



Industry Services Division
1400 E Washington Ave
P.O. Box 7162
Madison, WI 53707-7162

County
Ashland

Sanitary Permit Number (to be filled in by Co.)
613236

Sanitary Permit Application

In accordance with SPS 383.21(2), Wis. Adm. Code, submission of this form to the appropriate governmental unit is required prior to obtaining a sanitary permit. Note: Application forms for state-owned POWTS are submitted to the Department of Safety and Professional Services. Personal information you provide may be used for secondary purposes in accordance with the Privacy Law, s. 15.04(1)(m), Stats.

State Transaction Number

Project Address (if different than mailing address)
**24149 State Hwy 13/77
Glidden WI 54527**

I. Application Information - Please Print All Information

Property Owner's Name
Karen Thorp

Parcel #
010002760100

Property Owner's Mailing Address
PO Box 153

Property Location
Govt. Lot **5**
1/4, 1/4, Section 28
T 43 N ; R 2 W E of **(W)**

II. Type of Building (check all that apply)

1 or 2 Family Dwelling - Number of Bedrooms **2**

Public/Commercial - Describe Use _____

State Owned - Describe Use _____

Lot #

Block #

CSM Number

Subdivision Name

City of

Village of

Town of **Gordon**

III. Type of Permit: (Check only one box on line A. Complete line B if applicable)

A. New System Replacement System Treatment/Holding Tank Replacement Only Other Modification to Existing System (explain)

B. Permit Renewal Before Expiration Permit Revision Change of Plumber Permit Transfer to New Owner

List Previous Permit Number and Date Issued
None

IV. Type of POWTS System/Component/Device: (Check all that apply)

Non-Pressurized In-Ground Pressurized In-Ground At-Grade Mound ≥ 24 in. of suitable soil Mound < 24 in. of suitable soil

Holding Tank Other Dispersal Component (explain) Pretreatment Device (explain)

V. Dispersal/Treatment Area Information:

Design Flow (gpd) 300 Design Soil Application Rate (gpd/sf) .5 Dispersal Area Required (sf) 600 Dispersal Area Proposed (sf) 600 System Elevation 97

VI. Tank Info	Capacity in Gallons		Total Gallons	# of Units	Manufacturer	Prefab Concrete	Site Constructed	Steel	Fiber Glass	Plastic
	New Tanks	Existing Tanks								
Septic or Holding Tank	1000		1000	1	Concrete Products	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dosing Chamber	650		650	1	"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. Responsibility Statement- I, the undersigned, assume responsibility for installation of the POWTS shown on the attached plans.

Plumber's Name (Print) Greg Wagner Plumber's Signature *Greg Wagner* MP/MPRS Number 673773 Business Phone Number 7156612391

Plumber's Address (Street, City, State, Zip Code)
N16088 Old 13 Road, Park Falls WI 54552

VIII. County/Department Use Only

Approved Disapproved Owner Given Reason for Denial

Permit Fee \$ **400** Date Issued **7-16-19** Issuing Agent Signature *J. [Signature]*

IX. Conditions of Approval/Reasons for Disapproval

RECEIVED
JUL 12 2019

Ashland Co. Zoning

Attach to complete plans for the system and submit to the County only on paper not less than 8 1/2 x 11 inches in size

In-Ground Dosed-Gravity Plan Index & Cover Sheet

Component Manual Design References:
Version 2.0, SBD-10705-P (N.01/01, R. 10/12)

Pg 1 of 5	Index & Cover Sheet
Pg 2 of 5	Plot Plan
Pg 3 of 5	Dispersion Area Cross-Section & Plan View
Pg 4 of 5	Pump Tank Specifications
Pg 5 of 5	Management Plan

Attachments:	Enclosures:
Pump Curve	POWTS Application for Review
Tank Detail	Soil Evaluation Report & Site Map

Project Name / Description

Thorp

Owner Name(s): Karen Thorp Phone: 715 _264 _4061
 Owner Address: PO Box 153 Glidden WI Zip: 54527
 Project Address: 24148 State Hwy 13/77
 Govt. Lot: 5 1/4 of 1/4, Section 28, T 43 N-R 2 E or W
 Township: Gordon County: Ashland
 Project Parcel ID #: 010-00276-0100

Designer Information

Designer Name: Greg Wagner Phone: 715 _661 _2391
 Designer Address: N16088 Old 13 Rd, Park Falls Zip: 54552
 E-mail: gwagnerplumbingllc@gmail.com
 License Number: 673773

This space reserved for approval stamp.

Remarks:

APPROVED
 Ashland Co. Zoning Admin.
 Date 7-6-19

RECEIVED
 JUL 12 2019
 Ashland Co. Zoning

Signature: *Greg Wagner* Date: 7-10-2019
Original signature required on each submitted copy.

Gordon Lake

11-1-18 Water Level
87.62
W111118

89.67
g

97.14
g

98.47
g

98.44
b2

99.92
tree

99.55
b1

98.46
b3

98.76
set1

Approximate well

2 Bdrm Log Cabin

300 gpd design flow

100.00
torquescrew 1 stlog
97.50
eff pipe

TBM = torque screw
in bottom log
top of screw
Elev 100.00

Proposed New tank (1000 gallon) ^{Pump} 150 gallon
to Replace Collapsed Tank

2" PVC to drainfield

VENT

OBS

Slope = 5%

Suitable area for two EZ Flow trenches with 10' lengths each

NORTH

Thorp Scale 1" = 20ft

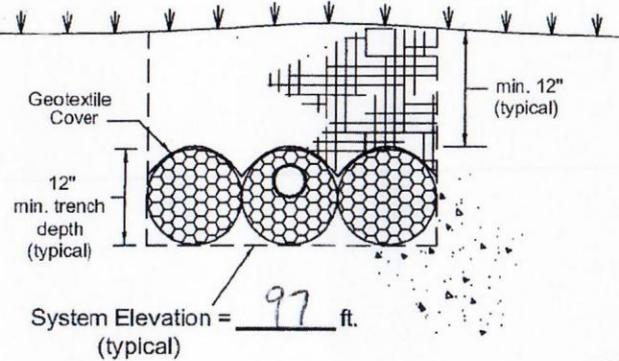
IN-GROUND DOSED-GRAVITY DISPERSAL AREA

Uniform Elevation Trenches with EZ1203HP Bundles

3-ft Trench (down-sizing credit)

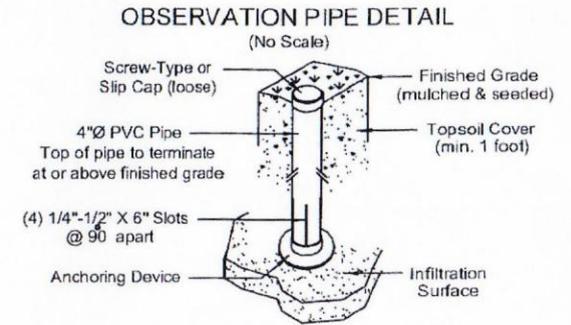


SOIL COVER



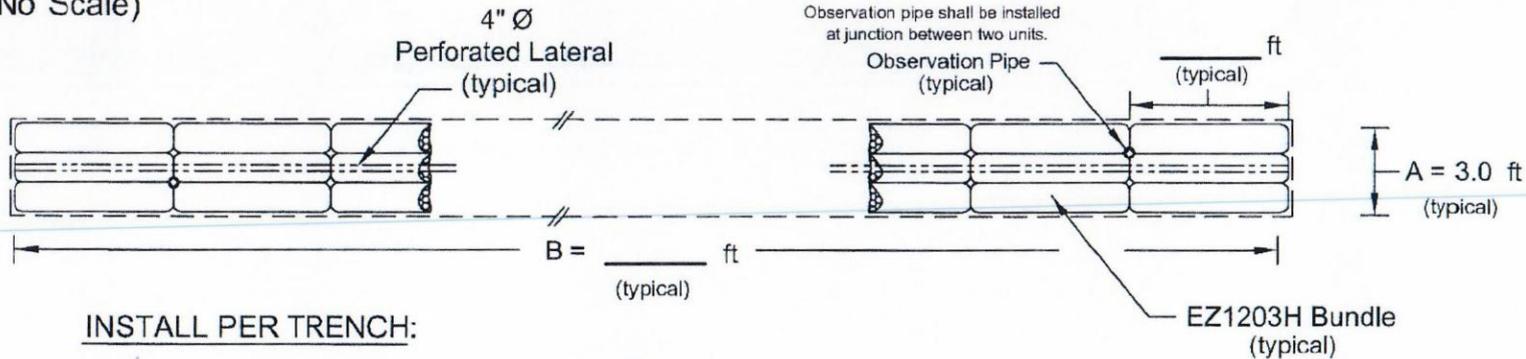
TYPICAL TRENCH CROSS SECTION VIEW
(No Scale)

Provide minimum 3 ft separation between trenches.



TYPICAL TRENCH PLAN VIEW
(No Scale)

(Show location of inlet / outlet pipe connection on plan view.)



INSTALL PER TRENCH:

6 10-ft bundles @ 50 ft² EISA/unit = 300 ft²

+ _____ 5-ft bundles @ 25 ft² EISA/unit = _____ ft²

= Proposed EISA per trench = 300 ft²

EZ1203H Bundle (typical)
(mfd by Infiltrator Systems, Inc.)
Install pursuant to manufacturer's instructions.

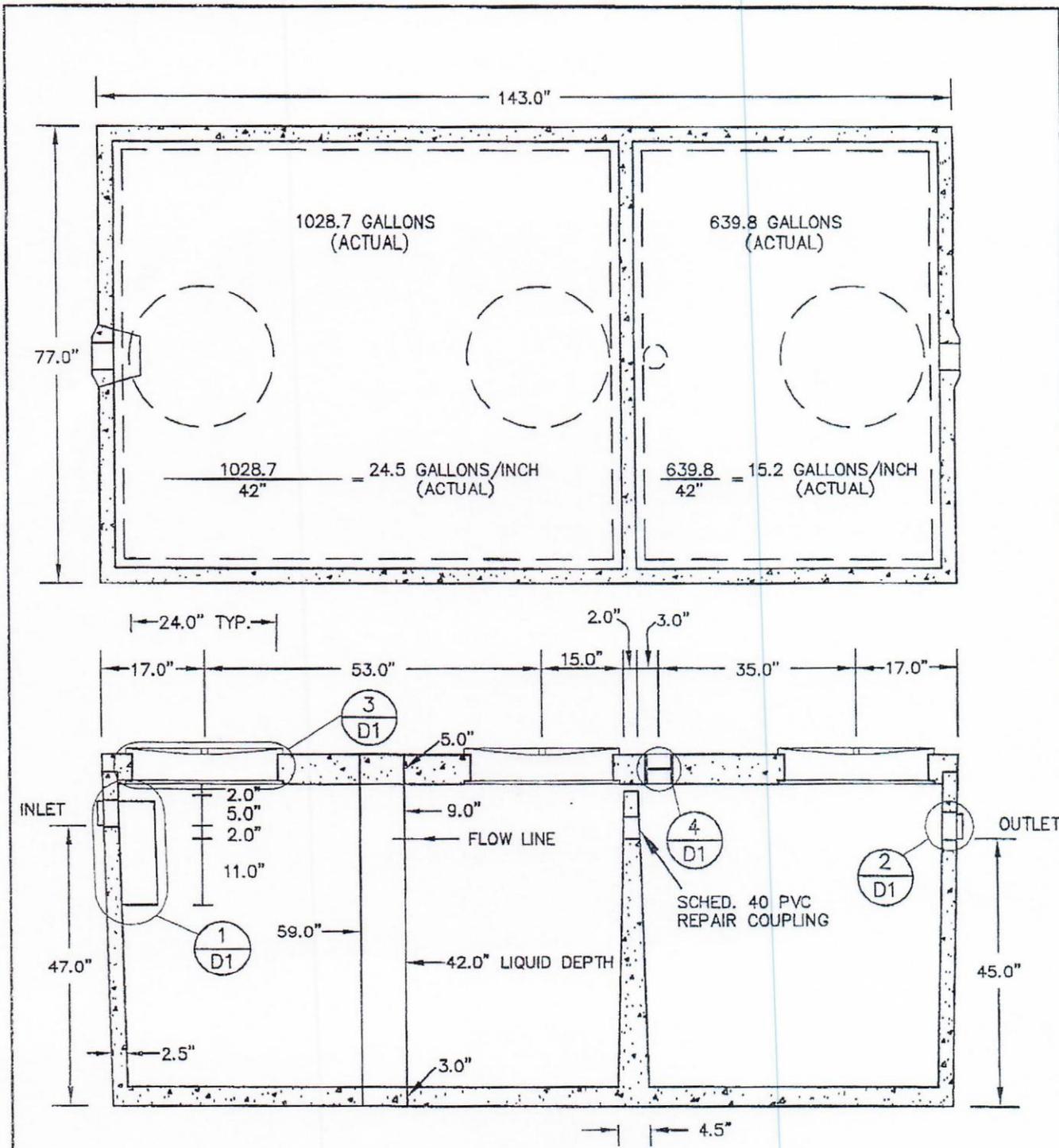
Required Infiltration Area = 600 ft²

x 2 trenches = Proposed Total EISA = 600 ft²

Distribution Method:

Pump to Gravity

RESET



- GENERAL NOTES:**
- 1.) ALL TANKS ARE EFFLUENT FILTER COMPATIBLE.
 - 2.) OUTLET BAFFLES ONLY SUPPLIED PER REQUEST.
 - 3.) 4" AND 6" MULTIPLE OPENINGS ARE AVAILABLE.
 - 4.) NOTIFY WHEN DEPTH OF BURY IS GREATER THAN 72".
 - 5.) 24" AND 30" MANHOLE OPENINGS ARE AVAILABLE.
 - 6.) NOTIFY WHEN INSTALLING IN EXTREME WET CONDITIONS.

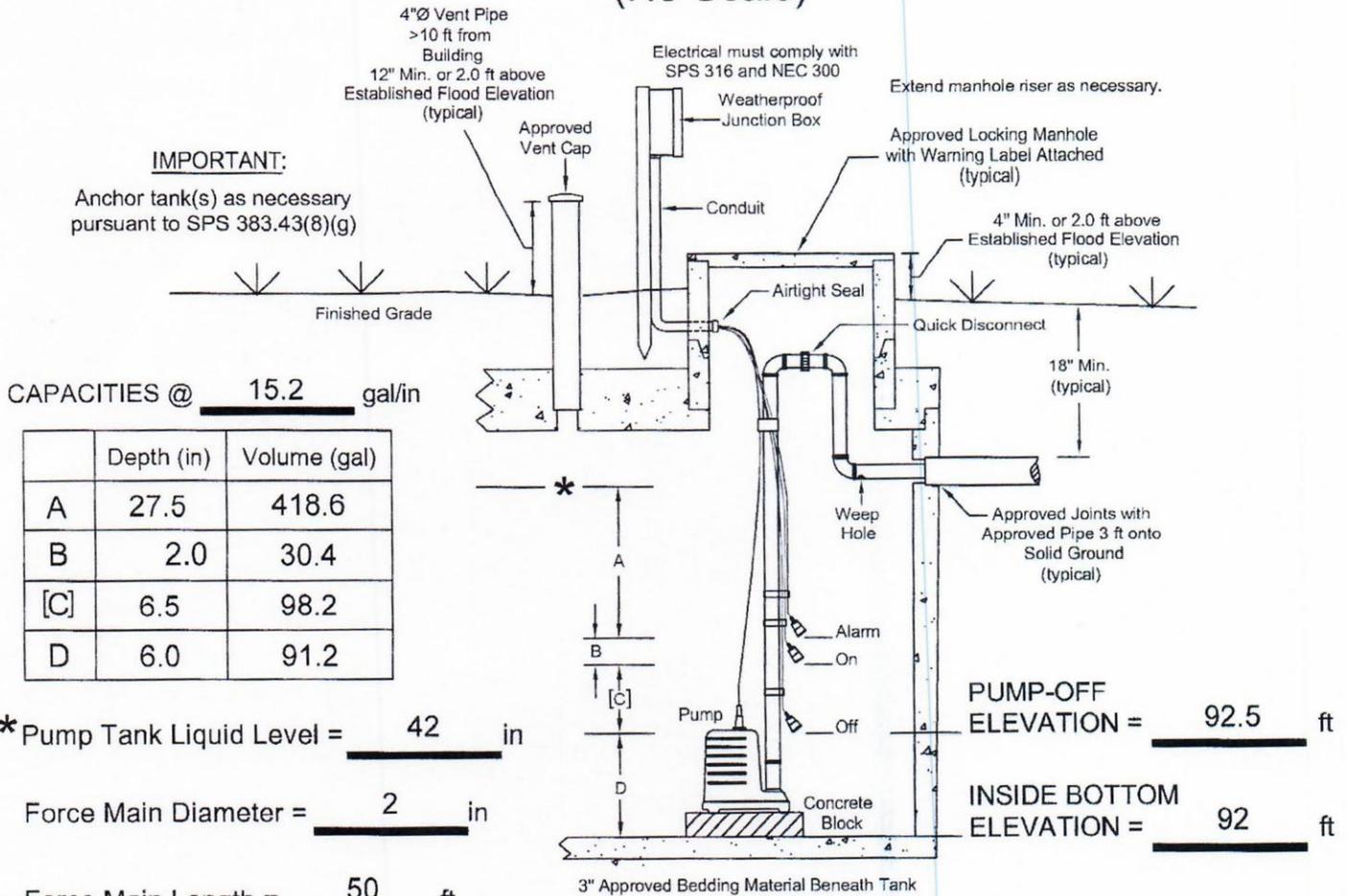
FILE # 20070221
 G.P.D. = 493 GALLONS (SEPTIC/PUMP)
 WEIGHT = 13,500 LBS.

ONEIDA CONCRETE PRODUCTS
 RHINELANDER, WI (800) 236-3124

SEPTIC TANK - 1028/639 GALLON - COMBO
 02/09/10

GRAVITY-DOSED SEPTIC / PUMP TANK SPECIFICATIONS (No Scale)

IMPORTANT:
Anchor tank(s) as necessary pursuant to SPS 383.43(8)(g)



CAPACITIES @ 15.2 gal/in

	Depth (in)	Volume (gal)
A	27.5	418.6
B	2.0	30.4
[C]	6.5	98.2
D	6.0	91.2

* Pump Tank Liquid Level = 42 in

Force Main Diameter = 2 in

Force Main Length = 50 ft

Force Main Void Volume = 8.2 gal

[C] Total Dose Volume (TDV) = 68.2 gal/dose

($\leq 0.2X$ design flow + force main void volume)

Vertical Lift = 5.5 ft

PUMP-OFF ELEVATION = 92.5 ft

INSIDE BOTTOM ELEVATION = 92 ft

PUMP TANK:	
Volume =	<u>639.8</u> gal
Manufacturer:	<u>Concrete Products</u>
Pump Manufacturer:	<u>SHEF</u>
Pump Model:	<u>SHEF 30</u> (See attached pump curve.)
Controls/Alarm Manufacturer:	<u>SJE Rhombus</u>
Controls/Alarm Model:	<u>PE Patrol</u>
<u>Float switches containing mercury are prohibited.</u>	

SEPTIC TANK(S):	
Total Volume =	<u>1028</u> gal
Manufacturer(s):	<u>Concrete Products</u>
<u>Install approved effluent filter at the septic tank outlet immediately upstream of the pump tank inlet.</u>	
Filter Manufacturer:	<u>Lifetime</u>
Filter Model:	<u>LT 18</u>

Performance Data

SHEF30

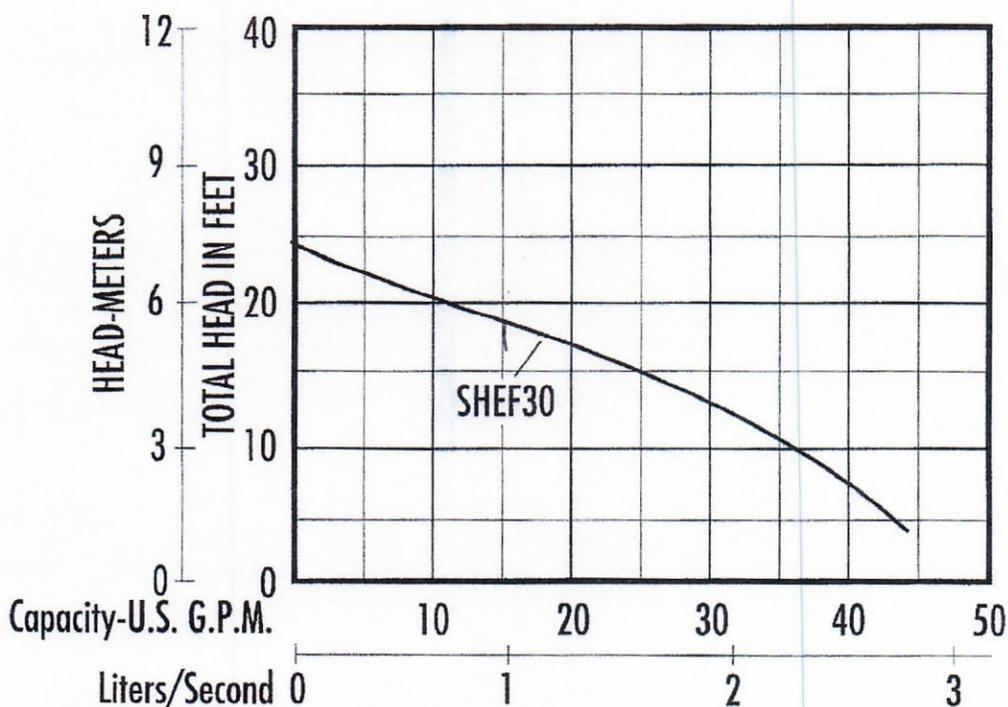
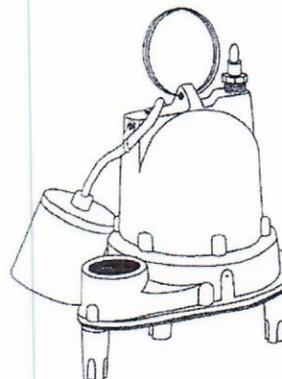
Wholesale Products Page: 6350-1

Section: Performance Data

Dated: January 2001

RPM: **1550**

Discharge: **1-1/2"** Solids: **3/4"**



The curves reflect maximum performance characteristics without exceeding full load (Nameplate) horsepower. All pumps have a service factor of 1.2. Operation is recommended in the bounded area with operational point within the curve limit. Performance curves are based on actual tests with clear water at 70° F. and 1280 feet site elevation.

Conditions of Service:

GPM: _____ TDH: _____



In-ground Dosed-Gravity Management Plan

IMPORTANT:

The owner of this in-ground dosed-gravity system shall be responsible for its perpetual operation and maintenance pursuant to requirements of SPS 382-384, Wisc. Admin. Code. Pursuant to SPS 383.52 (2), Wisc. Admin. Code, this system shall be considered a human health hazard if not maintained in accordance with this approved management plan. Furthermore, all inspection and maintenance activities shall be performed by a **registered POWTS Maintainer** in accordance with SPS 383.52 (3), Wisc. Admin. Code.

Maximum Dispersal Area Operating Limits:

Design Flow = 300 gpd; $BOD_5 \leq 220 \text{ mgL}^{-1}$; $TSS \leq 150 \text{ mgL}^{-1}$; $FOG \leq 30 \text{ mgL}^{-1}$

Inspection Checklist

INSPECT EVERY 3 YEARS

- o type of use
- o age of system
- o nuisance factors (*i.e.* odors, user complaints, *etc.*)
- o mechanical malfunction (*i.e.*, pumps, valves, switches, floats, *etc.*)
- o material fatigue (*i.e.*, leaks, breaks, corrosion, *etc.*)
- o solids volume in anaerobic treatment tank(s) and any distribution appurtenance(s) (*i.e.*, distribution / drop boxes)
- o neglect or improper use (*i.e.*, exceeding design capacities, prohibited activities, *etc.*)
- o extent of ponding in distribution cell prior to dosing
- o dosing irregularities - if applicable (*i.e.*, pump re-cycling, float switch settings, *etc.*)
- o electrical components - if applicable (*i.e.*, wiring, connections, switches, controls, timers, alarms, *etc.*)
- o distribution lateral or lateral orifice plugging (measure lateral distal pressure – compare to design specification)
- o surface discharge of effluent or sewage back-up into structure served

Maintenance Checklist

MAINTAIN EVERY 3 YEARS (or when necessary)

- o **Septic and dose tank(s)** shall be pumped by a certified septage servicing operator licensed under s. 281.48 Wis. Stats. **when the volume of solids in the tank(s) exceeds one-third (1/3) the liquid volume of the tank(s)** or as required by local ordinance. Disposal of contents shall be pursuant to NR 113, Wisc. Admin. Code.
- o **Effluent filter(s)** shall be inspected **every 3 years** and shall be cleaned **when necessary** to remove any accumulated solids according to manufacturer's specifications. A servicing period will always be greater than 12 months.

System maintenance reports shall be submitted to the proper local government unit in accordance with SPS 383.55 Wisc. Admin. Code. Report any component failure or malfunction to:

Name of individual or company: Greg Wagner Phone: 715-661-2391
 Local government unit: Ashland County Zoning Phone: 715-682-7014
 Local government unit address: 201 Main Street West, Ashland WI ZIP: 54806

Any defective part of this system shall be repaired, replaced, or removed pursuant to SPS 383.51 (1), Wisc. Admin. Code. Repair or replacement of failed or malfunctioning components shall comply with SPS 383, Wisc. Admin. Code. No product for chemical or physical restoration of the POWTS may be used unless approved by the department in accordance with SPS 384, Wisc. Admin. Code.

Contingency Plan

In the event that any failed treatment component of this POWTS cannot be repaired, it shall be replaced pursuant to a plan submitted to the appropriate agency for review and approval. A failed in-ground dispersal component may be abandoned and replaced by a code-complying dispersal component in a pre-determined area of suitable soils.

System Abandonment

If use of this POWTS is discontinued, it shall be abandoned in accordance with SPS 383.33, Wisc. Admin. Code.

SOIL EVALUATION REPORT

In accordance with SPS 385, Wis. Adm. Code

Attach complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent slope, scale or dimensions, north arrow, and location and distance to nearest road.

Please print all information.

Personal information you provide may be used for secondary purposes (Privacy Law, s. 15.04(1)(m))

County Ashland
Parcel I.D. 010-00276-0100
Reviewed by _____ Date _____

Property Owner Karen Thorp Property Location Govt. Lot 1/4 1/4 S 28 T 43 N R 2 E (or) W
Property Owner's Mailing Address PO Box 153 Lot # _____ Block # _____ Subd. Name or CSM# _____
City Glidden State WI Zip Code 54527 Phone Number (715) 264-4061 City Village Town Nearest Road Gordon 24148 St Hwy B/77

New Construction Use: Residential / Number of bedrooms 2 Code derived design flow rate 300 GPD
 Replacement Public or commercial - Describe: _____
Parent material _____ Flood Plan elevation if applicable 87.62 @ lake level 11-1-18
General comments and recommendations: use 0.5 loading rate for shallow system elev 97.0

Boring # _____ Boring Pit Ground surface elev. 99.55 ft. Depth to limiting factor > 66 in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Az. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	Soil Application Rate	
									*Eff#1	*Eff#2
A	0-9	10YR 3/3	—	lfs	Osg	mvfr	cw	3c	0.5	1.0
B	9-33	7.5YR 4/4	—	lfs	Osg	mvfr	cw	2m	0.5	1.0
cemented	33-40	7.5YR 4/4	—	S	Massive	mfi	cw	1f	0.7	1.6
E	40-66	10YR 4/4	—	cos	Osg	mvfr	cw	—	0.7	1.6

Boring # _____ Boring Pit Ground surface elev. 98.44 ft. Depth to limiting factor > 66 in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Az. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	Soil Application Rate	
									*Eff#1	*Eff#2
A	0-9	10YR 3/3	—	lfs	Osg	mvfr	cw	3c	0.5	1.0
B	9-37	7.5YR 4/4	—	lfs	Osg	mvfr	cw	2m	0.5	1.0
cemented	37-40	7.5YR 4/6	—	S	Massive	mfi	cw	1f	0.7	1.6
E	40-66	10YR 4/4	—	cos	Osg	mvfr	cw	—	0.7	1.6

* Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L * Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

CST Name (Please Print) Stacy D. Dehne Signature Stacy D. Dehne CST Number 41637
Address W 5011 Aspen Lane Date Evaluation Conducted 11-1-18 Telephone Number 715-762-2838
Park Falls WI 54552

97

3 Boring #

Boring
 Pit

Ground surface elev. 98.46 ft.

Depth to limiting factor 54 in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Az. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	Soil Application Rate	
									GPD/F ²	
									*Eff#1	*Eff#2
A	0-9	10YR 3/4	—	lfs	0.5g	mvfr	cw	3c	0.5	1.0
B	9-35	7.5YR 4/6	—	lfs	0.5g	mvfr	cw	2m	0.5	1.0
cemented	35-42	10YR 4/6	—	s	Massive	mf	cw	1f	0.7	1.6
E	42-54	10YR 4/4	—	cos	0.5g	mvfr	cw	—	0.7	1.6
E	54-66	7.5YR 4/4	some streaks	cos	0.5g	mvfr	cw	—	0.7	1.6

Boring #

Boring
 Pit

Ground surface elev. ____ ft.

Depth to limiting factor ____ in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Az. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	Soil Application Rate	
									GPD/F ²	
									*Eff#1	*Eff#2

Boring #

Boring
 Pit

Ground surface elev. ____ ft.

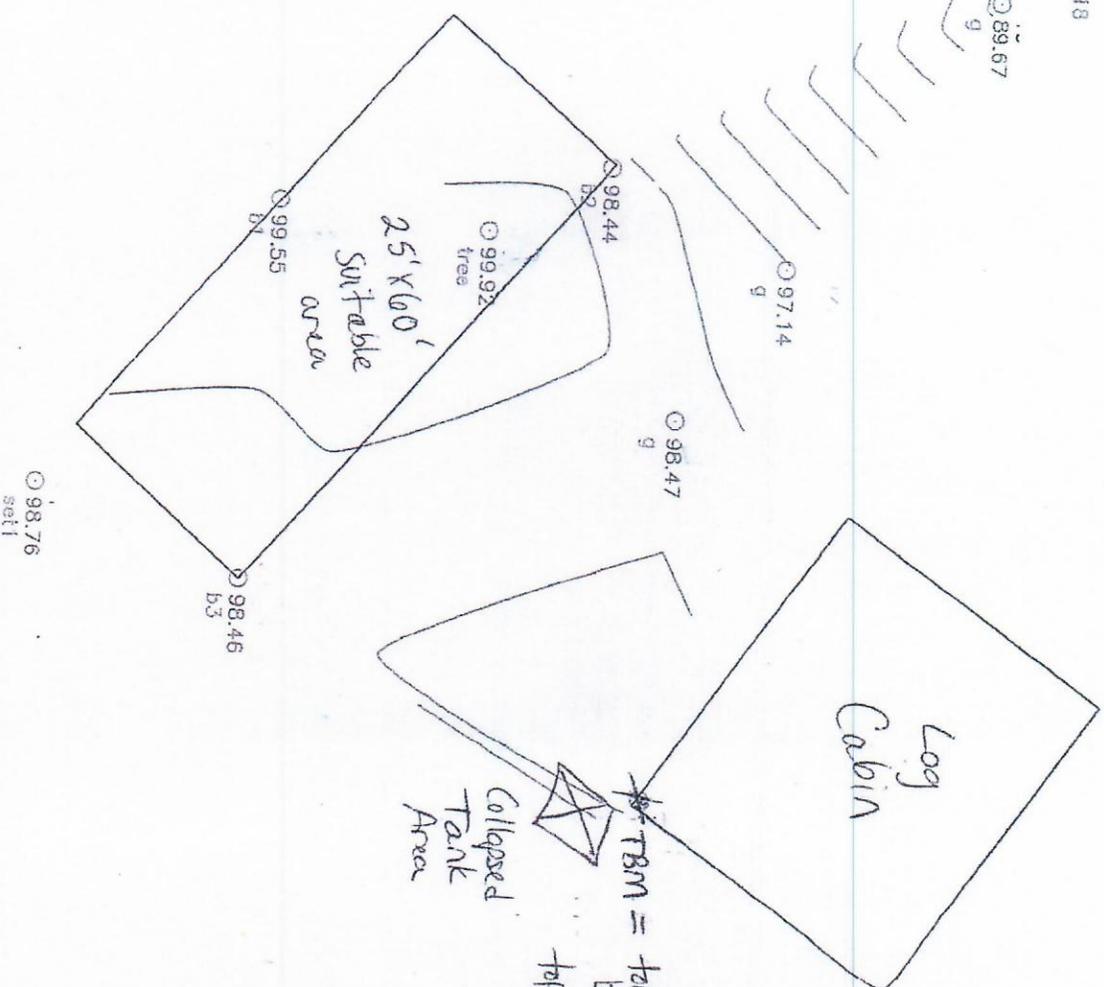
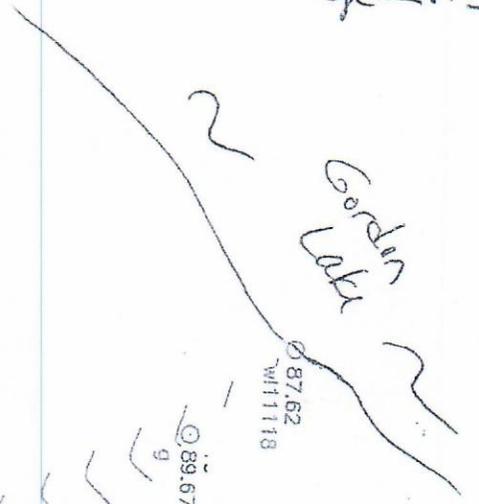
Depth to limiting factor ____ in.

Horizon	Depth In.	Dominant Color Munsell	Redox Description Qu. Az. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	Soil Application Rate	
									GPD/F ²	
									*Eff#1	*Eff#2

* Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

* Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

NORTH
↑



* TBM = ferrugine screen on bottom log
top of screws Elev 100.0

* Existing Effluent Pipe Elev 97.5

(See Sheet 4 of 4 for lot lines / Adjacent parcels)

Thorp, Karen
Scale 1" = 20' FT