MAP 12 LOT 13

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 289-3826

PROPERTY ADDRESS

Town Or Plantation	N. ORLAND
Street Subdivision Lot #	OFF WINKUMPAUGH RD.

PROPERTY OWNERS NAME

Last: KRICHELS First: STEPHEN

Applicant Name:	SAME
Mailing Address of Owner/Applicant (If Different)	RFD 2 BOX 486 E. HOLDEN ME 04429

ORLAND PERMIT # 343 TOWN COPY

Caution: Permit Required

Date Permit Issued: 8/16/88 $ 100.00 FEE ☐ If Double Fee Charged

Raymond Conroy Local Plumbing Inspector Signature L.P.I. # 520

Conditions of approval, if any, are attached. This permit is issued in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Owner/Applicant Statement

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

Stephen J. Krichels 8/88
Signature of Owner/Applicant Date

Caution: Inspection Required

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

Raymond Conroy
Local Plumbing Inspector Signature

8-8-88
Date Approved

PERMIT INFORMATION

THIS APPLICATION IS FOR:

1. ☒ NEW SYSTEM
2. ☐ REPLACEMENT SYSTEM
3. ☐ EXPANDED SYSTEM
4. ☐ SEASONAL CONVERSION
5. ☐ EXPERIMENTAL SYSTEM

THIS APPLICATION REQUIRES:

1. ☒ NO RULE VARIANCE REQUIRED
2. ☐ NEW SYSTEM VARIANCE Attach New System Variance Form
   ☐ REPLACEMENT SYSTEM VARIANCE Attach Replacement System Variance Form
3. ☐ Requiring Local Plumbing Inspector Approval
4. ☐ Requires State and Local Plumbing Inspector Approval

INSTALLATION IS:

COMPLETE SYSTEM

1. ☒ NON-ENGINEERED SYSTEM
2. ☐ PRIMITIVE SYSTEM (Includes Alternative Toilet)
3. ☐ ENGINEERED (+2000 gpd)

INDIVIDUALLY INSTALLED COMPONENTS:

4. ☐ TREATMENT TANK (ONLY)
5. ☐ HOLDING TANK
6. ☐ ALTERNATIVE TOILET (ONLY)
7. ☐ NON-ENGINEERED DISPOSAL AREA (ONLY)
8. ☐ ENGINEERED DISPOSAL AREA (ONLY)
9. ☐ SEPARATED LAUNDRY SYSTEM

IF REPLACEMENT SYSTEM:

YEAR FAILING SYSTEM INSTALLED _____

THE FAILING SYSTEM IS:

1. ☐ BED
2. ☐ CHAMBER
3. ☐ TRENCH
4. ☐ OTHER: _____

DISPOSAL SYSTEM TO SERVE:

1. ☒ SINGLE FAMILY DWELLING
2. ☐ MODULAR OR MOBILE HOME
3. ☐ MULTIPLE FAMILY DWELLING
4. ☐ OTHER _____ SPECIFY

SIZE OF PROPERTY

60± AC

ZONING

_____

TYPE OF WATER SUPPLY

PROP. DRILLED WELL

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

1. ☒ SEPTIC: ☐ Regular ☒ Low Profile
2. ☐ AEROBIC

SIZE: 1000 GALS.

WATER CONSERVATION

1. ☐ NONE
2. ☒ LOW VOLUME TOILET
3. ☐ SEPARATED LAUNDRY SYSTEM
4. ☐ ALTERNATIVE TOILET

SPECIFY: _____

PUMPING

1. ☐ NOT REQUIRED
2. ☒ MAY BE REQUIRED (DEPENDING ON TREATMENT TANK LOCATION AND ELEVATION)
3. ☐ REQUIRED

DOSE: _____ GALS.

CRITERIA USED FOR DESIGN FLOW (BEDROOMS, SEATING, EMPLOYEES, WATER RECORDS, ETC.)

3 BEDROOM SINGLE FAMILY DWELLING (4 PEOPLE)

MINIMUM -10% (LOW VOLUME TOILET)

DESIGN FLOW: 243 GPD (GALLONS/DAY)

SOIL CONDITIONS USED FOR DESIGN PURPOSES

PROFILE	CONDITION
3	C

DEPTH TO LIMITING FACTOR: 16

SIZE RATINGS USED FOR DESIGN PURPOSES

1. ☐ SMALL
2. ☐ MEDIUM
3. ☒ MEDIUM-LARGE
4. ☐ LARGE
5. ☐ EXTRA LARGE

DISPOSAL AREA TYPE/SIZE

1. ☒ BED 800 Sq. Ft.
2. ☐ CHAMBER _____ Sq. Ft.
   ☐ REGULAR ☐ H-20
3. ☐ TRENCH _____ Linear Ft.
4. ☐ OTHER: _____

SITE EVALUATOR STATEMENT

☐ SITE EVALUATION WAIVED BY LOCAL OPTION

On AUG 26, 1986 (date) I conducted a site evaluation for this project and certify that the data reported is accurate. The system I propose is in accordance with the Subsurface Wastewater Disposal Rules.

Allan E. Witt
Site Evaluator Signature

187
SE#

9/3/86
Date

* Local Plumbing Inspectors Signature if a Local Site Evaluation Waiver under a Local Option

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering

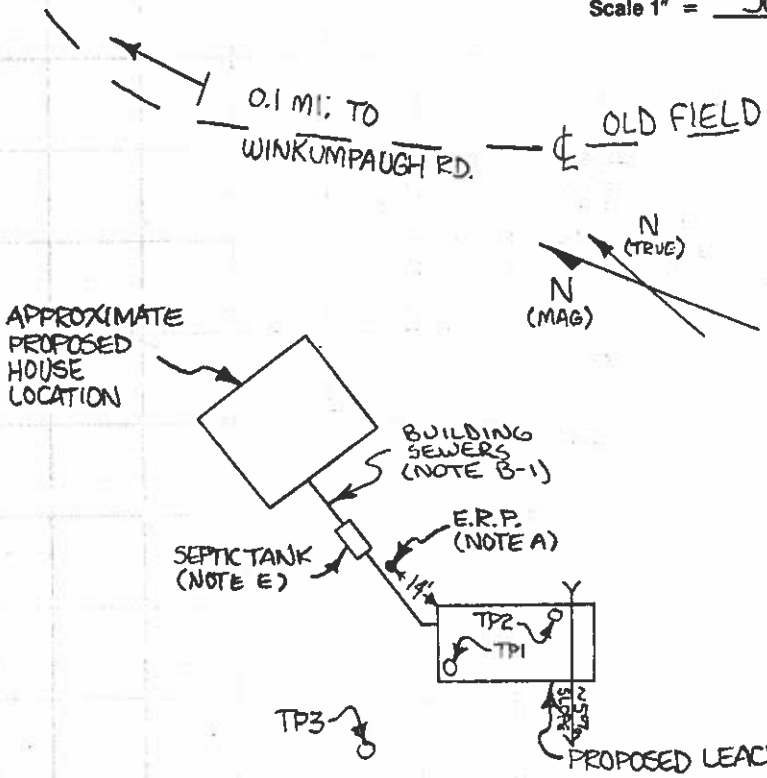
Town, City, Plantation: N. ORLAND

Street, Road, Subdivision: OFF WINKUMPAUGH RD

Owners Name: STEPHEN KRICHELS

SITE PLAN

Scale 1" = 50 Ft.



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

KEY:
- ARROW DESIGNATES DIRECTION OF DOWNHILL SLOPE
- ○ DESIGNATES OBSERVATION HOLE (T.P.)
- ● ELEVATION REFERENCE POINT (E.R.P.)

NO PROPERTY LINES NEARBY

OTHER OBSERVATION HOLE: TP3 3-C 16"

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

Observation Hole TP1 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)

	Texture	Consistency	Color	Mottling
0–6 Ap	GRAVELLY LOAM	FRIABLE	DARK BROWN	
6–15 Bs	GRAVELLY FINE SANDY LOAM		YELLOWISH-RED/DISH BROWN	
15–20 C1		SOMEWHAT FIRM IN PLACE	YELLOWISH-OLIVE	COMMON MEDIUM FAINT LIGHT GRAY
20–30 C2	GRAVELLY LOAM	FIRM IN PLACE	OLIVE-GRAY	
30–40	HAND DUG REFUSAL (NO LEDGE EVIDENT)			
40–50				

Soil Profile	Classification Condition	Slope	Limiting Factor	
3	C	~6 %	18"	☒ Ground Water ☐ Restrictive Layer ☐ Bedrock

Observation Hole TP2 ☒ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)

	Texture	Consistency	Color	Mottling
0–6 Ap	GRAVELLY LOAM	FRIABLE	DARK BROWN	
6–15 Bs	GRAVELLY VERY FINE SANDY LOAM		YELLOWISH-RED/DISH BROWN	
15–20 C	GRAVELLY LOAM	SOMEWHAT FIRM IN PLACE	OLIVE GRAY	COMMON FINE FAINT LIGHT GRAY
20–30	HAND DUG REFUSAL (NO LEDGE EVIDENT)			
30–40				
40–50				

Soil Profile	Classification Condition	Slope	Limiting Factor	
3	C	~5 %	16"	☒ Ground Water ☐ Restrictive Layer ☐ Bedrock

Site Evaluator Signature

182
SE#

9/3/86
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering

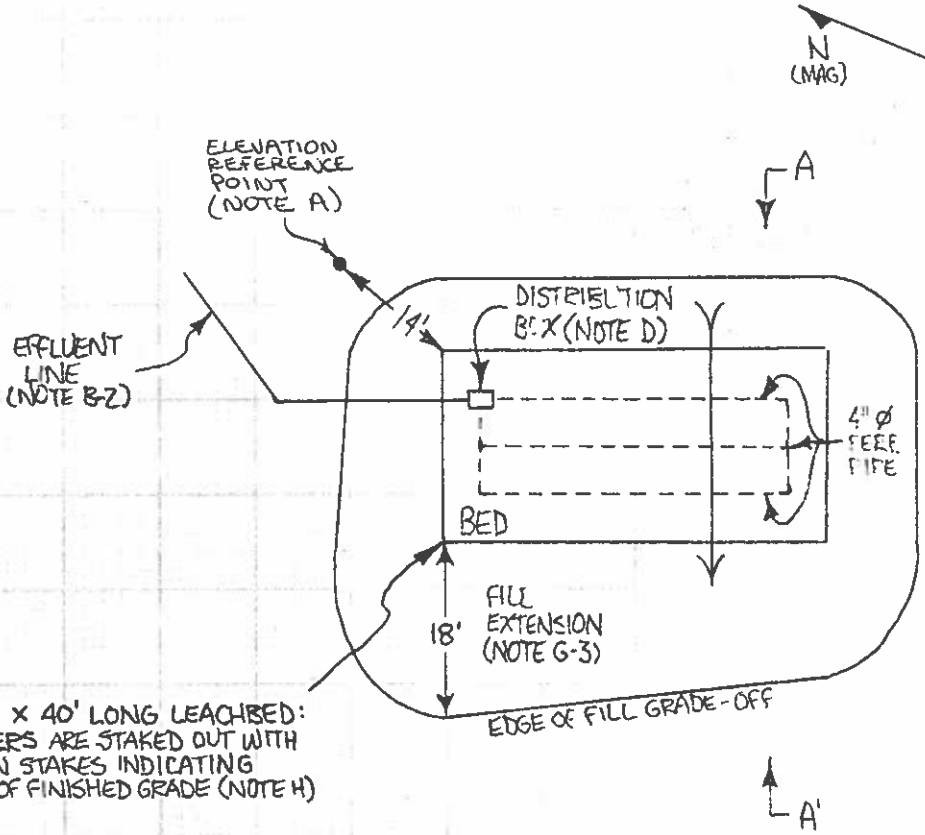
Town, City, Plantation: N. ORLAND

Street, Road, Subdivision: OFF WINKUMPAUGH RD

Owners Name: STEPHEN KRICHELS

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = 20 Ft.



20' WIDE x 40' LONG LEACHBED: 4 CORNERS ARE STAKED OUT WITH FLAGS ON STAKES INDICATING HEIGHT OF FINISHED GRADE (NOTE H)

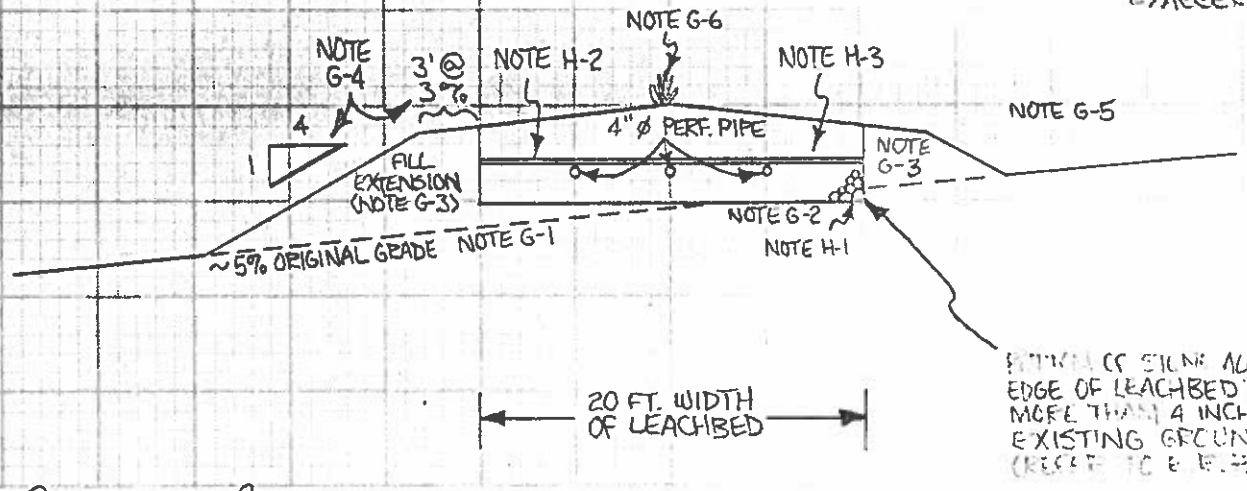
REFER TO ATTACHED SHEET FOR THESE DESIGN NOTES/ SPECIFICATIONS: (BY LETTER) A, B, D, E, F, G, H, J, K, L

FILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT LOCATION & DESCRIPTION
Depth of Fill (Upslope)	20"	Reference Elevation is	100.0	ERP IS A NAIL 39" UP ON A 4" DIA. APPLE
Depth of Fill (Downslope)	31-35"	Bottom of Disposal Area	96.0	LOCATED 14' @ N20½E FROM THE NE CORNER AND
		Top of Distribution Lines ~~or Chambers~~	96.9	31' FROM THE NW CORNER OF THE LEACHBED.

NOTE: 30 CU. YDS. OF STONE REQUIRED. (NOTE H-1)

DISPOSAL AREA CROSS SECTION (ACROSS A - A' ABOVE)

Scale:
Vertical: 1 inch = 5 Ft.
Horizontal: 1 inch = 10 Ft.
NOTE: VERTICAL SCALE IS INTENTIONALLY EXAGGERATED



BOTTOM OF STONE ALONG UPHILL EDGE OF LEACHBED IS TO BE NO MORE THAN 4 INCHES BENEATH EXISTING GROUND SURFACE. (REFER TO E-2)

Allan E. Catt
Site Evaluator Signature

187
SE#

9/3/86
Date

HHE-200 Rev 1/94

Ralph S. Baker
Cert. Soil Scientist
Lic. Site Evaluator

Allan E. Ott 244-5119
Lic. Site Evaluator
Southwest Harbor, Maine

Ralph S. Baker Associates

Star Route Box 24
Penobscot, Maine 04476
(207)326-4254

DESIGN NOTES/SPECIFICATIONS

for Subsurface Wastewater

Disposal System

Attachment to HHE-200 form for:

STEPHEN KRICHELS
owner/applicant

NOTE

(A) Elevation Reference Point (ERP) is ~~at the same elevation as~~ / 48" inches above / ~~below~~ // the bottom of the stone / ~~the bottom of the chambers~~ within the proposed disposal area as staked. Disposal area (leachfield) shall be no lower than indicated.

(B) Sewer Pipes: Use 4" diameter approved materials (watertight). Insulate as necessary to protect from freezing; bury at least 1' deep; seed.

1. Building sewer: For gravity flow from building to septic tank, maintain minimum pitch of 1/4"/ft. (1/8"/ft. with LPI's approval).
2. Effluent line: For gravity flow below septic tank, maintain minimum pitch of 1/16"/ft.

~~(C)~~ Pump Needed: Gravity flow to disposal area is not feasible. See DESIGN NOTES/SPECIFICATIONS for PUMPED SYSTEMS for details.

(D) Distribution Box: Serves as worthwhile access point to disposal area. Set box properly on firm base, and protect from freezing by covering with soil or insulation.

(E) Septic Tank:

1. Setback requirements which must be met when installing a septic tank include the following (unless reduced by waiver): 100 ft. from wells, except 75 ft. from owner's well; 100 ft. from high watermark of perennial waterbodies (may be reduced to 75 ft. if tank tested for water tightness in LPI's presence); 50 ft. from intermittent waterbodies; 25 ft. from man-made drainage ditches; 10 ft. from property lines; and 8 ft. from buildings.
2. Pumping of the septic tank every 3 to 4 years is generally considered good maintenance practice. Otherwise, clogging of the disposal area could result, necessitating costly replacement. Installation of a riser over the cleanout cover of the tank greatly facilitates maintenance.

(F) Setbacks for Disposal Areas: Same as for septic tanks (NOTE E above) except for the following (unless waived): 100 ft. from owner's well; 100 ft. from perennial waterbodies; 20 ft. from buildings with basements; 15 ft. from buildings without basements.

NOTE

(G) Disposal Area Construction Details:

1. The vegetation in the proposed disposal area and fill extensions shall be removed leaving as much of the original topsoil in place as possible. The ground surface shall then be raked/scarified to minimize glazing or smearing of the original soil.
2. The disposal area bottom and distribution line shall be level with a maximum grade tolerance of 1"/100 ft.
3. Clean fill (sandy loam or coarser) is to be placed in 8" lifts.
4. The finished grade of the backfill over the disposal area shall be crowned from the center of the disposal area at a 3% slope extending 3 ft. beyond the edge of the disposal area. At that point the fill shall be sloped at a uniform grade of no greater than 25% (4:1) to the original ground.
5. The land adjacent to the disposal area shall be graded to prevent both the accumulation of surface water on the disposal area, and the flow of surface water across it. Make sure that cellar drain line discharges away from disposal area also.
6. The finished disposal area and fill extensions shall be seeded to establish vegetation to prevent erosion: a) grass, clover, trefoil, vetch, perennial wildflowers, or other herbaceous perennials may be utilized for disposal area surfaces; woody shrubs are unacceptable; b) woody shrubs in conjunction with a hardy perennial ground cover may be used on fill extensions.

(H) Bed or Trench Area Details:

1. A minimum total of 12" of stone of uniform size, 3/4" to 3" size range, and free of fines, dust, ashes or clay, shall be used on the bottom of the disposal area. The distribution pipes shall be installed totally within the stone.
2. The stone shall be completely covered with one of the following materials: a) a minimum 2" layer of compressed hay; b) one layer of an approved non-woven filter fabric; c) 1" of fiberglass insulation.
3. Clean backfill, 8 to 12" in depth, shall be carefully placed over the hay layer or approved substitute.

(I) Chamber Disposal Area Details: Install approved chambers in accordance with manufacturer's recommendations and specifications.

(J) Seeding: (Recommended quantities per 1000sq. ft.) Rake in 90 lbs. lime, 30 lbs. 5-10-10 fertilizer (or 1/4 ton manure); seed with 2 to 4 lbs. "Conservation Mix" available at garden centers; then mulch with 1½ bales hay to prevent erosion and aid establishment of vegetative cover.

(K) Maintenance: Conserve water whenever possible. Low volume plumbing fixtures or flow reducers on showers, toilets, and sinks are strongly recommended. Also, do not drive or park vehicles over septic system. Also see NOTE E-2.

(L) For further information: Contact me, or your town's Local Plumbing Inspector (LPI), or Div. of Health Engineering, Dept. of Human Services, Augusta, ME 04333, Tel. 289-3826, which administers the Subsurface Wastewater Disposal Rules, from which most of these specifications are derived.