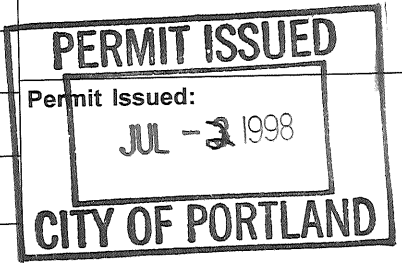


**City of Portland, Maine – Building or Use Permit Application** 389 Congress Street, 04101, Tel: (207) 874-8703, FAX: 874-8716

Permit No: **980695**

Location of Construction: <i>Cushing Island Octava Ave</i>		Owner: <i>Sidney Thaxter</i>		Phone: <i>773-6930</i>	
Owner Address: <i>93 Merrifield Rd, ME 04101</i>		Lessee/Buyer's Name:		Phone:	
Contractor Name: <i>The Thaxter Co.</i>		Address: <i>828-3553</i>		BusinessName:	
Past Use: <i>Vacant Land</i>		Proposed Use: <i>1-fam</i>		COST OF WORK: \$ <i>140,000.00</i>	
				PERMIT FEE: \$ <i>720.00</i>	
				FIRE DEPT. <input type="checkbox"/> Approved <input type="checkbox"/> Denied	
				INSPECTION: Use Group: Type: <i>2</i>	
				Signature: <i>[Signature]</i>	
Proposed Project Description: <i>Construct Single Family Dwelling</i>		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)		Signature: _____ Date: _____	
		Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved with Conditions <input type="checkbox"/> Denied			



Zone: *DK* CBL: *1062-A-013*

Zoning Approval: *[Signature]*

**Special Zone or Reviews:**

Shoreland  
 Wetland  
 Flood Zone  
 Subdivision  
 Site Plan maj  minor  mmm

Permit Taken By: *Mary Greek* Date Applied For: *29 May 1998*

- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal rules.
- Building permits do not include plumbing, septic or electrical work.
- Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

**Zoning Appeal**

Variance  
 Miscellaneous  
 Conditional Use  
 Interpretation  
 Approved  
 Denied

**Historic Preservation**

Not in District or Landmark  
 Does Not Require Review  
 Requires Review

Action:

Approved  
 Approved with Conditions  
 Denied

Date: *[Signature]*

*John [Signature] 786-4895*

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit

*26 June 1998 - Permit Routed*  
*02 June 1998*

SIGNATURE OF APPLICANT \_\_\_\_\_ ADDRESS: \_\_\_\_\_ DATE: \_\_\_\_\_ PHONE: \_\_\_\_\_

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE \_\_\_\_\_ PHONE: \_\_\_\_\_

CEO DISTRICT

COMMENTS

7-7-98 Spoke with contractor Mr. Wang re: [unclear]

9-14-98 Met contractor on island checked out set back Dr. Cheryl  
picking according to plans

4/2/99 Checked W/M. Nugent - He did Septic -

Morris Inup - all ok except Tread & Riser on top step  
1st to 2nd - discussed w/ John Paulin - he will have it  
corrected - also discussed guard rails & Daltonee Spacing  
no there would be no problems R

Inspection Record	
Type	Date
Foundation: _____	_____
Framing: _____	_____
Plumbing: _____	_____
Final: _____	_____
Other: _____	_____



CITY OF PORTLAND, MAINE  
Department of Building Inspection

# Certificate of Occupancy

LOCATION Ottawa Ave. Cushing Avenue CBL#106A-A-013

Issued to Sidney Thaxter

Date of Issue

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 980695, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES

Single Family Dwelling

APPROVED OCCUPANCY

Use Group R-3  
Type 5B  
BOCA 1996

Limiting Conditions: N/A

This certificate supersedes  
certificate issued

Approved:

6/23/99

(Date)

*Jonathan F. Reed*  
Inspector

*[Signature]*  
Inspector of Buildings

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

WAB

106A-A-015

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

## PROPERTY ADDRESS

Town Or Plantation	PORTLAND
Street Subdivision Lot #	CUSHING ISLAND
PROPERTY OWNERS NAME	
Last: THAXTER First: SIDNEY	
Applicant Name:	JOHN THAXTER
Mailing Address of Owner/Applicant (If Different)	THAXTER COMPANY P.O. BOX 7231 D.T.S. PORTLAND, ME. 04112

PORTLAND Date Permit issued: 5.29.89	PERMIT # 6495	STATE COPY \$ 1100	<input type="checkbox"/> Double Fee Charged
Local Plumbing Inspector Signature: <i>[Signature]</i>		PL # 9124	

**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.

*[Signature]* 5/29  
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.

Local Plumbing Inspector Signature \_\_\_\_\_ Date Approved \_\_\_\_\_

## PERMIT INFORMATION

**THIS APPLICATION IS FOR:**

- NEW SYSTEM
- REPLACEMENT SYSTEM
- EXPANDED SYSTEM
- EXPERIMENTAL SYSTEM

**SEASONAL CONVERSION**  
to be completed by the LPI

- SYSTEM COMPLIES WITH RULES
- CONNECTED TO SANITARY SEWER
- SYSTEM INSTALLED - P# \_\_\_\_\_
- SYSTEM DESIGN RECORDED AND ATTACHED

**IF REPLACEMENT SYSTEM:**  
YEAR FAILING SYSTEM INSTALLED \_\_\_\_\_

THE FAILING SYSTEM IS:

- BED
- CHAMBER
- TRENCH
- OTHER: \_\_\_\_\_

SIZE OF PROPERTY 40,000 sq ft ZONING \_\_\_\_\_

**THIS APPLICATION REQUIRES:**

- NO RULE VARIANCE
- NEW SYSTEM VARIANCE  
Attach New System Variance Form
- REPLACEMENT SYSTEM VARIANCE  
Attach Replacement System Variance Form
- MINIMUM LOT SIZE VARIANCE

a.  Requiring Local Plumbing Inspector Approval  
b.  Requires State and Local Plumbing Inspector Approval

**DISPOSAL SYSTEM TO SERVE:**

- SINGLE FAMILY DWELLING
- MODULAR OR MOBILE HOME
- MULTIPLE FAMILY DWELLING
- OTHER \_\_\_\_\_ SPECIFY \_\_\_\_\_

**INSTALLATION IS:**

COMPLETE SYSTEM

- NON-ENGINEERED SYSTEM
- PRIMITIVE SYSTEM  
(Includes Alternative Toilet)
- ENGINEERED (+ 2000 gpd)

INDIVIDUALLY INSTALLED COMPONENTS:

- TREATMENT TANK (ONLY)
- HOLDING TANK \_\_\_\_\_ GAL
- ALTERNATIVE TOILET (ONLY)
- NON-ENGINEERED DISPOSAL AREA (ONLY)
- ENGINEERED DISPOSAL AREA (ONLY)
- SEPARATED LAUNDRY SYSTEM

**TYPE OF WATER SUPPLY**  
PUBLIC WATER

## DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

**TREATMENT TANK**

- SEPTIC:  Regular  Low Profile
- AEROBIC

SIZE: 1,000 GALS.

**WATER CONSERVATION**

- NONE
- LOW VOLUME TOILET
- SEPARATED LAUNDRY SYSTEM
- ALTERNATIVE TOILET

SPECIFY: \_\_\_\_\_

**PUMPING**

- NOT REQUIRED
- MAY BE REQUIRED  
(DEPENDING ON TREATMENT TANK LOCATION AND ELEVATION)
- REQUIRED

DOSE: \_\_\_\_\_ GALS.

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

SINGLE FAMILY DWELLING (4 BEDROOM)

DESIGN FLOW: 360 (GALLONS/DAY)

**SOIL CONDITIONS USED FOR DESIGN PURPOSES**

PROFILE	CONDITION
2	A

DEPTH TO LIMITING FACTOR: 21

**SIZE RATINGS USED FOR DESIGN PURPOSES**

- SMALL
- MEDIUM
- MEDIUM-LARGE
- LARGE
- EXTRA LARGE

**DISPOSAL AREA TYPE/SIZE**

- BED \_\_\_\_\_ Sq. Ft.
- CHAMBER 612 Sq. Ft.  
INFILTRATORS  REGULAR  H-20
- TRENCH \_\_\_\_\_ Linear Ft.
- OTHER: \_\_\_\_\_

## SITE EVALUATOR STATEMENT

On JUNE 7, 1989 (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.

*[Signature]*  
Site Evaluator Signature

163  
SE#

6/17/89  
Date

(Local Plumbing Inspector's Signature)

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Town, City, Plantation  
**PORTLAND**

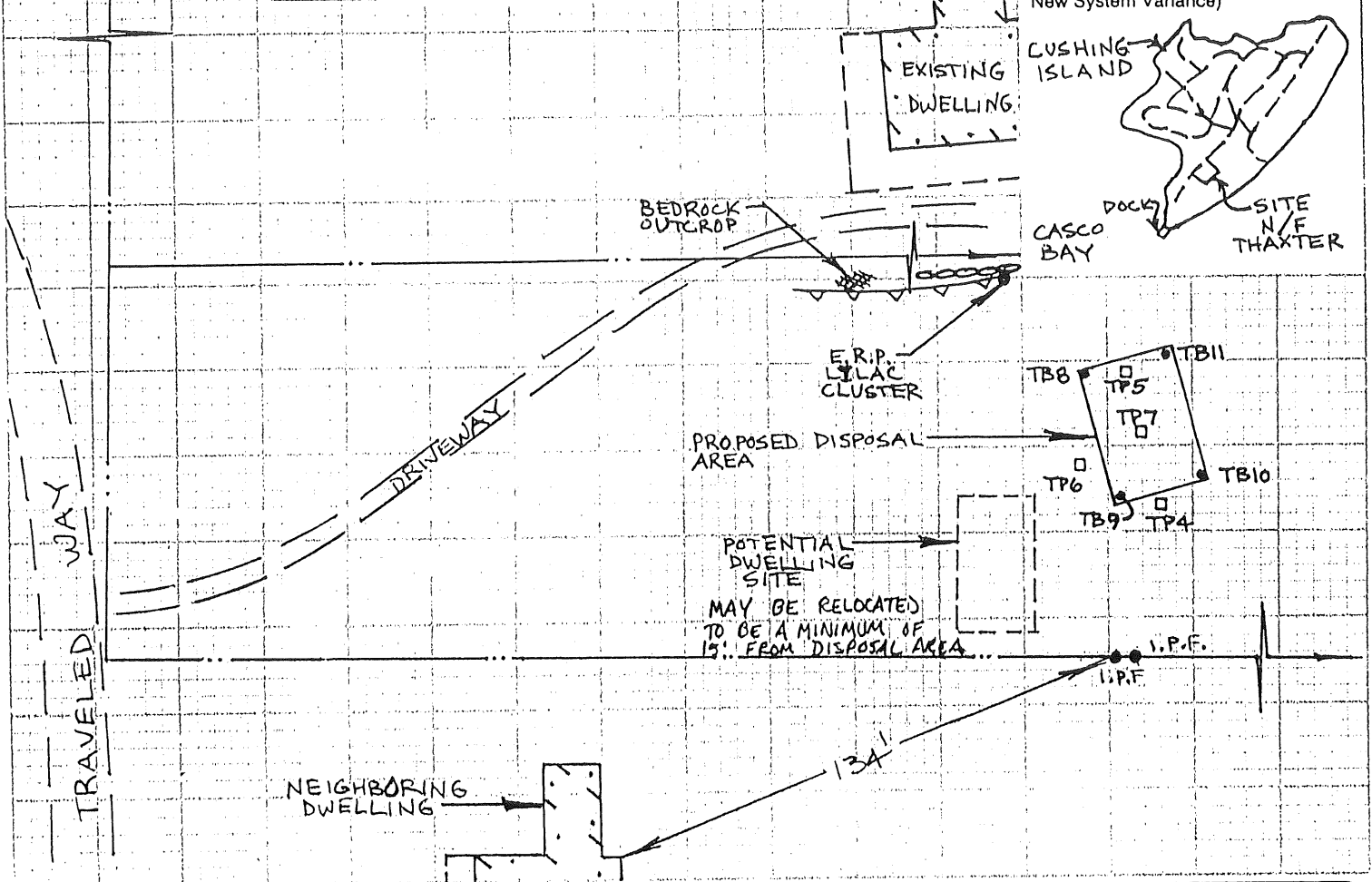
Street, Road, Subdivision  
**CUSHING ISLAND**

Owners Name  
**THAXTER, SIDNEY**

**TENNIS COURT SITE PLAN**

Scale 1" = 40 Ft.

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



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

Observation Hole TP5  Test Pit  Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	SANDY LOAM		DARK BROWN	
6				
10		FRIABLE		
15	LOAMY SAND		DARK YELLOWISH BROWN	
20			10YR 4/6	
25				
30				
35				
40				
45				
50				

Soil Profile <u>2</u>	Classification Condition <u>A</u>	Slope <u>    </u> %	Limiting Factor <u>24</u>	<input type="checkbox"/> Ground Water
			<input type="checkbox"/> Restrictive Layer	<input checked="" type="checkbox"/> Bedrock

Observation Hole TP7  Test Pit  Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	SANDY LOAM			
6				
10		FRIABLE		
15	GRAVELLY LOAMY SAND			
20				
25				
30				
35				
40				
45				
50				

Soil Profile <u>2</u>	Classification Condition <u>A</u>	Slope <u>    </u> %	Limiting Factor <u>21</u>	<input type="checkbox"/> Ground Water
			<input type="checkbox"/> Restrictive Layer	<input checked="" type="checkbox"/> Bedrock

*Albert Frick*  
Site Evaluator Signature

163  
SE #

6/17/89  
Date



# Albert Frick Associates, Inc.

## Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04038

(207) 839-5563

Town, City, Plantation <b>PORTLAND</b>	Street, Road, Subdivision <b>CUSHING ISLAND</b>	Owners Name <b>THAXTER, SIDNEY</b>
---	--	---------------------------------------

### SOIL DESCRIPTION AND CLASSIFICATION

Observation Hole TB 8     Test Pit     Boring  
 \_\_\_\_\_ " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0				
6				
10				
15				
20				
25				
30				
35				
40				
45				
50				

Soil Profile	Classification Condition	Slope _____ %	Limiting Factor <u>23</u>	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
--------------	--------------------------	---------------	---------------------------	--

Observation Hole TB 9     Test Pit     Boring  
 \_\_\_\_\_ " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0				
6				
10				
15				
20				
25				
30				
35				
40				
45				
50				

Soil Profile	Classification Condition	Slope _____ %	Limiting Factor <u>24</u>	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
--------------	--------------------------	---------------	---------------------------	--

### SOIL DESCRIPTION AND CLASSIFICATION

Observation Hole TB 10     Test Pit     Boring  
 \_\_\_\_\_ " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0				
6				
10				
15				
20				
25				
30				
35				
40				
45				
50				

Soil Profile	Classification Condition	Slope _____ %	Limiting Factor <u>26</u>	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
--------------	--------------------------	---------------	---------------------------	--

Observation Hole TB 11     Test Pit     Boring  
 \_\_\_\_\_ " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0				
6				
10				
15				
20				
25				
30				
35				
40				
45				
50				

Soil Profile	Classification Condition	Slope _____ %	Limiting Factor <u>29</u>	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
--------------	--------------------------	---------------	---------------------------	--

*Albert Frick*  
 Site Evaluator

163  
 SE#

6/17/89  
 Date

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering

Town, City, Plantation

Street, Road, Subdivision

Owners Name

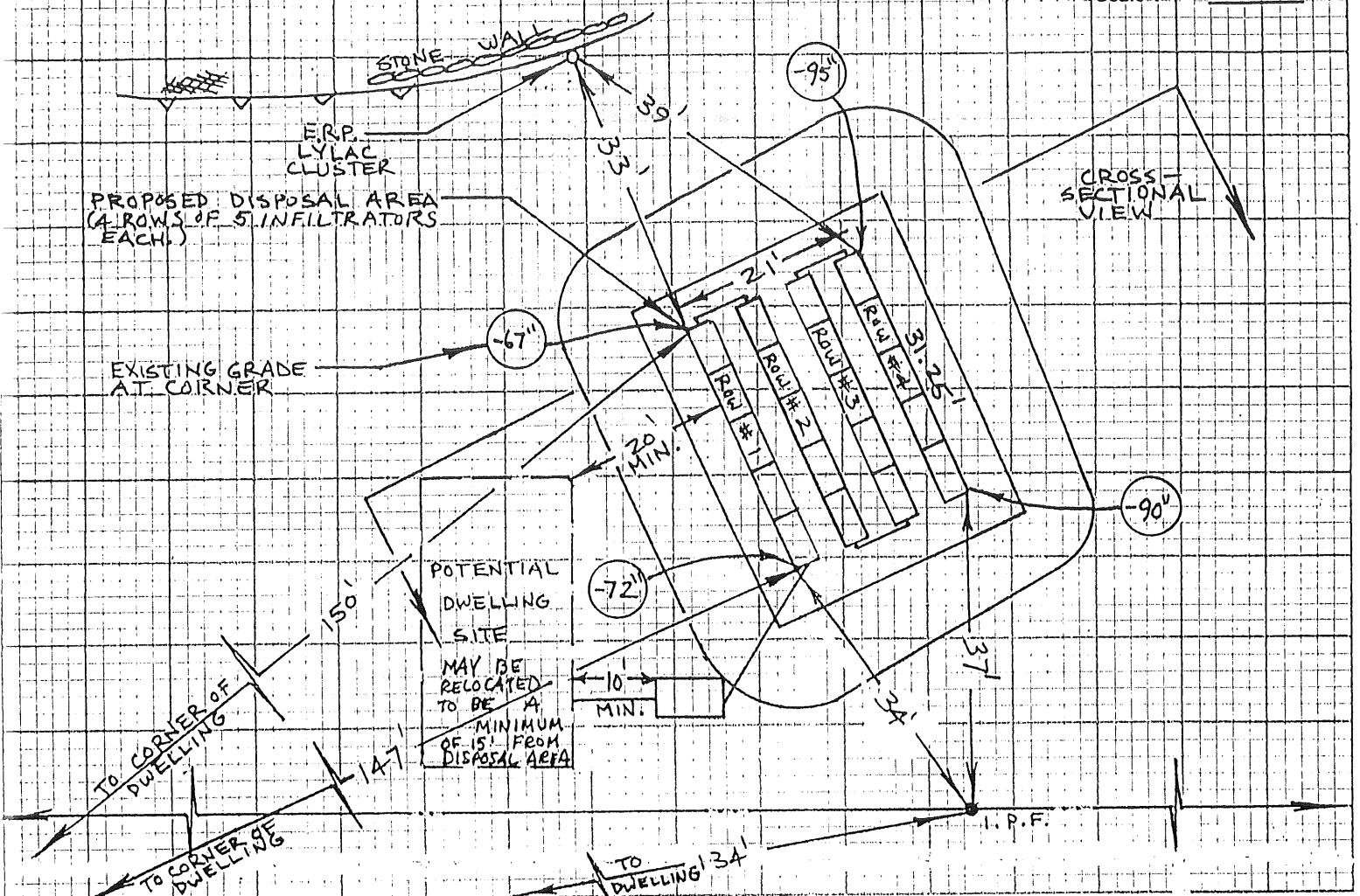
PORTLAND

CUSHING ISLAND

THAXTER, SIDNEY

## SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = \_\_\_\_\_ Ft.



### FILL REQUIREMENTS

### CONSTRUCTION ELEVATIONS

### ELEVATION REFERENCE POINT LOCATION & DESCRIPTION

Depth of Fill (Upslope) 25"-26"  
Depth of Fill (Downslope) 30"-31"

Reference Elevation is  
Bottom of Disposal Area  
Top of Distribution Lines or Chambers

DO SEE DETAIL BELOW

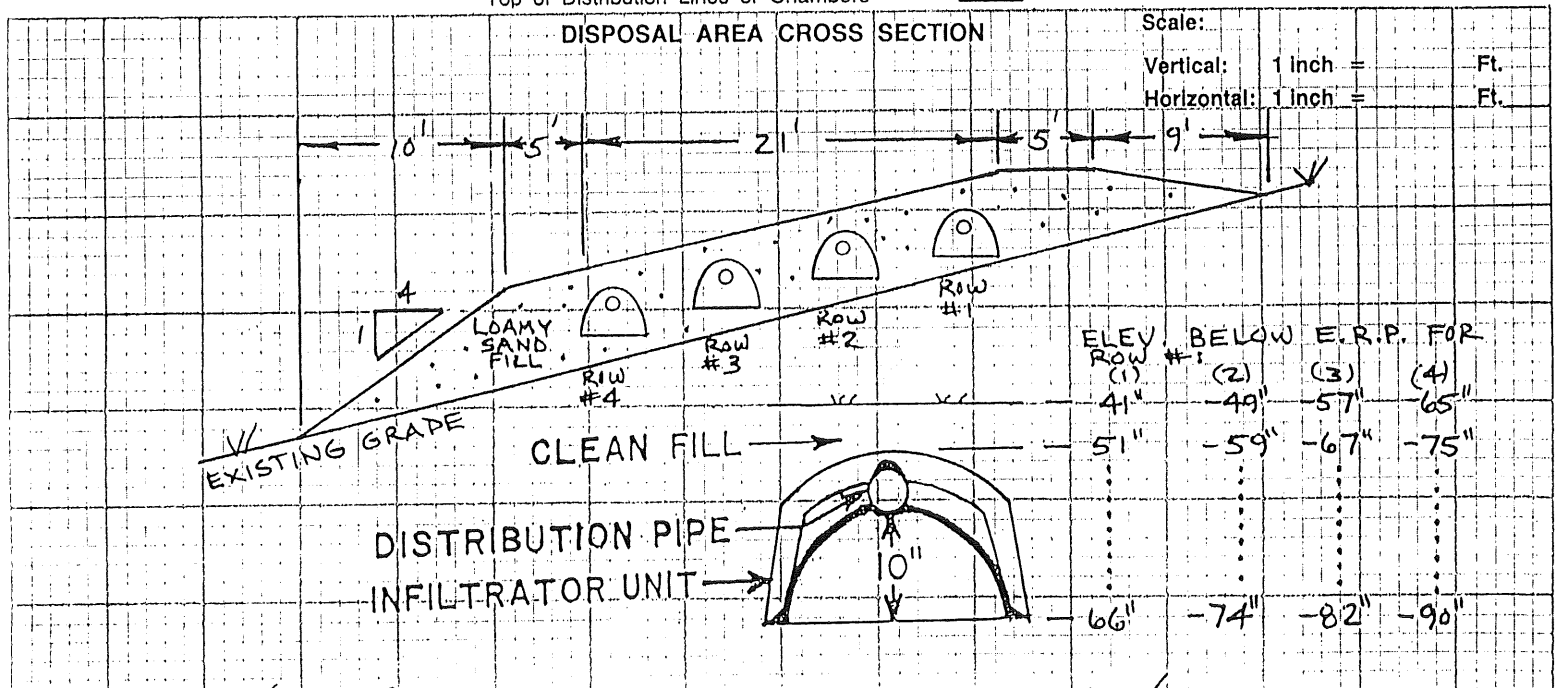
NAIL IN BASE OF LYLAC CLUSTER, BELOW STONE WALL.

### DISPOSAL AREA CROSS SECTION

Scale:

Vertical: 1 inch = \_\_\_\_\_ Ft.

Horizontal: 1 inch = \_\_\_\_\_ Ft.



*Albert Frick*  
Site Evaluator Signature

163  
SE#

6/17/89  
Date

160A-A-013

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

**PROPERTY LOCATION**

Town or Plantation: **PORTLAND**

Street Subdivision Lot: **CUSHING ISLAND**

**PROPERTY OWNER'S NAME**

Last: **THAXTER** First: **SIDNEY ST. F.**

Applicant's Name: \_\_\_\_\_

Mailing Address of Owner: **CURTIS THAXTER STEVENS et al**  
**P.O. BOX 7320**

Daytime Tel. \* **PORTLAND, ME 04112** **774-9000**

Date Permit Issued: **9/14/98**

Local Plumbing Inspector Signature: \_\_\_\_\_

FEE: \$ **110.00**  If Double Fee Charged

L.P.I. # **0129**

**Owner Statement**

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

Signature of Owner/Applicant: *[Signature]* Date: **9/14/98**

Municipal Tax Map \* \_\_\_\_\_ Lot \* \_\_\_\_\_

**Caution: Inspection 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

**TYPE OF APPLICATION:**

- First Time System
- Replacement System  
Type Replaced \_\_\_\_\_  
Year Installed \_\_\_\_\_
- Expanded System  
 a. one time exempted  
 b. non exempted
- Experimental System
- Seasonal Conversion

**THIS APPLICATION REQUIRES:**

- No Rule Variance
- New System Variance (Municipal-soil condition)
- First Time System Variance (State)
- Replacement System Variance  
 a. Local Plumbing Inspector approval  
 b. State & Local Plumbing Inspector approval
- Minimum Lot Size Variance
- Seasonal Conversion Approval

**DISPOSAL SYSTEM COMPONENT(S)**

- Non-Engineered System
- Primitive System (graywater & alt toilet)
- Alternative Toilet \_\_\_\_\_
- Non-Engineered Treatment Tank
- Holding Tank \_\_\_\_\_ Gallons
- Non-Engineered Disposal Area (only)
- Separated Laundry System
- Engineered System (+2000 gpd)
- Engineered Treatment Tank (only)
- Engineered Disposal Area (only)
- Pretreatment

**SIZE OF PROPERTY**

: **66,644 SQ. FT.**

**SHORELAND ZONING**

Yes  No

**DISPOSAL SYSTEM TO SERVE:**

- Single Family Dwelling Unit
- Multiple Family Dwelling: Number of Units \_\_\_\_\_
- Other \_\_\_\_\_

**TYPE OF WATER SUPPLY**

**PROPOSED DRILLED WELL**

## DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

**TREATMENT TANK**

- Concrete  
 a. Regular  
 b. Low Profile
- Plastic
- Other \_\_\_\_\_

SIZE **1000** Gallons

**DISPOSAL AREA TYPE / SIZE**

- Bed \_\_\_\_\_ Sq. Ft.
- Proprietary Device **152** Sq. Ft.  
 Cluster  Linear  
 Regular  H-20
- Trench
- Other \_\_\_\_\_

**24 ELTEN IN-DRAINS**

**GARBAGE DISPOSAL UNIT**

- No
- Yes  
 Multi-compartment tank  
 Tank in series  
 Increase in tank capacity  
 Filter on tank outlet

**CRITERIA USED FOR DESIGN FLOW (Show Calculations)**

**4 BEDROOMS AT 90 GALLONS PER DAY EACH =**

DESIGN FLOW: **360**  
(Gallons/Day)

**PROFILE & DESIGN CLASS**

PROFILE	DESIGN
<b>2</b>	<b>A</b>

DEPTH TO MOST LIMITING FACTOR **26"**

**DISPOSAL AREA SIZING**

- Small - 2.00
- Medium - 2.60
- Medium-Large - 3.30
- Large - 4.10
- Extra-Large - 5.00

**PUMPING**

- Not required
- May be required
- Required

DOSE \_\_\_\_\_ Gallons

## SITE EVALUATOR'S STATEMENT

On **8/17/98** (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.

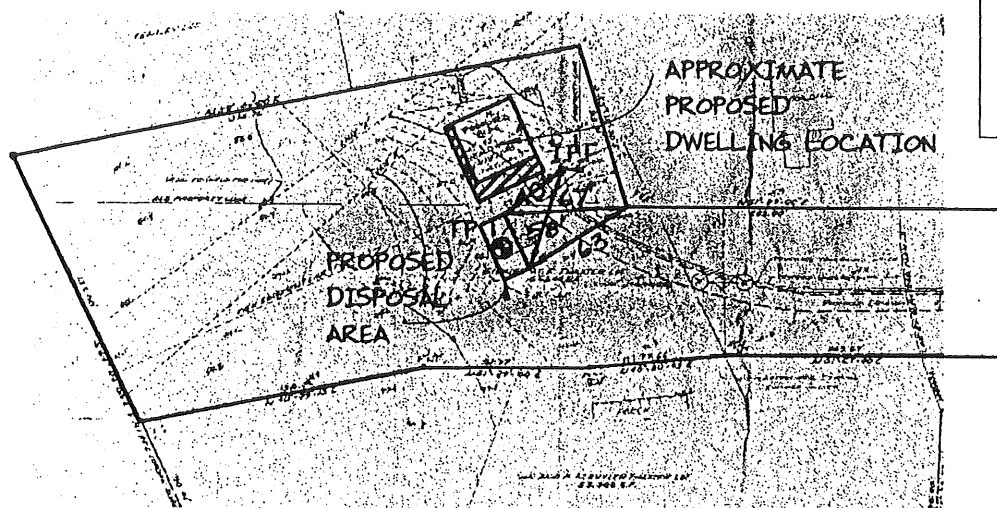
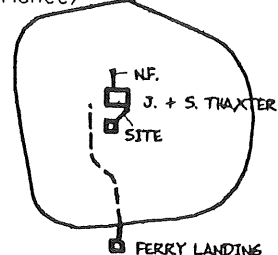
*Albert Frick*  
Site Evaluator Signature

**163**  
SE • **9/11/98**  
Date



# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering

Town, City, Plantation <b>PORTLAND</b>	Street, Road Subdivision <b>CUSHING ISLAND</b>	Owner's Name <b>PETE THAXTER</b>
SITE PLAN <span style="float: right;">Scale 1" = <u>100</u> Ft. or as shown</span>		SITE LOCATION PLAN (Attach Map from Maine Atlas for New System Variance)
 <p style="text-align: center;">APPROXIMATE PROPOSED DWELLING LOCATION</p> <p style="text-align: center;">PROPOSED DISPOSAL AREA</p>		 <p style="text-align: center;">NF. J. + S. THAXTER SITE</p> <p style="text-align: center;">FERRY LANDING</p>
(SEE PLAN ATTACHED)		

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)											
Observation Hole <u>TP 1</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring _____ " Depth of Organic Horizon Above Mineral Soil				Observation Hole _____ <input type="checkbox"/> Test Pit <input type="checkbox"/> Boring _____ " Depth of Organic Horizon Above Mineral Soil							
0	Texture	Consistency	Color	Mottling	0	Texture	Consistency	Color	Mottling		
10	SANDY LOAM	FRIABLE	DARK BROWN		10						
20					20						
30	BEDROCK				30						
40					40						
50					50						
Soil Classification <u>2</u> <u>A</u> Profile      Condition				Slope _____ %				Limiting Factor <u>26</u> "			
<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth				<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth							

*Albert Frick*  
Site Evaluator Signature

68  
SE \*

9/11/98  
Date

CURTIS THAXTER STEVENS BRODER & MICOLEAU LLC  
ATTORNEYS AT LAW

ONE CANAL PLAZA, P.O. BOX 7320, PORTLAND, ME 04112-7320 / TEL: 207-774-9000 FAX: 207-775-0612 / WEBPAGE: www.curthax.com

Sidney St. F. Thaxter  
sst@curthax.com

185 STATE STREET  
P.O. BOX 5307  
AUGUSTA, ME 04332  
TEL: 207-626-0388  
FAX: 207-626-3052

July 10, 1998

KEY PLAZA  
23 WATER STREET  
P.O. BOX 2205  
BANGOR, ME 04402-2205  
TEL: 207-942-4411  
FAX: 207-942-4488

Mr. Samuel Hofses  
City of Portland Building Inspector  
389 Congress Street  
Portland, Maine 04101

RE: Thaxter Property Located at  
Ottawa Avenue, Cushings Island

Dear Sam:

Enclosed is a copy of the building permit for my property as referenced above. Please note that provision 29, ("A State subsurface wastewater disposal permit must be obtained before any work begins") has been met.

Also enclosed is a copy of the permit that had already been issued to me by your office. We are going to proceed with construction based on that permit.

Thank you for your cooperation.

Sincerely,



Sidney St. F. Thaxter

SST/rbh  
Enclosures

O:\SST\CUSHINGS\HOFSES.LTR

Received  
14 July 98



**Albert Frick Associates, Inc.**

Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04038

(207) 839-5563

PORTLAND  
TOWN

CUSHING ISLAND  
LOCATION

THAXTER  
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

<u>PORTLAND</u>	<u>CUSHING ISLAND</u>	<u>THAXTER</u>
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  
95A County Road Gorham, Maine 04038  
(207) 839-5563

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering

Town, City, Plantation  
**PORTLAND**

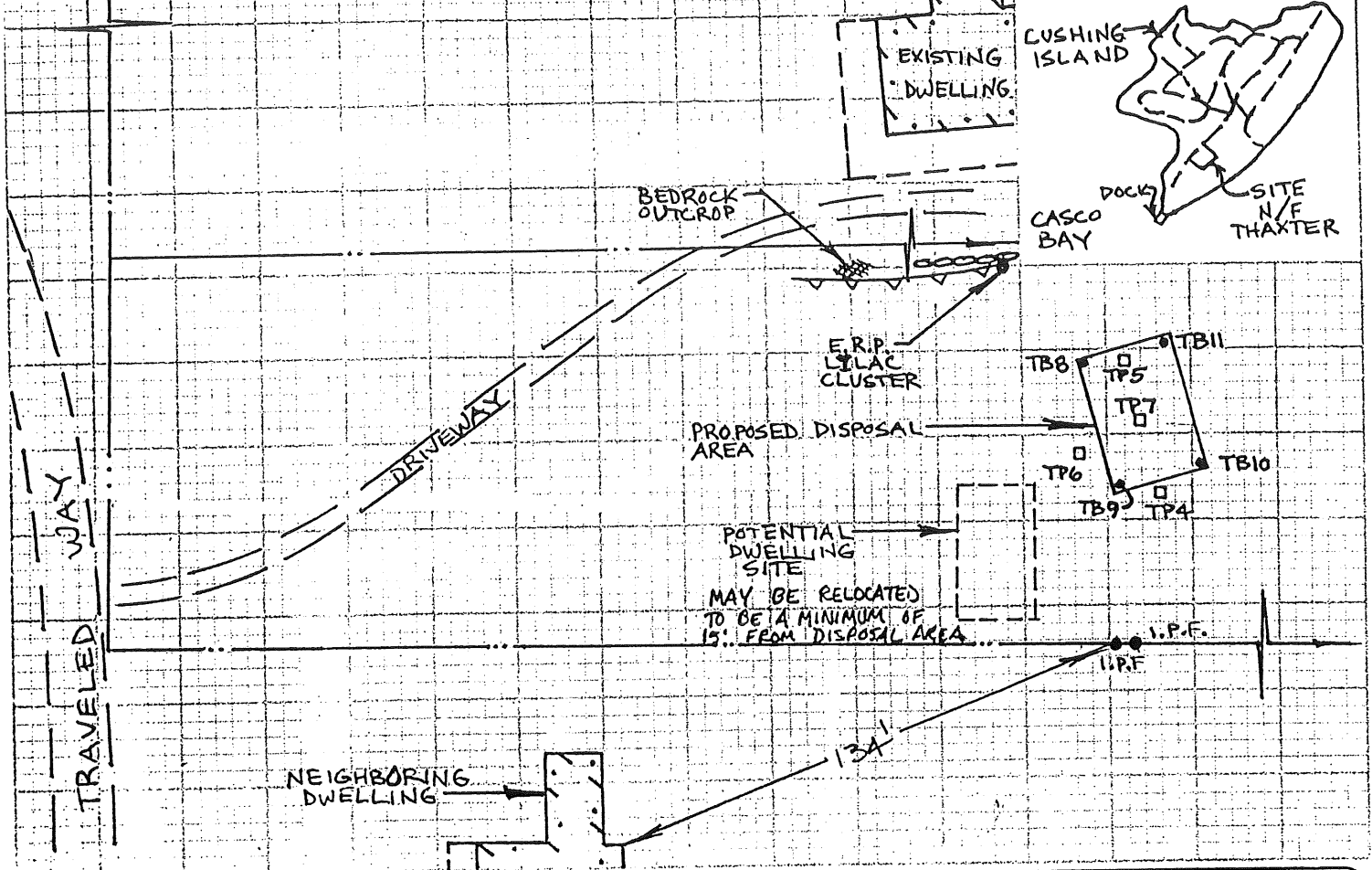
Street, Road, Subdivision  
**CUSHING ISLAND**

Owners Name  
**THAXTER, SIDNEY**

**TENNIS COURT SITE PLAN**

Scale 1" = 40' FL.

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



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

Observation Hole TP5  Test Pit  Boring

" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
SANDY LOAM		DARK BROWN	
	FRIABLE		
LOAMY SAND		DARK YELLOWISH BROWN	
		10.Y.R. 4/6	
BEDROCK			

Soil Profile 2 Classification A Slope     % Limiting Factor 24"  Ground Water  Restrictive Layer  Bedrock

Observation Hole TP7  Test Pit  Boring

" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
SANDY LOAM			
	FRIABLE		
GRAVELLY LOAMY SAND			
BEDROCK			

Soil Profile 2 Classification A Slope     % Limiting Factor 21"  Ground Water  Restrictive Layer  Bedrock

*Albert Frick*

163

6/17/89



# Albert Frick Associates, Inc.

## Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04038

(207) 839-5563

Town, City, Plantation <b>PORTLAND</b>	Street, Road, Subdivision <b>CUSHING ISLAND</b>	Owners Name <b>THAXTER, SIDNEY</b>
---	--	---------------------------------------

SOIL DESCRIPTION AND CLASSIFICATION												
Observation Hole <u>TB 8</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring		Observation Hole <u>TB 9</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring										
" Depth of Organic Horizon Above Mineral Soil		" Depth of Organic Horizon Above Mineral Soil										
Texture	Consistency	Color	Mottling									
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">0</td> <td style="width:15%;">6</td> <td style="width:15%;">10</td> <td style="width:15%;">15</td> <td style="width:15%;">20</td> <td style="width:15%;">23</td> <td style="width:15%;">30</td> <td style="width:15%;">40</td> <td style="width:15%;">50</td> </tr> </table>				0	6	10	15	20	23	30	40	50
0	6	10	15	20	23	30	40	50				
Soil Classification		Slope	Limiting Factor	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock								
Profile	Condition	%	<u>23</u>	<u>24</u>								

SOIL DESCRIPTION AND CLASSIFICATION												
Observation Hole <u>TB 10</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring		Observation Hole <u>TB 11</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring										
" Depth of Organic Horizon Above Mineral Soil		" Depth of Organic Horizon Above Mineral Soil										
Texture	Consistency	Color	Mottling									
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">0</td> <td style="width:15%;">6</td> <td style="width:15%;">10</td> <td style="width:15%;">15</td> <td style="width:15%;">20</td> <td style="width:15%;">26</td> <td style="width:15%;">30</td> <td style="width:15%;">40</td> <td style="width:15%;">50</td> </tr> </table>				0	6	10	15	20	26	30	40	50
0	6	10	15	20	26	30	40	50				
Soil Classification		Slope	Limiting Factor	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock								
Profile	Condition	%	<u>26</u>	<u>29</u>								

*Albert Frick*

*163*

*6/17/89*

Date

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering

Town, City, Plantation

Street, Road, Subdivision

Owners Name

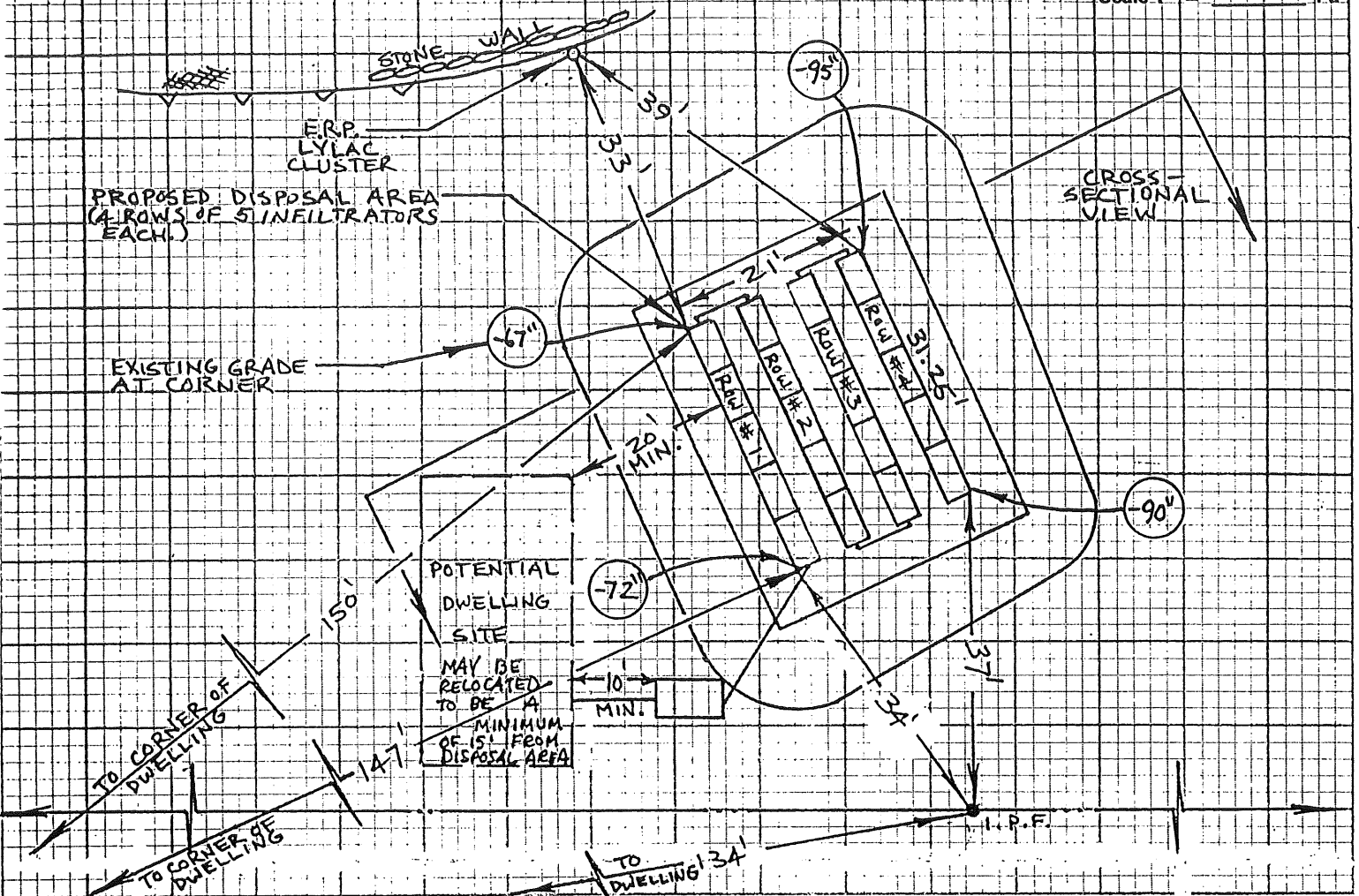
PORTLAND

CUSHING ISLAND

THAXTER, SIDNEY

## SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = \_\_\_\_\_ Ft.



### FILL REQUIREMENTS

Depth of Fill (Upslope) 25"-26"  
Depth of Fill (Downslope) 30"-31"

### CONSTRUCTION ELEVATIONS

Reference Elevation is  
Bottom of Disposal Area  
Top of Distribution Lines or Chambers

DO  
SEE  
DETAIL  
BELOW

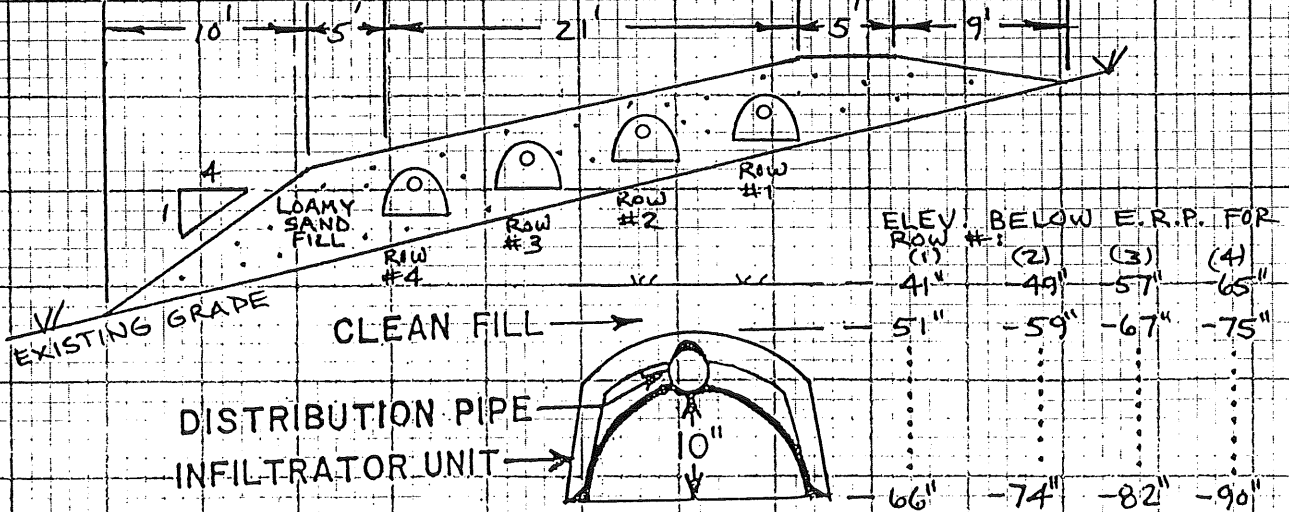
### ELEVATION REFERENCE POINT

LOCATION & DESCRIPTION  
NAIL IN BASE OF LYLAC  
CLUSTER, BELOW STONE WALL.

### DISPOSAL-AREA CROSS SECTION

Scale:

Vertical: 1 Inch = \_\_\_\_\_ Ft.  
Horizontal: 1 Inch = \_\_\_\_\_ Ft.



Albert Frick

163  
CE#

6/17/89  
Date

106A-A-013

**SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION**

**PROPERTY ADDRESS**

Town Or Plantation	PORTLAND
Street Subdivision Lot #	CUSHING ISLAND
<b>PROPERTY OWNERS NAME</b>	
Last: THAXTER	First: SIDNEY
Applicant Name:	JOHN THAXTER
Mailing Address of Owner/Applicant (If Different)	THAXTER COMPANY P.O. BOX 7231 D.T.S. PORTLAND, ME. 04112

PORTLAND PERMIT # 6495 APPLICANTS COPY

Date  
Permit Issued: 5/29/89 11/10/89 FEE  Double Fee Charged

*Samuel Hedges*  
Local Plumbing Inspector Signature L.P.I. # 01124

THE WORK SPECIFIED IN THIS APPLICATION IS HEREBY AUTHORIZED TO BE INSTALLED IN ACCORDANCE WITH THE RULES. THIS PERMIT EXPIRES AFTER TWO YEARS FROM DATE ISSUED UNLESS WORK HAS COMMENCED.

**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.

*John Thaxter* 5/29/89  
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.

Local Plumbing Inspector Signature Date Approved

**PERMIT INFORMATION**

<p><b>THIS APPLICATION IS FOR:</b></p> <p>1. <input checked="" type="checkbox"/> NEW SYSTEM</p> <p>2. <input type="checkbox"/> REPLACEMENT SYSTEM</p> <p>3. <input type="checkbox"/> EXPANDED SYSTEM</p> <p>4. <input type="checkbox"/> EXPERIMENTAL SYSTEM</p>	<p><b>THIS APPLICATION REQUIRES:</b></p> <p>1. <input checked="" type="checkbox"/> NO RULE VARIANCE</p> <p>2. <input type="checkbox"/> NEW SYSTEM VARIANCE Attach New System Variance Form</p> <p>3. <input type="checkbox"/> REPLACEMENT SYSTEM VARIANCE Attach Replacement System Variance Form</p> <p>a. <input type="checkbox"/> Requiring Local Plumbing Inspector Approval</p> <p>b. <input type="checkbox"/> Requires State and Local Plumbing Inspector Approval</p> <p>4. <input type="checkbox"/> MINIMUM LOT SIZE VARIANCE</p>	<p><b>INSTALLATION IS:</b></p> <p><b>COMPLETE SYSTEM</b></p> <p>1. <input checked="" type="checkbox"/> NON-ENGINEERED SYSTEM</p> <p>2. <input type="checkbox"/> PRIMITIVE SYSTEM (Includes Alternative Toilet)</p> <p>3. <input type="checkbox"/> ENGINEERED (+2000 gpd)</p> <p><b>INDIVIDUALLY INSTALLED COMPONENTS:</b></p> <p>4. <input type="checkbox"/> TREATMENT TANK (ONLY)</p> <p>5. <input type="checkbox"/> HOLDING TANK _____ GAL</p> <p>6. <input type="checkbox"/> ALTERNATIVE TOILET (ONLY)</p> <p>7. <input type="checkbox"/> NON-ENGINEERED DISPOSAL AREA (ONLY)</p> <p>8. <input type="checkbox"/> ENGINEERED DISPOSAL AREA (ONLY)</p> <p>9. <input type="checkbox"/> SEPARATED LAUNDRY SYSTEM</p>
<p><b>SEASONAL CONVERSION</b></p> <p>to be completed by the LPI</p> <p>5. <input type="checkbox"/> SYSTEM COMPLIES WITH RULES</p> <p>6. <input type="checkbox"/> CONNECTED TO SANITARY SEWER</p> <p>7. <input type="checkbox"/> SYSTEM INSTALLED - P# _____</p> <p>8. <input type="checkbox"/> SYSTEM DESIGN RECORDED AND ATTACHED</p>	<p><b>IF REPLACEMENT SYSTEM:</b></p> <p>YEAR FAILING SYSTEM INSTALLED _____</p> <p><b>THE FAILING SYSTEM IS:</b></p> <p>1. <input type="checkbox"/> BED      3. <input type="checkbox"/> TRENCH</p> <p>2. <input type="checkbox"/> CHAMBER      4. <input type="checkbox"/> OTHER: _____</p>	<p><b>DISPOSAL SYSTEM TO SERVE:</b></p> <p>1. <input checked="" type="checkbox"/> SINGLE FAMILY DWELLING</p> <p>2. <input type="checkbox"/> MODULAR OR MOBILE HOME</p> <p>3. <input type="checkbox"/> MULTIPLE FAMILY DWELLING</p> <p>4. <input type="checkbox"/> OTHER _____</p> <p style="text-align: center;">SPECIFY</p>
<p><b>SIZE OF PROPERTY</b></p> <p>40,000 sq. ft.</p>	<p><b>ZONING</b></p>	<p><b>TYPE OF WATER SUPPLY</b></p> <p>PUBLIC WATER</p>

**DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)**

<p><b>TREATMENT TANK</b></p> <p>1. <input checked="" type="checkbox"/> SEPTIC: <input checked="" type="checkbox"/> Regular <input type="checkbox"/> Low Profile</p> <p>2. <input type="checkbox"/> AEROBIC</p> <p>SIZE: 1,000 GALS.</p>	<p><b>WATER CONSERVATION</b></p> <p>1. <input type="checkbox"/> NONE</p> <p>2. <input checked="" type="checkbox"/> LOW VOLUME TOILET <b>REQUIRED</b></p> <p>3. <input type="checkbox"/> SEPARATED LAUNDRY SYSTEM</p> <p>4. <input type="checkbox"/> ALTERNATIVE TOILET</p> <p>SPECIFY: _____</p>	<p><b>PUMPING</b></p> <p>1. <input checked="" type="checkbox"/> NOT REQUIRED</p> <p>2. <input type="checkbox"/> MAY BE REQUIRED (DEPENDING ON TREATMENT TANK LOCATION AND ELEVATION)</p> <p>3. <input type="checkbox"/> REQUIRED</p> <p>DOSE: _____ GALS.</p>	<p><b>CRITERIA USED FOR DESIGN FLOW (BEDROOMS, SEATING, EMPLOYEES, WATER RECORDS, ETC.)</b></p> <p>SINGLE FAMILY DWELLING (4 BEDROOM)</p> <p>DESIGN FLOW: 360 (GALLONS/DAY)</p>				
<p><b>SOIL CONDITIONS USED FOR DESIGN PURPOSES</b></p> <table border="1"> <tr> <th>PROFILE</th> <th>CONDITION</th> </tr> <tr> <td>2</td> <td>A</td> </tr> </table> <p>DEPTH TO LIMITING FACTOR: 21</p>	PROFILE	CONDITION	2	A	<p><b>SIZE RATINGS USED FOR DESIGN PURPOSES</b></p> <p>1. <input type="checkbox"/> SMALL</p> <p>2. <input type="checkbox"/> MEDIUM</p> <p>3. <input checked="" type="checkbox"/> MEDIUM-LARGE</p> <p>4. <input type="checkbox"/> LARGE</p> <p>5. <input type="checkbox"/> EXTRA LARGE</p>	<p><b>DISPOSAL AREA TYPE/SIZE</b></p> <p>1. <input type="checkbox"/> BED _____ Sq. Ft.</p> <p>2. <input checked="" type="checkbox"/> CHAMBER 612 Sq. Ft. <b>INFILTRATORS</b></p> <p><input type="checkbox"/> REGULAR <input type="checkbox"/> H-20</p> <p>3. <input type="checkbox"/> TRENCH _____ Linear Ft.</p> <p>4. <input type="checkbox"/> OTHER: _____</p>	
PROFILE	CONDITION						
2	A						

**SITE EVALUATOR STATEMENT**

On JUNE 7, 1989 (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.

*Albert Frick*  
Site Evaluator Signature

163  
SE#

6/17/89  
Date



# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering

Town, City, Plantation

Street, Road, Subdivision

Owners Name

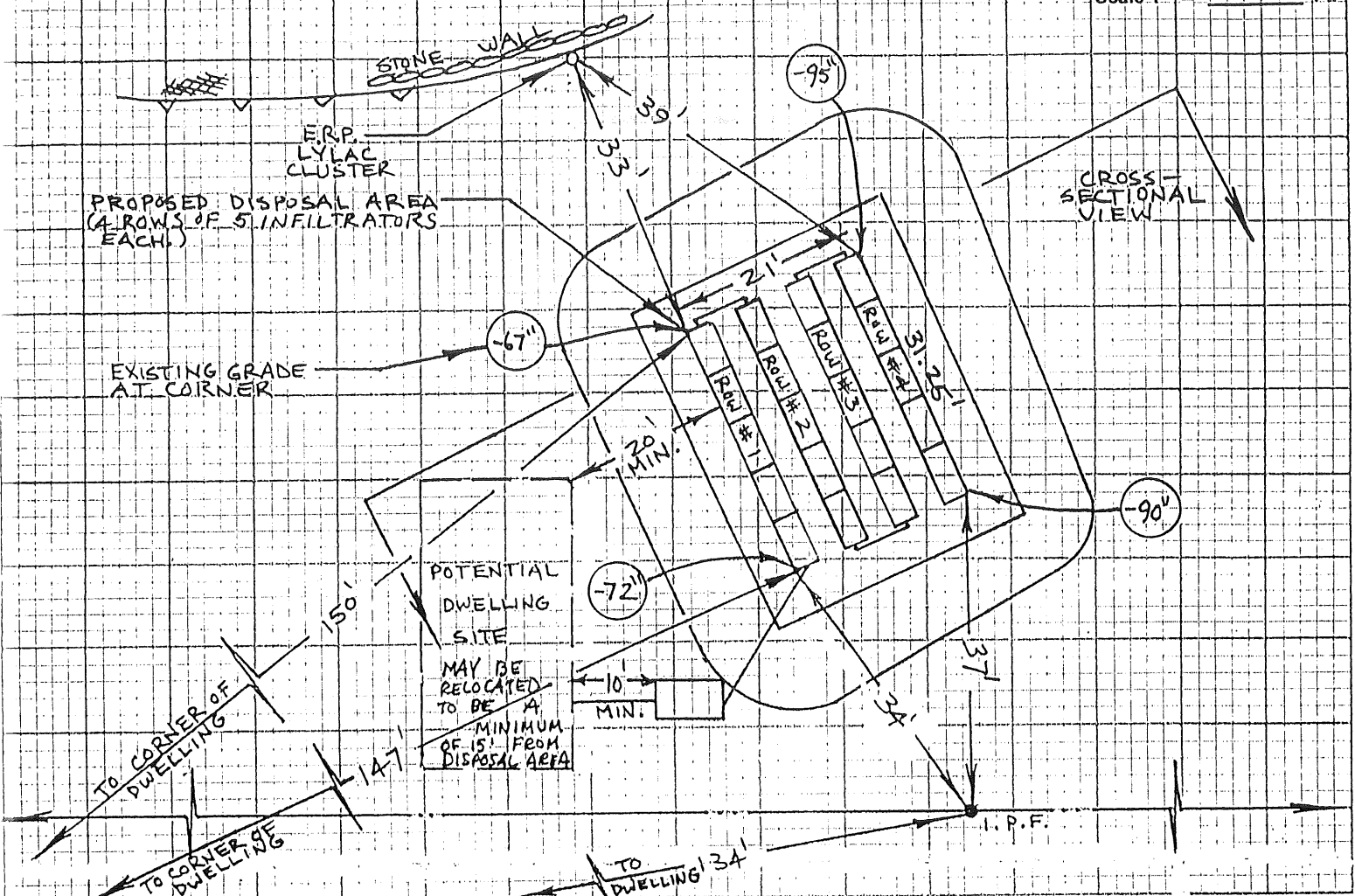
PORTLAND

CUSHING ISLAND

THAXTER, SIDNEY

## SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = \_\_\_\_\_ Ft.



### FILL REQUIREMENTS

### CONSTRUCTION ELEVATIONS

### ELEVATION REFERENCE POINT LOCATION & DESCRIPTION

Depth of Fill (Upslope) 25"-26"  
Depth of Fill (Downslope) 30"-31"

Reference Elevation is  
Bottom of Disposal Area  
Top of Distribution Lines or Chambers

DO SEE DETAIL BELOW

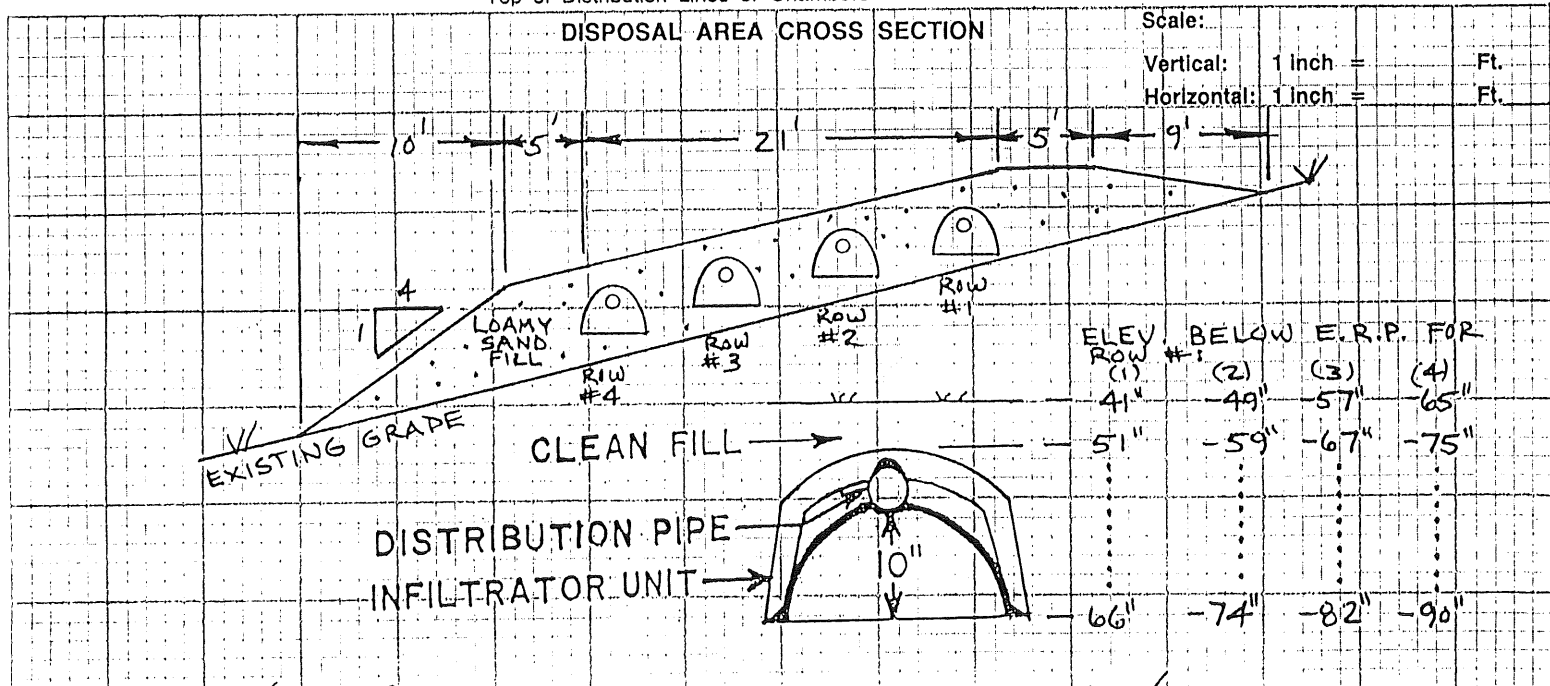
NAIL IN BASE OF LYLAC CLUSTER, BELOW STONE WALL.

### DISPOSAL AREA CROSS SECTION

Scale:

Vertical: 1 inch = \_\_\_\_\_ Ft.

Horizontal: 1 inch = \_\_\_\_\_ Ft.



*Albert Frick*  
Site Evaluator Signature

163  
SE#

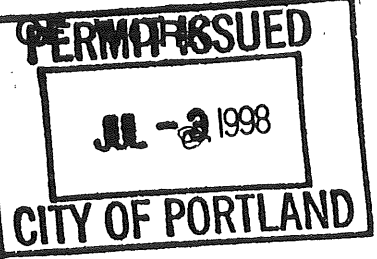
6/17/89  
Date

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE

# CITY OF PORTLAND

## BUILDING INSPECTION

# PERMIT



980695

Please Read  
Application And  
Notes, If Any,  
Attached

This is to certify that \_\_\_\_\_ The Thaxter Co.  
 has permission to \_\_\_\_\_ Construct Single Family Dwelling  
 AT \_\_\_\_\_ [Ottawa Ave, Cushing Island]

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

### OTHER REQUIRED APPROVALS

Fire Dept. \_\_\_\_\_  
 Health Dept. \_\_\_\_\_  
 Appeal Board \_\_\_\_\_  
 Other \_\_\_\_\_  
Department Name

*[Signature]*  
 Director - Building & Inspection Services  
*M. L. Aris*

**PENALTY FOR REMOVING THIS CARD**

## BUILDING PERMIT REPORT

DATE: 30 June 98 ADDRESS: Cushing Island Ottawa Ave. (106A-A-013)  
REASON FOR PERMIT: To Construct a single family dwelling  
BUILDING OWNER: Sidney Thaxter  
CONTRACTOR: The Thaxter Co.  
PERMIT APPLICANT: \_\_\_\_\_  
USE GROUP R-3 BOCA 1996 CONSTRUCTION TYPE 5B

### CONDITION(S) OF APPROVAL

This Permit is being issued with the understanding that the following conditions are met:

Approved with the following conditions: \*1, \*2, \*2.5, \*6, \*8, \*9, \*10, \*11, \*12, \*16, \*23, \*24, \*25, \*26, \*27, \*29, \*30, \*31, \*32

- \*1. This permit does not excuse the applicant from meeting applicable State and Federal rules and laws.
- \*2. Before concrete for foundation is placed, approvals from the Development Review Coordinator and Inspection Services must be obtained. (A 24 hour notice is required prior to inspection)
- \*2.5 Foundation drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. The drain shall extend a minimum of 12 inches beyond the outside edge of the footing. The thickness shall be such that the bottom of the drain is not higher than the bottom of the base under the floor, and that the top of the drain is not less than 6 inches above the top of the footing. The top of the drain shall be covered with an approved filter membrane material. Where a drain tile or perforated pipe is used, the invert of the pipe or tile shall not be higher than the floor elevation. The top of joints or top of perforations shall be protected with an approved filter membrane material. The pipe or tile shall be placed on not less than 2" of gravel or crushed stone, and shall be covered with not less than 6" of the same material.
3. Precaution must be taken to protect concrete from freezing.
4. It is strongly recommended that a registered land surveyor check all foundation forms before concrete is placed. This is done to verify that the proper setbacks are maintained.
5. Private garages located beneath habitable rooms in occupancies in Use Group R-1, R-2, R-3 or I-1 shall be separated from adjacent interior spaces by fire partitions and floor/ceiling assembly which are constructed with not less than 1-hour fire resisting rating. Private garages attached side-by-side to rooms in the above occupancies shall be completely separated from the interior spaces and the attic area by means of ½ inch gypsum board or the equivalent applied to the garage means of ½ inch gypsum board or the equivalent applied to the garage side. (Chapter 4 Section 407.0 of the BOCA/1996)
- \*6. All chimneys and vents shall be installed and maintained as per Chapter 12 of the City's Mechanical Code. (The BOCA National Mechanical Code/1993).
7. Sound transmission control in residential building shall be done in accordance with Chapter 12 section 1214.0 of the city's building code.
- \*8. Guardrails & Handrails: A guardrail system is a system of building components located near the open sides of elevated walking surfaces for the purpose of minimizing the possibility of an accidental fall from the walking surface to the lower level. Minimum height all Use Groups 42" , except Use Group R which is 36". In occupancies in Use Group A, B, H-4, I-1, I-2 M and R and public garages and open parking structures, open guards shall have balusters or be of solid material such that a sphere with a diameter of 4" cannot pass through any opening. Guards shall not have an ornamental pattern that would provide a ladder effect. (Handrails shall be a minimum of 34" but not more than 38". Use Group R-3 shall not be less than 30", but not more than 38".) Handrail grip size shall have a circular cross section with an outside diameter of at least 1 1/4" and not greater than 2".
- \*9. Headroom in habitable space is a minimum of 7'6".
- \*10. Stair construction in Use Group R-3 & R-4 is a minimum of 10" tread and 7 3/4" maximum rise. All other Use group minimum 11" tread. 7" maximum rise.
- \*11. The minimum headroom in all parts of a stairway shall not be less than 80 inches. (6' 8")
- \*12. Every sleeping room below the fourth story in buildings of use Groups R and I-1 shall have at least one operable window or exterior door approved for emergency egress or rescue. The units must be operable from the inside without the use of special knowledge or separate tools. Where windows are provided as means of egress or rescue they shall have a sill height not more than 44 inches (1118mm) above the floor. All egress or rescue windows from sleeping rooms shall have a minimum net clear opening height dimension of 24 inches (610mm). The minimum net clear opening width dimension

shall be 20 inches (508mm), and a minimum net clear opening of 5.7 sq. ft.

- 13. Each apartment shall have access to two (2) separate, remote and approved means of egress. A single exit is acceptable when it exits directly from the apartment to the building exterior with no communications to other apartment units.
- 14. All vertical openings shall be enclosed with construction having a fire rating of at least one (1) hour, including fire doors with self closer's. (Over 3 stories in height requirements for fire rating is two (2) hours.)
- 15. The boiler shall be protected by enclosing with (1) hour fire-rated construction including fire doors and ceiling, or by providing automatic extinguishment.
- \*16. All single and multiple station smoke detectors shall be of an approved type and shall be installed in accordance with the provisions of the City's Building Code Chapter 9, Section 19, 920.3.2 (BOCA National Building Code/1996), and NFPA 101 Chapter 18 & 19. (Smoke detectors shall be installed and maintained at the following locations):
  - In the immediate vicinity of bedrooms
  - In all bedrooms
  - In each story within a dwelling unit, including basements
 In addition to the required AC primary power source, required smoke detectors in occupancies in Use Groups R-2, R-3 and I-1 shall receive power from a battery when the AC primary power source is interrupted. (Interconnection is required)
- 17. A portable fire extinguisher shall be located as per NFPA #10. They shall bear the label of an approved agency and be of an approved type.
- 18. The Fire Alarm System shall be maintained to NFPA #72 Standard.
- 19. The Sprinkler System shall maintained to NFPA #13 Standard.
- 20. All exit signs, lights, and means of egress lighting shall be done in accordance with Chapter 10 Section & Subsections 1023. & 1024. Of the City's building code. (The BOCA National Building Code/1996)
- 21. Section 25-135 of the Municipal Code for the City of Portland states, "No person or utility shall be granted a permit to excavate or open any street or sidewalk from the time of November 15 of each year to April 15 of the following year".
- 22. The builder of a facility to which Section 4594-C of the Maine State Human Rights Act Title 5 MRSA refers, shall obtain a certification from a design professional that the plans commencing construction of the facility, the builder shall submit the certification to the Division of Inspection Services.
- \*23. Ventilation shall meet the requirements of Chapter 12 Sections 1210. Of the City's Building Code. (crawl spaces & attics)
- \*24. All electrical, plumbing and HVAC permits must be obtained by a Master Licensed holders of their trade.
- \*25. All requirements must be met before a final Certificate of Occupancy is issued.
- \*26. All building elements shall meet the fastening schedule as per Table 2305.2 of the City's Building Code. (The BOCA National Building Code/1996).
- \*27. Ventilation of spaces within a building shall be done in accordance with the City's Mechanical Code (The BOCA National Mechanical Code/1993).
- 28. Please read and implement the attached Land Use-Zoning report requirements.
- \*29. A STATE Subsurface wastewater Disposal permit must be obtained before any work begins.
- \*30. Bridging shall be done in accordance with section 2305.16
- \*31. Glass and Glazing shall be done in accordance with section 2405.1 & 2405.2
- \*32. Sloped glazing and SKYLIGHTS section 2404.



P. Samuel Hoffses, Building Inspector

cc: Lt. McDougall, PFD  
Marge Schmuckal

**CITY OF PORTLAND, MAINE  
DEVELOPMENT REVIEW APPLICATION  
PLANNING DEPARTMENT PROCESSING FORM  
ADDENDUM**

19980055  
I. D. Number

**Thaxter, Sidney**  
Applicant  
**95 Deerfield Rd, Portland, ME 04101**  
Applicant's Mailing Address  
**SAA**  
Consultant/Agent  
**773-6956/828-5553**  
Applicant or Agent Daytime Telephone, Fax

**5/29/98**  
Application Date  
**Cushing Island**  
Project Name/Description

**Ottawa Ave, Cushing Island**  
Address of Proposed Site  
**106A-A-013**  
Assessor's Reference: Chart-Block-Lot

---

**DRC Conditions of Approval**

Approved subject to Site Plan Review (Addendum) Conditions of Approval:

All damage to sidewalk, curb, street, or public utilities shall be repaired to City of Portland standards prior to issuance of a Certificate of Occupancy.

Two (2) City of Portland approved species and size trees must be planted on your street frontage prior to issuance of a Certificate of Occupancy.

Your new street address is now Ottawa Avenue, the number must be displayed on the street frontage of your house prior to issuance of a Certificate of Occupancy.

The Development Review Coordinator (874-8300 ext.8722) must be notified five (5) working days prior to date required for final site inspection. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

Show all utility connections: water, sanitary, sewer, storm drain, electric, telephone, cable.

A street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

The site contractor shall establish finish grades at the foundation, bulkhead and basement windows to be in conformance with the first floor elevation (FFE) and sill elevation (SE) set by the building contractor to provide for positive drainage away from entire footprint of building.

A drainage plan shall be submitted to and approved by Development Review Coordinator showing first floor elevation (FFE), sill elevation (SE), finish street/curb elevation, lot grading, existing and proposed contours, drainage patterns and paths, drainage swales, grades at or near abutting property lines, erosion control devices and locations and outlets for drainage from the property.

The Development Review Coordinator reserves the right to require additional lot grading or other drainage improvements as necessary due to field conditions.

---

**Planning Conditions of Approval**

---

**Inspections Conditions of Approval**

1. Separate permits shall be required for future decks, sheds, pool, and/or garage.

---

**Fire Conditions of Approval**

CITY OF PORTLAND, MAINE  
PUBLIC NOTICE

To All Building Permit Applicants and/or Contractors:

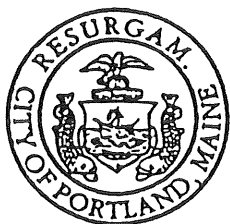
Effective immediately all temporary erosion control measures as shown on submitted site plans or as made part of a conditional approval of a site plan shall be installed, maintained, and inspected for proper functioning. Erosion control measures include but are not limited to silt fencing hay bales, stone check dams, earthen berms, stone lined swales, riprap embankments, riprap inlet/outlets of any pipe channel or culvert, sodded or grass strips, hay mulch cover on exposed soils, jute matting or erosion control blanket/matting, geotextile grids or webbing, and any provision approved by the City Engineer or Development Review Coordinator to decrease erosion or sedimentation.

All temporary and permanent erosion control measures shall be in conformance with the Maine Erosion and Sediment Control Handbook for construction: Best Management Practices as published by Cumberland County SWCD and the Maine Department of Environmental Protection. Consistent failure to install, maintain, or construct in an acceptable manner will result in a stop work order on the building permit. All erosion control measures shall be established in proposed areas of disturbed soils resulting from construction activities prior to actual construction unless a specific deadline has been made a condition of approval or agreed to by a Public Works Engineer or the Development Review Coordinator.

Effective immediately any request for Certificate of Occupancy will be denied if the above measures have not been addressed or completed. Only under extreme conditions, due to weather, shall the omission of the erosion control standards be included on the conditions for a Certificate of Occupancy, otherwise the request for a Certificate will be refused.

The City of Portland Planning Department and Public Works Department consider Erosion and Sediment Control Planning to be an absolutely necessary initial construction activity that requires as much attention and enforcement as building construction. For the protection of sensitive waterbodies, undisturbed lands, neighboring properties, established vegetated areas, and municipal drainage systems please pay careful attention to erosion and sediment control measures and conform to the notes, details, and conditions of approval as noted on your approved site plan. These controls must be installed and maintained continuously throughout the construction period. The City may inspect the site at any time to ensure compliance, and violations could result in work stoppage orders as indicated above.

We appreciate your prompt compliance with these requirements.



CITY OF PORTLAND  
Planning and Urban Development Department

MEMORANDUM

TO: Joseph E. Gray, Jr., Director of Planning and Urban Development  
Alexander Jaegerman, Chief Planner

FROM: James Seymour, Acting Development Review Coordinator

DATE: April 5, 1995

SUBJECT: Disclaimer Statement of Existing Poorly Drained Areas

It is the responsibility of the lot owner/homebuilder to assess drainage and provide for appropriate stormwater management design and engineering in an area which has evidence of poor hydrologic soil conditions, and/or a history of poor drainage, ponding, or soils saturation due to topography, fluctuation of seasonal ground water tables creating surface flooding, or as a result from rainfall events or snow/ice melts. The City of Portland is not responsible for resolving the drainage of land areas which could be described in any one of the above conditions.

The City of Portland Development Review Coordinator reviews lot grading for all single family homes to assure that field elevations will conform to the grades which exist at the abutting property line or to the grades which have been previously approved at the abutting property lines. The construction standards require that final foundation elevations be provided on site plans which are a minimum of 2 1/2 feet higher than street grades established at the frontage of the lot and provide positive drainage away from the entire foundation perimeter, including garage, and all basement accesses (ie. bulkheads, doorways and windows). As long as these standards are strictly enforced, most water problems on single family lots will be avoided. However, in locations with clear evidence of hydric soils, the following note shall be placed on all approved site plans:

"The City of Portland Development Review Coordinator has reviewed and approved this plan. The lot is located in an areas that is subject to seasonal conditions of saturation by surface or groundwater. Approval of this plan does not constitute a guarantee that no water problems will be experienced by the homeowners in this vicinity. Homeowners are advised to exercise care and diligence to ensure that their home and yard is adequately constructed and graded for localized drainage conditions."

**City of Portland, Maine – Building or Use Permit Application** 389 Congress Street, 04101, Tel: (207) 874-8703, FAX: 874-8716

Location of Construction: Cushing Island Ottawa Ave		Owner: Sidney Thaxter		Phone: 773-6956	
Owner Address: 95 Deerfield Ptld, ME 04101		Lessee/Buyer's Name:		Phone:	
Contractor Name: The Thaxter Co.		Address: 828-5553		Phone:	
Past Use: Vacant Land		Proposed Use: 1-fam		COST OF WORK: \$ 140,000.00	
				PERMIT FEE: \$ 720.00	
Proposed Project Description: Construct Single Family Dwelling		FIRE DEPT. <input type="checkbox"/> Approved <input type="checkbox"/> Denied		INSPECTION: Use Group: #3 Type: 00 20CA96 Signature: <i>[Signature]</i>	
		Signature:		Date:	
Permit Taken By: Mary Gresik		Date Applied For: 29 May 1998			

Permit No: **980695**

**PERMIT ISSUED**  
Permit Issued:  
**JUL - 3 1998**  
**CITY OF PORTLAND**

Zone: **IK** CBL: 106A-A-013  
Zoning Approval: *[Signature]* with *[Signature]* 6/30/98  
Special Zone or Reviews:  
 Shoreland with *[Signature]*  
 Wetland 75' SAC  
 Flood Zone - NA - Zone C  
 Subdivision map # 17  
 Site Plan maj  minor  mm

**Zoning Appeal**  
 Variance  
 Miscellaneous  
 Conditional Use  
 Interpretation  
 Approved  
 Denied

**Historic Preservation**  
 Not in District or Landmark  
 Does Not Require Review  
 Requires Review

Action:  
 Approved  
 Approved with Conditions  
 Denied  
Date: *[Signature]*

- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal rules.
- Building permits do not include plumbing, septic or electrical work.
- Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit

26 June 1998 - Permit Routed  
02 June 1998

SIGNATURE OF APPLICANT	ADDRESS:	DATE:	PHONE:
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE			PHONE:

White-Permit Desk Green-Assessor's Canary-D.P.W. Pink-Public File Ivory Card-Inspector

CEO DISTRICT *[Signature]*



BUILDING PERMIT REPORT

DATE: 30 June 98 ADDRESS: Cushing Island Ottawa Ave. (106A-A-013)
REASON FOR PERMIT: To Construct a single family dwelling
BUILDING OWNER: Sidney Thaxter
CONTRACTOR: The Thaxter Co.
PERMIT APPLICANT:
USE GROUP R-3 BOCA 1996 CONSTRUCTION TYPE 5B

CONDITION(S) OF APPROVAL

This Permit is being issued with the understanding that the following conditions are met:

Approved with the following conditions: \*1, \*2, \*2.5, \*6, \*8, \*9, \*10, \*11, \*12, \*16, \*23, \*24, \*25, \*26, \*27, \*29, \*30, \*31, \*32

- \*1. This permit does not excuse the applicant from meeting applicable State and Federal rules and laws.
\*2. Before concrete for foundation is placed, approvals from the Development Review Coordinator and Inspection Services must be obtained.
\*2.5. Foundation drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve.
3. Precaution must be taken to protect concrete from freezing.
4. It is strongly recommended that a registered land surveyor check all foundation forms before concrete is placed.
5. Private garages located beneath habitable rooms in occupancies in Use Group R-1, R-2, R-3 or I-1 shall be separated from adjacent interior spaces by fire partitions and floor/ceiling assembly which are constructed with not less than 1-hour fire resisting rating.
\*6. All chimneys and vents shall be installed and maintained as per Chapter 12 of the City's Mechanical Code.
7. Sound transmission control in residential building shall be done in accordance with Chapter 12 section 1214.0 of the city's building code.
\*8. Guardrails & Handrails: A guardrail system is a system of building components located near the open sides of elevated walking surfaces for the purpose of minimizing the possibility of an accidental fall from the walking surface to the lower level.
\*9. Headroom in habitable space is a minimum of 7'6".
\*10. Stair construction in Use Group R-3 & R-4 is a minimum of 10" tread and 7 3/4" maximum rise.
\*11. The minimum headroom in all parts of a stairway shall not be less than 80 inches.
\*12. Every sleeping room below the fourth story in buildings of use Groups R and I-1 shall have at least one operable window or exterior door approved for emergency egress or rescue.

shall be 20 inches (508mm), and a minimum net clear opening of 5.7 sq. ft.

- 13. Each apartment shall have access to two (2) separate, remote and approved means of egress. A single exit is acceptable when it exits directly from the apartment to the building exterior with no communications to other apartment units.
- 14. All vertical openings shall be enclosed with construction having a fire rating of at least one (1) hour, including fire doors with self closer's. (Over 3 stories in height requirements for fire rating is two (2) hours.)
- 15. The boiler shall be protected by enclosing with (1) hour fire-rated construction including fire doors and ceiling, or by providing automatic extinguishment.
- \*16. All single and multiple station smoke detectors shall be of an approved type and shall be installed in accordance with the provisions of the City's Building Code Chapter 9, Section 19, 920.3.2 (BOCA National Building Code/1996), and NFPA 101 Chapter 18 & 19. (Smoke detectors shall be installed and maintained at the following locations):
  - In the immediate vicinity of bedrooms
  - In all bedrooms
  - In each story within a dwelling unit, including basements
 In addition to the required AC primary power source, required smoke detectors in occupancies in Use Groups R-2, R-3 and I-1 shall receive power from a battery when the AC primary power source is interrupted. (Interconnection is required)
- 17. A portable fire extinguisher shall be located as per NFPA #10. They shall bear the label of an approved agency and be of an approved type.
- 18. The Fire Alarm System shall be maintained to NFPA #72 Standard.
- 19. The Sprinkler System shall maintained to NFPA #13 Standard.
- 20. All exit signs, lights, and means of egress lighting shall be done in accordance with Chapter 10 Section & Subsections 1023. & 1024. Of the City's building code. (The BOCA National Building Code/1996)
- 21. Section 25-135 of the Municipal Code for the City of Portland states, "No person or utility shall be granted a permit to excavate or open any street or sidewalk from the time of November 15 of each year to April 15 of the following year".
- 22. The builder of a facility to which Section 4594-C of the Maine State Human Rights Act Title 5 MRSA refers, shall obtain a certification from a design professional that the plans commencing construction of the facility, the builder shall submit the certification to the Division of Inspection Services.
- \*23. Ventilation shall meet the requirements of Chapter 12 Sections 1210. Of the City's Building Code. (crawl spaces & attics)
- \*24. All electrical, plumbing and HVAC permits must be obtained by a Master Licensed holders of their trade.
- \*25. All requirements must be met before a final Certificate of Occupancy is issued.
- \*26. All building elements shall meet the fastening schedule as per Table 2305.2 of the City's Building Code. (The BOCA National Building Code/1996).
- \*27. Ventilation of spaces within a building shall be done in accordance with the City's Mechanical Code (The BOCA National Mechanical Code/1993).
- 28. Please read and implement the attached Land Use-Zoning report requirements.
- \*29. A STATE Subsurface wastewater Disposal permit must be obtained before any work begins.
- \*30. Bridging shall be done in accordance with section 2305.16
- \*31. Glass and Glazing shall be done in accordance with sections 2405.1 & 2405.2
- \*32. Sloped glazing and SKYLIGHTS section 2404.



P. Samuel Hoffses, Building Inspector

cc: Lt. McDougall, PFD  
Marge Schmuckal

**CITY OF PORTLAND, MAINE  
DEVELOPMENT REVIEW APPLICATION  
PLANNING DEPARTMENT PROCESSING FORM  
ADDENDUM**

19980055  
I. D. Number

Thaxter, Sidney  
Applicant  
95 Deerfield Rd, Portland, ME 04101  
Applicant's Mailing Address  
SAA  
Consultant/Agent  
773-6956/828-5553  
Applicant or Agent Daytime Telephone, Fax

5/29/98  
Application Date  
Cushing Island  
Project Name/Description

Ottawa Ave, Cushing Island  
Address of Proposed Site  
106A-A-013  
Assessor's Reference: Chart-Block-Lot

---

**DRC Conditions of Approval**

Approved subject to Site Plan Review (Addendum) Conditions of Approval:

All damage to sidewalk, curb, street, or public utilities shall be repaired to City of Portland standards prior to issuance of a Certificate of Occupancy.

Two (2) City of Portland approved species and size trees must be planted on your street frontage prior to issuance of a Certificate of Occupancy.

Your new street address is now Ottawa Avenue, the number must be displayed on the street frontage of your house prior to issuance of a Certificate of Occupancy.

The Development Review Coordinator (874-8300 ext.8722) must be notified five (5) working days prior to date required for final site inspection. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

Show all utility connections: water, sanitary, sewer, storm drain, electric, telephone, cable.

A street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

The site contractor shall establish finish grades at the foundation, bulkhead and basement windows to be in conformance with the first floor elevation (FFE) and sill elevation (SE) set by the building contractor to provide for positive drainage away from entire footprint of building.

A drainage plan shall be submitted to and approved by Development Review Coordinator showing first floor elevation (FFE), sill elevation (SE), finish street/curb elevation, lot grading, existing and proposed contours, drainage patterns and paths, drainage swales, grades at or near abutting property lines, erosion control devices and locations and outlets for drainage from the property.

The Development Review Coordinator reserves the right to require additional lot grading or other drainage improvements as necessary due to field conditions.

---

**Planning Conditions of Approval**

---

**Inspections Conditions of Approval**

1. Separate permits shall be required for future decks, sheds, pool, and/or garage.

---

**Fire Conditions of Approval**



CITY OF PORTLAND  
Planning and Urban Development Department

MEMORANDUM

TO: Joseph E. Gray, Jr., Director of Planning and Urban Development  
Alexander Jaegerman, Chief Planner

FROM: James Seymour, Acting Development Review Coordinator

DATE: April 5, 1995

SUBJECT: Disclaimer Statement of Existing Poorly Drained Areas

It is the responsibility of the lot owner/homebuilder to assess drainage and provide for appropriate stormwater management design and engineering in an area which has evidence of poor hydrologic soil conditions, and/or a history of poor drainage, ponding, or soils saturation due to topography, fluctuation of seasonal ground water tables creating surface flooding, or as a result from rainfall events or snow/ice melts. The City of Portland is not responsible for resolving the drainage of land areas which could be described in any one of the above conditions.

The City of Portland Development Review Coordinator reviews lot grading for all single family homes to assure that field elevations will conform to the grades which exist at the abutting property line or to the grades which have been previously approved at the abutting property lines. The construction standards require that final foundation elevations be provided on site plans which are a minimum of 2 1/2 feet higher than street grades established at the frontage of the lot and provide positive drainage away from the entire foundation perimeter, including garage, and all basement accesses (ie. bulkheads, doorways and windows). As long as these standards are strictly enforced, most water problems on single family lots will be avoided. However, in locations with clear evidence of hydric soils, the following note shall be placed on all approved site plans:

"The City of Portland Development Review Coordinator has reviewed and approved this plan. The lot is located in an areas that is subject to seasonal conditions of saturation by surface or groundwater. Approval of this plan does not constitute a guarantee that no water problems will be experienced by the homeowners in this vicinity. Homeowners are advised to exercise care and diligence to ensure that their home and yard is adequately constructed and graded for localized drainage conditions."

**THIS IS NOT A PERMIT/CONSTRUCTION CANNOT COMMENCE UNTIL THE PERMIT IS ISSUED**

**Building or Use Permit Application  
Detached Single Family Dwelling**

In the interest of processing your application in the quickest possible manner, please complete the Information below for a Building or Use Permit.

**NOTE\*\*If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.**

Location/Address of Construction: <i>Cashings Island Portland Ottawa Ave</i>		
Total Square Footage of Proposed Structure: <i>2000.5</i>	Square Footage of Lot: <i>60,000 ±</i>	
Tax Assessor's Chart, Block & Lot Number Chart# <i>1/110A</i> Block# <i>D</i> Lot# <i>013</i>	Owner: <i>Sidney STE Thaxter</i>	Telephone#: <i>(603) 774-9000 (603) 773-6756</i>
Owner's Address: <i>95 Deerfield Rd 04101</i>	Lessee/Buyer's Name (If Applicable)	Cost Of Work: <i>\$ 140,000 ±</i>
Proposed Project Description:(Please be as specific as possible) <i>Single Family home. mm site plan</i>		
Contractor's Name, Address & Telephone <i>The Thaxter Company 7828-5553</i>		

Separate permits are required for Internal & External Plumbing, HVAC and Electrical installation.

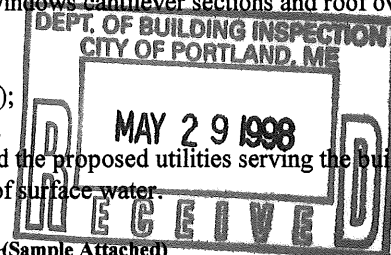
- All construction must be conducted in compliance with the 1996 B.O.C.A. Building Code as amended by Section 6-Art II.
- All plumbing must be conducted in compliance with the State of Maine Plumbing Code.
- All Electrical Installation must comply with the 1996 National Electrical Code as amended by Section 6-Art III.
- HVAC(Heating, Ventilation and Air Conditioning) installation must comply with the 1993 BOCA Mechanical Code.

You must include the following with you application:

- 1) A Copy of Your Deed or Purchase and Sale Agreement
- 2) A Copy of your Construction Contract, if available
- 3) A Plot Plan (Sample Attached)

A "minor/minor" site plan review is required prior to permit issuance. The Site plan must be prepared and sealed by a registered land surveyor (**2 copies are required**). A complete plot plan (Site Plan)includes:

- The shape and dimension of the lot, all existing buildings (if any), the proposed structure and the distance from the actual property lines. Structures include decks porches, a bow windows cantilever sections and roof overhangs, as well as, sheds, pools, garages and any other accessory structures.
- Scale and North arrow; Zoning District & Setbacks
- First Floor sill elevation ( based on mean sea level datum);
- Location and dimensions of parking areas and driveways;
- Location and size of both existing utilities in the street and the proposed utilities serving the building;
- Location of areas on the site that will be used to dispose of surface water.
- Existing and proposed grade contours



*permits 720  
50  
100  
870*

**4) Building Plans (Sample Attached)**

A complete set of construction drawings showing all of the following elements of construction:

- Cross Sections w/Framing details (including porches, decks w/ railings, and accessory structures)
- Floor Plans & Elevations
- Window and door schedules
- Foundation plans with required drainage and dampproofing
- Electrical and plumbing layout. Mechanical drawings for any specialized equipment such as furnaces, chimneys, gas equipment, HVAC equipment (air handling) or other types of work that may require special review must be included.

**Certification**

I hereby certify that I am the Owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: <i>Sidney Ste Thaxter</i>	Date: <i>5/29/98</i>
---	----------------------

Site Review Fee: \$150.00/Building Permit Fee: \$25.00 for the 1st \$1000.cost plus \$5.00 per \$1,000.00 construction cost thereafter.

**CITY OF PORTLAND, MAINE  
DEVELOPMENT REVIEW APPLICATION  
PLANNING DEPARTMENT PROCESSING FORM**

19980055

I. D. Number

Thaxter, Sidney

Applicant

95 Deerfield Rd, Portland, ME 04101

Applicant's Mailing Address

SAA

Consultant/Agent

773-6956/828-5553

Applicant or Agent Daytime Telephone, Fax

5/29/98

Application Date

Cushing Island

Project Name/Description

Ottawa Ave, Cushing Island

Address of Proposed Site

106A-A-013

Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply):  New Building  Building Addition  Change Of Use  Residential  
 Office  Retail  Manufacturing  Warehouse/Distribution  Parking Lot  Other (specify) \_\_\_\_\_

2000 Sq Ft 60,000 Sq Ft I-R1

Proposed Building square Feet or # of Units Acreage of Site Zoning

**Check Review Required:**

- |  |   |  |  |
|--|---|--|--|
| <input checked="" type="checkbox"/> Site Plan<br>(major/minor) | <input type="checkbox"/> Subdivision<br># of lots _____ | <input type="checkbox"/> PAD Review            | <input type="checkbox"/> 14-403 Streets Review   |
| <input type="checkbox"/> Flood Hazard                          | <input type="checkbox"/> Shoreland                      | <input type="checkbox"/> Historic Preservation | <input type="checkbox"/> DEP Local Certification |
| <input type="checkbox"/> Zoning Conditional<br>Use (ZBA/PB)    | <input type="checkbox"/> Zoning Variance                | <input type="checkbox"/> Other _____           |  |

Fees Paid: Site Plan \$50.00 Subdivision \_\_\_\_\_ Engineer Review \$100.00 Date: 5/29/98

**Inspections Approval Status:**

Reviewer Marge Schmuckal

- Approved  **Approved w/Conditions**  
see attached  Denied

Approval Date 6/30/98 Approval Expiration \_\_\_\_\_ Extension to \_\_\_\_\_  Additional Sheets Attached

Condition Compliance \_\_\_\_\_  
signature \_\_\_\_\_ date \_\_\_\_\_

Performance Guarantee  Required\*  Not Required

\* No building permit may be issued until a performance guarantee has been submitted as indicated below

- |   |                |  |                 |
|---|----------------|--|-----------------|
| <input type="checkbox"/> Performance Guarantee Accepted     | _____          | _____  | _____           |
|   | date           | amount   | expiration date |
| <input type="checkbox"/> Inspection Fee Paid                | _____          | _____  |                 |
|   | date           | amount   |                 |
| <input type="checkbox"/> Building Permit Issued             | _____          |  |                 |
|   | date           |  |                 |
| <input type="checkbox"/> Performance Guarantee Reduced      | _____          | _____  | _____           |
|   | date           | remaining balance                                  | signature       |
| <input type="checkbox"/> Temporary Certificate of Occupancy | _____          | <input type="checkbox"/> Conditions (See Attached) |                 |
|   | date           |  |                 |
| <input type="checkbox"/> Final Inspection                   | _____          | _____  |                 |
|   | date           | signature  |                 |
| <input type="checkbox"/> Certificate Of Occupancy           | _____          |  |                 |
|   | date           |  |                 |
| <input type="checkbox"/> Performance Guarantee Released     | _____          | _____  |                 |
|   | date           | signature  |                 |
| <input type="checkbox"/> Defect Guarantee Submitted         | _____          | _____  | _____           |
|   | submitted date | amount   | expiration date |
| <input type="checkbox"/> Defect Guarantee Released          |                |  |                 |

**CITY OF PORTLAND, MAINE  
DEVELOPMENT REVIEW APPLICATION  
PLANNING DEPARTMENT PROCESSING FORM**

**19980055**  
I. D. Number

**Thaxter, Sidney**  
Applicant  
**95 Deerfield Rd, Portland, ME 04101**  
Applicant's Mailing Address  
**SAA**  
Consultant/Agent  
**773-6956/828-5553**  
Applicant or Agent Daytime Telephone, Fax

**5/29/98**  
Application Date  
**Cushing Island**  
Project Name/Description

**Ottawa Ave, Cushing Island**  
Address of Proposed Site  
**106A-A-013**  
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply):  New Building  Building Addition  Change Of Use  Residential  
 Office  Retail  Manufacturing  Warehouse/Distribution  Parking Lot  Other (specify) \_\_\_\_\_  
**2000 Sq Ft** **60,000 Sq Ft**  
Proposed Building square Feet or # of Units Acreage of Site Zoning

**Check Review Required:**

Site Plan (major/minor)  Subdivision # of lots \_\_\_\_\_  PAD Review  14-403 Streets Review  
 Flood Hazard  Shoreland  Historic Preservation  DEP Local Certification  
 Zoning Conditional Use (ZBA/PB)  Zoning Variance  Other \_\_\_\_\_

Fees Paid: Site Plan **\$50.00** Subdivision \_\_\_\_\_ Engineer Review **\$100.00** Date: **5/29/98**

**DRC Approval Status:**

Reviewer **Jim Wendel**

Approved  Approved w/Conditions see attached  Denied  
Approval Date **6/23/98** Approval Expiration **6/23/99** Extension to \_\_\_\_\_  Additional Sheets Attached  
 Condition Compliance **Jim Wendel** **6/23/98**  
signature date

Performance Guarantee  Required\*  Not Required

\* No building permit may be issued until a performance guarantee has been submitted as indicated below

<input type="checkbox"/> Performance Guarantee Accepted	_____	_____	_____
	date	amount	expiration date
<input type="checkbox"/> Inspection Fee Paid	_____	_____	
	date	amount	
<input type="checkbox"/> Building Permit	_____		
	date		
<input type="checkbox"/> Performance Guarantee Reduced	_____	_____	_____
	date	remaining balance	signature
<input type="checkbox"/> Temporary Certificate Of Occupancy	_____	<input type="checkbox"/> Conditions (See Attached)	
	date		
<input type="checkbox"/> Final Inspection	_____	_____	
	date	signature	
<input type="checkbox"/> Certificate Of Occupancy	_____		
	date		
<input type="checkbox"/> Performance Guarantee Released	_____	_____	
	date	signature	
<input type="checkbox"/> Defect Guarantee Submitted	_____	_____	_____
	submitted date	amount	expiration date
<input type="checkbox"/> Defect Guarantee Released	_____	_____	
	date	signature	

Applicant: Sidney Thaxter

Date: 6/30/98

Address: Ottawa Ave, Cushing Isl. C-B-L: 106A-A-13

CHECK-LIST AGAINST ZONING ORDINANCE

Date - New Dwelling

Zone Location - IR-1

Interior or corner lot -

Proposed Use/Work -

to construct 40' x 45' bldg - NO GARAGE

HHE 200? Sewage Disposal - ? SAM to check

- Lot Street Frontage - 100' req - 2 roads @ 2' + 135' shown

Front Yard - 30' req - 30' + shown

Rear Yard - 30' req - 200' + shown

Side Yard - 20' req - 20' + shown

Projections - Deck Not shown on plot plan

Width of Lot - 100' req - 100' + shown

Height - 2 story (35' max) - ok

Lot Area - 60,000<sup>sq</sup> ft - 66,644<sup>sq</sup> ft shown

Lot Coverage/ Impervious Surface - 20% - (not close)

Area per Family - 60,000<sup>sq</sup> ft

Off-street Parking - 2 req - 2 shown

Loading Bays - N/A

Site Plan - minor/minor

Shoreland Zoning/ Stream Protection -

part of land is within 250', but where structure is placed is well back from 75' set back

Flood Plains - Zone C  
Panel 17



CITY OF PORTLAND, MAINE  
PUBLIC NOTICE

To All Building Permit Applicants and/or Contractors:

Effective immediately all temporary erosion control measures as shown on submitted site plans or as made part of a conditional approval of a site plan shall be installed, maintained, and inspected for proper functioning. Erosion control measures include but are not limited to silt fencing hay bales, stone check dams, earthen berms, stone lined swales, riprap embankments, riprap inlet/outlets of any pipe channel or culvert, sodded or grass strips, hay mulch cover on exposed soils, jute matting or erosion control blanket/matting, geotextile grids or webbing, and any provision approved by the City Engineer or Development Review Coordinator to decrease erosion or sedimentation.

All temporary and permanent erosion control measures shall be in conformance with the Maine Erosion and Sediment Control Handbook for construction: Best Management Practices as published by Cumberland County SWCD and the Maine Department of Environmental Protection. Consistent failure to install, maintain, or construct in an acceptable manner will result in a stop work order on the building permit. All erosion control measures shall be established in proposed areas of disturbed soils resulting from construction activities prior to actual construction unless a specific deadline has been made a condition of approval or agreed to by a Public Works Engineer or the Development Review Coordinator.

Effective immediately any request for Certificate of Occupancy will be denied if the above measures have not been addressed or completed. Only under extreme conditions, due to weather, shall the omission of the erosion control standards be included on the conditions for a Certificate of Occupancy, otherwise the request for a Certificate will be refused.

The City of Portland Planning Department and Public Works Department consider Erosion and Sediment Control Planning to be an absolutely necessary initial construction activity that requires as much attention and enforcement as building construction. For the protection of sensitive waterbodies, undisturbed lands, neighboring properties, established vegetated areas, and municipal drainage systems please pay careful attention to erosion and sediment control measures and conform to the notes, details, and conditions of approval as noted on your approved site plan. These controls must be installed and maintained continuously throughout the construction period. The City may inspect the site at any time to ensure compliance, and violations could result in work stoppage orders as indicated above.

We appreciate your prompt compliance with these requirements.

**CITY OF PORTLAND, ME  
BOCA 1996 Plan Review Record  
One and Two Family Dwelling**

Valuation: \$140,000 Plan Review # \_\_\_\_\_  
 Fee: \$720.00 Date: 30 June 98

Building Location: Ottawa Ave. Cushing Is. CBL: 106A-A-013

Building Description: Single family dwelling

Reviewed by: Sam Hoffses

Use or Occupancy: R-3 Type of Construction: 5B

\*NR: Not Required      NA: Not Applicable      SR: See Report      X: OK per plan

Correction List		
NO:	Description	Code Section
1.	All site Plan Requirements must be completed before a Certificate of Occupancy can or will be issued,	111.4
2.	The Contractor must follow the approved Plan to the letter - using the materials and fasteners as specified by the design Engineer.	
3.	Cutting, Notching and boring shall done in accordance with sections	2305.3 2305.3.1
4	Bridging	2305.16
5	Glass and Glazing	Section 2405. Chapter 24
6.	Slanted glazing and skylights	2404

Foundations (Chapter 18)

Wood Foundation (1808)

NA Design  
NA Installation

Footings (1807.0)

Depth below (outside) grade 4' minimum;  
but below frost line except for insulated footings.  
NA Insulated footing provided  
2460 Soil bearing value (table 1804.3)  
26" Footing width  
See plan Concrete footing (1810.0) .3.1, 3.2  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Foundation Walls**  
*Engineered Piles designed by Joseph H. Leasure #6242  
Professional Engineer.*

See plan Design (1812.1)  
See plan Minimum thickness Tables 1812.3.2.(1) & 1812.3.2 (2)  
See plan Water proofing and damp proofing Section 1813  
See plan Sill plate (2305.17)  
See plan Anchorage bolting in concrete (2305.17)  
See plan Columns (1912)  
See plan Crawl space (1210.2) Ventilation  
See plan Crawl opening size (1210.2.1)  
10" SonoTube with (1) #5 bar @ center hooked into Footing.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Floors (Chapter 16-23)

*Engineered -*  
" " " " " "  
2x10" 2x12 Joists - Non sleeping area LL40PSF (Table - 1606)  
OK Joists - Sleeping area LL30PSF (Table - 1606)  
OK Grade  
1000 Spacing  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Girder 4" bearing 2305

*See Engineered Plans.*

### Floors (contd.)

- OK Bearing (1 1/2" minimum on wood or steel 3" on masonry) and lapped (3")
- SP Bridging (2305.16)
- SR Boring and notching (2305.5.1)
- I Cutting and notching (2305.3)
- SR Fastening table (2305.2)
- NA Floor trusses (AFPANDS Chapter 35)
- see 21a Draft stopping (721.7)
- \_\_\_\_\_ Framing of openings (2305.11) (2305.12)
- \_\_\_\_\_ Flooring - (2304.4) 1" solid - 1/2" particle board
- N/A Concrete floors (1905) 3 1/2" 6 mil polyethylene vapor retarder
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### Wall Construction (Chapter 2300)

- \_\_\_\_\_ Design (1609) wind loads
- \_\_\_\_\_ Load requirements
- \_\_\_\_\_ Grade
- SR Fastening schedule (Table 2305.2)
- 2X6 Wall framing (2305.4.1)
- \_\_\_\_\_ Double top plate (2305.4.2)
- \_\_\_\_\_ Bottom plates: (2305.4.3)
- \_\_\_\_\_ Notching and boring: (2305.4.4) studs
- \_\_\_\_\_ Non load bearing walls (2305.5)
- \_\_\_\_\_ Notching and boring (2305.5.1)
- \_\_\_\_\_ Wind bracing (2305.7)
- \_\_\_\_\_ Wall bracing required (2305.8.1)
- \_\_\_\_\_ Stud walls (2305.8.3)
- \_\_\_\_\_ Sheathing installation (2305.8.4)
- \_\_\_\_\_ Minimum thickness of wall sheathing (Table 2305.13)
- N/A Metal construction
- \_\_\_\_\_ Masonry construction (Chapter 21)
- 1/2" Exterior wall covering (Chapter 14)
- \_\_\_\_\_ Performance requirements (1403)
- \_\_\_\_\_ Materials (1404)
- N/A Veneers (1405)
- \_\_\_\_\_ Interior finishes (Chapter 8)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Roof-Ceiling Construction (Chapter 23)**

- 2x12" Roof rafters - Design (2305.15) spans
- 1/2" Roof decking and sheathing (2305.15.1) 5/8" boards and (2307.3) (Table 2307.3.1(2))
- NA Roof trusses (2313.3.1)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Roof Coverings (Chapter 15)**

- Approved materials (1404.1)
- \_\_\_\_\_ Performance requirement (1505)
- Fire classification (1506)
- \_\_\_\_\_ Material and installation requirements (1507)
- \_\_\_\_\_ Roof structures (1510.0)
- Asphalt Type of covering (1507)

**Chimneys and Fireplaces  
BOCA Mechanical/1993**

- \_\_\_\_\_ Masonry (1206.0)
- \_\_\_\_\_ Factory - built (1205.0)
- GAS Masonry fireplaces (1404) (GAS) *AS per appliance req.*
- \_\_\_\_\_ Factory - built fireplace (1403)

**Mechanical  
1993 BOCA Mechanical Code**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

State Plumbing Code

PRIVATE SubSurface

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Load Design Criteria

Floor live load sleeping	<u>30 PSF</u>	<u>OK</u>
Floor live load non sleeping	<u>40 PSF</u>	<u>OK</u>
Roof live load	<u>42 PSF</u>	<u>See Plan</u>
Roof snow load	<u>46 PSF</u>	<u>Engineered</u>
Seismic Zone	<u>2</u>	<u>OK</u>
Weathering area	<u>S</u>	<u>W</u>
Frost line depth	<u>4' MIN</u>	<u>V</u>

Glazing (Chapter 24)

- SR Labeling (2402.1)
- \_\_\_\_\_ Louvered window or jalousies (2402.5)
- \_\_\_\_\_ Human impact loads (2405.0)
- \_\_\_\_\_ Specific hazardous locations (2405.2)
- SM Sloped glazing and skylights (2404)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Private Garages (Chapter 4)

- N/A General (407)
- N/A Beneath rooms (407.3)
- N/A Attached to rooms (407.4)
- N/A Door sills (407.5)
- N/A Means of egress (407.8)
- N/A Floor surface (407.9)
- N/A \_\_\_\_\_
- N/A \_\_\_\_\_
- N/A \_\_\_\_\_

Egress (Chapter 10)

- OK One exit from dwelling unit (1010.2)
- SR Sleeping room window (1010.4)
- OK EXIT DOOR (1017.3) 32" W 80" H
- \_\_\_\_\_ Landings (1014.3.2) stairway
- N/A Ramp slope (1016.0)
- \_\_\_\_\_ Stairways (1014.3) 36" W
- SR Treads (1014.6) 10" min.
- SR Riser (1014.6) 7 3/4" max.
- \_\_\_\_\_ Solid riser (1014.6.1)
- \_\_\_\_\_ Winders (1014.6.3)
- \_\_\_\_\_ Spiral and Circular (1014.6.4)
- SR Handrails (1022.2.2.) Ht.
- SR Handrail grip size (1022.2.4) 1 1/4" to 2"
- SR Guards (1012.0) 36" min.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Smoke Detectors (920.3.2)

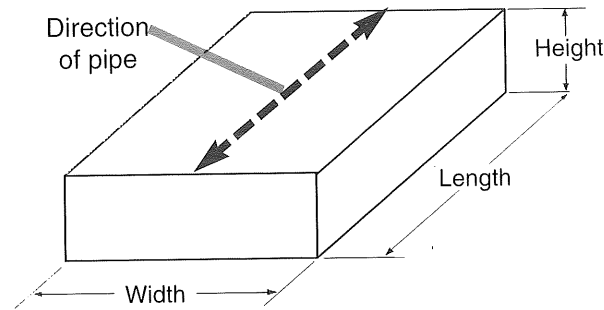
- SR Location and interconnection
- SR Power source

Dwelling Unit Separation  
Table 602

N/A

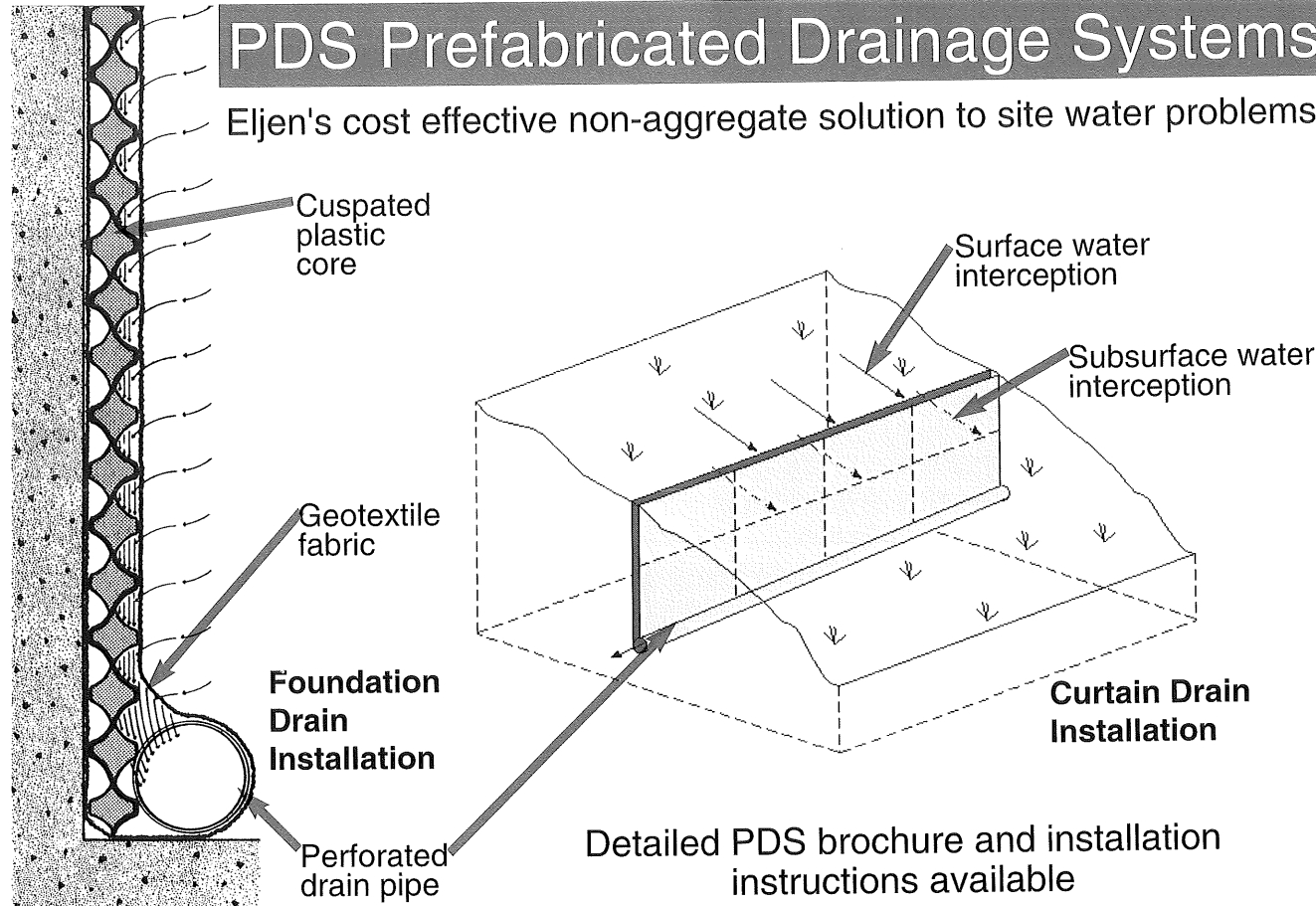
## In-Drain™ unit specifications

Type	Length	Width	Height	Wt.
A	3'	2'	7"	11 lbs
B	4'	3'	7"	22 lbs
Half B	2'	3'	7"	11 lbs



## PDS Prefabricated Drainage Systems

Eljen's cost effective non-aggregate solution to site water problems.



# ELJEN™

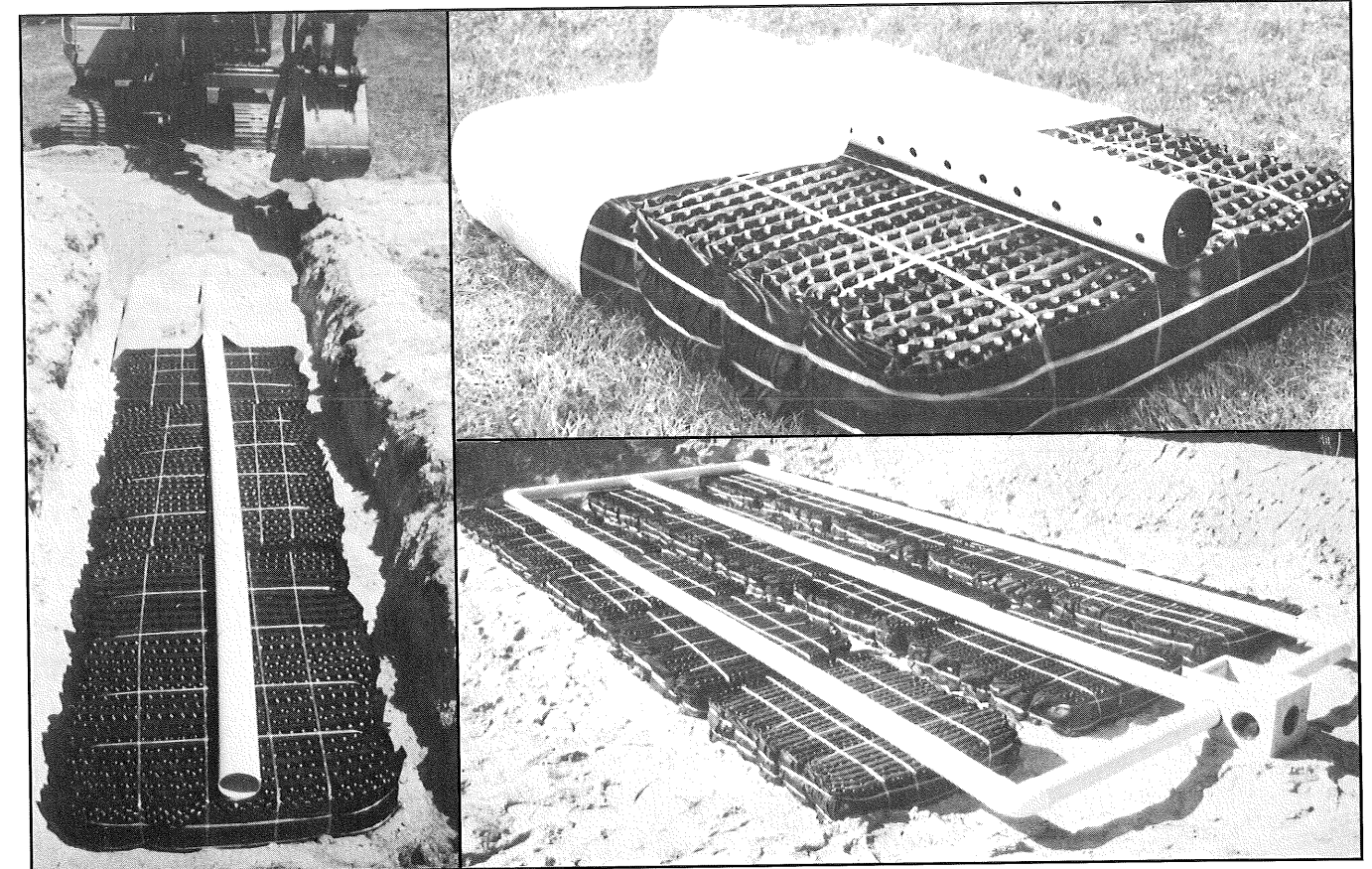
ENVIRONMENTAL  
PRODUCTS  
SINCE 1979

AN INTERNATIONAL COMPANY

## IN-DRAIN™ SYSTEM



The non-aggregate leach field system with new Bio-Matt™ Fabric.



### Eljen Corporation

15 Westwood Rd., Storrs, CT., 06268  
203-429-9486 • 800-444-1359  
Fax 203-487-1124  
Patent nos. 4,465,594 and 4,880,333

Distributed By:

**Construction**  
Consultants, Inc.

P.O. Box J  
Livermore Falls, ME 04254  
207-897-4072

#### LIMITED WARRANTY

- Each In-Drain™ unit is warranted to the original purchaser against defects in materials and workmanship for one year from the date of manufacture when installed in accordance with manufacturer's instructions. Eljen Corp. must be notified within fifteen (15) days of the appearance of any defect during this period. Eljen Corp. will supply a replacement unit. Eljen Corp.'s liability specifically excludes the cost of removal and/or installation of the units.
- The warranty does not extend to incidental, consequential, special or indirect damage. Specifically excluded from warranty coverage are: damage due to ordinary wear and tear, alteration, abuse or misuse, subjection to stresses or effluent loading greater than those prescribed in the design and installation instructions, the placement of improper materials by buyer into buyer's system, any event not caused by or under the control of Eljen Corp. In no event will Eljen Corp. be responsible for loss or damage to the buyer, the units, or any 3rd party resulting from its installation or shipment.
- Buyer shall be solely responsible for insuring that installation of the system is completed in accordance with all applicable laws, codes, rules and regulations.
- No warranties or representations at any time made by any representative of Eljen Corp. shall vary or expand the provisions hereof. No warranty applies to any party other than the original purchaser.

#### EXTENDED WARRANTY

Eljen offers a 10 year warranty for 1 and 2 family residential In-Drain systems. Conditions of system design, installation and maintenance apply. Please refer to detailed warranty available from Eljen or an authorized representative.

- In-Drain system pretreats effluent with a two-stage biomat
- System maintains greater long term leaching capacity
- Requires much smaller area than conventional systems
- Lower site impact and less offsite fill required
- Ends worries about dirty stone and stone dust
- Made with lightweight recycled materials
- Excellent documented long term track record
- The leach field system with a 10 year warranty

Unique Features of the In-Drain system

Eljen™ ... Products for a clean, healthy environment

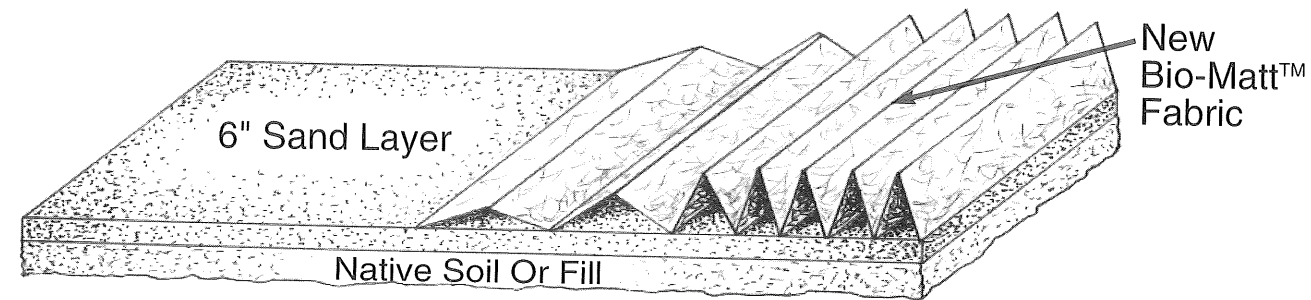
Eljen, In-Drain and Bio-Matt are trademarks of Eljen Corp.

© 1994, Eljen Corp. #C94



# Only the *Eljen In-Drain™* System "Pretreats" effluent with a two-stage biomat.

## Here's how it works...



● **Conventional Systems** have a single biomat forming at the soil interface.

● **In-Drains™ offer 2 biomat layers...**  
 1. Primary surface on fabric  
 2. Secondary at 6" sand layer.

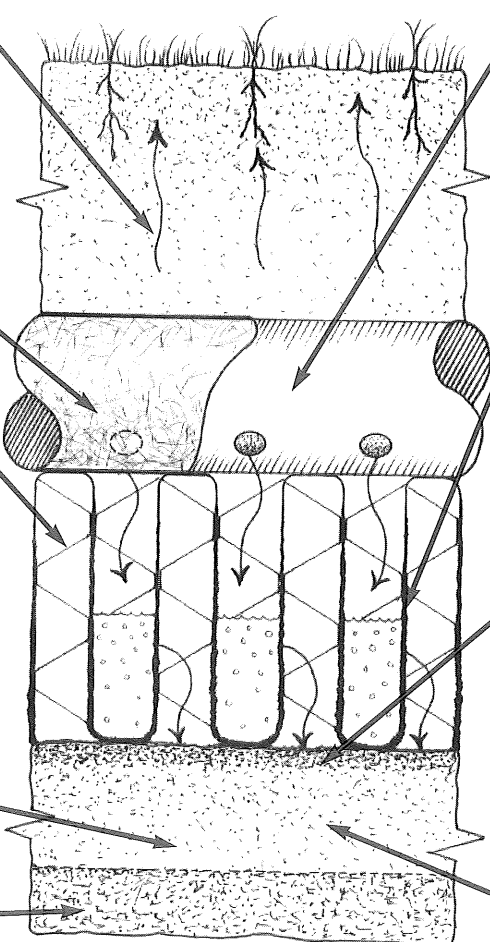
**Porous top of In-Drains** allows evapotranspiration and oxygen exchange for better effluent treatment.

**Antisiltation fabric** keeps fines out of In-Drains.

**Cusped plastic core** provides separation between layers of Bio-Matt™ fabric. Maintains unit structural integrity and aids in oxygen transfer. Increases treatment surface area & effluent storage capacity.

**Pretreated effluent** reduces potential for ground water pollution.

**Native soil or fill**



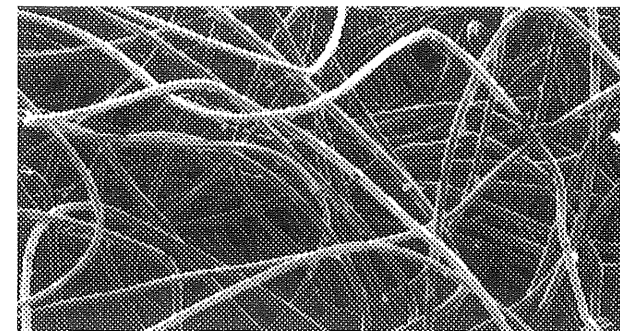
**Perforated pipe** distributes effluent to In-Drains™. Pipe is secured to In-Drains with preformed metal clamps.

**Primary biomat layer** forms on Bio-Matt™ fabric. Up to 10 ft² of fabric provided for every ft² of soil interface.

**Secondary biomat layer** forms at sand layer. Long term acceptance rate of this biomat layer is 3 to 10 times that of conventional systems.

**6" Concrete sand layer**

## Compare new Bio-Matt™ fabric vs. soil interface



Nonwoven fabric-50x magnification



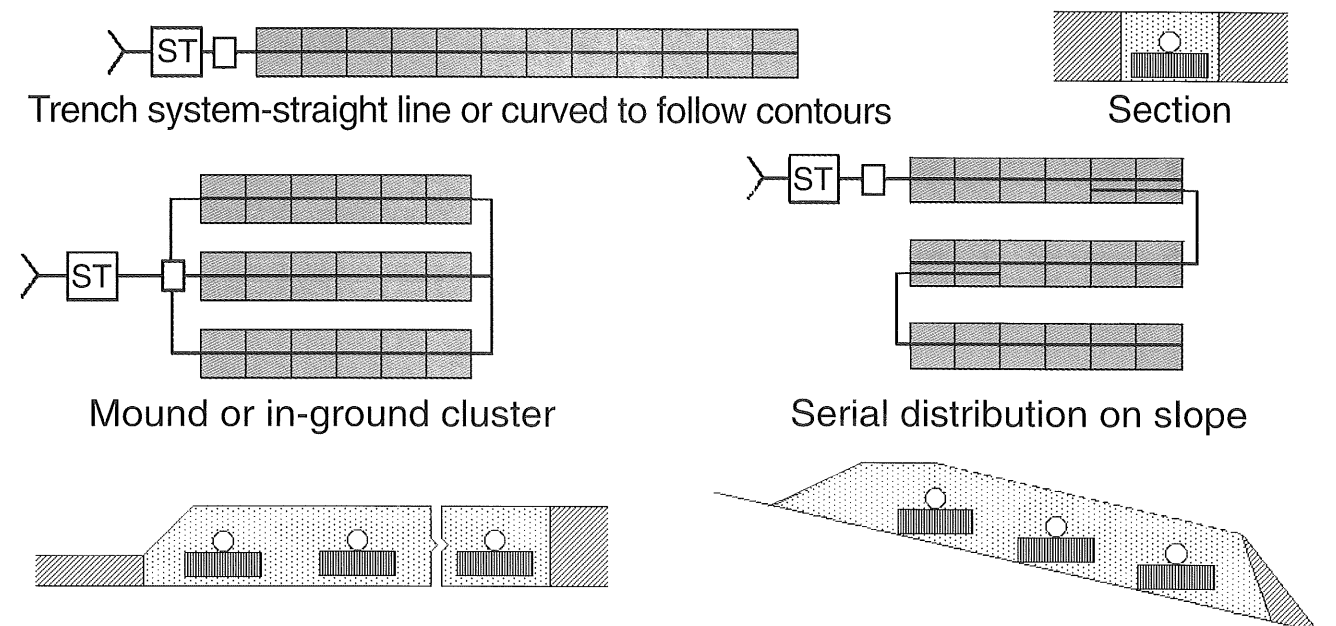
Concrete sand-50x magnification

Recent studies† have shown that the hydraulic conductivity ratio (HCR) of nonwoven fabric has a stable long term permeability in contact with sand. Bio-Matt™ fabric in standard In-Drains offers a comparable environment to soil for biomat growth and presents no masking effect on infiltration capacity. Many years of field experience confirm the long term acceptance rates (LTAR) used in sizing In-Drain leach field systems.

† 1989 study by Geoservices Inc., Norcross, GA.  
 Fabric photo courtesy Amoco Fabrics & Fibers Co.  
 Concrete sand photo courtesy GRI/Drexel

## Flexibility of installation

- Mound or in-ground installations
- Level or sloped sites
- Lightweight preassembled units
- Trench or cluster (bed) layouts
- D-Box or serial distribution
- No stone/gravel cleanup



Detailed installation guidelines available for all types of systems