These general recommendations for tree planting in Nevada are meant to be guidelines to consider during your planting activities. Special sites may require modifications.

**TREE SIZE AND CONDITION:**
Trees shall be a minimum of 1-inch caliper (diameter) at the base and 4 feet tall when planted and a maximum of 3 inches in caliper and 14 feet high. American Standard for Nursery Stock criteria may be used as well. Smaller seedling trees are appropriate in urban wind break situations, when care is taken to shelter them from animal damage and weather extremes. Larger trees are recommended for single specimen plantings, such as a community Christmas tree or Arbor Day tree.

It is essential that trees be self-supporting with straight trunks and leaders or tops intact. Trees that have been headed back are not acceptable. Trees should be normally shaped for their species and well branched with full foliage when leafed out. The roots must be healthy and sufficiently large to allow recovery after planting. The trunk must be free of abrasions and recent cuts and the tree free of insects and disease.

**TREE TYPE:** Trees that are container grown, balled and burlapped (B&B) or grown in root control bags are acceptable planting stock. Containers and bags must be removed at planting time. Bare rootstock is acceptable for dormant (early season) planting only.

**TREE SPECIES:** All tree species must be appropriate for the specific planting site. Trees selected should be hardy for the site and known to grow in that area. Disease resistant species and cultivars should be used when available. A desirable urban forest tree does not require intensive maintenance.

**PLANTING TIMING:** In southern Nevada, successful plantings are accomplished between September 15 and May 15 and in northern Nevada between March 15 and November 10.

**SPACING RECOMMENDATION:** Long-term survivability is the primary objective in urban forestry plantings. Special consideration should be given to site factors that impact this. These site factors include overhead and underground utilities, sidewalks, other landscape features, tree lawn widths, signage conflicts, visibility hazards, and land use patterns. In addition, the mature tree’s characteristic height and width and the intended use determine the final spacing requirements. Screening or windbreak plants are typically planted closer together than street tree plantings. Park and open-space plantings need only be concerned with use patterns. Remember, in urban forestry you are planting the tree for life—a long life.

The following recommendations are particularly applicable to street tree plantings. Many of these require knowledge of the mature characteristics of the selected tree. Columnar varieties can be planted closer together than the general recommendations.

- **✓** No tree that will have a mature tree trunk diameter greater than 12 inches at the base should be planted in a tree lawn or right-of-way less than 3 feet wide.
- **✓** Trees should not be planted within 30 feet of an intersection or where they block views for safety.
- **✓** Trees should not be planted within 10 feet of utility poles or within 15 feet of driveways and alleys.
- **✓** Large trees, those that mature to a height of greater than 60 feet, should be planted 40 to 60 feet apart.
- **✓** Medium trees, those that mature 30 to 60 feet in height, should be planted a minimum of 25 feet apart.
- **✓** Small trees, those that mature to less than 30 feet in height, should be planted a minimum of 10 feet apart.
- **✓** In business districts and general parking areas, trees must be planted a minimum of 30 inches from the curb to prevent damage from or to bumpers and doors.
- **✓** Trees should not be planted individually in parking lots. Parking lot plantings are most successful where the area is greater and trees can be grouped.
- **✓** Only trees with a mature height of less than 25 feet should be planted under utility lines.
TREE PLANTING PROCEDURE: These general procedures apply to various planting conditions and tree sizes.

- The planting hole should be dug at least 2 to 5 times the diameter and the same depth as the root ball or soil in the container.
- The sides of the hole should be slightly sloped inward and should be roughened to increase root penetrability into surrounding soil. Trees should sit on a pedestal or small hump of undisturbed soil to minimize settling and facilitate drainage.
- All containers, burlap, wire and any rope or string should be removed prior to planting. With the tree in place, the roots can be spread out naturally. Check for circling roots and reject those trees with them.
- The planting hole should be backfilled with the same soil that was removed. Additives are neither necessary nor desirable. All dirt clods should be broken.
- Mulch with a maximum of 4 inches of coarse organic mulch covering a circle that extends a minimum of 3 feet out from the trunk on all sides. The mulch should be pulled back 3 inches from the trunk. Tree grates are not generally recommended but may be necessary under special conditions.
- The tree should be staked only if it is not capable of supporting itself. Stakes are then anchored in native soil and are to be removed after one year. Use soft ties to prevent bark damage, keep the stake out of the tree limbs, and allow the staked tree 4 to 6 inches of movement.
- The only pruning necessary at planting is to remove injured or dead branches.

POST-PLANTING MAINTENANCE: In Nevada, the maintenance the tree receives the first five years following planting is the most critical. This applies no matter what the original tree size. A maintenance program that includes watering regularly to meet seasonal needs, adjusting water amounts and spacing of bubblers and emitters, pruning and protecting from insect and disease is required. In many areas protection from animal/human damage may be necessary.

SUGGESTED SPECIES: The following species are suggested trees to be used in urban forestry tree plantings. The list is by no means all-inclusive and is limited to 30 species. Those that will grow only in southern Nevada are starred. All trees, however, must be appropriate for the specific site. Remember the right tree for the right place is always the goal.

- Acacia*
- Aleppo Pine
- American hop hornbeam
- Amur maple
- Austrian pine
- Blue Atlas cedar
- California pepper tree*
- Canadian red cherry
- Chinese elm (*U. parvifolia*)
- Coast live oak
- Common hackberry
- Crabapple
- Eastern redbud
- European mountain ash
- Ginkgo
- Green ash
- Hawthorne
- Idaho flowering locust
- Junipers
- Linden
- London plantree
- Magnolia
- Mondel pine
- Mulga*
- Northern white cedar
- Red maple
- Red oak
- Sweet gum
- Thornless honey locust
- Zelkova

TREES NOT SUGGESTED

- Box elder
- Bradford pear‡
- Common olive†
- European white birch
- Silver maple
- Spruce†
- Poplars/cottonwoods†
- Tree of Heaven‡
- Siberian elm
- Seedless mulberry‡

† special consideration needed for these trees: spacing and climate
‡ over planted

For additional technical assistance contact the Nevada Division of Forestry, Urban Forestry Coordinator in Carson City or the Nevada Cooperative Extension, Urban Forestry State Specialist at the University of Nevada, Reno, Department of Applied Economics and Statistics.

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