

2010 6014

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Name: Department of Human Services
Division of Health Engineering, Station 10, 9-5
(207) 287-5672 Fax: (207) 287-4112

PROPERTY LOCATION

City, Town, or Plantation: **PORTLAND, GREAT DIAMOND IS.**

Street or Road: **1 BAY AVENUE**

Subdiv. or Lot #:

>> **Caution: Permit Required - Attach in Space Below** <<

PORTLAND PERMIT # **11476 TOWN COPY**

Local Plumbing Inspector Signature: *[Signature]*

Local Planning Inspector Signature: *[Signature]*

Municipal Tax Map # **83A**, Lot # **1**

OWNER/APPLICANT INFORMATION

Name (last, first, MI): **HARRIS PETER & DIANA** Owner

Mailing Address of: **JOHN HARRIS**

40 ANDERSON ROAD
WINDHAM, ME 04062

Daytime Tel # **415-3299**

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: *[Signature]* Date: **6/22/10**

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: _____ Date Approved: _____

PERMIT INFORMATION RECEIVED

TYPE OF APPLICATION

1. First Time System

2. Replacement System

Type Replaced: **TRENCH**

Year Installed: **UNKNOWN**

3. Expanded System

a. Minor Expansion

b. Major Expansion

4. Experimental System

5. Seasonal Conversion

SIZE OF PROPERTY

.5 ACRES 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 Approval

DISPOSAL SYSTEM TO SERVE

1. Single Family Dwelling Unit, No. of Bedrooms: **2**

2. Multiple Family Dwelling, No. of Units: _____

3. Other: _____

Current Use: Seasonal Year Round Undeveloped

DISPOSAL SYSTEM COMPONENTS

1. Complete Non-Engineered System

2. Primitive System (graywater & oil to let)

3. Alternative Toilet, specify: _____

4. Engineered Treatment Tank (only if holding tank, _____, sorons)

5. Non-Engineered Disposal Field (only)

6. Separated Laundry System

7. Complete Engineered System (2000 gpd)

8. Engineered Treatment Tank (only)

9. Engineered Disposal Field (only)

10. Pre-treatment, specify: _____

11. 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

2. Plastic

3. Other: _____

CAPACITY: **1000** gallons

SOIL DATA & DESIGN CLASS

PROFILE: **9** CONDITION: **DI** DESIGN: **4**

AT Observation Hole # **TP 1**

Depth: **10** Elevation: **-58**

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 d. H-20 loaded

4. Other: _____

SIZE: **960** sq. ft. lin. ft.

20 ELTEN IN-DRAIN UNITS

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

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

EFFLUENT/EJECTOR PUMP

1. Not required

2. May be required

3. Required

Specify only for engineered systems

DOSE: _____ Gallons

DESIGN FLOW

180 gallons per day

BASED ON

1. Table 501.1 (dwelling unit)

2. Table 501.2 (other facilities)

SHOW CALCULATIONS for other facilities:

2 BEDROOMS AT 90 GALLONS PER DAY EACH = 180 GPD

3. Section 503.0 (meter readings)

ATTACH WATER-METER DATA

LATITUDE AND LONGITUDE

at center of disposal area

Lat. **43** d **40** m **24** s

Lon. **70** d **11** m **49** s

(1 g.s. state margin of error)

SITE EVALUATOR STATEMENT

I certify that on **6/10/10** (date) I completed a site evaluation at this property and state that the data reported is accurate and that the proposed system is in compliance with the Subsurface Wastewater Disposal Rules 110-144A CMR 2411.

Site Evaluator Signature: *Albert Frick* SE # **K3** Date: **6/22/2010**

Albert Frick Telephone Number: **(207) 838-5563** E-mail Address: **AFA@MAINERR.COM**

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 30, SHS
(207) 287-5672 Fax (207) 287-4172

Town, City, Plantation

PORTLAND, GREAT DIAMOND IS.

Street, Road Subdivision

1 BAY AVENUE

Owner's Name

PETER & DIANA HARRIS

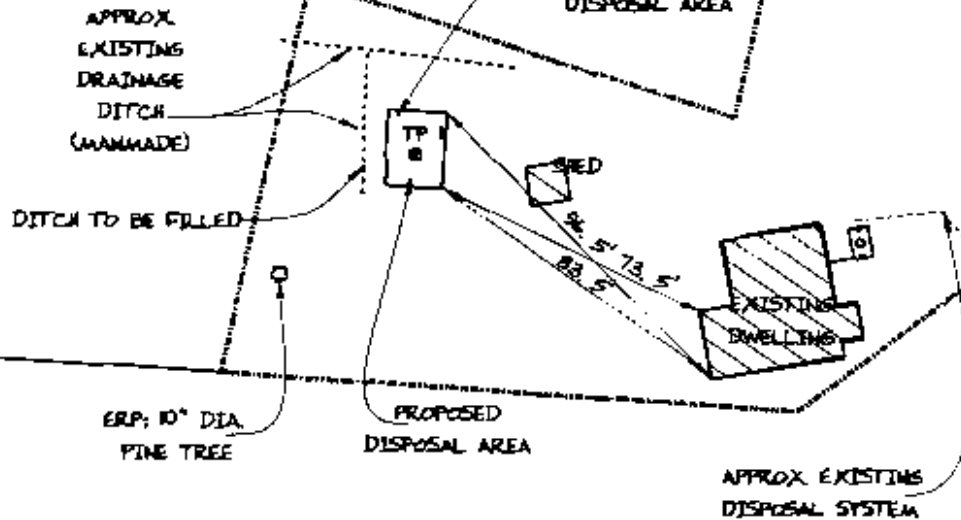
NOTE: ASSURE DISPOSAL AREA AND FILL EXTENSIONS ARE CONTAINED ON PROPERTY PRIOR TO INSTALLATION

SITE PLAN

Scale 1" = 50 Ft.
or as shown

ERP: 10" DIA PLAGGED PINE

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



NOTE: PROPERTY INFORMATION APPROXIMATED FOR TOWN TAX MAP, MAINE OFFICE OF GIS AERIAL PHOTOGRAPHY, & AS POINTED OUT BY OWNER ON-SITE. VERIFY PROPERTY LINES IN FIELD PRIOR TO INSTALLATION TO ASSURE PROPER SETBACKS.

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

Observation Hole TP 1 Test Pit Boring
Depth of Organic Horizon Above Mineral Soil _____

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

Texture	Consistency	Color	Mottling
SILT LOAM	FRIABLE	DARK BROWN	
SILTY CLAY	FIRM	OLIVE BROWN	COMMON DISTINCT

Texture	Consistency	Color	Mottling

Soil Classification: **S** Profile, **D** Condition
Slope: **3%**
Limiting Factor: **10"**
Ground Water:
Restrictive Layer:
Bedrock:
Pit Depth:

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

Albert Frick
Site Evaluator Signature

63
SE

6/22/2010
Date

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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
 Division of Health Care-reg. Station 10 SHS
 (207) 537-5677 FAX (207) 287-4172

Town, City, Plantation
PORTLAND, GREAT DIAMOND IS.

Street, Road, Subdivision
1 BAY AVENUE

Owner's Name
PETER & DIANA HARRIS

ERP: NAIL IN 10"
 DIA FLAGGED PINE

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 30' FT.

PROPOSED DISPOSAL
 AREA (4 ROWS OF 5
 ELJEN IN-DRAIN UNITS)

APPROXIMATE
 TOE OF FILL

EXISTING GRADE
 AT CORNER

APPROXIMATE PROPERTY LINES
 VERIFY PRIOR TO INSTALLATION

PROVIDE BOTTOM FEED
 DISTRIBUTION BOX, INSULATE
 WITH MIN 2" INSULATION
 PER CODE

1 1/2" TO 2" DIA
 EFFLUENT LINE BURIED
 BELOW FROST OR INSULATE
 TO PROTECT FROM FREEZING

PUMP STATION
 (ASSURE WATER TIGHTNESS)

NEW 100 GALLON CONCRETE
 MONOLITHIC SEPTIC TANK LOCATE
 WHERE FEASIBLE, 8' MIN
 FROM BUILDING STRUCTURE

NOTE: THOROUGHLY SCARIFY UNDER
 ENTIRE DISPOSAL FIELD, SHOULDER
 AREA, & FILL EXTENSION AREA PRIOR
 TO FILL PLACEMENT, THEN MIX FIRST
 4" LIFT OF FILL INTO EXISTING SOIL
 SURFACE TO PROMOTE MIXING

VERIFY WATERLINE LOCATION
 TO ASSURE MIN 10' SETBACK
 FROM DISPOSAL AREA

FILL REQUIREMENTS

CONSTRUCTION ELEVATIONS

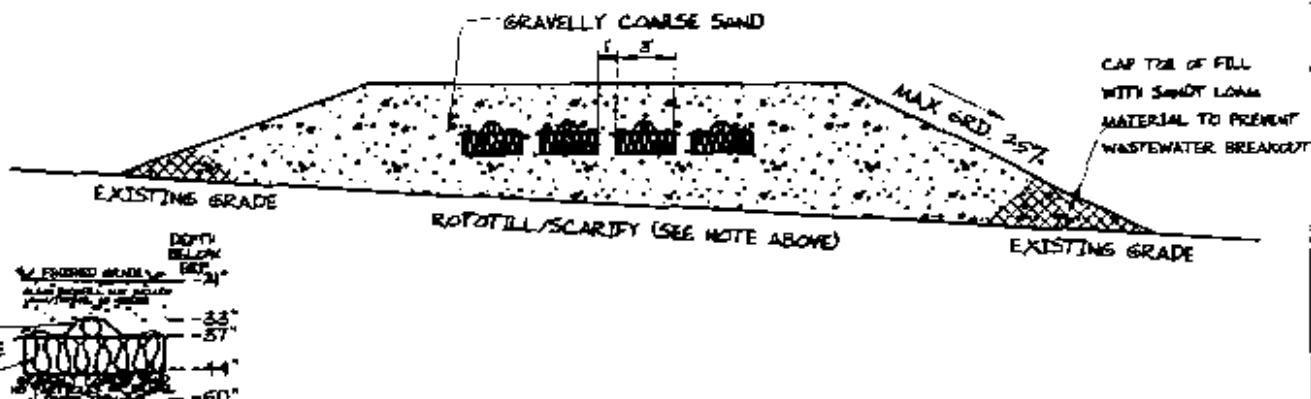
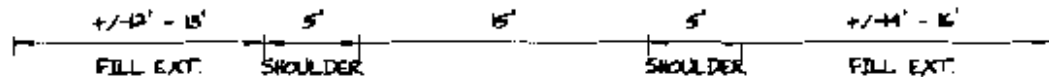
ELEVATION REFERENCE POINT

Depth of Fill (Upstope) : 37" - 38" Finished Grade Elevation
 Depth of Fill (Downstope) : 42" - 44" Top of ~~Proprietary Device~~ Proprietary Device
 DEPTHS AT CROSS-SECTION (shown below) Bottom of Disposal Area

SEE
 DETAIL
 BELOW
 Location & Description NAIL 54" ABOVE
 BASE OF 10" DIA FLAGGED PINE
 Reference Elevation in: 0.0' or -----

DISPOSAL AREA CROSS SECTION

SCALES:
 VERTICAL: 1" = 5' FT
 HORIZONTAL: 1" = 10' FT



Albert Frick
 Site Evaluator Signature

K3
 SE

6/22/2010
 Date

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

<u>PORTLAND, GREAT DIAMOND IS.</u>	<u>1 BAY AVENUE</u>	<u>PETER & DIANA HARRIS</u>
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.

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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.

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PORTLAND, GREAT DIAMOND IS.	1 BAY AVENUE	PETER & DIANA HARRIS
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 than 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 than 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) 839-5565

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form must be attached to an application (HHE-200) for any replacement system which requires a variance to the Rules. The LPI shall review the Replacement System Variance Request and HHE-200 and may approve the Request if all of the following requirements are met.

1. The proposed design meets the definition of a Replacement System as defined in the Rules (Sec. 1906.0)
2. The replacement system is determined by the Site Evaluator to be the most practical method to treat and dispose of the wastewater.
3. The BOD5 plus S.S. content of the wastewater is no greater than that of normal domestic effluent.

GENERAL INFORMATION

Town of Portland, Great Diamond Island

Permit No _____

Date Permit Issued _____

Property Owner's Name: Peter & Diana Harris

No. 415-3299

System's Location: 1 Bay Avenue

Property Owner's Address: C/O John Harris 40 Anderson Road, Windham, ME 04062

(if different from above) _____

SPECIFIC INSTRUCTIONS TO THE:

LOCAL PLUMBING INSPECTOR (LPI):

If any of the variances exceed your approval authority and/or do not meet all of the requirements listed under the Limitations Section above, then you are to send this Replacement System Variance Request, along with the Application, to the Department for review and approval consideration before issuing a Permit. (See reverse side for Comments Section and your signature.)

SITE EVALUATOR:

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

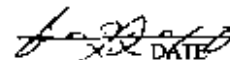
PROPERTY OWNER:

If has been determined by the Site Evaluator that a variance to the Rules is required for the proposed replacement system. This variance request is due to physical limitations of the site and/or soil conditions. The Site Evaluator has considered the site/soil restrictions and has concluded that a replacement system in total compliance with the Rules is not possible.

PROPERTY OWNER

I understand that the proposed system requires a variance to the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner. 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


DATE

LOCAL PLUMBING INSPECTOR

I, Jonathan R. [Redacted], the undersigned, have visited the above property and have determined to the best of my knowledge that it cannot be installed in compliance with the Rules. As a result of my review of the Replacement Variance Request, the Application, and my ~~own~~ investigation, I approve, disapprove) the variance request based on my authority to grant this variance. Note: If the LPI does not give his approval, he shall list his reasons for denial in Comments Section below and return to the applicant.

Comments: _____


LPI SIGNATURE

11/02/10
DATE



CITY OF PORTLAND, MAINE
Department of Building Inspections

Original Receipt

Date: Sept. 27 2010

Received from

John Henry

1000 1/2 BOSTON ST, BOSTON, MAINE

Cost of Construction \$ _____ Building Fee: _____

Permit Fee \$ _____ Site Fee: _____

Certificate of Occupancy Fee: _____

Sub. Fee Total: 110.00

Building (BL) _____ Plumbing (P) _____ Electrical (E) _____ Site Plan (SP) _____

Number 083A 2001

Check #: 13a Total Collected \$ 110.00

No work is to be started until permit issued.
Please keep original receipt for your records.

Taken by: *J. L. [Signature]*

NOTE - Applicant's Copy
ALLOW - Office Copy
BLACK - Permit Copy

Replacement System Variance Request

VARIANCE CATEGORY							VARIANCE REQUESTED TO:		
SOILS 9 D									
Soil Profile	Ground Water Table					10 inches			
Soil Condition	Restrictive Layer					inches			
from HHE-200	Bedrock					inches			
SETBACK DISTANCES (in feet)		Disposal Fields			Septic Tanks			Disposal Fields	Septic Tanks
From	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	To	To	
Wells with water usage of 2000 or more gpd or public water system wells	300 ft	300 ft	300 ft	150 ft	150 ft	150 ft			
Private Potable Water Supply	100 ft [a]	200 ft	300 ft	50 ft	100 ft	100 ft			
Water supply line	10 ft	20 ft	25 ft [g]	10 ft	10 ft	10 ft [g]			
Water course, major -	100 ft [c]	200 ft [c]	300 ft [c]	100 ft	100 ft	100 ft			
Water course, minor	50 ft [d]	100 ft [d]	150 ft [d]	50 ft [d]	50 ft [d]	50 ft [d]			
Drainage ditches	25 ft	50 ft	75 ft	25 ft	25 ft	25 ft	16'		
Edge of fill extension - Coastal wetlands, special freshwater wetlands, great ponds, rivers, streams	25 ft [d]	25 ft [d]	25 ft [d]	25 ft [d]	25 ft [d]	25 ft [d]			
Slopes greater than 3:1	10 ft [f]	18 ft [f]	25 ft [f]	N/A	N/A	N/A			
No full basement (e.g. slab, frost wall, columns)	15 ft	30 ft	40 ft	8 ft	14 ft	20 ft			
Full basement (below grade foundation)	20 ft	30 ft	40 ft	8.5 ft	14 ft	20 ft			
Property lines	10 ft [b]	18 ft [b]	20 ft [b]	10 ft [b]	15 ft [b]	20 ft [b]			
Burial sites or graveyards, measured from the down toe of the fill extension	25 ft	25 ft	25 ft	25 ft	25 ft	25 ft			

OTHER

1. Fill extension Grade - to 3:1

2.

3.

Footnotes: [a.] Private Potable water Supply setbacks may be reduced as prescribed in Chapter 7

[b.] Additional setbacks may be needed to prevent fill material extensions from encroaching onto abutting property.

[c.] Additional setbacks may be required by local Shoreland zoning.

[d.] Natural Resource Protection Act requires a 25 feet setback, on slopes of less than 20%, from the edge of soil disturbance and 100 feet on slopes greater than 20%. See Chapter 15.

[e.] May not be any closer to a private potable water supply than the existing disposal field or septic tank. This setback may be reduced for single family houses with Department approval. See Section 702.3.

[f.] The fill extension shall reach the existing ground before the 3:1 slope or within 100 feet of the disposal field.

[g.] See Section 1402.8 for special procedures when these minimum setbacks cannot be achieved.

Alfred Frick
SITE EVALUATOR'S SIGNATURE

6/22/2010
DATE

FOR USE BY THE DEPARTMENT ONLY

The Department has reviewed the variance(s) and (it 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

Fill Estimation Worksheet

Albert Frick Associates Inc.

95A County Road

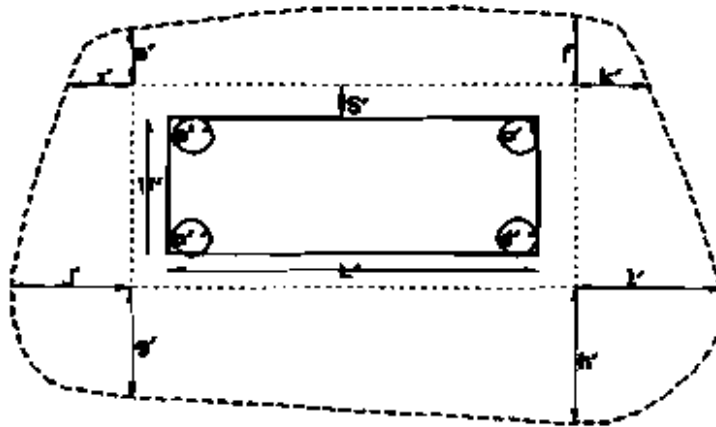
Gorham, Me 04038

839-5583 FAX - 839-5564

E-Mail - AFA@Maine.RR.Com

Town: **GREAT DIAMOND IS**
 Project owner/applicant: **HARRIS**
 Address:

This worksheet is being provided as a complimentary tool to assist in estimating the **approximate** amount of fill required to construct the proposed system. This worksheet does not substitute for a personal visit to the site for your own estimate. These calculations are intended to serve as a check to your work. Site features beyond the model (terrain) can vary to effect model projections.



Length (L)	20 feet
Width (W)	15 feet
Shoulder (S)	6 feet
<u>Depth of fill:</u>	
upper left (a)	37 inches
upper right (c)	38 inches
lower left (b)	42 inches
lower right (d)	44 inches
<u>Fill Extension:</u>	
left up (e)	12 feet
right up (f)	13 feet
left down (g)	14 feet
right down (h)	16 feet
upper left (i)	12 feet
lower left (j)	14 feet
upper right (k)	13 feet
lower right (l)	16 feet
Cost of fill per yard= \$ 0.00	

Body	94 cubic yards
Fill Down	30 cubic yards
Fill Up	22 cubic yards
Fill left	20 cubic yards
Fill right	23 cubic yards
Fill upleft	5 cubic yards
Fill upright	6 cubic yards
Fill downleft	7 cubic yards
Fill downright	10 cubic yards

SubTotal=	217 cubic yards
Shrinkage %=	15 %
Total Backfill	250 cubic yards

Adjusted cost of Total Backfill= \$ -



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PORTLAND, GREAT DIAMOND IS.	1 BAY AVENUE	PETER & DIANA HARRIS
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 than 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 settling). 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 than 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
92A Crest Road Galesburg, Maine 04858
10271 879-5665

Gayle Guertin - Permit for Septic System applied on 9/27/2010: 1 Bay Avenue Great Diamond Island: Under name: Peter and Diana Harris

From: "Harris, John J" <JHarris@unum.com>
To: "gg@portlandmaine.gov" <gg@portlandmaine.gov>
Date: 10/25/2010 3:10 PM
Subject: Permit for Septic System applied on 9/27/2010: 1 Bay Avenue Great Diamond Island: Under name: Peter and Diana Harris

Hi Gayle,

This is just a follow up to my phone conversation with your department this morning.

I called to speak with you today to follow up on the permit for the replacement septic system/leach field at my parents place on Great Diamond Island. The address is 1 Bay Avenue, Great Diamond Island. I applied in person to you on 9/27/2010. You said it would be 15 business days, but it could be less.

Anyhow the woman that answered told me to call back again on Wednesday. I forgot her name, but I still have your card and will follow up with you on Wednesday.

Thanks!

John Harris
On behalf of Peter and Diana Harris

John Harris
Systems Consultant II – Enterprise Architecture
Technical Domain Architect -- Enterprise Document Generation

Unum Group
Mailstop: A306
2211 Congress St. Portland ME 04122
207-575-7497
207-415-3299 (mobile)
jjharris@unum.com

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 20106014	Date Applied For: 09/27/2010	CBL: 083A R001001
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Location of Construction: 1 BAY AVE	Owner Name: Harris Peter C & Diana F Harris Its	Owner Address: 16 Penwood Dr	Phone:
Business Name:	Contractor Name: Harris Peter C & Diana F Harris Its	Contractor Address: 16 Penwood Dr Portland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: Replacement System	

Proposed Use:	Proposed Project Description:
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Dept: Building	Status: Approved	Reviewer: Jonathan Rioux	Approval Date: 11/02/2010
Note:			Ok to Issue: <input checked="" type="checkbox"/>

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the City of Portland Inspection Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months, if the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue with construction.**

 X **Backfill inspection of septic field for approved materials, stabilization, slopes and extensions**

 X **Septic field and extension inspection for bottom preparation/scurification to verify removal of vegetation, established transitional horizon and erosion and sedimentation control measures.**

 X **Exposed septic field installation and tank location inspection to check elevations, dimensions, piping, pumping station and system design prior to covering.**

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.