED DOWEL

REINFORCEMENT NOTES:

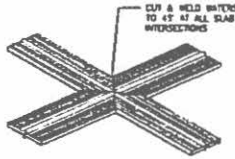
1. REINFORCEMENT BAR LAP SPLICES SHALL BE CLASS B SPLICES UNLESS NOTED OTHERWISE.
   a. CLASS A SPLICE = 1.0 x l_d
   b. CLASS B SPLICE = 1.3 x l_d
2. WELDED WIRE LAP LENGTHS SHALL BE ONE [illegible] SPACE +2"
3. HORIZONTAL BAR LAP SPLICES IN WALLS AND SLABS SHALL BE STAGGERED A MINIMUM THREE FEET SUCH THAT NO MORE THAN EVERY THIRD BAR IS SPLICED AT ANY ONE LOCATION.
4. WIRE TIES SHALL BE USED EVERY 12" ALONG A LAP SPLICE.
5. REINFORCING STEEL [illegible] OTHER BARS AS NEED[illegible]
6. ALL REINFORCING STEEL [illegible] SHALL SHALL BE CONNECTED TO FORM AN EQUAL POTENTIAL PLANE PC[illegible] CIRCUITS ACROSS JOINTS WHERE STEEL [illegible]



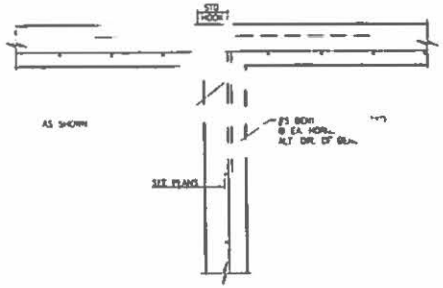
TYP. WALL [illegible] CORNER DETAIL
N.T.S.



WALL/SLAB JOINT INTERSECTION
N.T.S.



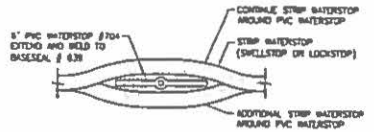
SLAB JOINT INTERSECTION
N.T.S.



DEVELOPMENT LENGTH.[illegible]			
BAR SIZE	SLAB		
#3	15"	19"	15"
#4	[illegible]	[illegible]	[illegible]
#5	[illegible]	[illegible]	[illegible]
#6	28"	37"	29"
#7	[illegible]	[illegible]	42"
#8	[illegible]	[illegible]	48"
#9	34"	70"	54"

* MINIMUM 4000 psi CONCRETE

STANDARD HOOK LE[illegible]	
BAR SIZE	LENGTH
#4	[illegible]
#5	10"
#6	1'-0"
#7	1'-2"
#8	1'-6
#9	1'-6"



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

SCALE VALID ONLY ON 22"x34" SIZE PLANS

MAURER-STUTZ ENGINEERS SURVEYORS

TYPICAL CONCRETE DETAILS

SWINE FACILITY IMPROVEMENTS

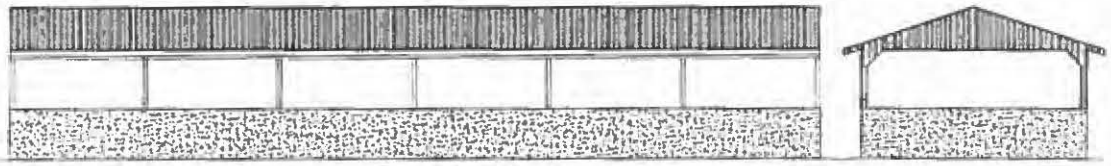
PETE CHRISTENSEN

BAS

May 4, 2015

S700

PROJECT DESCRIPTION: POST FRAME COMPOST BUILDING



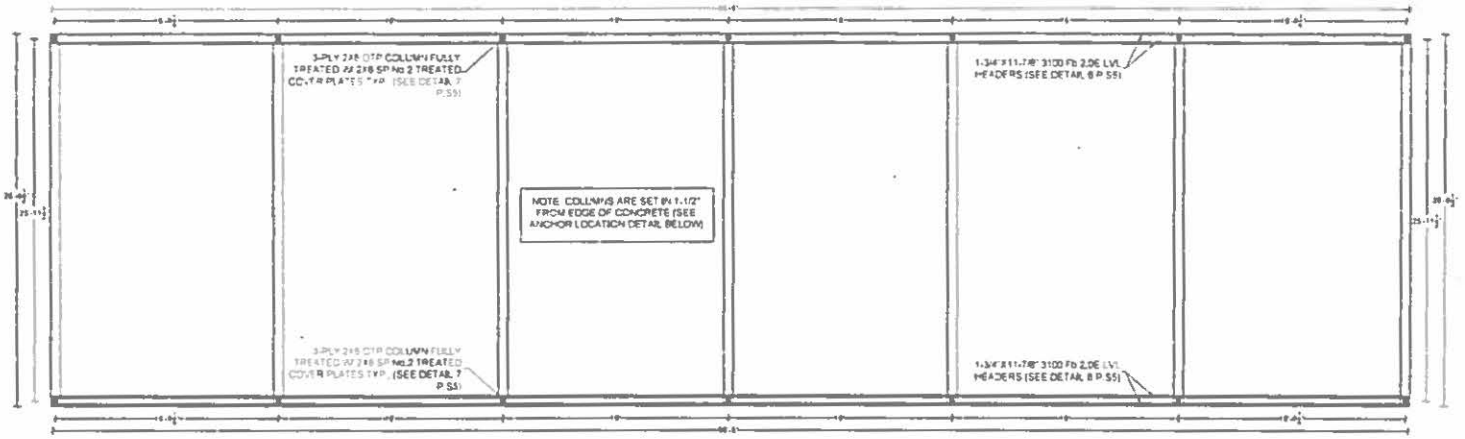
4725 1950 N. AVENUE
SHEFFIELD, IL 61361

POST FRAME COMPOST BUILDING

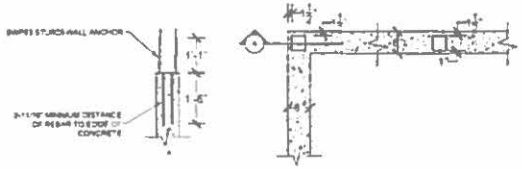
TITLE PAGE

FINAL

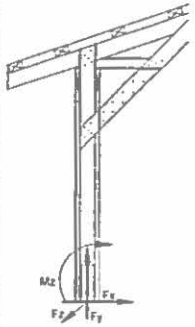
S0



POST PLAN VIEW



SWP63 ANCHOR LOCATION
SCALE: NTS



	DEAD	LR	SNOW	WIND
Fx	1503 lbs	349.3 lbs	349.3 lbs	480.7 lbs
Fy	126.5 lbs	3,928 lbs	3,928 lbs	-2,602 lbs or 2,400 lbs
Fz	0	0	0	140 lbs
Mo	2,916 lb-in	8,077 lb-in	8,077 lb-in	15,527 lb-in

MAX REACTIONS (ASD) AT BASE OF COLUMN
SCALE: NTS

4725 1950 N. AVENUE
SHEFFIELD, IL 61361

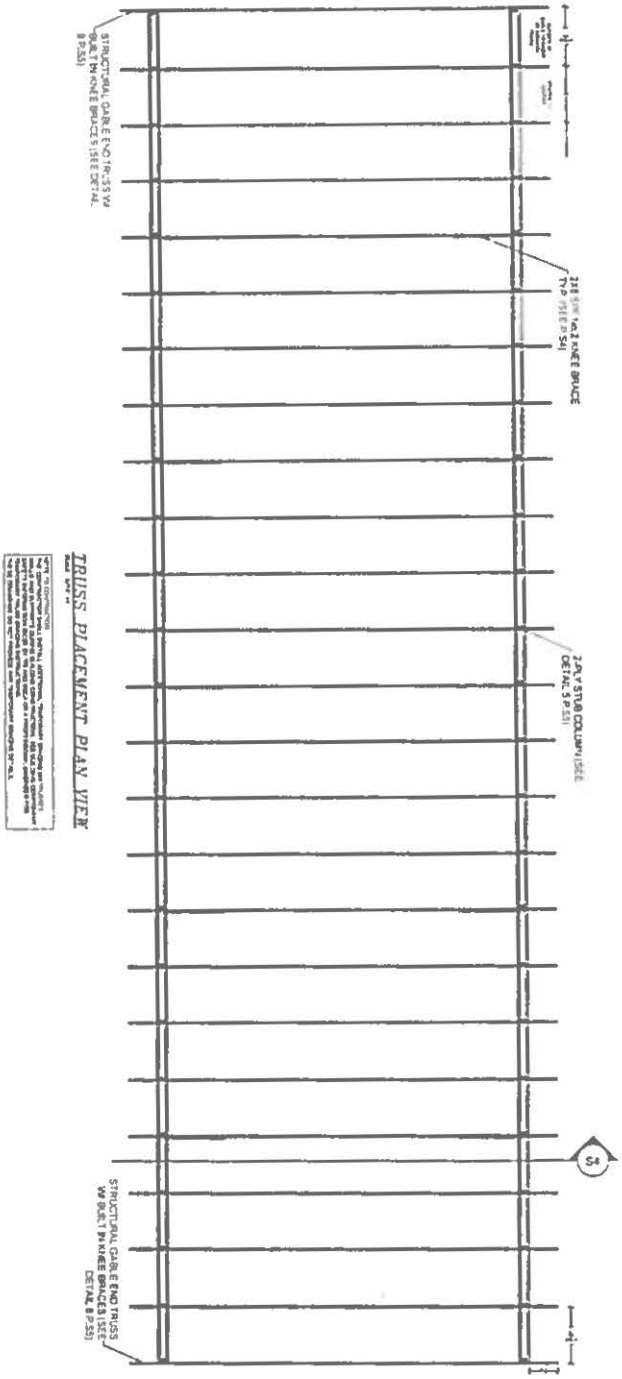
POST FRAME COMPOST BUILDING

POST PLAN VIEW

FINAL

S1

2 OF 7



TRUSS PLACEMENT PLAN VIEW

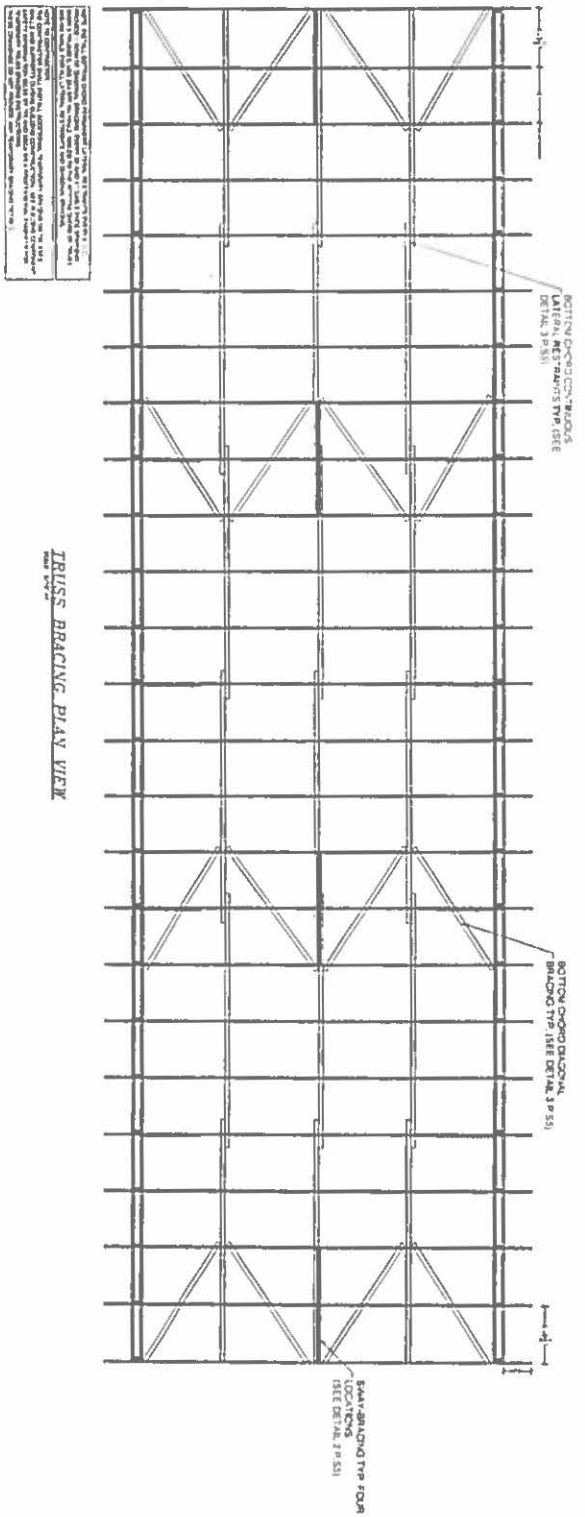
FINAL

S2

3 OF 7

POST FRAME COMPOST BUILDING

TRUSS PLACEMENT PLAN VIEW



TRUSS BRACING PLAN VIEW

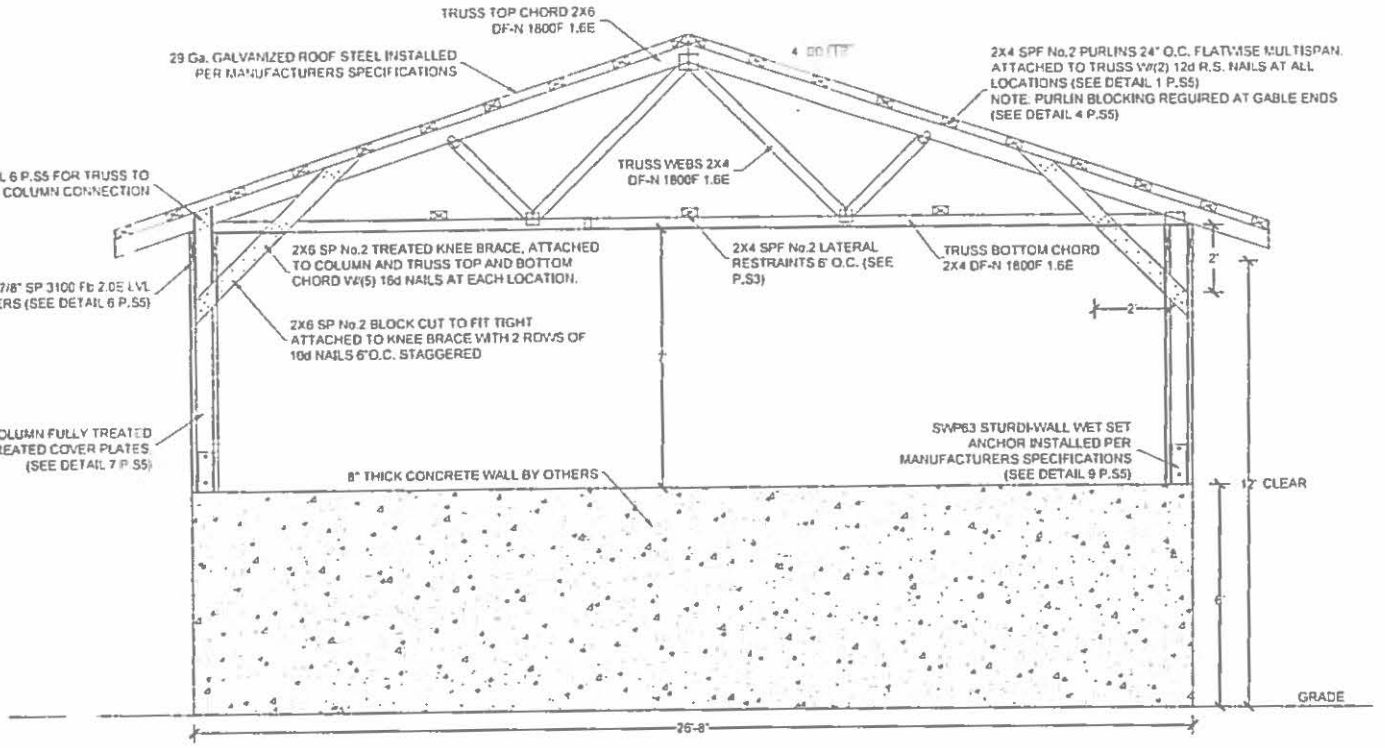
FINAL

S3

4 OF 7

POST FRAME COMPOST BUILDING

TRUSS BRACING PLAN VIEW



BUILDING CROSS SECTION

SCALE 1/2" = 1'

Frank E Stewart

4725 1950 N. AVENUE
SHEFFIELD IL 61361

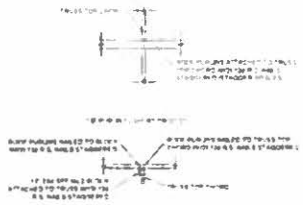
POST FRAME COMPOST BUILDING

BUILDING CROSS SECTION

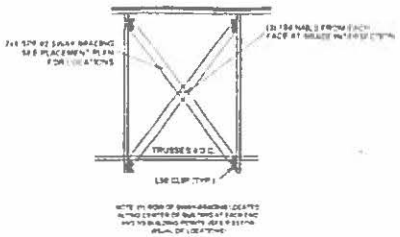
FINAL

S4

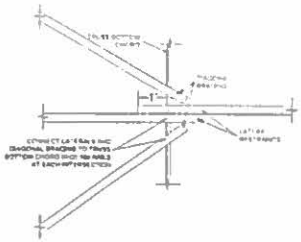
5 OF 7



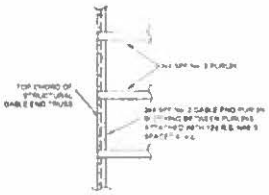
1 PURLIN CONNECTION
SCALE 3/8" = 1'



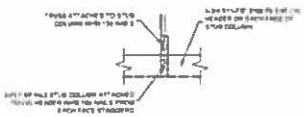
2 SWAY BRACING
SCALE 3/8" = 1'



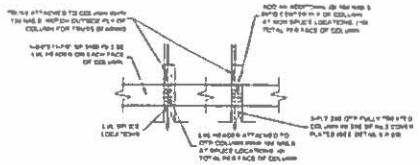
3 BOTTOM CHORD BRACING
SCALE 3/8" = 1'



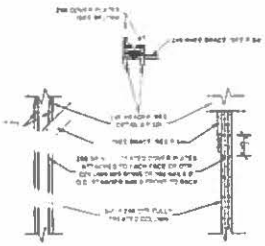
4 PURLIN BLOCKING
SCALE 3/8" = 1'



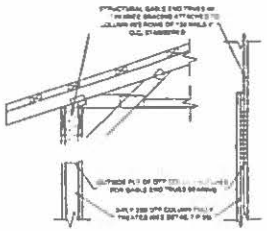
5 STUB COLUMN
SCALE 3/8" = 1'



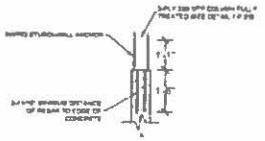
6 TRUSS & LVL CONNECTION
SCALE 3/8" = 1'



7 COLUMN DETAIL
SCALE 3/8" = 1'



8 BUILT IN KNEE BRACE
SCALE 3/8" = 1'



9 SWP63 ANCHOR
SCALE 3/8" = 1'

FRANK E. STEWART
BY WHOM RECEIVED
STRUCTURAL ENGINEER
ILLINOIS
Frank E Stewart

4725 1950 N. AVENUE
SHEFFIELD, IL 61361

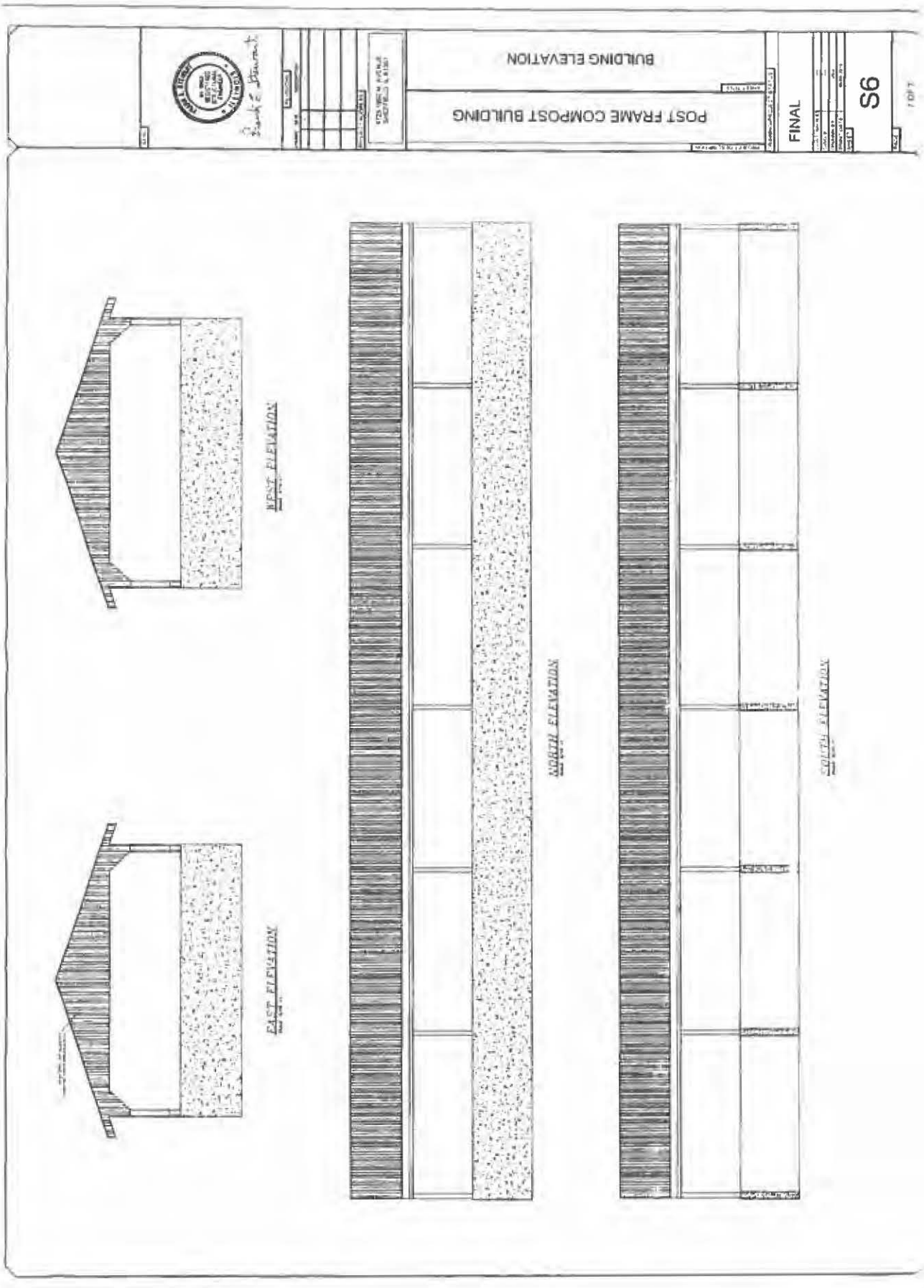
POST FRAME COMPOST BUILDING

DETAILS

FINAL

S5

6 OF 7


POST FRAME COMPOST BUILDING
BUILDING ELEVATION
FINAL
S6
WEST ELEVATION
EAST ELEVATION
NORTH ELEVATION
SOUTH ELEVATION

ILLINOIS POLLUTION CONTROL BOARD
July 24, 2014

CHRISTENSEN SWINE - Sheffield (Property Identification Number 07-26-400-001),	)	
Petitioner,	)	
v.	)	PCB 15-9
	)	(Tax Certification – Water)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

ORDER OF THE BOARD (by D. Glosser):

On July 15, 2014, the Illinois Environmental Protection Agency (Agency) filed a recommendation that the Board certify certain facilities of Christensen Swine-Sheffield (Christensen) as "pollution control facilities" for preferential tax treatment under the Property Tax Code. *See* 35 ILCS 200/11-5 *et seq.* (2012); 35 Ill. Adm. Code 125. Christensen's livestock waste management facilities are located at Section 26, T17N, R6E of 4th PM in Bureau County. In this order, the Board describes the legal framework for tax certifications, discusses the Agency's recommendation, and certifies that Christensen's identified "manure management structures," are pollution control facilities.

LEGAL FRAMEWORK

Under the Property Tax Code, "[i]t is the policy of this State that pollution control facilities should be valued, at 33 1/3% of the fair cash value of their economic productivity to their owners." 35 ILCS 200/11-5 (2012); *see also* 35 Ill. Adm. Code 125.200(a)(2). "For tax purposes, pollution control facilities shall be certified as such by the Pollution Control Board and shall be assessed by the Department of Revenue." 35 ILCS 200/11-20 (2012); *see also* 35 Ill. Adm. Code 125.200(a). Under the statute, the Board determines if the facilities are pollution control facilities; however, the Board is not authorized to assess a value of those facilities.

Under Section 125.202 of the Board's procedural rules, a person may submit an application for tax certification to the Agency. *See* 35 Ill. Adm. Code 125.202. If the Agency receives a tax certification application, the Agency must file with the Board a recommendation on the application, unless the applicant withdraws the application. *See* 35 Ill. Adm. Code 125.204(a). Among other things, the Agency's filing must recommend that the Board issue or deny tax certification. *See* 35 Ill. Adm. Code 125.204(a)(4). If the Board finds "that the claimed facility or relevant portion thereof is a pollution control facility . . ., the Pollution Control Board . . . shall enter a finding and issue a certificate to that effect." 35 ILCS 200/11-25 (2012); *see also* 35 Ill. Adm. Code 125.216(a).

AGENCY RECOMMENDATION

The Agency states that it received a tax certification application from Christensen on December 17, 2013.[1] Rec. at 1. On July 15, 2014, the Agency filed a recommendation with the Board, attaching Christensen's application. The Agency's recommendation identifies the facilities at issue:

> 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; once 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. *Id.*

The Agency further describes the facilities: "used to collect, transport and/or store livestock wastes prior to cropland application." Rec. at 1.

The Agency recommends that the Board certify that the facilities recommended for certification are pollution control facilities as defined in Section 11-10 of the Property Tax Code (35 ILCS 200/11-10 (2012)) with the primary purpose "of eliminating, preventing, or reducing water pollution.". Rec. at 2; *see also* Rec., Agency Technical Memorandum.

TAX CERTIFICATE

Based upon the Agency's recommendation and Christensen's application, the Board finds and certifies that Christensen's facilities recommended for certification identified in this order are pollution control facilities under the Property Tax Code (35 ILCS 200/11-10 (2012)). The Board makes no finding regarding the assessed value of [that facility/those facilities]. Under Section 11-25 of the Property Tax Code, the effective date of this certificate is "the date of application for the certificate or the date of the construction of the facility, which ever is later." 35 ILCS 200/11-25 (2012); *see also* 35 Ill. Adm. Code 125.216(a). Section 125.216(d) of the Board's procedural rules states that the Clerk "will provide the applicant and the Agency with a copy of the Board's order setting forth *the Board's findings and certificate, if any*." 35 Ill. Adm. Code 125.216(d) (quoting in italics 35 ILCS 200/11-30 (2012)). The Clerk therefore will provide Christensen and the Agency with a copy of this order.

IT IS SO ORDERED.

Section 11-60 of the Property Tax Code provides that any applicant or holder aggrieved by the issuance, refusal to issue, denial, revocation, modification or restriction of a pollution control certificate or a low sulfur dioxide emission coal fueled device certificate may appeal the Board's finding and order to the Circuit Court under the Administrative Review Law (735 ILCS 5/3-101 *et seq.* (2012)). *See* 35 ILCS 200/11-60 (2012).

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[1] The Agency's recommendation is cited as "Rec. at _."

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on July 24, 2014, by a vote of 4-0.

John T. Therriault

John T. Therriault, Clerk
Illinois Pollution Control Board

STATE OF ILLINOIS)
)
COUNTY OF SANGAMON)

CERTIFICATE OF SERVICE

I, the undersigned attorney at law, hereby certify that I have served on the date of September 22, 2016, the attached **APPEARANCE** and **RECOMMENDATION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,** upon the following persons by First Class U.S. Mail, with proper postage or delivery charges prepaid:

Steve Santarelli
Illinois Department of Revenue
101 West Jefferson
P.O. Box 19033
Springfield, Illinois 62794

Peter Sheffield
P.O. Box 11
Sheffield, Illinois 61361

Peter Sheffield
P.O. Box 11
Sheffield, Illinois 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

THIS FILING IS SUBMITTED ON RECYCLED PAPER