

7009 6007

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

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

PROPERTY LOCATION

City, Town, or Plantation: **PORTLAND**

Street or Road: **90 CRESCENT AVENUE**

Subdivision, Lot #: **GREAT DIAMOND ISLAND**

PORTLAND
Date Permit Issued: **10/28/09**

PERMIT # **11103 TOWN COPY**

FEE: \$ **1,000** If Double Fee Charged

L.P.I. # **21744**

OWNER/APPLICANT INFORMATION

Name (last, first, MI): **ROBERTS / CONNOLLY** / **KATHY SUE / NANCY JO** Owner

Mailing Address of: **98 Island Avenue**
Peaks Island, ME, 04108

Daytime Tel.: **207-746-2508**

Local Plumbing Inspector Signature: *Thomas M. Mally*

Municipal Tax Map: **83A** Lot: **78, 40** SEC. **E**

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: *Daniel M. Mulhern* Date: **10-21-09**

Caution: Inspections Required

RECEIVED

Local Plumbing Inspector Signature: _____ Date Approved: _____

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 (EXISTING)
32,149 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. Multiple Family Dwelling, No. of Units: **2**
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)
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)

<p>TREATMENT TANK</p> <p>1. <input type="checkbox"/> Concrete a. <input type="checkbox"/> Regular b. <input type="checkbox"/> Low Profile</p> <p>2. <input checked="" type="checkbox"/> Plastic</p> <p>3. <input type="checkbox"/> Other: _____</p> <p>CAPACITY 2-4000 gallons (IN SERIES)</p>	<p>DISPOSAL FIELD TYPE & SIZE</p> <p>1. <input type="checkbox"/> Stone Bed 2. <input type="checkbox"/> Stone Trench 3. <input checked="" type="checkbox"/> Proprietary Device a. <input type="checkbox"/> Cluster array c. <input checked="" type="checkbox"/> Linear b. <input checked="" type="checkbox"/> Regular d. <input type="checkbox"/> H-20 loaded</p> <p>4. <input type="checkbox"/> Other: _____</p> <p>SIZE 1680 <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft. 35 ELJEN IN-DRAIN UNITS</p>	<p>GARBAGE DISPOSAL UNIT</p> <p>1. <input checked="" type="checkbox"/> No 3. <input type="checkbox"/> Maybe 2. <input type="checkbox"/> Yes >> Specify one below: a. <input type="checkbox"/> Multi-compartment tank b. <input type="checkbox"/> _____ tanks in series c. <input type="checkbox"/> Increase in tank capacity d. <input type="checkbox"/> Filter on tank outlet</p>	<p>DESIGN FLOW 450 gallons per day BASED ON: 1. <input checked="" type="checkbox"/> Table 501.1 (dwelling unit(s)) 2. <input type="checkbox"/> Table 501.2 (other facilities) SHOW CALCULATIONS for other facilities</p> <p>DUPLEX: 1-3 BEDROOM & 1-2 BEDROOM 90 GALLONS PER DAY PER BEDROOM</p> <p>3. <input type="checkbox"/> Section 503.0 (meter readings) ATTACH WATER-METER DATA</p>
<p>SOIL DATA & DESIGN CLASS</p> <p>PROFILE 3 CONDITION C DESIGN I</p> <p>AT Observation Hole: TP A Depth 22" OF MOST LIMITING SOIL FACTOR</p>	<p>DISPOSAL FIELD SIZING</p> <p>1. <input type="checkbox"/> Small - 2.0 sq.ft./gpd 2. <input type="checkbox"/> Medium - 2.6 sq.ft./gpd 3. <input checked="" type="checkbox"/> Medium-Large - 3.3 sq.ft./gpd 4. <input type="checkbox"/> Large - 4.1 sq.ft./gpd 5. <input type="checkbox"/> Extra-Large - 5.0 sq.ft./gpd</p>	<p>EFFLUENT/EJECTOR PUMP</p> <p>1. <input type="checkbox"/> Not required 2. <input type="checkbox"/> May be required 3. <input checked="" type="checkbox"/> Required</p> <p>Specify only for engineered systems: DOSE: _____ Gallons</p>	<p>LATITUDE AND LONGITUDE at center of disposal area</p> <p>Lat. 43 d 40 m 47 s Lon. 70 d 12 m 14 s if g.p.s., state margin of error</p>

SITE EVALUATOR STATEMENT

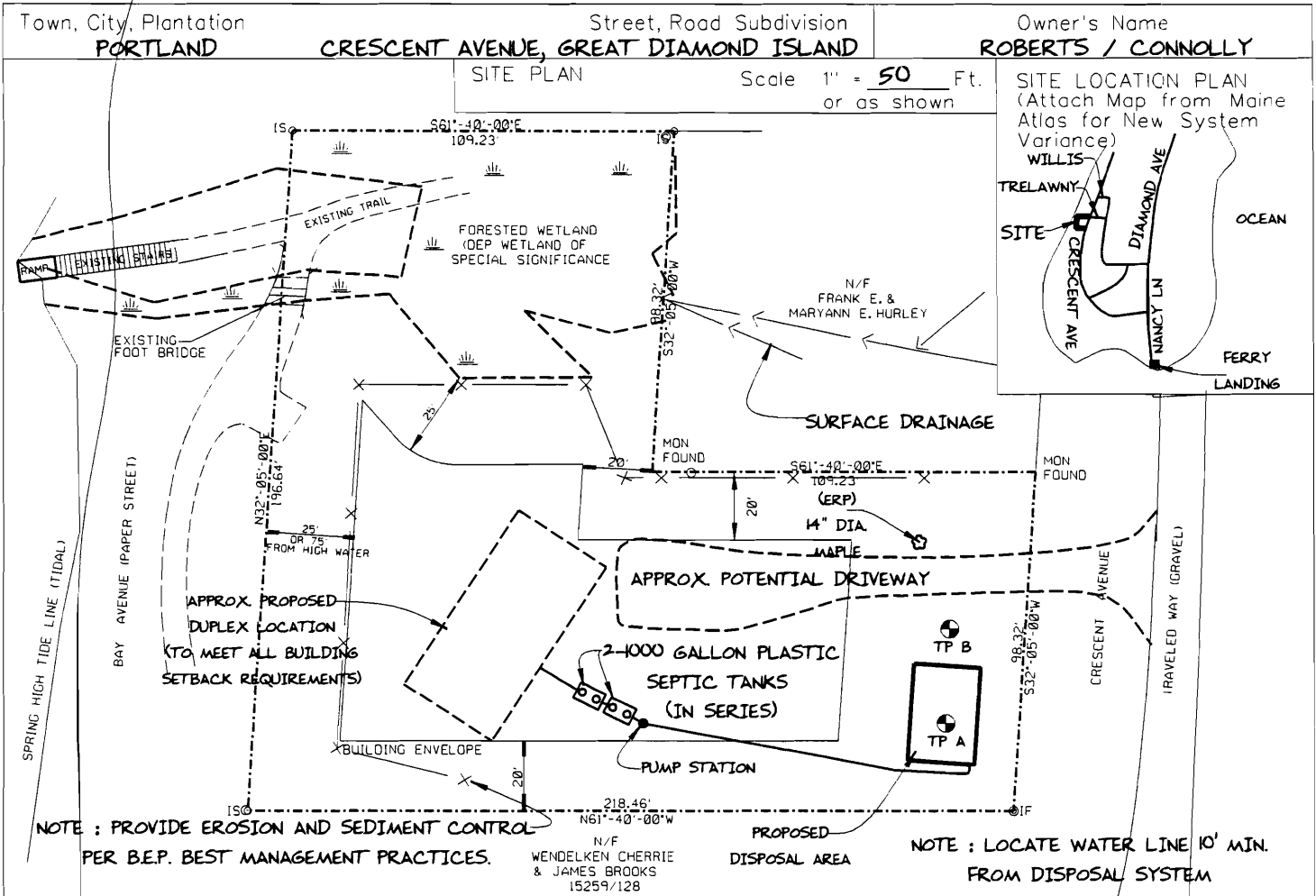
I certify that on **8/20/08** (date) I completed a site evaluation on this property and state that the data reported is accurate and that the proposed system is in compliance with the Subsurface Wastewater Disposal Rules (10-144A CMR 21).

Site Evaluator Signature: *Albert Frick* SE # **163** Date: **3/13/2009**

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

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

Observation Hole **TP A** Test Pit Boring
" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0			DARK BROWN	
0-10	FINE SANDY LOAM			
10-20		FRIABLE	DARK YELLOW BROWN	
20-30			YELLOW BROWN	
30-40	LOAMY FINE SAND	FIRM	OLIVE BROWN	COMMON, DISTINCT
40-50				
50	LIMIT OF EXCAVATION			

Soil Classification: **3 C**
Profile: **3** Condition: **C**
Slope: **22%**
Limiting Factor: **22%**
 Ground Water
 Restrictive Layer
 Bedrock
 Pit Depth

Observation Hole **TP 2** Test Pit Boring
" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mattling
0			DARK BROWN	
0-10	SANDY LOAM			
10-20		FRIABLE	YELLOW BROWN	
20-30			LIGHT OLIVE BROWN	FEW, FAINT
30-40	LOAMY SAND	FIRM	OLIVE BROWN	COMMON, DISTINCT
40-50				
50	LIMIT OF EXCAVATION			

Soil Classification: **3 C**
Profile: **3** Condition: **C**
Slope: **18%**
Limiting Factor: **18%**
 Ground Water
 Restrictive Layer
 Bedrock
 Pit Depth

Albert Frick
Site Evaluator Signature

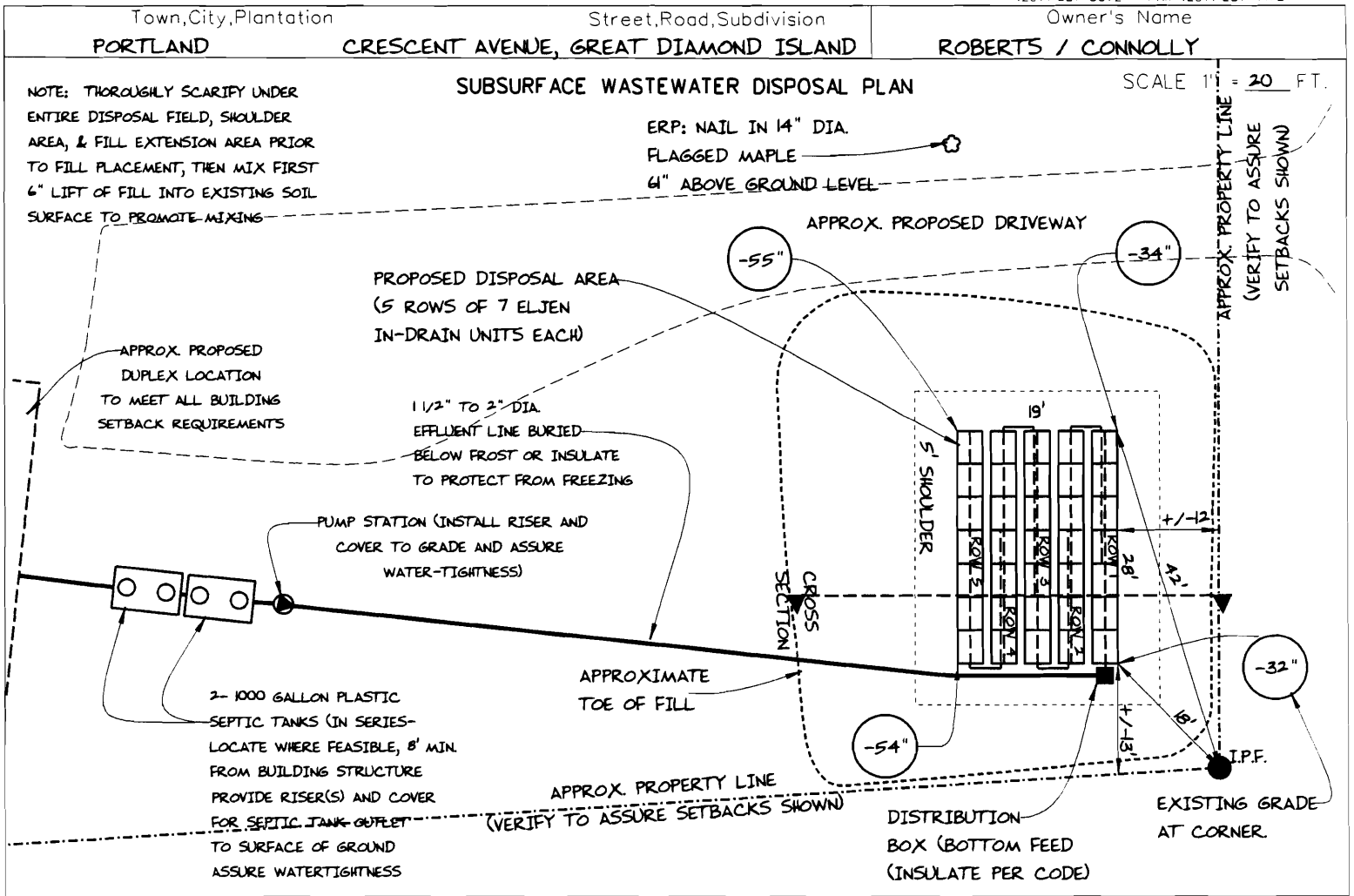
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SE

3/13/2009
Date

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FILL REQUIREMENTS

Depth of Fill (Upslope) : 21" - 23"
 Depth of Fill (Downslope) : 23" - 24"
 DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

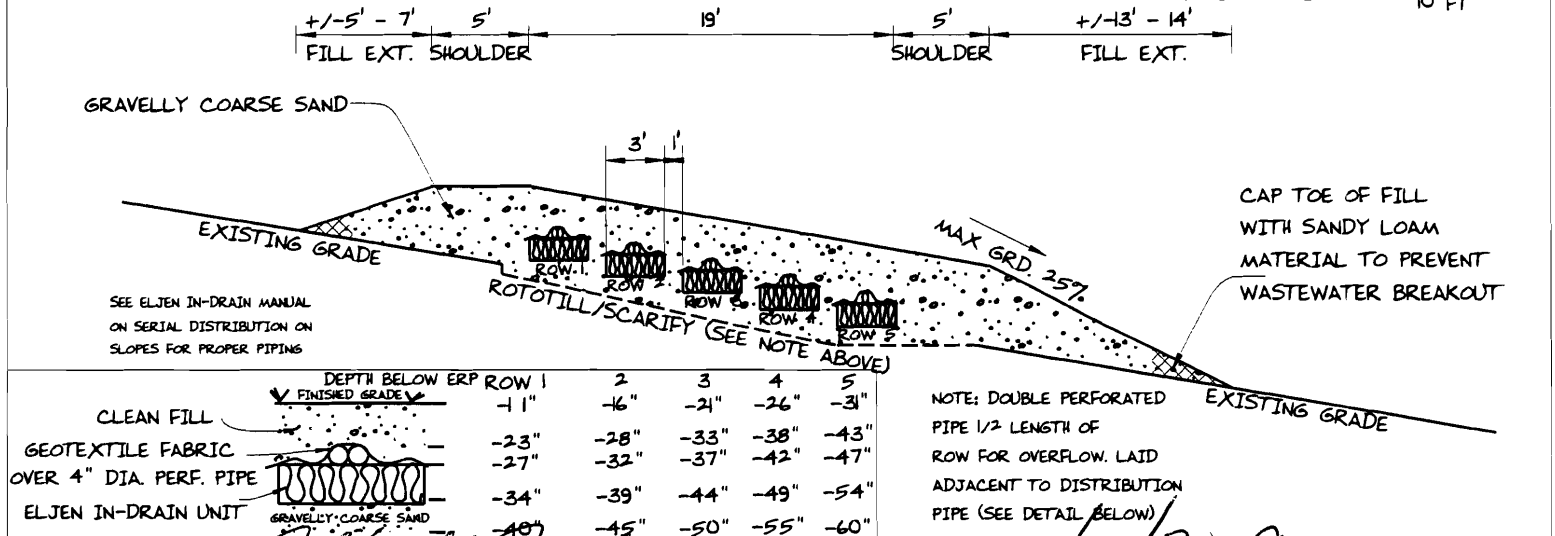
Finished Grade Elevation
 Top of Distribution Pipe or Proprietary Device
 Bottom of Disposal Area

ELEVATION REFERENCE POINT

SEE DETAIL BELOW Location & Description 1 1/2" DIA. MAPLE NAIL 4" ABOVE BASE
 Reference Elevation is: 0.0" or -----

DISPOSAL AREA CROSS SECTION

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



Albert Frick
 Site Evaluator Signature

163
 SE *

3/13/2009
 Date

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Albert Frick Associates, Inc.

Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04038

(207) 859-5565

PORTLAND

CRESCENT AVENUE, GREAT DIAMOND ISLAND

ROBERTS / CONNOLLY

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.

PORTLAND	CRESCENT AVENUE, GREAT DIAMOND ISLAND	ROBERTS / CONNOLLY
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.

