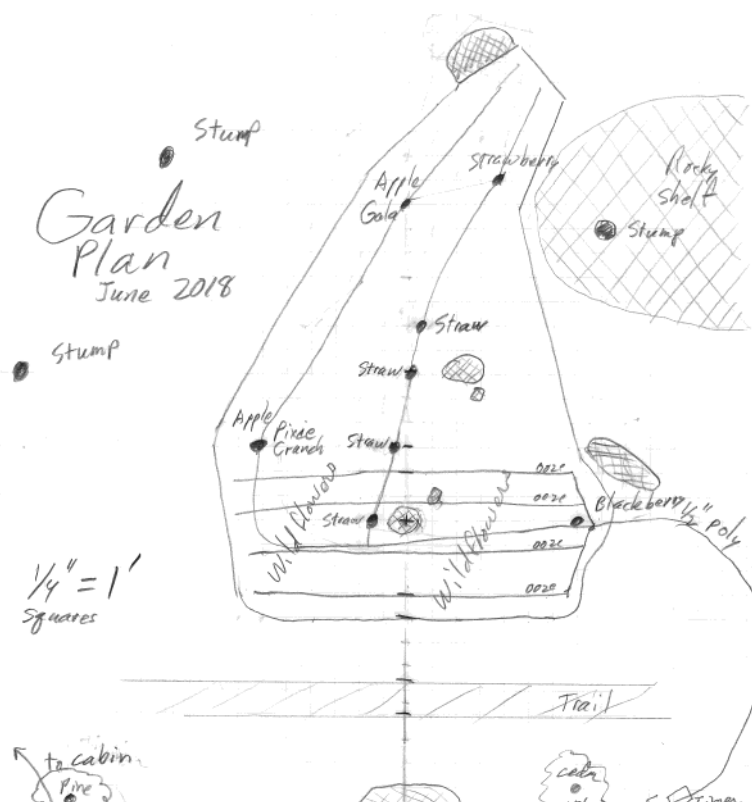


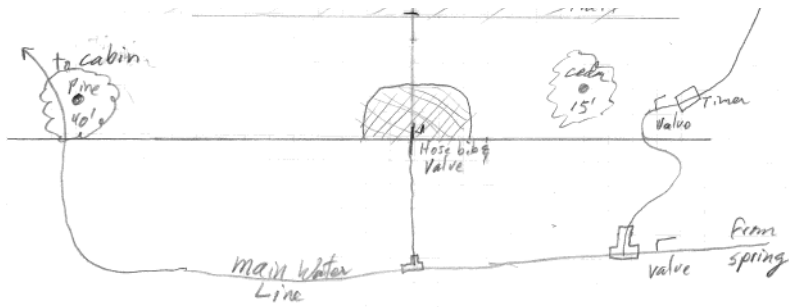
Drip System

Friday, April 27, 2018

Gardening Supplies :

Qty	UM	Desc	
50	ft	1/2" Polyethylene main line	shed
40	ft	1/4" distribution line	shed
50	ft	1/4 ooze pipe (1 gal/hr/ft)	shed
1	box	Garden staples	shed
0.5	lb	Gurney's Fruit Tree starter 2-1-2	shed
0.5	lb	Osmocote Smart Release 14-14-14	
50	Tbls	Miracle Gro 24-8-16	
		1/2" T compression fittings	
		1/4" T barbed fittings	
		1/4" barbed connectors	
10	ea	1 ghp drip emitters	shed
	ea	1/2 ghp drip emitters	shed
	ea	2 ghp drip emitters	shed
1	ea	Soil Test Kit	
		Garden gloves	
		Kneeling pad	
		Knee pads	
		hand spade	
		hand rake	





Main water line	3/4" Poly
Blue-Loc, Adapter	3/4BL x 3/4 MIPT
Ball valve	3/4" FIPT, brass
Nipple	3/4" x 2", galv
T	3/4x3/4x3/4, galv
Blue-Loc, Adapter	3/4BL x 3/4 MIPT
Nipple	3/4 x 3" galv
Pressure regulator	30 PSI
Backflow preventer	type PVB
Reducer	3/4 MIPT to 1/2"FIPT
Adapter	1/2"MIPT to 5/8" Poly
Drip line	5/8" Poly
distribution line	1/4"
Emitters	1 gph



Lower Left - Incoming Main Water line 3/4"

Right - Outgoing Drip line 5/8"

Upper - Outgoing Main Water line to cabin 3/4"

Main Shutoff valve and Drip Timer

Located in rock crevice (see next picture)

1/2" compression fittings

3/4" Hose fittings on timer



Rock Crevice

Route of distribution line and location of shutoff vavle

Do not bury 5/8" Drip line. Stake it in place.
Install Backflow preventer at least 1 ft about highest emitter.

Minimize use of 1/4" distribution line.
Use 5/8" T fittings to split main drip line.
Install end cap on end of main line for line flushing.

Assume emitters water a 12" radius circle = 3 ft².
Add extra emitters to cover entire "drip zone" of each plant.
Make sure that highest emitter in each line is above soil level.
Do not bury emitters.
Stake all emitters in place.



Distribution line	5/8" Poly
feeder line	1/4"
Emitters	1 gph

Over-the-rock Hose

"T", barbed with SS clam	3/4" poly
Adaptor	3/4 BL to 3/4 MIPT
Ball valve	3/4 brass
Reducer	3/4 MIPT to 1/2 FIPT
Nipple	1/2 x 4



Early May,
Just Planted
Hale and overnight freeze.



Planted 6/15/2017:
1 Pixie Crunch apple tree
1 Gala apple tree
8 Sparkle Supreme Strawberry plants
1 Heaven-Can-Wait Blackberry bush



6/12/2018

Wildflowers planted 5/19/2018



Apples

Soil: Well drained, deep, fertile, pH: 5.7 - 7.0

Fertilize:

Miracle-Gro, 24-8-12, every 2 weeks:

Sprinkle tree from trunk to 3 ft.

This is an area of 25 ft².

= 2.5 gal of solution = 2.5 Tblsp sprinkled to 3'

= 0.24 lb N/1000 ft².

Osmocote, 14-14-14, once in spring:

Mix Osmocote Smart-Release into top 1-3 inches of soil

from 1' to 2.5 ft from trunk.

This is an area of 16 ft².

= 4.8 Tblsp per tree mixed from 1' to 2.5'

= 1.4 lbs N / 1000 ft².

Gurney's Tree Food, 2-1-2, spring and late summer:

Mix Gurney tree food into top 1-3 inches of soil from 1.5 ft to 3.5 ft from trunk.

This is an area of 30 ft².

= 4.5 Tblsp per tree mixed from 1.5' to 3.5'

= 0.1 lbs N / 1000 ft².

Water, entire drip zone:

1 gal = 0.134 ft³, 1" of rain = 0.62 gal/ft².

1" of water/week, 10 ft²/tree => 3 emitters/tree

= 3 emitters (1gph), 16 min, 7/week

= 1.9 gal/week/emitter x (3 emitters/tree)

= 5.6 gal/week/tree

Prune: Late Winter or very early spring



Blackberries

Soil: Well drained, deep, fertile, pH: 5.5 - 7

Fertilize:

Miracle-Gro, 24-8-12, every 2 weeks:

Sprinkle tree from trunk to 3 ft.

This is an area of 25 ft².

= 2.5 gal of solution = 2.5 Tblsp sprinkled to 3'

= 0.24 lb N/1000 ft².

Osmocote, 14-14-14, once in spring:

Mix Osmocote Smart-Release into top 1-3 inches of soil

from 1' to 2.5 ft from trunk.

This is an area of 16 ft².

= 4.8 Tblsp per tree mixed from 1' to 2.5'

= 1.4 lbs N / 1000 ft².

Water:

Keep moist but not wet.

1" of water/week

10 ft² / bush => 3 emitters/bush

= 3 emitters (1gph), 16 min, 7/week

= 5.6 gal/week/bush

Prune:

Top the primo canes of erect cultivars during the Summer. Don't top trailing cultivars during the growing season. Shorten the laterals of erect cultivars.

Pick:

After you see ripened blackberries, pick them every three to six days.

STRAWBERRIES

Soil: Well drained, pH: 5.5 - 7

Water:

Keep moist but not wet.

1" of water per week (3 ft² / plant)

Fertilize:

June-bearing **strawberries** are the easiest to fertilize because they only need one feeding a year, **after** the berries are harvested.

Miracle-Gro, 24-8-12, every 2 weeks:

Sprinkle plant to 1 ft radius

This is an area of 3 ft².

mix 2 Tblsp in 2 gal of water

= 1/5 gal of solution x 10 plants sprinkled to 1'

= 0.24 lb N/1000 ft².

Osmocote, 14-14-14, once in spring:

Mix Osmocote Smart-Release into top 1-3 inches of soil

to 1" radius

This is an area of 3 ft² each plant.

= 1 Tblsp per plant mixed to 1'

= 1.4 lbs N / 1000 ft².

= 1 emitter (1gph), 16 min, daily

= 1.9 gal/week/plant

Prune:

Eliminate daughter plants as needed. First and second generations produce higher yields. Try to space each plant about 10 inches apart.

When the growing season is over, mow or cut foliage down to one inch and mulch plants about 4 inches deep with straw, pine needles or other organic material. This can be done after the first couple of frosts, or when air temps reach 20 F. Remove mulch in early spring, after danger of frost has passed.

Row covers are a good option for protecting blossoms and fruit from birds.

Total water usage = 36 gal/week

Wildflower Mix

Seeded 5/19/2018

Planning:

Soil temp > 55° F

Well drained, pH: 6 - 7

sun to partial shade

6 to 48 in height

Spread at rate of 1 lb / 2000 ft²

= 1 Tblsp per 280 ft² (16' x 16')

Soil Preparation:

Remove all existing growth and debris

Loosen top 3 inches of soil

Scatter seeds evenly and tamp in

Water thoroughly

Water:

Water twice daily to keep beds moist until plants are 4" tall. Thereafter, water is only needed in drought.

Using ooze pipe:

Initially:

Lay pipe every foot.

1 gal/hr/ft = 1 gal/hr/ft². =

1 gal/hr x 17 min x 7 days = 2 inches of rain per week

After established:

Remove every other ooze pipe (1 pipe every 2 ft)

1 gal/hr/ft = 0.5 gal/hr/ft². =

0.5 gal/hr x 17 min x 7 days = 1 inch of rain per week

Fertilize: None

Reseeding next spring:

Mow old material in Fall and remove in Spring.

Most flowers will reseed naturally.