Urban Trees
Selection, Placement, Planting and Care

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Selecting Quality Trees from the Nursery

Poor Quality vs. Good Quality

Important Considerations

- Production method
- Maximum size at planting
- Root ball dimensions
- Root collar location
- Root defects
- Root ball:caliper:height relationship
- Trunk and branch structure

Other Factors Influencing Tree Quality

- Canopy uniformity and fullness.
- Quality of old pruning cuts.
- Seed or propagule source.
- Insect and disease infestation.
- Trunk injury or broken branches.
- Tree wrap (may be covering up wounds).
- Foliage color and size.
- Dieback in canopy.
- Presence of stakes.

Placement

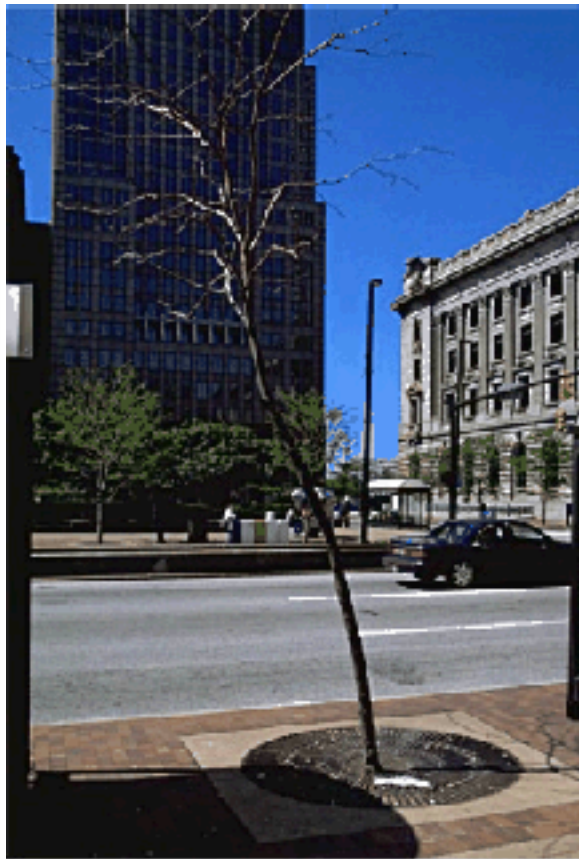# Urban Design to Encourage Tree Canopy

- Trees often grow poorly in urban areas unless the infrastructure has been specially designed to accommodate tree root growth

Few citizens want cities without trees.

- A city without trees is hotter in summer, receives less rainfall, has greater runoff following storms, has fewer shoppers, and is not inviting

Poor design leads to failure.

- Trees struggle unless spaces are designed appropriately

- When lots of money is thrown at tree projects without guidance from knowledgeable professionals, waste occurs and no one wins

Good design leads to success.

- Healthy trees increase property value, intercept air pollutants, buffer temperatures, reduce wind speed, cool the city, reduce runoff from storms, encourage people to visit and spend money at shops, and create a more inviting community

- Trees thrive when good designs are executed properly

Planting

Ten Steps to Proper Planting

- Look up for wires/lights
- Dig shallow/wide hole
- Find the top-most root
- Place tree in hole
- Position top root 1-2" above landscape soil
- Straighten tree
- Remove synthetic materials
- Add backfill soil and firm the root ball
- Add mulch to cover root ball sides
- Stake if needed

Look up for wires/lights.

Dig shallow/wide hole

Find the top-most root.

Sever girdling roots if tree is containerized

Place tree in hole and position top root 1-2" above landscape soil

Straighten tree and remove synthetic materials

Add backfill soil and firm the rootball.

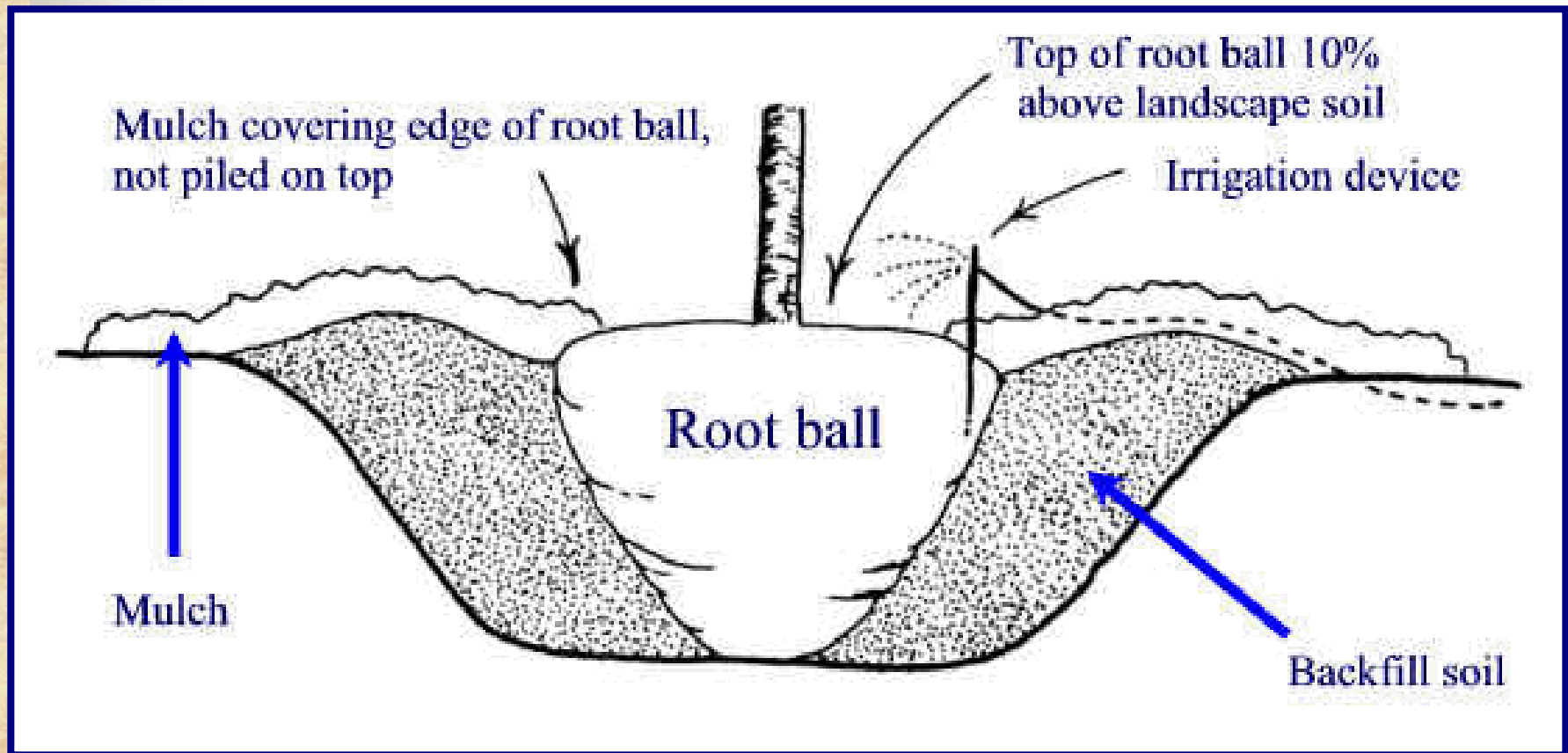# Make sure existing rootball is not covered by backfill

Water

Add soil to settled areas.

Add mulch to cover rootball sides and stake if needed
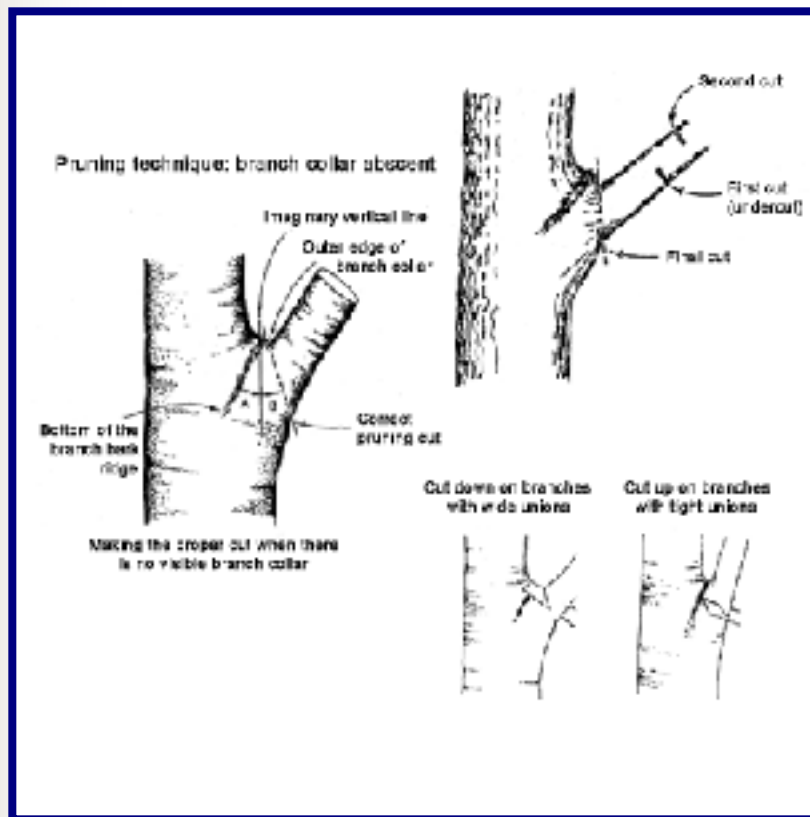
Do not pile mulch against the trunk!

Proper Planting Detail

Mulch covering edge of root ball, not piled on top

Top of root ball 10% above landscape soil

Irrigation device

Root ball

Mulch

Backfill soil

Pruning Shade Trees in the Landscape

Large Branch Removal

- Make three cuts to remove a large branch

- Cut down through branches that have a wide angle; cut up through branches with a narrow angle

Before Branch Removal

- Begin a cut at the edge of the branch collar

- The collar contains the branch protection zone which slows the spread of decay into the trunk

After Branch Removal

- The collar is left intact after a branch is properly removed

One Year Later

- One year after this branch was removed, callus and woundwood is forming in a circular pattern

- Properly removed branches will form this circular pattern or, initially, a 'U' shaped pattern

Before and After Pruning Photos

Scarlet Oak Before Pruning

Scarlet Oak After Pruning

Willow Oak Before Pruning

Willow Oak After Pruning

Willow Oak Before Pruning

Willow Oak After Pruning