

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10
(207) 287-5672 FAX (207) 287-4172

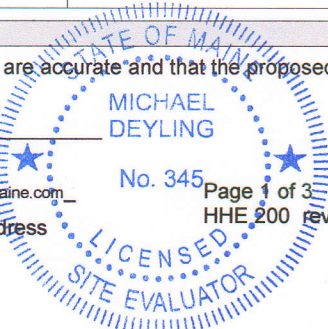
PROPERTY LOCATION		>> Caution: Approval Required<<	
City, Town, or Plantation	MONHEGAN	Town/City _____	Permit # _____
Street or Road	LIGHTHOUSE HILL	Date Permit Issued _____	Fee _____ Double Fee Charged []
Subdivision, Lot #	MEADOW LOTS	_____ LPI # _____	
OWNER/APPLICANT INFORMATION		Local Plumbing Inspector signature The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules	
Name (last, first, MI) MONHEGAN ISLAND SUSTAINABLE COMMUNITY ASSOCIATION (MISCA)			
Mailing Address of PO BOX 303 MONHEGAN, MAINE 04852			
X Owner X Applicant			
Email:	Misca04852@gmail.com	Municipal Tax Map # _____ Lot # _____	
Owner or Applicant Statement I state 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.		Caution: Inspection Required I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.	
_____ Signature of Owner or Applicant		_____ Local Plumbing Inspector Signature	
_____ Date		_____ (1st) Date Approved	
_____ Date		_____ (2nd) Date Approved	

PERMIT INFORMATION		
TYPE OF APPLICATION 1. <input checked="" type="checkbox"/> First Time System 2. <input type="checkbox"/> Replacement System Type Replaced: _____ Year Installed: _____ 3. <input type="checkbox"/> Expanded System a. <input type="checkbox"/> Minor Expansion b. <input type="checkbox"/> Major Expansion 4. <input type="checkbox"/> Experimental System 5. <input type="checkbox"/> Seasonal Conversion	THIS APPLICATION REQUIRES 1. <input checked="" type="checkbox"/> No Rule Variance 2. <input type="checkbox"/> First Time System Variance a. <input type="checkbox"/> Local Plumbing Inspector Approval b. <input type="checkbox"/> State & Local Plumbing Inspector Approval 3. <input type="checkbox"/> Replacement System Variance a. <input type="checkbox"/> Local Plumbing Inspector Approval b. <input type="checkbox"/> State & Local Plumbing Inspector Approval 4. <input type="checkbox"/> Minimum Lot Size Variance 5. <input type="checkbox"/> Seasonal Conversion Permit	DISPOSAL SYSTEM COMPONENT(S) 1. <input checked="" type="checkbox"/> Complete Non-engineered System 2. <input type="checkbox"/> Primitive System (graywater & alternative toilet) 3. <input type="checkbox"/> Alternative Toilet, specify: _____ 4. <input type="checkbox"/> Non-engineered Treatment Tank (only) 5. <input type="checkbox"/> Holding Tank, capacity: _____ gallons 6. <input type="checkbox"/> Non-engineered Disposal Field (only) 7. <input type="checkbox"/> Separated Laundry System 8. <input type="checkbox"/> Complete Engineered System (2000 gpd or more) 9. <input type="checkbox"/> Engineered Treatment Tank (only) 10. <input type="checkbox"/> Engineered Disposal Field (only) 11. <input checked="" type="checkbox"/> Pre-treatment, specify: <u>AERATION UNIT</u> 12. <input type="checkbox"/> Miscellaneous components
SIZE OF PROPERTY _____ sq. ft. <input checked="" type="checkbox"/> 40,000 +/- _____ acres <input type="checkbox"/>	DISPOSAL SYSTEM TO SERVE 1. <input type="checkbox"/> Single Family Dwelling Unit, No. of Bedrooms: _____ 2. <input type="checkbox"/> Multiple Family Dwelling, No. of Units: _____ 3. <input checked="" type="checkbox"/> Other: (2) 3-BDRM HOMES current use: _____ seasonal _____ year Round <u>X</u> Undeveloped	TYPE OF WATER SUPPLY 1. <input type="checkbox"/> Drilled Well 2. <input type="checkbox"/> Dug Well 3. <input type="checkbox"/> Private 4. <input checked="" type="checkbox"/> Public (ISLAND SUPPLY)
SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK 1. <input type="checkbox"/> Concrete a. <input type="checkbox"/> Regular b. <input type="checkbox"/> Low Profile 2. <input checked="" type="checkbox"/> Plastic 3. <input type="checkbox"/> Other: _____ CAPACITY: 2 @ 1000 gallons	DISPOSAL FIELD TYPE & SIZE 1. <input checked="" type="checkbox"/> Stone Bed 2. <input type="checkbox"/> Stone Trench 3. <input type="checkbox"/> Proprietary Device a. <input type="checkbox"/> Cluster array c. <input type="checkbox"/> Linear b. <input type="checkbox"/> Regular load d. <input type="checkbox"/> H-20 Load 4. <input type="checkbox"/> Other: _____ SIZE: 20 X 18 FEET	GARBAGE DISPOSAL UNIT 1. <input checked="" type="checkbox"/> No 2. <input type="checkbox"/> Yes 3. <input type="checkbox"/> Maybe >> If yes/maybe, specify one below: a. <input type="checkbox"/> Multi-Compartment Tank b. <input type="checkbox"/> _____ Tanks in Series c. <input type="checkbox"/> Increase in Tank Capacity d. <input type="checkbox"/> Filter on Tank Outlet	DESIGN FLOW _____ gallons-per-day (gpd) 540 BASED ON: 1. <input checked="" type="checkbox"/> Table 501.1 (dwelling unit(s)) 2. <input type="checkbox"/> Table 501.2 (other facilities) SHOW CALCULATIONS 3. <input type="checkbox"/> Section 503.0 (meter readings)
SOIL DATA & DESIGN CLASS PROFILE CONDITION DESIGN [3] • [C] at Observation Hole # TB-1 Depth 26" OF MOST LIMITING SOIL FACTOR	DISPOSAL FIELD SIZING 1. <input type="checkbox"/> Medium -- 2.6 sq. ft./gpd 2. <input checked="" type="checkbox"/> Medium-Large -- 3.3 sq. ft./gpd 3. <input type="checkbox"/> Large -- 4.1 sq. ft./gpd 4. <input type="checkbox"/> Extra Large -- 5.0 sq. ft./gpd	EFFLUENT/EJECTOR PUMP 1. <input checked="" type="checkbox"/> Not Required 2. <input type="checkbox"/> May Be Required 3. <input type="checkbox"/> Required	Latitude and longitude Lat 43 d 45 m 50.8 s Lon 69 d 19 m 02.9 s If gps state margin of error _____

SITE EVALUATOR STATEMENT			
I certify that on <u>5/18/2020</u> I completed a site evaluation on this property and state that the data reported herein are accurate and that the proposed system is in compliance with the Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).			
 Site Evaluator Signature	345 SE #	5/20/2020 Date	MICHAEL DEYLING No. 345 Page 1 of 3 HHE 200 rev 08/2011 E-Mail Address mdeyding@ces-maine.com
Michael Deyling Site Evaluator Name Printed	(207)795-6009 Telephone #		

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



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10
(207) 287-5672 FAX (207) 287-4172

Town, City, Plantation
MONHEGAN

Street, Road, Subdivision
MEADOW LOTS

Owner or Applicant Name
MISCA

CEMETARY

Lot line TBD

SITE LOCATION MAP
(Attach map from Maine Atlas for First Time System Variance)

500 gallon settling tank
1000 gallon aeration tank
1,000 gal septic tanks

Possible future home location TBD

slope

Lighthouse Rd

SITE

Tribler Rd

20 x 18 ft stone bed disposal field

Access trail

ERP - Nail in clump of Maple trees. Nail is 57" above gr. ERP set to 0"

Property line (see attached survey for more detail)

Turn-off, parking area

well

Road/trail

Septic reserve area

2nd tie point - flag on fir tree

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # TB-1 ◀ Boring

Observation Hole # □ Test Pit □ Boring

1 "	Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling	
0				NONE OBSERVED
6	FINE SANDY LOAM	FRIABLE	DARK BROWN	
12	(ROCKS COMMON)			
18				
24				
30	SOFT	LEDGE ?		
36				
42				
48				
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> restrictive <input checked="" type="checkbox"/> Bedrock
3	C	10	26 "	

"	Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling	
0				
6				
12				
18				
24				
30				
36				
42				
48				
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock

Michael J. Long
Site Evaluator Signature

345
SE #

5/20/2020
Date

Page 2 of 3
HHE-200 Rev. 10/02

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10
(207) 287-5672 FAX (207) 287-4172

Town, City, Plantation
MONHEGAN

Street, Road, Subdivision
MEADOW LOTS

Owner or Applicant Name
MISCA

SUBSURFACE WASTEWATER DISPOSAL PLAN

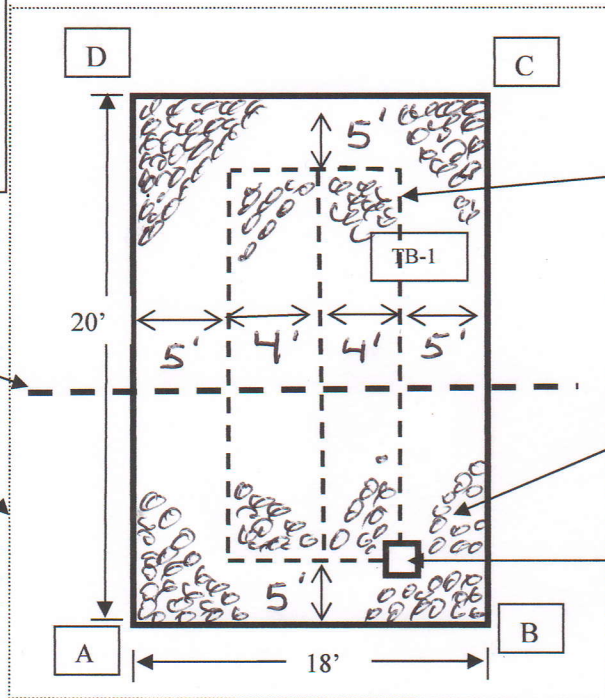
Scale: as shown

Original ground elevations

A= -67" ERP
B= -47" ERP
C= -54 ERP
D= -78" ERP
TB-1= -52" ERP

Line of cross section below

Fill extension includes 3' shoulder from stone and sloped at 4:1 to grade.
Consider retaining wall 10 feet from stone to minimize fill extension.



Toward Homes

4" perforated PVC lateral,
10 feet in length

Disposal field stone

Distribution box (can be
relocated for better pipe access)

BACKFILL REQUIREMENTS

Depth of Backfill (upslope) 13-20 +/-"
Depth of Backfill (downslope) 33-44 +/-"
Depths at cross section (shown below)

CONSTRUCTION ELEVATIONS

Finished Grade Elevation -34" ERP
Top of perf pipe -44" ERP (cover pipe w/ 1" of stone)
Bottom of Disposal -56" ERP

ELEVATION REFERENCE POINT

Location & Description: Nail in clump of small
Maple trees. Nail is 57" above ground.
Reference Elevation is: **0.0"**

Fill extension includes a 3 ft.
shoulder of sand backfill beyond
stone and is sloped at 4:1 to
original grade.

Slope or crown surface to drain

As shown

Consider installing retaining wall 10
ft. from stone around perimeter of
bed to minimize fill extension.

-34" ERP +/-

-44" ERP

-56" ERP

Loam

Granular backfill

Disposal field stone

Geotextile fabric

Approx original ground surface

4" perforated PVC lateral

Scarify base and create 4-6" transition
zone (see construction notes)

Site Evaluator Signature

Michael Dwyer

SE #

345

Date

5/20/2020

HHE-200 Rev.10/02

Page 3 of 3

CONSTRUCTION NOTES

1) The wastewater disposal system includes an 18 X 20 ft. stone bed to be installed in conjunction with 2-1,000 gallon septic tanks (one serving each proposed home) and an Advanced Onsite Solutions (AOS) Clean Solution Aerobic Treatment Unit (ATU) or equivalent. Sewer lines from the homes will be routed to individual septic tanks. The AOS system will consist of a 1,000 gallon aeration tank and a 500 gallon settling tank. Effluent from the septic tanks shall be routed to the treatment system and subsequently to the stone bed disposal field. It is anticipated that the system will be a gravity flow system. *[Note that the contractor/home owner (or MISCA shall establish sewer line elevation at the Site to allow for gravity flow to tanks, ATU and disposal field accounting for septic tank drop, treatment system drop, distribution box drop, length of piping and pitch. Location and orientation of septic tank and treatment tanks may be adjusted in the field based on conditions encountered (ledge)]*. It is recommended that an 18 X 20 ft. disposal field "reserve" area be included in any easement or right of way agreement for wastewater disposal.

A property boundary survey completed by Falla and Sons Land Surveyors was used in configuring the system. Contractor and/or owner shall verify property lines prior to construction.

ATU specification and cost can be obtained from Gary Spaulding at Advanced On-Site Solutions at (603) 783-8042 or (603) 496-9797 – cell.

2) The elevation reference point (ERP) is a nail in a small maple tree within a clump of Maples. The nail is 57" above ground. The ERP is set at "0" inches. The bottom of the disposal bed is at -56" ERP, the top of the distribution lateral is at -44" ERP. The perforated lateral shall be covered with a minimum 1 inch of stone. The base of the disposal bed and the perforated laterals shall be placed level. A slope of up to 0.5 inch in 25 feet is allowable by subsurface wastewater disposal Rules. The contractor shall verify all elevation measurements prior to and during construction.

Backfill used to establish grade, and in fill extension areas shall be a coarse granular backfill with no more than 2% clay sized particles (see Table 11A of Rules for gradation). No stones larger than 3" in diameter shall be present in the backfill. The fill extension area may encompass the septic tank and treatment tank locations adjacent to the disposal field. Fill extensions are to be adjusted in the field as conditions permit. Consideration can be given to installing a retaining wall 10 feet from the edge of the stone bed to minimize fill extension dimensions.

3) Establish erosion control measures as needed to prevent sediment transport off of the construction Site. Vegetation and loam shall be removed from the disposal field footprint and fill extension areas prior to constructing the field. A 4 to 6-inch thick transition zone shall be established at the base of the disposal bed. The transition zone shall consist of clean coarse gravelly sand uniformly mixed into the exposed soil at the base of the disposal bed. The mixing (transition) zone shall be established by rototilling or by use of excavator bucket teeth to thoroughly mix the gravelly sand into the native soil to a depth of approximately 4 to 6-inches. Care should be taken to create the transition zone when base soils are dry. Existing native soil is silt and clay that will easily smear and reduce infiltration capacity when wet. Compaction of the disposal field area shall be avoided. If compaction occurs due to smearing or equipment moving across the field, the bottom of the disposal bed shall be scarified to provide a non-compacted transition zone between the disposal bed base and underlying material.

4) The stone disposal bed shall consist of clean uniform stone. See Table 11B of the Subsurface Wastewater Disposal Rules. (nominal size 3/4 inches recommended)

5) A non-woven geotextile filter fabric be placed over the stone disposal bed.

6) Final grades shall be such that surface water (precipitation) will drain away from the disposal area. Upon completion, the area shall be seeded and mulched.

7) Incorporate Chapter 11 of Subsurface Waste Water Disposal Rules (144 CMR 241) as applicable for disposal field construction and installation.

Do Your Part, Be SepticSmart:

The Do's and Don'ts of Your Septic System

Learn these simple steps to protect your home, health, environment and property value:

Protect It and Inspect It:

Do:

- Have your system inspected (in general) every three years by a licensed contractor and have the tank pumped, when necessary, generally every three to five years.

Think at the Sink:

Don't:

- Pour cooking grease or oil down the sink or toilet.
- Rinse coffee grounds into the sink.
- Pour household chemicals down the sink or flush them.

Do:

- Eliminate or limit the use of a garbage disposal.
- Properly dispose of coffee grounds & food.
- Put grease in a container to harden before discarding in the trash.

Don't Overload the Commode:

Don't:

- Flush non-degradable products or chemicals, such as feminine hygiene products, condoms, dental floss, diapers, cigarette butts, cat litter, paper towels, pharmaceuticals.

Do:

- Dispose of these items in the trash can!

Shield Your Field:

Don't:

- Park or drive on your drainfield. The weight can damage the drain lines.
- Plant trees or shrubs too close to your drainfield, roots can grow into your system and clog it.

Do:

- Consult a septic service professional to advise you of the proper distance for planting trees and shrubs, depending on your septic tank location.

Don't Strain Your Drain:


Don't

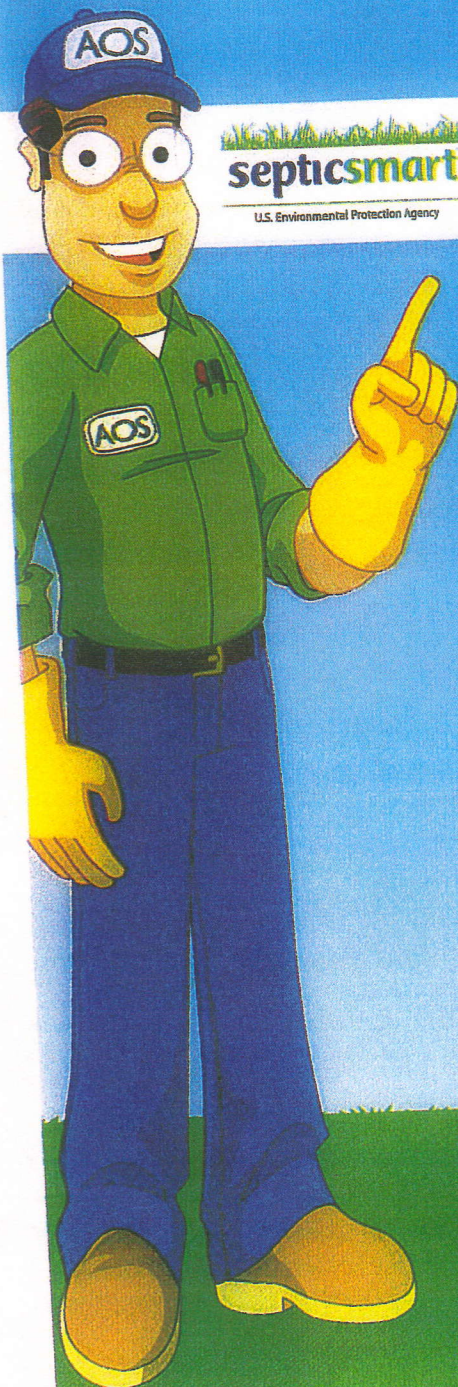
- Concentrate your water use by using your dishwasher, shower, washing machine, and toilet at the same time. All that extra water can really strain your septic system.

Do:

- Stagger the use of water-generating appliances. This can be helpful especially if your system has not been pumped in a long time.
- Become more water efficient by fixing plumbing leaks and consider installing bathroom and kitchen faucet aerators and water-efficient products.

For more SepticSmart tips, visit: www.epa.gov/septicmart

 EPA 832-RT3-002 • September 2013



Proper Landscaping On and Around Your Septic System

The drainfield is a vital part of your septic system. Having the right landscaping on and around your system is important, as tree and shrubbery roots can grow into the drain lines. Also, other heavy items like cars and livestock can break drain lines. Strong roots and heavy items can cause the drainfield to fail. And if the drainfield fails, your system fails.

Here are some tips to keep your drainfield out of harm's way.

Locate your septic tank and drainfield. Then make sure the area is clear of:

- Underground sprinkler lines
- Decks and patios
- Sports courts
- Storage sheds
- Swing sets
- Sand boxes
- Driveways
- Vehicles
- Swimming pools

Plant native, drought-tolerant plants. These are some of the best for your septic system and its drainfield:

Grass:

- Fescue
- Lawn
- Ornamental grasses
- Wildflower meadow mixes

Groundcovers for sun:

- Bugleweed (Ajuga)
- Carpet heathers (Calluna Vulgaris)
- Cotoneaster (Cotoneaster)
- Ground ivy (Glechoma)
- Kinnikinnick (Arctostaphylos)
- Periwinkle (Vinca)

Groundcovers for shade:

- Bunchberry (Cornus)
- Chameleon (Houttuynia)
- Ferns
- Mosses
- Sweet woodruff (Galium Odoratum)
- Wild ginger (Asarum)
- Wintergreen (Gaultheria)

Follow Septic Sam's landscaping do's and don'ts:

Don't:

- Plant a vegetable garden on or near the drainfield.
- Put plastic sheets, bark, gravel or other fill over the drainfield.
- Reshape or fill the ground surface over the drainfield and reserve area. However, just adding topsoil is generally OK if it isn't more than a couple of inches.
- Make ponds on or near the septic system and the reserve area.

Do:

- Plant grass or keep existing native vegetation. These are the best covers for your drainfield.
- Direct all surface drainage away from the septic system.
- Use shallow-rooted plants (see plant list above). Tree and shrub roots can grow into the drainlines, clogging and breaking them.
- Avoid water-loving plants and trees.
- Make sure the tank lid is secure.

For more SepticSmart tips, visit www.epa.gov/septicmart



EPA-832-F-14-009 • September 2014



septicmart

U.S. Environmental Protection Agency

