

Berkeley County *Street Tree Planting Manual*



Office of the Planning and Zoning Department

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1) Allowable street tree types

1.1) Allowable tree types for canopy street trees shall be:

- A) 'Allee' elm
- B) 'Bosque' elm
- C) 'High Beam' Overcup oak
- D) 'Highrise' live oak
- E) 'Highpoint' nutall oak
- F) 'Hightower' willow oak

1.2) Allowable tree types for understory street trees shall be single stem, varieties as follows:

- A) Crape Myrtle
- B) Ironwood
- C) Savannah Holly
- D) Sweetbay Magnolia
- E) Sabal Palm

* **Note: Understory trees may comprise no more than 30% of the neighborhood's required street trees. Trees in excess of the required street trees may be either canopy or understory. If developed in phases, the 30% will be calculated per phase. Areas considered urban/commercial or mixed-use may exceed the 30% understory tree maximum whenever the streetscape and architectural design limit the available space for larger trees.**

2) Tree form

2.1) Single stem variety trees shall have a dominant leader and adhere to proper form as set forth by the American Nurseryman's Standards.

3) Minimum tree size at time of planting

3.1) Canopy trees shall be a minimum of 2" caliper at time of planting.

3.2) Understory trees shall be a minimum of 1.5" caliper at time of planting.

4) Tree spacing

4.1) Canopy trees shall be spaced between 35' on center to 55' on center. Spacing should be as consistent as possible given that flexibility in spacing will be provided to accommodate site, infrastructure, and utility constraints. Spacing may be in staggered or aligned configurations.

4.2) Understory trees shall be spaced between 20' on center to 30' on center. Spacing should be as consistent as possible given that flexibility in spacing will be provided to accommodate site, infrastructure, and utility constraints.

* **Note: aligning trees on property line intersections is both allowed and encouraged where utilities are not located.**

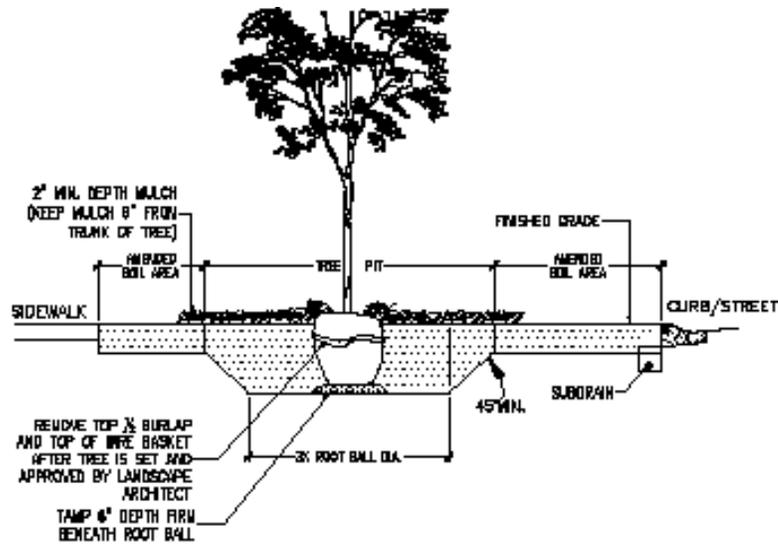
5) General allowable street tree locations in Rights of Way

5.1) In order to be permitted within a minimum **50'** Right of Way, proposed canopy tree locations must meet the following criteria:

- A) The posted speed limit shall be equal to or below 30 miles per hour.
- B) The canopy tree must be located a minimum of 5' from the back of curb.
- C) The canopy tree must be located a minimum of 3' from the edge of a sidewalk.
- D) If a canopy tree is to be planted within an urban planter cut-out, the minimum separations must be maintained, as well as an unobstructed minimum 5' sidewalk.
- E) Canopy trees should be located such that the tree trunk is a minimum of:
 - (1) 5' separation from any water and sewer utility lines that are shallower than 5' deep
 - (2) 5' separation from a stormwater pipe (for stormwater pipes parallel to the roadway, a 3' separation with root barrier located between the tree and pipe is permitted)
 - (3) 10' separation from a stormwater structure
 - (4) 10' separation from a fire hydrant
 - (5) 10' separation from a street light
 - (6) 5' separation from driveway edges
 - (7) 30' separation from intersections, measured from the point of intersection of the nearest right of way lines
- F) Root barrier shall be installed along the street curb/underdrain at a minimum of 3' deep and shall be a minimum of 30 linear feet long, and positioned as to be centered on the tree.
- G) Root barrier shall be installed along sidewalks at a minimum of 2' deep and shall be a minimum of 30 linear feet long, and positioned as to be centered on the tree.

* **Note: Root barrier must be a ribbed & interlocking polypropylene product such as DeepRoot Barriers or equal. All barriers shall be installed in accordance with manufactured recommended instructions.**

* See street tree diagrams and details for further explanation.

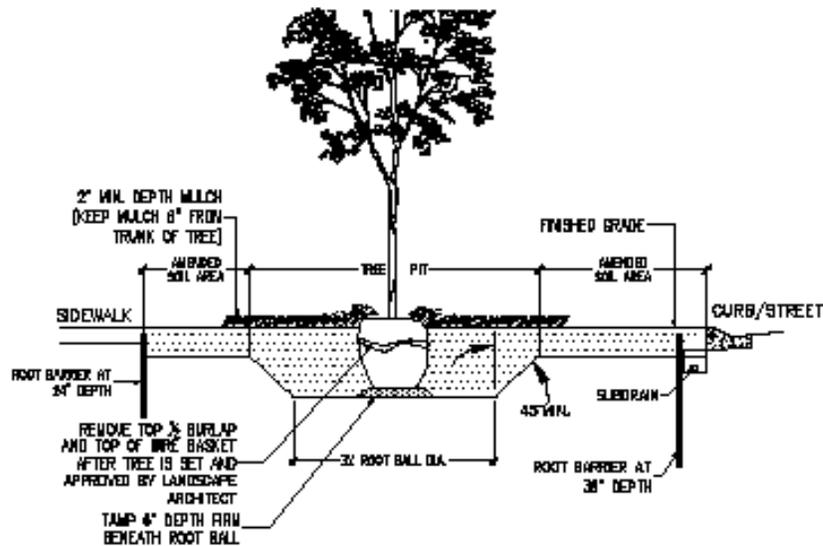


GENERAL NOTES:

1. PLANT SO THAT TOP OF ROOT BALL IS 2" ABOVE FINISH GRADE.
2. SCARIFY SIDES AND BOTTOM OF PIT.
3. BACKFILL TREE PIT AND WATER UNTIL NO MORE WATER IS ABSORBED.
4. HAND TAMP OR PROBE WITH SHOVEL HANDLES TO REMOVE VOIDS.
5. DO NOT WRAP TREE TRUNKS.
6. AMEND SOIL AREA AROUND TREE BY THOROUGHLY TILLING IN PLANTING SOIL MIXTURE AMENDMENTS TO DEPTH OF 6".

STREET TREE PLANTING DETAIL

NOT TO SCALE

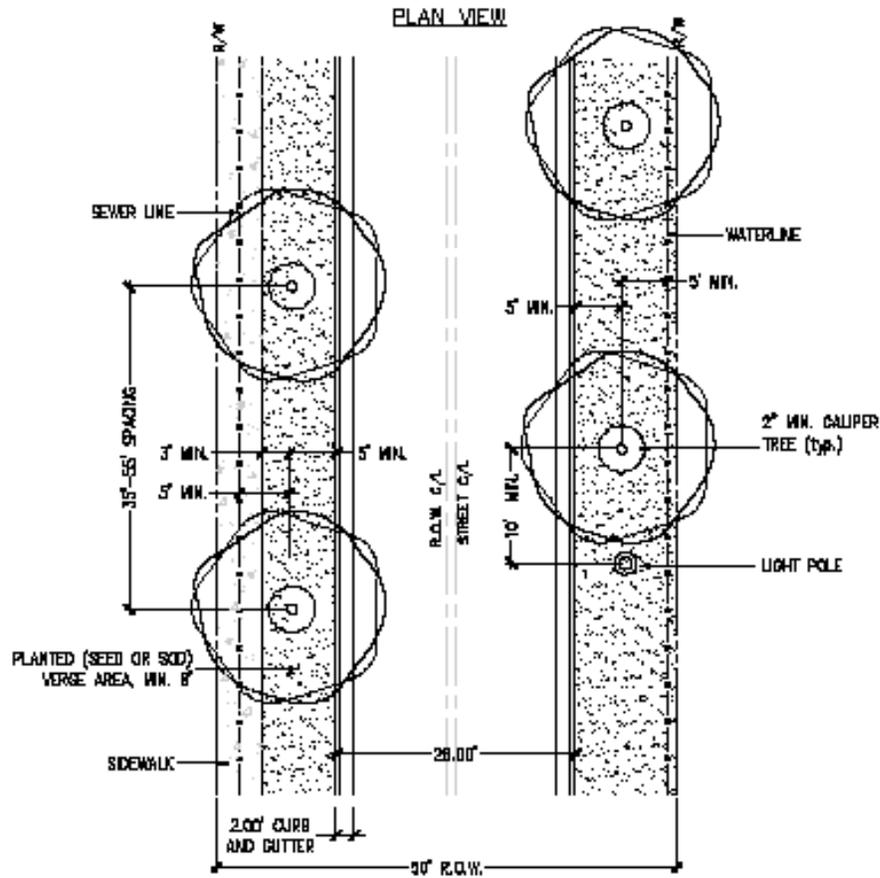


GENERAL NOTES:

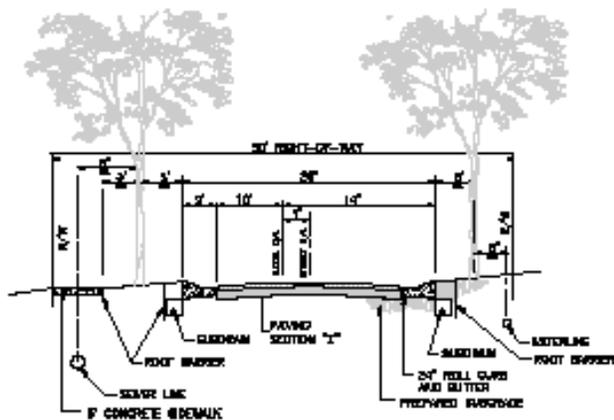
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4. HAND TAMP OR PROBE WITH SHOVEL HANDLES TO REMOVE VOIDS.
5. DO NOT WRAP TREE TRUNKS.
6. AMEND SOIL AREA AROUND TREE BY THOROUGHLY TILLING IN PLANTING SOIL MIXTURE AMENDMENTS TO DEPTH OF 6".

**CANOPY STREET TREE PLANTING W/
ROOT BARRIER DETAIL**

NOT TO SCALE



- NOTES:**
1. TREE SPACING MAY BE IN FORMAL OR INFORMAL ARRANGEMENTS.
 2. SEE CANOPY STREET TREE W/ ROOT BARRIER DETAIL.
 3. LATERAL SEPARATIONS FROM WATER AND SEWER LINES MAY BE REDUCED WHEN THE LINES ARE A MINIMUM OF 8" DEEP.
 4. SEE STREET TREE PLANTING DETAIL.



SECTION

**TYPICAL 50' R.O.W.
CANOPY STREET TREE PLANTING**

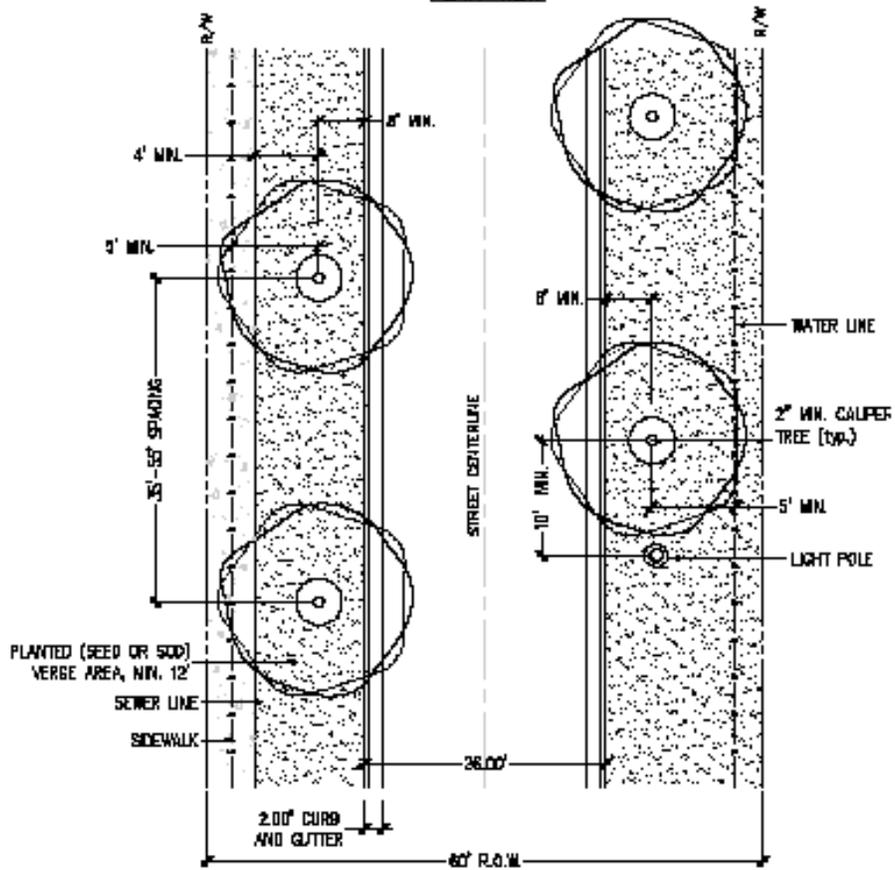
NOT TO SCALE

5.2) In order to be permitted within a minimum 60' Right of Way, proposed canopy tree locations must meet the following criteria:

- A) The posted speed limit of the right of way shall be equal to or below 30 miles per hour.
- B) The canopy tree must be located a minimum of 8' from the back of curb
- C) The canopy tree must be located a minimum of 4' from the edge of a sidewalk
- D) If a canopy tree is to be planted within an urban planter cut-out, the minimum separations must be maintained, as well as an unobstructed minimum 5' sidewalk.
- E) Canopy trees should be located such that the tree trunk is a minimum of:
 - (1) 5' separation from any water and sewer utility lines that are shallower than 5' deep
 - (2) 5' separation from a stormwater pipe
 - (3) 10' separation from a stormwater structure
 - (4) 10' separation from a fire hydrant
 - (5) 10' separation from a street light
 - (6) 5' separation from driveway edges
 - (7) 30' separation from intersections, measured from the point of intersection of the nearest right of way lines

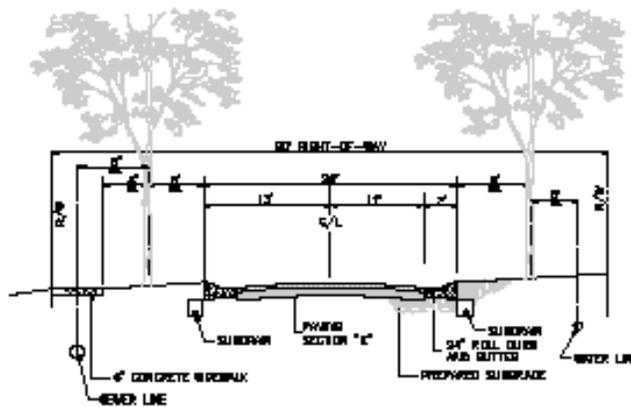
* See street tree diagrams and details for further explanation.

PLAN VIEW



NOTES:

1. TREE SPACING MAY BE IN FORMAL OR INFORMAL ARRANGEMENTS.
2. ROOT BARRIERS NOT REQUIRED PROVIDED THAT ABOVE MINIMUM LATERAL SEPARATIONS ARE MET.
3. LATERAL SEPARATIONS FROM WATER AND SEWER LINES MAY BE REDUCED WHEN THE LINES ARE A MINIMUM OF 5' DEEP.
4. SEE STREET TREE PLANTING DETAIL.



SECTION

TYPICAL 60' R.O.W.
CANOPY STREET TREE PLANTING

NOT TO SCALE

5.3) In order to be permitted within the Right of Way, proposed understory tree location must meet the following criteria:

- A) The posted speed limit of the right of way shall be equal to or below 30 miles per hour.
- B) The understory tree must be located a minimum of 5' from the back of curb
- C) The understory tree must be located a minimum of 3' from the edge of a sidewalk
- D) If an understory tree is to be planted within an urban planter cut-out, the minimum separations must be maintained, as well as an unobstructed minimum 5' sidewalk.
- E) Understory trees should be located such that the tree trunk is a minimum of:
 - (1) 4' separation from any water and sewer utility lines that are shallower than 4' deep
 - (2) 3' separation from a stormwater pipes
 - (3) 7' separation from a stormwater structure
 - (4) 7' separation from a fire hydrant
 - (5) 7' separation from a street light
 - (6) 5' separation from driveway edges
 - (7) 30' separation from intersections, measured from the point of intersection of the nearest right of way lines

* See street tree diagrams and details for further explanation.

6) Street tree care

6.1) General

- A) Trees shall be maintained by the Developer and/or Homeowners Association. Trees that die due to natural causes, neglect, or utility/road maintenance repair shall be replanted by the Developer and/or Homeowners Association.
- B) Maintenance responsibilities shall be clearly defined in all encroachment permits and covenants and restrictions.

6.2) Water

- A) Trees shall be provided adequate water during their 1 year establishment period.
- B) Watering may occur via irrigation, hand watering or gator bags.

6.3) Pruning

- A) Trees with limbs protruding over roadways shall be pruned to maintain a 14' high clear zone over the roadway.
- B) Trees with limbs protruding over sidewalks or trails shall be pruned to maintain a 7' high clear zone over the sidewalk or trail.

6.4) Mulch

- A) Canopy trees will require a minimum of 18 sq. ft. mulch area at the base of each tree. The mulch area shall be a minimum of 2" deep. Mulch must remain for a minimum of two years from time of planting.
- B) Understory trees will require a minimum of 12 sq. ft. mulch area at the base of each tree. The mulch area shall be a minimum of 2" deep. Mulch must remain for a minimum of two years from time of planting.

7) Landscaping/Street tree submittal requirements

- 7.1) Landscaping /Street Tree Plan must be drawn and submitted to Berkeley County for review as part of the Preliminary Plan Submittal. No trees may be planted within the Right of Way without a prior approved Landscaping / Street Tree Plan and the issuing of an encroachment permit. The Landscaping / Street Tree Plan shall include:
 - A) Label existing and proposed right of ways, lot lines, streets, curbs, buildings, sidewalks, existing trees, drainage features, utilities, light fixtures, ponds, etc.
 - B) Drainage structures and pipes as well as water and sewer lines shall be shown in a bold line type to clearly delineate their location on the plan.
 - C) Dimensions for road and lane widths, verge widths, sidewalk widths, median widths, swales, planter cut-outs, curbs, etc.
 - D) Proposed location of each street tree as well as the standard details provided in the Ordinance.

- E) A chart for both the current phase and for the overall subdivision (if master planned) that indicates the number of canopy and understory trees required, number provided, and the associated percentages of each.
- F) A street tree schedule that includes tree type, size, and quantity.
- G) A tree planting, mulching, and watering detail that meets the requirements of this ordinance.

8) Required Tree Planting Times

- 8.1) Trees may be planted as each lot finalizes construction. In order to obtain the Certificate of Occupation for each home and associated lot, the developer / builder must first plant any and all required street trees located within 10' of the aforementioned lot. Staff may grant flexibility on a case by case basis.
- 8.2) Trees must be planted per the approved Landscape / Street Tree Plan.
- 8.3) Sidewalks and Street Trees adjacent to all Common / Homeowner's Association owned areas shall be installed prior to final plat approval. Planting is not encouraged during the summer months and bonds will be accepted on a case by case basis.