#### Guidelines and Best Practices for Tree Planting in Cheyenne (1)

**Street Trees:** Those trees required along streets, can be in conjunction with detached or attached sidewalks.

**1. Tree Type:** Canopy shade trees shall be planted unless overhead utilities exist then deciduous ornamental trees shall be planted.

### Shade trees recommended for Cheyenne, include the following:

Statestreet Maple

Sensation Boxelder

Norway Maple (Deborah, Emerald Lustre, Emerald Queen)

Ohio Buckeye

Honeylocust (Imperial, Northern Acclaim, Shademaster, Skyline)

Hackberry

Cottonwood (lanceleaf, Sargent Straight)

Bur Oak

Glenleven Linden

American Linden (Frontyard, Legend, Sentry)

Littleleaf Linden (Greenspire, Harvest Gold)

American Elm (Prairie Expedition, Princeton)

Asian Elm (Accolade, Discovery, New Horizon, Triumph)

#### 2. Tree spacing

- o 25-40 ft. for shade trees
- o 20-30 ft. for ornamental trees (only allowed where overhead utilities are present)
- o City Forester can adjust for special situations

#### 3. Planting location

- o detached sidewalks- tree shall be planted in center of tree lawn
- o attached sidewalks- trees shall be planted 2.5 to 6 ft. behind sidewalk (4-6' preferred)

#### 4. Minimum tree size

- o Canopy shade trees: 1.5-2.0 in. caliper measured at 6 in. above ground
- Ornamental trees: 1.5 in. caliper measured at 6 in. above ground

#### **5. Tree species diversity** shall meet the following guidelines:

Total number of trees on site (internal and street trees) Maximum percentage of any one species

10-19 50% 20-39 33% 40-59 25% 60 or more 15%

#### 6. City Forestry Permit

A permit from Cheyenne Urban Forestry Division (637-6428) is required prior to planting in the City right-of-way.



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## CITY OF CHEYENNE

### Guidelines and Best Practices for Tree Planting in Cheyenne (2)

#### 7. Tree Planting

- o The planting hole width should be at least 2.5 times the width of the root ball.
- o Remove any bamboo that was tied to the tree from the nursery.
- o For balled and burlapped trees, the entire wire basket, any twine and the top two-thirds of the burlap must be removed.
- o For potted or fabric bagged trees, cut any circling roots to prevent roots from circling in the planting hole, consider using the box cut method.
- o The root ball should sit on undisturbed soil to prevent the tree from settling.
- The root flare (transition zone between stem and roots) should be just above grade, if root flare is not visible, soil should be removed from top of root ball until the root flare is visible.
- o Do not amend the soil within the tree planting hole unless the entire tree lawn area is to be amended.
- o Water in the tree by applying water to the root ball and backfilled area during planting.
- o Stake the tree to prevent it from blowing over by using 2 wooden posts driven into undisturbed soil at opposite sides of the stem and securing the tree using wire and nylon straps or arbortie type material. Be sure to allow some movement of the stem in the wind.
- o Remove all staking material within 1-2 years after planting.

#### 8. Irrigation system

- o An automatic irrigation system shall be installed to irrigate all plants based on their watering needs.
- o Seeded native grass areas may be exempt from having permanent irrigation.
- o Trees within the downtown may be exempt from having permanent irrigation.
- o In areas without sprinkler irrigation, drip irrigation shall be installed.
- o All drip irrigation should be placed on top of the root ball.
- Trees planned for drip irrigation should have emitters or bubblers placed on opposite sides of the stem or drip tubing rings (preferred) and spread evenly around the root ball. Emitters/bubblers should be selected to generally apply water at a rate of one gallon or less per hour but should be based on soil type and grade.
- o Each tree should be watered twice per week at a rate of 20 gallons per watering during the growing season and once per month at a rate of 20-30 gallons during the dormant season.
- o Irrigation rates shall be increased as the tree grows and shall equal 10 gallons per inch of stem caliper. Therefore, a 3 inch caliper tree shall receive 30 gallons of water.
- o Hand watering will be necessary during the dormant season to keep trees alive.
- o Shrubs, perennials and ornamental grasses should be provided emitters/bubblers spread across the root ball and should be watered twice per week at a rate of 5-10 gallons per watering.

#### 9. Mulching

o Trees in seeded or turf grass areas shall have wood fiber, chip or bark mulch rings of at least 4 ft. in diameter to a depth of 3 inches. Wood fiber/chip/bark mulch rings should be replenished every 2 years and any grass or weed encroachment should be eliminated to ensure 4 ft. mulch rings are maintained.



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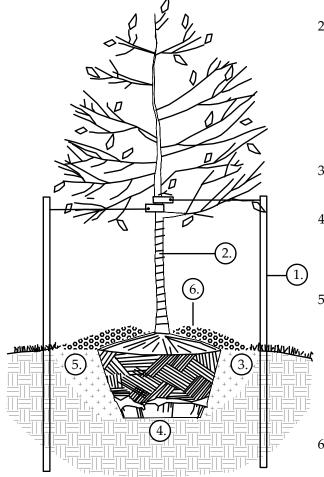




## CITY OF CHEYENNE

## DECIDUOUS TREES

- NTS
- 1. ALL TREES PLANTED WITHIN THE RIGHT-OF-WAY SHOULD BE MINIMUM 1.5-2 INCH CALIPER.
- 2. TO PROTECT FROM WINDY CONDITIONS, STAKE TREE USING 2 EACH, 2" DIAMETER WOODEN POSTS WITH NYLON WEBBING OR WIRE AND NYLON STRAPS.
  ALLOW FOR SOME MOVEMENT OF THE STEM. SET POSTS VERTICALLY PLUMB JUST OUTSIDE THE PLANTING HOLE. PROMPTLY REMOVE ALL STAKING MATERIAL AFTER TREE HAS ROOTED AND CAN STAND ON ITS OWN.
- 3. WRAP TREES TO FIRST BRANCH IN THE FALL. IF PLANTED IN SPRING, DO NOT WRAP.
- 4. DIG PLANTING HOLE AT LEAST 2.5 TIMES THE WIDTH OF THE ROOT BALL. LOOSEN SOIL. DIG AND TURN SOIL TO REDUCE COMPACTION TO THE AREA AND TO THE DEPTH SHOWN. SET TREE ON UNDISTURBED SUBGRADE.
  - 5. FIND THE ROOT FLARE, IF NOT VISIBLE REMOVE SOIL FROM THE TOP OF THE ROOT BALL. LOCATE THE BOTTOM OF THE ROOT FLARE 0"-2" ABOVE LOWEST ADJACENT GRADE (DEPENDING ON SOIL TYPE). REMOVE THE ENTIRE WIRE BASKET, ALL TWINE AND THE TOP TWO-THIRDS OF THE BURLAP. CUT ALL CIRCLING ROOTS TO ELIMINATE GIRDLING AND TO ENCOURAGE ROOTING INTO ADJACENT SOIL.
  - 6. BACKFILL AROUND THE ROOT BALL AND STRAIGHTEN UP THE TREE, DO NOT AMEND THE SOIL. WATER THE ROOT BALL AND BACKFILLED SOIL AND GENTLY COMPRESS THE SOIL AROUND THE ROOT BALL. DO NOT PLACE SOIL ON TOP OF THE ROOT BALL.
- 7. PROVIDE WOOD MULCH (3" DEPTH), MIN. 48" DIA.
  MULCH RING IN TURF AND NATIVE GRASS AREAS.
  ROCK MULCH IS ALLOWED IN LANDSCAPED BEDS. DO
  NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.



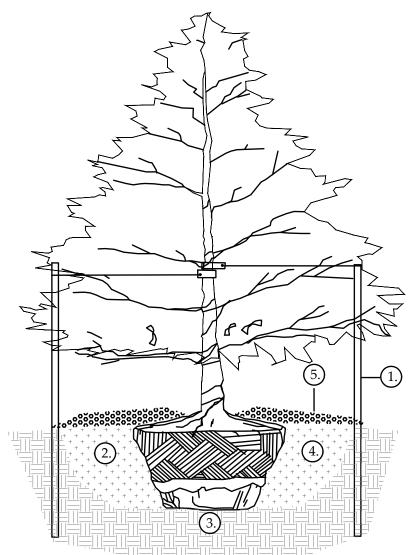


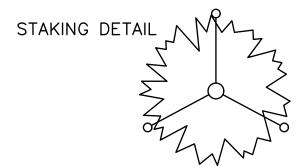
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## CITY OF CHEYENNE





- EVERGREENS ARE NOT ALLOWED TO BE PLANTED WITHIN THE RIGHT-OF-WAY.
- 2. TO PROTECT FROM WINDY CONDITIONS, STAKE TREE USING 3 EACH, 2" DIAMETER WOODEN POSTS WITH NYLON WEBBING OR WIRE AND NYLON STRAPS. ALLOW FOR SOME MOVEMENT OF THE STEM. SET POSTS VERTICALLY PLUMB JUST OUTSIDE THE PLANTING HOLE. PROMPTLY REMOVE ALL STAKING MATERIAL AFTER TREE HAS ROOTED AND CAN STAND ON ITS OWN.
- 3. DIG PLANTING HOLE AT LEAST 2.5 TIMES THE WIDTH OF THE ROOT BALL. LOOSEN SOIL. DIG AND TURN SOIL TO REDUCE COMPACTION TO THE AREA AND TO THE DEPTH SHOWN. SET TREE ON UNDISTURBED SUBGRADE.
- 4. FIND THE ROOT FLARE, IF NOT VISIBLE REMOVE SOIL FROM THE TOP OF THE ROOT BALL. LOCATE THE BOTTOM OF THE ROOT FLARE 0"-2" ABOVE LOWEST ADJACENT GRADE (DEPENDING ON SOIL TYPE). REMOVE THE ENTIRE WIRE BASKET, ALL TWINE AND THE TOP TWO-THIRDS OF THE BURLAP. CUT ALL CIRCLING ROOTS TO ELIMINATE GIRDLING AND TO ENCOURAGE ROOTING INTO ADJACENT SOIL.
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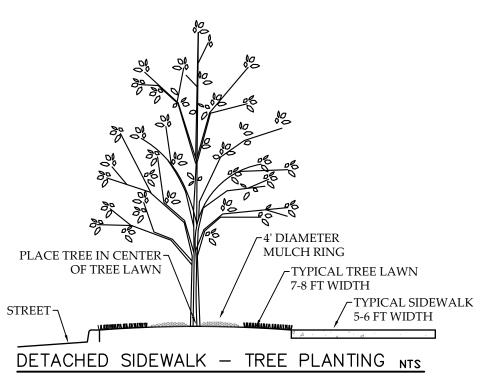


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## CITY OF CHEYENNE



A PERMIT (FREE OF CHARGE) FROM THE CHEYENNE URBAN FORESTRY DIVISION (637-6428) IS REQUIRED PRIOR TO PLANTING IN THE PUBLIC RIGHT-OF-WAY.

SHADE TREES SHOULD BE SPACED BETWEEN 25-40 FEET APART.

ORNAMENTAL TREES (USE ONLY WHEN OVERHEAD UTILITES ARE PRESENT) SHOULD BE SPACED 20-30 FEET APART.

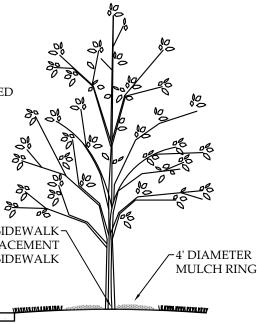
EVERGREEN TREES ARE NOT ALLOWED TO BE PLANTED WITHIN THE

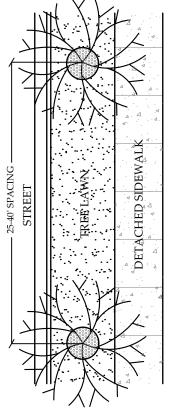
RIGHT-OF-WAY.

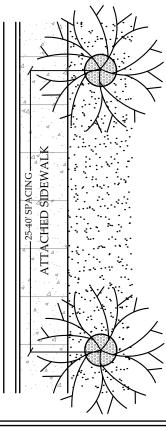
PLACE TREE MIN. 2.5 FT BEHIND SIDEWALK IF UTILITY'S ARE PRESENT. OPTIMAL PLACEMENT 4-6 FT BEHIND SIDEWALK

> TYPICAL SIDEWALK-5-6 FT WIDTH

ATTACHED SIDEWALK - TREE PLANTING NTS









Know what's below.
Call before you dig.

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# CITY OF CHEYENNE