20106005

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, SHS 11
(207) 287-5689 FAX (207) 287-3165

PROPERTY LOCATION

City, Town, or Plantation	PORTLAND
Street or Road	42 PENRITH ROAD
Subdivision, Lot #	

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	N/F HEWES RICHARD & MARGARET (Owner)
Mailing Address of ☐ Owner ■ Applicant	ERIC GRIFFIN 54 KENWOOD STREET PORTLAND, ME 04102
Daytime Tel. #	

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

PORTLAND
Date Permit Issued: 6/22/10
PERMIT # 11317 STATE COPY
$ 100 ☐ If Double Fee Charged
L.P.I. # 360
Local Plumbing Inspector Signature

Municipal Tax Map # 219 Lot # A-28

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/Applicant — Date: 6-2-10

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 (Check only one item)

1. ☐ First Time System
2. ■ Replacement System
   Type Replaced: ____
   Year Installed: PRE-1974
3. ☐ Expanded System
4. ☐ Experimental System

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

DISPOSAL SYSTEM COMPONENTS

1. ☐ Complete Non-Engineered System
2. ☐ Primitive System (greywater & pit toilet)
3. ☐ Pit Privy
5. ☐ Holding Tank, ____ Gallons
6. ■ Non-Engineered Disposal Field (only)
7. ☐ Greywater System
8. ☐ Complete Engineered System (2000gpd+)
10. ☐ Engineered Disposal Field (only)
11. ☐ Pre-treatment, specify:

(Item numbers are used for data entry purposes)

SIZE OF PROPERTY

22,500 ■ sq. ft. ☐ acres

DISPOSAL SYSTEM TO SERVE

1. ■ Single Family Dwelling Unit, No. of Bedrooms: 4
2. ☐ Multiple Family Dwelling, No of Units: ____
3. ☐ Other: ____ (specify)

SHORELAND ZONING

☐ Yes ■ No

TYPE OF WATER SUPPLY

1. ☐ Drilled Well 2. ☐ Dug Well 3 ☐ Spring
4. ■ Public 5. ☐ Other:

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK EXISTING

1. ■ Concrete
   a. ■ Regular
   b. ☐ Low Profile
2. ☐ Plastic
3. ☐ Other: ____

CAPACITY 1500 gallons
CHECK CONDITION OF TANK AND BAFFLES, REPLACE IF NECESSARY

DISPOSAL FIELD TYPE & SIZE

1. ☐ Stone Bed ☐ 2. Stone Trench
3. ■ Proprietary Device
   a. ☐ Cluster array c. ■ Linear
   b. ■ Regular d ☐ H-20 loaded
4. ☐ Other:

SIZE 1296 ■ sq. ft. ☐ lin. ft.
27 ELJEN IN-DRAIN UNITS

GARBAGE DISPOSAL UNIT

1. ☐ No 2. ■ Yes

If Yes, Specify one below:

a. ☐ Multi-compartment tank
b. ☐ _____ tonks in series
c. ■ Increase in tank capacity
d. ☐ Filter on tank outlet RECOMMENDED

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 -

4 BEDROOMS AT 90 GALLONS PER DAY EACH

3. ☐ Section 503.0 (meter readings)
ATTACH WATER-METER DATA

SOIL DATA & DESIGN CLASS

PROFILE / CONDITION / DESIGN
12 / C / 1
(7 C CONDITIONS)

AT Observation Hole # TP 1
Depth 26 " Elevation -61 "
OF MOST LIMITING SOIL FACTOR

DISPOSAL FIELD SIZING

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

(Item numbers are used for data entry purposes)

EFFLUENT/EJECTOR PUMP

1. ☐ Not required
2. ☐ Required

SEE SEPTIC TANK NOTE ON PAGE 3

Specify only for engineered systems:
DOSE: ____ Gallons

LATITUDE AND LONGITUDE

at center of disposal area
Lat. N43 d 39 m 38.9 s
Lon. W70 d 18 m 50.5 s
If g.p.s., state margin of error ____

SITE EVALUATOR STATEMENT

I Certify that on 5/6/10 (date) I completed a site evaluation on this property and state that the data recorded is accurate and that the proposed sytem is in compliance with the Subsurface Wastewater Disposal Rules (10-144A CMR 241).

RECEIVED
JUN - 4 2010
Dept. of Building Inspections
City of Portland Maine

Albert Frick — Site Evaluator Signature
163 — SE #
5/11/10 — Date

ALBERT FRICK — Site Evaluator Name Printed
(207) 839-5563 — Telephone Number
AFA@MAINERR.COM — E-mail Address

ALBERT FRICK ASSOCIATES – 85A COUNTY ROAD ROAD GORHAM, MAINE 04038 – (207) 839-5563

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

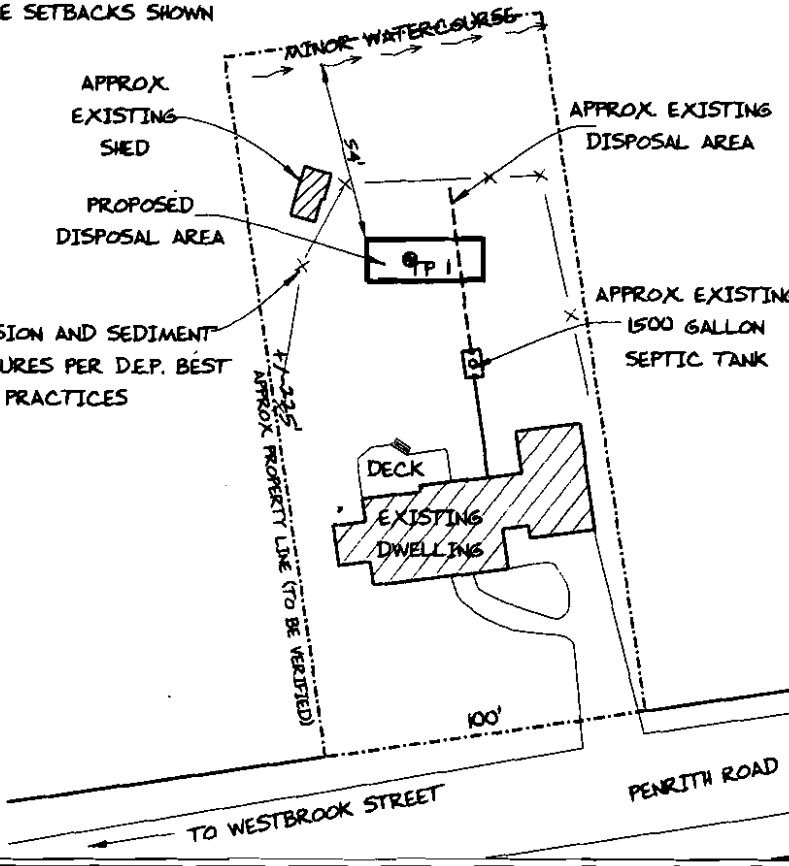
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept of Health & Human Services
Division of Environmental Health , SHS 11
(207) 287-5689 FAX (207) 287-3165

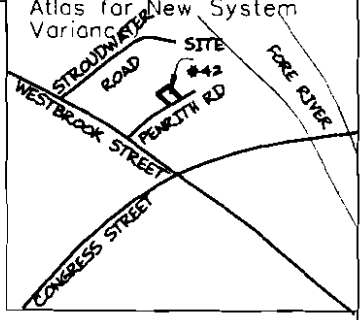
Town, City, Plantation	Street, Road Subdivision	Owner's Name
PORTLAND	42 PENRITH ROAD	N/F HEWES (FOR ERIC GRIFFIN)

PROPERTY INFORMATION PER TOWN TAX MAP AND AERIAL PHOTOGRAPHY, VERIFY TO ASSURE SETBACKS SHOWN

SITE PLAN Scale 1" = 60 Ft. or as shown



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



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

Observation Hole TP 1 ■ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)

	Texture	Consistency	Color	Mottling
0	SANDY LOAM (FILL)		DARK BROWN	
10	LOAMY SAND (FILL)	FRIABLE		
20	COARSE SAND (FILL)		LIGHT YELLOW BROWN	
30				FEW, DISTINCT ΔΔΔ FREE WATER
40	VERY FINE SANDY LOAM AND SILT	FIRM	OLIVE	COMMON; DISTINCT
50				

Soil Classification		Slope	Limiting Factor	Ground Water / Restrictive Layer / Bedrock
12 (Profile)	C (Condition)	14 %	26 "	■ Ground Water ☐ Restrictive Layer ☐ Bedrock

(7 C conditions)

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		Slope	Limiting Factor	Ground Water / Restrictive Layer / Bedrock
Profile	Condition	____ %	"	☐ Ground Water ☐ Restrictive Layer ☐ Bedrock

Albert Frick
Site Evaluator Signature

163
SE #

5/11/10
Date

ALBERT FRICK ASSOCIATES - 85A COUNTY ROAD ROAD GORHAM, MAINE 04038 - (207) 839-5563

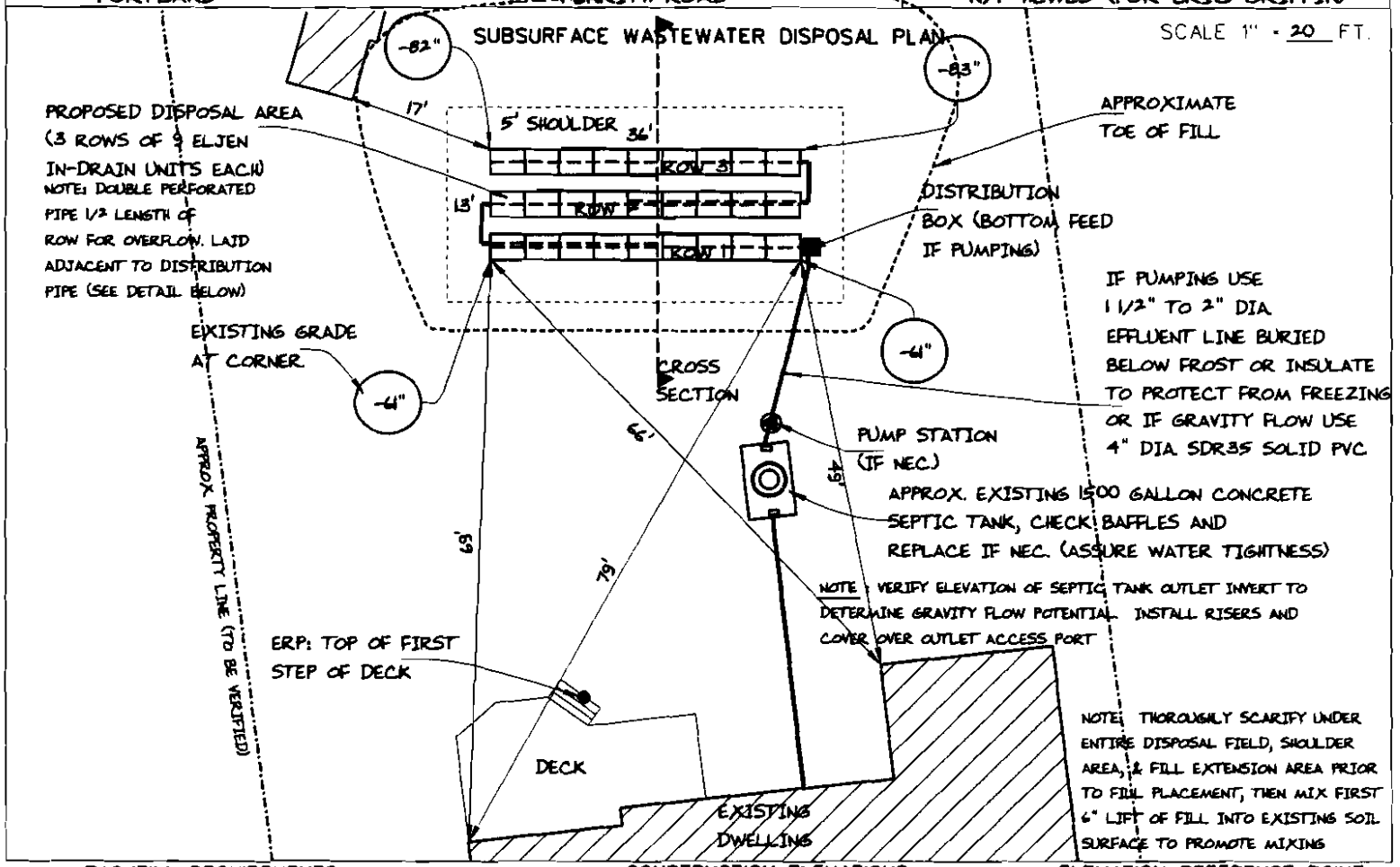
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept of Health & Human Services
Division of Environmental Health , SHS 11
(207) 287-5689 FAX (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
PORTLAND	42 PENRITH ROAD	N/F HEWES (FOR ERIC GRIFFIN)

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.



BACKFILL REQUIREMENTS

Depth of Backfill (Upslope) : 16"
Depth of Backfill (Downslope) : 17" - 18"
DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

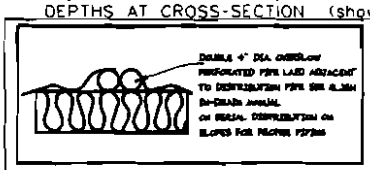
Finished Grade Elevation
Top of Distribution Pipe or Proprietary Device
Bottom of Disposal Field

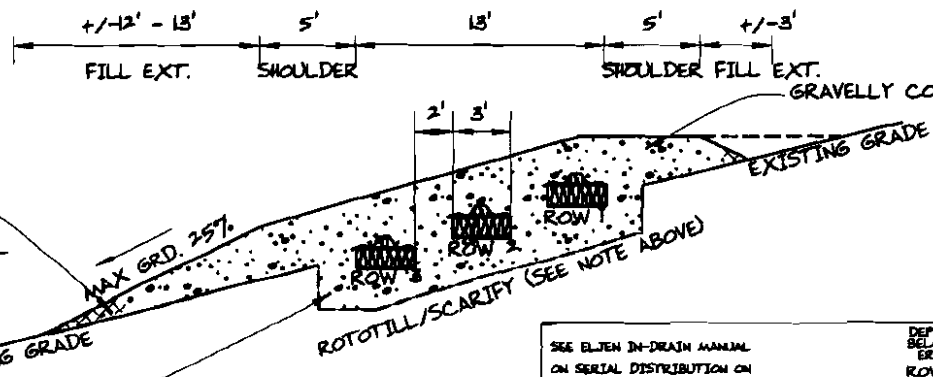
ELEVATION REFERENCE POINT

SEE DETAIL BELOW
Location & Description TOP OF FIRST STEP OF DECK
Reference Elevation is: 0.0" or _____

DISPOSAL FIELD CROSS SECTION

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





REMOVE ALL PORTIONS OF EXISTING DISPOSAL AREA ENCOUNTERED TO A MINIMUM DEPTH OF 2' BENEATH AND 5' AROUND PROPOSED DISPOSAL AREA AND REPLACE WITH CLEAN GRAVELLY COARSE SAND FILL

SEE ELJEN IN-DRAIN MANUAL ON SERIAL DISTRIBUTION ON SLOPES FOR PROPER PIPING	DEPTH BELOW ERP ROW 1	2	3
CLEAN FILL	-45"	-55"	-65"
GEOTEXTILE FABRIC	-57"	-67"	-77"
OVER 4" DIA. PERF. PIPE	-61"	-71"	-81"
ELJEN IN-DRAIN UNIT	-68"	-78"	-88"
	-74"	-84"	-94"

Albert Frick
Site Evaluator Signature

163
SE #

5/11/10
Date

ALBERT FRICK ASSOCIATES - 95A COUNTY ROAD ROAD GORHAM, MAINE 04038 - (207) 839-5563

Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators
95A County Road Gorham, Maine 04038
(207) 839-5563

PORTLAND	42 PENRITH ROAD	N/F HEWES (FOR ERIC GRIFFIN)
TOWN	LOCATION	APPLICANT'S NAME

1) The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Department of Human Services pursuant to 22 M.R.S.A. § 42 (the "Rules") are incorporated herein by reference and made a part of this application and shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system Installer should contact Albert Frick Associates, Inc. 839-5563, if there are any questions concerning materials, procedures or designs. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the Rules and with all state and municipal laws and ordinances pertaining to the permitting, inspection and construction of subsurface wastewater disposal systems.

2) This application is intended to represent facts pertinent to the Rules only. It shall be the responsibility of the owner/applicant, system Installer and/or building contractor to determine compliance with and to obtain permits under all applicable local, state and/or federal laws and regulations (including, without limitation, Natural Resources Protection Act, wetland regulations, zoning ordinances, subdivision regulations, Site Location of Development Act and minimum lot size laws) before installing this system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations. Prior to the commencement of construction/installation, the local plumbing inspector or Code Enforcement Officer shall inform the owner/applicant and Albert Frick Associates, Inc of any local ordinances which are more restrictive than the Rules in order that the design may be amended. All designs are subject to review by local, state and/or federal authorities. Albert Frick Associates, Inc.'s liability shall be limited to revisions required by regulatory agencies pursuant to laws or regulations in effect at the time of preparation of this application.

3) All information shown on this application relating to property lines, well locations, subsurface structures and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based solely upon information provided by the owner/applicant and has been relied upon by Albert Frick Associates, Inc. in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties but not readily visible above grade should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4) Installation of a garbage (grinder) disposal is not recommended. If one is installed, an additional 1000 gallon septic tank or a septic tank filter shall be connected in series to the proposed septic tank. Risers and covers should be installed over the septic tank outlet to allow for easy maintenance.

5) The system user shall avoid introducing kitchen grease or fats into this system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life.

6) The septic tank should be pumped within two years of installation and subsequently as recommended by the pump service, but in no event should the septic tank be pumped less often than every three years. All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion.

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

PORTLAND	42 PENRITH ROAD	N/F HEWES (FOR ERIC GRIFFIN)
TOWN	LOCATION	APPLICANT'S NAME

7) The actual water flow or number of bedrooms shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed. If the system is supplied by public water or a private service with a water meter, the water consumption per period should be divided by the number of days to calculate the average daily water consumption [water usage (cu. ft.) x 7.48 cu. ft. (gallons per cu. ft.) ÷ (# of days in period) = gals per day].

8) The general minimum setbacks between a well and septic system serving a single family residence is 100-300 feet, unless the local municipality has a more stringent requirement. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9) When a gravity system is proposed: BEFORE CONSTRUCTION/INSTALLATION BEGINS, the system installer or building contractor shall review the elevations of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum slope requirement. In gravity systems, the invert of the septic tank(s) outlet(s) shall be at least 4 inches above the invert of the distribution box outlet at the disposal area.

10) When an effluent pump is required: Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and lid at or above grade. An alarm device warning of a pump failure shall be installed. Also, when pumping is required of a chamber system, install a "T" connection in the distribution box and place 3 inches of stone or a splash plate in the first chamber. Insulate gravity pipes, pump lines and the distribution box as necessary to prevent freezing.

11) On all systems, remove the vegetation, organic duff and old fill material from under the disposal area and any fill extension. On sites where the proposed system is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal and fill extension area to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper that 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or differential setting). Do not use wheeled equipment on the scarified soil area until after 12 inches of fill is in place. Keep equipment off proprietary devices. Divert the surface water away from the disposal area by ditching or shallow landscape swales.

12) Unless noted otherwise, fill shall be gravelly coarse sand which contains no more that 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process.

13) Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.

14) Seed all filled and disturbed surfaces with perennial grass seed, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover system. Woody trees or shrubs are not permitted on the disposal area or fill extensions.

15) If an advanced wastewater treatment unit is part of the design, the system shall be operated and maintained per manufacturer's specifications.

Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators
95A County Road Gorham, Maine 04038
(207) 839-5563