

SCUSD Garden Specifications

May 2012



I) General requirements

A) Locate Underground Utilities

- 1) All underground utilities must be located within the proposed garden area prior to commencing any work. Contact Capital Assets Management Service to schedule a time to locate.

B) Soil Testing is required for all soils where plants will be grown. If higher than recommended levels of contaminants are found, soil replacement or raised planter boxes with new clean soil will be required.

- 1) Sunland Analytical, 11353 Pyrites Way #4, Rancho Cordova, CA 95670

- (a) (916) 852-8557 http://sunland-analytical.com/sun_page/lab_fs06.htm

- (b) Business hours: 8:00 to 5:00 Monday – Friday

- (c) Recommended tests: lead, heavy metals, soil fertility, and pH

- 2) For gardens in areas that were not previously occupied by buildings, an agricultural analysis is required:

- (a) STP.3 - General Soil Analysis - pH, E.C.e., C.E.C., Total Dissolved Salts, Nitrate, Phosphorus, Potassium, Sodium, Calcium, Magnesium, Sulfur, Copper, Iron, Manganese, Zinc, Gypsum or Lime Req.

- 3) For gardens in areas that were previously occupied by buildings an environmental analysis is required:

- (a) ETP.5 - Total Concentration (9 Metals) Title 14 - Acid Digestion analyzed by (6010/7000) As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn

C) ADA (American with Disabilities Act) for raised planter boxes

- 1) Work surface height of raised planter boxes:

- (a) Elementary school - 26-30-inches high at the top of the box (Section 902.4 in the ADA/ABA)

- (b) Middle school/high school 28-34-inches high at the top of the box.

- 2) Width of planter boxes:

- (a) Maximum 48-inches wide (recommended)

- 3) Space between planter boxes:

- (a) Minimum clear path of travel to be 48-inches wide, 360° (recommended) around all planter boxes
- (b) Minimum clear path of travel for dead end – turn about areas is 72 inches
- (c) No obstructions shall be within the path of travel – i.e. water risers or support posts.

D) Inspections

- 1) Plumbing Shop approval on all irrigation installations is required prior to backfill
- 2) Carpenter Shop approval of all raised bed construction is required prior to filling with soil

II) Gardens

A) Irrigation

- 1) All in ground sprinkler irrigation needs to be Schedule 40 PVC pipe
- 2) All above ground irrigation pipe shall be galvanized pipe
- 3) Hose bibs shall require a key to operate the valve
- 4) A main valve to the garden will be required
- 5) All sprinkler clocks need to be 4 Station ESP Modular Controllers (Rainbird ESP4M)
- 6) All sprinkler heads need to be Rainbird 1804s or 1802s with adjustable nozzles.
- 7) Drip lines are NOT acceptable, due to vandalism issues

B) Electrical easement requirements

- 1) 4-ft easement around all structures
- 2) Gardens require a 4-ft easement on both sides of underground electrical; 8-ft total. 12-ft easement from overhead lines
- 3) Trees and shrubs require an 8-ft easement from underground and 16-ft easement from overhead lines

C) Chain link fence

- 1) 9-gage 6-foot cyclone fencing with 2" square mesh
- 2) Schedule 40 galvanized posts, 2-3/8" in the field, 2-7/8" corner posts, 2-7/8" gate posts
- 3) Galvanized pipe top rail 1-3/8" with cap
- 4) 9-gage galvanized bottom wire
- 5) One 12-ft wide swing gate is required for gardens larger than 15'x15'
- 6) One 48" wide/clear ADA pedestrian gate is required
- 7) Locks shall be Master lock with changeable combination

D) Walkway material

- 1) Non- ADA pathways - Shredded cedar mulch

- 2) ADA pathways - Decomposed Granite (DG) mixed with cement and water for solid surface
 - (a) 2 mil trackfine grade, less than ¼ inch in diameter
 - (b) Use 1 bag of store bought ready-mix cement for each yard of DG
 - 3) Concrete, stone, or brick pavers to provide an accessible pathway for ADA
- E) Raised planter boxes
- 1) Soil testing or remove 4-inches of soil and dispose per District procedure
 - 2) Place landscape fabric at base
 - 3) If gophers are present in the soil, place ¼" wire mesh at bottom at base
 - 4) Material
 - (a) Interlocking masonry block, secured following manufactures recommendations, i.e. glue or pins
 - (b) Soil will be soil/planting mix that is bagged and commercially available. Do NOT reuse soil from the site
- F) At-grade garden
- 1) Soil testing or remove a minimum 24-inches of existing soil and dispose per District procedure
 - 2) Place landscape fabric at base
 - 3) Soil will be soil/planting mix that is bagged and commercially available. Do NOT reuse soil from the site
- G) Composting bins
- 1) Shipping pallets <http://www.gardenersworld.com/how-to/projects/compost-bin/>
 - 2) Commercially purchased compost tumbler or equal
<http://www.gardeningwithkids.org/composting.html>
- H) Tool Shed
- 1) Commercially purchased tool shed
 - 2) Skylight is the only acceptable means to light the shed. Electrical wiring is NOT acceptable
 - 3) Must be placed on decomposed granite, piers or a poured in place concrete slab
- I) Miscellaneous structures
- 1) Custom-built enclosures, trellises, greenhouses, shade structures, arbors, etc. will need additional District evaluation and may need additional review by the Division of the State Architect.

- 2) These structures will be constructed with durable materials and finished to minimize future maintenance.

J) Trees

- 1) Sacramento Tree Foundation trees from the SCUSD approved list are acceptable
- 2) Fruit trees
 - (a) Navel oranges, mandarin oranges, grapefruit, lemons, loquat (ripens in early spring) and cherry or other fruit that ripens during the school year.

K) Plants

1) Shrubs

- (a) ABELIA GRANDFLORA "SHERWOODII" ... GLOSSY ABELIA
- (b) AGAPANTHUS AFRICANUS...LILY-OF-THE-NILE
- (c) AGAPANTHUS AFRICANUS "PETER PAN"... DWARF LILY-OF-THE-NILE
- (d) AZALEA (PINK)... PINK DECIDUOUS AZALEA
- (e) AZALEA (WHITE)... WHITE DECIDUOUS AZALEA
- (f) BACCHARIS PILULARIS "TWIN PEAKS" ... DWARF COYOTE BRUSH
- (g) CAMELLIA SASANQUA "YULETIDE"... CAMELLIA
- (h) CEANOTHUS "EMILY BROWN" ... CEANOTHUS
- (i) CEANOTHUS "JOYCE COULTER"... CEANOTHUS
- (j) CEANOTHUS "YANKEE POINT" ... CEANOTHUS
- (k) CISTUS "DORIS HIBBERSON"... PINK ROCKROSE
- (l) CISTUS PURPURLUS...ORCHID ROCKROSE
- (m) CISTUS HYBRIDUS...WHITE ROCKROSE
- (n) COTONEASTER HORIZONTALIS...ROCK COTONEASTER
- (o) COTONEASTER PARNEYI...PARNEY COTONEASTER
- (p) DIETES VEGETA...FORTNIGHT LILY
- (q) ESCALLONIA RUBRA "NEWPORT DWARF" ... DWARF ESCALLONIA
- (r) EUONYMUS MICROPHYLLA "VARIEGATA"... EUONYMUS
- (s) HYPERICUM MOSERANUM...GOLD FLOWER
- (t) MAHONIA AQUIFOLIUM "COMPACTA"... DWARF OREGON GRAPE
- (u) NANDINA DOMESTICA "HARBOR DWARF"... DWARF HEAVENLY BAMBOO
- (v) PHOTINIA FRASERI...PHOTINIA
- (w) PHOTINIA FRASERI "INDIAN PRINCESS" ... DWARF PHOTINIA

(x) PITTOSPORUM TOBIRA "WHEELER'S DWARF" ... DWARF PITTOSPORUM

(y) PODOCARPUS GRACILIOR... FERN PINE

(z) RAPHIOLEPIS INDICA "BALLERINA" ... DWARF INDIA HAWTHORN

(aa) RAPHIOLEPIS INDICA "JACK EVANS" ... PINK INDIA HAWTHORN

(bb) TRACHELOSPERMUM JASMINOIDES... STAR JAMINE

(cc) VIBURNUM DAVIDII ... DAVID'S VIBURNUM

(dd) XLOSMA CONGESTUM ... SHINY LEAF XYLOSMA

2) Non-approved plants

(a) Include but are not limited to: bamboo, sugar cane, Taro, berries that become evasive, mints, morning glories, cactus, and other plants that become evasive and spread easily.

III) Support provided by District

A) Electrical Shop will locate underground electrical lines

B) Plumbing Shop will locate underground plumbing lines, cap unnecessary sprinklers, assist with water source, provided there is water nearby

C) Laborers will dig fence post holes, trim trees and remove unnecessary grass

IV) District Contacts

A) Farah McDill, Green School Fellow, fmcdill@usgbc.org

B) Tommy Greer, Landscape/Labor Supervisor, tommy-greer@sac-city.k12.ca.us

C) Ed Petralli, Plumbing Shop Supervisor, ed-petralli@sac-city.k12.ca.us

D) Don Compton, Electrical Shop Supervisor, Don-Compton@sac-city.k12.ca.us

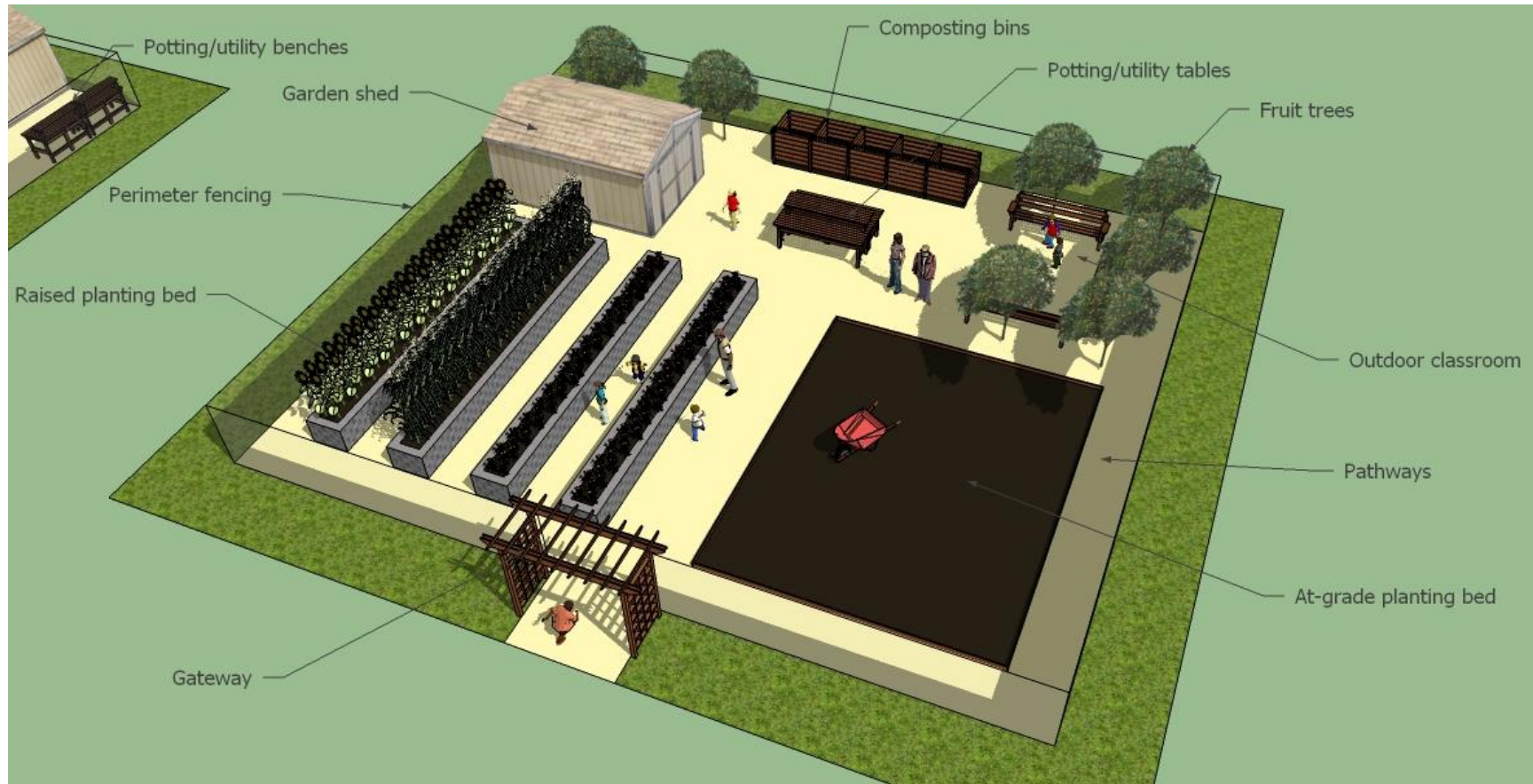
E) Nick Vargas, Carpenter Shop Supervisor, Nick-Vargas@sac-city.k12.ca.us

F) Crystal Hoff, Planning Technician, Crystal-Hoff@sac-city.k12.ca.us

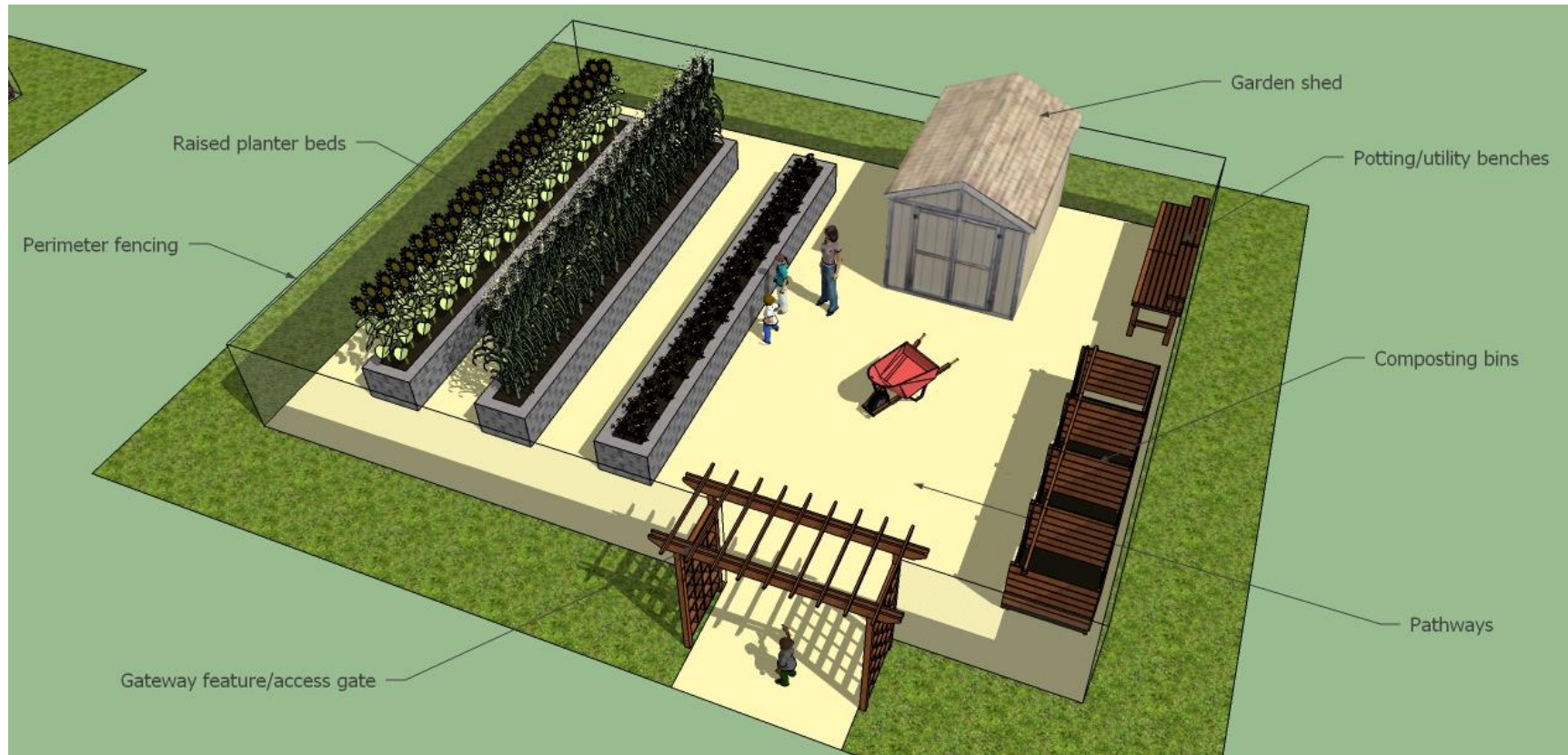
G) Facilities Office – 916-264-4075

Sample Garden Plans:

Large Garden:



Medium Garden:



Small Garden:

