

88-H-1.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

State Department of Human Services
Division of Public Health Engineering, Station 10-SMS
207-287-5672 FAX 207-287-4172

PROPERTY LOCATION

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

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

Street or Road: **PARK AVENUE (Highland)**

PORTLAND

PERMIT # 9469

STATE COPY

Subdivision, Lot #

Date Permit Issued: **7.14.05**

\$ **1100.00**

If Double Fee Charged

OWNER/APPLICANT INFORMATION

Name (last, first, MI): **N/E JOHNSON COVINGTON** Owner

Jeanne Bourke
Local Plumbing Inspector Signature

L.P.I. # **0732**

Mailing Address of: **STEVE MacISAAC**

Owner Applicant
P.O. Box 93 PEAKS ISLAND, ME. 04108

Daytime Tel. # **766-5514**

Municipal Tax Map # _____ Lot # _____

Owner or Applicant Statement

Caution: Inspections Required

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a permit.

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

(1st) Date Approved _____

(2nd) Date Approved _____

Signature of Owner/Applicant _____

Date _____

Local Plumbing Inspector Signature _____

PERMIT INFORMATION

TYPE OF APPLICATION

- First Time System
- Replacement System
Type Replaced: _____
Year Installed: _____
- Expanded System
 - Minor Expansion
 - Major Expansion
- Experimental System
- Seasonal Conversion

THIS APPLICATION REQUIRES

- No Rule Variance
- First Time System Variance
 - Local Plumbing Inspector Approval
 - State & Local Plumbing Inspector Approval
- Replacement System Variance
 - Local Plumbing Inspector Approval
 - State & Local Plumbing Inspector Approval
- Minimum Lot Size Variance
- Seasonal Conversion Approval

DISPOSAL SYSTEM COMPONENTS

- Complete Non-Engineered System
- Primitive System (graywater & all toilet)
- Alternative Toilet, specify: _____
- Non-Engineered Treatment Tank (only)
 - Holding Tank, _____ Gallons
- Non-Engineered Disposal Field (only)
- Separated Laundry System
- Complete Engineered System (2000-gpd)
- Engineered Treatment Tank (only)
- Engineered Disposal Field (only)
- Pre-treatment, specify: _____
- Miscellaneous components

SIZE OF PROPERTY

34,790 +/- sq. ft. acres

DISPOSAL SYSTEM TO SERVE

- Single Family Dwelling Unit, No. of Bedrooms: **3**
 - Multiple Family Dwelling, No. of Units: _____
 - Other: _____
- SPECIFY: _____
Current Use Seasonal Year Round Undeveloped

TYPE OF WATER SUPPLY

- Drilled Well
 - Dug Well
 - Private
 - Public
 - Other: _____
- OR **SEASONAL**

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

- Concrete
 - Regular
 - Low Profile
 - Plastic
 - Other: _____
- CAPACITY: **3-1000** gallons

DISPOSAL FIELD TYPE & SIZE

- Stone Bed
 - Stone Trench
 - Proprietary Device
 - Cluster array
 - Linear
 - Other: _____
- SIZE: **960** sq. ft. lin. ft.
20 ELJEN IN-DRAIN UNITS

GARBAGE DISPOSAL UNIT

- No
- Yes - Specify one below:
 - Multi-compartment tank
 - _____ tanks in series
 - Increase in tank capacity
- Filter on tank outlet

DESIGN FLOW

270 gallons per day
BASED ON:
 Table 501.1 (dwelling units)
 Table 501.2 (other facilities)
SHOW CALCULATIONS
- for other facilities -

SOIL DATA & DESIGN CLASS

PROFILE: **2** CONDITION: **A** DESIGN: **I**

DISPOSAL FIELD SIZING

- Small - 2.0 sq ft./gpd
- Medium - 2.6 sq ft./gpd
- Medium-Large - 3.3 sq ft./gpd
- Large - 4.1 sq ft./gpd
- Extra-Large - 5.0 sq ft./gpd

PUMPING

- Not required
- May be required
- Required - Specify only for engineered or experimental systems:

SINGLE FAMILY DWELLING

3 BEDROOMS @ 90

GALLONS PER DAY

= 270 GPD

Section 503.0 (meter readings)
ATTACH WATER-METER DATA

SITE EVALUATOR STATEMENT

Certify that on **12/8/04** date, I completed a site evaluation on this property and state that the above described system is in compliance with the Subsurface Wastewater Disposal Rules (24-CMR 21.001).

Albert Frick
Site Evaluator Signature

163

SE -

1/21/2005
Date

ALBERT FRICK

(207) 839-5563

ALBERTFRICK@WORLDNET.ATT.NET

APR - 8 2005

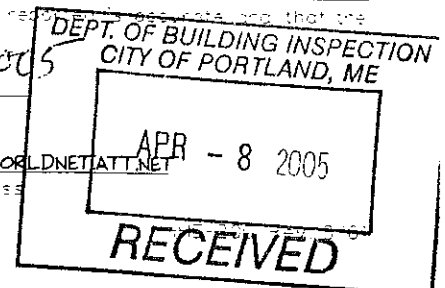
Site Evaluator Name Printed

Telephone Number

E-mail Address

ALBERT FRICK ASSOCIATES - 95A COUNTY ROAD ROAD GORHAM, MAINE 04038 - (207) 839-5563

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator



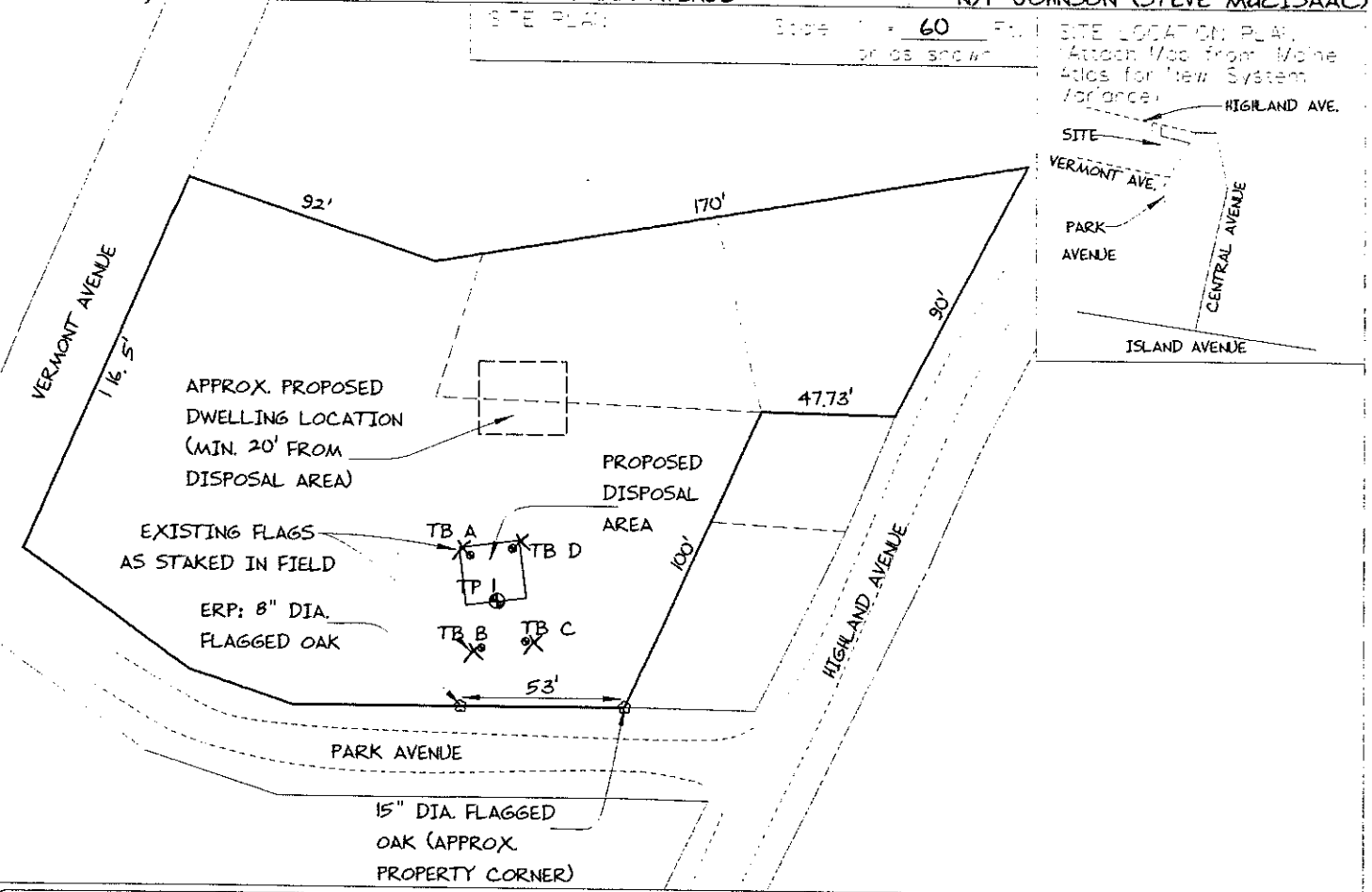
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
 Division of Public Engineering, Station 10, Bldg
 1007, 387-5672 Fax: 387-1873

Town, City, Plantation
PORTLAND, PEAKS ISLAND

Street, Road, Easement
PARK AVENUE

Owner's Name
N/F JOHNSON (STEVE MacISAAC)



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

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

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0			DARK BROWN	
10	GRAVELLY SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	
20			YELLOWISH BROWN	
30	///	///	///	///
35	REFUSAL (BEDROCK OR LARGE STONE)			
40				
50				

Soil Classification: **2 A**
 Slope: **27"**
 Limiting Factor: **27"**
 Ground Water Restrictive Layer:
 Bedrock:
 Depth:

Observation Hole TB A-D Test Pit Boring
 " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0				
10				
20				
24	TB A = 24" TO BEDROCK			
24	TB B = 24" TO BEDROCK			
40	TB C = 40" + TO BEDROCK			
24	TB D = 24" TO BEDROCK			
30				
40				
50				

Soil Classification: **"**
 Slope: **"**
 Limiting Factor: **"**
 Ground Water Restrictive Layer:
 Bedrock:
 Depth:

Albert Frick
 Site Evaluator Signature

163
 SE

11/21/2005
 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
 Division of Region Engineering, Station 10, S-5
 207-287-5871 FAX 207-287-2170

Town, City, Plantation
PORTLAND, PEAKS ISLAND

Street, Road, Subd. Area
PARK AVENUE

Owner's Name
N/F JOHNSON (STEVE MacISAAC)

APPROX. PROPOSED
 DWELLING LOCATION
 (MIN. 20' FROM
 DISPOSAL AREA)

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.

1000 GALLON CONCRETE
 SEPTIC TANK LOCATE
 WHERE FEASIBLE, 8' MIN.
 FROM BUILDING STRUCTURE

4" DIA. SDR-35
 SOLID ABS

EXISTING GRADE
 AT CORNER.

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

DISTRIBUTION
 BOX

EXISTING FLAGS
 AS STAKED IN FIELD

ERP: 8" DIA.
 FLAGGED OAK

APPROX. PROPERTY LINE
 (TO BE VERIFIED)

PARK AVENUE

HIGHLAND AVENUE

FILL REQUIREMENTS

Depth of Fill (Upslope) ± 23" - 25"
 Depth of Fill (Downslope) ± 27" - 34"
 DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

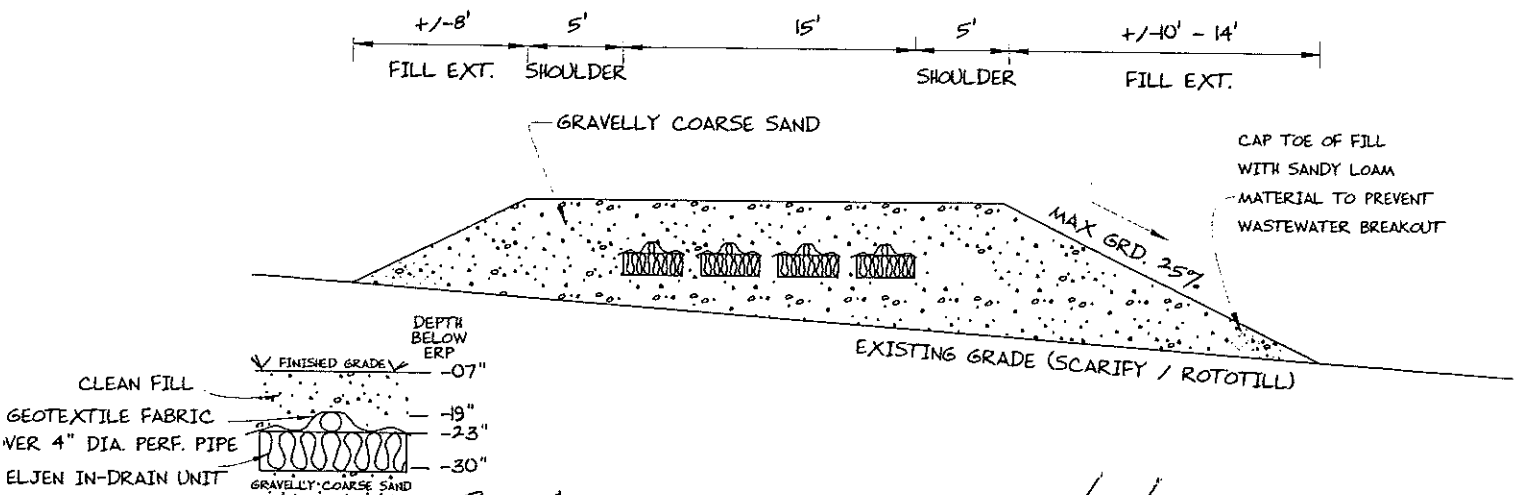
Finished Grade Elevation
 Top of Distribution Pipe Proprietary Device
 Bottom of Disposal Area

ELEVATION REFERENCE POINT
 Location & Description NAIL 59" ABOVE
 BASE OF 8" DIA. FLAGGED OAK
 Reference Elevation is: 0.0" or

SEE
 DETAIL
 BELOW

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

DISPOSAL AREA CROSS SECTION



DEPTH BELOW ERP
 ✓ FINISHED GRADE -07"
 CLEAN FILL -19"
 GEOTEXTILE FABRIC -23"
 VER 4" DIA. PERF. PIPE -30"
 ELJEN IN-DRAIN UNIT
 GRAVELLY COARSE SAND

CAP TOE OF FILL
 WITH SANDY LOAM
 MATERIAL TO PREVENT
 WASTEWATER BREAKOUT

Albert Frick
 Site Evaluator's Signature

163
 SE #

1/21/2005
 Date

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 HE-201 Rev. 10-00



Albert Frick Associates, Inc.

Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04038

(207) 839-5563

PORTLAND, PEAKS ISLAND	PARK AVENUE	N/F JOHNSON (STEVE MacISAAC)
TOWN	LOCATION	APPLICANT'S NAME

1) The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Department of Human Services pursuant to 22 M.R.S.A. § 42 (the "Rules") are incorporated herein by reference and made a part of this application and shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system Installer should contact Albert Frick Associates, Inc. 839-5563, if there are any questions concerning materials, procedures or designs. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the Rules and with all state and municipal laws and ordinances pertaining to the permitting, inspection and construction of subsurface wastewater disposal systems.

2) This application is intended to represent facts pertinent to the Rules only. It shall be the responsibility of the owner/applicant, system Installer and/or building contractor to determine compliance with and to obtain permits under all applicable local, state and/or federal laws and regulations (including, without limitation, Natural Resources Protection Act, wetland regulations, zoning ordinances, subdivision regulations, Site Location of Development Act and minimum lot size laws) before installing this system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations.

Prior to the commencement of construction/installation, the local plumbing inspector shall inform the owner/applicant and Albert Frick Associates, Inc of any local ordinances which are more restrictive than the Rules in order that the design may be amended. All designs are subject to review by local, state and/or federal authorities. Albert Frick Associates, Inc.'s liability shall be limited to revisions required by regulatory agencies pursuant to laws or regulations in effect at the time of preparation of this application.

3) All information shown on this application relating to property lines, well locations, subsurface structures and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based solely upon information provided by the owner/applicant and has been relied upon by Albert Frick Associates, Inc. in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information.

4) Installation of a garbage (grinder) disposal is not recommended. If one is installed, an additional 1000 gallon septic tank or a septic tank filter should be connected in series to the proposed septic tank.

5) The system user shall avoid introducing kitchen grease or fats into this system. Chemicals such as septic tank cleaners and/ or chlorine (such as from water treatment) and controlled or hazardous substances shall not be disposed of in this system.

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

PORTLAND, PEAKS ISLAND

PARK AVENUE

N/F JOHNSON (STEVE MacISAAC)

TOWN

LOCATION

APPLICANT'S NAME

6) The septic tank should be pumped within two years of installation and subsequently as recommended by the pump service, but in no event should the septic tank be pumped less often than 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.) divided by the # 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 requirement. In gravity systems, the invert of the septic tank(s) outlet(s) shall be at least 4 inches above the invert of the distribution box outlet at the disposal area. 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 of a chamber system, install a "T" connection in the distribution box and place 3 inches of stone or a splash plate in the first chamber. Insulate gravity pipes, pump lines and the distribution box as necessary to prevent freezing.

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



Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators

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

Fill Estimation Worksheet

Albert Frick Associates Inc.

95A County Road

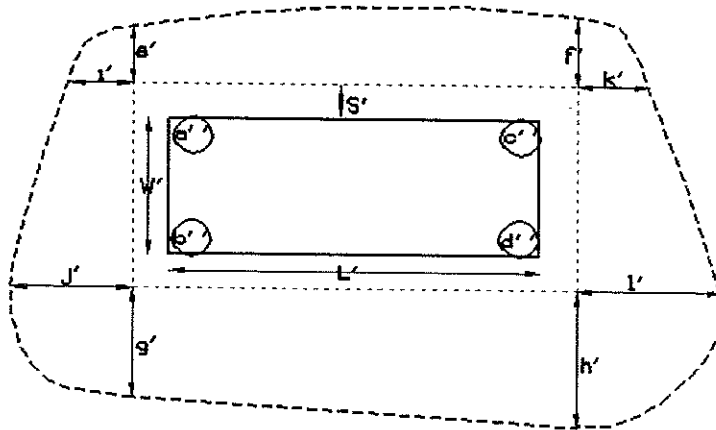
Gorham, Me 04038

839-5563 FAX - 839-5564

E-Mail - Albertfrick@worldnet.att.net

Town: Portland (Peaks Isl.)
 Project owner/applicant: teve MacIsaac
 Address: Park Avenue
Peaks Island

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



Length (L)	<u>20</u> feet
Width (W)	<u>15</u> feet
Shoulder (S)	<u>5</u> feet
<i>Depth of fill:</i>	
upper left (a)	<u>25</u> inches
upper right (c)	<u>23</u> inches
lower left (b)	<u>34</u> inches
lower right (d)	<u>27</u> inches
<i>Fill Extension:</i>	
left up (e)	<u>8</u> feet
right up (f)	<u>8</u> feet
left down (g)	<u>14</u> feet
right down (h)	<u>10</u> feet
upper left (i)	<u>8</u> feet
lower left (j)	<u>14</u> feet
upper right (k)	<u>8</u> feet
lower right (l)	<u>10</u> feet
Cost of fill per yard= \$ 0.00	

Body	64 cubic yards
Fill Down	17 cubic yards
Fill Up	9 cubic yards
Fill left	13 cubic yards
Fill right	9 cubic yards
Fill upleft	2 cubic yards
Fill upright	2 cubic yards
Fill downleft	6 cubic yards
Fill downright	3 cubic yards

SubTotal=	125 cubic yards
Shrinkage %=	15 %
Total Backfill	144 cubic yards

Adjusted cost of Total Backfill= \$ -