



Vegetable Gardens, Hugelkultur, and Wicking Beds

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Zilker Botanical Garden
Austin Area Garden Center



Vegetable Gardening Methods

- Garden Templates
- Companion Planting
- Square Foot Gardening
- Double-Dig Method
- Hugelkultur
- Ollas
- Wicking Beds



Types of Veggie Garden Beds



In-ground plots using existing soil



Raised beds with wooden frames, 4' x 8'



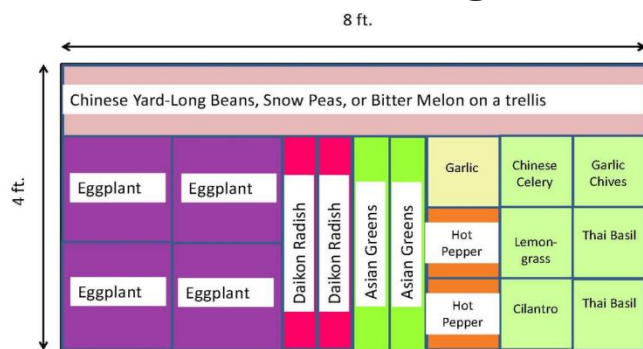
Container gardening



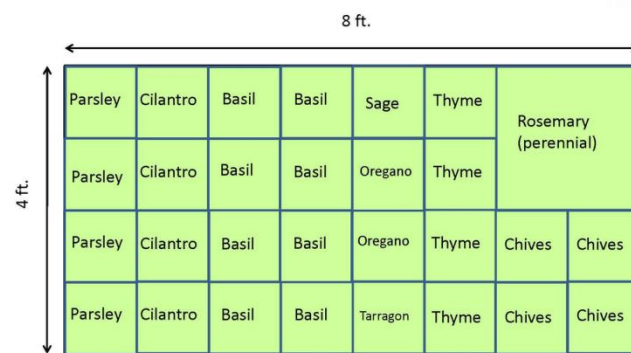
Elevated beds - may be ideal for seniors and ADA access

Garden Templates

- Can help you map out what you want where in advance
- Great for school gardens, church gardens

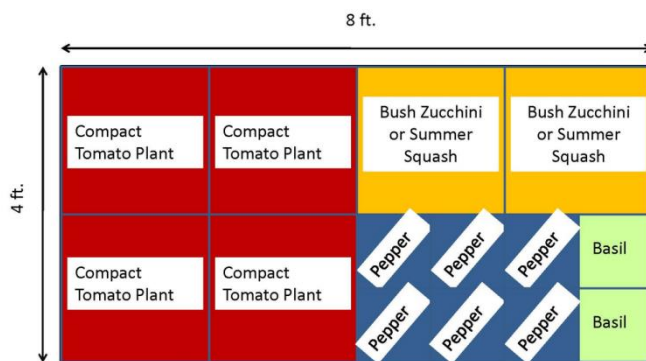


Asian Garden

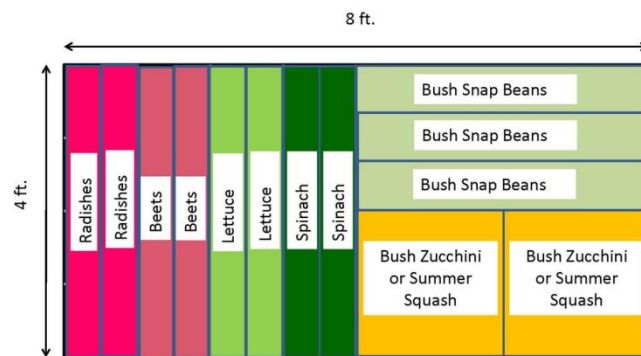


Culinary Herb Garden

Thyme, Chives, Oregano, Tarragon, Sage, and Rosemary are perennials



Summer Only Garden



Fall Garden

Garden Templates



Design Your Row or Bed | **Design Your Site Map**

Your Garden Name

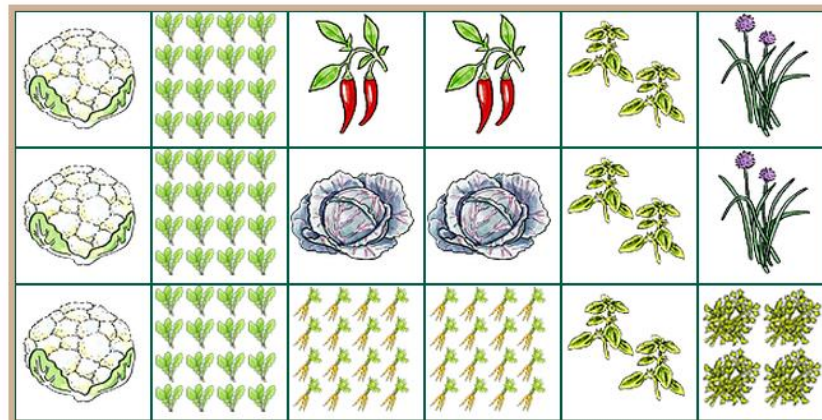
1. Select your size:
Width: Length:

2. Drag and drop item onto bed

Save | Print | Load | Edit Plan | Start Over | Email

◀ Previous | Next ▶

bok choi	broccoli	brussels sprouts	cabbage	carrot	celery	chives	cilantro
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Garden Resources



Vegetable Garden Planting Guide



Daphne Richards, County Extension Agent - Horticulture
 Texas AgriLife Extension Service, Travis County, 1600-B Smith Road, Austin, TX 78721 512-854-9600
 Compiled by Patty G Leander, Master Gardener Vegetable Specialist travismg@ag.tamu.edu

Plant seed unless otherwise noted	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Artichoke (crowns/transplants)	←-crowns-									←-transplants-		
Asian greens (seeds or transplants)												
Asparagus (crowns)												
Beans, snap and lima												
Beets												
Broccoli (transplants)												
Brussels sprouts (transplants)												
Cabbage (transplants)												
Cantaloupe (muskmelon)												
Carrots												
Cauliflower (transplants)												
Chard, Swiss (seeds or transplants)												
Collards (seeds or transplants)												
Corn												
Cucumber												
Eggplant (transplants)												
Fava beans												
Garlic												
Greens, cool season												
Greens, warm season												
Kale (seeds or transplants)												
Kohlrabi (seeds or transplants)												
Leeks (seeds/transplants)												
Lettuce (seeds or transplants)												
Mustard (seeds or transplants)												
Okra												
Onion, bulbing (transplants)												
Onion, bunching/multiplying												
Peas, English, snap and snow												
Peas, Southern												
Pepper (transplants)												
Potato, Irish												
Potato, sweet (slips)												
Pumpkin												
Radish												
Shallots												
Spinach (seeds or transplants)												
Squash, summer												
Squash, winter												
Tomatoes (transplants)												
Turmp												
Watermelon												

Plants grown in winter will benefit from protection during freezing weather
 Plants grown in late summer will benefit from shade cover during establishment

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age or national origin.
 The Texas A&M System, USDA and the County Commissioners Courts of Texas cooperating.

January 2012

Companion Planting

Compatible pairings:

- Beans with cucumber, peas, and lettuce
- Broccoli with onion
- Cauliflower with celery
- Eggplant and spinach
- Leeks with carrots
- Lettuce with strawberries or radishes
- Onions with bell pepper
- Potatoes with sweet corn
- Squash with sweet corn
- Swiss chard with onions

Incompatible pairings to avoid:

- Asparagus and garlic
- Beans and onions
- Beets and beans
- Broccoli and beans
- Cabbage and strawberries
- Carrots and celery
- Corn and tomatoes
- Onions and peas
- Potatoes and tomatoes

Marigolds repel Mexican bean beetles, squash bugs, thrips, tomato hornworms, whiteflies, and nematodes!



Waterwise Gardening Methods



Drought Restrictions: Alternative Compliance for Vegetable Gardening

- Austin City Code now allows an exemption to drought restrictions that permits watering of vegetable gardens using:
 - Hand watering
 - Soaker hoses
 - Drip irrigation
- NO sprinklers, no unattended watering of veggie gardens

The infographic is a table with three main columns: Residential, Commercial, and Public Schools. Each column has a header row with icons (house, city skyline, schoolhouse) and a sub-header row. Below are rows for watering methods, days of the week, and specific days for odd/even addresses. The background is blue and green with a city skyline silhouette.

RESIDENTIAL		COMMERCIAL		PUBLIC SCHOOLS	
Hose-End Sprinklers BEFORE 10 AM or AFTER 7 PM	Automatic Irrigation BEFORE 5 AM or AFTER 7 PM	Hose-End Sprinklers BEFORE 10 AM or AFTER 7 PM	Automatic Irrigation BEFORE 5 AM or AFTER 7 PM	Hose-End Sprinklers BEFORE 10 AM or AFTER 7 PM	Automatic Irrigation BEFORE 5 AM or AFTER 7 PM
Even Address Sunday	Even Address Thursday	Even Address Tuesday		Monday	
Odd Address Saturday	Odd Address Wednesday	Odd Address Friday			

STAGE 2 WATER RESTRICTIONS
WATERING ONE DAY PER WEEK

Hugelkultur

- Essentially, making raised garden beds filled with rotting wood
- Use up rotting wood, twigs, branches and even whole trees that would otherwise go to the dump or be burned
- Avoid using cedar, walnut or other tree species deemed allelopathic.



raised garden bed hugelkultur after one month



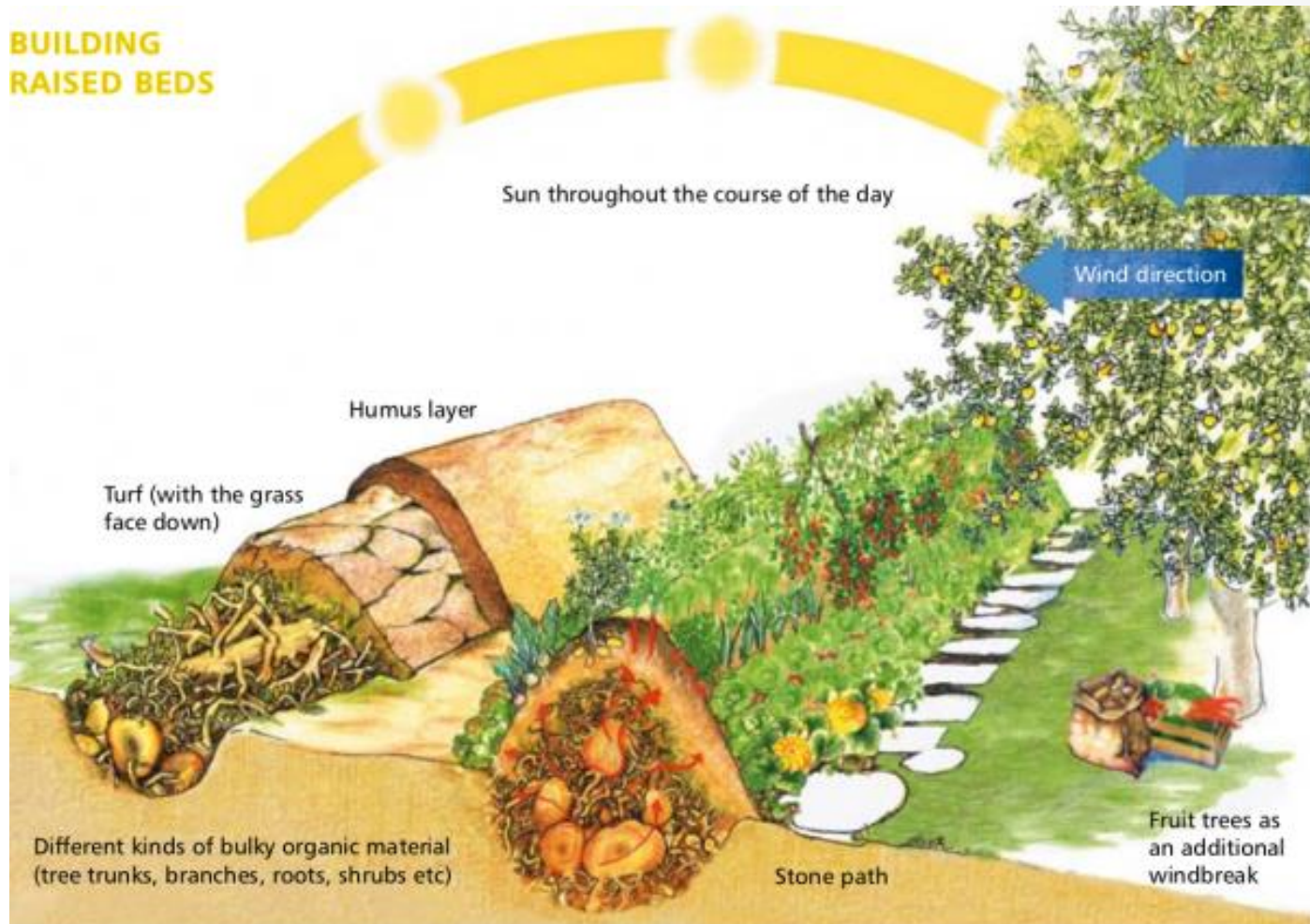
raised garden bed hugelkultur after one year



raised garden bed hugelkultur after two years

Hugelkultur

BUILDING RAISED BEDS



Hugelkultur Basic Steps

- Select area approx. 6 feet by 3 feet
- Gather material:
 - fallen logs, branches, fallen leaves
 - nitrogen-rich material (kitchen waste/manure)
 - top soil
 - mulching material (such as straw)
- First layer: logs
- Second layer: branches, twigs (roughly til it's 3 feet high)
- Water these layers
- Fill in the space between with leaf litter, manure, kitchen scraps
- Top off the bed with 1-2 inches of top soil and a layer of mulch

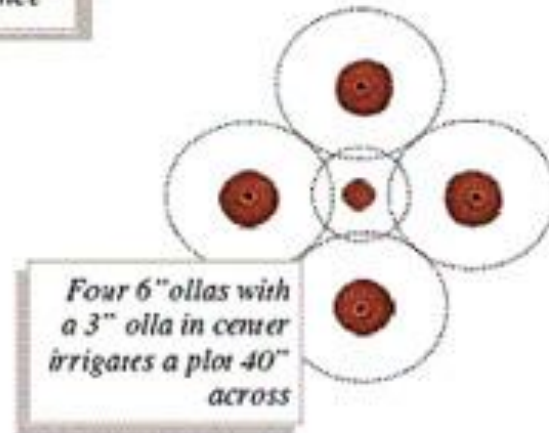
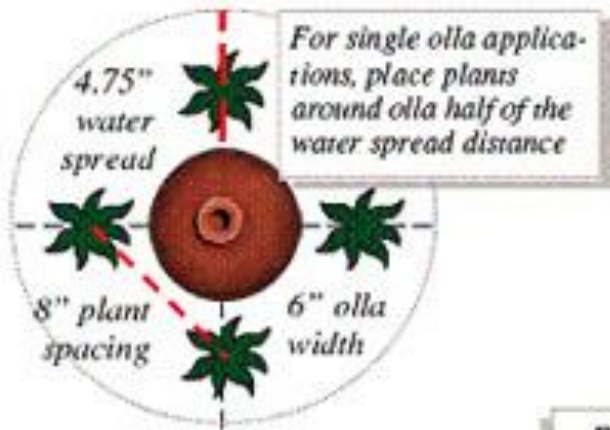
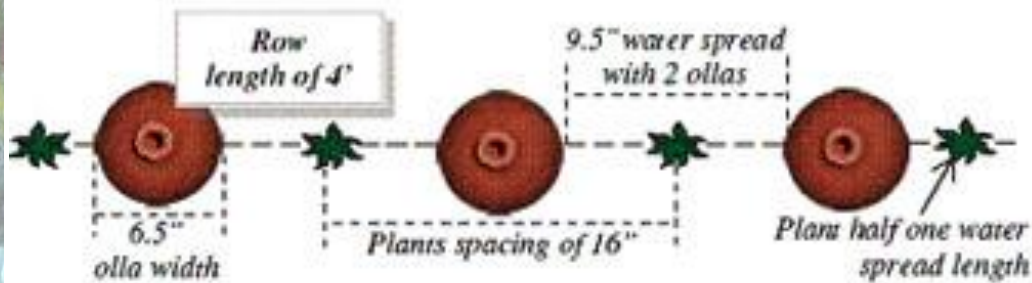


Ollas



- Porous clay pot buried in the ground with neck exposed
- Water 1-2 times per week
- Water seeps into soil at slow rate so nearby plants have a constant root-level water source
- Low tech, low cost irrigation
- Dry soil surface = less weeds, less compaction!

Ollas - Spacing



Round container
Olla width: 8"
Container size: 18" diameter
Water spread: 18" diameter
Plant spacing: varies with plant type

Wicking Bed Construction

15" Compost

Filter Fabric

2" Sand Layer

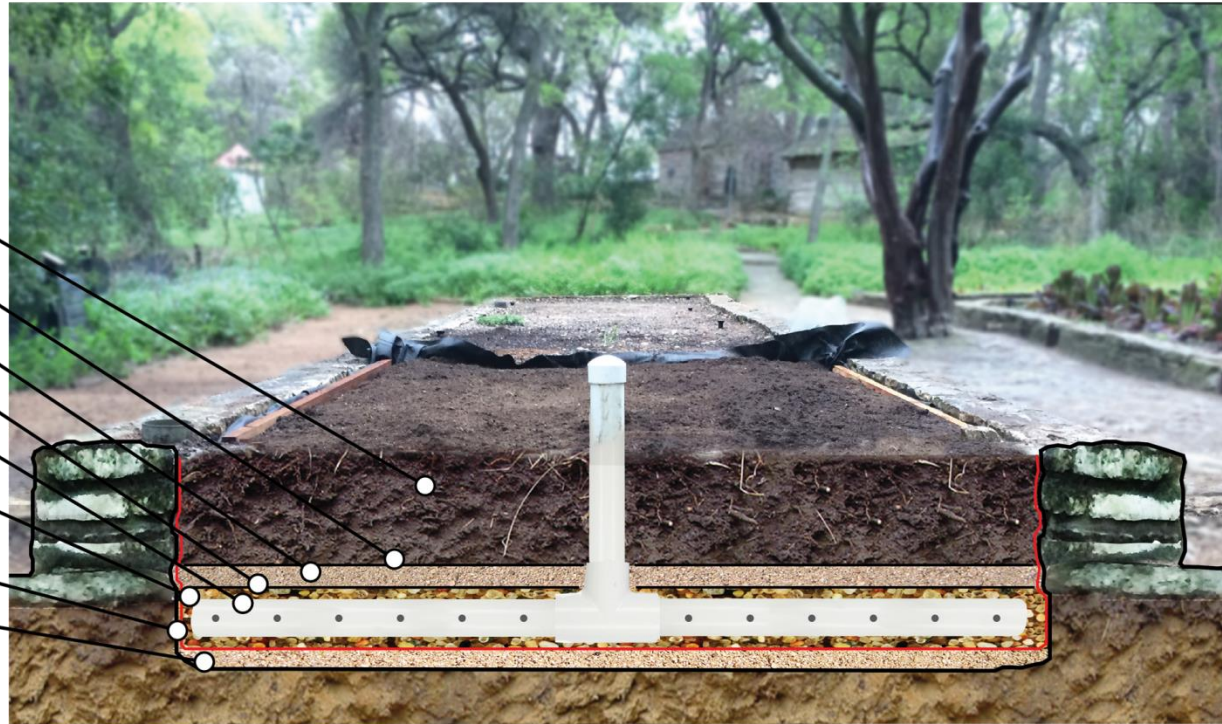
Filter Fabric

4" Perforated
Pipe

6" Washed
Pea Gravel

Pond Liner

2" Leveling
Sand Base



Location: Zilker Botanical Garden

Wicking Bed Construction – Sand Base



Location: Zilker Botanical Garden

Wicking Bed Construction – Pond Liner



Wicking Bed Construction – Pipe Covered with Pea Gravel



Wicking Bed Construction – Filter Fabric



Wicking Bed Construction – 2nd Sand Layer



Wicking Bed Construction – 2nd Layer Filter Fabric



Wicking Bed Construction – Compost



Wicking Bed Construction

15" Compost

Filter Fabric

2" Sand Layer

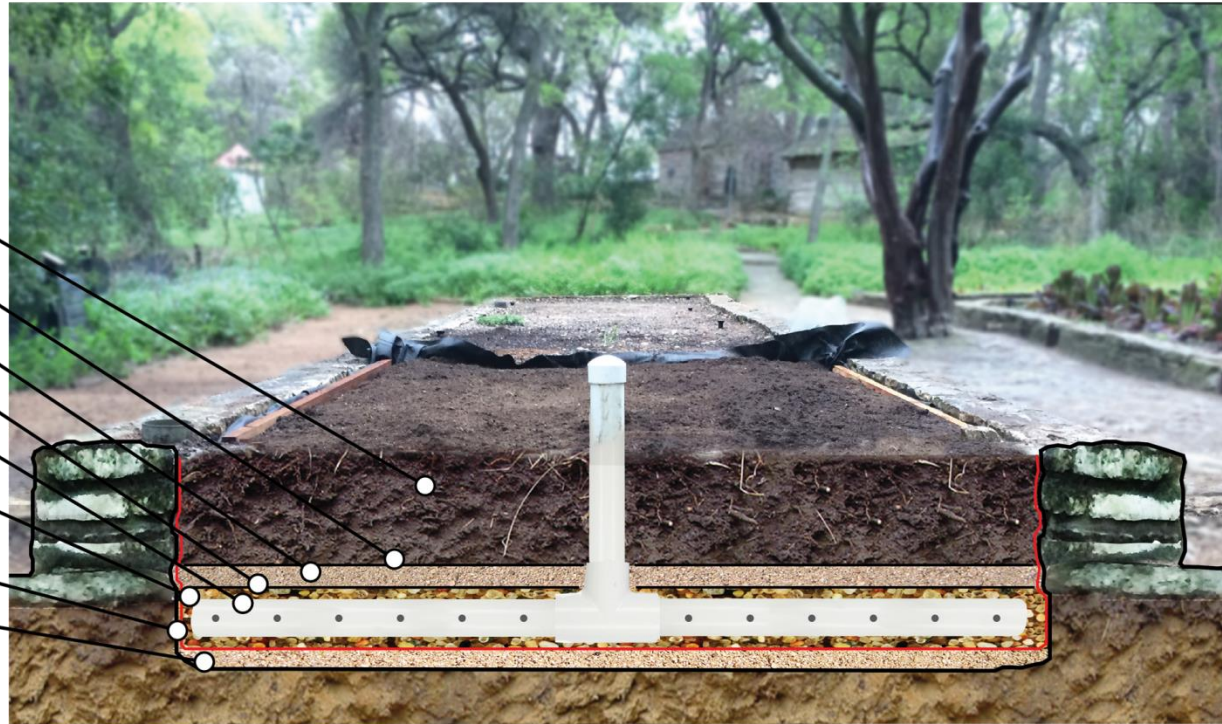
Filter Fabric

4" Perforated
Pipe

6" Washed
Pea Gravel

Pond Liner

2" Leveling
Sand Base



Location: Zilker Botanical Garden



Gardening and Wicking Bed Free Resources

Dillo Dirt

City of Austin Water Utility <http://www.austintexas.gov/dillodirt>

Free Dillo Dirt for projects with non-profits, parks, and schools. Offered by the dump truck load. Must pick up from Hornsby Bend Biosolids Management Plant located at 2210 South FM 973 Austin, TX 78725.

Contact: Jody Slagle (512) 972-1954 Jody.Slagle@austintexas.gov

Free Seeds, Seedlings, and Compost

http://www.sustainablefoodcenter.org/GL_harvest.html

Participate in Sustainable Food Center's Spread the Harvest food sharing program and receive seeds, seedlings, and compost for your garden. Contact Grow Local at Contact: (512) 236-0074 x 105

Free Woodchips

City of Austin Resource Recovery Center

Free mulch is available to the public at the City of Austin Landfill on a first-come, first-served basis. Please bring pitchforks, bags and shovels to load the mulch yourself.

Contact: 3810 Todd Lane Austin, TX 78744. (512) 974-4373

Monday - Friday; 8 a.m. to 4 p.m.; Closed Saturday and Sunday

Burlap Sacks:

Contact a coffee shop near you. Many are willing to donate their old burlap sacks.



Grow Local Classes in the Teaching Garden

Gardening workshops in our on-site garden that promise participants of all levels a hands-on experience exploring home food gardening topics!

Prices start at just \$12!



For more information and to register:
<http://www.sustainablefoodcenter.org/grow-local/upcoming-classes>



Class:	Date:	Time:
Get Growing: Soil Health & Composting	Sept 3, 2014	6:00 pm – 7:30 pm
Deep Roots: Raised Bed Construction	Sept 13, 2014	10:00 am – 12:30 pm
Get Growing: Plan Your Fall Garden	Oct 8, 2014	6:00 pm – 7:30 pm
Deep Roots: Rain Gardens	Oct 18, 2014	10:00 am – 12:30 pm
“Just Seeds”: Seed Saving Basics	Oct 23, 2014	6:00 pm – 8:00 pm
Get Growing: Fall Pests & Diseases	Nov 8, 2014	10:30 am – 12:00 pm
Deep Roots: Edible Flowers	Nov 8, 2014	1:00 pm – 3:30 pm
Get Growing: Propagation & Greenhouses	Dec 3, 2014	6:00 pm – 7:30 pm
Get Growing: Container Gardening	Dec 6, 2014	10:30 am – 12:00 pm
Deep Roots: Fruit Tree Care	Dec 6, 2014	1:00 pm – 3:30 pm



THANK YOU!

Any questions?

Special thanks to:

Cullen Finnegan, PARD (wicking bed expert)

Liz McVeety, PARD

**Please visit the wicking bed at Zilker Botanical Garden, and
the hugelkultur beds at Blackshear Community Garden!**

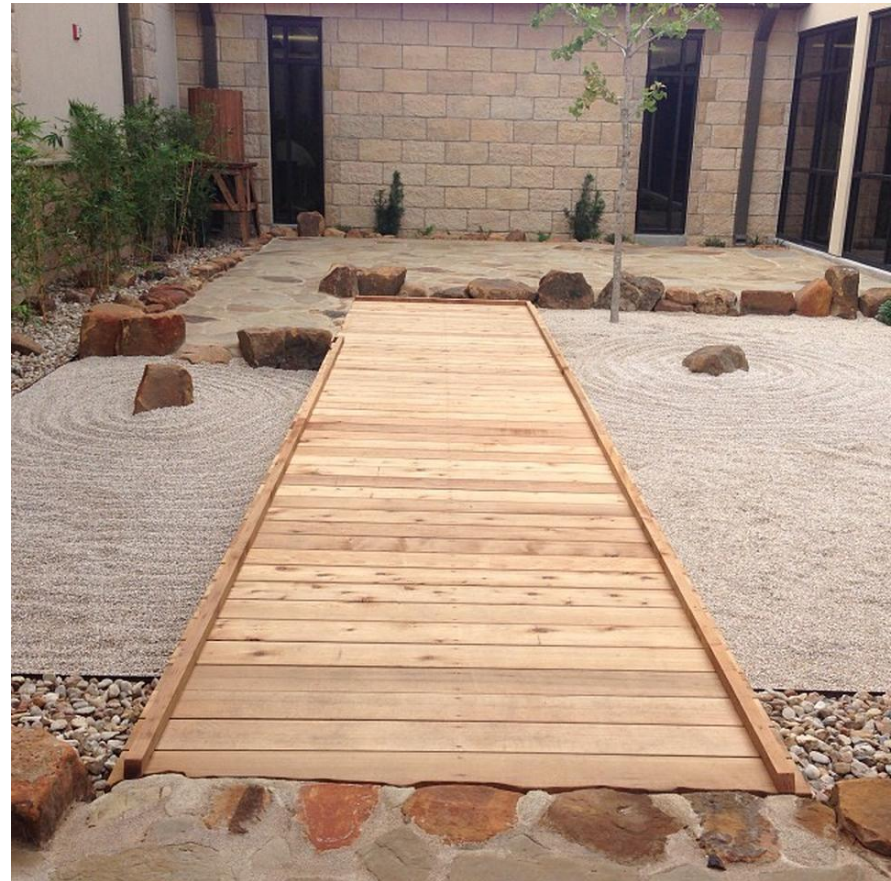
Recommended Books:

How to Grow More Vegetables, John Jeavons

The New Central Texas Gardener, Cheryl Hazeltine & Barry Lovelace

BREAK – Visit the Zen Garden

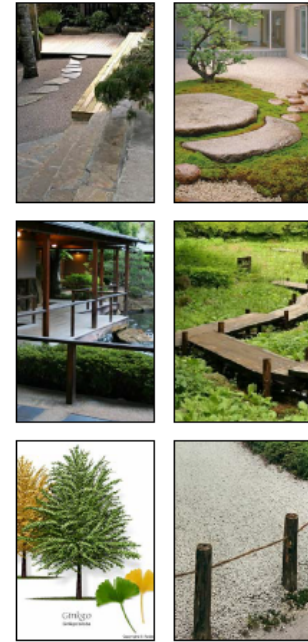
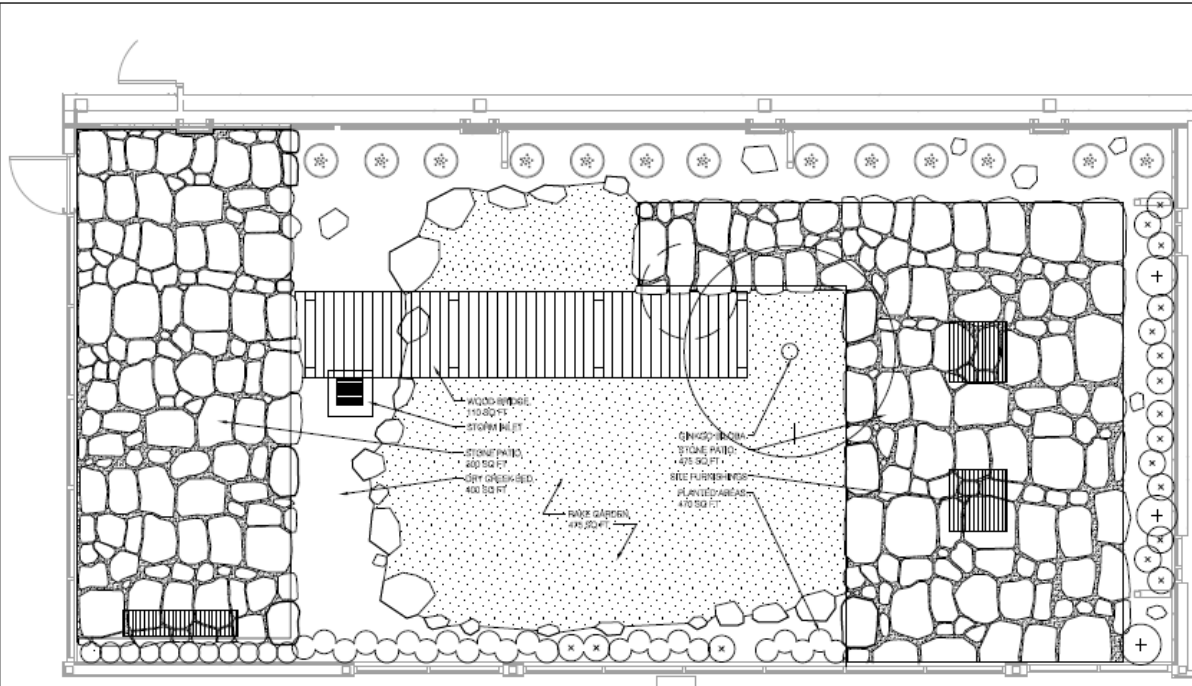
After



Before



BREAK – Visit the Zen Garden



1
L1 COURTYARD LANDSCAPE PLAN
SCALE 8/8" = 1'-0"



PLANT MATERIAL SCHEDULE – MEDITATION GARDEN			
COMMON NAME	SCIENTIFIC NAME	QTY.	NOTES
FOXTAIL FERN	ASPARAGUS DENISFLORUS	10	--
RED-LEAF BAMBOO	BAMBUSA MULTIFLORA	13	--
BICOLOR IRIS	IRIS BICOLOR	11	--
DWARF YALPON HOLLY	ILEX VOMITORIA 'NANA'	14	--
BAMBOO MUHLY	MUHLENBERGIA DUMOSA	3	--
MEXICAN FEATHER GRASS	NASSELLA TENUISSIMA	13	--
GINKGO TREE	GINKGO BILoba	1	--
YUK PODOCARPUS	PODOCARPUS MACROPHYLLUS	3	--
SILVER FERN	THELYPTERIS KUNTHII	18	--
--	--	--	--

STONE MATERIAL SCHEDULE – MEDITATION GARDEN			
TYPE	TOTAL AMOUNT	DEPTH	STONE DIMENSIONS
DECOMPOSED GRANITE	~800 SQ FEET	1"	LESS THAN 1/4"
BROWN SANDSTONE – PATIO	~780 SQ FEET	1.25"	4' X 2' X 2 1/4"
RED/NEW MEXICO SILVER GRAVEL	~400 SQ FEET	3"	1 1/2" - 3"
WHITE STONE SCREENINGS	~875 SQ FEET	3"	GREATER THAN 1/4", BUT LESS THAN 1/2"
MOSS BOULDER	11	--	--
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DESIGNER	DESIGN ASSOCIATOR	REVISIONS
Shari Huey	Joseph Alshabary	
DIVISION MANAGER	APPROVED	
Mary Strube		
MANAGEMENT SUPERVISOR	APPROVED	
Mary Strube		
LANDSCAPE ARCHITECT	DRAWN BY	
Mary Strube	PF	

Asian American Resource Center
LANDSCAPE PLAN for COURTYARD GARDEN

SCALE: AS NOTED
DATE: 07/8/13
SHEET: L1
of 1