

PATRICK ENGINEERING & SURVEYING

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SUBJECT: Cost Breakdown for Percolation Tests and Septic Layout Approval on Steep Slopes that Exceed 25% for APN

Percolation tests are used to determine the rate the soil in the test area will accept and disperse the effluent. This test is used to determine the size of leach field necessary for a particular project. For example, a percolation rate of 45 minutes to the inch will support a two-bedroom house with 400 feet of leach line, a three-bedroom house with 480 feet of leach line or a four-bedroom house with 540 feet of leach line. A 100% reserve area is required unless the rates go higher than 60 minutes per inch. Percolation rates higher than 60 minutes to the inch require additional reserve area.

After the percolation tests are completed, a leach field can be designed within the physical constraints of the property, the county rules and the owner's preferences.

The design is then submitted to the county for their approval. This is called a layout approval and is necessary to obtain a building permit.

Note: The following requirements must be met for the installation of leach lines on steep slopes exceeding 25%. The maximum slope allowed is 40%. Leach lines on steep slopes shall be installed in 5-foot-deep trenches with 12 inches of leach rock below the pipe or with approved chambers or other gravel-less systems.

COST BREAKDOWN:

I.	Research/Site Inspection/Calcs		
	1.0 hrs. @ \$200.00/hr.	=	\$ 200.00
II.	Percolation Tests		
	A. Dig Holes/Presoak		
	(Minimum 6 holes/site +		
	2 Tests 5' below the		
	proposed trench depth.)/ Test		
	10.0 hrs. @ \$125.00/hr.	=	\$1,250.00
	B. 2 soil profile borings		
	to a depth of 10' below		
	the trench depth.		
	2.0 hrs. @ \$125.00/hr.	=	\$ 250.00
	C. Additional Holes (if		
	required) @ \$125.00/hr.	=	_____
			\$1,500.00
III.	Layout		
	8.0 hrs. @ \$140.00/hr.	=	\$1,120.00
	1.0 hrs. @ \$200.00/hr.	=	<u>\$ 200.00</u>
			\$1,320.00
IV.	County Forms/Processing/Fees		
	1.0 hrs. @ \$200.00/hr.	=	\$ 200.00
	1.0 hrs. @ \$125.00/hr.	=	\$ 125.00
	Slope Stability Letter	=	\$ 700.00
	Waiver Letter <i>(If Required)</i>		
	County Fees	=	<u>\$1,129.00</u>
			<u>\$2,154.00</u>
TOTAL			\$5,174.00

ALL ONGOING PROJECTS ARE BILLED ON A MONTHLY BASIS, AND PAYMENT IS EXPECTED UPON RECEIPT OF AN INVOICE.

TERMINATION OF THIS CONTRACT BY EITHER PARTY MUST BE IN WRITING. IF THE CLIENT TERMINATES THIS CONTRACT, ALL COSTS INCURRED THROUGH THE DATE OF TERMINATION MUST BE PAID IN FULL.

ALL CHANGES, ADDITIONS OR DELETIONS WILL BE MADE BY CHANGE ORDERS AND MUST BE AGREED TO BY ALL PARTIES.

PATRICK ENGINEERING AND SURVEYING HOURLY RATES:

ENGINEER	\$200.00/HOUR
DESIGNER/DRAFTSPERSON	\$140.00/HOUR
PROJECT COORDINATOR	\$125.00/HOUR
SURVEY CREW (2 MAN CREW)	\$220.00/HOUR
SURVEY CREW (1 MAN CREW)	\$150.00/HOUR

PATRICK L. BROWN, RCE #18067

ACCEPTANCE:

UPON REVIEW AND CONSIDERATION, I, (WE) _____, THE UNDERSIGNED, HEREBY ACCEPT THIS CONTRACT WITH PATRICK ENGINEERING AND SURVEYING AND AUTHORIZE WORK TO COMMENCE UPON RECEIPT OF THIS SIGNED DOCUMENT AND OUR CHECK IN THE AMOUNT OF \$1,000.00.

PLEASE PROVIDE PATRICK ENGINEERING AND SURVEYING WITH A COPY OF YOUR TITLE POLICY DETAILING THE EASEMENTS OF YOUR PROPERTY. THANK YOU.

SIGNATURE

DATE

SIGNATURE

DATE