



TALL POT PROPAGATION SPECIFICATIONS

SUBSECTION 1.1 – GENERAL

The work consists of furnishing all equipment, materials and labor required for the establishment, growing, and maintenance of tall pot plant nursery stock in accordance with the plans, details, and specifications including tall pot racks, containers, soil, seed, watering, pruning, etc.

Tall Pot Plants shall be grown in tall pot containers with a depth of 30 inches unless noted otherwise in the details and specifications, and have a root zone 26” in length. Height of Tall Pot Plants shall be a minimum of 12 inches and a maximum of 36 inches measured from the top of the soil to the tip of the plant. Each plant shall be capable of standing erect, after planting, without support.

SUBSECTION 1.2 – TALL POT CONTAINER

Tall Pots Containers shall be made from 6-inch diameter D2729 PVC sewer pipe (or approved equal) cut into 30-inch lengths (a 10-foot length of pipe makes 4 Tall Pot Containers) per the Details and Specifications. Four 3/16-inch holes shall be drilled at the cardinal points approximately 1-inch from the bottom of the container to hold the aluminum fence ties. A 7-inch by 7-inch piece of wire mesh cloth with ¼-inch square grid shall be inserted in the bottom of the container to hold in soil. Two (2) aluminum fence ties shall be inserted through the holes to hold the wire mesh cloth (galvanized wire corrodes, letting the wire mesh cloth fall out of the container and is not acceptable). Fence ties shall be Item FT090825ALUM aluminum fence tie with hook manufactured by Winders and Le Blanc, Inc., 4907 Cecilia Street, Cudahy, CA 90201-5914, (323) 771-6151, winders_leblanc@earthlink.net, and distributed by American Fence, Inc. (or approved equal). Two (2) 1/2-inch holes shall be drilled opposing each other approximately 1-1/4-inches from the top of the container to insert hay hooks for maneuvering the pots.

SUBSECTION 1.3 –GROWING

A pre-emergent herbicide may be sprayed on the ground of the nursery prior to starting a new crop of Tall Pot plants, but should not be used once plants are present in the nursery.

Unless an insect infestation threatens to kill an entire crop of Tall Pot plants in the nursery, pesticides should not be used once plants are present in the nursery.

Because the Tall Pot Plant species are arid land plants that are naturally adapted to relatively poor soils and will be placed into natural growing conditions, no fertilizers or soil amendments are to be used during growing. Specialty soil mixture to be used for Tall Pot Plants is based on Joshua Tree National Park and AZ Game and Fish specifications, and shall be as follows:

- 40% Perlite
- 40% Washed Sand
- 20% "Heber" style native mulch

Each Tall Pot container shall be filled with approximately .5 cu.ft. of soil mix to 1-inch below the hay hook holes (Do not fill higher as water will run out hay hook holes instead of soaking in). If hay hook holes are not drilled, fill to 3-inches below top of container.

Water thoroughly (until water drips out bottom of container) to settle soil and remove air pockets, top with more soil as needed, and then water again before planting seeds. Total soil depth shall be 26 inches unless otherwise specified in the details or specifications.

SUBSECTION 1.4 – SEED

Seeds shall be certified fresh as follows:

Ironwood (*Olnea tesota*) seeds should be from current year or most recent previous year.

Blue Palo Verde (*Parkinsonia floridum*) and Foothills Palo Verde (*Parkinsonia microfolia*) seeds should be no more than 2 years old.

Velvet Mesquite (*Prosopis velutina*) and Screwbean Mesquite (*Prosopis pubescens*) seeds should be no more than 3 years old.

Desert Willow (*Chilopsis linearis*) should be no more than 2 years old.

Shrub species (salt bush, hackberry, hopbush) should be no more than 2 years old.

For many species, 1-pound of seeds equals several thousand seeds, so purchasing in small fresh lots is recommended.

SUBSECTION 1.5 –GERMINATION

Seeds should be scarified, soaked, or cold stratified following the commonly accepted methods for each species. References to scarification methods will be supplied by the Flood Control District of Maricopa County (District). Generally, hard-coated arid land seeds germinate well when nicked with sandpaper and soaked in water for 24 to 48 hours. Commercial growers may use acid scarification methods if desired.

Seeds protected with a dusting of Sevin or other pesticide should be rinsed before planting.

Plant two or three seeds per tall pot container approximately 1/2 to 1-inch deep in soil using "finger planting" or small spoon. Cover seeds immediately with soil. Sprinkle top of soil gently with water within 1/2-hour of planting seeds.

Desert trees (mesquites, palo verdes, ironwoods, desert willows) germinate best starting in late February or early March after the last frost, and when the overnight soil temperature remains above 55 degrees F. Many shrub species such as salt bush and hackberry germinate best if refrigerated at least 48 hours and planted in December or January.

Cull weakest cotyledons at two weeks post germination, by cutting, leaving the best two. Cull weakest sapling at one month post germination, by cutting the stem. (Cutting instead of pulling avoids damage to the fine root hairs of the remaining plants.)

SUBSECTION 1.6 – PRUNING

Unless Tall Pot grown plants are in the nursery longer than 1-1/2 years, they should not require pruning of foliage. Shape foliage only if too woody to slip out of container before planting.

Cutting of taproot should only be done if it makes contact with the ground under the container while still in the nursery.

SUBSECTION 1.7 – PROTECTORS

Biodegradable plant protectors shall be provided and installed around Tall Pot Plants while in the nursery to help prevent herbivory from rodents and other small animals once planted.

Biodegradable tree shelters shall be Forestry Suppliers, Inc. Item 17017, Rigid Seedling Protector Tubes (or exact equivalent approved by District) supported with Forestry Suppliers, Inc. Item 17010 three-eighths (3/8) inch by four (4) foot Bamboo Stake (or exact equivalent approved by District). Biodegradable plant protectors shall be installed below soil grade approximately 1-inch to help secure it and keep small animals from getting under it easily. To prevent wind milling and damage to the plant, protectors are to be anchored to the bamboo stake by two cable ties, one at soil level and one further up the bamboo stake. Plant protectors shall be installed before the plants get too bushy.

Leggy species such as mesquite and desert willow do well with biodegradable plant protectors. Bushy species such as paloverde and ironwood need to have the protectors installed before they get too bushy, otherwise wire cages must be used.