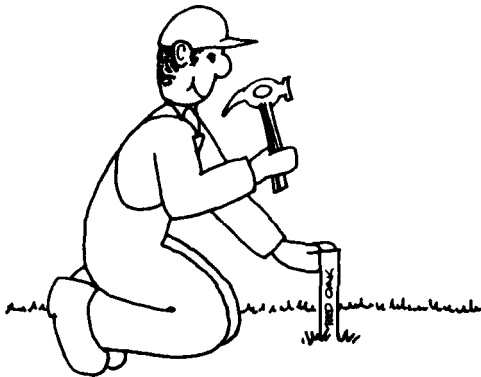


HOW TO PLANT TREES

BEFORE PLANTING see that the proper planting site has been determined. Place a wooden stake marked with tree name where each tree will be planted. It is much easier to readjust stakes than planted trees. Be sure there is enough time and labor available to do a good planting job. It *always* pays.

Trees from commercial nurseries from 4 to 10 feet high are best for most situations. Many nurseries offer trees in metal, paper or fiber containers, but balled and burlapped and bare rooted trees are also available. Bare rooted trees are normally planted in early spring; balled and container grown trees can be planted over a longer period of time but late fall or early spring are best. All trees should be kept cool and moist before planting. Bare rooted trees must be kept covered and planted as soon as possible after they are received. Very large trees are harder to handle and are usually planted by professional nurserymen.



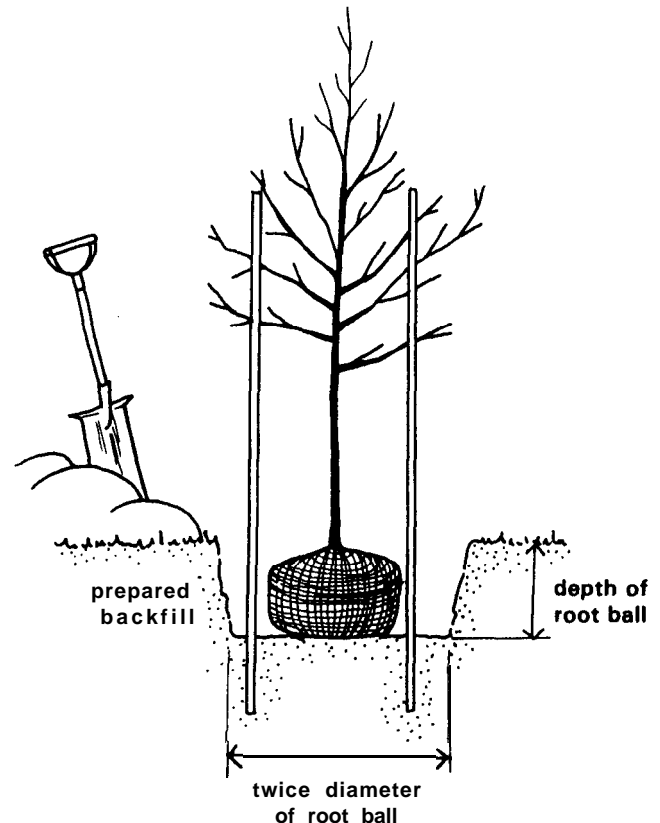
MARK EXACT PLANTING SPOTS BEFORE BEGINNING.

MATERIALS NEEDED to plant a tree will vary with size and species of tree and soil. However, an average tree will require the following:

- 2 six foot metal fenceposts
- 4 to 6 feet of stiff wire
- 6 to 8 inch length of garden hose or plastic tubing
- 6 to 8 feet of trunk wrapping paper
- Bushel of bark or wood chips
- Cup of fertilizer (16-8-8, 12-12-12, or other)
- 5 gallons of water
- Pruning shears
- Masking tape

DIG A HOLE that is slightly deeper than the roots or root ball and about twice as wide. Completely remove any sod and discard. Prepare a backfill by chopping or breaking excavated material into particles as fine as possible, removing all rubble. Thoroughly mix in the fertilizer. Place the root ball on a thin layer of backfill so that the top of the ball rests at the same level with the surrounding ground. Metal containers should be carefully removed before planting. They may need to be split with a special cutter - ask your nurseryman to do this for you if trees will be planted the same day. Paper or fiber pots need not be removed but the lip or top edge of each container should be cut or torn away before backfilling. Cut the twine or binding material from the trunk on balled and burlapped plants.

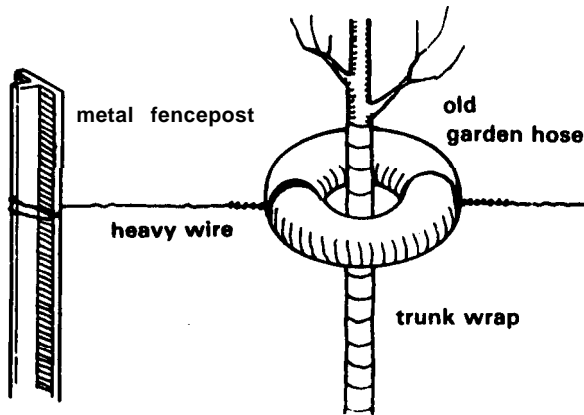
Drive metal stakes or fenceposts into the bottom of the planting hole **before** setting the tree to avoid damaging roots. If steel fenceposts are available, use the type without base flange so that later removal will be easier. Align posts **with** or parallel to prevailing wind or traffic. Two are adequate for most jobs. **Stakes should be equidistant from the tree and project about 4 feet from the ground after backfill.**



DIG THE HOLE LARGER THAN THE ROOT BALL.

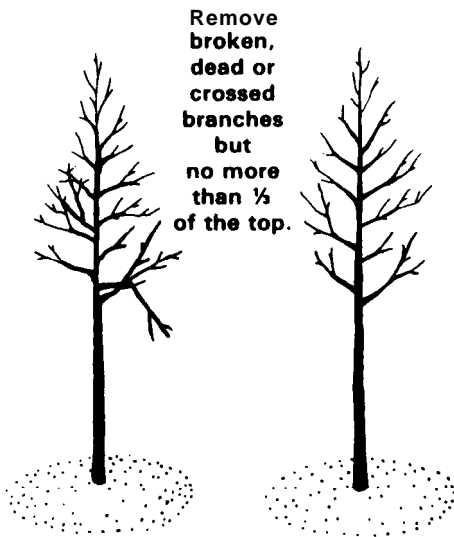
Place tree carefully in the hole. Fill hole about halfway with backfill and water well. Then fill the hole in completely and soak. With bare rooted trees, suspend the tree at the correct height with one hand while backfilling with the other. Form an earth ridge in a ring around the edge of the planting hole to serve as a basin for later watering. Wrap trunk tightly with wrapping paper beginning at the bottom, lapping about one-half width on each turn, working up to the lowest or next to the lowest branch. Secure with several turns of masking tape, not wire.

Form a ring or "doughnut" that is two or three times the diameter of the tree's trunk from wire covered with garden hose or tubing. Suspend the doughnut by wires from each stake as high as possible on the trunk. Do not allow ends of wires to rub or cut into the bark.

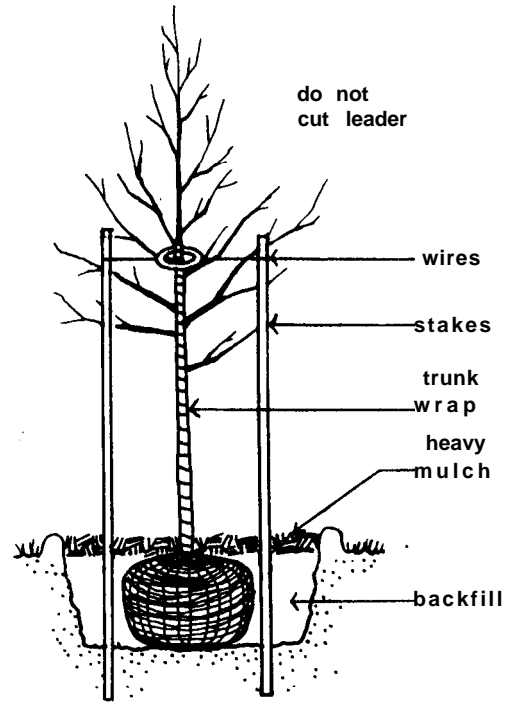


ALLOW TREE TO MOVE SLIGHTLY WITHIN THE BRACE.

Prune all dead, crossed or broken branches. Generally, remove limbs flush with the trunk. Do not remove the leader. Mulch the entire earth surface 3 or more inches deep with wood or bark chips to conserve soil moisture, to help prevent competing grasses and weeds, and to eliminate the need for "trim" mowing.

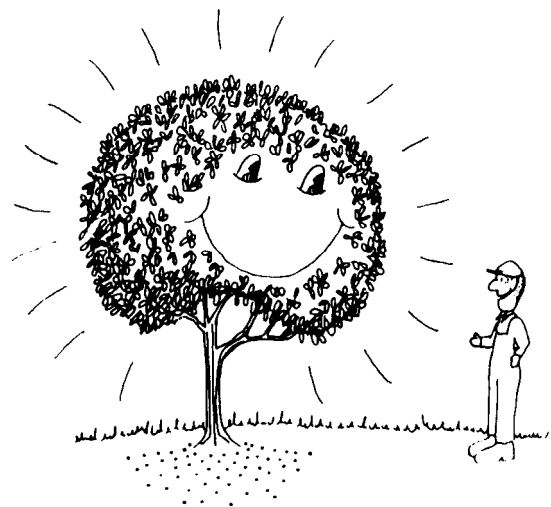


If rabbits or mice are a problem, wrap a cylinder or heavy wire or hardware cloth around the base of the tree 2 feet high. Rodents may damage or kill trees by gnawing or chewing bark.



PROPERLY PLANTED TREES SHOULD LOOK LIKE THIS.

MAINTENANCE for young trees is very important. If earth settles around a tree after planting and exposes roots, rake away mulch, place more earth around it as needed, reform the earth ring, then replace mulch. Tree should receive the water equivalent of 1-inch of rainfall a week during the first 2 years and as needed for the next 2 years especially during dry spells. The earth ring may be removed in 2 years, but mulch should be maintained and replaced until the tree is well established (4 to 6 years). Remove doughnut and wire assembly after one growing season unless tree is unable to stand by itself. In this case, remove about one-third of the top branches, making cuts flush with the trunk, and leave wires on the tree for one more growing season. A light application of high nitrogen fertilizer will benefit trees if applied in early spring. Broadcast about 1 cup evenly around the base of each tree away from the trunk.



WELL MAINTAINED TREES ARE HAPPY TREES.



Urban and Community Forestry



STANDARD TREE PLANTING DETAIL

The hole:

Excavate a pit which is at least twice the diameter of the rootball and the same depth — no deeper. Handle the tree by the rootball, not the trunk. **Be sure the rootball or container soil rests on solid ground.** For best root development, enlarge the planting area by removing existing turf, then spading or tilling soil in a wide ring.

Carefully cut twine wrapped around the stem at the top of the rootball. Remove burlap from the top of the rootball to prevent wicking of moisture from the soil. Remove completely any plastic burlap or container.

Backfill soil:

Backfill the pit with chopped excavated soil. Use local topsoil for backfill if excavated soil is of poor quality. Discard rocks and debris.

Water:

Saturate the entire backfilled soil with water. Add more soil if needed to compensate for settling.

Mulch:

Cover smoothed soil with 3 inches of wood or bark chips. Leave a small gap near the trunk. Keep mulch weeded. Replace as needed.

Pruning:

Remove **only** broken or badly deformed branches. Begin a regular pruning program the second or third year after planting.

The following procedures are optional:

Stakes:

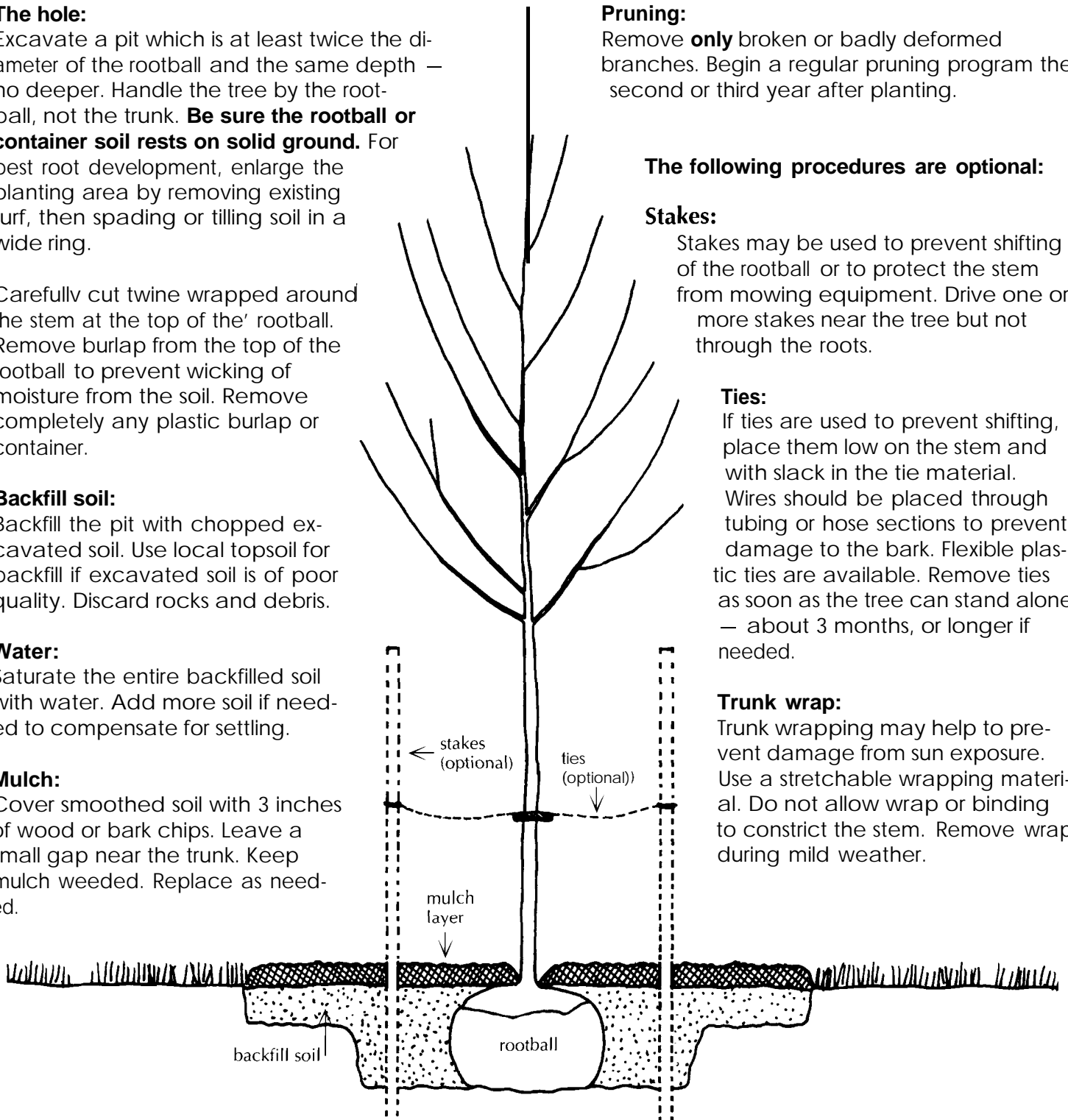
Stakes may be used to prevent shifting of the rootball or to protect the stem from mowing equipment. Drive one or more stakes near the tree but not through the roots.

Ties:

If ties are used to prevent shifting, place them low on the stem and with slack in the tie material. Wires should be placed through tubing or hose sections to prevent damage to the bark. Flexible plastic ties are available. Remove ties as soon as the tree can stand alone — about 3 months, or longer if needed.

Trunk wrap:

Trunk wrapping may help to prevent damage from sun exposure. Use a stretchable wrapping material. Do not allow wrap or binding to constrict the stem. Remove wrap during mild weather.



These procedures may be used for planting in relatively uncompacted soils, or where water will percolate through the topsoil layer.



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TREE PLANTING DETAIL FOR COMPACTED SOILS

The hole:

Excavate a wide, shallow hole which is 3 to 4 times the width of the rootball or container and only 1/2 as deep. Handle the tree by the rootball, not the trunk. **Be sure the rootball or container soil rests on solid ground.** For best root development, enlarge the planting area by removing existing turf, then spading or tilling soil in a wide ring. Soils which hold excessive moisture may need a sub-surface drain tube installed below the rootball (not shown).

Carefully cut twine wrapped around the stem at the top of the rootball. Remove burlap from the top of the rootball to prevent wicking of moisture from the soil. Remove completely any plastic burlap or container.

Backfill soil:

Backfill the pit with local topsoil to improve aeration, or finely chop excavated soil. Discard rocks and debris. Mound backfill slightly to the top of the rootball, and flare to edges of excavation.

Water:

Saturate the entire backfilled soil with water. Add more soil if needed to compensate for settling.

Mulch:

Cover smoothed soil with 3 inches of wood or bark chips. Leave a small gap near the trunk. Keep mulch weeded. Replace as needed.

Pruning:

Remove **only** broken or badly deformed branches. Begin a regular pruning program the second or third year after planting.

The following procedures are optional:

Stakes:

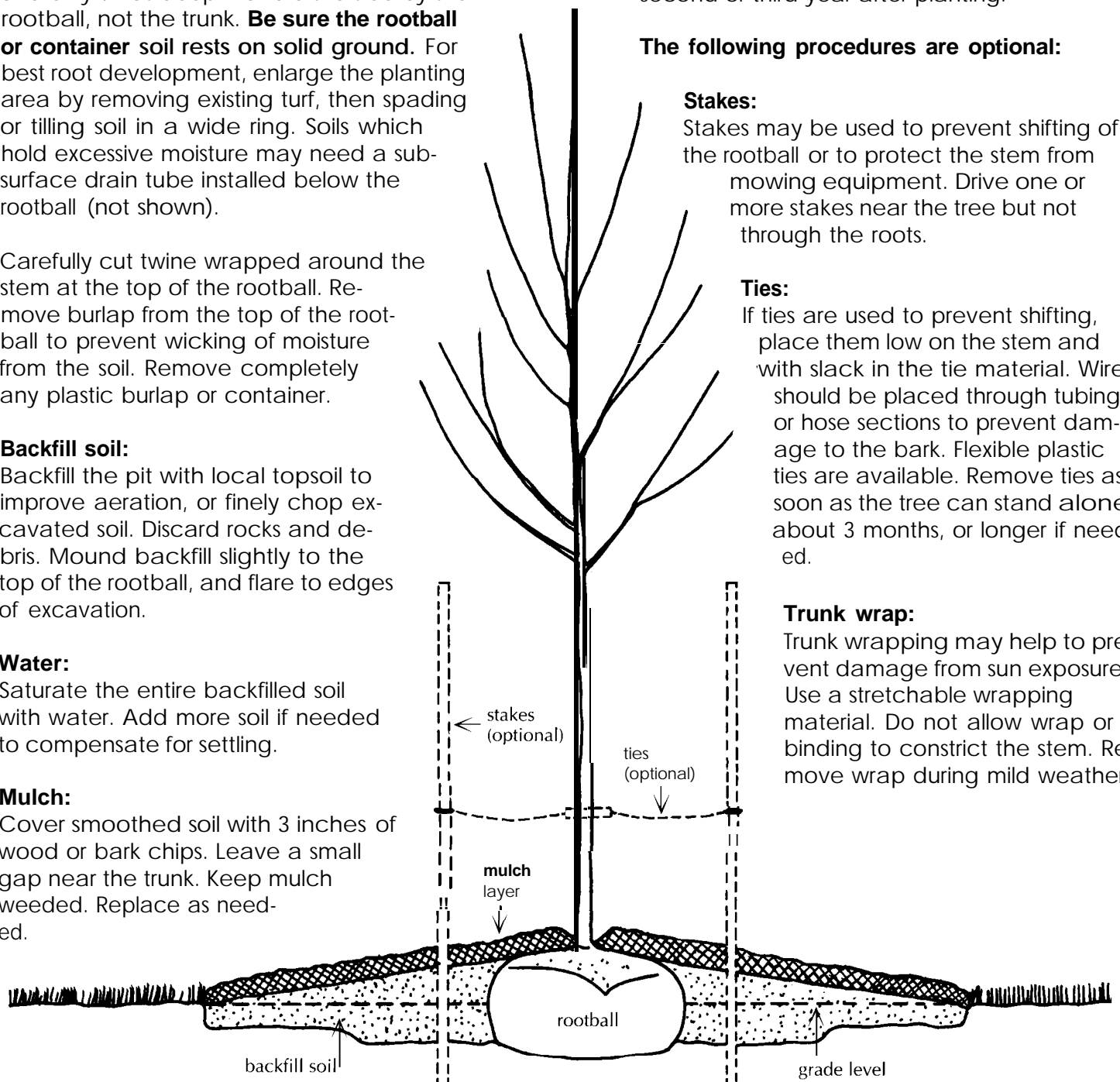
Stakes may be used to prevent shifting of the rootball or to protect the stem from mowing equipment. Drive one or more stakes near the tree but not through the roots.

Ties:

If ties are used to prevent shifting, place them low on the stem and with slack in the tie material. Wires should be placed through tubing or hose sections to prevent damage to the bark. Flexible plastic ties are available. Remove ties as soon as the tree can stand alone—about 3 months, or longer if needed.

Trunk wrap:

Trunk wrapping may help to prevent damage from sun exposure. Use a stretchable wrapping material. Do not allow wrap or binding to constrict the stem. Remove wrap during mild weather.



These procedures may be used for planting in dense, compacted soils or subsoils, which are common to disturbed areas around construction sites.