THE NEW LPI..

AND OTHER TIPS..

WHAT YOU ALWAYS WANTED TO KNOW.....

We Will Be Covering..

- HHE-200 FORMS
- SITE EVALUATION PROCESS
- SETBACKS
- PERMITING
- BACKFILL MATERIAL
- INSPECTIONS
- COMPLAINTS
- ISSUES

OUR RULES

- SUBSURFACE WASTEWATER
- GUIDANCE SUPPLEMENT SSWD
- APPOINTMENT & ADMIN OF LPI’S
- SEASONAL CONVERSION
- MIN. LOT SIZE
- ENFORCEMENT MANUAL
- SITE EVALUATORS

Why Are Local Plumbing Inspectors needed???

§4221. Plumbing inspectors

1. Appointment; compensation; removal. In every municipality, the municipal officers shall appoint one or more inspectors of plumbing, who need not be residents of the municipality for which they are appointed.

Plumbing inspectors are appointed for a term of one year or more and must be sworn and the appointment recorded

The municipal officers shall notify the department and the State Planning Office of the appointment of a plumbing inspector in writing within 30 days of the appointment.

Compensation of plumbing inspectors is determined by the municipal officers and paid by the respective municipalities.

The municipal officers may remove a plumbing inspector for cause, after notice and hearing.

Duties. Plumbing inspectors shall:

Inspect all plumbing for which permits are granted, within their respective municipalities, to ensure compliance with state rules and municipal ordinances and investigate all construction or work covered by those rules and ordinances

Condemn and reject all work done or being done or material used or being used which does not comply with state rules and municipal ordinances, and order changes necessary to obtain compliance

Issue a certificate of approval for any work that the inspector has approved

Keep an accurate account of all fees collected and transfer those fees to the municipal treasurer

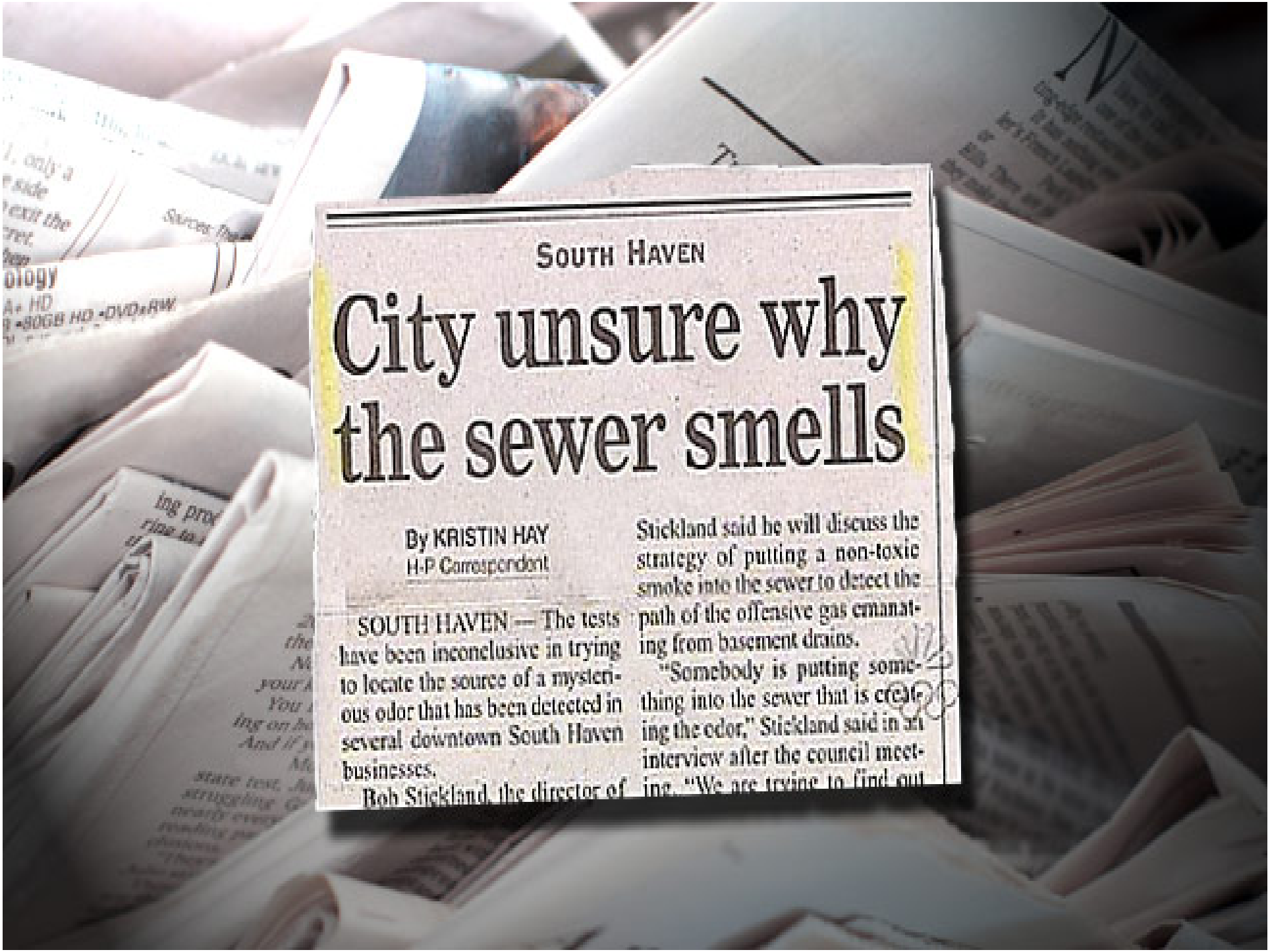
Keep a complete record of all essential transactions of the office

Perform other duties as provided by municipal ordinance

Investigate complaints of alleged violations relating to plumbing or subsurface waste water disposal and take appropriate action as specified by the department by rule in the department's enforcement manual for subsurface waste water disposal and plumbing rules …AND

Accompany staff of the Department of Environmental Protection or the department in the conduct of a sanitary survey intended to identify potentially failing subsurface waste water disposal systems affecting shellfish harvesting areas when requested by either agency.

OTHER REASONS….



SOUTH HAVEN

City unsure why the sewer smells

By KRISTIN HAY
H-P Correspondent

SOUTH HAVEN — The tests have been inconclusive in trying to locate the source of a mysterious odor that has been detected in several downtown South Haven businesses.

Bob Stickland, the director of

Stickland said he will discuss the strategy of putting a non-toxic smoke into the sewer to detect the path of the offensive gas emanating from basement drains.

"Somebody is putting something into the sewer that is creating the odor," Stickland said in an interview after the council meeting. "We are trying to find out

Indirect Waste: Lowest point of pipe to flood level rim shall be 1 inch min.


Fail
failblog.org

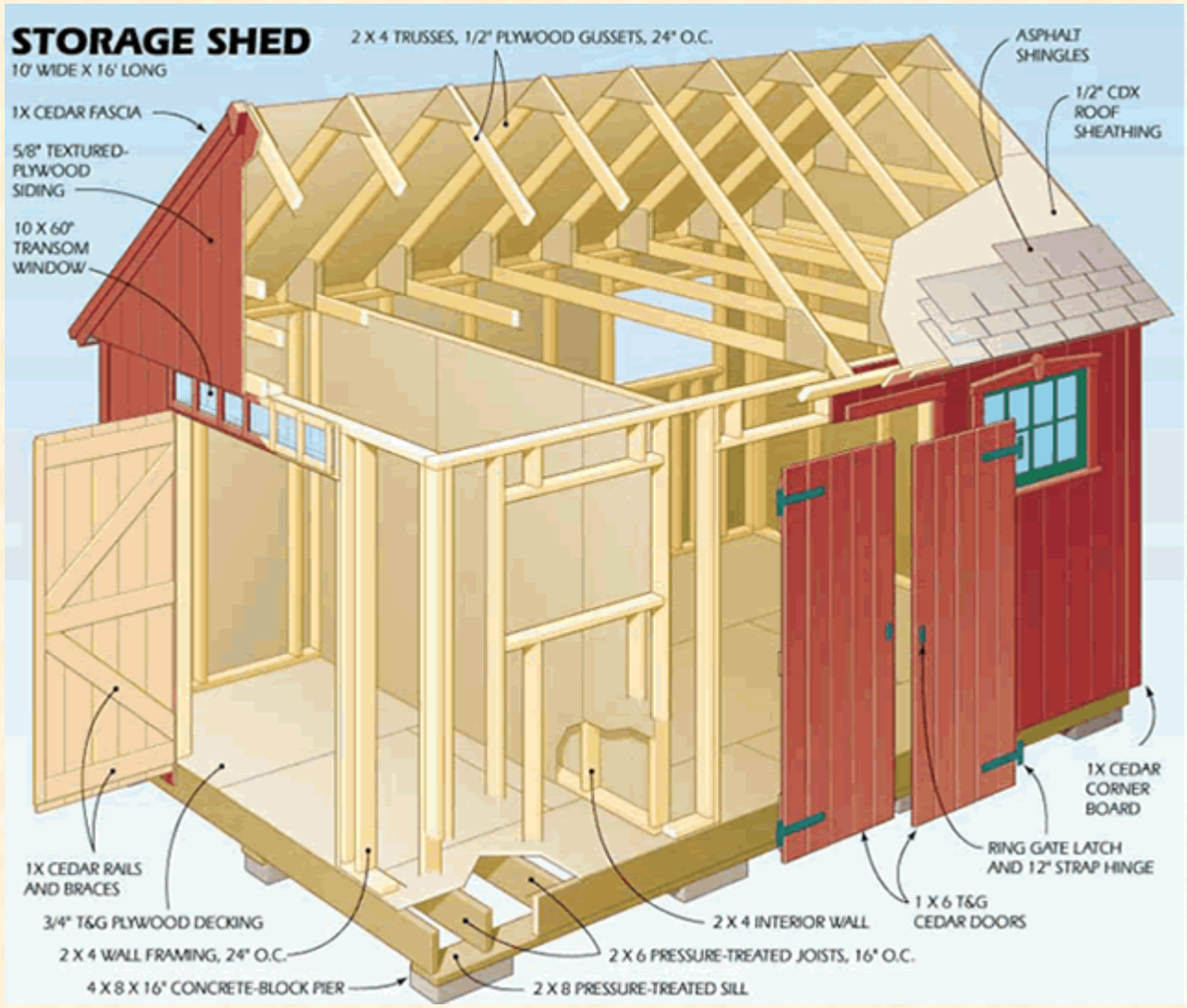
STATE STATUTE
TITLE 30-A

SS 4211, #3

SUBSURFACE WASTEWATER DISPOSAL SYSTEM:

No person may <u>ERECT A STRUCTURE</u> that requires a subsurface wastewater disposal system until documentation has been provided to the municipal officers that the disposal system can be constructed in compliance with rules adopted under Title 22, Section 42 (MAINE SUBSURFACE WASTEWATER DISPOSAL RULES) and this section.

IM ONLY BUILDING A SHED


STORAGE SHED
10' WIDE X 16' LONG
2 X 4 TRUSSES, 1/2" PLYWOOD GUSSETS, 24" O.C.
ASPHALT SHINGLES
1/2" CDX ROOF SHEATHING
1X CEDAR FASCIA
5/8" TEXTURED-PLYWOOD SIDING
10 X 60" TRANSOM WINDOW
1X CEDAR CORNER BOARD
RING GATE LATCH AND 12" STRAP HINGE
1 X 6 T&G CEDAR DOORS
1X CEDAR RAILS AND BRACES
3/4" T&G PLYWOOD DECKING
2 X 4 INTERIOR WALL
2 X 4 WALL FRAMING, 24" O.C.
2 X 6 PRESSURE-TREATED JOISTS, 16" O.C.
4 X 8 X 16" CONCRETE-BLOCK PIER
2 X 8 PRESSURE-TREATED SILL

6 MONTHS LATER YOU JUST HAPPEN TO BE DRIVING BY…….

SECTION 2 ADMINISTRATION: E (4)

. Expansion (Increase in wastewater flow) refers to the enlargement or change in use of a structure using an existing subsurface wastewater disposal system that brings the total structure into a classification that requires larger subsurface wastewater disposal system components under these Rules, or the replacement of an alternative toilet with a water closet, and/or the addition of pressurized water to a structure, as follows:

The initial expansion of a single family home by the addition of one or more bedrooms,

or

the introduction of mechanically pressurized water to a structure formerly served by hand pumped or hand carried water;

The initial expansion of a non-residential structure which results in an increase in design flow of 10 percent or more;

or

Expansions of a structure, such as a porch, living room or sun room, which do not increase the design flow, are exempt from the requirements of this Section.


35

Does a dwelling need Fixtures?

UNIFORM PLUMBING CODE
2009

Section 412.0

Minimum Number of Fixtures

412.1 Fixture Count

Plumbing Fixtures Shall Be Provided For The Type Of Building Occupancy And In The Minimum Number Shown in

Table 4-1

TABLE 4-1
Minimum Plumbing Facilities[1]

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction. Table 4-1 applies to new buildings, additions to a building, and changes of occupancy or type in an existing building resulting in increased occupant load. Exception: New cafeterias used only by employees.

The total occupant load shall be determined in accordance with the Building Code. The type of building or occupancy shall be determined based on the actual use of the various spaces within the building. Building categories not shown in Table 4-1 shall be considered separately by the Authority Having Jurisdiction. The minimum number of fixtures shall be calculated at 50 percent male and 50 percent female based on the total occupant load.

Once the occupant load and uses are determined, the requirements of Section 412.0 and Table 4-1 shall be applied to determine the minimum number of plumbing fixtures required.

Type of Building[2] or Occupancy	Water Closets[14] (Fixtures per Person)	Urinals[5, 10] (Fixtures per Person)	Lavatories (Fixtures per Person)	Bathtubs or Showers (Fixtures per Person)	Drinking[3, 13, 17] Fountains (Fixtures per Person)
Assembly places – theatres, auditoriums, convention halls, etc.– for permanent employee use	Male 1: 1-15 2: 16-35 3: 36-55 Over 55, add 1 fixture for each additional 40 persons. Female 1: 1-15 3: 16-35 4: 36-55	Male 0: 1-9 1: 10-50 Add one fixture for each additional 50 males.	Male 1 per 40 Female 1 per 40		
Assembly places – theatres, auditoriums, convention halls, etc.– for public use	Male 1: 1-100 2: 101-200 3: 201-400 Over 400, add one fixture for each additional 500 males and 1 for each additional 125 females. Female 3: 1-50 4: 51-100 8: 101-200 11: 201-400	Male 1: 1-100 2: 101-200 3: 201-400 4: 401-600 Over 600, add 1 fixture for each additional 300 males.	Male 1: 1-200 2: 201-400 3: 401-750 Over 750, add one fixture for each additional 500 persons. Female 1: 1-200 2: 201-400 3: 401-750		1: 1-150 2: 151-400 3: 401-750 Over 750, add one fixture for each additional 500 persons.
Dormitories[9]– School or labor[16]	Male 1 per 10 Add 1 fixture for each additional 25 males (over 10) and 1 for each additional 20 females (over 8). Female 1 per 8	Male 1 per 25 Over 150, add 1 fixture for each additional 50 males.	Male 1 per 12 Over 12, add one fixture for each additional 20 males and 1 for each 15 additional females. Female 1 per 12	1 per 8 For females, add 1 bathtub per 30. Over 150, add 1 bathtub per 20.	1 per 150[12]
Dormitories – for staff use[16]	Male 1: 1-15 2: 16-35 3: 36-55 Over 55, add 1 fixture for each additional 40 persons. Female 1: 1-15 3: 16-35 4: 36-55	Male 1 per 50	Male 1 per 40 Female 1 per 40	1 per 8	
Dwellings[4] Single dwelling Multiple dwelling or apartment house[16]	1 per dwelling 1 per dwelling or apartment unit		1 per dwelling 1 per dwelling or apartment unit	1 per dwelling 1 per dwelling or apartment unit	
Hospital waiting rooms	1 per room		1 per room		1 per 150[12]

Does a dwelling need hot and cold water?

UNIFORM PLUMBING CODE
2009

Chapter 6

Section 601.0
Hot And Cold Water Required

Section 601.1

CHAPTER 6

WATER SUPPLY AND DISTRIBUTION

601.0 Hot and Cold Water Required.

601.1 Except where not deemed necessary for safety or sanitation by the Authority Having Jurisdiction, each plumbing fixture shall be provided with an adequate supply of potable running water piped thereto in an approved manner, so arranged as to flush and keep it in a clean and sanitary condition without danger of backflow or cross-connection. Water closets and urinals shall be flushed by means of an approved flush tank or flushometer valve.

Exception: Listed fixtures that do not require water for their operation and are not connected to the water supply.

In occupancies where plumbing fixtures are installed for private use, hot water shall be required for bathing, washing, laundry, cooking purposes, dishwashing or maintenance. In occupancies where plumbing fixtures are installed for public use, hot water shall be required for bathing and washing purposes. This requirement shall not supersede the requirements for individual temperature control limitations for public lavatories, bathtubs, whirlpool bathtubs and shower control valves.

601.2 Identification of a Potable and Nonpotable Water System. In buildings where potable water and nonpotable water systems are installed, each system shall be clearly identified in accordance with Sections 601.2.1 through 601.2.4.

601.2.1 Potable Water. Green background with white lettering.

601.2.2 Color and Information. Each system shall be identified with a colored pipe or band and coded with paints, wraps and materials compatible with the piping.

listed in Table 14–1,
discharge side shall be

601.2.4 Outlets. Each
water line that is used
be posted with black
follows: "CAUTION:
DO NOT DRINK."

601.3 Faucets and diverters
water distribution system
sponds to the left side of the

TABLE

Minimum Length of Color

Outside Diameter of Pipe or Covering		
inches	(mm)	of inc
1/2 to 1-1/4	(15 to 32)	8
1-1/2 to 2	(40 to 50)	8
2-1/2 to 6	(65 to 150)	12
8 to 10	(200 to 250)	24
Over 10	(Over 250)	32

602.0 Unlawful Connectio

602.1 No installation of po
or part thereof shall be mac
will be possible for use
contaminated water, mixtu
any portion of such piping
equipment, or plumbing f
siphonage, suction, or any
normal use and operation
tank, receptor, equipmen
flooded or subject to pres

Section 2 A(5) – Subsurface Rules

Wastewater disposal: Any wastewater, as defined in these Rules must be disposed of by one of the following methods:

On-site disposal: A subsurface wastewater disposal system designed, installed, and used in accordance with these Rules;

Public sewer: A public sewer system; or

Licensed discharge: A wastewater discharge system licensed by the Maine Department of Environmental Protection under 38 M.R.S. §§ 413 and § 414-A, as amended.

Section 2A(6) Subsurface Rules

Public sewer connection: A connection to a public sewer system is required either

(a)when public sewers come within 200 feet of the premises served, and a public sewer connection is required by 38 M.R.S. §1160,

or

(b) when required by municipal ordinance pursuant to 30-A M.R.S. § 3405.

BUNKHOUSES

A DETACHED BEDROOM HAVING **NO PLUMBING**; ACCESSORY TO A SINGLE FAMILY DWELLING FOR THE TEMPORARY ACCOMODATIONS OF GUESTS OF THE PROPERTY OWNER WHILE THE OWNER IS AN OCCUPANT OF THE PRINCIPAL DWELLING.

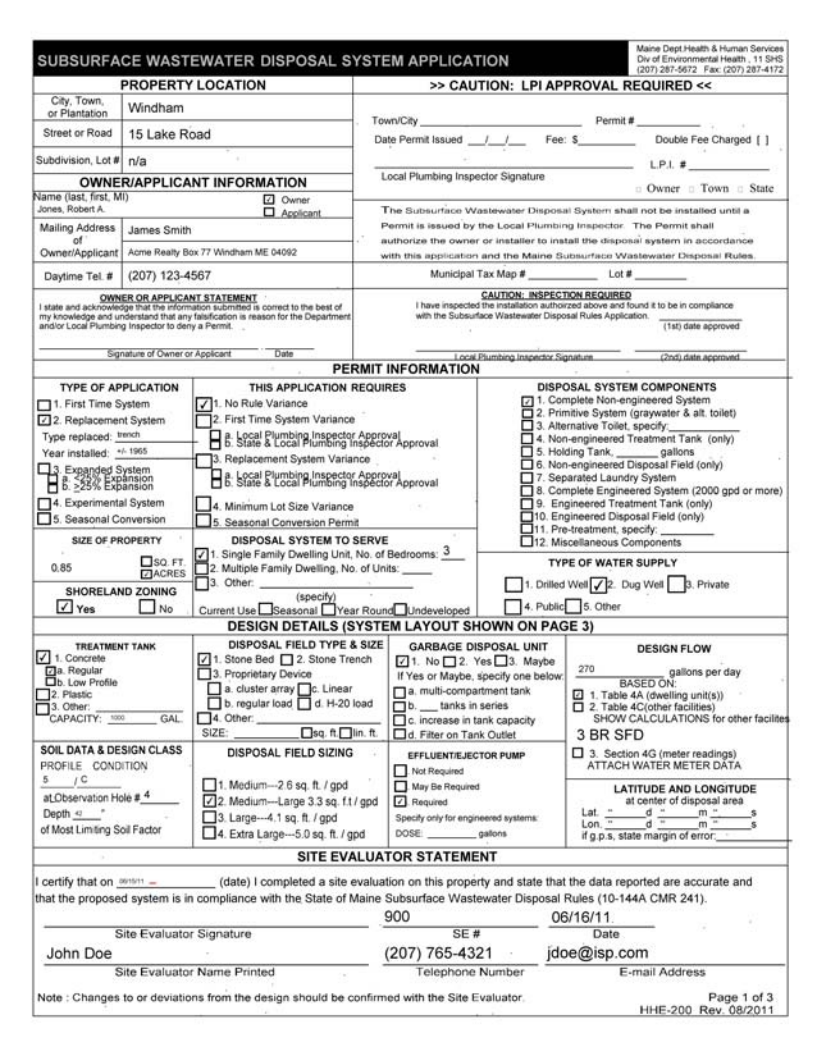
SUBSURFACE WASTEWATER APPLICATIONS (HHE-200)

HHE-200 Form

Page One

Page one of the HHE-200 Form must be signed by both the owner/applicant and the Site Evaluator.

It is important to check that each block on the form is properly completed. If any information is lacking, the LPI should not issue the permit.



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation: Windham
Street or Road: 15 Lake Road
Subdivision, Lot #: n/a

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Jones, Robert A. ☑ Owner ☐ Applicant
Mailing Address of Owner/Applicant: James Smith, Acme Realty Box 77 Windham ME 04092
Daytime Tel. #: (207) 123-4567

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.

Signature of Owner or Applicant ____ Date ____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City ____ Permit # ____
Date Permit Issued ___/___/___ Fee: $____ Double Fee Charged [ ]
Local Plumbing Inspector Signature ____ L.P.I. # ____
☐ Owner ☐ Town ☐ State

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.

Municipal Tax Map # ____ Lot # ____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. ____ (1st) date approved

Local Plumbing Inspector Signature ____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐ 1. First Time System
☑ 2. Replacement System
Type replaced: trench
Year installed: +/- 1965
☐ 3. Expanded System ☐ a. <25% Expansion ☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. 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

0.85 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☑ Yes ☐ No

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

TYPE OF WATER SUPPLY

☐ 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: ____ ☐ 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

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilities
3 BR SFD
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
5 / C
at Observation Hole # 4
Depth 42 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☑ 2. Medium---Large 3.3 sq. f.t / gpd
☐ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ Not Required
☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: ____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. ° ____ d ° ____ m ° ____ s
Lon. ° ____ d ° ____ m ° ____ s
if g.p.s. state margin of error: ____

SITE EVALUATOR STATEMENT

I certify that on 06/15/11 (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	SE #	Date
	900	06/16/11
John Doe	(207) 765-4321	jdoe@isp.com
Site Evaluator Name Printed	Telephone Number	E-mail Address

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

Page 1 of 3
HHE-200 Rev. 08/2011

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

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City, Town, or Plantation	Windham
Street or Road	15 Lake Road
Subdivision, Lot #	n/a

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

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Name (last, first, MI): Jones, Robert A. ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	James Smith
	Acme Realty Box 77 Windham ME 04092
Daytime Tel. #	(207) 123-4567

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☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. " d " m " s
Lon. " d " m " s
if g.p.s, state margin of error: _____

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Site Evaluator Signature	900 SE #	06/16/11 Date
John Doe Site Evaluator Name Printed	(207) 765-4321 Telephone Number	jdoe@isp.com E-mail Address

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

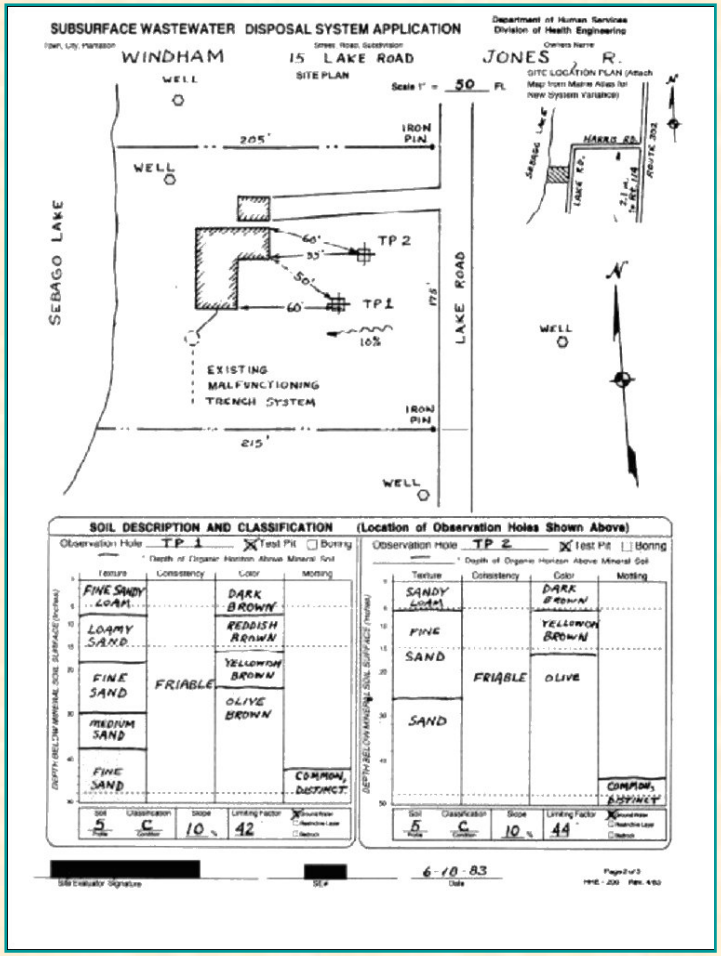
HHE-200 Form

Page Two

Page 2 consists of a general site plan and soil test pit logs.

The LPI should check the soil profile and condition shown in the test pit logs against the profile and condition used for design purposes on Page 1.

The LPI should also check that at least one test pit is located in the disposal area.



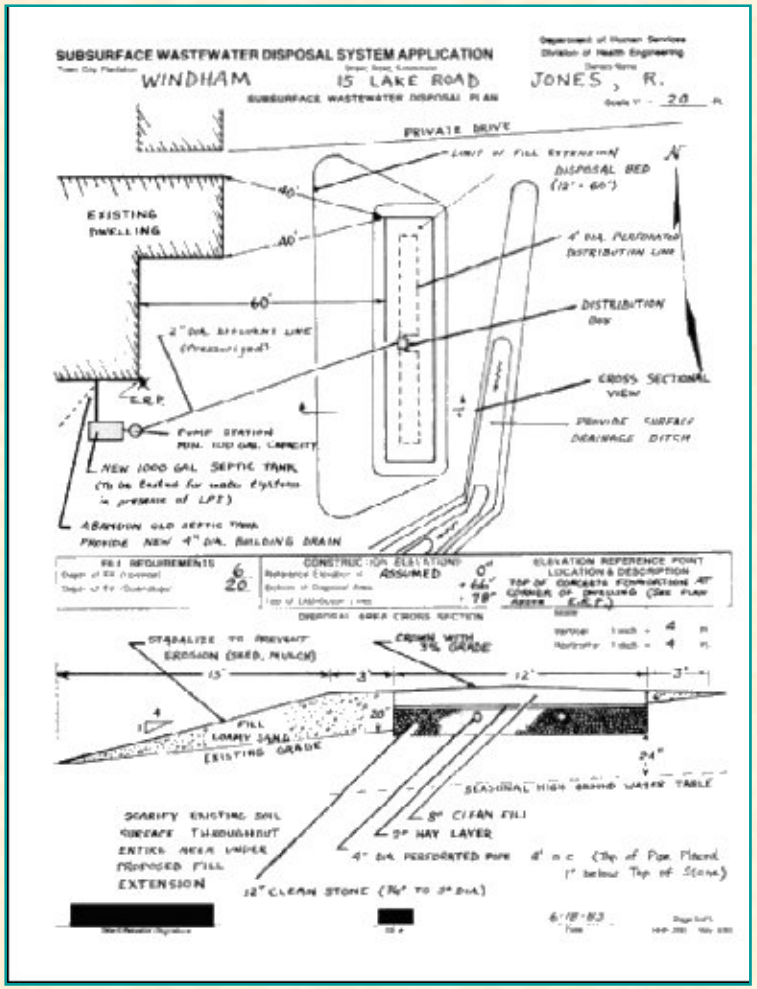
HHE-200 Form

Page Three

Page 3 consists of a detailed construction plan which indicates the location of the treatment tank, disposal field, limits of fill, extension, setbacks, property lines, test pit locations, and elevation reference point location.

This plan must include horizontal swing ties, system layout, and construction elevations.

Page three also contains a representative cross section of the disposal area.



SITE EVALUATION PROCESS

Why is a site evaluation needed?

To prevent contamination and health risks

HOW??

- Evaluates type of soil
  (drainage capabilities)
- Keeps system away from wells, water bodies.
  (setback requirements)
- Keeps system away from the water table, ledge and other restrictive layers
  (separation distances)
- Size of system– based on soil type and # of bedrooms.
- Determines what type of system is best for property.

A site evaluation is needed for;

All Newly Designed

Subsurface sewage disposal systems

Pit privies

Holding tanks

IF THE STATE AND LOCAL PLUMBING INSPECTOR APPROVAL BOX IS CHECKED

DO NOT PERMIT IT,

SEND IT TO US FOR APPROVAL

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

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□ Owner □ Town □ State

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Mailing Address of Owner/Applicant	James Smith Acme Realty Box 77 Windham ME 04092
Daytime Tel. #	(207) 123-4567

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_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☐ 1. First Time System
☑ 2. Replacement System
Type replaced: trench
Year installed: +/- 1965
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. 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

0.85 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☑ Yes ☐ No

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

TYPE OF WATER SUPPLY

☐ 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: _____ ☐ 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

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
3 BR SFD
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
5 / C
at Observation Hole # 4
Depth 42 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☑ 2. Medium---Large 3.3 sq. f.t / gpd
☐ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ Not Required
☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE
at center of disposal area

Lat. __ d __ m __ s
Lon. __ d __ m __ s
if g.p.s, state margin of error: __

SITE EVALUATOR STATEMENT

I certify that on 09/15/11 (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	SE #	Date
	900	06/16/11

Site Evaluator Name Printed	Telephone Number	E-mail Address
John Doe	(207) 765-4321	jdoe@isp.com

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

SITE EVALUATION PROCESS

Site Evaluation Process

The physical characteristics of a parcel of land must be fully evaluated in order to design a safe and effective disposal system. Each site has its own unique characteristics and limitations which must be observed and considered in the design.

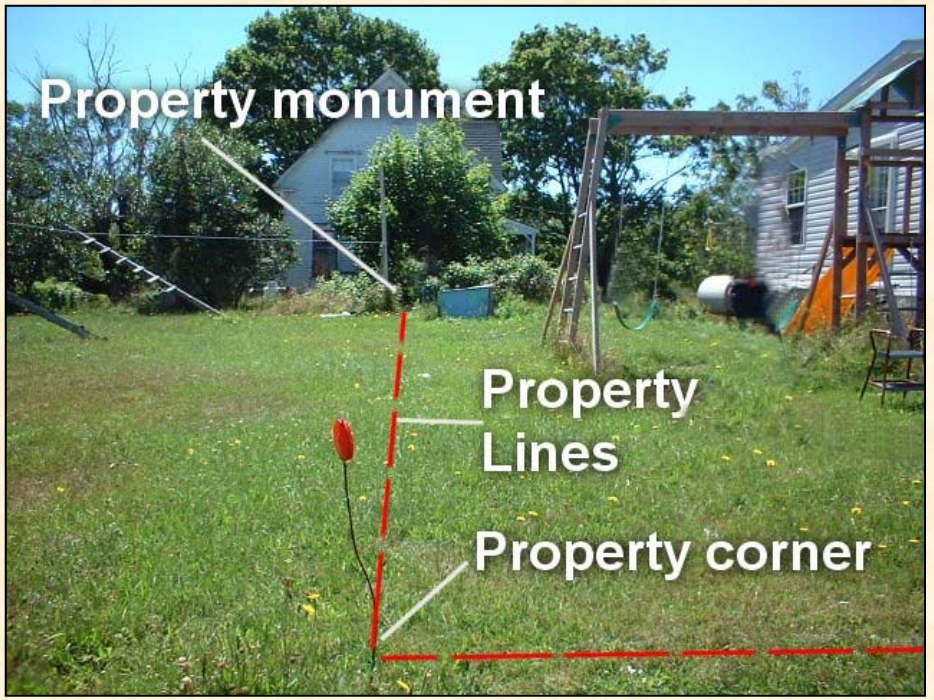
Observations of the surrounding land and development are just as important as viewing the particular parcel of land under consideration.

SITE EVALUATION PROCESS

Site Evaluation Process

Sometimes the applicant has a preference to where the system is to be placed if the soil conditions are accommodating. First considerations should be given to the desired locations if at all possible.

This site's potential locations for a replacement disposal area are limited by adjacent development and a small lot size.



SITE EVALUATION PROCESS

Site Evaluation Process

Existing ground slope beneath the disposal field shall not exceed 20 percent (20 feet in 100 feet). The disposal field is defined as the area under the stone bed or proprietary devices only.

SITE EVALUATION PROCESS

Setback Requirements

Table 7B – Less than 1000 gpd

Waterbody setbacks

Major water body – 100 ft.

Minor water body - 50 ft.

Drainage ditch – 25 ft.

Toe of fill to wetlands - 25 ft.

SITE EVALUATION PROCESS

Setback Requirements

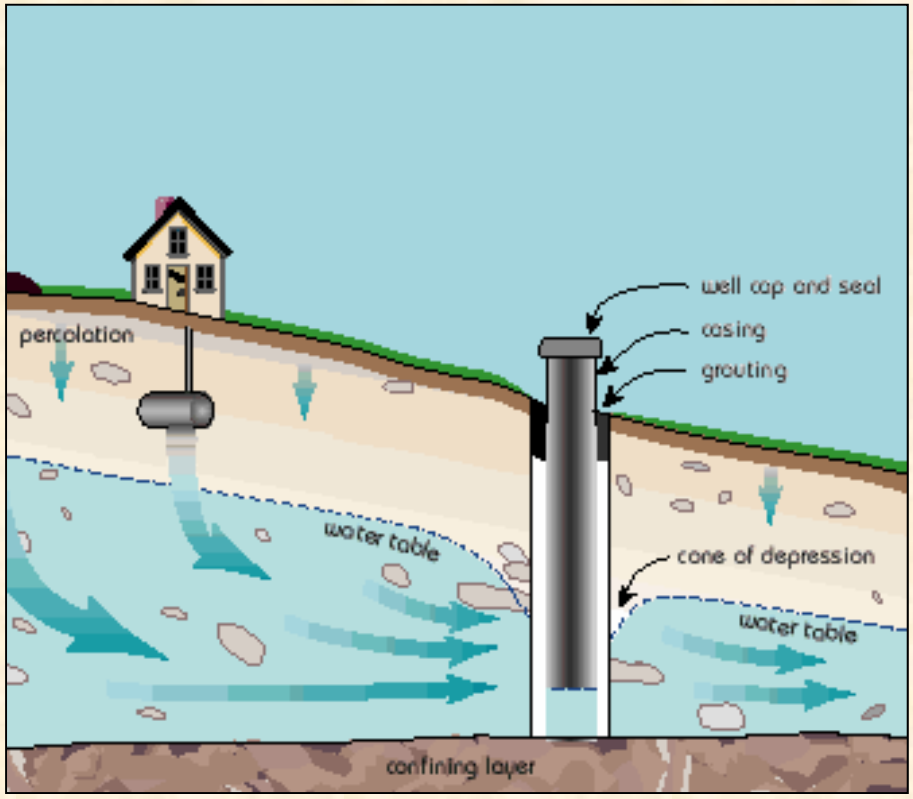
Table 7B – Less than 1000 gpd

Well setbacks (without variances)

Potable Water Supply-100 ft. (Owners/Abutters well)

Public supply well – 300 ft.

Water line (not main) – 10 ft.



Subsurface Wastewater Disposal Rules

Setback Requirements

Table 7B – Less than 1000 gpd

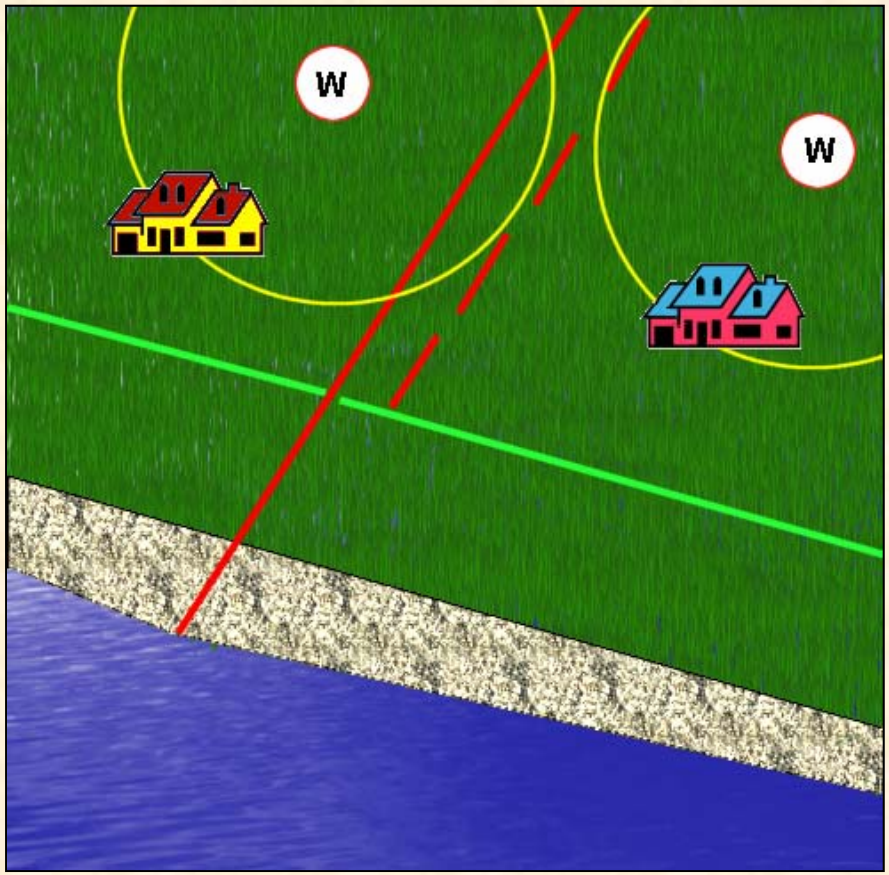
Structures and property lines:

Property lines – 10 ft.

Slab, etc. foundation – 15 ft.

Full foundations/frost walls – 20 ft.

Burial grounds – 25 ft. from toe of fill



Subsurface Wastewater Disposal Rules

Setback Requirements
Table 7B – Less than 1000 gpd

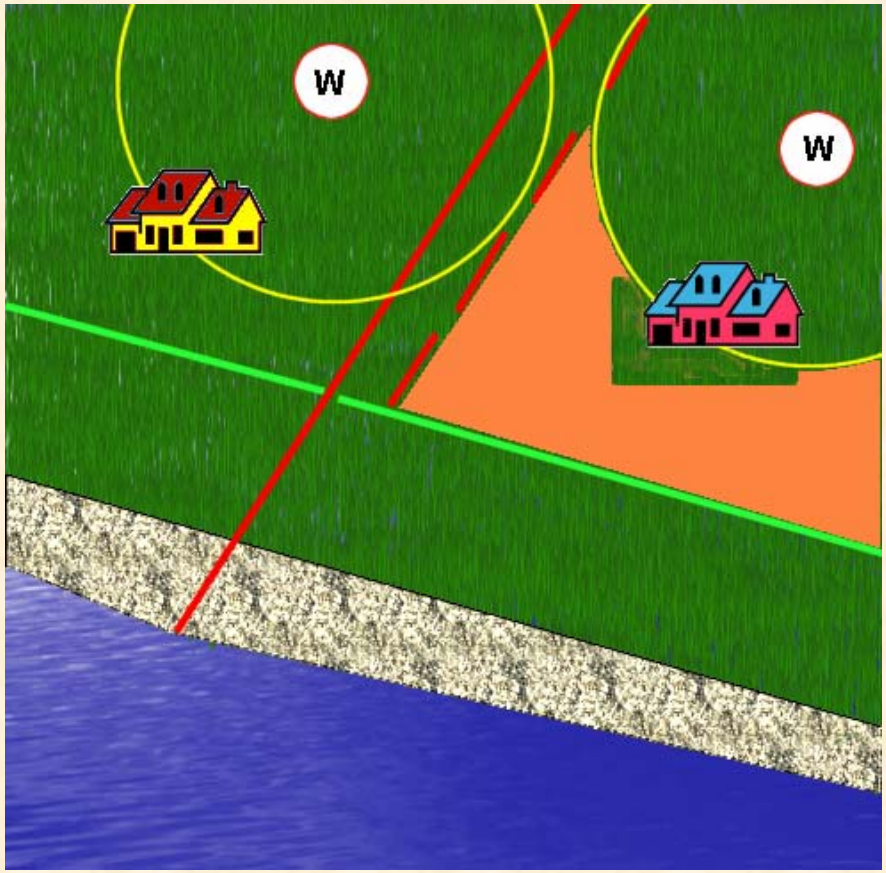
Structures and property lines:

Property lines – 10 ft.

Slab, etc. foundation – 15 ft.

Full foundations – 20 ft.

Burial grounds – 25 ft. from toe of fill



SITE EVALUATION PROCESS

Site Evaluation Process

Disposal of liquids into the soil from a disposal area is through soil pores, between soil aggregates and through root channels. Soil texture, soil structure, moisture content, and root penetration also affect the liquid movement through the soil.

Setbacks for Septic Tanks

- Full Basement – 8 feet
- Slab – 8 feet
- Both can be reduced to 5 feet for Replacement Systems
- Private Wells – 50 feet
- Public Wells – 150 feet
- Can be reduced to 25 feet for Private Wells, no reduction for Public Wells


(C) 2006-1991 Daniel Friedman

MINIMUM SOIL CONDITIONS **<u>OUTSIDE</u> THE SHORELAND ZONE**

- Table 4F - First Time Systems requires 9 inches to most limiting factor.

MINIMUM SOIL CONDITIONS **INSIDE THE SHORELAND ZONE**

- Table 4F - First Time Systems requires 15 inches to most limiting factor.

SITE EVALUATION PROCESS

Site Evaluation Process

However, if limited soils are available or there are setback conflicts, the Site Evaluator may have to prepare a variance request, for as best a fit as possible when considering existing development.

This property abuts the site in the prior slide. Note the location of a non-potable dug well, and the drilled well casing under the oil tank.

Definitions

- A primitive disposal system consists of a grey water disposal field designed to handle hand-carried or hand-pumped water only and an alternative toilet.
- A limited system consists of a grey water disposal field to handle water supplied from elevated storage tanks or cisterns, of no more than 1,000 gallons capacity, and portable pumps, among other non-conventional pressurized water supplies, and an alternative toilet.

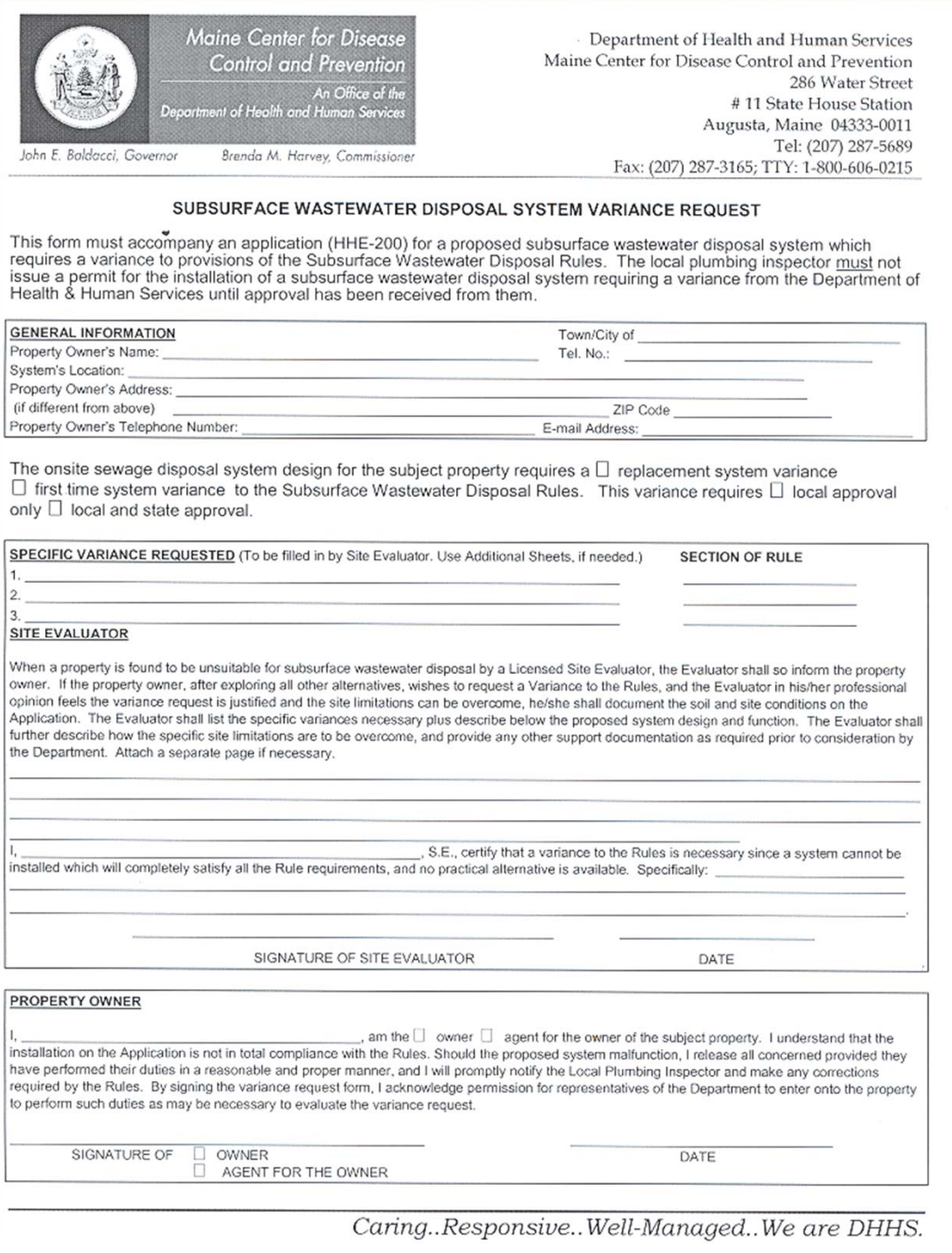
Backup system/Reserve Area Primitive & Limited

- Backup system reserve area required: The site evaluator must delineate on the application (HHE-200 Form) a reserve area where a full-size subsurface wastewater disposal area can be installed in compliance with first-time system criteria. The owner may not take or allow any action which would prevent the use of the reserve area for a disposal area installation. (page 23)

SITE EVALUATION PROCESS

System Variance Request – HHE-204

Division of Environmental Health
Subsurface Wastewater Program



Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

John E. Baldacci, Governor Brenda M. Harvey, Commissioner

Department of Health and Human Services
Maine Center for Disease Control and Prevention
286 Water Street
11 State House Station
Augusta, Maine 04333-0011
Tel: (207) 287-5689
Fax: (207) 287-3165; TTY: 1-800-606-0215

SUBSURFACE WASTEWATER DISPOSAL SYSTEM VARIANCE REQUEST

This form must accompany an application (HHE-200) for a proposed subsurface wastewater disposal system which requires a variance to provisions of the Subsurface Wastewater Disposal Rules. The local plumbing inspector must not issue a permit for the installation of a subsurface wastewater disposal system requiring a variance from the Department of Health & Human Services until approval has been received from them.

GENERAL INFORMATION

Town/City of _____
Property Owner's Name: _____ Tel. No.: _____
System's Location: _____
Property Owner's Address: _____
(if different from above) _____ ZIP Code _____
Property Owner's Telephone Number: _____ E-mail Address: _____

The onsite sewage disposal system design for the subject property requires a ☐ replacement system variance ☐ first time system variance to the Subsurface Wastewater Disposal Rules. This variance requires ☐ local approval only ☐ local and state approval.

SPECIFIC VARIANCE REQUESTED (To be filled in by Site Evaluator. Use Additional Sheets, if needed.) **SECTION OF RULE**

1. _____
2. _____
3. _____

SITE EVALUATOR

When a property is found to be unsuitable for subsurface wastewater disposal by a Licensed Site Evaluator, the Evaluator shall so inform the property owner. If the property owner, after exploring all other alternatives, wishes to request a Variance to the Rules, and the Evaluator in his/her professional opinion feels the variance request is justified and the site limitations can be overcome, he/she shall document the soil and site conditions on the Application. The Evaluator shall list the specific variances necessary plus describe below the proposed system design and function. The Evaluator shall further describe how the specific site limitations are to be overcome, and provide any other support documentation as required prior to consideration by the Department. Attach a separate page if necessary.

_____
_____
_____
_____

I, _____, S.E., certify that a variance to the Rules is necessary since a system cannot be installed which will completely satisfy all the Rule requirements, and no practical alternative is available. Specifically: _____
_____
_____.

_____ _____
SIGNATURE OF SITE EVALUATOR DATE

PROPERTY OWNER

I, _____, am the ☐ owner ☐ agent for the owner of the subject property. I understand that the installation on the Application is not in total compliance with 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.

_____ _____
SIGNATURE OF ☐ OWNER ☐ AGENT FOR THE OWNER DATE

Caring..Responsive..Well-Managed..We are DHHS.

SITE EVALUATION PROCESS

Replacement System Variance Request – HHE-204

Division of Environmental Health
Subsurface Wastewater Program

LOCAL PLUMBING INSPECTOR - Approval at local level

The local plumbing inspector shall review all First Time System Variance requests prior to rendering a decision.
I, _____, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system (☐ does ☐ does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (☐ do ☐ do not) approve the requested variance. I (☐ will ☐ will not) issue a permit for the system's installation as proposed by the application.

LPI Signature _____ Date _____

LOCAL PLUMBING INSPECTOR - Referral to the Department of Health and Human Services

The local plumbing inspector shall review all First Time System Variance requests prior to forwarding to the Division of Environmental Health.
I, _____, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system (☐ does ☐ does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone or local ordinances controlling such disposal.
Therefore, I (☐ do ☐ do not) recommend the issuance of a permit for the system's installation as proposed by the application.

LPI Signature _____ 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 _____

Note: 1. Variances for soil conditions may be approved at the local level as long as the total point assessment is at least the minimum allowed. (See Section 701.2 for Municipal Review.)

2. Variances for other than soil conditions or soil conditions beyond the limit of the LPI's authority are to be submitted to the Department for review. (See Section 701.1 for Department Review.) The LPI's signature is required on these variance requests prior to submission to the Department.

SOIL, SITE AND ENGINEERING FACTORS FOR FIRST TIME SYSTEM VARIANCE ASSESSMENT WITH LIMITING SOIL DRAINIANGE CONDITIONS (SEE TABLES 700.3 to 700.13)

	CHARACTERISTIC	POINT ASSESSMENT
Soil Profile		
Depth to Groundwater/Restrictive Layer		
Terrain		
Size of Property		
Waterbody Setback		
Water Supply		
Type of Development		
Disposal Area Adjustment		
Vertical Separation Adjustment		
Additional Treatment		
TOTAL POINT ASSESSMENT:		

Minimum Points (Check one): Outside Shoreland-50 ☐ Inside Shoreland-65 ☐ Subdivision-65 ☐

3 COPIES OF THE HHE-200 FORM IS DELIVERED TO THE LPI FROM THE APPLICANT

HHE-200 Form

Page One

OWNER - APPLICANT

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	***
Street or Road	***
Subdivision, Lot #	***

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	*** ■ Owner □ Applicant
Mailing Address of Owner/Applicant	***
	***
Daytime Tel. #	(207) *** _****

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.

*** **/**/07

*Signature of Owner or Applicant — Date

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

Town/City _____ Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

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.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature

_____ (2nd) date approved

HHE-200 Form

Page One

PERMIT INFORMATION

TYPE OF APPLICATION

- ■ 1. First Time System
- □ 2. Replacement System
  - Type replaced: _____
  - Year installed: _____
- □ 3. Expanded System
  - □ a. Minor Expansion
  - □ b. Major Expansion
- □ 4. Experimental System
- □ 5. Seasonal Conversion

SIZE OF PROPERTY

± 4.5 □ SQ. FT. ■ ACRES

SHORELAND ZONING

□ Yes ■ No

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 TO SERVE

- □ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
- □ 2. Multiple Family Dwelling, No. of Units: ____
- ■ 3. Other: commercial business (specify)

Current Use □ Seasonal ■ Year Round □ Undeveloped

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

TYPE OF WATER SUPPLY

■ 1. Drilled Well □ 2. Dug Well □ 3. Private

□ 4. Public □ 5. Other

HHE-200 Form

Page One

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
- ■ 1. Concrete
  - ■ a. Regular
  - □ b. Low Profile
- □ 2. Plastic
- □ 3. Other: _____
- CAPACITY: 1,500 GAL.

SOIL DATA & DESIGN CLASS

PROFILE / CONDITION / DESIGN
8 / C / 1
at Observation Hole # 1
Depth 16"
of Most Limiting Soil Factor

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
  - type: Eljen In-drain
- □ 4. Other: _____
- SIZE: 66 units □ sq. ft. □ lin. ft.

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

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

EFFLUENT/EJECTOR PUMP
- □ 1. Not Required
- □ 2. May Be Required
- ■ 3. Required

Specify only for engineered systems:
DOSE: _____ gallons

DESIGN FLOW

750 gallons per day

BASED ON:
- ■ 1. Table 501.1 (dwelling unit(s))
- □ 2. Table 501.2 (other facilities)

SHOW CALCULATIONS for other facilities

50 employees @ 15 gpd each

- □ 3. Section 503.0 (meter readings)

ATTACH WATER METER DATA

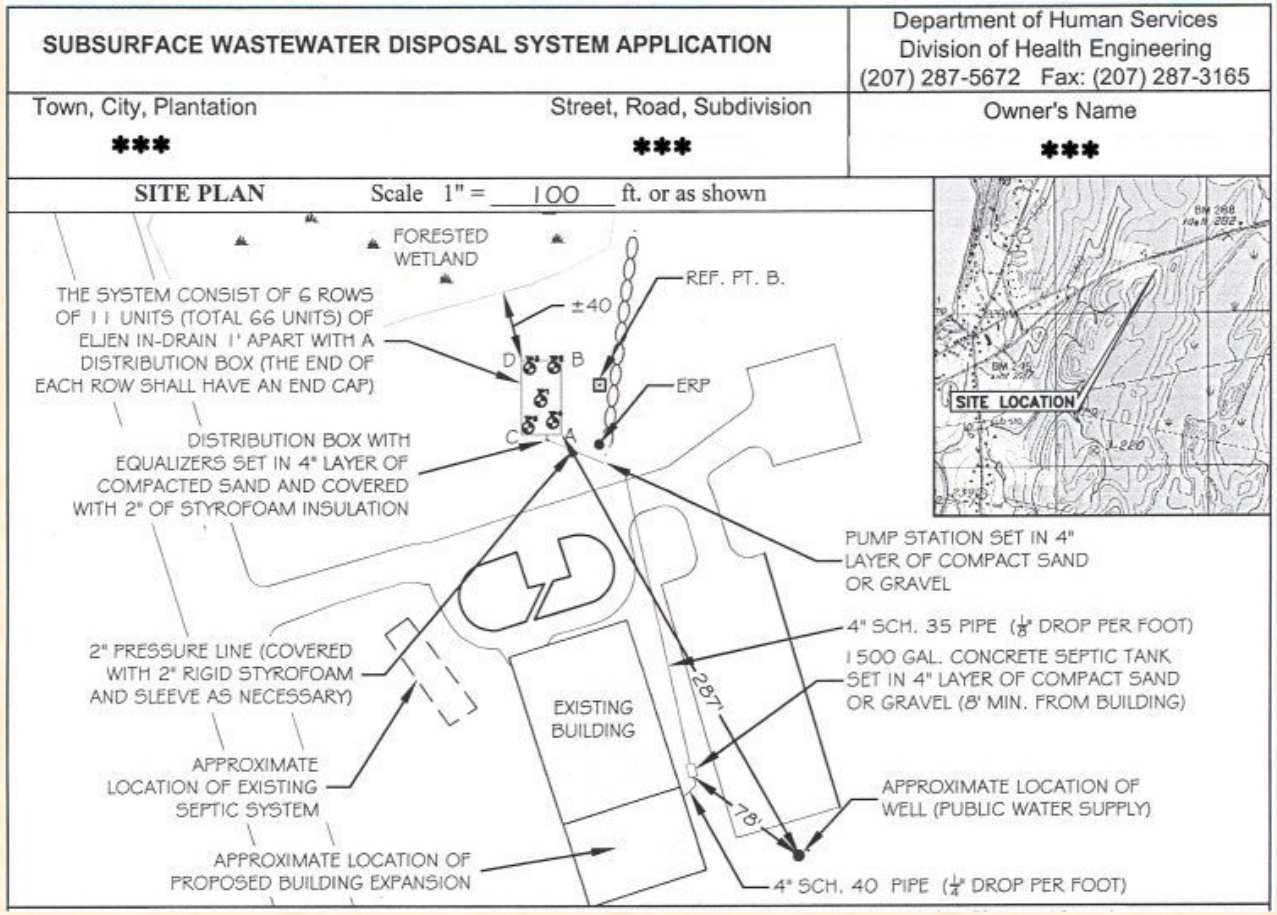
LATITUDE AND LONGITUDE

at center of disposal area

Lat. 044 d 24 m 01.8 s
Lon. 069 d 33 m 25.2 s
if g.p.s, state margin of error: _____

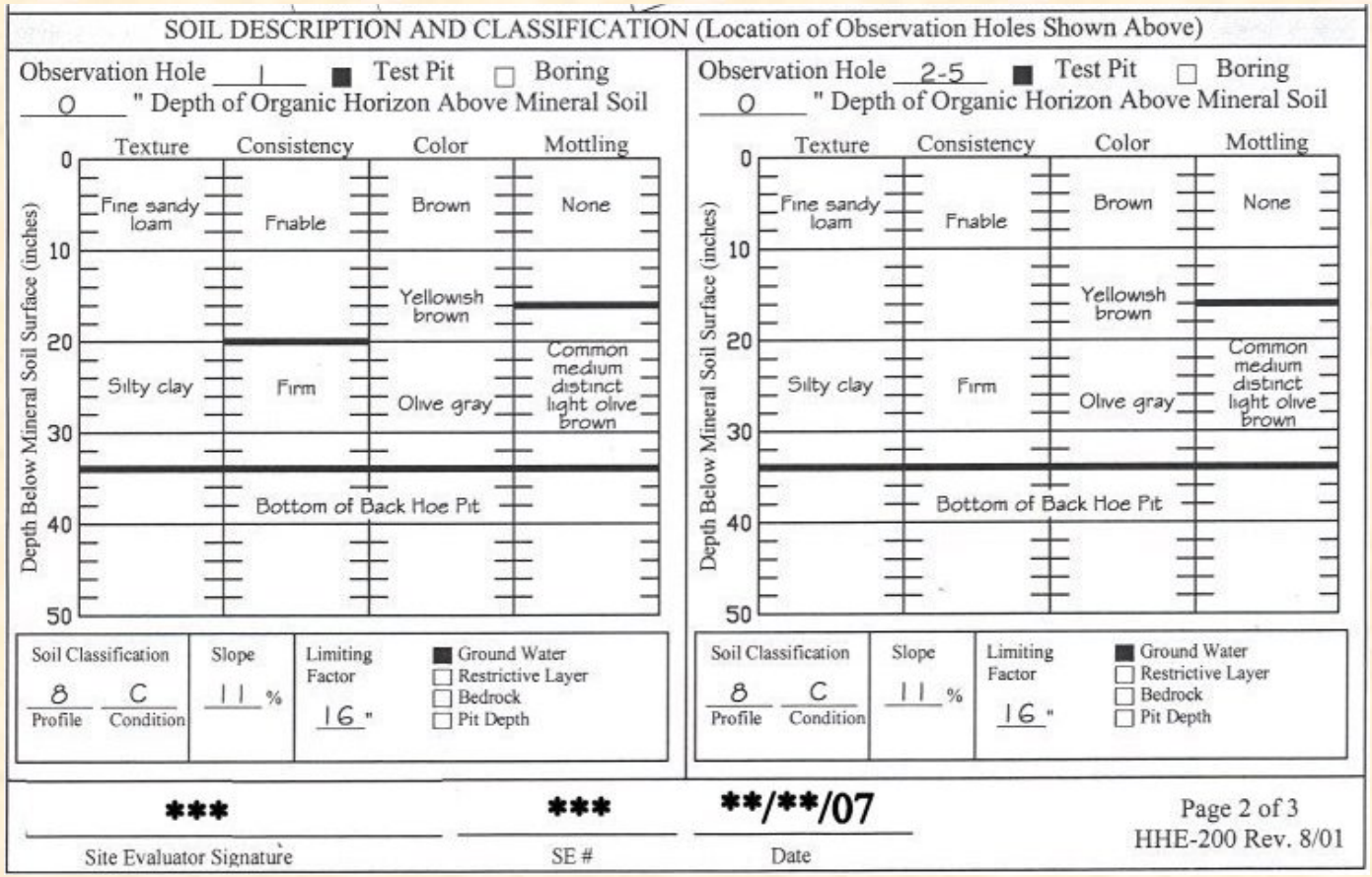
HHE-200 Form

Page Two



HHE-200 Form

Page Two



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

Observation Hole 1 ■ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	Fine sandy loam	Friable	Brown	None
10			Yellowish brown	
20	Silty clay	Firm	Olive gray	Common medium distinct light olive brown
30				
40	Bottom of Back Hoe Pit			
50				

Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	11 %	16 "	■ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole 2-5 ■ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0	Fine sandy loam	Friable	Brown	None
10			Yellowish brown	
20	Silty clay	Firm	Olive gray	Common medium distinct light olive brown
30				
40	Bottom of Back Hoe Pit			
50				

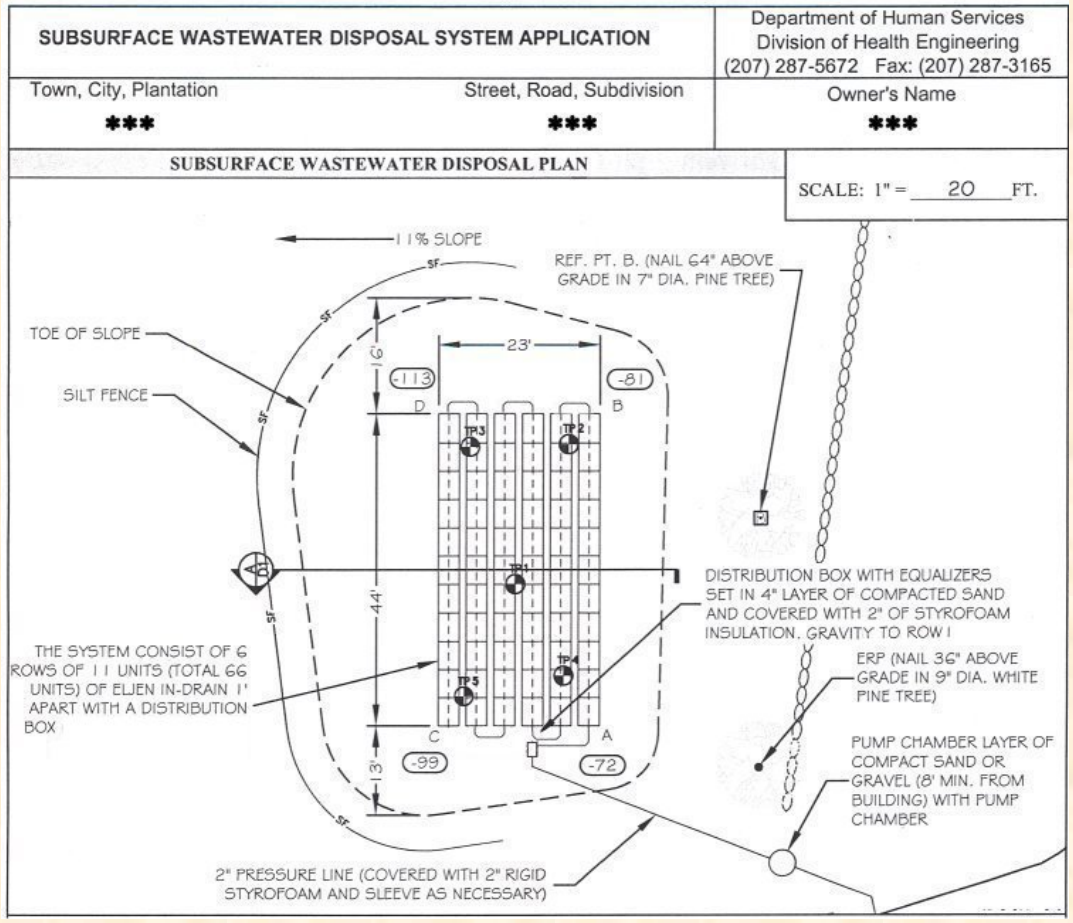
Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	11 %	16 "	■ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Site Evaluator Signature	SE #	Date	
***	***	**/**/07	Page 2 of 3 HHE-200 Rev. 8/01

Division of Environmental Health
Subsurface Wastewater Program

HHE-200 Form

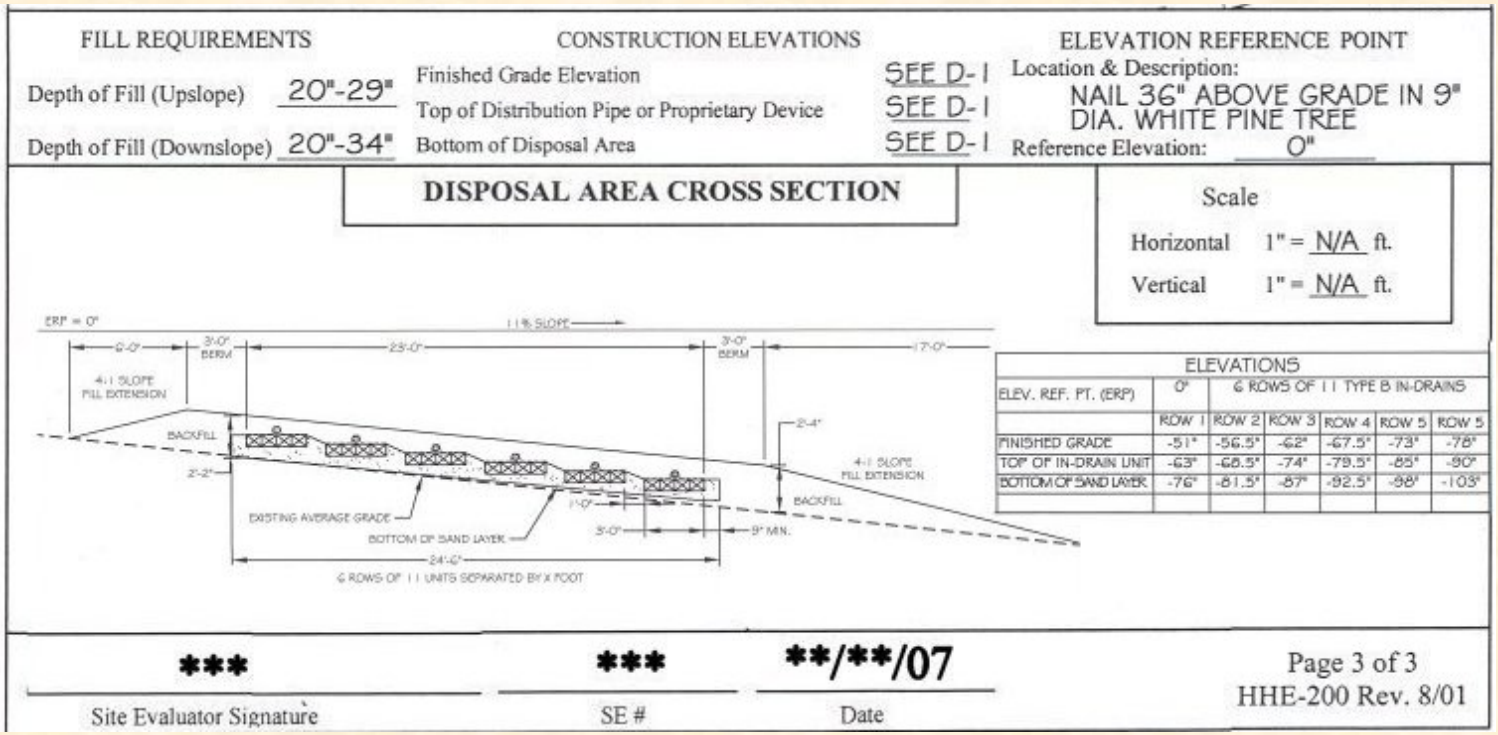
Page Three



Division of Environmental Health
Subsurface Wastewater Program

HHE-200 Form

Page Three



FILL REQUIREMENTS

Depth of Fill (Upslope) 20"-29"

Depth of Fill (Downslope) 20"-34"

CONSTRUCTION ELEVATIONS

Finished Grade Elevation SEE D-1

Top of Distribution Pipe or Proprietary Device SEE D-1

Bottom of Disposal Area SEE D-1

ELEVATION REFERENCE POINT

Location & Description: NAIL 36" ABOVE GRADE IN 9" DIA. WHITE PINE TREE

Reference Elevation: 0"

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = N/A ft.

Vertical 1" = N/A ft.

ELEVATIONS

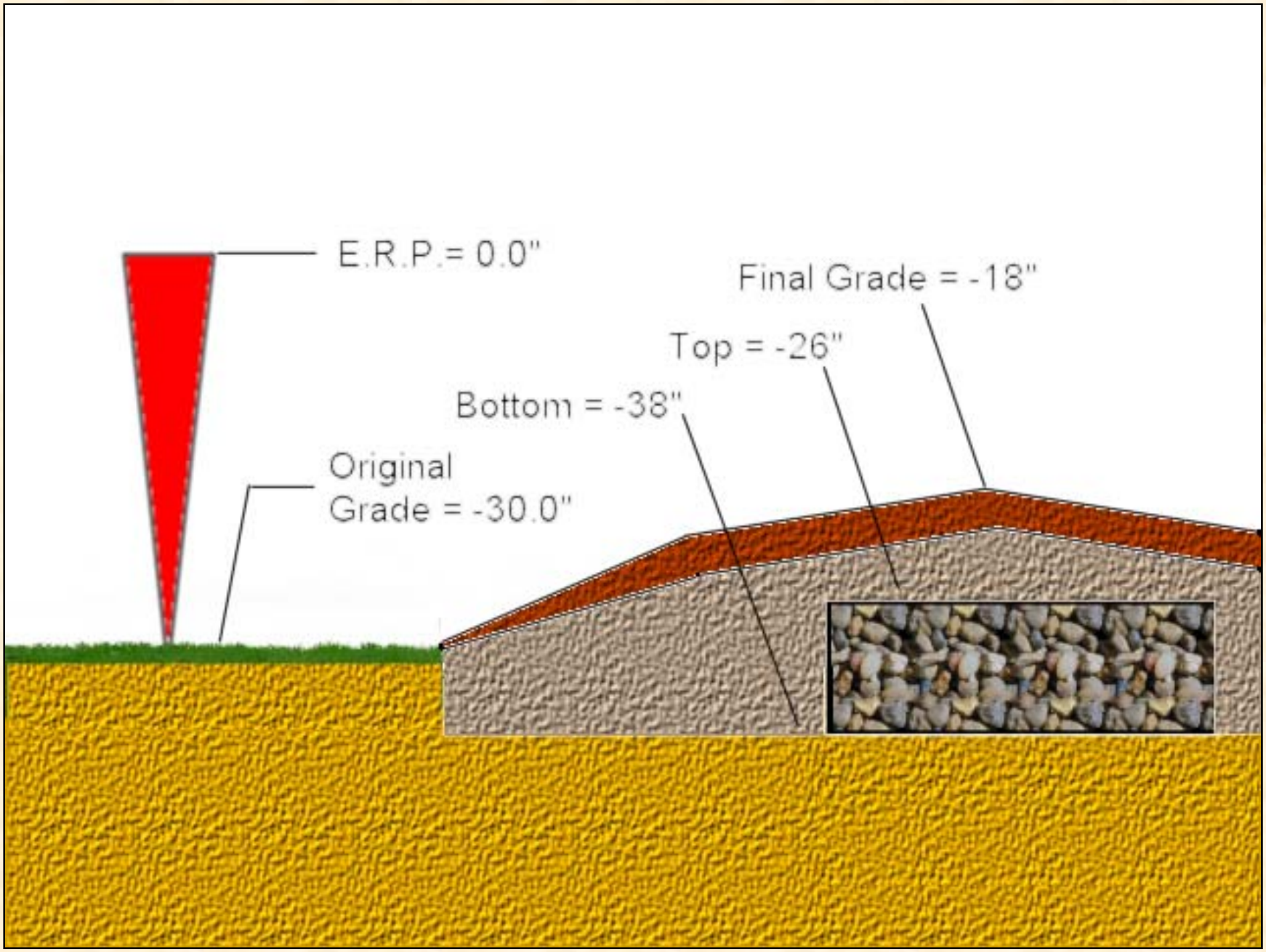
ELEV. REF. PT. (ERP)	0"	6 ROWS OF 11 TYPE B IN-DRAINS				
	ROW 1	ROW 2	ROW 3	ROW 4	ROW 5	ROW 5
FINISHED GRADE	-51"	-56.5"	-62"	-67.5"	-73"	-78"
TOP OF IN-DRAIN UNIT	-63"	-68.5"	-74"	-79.5"	-85"	-90"
BOTTOM OF SAND LAYER	-76"	-81.5"	-87"	-92.5"	-98"	-103"

*** Site Evaluator Signature

*** SE #

//07 Date

Page 3 of 3
HHE-200 Rev. 8/01


E.R.P. = 0.0"
Final Grade = -18"
Top = -26"
Bottom = -38"
Original
Grade = -30.0"

Permitting

Maine Department of Health and Human Services
Bureau of Health, Division of Health Engineering
Wastewater and Plumbing Control Program

NO MORE

PERMIT STICKERS
AS OF AUGUST 1, 2011

Remaining stickers to be used

Keep permit numbers continuous

PERMITTING HHE-200

When the HHE-200 comes across your desk, use the rules that are in effect as of that day.

It doesn’t matter how old the design is, as long as it meets the rules.

If it doesn’t meet the rules, have it revised.

$15.00 DEP Surcharge

2009 Budget Bill, PL 2009, ch213

Requires municipalities to assess a $15.00 surcharge to all non-engineered Subsurface Wastewater system permits, wheter a first time, replacement or expansion but not to system componants.

The $15.00 surcharge will need to be accounted for seperately and should be submitted to the Department as a separate check for forwarding to the MDEP for processing.

MUNICIPAL AND LURC TERRITORIES
PERMIT FEE SCHEDULE
(Fees to be paid to the municipality/LPI)
Permits for complete disposal system and variances

Engineered system	$200.00
Non-engineered system	$250.00
Primitive system (includes one alternative toilet)	$100.00
Separate grey waste disposal field	$35.00
Seasonal conversion permit	$50.00
First-Time System Variance	$20.00

Permits for separate parts of disposal system

Alternative toilet (only)	$50.00
Disposal field only (engineered system)	$150.00
Disposal field only (non-engineered)	$150.00
Treatment tank only (non-engineered)	$150.00
Treatment tank (engineered system)	$80.00
Holding tank	$100.00
Other components (complete pump station, piping, other)	$30.00

TABLE 3B
DEPARTMENT REVIEW FEE SCHEDULE
(Fees to be paid directly to the Department)

Engineered system review	$100.00
Minimum lot request review fee	$50.00
Multi-user review fee	$100.00
Licensed Establishment Review	$20.00
Microfilm Record Search	$5.00

10-144
Chapter 240
STATE OF MAINE
RULES FOR APPOINTMENT AND ADMINISTRATION
OF
LOCAL PLUMBING INSPECTORS

Table A: Permits for Internal Plumbing

Minimum fee, includes up to four fixtures	$40.00
Individual fixtures, each, above four total	$10.00
Hook up to public sewer	$10.00
Hook up to existing subsurface system	$10.00
Piping relocation with no new fixtures	$10.00
Permit transfer	$10.00

Pursuant to 30-A M.R.S. § 4215(4), municipalities retain 75 percent of those minimum permit fees and must forward the remaining 25 % percent to the Department.

Municipalities may assess additional permit fees, above those listed in Table 3A, if authorized to do so by local ordinance, along with any monetary penalties assessed, pursuant to 30-A M.R.S. § 4452(3). The entire additional permit and any penalty fees are retained by the municipality.

Transferable: A disposal system permit is transferable to successive property owners, provided that it has not expired, and no changes to the design are proposed.

Section 2(F)

Disposal area modification, repair or alteration: Any excavation to modify, repair or alter a disposal area, other than the addition of fill, requires a permit. If a permit is required, such modification, repair or alteration must be as prescribed by a Maine professional engineer or a Maine licensed site evaluator and must be considered a disposal area for permitting purposes.

Page 38

The LPI may authorize changes to the location(s) of treatment tanks, lift stations, building sewers, distribution boxes, drop boxes, and force mains provided that applicable minimum setback distances are maintained. Such alterations must be documented by the LPI.

Section 3A.1 PERMIT REQUIRED

WORK MUST NOT BE STARTED UNTIL THE PLUMBING INSPECTOR HAS ISSUED A DISPOSAL SYSTEM PERMIT FOR THE WORK

Section 3C.2a LATE PERMIT FEE: A person who starts construction without first obtaining a permit must pay double the permit fee.

Section 3B.6 TIME LIMIT- WORK MUST BE COMMENCED WITHIN 24 MONTHS OF PERMIT ISSUANCE.

Section 3B.7 DEPARTURES FROM DESIGN- MUST BE APPROVED BY THE SITE EVALUATOR

Section 11I.6 NOTIFICATION REQUIRED- THE LPI SHALL BE NOTIFIED 24 HOURS BEFORE THE SYSTEM IS READY FOR INSPECTION

Design Flows for Dwelling Units

- Min. 2 bed = 180 GPD/each additional=90 gpd
- Attached garage apartment without kitchen + 90/bed
- Attached garage apartment with kitchen + 120
- Separate garage apartment with or without kitchen min 2 bed = 180 GPD (page 20)

- Maximum 4 bed can be combined in a 1000 gallon septic tank
- 5 bedrooms = 1,250 gallon septic tank
- Each additional bedroom + 250 gallons per bedroom (page 41)

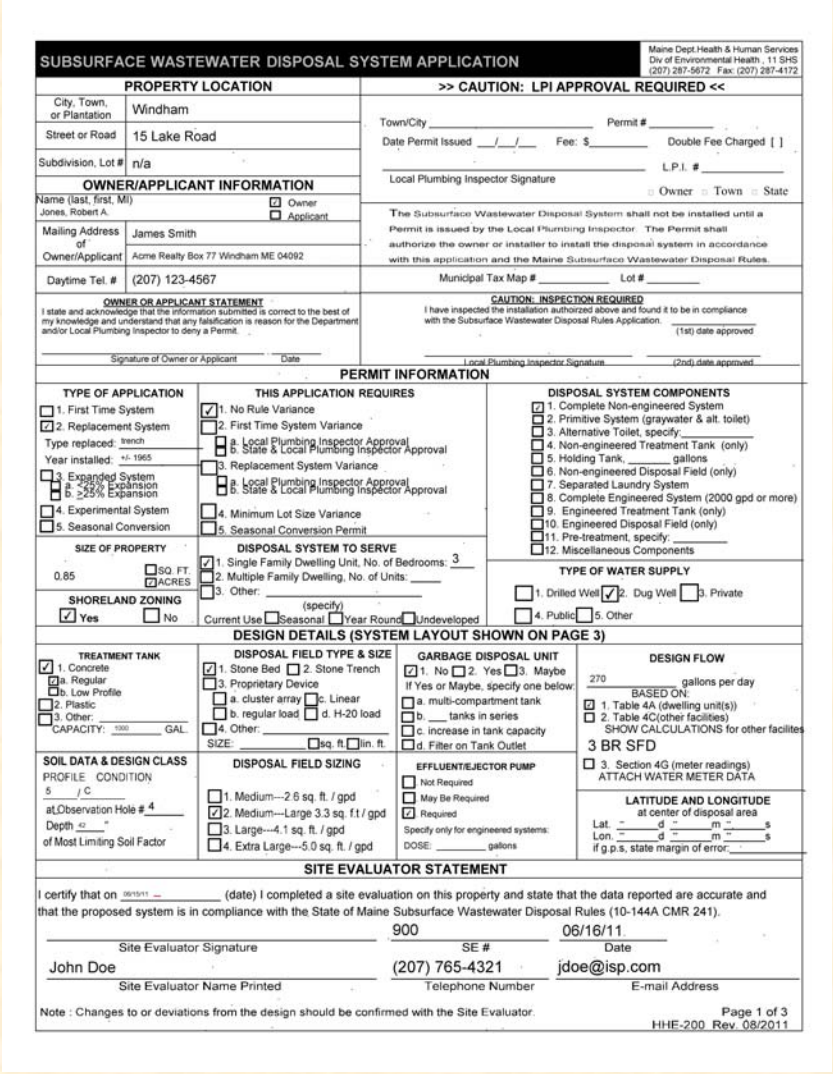
Dwelling unit: Any structure or portion of a structure, permanent or temporary in nature, used or proposed to be used as a residence seasonally or throughout the year.

Permitting

Application

It is important to check that each block on the form is properly completed.

Page one of the HHE-200 Form must be signed by both the owner/applicant and the Site Evaluator before a permit can be issued.



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation: Windham
Street or Road: 15 Lake Road
Subdivision, Lot #: n/a

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Jones, Robert A. — ☑ Owner ☐ Applicant
Mailing Address of Owner/Applicant: James Smith; Acme Realty Box 77 Windham ME 04092
Daytime Tel. #: (207) 123-4567

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.

Signature of Owner or Applicant — Date

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]
Local Plumbing Inspector Signature — L.P.I. # _____
○ Owner ○ Town ○ State

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.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

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

PERMIT INFORMATION

TYPE OF APPLICATION

☐ 1. First Time System
☑ 2. Replacement System
Type replaced: trench
Year installed: +/- 1965
☐ 3. Expanded System ☐ a. <25% Expansion ☐ b. ≥25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

SIZE OF PROPERTY

0.85 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING

☑ Yes ☐ No

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 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

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

TYPE OF WATER SUPPLY

☐ 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: _____ ☐ 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

270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
3 BR SFD
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
5 / C
at Observation Hole # 4
Depth 42 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium---2.6 sq. ft. / gpd
☑ 2. Medium---Large 3.3 sq. f.t / gpd
☐ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ Not Required
☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. ___ d ___ m ___ s
Lon. ___ d ___ m ___ s
if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT

I certify that on 06/15/11 (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 — 900 SE # — 06/16/11 Date
John Doe Site Evaluator Name Printed — (207) 765-4321 Telephone Number — jdoe@isp.com E-mail Address

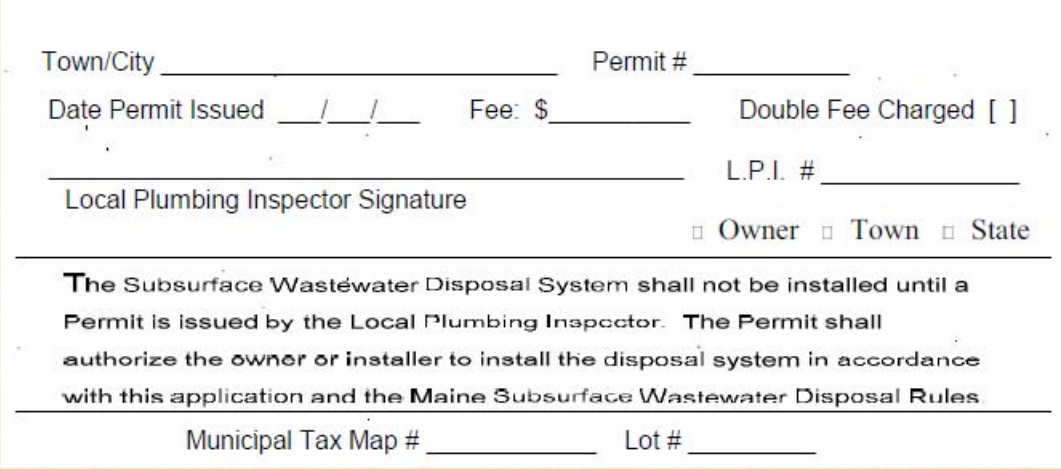
Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

Page 1 of 3
HHE-200 Rev. 08/2011

Permitting

Permits

Permits should only be issued by the Local Plumbing Inspector appointed to the area. If an LPI has more than one area, make sure the correct area is printed on the permit being issued.



Town/City _____ Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

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.

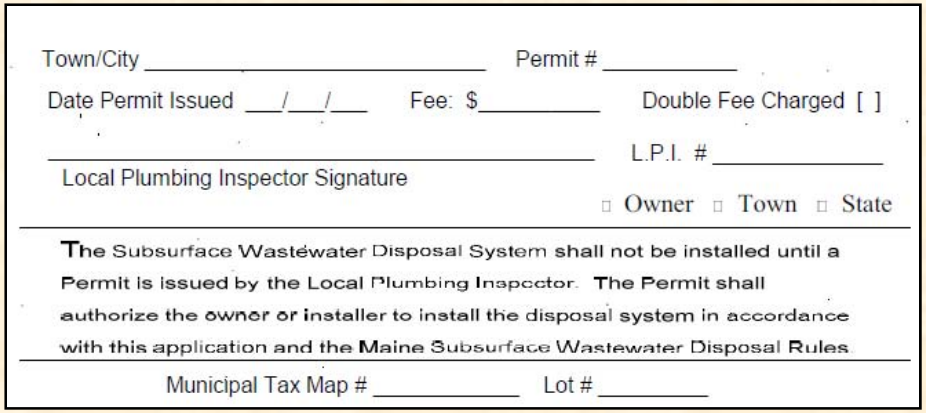
Municipal Tax Map # _____ Lot # _____

Permitting

Record Keeping

HHE-200 Forms and Plumbing Applications should be kept on file by the Town.

Filing by map and lot number is the most popular method simply because everything that has to deal with that certain property is all contained in one folder.



Town/City _____ Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

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.

Municipal Tax Map # _____ Lot # _____

Permitting

Replacement Septic Tanks

No soil test needed

The LPI can prepare an application for a replacement septic tank by completing Page 1 of an HHE-200 Form.

Permitting

Vault Privies

Vault privies are permitted as “Alternative Toilet”.

Sealed vaults shall have a minimum liquid capacity of at least 500 gallons.

The LPI can prepare an application for a vault privy by completing Page 1 of an HHE-200 Form.

Permitting

Holding Tanks

Holding tanks require an HHE-200 Form from the SE PROVING NO PRACTICAL ALTERNATIVE and a completed holding tank pumper agreement (HHE-233) with an owner and municipality statement and deed covenant.


roe-ks.com

HOLDING TANKS
-
EXPANSIONS

HOLDING TANKS – Section 7D

Holding tanks **can not** be used to satisfy the requirements of:

- **FIRST TIME HOLDING TANKS WITHOUT A LOCAL ORDINANCE FOR RESIDENTIAL USE**
- **First time system located within the shoreland zoned area of major water courses**
- **Seasonal Conversion Permits**
- **The facility served must not require a license as an eating establishment from the Department.**

HOLDING TANKS – Section 7D

- VISUAL / AUDIBLE ALARM
- MIN. 1000 GAL. or 7 Times the Design Flow..2 BR/180 GPD X 7 =1,260 GAL.

  (1500 GAL TANK)
- Permitted as holding tank after July 1,1974, Discontinuance must meet first time criteria
- Nonresidential design flow must not exceed 100 GPD or 500 gallons per week greater flows has to be referred to Dept.

EXPANSIONS – Section 9

DEFINITION: THE ENLARGEMENT OR CHANGE IN USE OF A **STRUCTURE** USING AN EXISTING SUBSURFACE WASTEWATER DISPOSAL SYSTEM THAT BRINGS THE TOTAL STUCTURE INTO A CLASSIFICATION THAT REQUIRES LARGER SUBSURFACE WASTEWATER DISPOSAL SYSTEM COMPONENTS

EXPANSIONS: Section 9A.3

- The initial expansion of a single family home after May 1, 1995 by one or more bedrooms or the introduction of mechanically pressurized water formerly served by hand pumped or hand carried water.

- Other structures- increase in design flow of 10% or more.

Expansions **Outside** the shoreland zone

Owner may elect not to install at the time of expansion provided the existing system is not malfunctioning.

- Provide a completed HHE-200 form
- Recorded with the registry of deeds, (does not need to be permitted)
- Person seeking to expand must notify abutters by certified mail with a copy of the notice of documentation. (HHE-200)
- Protection of future installation

Expansions inside the shoreland zone

9A.4a: MUST BE INSTALLED PRIOR TO THE EXPANSION

9C: Expansion design criteria inside the shoreland zone: Expanded disposal systems of one bedroom or less than 25 percent of the total design flow must meet replacement system design criteria as set forth in Section 8.

Expanded disposal systems of two bedrooms or more, or equal to or greater than 25 percent of the total design flow must meet first time system design criteria as set forth in Section 7.

SYSTEM TYPES

Engineered Systems
Section 10

Scope: This Chapter governs the design and installation of engineered systems with design flows of 2,000 gpd or more, or disposing of wastewater with a combined BOD5 and total suspended solids concentration greater than 1,400 mg/l.

Multi User System
Chapter 10F

10F Designed to serve three or more parcels with structures under individual and separate ownerships and when the disposal system is not owned by one individual.

10G General: Ownership of all parts of the multi-user system beyond the building sewer must be vested in a single and independent, legally established entity under Maine law.

Subsurface Wastewater Disposal Rules

SYSTEM TYPES

Cesspools, Clay Agricultural Drainage Tiles and Vee-Notched Plank trenches – still legal to operate as long as they are not Malfunctioning.

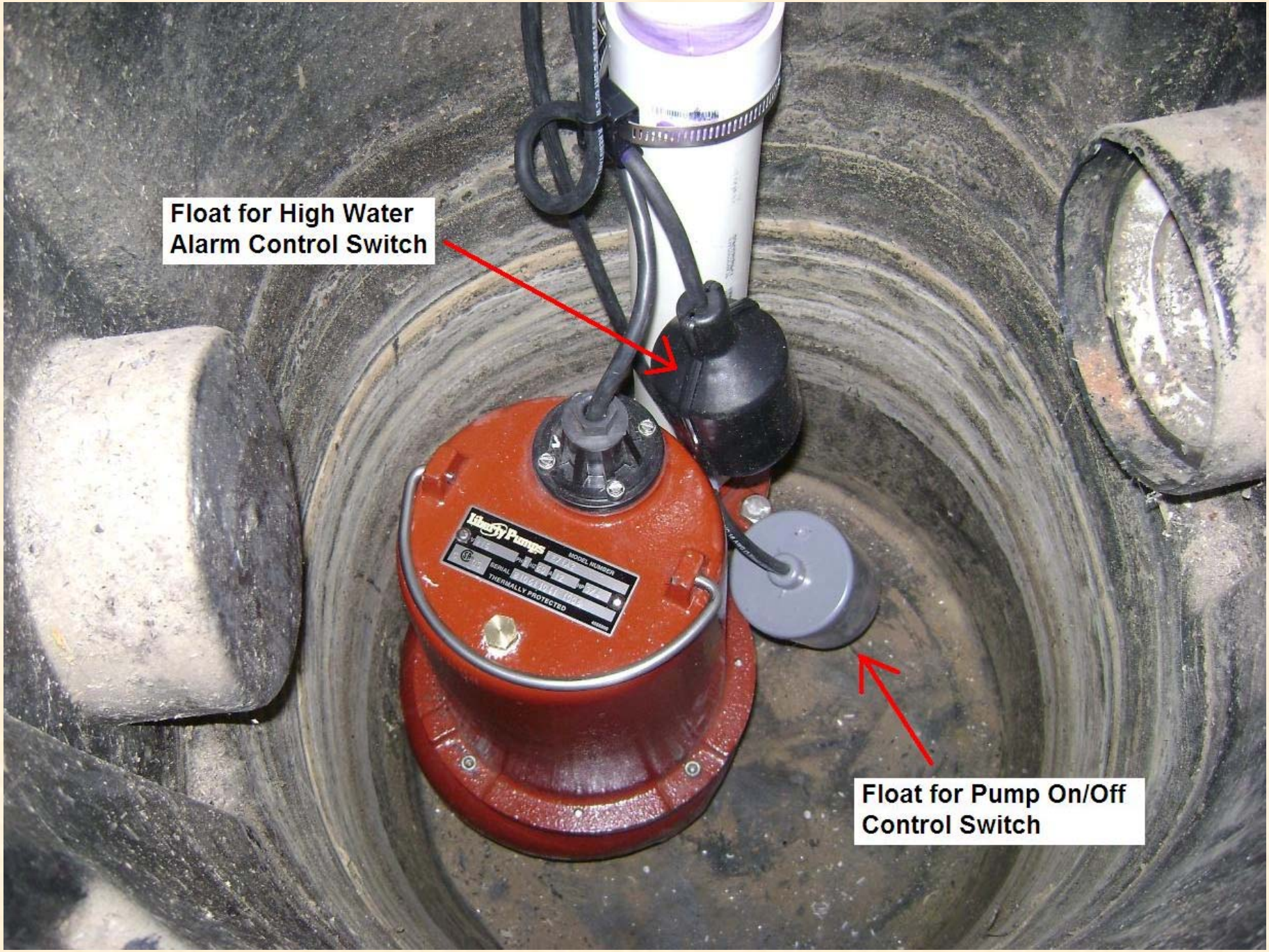
Primitive systems --consist of an alternate toilet such as a pit privy and a small graywater disposal area to accommodate a hand carried or hand pumped water supply

Limited systems– alternative toilet, septic tank & disposal field which handles only gray water originating from elevated storage tanks, cisterns of no more than 1000 gallons

A Combined System -- typically comprised of a septic tank and a disposal area sized to accommodate a pressurized water supply with full plumbing fixture loads.

Not a Primitive System

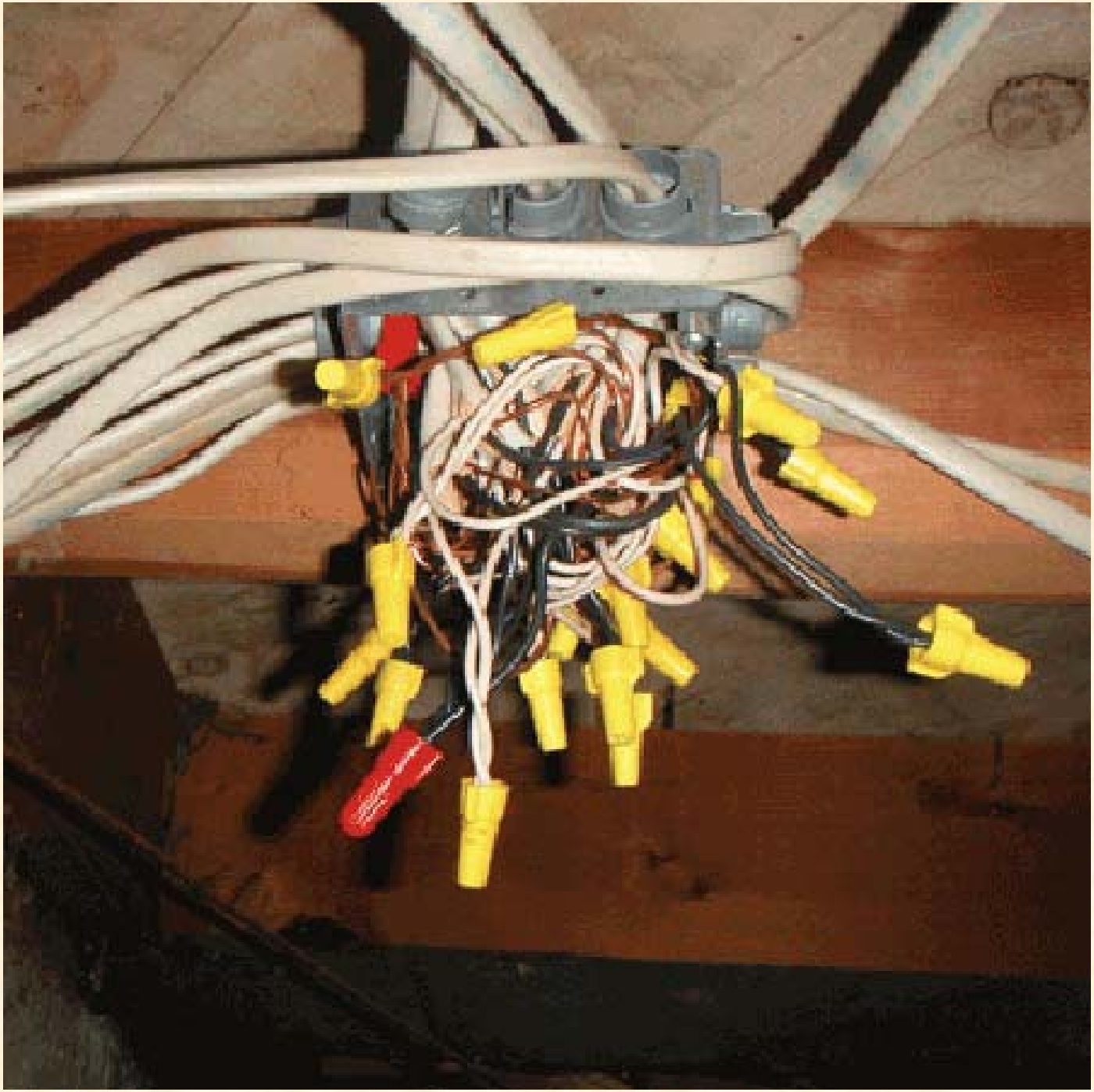
This is not a legal pump station


Float for High Water
Alarm Control Switch
Float for Pump On/Off
Control Switch

Section 6S.10
High-Water Alarm

The alarm and its switch must not be on the same electrical circuit as the pump and its switch.

Control panel breakers must be of less amp then main breaker box.



Inspections

Maine Department of Health and Human Services
Bureau of Health, Division of Health Engineering
Wastewater and Plumbing Control Program


10/01/2011 03:32:15PM

Section 11D.1 CONSTRUCTION

<u>THE INSTALLER</u> OF THE SYSTEM SHALL MAKE CERTAIN THAT THE SYSTEM AND ALL ITS COMPONENT PARTS ARE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS OF THIS CODE, THE SE PLAN AND ANY OTHER SPECIAL ENGINEERING REQUIREMENTS.

Section 11D.2
SOIL AND BACKFILL MATERIAL

<u>THE INSTALLER</u> OF THE SYSTEM SHALL MAKE CERTAIN THAT THE CONSTRUCTION AND INSTALLATION ARE PERFORMED WITHOUT AFFECTING THE CAPACITY OF THE SOIL AND BACKFILL MATERIAL TO ABSORB AND TREAT THE EFFLUENT.

Timing & Sequence

There are a minimum of two inspections required for subsurface wastewater disposal systems.

The first inspection shall be made after site preparation to confirm that:

SOIL EROSION & SEDIMENT CONTROL

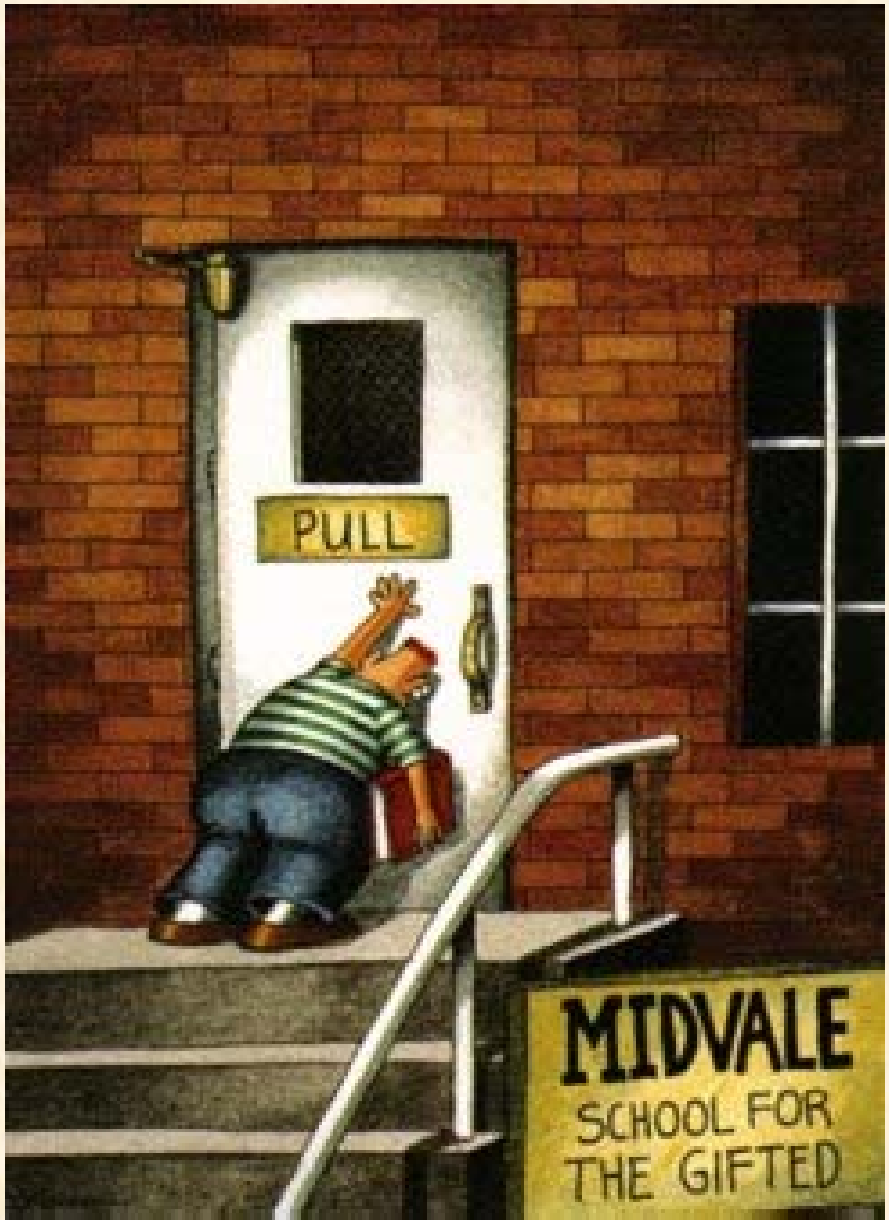
CLEARING OF THE SITE

SCARIFICATION

TRANSITION HORIZON

Pay attention to obvious signs

IS THERE STANDING WATER ON TOP OF THE SCARIFICATION?



DO YOU NOTICE A WELL CLOSER THEN WHAT'S ON THE PLAN?


06/07/2011

Site Preparation

11B.1a Soil Erosion and Sediment Control

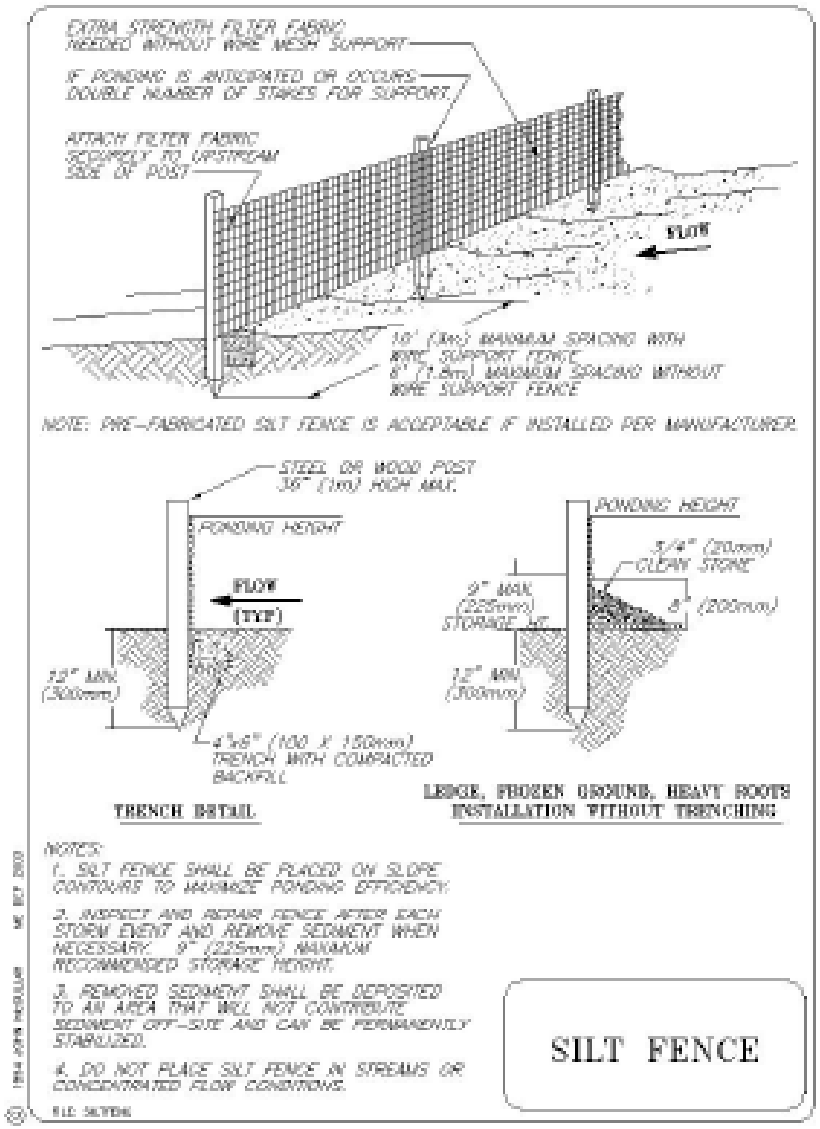
IN AREAS ADJACENT TO A WATER BODY OR WETLANDS, PREVENTATIVE EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE EMPLOYED CONSISTENT WITH SECTION 11M.

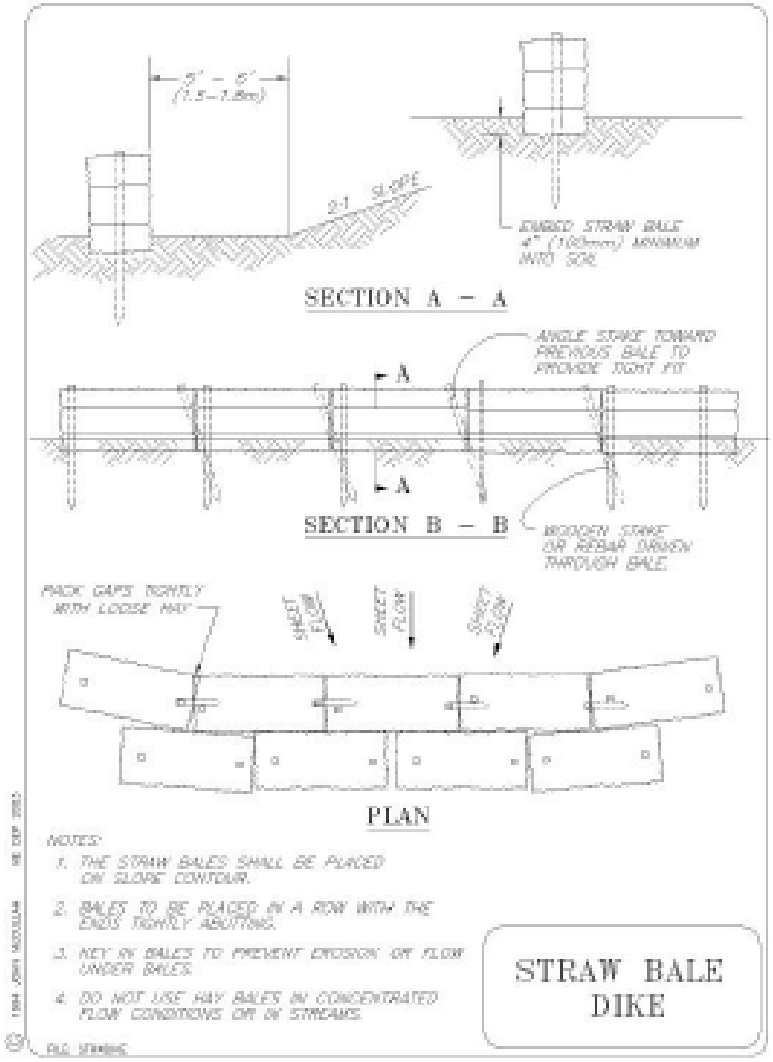
11M - WORK ADJACENT TO SPECIAL WETLANDS AND WATER BODIES

11M.3 - RUNOFF PREVENTION

1H – Wetlands and Waterbodies

1) SITES WITH SLOPES OF LESS THAN 33% REQUIRE A 25" UNDISTURBED SETBACK, MORE THAN 33% SLOPE WITHIN 25' REQUIRES A 75' SETBACK FROM ANY SOIL DISTURBANCE


EXTRA STRENGTH FILTER FABRIC NEEDED WITHOUT WIRE MESH SUPPORT
IF PONDING IS ANTICIPATED OR OCCURS DOUBLE NUMBER OF STAKES FOR SUPPORT.
ATTACH FILTER FABRIC SECURELY TO UPSTREAM SIDE OF POST
SLOPE
10' (3m) MAXIMUM SPACING WITH WIRE SUPPORT FENCE
6' (1.8m) MAXIMUM SPACING WITHOUT WIRE SUPPORT FENCE
NOTE: PRE-FABRICATED SILT FENCE IS ACCEPTABLE IF INSTALLED PER MANUFACTURER.
STEEL OR WOOD POST 36" (1m) HIGH MAX.
PONDING HEIGHT
FLOW (TYP.)
12" MIN. (300mm)
4"x6" (100 X 150mm) TRENCH WITH COMPACTED BACKFILL
TRENCH DETAIL
PONDING HEIGHT
3/4" (20mm) CLEAN STONE
9" MAX. (225mm) STORAGE HT.
8" (200mm)
12" MIN. (300mm)
LEDGE, FROZEN GROUND, HEAVY ROOTS INSTALLATION WITHOUT TRENCHING
NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
4. DO NOT PLACE SILT FENCE IN STREAMS OR CONCENTRATED FLOW CONDITIONS.
SILT FENCE
1994 JOHN NICOLLAR ME DEP 2003


3' - 6'
(1.5 - 1.8m)
2:1 SLOPE
EMBED STRAW BALE
4" (100mm) MINIMUM
INTO SOIL
SECTION A - A
ANGLE STAKE TOWARD
PREVIOUS BALE TO
PROVIDE TIGHT FIT
A
A
SECTION B - B
WOODEN STAKE
OR REBAR DRIVEN
THROUGH BALE
PACK GAPS TIGHTLY
WITH LOOSE HAY
SHEET
FLOW
SHEET
FLOW
SHEET
FLOW
PLAN
NOTES:
1. THE STRAW BALES SHALL BE PLACED ON SLOPE CONTOUR.
2. BALES TO BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING.
3. KEY IN BALES TO PREVENT EROSION OR FLOW UNDER BALES.
4. DO NOT USE HAY BALES IN CONCENTRATED FLOW CONDITIONS OR IN STREAMS.
STRAW BALE
DIKE

Section 11B.1b - CLEARING THE SITE

- VEGETATION MUST BE CUT AND REMOVED FROM THE AREA WHERE BACKFILL IS PLACED

DOES THIS INCLUDE THE FILL EXTENSIONS?

SCARIFICATION

Section 11B.3 - SCARIFY THE SITE

THE AREA UNDER THE DISPOSAL FIELD AND BACKFILL EXTENSIONS MUST BE PLOWED OR DISKED TO PRODUCE A THOROUGHLY ROUGHENED SURFACE. PLOWING MUST BE DONE PARALLEL TO THE TOPOGRAPHIC CONTOUR IN SUCH A DIRECTION THAT EACH PLOW FURROW WILL BE THROWN UPSLOPE.

THE SOIL SHOULD BE BROKEN UP TO A DEPTH OF 6-8 INCHES.

ALTERNATIVELY, A ROTO-TILLER OR THE TEETH OF A BACKHOE MAY BE USED.

Section 11B.3
TRANSITIONAL HORIZON

ON SITES WHERE THE BACKFILL MATERIAL IS COARSER THAN THE ORIGINAL SOIL, A MINIMUM OF 4 INCHES OF BACKFILL MATERIALS MUST BE MIXED (BY PLOWING, DISCING OR ROTO-TILLING) INTO THE ORIGINAL SOIL TO FORM A TRANSITIONAL HORIZON BENEATH THE DISPOSAL AREA FOOTPRINT AND ALL SIDE AND DOWNHILL FILL EXTENSIONS.

11B.5 - FILL LARGE HOLES

- LEFT AS A RESULT OF STUMP AND STONE REMOVAL, MUST BE FILLED WITH BACKFILL MATERIAL THAT MEETS THE REQUIREMENTS OF SECTION 804 BACKFILL

4A.8 SURFACE WATER DIVERSION

SURFACE WATER MUST BE DIVERTED AWAY FROM THE DISPOSAL FIELD AND FILL EXTENSIONS

BAD TRANSITIONAL HORIZONS & SCARIFICATION


CAT
CAT

ANOTHER SITE

BACKFILL

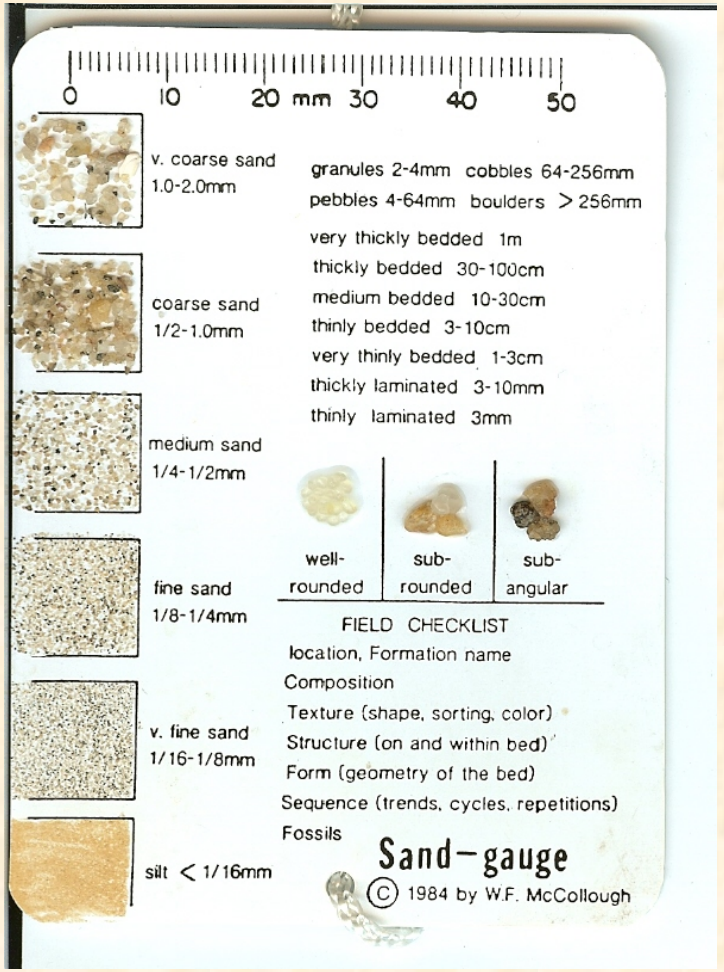
STANDARDS

11E.2 Backfill standards: The backfill material must be gravelly coarse sand which meets the following requirements:

Table 11A – Backfill Textural Gradation

Sieve Size	Percent Passing by Weight
3”	100
1.5”	95-100
0.75”	90-100
#4	75-100
#10	55-85
#20	30-65
#40	15-45
#60	10-25
#100	5-15
#200	2-8
Clay Fraction	0-2

Construction Related Rules
How to Check Sand Spec:



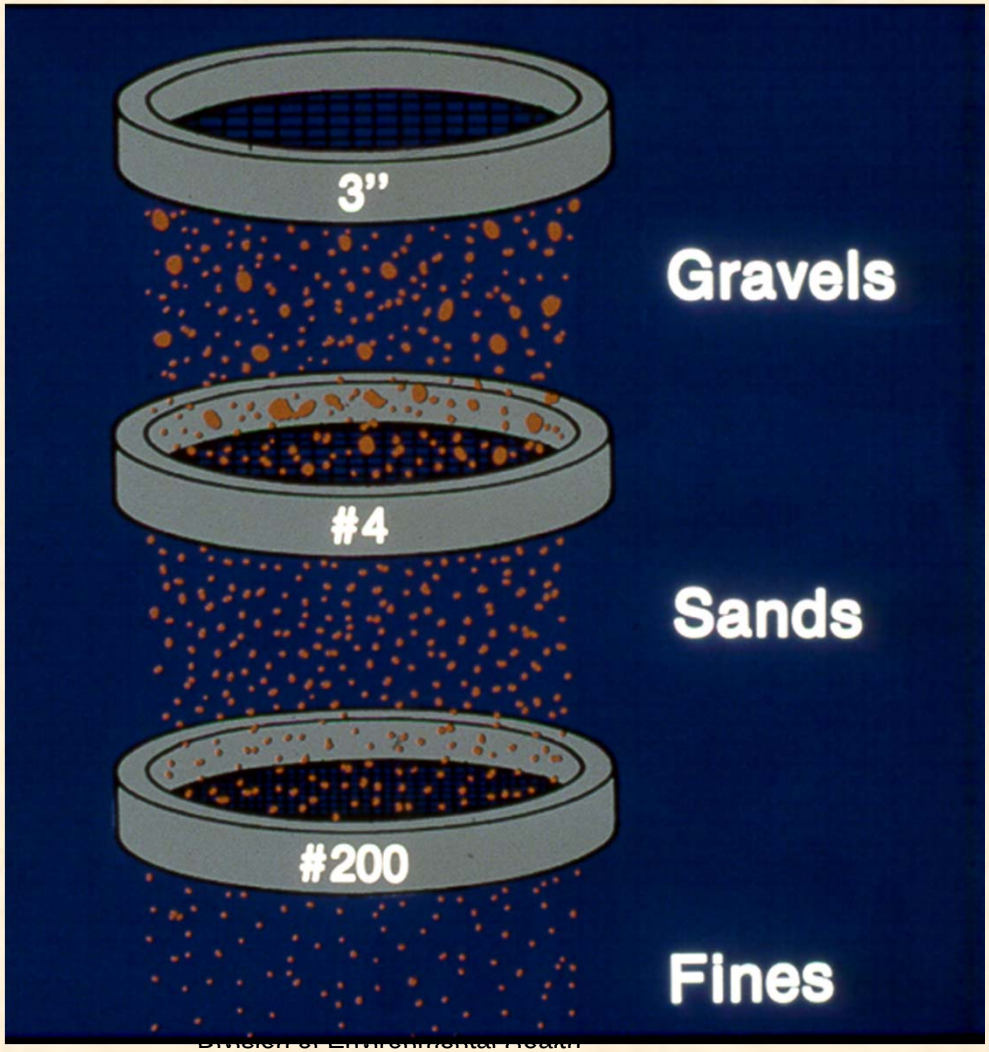
Construction Related Rules

Table 1. Soil Separates

Name of Separate	Diameter (range) mm.
Very coarse sand	2.00 - 1.00
Coarse sand	1.00 - 0.50
Medium sand	0.50 - 0.25
Fine sand	0.25 - 0.10
Very fine sand	0.10 - 0.05
Silt	0.05 - 0.002
Clay	less than 0.002

Sieve Analyses

Sieve Analyses



Sieve Designation - Large

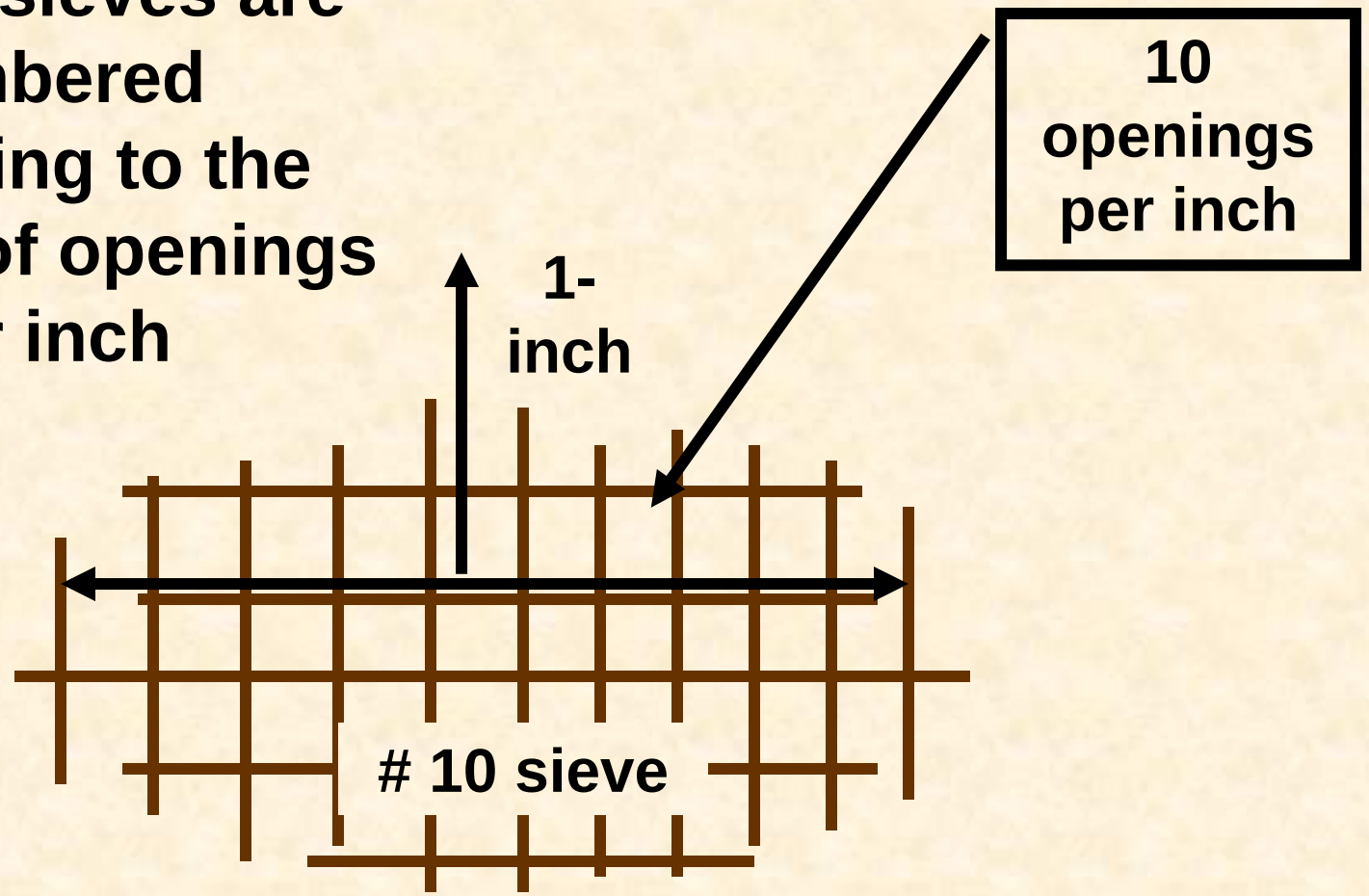
Sieves larger than the #4 sieve are designated by the size of the openings in the sieve

Review Activity 2

- Commonly used larger size sieves
  - 3 inch
  - 2 inch
  - 1-1/2 inch
  - 1 inch
  - 3/4 inch
  - 1/2 inch
  - 3/8 inch

Sieve Designation - Smaller

Smaller sieves are numbered according to the number of openings per inch



Construction Related Rules

S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C-117 & C-136

t Name TUPPER PIT TESTING

Client CONSTRUCTION CONSULTANTS

Material Type IN DRAIN SAND

Material Source

Project Number 04-0426

Lab ID 1664G

Date Received 5/6/2004

Date Completed 5/7/2004

Tested By CRAIG TURCOTTE

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	SPECIFICATIONS (%)
150 mm	6"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	100	
25.0 mm	1"	100	
19.0 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	94	100
4.75 mm	No. 4	89	95 - 100
2.36 mm	No. 8	82	80 - 100
1.18 mm	No. 16	71	50 - 85
600 um	No. 30	51	25 - 60
300 um	No. 50	26	5 - 30
150 um	No. 100	10	0 - 10
75 um	No. 200	3.9	

Construction Related Rules

Washed concrete sand meeting the ASTM C-33 specification.

Sieve Designation		Percentage by Weight Passing Square Mesh Sieves
Metric	English	
9.5 mm	3/8 inch	100
4.75 mm	No. 4	95-100
2.36 mm	No. 8	80-100
1.18 mm	No. 16	50-85
600 µm	No. 30	25-60
300 µm	No. 50	10-30
150 µm	No. 100	2-10
75 µm	No. 200	0-5.0 maximum

COARSE SAND

MEDIUM SAND

WET SITES on 9 INCH SOILS and REPLACEMENT SYSTEMS

PLASTIC LIMIT

11A.1 General: On sites with fine soil textures, excavations that expose the bottom and sidewall area of the disposal field must not be carried out when the soil moisture content is above the plastic limit except when correcting a nuisance, there is no practical alternative, the plumbing inspector agrees and special construction techniques are used. The absolute plastic limit can be estimated by rolling the soil with the fingers. If the soil forms a wire or rod 1/8th of an inch in diameter and does not crumble when handled, the soil moisture content is too high to proceed with the excavation.

PLASTIC LIMIT

The soil must be dry and friable when site prep is started.
Smearing and compaction due to construction in a wet soil decrease the soil's ability to absorb wastewater. If a sample of the soil at the trench bottom depth forms a ribbon (e.g. 1/8-inch diameter) when rolled between the palms of the hands, the soil is too wet to excavate. If the soil crumbles into its natural structure, excavation may proceed. This pre-scarification examination is essential to help ensure proper operation of the system.

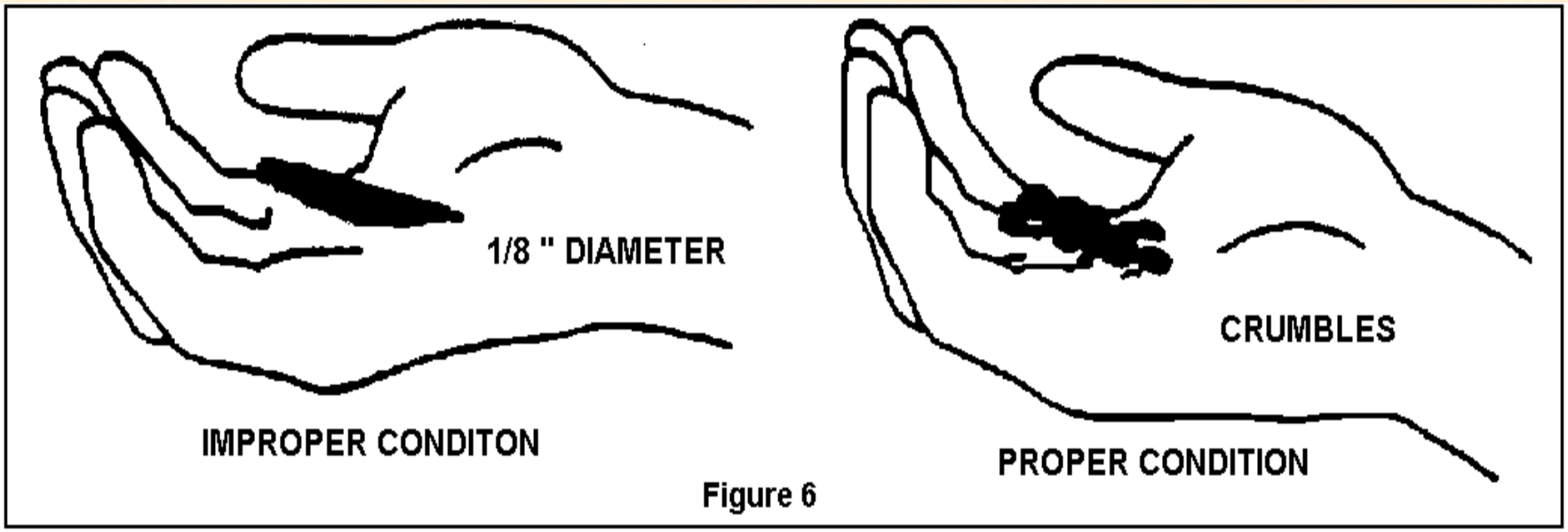


Figure 6

Maine Department of Health & Human Services
Maine Center for Disease Control & Prevention
Division of Environmental Health – Subsurface Wastewater Unit

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Voluntary Certification Program

Subsurface Wastewater Disposal System Installer

In association with the Maine Department of Environmental Protection, Nonpoint Source Training and Resource Center the Division of Environmental Health is pleased to offer a voluntary certification program for individuals who install subsurface wastewater disposal systems. The Maine Subsurface Wastewater Disposal Rules, CMR 241, do not require certification as a condition of obtaining a permit for the purpose of installing a subsurface wastewater disposal system; however possession of this certification **may allow the installer to sign an affidavit (HHE-238B) to cover the first system inspection noted in Section 111.5.1 of the Rules if the local plumbing inspector is in agreement.**

Once issued the certification is good for five (5) years. The following criteria must be met for initial certification by the Department:

1. Attendance at one (1) Basic System Installation Training Session conducted by the Subsurface Wastewater Program; and
2. Submission of page one from two (2) HHE-200 Forms which were permitted and installed by the applicant and inspected and found in compliance with the Rules by the Local Plumbing Inspector. **PLEASE MAKE SURE THAT THE 1ST AND 2ND INSPECTIONS ARE DONE ON THESE HHE FORMS.**

The certification will be automatically renewed after five (5) years if the certified individual submits proof of attendance at subsurface waster related training session(s) providing a minimum of 6 contact hours within the past certification period. Individuals attending JETCC sponsored sessions will be credited automatically. It is the responsibility of the certified individual to insure that proof of attendance is provided to the Division of Environmental Health.

Mail to: **Maine Department of Health & Human Services**
Division of Environmental Health
Attn: Wendy Austin
11 State House Station
Augusta, Maine 04333-0011

Name: _____

Company: _____

Address: _____

Municipality: _____ State: _____ Zip: _____

Telephone: _____ Email: _____

Training Session Attended: _____ Date: _____

Revised 12/10/09

DIVISION OF ENVIRONMENTAL HEALTH

SUBSURFACE WASTEWATER PROGRAM

AFFIDAVIT OF SITE PREPARATION

This affidavit is to be completed by a certified system installer and submitted to the Local Plumbing Inspector to document compliance with **Section 111.5.1** of the Maine Subsurface Wastewater Disposal Rules, **144 CMR 241.** ***Permission to utilize this document in lieu of a site preparation inspection by the Local Plumbing Inspector must be verified when the permit is issued.*** This affidavit is ***not*** to be utilized in place of the system inspection described in **Section 111.5.2** of the Rules.

INSTALLER NAME: _____
(Please Print)

CERTIFICATION NUMBER: _____

SSWD PERMIT NUMBER: _____

PERMIT ISSUE DATE: _____

PROPERTY OWNER NAME: _____

PROPERTY ADDRESS: _____

MUNICIPALITY: _____

By signing and submitting this document to the Local Plumbing Inspector, I certify that all construction activities noted in **Section 111.5.1** including removal of all vegetation from the disposal field area and fill extensions as specified in **Section 801.3**; roughening of the ground surface as specified in **Section 801.4**; establishment of a transitional horizon as specified in **Section 801.5**; and placement of erosion control devices as specified in **Section 801.2** have been completed in full compliance with the Maine Subsurface Wastewater Disposal Rules, **144 CMR 241** for the referenced SSWD permit.

INSTALLER SIGNATURE: _____

DATE SUBMITTED: _____

By signing and accepting this document from the Certified Installer, I acknowledge that a site preparation inspection was not conducted for the referenced SSWD permit.

LPI SIGNATURE: _____

ACCEPTANCE DATE: _____

HHE-238-B (Revision 01/2008)

THIS FORM ONLY TO BE USED AFTER THE LPI'S APPROVAL

EXCAVATION

Section 11C.2
BOTTOM OF DISPOSAL FIELD

- THIS SERVES AS THE FINAL STAGE OF THE DISTRIBUTION NETWORK

- MUST BE INSTALLED AT THE ELEVATION SPECIFIED ON THE PERMIT.

- MUST MAINTAIN A LEVEL GRADE.
  (2” WITHIN 100’)

Section 11C.3

AVOID UNNECESSARY COMPACTION

- RUBBER TIRED VEHICLES SHOULD NOT BE DRIVEN OVER THE EXPOSED BOTTOM OF THE DISPOSAL FIELD

- SHOULD BE CARRIED OUT BY A BACKHOE OPERATING OUTSIDE THE PERIMETER OF THE DISPOSAL AREA

Which looks like…….

And if not corrected could look like…..

Which would result in……

11C.4 - REOPEN SMEARED OR COMPACTED BOTTOM OR SIDEWALL SURFACES

- THIS PORTION MUST BE SCARIFIED TO RE-OPEN SOIL PORES.

- ROTO-TILLING MAY BE NECESSARY TO REACH THE LIMIT OF COMPACTED SOIL DEPTH.


CAT

Section 11C.5 - WEATHER CONDITIONS

- **WORK SHOULD BE SCHEDULED SO THAT EXCAVATED AREAS ARE NOT EXPOSED TO RAINFALL OR WIND BLOWN SILT**

- **DEBRIS MUST BE REMOVED BEFORE BACKFILLING**

- **DISPOSAL FIELDS SHOULD NOT BE INSTALLED IN FROZEN GROUND OR WHEN THE AMBIENT AIR TEMP. IS BELOW FREEZING**

11I - INSPECTIONS

11I.1 REQUIRED:

IT SHALL BE THE DUTY OF THE PLUMBING INSPECTOR TO ENFORCE THE PROVISIONS OF THIS CODE AND TO MAKE SUCH INSPECTIONS AS MAY BE REQUIRED BY THIS CODE

Inspections

The second inspection shall be made after installation of the system components, including stone, pipes or proprietary devices, tanks, hay, filter fabric, and fill beneath and beside of the disposal area but before backfill is placed above the disposal system components.

Inspections

No part of a system may be backfilled until it has been inspected and approved. If any part is covered before being inspected and approved, it shall be uncovered at the discretion of the plumbing inspector and at the expense and risk of the owner.

If inspection discloses defective material, design, siting, or poor construction that does not conform to the requirements of the Rules, the nonconforming parts shall be removed, replaced, and reinspected.

The LPI must sign the inspection block on the HHE-200 Form or Plumbing Application, just below the permit label area, which comprises a Certificate of Approval.

The LPI should simultaneously sign the permittee's copy and the Town's copy. This will provide the Town and the permitee with a permanent record that the inspection took place.

Construction Related Rules

Chapter 6 – Septic Tanks, Dosing Tanks & Grease Interceptors

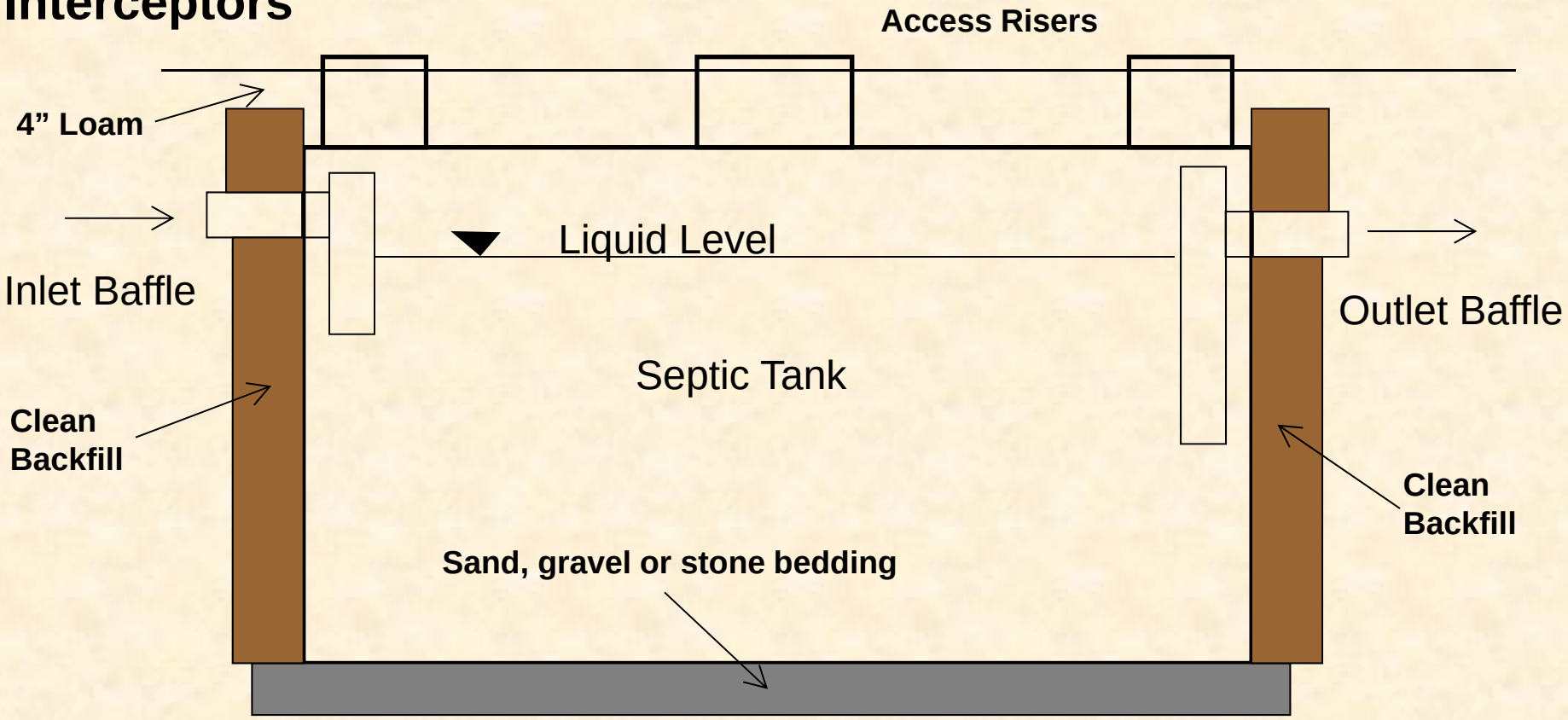


Illustration of Tank Installation

Plastic Chambers

- Chambers are used in the trench or cluster configuration. Permitted substitutions can be found on Page 60, Table 6H of the new rules.
- Just remember, you can substitute a High Capacity for a High Capacity of another manufacturer but not a High Capacity for a Standard, Quick 4 or Low Profile.

Concrete Chambers

- Each 4’ by 8’ chamber in trench configuration with 8’ sidewalls has an infiltration area of 90sqft
- Infiltration area of 77 sqft for 4’ sidewall.
- The 8’ by 8’ chamber has an infiltration area of 128 sqft in cluster configuration and 154 sqft in trench configuration.
- Any approved manufacturer of concrete chambers can substitute for another as long as the size is the same.

RISERS, RESIDENTIAL

- IF BURIED, WATER TIGHT RISERS TO WITHIN 6” OF ORIGINAL GRADE ARE REQUIRED.

- RISER OPENING MUST BE 18” IN DIAMETER OVER THE TANK COVER

- IF THERE IS A PUMP STATION WITHIN THE TANK, THE RISER DIAMETER MUST BE 24”

- OUTLET BAFFLES THAT UTILIZE AN EFFLUENT FILTER MUST HAVE A RISER OF AT LEAST 18”

RISERS, OTHER FACILITIES

ALL RISERS MUST BE LOCATED AT GRADE. GRADE MUST SLOPE AWAY FROM THE OPENINGS

Construction Related Rules

TABLE 11B
Maximum Percent passing by weight

		Nominal Stone Size	
		1 ½”	¾”
Sieve Size	2”	100	100
	1 ½’”	95 - 100	100
	3/4”	0 - 40	90 - 100
	1/2”	0 - 20	0 - 55
	3/8”	0 - 8	0 - 25
	#4	0 - 5	0 - 10
	#200	0 - 2	0 - 2

Construction Related Rules

Chapter 11 - Disposal Field Construction Techniques

Section 11F.2d Placement

Stone may be placed in the disposal field site using a back-hoe, front-end loader, or dump truck, from the sides of the disposal field rather than by driving onto the prepared area of the disposal field.

In the case of large disposal fields, tracked equipment may be operated within the disposal field.

Inspections

Second Inspection

A common installation error is use of poor quality or poorly sized stone, which results in reduced void space and occasional sealing off by very fine particles.

Stone must be ¾" OR 1 ½" in size, clean, and evenly sized to provide sufficient void space.

Some installers wrongly interpret the size range as allowing a mix of sizes.

PIPING BETWEEN COMPONENTS

Section 6M - PIPING

- **GRAVITY FLOW – NO LESS THEN 3”, PRIMITIVE 1.5”**
- **PUMP DISCHARGE - NO LESS THAN MANUFACTURER SPEC.**
- **JOINTS - MADE WATERTIGHT**
- **LAID IN A FIRM FOUNDATION AND PROTECTED FROM FREEZING**

- **BUILDING SEWER PITCH – PIPES UNDER 4” = 1/4 “ PER FOOT**
- **PIPES 4” & LARGER = 1/8” PER FOOT MAY BE AUTHORIZED BY THE LPI**

- **EFFLUENT LINE PITCH – 1/8” PER FOOT**

The disposal field stone shall be covered with a layer of non-woven fabric or two (2) inches of compressed hay.

Non-woven fabric may be used, provided the edges of adjacent sheets of fabric overlap by a minimum of 6 inches; and the for the fabric shall be 4.0 ounces/square yard (per ASTM D-3776).

SECOND INSPECTION ELEVATIONS, BACKFILL, SLOPE, PITCH…

PRIOR TO COVERING THE SYSTEM

SYSTEM COMPONENTS

STONE, PIPES OR PROPRIETARY DEVICES

TANKS, HAY, FILTER FABRIC

FILL BENEATH AND BESIDE THE DISPOSAL FIELD INCLUDING FILL EXTENSIONS

CURTAIN DRAINS, DIVERSION DITCHES, BERMS

SHOULDER, FILL EXTENSIONS

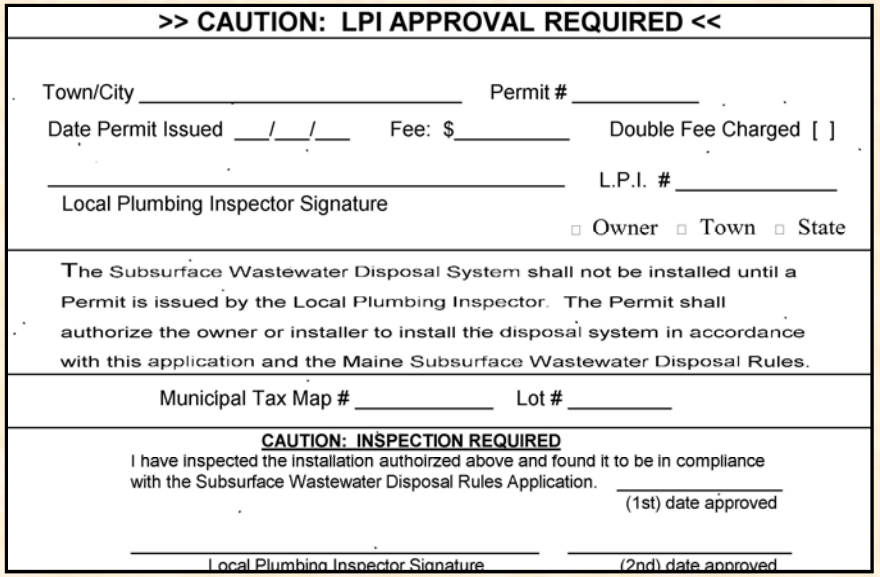
THIS IS NOT A CORRECT RETAINING WALL FOR FILL EXTENSIONS…

Permitting

Certificates of Approval

The LPI must sign the inspection block on the HHE-200 Form or Plumbing Application, just below the permit information area, which comprises a Certificate of Approval.

The LPI should simultaneously sign the permittee's copy and the Town's copy. This will provide the Town and the permitee with a permanent record that the inspection took place.



>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____

Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]

_____ L.P.I. # _____

Local Plumbing Inspector Signature

□ Owner □ Town □ State

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.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authoirzed above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ Local Plumbing Inspector Signature _____ (2nd) date approved

Section 11E
FILL MATERIAL PLACEMENT ABOVE DISPOSAL FIELD

IMMEDIATELY ABOVE THE FILTER FABRIC OR HAY, FILL IS REQUIRED AS SPECIFIED ON THE PLANS, (TABLE 800.1)

A MINIMUM OF 8 INCHES INCLUDING COVER MATERIAL

COVER MATERIAL

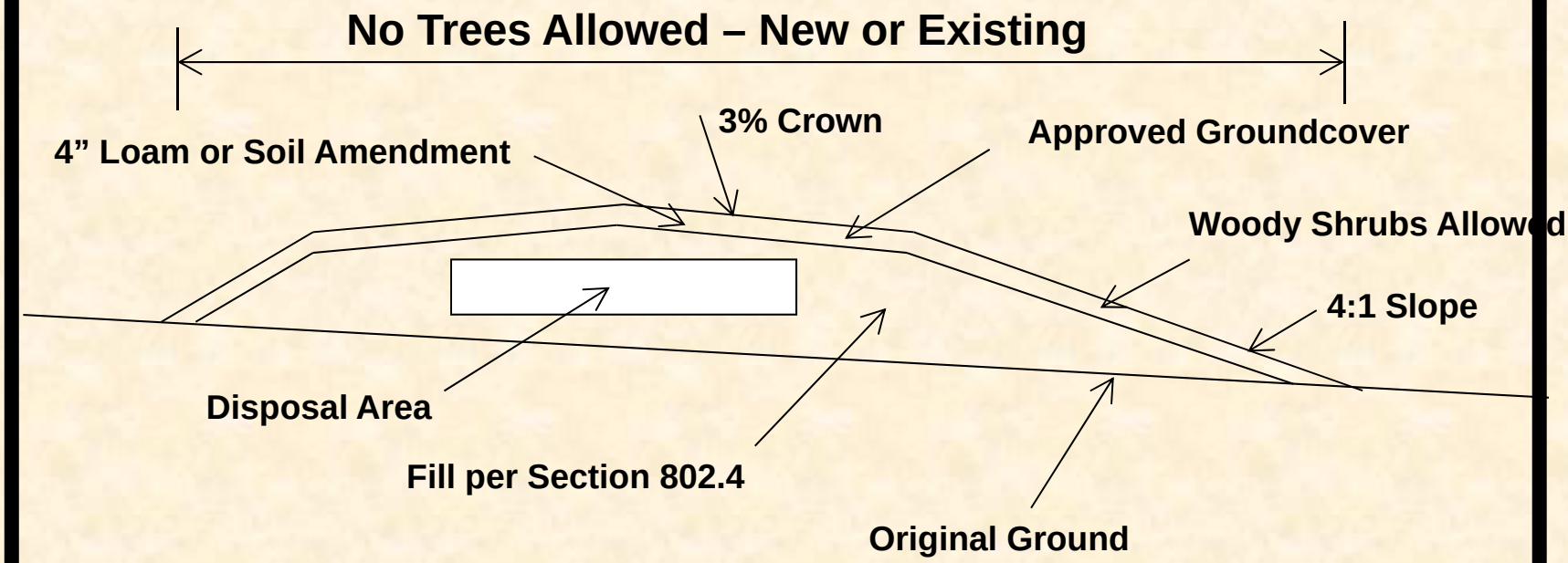
11E.2d - Cover Material

IMMEDIATELY ABOVE THE BACKFILL OR FILL MATERIAL, A MINIMUM OF 4” OF SOIL OR SOIL AMENDMENT MIX, SUITIBLE FOR ESTABLISHMENT OF A GOOD VEGITATIVE COVER MUST BE PLACED OVER THE ENTIRE DISTURBED SOIL AREA, INCLUDING FILL EXTENSIONS

3% CROWN, 3’ SHOULDER AND 4:1 FILL EXTENSIONS

Construction Related Rules

Chapter 11 - Disposal Field Construction Techniques



11G.7 - FINAL EROSION CONTROL

VEGETATIVE COVERS

GRASS, CLOVER, TREFOIL, VETCH, WILD FLOWERS, ETC..

OTHER COVERS
BARK CHIPS, WOOD CHIPS

WOODY SHRUBS AND TREES ARE UNACCEPTABLE EXCEPT FOR WOODY SHRUBS ON FILL EXTENSIONS

Division of Environmental Health
Subsurface Wastewater Program

ENFORCEMENT

Page 1-5, sec:111.8
Covering of work

No part of a system may be backfilled until it has been inspected and approved.

It **SHALL** be uncovered at the discretion of the LPI and the expense and risk of the homeowner

Resolving violations - complaints

- Investigate the situation

  Is it a true complaint?
- Evaluate the problem

  Talk to the owner, what can be done?
- Document……Write a letter
- Initiate corrective actions

INVESTIGATIVE NOTES

- Inspection Observations
- Date, Time, Location
- Parties present
- Result of the inspection
- PHOTOS
- Inspection form on page 15 of the Enforcement manual

CORRECTIVE ACTIONS could be….

oral notice of violation

stop work order

written notice of violation

Violations of the rules during installation

Communication…

LPI & Contractor & Homeowner

If it doesn’t get fixed, no inspection signature

New installation?
Not getting fixed?

- Call up the mortgage holder
- Explain that there will not be a final inspection signature
- No certificate of occupancy

Malfunctioning system violations

Written letter ordering repair / certified

2nd written letter / certified

Prepare and present all documentation to Municipal officials

Serve abatement order signed by officials to responsible party

In the event nothing is done, municipality may cause it to be fixed and recovering costs through court / taxes

The written violation should include…

- The violation
- Penalties
- Deadline date in which I shall be corrected

Right of entry:

1) For the purpose of enforcing the rules.

2) Proper credentials

If denied, the LPI may seek an administrative Inspection Warrant

Administering violations requires

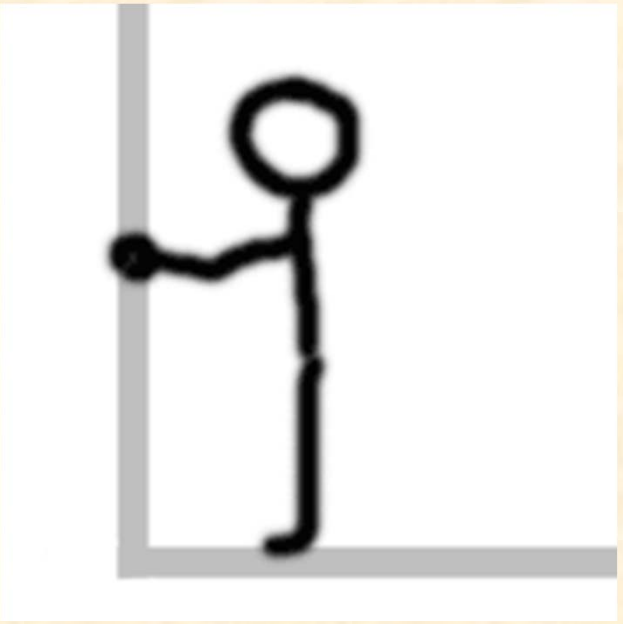
Public Relations

Assertiveness

Determination

Patience

Understanding

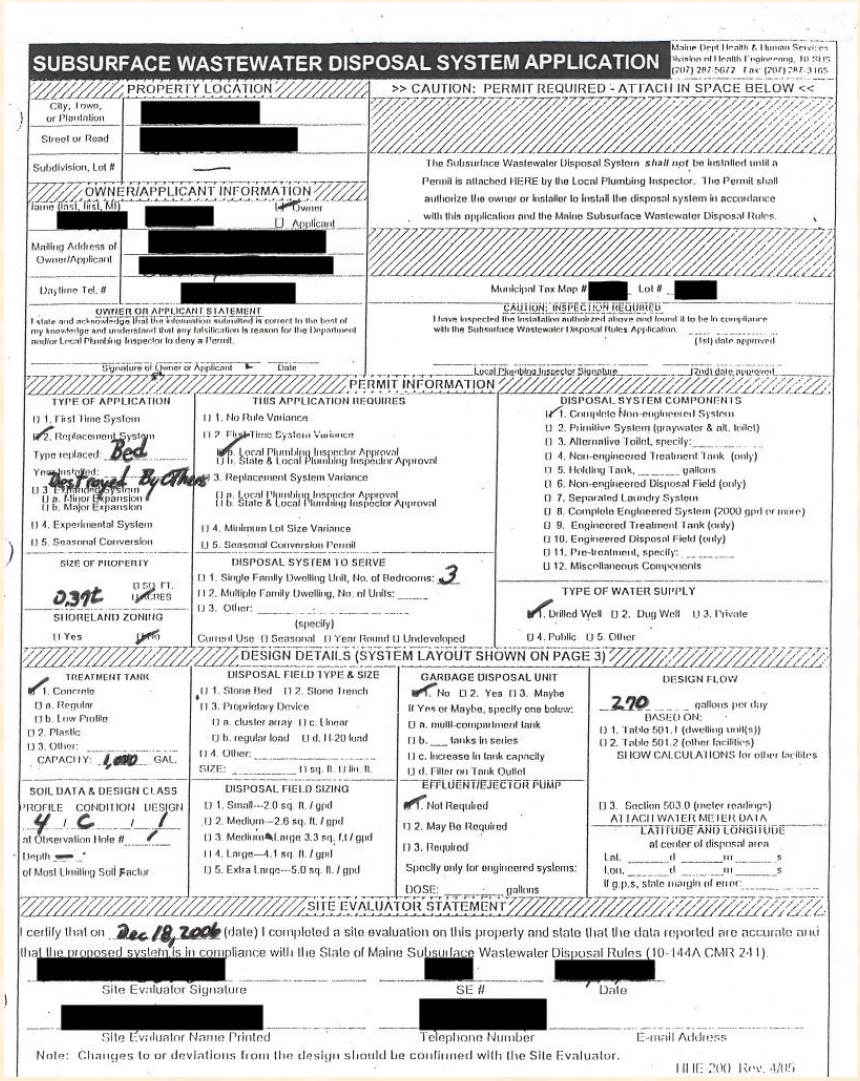


POOR SITE EVALUATION

HHE-200 Form

Page one of the HHE-200 Form must be signed by both the owner/applicant and the Site Evaluator before a permit can be issued.

It is important to check that each block on the form is properly completed. If any information is lacking, the LPI should not issue the permit.



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

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

City, Town, or Plantation: [redacted]
Street or Road: [redacted]
Subdivision, Lot #: —

The Subsurface Wastewater Disposal System *shall not* be installed until a Permit is attached HERE 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.

OWNER/APPLICANT INFORMATION

Name (last, first, MI): [redacted] ☑ Owner ☐ Applicant
Mailing Address of Owner/Applicant: [redacted]
Daytime Tel. #: [redacted]

Municipal Tax Map # [redacted] Lot # [redacted]

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.

Signature of Owner or Applicant — 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.

(1st) date approved

Local Plumbing Inspector Signature — (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION
☐ 1. First Time System
☑ 2. Replacement System
Type replaced: Bed
Year installed: Don't Know By Other
☐ 3. Expansion of System
☐ a. Minor Expansion
☐ b. Major Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES
☐ 1. No Rule Variance
☐ 2. Flood Hazard Zone 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
0.39± ☐ SQ. FT. ☐ ACRES

SHORELAND ZONING
☐ Yes ☑ No

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

TYPE OF WATER SUPPLY
☑ 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: 1,000 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: _____ ☐ 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
270 gallons per day
BASED ON:
☐ 1. Table 501.1 (dwelling unit(s))
☐ 2. Table 501.2 (other facilities)
SHOW CALCULATIONS for other facilities
☐ 3. Section 503.0 (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS
PROFILE CONDITION DESIGN
4 / C / 1
at Observation Hole # 1
Depth —"
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

LATITUDE AND LONGITUDE
at center of disposal area
Lat. ____ d ____ m ____ s
Lon. ____ d ____ m ____ s
If g.p.s., state margin of error: _____

SITE EVALUATOR STATEMENT

I certify that on Dec 18, 2006 (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).

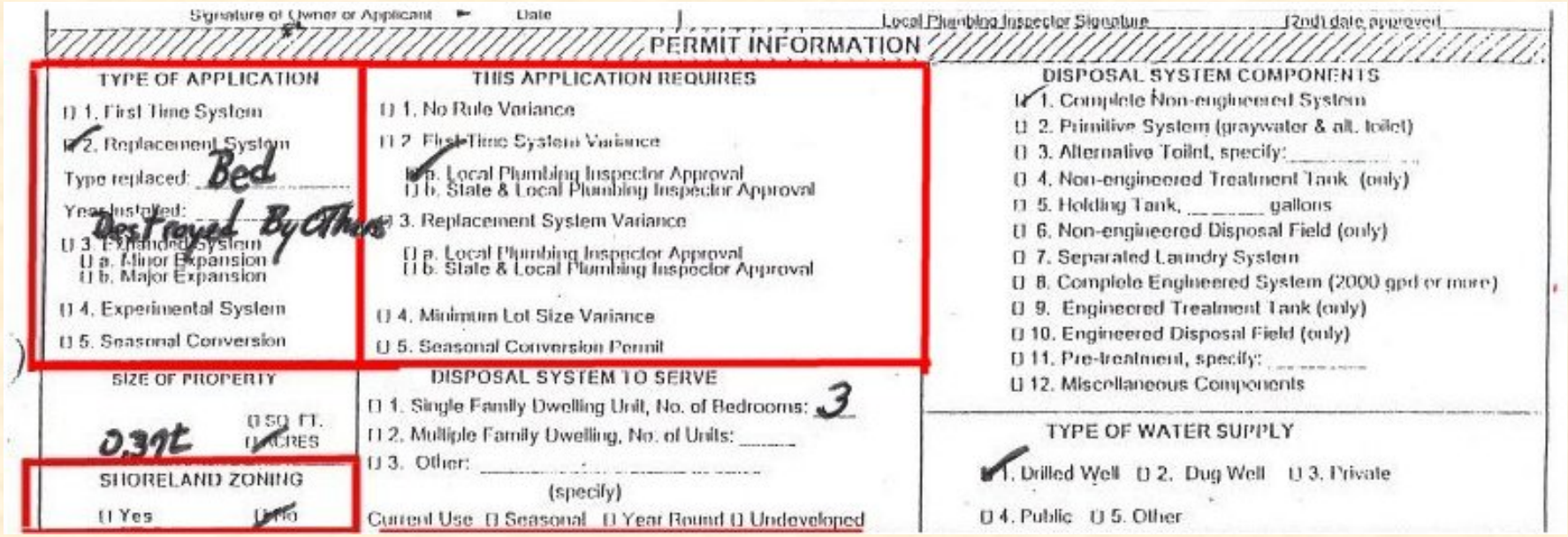
[redacted] — Site Evaluator Signature
[redacted] — SE #
[redacted] — Date
[redacted] — Site Evaluator Name Printed
[redacted] — Telephone Number
E-mail Address

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

HHE-200 Rev. 4/05

HHE-200 Form

Page One



Signature of Owner or Applicant ► Date

Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

- ☐ 1. First Time System
- ☑ 2. Replacement System
  - Type replaced: Bed
  - Year Installed: Destroyed By Other
- ☐ 3. Expanded System
  - ☐ a. Minor Expansion
  - ☐ b. Major Expansion
- ☐ 4. Experimental System
- ☐ 5. 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

0.39 ☐ 50 FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

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

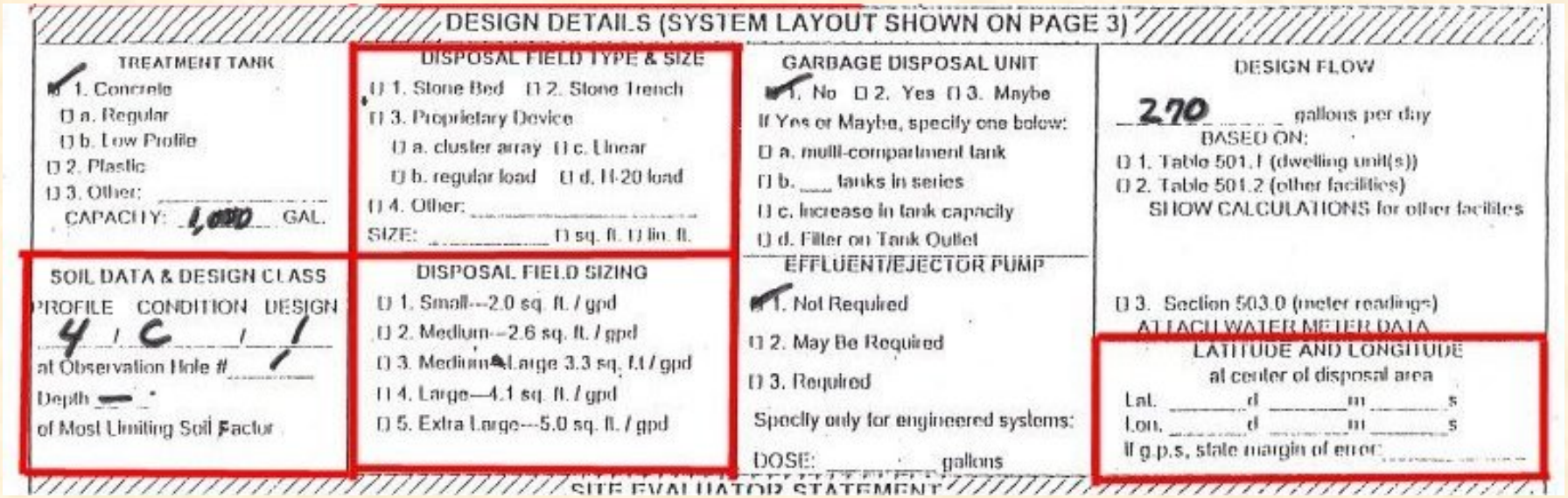
TYPE OF WATER SUPPLY

☑ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private

☐ 4. Public ☐ 5. Other

HHE-200 Form

Page One



DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

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

CAPACITY: 1,000 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: _____ ☐ 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

270 gallons per day

BASED ON:
- ☐ 1. Table 501.1 (dwelling unit(s))
- ☐ 2. Table 501.2 (other facilities)

SHOW CALCULATIONS for other facilities

SOIL DATA & DESIGN CLASS

PROFILE 4 / CONDITION C / DESIGN 1

at Observation Hole # 1

Depth — "

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. _____ d _____ m _____ s

Lon. _____ d _____ m _____ s

If g.p.s, state margin of error: _____

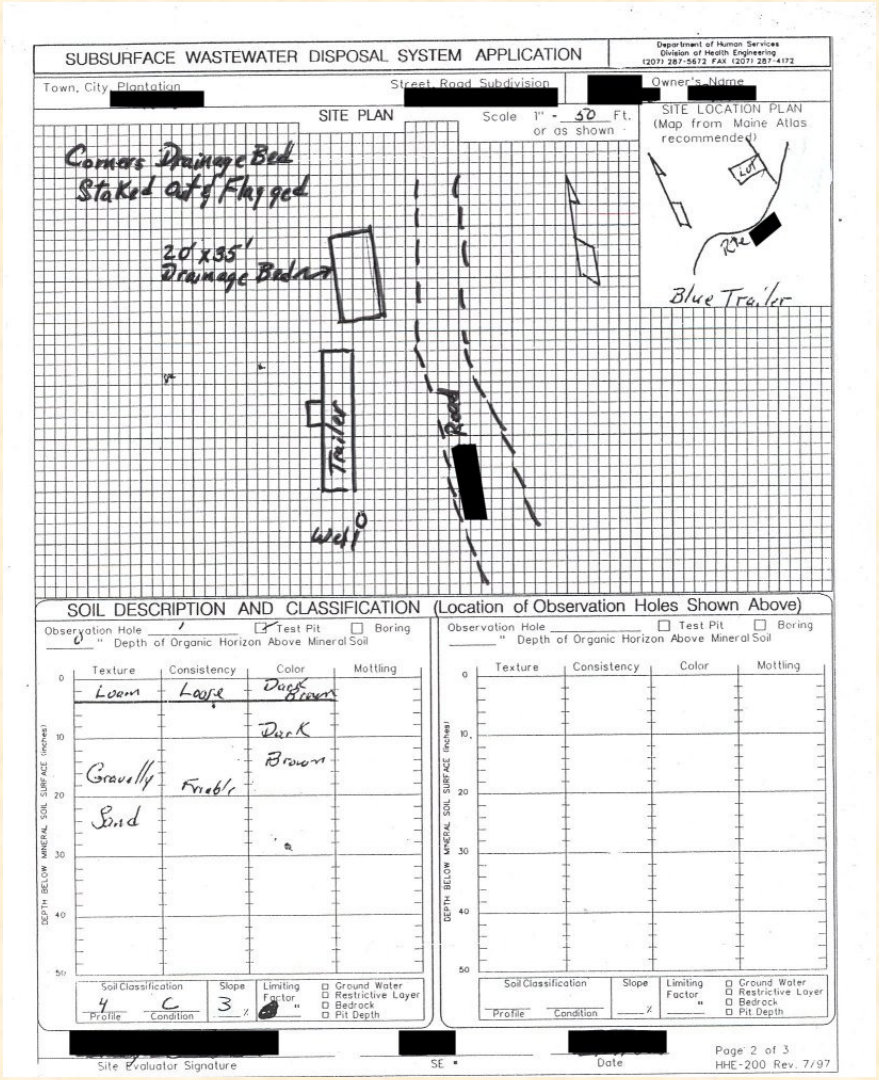
SITE EVALUATOR STATEMENT

HHE-200 Form

Page Two

The site plan should show all prominent features in the vicinity of the proposed system.

Test pit logs should be complete and accurate.



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 FAX (207) 287-4172

Town, City Plantation [redacted] Street, Road, Subdivision [redacted] Owner's Name [redacted]

SITE PLAN

Scale 1" = 50 Ft. or as shown

Corners Drainage Bed Staked out & Flagged

20'x35' Drainage Bed

Trailer

Well

SITE LOCATION PLAN
(Map from Maine Atlas recommended)

Lot

Rte

Blue Trailer

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

Observation Hole 1 ☑ Test Pit ☐ Boring
0" Depth of Organic Horizon Above Mineral Soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Loam	Loose	Dark Brown	
10	Gravelly Sand	Friable	Dark Brown	
20				
30				
40				
50				

Soil Classification: Profile 4, Condition C
Slope: 3 %
Limiting Factor: ☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
10				
20				
30				
40				
50				

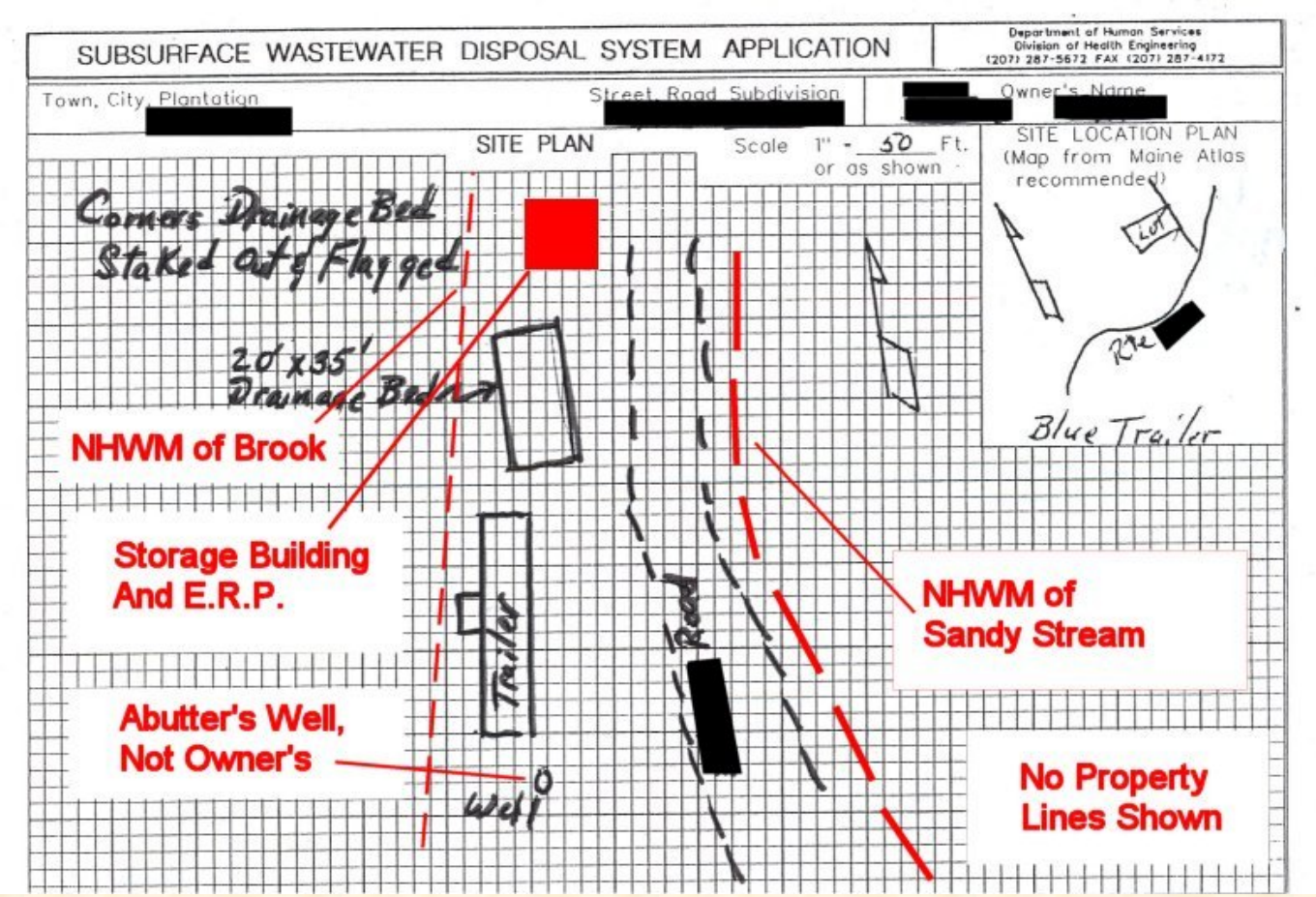
Soil Classification: Profile, Condition
Slope: %
Limiting Factor: ☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

[redacted] Site Evaluator Signature [redacted] SE # [redacted] Date

Page 2 of 3
HHE-200 Rev. 7/97

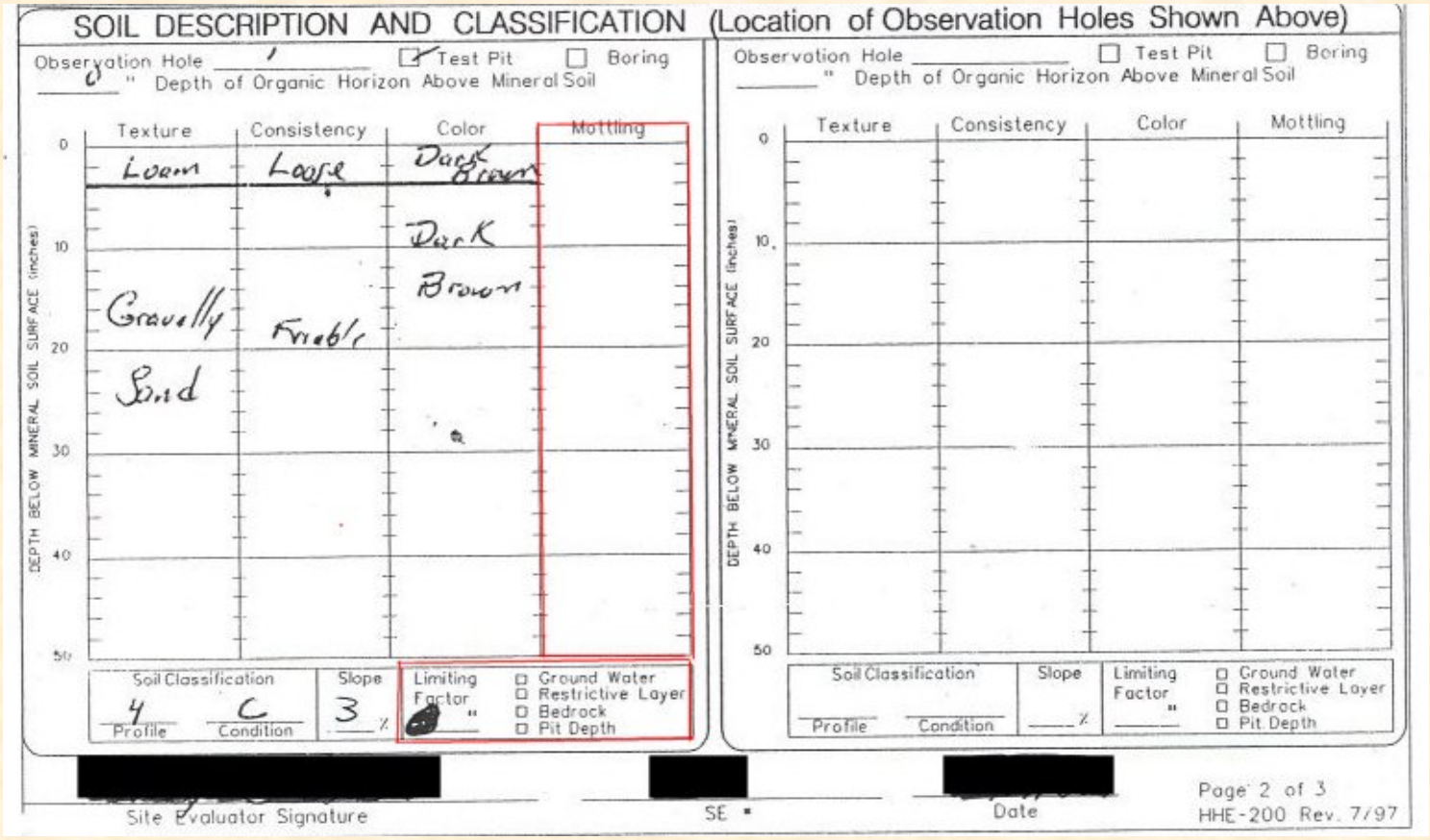
HHE-200 Form

Page Two



HHE-200 Form

Page Two



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

Observation Hole 1 ☑ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)

	Texture	Consistency	Color	Mottling
0	Loam	Loose	Dark Brown	
10	Gravelly	Friable	Dark Brown	
20	Sand			
30				
40				
50				

Soil Classification: 4 Profile / C Condition

Slope: 3 %

Limiting Factor: " ☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole ☐ Test Pit ☐ Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)

	Texture	Consistency	Color	Mottling
0				
10				
20				
30				
40				
50				

Soil Classification: Profile / Condition

Slope: %

Limiting Factor: " ☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

[redacted] Site Evaluator Signature [redacted] SE [redacted] Date

Page 2 of 3

HHE-200 Rev. 7/97

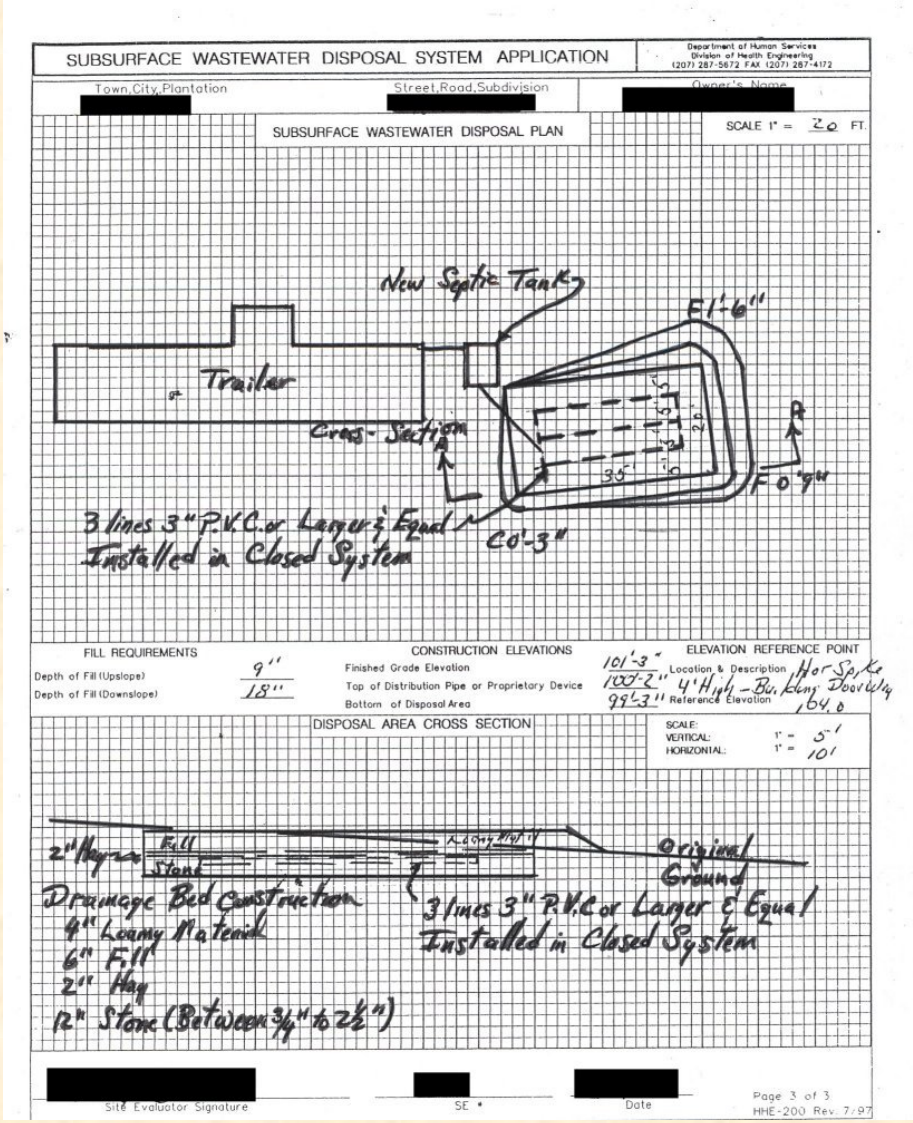
HHE-200 Form

Page Two

HHE-200 Form

Page Three

Page three should contain all necessary construction data for installation of the disposal area.



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 FAX (207) 287-4172

Town, City, Plantation [redacted] Street, Road, Subdivision [redacted] Owner's Name [redacted]

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.

New Septic Tank

Trailer

Cross-Section

3 lines 3" P.V.C. or Larger & Equal Installed in Closed System

FILL REQUIREMENTS

Depth of Fill (Upslope) 9"

Depth of Fill (Downslope) 18"

CONSTRUCTION ELEVATIONS

Finished Grade Elevation 101'-3"

Top of Distribution Pipe or Proprietary Device 100'-2"

Bottom of Disposal Area 99'-3"

ELEVATION REFERENCE POINT

Location & Description 4' High - Bucking Doorway Hor. Spike

Reference Elevation 104.0

DISPOSAL AREA CROSS SECTION

SCALE: VERTICAL: 1" = 5' HORIZONTAL: 1" = 10'

2" Hay

Fill

Stone

Original Ground

Drainage Bed Construction
4" Loamy Material
6" Fill
2" Hay
12" Stone (Between ¾" to 2½")

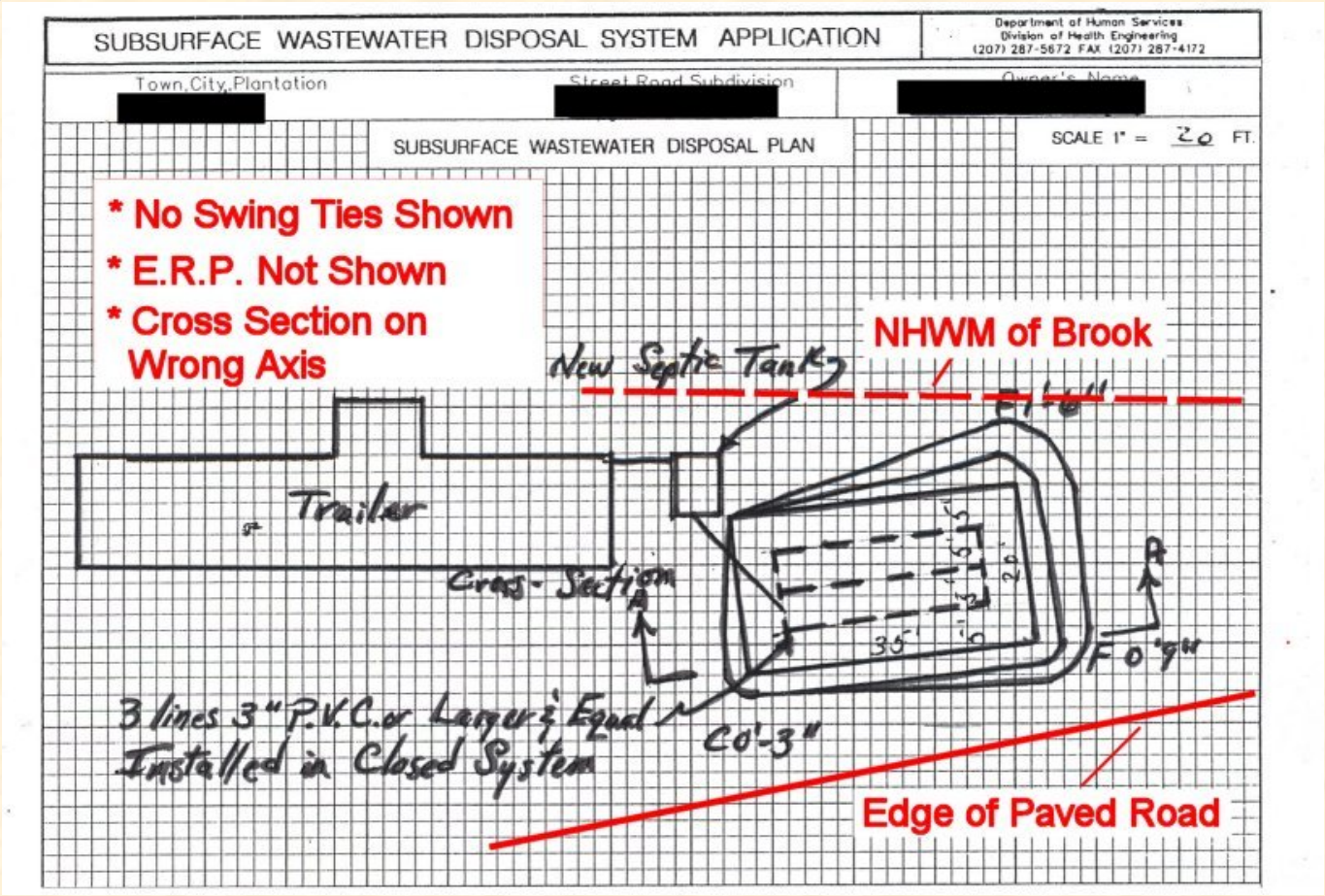
3 lines 3" P.V.C. or Larger & Equal Installed in Closed System

[redacted] Site Evaluator Signature [redacted] SE # [redacted] Date

Page 3 of 3
HHE-200 Rev. 7/97

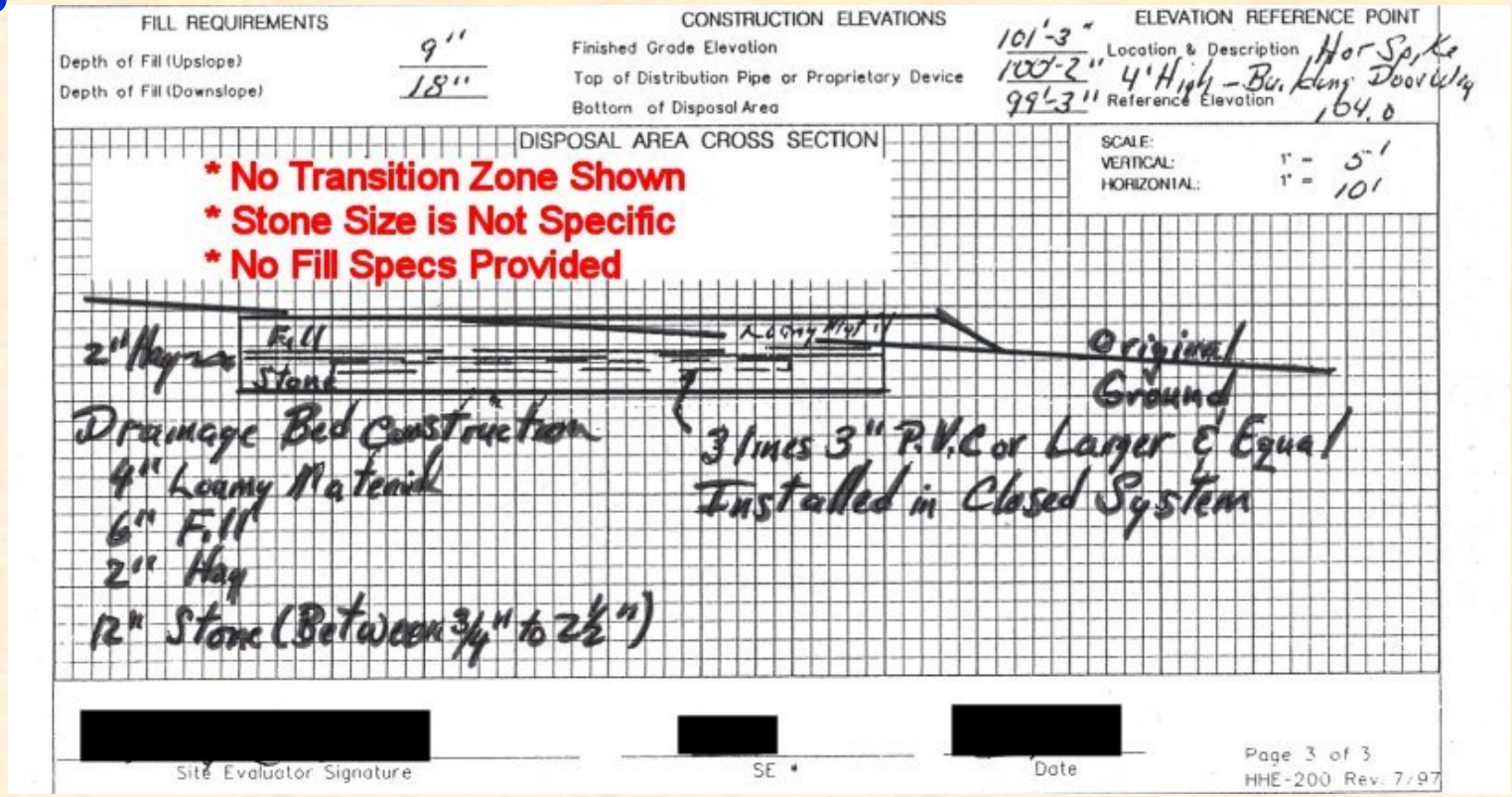
HHE-200 Form

Page Three



HHE-200 Form

Page Three



FILL REQUIREMENTS

Depth of Fill (Upslope) 9"

Depth of Fill (Downslope) 18"

CONSTRUCTION ELEVATIONS

Finished Grade Elevation 101'-3"

Top of Distribution Pipe or Proprietary Device 100'-2"

Bottom of Disposal Area 99'-3"

ELEVATION REFERENCE POINT

Location & Description Hor Spike 4' High - Bu. King Door Jamb

Reference Elevation 164.0

DISPOSAL AREA CROSS SECTION

SCALE:
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 10'

* No Transition Zone Shown
* Stone Size is Not Specific
* No Fill Specs Provided

2" Hay
Fill
Stone
Original Ground
3 lines 3" P.V.C or Larger & Equal Installed in Closed System

Drainage Bed Construction
4" Loamy Material
6" Fill
2" Hay
12" Stone (Between 3/4" to 2 1/2")

[redacted]
Site Evaluator Signature

[redacted]
SE #

[redacted]
Date

Page 3 of 3
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MALFUNCTION COMPLAINTS

Maine Subsurface Wastewater Disposal Rules
Definition of Malfunction

Malfunctioning system: A system that is not operating or is not functioning properly based on the following indicators:

- Ponding or outbreak of wastewater or septic tank effluent onto the surface of the ground;

- Seepage of wastewater or septic tank effluent into parts of buildings below ground;

- Back-up of wastewater into the building being served that is not caused by a physical blockage of the internal plumbing;

- Or contamination of nearby water wells or water bodies/courses.

Anatomy of a Malfunction Investigation

Breakout of Effluent.

Anatomy of a Malfunction Investigation

Breakout of Effluent and Abutter's Boat

It is the municipality's responsibility to remedy a malfunctioning subsurface wastewater disposal system per Title 30-A §3428

1. Abatement procedure. Upon complaint of any person resulting in documentation of a malfunctioning waste water disposal unit or on their own information, the municipal officers shall serve an order to remedy a malfunctioning waste water disposal unit upon the owner of any premises within that municipality that has such a malfunctioning unit.

2. Content of order. The order must be addressed to the owner of the premises and must contain:

A. The date

B. The fact of the malfunctioning waste water disposal unit;

C. A notice to **remedy the nuisance within 10 days** of service of the order; and

D. The signatures of the municipal officers.

The municipal officers may allow the owner of the premises to request an extension of the 10-day period for no longer than an **additional 20 days** and may explain how to request an extension in the order. The municipal officers or their agents may approve an extension if it is reasonably necessary for and likely to result in remediation of the nuisance.

It is the municipality's responsibility to remedy a malfunctioning subsurface wastewater disposal system per Title 30-A §3428

3. Service and return of service. One of the municipal officers or a law enforcement officer shall serve the order personally upon the owner, tenant or occupant in possession. The server shall make and file a return of service indicating the method used and the person served.

4. Abatement. If the nuisance is not abated within the 10-day period or such period up to but not exceeding the additional 20 days as allowed by the municipal officers under subsection 2, the municipal officers or their agents may enter the premises and have the malfunction adequately remedied. To recover any actual and direct expenses, including reasonable attorney's fees if the municipality is the prevailing party, incurred by the municipality in the abatement of such nuisances, the municipality shall:

A. File a civil action against the owner. The costs, including reasonable attorney fees, to create and prosecute an action to collect expenses following such a civil complaint, shall also be recovered from the owners; or
B. Assess a special tax against the land on which the waste water disposal unit is located for the amount of the expenses. This amount shall be included in the next annual warrant to the tax collector of the municipality for collection in the same manner as other state, county and municipal taxes are collected. Interest as determined by the municipality pursuant to Title 36, section 505, in the year in which the special tax is assessed, shall accrue on all unpaid balances of any special tax beginning on the 60th day after the day of commitment of the special tax to the collector. The interest shall be added to and become part of the tax.

The Department's Role in the remedy of a malfunctioning subsurface wastewater disposal system per Title 30-A §4212

1. Administration of rules. The department is responsible for ensuring the proper administration of the subsurface wastewater disposal rules and permitting processes by municipalities. **The department shall assist municipalities in complying with this subchapter and with section 3428.**

2. Review. The department shall review the administration of subsurface wastewater disposal rules and laws in each municipality for compliance with this subchapter and with section 3428. This review must be made on a regular basis and may be made in response to a written complaint from any person as necessary. The department shall inspect the municipality's records and discuss the administration of the program with the local plumbing inspector. The local plumbing inspector shall be available during the department's review and shall cooperate in providing all necessary information. The department shall report the results of its review in writing to the municipality and, when applicable, to the complainant. The written notice must set forth the department's findings of whether the municipality is in compliance with this subchapter and section 3428.

The Department's Role in the remedy of a malfunctioning subsurface wastewater disposal system per Title 30-A §4212

3**. Violation; penalty.** If after review the department finds any violation of this subchapter or section 3428, it shall **notify the municipality that it has 30 days in which to take enforcement action** and shall specify what action must be taken in order to achieve compliance.

The municipality shall file a plan acceptable to the department setting forth how it will attain compliance.

The department shall notify the municipality that it will **review the municipality for compliance within 60 days of accepting the plan** and shall conduct that review.

Any municipality which fails to file an acceptable plan with the department or which **remains in violation at the expiration of the 60-day period is subject to a civil penalty of at least $500.**

The department shall enforce this section in any court of competent jurisdiction.

Every 30-day period that a municipality remains in violation after review and notification constitutes a separate offense.

ISSUES / COMPLAINTS

Malfunctioning system: A system that is not operating or is not functioning properly, based on the following indicators: ponding or outbreak of wastewater or septic tank effluent onto the surface of the ground; seepage of wastewater or septic tank effluent into parts of buildings below ground; back-up of wastewater into the building being served that is not caused by a physical blockage of the internal plumbing; or contamination of nearby water wells or waterbodies/courses.

Malfunction

Possible Malfunction

WHEN DOING INSPECTIONS

BE PREPARED TO SEE ANYTHING

Campgrounds


VALTERRA


Corsair

Why can’t I hook up to my septic?

TOMHEGAN
$30 MILLION HOME


DO NOT
DRIVE ON
RUNWAY
GO AROUND
HORNE
CONSTRUCTION
AUTHORIZED
PERSONNEL ONLY
PRIVATE PROPERTY
NO TRESPASSING
ABSOLUTELY NO VISITORS
HORNE
CONSTRUCTION
FOR CONSTRUCTION EMPLOYMENT INFORMATION
CALL (207) 534-7771 - DO NOT APPLY IN PERSON
HORNE
CONSTRUCTION


FIRE
EXTINGUISHER


HEATING RETURN
HEATING SUPPLY
SNOWMELT RETURN
SNOWMELT SUPPLY
HEATING RETURN
HEATING SUPPLY
HEATING SUPPLY
SNOWMELT SUPPLY


SNOWMELT RETURN
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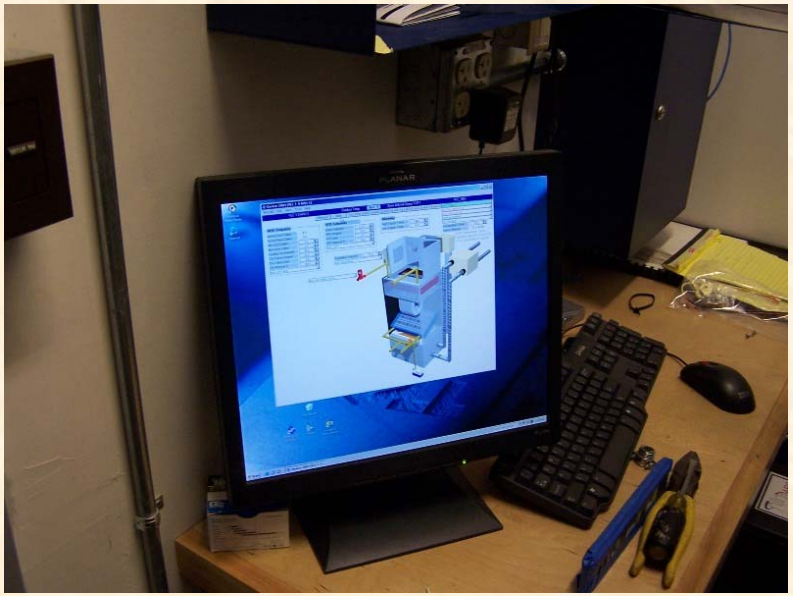
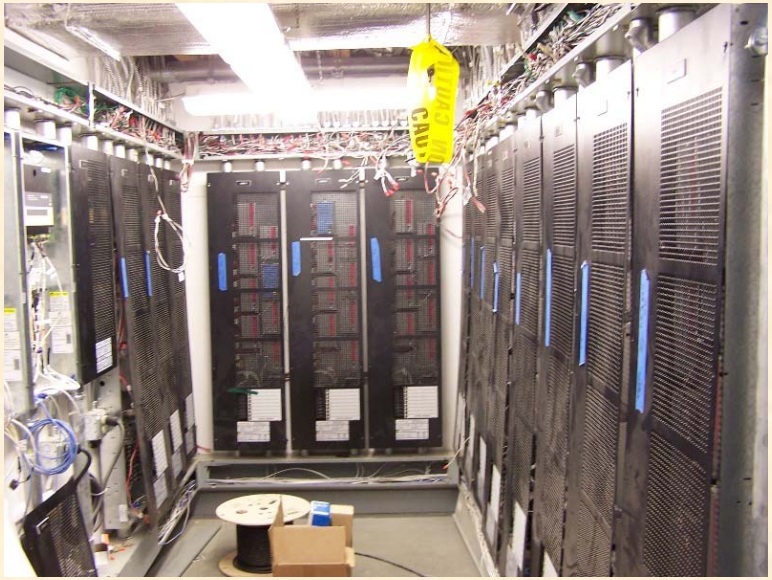
HEATING SUPPLY
SNOWMELT SUPPLY


PLANAR


SHADE
PENDANTS
TRACKS
PERIMETER
LAMPS
FIREPLACE
BEDROOM
HALL


CAUTION

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Brent Lawson 592-7376
brent.lawson@maine.gov

Vacant, State Site Evaluator

http://www.maine.gov/dhhs/mecdc/environmental-health/plumb/index.htm