



Build a 6' by 12' open but with roof shed with stand for the pump, a table for sorting produce and a simple sink for washing produce after everything else is in place

pump

water line
1" pipe
2 feet down (min)

dug well
20 feet deep min

35 feet from property corners

420.00 in

1 in. 79cc Gasoline Engine Clear Water Pump - 35 GPM
 PREDATOR 1 in. 79cc Gasoline Engine Clear Water Pump - 35 GPM
 \$22999

According to the owner's manual of the Predator 1 inch 79CC Gas engine clear water pump1, the suction and discharge size is 1" NPT (National Pipe Thread). This means that the threads are tapered and can create a seal when tightened. The NPT standard is widely used in the US and Canada for plumbing applications2.

design a dug well for irrigation				
130 garden width				
130 garden depth				
60 percent used for plants				
1 how many inches of water needed per week				
6253	CALC: how many gallons per week needed from well			
0.6203373	CALC: gallons per minute needed			
how many gallons of water will a well produce				
36 diameter of well tiles in inches				
18 depth of water in well in feet				
951.2316	CALC: how many gallons in this well			
how often is it going to be used to water the garden				
14 number of times a week				
0.5 how many hours each time				
446.642857	CALC: How many gallons needed for the length of this run			
893.285714	CALC: How many gallons if run at this rate for 1 hour			
14.8880952	CALC: How many gpm must the pump produce during this run			
13.5568381	CALC: How many hours would it take to refill the well at 0.6203373	gpm		
1.29461698	CALC: how many gpm must the well produce to fill in	11.5	hours	

Table

Pipe Size (Sch. 40)	I.D. (range)	O.D.	GPM (w/ min. PSI loss & noise)	GPH (w/ min. PSI loss & noise)
1/2"	0.5 - 0.6"	0.85"	7	420
3/4"	0.75 - 0.85"	1.06"	11	660
1"	1 - 1.03"	1.33"	16	960
1-1/4"	1.25 - 1.36"	1.67"	25	1,500
1-1/2"	1.5 - 1.6"	1.9"	35	2,100
2"	1.95 - 2.05"	2.38"	55	3,300

