REPLACEMENT SYSTEM VARIANCE REQUEST

Town Copy $120.00

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form shall be attached to an application (HHE-200) for the proposed replacement system which requires a variance to the Rules. The LPI shall review the Replacement System Variance Request and HHE-200 and may approve the Request if all of the following requirements can be met, and the variance(s) requested fall within the limits of LPI's authority.

1. The proposed design meets the definition of a Replacement System as defined in the Rules (Sec. 2006)
2. There will be no change in use of the structure except as authorized for minor expansions outside the shoreland zone of major waterbodies/courses.
3. The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.
4. The BOD5 plus S.S. content of the wastewater is no greater than that of normal domestic effluent.

GENERAL INFORMATION Town of Augusta

Permit No. 6258 Date Permit Issued 12/15/08

Property Owner's Name: Thurston, Charlie Tel. No.: 242-0737

System's Location: 361 Spring Road

Property Owner's Address: 361 Spring Road

(if different from above) _____

SPECIFIC INSTRUCTIONS TO THE:

LOCAL PLUMBING INSPECTOR (LPI):

If any of the variances exceed your approval authority and/or do not meet all of the requirements listed under the Limitations Section above, then you are to send this Replacement System Variance Request, along with the Application, to the Department for review and approval consideration before issuing a Permit. (See reverse side for Comments Section and your signature.)

SITE EVALUATOR:

If after completing the Application, you find that a variance for the proposed replacement system is needed, complete the Replacement Variance Request with your signature on reverse side of form.

PROPERTY OWNER:

If has been determined by the Site Evaluator that a variance to the Rules is required for the proposed replacement system. This variance request is due to physical limitations of the site and/or soil conditions. Both the Site Evaluator and the LPI have considered the site/soil restrictions and have concluded that a replacement system in total compliance with the Rules is not possible.

PROPERTY OWNER

I understand that the proposed system requires a variance to the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner, and I will promptly notify the Local Plumbing Inspector and make any corrections required by the Rules. By signing the variance request form, I acknowledge permission for representatives of the Department to enter onto the property to perform such duties as may be necessary to evaluate the variance request.

Charles E. Thurston — SIGNATURE OF OWNER

12-16-2008 — DATE

LOCAL PLUMBING INSPECTOR

I, Mary R. Griffin, the undersigned, have visited the above property and have determined to the best of my knowledge that it cannot be installed in compliance with the Rules. As a result of my review of the Replacement Variance Request, the Application, and my on-site investigation, I **(check and complete either a or b)**:

☐ a. (☑ approve, ☐ disapprove) the variance request based on my authority to grant this variance. Note: If the LPI does not give his approval, he shall list his reasons for denial in **Comments** Section below and return to the applicant.

–OR–

☐ b. find that one or more of the requested Variances exceeds my approval authority as LPI. I (☐ recommend, ☐ do not recommend) the Department's approval of the variances. Note: If the LPI does not recommend the Department's approval, she shall state his reasons in Comments Section below as to why the proposed replacement system is not being recommended.

Comments:

Mary R. Griffin — LPI SIGNATURE

12/15/08 — DATE

STATE OF MAINE JEFFREY MALINOWSKI 373 LICENSED SITE EVALUATOR

Replacement System Variance Request

VARIANCE CATEGORY	LIMIT OF LPI'S APPROVAL AUTHORITY						VARIANCE REQUESTED TO:	
SOILS								
Soil Profile	Ground Water Table			to 7"				inches
Soil Condition	Restrictive Layer			to 7"				inches
from HHE-200	Bedrock			to 12"				inches
SETBACK DISTANCES (in feet)	**Disposal Fields (total design flow)**			**Septic Tanks (total design flow)**			**Disposal Fields**	**Septic Tanks**
From	**Less than 1000 gpd**	**1000 to 2000 gpd**	**Over 2000 gpd**	**Less than 1000 gpd**	**1000 to 2000 gpd**	**Over 2000 gpd**	**To**	**To**
Wells with water usage of 2000 or more gpd or public water supply wells	300 ft	300 ft	300 ft	150 ft	150 ft	150 ft		
Owner's wells	100 down to 60 ft [a]	200 down to 100 ft	300 down to 150 ft	100 down to 50 ft [b]	100 down to 50 ft	100 down to 50 ft		
Neighbor's wells	100 down to 60 ft [f]	200 down to 120 ft [f]	300 down to 180 ft [f]	100 down to 50 ft [f]	100 down to 75 ft [f]	100 down to 75 ft [f]		
Water supply line	10 ft	20 ft	25 ft [h]	10 ft	10 ft	10 ft [h]		
Water course, major - for replacements only, see Table 400.4 for major expansions	100 down to 60 ft [d]	200 down to 120 ft [d]	300 down to 180 ft [d]	100 down to 50 ft [b]	100 down to 50 ft	100 down to 50 ft		
Water course, minor	50 down to 25 ft [e]	100 down to 50 ft [e]	150 down to 75 ft [e]	50 down to 25 ft [e]	50 down to 25 ft [e]	50 down to 25 ft [e]		
Drainage ditches	25 down to 12 ft	50 down to 25 ft	75 down to 35 ft	25 down to 12 ft	25 down to 12 ft	25 down to 12 ft	8'	
Edge of fill extension – Coastal wetlands, special freshwater wetlands, great ponds, rivers, streams	25 ft [e]	25 ft [e]	25 ft [e]	25 ft [e]	25 ft [e]	25 ft [e]		
Slopes greater than 3:1	10 ft [g]	18 ft [g]	25 ft [g]	N/A	N/A	N/A		
No full basement [e.g. slab, frost wall, columns]	15 down to 7 ft	30 down to 15 ft	40 down to 20 ft	8 down to 5 ft	14 down to 7 ft	20 down to 10 ft		
Full basement [below grade foundation]	20 down to 10 ft	30 down to 15 ft	40 down to 20 ft	8 down to 5 ft	14 down to 7 ft	20 down to 10 ft		
Property lines	10 down to 5 ft [c]	18 down to 9 ft [c]	20 down to 10 ft [c]	10 down to 4 ft [c]	15 down to 7 ft [c]	20 down to 10 ft [c]		
Burial sites or graveyards, measured from the down toe of the fill extension	25 ft	25 ft	25 ft	25 ft	25 ft	25 ft		

OTHER

1. Fill extension Grade - to 3:1
2.
3.

Footnotes: [a.] Single-family well setbacks may be reduced as prescribed in Section 701.2.
[b.] This distance may be reduced to 25 feet, if the septic or holding tank is tested in the plumbing inspector's presence and shown to be watertight or of monolithic construction.
[c.] Additional setbacks may be needed to prevent fill material extensions from encroaching onto abutting property.
[d.] Additional setbacks may be required by local Shoreland zoning.
[e.] Natural Resource Protection Act requires a 25 feet setback, on slopes of less than 20%, from the edge of soil disturbance and 100 feet on slopes greater than 20%. See Chapter 15.
[f.] May not be any closer to neighbors well than the existing disposal field or septic tank unless written permission is granted by the neighbor. This setback may be reduced for single family houses with Department approval. See Section 702.3.
[g.] The fill extension shall reach the existing ground before the 3:1 slope or within 100 feet of the disposal field.
[h.] See Section 1402.10 for special procedures when these minimum setbacks cannot be achieved.

SITE EVALUATOR'S SIGNATURE — DATE 12-10-08

FOR USE BY THE DEPARTMENT ONLY

The Department has reviewed the variance(s) and (☐ does ☐ does not) give its approval. Any additional requirements, recommendations, or reasons for the Variance denial, are given in the attached letter.

SIGNATURE OF THE DEPARTMENT — DATE

STATE OF MAINE
JEFFREY
MALINOWSKI
373
LICENSED
SITE EVALUATOR

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

PROPERTY LOCATION

City, Town, or Plantation: Augusta
Street or Road: Spring Road
Subdivision, Lot #:

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

AUGUSTA
PERMIT # 6258 TOWN COPY
Date Permit Issued: 12/15/08
$ 120.00 ☐ If Double Fee Charged
Local Plumbing Inspector Signature
L.P.I. # 850

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Thurston, Charlie
☒ Owner ☐ Applicant

Mailing Address of Owner/Applicant: 361 Spring Road, Augusta, ME 04330

Daytime Tel. #: (207) 242-0737

Municipal Tax Map # 15 Lot # 4 RV

OWNER OR APPLICANT STATEMENT
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.
Charlie E. Thurston — Signature of Owner or Applicant — 12-12-08 Date

CAUTION: INSPECTION REQUIRED
I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.
Local Plumbing Inspector Signature — 2/26/09 (1st) date approved — 2/26/09 (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION
- ☐ 1. First Time System
- ☒ 2. Replacement System
  - Type replaced: Trench
  - Year installed: 1950's?
- ☐ 3. Expanded System
  - ☐ a. Minor Expansion
  - ☐ b. Major Expansion
- ☐ 4. Experimental System
- ☐ Seasonal Conversion

THIS APPLICATION REQUIRES
- ☐ 1. No Rule Variance
- ☐ 2. First Time System Variance
  - ☐ a. Local Plumbing Inspector Approval
  - ☐ b. State & Local Plumbing Inspector Approval
- ☒ 3. Replacement System Variance
  - ☒ a. Local Plumbing Inspector Approval
  - ☐ b. State & Local Plumbing Inspector Approval
- ☐ 4. Minimum Lot Size Variance
- ☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS
- ☒ 1. Complete Non-engineered System
- ☐ 2. Primitive System (graywater & alt. toilet)
- ☐ 3. Alternative Toilet, specify:
- ☐ 4. Non-engineered Treatment Tank (only)
- ☐ 5. Holding Tank, _____ gallons
- ☐ 6. Non-engineered Disposal Field (only)
- ☐ 7. Separated Laundry System
- ☐ 8. Complete Engineered System (2000 gpd or more)
- ☐ 9. Engineered Treatment Tank (only)
- ☐ 10. Engineered Disposal Field (only)
- ☐ 11. Pre-treatment, specify:
- ☐ 12. Miscellaneous Components

SIZE OF PROPERTY
10500± ☒ SQ. FT. ☐ ACRES

DISPOSAL SYSTEM TO SERVE
- ☒ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
- ☐ 2. Multiple Family Dwelling, No. of Units:
- ☐ 3. Other: (specify)

Current Use ☐ Seasonal ☐ Year Round ☐ Undeveloped

SHORELAND ZONING
☐ Yes ☒ No

TYPE OF WATER SUPPLY
Proposed
☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☒ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
- ☒ 1. Concrete
  - ☒ a. Regular
  - ☐ b. Low Profile
- ☐ 2. Plastic
- ☐ 3. Other:

CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE
- ☐ 1. Stone Bed ☐ 2. Stone Trench
- ☒ 3. Proprietary Device
  - ☐ a. cluster array ☒ c. Linear
  - ☐ b. regular load ☐ d. H-20 load
- ☐ 4. Other:

SIZE: 240 ☐ sq. ft. ☒ lin. ft.

GARBAGE DISPOSAL UNIT
☐ 1. No ☐ 2. Yes ☒ 3. Maybe
If Yes or Maybe, specify one below:
- ☐ a. multi-compartment tank
- ☐ b. ___ tanks in series
- ☐ c. Increase in tank capacity
- ☒ d. Filter on Tank Outlet

DESIGN FLOW
292 gallons per day
BASED ON:
- ☒ 1. Table 501.1 (dwelling unit(s))
- ☐ 2. Table 501.2 (other facilities)

SHOW CALCULATIONS for other facilites

SOIL DATA & DESIGN CLASS
PROFILE / CONDITION / DESIGN
8 / C / 1
at Observation Hole # TB#1
Depth 24 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING
- ☐ 1. Small—2.0 sq. ft. / gpd
- ☐ 2. Medium—2.6 sq. ft. / gpd
- ☐ 3. Medium—Large 3.3 sq. ft / gpd
- ☒ 4. Large—4.1 sq. ft. / gpd
- ☐ 5. Extra Large—5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP
- ☐ 1. Not Required
- ☒ 2. May Be Required
- ☐ 3. Required

Specify only for engineered systems:
DOSE: _____ gallons

- ☐ 3. Section 503.0 (meter readings)

ATTACH WATER METER DATA

LATITUDE AND LONGITUDE
at center of disposal area
Lat. 44° d 17' m 18" s
Lon. 69° d 41' m 57" s
If g.p.s, state margin of error:

SITE EVALUATOR STATEMENT

I certify that on 12/6/2008 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature — 373 SE # — 12-10-2008 Date

Jeffrey L. Malinowski — Site Evaluator Name Printed
724-2538 — Telephone Number
E-mail Address

STATE OF MAINE JEFFREY MALINOWSKI 373 LICENSED SITE EVALUATOR

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

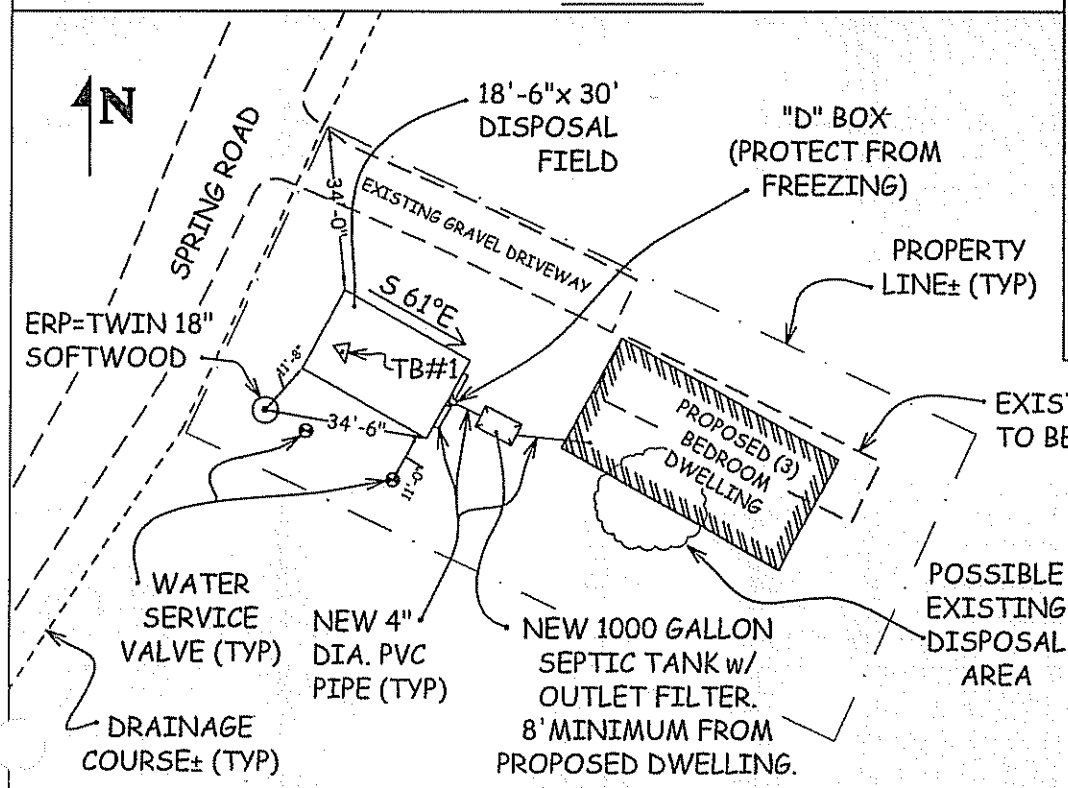
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
Augusta	Spring Road	Thurston, Charlie

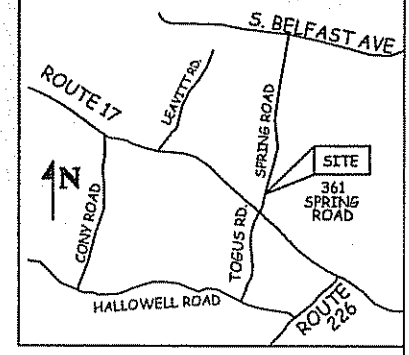
SITE PLAN

Scale 1" = 40' ft. or as shown



*NOTE: ALL PARTS OF SEPTIC SYSTEM TO BE 10' MINIMUM FROM WATER SUPPLY LINE. DISTRIBUTION FIELD TO BE 20' MINIMUM FROM FOUNDATION OR 15' FROM SLAB.

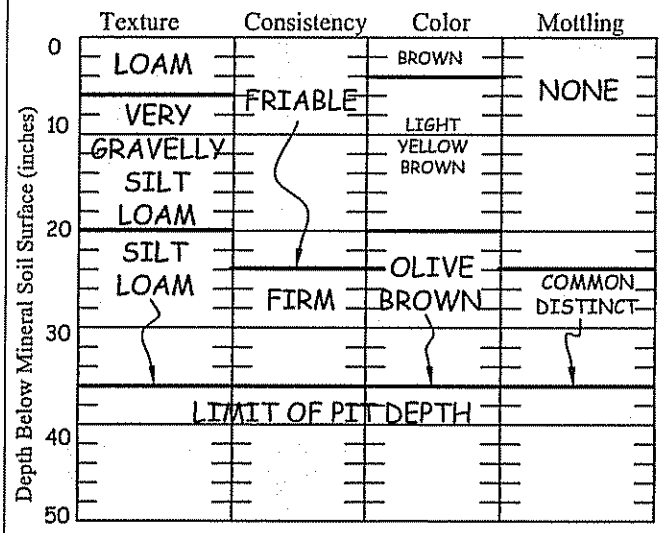
SITE LOCATION PLAN



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TB #1 ☐ Test Pit ☒ Boring

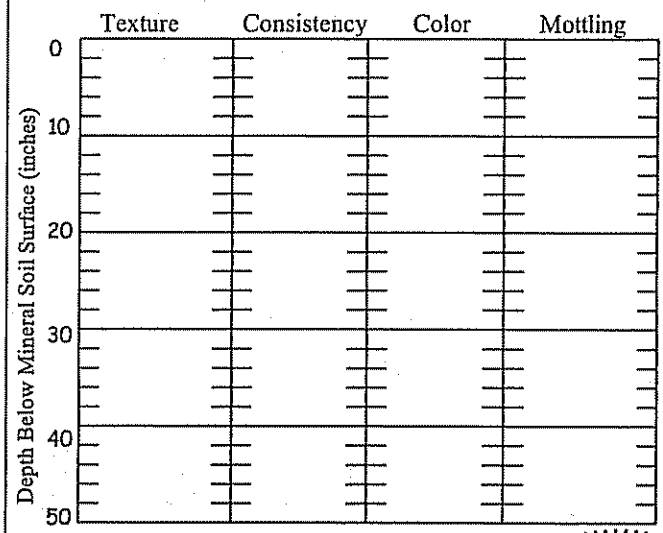
1/2 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
8 (Profile) C (Condition)	1 %	24"	☒ Ground Water ☒ Restrictive Layer [ ] Bedrock [ ] Pit Depth

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
_____ (Profile) _____ (Condition)	_____ %	_____"	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

STATE OF MAINE
JEFFREY
LICENSED
SITE EVALUATOR

Site Evaluator Signature | 373 SE # | 12-10-2008 Date

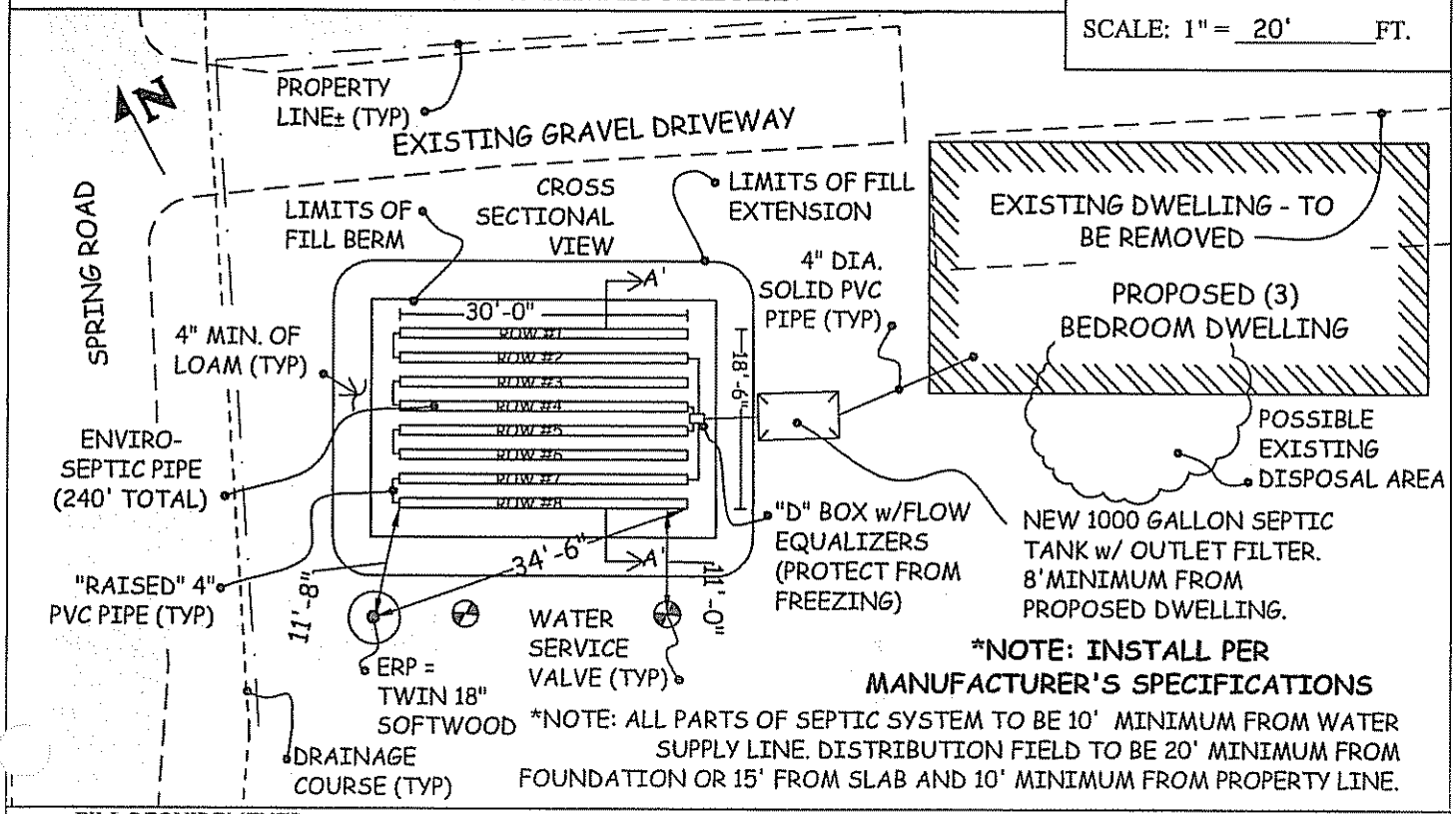
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
Augusta	Spring Road	Thurston, Charlie

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20' FT.



***NOTE: INSTALL PER MANUFACTURER'S SPECIFICATIONS**

*NOTE: ALL PARTS OF SEPTIC SYSTEM TO BE 10' MINIMUM FROM WATER SUPPLY LINE. DISTRIBUTION FIELD TO BE 20' MINIMUM FROM FOUNDATION OR 15' FROM SLAB AND 10' MINIMUM FROM PROPERTY LINE.

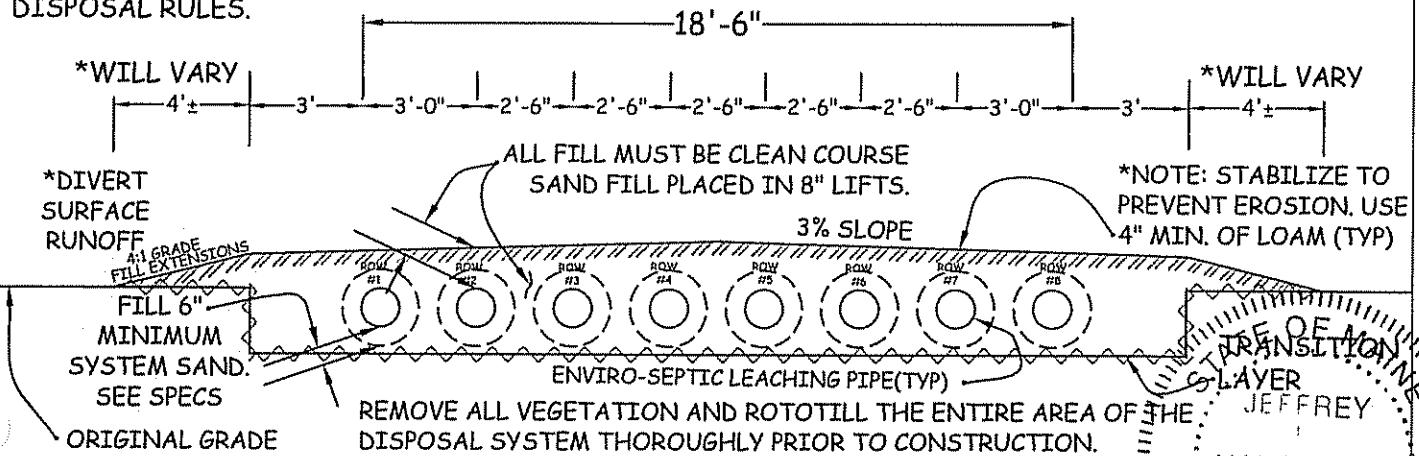
FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT	
Depth of Fill (Upslope)	12"±	Finished Grade Elevation		Location & Description:	18" Twin Softwood Tree 39" Above Ground
		Top of Distribution Pipe or Proprietary Device	-36"		
Depth of Fill (Downslope)	12"±	Bottom of Disposal Area	-48"	Reference Elevation:	- 0" -

DISPOSAL AREA CROSS SECTION

Scale
Horizontal 1" = 5' ft.
Vertical 1" = 5' ft.

*INSTALL PER MAINE SUBSURFACE WASTE WATER DISPOSAL RULES.

*INSTALL PER MANUFACTURER'S SPECIFICATIONS.



REMOVE ALL VEGETATION AND ROTOTILL THE ENTIRE AREA OF THE DISPOSAL SYSTEM THOROUGHLY PRIOR TO CONSTRUCTION.

STATE OF MAINE
JEFFREY MALINOWSKI
373
LICENSED SITE EVALUATOR

Site Evaluator Signature	SE #	Date
	373	12-10-2008

GENERAL NOTES

1. The most recent revision of the Maine Subsurface Wastewater Disposal Rules ("Rules") is hereby made part of this HHE-200 Form and shall be consulted by the disposal system installer for further construction details, material specifications, cautions, and other related details pertinent to the installation of this disposal system.

2. The HHE-200 Form is intended to represent facts pertinent to the "Rules" only. The owner or applicant must check both local and state ordinances and regulations regarding other building regulations (i.e. zoning, wetlands, building codes, minimum lot size, ect.) before considering this an approved or buildable site.

3. All information shown on this form relating to property lines and subsurface structures (such as but not limited to: water lines, septic tanks, cess pools, cellar drains, utility lines, etc.) are noted, plotted or left off as not affecting the system based on information provided by the owner or his agent. It is the responsibility of the owner or his agent to confirm, BEFORE CONSTRUCTION BEGINS, the above and/or other features which may affect (or be adversely affected by) the installation of this system.

4. When a gravity system is proposed, BEFORE CONSTRUCTION BEGINS, the disposal system installer and building contractor shall review the relative elevations of all points given on this HHE-200 Form and the elevation of the existing or proposed building drain and septic tank openings for compatibility to the minimum code pitch requirements. Any questions that arise should be directed to the local plumbing inspector or design site evaluator. When a pump system is installed it should be sealed (along with the tank) and an alarm device warning of pump failure shall be installed. At present, venting of pumped systems is optional.

5. If the use of a laundry machine becomes excessive, a separate laundry bed should be designed and installed. A lint catching device should be installed for the washing machine (if it doesn't have one) and cleaned frequently. If a distribution box has been shown in the design and is intended to offer an inspection port whereby the owner can check for excessive lint or grease build-up before damage to the system is done. ***Inspection should be frequent.*** This system has not been designed or sized to accommodate a garbage disposal. If one is to be used, you must first notify me so that I can increase the disposal size and septic tank capacity.

6. The actual flow or number of bedrooms shall not extend the design criteria indicated on this HHE-200 Form without a re-evaluation of the system.

7. The general setback distance between a well and disposal system serving a single-family residence is 100 feet. The location of a new well that is within 100 feet of the proposed system may void this design. Locations of all wells within 200' of any component shall be located before construction begins and any well within 100' shall be applied to the 100' Rule. For additional setback requirements, see Chapter 4 of the "Rules".

8. All construction shall be inspected by the local plumbing inspector and shall comply with Chapter 12, Section 1205 of the "Rules".

9. If the owner or installer has any questions, please do not hesitate to contact me.

10. The system shall not be exposed to flushable wipes or any solid granular clothes washing detergents because of the threat of premature system failure.

11. All proprietary devices, regardless of the brand, shall be installed to the manufacturer's specifications, at all times.

12. Take all necessary precautions to insulate all lines and/or components of the disposal system in such a way that prevents freezing.

SE#373 Date: 12-10-2008

STATE OF MAINE
JEFFREY
L.
MALINOWSKI
373
LICENSED
SITE EVALUATOR

Department of Human Services, Bureau of Health
Division of Health Engineering, Wastewater and Plumbing Control Program
Top Nine Tips for a Healthy Septic Tank

1. Pump your septic tank every two to five years, depending how heavily the system is used. Insist that the pumper clean your septic tank through the manhole in the center of the top of your septic tank, rather than the inspection ports above the inlet and outlet baffles.

2. Keep kitchen grease, such as bacon fat and deep fryer oil, out of your septic system. It is not broken down easily by your system, can clog your drain field, and cannot be dissolved by any readily available solvent that is legal to introduce to groundwater.

3. Space out laundry loads over the course of the week and wash only full loads. The average load of laundry uses 47 gallons of water. One load per day rather than 7 loads on Saturday makes a big difference to your septic system. Also, front-loading washers use less water than top loading machines.

4. Install low usage water fixtures. By installing low water usage showerheads (2.5 gallons/minute), toilets (1.6 gallons), dishwashers (5.3 gallons) and washing machines (14 gallons) an average family can reduce the amount of water entering the septic system by 20,000 gallons per year! Low flow showerheads and toilets can be purchased at local lumberyards. Water saving dishwashers and washing machines can be purchased at better appliance stores.

5. Install a septic tank outlet filter in your tank. These generally sell for $100 to $200 depending upon brand and model. They catch small floating particles and lightweight solids, such as hair, before they can make it out to the disposal area and cause trouble. Some models are also designed to capture suspended grease.

6. Use liquid laundry detergent. Powered laundry detergents use clay as a "carrier." This clay can hasten the buildup of solids in the septic tank and potentially plug the disposal area.

7. Minimize the amount of household cleaners (bleach, harsh cleaners) and similar potentially toxic substances entering the septic system. Pump your septic tank every 6 to 12 months if you do lots of painting or staining, as with a home remodel or renovation, and you wash the tools in a sink or basin which drains to the septic system. Note: some substances are not allowed to be introduced into septic systems or groundwater tables. If in doubt, contact the Local Plumbing Inspector for more information.

8. Do not use disinfecting automatic toilet bowl cleaners, such as those containing bleach or acid compounds. The continuous slow release of these chemicals into the septic system kills the micro-organisms which treat your wastewater.

9. You do not need to put special additives into your septic system. In fact, some can do more harm than good. Those which advertise that they will remove solids from your tank, usually do. The problem is that the solids exit the tank and end up in the disposal field. Once there, the solids seal off the disposal area, and the system malfunctions. Also, although it hurts nothing, it is not necessary to "seed" a new system with yeast, horse manure, and so forth. Normal human waste contains enough bacteria for the septic tank, and other microbes are already present in the soil and stones of the disposal area.

SE#373 Date: 12/10/2008