

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207)289-3826

PROPERTY ADDRESS

Town Or Plantation: AUGUSTA

Street Subdivision Lot #: RIVERSIDE DRIVE

PROPERTY OWNERS NAME

Last: THOMPSON First: MONA E

Applicant Name:

Mailing Address of Owner/Applicant (If Different): P.O. BOX 302 WINTHROP, ME 04364

Caution: Permit Required

AUGUSTA Date Permit Issued: 6-28-90 \$ 140.00 FEE Double Fee Charged

Stan R. Fuller Local Plumbing Inspector Signature L.P.I. # 1857D

M. Thompson not present to offer evaluation... Subperm.

Owner/Applicant Statement

I certify that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Local Plumbing Inspector to deny a Permit.

[Signature] Signature of Owner/Applicant Date: 6-28-90

Caution: Inspection Required

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules.

[Signature] Local Plumbing Inspector Signature Date Approved: 8-16-90

PERMIT INFORMATION

THIS APPLICATION IS FOR:

- NEW SYSTEM
- REPLACEMENT SYSTEM
- EXPANDED SYSTEM
- EXPERIMENTAL SYSTEM

SEASONAL CONVERSION
to be completed by the LPI

- SYSTEM COMPLIES WITH RULES
- CONNECTED TO SANITARY SEWER
- SYSTEM INSTALLED - P# _____
- SYSTEM DESIGN RECORDED AND ATTACHED

IF REPLACEMENT SYSTEM:
YEAR FAILING SYSTEM INSTALLED 1942

THE FAILING SYSTEM IS:

- BED
- CHAMBER
- TRENCH
- OTHER: _____

SIZE OF PROPERTY: 1 acre ± ZONING: _____

THIS APPLICATION REQUIRES:

- NO RULE VARIANCE
- NEW SYSTEM VARIANCE
Attach New System Variance Form
- REPLACEMENT SYSTEM VARIANCE
Attach Replacement System Variance Form
 - Requiring Local Plumbing Inspector Approval
 - Requires State and Local Plumbing Inspector Approval
- MINIMUM LOT SIZE VARIANCE

DISPOSAL SYSTEM TO SERVE:

- SINGLE FAMILY DWELLING
- MODULAR OR MOBILE HOME
- MULTIPLE FAMILY DWELLING
- OTHER: _____ SPECIFY

INSTALLATION IS:

COMPLETE SYSTEM

- NON-ENGINEERED SYSTEM
- PRIMITIVE SYSTEM
(Includes Alternative Toilet)
- ENGINEERED (+ 2000 gpd)

INDIVIDUALLY INSTALLED COMPONENTS:

- TREATMENT TANK (ONLY)
- HOLDING TANK _____ GAL
- ALTERNATIVE TOILET (ONLY)
- NON-ENGINEERED DISPOSAL AREA (ONLY)
- ENGINEERED DISPOSAL AREA (ONLY)
- SEPARATED LAUNDRY SYSTEM

TYPE OF WATER SUPPLY
CITY WATER

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

<p>TREATMENT TANK</p> <ol style="list-style-type: none"> <input checked="" type="checkbox"/> <u>SEPTIC: Regular</u> <input type="checkbox"/> Low Profile <input type="checkbox"/> AEROBIC <p>SIZE: <u>1000</u> GALS.</p>	<p>WATER CONSERVATION</p> <ol style="list-style-type: none"> <input checked="" type="checkbox"/> <u>NONE</u> <input type="checkbox"/> LOW VOLUME TOILET <input type="checkbox"/> SEPARATED LAUNDRY SYSTEM <input type="checkbox"/> ALTERNATIVE TOILET <p>SPECIFY: _____</p>	<p>PUMPING</p> <ol style="list-style-type: none"> <input type="checkbox"/> NOT REQUIRED <input checked="" type="checkbox"/> <u>MAY BE REQUIRED</u> (DEPENDING ON TREATMENT TANK LOCATION AND ELEVATION) <input type="checkbox"/> REQUIRED <p>DOSE: _____ GALS.</p>	<p>CRITERIA USED FOR DESIGN FLOW (BEDROOMS, SEATING, EMPLOYEES, WATER RECORDS, ETC.)</p> <p style="font-size: 1.2em;"><u>2 BEDROOM</u> <u>RESIDENTIAL</u></p>			
<p>SOIL CONDITIONS USED FOR DESIGN PURPOSES</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">PROFILE: <u>P</u></td> <td style="width: 50%;">CONDITION: <u>D</u></td> </tr> <tr> <td colspan="2">DEPTH TO LIMITING FACTOR: <u>7</u></td> </tr> </table>	PROFILE: <u>P</u>	CONDITION: <u>D</u>		DEPTH TO LIMITING FACTOR: <u>7</u>		<p>SIZE RATINGS USED FOR DESIGN PURPOSES</p> <ol style="list-style-type: none"> <input type="checkbox"/> SMALL <input type="checkbox"/> MEDIUM <input type="checkbox"/> MEDIUM-LARGE <input checked="" type="checkbox"/> <u>LARGE</u> <input type="checkbox"/> EXTRA LARGE
PROFILE: <u>P</u>	CONDITION: <u>D</u>					
DEPTH TO LIMITING FACTOR: <u>7</u>						

DESIGN FLOW: 240 (GALLONS/DAY)

E EVALUATOR STATEMENT

On 5-11-90 (date) I conducted a site evaluation for this project and certify that the data reported is accurate. The system I propose is in accordance with the Subsurface Wastewater Disposal Rules.

Michaeline Newbery
Site Evaluator Signature

220
SE#

31 May 1990
Date

(Local Plumbing Inspector's Signature if permit is for Seasonal Conversion.)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering

Town, City, Plantation

AUGUSTA

Street, Road, Subdivision

RIVERSIDE DRIVE

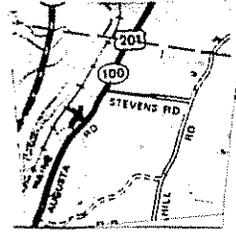
Owners Name

THOMPSON, MOYRA F.

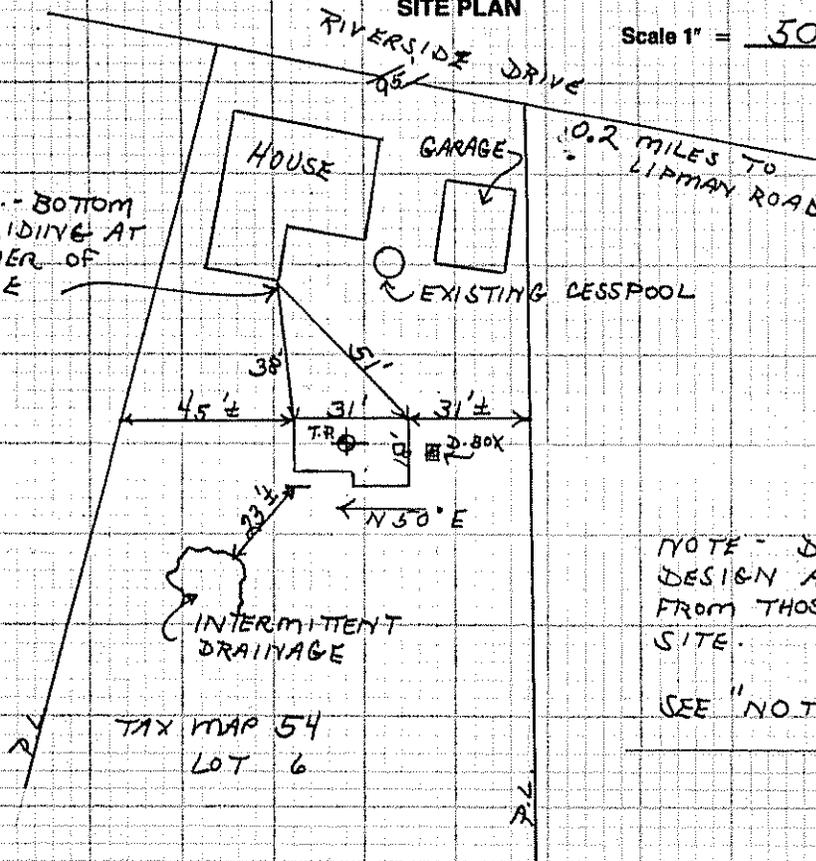
SITE PLAN

Scale 1" = 50 FL.

SITE LOCATION PLAN (Attach Map from Maine Atlas for New System Variance)



ERP - BOTTOM OF SIDING AT CORNER OF HOUSE



NOTE - DIMENSIONS OF DESIGN ARE DIFFERENT FROM THOSE FLAGGED AT SITE.

SEE "NOTES"

SOIL DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole 1 Test Pit Boring

 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0	LOAM TO SILT LOAM	FIRM	DARK BROWN	
6			LIGHT BROWN	
10	VERY FINE SAND		LIGHT-YELLOW BROWN	PROMINENT
15	SAND		OLIVE	
20	LOAM TO SILT LOAM			
30	FINE SAND			
40				
50				

Soil Profile <u>P</u>	Classification Condition <u>D</u>	Slope <u>1</u> %	Limiting Factor <u>7</u>	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Observation Hole Test Pit Boring

 " Depth of Organic Horizon Above Mineral Soil

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0				
6				
10				
15				
20				
30				
40				
50				

Soil Profile <u> </u>	Classification Condition <u> </u>	Slope <u> </u> %	Limiting Factor <u> </u>	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Michaeline Mulvey
Site Evaluator Signature

220
SE#

31 May 1990
Date

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form shall be attached to an application for the proposed replacement system which does not comply with the Rules. The LPI shall review the Replacement System Variance Request and Application 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 from the rules.
2. A system cannot be designed and installed in total compliance with the Rules.
3. The design flow is less than 500 GPD.
4. There will be no change in use of the structure.
5. The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.

GENERAL INFORMATION

Town of AUGUSTA

Permit No. _____ E Date Permit Issued _____
MONTH/DAY/YEAR

Property Owner's Name: MONA F. THOMPSON Tel. No. _____

System's Location: RIVERSIDE DRIVE
STREET

AUGUSTA TOWN Maine 04330
ZIP

Property Owner's Address: P.O. BOX 302
(if different from above) STREET

WINTHROP TOWN ME. STATE 04364
ZIP

SPECIFIC INSTRUCTIONS TO THE:

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, they 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.)

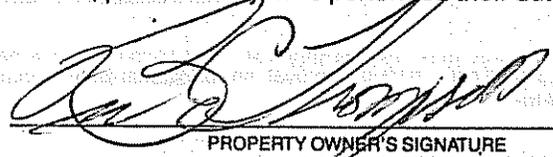
SITE EVALUATOR:

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

PROPERTY OWNER:

It 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.

The OWNER shall sign this statement. Therefore, having read both this Replacement Variance Request and the attached Application, I understand that the proposed system is not in total compliance with the Rules and hereby release all those concerned with this Variance, provided they have performed their duties in a reasonable and proper manner.


PROPERTY OWNER'S SIGNATURE

DATE

VARIANCE CATEGORY	VARIANCE REQUESTED	LIMIT OF LPI'S APPROVAL AUTHORITY		VARIANCE REQUESTED TO:	
SOILS	Soil Profile	Ground Water Table		to 6" inches	
	Soil Condition	Restrictive Layer		to 6" inches	
	from HHE-200	Bedrock		to 10" inches	
SETBACK DISTANCES (IN FEET)	FROM:	TREATMENT TANK	DISPOSAL AREA	TREATMENT TANK	DISPOSAL AREA
Potable Water Supplies	1. Well: > 2000 gal/day	100'	300'		
	2. Well: < 2000 gal/day				
	a. Neighbor's	50'	60'		
	b. Property Owner's	25'	50'		
	3. Water Supply Line	See note 'a'			
Waterbodies	1. Perennial	50'	60'		
	2. Intermittent	15'	20'		23'
	3. Manmade drainage ditch	10'	15'		
Downhill Slope	Greater than 3:1 (33%)	5' ^c	10' ^c		
Buildings	1. With Basement	5'	10'		
	2. Without Basement	5'	10'		
Property Line		4'	5'		

OTHER

1. Fill extension Grade—to 3:1

2.

3.

Footnotes:

- a. This setback distance cannot be reduced by variance. See Table 6-2.
- b. Written Permission from the owner of a well is required when a replacement system will be located less than 100 feet but closer to that well than the system it is replacing.
- c. Sufficient distance shall be maintained to assure that the toe of the fill does not extend to the 3:1 slope.

Michaeline Bentley
SITE EVALUATOR'S SIGNATURE

31 May 1990
DATE

LPI STATEMENT

I, *Jay R. Tull*, LPI for the Town of *Augusta* have conducted an on-site inspection for the proposed replacement system and have determined to the best of my knowledge, that it cannot be installed in total compliance with the Rules, applicable Municipal Wastewater Disposal Ordinances, or the Local Shoreland Zoning Ordinance. As a result of my review of the Replacement System 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, he shall state his reasons in **Comments** Section below as to why the proposed replacement system is not being recommended.

Comments: _____

Jay R. Tull
LPI'S SIGNATURE

6-28-90
DATE

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

THIS DESIGN INCLUDES THE USE OF EQUALIZERS

(Be sure to order EQUALIZERS when you order the distribution box)

This design requires the use of a distribution box. In order to insure that the distribution is uniform between the various outlets at low flows, the use of EQUALIZERS is necessary.

An EQUALIZER is a plastic device which is placed in the ends of the each of the outlet pipes in the distribution box. Thus one EQUALIZER will be needed for each outlet pipe.

Without the EQUALIZERS, the distribution of effluent at low flows (most of the flow is at low flow rates) will be very poor.

Be sure to follow the instructions packaged with each EQUALIZER. Be certain that the EQUALIZERS are securely installed (use plastic pipe cement, if necessary).

Even with the use of EQUALIZERS it is still very important that the box be installed so that the pipes are at the same elevation, and that the box be free of dirt and debris.

If you have any questions, call the Site Evaluator.



INSTALLATION INSTRUCTIONS

For most pipe types, installation is a matter of simply pushing the EQUALIZER into the pipe end - a pressure fit. Just make sure it is a pressure fit and that the point of the opening is at the bottom. Install on outlet pipes only.

If your pipe is "thin walled" (ASTM D2729), you will find that the EQUALIZER fits loosely in the pipe end and could fall out. In that case you must either glue it in place (using regular plastic pipe cement), or add a "shim" to make it a tight fit. The glue, if used, is only to tack it in place and need not be continuous around the whole rim.

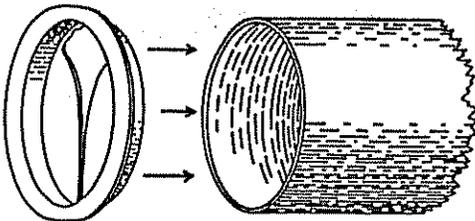
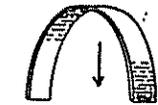
Figure 1 shows how to make and install a shim using only a piece of the thin wall pipe itself. Saw off a very short piece of the pipe - about a half inch will do (a hack saw works well for this). Then cut the resulting small ring into two equal halves. Either of these halves can then be used as a shim. Simply place the shim over the top half of the EQUALIZER and slide the resulting assembly into the pipe, forcing the top half (with the shim) in first. Since the flow should always be into the outlet pipes, there should be no tendency for the flow to dislodge the EQUALIZER. Thus there is usually no need for gluing. If the EQUALIZERS are glued in place, simply be sure that the bottom of the EQUALIZERS are all on the bottom of the pipes as the glue sets.

Remove debris (sticks, hay, leaves, fuzz, etc) from box before closing. A small amount of soil will not affect operation of the EQUALIZERS, but floating debris larger than an eighth of an inch or so could affect it. (Even if some debris does block the lower portion of the EQUALIZER, it will only degrade its performance slightly - it won't keep it from working). Obviously, even with EQUALIZERS, it is important to try to keep the pipes at the same level for best flow dividing.

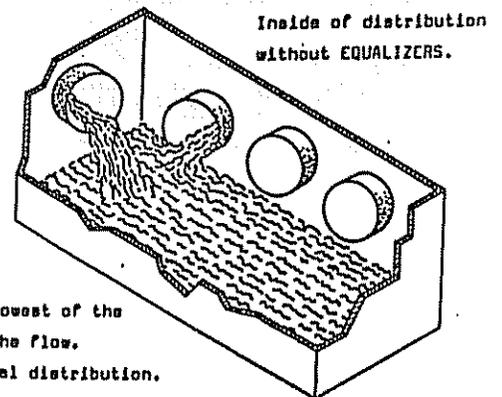
While not part of the installation, - you might like to watch a EQUALIZER work. Simply come back after the tank is full and the effluent is flowing into the box. Make sure no one has run any water in the house for a couple of hours. Then flush a toilet once. You will be able to see that the flow into each pipe is very small, but about equal. Now remove the EQUALIZERS. Usually you will find that one or more pipes are "high and dry" - no effluent flowing down them at all!

This demonstration really brings home the need for the EQUALIZERS. Even if your initial installation is so perfect that you got good flow division without EQUALIZERS, unless your whole distribution box and the pipes are below the frost line and on compacted ground, they won't be perfect next year. After settling and frost heave, the flow would be very badly distributed without EQUALIZERS.

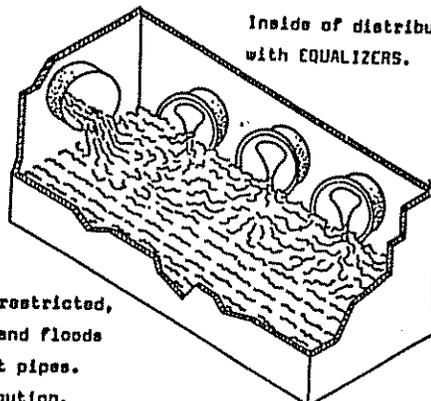
Add a shim for thin wall pipes. Place shim on upper half of the EQUALIZER, then press assembly into end of outlet pipe. Always place narrowest part of EQUALIZER opening at the bottom.



Without EQUALIZERS - the lowest of the open pipes takes most of the flow. This gives extremely unequal distribution.



Inside of distribution box with EQUALIZERS.



With EQUALIZERS - the flow is restricted, so the level in the box rises and floods the entrances to all the outlet pipes. This gives almost equal distribution.