



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES &
ENVIRONMENTAL CONTROL
DIVISION OF WATER
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

Groundwater Discharges Section

Telephone: (302) 739-9948

NOTICE OF VIOLATION
W-21-GWD-05
VIA Certified Mail -Return Receipt Requested
&
VIA Email

July 8, 2021

Ken Burnham
Donovan-Smith MHP, LLC
1080 Pittsford Victor Road,
Suite 202
Pittsford, NY 14534
kburnham1452@yahoo.com

John W. Paradee, Esq.
Baird Mandalas Brockstedt, LLC
Counsel for Donovan-Smith MHP, LLC
6 S. Street
Dover, DE 19901
john@bmbde.com

Dear Mr. Burnham:

Pursuant to the authority in 7 *Del. C.* § 6019, this **Notice of Violation** (NOV) is being issued to Donovan-Smith MHP, LLC, for violating 7 *Del. C.* Chapter 60 and 7 *Del. Admin. C.* § 7101 - State of Delaware *Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems* (the Regulations) as documented in this NOV.

BACKGROUND

On September 9, 1998, the Delaware Department of Natural Resources and Environmental Control, Division of Water, Groundwater Discharges Section (the Department) issued an On-Site Wastewater Treatment and Disposal System (OWTDS) Construction and Operations Permit No. C4005-98S (the Permit) to Donovan-Smith MHP, LLC, authorizing the construction/installation and operation of an OWTDS at the Donovan-Smith Mobile Home Park (the Park) located along the southwest side of CR 263, northeast of Savannah Road, Lewes, Sussex County, DE (tax map number: 3-35-8.14-43) (A copy of Permit C4005-98S is attached hereto as Exhibit A). The OWTDS consists of a 2,800-gallon septic tank, 1,000-gallon dose tank, and a 154-ft by 24-ft pressured dosed capping fill bed for subsurface disposal of wastewater. The Permit included construction/installation and operational requirements designed to protect human health and the environment, as well as requirements that Donovan-Smith MHP, LLC, connect the Park to sanitary sewer when sanitary sewer services became available. The Permit expired on September 7, 2008, and a renewal application was not submitted to the Department as required by § 7101-6.5.4 of the Regulations; therefore, Donovan-Smith MHP, LLC, is currently discharging without a valid permit.

The Department performs inspections at the Park annually, and over the last several years, the Department has documented compliance concerns on a number of occasions. Most recently, on January 15, 2021, the Department's Senior Environmental Compliance Specialist inspected the Park's OWTDS. The inspector observed alarm lights flashing and untreated wastewater surfacing above the pressured dosed bed. Since that initial inspection, the Department has performed inspections on February 17, 2021, March 19, 2021, and April 9, 2021, and documented the continued surfacing of untreated wastewater above the pressure dosed bed. Furthermore, the Department has received multiple complaints of surfacing wastewater and other issues concerning community septic systems servicing other areas of the Park. The exposure of untreated wastewater to the public is a significant public health hazard and risk to the environment.

The specific statutory and regulatory violations and associated actions necessary to correct these violations are identified below.

VIOLATIONS

Unauthorized Discharge to Groundwater

Law:

7 *Del. C.* § 6003(a)(2) states:

"No person shall, without first having obtained a permit from the Secretary, undertake any activity in a way which may cause or contribute to discharge of a pollutant into any surface or ground water."

AND

Section 7101-3.10 of the State of Delaware's *Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems* states:

"Discharge of untreated or partially treated wastewater or septic tank effluent directly or indirectly onto the ground surface or into groundwater and/or surface waters of the State, unless authorized by a permit issued by the Department, constitutes a public health hazard and is prohibited."

Facts:

Since (at least) January 15, 2021, Department staff has observed untreated wastewater surfacing above the Park's OWTDS pressured dosed bed. In addition, the Permit expired in 2008 and a renewal application was not submitted to the Department as required by the Regulations (7 *Del. Admin. C.* § 7101-6.5.4).

Conclusion:

Since September 7, 2008, the Park's OWTDS has been operating without a valid permit. In addition, since (at least) January 15, 2021, untreated wastewater has been surfacing above the OWTDS pressure dosed bed and the unauthorized discharge of untreated wastewater to ground surface and groundwater continues. In addition, the Department has received complaints suggesting that other community systems not covered by the Permit may be out of compliance and failing. Thus, the Department has concluded that Donovan-Smith MHP, LLC, is in violation of 7 *Del. C.* Chapter 60 and the Regulations.

ACTIONS REQUIRED

Pursuant to 7 *Del. C.* § 6019, Donovan-Smith MHP, LLC, shall correct the violations documented herein and come into compliance with 7 *Del. C.* § 6003 and the Regulations by taking the following actions:

1. Donovan-Smith MHP, LLC, shall install a temporary fence designed to keep children and pets away from all areas with surfacing untreated wastewater.
2. Donovan-Smith MHP, LLC, shall post and maintain "Keep Out" signs around the areas of surfacing untreated wastewater.
3. Donovan-Smith MHP, LLC, shall pump out septic and dosing tanks within 5 days of receiving this NOV. Pumping shall be performed by a licensed Class F waste hauler. In addition, Donovan-Smith MHP, LLC, shall pump out the system at a minimum every 3 days, thereafter, or more frequently if surfacing wastewater is observed. Pumping records shall be submitted to the Department's Groundwater Discharges Section within 14 days of receiving this NOV and then monthly thereafter until the violations are corrected.
4. The Department has determined that a "central wastewater system" (i.e. sanitary sewer service) is physically and legally available to the Park under 7 *Del. Admin. C.* §§ 7101-3.31.9 – 7101-3.31.11; therefore, Donovan-Smith, MHP, LLC, must correct these violations by connecting the Park to the sanitary sewer system.¹ Specifically, the Department has determined that sanitary sewer service is presently available within 200 to 250 feet of the Park. In addition, from prior communications with Donovan-Smith MHP, LLC, and the Lewes Board of Public Works (Lewes BPW), the Department understands that the Lewes BPW is prepared to provide sanitary sewer service to the Park.

¹Permit No. C4005-98S (Exhibit A) also required that Donovan-Smith MHP, LLC, connect to the sanitary sewer system. "The owner shall connect to the county or municipal sewer system if and when such services become available. Connection shall be in accordance with County or Municipal rules and regulations. This permit becomes void unless the GWDS approves continued operation." (Exhibit A at DNREC 0004).

Donovan Smith MHP
Notice of Violation
July 8, 2021

To ensure that Donovan-Smith MHP, LLC, corrects these violations, Donovan Smith MHP, LLC, shall submit a Corrective Action Plan (Plan) to the Department's Groundwater Discharges Section within 30 days of receipt of this NOV. The Plan shall detail: (1) plans for connecting the Park to the Lewes BPW sanitary sewer, including the steps to obtain the connection, (2) eliminating the use of all on-site wastewater treatment and disposal systems and subsequent proper abandonment (including the OWTDS previously covered by the Permit and all other on-site community systems); and (3) proposed timelines for completion of the work.

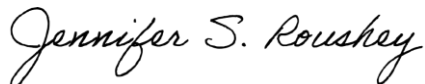
NOTICE

This letter shall serve as formal Notice of the above violations of *7 Del. C. Chapter 60 and 7 Del. Admin. C. § 7101 State of Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems*.

The Department, to the extent necessary, reserves the right to take compulsory enforcement regarding these and other violations by Donovan-Smith MPH, LLC, including but not limited to one or more of the following: an action under *7 Del. C. § 6005(b)(1)* seeking civil penalties of up to \$10,000.00 per day for past violations, an action under *7 Del. C. § 6005(b)(2)* seeking civil penalties for continuing violations of up to \$10,000.00 per day, an action in the Court of Chancery pursuant to *7 Del. C. § 6005(b)(2)* seeking a temporary restraining order or an injunction, a Cease and Desist Order pursuant to *7 Del. C. § 6018*, and the imposition of administrative penalties up to \$10,000.00 per day and recovery of the Department's costs and attorney's fees pursuant to *7 Del. C. §§ 6005(b)(3) & (c)(1)*.

Should you have any questions regarding this NOV, please feel free to contact John Rebar at (302) 739- 9948 or email at john.rebar@delaware.gov.

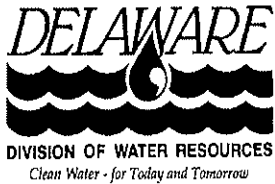
Sincerely,



Jennifer S. Roushey
Environmental Program Administrator

CC: Virgil Holmes, DNREC
John Rebar, DNREC
Ping Wang, DNREC
Derrick Caruthers, DNREC
William J. Kassab, DOJ

EXHIBIT A



C4005-98 S

PERMIT
159570-S



Tax Map Number: 3-35-8.14-43 LOTS 8,9,10

1 of 14 page(s)

Pursuant to provisions of Title 7, Delaware Code, Chapter 60, permission is hereby granted to:

**Donovan/Smith MHP LLC
C/O Bill Kilroy, 10039-39 Grays Corner Rd, Berlin, MD 21811**

to construct, operate, and maintain an on-site wastewater system.

Construction must be completed on or before 09/07/99, one year from permit issuance date. Construction must be done by a person duly licensed by the Delaware DNREC for such activity.

This permit authorizes operation of the wastewater system through 09/07/08.

All current regulations governing wastewater system installation shall be followed.

All attached permit conditions shall be complied with.

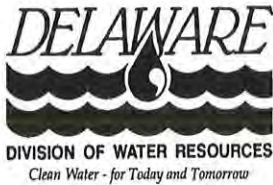
The applicant is responsible for obtaining all additionally required permits and approvals.

Raymond A. Elough

AUTHORIZED SIGNATURE

09/08/98

DATE



C4005-98-5

PERMIT
159570-S
Conditions



2/14 page(s).

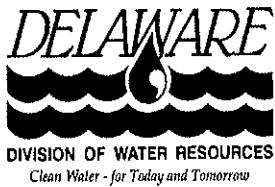
Tax Map Number: 3-35-8.14-43 LOTS 8

This Permit may be revoked upon violation of any of the following conditions:

- * The system MUST be installed by a licensed Class E contractor. The Contractor shall notify the Ground Water Discharges Section (GWDS) at (302) 739-4761 in Kent and New Castle Counties and at (302) 856-4561 in Sussex County 24 hours prior to construction start up. The contractor must have an approved permit on site during construction of this system.
- * The Contractor shall notify the design engineer and the GWDS for a dual inspection prior to covering the installation. Approval from both parties must be given prior to covering. The Engineer shall provide as built drawings within 10 days after inspection.
- * Connections or additions to the proposed system other than proposed on the plans will not be allowed without prior approval from the Ground Water Discharges Section.
- * Roof downspouts, foundation drains, storm sewers, combined sewers or appurtenances thereto, or any sewer or device carrying or discharging storm water, surface water, groundwater, cooling water, oil, or water softener brine shall not be connected to the system.
- * The bottom of the seepage area shall be installed according to the cross section in the design plans. Any deviation must be approved by the Designer who must also seek approval from the GWDS.
- * Barriers shall be installed to prevent vehicular traffic from crossing the disposal system.
- * All electrical connections shall be waterproof, corrosion resistant and explosion proof.
- * There shall be no soil disturbance to the absorption area except the minimum required for installation.
- * The existing sewage disposal system shall be abandoned. The tank shall be pumped and filled or excavated as required in Section 5.06000 of the Regulations Governing the Design, Installation, and Operation of On-Site Wastewater Treatment and Disposal Systems.

"Working for You to Provide Clean Water for Today and Tomorrow"

DNREC0003



C 4005-98
PERMIT
159570-S
Conditions



3/14 page(s).

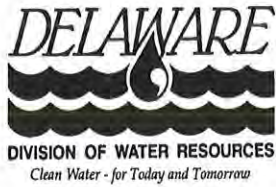
Tax Map Number: 3-35-8.14-43 LOTS 8

This Permit may be revoked upon violation of any of the following conditions:

- * If the existing system is encountered during excavation, STOP construction and contact the Designer and the Ground Water Discharges Section.
- * The Contractor shall install a battery in the timer.
- * The owner shall connect to the county or municipal sewer system if and when such services become available. Connection shall be in accordance with County or Municipal rules and regulations. This permit becomes void unless the GWDS approves continued operation.
- * This system shall be maintained in such a manner as to prevent surfacing, pooling and/or discharging of wastewater to any surface waters and abnormal odors.
- * The sites of the initial and replacement absorption facilities shall not be covered by asphalt or concrete or subject to vehicular traffic or any activity which would adversely affect the soils. These sites shall be maintained so that they are free from encroachments by accessory buildings and additions to the main building.
- * The Ground Water Discharges Section recommends that all trees and shrubs shall be located to prevent root intrusion into the disposal area.
- * The average daily discharge of this system is restricted to 1440 gallons per day.
- * The septic tank shall be pumped by a licensed liquid waste hauler at a minimum of once every 3 years.
- * A minimum area of 1.440 acres shall remain pervious and available for groundwater recharge after total project completion. This net pervious area shall be maintained so that it remains unpaved and free from encroachments by accessory buildings and additions to the main building.

"Working for You to Provide Clean Water for Today and Tomorrow"

DNREC0004



C4005 98
PERMIT
159570-S
Conditions



3,4/14 page(s).

Tax Map Number: 3-35-8.14-43 LOTS 8

This Permit may be revoked upon violation of any of the following conditions:

- * A Satisfactory Certificate of Completion must be issued by the Department for the system prior to its use. This permit is NOT valid for operation and maintenance until the required Certificate has been issued.
- * It is the responsibility of the Contractor to verify that all isolation distances, as noted and approved in the permit, can be maintained. Furthermore, the Contractor shall notify the Designer if field conditions exist that prohibit his/her ability to maintain the approved isolation distances and/or meet Regulation requirements.
- * The proposed dwelling must be connected to the septic tank with sch 40 PVC pipe. Minimum distance from the septic tank and any other portion of the system is 10 feet.
- * System must be pressure tested by design engineer.
- * Final Site Restoration must comply with Section 6.01070 of the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems.
- * The Department will conduct an annual compliance inspection on this system. There will be letters sent out annually to schedule the inspection and an inspection fee will be charged at this time.

"Working for You to Provide Clean Water for Today and Tomorrow"

DNREC0005

file 713

159570.5



APPLICATION - PERMIT
ON-SITE WASTEWATER SYSTEM



(Please Type or Print Legibly)

OWNER'S NAME: Donovan-Smith M.H.P., LLC

PHONE: 410-251-3878

ADDRESS: Bill Kilroy, 10039 -39 Grays Corner Road, Berlin, MD 21811

PROJECT LOCATION: Donovan-Smith Mobile Home Park, Southwest side of CR #263, northeast of Savannah Road

TAX/MAP #: 3-35-8.14-43

APPLICATION PREPARER

Jeffrey S. Reed, P.E.

DNREC

LICENSE #: 2285

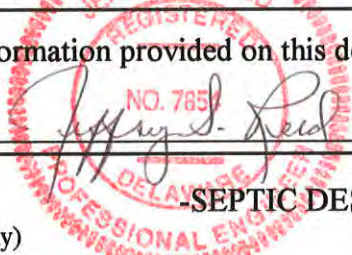
PREPARER'S ADDRESS:

RD 1 Box 284A
Ellendale, DE 19941

PHONE: (302) 422-2574

I hereby affirm that the information provided on this document is accurate and complete.

Preparer's Signature: _____



Date: July 13, 1998

-SEPTIC DESIGN CRITERIA-

(Please check all boxes that apply)

System Type: (CF = Cap & Fill / FD = Full Depth)

Type of Construction:

- Low Pressure Pipe (FD)
- Elevated Sand Mound
- Pressure Dose (FD)
- Holding Tank
- Gravity (FD)
- Std. Pressure Dose (FD)
- Std. Pressure Dose (CF)

- Low Pressure Pipe (CF)
- Wisconsin At-Grade
- Pressure Dose (CF)
- Subsurface Micro Irrigation
- Gravity (CF)
- Other

- Replacement
- New Construction
- Component Replacement
- Component:
- Repair to Existing System
- Reason:

Authorization to Use Existing System

Permit #

Present Condition:

Structure to be connected:

Bed or Trench

Gravelless Chamber or Stone/Gravel
Sand-lined Yes No

Existing System Malfunctioning Yes No N/A

Pre-Treatment Units

- Septic Tank
- Recirculating Sand Filter
- Other _____

of Bedrooms: 12

Avg. Percolation Rate: 35 MPI

Gallons Per Day Flow: 1440

Minimum Sq. Ft. Rcq'd: 3578.0

Sq. Ft. Proposed: 3696.0



Central Water Available Yes No

(If yes, please state Utility Name: _____)

Revised 2/26/97

07-28-98 4CL5628

ENR11APPL 750.00

DNREC0006

CITADEL ENGINEERING, INC.



Jeffrey S. Reed, P.E.
RD 1, Box 284A
Ellendale, DE 19941
(302) 422-2574

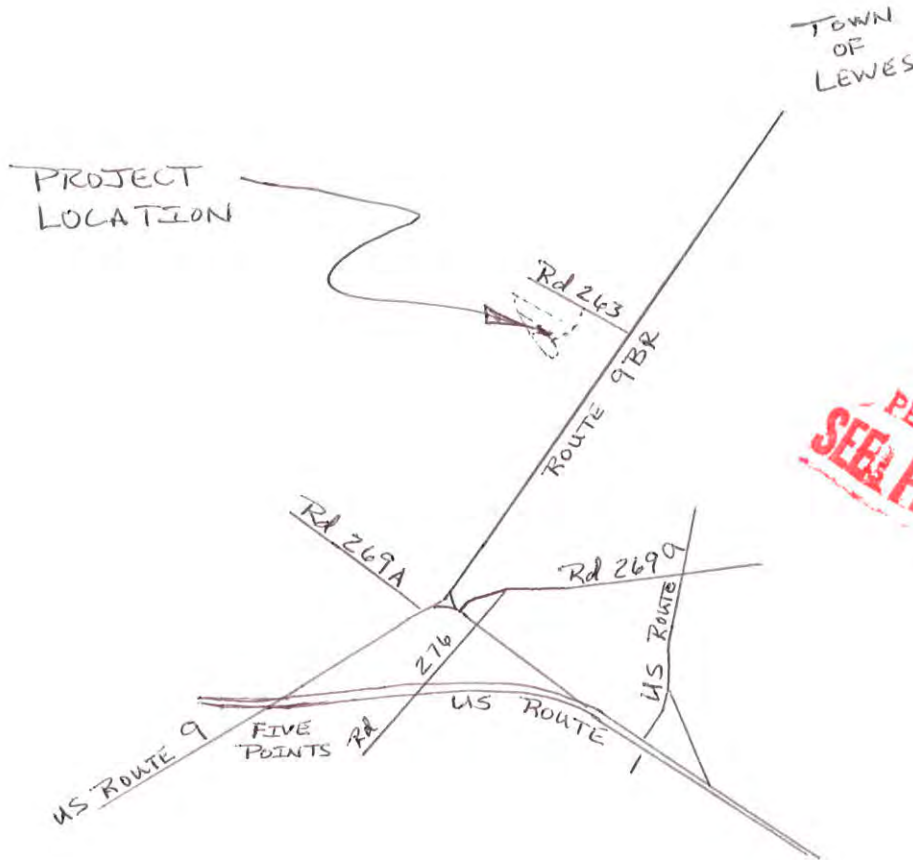


RECEIVED
JUL 28 1998
ON-SITE WASTEWATER DESIGN
SUSSEX COUNTY OFFICE



PROFESSIONAL ENGINEERS
SIGNATURE AND SEAL

VICINITY MAP



D.N.R.E.C.
PERMIT # 159570
APPROVED
SEE PERMIT CONDITIONS

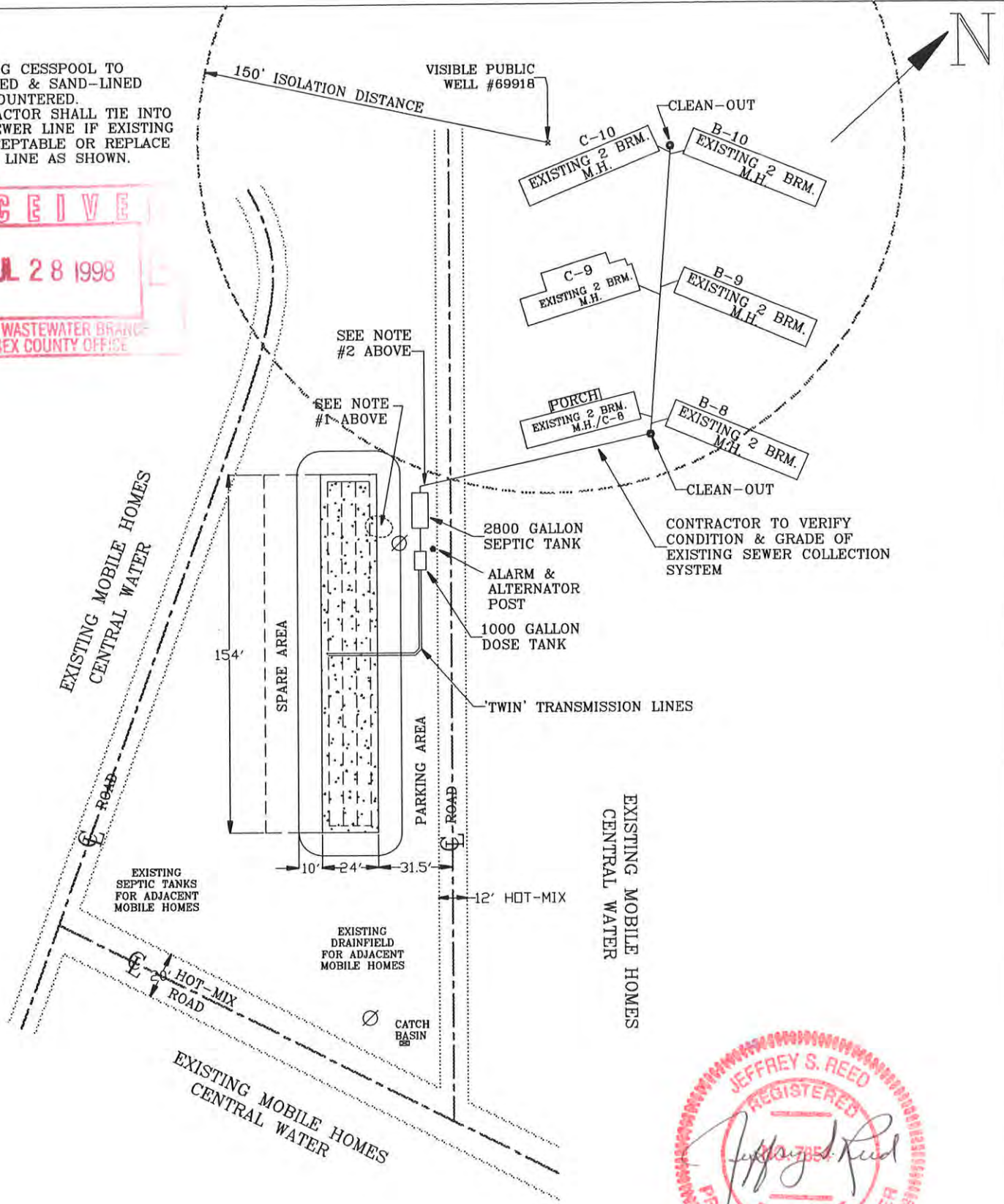
Owner's/Authorized Agent Signature: _____

Date: 7/13/98

* A copy of this page must be submitted with both the **DNREC0007** and well construction report(s).

NOTES:

- 1.) EXISTING CESSPOOL TO BE EXCAVATED & SAND-LINED WHERE ENCOUNTERED.
- 2.) CONTRACTOR SHALL TIE INTO EXISTING SEWER LINE IF EXISTING LINE IS ACCEPTABLE OR REPLACE COLLECTION LINE AS SHOWN.



LEGEND

LIGHT POLE

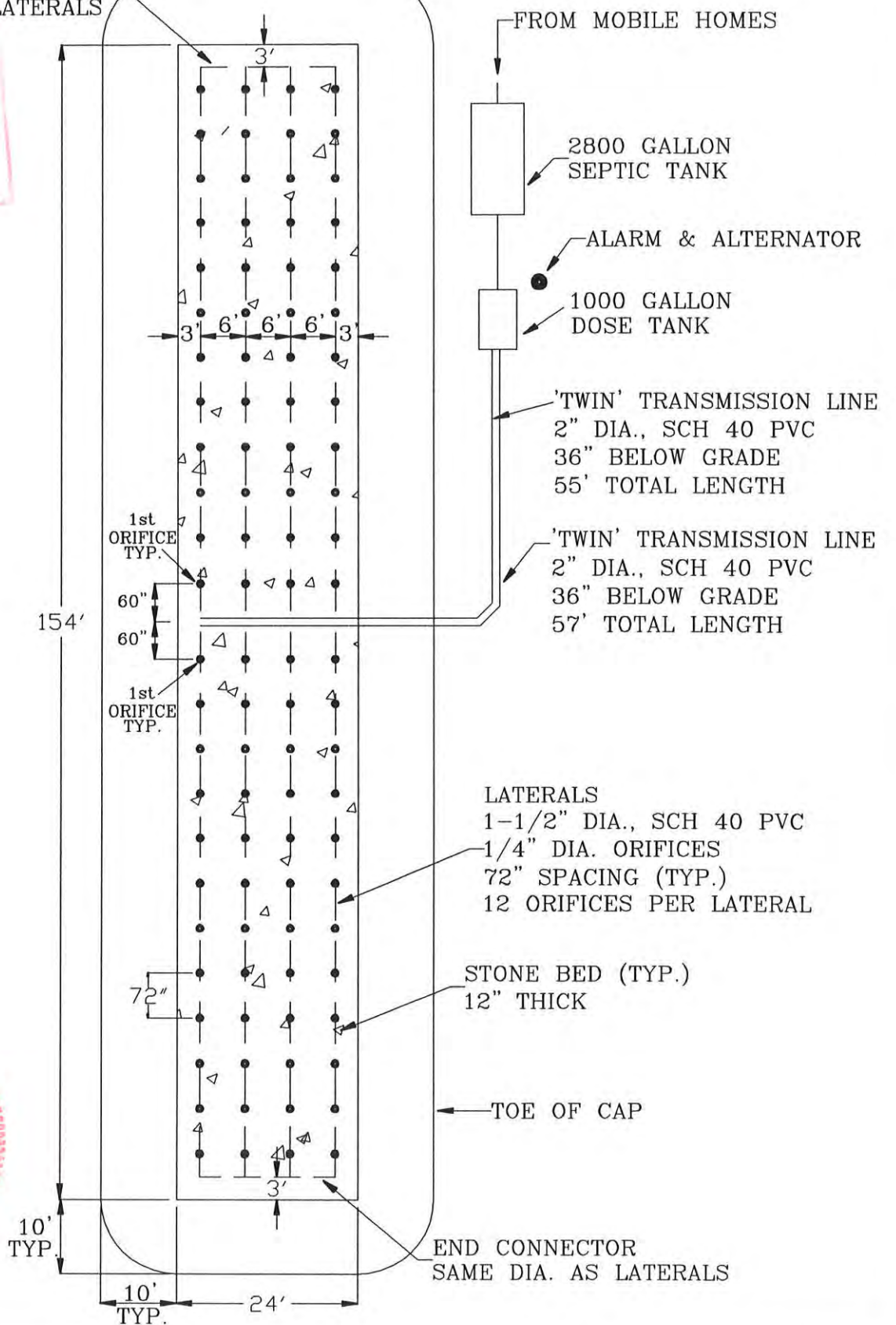
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 Date : 7/9/98
 Drawn by: JVR
 Client: 98180

SEPTIC PLOT PLAN

DNREC0008

CITADEL ENGINEERING, INC.
 Jeffrey S. Reed, P.E.
 RD 1, Box 284A
 Ellendale, DE 19941
 (302) 422-2574

END CONNECTOR
SAME DIA.
AS LATERALS



FROM MOBILE HOMES

2800 GALLON
SEPTIC TANK

ALARM & ALTERNATOR

1000 GALLON
DOSE TANK

'TWIN' TRANSMISSION LINE
2" DIA., SCH 40 PVC
36" BELOW GRADE
55' TOTAL LENGTH

'TWIN' TRANSMISSION LINE
2" DIA., SCH 40 PVC
36" BELOW GRADE
57' TOTAL LENGTH

LATERALS
1-1/2" DIA., SCH 40 PVC
1/4" DIA. ORIFICES
72" SPACING (TYP.)
12 ORIFICES PER LATERAL

STONE BED (TYP.)
12" THICK

TOE OF CAP

END CONNECTOR
SAME DIA. AS LATERALS

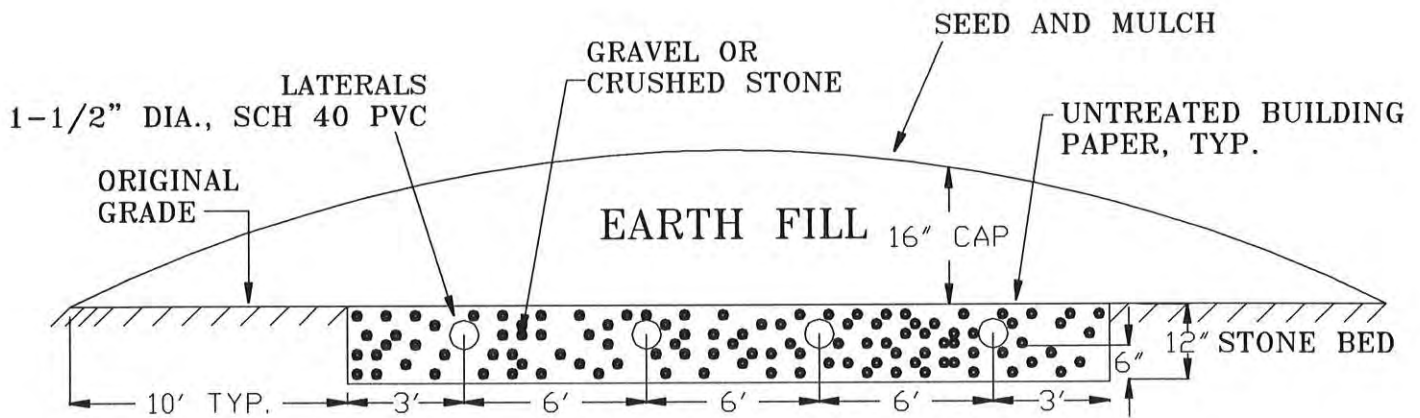


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Date :7/13/98
Drawn by: JVR
Client: 98180
DONOVAN-SMITH

PRESSURED DOSED
CAPPING FILL BED
PLAN VIEW

DNREC0009

CITADEL ENGINEERING, INC.
Jeffrey S. Reed, P.E.
RD 1, Box 284A
Ellendale, DE 19941
(302) 422-2574



TYP. CROSS SECTION

no scale



Scale: no scale
Sheet: N/A
Date :7/13/98
Drawn by: JVR
Client: 98180
DONOVAN-SMITH

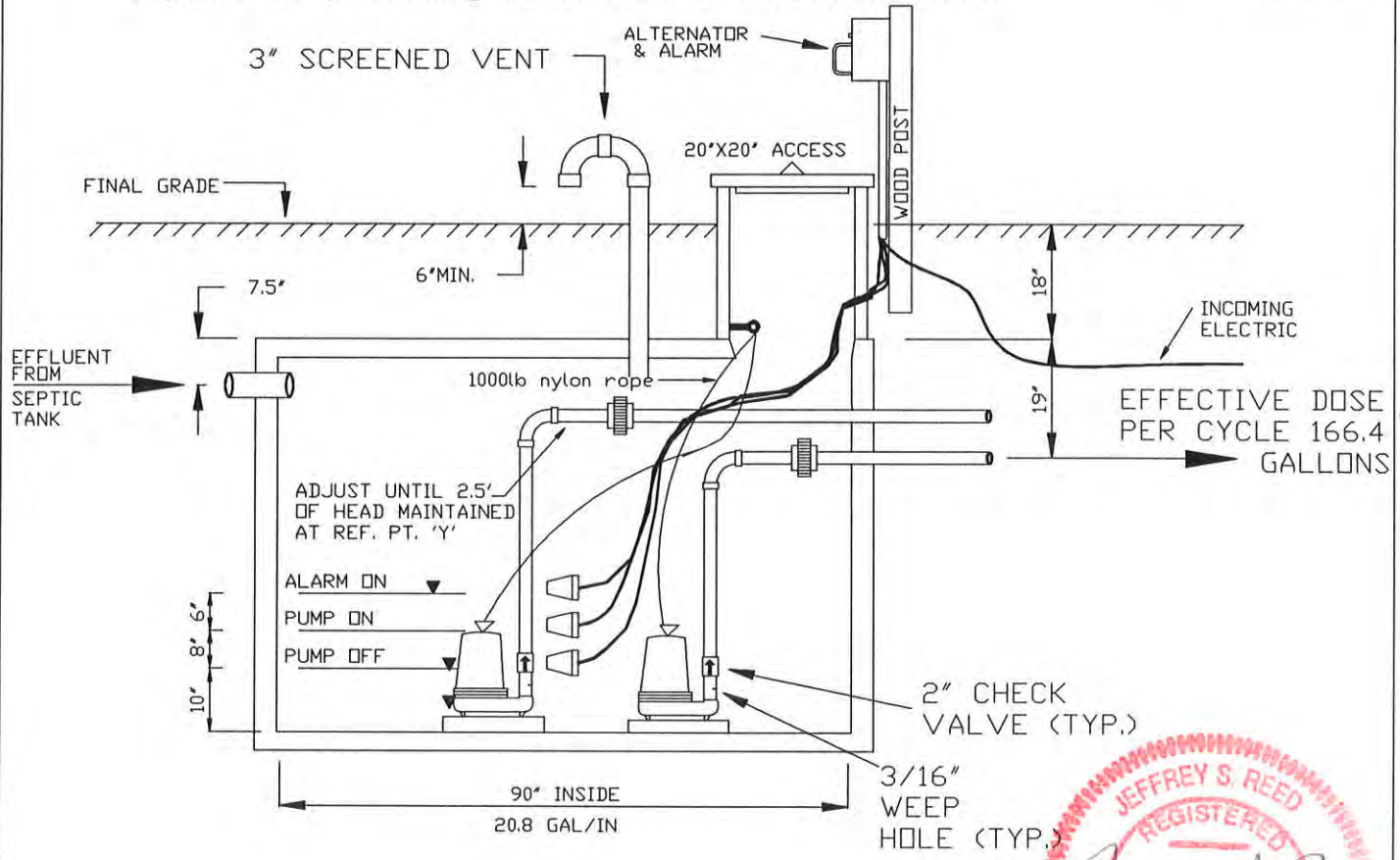
PRESSURED DOSED
CAPPING FILL BED
TYPICAL CROSS-SECTION
DNREC0010

**CITADEL
ENGINEERING, INC.**
Jeffrey S. Reed, P.E.
RD 1, Box 284A
Ellendale, DE 19941
(302) 422-2574

RECEIVED
JUL 28 1998
 ON-SITE WASTEWATER BRANCH
 SUSSEX COUNTY, DE

NOTES:

- 1) Dosing tank dimensions procured from National Concrete Products, Greenwood, DE (302) 349-5528. Approved equal is acceptable as per engineer.
- 2) All tank inlets, outlets, and access extensions shall be properly sealed.
- 3) Dosing chamber shall be set on firm, stable bed and excavation shall not exceed two feet beyond tank perimeter.
- 4) Pump shall be connected to a separate circuit from alarm.
- 5) All piping inside tank shall be 2" diameter sch 40 pvc unless noted otherwise.
- 6) All electrical connections inside tank shall be waterproof, explosion-proof, and corrosion resistant.
- 7) All dosing chamber components shall be field tested for water tightness, accuracy, and proper operation prior to engineers inspection.
- 8) Pump shall be Goulds (or approved equal by engineer) MODEL No. 3885 WE0511H capable of producing 55 GPM at 20.4 Feet of head.



JEFFREY S. REED
 REGISTERED
Jeffrey S. Reed
 PROFESSIONAL ENGINEER
 DELAWARE

SCALE: 1"=30"
 DATE : 7/13/98
 SHEET: - of -
 DRAWN BY: JVR
 CLIENT: DONOVAN-SMITH
 MHP 98180

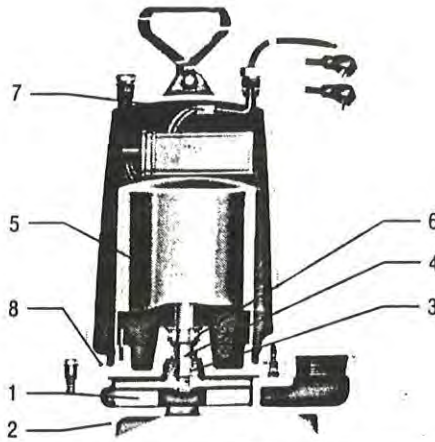
**1000 GALLON
 DOSING TANK
 SECTION**

**CITADEL
 ENGINEERING, INC.**
 Jeffrey S. Reed, P.E.
 RD 1, Box 284A
 Ellendale, DE 19941
 (302) 422-2574

RECEIVED
JUL 28 1998
ON-SITE WASTEWATER BRANCH
SUSSEX COUNTY OFFICE

PARTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical seal
4	Shaft
5	Motor
6	Bearings - upper and lower
7	Power cable
8	O-ring



Goulds
Submersible Effluent Pump

MODEL

3885



MODELS

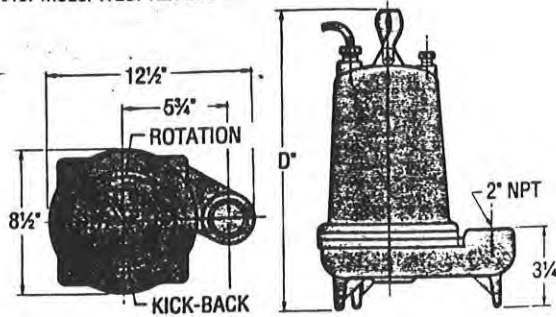
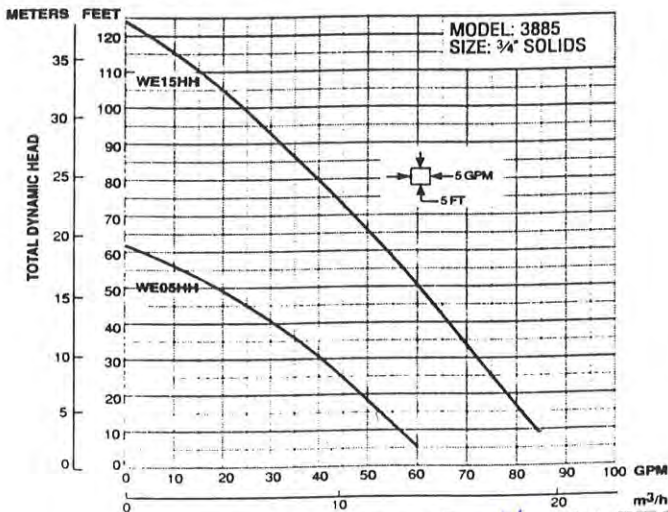
Order No.	HP	Volts*	Phase	Max. Amp.	RPM	3 ϕ Heater Size	Wt. (lbs.)
WE0311L	1/2	115	1	9.4	1750	N/A	56
WE0312L		230					
WE0318L		200					
WE0311M		115					
WE0312M		230					
WE0318M	200						
WE0511H	1/2	115	3	14.5	3500	K32	60
WE0512H		230					
WE0518H		200					
WE0538H		200					
WE0532H		230					
WE0534H		460					
WE0511HH		115					
WE0512HH		230					
WE0518HH		200					
WE0538HH		200					
WE0532HH	230						
WE0534HH	460						
WE0712H	3/4	230	1	10.0	3500	N/A	70
WE0718H		200					
WE0738H		200					
WE0732H		230					
WE0734H		460					
WE1012H	1	230	3	12.5	3500	K49	80
WE1018H		200					
WE1038H		200					
WE1032H		230					
WE1034H		460					
WE1512H	1 1/2	230	1	15.7	3500	K28	80
WE1538H		200					
WE1532H		230					
WE1534H		460					
WE1512HH		230					
WE1538HH	200						
WE1532HH	230						
WE1534HH	460						

PERFORMANCE RATINGS (gallons per minute)

Order No.	Total Head Feet of Water								
	HP	1/2	3/4	1	1 1/2	2	3	4	5
WE0311L	1750								
WE0312L	1750								
WE0318L	1750								
WE0511H	3500								
WE0512H	3500								
WE0518H	3500								
WE0532H	3500								
WE0534H	3500								
WE0712H	3500								
WE0718H	3500								
WE0732H	3500								
WE0734H	3500								
WE1012H	3500								
WE1018H	3500								
WE1032H	3500								
WE1034H	3500								
WE1512H	3500								
WE1532H	3500								
WE1534H	3500								

DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)
 D* 1/2, 3/4, 1 and 1 HP = 15"
 except for model WE0712H and WE1012H = 18"; 1 1/2 HP = 18"



EFFLUENT EJECTOR SYSTEM

Effluent ejector system offers ease of ordering and installation. A single ordering number specifies a complete system designed for most residential and commercial sump and effluent pump applications.



Package Includes:

- Submersible Effluent Pump WE0311L, 12L or WE0311M, 12M, WE0511HH, 12HH
- Mechanical Level Control Switch A2-5 (115V), A2-6 (230V)
- Basin A7-1801S, Basin Cover A8-1822
- Check Valve A9-2P
- Order No.: SWE0311L, SWE0312L, SWE0311M, SWE0312M, SWE0511HH, SWE0512HH



2 Pumps
Req'd

Goulds Submersible Effluent Pump

RECEIVED
JUL 28 1998
ON-SITE WASTEWATER BRANCH
SUSSEX COUNTY OFFICE

MODEL

3885

APPLICATIONS

- Specifically designed for the following uses:
- Homes
 - Farms
 - Trailer courts
 - Motels
 - Schools
 - Hospitals
 - Industry
 - Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: 3/4" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 128 GPM.
- Total heads: up to 123 feet TDH.
- Mechanical seal: silicon carbide-rotary seat/silicon carbide-stationary seat, 300 series stainless steel metal parts, BUNA-N elastomers.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- Fasteners: 300 series stainless steel.
- Capable of running dry without damage to components.

Motor

Single phase:

- 1/3 HP, 115 V, 200 V, 230 V, 60 Hz, 1750 RPM; 1/2 HP, 115 V, 60 Hz, 3500 RPM; 1/2 HP - 1 1/2 HP, 230 V, 60 Hz, 3500 RPM.
- Built-in overload with automatic reset.
- Class B insulation.

Three phase:

- 1/2 HP - 1 1/2 HP 200/230/460 V, 60 Hz, 3500 RPM.
- Class B insulation.

- Overload protection must be provided in starter unit.
- Shaft: threaded, 400 series stainless steel.
- Bearings: ball bearings upper and lower.
- Power cord: 20 foot standard length (optional lengths available).
- **Single phase:**
 - 1/3 and 1/2 HP - 16/3 SJTO with 115 V or 230 V three prong plug.
 - 3/4-1 1/2 HP - 14/3 STO with bare leads.
- **Three phase:**
 - 1/2-1 1/2 HP - 14/4 STO with bare leads. On CSA listed models - 20 foot length SJTW and STW are standard.

FEATURES

- **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for

smooth operation. Silicon bronze impeller available as an option.

- **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge adaptable for slide rail systems.

- **Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE** sealing faces. Stainless steel metal parts, BUNA-N elastomers.

- **Shaft:** Corrosion-resistant stainless steel. Threaded design. Locknut on three phase models to guard against component damage on accidental reverse rotation.

- **Motor:** Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

- **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits,

can be operated continuously without damage.

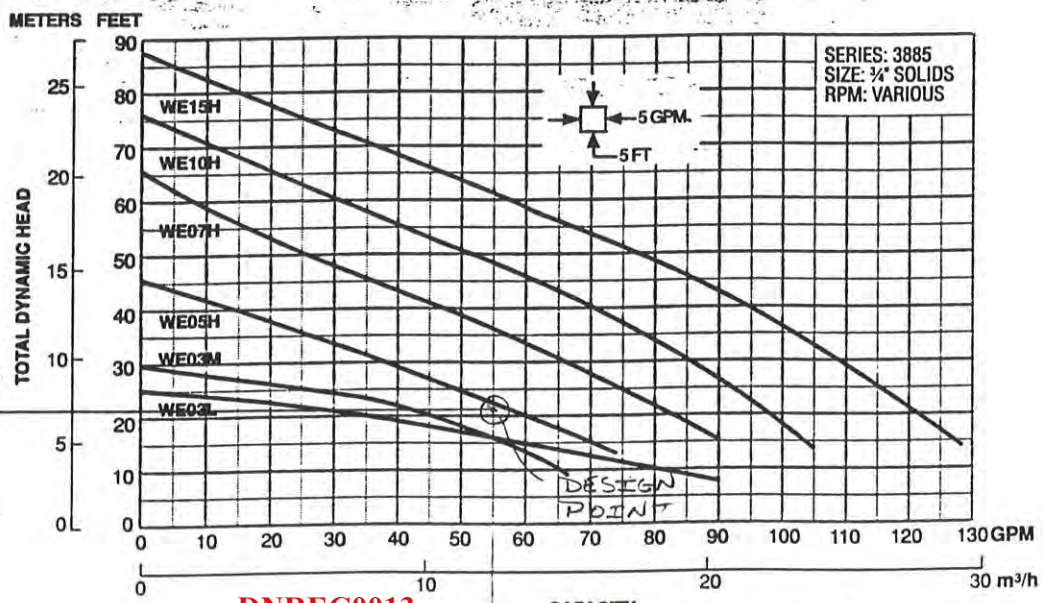
- **Bearings:** Upper and lower heavy duty ball bearing construction.

- **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking.

- **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

- Canadian Standards Association
- Underwriters Laboratories



DNREC0013

5 PAGES 12 OF 14 PAGES

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 ON-SITE WASTEWATER DIVISION
 SUSSEX COUNTY OH



SJE™ SERIES 1200

SINGLE PHASE, DUPLEX ALTERNATING PUMP CONTROL/ALARM SYSTEM



MODEL 1201 & 1202 (include circuit breakers)
MODEL 1203 & 1204

SPECIFICATIONS					
MODEL	FLOATS INCLUDED	INCOMING POWER CIRCUITS	PUMP CONTROL ARRANGEMENT	PUMP SECTION* VOLTAGE RATING SINGLE PHASE	ALARM/CONTROL VOLTAGE RATING SINGLE PHASE
1201-01 (w/breakers)	3	1	Both pumps must be same voltage ratings. (2) 120V Pumps or (2) 230V Pumps	120VAC, 60Hz 1HP or 230VAC, 60Hz 2HP	120VAC, 60Hz 70 WATTS MAX.
1202-01 (w/breakers)	4				
1203-01	3	3	(2) 120V Pumps or (2) 230V Pumps or (1) 120V Pump and (1) 230V Pump		
1204-01	4				

Maximum pump running current: 20 Amps
 Maximum pump starting current: 120 Amps

Recommended for use on pumps of 1 HP (120V) and/or 2 HP (230V) provided pump amp draw does not exceed 20 running amps or 120 starting amps.

This pump control should be used only with pumps equipped with integral thermal overload protection.

PANEL ENCLOSURE: NEMA 4X, weathertight non-corrosive fiberglass enclosure.

FLOAT SWITCHES: SENSOR FLOAT Control Switch (Model 20PC).
HOUSING: 3.38" (8.58cm) diameter x 4.55" (11.56cm) long, high impact resistant, non-corrosive PVC plastic for use in liquids up to 140° F (60° C).
CABLE: 20' (6.09m) 16 gauge, 2 conductor SJOW-A(UL), SJOW (CSA) water resistant Neoprene

CITADEL ENGINEERING, INC.



Jeffrey S. Reed, P.E.
RD 1, Box 284A
Ellendale, DE 19941
(302) 422-2574



General Notes

- 1.) All construction shall comply to DNREC regulations and all applicable memorandums.
- 2.) If any unusual or unforeseen problems arise during construction, the engineer shall be notified immediately and construction shall cease until proper authorities have been notified. This shall include, but not limited to, site soil compaction, high water table, variations in design layout, and possible wetland conflicts.
- 3.) All adjacent wells and septic systems located on plot plan as of the field inspection on June 17, 1998. Contractor shall verify all proposed improvements and existing adjacent property improvements prior to construction/installation of proposed improvements.
- 4.) Contractor shall comply with all Occupational Safety and Health Act (OSHA). Design does not include any construction safety. Contractor shall be responsible for all OSHA requirements during construction.
- 5.) Contractor shall verify that all building sewer lines have proper grade to allow gravity flow where required. Any deviations should be coordinate with engineer/owner/building contractor, or other, as required.
- 6.) Contractor shall contact Miss Utility prior to construction and coordinate/locate any utilities not covered by Miss Utility with the owner.
- 7.) Contractor shall submit location drawing for any field changes in septic plot plan.
- 8.) All component operation maintenance manuals are to be supplied to the owner by installer.
- 9.) Filter fabric to be Dupont, style 3201, or equal.
- 10.) All easements found are shown on plot plan.
- 11.) All sewer lines shall be sch. 40, 4 inch diameter unless noted otherwise.
- 12.) All sewer lines under driveways or other areas subject to vehicular traffic shall be placed in a cast iron sleeve. Encasement shall extend 2 feet beyond driveway edge.
- 13.) The engineer shall be notified 24 hour's minimum prior requested inspection. Contractor shall verbally advise engineer of location and type of all component manufacture and model numbers. Items to be reported, but not limited to; pump (s), float (s), alarms, timers, etc..
- 14.) Contractor shall maintain a minimum of 50 feet from ditch or impermeable barrier must be installed in accordance with DNREC policy, August 27, 1990, or build 9" berm as per DNREC policy, January 19, 1992.