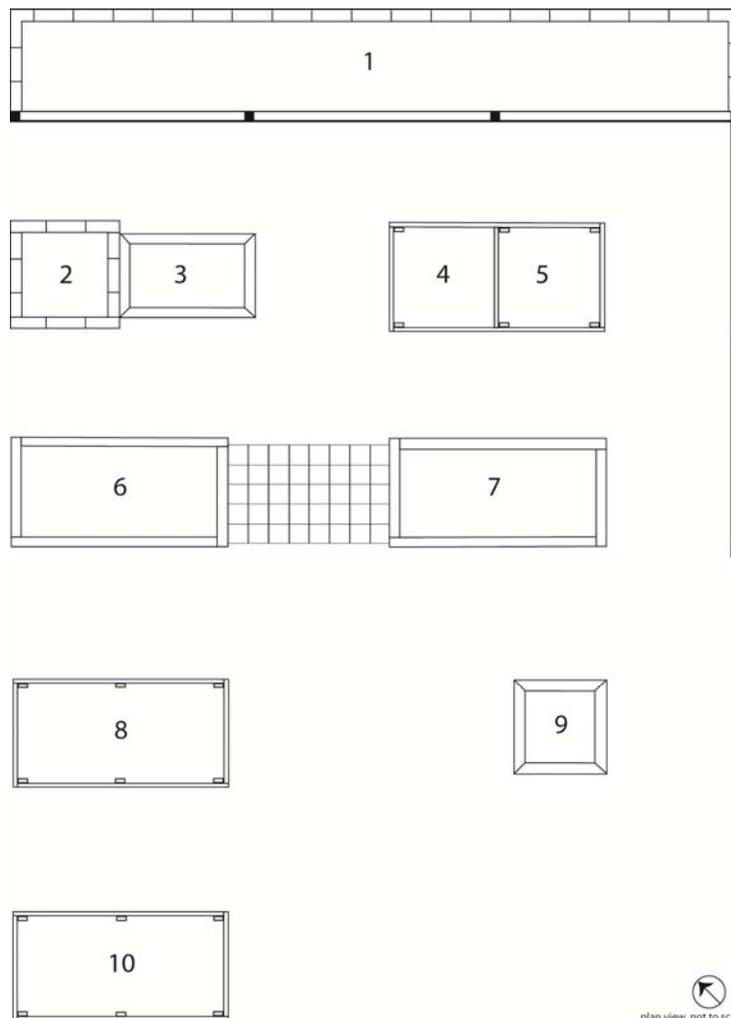




Vegetable Garden: Raised Beds

There are many benefits to growing vegetables in raised beds. The primary reasons include: 1) ease of access to the soil surface for planting, weeding, and harvesting; 2) increased soil depth to encourage healthy root growth; and 3) addition of structural interest to the garden.

The DIG's Vegetable Garden consists of a series of raised beds that produce vegetables year round. They are constructed with various building materials, available at local home supply stores. The diagram below indicates the location of each raised bed. The table that follows lists the dimensions, planting area, materials and approximate cost for each raised bed (please note dollar values are based on February 2011 figures and subject to change at any time). Basic site preparation and construction tips are also included.



Plan view of raised beds at the DIG

Bed	Image	Description		Cost/Unit	
1		Dimensions:	24'(l) x 3'(w) x 18"(h)		
		Planting Area:	Approx. 53 square feet (SF)		
		Materials:	(45) 8" x 8" x 16" masonry block (25) 2" x 8" x 16" masonry cap (4) Exterior adhesive epoxy	\$2.00/EA \$1.25/EA \$2.50/EA	
		Soil:	3 cubic yards (CY)	\$32.00/CY	
		Approx. Cost:	\$227.25		
		Approx. Cost/SF:	\$4.29		
2		Dimensions:	4'(l) x 4'(w) x 16"(h)		
		Planting Area:	Approx. 7 square feet (SF)		
		Materials:	(21) 8" x 8" x 16" masonry block (10) 2" x 8" x 16" masonry cap (1) Exterior adhesive epoxy	\$2.00/EA \$1.25/EA \$2.50/EA	
		Soil:	1/3 cubic yard (CY)	\$32.00/CY	
		Approx. Cost:	\$68.00		
		Approx. Cost/SF:	\$9.71		
3		Dimensions:	5'(l) x 3'(w) x 18"(h)		
		Planting Area:	Approx. 12 square feet (SF)		
		Materials:	(3) 2" x 4" x 8' pressure treated boards (7) 2" x 6" x 8' pressure treated boards (1) 1"(t) x 8'(l) x 4'(w) Styrofoam panel (optional) (1) 18'(l) x 18"(w) landscape fabric (optional) 2-1/2" deck screws	\$3.00/EA \$5.00/EA \$9.00/EA \$10.00/EA \$6.00/BX	
		Soil:	1 cubic yard (CY)	\$32.00/CY	
		Approx. Cost:	\$101		
		Approx. Cost/SF:	\$8.42		

Bed	Image	Description		Cost/Unit	
4, 5		Dimensions:	8'(l) x 4'(w) x 22"(h) and 30" h		
		Planting Area:	32 square feet (SF)		
		Materials:	(11) 2" x 8" x 8' pressure treated boards (1) 2" x 4" x 12' pressure treated board for internal support 2-1/2" deck screws	\$8.00/EA \$5.00/EA \$6.00/BX	
		Soil:	3 cubic yards (CY)	\$32.00/CY	
		Approx. Cost:	\$195.00		
		Approx. Cost/SF:	\$6.10		
		6, 7		Dimensions:	8'(l) x 4'(w) x 17.5"(h)
Planting Area:	32 square feet (SF)				
Materials:	(18) 3" x 4" x 8' landscape logs (8) 3/8" or 1/2" x 2' rebar stakes			\$4.00/EA \$1.25/EA	
Soil:	1.5 cubic yards (CY)			\$32.00/CY	
Approx. Cost:	\$130.00				
Approx. Cost/SF:	\$4.06				
8, 10		Dimensions:	8'(l) x 4'(w) x 24"(h)		
		Planting Area:	32 square feet (SF)		
		Materials:	(9) 2" x 8" x 8' pressure treated boards (1) 2" x 4" x 12' pressure treated board for internal support 2-1/2" deck screws	\$8.00/EA \$5.00/EA \$6.00/BX	
		Soil:	3 cubic yards (CY)	\$32.00/CY	
		Approx. Cost:	\$179.00		
		Approx. Cost/SF:	\$5.60		

Bed	Image	Description		Cost/Unit
9		Dimensions:	3'(l) x 3'(w) x 16"(h)	
		Planting Area:	4 square feet (SF)	
		Materials:	(1) 2" x 8" x 8' pressure treated boards	\$8.00/EA
			(1) 2" x 8" x 12' pressure treated board	\$12.00/EA
			(2) 1" x 4" x 8' pressure treated board	\$4.00/EA
			(1) 1"(t) x 8'(l) x 2'(w) Styrofoam panel (optional)	\$10.00/EA
			2-1/2" deck screws	\$6.00/BX
	Soil:	1/4 cubic yard (CY)	\$32.00/CY	
	Approx. Cost:	\$52.00		
	Approx. Cost/SF:	\$13.00		

Basic site preparation and construction tips for raised beds:

- Choose a location that receives **at least six hours of sun a day**, as most vegetables require this much light to produce fruit. Orient the longest length of the raised bed east-west to mimic the path of the sun during the growing season. Plant taller vegetables along the north edge of the bed to prevent shadows from falling on shorter plants.
- Locate raised beds **close to a water source**. Consult an irrigation technician if you're considering drip irrigation.
- **Locate** raised beds in an area that is slightly sloped to ensure water will move away from it. Typically, it's not advisable to put a raised bed in a low area that collects water.
- **Clear** the area of any unwanted vegetation.
- **Build** the raised beds, making sure the sides are square and the tops are level. Bed height can be altered to suit the needs of the gardener.
- **Calculate how much soil is needed** to fill the raised beds: Measure the inside width, length and height of the bed (make sure the units are the same – use all feet or all inches). Multiply these together to determine the cubic feet (CF) or refer to table above where the figures are provided). Divide by 27 to get the amount of cubic yards (CY) you'll need to fill the bed. Round up as the soil will settle over time. $3' \times 6' \times 2' = 36 \text{ CF}$. $36 \text{ CF} / 27 = 1.33 \text{ CY}$. If you're buying soil in bags, it's best to have the cubic feet (CF) measurement. If you're buying soil in bulk, it's best to have the cubic yard (CY) measurement. Take both to be on the safe side.

- **Fill the beds** with soil. Some options include the following:
 - Bulk topsoil – you load and transport. Know how many cubic yards (CY) of soil you need. A typical truck bed can hold anywhere from ¾ yard to 1.5 yards of topsoil. Know the size of your truck bed and/or trailer and how much you are comfortable transporting. Bring a tarp to cover the soil and prevent it from blowing out on your way home. A tarp also prevents damage from flying debris to your vehicle and those around you.
 - Bulk topsoil – delivered to your driveway.
 - Bagged topsoil – lots of options are available at local nurseries and home supply stores. Look for a blended mix of loam, sand and compost. Bags labeled “Garden Soil” typically aren’t the best materials to choose. The amount of soil in the bag should be clearly labeled in cubic feet (CF).

See the following Texas Master Gardener/AgriLife Extension publications for additional information on what, how and when to plant your raised beds:

- Brazos County Master Gardener Website - Gardening Resources - Vegetables
<http://www.brazosmq.com/gardening-resources/vegetables>
- Vegetable Planting Guide for Brazos County
<http://www.brazosmq.com/info/vegetable-planting-guide-for-brazos-county.pdf>
- Vegetable Varieties for Brazos County
<http://www.brazosmq.com/info/vegetable-varieties-for-brazos-county.pdf>
- E-545: Vegetable Gardening in Containers (Joseph Masabni, Sam Cotner. Revised February 25, 2009)
http://repository.tamu.edu/bitstream/handle/1969.1/87590/pdf_2695.pdf?sequence=1
- E-502: Texas Home Vegetable Growing Guide (Joseph Masabni. Revised February 24, 2009)
http://aggie-horticulture.tamu.edu/publications/guides/E-502_home_vegetable_guide.pdf

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