

091-K-003 (3)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

PROPERTY LOCATION		PORTLAND 6801 TOWN COPY	
Town or Plantation	PORTLAND	Date Permit Issued: 3/15/99	\$ 75 FEE <input type="checkbox"/> Double Fee Charged
Street Subdivision Lot	PEAKS ISLAND	L.P.I. # 0124	
PROPERTY OWNER'S NAME		Local Plumbing Inspector Signature	
Last: MACISAAC	First: STEVEN & KIMBERLY		
Applicant's Name	STEVEN MAC ISAAC		
Mailing Address of Owner	BOX 93		
Daytime Tel.	PEAKS ISLAND, ME 04108	Municipal Tax Map	Lot
Owner Statement		Caution: Inspection Required	
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		I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application	
Signature of Owner/Applicant		Local Plumbing Inspector Signature	
Date		Date Approved 8-16-99	

PERMIT INFORMATION

TYPE OF APPLICATION: 1. <input type="checkbox"/> First Time System 2. <input checked="" type="checkbox"/> Replacement System Type Replaced _____ Year Installed _____ 3. <input type="checkbox"/> Expanded System <input type="checkbox"/> a. one time exempted <input type="checkbox"/> b. non exempted 4. <input type="checkbox"/> Experimental System 5. <input type="checkbox"/> Seasonal Conversion	THIS APPLICATION REQUIRES: 1. <input type="checkbox"/> No Rule Variance 2. <input type="checkbox"/> First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector approval <input type="checkbox"/> b. State & Local Plumbing Inspector approval 3. <input checked="" type="checkbox"/> Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector approval <input type="checkbox"/> b. State & Local Plumbing Inspector approval 4. <input type="checkbox"/> Minimum Lot Size Variance 5. <input type="checkbox"/> Seasonal Conversion Approval	DISPOSAL SYSTEM COMPONENT(S) 1. <input type="checkbox"/> Non-Engineered System 2. <input type="checkbox"/> Primitive System (graywater & alt toilet) 3. <input type="checkbox"/> Alternative Toilet 4. <input type="checkbox"/> Non-Engineered Treatment Tank 5. <input type="checkbox"/> Holding Tank _____ Gallons 6. <input checked="" type="checkbox"/> Non-Engineered Disposal Area (only) 7. <input type="checkbox"/> Separated Laundry System 8. <input type="checkbox"/> Engineered System (>2000 gpd) 9. <input type="checkbox"/> Engineered Treatment Tank (only) 10. <input type="checkbox"/> Engineered Disposal Area (only) 11. <input type="checkbox"/> Pretreatment
SIZE OF PROPERTY 11,585 S.F. ±	DISPOSAL SYSTEM TO SERVE: 1. <input type="checkbox"/> Single Family Dwelling Unit 2. <input type="checkbox"/> Multiple Family Dwelling: Number of Units _____ 3. <input type="checkbox"/> Other _____	TYPE OF WATER SUPPLY DRILLED WELL (SEASONAL PUBLIC WATER)
SHORELAND ZONING <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK 1. <input type="checkbox"/> Concrete <input type="checkbox"/> a. Regular <input type="checkbox"/> b. Low Profile 2. <input checked="" type="checkbox"/> Plastic (EXISTING) 3. <input type="checkbox"/> Other _____ SIZE 1000 Gallons (INSTALL OUTLET BAFFLE)	DISPOSAL AREA TYPE / SIZE 1. <input type="checkbox"/> Bed _____ Sq. Ft. 2. <input checked="" type="checkbox"/> Proprietary Device 900 Sq. Ft. <input type="checkbox"/> Cluster <input checked="" type="checkbox"/> Linear <input checked="" type="checkbox"/> Regular <input type="checkbox"/> H-20 3. <input type="checkbox"/> Trench 4. <input type="checkbox"/> Other _____ 18 PLASTIC CHAMBERS	GARBAGE DISPOSAL UNIT 1. <input checked="" type="checkbox"/> No 2. <input type="checkbox"/> Yes <input type="checkbox"/> Multi-compartment tank <input type="checkbox"/> Tank in series <input type="checkbox"/> Increase in tank capacity <input type="checkbox"/> Filter on tank outlet	CRITERIA USED FOR DESIGN FLOW (Show Calculations) SINGLE FAMILY DWELLING (3 BEDROOM) DESIGN FLOW: 270 (Gallons/Day)
PROFILE & DESIGN CLASS PROFILE 12 DESIGN A/D DEPTH TO MOST LIMITING FACTOR 10" (FILLED LAND)	DISPOSAL AREA SIZING 1. <input type="checkbox"/> Small - 2.00 2. <input type="checkbox"/> Medium - 2.60 3. <input checked="" type="checkbox"/> Medium-Large - 3.30 4. <input type="checkbox"/> Large - 4.10 5. <input type="checkbox"/> Extra-Large - 5.20	PUMPING 1. <input checked="" type="checkbox"/> Not required 2. <input type="checkbox"/> May be required 3. <input type="checkbox"/> Required DOSE _____ Gallons	

SITE EVALUATOR'S STATEMENT

On 3/3/99 (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.

Site Evaluator Signature

SE

Date

ALBERT FRICK ASSOC., INC.
Site Evaluator Name Printed163
839-5563
TelephonePage 1 of 3
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Division of Health Engineering
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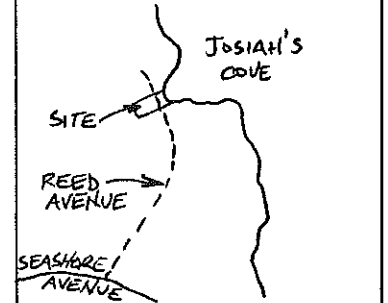
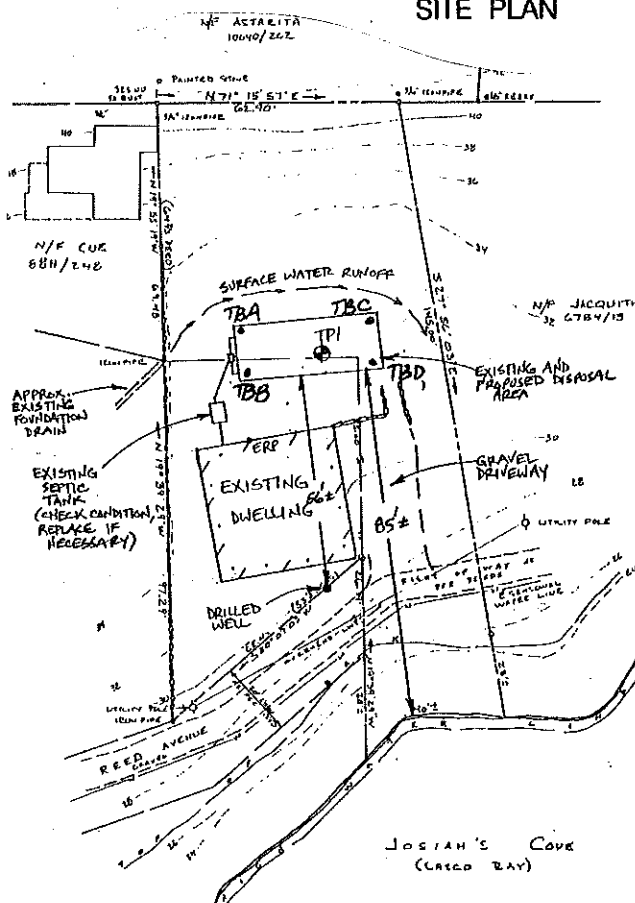
Town, City, Plantation
PORTLAND (PEAKS ISLAND.)

Street, Road Subdivision
REED AVENUE
SITE PLAN

Owner's Name
MACISAAC, STEVEN & KIMBERLY

Scale $1" = 50. \pm$ Ft.
or as shown

SITE LOCATION PLAN
(Map from Maine Atlas recommended)



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

Observation Hole TPI ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil
(TEST PIT OBSERVED JUNE 1, 1995)

Texture	Consistency	Color	Mottling
SANDY LOAM		DARK BROWN	
WITH COBBLE FRAGMENTS (FILL)	FRIABLE		
			FREE WATER
	BEDROCK		

Soil Classification 12 A/C Slope 10 % Limiting Factor 10 " ☒ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Observation Hole TBA-D ☐ Test Pit ☒ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
TBA = 48" TO BEDROCK			
TBB = 56" TO BEDROCK			
TBC = 54" TO BEDROCK			
TBD = 52" TO BEDROCK			

Soil Classification 12 A/C Slope 10 % Limiting Factor 10 " ☒ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth

Albert J. Ford
Site Evaluator Signature

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SE

2/5/99
Date

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Division of Health Engineering
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MACISAAC, STEVEN & KIMBERLY

Hand-drawn site plan and cross-section of a septic system disposal area. The plan view shows a "D-BOX" containing 18 numbered plastic chambers arranged in three rows of six. Dimensions include a total width of 37.5', a depth of 15', and individual chamber dimensions of 26.5' x 15'. A "STONE WALL (APPROX. PROPT. LINE)" is on the left, and an "EXISTING DWELLING" is at the bottom. A "GRAVEL DRIVEWAY" is 85'± from the disposal area. Elevation markers include -60", -46", -68", and -61" (existing grade in fill). A "CROSS-SECTIONAL VIEW" is indicated. Notes include: "NOTE: PROVIDE SURFACE WATER RUNOFF AROUND DISPOSAL AREA (15' MIN. FROM DISPOSAL AREA)", "REMOVE EXISTING CHAMBERS AND FILL MATERIAL TO 12" BELOW AND 2' AROUND EXISTING CHAMBERS AND REPLACE WITH CLEAN GRAVELLY COARSE SAND.", and "EXISTING 1000 GALLON FIBERGLASS SEPTIC TANK (CHECK CONDITION OF TANK AND BAFFLES, REPLACE IF NECESSARY)". A "PROPOSED DISPOSAL AREA (3 ROWS OF 6 PLASTIC CHAMBERS)" is labeled. A "TO APPROX. HIGH WATER MARK" line is shown at the bottom right.

-50" ✓ Location & Description BOTTOM OF
-62" IVORY TRIM BOARD ON REAR
-78" OF DWELLING, 26" ABOVE GRADE
Reference Elevation 00"

Hand-drawn cross-section diagram of a road construction project. The diagram shows a roadbed with a width of 10' on the left, followed by a 5' section, a 15' section, and two 5' sections on the right. The roadbed is labeled 'CAP TOE OF FILL WITH FINER TEXTURED SOIL'. Below the roadbed is a layer of 'EXISTING GRADE'. The roadbed is supported by a layer of 'GRAVELLY COARSE SAND'. A 'CHAMBER UNIT' is shown, consisting of a 'CHAMBER DETAIL (NO SCALE)' which is a trapezoidal structure with a circular opening. The chamber unit is filled with 'CLEAN 1 1/2 - 2 1/2" DIA. CRUSHED STONE (6")'. The elevations are marked on the right side: 50, 62, 78, and 84. The chamber unit is shown at an elevation of 78, and the gravelly coarse sand is at an elevation of 62. The roadbed is at an elevation of 50. The chamber unit is shown at an elevation of 84.

CHAMBER DETAIL (NO SCALE)

Albert Frick
Site Evaluator Signature

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SE •

3/5/99

Date _____



Albert Frick Associates, Inc.

Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04038
(207) 839-5563 FAX (207) 839-5564

Albert Frick SS, SE
James Logan SS, SE
Matthew Logan SE

PORTLAND (PEAKS ISLAND)	REED AVE.	STEVEN MACISAAC
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 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.

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 should be connected in series to the proposed septic tank.

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) and controlled or hazardous substances shall not be disposed of in this system.

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

PORTLAND (PEAKS ISLAND) REED AVE. STEVEN MACISAAC
TOWN LOCATION APPLICANT'S NAME

- 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 once every three years.
- 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).
- 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 requirements. 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. When an effluent pump is required, provisions shall be made to make certain that surface ground water does not enter the septic tank or pump station. An alarm device warning of a pump failure shall be installed. Also, when pumping is required to 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.
- 10) 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 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 thoroughly before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage). Do not use wheeled equipment on the scarified soil area until after 12 inches of fill is in place. Keep equipment off the chambers. Divert the surface water away from the disposal area by ditching or shallow swales.
- 11) Unless noted otherwise, fill shall be gravelly coarse sand which contains no more than 5% fines (silt and clay).
- 12) Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.
- 13) Seed all filled and disturbed surfaces with perennial grass seed, then mulch with hay or equivalent material to prevent erosion.



Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form shall be attached to an application (HHE-200) for the proposed replacement system which requires a variance to the Rules. The LPI shall review the Replacement System Variance Request an HHE-200 and may approve the Request if all of the following requirements can be met, and the variance(s) requested fall within the limits of LPI's authority.

1. The proposed design meets the definition of a Replacement System as defined in the Rules (Sec. 1903)
2. There will be no change in use of the structure except as authorized for one-time exempted expansions outside the shoreland zone of major waterbodies/courses.
3. The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.
4. The BOD₅ plus S.S. content of the wastewater is no greater than that of normal domestic effluent.

GENERAL INFORMATION

Town of PORTLAND (PEAKS ISLAND)

Permit No. _____

Date Permit Issued _____

Property Owner's Name: STEVEN & KIMBERLY MACISAAC Tel. No.: 766-5514

System's Location: 140 REED AVENUE, PEAKS ISLAND, ME 04108

Property Owner's Address: _____

(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. Both the Site Evaluator and the LPI have considered the site/soil restrictions and have 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, 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

DATE

LOCAL PLUMBING INSPECTOR

I, Tom Reinsharous, 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 on-site investigation, I (check and complete either a or b):

☒ a. ☒ 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. —OR—

☐ b. find that one or more of the requested Variances exceeds my approval authority as LPI. I (☐ recommend, ☐ do not recommend) the Department's approval of the variances. Note: If the LPI does not recommend the Department's approval, she shall state his reasons in Comments Section below as to why the proposed replacement system is not being recommended.

Comments: I was called to the site 2-23-99 and witnessed the failure of the old system from improper installation due to site changes I requested a new site plan so I could determine what the system actually should be located (T.R)

* Tom Reinsharous *
LPI SIGNATURE

* 3-15-99 *
DATE

Replacement System Variance Request

VARIANCE CATEGORY	VARIANCE REQUESTED		LIMIT OF LPI'S APPROVAL AUTHORITY		VARIANCE REQUESTED TO:	
SOILS					12 A/D	
Soil Profile	Ground Water Table		to 7"		10 inches	
Soil Condition	Restrictive Layer		to 7"		inches	
from HHE-200	Bedrock		to 12"		inches	
SETBACK DISTANCES (in feet)	Disposal Fields		Septic Tanks		Disposal Fields	Septic Tanks
From	Less than 1000 gpd	1000 to 2000 gpd	Less Than 1000 gpd	1000 to 2000 gpd	To	To
Wells with water usage of 2000 or more gpd	300 ^a ft	300 ft	100 ^b ft	100 ft		
Owner's wells	100 down to 50 ft	200 down to 100 ft	100 ^b down to 50 ft	100 down to 50 ft	56'±	50'±
Neighbor's wells	100 ^b down to 60 ft	200 ^b down to 120 ft	100 ^b down to 50 ft	100 ^b down to 75 ft		
Water supply line	10 ft ^a	20 ft ^a	10 ft ^a	10 ft ^a		
Water course, major - for replacements only, see Table 400.4 for exempted expansions	100 down to 60 ft	200 down to 120 ft	100 down to 50 ft	100 down to 50 ft	85'±	90'±
Water course, minor	50 down to 25 ft	100 down to 50 ft	50 down to 25 ft	50 down to 25 ft		
Drainage ditches	25 down to 12 ft	50 down to 25 ft	25 down to 12 ft	25 down to 12 ft	15' MIN.	
Coastal wetlands, special freshwater wetlands, great ponds, rivers, streams (edge of fill extension)	25 ft ^d	25 ft ^d	25 ft ^d	25 ft ^d		
Slopes greater than 3:1	10 ft	18 ft	N/A	N/A		
No full basement [e.g. slab, frost wall, columns]	15 down to 7 ft	30 down to 15 ft	8 down to 5 ft	14 down to 7 ft		
Full basement [below grade foundation]	20 down to 10 ft	30 down to 15 ft	8 down to 5 ft	14 down to 7 ft		
Property lines	10 down to 5 ft	18 ft down to 9 ^c ft	10 ft down to 4 ^c ft	15 ft down to 7 ^c ft		
Burial sites or graveyards, measured from the down toe of the fill extension	25 ft	25 ft	25 ft	25 ft		

OTHER

1. Fill extension Grade - to 3:1 NEAR SIDE PROPERTY LINE, IF NECESSARY

2.

3.

Footnotes:

- This setback distance cannot be reduced by the LPI, but may be considered for reduction by State variance.
- Written Permission from the owner of a well is required when a replacement system will be located less than 100 (or 200 ft. for 1000-2000 gpd) feet and closer to that well than the system it is replacing.
- Sufficient distance shall be maintained to assure that the toe of the fill does not extend to the 3:1 slope or property line.
- Natural Resources Protection Act requires a 25 foot setback on slopes with less than 20% from the edge of disturbance and 100 feet on slopes greater than 20% except for the repair or installation of a replacement system when no practical alternative exists.

Albert Feick
SITE EVALUATOR'S SIGNATURE

3/5/99
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