SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

PROPERTY LOCATION

City, Town, or Location	Augusta
Street or Road	292 Mud Mills Road
Subdivision, Lot #	

>> Caution: Permit Required – Attach In Space Below <<

AUGUSTA PERMIT # 5649 DOWN COPY
Date Permit Issued: 9/23/05 $ 100.00 FEE ☐ Double Fee Charged
Local Plumbing Inspector Signature: Gary R. Lustin L.P.I. # 850

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Jackson, Paul ☑ Owner ☐ Applicant

Mailing Address of ☑ Owner ☐ Applicant: 100 High St, Dexter ME 04930

Daytime Tel. #: 924-7698

Municipal Tax Map # 3560 / 12 Lot # 281 / 133

Owner or Applicant Statement

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

Paul Jackson 9-12-05
Signature of Owner or Applicant — Date

Caution: Inspections Required

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

Local Plumbing Inspector Signature — (1st) Date Approved — (2nd) Date Approved

PERMIT INFORMATION

TYPE OF APPLICATION
1. ☑ First Time System
2. ☐ Replacement System
   Type Replaced: _____
   Year Installed: _____
3. ☐ Expanded System
   a. ☐ One-time exempted
   b. ☐ Non-exempted
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 Approval

DISPOSAL SYSTEM COMPONENT(S)
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
~12 acres ☐ sq. ft. ☑ acres

SHORELAND ZONING
☐ Yes ☑ No

DISPOSAL SYSTEM TO SERVE
1. ☑ Single Family Dwelling Unit, No. of Bedrooms: 4
2. ☐ Multiple Family Dwelling, No. of Units: _____
3. ☐ Other: Actually Two Mobile Homes SPECIFY w/ 2 BR ea

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

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
1. ☐ Concrete
   a. ☐ Regular
   b. ☐ Low Profile
   } Select to suit site conditions
2. ☐ Plastic
3. ☐ Other: _____
CAPACITY 1000 gallons

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 250 ☐ sq. ft. ☑ lin. ft.

GARBAGE DISPOSAL UNIT
1. ☑ No 3. ☐ Maybe
2. ☐ Yes >> Specify one below:
   a. ☐ Multi-compartment Tank
   b. ☐ Tanks in Series
   c. ☐ Increase in Tank Capacity
   d. ☐ Filter on Tank Outlet

DESIGN FLOW
360 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
3 / C / 1
at Observation Hole # 1
Depth 22" Elevation -57"
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

PUMPING
1. ☐ Not Required
2. ☑ May Be Required
3. ☐ Required >> Specify only for engineered or experimental systems:
DOSE: 50 gallons

SITE EVALUATOR STATEMENT

I Certify that on 5/13/05 (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).

Harrison Bisphan — Site Evaluator Signature
201 — SE #
5/22/05 — Date
Harrison Bisphan — Site Evaluator Name Printed
547-3005 — Telephone #

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Division of Health Engineering
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Town, City, Plantation: Augusta | Street, Road, Subdivision: Mud Mill Rd | Owner's Name: Paul Jackson

SITE PLAN

Scale 1" = _____ Ft. or as shown

See attached pg 2a of 3

SITE LOCATION PLAN

(Map from Maine Atlas recommended)

See attached pg 2a of 3

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

Observation Hole 1 ☑ Test Pit ☐ Boring

4 " Depth of Organic Horizon Above Mineral Soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Very Stony SL	Loose	Very Dk Br	
10			Dk Or	
20		Friable	Med Yl Br	
30		Firm	Lt Yl Br	Faint
40				
50				

Soil Classification	Slope	Limiting Factor	Ground Water / Restrictive Layer / Bedrock / Pit Depth
3 Profile / C Condition	~16 %	23"	☑ Ground Water ☑ Restrictive Layer ☐ Bedrock ☐ Pit Depth

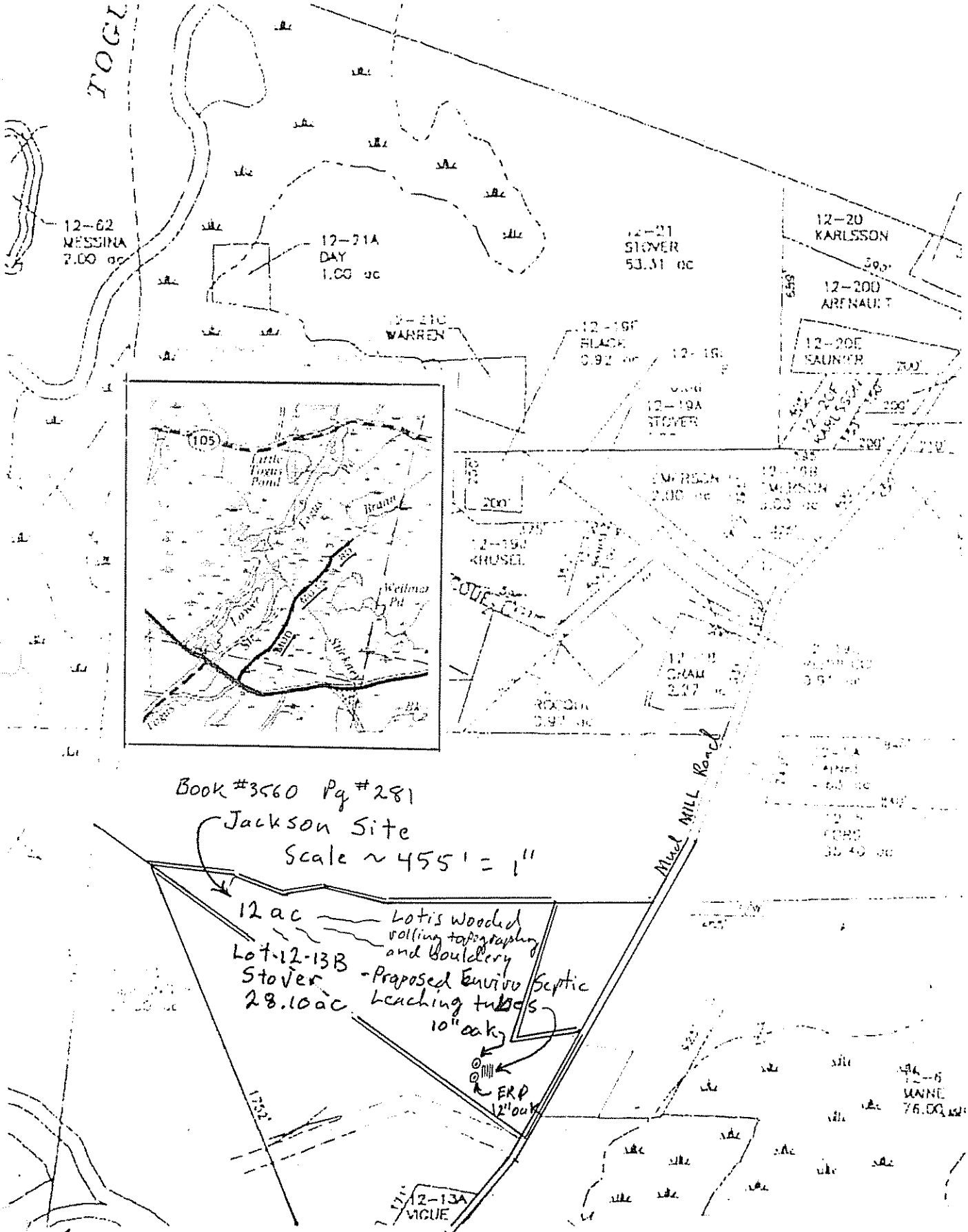
Observation Hole 2 ☑ Test Pit ☐ Boring

4 " Depth of Organic Horizon Above Mineral Soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Very Stony SL	Loose	Very Dk Br	
10			Dk Or	
20		Friable	Med Yl Br	
30		Firm	Lt Yl Br	Faint
40				
50				

Soil Classification	Slope	Limiting Factor	Ground Water / Restrictive Layer / Bedrock / Pit Depth
3 Profile / C Condition	~20 %	26"	☑ Ground Water ☑ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Site Evaluator Signature | 201 SE • | 5/22/05 Date



DB #201

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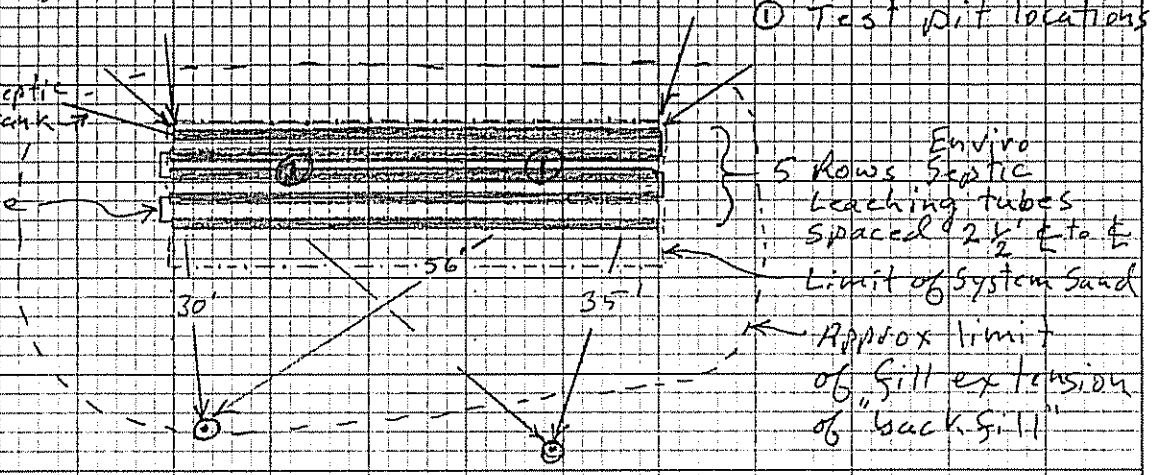
Town, City, Plantation	Street, Road, Subdivision	Owner's Name
Augusta	Mud Mill Rd	Paul Jackson

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.

All Construction to be in accordance with Maine Subsurface Wastewater Disposal Rules



- Septic Tank to be minimum of 8' from foundations or mobile home and minimum of 100' from wells.
- Leaching Tubes to be minimum of 20' from foundations, 15' from mobile home and minimum of 100' from wells

See Attached Pgs 3a 3b & 3c +3d of 3 for additional requirements

FILL REQUIREMENTS

Depth of Fill (Upslope) ~12"
Depth of Fill (Downslope) Varies ~18"+

CONSTRUCTION ELEVATIONS

Finished Grade Elevation at row 1
Top of Distribution Pipe or Proprietary Device -20"
Bottom of Disposal Area 56" below

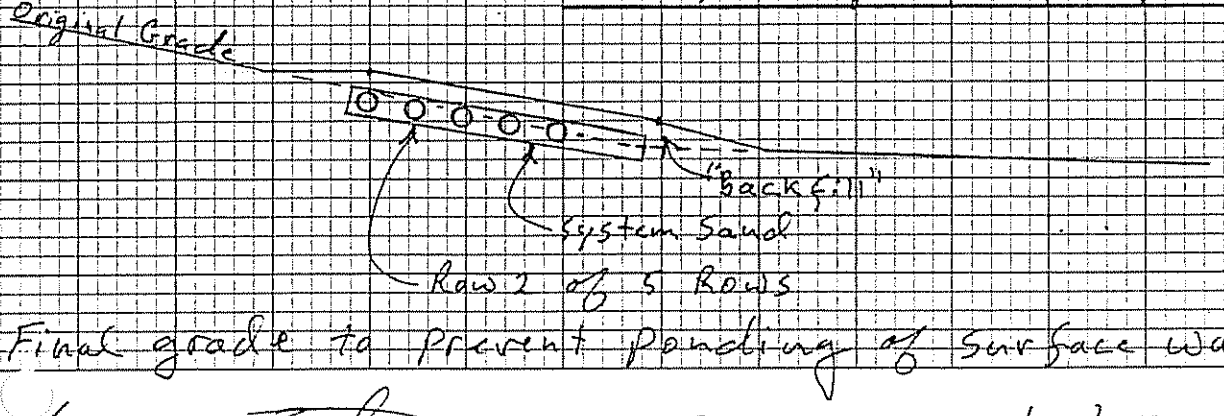
ELEVATION REFERENCE POINT

Location & Description is red slagged nail in tree (oak) 54" above base of tree
Reference Elevation 0'00"

DISPOSAL AREA CROSS SECTION

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

Row #	1	2	3	4	5
Top of leaching tube	-30"	-35"	-40"	-45"	-50"
Bottom of leaching tube	-42"	-47"	-52"	-57"	-62"



Final grade to prevent ponding of surface water

Harrison Bayley
Site Evaluator Signature

201
SE #

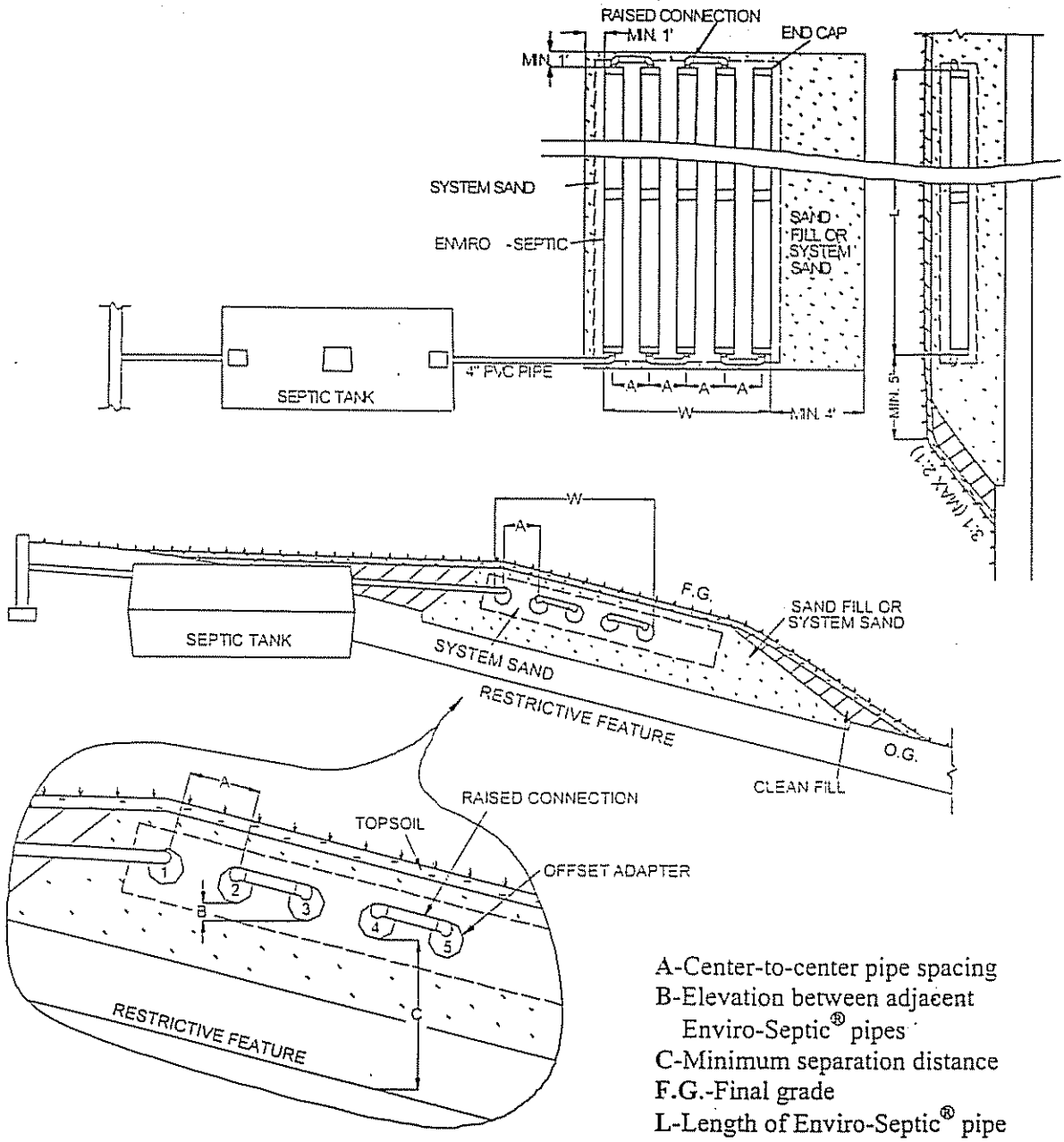
5/22/05
Date

Augusta Mud Mill Rd Jackson

Basic Serial Systems – Level In-Ground, Level Raised, In-Ground Sloping, and Raised Sloping, Continued

Raised sloping

Here are top/side and end views of a raised sloping system. This system has a slope greater than 10%.



A-Center-to-center pipe spacing
B-Elevation between adjacent Enviro-Septic® pipes
C-Minimum separation distance
F.G.-Final grade
L-Length of Enviro-Septic® pipe
O.G.-Original grade
W-Width of Enviro-Septic® pipe

Note: Tank location may vary.

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Augusta Mud Mill Rd Jackson

Section E
Sand and Fill Requirements

Introduction

This page describes the sand and fill requirements for the Enviro-Septic® Leaching System.

System sand

All configurations of Enviro-Septic® require a minimum of 6" of system sand surrounding the circumference of the pipe. This sand, typically gravelly coarse sand, must adhere to the following percentage and quality restrictions.

Percentage Restrictions
35% or less of the total sand may be gravel.
40%-90% of the total sand is to be coarse and very coarse sand.
Gravel Quality Restrictions
No gravel is to exceed ¾" in diameter.
No gravel is smaller than 2mm/.0787" in diameter. (It must not pass through a #10 sieve.)
Coarse Sand Quality Restrictions
No coarse sand is smaller than 0.5mm/.0196" in diameter. (It must not pass through a #35 sieve.)
Fines Quality Restrictions
No more than 2% of the total sand may pass through a #200 sieve.

ASTM Standard: C-33 (concrete sand) meets the above requirements.

Sand fill and clean fill

Sand fill is the material used to surround the system sand. ME Rules 904.2 Copy Attached

Note: System sand may also be used as sand fill.

Clean fill is the material used to complete the system. Clean Permeable Fill Materials

Reference: See "Sand Fill and Clean Fill Requirements" in your State attachment.

Raised system fill extensions

Raised systems require fill extensions.

Reference: See "Raised systems fill extensions" in your State attachment.

Perimeter sand requirements

Systems sloping 10% or less require the system sand and sand fill area to extend a minimum of 1.0' around the perimeter of the Enviro-Septic® pipe.

Systems sloping greater than 10% require the system sand and sand fill area to extend a minimum of 1.0' on three sides and 4.0' beyond the Enviro-Septic® pipe on the down-slope side.

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CHAPTER 8

DISPOSAL FIELD CONSTRUCTION TECHNIQUES

SECTION 800.0 GENERAL

800.1 Intent: This Chapter governs the installation of disposal fields.

800.2 General: On sites with fine soil textures, excavations that expose the bottom and sidewall area of the disposal field shall 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.

800.3 Dig Safe Law: The "Dig Safe Law" 23 MRSA §3360-A(D) places certain notification requirements on any person doing excavations. Excavation is broadly defined to mean any operation in which earth, rock or other material on or below the ground is moved or otherwise displaced by means of power tools, power equipment or explosives and including grading, trenching, digging, ditching, drilling, auguring, tunneling, scraping and cable or pipe driving, except tilling of the soil and gardening or agricultural purposes. Tel.: 1-888-225-4977.

SECTION 801.0 SITE PREPARATION

801.1 Site preparation requirements: Prior to the placement of any backfill material, the ground surface shall be prepared as follows:

801.2 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 1504.0.

801.3 Clearing: Vegetation shall be cut and removed from the area where backfill material is to be placed.

801.4 Scarify the site: Where possible, the area under the disposal field and backfill extensions shall be plowed or disked to produce a thoroughly roughened surface. Plowing shall be done parallel to the topographic contour in such a direction that each plow furrow will be thrown up-slope. The soil should be broken up to a depth of 6 to 8 inches. Alternatively, a rototiller or the teeth of a backhoe may be used.

801.5 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, disking, or rototilling) into the original soil to form a transitional horizon.

801.6 Fill large holes: If large holes are left as a result of stump and/or stone removal, these holes shall be filled with suitable backfill material that meets the requirements of Subsection 803.2.

801.7 Surface water diversion: Surface water shall be diverted away from the disposal field site.

SECTION 802.0 EXCAVATION

802.1 Excavation requirements: Any excavation required for the installation of a disposal field shall comply with all the requirements in this Section.

802.2 Bottom of disposal field: The bottom of each disposal field shall be installed at the elevation specified on the permit. It shall be maintained to a level grade no greater than 2 inches within 100 feet. Note: The bottom of a disposal field serves as the final stage of the distribution network.

802.3 Avoid unnecessary compaction: Excavation shall be carried out in a manner that will avoid unnecessary compaction of both sidewalls and bottom area. Heavy equipment, especially rubber tired vehicles such as front-end loaders, should not be driven over the exposed bottom of the disposal field. Excavation should be carried out, when possible, by a back-hoe operating from outside the perimeter of the previously excavated portions of the disposal fields.

802.4 Reopen smeared or compacted bottom or sidewall surfaces: If any portion of the bottom or sidewalls becomes smeared or compacted, that portion must be scarified to reopen soil pores. Rototilling may be necessary to reach the limit of compacted soil depth.

802.5 Weather conditions: Work should be scheduled so that excavated areas are not exposed to rainfall or wind-blown silt. Any loose soil or debris that is washed or otherwise deposited within the excavation shall be carefully removed prior to backfilling. Additionally, disposal fields should not be installed in frozen ground or when the ambient air temperature is below freezing, especially if construction will take place over several days.

SECTION 803.0 INSTALLATION

803.1 Construction: The installer 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 plan prepared by the site evaluator, and with any special engineering design requirements approved or required by the Department under Chapter 19.

803.2 Soil and backfill material: The installer of the system shall make certain that the construction and installation are performed without adversely affecting the capacity of the soil or backfill material to adequately absorb or treat the septic tank effluent.

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Augusta

Mud Mill Rd. Jackson

SECTION 804.0 BACKFILL PLACEMENT FOR DISPOSAL AREAS INCLUDING FILL EXTENSIONS

804.1 General: Selection and placement of backfill shall comply with the requirements of this section.

804.2 Backfill standards: The backfill material shall be a coarse sand to a gravelly coarse sand which meets the following requirements:

804.2.1 *Coarse* fragments: The upper limit of *coarse fragments shall be* 3 inches in diameter and approximately 5% by volume;

804.2.2 Textural analysis: The soil texture for backfill, unless otherwise authorized by this code, is coarse sand to gravelly coarse sand with approximately 4 to 8% of the sand, silt and clay fraction passing a #200 sieve. The upper limit of clay sized particles in the sand, silt, and clay fraction shall be approximately 2%. The backfill shall contain approximately 15% to 30% (by weight) coarse fragments (gravel 2 mm to 3 inches).

804.2.3 Field Determination of backfill: Due to the difficulty of obtaining sieve analyses and the variability of backfill material, the following procedures can be used in the field to determine the suitability of backfill material. The backfill is suitable if the soil texture is loose single grains, the individual sand grains can be readily seen (similar to salt or sugar grains) and felt, and the following conditions are observed: If squeezed in the hand when dry, it will fall apart when the pressure is released but has enough fines to stain the lines in the palm of the hand; or, if squeezed when moist, it will form a cast that will crumble when touched and bears very careful handling; and it does not form a ribbon between the thumb and forefinger but has enough fines to stain the lines in the palm of the hand.

804.2.4 Coarser material beneath or beside disposal system: Coarser material may be placed immediately adjacent to the disposal field provided that the rest of the backfill material meets the requirements of Subsection 804.2. If coarser material is used beneath the disposal field it shall be considered part of the disposal field for determining the separation between the limiting factor and the bottom of the disposal system.

804.2.5 Fill material placement above disposal system: Immediately above the filter fabric, hay or proprietary devices, fill is required as specified on the plans. It shall be a minimum of 8 inches in thickness (including cover material).

804.2.6 Cover material: Immediately above the backfill or fill material, at least 4" of soil or soil and soil amendment mix, suitable for establishment of a good vegetative cover, shall be placed over the entire disturbed soil area, including fill extensions.

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