

# LET'S PLAN YOUR SPRINKLER SYSTEM

**1** First measure and draw a plot plan of your property. Use the grid sheet provided and include:

- A. The outline of your property to scale (each square on the grid equals one foot).
- B. Show your house and any other structures.
- C. Include all walks, patios and driveways.
- D. Include all grass areas, flowerbeds, trees and shrubs.
- E. Now add the water meter location and service line.

**2** Now it's time to gather some important information.

A. What is the size of your water meter?

The size is usually stamped on the water meter. Most are 5/8", 3/4" or 1". If you cannot locate the size, call your local water company for assistance.

B. What is the diameter of your water service line? \_\_\_\_\_"

Here is a simple method: wrap a string around the pipe leading from your water meter to your house. Use the following table to determine the service line diameter.

Length of String	2 3/4"	3 1/4"	3 1/2"	4"	4 3/8"	5"
Copper Service Line	3/4"	—	1"	—	1 1/4"	—
Galvanized Service Line	—	3/4"	—	1"	—	1 1/4"

C. Measure the distance from your water meter to the front of your house. Now, measure the distance from your water meter to the rear of the house.

How long is your service line?  
 Front yard \_\_\_\_\_ ft.  
 Back yard \_\_\_\_\_ ft.

D. With all the faucets turned off, attach a pressure gauge dial to your outside faucet and open the valve. Read the gauge dial. Water pressure is expressed as pounds per square inch (psi).

What is your static water pressure? \_\_\_\_\_ psi

**3** Let's find out how much water is available for your sprinkler system.

A. Using the information you've gathered, look at the three charts. Each chart is based upon the length of your supply line. You will probably have to use different charts for your front and back yards.

B. Starting with the size of your water meter and supply line, follow the column horizontally. You'll notice that if you choose 1" valves instead of 3/4" valves, the GPM (gallons per minute) available to your system is greater.

The same holds true for the diameter of your system pipe. Make your valve and pipe size selections based on the amount of water needed for your system. If in doubt, select the column with the larger valve and pipe size and use this as a maximum number. If you find after completing section 4 that you don't require that much water, you can recalculate using smaller valves and pipe.

## EXAMPLE:

Using the 100' Supply Line Chart, a yard with a 3/4" meter and 3/4" supply line with 50 psi could have 9.5 GPM to 10.6 GPM depending upon the size of the system pipe.

This represents the MAXIMUM GPM that the sprinklers on one valve can discharge.  
 Total available GPM, front yard \_\_\_\_\_  
 Total available GPM, back yard \_\_\_\_\_

### BASED ON 50' SUPPLY LINE

WATER METER SIZE	WATER SERVICE LINE SIZE	30'	35'	40'	45'	50'	55'	60'	65'	70'	75'	80'	85'	90'	95'	100'
3/4"	3/4"	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8
3/4"	1"	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3
1"	3/4"	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8
1"	1"	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3
1 1/4"	3/4"	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
1 1/4"	1"	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3
1 1/4"	1 1/4"	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8

### BASED ON 100' SUPPLY LINE

WATER METER SIZE	WATER SERVICE LINE SIZE	30'	35'	40'	45'	50'	55'	60'	65'	70'	75'	80'	85'	90'	95'	100'
3/4"	3/4"	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8
3/4"	1"	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3
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1"	1"	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3
1 1/4"	3/4"	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
1 1/4"	1"	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3
1 1/4"	1 1/4"	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8

### BASED ON 150' SUPPLY LINE

WATER METER SIZE	WATER SERVICE LINE SIZE	30'	35'	40'	45'	50'	55'	60'	65'	70'	75'	80'	85'	90'	95'	100'
3/4"	3/4"	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8
3/4"	1"	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3
1"	3/4"	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8
1"	1"	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3
1 1/4"	3/4"	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
1 1/4"	1"	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3
1 1/4"	1 1/4"	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8

Materials to be used:

6" Pop-up sprinkler heads

1" PVC

3/4" PVC

2 x 3/4" Plastic valves

1 x 3/4" Emergency shut-off (brass)

2 3/4" Anti-siphon valves with backflow preventer  
(please note that these valves will be 2' away from the faucet, on the east side and will be at least 6" higher than the highest sprinkler)

A = WATER METER

B = WATER MAIN

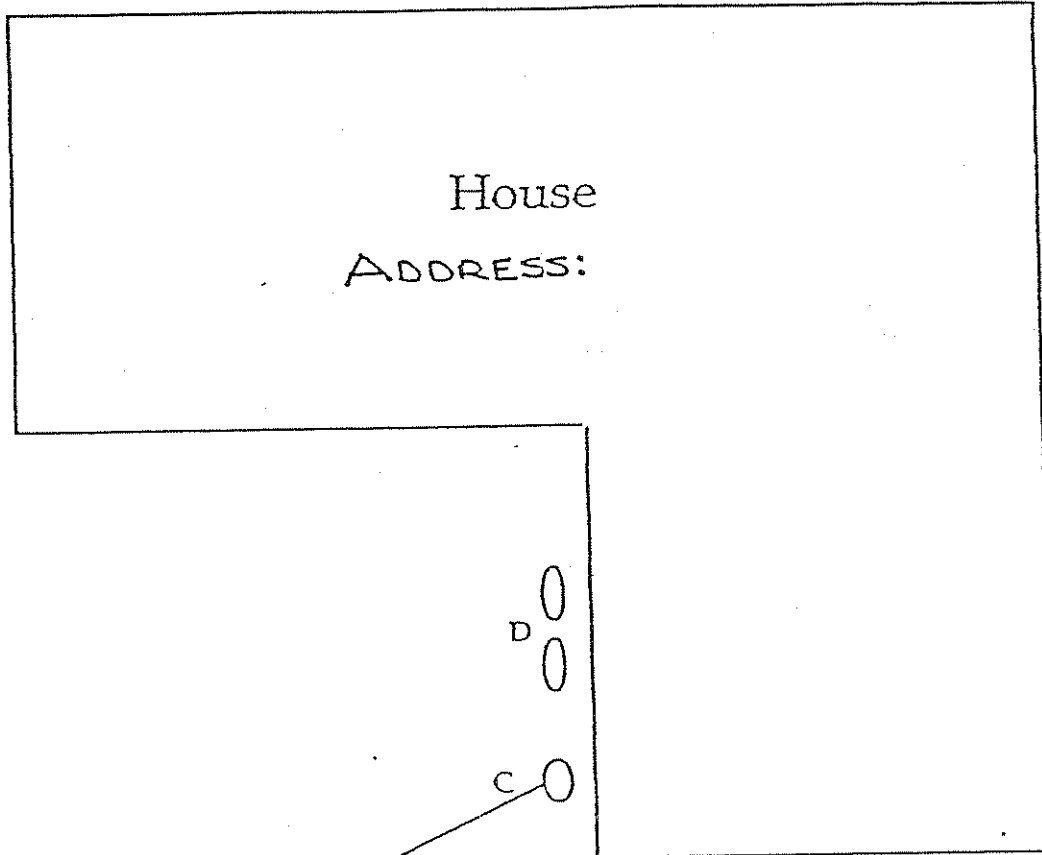
C = FAUCET

D = 2 - 3/4" ANTI SIPHON VALVES

ADDITIONAL INFORMATION

• PIPING WILL BE APPROXIMATELY 12" - 14" UNDERGROUND.

• EMERGENCY SHUT OFF VALVE WILL BE INSTALLED.



Property Line

← STREET →